

# Appendix C Air Quality Modeling

## **Appendix C – Air Quality**

- a) Wind and Climate Information
- b) Ambient Air Data
- c) Regional Construction Emissions- CalEEMod Output Files
  - 1) Regular or Standard Construction Equipment
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## **Sub-Appendix a**

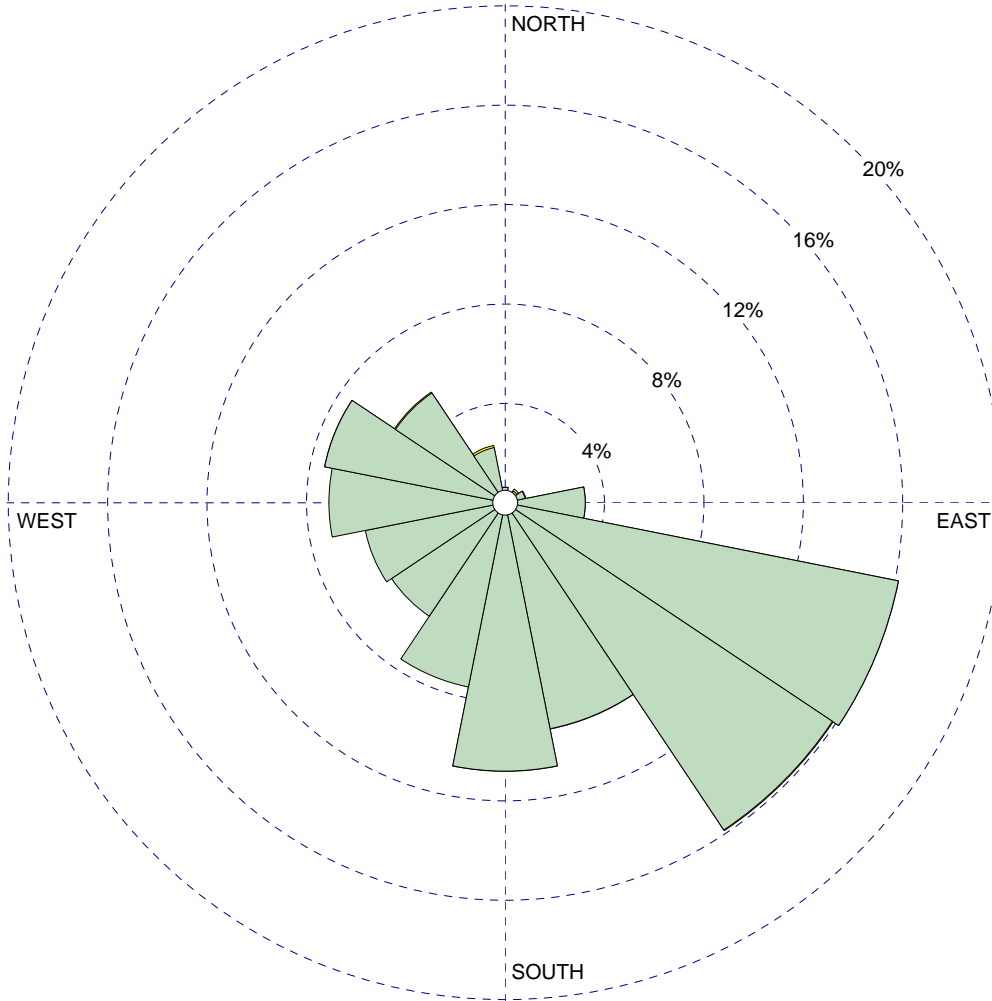
### Wind and Climate Information

WIND ROSE PLOT:

**Burbank Air Monitoring Station**

DISPLAY:

**Wind Speed  
Direction (blowing from)**

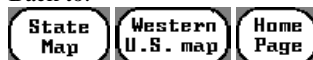


WIND SPEED  
(m/s)

>= 5.36  
 0.50 - 5.36  
 Calms: 0.87%

COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	<b>Start Date: 1/1/2005 - 00:00</b> <b>End Date: 12/31/2007 - 23:00</b>	MODELER:	
	CALM WINDS:	TOTAL COUNT:	
	<b>0.87%</b>	<b>26164 hrs.</b>	
	AVG. WIND SPEED:	DATE:	PROJECT NO.:
	<b>1.82 m/s</b>	<b>1/14/2016</b>	

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**NOTE:**

To print data frame (right side), click on right frame before printing.

**1981 - 2010**

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
- [Monthly Tabular data \(~1 KB\)](#)
- [NCDC 1981-2010 Normals \(~3 KB\)](#)

**1971 - 2000**

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
- [Monthly Tabular data \(~1 KB\)](#)
- [NCDC 1971-2000 Normals \(~3 KB\)](#)

**1961 - 1990**

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
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# BURBANK VALLEY PUMP PLA, CALIFORNIA

## Period of Record General Climate Summary - Temperature

Station:(041194) BURBANK VALLEY PUMP PLA															
From Year=1939 To Year=2006															
	Monthly Averages			Daily Extremes				Monthly Extremes				Max. Temp.		Min. Temp.	
	Max.	Min.	Mean	High	Date	Low	Date	Highest Mean	Year	Lowest Mean	Year	>= 90 F	<= 32 F	<= 32 F	<= 0 F
	F	F	F	F	dd/yyyy or yyyymmdd	F	dd/yyyy or yyyymmdd	F	-	F	-	# Days	# Days	# Days	# Days
January	67.3	41.6	54.4	93	31/2003	22	29/1979	63.4	2003	45.1	1949	0.1	0.0	1.7	0.0
February	68.8	43.6	56.2	92	16/1977	27	15/1942	61.9	1954	50.7	1949	0.2	0.0	0.6	0.0
March	70.4	45.7	58.0	98	26/1988	22	07/1980	64.5	2004	52.7	1952	0.4	0.0	0.4	0.0
April	73.9	49.0	61.5	105	06/1989	32	05/1978	68.1	1989	53.4	1967	1.7	0.0	0.0	0.0
May	76.7	53.4	65.1	107	29/1984	39	21/1975	71.8	1984	60.6	1998	2.4	0.0	0.0	0.0
June	81.5	57.2	69.3	111	27/1976	43	14/1943	77.7	1981	64.0	1944	4.8	0.0	0.0	0.0
July	88.5	61.0	74.7	108	26/1943	45	02/1979	79.7	1984	69.0	1944	13.6	0.0	0.0	0.0
August	89.2	61.3	75.2	111	26/1944	46	28/1975	80.4	1994	71.7	1948	14.6	0.0	0.0	0.0
September	87.2	59.1	73.2	113	12/1971	43	26/1941	81.4	1984	67.3	1986	11.8	0.0	0.0	0.0
October	81.0	53.3	67.1	108	01/1980	33	30/1971	72.3	1991	62.7	2002	5.9	0.0	0.0	0.0
November	73.5	45.9	59.7	98	03/1976	29	30/1975	65.0	1949	54.0	1994	1.0	0.0	0.2	0.0
December	68.0	41.7	54.9	92	03/1958	22	08/1978	59.6	1958	49.3	1971	0.0	0.0	1.4	0.0
Annual	77.2	51.1	64.1	113	19710912	22	19781208	66.7	1984	61.9	1944	56.5	0.0	4.2	0.0
Winter	68.1	42.3	55.2	93	20030131	22	19781208	59.1	1981	48.6	1949	0.3	0.0	3.6	0.0
Spring	73.7	49.4	61.5	107	19840529	22	19800307	66.1	1993	58.2	1999	4.4	0.0	0.4	0.0
Summer	86.4	59.8	73.1	111	19440826	43	19430614	77.3	1981	69.1	1944	33.0	0.0	0.0	0.0
Fall	80.6	52.8	66.7	113	19710912	29	19751130	70.2	1991	63.9	1973	18.7	0.0	0.2	0.0

Table updated on Jul 28, 2006

For monthly and annual means, thresholds, and sums:

Months with 5 or more missing days are not considered

Years with 1 or more missing months are not considered

Seasons are climatological not calendar seasons

Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May

Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Western Regional Climate Center, [wrc@dr.edu](mailto:wrc@dr.edu)

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**NOTE:**

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# BURBANK VALLEY PUMP PLA, CALIFORNIA

## Period of Record General Climate Summary - Precipitation

### 1981 - 2010

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
- [Monthly Tabular data \(~1 KB\)](#)
- [NCDC 1981-2010 Normals \(~3 KB\)](#)

### 1971 - 2000

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
- [Monthly Tabular data \(~1 KB\)](#)
- [NCDC 1971-2000 Normals \(~3 KB\)](#)

### 1961 - 1990

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
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- [Spring 'Freeze' Probabilities](#)
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- Monthly Temperature Listings

[Average](#)

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[Extreme Minimum\(\\*\)](#)

#### Precipitation

- [Monthly Average](#)
- [Daily Extreme and Average](#)
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Station:(041194) BURBANK VALLEY PUMP PLA														
From Year=1939 To Year=2006														
	Precipitation											Total Snowfall		
	Mean	High	Year	Low	Year	1 Day Max.	>= 0.01 in.	>= 0.10 in.	>= 0.50 in.	>= 1.00 in.	Mean	High	Year	
	in.	in.	-	in.	-	in.	dd/yyyy or yyyyymmdd	# Days	# Days	# Days	# Days	in.	in.	-
January	3.37	15.92	1995	0.00	1948	7.76	22/1943	6	4	2	1	0.1	4.7	1949
February	3.94	15.52	1998	0.00	1964	4.50	08/1993	6	4	2	1	0.0	0.0	1940
March	2.91	12.87	1978	0.00	1956	5.45	01/1983	6	4	2	1	0.0	0.5	1950
April	1.18	5.66	1965	0.00	1962	2.30	12/1956	4	2	1	0	0.0	0.0	1940
May	0.28	4.37	1998	0.00	1942	2.29	08/1977	2	1	0	0	0.0	0.0	1940
June	0.07	1.04	1993	0.00	1940	1.01	05/1993	1	0	0	0	0.0	0.0	1940
July	0.01	0.21	1986	0.00	1940	0.18	12/1992	0	0	0	0	0.0	0.0	1940
August	0.11	2.97	1977	0.00	1940	2.86	17/1977	1	0	0	0	0.0	0.0	1940
September	0.20	3.39	1976	0.00	1940	1.43	10/1976	1	1	0	0	0.0	0.0	1940
October	0.59	7.26	2004	0.00	1953	3.00	19/2004	2	1	0	0	0.0	0.0	1940
November	1.54	10.63	1965	0.00	1948	5.28	29/1970	3	2	1	0	0.0	0.0	1940
December	2.30	8.07	1940	0.00	1950	5.30	29/1965	5	3	2	1	0.0	0.0	1939
Annual	16.51	39.77	1983	3.52	1947	7.76	19430122	36	23	10	5	0.1	4.7	1949
Winter	9.62	32.33	2005	1.81	1961	7.76	19430122	17	12	6	3	0.1	4.7	1949
Spring	4.37	18.19	1983	0.00	1997	5.45	19830301	12	7	3	1	0.0	0.5	1950
Summer	0.19	2.97	1977	0.00	1940	2.86	19770817	2	0	0	0	0.0	0.0	1940
Fall	2.33	11.38	1965	0.00	1980	5.28	19701129	6	4	2	1	0.0	0.0	1940

Table updated on Jul 28, 2006

For monthly and annual means, thresholds, and sums:  
 Months with 5 or more missing days are not considered  
 Years with 1 or more missing months are not considered  
 Seasons are climatological not calendar seasons  
 Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May  
 Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Western Regional Climate Center, [wrc@dro.edu](mailto:wrc@dro.edu)

**Sub-Appendix b**  
Ambient Air Data


**Top 4 Summary: Highest 4 Daily Maximum 8-Hour Ozone Averages**

at Los Angeles-North Main Street

	2012		2013		2014	
	Date	8-Hr Average	Date	8-Hr Average	Date	8-Hr Average
National:						
First High:	Sep 30	0.077	May 3	0.069	Oct 5	0.094
Second High:	Sep 15	0.074	May 12	0.062	Sep 14	0.076
Third High:	Sep 23	0.069	Oct 6	0.061	Aug 30	0.073
Fourth High:	Sep 22	0.068	Aug 15	0.060	May 3	0.072
California:						
First High:	Sep 30	0.077	May 3	0.070	Oct 5	0.095
Second High:	Sep 15	0.075	May 12	0.062	Sep 14	0.076
Third High:	Sep 22	0.069	Aug 15	0.061	Aug 30	0.074
Fourth High:	Sep 23	0.069	Sep 15	0.061	May 3	0.073
National:						
# Days Above the Standard:		1		0		2
Nat'l Standard Design Value:		0.064		0.062		0.066
National Year Coverage:		89		89		91
California:						
# Days Above the Standard:		2		0		7
California Designation Value:		0.069		0.070		0.077
Expected Peak Day Concentration:		0.071		0.070		0.079
California Year Coverage:		87		82		92

**Notes:**

Eight-hour ozone averages and related statistics are available at Los Angeles-North Main Street between 1979 and 2014. Some years in this range may not be represented. All averages expressed in parts per million.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

**Available Pollutants:**

8-Hour Ozone | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | State Sulfur Dioxide | Hydrogen Sulfide





## Top 4 Summary: Highest 4 Daily Maximum Hourly Ozone Measurements

at Los Angeles-North Main Street

	2012		2013		2014	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Sep 22	0.093	May 13	0.081	Oct 5	0.113
Second High:	Sep 23	0.089	May 12	0.079	Sep 16	0.104
Third High:	Sep 9	0.085	May 3	0.078	Sep 14	0.097
Fourth High:	Sep 30	0.084	Sep 7	0.075	Oct 12	0.094
California:						
# Days Above the Standard:		0		0		3
California Designation Value:		0.09		0.09		0.10
Expected Peak Day Concentration:		0.089		0.087		0.095
National:						
# Days Above the Standard:		0		0		0
Nat'l Standard Design Value:		0.089		0.085		0.094
Year Coverage:		91		87		95

### Notes:

Hourly ozone measurements and related statistics are available at Los Angeles-North Main Street between 1979 and 2014. Some years in this range may not be represented.

All concentrations expressed in parts per million.

The national 1-hour ozone standard was revoked in June 2005 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or *italics*.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)



## Top 4 Summary: Highest 4 Daily 24-Hour PM2.5 Averages

at Los Angeles-North Main Street

	2012		2013		2014	
	Date	24-Hr Average	Date	24-Hr Average	Date	24-Hr Average
National:						
First High:	Dec 9	58.7	Feb 5	43.1	Jan 1	59.9
Second High:	Dec 8	44.0	Mar 15	33.1	Jan 9	37.9
Third High:	Dec 7	39.1	Jul 5	31.4	Jan 29	37.6
Fourth High:	Nov 7	36.4	Oct 21	31.3	Jan 4	37.0
California:						
First High:	Dec 9	79.0	Feb 5	54.8	Jan 1	65.0
Second High:	Dec 8	59.3	Mar 15	48.0	Jul 5	56.4
Third High:	Dec 7	53.0	Oct 21	42.3	Jul 4	45.7
Fourth High:	Nov 7	50.7	Oct 26	41.0	Jan 29	45.1
National:						
Estimated # Days > 24-Hour Std:		4.2		1.1		6.1
Measured # Days > 24-Hour Std:		4		1		6
24-Hour Standard Design Value:		30		31		32
24-Hour Standard 98th Percentile:		32.0		29.0		34.5
Annual Standard Design Value:		12.5		12.5		12.3
Annual Average:		12.5		12.0		12.3
California:						
Annual Std Designation Value:		13		19		19
Annual Average:		12.7		19.0		*
Year Coverage:		92		95		91

### Notes:

Daily PM2.5 averages and related statistics are available at Los Angeles-North Main Street between 1999 and 2014. Some years in this range may not be represented.

All averages expressed in micrograms per cubic meter.

An exceedance of a standard is not necessarily related to a violation of the standard.

State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)



## Top 4 Summary: Highest 4 Daily 24-Hour PM10 Averages

at Los Angeles-North Main Street

	2012		2013		2014	
	Date	24-Hr Average	Date	24-Hr Average	Date	24-Hr Average
National:						
First High:	May 21	80.0	Nov 12	57.0	Oct 8	66.0
Second High:	Jun 8	74.0	Oct 25	46.0	Jan 29	61.0
Third High:	Jun 26	64.0	Dec 18	45.0	Jul 4	52.0
Fourth High:	Apr 3	55.0	Jun 21	40.0	Jan 23	49.0
California:						
First High:	Dec 9	90.9	Feb 5	74.5	Jan 1	86.8
Second High:	May 21	79.7	Oct 21	64.5	Jan 29	71.1
Third High:	Dec 8	72.0	Mar 25	63.5	Jan 10	71.0
Fourth High:	Dec 7	70.9	Mar 15	62.4	Jan 9	67.0
National:						
Estimated # Days > 24-Hour Std:		0.0		0.0		0.0
Measured # Days > 24-Hour Std:		0		0		0
3-Yr Avg Est # Days > 24-Hr Std:		0.0		0.0		0.0
<i>Annual Average:</i>		30.2		29.5		30.6
<i>3-Year Average:</i>		29		30		30
California:						
Estimated # Days > 24-Hour Std:		24.2		21.4		18.7
Measured # Days > 24-Hour Std:		43		20		38
Annual Average:		30.0		35.3		30.2
3-Year Maximum Annual Average:		30		35		35
Year Coverage:		99		97		92

### Notes:

Daily PM10 averages and related statistics are available at Los Angeles-North Main Street between 1988 and 2014. Some years in this range may not be represented.

All averages expressed in micrograms per cubic meter.

The national annual average PM10 standard was revoked in December 2006 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or *italics*.

An exceedance of a standard is not necessarily related to a violation of the standard.

All values listed above represent midnight-to-midnight 24-hour averages and may be related to an [exceptional event](#).

State and national statistics may differ for the following reasons:

State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

State statistics for 1998 and later are based on local conditions (except for sites in the South Coast Air Basin, where State statistics for 2002 and later are based on local conditions). National statistics are based on standard conditions.

State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

Measurements are usually collected every six days. Measured days counts the days that a measurement was greater than the level of the standard; Estimated days mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.

3-Year statistics represent the listed year and the 2 years before the listed year.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)





## Top 4 Summary: Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

at Los Angeles-North Main Street

	2012		2013		2014	
	Date	8-Hr Average	Date	8-Hr Average	Date	8-Hr Average
National:						
First High:	Jan 15	1.91		*		*
Second High:	Jan 6	1.61		*		*
Third High:	Jan 7	1.60		*		*
Fourth High:	Jan 14	1.57		*		*
California:						
First High:	Jan 14	1.91		*		*
Second High:	Jan 1	1.74		*		*
Third High:	Jan 5	1.61		*		*
Fourth High:	Jan 6	1.60		*		*
National:						
# Days Above the Standard:		0		0		0
California:						
# Days Above the Standard:		0		0		0
Expected Peak Day Concentration:		2.29				
Year Coverage:		48		*		*

### Notes:

Eight-hour carbon monoxide averages and related statistics are available at Los Angeles-North Main Street between 1979 and 2012. Some years in this range may not be represented.

All averages expressed in parts per million.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)



## Top 4 Summary: Highest 4 Daily Maximum Hourly Nitrogen Dioxide Measurements

at Los Angeles-North Main Street

	2012		2013		2014	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Nov 23	77.3	Mar 14	90.3	May 2	82.1
Second High:	Oct 17	74.4	Nov 12	82.6	Apr 30	76.9
Third High:	Apr 4	72.0	May 13	80.7	Jan 29	76.0
Fourth High:	Oct 29	71.9	Sep 5	69.1	Apr 10	74.2
California:						
First High:	Nov 23	77	Mar 14	90	May 2	82
Second High:	Oct 17	74	Nov 12	82	Jan 29	76
Third High:	Apr 4	72	May 13	80	Apr 30	76
Fourth High:	Oct 29	71	Sep 5	69	Apr 10	74
National:						
1-Hour Standard Design Value:		*		*		*
1-Hour Standard 98th Percentile:		68.9		62.5		69.4
# Days Above the Standard:		0		0		0
Annual Standard Design Value:		*		22		22
California:						
1-Hour Std Designation Value:		90		80		80
Expected Peak Day Concentration:		86		84		82
# Days Above the Standard:		0		0		0
Annual Std Designation Value:		25		*		22
Annual Average:		*		*		22
Year Coverage:		76		75		95

### Notes:

Hourly nitrogen dioxide measurements and related statistics are available at Los Angeles-North Main Street between 1979 and 2014. Some years in this range may not be represented.

All concentrations expressed in parts per billion.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | Nitrogen Dioxide | State Sulfur Dioxide | Hydrogen Sulfide



## Top 4 Summary: Highest 4 Daily Maximum 8-Hour Ozone Averages

### at West Los Angeles-VA Hospital

	2012		2013		2014	
	Date	8-Hr Average	Date	8-Hr Average	Date	8-Hr Average
National:						
First High:	Sep 15	0.073	May 3	0.075	Oct 5	0.094
Second High:	Sep 30	0.067	Mar 24	0.065	May 2	0.085
Third High:	Sep 22	0.066	Aug 15	0.060	May 16	0.078
Fourth High:	Oct 17	0.065	Oct 6	0.059	May 3	0.077
California:						
First High:	Sep 15	0.074	May 3	0.076	Oct 5	0.095
Second High:	Sep 30	0.068	Mar 24	0.066	May 2	0.086
Third High:	Sep 22	0.067	Aug 15	0.061	May 16	0.079
Fourth High:	Oct 17	0.066	Oct 6	0.059	May 3	0.077
National:						
# Days Above the Standard:		0		0		4
Nat'l Standard Design Value:		0.065		0.062		0.067
National Year Coverage:		97		88		92
California:						
# Days Above the Standard:		1		1		6
California Designation Value:		0.072		0.069		0.074
Expected Peak Day Concentration:		0.072		0.069		0.075
California Year Coverage:		97		88		90

#### Notes:

Eight-hour ozone averages and related statistics are available at West Los Angeles-VA Hospital between 1984 and 2014. Some years in this range may not be represented. All averages expressed in parts per million.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

#### Available Pollutants:

8-Hour Ozone | [Hourly Ozone](#) | PM2.5 | PM10 | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | State Sulfur Dioxide | Hydrogen Sulfide



## Top 4 Summary: Highest 4 Daily Maximum Hourly Ozone Measurements

### at West Los Angeles-VA Hospital

	2012		2013		2014	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Sep 30	0.093	May 3	0.088	Oct 5	0.116
Second High:	Oct 1	0.093	May 13	0.086	May 2	0.094
Third High:	Oct 29	0.086	Sep 6	0.083	May 16	0.094
Fourth High:	Sep 23	0.083	Mar 24	0.076	Oct 6	0.090
California:						
# Days Above the Standard:		0		0		1
California Designation Value:		0.09		0.08		0.09
Expected Peak Day Concentration:		0.089		0.084		0.090
National:						
# Days Above the Standard:		0		0		0
Nat'l Standard Design Value:		0.095		0.093		0.093
Year Coverage:		98		90		94

#### Notes:

Hourly ozone measurements and related statistics are available at West Los Angeles-VA Hospital between 1984 and 2014. Some years in this range may not be represented.

All concentrations expressed in parts per million.

The national 1-hour ozone standard was revoked in June 2005 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or *italics*.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

#### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)





## Top 4 Summary: Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

### at West Los Angeles-VA Hospital



	2012		2013		2014	
	Date	8-Hr Average	Date	8-Hr Average	Date	8-Hr Average
National:						
First High:	Jan 6	1.15		*		*
Second High:	Jan 1	1.15		*		*
Third High:	Jan 7	1.14		*		*
Fourth High:	Jan 11	1.12		*		*
California:						
First High:	Jan 5	1.15		*		*
Second High:	Jan 7	1.14		*		*
Third High:	Jan 11	1.12		*		*
Fourth High:	Jan 3	1.11		*		*
National:						
# Days Above the Standard:		0		0		0
California:						
# Days Above the Standard:		0		0		0
Expected Peak Day Concentration:		1.50				
Year Coverage:		39		*		*

**Notes:**

Eight-hour carbon monoxide averages and related statistics are available at West Los Angeles-VA Hospital between 1984 and 2012. Some years in this range may not be represented.

All averages expressed in parts per million.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

**Available Pollutants:**

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)



## Top 4 Summary: Highest 4 Daily Maximum Hourly Nitrogen Dioxide Measurements

### at West Los Angeles-VA Hospital

	2012		2013		2014	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Nov 15	61.3	Nov 1	51.2	Dec 23	63.9
Second High:	Oct 17	59.1	Mar 1	50.9	Jan 3	61.0
Third High:	Mar 5	56.8	Feb 26	49.6	May 15	60.0
Fourth High:	Oct 18	56.7	Dec 17	49.2	Feb 13	59.1
California:						
First High:	Nov 15	61	Nov 1	51	Dec 23	63
Second High:	Oct 17	59	Mar 1	50	Jan 3	61
Third High:	Mar 5	56	Feb 26	49	May 15	60
Fourth High:	Mar 10	56	Oct 18	49	Feb 13	59
National:						
1-Hour Standard Design Value:		56		*		*
1-Hour Standard 98th Percentile:		53.6		48.8		53.9
# Days Above the Standard:		0		0		0
Annual Standard Design Value:		13		*		13
California:						
1-Hour Std Designation Value:		70		70		60
Expected Peak Day Concentration:		68		67		60
# Days Above the Standard:		0		0		0
Annual Std Designation Value:		15		15		13
Annual Average:		*		*		13
Year Coverage:		88		72		93

#### Notes:

Hourly nitrogen dioxide measurements and related statistics are available at West Los Angeles-VA Hospital between 1984 and 2014. Some years in this range may not be represented.

All concentrations expressed in parts per billion.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

\* means there was insufficient data available to determine the value.

#### Available Pollutants:

[8-Hour Ozone](#) | [Hourly Ozone](#) | [PM2.5](#) | [PM10](#) | [Carbon Monoxide](#) | [Nitrogen Dioxide](#) | [State Sulfur Dioxide](#) | [Hydrogen Sulfide](#)

**Sub-Appendix c**

Regional Construction Emissions

CalEEMod Output Files

**Sub-Appendix c-1**

Regional Construction Emissions

Regular or Standard Construction Equipment

## Harvard Westlake Parking Structure Los Angeles-South Coast County, Winter

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	750.00	Space	1.90	300,000.00	0
User Defined Parking	0.00	User Defined Unit	1.52	59,921.00	0
User Defined Recreational	64,350.00	User Defined Unit	0.00	64,350.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2019
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Athletic Field is under land use category of User defined recreational.

Roadway and landscape are under parking user defined

Construction Phase - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment -

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on construction plan

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Trips and VMT - Overlapping phases: 1) Grading, Soil Nailing, and Shotcrete 2) Foundations/Structure, Tower/Ramp 3) Foundations/Structure, Bridge.

Assumed max of 85 concrete trips per day  
Grading -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	290.00
tblConstructionPhase	NumDays	230.00	114.00
tblConstructionPhase	NumDays	230.00	82.00
tblConstructionPhase	NumDays	230.00	165.00
tblConstructionPhase	NumDays	8.00	245.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	3/6/2018	4/12/2017
tblConstructionPhase	PhaseEndDate	1/10/2018	4/26/2017
tblConstructionPhase	PhaseEndDate	6/6/2018	7/19/2018
tblConstructionPhase	PhaseEndDate	12/26/2018	3/23/2018
tblConstructionPhase	PhaseStartDate	6/7/2017	7/14/2016
tblConstructionPhase	PhaseStartDate	4/13/2017	7/28/2016
tblConstructionPhase	PhaseStartDate	4/27/2017	6/9/2017
tblConstructionPhase	PhaseStartDate	7/20/2018	10/17/2017
tblConstructionPhase	PhaseStartDate	3/24/2018	3/26/2018
tblEnergyUse	LightingElect	0.00	3.26
tblEnergyUse	NT24E	0.00	3.26
tblEnergyUse	T24E	0.00	3.26
tblGrading	AcresOfGrading	612.50	450.00

tblGrading	MaterialExported	0.00	140,000.00
tblLandUse	LandUseSquareFeet	0.00	59,921.00
tblLandUse	LandUseSquareFeet	0.00	64,350.00
tblLandUse	LotAcreage	6.75	1.90
tblLandUse	LotAcreage	0.00	1.52
tblOffRoadEquipment	HorsePower	162.00	330.00
tblOffRoadEquipment	HorsePower	255.00	207.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	361.00	185.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00
tblTripsAndVMT	VendorTripNumber	70.00	50.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	13.6035	136.2273	88.9519	0.1830	11.1459	6.7725	17.9184	4.3514	6.4285	10.7799	0.0000	18,215.4228	18,215.4228	2.8118	0.0000	18,274.4699
2017	12.4729	124.7194	86.4321	0.1830	11.4750	6.0865	17.5615	4.4322	5.7743	10.2064	0.0000	17,965.9590	17,965.9590	2.7611	0.0000	18,023.9420
2018	6.6818	67.3002	55.3903	0.0970	0.9951	3.3668	4.3619	0.2702	3.1364	3.4066	0.0000	9,464.0855	9,464.0855	2.2109	0.0000	9,510.5147
2019	0.7886	7.6427	6.8372	0.0182	0.3478	0.3261	0.6739	0.0925	0.3000	0.3925	0.0000	1,708.8333	1,708.8333	0.4459	0.0000	1,718.1970
<b>Total</b>	<b>33.5468</b>	<b>335.8896</b>	<b>237.6115</b>	<b>0.4813</b>	<b>23.9638</b>	<b>16.5519</b>	<b>40.5157</b>	<b>9.1462</b>	<b>15.6392</b>	<b>24.7854</b>	<b>0.0000</b>	<b>47,354.3006</b>	<b>47,354.3006</b>	<b>8.2297</b>	<b>0.0000</b>	<b>47,527.1237</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	13.6035	136.2273	88.9519	0.1830	6.2448	6.7725	13.0173	2.1979	6.4285	8.6264	0.0000	18,215.4227	18,215.4227	2.8118	0.0000	18,274.4699
2017	12.4729	124.7194	86.4321	0.1830	6.5739	6.0865	12.6604	2.2787	5.7743	8.0529	0.0000	17,965.9590	17,965.9590	2.7611	0.0000	18,023.9420
2018	6.6818	67.3002	55.3903	0.0970	0.9951	3.3668	4.3619	0.2702	3.1364	3.4066	0.0000	9,464.0855	9,464.0855	2.2109	0.0000	9,510.5147
2019	0.7886	7.6427	6.8372	0.0182	0.3478	0.3261	0.6739	0.0925	0.3000	0.3925	0.0000	1,708.8333	1,708.8333	0.4459	0.0000	1,718.1970
<b>Total</b>	<b>33.5468</b>	<b>335.8896</b>	<b>237.6115</b>	<b>0.4813</b>	<b>14.1616</b>	<b>16.5519</b>	<b>30.7135</b>	<b>4.8392</b>	<b>15.6392</b>	<b>20.4784</b>	<b>0.0000</b>	<b>47,354.3005</b>	<b>47,354.3005</b>	<b>8.2297</b>	<b>0.0000</b>	<b>47,527.1237</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>40.90</b>	<b>0.00</b>	<b>24.19</b>	<b>47.09</b>	<b>0.00</b>	<b>17.38</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## 2.2 Overall Operational



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2016	6/28/2016	5	20	
2	Grading	Grading	6/29/2016	6/6/2017	5	245	
3	Soil Nailing	Building Construction	7/14/2016	4/12/2017	5	195	
4	Shotcrete	Building Construction	7/28/2016	4/26/2017	5	195	
5	Foundation/Structure	Building Construction	6/9/2017	7/19/2018	5	290	
6	Tower/Ramp	Building Construction	10/17/2017	3/23/2018	5	114	
7	Bridge	Building Construction	3/26/2018	7/17/2018	5	82	
8	Streetwork	Paving	7/18/2018	8/14/2018	5	20	
9	Sitework	Building Construction	8/15/2018	4/2/2019	5	165	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 450**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	330	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	207	0.40
Grading	Scrapers	2	8.00	185	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	84	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	96	0.37

Soil Nailing	Air Compressors	2	8.00	78	0.48
Soil Nailing	Bore/Drill Rigs	2	8.00	160	0.50
Soil Nailing	Pumps	2	8.00	84	0.74
Shotcrete	Air Compressors	2	8.00	78	0.48
Shotcrete	Pumps	2	8.00	84	0.74
Foundation/Structure	Air Compressors	1	8.00	78	0.48
Foundation/Structure	Bore/Drill Rigs	1	8.00	160	0.50
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Pumps	1	8.00	84	0.74
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	2	8.00	84	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	96	0.37
Bridge	Cranes	1	8.00	226	0.29
Streetwork	Graders	1	8.00	174	0.41
Streetwork	Paving Equipment	1	8.00	130	0.36
Streetwork	Plate Compactors	1	8.00	8	0.43
Streetwork	Rollers	1	8.00	80	0.38
Streetwork	Scrapers	1	8.00	361	0.48
Sitework	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Sitework	Tractors/Loaders/Backhoes	1	8.00	84	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Tower/Ramp	0			0.00	14.70	6.90											
Bridge	1	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT							
Streetwork	5	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT							
Sitework	2	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT							

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.5788	17.1258	12.8976	0.0120		0.8960	0.8960		0.8243	0.8243		1,247.1093	1,247.1093	0.3762		1,255.0089
<b>Total</b>	<b>1.5788</b>	<b>17.1258</b>	<b>12.8976</b>	<b>0.0120</b>	<b>6.0221</b>	<b>0.8960</b>	<b>6.9181</b>	<b>3.3102</b>	<b>0.8243</b>	<b>4.1346</b>		<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>		<b>1,255.0089</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0232	0.0311	0.3257	6.9000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		58.0016	58.0016	3.3500e-003		58.0718
<b>Total</b>	<b>0.0232</b>	<b>0.0311</b>	<b>0.3257</b>	<b>6.9000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>58.0016</b>	<b>58.0016</b>	<b>3.3500e-003</b>		<b>58.0718</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000				0.0000
Off-Road	1.5788	17.1258	12.8976	0.0120		0.8960	0.8960		0.8243	0.8243	0.0000	1,247.1093	1,247.1093	0.3762			1,255.0089
<b>Total</b>	<b>1.5788</b>	<b>17.1258</b>	<b>12.8976</b>	<b>0.0120</b>	<b>2.3486</b>	<b>0.8960</b>	<b>3.2446</b>	<b>1.2910</b>	<b>0.8243</b>	<b>2.1153</b>	<b>0.0000</b>	<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>			<b>1,255.0089</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0232	0.0311	0.3257	6.9000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		58.0016	58.0016	3.3500e-003			58.0718
<b>Total</b>	<b>0.0232</b>	<b>0.0311</b>	<b>0.3257</b>	<b>6.9000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>58.0016</b>	<b>58.0016</b>	<b>3.3500e-003</b>			<b>58.0718</b>

**3.3 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000				0.0000
Off-Road	6.3232	71.5648	31.4699	0.0592		3.5217	3.5217		3.2399	3.2399		6,153.6608	6,153.6608	1.8562			6,192.6402
<b>Total</b>	<b>6.3232</b>	<b>71.5648</b>	<b>31.4699</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.5217</b>	<b>11.5562</b>	<b>3.5303</b>	<b>3.2399</b>	<b>6.7703</b>		<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>			<b>6,192.6402</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.3429	20.8927	16.6009	0.0537	2.0554	0.2996	2.3550	0.5401	0.2756	0.8156		5,406.6052	5,406.6052	0.0406			5,407.4574
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201			348.4308
<b>Total</b>	<b>1.4819</b>	<b>21.0792</b>	<b>18.5551</b>	<b>0.0578</b>	<b>2.3908</b>	<b>0.3027</b>	<b>2.6935</b>	<b>0.6290</b>	<b>0.2785</b>	<b>0.9075</b>		<b>5,754.6146</b>	<b>5,754.6146</b>	<b>0.0607</b>			<b>5,755.8883</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000
Off-Road	6.3232	71.5648	31.4699	0.0592		3.5217	3.5217		3.2399	3.2399	0.0000	6,153.6608	6,153.6608	1.8562		6,192.6402
<b>Total</b>	<b>6.3232</b>	<b>71.5648</b>	<b>31.4699</b>	<b>0.0592</b>	<b>3.1335</b>	<b>3.5217</b>	<b>6.6551</b>	<b>1.3768</b>	<b>3.2399</b>	<b>4.6168</b>	<b>0.0000</b>	<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>		<b>6,192.6402</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3429	20.8927	16.6009	0.0537	2.0554	0.2996	2.3550	0.5401	0.2756	0.8156		5,406.6052	5,406.6052	0.0406		5,407.4574
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>1.4819</b>	<b>21.0792</b>	<b>18.5551</b>	<b>0.0578</b>	<b>2.3908</b>	<b>0.3027</b>	<b>2.6935</b>	<b>0.6290</b>	<b>0.2785</b>	<b>0.9075</b>		<b>5,754.6146</b>	<b>5,754.6146</b>	<b>0.0607</b>		<b>5,755.8883</b>

**3.3 Grading - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000			0.0000
Off-Road	5.9108	66.1724	30.4275	0.0592		3.2405	3.2405		2.9812	2.9812		6,055.5587	6,055.5587	1.8554		6,094.5224



<b>Total</b>	<b>5.9108</b>	<b>66.1724</b>	<b>30.4275</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.2405</b>	<b>11.2750</b>	<b>3.5303</b>	<b>2.9812</b>	<b>6.5116</b>		<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>
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**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2639	19.1889	16.0164	0.0536	2.3845	0.2736	2.6581	0.6209	0.2517	0.8726		5,318.8052	5,318.8052	0.0398		5,319.6413
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>1.3886</b>	<b>19.3575</b>	<b>17.7798</b>	<b>0.0577</b>	<b>2.7198</b>	<b>0.2767</b>	<b>2.9965</b>	<b>0.7098</b>	<b>0.2545</b>	<b>0.9643</b>		<b>5,653.7659</b>	<b>5,653.7659</b>	<b>0.0584</b>		<b>5,654.9915</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000
Off-Road	5.9108	66.1724	30.4275	0.0592		3.2405	3.2405		2.9812	2.9812	0.0000	6,055.5587	6,055.5587	1.8554		6,094.5224
<b>Total</b>	<b>5.9108</b>	<b>66.1724</b>	<b>30.4275</b>	<b>0.0592</b>	<b>3.1335</b>	<b>3.2405</b>	<b>6.3739</b>	<b>1.3768</b>	<b>2.9812</b>	<b>4.3581</b>	<b>0.0000</b>	<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2639	19.1889	16.0164	0.0536	2.3845	0.2736	2.6581	0.6209	0.2517	0.8726		5,318.8052	5,318.8052	0.0398		5,319.6413
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>1.3886</b>	<b>19.3575</b>	<b>17.7798</b>	<b>0.0577</b>	<b>2.7198</b>	<b>0.2767</b>	<b>2.9965</b>	<b>0.7098</b>	<b>0.2545</b>	<b>0.9643</b>		<b>5,653.7659</b>	<b>5,653.7659</b>	<b>0.0584</b>		<b>5,654.9915</b>

### 3.4 Soil Nailing - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1260	26.3481	21.2801	0.0350		1.6938	1.6938		1.6572	1.6572		3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>3.1260</b>	<b>26.3481</b>	<b>21.2801</b>	<b>0.0350</b>		<b>1.6938</b>	<b>1.6938</b>		<b>1.6572</b>	<b>1.6572</b>		<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2691	0.3714	6.5000e-004	0.0187	4.1500e-003	0.0229	5.3200e-003	3.8100e-003	9.1400e-003		65.5176	65.5176	5.0000e-004		65.5281
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>0.1669</b>	<b>0.4556</b>	<b>2.3255</b>	<b>4.7600e-003</b>	<b>0.3540</b>	<b>7.3200e-003</b>	<b>0.3614</b>	<b>0.0943</b>	<b>6.7200e-003</b>	<b>0.1010</b>		<b>413.5270</b>	<b>413.5270</b>	<b>0.0206</b>		<b>413.9589</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1260	26.3481	21.2801	0.0350		1.6938	1.6938		1.6572	1.6572	0.0000	3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>3.1260</b>	<b>26.3481</b>	<b>21.2801</b>	<b>0.0350</b>		<b>1.6938</b>	<b>1.6938</b>		<b>1.6572</b>	<b>1.6572</b>	<b>0.0000</b>	<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0279	0.2691	0.3714	6.5000e-004	0.0187	4.1500e-003	0.0229	5.3200e-003	3.8100e-003	9.1400e-003		65.5176	65.5176	5.0000e-004		65.5281
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308

<b>Total</b>	<b>0.1669</b>	<b>0.4556</b>	<b>2.3255</b>	<b>4.7600e-003</b>	<b>0.3540</b>	<b>7.3200e-003</b>	<b>0.3614</b>	<b>0.0943</b>	<b>6.7200e-003</b>	<b>0.1010</b>		<b>413.5270</b>	<b>413.5270</b>	<b>0.0206</b>		<b>413.9589</b>
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### 3.4 Soil Nailing - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7732	23.3073	21.1142	0.0350		1.4620	1.4620		1.4323	1.4323		3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>2.7732</b>	<b>23.3073</b>	<b>21.1142</b>	<b>0.0350</b>		<b>1.4620</b>	<b>1.4620</b>		<b>1.4323</b>	<b>1.4323</b>		<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0254	0.2452	0.3522	6.5000e-004	0.0187	3.6900e-003	0.0224	5.3300e-003	3.4000e-003	8.7200e-003		64.4702	64.4702	4.8000e-004		64.4803
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.1500</b>	<b>0.4139</b>	<b>2.1155</b>	<b>4.7600e-003</b>	<b>0.3541</b>	<b>6.7300e-003</b>	<b>0.3608</b>	<b>0.0943</b>	<b>6.2000e-003</b>	<b>0.1005</b>		<b>399.4308</b>	<b>399.4308</b>	<b>0.0190</b>		<b>399.8305</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7732	23.3073	21.1142	0.0350		1.4620	1.4620		1.4323	1.4323	0.0000	3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>2.7732</b>	<b>23.3073</b>	<b>21.1142</b>	<b>0.0350</b>		<b>1.4620</b>	<b>1.4620</b>		<b>1.4323</b>	<b>1.4323</b>	<b>0.0000</b>	<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0254	0.2452	0.3522	6.5000e-004	0.0187	3.6900e-003	0.0224	5.3300e-003	3.4000e-003	8.7200e-003		64.4702	64.4702	4.8000e-004		64.4803
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.1500</b>	<b>0.4139</b>	<b>2.1155</b>	<b>4.7600e-003</b>	<b>0.3541</b>	<b>6.7300e-003</b>	<b>0.3608</b>	<b>0.0943</b>	<b>6.2000e-003</b>	<b>0.1005</b>		<b>399.4308</b>	<b>399.4308</b>	<b>0.0190</b>		<b>399.8305</b>

**3.5 Shotcrete - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	2.3201	16.1445	12.7484	0.0211		1.2369	1.2369		1.2369	1.2369		1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>2.3201</b>	<b>16.1445</b>	<b>12.7484</b>	<b>0.0211</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0465	0.4485	0.6189	1.0900e-003	0.0312	6.9100e-003	0.0381	8.8700e-003	6.3600e-003	0.0152		109.1961	109.1961	8.3000e-004		109.2135
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>0.1855</b>	<b>0.6350</b>	<b>2.5730</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>0.0101</b>	<b>0.3766</b>	<b>0.0978</b>	<b>9.2700e-003</b>	<b>0.1071</b>		<b>457.2054</b>	<b>457.2054</b>	<b>0.0209</b>		<b>457.6444</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3201	16.1445	12.7484	0.0211		1.2369	1.2369		1.2369	1.2369	0.0000	1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>2.3201</b>	<b>16.1445</b>	<b>12.7484</b>	<b>0.0211</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1.2369</b>	<b>1.2369</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0465	0.4485	0.6189	1.0900e-003	0.0312	6.9100e-003	0.0381	8.8700e-003	6.3600e-003	0.0152		109.1961	109.1961	8.3000e-004			109.2135
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201			348.4308
<b>Total</b>	<b>0.1855</b>	<b>0.6350</b>	<b>2.5730</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>0.0101</b>	<b>0.3766</b>	<b>0.0978</b>	<b>9.2700e-003</b>	<b>0.1071</b>		<b>457.2054</b>	<b>457.2054</b>	<b>0.0209</b>			<b>457.6444</b>

**3.5 Shotcrete - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.0833	14.8911	12.6448	0.0211		1.0915	1.0915		1.0915	1.0915		1,996.5973	1,996.5973	0.1867			2,000.5175
<b>Total</b>	<b>2.0833</b>	<b>14.8911</b>	<b>12.6448</b>	<b>0.0211</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>			<b>2,000.5175</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0423	0.4087	0.5870	1.0900e-003	0.0312	6.1600e-003	0.0374	8.8800e-003	5.6600e-003	0.0145		107.4503	107.4503	8.1000e-004		107.4672
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.1670</b>	<b>0.5773</b>	<b>2.3504</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>9.2000e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4600e-003</b>	<b>0.1063</b>		<b>442.4110</b>	<b>442.4110</b>	<b>0.0194</b>		<b>442.8174</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0833	14.8911	12.6448	0.0211		1.0915	1.0915		1.0915	1.0915	0.0000	1,996.5973	1,996.5973	0.1867		2,000.5175
<b>Total</b>	<b>2.0833</b>	<b>14.8911</b>	<b>12.6448</b>	<b>0.0211</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1.0915</b>	<b>1.0915</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>		<b>2,000.5175</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000



Vendor	0.0423	0.4087	0.5870	1.0900e-003	0.0312	6.1600e-003	0.0374	8.8800e-003	5.6600e-003	0.0145		107.4503	107.4503	8.1000e-004		107.4672
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.1670</b>	<b>0.5773</b>	<b>2.3504</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>9.2000e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4600e-003</b>	<b>0.1063</b>		<b>442.4110</b>	<b>442.4110</b>	<b>0.0194</b>		<b>442.8174</b>

### 3.6 Foundation/Structure - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216		4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>4.1360</b>	<b>41.8050</b>	<b>29.4873</b>	<b>0.0493</b>		<b>2.3673</b>	<b>2.3673</b>		<b>2.2216</b>	<b>2.2216</b>		<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4231	4.0867	5.8704	0.0109	0.3120	0.0616	0.3735	0.0888	0.0566	0.1454		1,074.5032	1,074.5032	8.0600e-003		1,074.6724
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.5477</b>	<b>4.2554</b>	<b>7.6337</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0646</b>	<b>0.7119</b>	<b>0.1777</b>	<b>0.0594</b>	<b>0.2371</b>		<b>1,409.4638</b>	<b>1,409.4638</b>	<b>0.0266</b>		<b>1,410.0226</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216	0.0000	4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>4.1360</b>	<b>41.8050</b>	<b>29.4873</b>	<b>0.0493</b>		<b>2.3673</b>	<b>2.3673</b>		<b>2.2216</b>	<b>2.2216</b>	<b>0.0000</b>	<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4231	4.0867	5.8704	0.0109	0.3120	0.0616	0.3735	0.0888	0.0566	0.1454		1,074.5032	1,074.5032	8.0600e-003		1,074.6724
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.5477</b>	<b>4.2554</b>	<b>7.6337</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0646</b>	<b>0.7119</b>	<b>0.1777</b>	<b>0.0594</b>	<b>0.2371</b>		<b>1,409.4638</b>	<b>1,409.4638</b>	<b>0.0266</b>		<b>1,410.0226</b>

**3.6 Foundation/Structure - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5526	35.4556	28.3748	0.0492		1.9738	1.9738		1.8540	1.8540		4,891.8621	4,891.8621	1.2949		4,919.0554
<b>Total</b>	<b>3.5526</b>	<b>35.4556</b>	<b>28.3748</b>	<b>0.0492</b>		<b>1.9738</b>	<b>1.9738</b>		<b>1.8540</b>	<b>1.8540</b>		<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3970	3.7556	5.6450	0.0109	0.3120	0.0580	0.3700	0.0888	0.0533	0.1421		1,056.7394	1,056.7394	8.0200e-003		1,056.9078
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.5089</b>	<b>3.9087</b>	<b>7.2402</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0609</b>	<b>0.7082</b>	<b>0.1777</b>	<b>0.0560</b>	<b>0.2338</b>		<b>1,379.4169</b>	<b>1,379.4169</b>	<b>0.0253</b>		<b>1,379.9472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5526	35.4556	28.3748	0.0492		1.9738	1.9738		1.8540	1.8540	0.0000	4,891.8621	4,891.8621	1.2949		4,919.0554

<b>Total</b>	<b>3.5526</b>	<b>35.4556</b>	<b>28.3748</b>	<b>0.0492</b>		<b>1.9738</b>	<b>1.9738</b>		<b>1.8540</b>	<b>1.8540</b>	<b>0.0000</b>	<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3970	3.7556	5.6450	0.0109	0.3120	0.0580	0.3700	0.0888	0.0533	0.1421		1,056.7394	1,056.7394	8.0200e-003		1,056.9078
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.5089</b>	<b>3.9087</b>	<b>7.2402</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0609</b>	<b>0.7082</b>	<b>0.1777</b>	<b>0.0560</b>	<b>0.2338</b>		<b>1,379.4169</b>	<b>1,379.4169</b>	<b>0.0253</b>		<b>1,379.9472</b>

**3.7 Tower/Ramp - 2017**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**3.7 Tower/Ramp - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

### 3.8 Bridge - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5584	6.6732	2.4673	5.6400e-003		0.2888	0.2888		0.2657	0.2657		568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.5584</b>	<b>6.6732</b>	<b>2.4673</b>	<b>5.6400e-003</b>		<b>0.2888</b>	<b>0.2888</b>		<b>0.2657</b>	<b>0.2657</b>		<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5584	6.6732	2.4673	5.6400e-003		0.2888	0.2888		0.2657	0.2657	0.0000	568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.5584</b>	<b>6.6732</b>	<b>2.4673</b>	<b>5.6400e-003</b>		<b>0.2888</b>	<b>0.2888</b>		<b>0.2657</b>	<b>0.2657</b>	<b>0.0000</b>	<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

### 3.9 Streetwork - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4925	27.6327	17.9542	0.0282		1.3269	1.3269		1.2215	1.2215		2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4925</b>	<b>27.6327</b>	<b>17.9542</b>	<b>0.0282</b>		<b>1.3269</b>	<b>1.3269</b>		<b>1.2215</b>	<b>1.2215</b>		<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

#### Mitigated Construction On-Site



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4925	27.6327	17.9542	0.0282		1.3269	1.3269		1.2215	1.2215	0.0000	2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4925</b>	<b>27.6327</b>	<b>17.9542</b>	<b>0.0282</b>		<b>1.3269</b>	<b>1.3269</b>		<b>1.2215</b>	<b>1.2215</b>	<b>0.0000</b>	<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

### 3.10 Sitework - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7365	8.3553	5.3155	0.0137		0.3713	0.3713		0.3416	0.3416		1,378.3741	1,378.3741	0.4291		1,387.3854

<b>Total</b>	<b>0.7365</b>	<b>8.3553</b>	<b>5.3155</b>	<b>0.0137</b>		<b>0.3713</b>	<b>0.3713</b>		<b>0.3416</b>	<b>0.3416</b>		<b>1,378.374</b>	<b>1,378.3741</b>	<b>0.4291</b>		<b>1,387.385</b>
												<b>1</b>				<b>4</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7365	8.3553	5.3155	0.0137		0.3713	0.3713		0.3416	0.3416	0.0000	1,378.374	1,378.3741	0.4291		1,387.385
												<b>1</b>				<b>4</b>
<b>Total</b>	<b>0.7365</b>	<b>8.3553</b>	<b>5.3155</b>	<b>0.0137</b>		<b>0.3713</b>	<b>0.3713</b>		<b>0.3416</b>	<b>0.3416</b>	<b>0.0000</b>	<b>1,378.374</b>	<b>1,378.3741</b>	<b>0.4291</b>		<b>1,387.385</b>
												<b>1</b>				<b>4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004			42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172			323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>			<b>365.3157</b>

**3.10 Sitework - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.6708	7.3638	5.1579	0.0137		0.3210	0.3210		0.2953	0.2953		1,357.4181	1,357.4181	0.4295			1,366.4370
<b>Total</b>	<b>0.6708</b>	<b>7.3638</b>	<b>5.1579</b>	<b>0.0137</b>		<b>0.3210</b>	<b>0.3210</b>		<b>0.2953</b>	<b>0.2953</b>		<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>			<b>1,366.4370</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0150	0.1385	0.2187	4.3000e-004	0.0125	2.2000e-003	0.0147	3.5500e-003	2.0300e-003	5.5800e-003		41.4007	41.4007	3.1000e-004	41.4073	
Worker	0.1028	0.1403	1.4606	4.0900e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		310.0145	310.0145	0.0161	310.3527	
<b>Total</b>	<b>0.1178</b>	<b>0.2789</b>	<b>1.6793</b>	<b>4.5200e-003</b>	<b>0.3478</b>	<b>5.0700e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6900e-003</b>	<b>0.0972</b>		<b>351.4153</b>	<b>351.4153</b>	<b>0.0164</b>	<b>351.7601</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6708	7.3638	5.1579	0.0137		0.3210	0.3210		0.2953	0.2953	0.0000	1,357.4181	1,357.4181	0.4295		1,366.4370
<b>Total</b>	<b>0.6708</b>	<b>7.3638</b>	<b>5.1579</b>	<b>0.0137</b>		<b>0.3210</b>	<b>0.3210</b>		<b>0.2953</b>	<b>0.2953</b>	<b>0.0000</b>	<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>		<b>1,366.4370</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0150	0.1385	0.2187	4.3000e-004	0.0125	2.2000e-003	0.0147	3.5500e-003	2.0300e-003	5.5800e-003		41.4007	41.4007	3.1000e-004		41.4073

Worker	0.1028	0.1403	1.4606	4.0900e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		310.0145	310.0145	0.0161		310.3527
Total	0.1178	0.2789	1.6793	4.5200e-003	0.3478	5.0700e-003	0.3529	0.0925	4.6900e-003	0.0972		351.4153	351.4153	0.0164		351.7601

## Harvard Westlake Parking Structure Los Angeles-South Coast County, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	750.00	Space	1.90	300,000.00	0
User Defined Parking	0.00	User Defined Unit	1.52	59,921.00	0
User Defined Recreational	64,350.00	User Defined Unit	0.00	64,350.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2019
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Athletic Field is under land use category of User defined recreational.

Roadway and landscape are under parking user defined

Construction Phase - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment -

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on construction plan

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Trips and VMT - Overlapping phases: 1) Grading, Soil Nailing, and Shotcrete 2) Foundations/Structure, Tower/Ramp 3) Foundations/Structure, Bridge.

Assumed max of 95 concrete trips per day.

Grading -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	290.00
tblConstructionPhase	NumDays	230.00	114.00
tblConstructionPhase	NumDays	230.00	82.00
tblConstructionPhase	NumDays	230.00	165.00
tblConstructionPhase	NumDays	8.00	245.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	3/6/2018	4/12/2017
tblConstructionPhase	PhaseEndDate	1/10/2018	4/26/2017
tblConstructionPhase	PhaseEndDate	6/6/2018	7/19/2018
tblConstructionPhase	PhaseEndDate	12/26/2018	3/23/2018
tblConstructionPhase	PhaseStartDate	6/7/2017	7/14/2016
tblConstructionPhase	PhaseStartDate	4/13/2017	7/28/2016
tblConstructionPhase	PhaseStartDate	4/27/2017	6/9/2017
tblConstructionPhase	PhaseStartDate	7/20/2018	10/17/2017
tblConstructionPhase	PhaseStartDate	3/24/2018	3/26/2018
tblEnergyUse	LightingElect	0.00	3.26
tblEnergyUse	NT24E	0.00	3.26
tblEnergyUse	T24E	0.00	3.26
tblGrading	AcresOfGrading	612.50	450.00

tblGrading	MaterialExported	0.00	140,000.00
tblLandUse	LandUseSquareFeet	0.00	59,921.00
tblLandUse	LandUseSquareFeet	0.00	64,350.00
tblLandUse	LotAcreage	6.75	1.90
tblLandUse	LotAcreage	0.00	1.52
tblOffRoadEquipment	HorsePower	162.00	330.00
tblOffRoadEquipment	HorsePower	255.00	207.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	361.00	185.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00



tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00
tblTripsAndVMT	VendorTripNumber	70.00	50.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	13.5056	135.4451	86.8778	0.1839	11.1459	6.7716	17.9175	4.3514	6.4277	10.7791	0.0000	18,291.6992	18,291.6992	2.8112	0.0000	18,350.7350
2017	12.3884	124.0031	84.3306	0.1838	11.4750	6.0858	17.5608	4.4322	5.7736	10.2058	0.0000	18,039.7688	18,039.7688	2.7605	0.0000	18,097.7401
2018	6.6386	67.1783	54.4970	0.0976	0.9951	3.3662	4.3614	0.2702	3.1359	3.4061	0.0000	9,511.8113	9,511.8113	2.2107	0.0000	9,558.2353
2019	0.7839	7.6257	6.9069	0.0185	0.3478	0.3260	0.6738	0.0925	0.3000	0.3925	0.0000	1,727.6930	1,727.6930	0.4459	0.0000	1,737.0565
<b>Total</b>	<b>33.3166</b>	<b>334.2522</b>	<b>232.6124</b>	<b>0.4838</b>	<b>23.9638</b>	<b>16.5497</b>	<b>40.5135</b>	<b>9.1462</b>	<b>15.6372</b>	<b>24.7834</b>	<b>0.0000</b>	<b>47,570.9723</b>	<b>47,570.9723</b>	<b>8.2283</b>	<b>0.0000</b>	<b>47,743.7668</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	13.5056	135.4451	86.8778	0.1839	6.2448	6.7716	13.0164	2.1979	6.4277	8.6256	0.0000	18,291.6992	18,291.6992	2.8112	0.0000	18,350.7350
2017	12.3884	124.0031	84.3306	0.1838	6.5739	6.0858	12.6597	2.2787	5.7736	8.0523	0.0000	18,039.7688	18,039.7688	2.7605	0.0000	18,097.7401
2018	6.6386	67.1783	54.4970	0.0976	0.9951	3.3662	4.3614	0.2702	3.1359	3.4061	0.0000	9,511.8113	9,511.8113	2.2107	0.0000	9,558.2353
2019	0.7839	7.6257	6.9069	0.0185	0.3478	0.3260	0.6738	0.0925	0.3000	0.3925	0.0000	1,727.6930	1,727.6930	0.4459	0.0000	1,737.0565
<b>Total</b>	<b>33.3166</b>	<b>334.2522</b>	<b>232.6124</b>	<b>0.4838</b>	<b>14.1616</b>	<b>16.5497</b>	<b>30.7113</b>	<b>4.8392</b>	<b>15.6372</b>	<b>20.4764</b>	<b>0.0000</b>	<b>47,570.9723</b>	<b>47,570.9723</b>	<b>8.2283</b>	<b>0.0000</b>	<b>47,743.7668</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>40.90</b>	<b>0.00</b>	<b>24.19</b>	<b>47.09</b>	<b>0.00</b>	<b>17.38</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## 2.2 Overall Operational



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2016	6/28/2016	5	20	
2	Grading	Grading	6/29/2016	6/6/2017	5	245	
3	Soil Nailing	Building Construction	7/14/2016	4/12/2017	5	195	
4	Shotcrete	Building Construction	7/28/2016	4/26/2017	5	195	
5	Foundation/Structure	Building Construction	6/9/2017	7/19/2018	5	290	
6	Tower/Ramp	Building Construction	10/17/2017	3/23/2018	5	114	
7	Bridge	Building Construction	3/26/2018	7/17/2018	5	82	
8	Streetwork	Paving	7/18/2018	8/14/2018	5	20	
9	Sitework	Building Construction	8/15/2018	4/2/2019	5	165	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 450

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	330	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	207	0.40
Grading	Scrapers	2	8.00	185	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	84	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	96	0.37

Soil Nailing	Air Compressors	2	8.00	78	0.48
Soil Nailing	Bore/Drill Rigs	2	8.00	160	0.50
Soil Nailing	Pumps	2	8.00	84	0.74
Shotcrete	Air Compressors	2	8.00	78	0.48
Shotcrete	Pumps	2	8.00	84	0.74
Foundation/Structure	Air Compressors	1	8.00	78	0.48
Foundation/Structure	Bore/Drill Rigs	1	8.00	160	0.50
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Pumps	1	8.00	84	0.74
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	2	8.00	84	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	96	0.37
Bridge	Cranes	1	8.00	226	0.29
Streetwork	Graders	1	8.00	174	0.41
Streetwork	Paving Equipment	1	8.00	130	0.36
Streetwork	Plate Compactors	1	8.00	8	0.43
Streetwork	Rollers	1	8.00	80	0.38
Streetwork	Scrapers	1	8.00	361	0.48
Sitework	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Sitework	Tractors/Loaders/Backhoes	1	8.00	84	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Tower/Ramp	0				0.00	14.70	6.90										
Bridge	1	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT							
Streetwork	5	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT							
Sitework	2	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT							

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000				0.0000
Off-Road	1.5788	17.1258	12.8976	0.0120		0.8960	0.8960		0.8243	0.8243		1,247.1093	1,247.1093	0.3762			1,255.0089
<b>Total</b>	<b>1.5788</b>	<b>17.1258</b>	<b>12.8976</b>	<b>0.0120</b>	<b>6.0221</b>	<b>0.8960</b>	<b>6.9181</b>	<b>3.3102</b>	<b>0.8243</b>	<b>4.1346</b>		<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>			<b>1,255.0089</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Worker	0.0223	0.0280	0.3469	7.3000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		61.4511	61.4511	3.3500e-003		61.5213
<b>Total</b>	<b>0.0223</b>	<b>0.0280</b>	<b>0.3469</b>	<b>7.3000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>61.4511</b>	<b>61.4511</b>	<b>3.3500e-003</b>		<b>61.5213</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000				0.0000
Off-Road	1.5788	17.1258	12.8976	0.0120		0.8960	0.8960		0.8243	0.8243	0.0000	1,247.1093	1,247.1093	0.3762			1,255.0089
<b>Total</b>	<b>1.5788</b>	<b>17.1258</b>	<b>12.8976</b>	<b>0.0120</b>	<b>2.3486</b>	<b>0.8960</b>	<b>3.2446</b>	<b>1.2910</b>	<b>0.8243</b>	<b>2.1153</b>	<b>0.0000</b>	<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>			<b>1,255.0089</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0223	0.0280	0.3469	7.3000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		61.4511	61.4511	3.3500e-003			61.5213
<b>Total</b>	<b>0.0223</b>	<b>0.0280</b>	<b>0.3469</b>	<b>7.3000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>61.4511</b>	<b>61.4511</b>	<b>3.3500e-003</b>			<b>61.5213</b>

**3.3 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000				0.0000
Off-Road	6.3232	71.5648	31.4699	0.0592		3.5217	3.5217		3.2399	3.2399		6,153.6608	6,153.6608	1.8562			6,192.6402
<b>Total</b>	<b>6.3232</b>	<b>71.5648</b>	<b>31.4699</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.5217</b>	<b>11.5562</b>	<b>3.5303</b>	<b>3.2399</b>	<b>6.7703</b>		<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>			<b>6,192.6402</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.2682	20.1831	14.3229	0.0538	2.0554	0.2988	2.3543	0.5401	0.2749	0.8149		5,419.3277	5,419.3277	0.0401			5,420.1693
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201			369.1279
<b>Total</b>	<b>1.4018</b>	<b>20.3513</b>	<b>16.4039</b>	<b>0.0581</b>	<b>2.3908</b>	<b>0.3020</b>	<b>2.6928</b>	<b>0.6290</b>	<b>0.2778</b>	<b>0.9068</b>		<b>5,788.0341</b>	<b>5,788.0341</b>	<b>0.0601</b>			<b>5,789.2972</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000
Off-Road	6.3232	71.5648	31.4699	0.0592		3.5217	3.5217		3.2399	3.2399	0.0000	6,153.6608	6,153.6608	1.8562		6,192.6402
<b>Total</b>	<b>6.3232</b>	<b>71.5648</b>	<b>31.4699</b>	<b>0.0592</b>	<b>3.1335</b>	<b>3.5217</b>	<b>6.6551</b>	<b>1.3768</b>	<b>3.2399</b>	<b>4.6168</b>	<b>0.0000</b>	<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>		<b>6,192.6402</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2682	20.1831	14.3229	0.0538	2.0554	0.2988	2.3543	0.5401	0.2749	0.8149		5,419.3277	5,419.3277	0.0401		5,420.1693
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>1.4018</b>	<b>20.3513</b>	<b>16.4039</b>	<b>0.0581</b>	<b>2.3908</b>	<b>0.3020</b>	<b>2.6928</b>	<b>0.6290</b>	<b>0.2778</b>	<b>0.9068</b>		<b>5,788.0341</b>	<b>5,788.0341</b>	<b>0.0601</b>		<b>5,789.2972</b>

**3.3 Grading - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000			0.0000
Off-Road	5.9108	66.1724	30.4275	0.0592		3.2405	3.2405		2.9812	2.9812		6,055.5587	6,055.5587	1.8554		6,094.5224

<b>Total</b>	<b>5.9108</b>	<b>66.1724</b>	<b>30.4275</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.2405</b>	<b>11.2750</b>	<b>3.5303</b>	<b>2.9812</b>	<b>6.5116</b>		<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>
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**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1992	18.5379	13.7239	0.0537	2.3845	0.2730	2.6575	0.6209	0.2512	0.8720		5,331.3295	5,331.3295	0.0393		5,332.1546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>1.3193</b>	<b>18.6900</b>	<b>15.6095</b>	<b>0.0581</b>	<b>2.7198</b>	<b>0.2761</b>	<b>2.9959</b>	<b>0.7098</b>	<b>0.2540</b>	<b>0.9637</b>		<b>5,686.2377</b>	<b>5,686.2377</b>	<b>0.0578</b>		<b>5,687.4524</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000
Off-Road	5.9108	66.1724	30.4275	0.0592		3.2405	3.2405		2.9812	2.9812	0.0000	6,055.5587	6,055.5587	1.8554		6,094.5224
<b>Total</b>	<b>5.9108</b>	<b>66.1724</b>	<b>30.4275</b>	<b>0.0592</b>	<b>3.1335</b>	<b>3.2405</b>	<b>6.3739</b>	<b>1.3768</b>	<b>2.9812</b>	<b>4.3581</b>	<b>0.0000</b>	<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1992	18.5379	13.7239	0.0537	2.3845	0.2730	2.6575	0.6209	0.2512	0.8720		5,331.3295	5,331.3295	0.0393		5,332.1546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>1.3193</b>	<b>18.6900</b>	<b>15.6095</b>	<b>0.0581</b>	<b>2.7198</b>	<b>0.2761</b>	<b>2.9959</b>	<b>0.7098</b>	<b>0.2540</b>	<b>0.9637</b>		<b>5,686.2377</b>	<b>5,686.2377</b>	<b>0.0578</b>		<b>5,687.4524</b>

### 3.4 Soil Nailing - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1260	26.3481	21.2801	0.0350		1.6938	1.6938		1.6572	1.6572		3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>3.1260</b>	<b>26.3481</b>	<b>21.2801</b>	<b>0.0350</b>		<b>1.6938</b>	<b>1.6938</b>		<b>1.6572</b>	<b>1.6572</b>		<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0253	0.2625	0.3050	6.6000e-004	0.0187	4.1000e-003	0.0228	5.3200e-003	3.7700e-003	9.1000e-003		66.0662	66.0662	4.8000e-004		66.0764
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>0.1589</b>	<b>0.4307</b>	<b>2.3861</b>	<b>5.0200e-003</b>	<b>0.3540</b>	<b>7.2700e-003</b>	<b>0.3613</b>	<b>0.0943</b>	<b>6.6800e-003</b>	<b>0.1010</b>		<b>434.7726</b>	<b>434.7726</b>	<b>0.0206</b>		<b>435.2043</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1260	26.3481	21.2801	0.0350		1.6938	1.6938		1.6572	1.6572	0.0000	3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>3.1260</b>	<b>26.3481</b>	<b>21.2801</b>	<b>0.0350</b>		<b>1.6938</b>	<b>1.6938</b>		<b>1.6572</b>	<b>1.6572</b>	<b>0.0000</b>	<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0253	0.2625	0.3050	6.6000e-004	0.0187	4.1000e-003	0.0228	5.3200e-003	3.7700e-003	9.1000e-003		66.0662	66.0662	4.8000e-004		66.0764
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279

Total	0.1589	0.4307	2.3861	5.0200e-003	0.3540	7.2700e-003	0.3613	0.0943	6.6800e-003	0.1010		434.7726	434.7726	0.0206		435.2043
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### 3.4 Soil Nailing - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7732	23.3073	21.1142	0.0350		1.4620	1.4620		1.4323	1.4323		3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>2.7732</b>	<b>23.3073</b>	<b>21.1142</b>	<b>0.0350</b>		<b>1.4620</b>	<b>1.4620</b>		<b>1.4323</b>	<b>1.4323</b>		<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0231	0.2393	0.2864	6.6000e-004	0.0187	3.6600e-003	0.0224	5.3300e-003	3.3600e-003	8.6900e-003		65.0112	65.0112	4.7000e-004		65.0210
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.1432</b>	<b>0.3914</b>	<b>2.1719</b>	<b>5.0200e-003</b>	<b>0.3541</b>	<b>6.7000e-003</b>	<b>0.3607</b>	<b>0.0943</b>	<b>6.1600e-003</b>	<b>0.1004</b>		<b>419.9194</b>	<b>419.9194</b>	<b>0.0190</b>		<b>420.3189</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7732	23.3073	21.1142	0.0350		1.4620	1.4620		1.4323	1.4323	0.0000	3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>2.7732</b>	<b>23.3073</b>	<b>21.1142</b>	<b>0.0350</b>		<b>1.4620</b>	<b>1.4620</b>		<b>1.4323</b>	<b>1.4323</b>	<b>0.0000</b>	<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0231	0.2393	0.2864	6.6000e-004	0.0187	3.6600e-003	0.0224	5.3300e-003	3.3600e-003	8.6900e-003		65.0112	65.0112	4.7000e-004		65.0210
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.1432</b>	<b>0.3914</b>	<b>2.1719</b>	<b>5.0200e-003</b>	<b>0.3541</b>	<b>6.7000e-003</b>	<b>0.3607</b>	<b>0.0943</b>	<b>6.1600e-003</b>	<b>0.1004</b>		<b>419.9194</b>	<b>419.9194</b>	<b>0.0190</b>		<b>420.3189</b>

**3.5 Shotcrete - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	2.3201	16.1445	12.7484	0.0211		1.2369	1.2369		1.2369	1.2369		1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>2.3201</b>	<b>16.1445</b>	<b>12.7484</b>	<b>0.0211</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0421	0.4375	0.5083	1.1000e-003	0.0312	6.8400e-003	0.0380	8.8700e-003	6.2900e-003	0.0152		110.1103	110.1103	8.1000e-004		110.1273
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>0.1758</b>	<b>0.6057</b>	<b>2.5894</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>0.0100</b>	<b>0.3765</b>	<b>0.0978</b>	<b>9.2000e-003</b>	<b>0.1070</b>		<b>478.8167</b>	<b>478.8167</b>	<b>0.0209</b>		<b>479.2552</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3201	16.1445	12.7484	0.0211		1.2369	1.2369		1.2369	1.2369	0.0000	1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>2.3201</b>	<b>16.1445</b>	<b>12.7484</b>	<b>0.0211</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1.2369</b>	<b>1.2369</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0421	0.4375	0.5083	1.1000e-003	0.0312	6.8400e-003	0.0380	8.8700e-003	6.2900e-003	0.0152		110.1103	110.1103	8.1000e-004			110.1273
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201			369.1279
<b>Total</b>	<b>0.1758</b>	<b>0.6057</b>	<b>2.5894</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>0.0100</b>	<b>0.3765</b>	<b>0.0978</b>	<b>9.2000e-003</b>	<b>0.1070</b>		<b>478.8167</b>	<b>478.8167</b>	<b>0.0209</b>			<b>479.2552</b>

**3.5 Shotcrete - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.0833	14.8911	12.6448	0.0211		1.0915	1.0915		1.0915	1.0915		1,996.5973	1,996.5973	0.1867			2,000.5175
<b>Total</b>	<b>2.0833</b>	<b>14.8911</b>	<b>12.6448</b>	<b>0.0211</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>			<b>2,000.5175</b>

**Unmitigated Construction Off-Site**



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	0.3989	0.4773	1.1000e-003	0.0312	6.0900e-003	0.0373	8.8800e-003	5.6000e-003	0.0145		108.3520	108.3520	7.8000e-004		108.3684
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.1586</b>	<b>0.5510</b>	<b>2.3628</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>9.1300e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4000e-003</b>	<b>0.1062</b>		<b>463.2602</b>	<b>463.2602</b>	<b>0.0193</b>		<b>463.6662</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0833	14.8911	12.6448	0.0211		1.0915	1.0915		1.0915	1.0915	0.0000	1,996.5973	1,996.5973	0.1867		2,000.5175
<b>Total</b>	<b>2.0833</b>	<b>14.8911</b>	<b>12.6448</b>	<b>0.0211</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1.0915</b>	<b>1.0915</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>		<b>2,000.5175</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0385	0.3989	0.4773	1.1000e-003	0.0312	6.0900e-003	0.0373	8.8800e-003	5.6000e-003	0.0145		108.3520	108.3520	7.8000e-004		108.3684
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.1586</b>	<b>0.5510</b>	<b>2.3628</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>9.1300e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4000e-003</b>	<b>0.1062</b>		<b>463.2602</b>	<b>463.2602</b>	<b>0.0193</b>		<b>463.6662</b>

### 3.6 Foundation/Structure - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216		4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>4.1360</b>	<b>41.8050</b>	<b>29.4873</b>	<b>0.0493</b>		<b>2.3673</b>	<b>2.3673</b>		<b>2.2216</b>	<b>2.2216</b>		<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3852	3.9888	4.7727	0.0110	0.3120	0.0609	0.3729	0.0888	0.0561	0.1448		1,083.5197	1,083.5197	7.8200e-003		1,083.6839
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.5053</b>	<b>4.1408</b>	<b>6.6582</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0640</b>	<b>0.7113</b>	<b>0.1777</b>	<b>0.0589</b>	<b>0.2365</b>		<b>1,438.4279</b>	<b>1,438.4279</b>	<b>0.0264</b>		<b>1,438.9817</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216	0.0000	4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>4.1360</b>	<b>41.8050</b>	<b>29.4873</b>	<b>0.0493</b>		<b>2.3673</b>	<b>2.3673</b>		<b>2.2216</b>	<b>2.2216</b>	<b>0.0000</b>	<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3852	3.9888	4.7727	0.0110	0.3120	0.0609	0.3729	0.0888	0.0561	0.1448		1,083.5197	1,083.5197	7.8200e-003		1,083.6839
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.5053</b>	<b>4.1408</b>	<b>6.6582</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0640</b>	<b>0.7113</b>	<b>0.1777</b>	<b>0.0589</b>	<b>0.2365</b>		<b>1,438.4279</b>	<b>1,438.4279</b>	<b>0.0264</b>		<b>1,438.9817</b>

**3.6 Foundation/Structure - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5526	35.4556	28.3748	0.0492		1.9738	1.9738		1.8540	1.8540		4,891.8621	4,891.8621	1.2949		4,919.0554
<b>Total</b>	<b>3.5526</b>	<b>35.4556</b>	<b>28.3748</b>	<b>0.0492</b>		<b>1.9738</b>	<b>1.9738</b>		<b>1.8540</b>	<b>1.8540</b>		<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3629	3.6673	4.5590	0.0110	0.3120	0.0574	0.3694	0.0888	0.0528	0.1416		1,065.6234	1,065.6234	7.7800e-003		1,065.7868
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.4710</b>	<b>3.8054</b>	<b>6.2723</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0604</b>	<b>0.7077</b>	<b>0.1777</b>	<b>0.0555</b>	<b>0.2332</b>		<b>1,407.5442</b>	<b>1,407.5442</b>	<b>0.0250</b>		<b>1,408.0693</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5526	35.4556	28.3748	0.0492		1.9738	1.9738		1.8540	1.8540	0.0000	4,891.8621	4,891.8621	1.2949		4,919.0554

<b>Total</b>	<b>3.5526</b>	<b>35.4556</b>	<b>28.3748</b>	<b>0.0492</b>		<b>1.9738</b>	<b>1.9738</b>		<b>1.8540</b>	<b>1.8540</b>	<b>0.0000</b>	<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3629	3.6673	4.5590	0.0110	0.3120	0.0574	0.3694	0.0888	0.0528	0.1416		1,065.6234	1,065.6234	7.7800e-003		1,065.7868
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.4710</b>	<b>3.8054</b>	<b>6.2723</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0604</b>	<b>0.7077</b>	<b>0.1777</b>	<b>0.0555</b>	<b>0.2332</b>		<b>1,407.5442</b>	<b>1,407.5442</b>	<b>0.0250</b>		<b>1,408.0693</b>

**3.7 Tower/Ramp - 2017**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**3.7 Tower/Ramp - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

### 3.8 Bridge - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5584	6.6732	2.4673	5.6400e-003		0.2888	0.2888		0.2657	0.2657		568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.5584</b>	<b>6.6732</b>	<b>2.4673</b>	<b>5.6400e-003</b>		<b>0.2888</b>	<b>0.2888</b>		<b>0.2657</b>	<b>0.2657</b>		<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5584	6.6732	2.4673	5.6400e-003		0.2888	0.2888		0.2657	0.2657	0.0000	568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.5584</b>	<b>6.6732</b>	<b>2.4673</b>	<b>5.6400e-003</b>		<b>0.2888</b>	<b>0.2888</b>		<b>0.2657</b>	<b>0.2657</b>	<b>0.0000</b>	<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>



### 3.9 Streetwork - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4925	27.6327	17.9542	0.0282		1.3269	1.3269		1.2215	1.2215		2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4925</b>	<b>27.6327</b>	<b>17.9542</b>	<b>0.0282</b>		<b>1.3269</b>	<b>1.3269</b>		<b>1.2215</b>	<b>1.2215</b>		<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4925	27.6327	17.9542	0.0282		1.3269	1.3269		1.2215	1.2215	0.0000	2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4925</b>	<b>27.6327</b>	<b>17.9542</b>	<b>0.0282</b>		<b>1.3269</b>	<b>1.3269</b>		<b>1.2215</b>	<b>1.2215</b>	<b>0.0000</b>	<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

**3.10 Sitework - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7365	8.3553	5.3155	0.0137		0.3713	0.3713		0.3416	0.3416		1,378.3741	1,378.3741	0.4291		1,387.3854

<b>Total</b>	<b>0.7365</b>	<b>8.3553</b>	<b>5.3155</b>	<b>0.0137</b>		<b>0.3713</b>	<b>0.3713</b>		<b>0.3416</b>	<b>0.3416</b>		<b>1,378.374</b>	<b>1,378.3741</b>	<b>0.4291</b>		<b>1,387.385</b>
												<b>1</b>				<b>4</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7365	8.3553	5.3155	0.0137		0.3713	0.3713		0.3416	0.3416	0.0000	1,378.374	1,378.3741	0.4291		1,387.385
												<b>1</b>				<b>4</b>
<b>Total</b>	<b>0.7365</b>	<b>8.3553</b>	<b>5.3155</b>	<b>0.0137</b>		<b>0.3713</b>	<b>0.3713</b>		<b>0.3416</b>	<b>0.3416</b>	<b>0.0000</b>	<b>1,378.374</b>	<b>1,378.3741</b>	<b>0.4291</b>		<b>1,387.385</b>
												<b>1</b>				<b>4</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004			42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172			342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>			<b>384.9140</b>

**3.10 Sitework - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.6708	7.3638	5.1579	0.0137		0.3210	0.3210		0.2953	0.2953		1,357.4181	1,357.4181	0.4295			1,366.4370
<b>Total</b>	<b>0.6708</b>	<b>7.3638</b>	<b>5.1579</b>	<b>0.0137</b>		<b>0.3210</b>	<b>0.3210</b>		<b>0.2953</b>	<b>0.2953</b>		<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>			<b>1,366.4370</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0138	0.1353	0.1758	4.4000e-004	0.0125	2.1800e-003	0.0147	3.5500e-003	2.0100e-003	5.5600e-003		41.7508	41.7508	3.0000e-004	41.7572	
Worker	0.0993	0.1266	1.5733	4.3400e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		328.5241	328.5241	0.0161	328.8623	
<b>Total</b>	<b>0.1131</b>	<b>0.2619</b>	<b>1.7491</b>	<b>4.7800e-003</b>	<b>0.3478</b>	<b>5.0500e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6700e-003</b>	<b>0.0972</b>		<b>370.2749</b>	<b>370.2749</b>	<b>0.0164</b>	<b>370.6195</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6708	7.3638	5.1579	0.0137		0.3210	0.3210		0.2953	0.2953	0.0000	1,357.4181	1,357.4181	0.4295		1,366.4370
<b>Total</b>	<b>0.6708</b>	<b>7.3638</b>	<b>5.1579</b>	<b>0.0137</b>		<b>0.3210</b>	<b>0.3210</b>		<b>0.2953</b>	<b>0.2953</b>	<b>0.0000</b>	<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>		<b>1,366.4370</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0138	0.1353	0.1758	4.4000e-004	0.0125	2.1800e-003	0.0147	3.5500e-003	2.0100e-003	5.5600e-003		41.7508	41.7508	3.0000e-004		41.7572

Worker	0.0993	0.1266	1.5733	4.3400e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		328.5241	328.5241	0.0161		328.8623
<b>Total</b>	<b>0.1131</b>	<b>0.2619</b>	<b>1.7491</b>	<b>4.7800e-003</b>	<b>0.3478</b>	<b>5.0500e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6700e-003</b>	<b>0.0972</b>		<b>370.2749</b>	<b>370.2749</b>	<b>0.0164</b>		<b>370.6195</b>

## Harvard Westlake Parking Structure Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	750.00	Space	1.90	300,000.00	0
User Defined Parking	0.00	User Defined Unit	1.52	59,921.00	0
User Defined Recreational	64,350.00	User Defined Unit	0.00	64,350.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2019
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Athletic Field is under land use category of User defined recreational.

Residential and landscape are under parking - user defined

Construction Phase - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment -

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on construction plan

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Trips and VMT - Overlapping phases: 1) Grading, Soil Nailing, and Shotcrete 2) Foundations/Structure, Tower/Ramp 3) Foundations/Structure, Bridge.

Accumulated max of 95 concrete trips per day  
Grading -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	290.00
tblConstructionPhase	NumDays	230.00	114.00
tblConstructionPhase	NumDays	230.00	82.00
tblConstructionPhase	NumDays	230.00	165.00
tblConstructionPhase	NumDays	8.00	245.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	3/6/2018	4/12/2017
tblConstructionPhase	PhaseEndDate	1/10/2018	4/26/2017
tblConstructionPhase	PhaseEndDate	6/6/2018	7/19/2018
tblConstructionPhase	PhaseEndDate	12/26/2018	3/23/2018
tblConstructionPhase	PhaseStartDate	6/7/2017	7/14/2016
tblConstructionPhase	PhaseStartDate	4/13/2017	7/28/2016
tblConstructionPhase	PhaseStartDate	4/27/2017	6/9/2017
tblConstructionPhase	PhaseStartDate	7/20/2018	10/17/2017
tblConstructionPhase	PhaseStartDate	3/24/2018	3/26/2018
tblEnergyUse	LightingElect	0.00	3.26
tblEnergyUse	NT24E	0.00	3.26
tblEnergyUse	T24E	0.00	3.26
tblGrading	AcresOfGrading	612.50	450.00



tblGrading	MaterialExported	0.00	140,000.00
tblLandUse	LandUseSquareFeet	0.00	59,921.00
tblLandUse	LandUseSquareFeet	0.00	64,350.00
tblLandUse	LotAcreage	6.75	1.90
tblLandUse	LotAcreage	0.00	1.52
tblOffRoadEquipment	HorsePower	162.00	330.00
tblOffRoadEquipment	HorsePower	255.00	207.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	361.00	185.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00
tblTripsAndVMT	VendorTripNumber	70.00	50.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.8730	8.9335	5.7299	0.0118	1.2422	0.4369	1.6791	0.5178	0.4135	0.9313	0.0000	1,069.5654	1,069.5654	0.1675	0.0000	1,073.0839
2017	0.9470	9.6863	6.8405	0.0138	1.2075	0.4737	1.6813	0.4916	0.4458	0.9374	0.0000	1,236.9222	1,236.9222	0.2146	0.0000	1,241.4288
2018	0.3875	3.8346	3.2787	6.2900e-003	0.0800	0.1905	0.2705	0.0217	0.1780	0.1997	0.0000	552.7437	552.7437	0.1216	0.0000	555.2970
2019	0.0258	0.2524	0.2265	6.0000e-004	0.0113	0.0108	0.0220	3.0000e-003	9.9000e-003	0.0129	0.0000	51.3134	51.3134	0.0134	0.0000	51.5937
<b>Total</b>	<b>2.2333</b>	<b>22.7069</b>	<b>16.0755</b>	<b>0.0325</b>	<b>2.5410</b>	<b>1.1118</b>	<b>3.6529</b>	<b>1.0341</b>	<b>1.0472</b>	<b>2.0813</b>	<b>0.0000</b>	<b>2,910.5446</b>	<b>2,910.5446</b>	<b>0.5171</b>	<b>0.0000</b>	<b>2,921.4033</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.8730	8.9335	5.7299	0.0118	0.6051	0.4369	1.0420	0.2338	0.4135	0.6473	0.0000	1,069.5646	1,069.5646	0.1675	0.0000	1,073.0830
2017	0.9470	9.6863	6.8405	0.0138	0.6071	0.4737	1.0809	0.2278	0.4458	0.6736	0.0000	1,236.9212	1,236.9212	0.2146	0.0000	1,241.4278
2018	0.3875	3.8346	3.2787	6.2900e-003	0.0800	0.1905	0.2705	0.0217	0.1780	0.1997	0.0000	552.7432	552.7432	0.1216	0.0000	555.2965
2019	0.0258	0.2524	0.2265	6.0000e-004	0.0113	0.0108	0.0220	3.0000e-003	9.9000e-003	0.0129	0.0000	51.3133	51.3133	0.0134	0.0000	51.5936
<b>Total</b>	<b>2.2333</b>	<b>22.7068</b>	<b>16.0755</b>	<b>0.0325</b>	<b>1.3035</b>	<b>1.1118</b>	<b>2.4153</b>	<b>0.4863</b>	<b>1.0472</b>	<b>1.5335</b>	<b>0.0000</b>	<b>2,910.5423</b>	<b>2,910.5423</b>	<b>0.5171</b>	<b>0.0000</b>	<b>2,921.4009</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>48.70</b>	<b>0.00</b>	<b>33.88</b>	<b>52.97</b>	<b>0.00</b>	<b>26.32</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## 2.2 Overall Operational

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1042	7.7900e-003	0.8390	6.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	1.6156	1.6156	4.3800e-003	0.0000	1.7076
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	758.7266	758.7266	0.0349	7.2200e-003	761.6959
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1042</b>	<b>7.7900e-003</b>	<b>0.8390</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>760.3422</b>	<b>760.3422</b>	<b>0.0393</b>	<b>7.2200e-003</b>	<b>763.4034</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1042	7.7900e-003	0.8390	6.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	1.6156	1.6156	4.3800e-003	0.0000	1.7076
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	758.7266	758.7266	0.0349	7.2200e-003	761.6959
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1042</b>	<b>7.7900e-003</b>	<b>0.8390</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>760.3422</b>	<b>760.3422</b>	<b>0.0393</b>	<b>7.2200e-003</b>	<b>763.4034</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2016	6/28/2016	5	20	
2	Grading	Grading	6/29/2016	6/6/2017	5	245	
3	Soil Nailing	Building Construction	7/14/2016	4/12/2017	5	195	
4	Shotcrete	Building Construction	7/28/2016	4/26/2017	5	195	
5	Foundation/Structure	Building Construction	6/9/2017	7/19/2018	5	290	
6	Tower/Ramp	Building Construction	10/17/2017	3/23/2018	5	114	
7	Bridge	Building Construction	3/26/2018	7/17/2018	5	82	
8	Streetwork	Paving	7/18/2018	8/14/2018	5	20	
9	Sitework	Building Construction	8/15/2018	4/2/2019	5	165	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 450

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	330	0.38
Grading	Graders	1	8.00	174	0.41

Grading	Rubber Tired Dozers	1	8.00	207	0.40
Grading	Scrapers	2	8.00	185	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	84	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	96	0.37
Soil Nailing	Air Compressors	2	8.00	78	0.48
Soil Nailing	Bore/Drill Rigs	2	8.00	160	0.50
Soil Nailing	Pumps	2	8.00	84	0.74
Shotcrete	Air Compressors	2	8.00	78	0.48
Shotcrete	Pumps	2	8.00	84	0.74
Foundation/Structure	Air Compressors	1	8.00	78	0.48
Foundation/Structure	Bore/Drill Rigs	1	8.00	160	0.50
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Pumps	1	8.00	84	0.74
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	2	8.00	84	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	96	0.37
Bridge	Cranes	1	8.00	226	0.29
Streetwork	Graders	1	8.00	174	0.41
Streetwork	Paving Equipment	1	8.00	130	0.36
Streetwork	Plate Compactors	1	8.00	8	0.43
Streetwork	Rollers	1	8.00	80	0.38
Streetwork	Scrapers	1	8.00	361	0.48
Sitework	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Sitework	Tractors/Loaders/Backhoes	1	8.00	84	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tower/Ramp	0			0.00	14.70	6.90				
Bridge	1	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Streetwork	5	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sitework	2	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0602	0.0000	0.0602	0.0331	0.0000	0.0331	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1713	0.1290	1.2000e-004		8.9600e-003	8.9600e-003		8.2400e-003	8.2400e-003	0.0000	11.3136	11.3136	3.4100e-003	0.0000	11.3853
<b>Total</b>	<b>0.0158</b>	<b>0.1713</b>	<b>0.1290</b>	<b>1.2000e-004</b>	<b>0.0602</b>	<b>8.9600e-003</b>	<b>0.0692</b>	<b>0.0331</b>	<b>8.2400e-003</b>	<b>0.0413</b>	<b>0.0000</b>	<b>11.3136</b>	<b>11.3136</b>	<b>3.4100e-003</b>	<b>0.0000</b>	<b>11.3853</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.3300e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5346	0.5346	3.0000e-005	0.0000	0.5353
<b>Total</b>	<b>2.2000e-004</b>	<b>3.2000e-004</b>	<b>3.3300e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5346</b>	<b>0.5346</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5353</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0235	0.0000	0.0235	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1713	0.1290	1.2000e-004		8.9600e-003	8.9600e-003		8.2400e-003	8.2400e-003	0.0000	11.3136	11.3136	3.4100e-003	0.0000	11.3852
<b>Total</b>	<b>0.0158</b>	<b>0.1713</b>	<b>0.1290</b>	<b>1.2000e-004</b>	<b>0.0235</b>	<b>8.9600e-003</b>	<b>0.0325</b>	<b>0.0129</b>	<b>8.2400e-003</b>	<b>0.0212</b>	<b>0.0000</b>	<b>11.3136</b>	<b>11.3136</b>	<b>3.4100e-003</b>	<b>0.0000</b>	<b>11.3852</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



Worker	2.2000e-004	3.2000e-004	3.3300e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5346	0.5346	3.0000e-005	0.0000	0.5353
<b>Total</b>	<b>2.2000e-004</b>	<b>3.2000e-004</b>	<b>3.3300e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5346</b>	<b>0.5346</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5353</b>

### 3.3 Grading - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9842	0.0000	0.9842	0.4325	0.0000	0.4325	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4205	4.7591	2.0928	3.9400e-003		0.2342	0.2342		0.2155	0.2155	0.0000	371.2367	371.2367	0.1120	0.0000	373.5883
<b>Total</b>	<b>0.4205</b>	<b>4.7591</b>	<b>2.0928</b>	<b>3.9400e-003</b>	<b>0.9842</b>	<b>0.2342</b>	<b>1.2184</b>	<b>0.4325</b>	<b>0.2155</b>	<b>0.6479</b>	<b>0.0000</b>	<b>371.2367</b>	<b>371.2367</b>	<b>0.1120</b>	<b>0.0000</b>	<b>373.5883</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0877	1.4141	1.0717	3.5700e-003	0.1341	0.0199	0.1539	0.0353	0.0183	0.0536	0.0000	326.6137	326.6137	2.4300e-003	0.0000	326.6647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7100e-003	0.0127	0.1327	2.8000e-004	0.0219	2.1000e-004	0.0221	5.8100e-003	1.9000e-004	6.0000e-003	0.0000	21.3321	21.3321	1.2100e-003	0.0000	21.3576
<b>Total</b>	<b>0.0964</b>	<b>1.4268</b>	<b>1.2044</b>	<b>3.8500e-003</b>	<b>0.1559</b>	<b>0.0201</b>	<b>0.1760</b>	<b>0.0411</b>	<b>0.0185</b>	<b>0.0596</b>	<b>0.0000</b>	<b>347.9458</b>	<b>347.9458</b>	<b>3.6400e-003</b>	<b>0.0000</b>	<b>348.0223</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3839	0.0000	0.3839	0.1687	0.0000	0.1687	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4205	4.7591	2.0927	3.9400e-003		0.2342	0.2342		0.2155	0.2155	0.0000	371.2363	371.2363	0.1120	0.0000	373.5878
<b>Total</b>	<b>0.4205</b>	<b>4.7591</b>	<b>2.0927</b>	<b>3.9400e-003</b>	<b>0.3839</b>	<b>0.2342</b>	<b>0.6180</b>	<b>0.1687</b>	<b>0.2155</b>	<b>0.3841</b>	<b>0.0000</b>	<b>371.2363</b>	<b>371.2363</b>	<b>0.1120</b>	<b>0.0000</b>	<b>373.5878</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0877	1.4141	1.0717	3.5700e-003	0.1341	0.0199	0.1539	0.0353	0.0183	0.0536	0.0000	326.6137	326.6137	2.4300e-003	0.0000	326.6647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7100e-003	0.0127	0.1327	2.8000e-004	0.0219	2.1000e-004	0.0221	5.8100e-003	1.9000e-004	6.0000e-003	0.0000	21.3321	21.3321	1.2100e-003	0.0000	21.3576
<b>Total</b>	<b>0.0964</b>	<b>1.4268</b>	<b>1.2044</b>	<b>3.8500e-003</b>	<b>0.1559</b>	<b>0.0201</b>	<b>0.1760</b>	<b>0.0411</b>	<b>0.0185</b>	<b>0.0596</b>	<b>0.0000</b>	<b>347.9458</b>	<b>347.9458</b>	<b>3.6400e-003</b>	<b>0.0000</b>	<b>348.0223</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					0.9842	0.0000	0.9842	0.4325	0.0000	0.4325	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3310	3.7057	1.7039	3.3100e-003		0.1815	0.1815		0.1670	0.1670	0.0000	307.6366	307.6366	0.0943	0.0000	309.6160
<b>Total</b>	<b>0.3310</b>	<b>3.7057</b>	<b>1.7039</b>	<b>3.3100e-003</b>	<b>0.9842</b>	<b>0.1815</b>	<b>1.1657</b>	<b>0.4325</b>	<b>0.1670</b>	<b>0.5994</b>	<b>0.0000</b>	<b>307.6366</b>	<b>307.6366</b>	<b>0.0943</b>	<b>0.0000</b>	<b>309.6160</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0696	1.0937	0.8694	3.0100e-003	0.1309	0.0153	0.1462	0.0341	0.0141	0.0482	0.0000	270.5768	270.5768	2.0100e-003	0.0000	270.6190
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5700e-003	9.7000e-003	0.1009	2.3000e-004	0.0184	1.7000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.2907	17.2907	9.4000e-004	0.0000	17.3105
<b>Total</b>	<b>0.0762</b>	<b>1.1034</b>	<b>0.9703</b>	<b>3.2400e-003</b>	<b>0.1493</b>	<b>0.0155</b>	<b>0.1648</b>	<b>0.0390</b>	<b>0.0142</b>	<b>0.0533</b>	<b>0.0000</b>	<b>287.8675</b>	<b>287.8675</b>	<b>2.9500e-003</b>	<b>0.0000</b>	<b>287.9295</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3839	0.0000	0.3839	0.1687	0.0000	0.1687	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3310	3.7057	1.7039	3.3100e-003		0.1815	0.1815		0.1670	0.1670	0.0000	307.6362	307.6362	0.0943	0.0000	309.6157

<b>Total</b>	<b>0.3310</b>	<b>3.7057</b>	<b>1.7039</b>	<b>3.3100e-003</b>	<b>0.3839</b>	<b>0.1815</b>	<b>0.5653</b>	<b>0.1687</b>	<b>0.1670</b>	<b>0.3356</b>	<b>0.0000</b>	<b>307.6362</b>	<b>307.6362</b>	<b>0.0943</b>	<b>0.0000</b>	<b>309.6157</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0696	1.0937	0.8694	3.0100e-003	0.1309	0.0153	0.1462	0.0341	0.0141	0.0482	0.0000	270.5768	270.5768	2.0100e-003	0.0000	270.6190
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5700e-003	9.7000e-003	0.1009	2.3000e-004	0.0184	1.7000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.2907	17.2907	9.4000e-004	0.0000	17.3105
<b>Total</b>	<b>0.0762</b>	<b>1.1034</b>	<b>0.9703</b>	<b>3.2400e-003</b>	<b>0.1493</b>	<b>0.0155</b>	<b>0.1648</b>	<b>0.0390</b>	<b>0.0142</b>	<b>0.0533</b>	<b>0.0000</b>	<b>287.8675</b>	<b>287.8675</b>	<b>2.9500e-003</b>	<b>0.0000</b>	<b>287.9295</b>

**3.4 Soil Nailing - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1907	1.6072	1.2981	2.1300e-003		0.1033	0.1033		0.1011	0.1011	0.0000	190.3536	190.3536	0.0357	0.0000	191.1024
<b>Total</b>	<b>0.1907</b>	<b>1.6072</b>	<b>1.2981</b>	<b>2.1300e-003</b>		<b>0.1033</b>	<b>0.1033</b>		<b>0.1011</b>	<b>0.1011</b>	<b>0.0000</b>	<b>190.3536</b>	<b>190.3536</b>	<b>0.0357</b>	<b>0.0000</b>	<b>191.1024</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6500e-003	0.0167	0.0218	4.0000e-005	1.1200e-003	2.5000e-004	1.3700e-003	3.2000e-004	2.3000e-004	5.5000e-004	0.0000	3.6432	3.6432	3.0000e-005	0.0000	3.6438
Worker	7.9900e-003	0.0117	0.1217	2.6000e-004	0.0201	1.9000e-004	0.0203	5.3300e-003	1.8000e-004	5.5000e-003	0.0000	19.5678	19.5678	1.1100e-003	0.0000	19.5911
<b>Total</b>	<b>9.6400e-003</b>	<b>0.0284</b>	<b>0.1435</b>	<b>3.0000e-004</b>	<b>0.0212</b>	<b>4.4000e-004</b>	<b>0.0216</b>	<b>5.6500e-003</b>	<b>4.1000e-004</b>	<b>6.0500e-003</b>	<b>0.0000</b>	<b>23.2111</b>	<b>23.2111</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>23.2350</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1907	1.6072	1.2981	2.1300e-003		0.1033	0.1033		0.1011	0.1011	0.0000	190.3533	190.3533	0.0357	0.0000	191.1022
<b>Total</b>	<b>0.1907</b>	<b>1.6072</b>	<b>1.2981</b>	<b>2.1300e-003</b>		<b>0.1033</b>	<b>0.1033</b>		<b>0.1011</b>	<b>0.1011</b>	<b>0.0000</b>	<b>190.3533</b>	<b>190.3533</b>	<b>0.0357</b>	<b>0.0000</b>	<b>191.1022</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6500e-003	0.0167	0.0218	4.0000e-005	1.1200e-003	2.5000e-004	1.3700e-003	3.2000e-004	2.3000e-004	5.5000e-004	0.0000	3.6432	3.6432	3.0000e-005	0.0000	3.6438
Worker	7.9900e-003	0.0117	0.1217	2.6000e-004	0.0201	1.9000e-004	0.0203	5.3300e-003	1.8000e-004	5.5000e-003	0.0000	19.5678	19.5678	1.1100e-003	0.0000	19.5911
<b>Total</b>	<b>9.6400e-003</b>	<b>0.0284</b>	<b>0.1435</b>	<b>3.0000e-004</b>	<b>0.0212</b>	<b>4.4000e-004</b>	<b>0.0216</b>	<b>5.6500e-003</b>	<b>4.1000e-004</b>	<b>6.0500e-003</b>	<b>0.0000</b>	<b>23.2111</b>	<b>23.2111</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>23.2350</b>

### 3.4 Soil Nailing - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1012	0.8507	0.7707	1.2800e-003		0.0534	0.0534		0.0523	0.0523	0.0000	113.1841	113.1841	0.0206	0.0000	113.6168
<b>Total</b>	<b>0.1012</b>	<b>0.8507</b>	<b>0.7707</b>	<b>1.2800e-003</b>		<b>0.0534</b>	<b>0.0534</b>		<b>0.0523</b>	<b>0.0523</b>	<b>0.0000</b>	<b>113.1841</b>	<b>113.1841</b>	<b>0.0206</b>	<b>0.0000</b>	<b>113.6168</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-004	9.1300e-003	0.0123	2.0000e-005	6.7000e-004	1.3000e-004	8.1000e-004	1.9000e-004	1.2000e-004	3.1000e-004	0.0000	2.1451	2.1451	2.0000e-005	0.0000	2.1455
Worker	4.2800e-003	6.3200e-003	0.0658	1.5000e-004	0.0120	1.1000e-004	0.0121	3.1900e-003	1.0000e-004	3.2900e-003	0.0000	11.2698	11.2698	6.1000e-004	0.0000	11.2827

<b>Total</b>	<b>5.1800e-003</b>	<b>0.0155</b>	<b>0.0781</b>	<b>1.7000e-004</b>	<b>0.0127</b>	<b>2.4000e-004</b>	<b>0.0129</b>	<b>3.3800e-003</b>	<b>2.2000e-004</b>	<b>3.6000e-003</b>	<b>0.0000</b>	<b>13.4150</b>	<b>13.4150</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>13.4282</b>
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1012	0.8507	0.7707	1.2800e-003		0.0534	0.0534		0.0523	0.0523	0.0000	113.1840	113.1840	0.0206	0.0000	113.6167
<b>Total</b>	<b>0.1012</b>	<b>0.8507</b>	<b>0.7707</b>	<b>1.2800e-003</b>		<b>0.0534</b>	<b>0.0534</b>		<b>0.0523</b>	<b>0.0523</b>	<b>0.0000</b>	<b>113.1840</b>	<b>113.1840</b>	<b>0.0206</b>	<b>0.0000</b>	<b>113.6167</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-004	9.1300e-003	0.0123	2.0000e-005	6.7000e-004	1.3000e-004	8.1000e-004	1.9000e-004	1.2000e-004	3.1000e-004	0.0000	2.1451	2.1451	2.0000e-005	0.0000	2.1455
Worker	4.2800e-003	6.3200e-003	0.0658	1.5000e-004	0.0120	1.1000e-004	0.0121	3.1900e-003	1.0000e-004	3.2900e-003	0.0000	11.2698	11.2698	6.1000e-004	0.0000	11.2827
<b>Total</b>	<b>5.1800e-003</b>	<b>0.0155</b>	<b>0.0781</b>	<b>1.7000e-004</b>	<b>0.0127</b>	<b>2.4000e-004</b>	<b>0.0129</b>	<b>3.3800e-003</b>	<b>2.2000e-004</b>	<b>3.6000e-003</b>	<b>0.0000</b>	<b>13.4150</b>	<b>13.4150</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>13.4282</b>

**3.5 Shotcrete - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1299	0.9041	0.7139	1.1800e-003		0.0693	0.0693		0.0693	0.0693	0.0000	101.4318	101.4318	0.0106	0.0000	101.6549
<b>Total</b>	<b>0.1299</b>	<b>0.9041</b>	<b>0.7139</b>	<b>1.1800e-003</b>		<b>0.0693</b>	<b>0.0693</b>		<b>0.0693</b>	<b>0.0693</b>	<b>0.0000</b>	<b>101.4318</b>	<b>101.4318</b>	<b>0.0106</b>	<b>0.0000</b>	<b>101.6549</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0256	0.0333	6.0000e-005	1.7200e-003	3.8000e-004	2.1000e-003	4.9000e-004	3.5000e-004	8.4000e-004	0.0000	5.5744	5.5744	4.0000e-005	0.0000	5.5752
Worker	7.3400e-003	0.0107	0.1117	2.3000e-004	0.0184	1.8000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.9639	17.9639	1.0200e-003	0.0000	17.9853
<b>Total</b>	<b>9.8600e-003</b>	<b>0.0363</b>	<b>0.1450</b>	<b>2.9000e-004</b>	<b>0.0201</b>	<b>5.6000e-004</b>	<b>0.0207</b>	<b>5.3800e-003</b>	<b>5.1000e-004</b>	<b>5.8900e-003</b>	<b>0.0000</b>	<b>23.5382</b>	<b>23.5382</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>23.5605</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					



Off-Road	0.1299	0.9041	0.7139	1.1800e-003		0.0693	0.0693		0.0693	0.0693	0.0000	101.4317	101.4317	0.0106	0.0000	101.6548
<b>Total</b>	<b>0.1299</b>	<b>0.9041</b>	<b>0.7139</b>	<b>1.1800e-003</b>		<b>0.0693</b>	<b>0.0693</b>		<b>0.0693</b>	<b>0.0693</b>	<b>0.0000</b>	<b>101.4317</b>	<b>101.4317</b>	<b>0.0106</b>	<b>0.0000</b>	<b>101.6548</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0256	0.0333	6.0000e-005	1.7200e-003	3.8000e-004	2.1000e-003	4.9000e-004	3.5000e-004	8.4000e-004	0.0000	5.5744	5.5744	4.0000e-005	0.0000	5.5752
Worker	7.3400e-003	0.0107	0.1117	2.3000e-004	0.0184	1.8000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.9639	17.9639	1.0200e-003	0.0000	17.9853
<b>Total</b>	<b>9.8600e-003</b>	<b>0.0363</b>	<b>0.1450</b>	<b>2.9000e-004</b>	<b>0.0201</b>	<b>5.6000e-004</b>	<b>0.0207</b>	<b>5.3800e-003</b>	<b>5.1000e-004</b>	<b>5.8900e-003</b>	<b>0.0000</b>	<b>23.5382</b>	<b>23.5382</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>23.5605</b>

### **3.5 Shotcrete - 2017**

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0865	0.6180	0.5248	8.7000e-004		0.0453	0.0453		0.0453	0.0453	0.0000	75.1682	75.1682	7.0300e-003	0.0000	75.3158
<b>Total</b>	<b>0.0865</b>	<b>0.6180</b>	<b>0.5248</b>	<b>8.7000e-004</b>		<b>0.0453</b>	<b>0.0453</b>		<b>0.0453</b>	<b>0.0453</b>	<b>0.0000</b>	<b>75.1682</b>	<b>75.1682</b>	<b>7.0300e-003</b>	<b>0.0000</b>	<b>75.3158</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-003	0.0173	0.0233	5.0000e-005	1.2700e-003	2.5000e-004	1.5300e-003	3.6000e-004	2.3000e-004	6.0000e-004	0.0000	4.0650	4.0650	3.0000e-005	0.0000	4.0656
Worker	4.8700e-003	7.1900e-003	0.0748	1.7000e-004	0.0136	1.3000e-004	0.0138	3.6200e-003	1.2000e-004	3.7400e-003	0.0000	12.8136	12.8136	7.0000e-004	0.0000	12.8283
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0245</b>	<b>0.0981</b>	<b>2.2000e-004</b>	<b>0.0149</b>	<b>3.8000e-004</b>	<b>0.0153</b>	<b>3.9800e-003</b>	<b>3.5000e-004</b>	<b>4.3400e-003</b>	<b>0.0000</b>	<b>16.8786</b>	<b>16.8786</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>16.8939</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0865	0.6180	0.5248	8.7000e-004		0.0453	0.0453		0.0453	0.0453	0.0000	75.1681	75.1681	7.0300e-003	0.0000	75.3157
<b>Total</b>	<b>0.0865</b>	<b>0.6180</b>	<b>0.5248</b>	<b>8.7000e-004</b>		<b>0.0453</b>	<b>0.0453</b>		<b>0.0453</b>	<b>0.0453</b>	<b>0.0000</b>	<b>75.1681</b>	<b>75.1681</b>	<b>7.0300e-003</b>	<b>0.0000</b>	<b>75.3157</b>

**Mitigated Construction Off-Site**



Vendor	0.0299	0.3043	0.4105	8.0000e-004	0.0224	4.4700e-003	0.0269	6.3900e-003	4.1100e-003	0.0105	0.0000	71.5048	71.5048	5.2000e-004	0.0000	71.5158
Worker	8.5700e-003	0.0126	0.1316	3.1000e-004	0.0240	2.2000e-004	0.0242	6.3700e-003	2.0000e-004	6.5800e-003	0.0000	22.5397	22.5397	1.2300e-003	0.0000	22.5655
<b>Total</b>	<b>0.0385</b>	<b>0.3169</b>	<b>0.5420</b>	<b>1.1100e-003</b>	<b>0.0464</b>	<b>4.6900e-003</b>	<b>0.0511</b>	<b>0.0128</b>	<b>4.3100e-003</b>	<b>0.0171</b>	<b>0.0000</b>	<b>94.0444</b>	<b>94.0444</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>94.0812</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3019	3.0518	2.1526	3.6000e-003		0.1728	0.1728		0.1622	0.1622	0.0000	328.7273	328.7273	0.0867	0.0000	330.5469
<b>Total</b>	<b>0.3019</b>	<b>3.0518</b>	<b>2.1526</b>	<b>3.6000e-003</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1622</b>	<b>0.1622</b>	<b>0.0000</b>	<b>328.7273</b>	<b>328.7273</b>	<b>0.0867</b>	<b>0.0000</b>	<b>330.5469</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0299	0.3043	0.4105	8.0000e-004	0.0224	4.4700e-003	0.0269	6.3900e-003	4.1100e-003	0.0105	0.0000	71.5048	71.5048	5.2000e-004	0.0000	71.5158
Worker	8.5700e-003	0.0126	0.1316	3.1000e-004	0.0240	2.2000e-004	0.0242	6.3700e-003	2.0000e-004	6.5800e-003	0.0000	22.5397	22.5397	1.2300e-003	0.0000	22.5655
<b>Total</b>	<b>0.0385</b>	<b>0.3169</b>	<b>0.5420</b>	<b>1.1100e-003</b>	<b>0.0464</b>	<b>4.6900e-003</b>	<b>0.0511</b>	<b>0.0128</b>	<b>4.3100e-003</b>	<b>0.0171</b>	<b>0.0000</b>	<b>94.0444</b>	<b>94.0444</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>94.0812</b>

### 3.6 Foundation/Structure - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2558	2.5528	2.0430	3.5400e-003		0.1421	0.1421		0.1335	0.1335	0.0000	319.5232	319.5232	0.0846	0.0000	321.2994
<b>Total</b>	<b>0.2558</b>	<b>2.5528</b>	<b>2.0430</b>	<b>3.5400e-003</b>		<b>0.1421</b>	<b>0.1421</b>		<b>0.1335</b>	<b>0.1335</b>	<b>0.0000</b>	<b>319.5232</b>	<b>319.5232</b>	<b>0.0846</b>	<b>0.0000</b>	<b>321.2994</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0277	0.2758	0.3886	7.9000e-004	0.0221	4.1500e-003	0.0262	6.3000e-003	3.8200e-003	0.0101	0.0000	69.3599	69.3599	5.1000e-004	0.0000	69.3707
Worker	7.5800e-003	0.0113	0.1175	3.0000e-004	0.0237	2.1000e-004	0.0239	6.2900e-003	2.0000e-004	6.4800e-003	0.0000	21.4162	21.4162	1.1300e-003	0.0000	21.4398
<b>Total</b>	<b>0.0353</b>	<b>0.2871</b>	<b>0.5061</b>	<b>1.0900e-003</b>	<b>0.0458</b>	<b>4.3600e-003</b>	<b>0.0501</b>	<b>0.0126</b>	<b>4.0200e-003</b>	<b>0.0166</b>	<b>0.0000</b>	<b>90.7761</b>	<b>90.7761</b>	<b>1.6400e-003</b>	<b>0.0000</b>	<b>90.8105</b>

#### Mitigated Construction On-Site





**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.8 Bridge - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.2736	0.1012	2.3000e-004		0.0118	0.0118		0.0109	0.0109	0.0000	21.1277	21.1277	6.5800e-003	0.0000	21.2658
<b>Total</b>	<b>0.0229</b>	<b>0.2736</b>	<b>0.1012</b>	<b>2.3000e-004</b>		<b>0.0118</b>	<b>0.0118</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>21.1277</b>	<b>21.1277</b>	<b>6.5800e-003</b>	<b>0.0000</b>	<b>21.2658</b>

**Unmitigated Construction Off-Site**





Vendor	6.3000e-004	6.2800e-003	8.8500e-003	2.0000e-005	5.0000e-004	9.0000e-005	6.0000e-004	1.4000e-004	9.0000e-005	2.3000e-004	0.0000	1.5799	1.5799	1.0000e-005	0.0000	1.5801
Worker	4.3200e-003	6.4400e-003	0.0669	1.7000e-004	0.0135	1.2000e-004	0.0136	3.5800e-003	1.1000e-004	3.6900e-003	0.0000	12.1953	12.1953	6.4000e-004	0.0000	12.2088
<b>Total</b>	<b>4.9500e-003</b>	<b>0.0127</b>	<b>0.0758</b>	<b>1.9000e-004</b>	<b>0.0140</b>	<b>2.1000e-004</b>	<b>0.0142</b>	<b>3.7200e-003</b>	<b>2.0000e-004</b>	<b>3.9200e-003</b>	<b>0.0000</b>	<b>13.7752</b>	<b>13.7752</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>13.7889</b>

### 3.9 Streetwork - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0249	0.2763	0.1795	2.8000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	25.6539	25.6539	7.9200e-003	0.0000	25.8203
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0249</b>	<b>0.2763</b>	<b>0.1795</b>	<b>2.8000e-004</b>		<b>0.0133</b>	<b>0.0133</b>		<b>0.0122</b>	<b>0.0122</b>	<b>0.0000</b>	<b>25.6539</b>	<b>25.6539</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>25.8203</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	1.5300e-003	2.1600e-003	0.0000	1.2000e-004	2.0000e-005	1.5000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3853	0.3853	0.0000	0.0000	0.3854
Worker	1.0500e-003	1.5700e-003	0.0163	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	2.9745	2.9745	1.6000e-004	0.0000	2.9778
<b>Total</b>	<b>1.2000e-003</b>	<b>3.1000e-003</b>	<b>0.0185</b>	<b>4.0000e-005</b>	<b>3.4100e-003</b>	<b>5.0000e-005</b>	<b>3.4700e-003</b>	<b>9.1000e-004</b>	<b>5.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>3.3598</b>	<b>3.3598</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.3631</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0249	0.2763	0.1795	2.8000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	25.6539	25.6539	7.9200e-003	0.0000	25.8202
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0249</b>	<b>0.2763</b>	<b>0.1795</b>	<b>2.8000e-004</b>		<b>0.0133</b>	<b>0.0133</b>		<b>0.0122</b>	<b>0.0122</b>	<b>0.0000</b>	<b>25.6539</b>	<b>25.6539</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>25.8202</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	1.5300e-003	2.1600e-003	0.0000	1.2000e-004	2.0000e-005	1.5000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3853	0.3853	0.0000	0.0000	0.3854
Worker	1.0500e-003	1.5700e-003	0.0163	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	2.9745	2.9745	1.6000e-004	0.0000	2.9778
<b>Total</b>	<b>1.2000e-003</b>	<b>3.1000e-003</b>	<b>0.0185</b>	<b>4.0000e-005</b>	<b>3.4100e-003</b>	<b>5.0000e-005</b>	<b>3.4700e-003</b>	<b>9.1000e-004</b>	<b>5.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>3.3598</b>	<b>3.3598</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.3631</b>

**3.10 Sitework - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0365	0.4136	0.2631	6.8000e-004		0.0184	0.0184		0.0169	0.0169	0.0000	61.8968	61.8968	0.0193	0.0000	62.3014
<b>Total</b>	<b>0.0365</b>	<b>0.4136</b>	<b>0.2631</b>	<b>6.8000e-004</b>		<b>0.0184</b>	<b>0.0184</b>		<b>0.0169</b>	<b>0.0169</b>	<b>0.0000</b>	<b>61.8968</b>	<b>61.8968</b>	<b>0.0193</b>	<b>0.0000</b>	<b>62.3014</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-004	7.5800e-003	0.0107	2.0000e-005	6.1000e-004	1.1000e-004	7.2000e-004	1.7000e-004	1.0000e-004	2.8000e-004	0.0000	1.9074	1.9074	1.0000e-005	0.0000	1.9077
Worker	5.2100e-003	7.7800e-003	0.0808	2.1000e-004	0.0163	1.5000e-004	0.0164	4.3200e-003	1.3000e-004	4.4600e-003	0.0000	14.7236	14.7236	7.7000e-004	0.0000	14.7399
<b>Total</b>	<b>5.9700e-003</b>	<b>0.0154</b>	<b>0.0915</b>	<b>2.3000e-004</b>	<b>0.0169</b>	<b>2.6000e-004</b>	<b>0.0171</b>	<b>4.4900e-003</b>	<b>2.3000e-004</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>16.6310</b>	<b>16.6310</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>16.6476</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0365	0.4136	0.2631	6.8000e-004		0.0184	0.0184		0.0169	0.0169	0.0000	61.8967	61.8967	0.0193	0.0000	62.3014

Total	0.0365	0.4136	0.2631	6.8000e-004		0.0184	0.0184		0.0169	0.0169	0.0000	61.8967	61.8967	0.0193	0.0000	62.3014
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-004	7.5800e-003	0.0107	2.0000e-005	6.1000e-004	1.1000e-004	7.2000e-004	1.7000e-004	1.0000e-004	2.8000e-004	0.0000	1.9074	1.9074	1.0000e-005	0.0000	1.9077
Worker	5.2100e-003	7.7800e-003	0.0808	2.1000e-004	0.0163	1.5000e-004	0.0164	4.3200e-003	1.3000e-004	4.4600e-003	0.0000	14.7236	14.7236	7.7000e-004	0.0000	14.7399
<b>Total</b>	<b>5.9700e-003</b>	<b>0.0154</b>	<b>0.0915</b>	<b>2.3000e-004</b>	<b>0.0169</b>	<b>2.6000e-004</b>	<b>0.0171</b>	<b>4.4900e-003</b>	<b>2.3000e-004</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>16.6310</b>	<b>16.6310</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>16.6476</b>

**3.10 Sitework - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2430	0.1702	4.5000e-004		0.0106	0.0106		9.7400e-003	9.7400e-003	0.0000	40.6372	40.6372	0.0129	0.0000	40.9072
<b>Total</b>	<b>0.0221</b>	<b>0.2430</b>	<b>0.1702</b>	<b>4.5000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>9.7400e-003</b>	<b>9.7400e-003</b>	<b>0.0000</b>	<b>40.6372</b>	<b>40.6372</b>	<b>0.0129</b>	<b>0.0000</b>	<b>40.9072</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	4.6600e-003	6.8900e-003	1.0000e-005	4.1000e-004	7.0000e-005	4.8000e-004	1.2000e-004	7.0000e-005	1.8000e-004	0.0000	1.2455	1.2455	1.0000e-005	0.0000	1.2457
Worker	3.1900e-003	4.7600e-003	0.0494	1.4000e-004	0.0109	9.0000e-005	0.0109	2.8800e-003	9.0000e-005	2.9700e-003	0.0000	9.4307	9.4307	4.8000e-004	0.0000	9.4408
<b>Total</b>	<b>3.6700e-003</b>	<b>9.4200e-003</b>	<b>0.0562</b>	<b>1.5000e-004</b>	<b>0.0113</b>	<b>1.6000e-004</b>	<b>0.0114</b>	<b>3.0000e-003</b>	<b>1.6000e-004</b>	<b>3.1500e-003</b>	<b>0.0000</b>	<b>10.6762</b>	<b>10.6762</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>10.6865</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2430	0.1702	4.5000e-004		0.0106	0.0106		9.7400e-003	9.7400e-003	0.0000	40.6371	40.6371	0.0129	0.0000	40.9071
<b>Total</b>	<b>0.0221</b>	<b>0.2430</b>	<b>0.1702</b>	<b>4.5000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>9.7400e-003</b>	<b>9.7400e-003</b>	<b>0.0000</b>	<b>40.6371</b>	<b>40.6371</b>	<b>0.0129</b>	<b>0.0000</b>	<b>40.9071</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	4.6600e-003	6.8900e-003	1.0000e-005	4.1000e-004	7.0000e-005	4.8000e-004	1.2000e-004	7.0000e-005	1.8000e-004	0.0000	1.2455	1.2455	1.0000e-005	0.0000	1.2457
Worker	3.1900e-003	4.7600e-003	0.0494	1.4000e-004	0.0109	9.0000e-005	0.0109	2.8800e-003	9.0000e-005	2.9700e-003	0.0000	9.4307	9.4307	4.8000e-004	0.0000	9.4408
<b>Total</b>	<b>3.6700e-003</b>	<b>9.4200e-003</b>	<b>0.0562</b>	<b>1.5000e-004</b>	<b>0.0113</b>	<b>1.6000e-004</b>	<b>0.0114</b>	<b>3.0000e-003</b>	<b>1.6000e-004</b>	<b>3.1500e-003</b>	<b>0.0000</b>	<b>10.6762</b>	<b>10.6762</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>10.6865</b>

**Sub-Appendix c-2**

Regional Construction Emissions

Tier III Construction Equipment



## Harvard Westlake Parking Structure Los Angeles-South Coast County, Winter

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	750.00	Space	1.90	300,000.00	0
User Defined Parking	0.00	User Defined Unit	1.52	59,921.00	0
User Defined Recreational	64,350.00	User Defined Unit	0.00	64,350.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2019
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Athletic Field is under land use category of User defined recreational.

Roadway and landscape are under parking user defined

Construction Phase - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment -

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on construction plan

Off-road Equipment - based on equipment mix provided by the constructor



tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	290.00
tblConstructionPhase	NumDays	230.00	114.00
tblConstructionPhase	NumDays	230.00	82.00
tblConstructionPhase	NumDays	230.00	165.00
tblConstructionPhase	NumDays	8.00	245.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	3/6/2018	4/12/2017
tblConstructionPhase	PhaseEndDate	1/10/2018	4/26/2017
tblConstructionPhase	PhaseEndDate	6/6/2018	7/19/2018
tblConstructionPhase	PhaseEndDate	12/26/2018	3/23/2018
tblConstructionPhase	PhaseStartDate	6/7/2017	7/14/2016
tblConstructionPhase	PhaseStartDate	4/13/2017	7/28/2016
tblConstructionPhase	PhaseStartDate	4/27/2017	6/9/2017
tblConstructionPhase	PhaseStartDate	7/20/2018	10/17/2017
tblConstructionPhase	PhaseStartDate	3/24/2018	3/26/2018
tblEnergyUse	LightingElect	0.00	3.26
tblEnergyUse	NT24E	0.00	3.26
tblEnergyUse	T24E	0.00	3.26
tblGrading	AcresOfGrading	612.50	450.00
tblGrading	MaterialExported	0.00	140,000.00
tblLandUse	LandUseSquareFeet	0.00	59,921.00
tblLandUse	LandUseSquareFeet	0.00	64,350.00
tblLandUse	LotAcreage	6.75	1.90

tblLandUse	LotAcreage	0.00	1.52
tblOffRoadEquipment	HorsePower	162.00	330.00
tblOffRoadEquipment	HorsePower	255.00	207.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	361.00	185.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00
tblTripsAndVMT	VendorTripNumber	70.00	50.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	13.6035	136.2273	88.9519	0.1830	11.1459	6.7725	17.9184	4.3514	6.4285	10.7799	0.0000	18,215.4228	18,215.4228	2.8118	0.0000	18,274.4699

2017	12.4729	124.7194	86.4321	0.1830	11.4750	6.0865	17.5615	4.4322	5.7743	10.2064	0.0000	17,965.9590	17,965.9590	2.7611	0.0000	18,023.9420
2018	6.6818	67.3002	55.3903	0.0970	0.9951	3.3668	4.3619	0.2702	3.1364	3.4066	0.0000	9,464.0855	9,464.0855	2.2109	0.0000	9,510.5147
2019	0.7886	7.6427	6.8372	0.0182	0.3478	0.3261	0.6739	0.0925	0.3000	0.3925	0.0000	1,708.8333	1,708.8333	0.4459	0.0000	1,718.1970
<b>Total</b>	<b>33.5468</b>	<b>335.8896</b>	<b>237.6115</b>	<b>0.4813</b>	<b>23.9638</b>	<b>16.5519</b>	<b>40.5157</b>	<b>9.1462</b>	<b>15.6392</b>	<b>24.7854</b>	<b>0.0000</b>	<b>47,354.3006</b>	<b>47,354.3006</b>	<b>8.2297</b>	<b>0.0000</b>	<b>47,527.1237</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	4.4731	76.8933	94.8251	0.1830	6.2448	3.2712	9.5160	2.1979	3.2456	5.4434	0.0000	18,215.4227	18,215.4227	2.8118	0.0000	18,274.4699
2017	4.3443	75.0722	93.6172	0.1830	6.5739	3.2437	9.8175	2.2787	3.2203	5.4989	0.0000	17,965.9590	17,965.9590	2.7611	0.0000	18,023.9420
2018	2.4820	41.5735	60.0898	0.0970	0.9951	1.9817	2.9768	0.2702	1.9764	2.2466	0.0000	9,464.0855	9,464.0855	2.2109	0.0000	9,510.5147
2019	0.4569	7.0645	9.6289	0.0182	0.3478	0.3107	0.6586	0.0925	0.3104	0.4028	0.0000	1,708.8333	1,708.8333	0.4459	0.0000	1,718.1970
<b>Total</b>	<b>11.7563</b>	<b>200.6036</b>	<b>258.1610</b>	<b>0.4813</b>	<b>14.1616</b>	<b>8.8073</b>	<b>22.9689</b>	<b>4.8392</b>	<b>8.7526</b>	<b>13.5918</b>	<b>0.0000</b>	<b>47,354.3005</b>	<b>47,354.3005</b>	<b>8.2297</b>	<b>0.0000</b>	<b>47,527.1237</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>64.96</b>	<b>40.28</b>	<b>-8.65</b>	<b>0.00</b>	<b>40.90</b>	<b>46.79</b>	<b>43.31</b>	<b>47.09</b>	<b>44.03</b>	<b>45.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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1	Site Preparation	Site Preparation	6/1/2016	6/28/2016	5	20
2	Grading	Grading	6/29/2016	6/6/2017	5	245
3	Soil Nailing	Building Construction	7/14/2016	4/12/2017	5	195
4	Shotcrete	Building Construction	7/28/2016	4/26/2017	5	195
5	Foundation/Structure	Building Construction	6/9/2017	7/19/2018	5	290
6	Tower/Ramp	Building Construction	10/17/2017	3/23/2018	5	114
7	Bridge	Building Construction	3/26/2018	7/17/2018	5	82
8	Streetwork	Paving	7/18/2018	8/14/2018	5	20
9	Sitework	Building Construction	8/15/2018	4/2/2019	5	165

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 450**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	330	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	207	0.40
Grading	Scrapers	2	8.00	185	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	84	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	96	0.37
Soil Nailing	Air Compressors	2	8.00	78	0.48
Soil Nailing	Bore/Drill Rigs	2	8.00	160	0.50
Soil Nailing	Pumps	2	8.00	84	0.74
Shotcrete	Air Compressors	2	8.00	78	0.48



Shotcrete	Pumps	2	8.00	84	0.74
Foundation/Structure	Air Compressors	1	8.00	78	0.48
Foundation/Structure	Bore/Drill Rigs	1	8.00	160	0.50
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Pumps	1	8.00	84	0.74
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	2	8.00	84	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	96	0.37
Bridge	Cranes	1	8.00	226	0.29
Streetwork	Graders	1	8.00	174	0.41
Streetwork	Paving Equipment	1	8.00	130	0.36
Streetwork	Plate Compactors	1	8.00	8	0.43
Streetwork	Rollers	1	8.00	80	0.38
Streetwork	Scrapers	1	8.00	361	0.48
Sitework	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Sitework	Tractors/Loaders/Backhoes	1	8.00	84	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tower/Ramp	0			0.00	14.70	6.90				
Bridge	1	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Streetwork	5	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sitework	2	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.5788	17.1258	12.8976	0.0120		0.8960	0.8960		0.8243	0.8243		1,247.1093	1,247.1093	0.3762		1,255.0089
<b>Total</b>	<b>1.5788</b>	<b>17.1258</b>	<b>12.8976</b>	<b>0.0120</b>	<b>6.0221</b>	<b>0.8960</b>	<b>6.9181</b>	<b>3.3102</b>	<b>0.8243</b>	<b>4.1346</b>		<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>		<b>1,255.0089</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0232	0.0311	0.3257	6.9000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		58.0016	58.0016	3.3500e-003		58.0718
<b>Total</b>	<b>0.0232</b>	<b>0.0311</b>	<b>0.3257</b>	<b>6.9000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>58.0016</b>	<b>58.0016</b>	<b>3.3500e-003</b>		<b>58.0718</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	0.2918	5.9080	7.0194	0.0120		0.2798	0.2798		0.2798	0.2798	0.0000	1,247.1093	1,247.1093	0.3762		1,255.0089
<b>Total</b>	<b>0.2918</b>	<b>5.9080</b>	<b>7.0194</b>	<b>0.0120</b>	<b>2.3486</b>	<b>0.2798</b>	<b>2.6285</b>	<b>1.2910</b>	<b>0.2798</b>	<b>1.5708</b>	<b>0.0000</b>	<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>		<b>1,255.0089</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0232	0.0311	0.3257	6.9000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		58.0016	58.0016	3.3500e-003		58.0718
<b>Total</b>	<b>0.0232</b>	<b>0.0311</b>	<b>0.3257</b>	<b>6.9000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>58.0016</b>	<b>58.0016</b>	<b>3.3500e-003</b>		<b>58.0718</b>

**3.3 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000				0.0000
Off-Road	6.3232	71.5648	31.4699	0.0592		3.5217	3.5217		3.2399	3.2399		6,153.6608	6,153.6608	1.8562			6,192.6402
<b>Total</b>	<b>6.3232</b>	<b>71.5648</b>	<b>31.4699</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.5217</b>	<b>11.5562</b>	<b>3.5303</b>	<b>3.2399</b>	<b>6.7703</b>		<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>			<b>6,192.6402</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.3429	20.8927	16.6009	0.0537	2.0554	0.2996	2.3550	0.5401	0.2756	0.8156		5,406.6052	5,406.6052	0.0406			5,407.4574
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201			348.4308
<b>Total</b>	<b>1.4819</b>	<b>21.0792</b>	<b>18.5551</b>	<b>0.0578</b>	<b>2.3908</b>	<b>0.3027</b>	<b>2.6935</b>	<b>0.6290</b>	<b>0.2785</b>	<b>0.9075</b>		<b>5,754.6146</b>	<b>5,754.6146</b>	<b>0.0607</b>			<b>5,755.8883</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000				0.0000

Off-Road	1.4569	28.9239	34.9322	0.0592		1.2859	1.2859		1.2859	1.2859	0.0000	6,153.6608	6,153.6608	1.8562		6,192.6402
<b>Total</b>	<b>1.4569</b>	<b>28.9239</b>	<b>34.9322</b>	<b>0.0592</b>	<b>3.1335</b>	<b>1.2859</b>	<b>4.4194</b>	<b>1.3768</b>	<b>1.2859</b>	<b>2.6628</b>	<b>0.0000</b>	<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>		<b>6,192.6402</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3429	20.8927	16.6009	0.0537	2.0554	0.2996	2.3550	0.5401	0.2756	0.8156		5,406.6052	5,406.6052	0.0406		5,407.4574
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>1.4819</b>	<b>21.0792</b>	<b>18.5551</b>	<b>0.0578</b>	<b>2.3908</b>	<b>0.3027</b>	<b>2.6935</b>	<b>0.6290</b>	<b>0.2785</b>	<b>0.9075</b>		<b>5,754.6146</b>	<b>5,754.6146</b>	<b>0.0607</b>		<b>5,755.8883</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000			0.0000
Off-Road	5.9108	66.1724	30.4275	0.0592		3.2405	3.2405		2.9812	2.9812		6,055.5587	6,055.5587	1.8554		6,094.5224
<b>Total</b>	<b>5.9108</b>	<b>66.1724</b>	<b>30.4275</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.2405</b>	<b>11.2750</b>	<b>3.5303</b>	<b>2.9812</b>	<b>6.5116</b>		<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2639	19.1889	16.0164	0.0536	2.3845	0.2736	2.6581	0.6209	0.2517	0.8726		5,318.8052	5,318.8052	0.0398		5,319.6413
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>1.3886</b>	<b>19.3575</b>	<b>17.7798</b>	<b>0.0577</b>	<b>2.7198</b>	<b>0.2767</b>	<b>2.9965</b>	<b>0.7098</b>	<b>0.2545</b>	<b>0.9643</b>		<b>5,653.7659</b>	<b>5,653.7659</b>	<b>0.0584</b>		<b>5,654.9915</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000
Off-Road	1.4569	28.9239	34.9322	0.0592		1.2859	1.2859		1.2859	1.2859	0.0000	6,055.5587	6,055.5587	1.8554		6,094.5224
<b>Total</b>	<b>1.4569</b>	<b>28.9239</b>	<b>34.9322</b>	<b>0.0592</b>	<b>3.1335</b>	<b>1.2859</b>	<b>4.4194</b>	<b>1.3768</b>	<b>1.2859</b>	<b>2.6628</b>	<b>0.0000</b>	<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day				
Hauling	1.2639	19.1889	16.0164	0.0536	2.3845	0.2736	2.6581	0.6209	0.2517	0.8726	5,318.8052	5,318.8052	0.0398	5,319.6413	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917	334.9606	334.9606	0.0186	335.3502	
<b>Total</b>	<b>1.3886</b>	<b>19.3575</b>	<b>17.7798</b>	<b>0.0577</b>	<b>2.7198</b>	<b>0.2767</b>	<b>2.9965</b>	<b>0.7098</b>	<b>0.2545</b>	<b>0.9643</b>	<b>5,653.7659</b>	<b>5,653.7659</b>	<b>0.0584</b>	<b>5,654.9915</b>	

### 3.4 Soil Nailing - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1260	26.3481	21.2801	0.0350		1.6938	1.6938		1.6572	1.6572		3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>3.1260</b>	<b>26.3481</b>	<b>21.2801</b>	<b>0.0350</b>		<b>1.6938</b>	<b>1.6938</b>		<b>1.6572</b>	<b>1.6572</b>		<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0279	0.2691	0.3714	6.5000e-004	0.0187	4.1500e-003	0.0229	5.3200e-003	3.8100e-003	9.1400e-003		65.5176	65.5176	5.0000e-004		65.5281

Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>0.1669</b>	<b>0.4556</b>	<b>2.3255</b>	<b>4.7600e-003</b>	<b>0.3540</b>	<b>7.3200e-003</b>	<b>0.3614</b>	<b>0.0943</b>	<b>6.7200e-003</b>	<b>0.1010</b>		<b>413.5270</b>	<b>413.5270</b>	<b>0.0206</b>		<b>413.9589</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7602	16.1733	23.4403	0.0350		0.9906	0.9906		0.9906	0.9906	0.0000	3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>0.7602</b>	<b>16.1733</b>	<b>23.4403</b>	<b>0.0350</b>		<b>0.9906</b>	<b>0.9906</b>		<b>0.9906</b>	<b>0.9906</b>	<b>0.0000</b>	<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0279	0.2691	0.3714	6.5000e-004	0.0187	4.1500e-003	0.0229	5.3200e-003	3.8100e-003	9.1400e-003		65.5176	65.5176	5.0000e-004		65.5281
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>0.1669</b>	<b>0.4556</b>	<b>2.3255</b>	<b>4.7600e-003</b>	<b>0.3540</b>	<b>7.3200e-003</b>	<b>0.3614</b>	<b>0.0943</b>	<b>6.7200e-003</b>	<b>0.1010</b>		<b>413.5270</b>	<b>413.5270</b>	<b>0.0206</b>		<b>413.9589</b>

**3.4 Soil Nailing - 2017**



**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7732	23.3073	21.1142	0.0350		1.4620	1.4620		1.4323	1.4323		3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>2.7732</b>	<b>23.3073</b>	<b>21.1142</b>	<b>0.0350</b>		<b>1.4620</b>	<b>1.4620</b>		<b>1.4323</b>	<b>1.4323</b>		<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0254	0.2452	0.3522	6.5000e-004	0.0187	3.6900e-003	0.0224	5.3300e-003	3.4000e-003	8.7200e-003		64.4702	64.4702	4.8000e-004		64.4803
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.1500</b>	<b>0.4139</b>	<b>2.1155</b>	<b>4.7600e-003</b>	<b>0.3541</b>	<b>6.7300e-003</b>	<b>0.3608</b>	<b>0.0943</b>	<b>6.2000e-003</b>	<b>0.1005</b>		<b>399.4308</b>	<b>399.4308</b>	<b>0.0190</b>		<b>399.8305</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	0.7602	16.1733	23.4403	0.0350		0.9906	0.9906		0.9906	0.9906	0.0000	3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>0.7602</b>	<b>16.1733</b>	<b>23.4403</b>	<b>0.0350</b>		<b>0.9906</b>	<b>0.9906</b>		<b>0.9906</b>	<b>0.9906</b>	<b>0.0000</b>	<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0254	0.2452	0.3522	6.5000e-004	0.0187	3.6900e-003	0.0224	5.3300e-003	3.4000e-003	8.7200e-003		64.4702	64.4702	4.8000e-004		64.4803
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.1500</b>	<b>0.4139</b>	<b>2.1155</b>	<b>4.7600e-003</b>	<b>0.3541</b>	<b>6.7300e-003</b>	<b>0.3608</b>	<b>0.0943</b>	<b>6.2000e-003</b>	<b>0.1005</b>		<b>399.4308</b>	<b>399.4308</b>	<b>0.0190</b>		<b>399.8305</b>

### 3.5 Shotcrete - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3201	16.1445	12.7484	0.0211		1.2369	1.2369		1.2369	1.2369		1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>2.3201</b>	<b>16.1445</b>	<b>12.7484</b>	<b>0.0211</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0465	0.4485	0.6189	1.0900e-003	0.0312	6.9100e-003	0.0381	8.8700e-003	6.3600e-003	0.0152		109.1961	109.1961	8.3000e-004		109.2135
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201		348.4308
<b>Total</b>	<b>0.1855</b>	<b>0.6350</b>	<b>2.5730</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>0.0101</b>	<b>0.3766</b>	<b>0.0978</b>	<b>9.2700e-003</b>	<b>0.1071</b>		<b>457.2054</b>	<b>457.2054</b>	<b>0.0209</b>		<b>457.6444</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4216	9.6264	12.9992	0.0211		0.6746	0.6746		0.6746	0.6746	0.0000	1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>0.4216</b>	<b>9.6264</b>	<b>12.9992</b>	<b>0.0211</b>		<b>0.6746</b>	<b>0.6746</b>		<b>0.6746</b>	<b>0.6746</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0465	0.4485	0.6189	1.0900e-003	0.0312	6.9100e-003	0.0381	8.8700e-003	6.3600e-003	0.0152		109.1961	109.1961	8.3000e-004			109.2135
Worker	0.1390	0.1865	1.9541	4.1100e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		348.0093	348.0093	0.0201			348.4308
<b>Total</b>	<b>0.1855</b>	<b>0.6350</b>	<b>2.5730</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>0.0101</b>	<b>0.3766</b>	<b>0.0978</b>	<b>9.2700e-003</b>	<b>0.1071</b>		<b>457.2054</b>	<b>457.2054</b>	<b>0.0209</b>			<b>457.6444</b>

### 3.5 Shotcrete - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.0833	14.8911	12.6448	0.0211		1.0915	1.0915		1.0915	1.0915		1,996.5973	1,996.5973	0.1867			2,000.5175
<b>Total</b>	<b>2.0833</b>	<b>14.8911</b>	<b>12.6448</b>	<b>0.0211</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>			<b>2,000.5175</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0423	0.4087	0.5870	1.0900e-003	0.0312	6.1600e-003	0.0374	8.8800e-003	5.6600e-003	0.0145		107.4503	107.4503	8.1000e-004	107.4672
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186	335.3502
<b>Total</b>	<b>0.1670</b>	<b>0.5773</b>	<b>2.3504</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>9.2000e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4600e-003</b>	<b>0.1063</b>		<b>442.4110</b>	<b>442.4110</b>	<b>0.0194</b>	<b>442.8174</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4216	9.6264	12.9992	0.0211		0.6746	0.6746		0.6746	0.6746	0.0000	1,996.5973	1,996.5973	0.1867		2,000.5175
<b>Total</b>	<b>0.4216</b>	<b>9.6264</b>	<b>12.9992</b>	<b>0.0211</b>		<b>0.6746</b>	<b>0.6746</b>		<b>0.6746</b>	<b>0.6746</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>		<b>2,000.5175</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0423	0.4087	0.5870	1.0900e-003	0.0312	6.1600e-003	0.0374	8.8800e-003	5.6600e-003	0.0145		107.4503	107.4503	8.1000e-004		107.4672
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502

<b>Total</b>	<b>0.1670</b>	<b>0.5773</b>	<b>2.3504</b>	<b>5.2000e-003</b>	<b>0.3665</b>	<b>9.2000e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4600e-003</b>	<b>0.1063</b>		<b>442.4110</b>	<b>442.4110</b>	<b>0.0194</b>		<b>442.8174</b>
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### 3.6 Foundation/Structure - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216		4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>4.1360</b>	<b>41.8050</b>	<b>29.4873</b>	<b>0.0493</b>		<b>2.3673</b>	<b>2.3673</b>		<b>2.2216</b>	<b>2.2216</b>		<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4231	4.0867	5.8704	0.0109	0.3120	0.0616	0.3735	0.0888	0.0566	0.1454		1,074.5032	1,074.5032	8.0600e-003		1,074.6724
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.5477</b>	<b>4.2554</b>	<b>7.6337</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0646</b>	<b>0.7119</b>	<b>0.1777</b>	<b>0.0594</b>	<b>0.2371</b>		<b>1,409.4638</b>	<b>1,409.4638</b>	<b>0.0266</b>		<b>1,410.0226</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1642	23.9682	33.3893	0.0493		1.3102	1.3102		1.3102	1.3102	0.0000	4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>1.1642</b>	<b>23.9682</b>	<b>33.3893</b>	<b>0.0493</b>		<b>1.3102</b>	<b>1.3102</b>		<b>1.3102</b>	<b>1.3102</b>	<b>0.0000</b>	<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4231	4.0867	5.8704	0.0109	0.3120	0.0616	0.3735	0.0888	0.0566	0.1454		1,074.5032	1,074.5032	8.0600e-003		1,074.6724
Worker	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
<b>Total</b>	<b>0.5477</b>	<b>4.2554</b>	<b>7.6337</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0646</b>	<b>0.7119</b>	<b>0.1777</b>	<b>0.0594</b>	<b>0.2371</b>		<b>1,409.4638</b>	<b>1,409.4638</b>	<b>0.0266</b>		<b>1,410.0226</b>

**3.6 Foundation/Structure - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	3.5526	35.4556	28.3748	0.0492		1.9738	1.9738		1.8540	1.8540		4,891.8621	4,891.8621	1.2949		4,919.0554
<b>Total</b>	<b>3.5526</b>	<b>35.4556</b>	<b>28.3748</b>	<b>0.0492</b>		<b>1.9738</b>	<b>1.9738</b>		<b>1.8540</b>	<b>1.8540</b>		<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3970	3.7556	5.6450	0.0109	0.3120	0.0580	0.3700	0.0888	0.0533	0.1421		1,056.7394	1,056.7394	8.0200e-003		1,056.9078
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.5089</b>	<b>3.9087</b>	<b>7.2402</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0609</b>	<b>0.7082</b>	<b>0.1777</b>	<b>0.0560</b>	<b>0.2338</b>		<b>1,379.4169</b>	<b>1,379.4169</b>	<b>0.0253</b>		<b>1,379.9472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1642	23.9682	33.3893	0.0492		1.3102	1.3102		1.3102	1.3102	0.0000	4,891.8621	4,891.8621	1.2949		4,919.0554
<b>Total</b>	<b>1.1642</b>	<b>23.9682</b>	<b>33.3893</b>	<b>0.0492</b>		<b>1.3102</b>	<b>1.3102</b>		<b>1.3102</b>	<b>1.3102</b>	<b>0.0000</b>	<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>



**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3970	3.7556	5.6450	0.0109	0.3120	0.0580	0.3700	0.0888	0.0533	0.1421		1,056.7394	1,056.7394	8.0200e-003		1,056.9078
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.5089</b>	<b>3.9087</b>	<b>7.2402</b>	<b>0.0150</b>	<b>0.6473</b>	<b>0.0609</b>	<b>0.7082</b>	<b>0.1777</b>	<b>0.0560</b>	<b>0.2338</b>		<b>1,379.4169</b>	<b>1,379.4169</b>	<b>0.0253</b>		<b>1,379.9472</b>

**3.7 Tower/Ramp - 2017**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

### 3.7 Tower/Ramp - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

### 3.8 Bridge - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.5584	6.6732	2.4673	5.6400e-003		0.2888	0.2888		0.2657	0.2657		568.0309	568.0309	0.1768			571.7444
<b>Total</b>	<b>0.5584</b>	<b>6.6732</b>	<b>2.4673</b>	<b>5.6400e-003</b>		<b>0.2888</b>	<b>0.2888</b>		<b>0.2657</b>	<b>0.2657</b>		<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>			<b>571.7444</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004			42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172			323.0394

<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1387	2.6818	3.0054	5.6400e-003		0.1017	0.1017		0.1017	0.1017	0.0000	568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.1387</b>	<b>2.6818</b>	<b>3.0054</b>	<b>5.6400e-003</b>		<b>0.1017</b>	<b>0.1017</b>		<b>0.1017</b>	<b>0.1017</b>	<b>0.0000</b>	<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

**3.9 Streetwork - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4925	27.6327	17.9542	0.0282		1.3269	1.3269		1.2215	1.2215		2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4925</b>	<b>27.6327</b>	<b>17.9542</b>	<b>0.0282</b>		<b>1.3269</b>	<b>1.3269</b>		<b>1.2215</b>	<b>1.2215</b>		<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.6811	13.3934	17.6392	0.0282		0.6053	0.6053		0.6053	0.6053	0.0000	2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6811</b>	<b>13.3934</b>	<b>17.6392</b>	<b>0.0282</b>		<b>0.6053</b>	<b>0.6053</b>		<b>0.6053</b>	<b>0.6053</b>	<b>0.0000</b>	<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

**3.10 Sitework - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7365	8.3553	5.3155	0.0137		0.3713	0.3713		0.3416	0.3416		1,378.3741	1,378.3741	0.4291		1,387.3854
<b>Total</b>	<b>0.7365</b>	<b>8.3553</b>	<b>5.3155</b>	<b>0.0137</b>		<b>0.3713</b>	<b>0.3713</b>		<b>0.3416</b>	<b>0.3416</b>		<b>1,378.3741</b>	<b>1,378.3741</b>	<b>0.4291</b>		<b>1,387.3854</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004			42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172			323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>			<b>365.3157</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3391	6.7857	7.9496	0.0137		0.3057	0.3057		0.3057	0.3057	0.0000	1,378.3741	1,378.3741	0.4291			1,387.3854
<b>Total</b>	<b>0.3391</b>	<b>6.7857</b>	<b>7.9496</b>	<b>0.0137</b>		<b>0.3057</b>	<b>0.3057</b>		<b>0.3057</b>	<b>0.3057</b>	<b>0.0000</b>	<b>1,378.3741</b>	<b>1,378.3741</b>	<b>0.4291</b>			<b>1,387.3854</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0159	0.1502	0.2258	4.4000e-004	0.0125	2.3200e-003	0.0148	3.5500e-003	2.1300e-003	5.6800e-003		42.2696	42.2696	3.2000e-004		42.2763
Worker	0.1120	0.1531	1.5953	4.1100e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		322.6775	322.6775	0.0172		323.0394
<b>Total</b>	<b>0.1278</b>	<b>0.3033</b>	<b>1.8211</b>	<b>4.5500e-003</b>	<b>0.3478</b>	<b>5.2600e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8500e-003</b>	<b>0.0973</b>		<b>364.9471</b>	<b>364.9471</b>	<b>0.0176</b>		<b>365.3157</b>

### 3.10 Sitework - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6708	7.3638	5.1579	0.0137		0.3210	0.3210		0.2953	0.2953		1,357.4181	1,357.4181	0.4295		1,366.4370
<b>Total</b>	<b>0.6708</b>	<b>7.3638</b>	<b>5.1579</b>	<b>0.0137</b>		<b>0.3210</b>	<b>0.3210</b>		<b>0.2953</b>	<b>0.2953</b>		<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>		<b>1,366.4370</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000



Vendor	0.0150	0.1385	0.2187	4.3000e-004	0.0125	2.2000e-003	0.0147	3.5500e-003	2.0300e-003	5.5800e-003		41.4007	41.4007	3.1000e-004		41.4073
Worker	0.1028	0.1403	1.4606	4.0900e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		310.0145	310.0145	0.0161		310.3527
<b>Total</b>	<b>0.1178</b>	<b>0.2789</b>	<b>1.6793</b>	<b>4.5200e-003</b>	<b>0.3478</b>	<b>5.0700e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6900e-003</b>	<b>0.0972</b>		<b>351.4153</b>	<b>351.4153</b>	<b>0.0164</b>		<b>351.7601</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3391	6.7857	7.9496	0.0137		0.3057	0.3057		0.3057	0.3057	0.0000	1,357.4181	1,357.4181	0.4295			1,366.4370
<b>Total</b>	<b>0.3391</b>	<b>6.7857</b>	<b>7.9496</b>	<b>0.0137</b>		<b>0.3057</b>	<b>0.3057</b>		<b>0.3057</b>	<b>0.3057</b>	<b>0.0000</b>	<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>			<b>1,366.4370</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0150	0.1385	0.2187	4.3000e-004	0.0125	2.2000e-003	0.0147	3.5500e-003	2.0300e-003	5.5800e-003		41.4007	41.4007	3.1000e-004		41.4073
Worker	0.1028	0.1403	1.4606	4.0900e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		310.0145	310.0145	0.0161		310.3527
<b>Total</b>	<b>0.1178</b>	<b>0.2789</b>	<b>1.6793</b>	<b>4.5200e-003</b>	<b>0.3478</b>	<b>5.0700e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6900e-003</b>	<b>0.0972</b>		<b>351.4153</b>	<b>351.4153</b>	<b>0.0164</b>		<b>351.7601</b>

## Harvard Westlake Parking Structure Los Angeles-South Coast County, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	750.00	Space	1.90	300,000.00	0
User Defined Parking	0.00	User Defined Unit	1.52	59,921.00	0
User Defined Recreational	64,350.00	User Defined Unit	0.00	64,350.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2019
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Athletic Field is under land use category of User defined recreational.

Roadway and landscape are under parking user defined

Construction Phase - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment -

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on construction plan

Off-road Equipment - based on equipment mix provided by the constructor



tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	290.00
tblConstructionPhase	NumDays	230.00	114.00
tblConstructionPhase	NumDays	230.00	82.00
tblConstructionPhase	NumDays	230.00	165.00
tblConstructionPhase	NumDays	8.00	245.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	3/6/2018	4/12/2017
tblConstructionPhase	PhaseEndDate	1/10/2018	4/26/2017
tblConstructionPhase	PhaseEndDate	6/6/2018	7/19/2018
tblConstructionPhase	PhaseEndDate	12/26/2018	3/23/2018
tblConstructionPhase	PhaseStartDate	6/7/2017	7/14/2016
tblConstructionPhase	PhaseStartDate	4/13/2017	7/28/2016
tblConstructionPhase	PhaseStartDate	4/27/2017	6/9/2017
tblConstructionPhase	PhaseStartDate	7/20/2018	10/17/2017
tblConstructionPhase	PhaseStartDate	3/24/2018	3/26/2018
tblEnergyUse	LightingElect	0.00	3.26
tblEnergyUse	NT24E	0.00	3.26
tblEnergyUse	T24E	0.00	3.26
tblGrading	AcresOfGrading	612.50	450.00
tblGrading	MaterialExported	0.00	140,000.00
tblLandUse	LandUseSquareFeet	0.00	59,921.00
tblLandUse	LandUseSquareFeet	0.00	64,350.00
tblLandUse	LotAcreage	6.75	1.90

tblLandUse	LotAcreage	0.00	1.52
tblOffRoadEquipment	HorsePower	162.00	330.00
tblOffRoadEquipment	HorsePower	255.00	207.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	361.00	185.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00
tblTripsAndVMT	VendorTripNumber	70.00	50.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	13.5056	135.4451	86.8778	0.1839	11.1459	6.7716	17.9175	4.3514	6.4277	10.7791	0.0000	18,291.6992	18,291.6992	2.8112	0.0000	18,350.7350

2017	12.3884	124.0031	84.3306	0.1838	11.4750	6.0858	17.5608	4.4322	5.7736	10.2058	0.0000	18,039.7688	18,039.7688	2.7605	0.0000	18,097.7401
2018	6.6386	67.1783	54.4970	0.0976	0.9951	3.3662	4.3614	0.2702	3.1359	3.4061	0.0000	9,511.8113	9,511.8113	2.2107	0.0000	9,558.2353
2019	0.7839	7.6257	6.9069	0.0185	0.3478	0.3260	0.6738	0.0925	0.3000	0.3925	0.0000	1,727.6930	1,727.6930	0.4459	0.0000	1,737.0565
<b>Total</b>	<b>33.3166</b>	<b>334.2522</b>	<b>232.6124</b>	<b>0.4838</b>	<b>23.9638</b>	<b>16.5497</b>	<b>40.5135</b>	<b>9.1462</b>	<b>15.6372</b>	<b>24.7834</b>	<b>0.0000</b>	<b>47,570.9723</b>	<b>47,570.9723</b>	<b>8.2283</b>	<b>0.0000</b>	<b>47,743.7668</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	4.3752	76.1112	92.7510	0.1839	6.2448	3.2704	9.5152	2.1979	3.2448	5.4427	0.0000	18,291.6992	18,291.6992	2.8112	0.0000	18,350.7350
2017	4.2598	74.3559	91.5158	0.1838	6.5739	3.2430	9.8168	2.2787	3.2196	5.4983	0.0000	18,039.7688	18,039.7688	2.7605	0.0000	18,097.7401
2018	2.4389	41.4516	59.1965	0.0976	0.9951	1.9811	2.9762	0.2702	1.9758	2.2460	0.0000	9,511.8113	9,511.8113	2.2107	0.0000	9,558.2353
2019	0.4522	7.0476	9.6987	0.0185	0.3478	0.3107	0.6585	0.0925	0.3103	0.4028	0.0000	1,727.6930	1,727.6930	0.4459	0.0000	1,737.0565
<b>Total</b>	<b>11.5260</b>	<b>198.9663</b>	<b>253.1619</b>	<b>0.4838</b>	<b>14.1616</b>	<b>8.8051</b>	<b>22.9667</b>	<b>4.8392</b>	<b>8.7506</b>	<b>13.5898</b>	<b>0.0000</b>	<b>47,570.9723</b>	<b>47,570.9723</b>	<b>8.2283</b>	<b>0.0000</b>	<b>47,743.7668</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>65.40</b>	<b>40.47</b>	<b>-8.83</b>	<b>0.00</b>	<b>40.90</b>	<b>46.80</b>	<b>43.31</b>	<b>47.09</b>	<b>44.04</b>	<b>45.17</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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1	Site Preparation	Site Preparation	6/1/2016	6/28/2016	5	20
2	Grading	Grading	6/29/2016	6/6/2017	5	245
3	Soil Nailing	Building Construction	7/14/2016	4/12/2017	5	195
4	Shotcrete	Building Construction	7/28/2016	4/26/2017	5	195
5	Foundation/Structure	Building Construction	6/9/2017	7/19/2018	5	290
6	Tower/Ramp	Building Construction	10/17/2017	3/23/2018	5	114
7	Bridge	Building Construction	3/26/2018	7/17/2018	5	82
8	Streetwork	Paving	7/18/2018	8/14/2018	5	20
9	Sitework	Building Construction	8/15/2018	4/2/2019	5	165

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 450**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	330	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	207	0.40
Grading	Scrapers	2	8.00	185	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	84	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	96	0.37
Soil Nailing	Air Compressors	2	8.00	78	0.48
Soil Nailing	Bore/Drill Rigs	2	8.00	160	0.50
Soil Nailing	Pumps	2	8.00	84	0.74
Shotcrete	Air Compressors	2	8.00	78	0.48

Shotcrete	Pumps	2	8.00	84	0.74
Foundation/Structure	Air Compressors	1	8.00	78	0.48
Foundation/Structure	Bore/Drill Rigs	1	8.00	160	0.50
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Pumps	1	8.00	84	0.74
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	2	8.00	84	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	96	0.37
Bridge	Cranes	1	8.00	226	0.29
Streetwork	Graders	1	8.00	174	0.41
Streetwork	Paving Equipment	1	8.00	130	0.36
Streetwork	Plate Compactors	1	8.00	8	0.43
Streetwork	Rollers	1	8.00	80	0.38
Streetwork	Scrapers	1	8.00	361	0.48
Sitework	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Sitework	Tractors/Loaders/Backhoes	1	8.00	84	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tower/Ramp	0			0.00	14.70	6.90				
Bridge	1	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Streetwork	5	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sitework	2	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000				0.0000
Off-Road	1.5788	17.1258	12.8976	0.0120		0.8960	0.8960		0.8243	0.8243		1,247.1093	1,247.1093	0.3762			1,255.0089
<b>Total</b>	<b>1.5788</b>	<b>17.1258</b>	<b>12.8976</b>	<b>0.0120</b>	<b>6.0221</b>	<b>0.8960</b>	<b>6.9181</b>	<b>3.3102</b>	<b>0.8243</b>	<b>4.1346</b>		<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>			<b>1,255.0089</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0223	0.0280	0.3469	7.3000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		61.4511	61.4511	3.3500e-003			61.5213
<b>Total</b>	<b>0.0223</b>	<b>0.0280</b>	<b>0.3469</b>	<b>7.3000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>61.4511</b>	<b>61.4511</b>	<b>3.3500e-003</b>			<b>61.5213</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	0.2918	5.9080	7.0194	0.0120		0.2798	0.2798		0.2798	0.2798	0.0000	1,247.1093	1,247.1093	0.3762		1,255.0089
<b>Total</b>	<b>0.2918</b>	<b>5.9080</b>	<b>7.0194</b>	<b>0.0120</b>	<b>2.3486</b>	<b>0.2798</b>	<b>2.6285</b>	<b>1.2910</b>	<b>0.2798</b>	<b>1.5708</b>	<b>0.0000</b>	<b>1,247.1093</b>	<b>1,247.1093</b>	<b>0.3762</b>		<b>1,255.0089</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0280	0.3469	7.3000e-004	0.0559	5.3000e-004	0.0564	0.0148	4.9000e-004	0.0153		61.4511	61.4511	3.3500e-003		61.5213
<b>Total</b>	<b>0.0223</b>	<b>0.0280</b>	<b>0.3469</b>	<b>7.3000e-004</b>	<b>0.0559</b>	<b>5.3000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.9000e-004</b>	<b>0.0153</b>		<b>61.4511</b>	<b>61.4511</b>	<b>3.3500e-003</b>		<b>61.5213</b>

**3.3 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000			0.0000
Off-Road	6.3232	71.5648	31.4699	0.0592		3.5217	3.5217		3.2399	3.2399		6,153.6608	6,153.6608	1.8562		6,192.6402
<b>Total</b>	<b>6.3232</b>	<b>71.5648</b>	<b>31.4699</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.5217</b>	<b>11.5562</b>	<b>3.5303</b>	<b>3.2399</b>	<b>6.7703</b>		<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>		<b>6,192.6402</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2682	20.1831	14.3229	0.0538	2.0554	0.2988	2.3543	0.5401	0.2749	0.8149		5,419.3277	5,419.3277	0.0401		5,420.1693
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>1.4018</b>	<b>20.3513</b>	<b>16.4039</b>	<b>0.0581</b>	<b>2.3908</b>	<b>0.3020</b>	<b>2.6928</b>	<b>0.6290</b>	<b>0.2778</b>	<b>0.9068</b>		<b>5,788.0341</b>	<b>5,788.0341</b>	<b>0.0601</b>		<b>5,789.2972</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000

Off-Road	1.4569	28.9239	34.9322	0.0592		1.2859	1.2859		1.2859	1.2859	0.0000	6,153.6608	6,153.6608	1.8562		6,192.6402
<b>Total</b>	<b>1.4569</b>	<b>28.9239</b>	<b>34.9322</b>	<b>0.0592</b>	<b>3.1335</b>	<b>1.2859</b>	<b>4.4194</b>	<b>1.3768</b>	<b>1.2859</b>	<b>2.6628</b>	<b>0.0000</b>	<b>6,153.6608</b>	<b>6,153.6608</b>	<b>1.8562</b>		<b>6,192.6402</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2682	20.1831	14.3229	0.0538	2.0554	0.2988	2.3543	0.5401	0.2749	0.8149		5,419.3277	5,419.3277	0.0401		5,420.1693
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>1.4018</b>	<b>20.3513</b>	<b>16.4039</b>	<b>0.0581</b>	<b>2.3908</b>	<b>0.3020</b>	<b>2.6928</b>	<b>0.6290</b>	<b>0.2778</b>	<b>0.9068</b>		<b>5,788.0341</b>	<b>5,788.0341</b>	<b>0.0601</b>		<b>5,789.2972</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0346	0.0000	8.0346	3.5303	0.0000	3.5303			0.0000			0.0000
Off-Road	5.9108	66.1724	30.4275	0.0592		3.2405	3.2405		2.9812	2.9812		6,055.5587	6,055.5587	1.8554		6,094.5224
<b>Total</b>	<b>5.9108</b>	<b>66.1724</b>	<b>30.4275</b>	<b>0.0592</b>	<b>8.0346</b>	<b>3.2405</b>	<b>11.2750</b>	<b>3.5303</b>	<b>2.9812</b>	<b>6.5116</b>		<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1992	18.5379	13.7239	0.0537	2.3845	0.2730	2.6575	0.6209	0.2512	0.8720		5,331.3295	5,331.3295	0.0393		5,332.1546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>1.3193</b>	<b>18.6900</b>	<b>15.6095</b>	<b>0.0581</b>	<b>2.7198</b>	<b>0.2761</b>	<b>2.9959</b>	<b>0.7098</b>	<b>0.2540</b>	<b>0.9637</b>		<b>5,686.2377</b>	<b>5,686.2377</b>	<b>0.0578</b>		<b>5,687.4524</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1335	0.0000	3.1335	1.3768	0.0000	1.3768			0.0000			0.0000
Off-Road	1.4569	28.9239	34.9322	0.0592		1.2859	1.2859		1.2859	1.2859	0.0000	6,055.5587	6,055.5587	1.8554		6,094.5224
<b>Total</b>	<b>1.4569</b>	<b>28.9239</b>	<b>34.9322</b>	<b>0.0592</b>	<b>3.1335</b>	<b>1.2859</b>	<b>4.4194</b>	<b>1.3768</b>	<b>1.2859</b>	<b>2.6628</b>	<b>0.0000</b>	<b>6,055.5587</b>	<b>6,055.5587</b>	<b>1.8554</b>		<b>6,094.5224</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day			
Hauling	1.1992	18.5379	13.7239	0.0537	2.3845	0.2730	2.6575	0.6209	0.2512	0.8720	5,331.3295	5,331.3295	0.0393	5,332.1546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917	354.9083	354.9083	0.0186	355.2978
<b>Total</b>	<b>1.3193</b>	<b>18.6900</b>	<b>15.6095</b>	<b>0.0581</b>	<b>2.7198</b>	<b>0.2761</b>	<b>2.9959</b>	<b>0.7098</b>	<b>0.2540</b>	<b>0.9637</b>	<b>5,686.2377</b>	<b>5,686.2377</b>	<b>0.0578</b>	<b>5,687.4524</b>

### 3.4 Soil Nailing - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1260	26.3481	21.2801	0.0350		1.6938	1.6938		1.6572	1.6572		3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>3.1260</b>	<b>26.3481</b>	<b>21.2801</b>	<b>0.0350</b>		<b>1.6938</b>	<b>1.6938</b>		<b>1.6572</b>	<b>1.6572</b>		<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0253	0.2625	0.3050	6.6000e-004	0.0187	4.1000e-003	0.0228	5.3200e-003	3.7700e-003	9.1000e-003		66.0662	66.0662	4.8000e-004		66.0764



Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>0.1589</b>	<b>0.4307</b>	<b>2.3861</b>	<b>5.0200e-003</b>	<b>0.3540</b>	<b>7.2700e-003</b>	<b>0.3613</b>	<b>0.0943</b>	<b>6.6800e-003</b>	<b>0.1010</b>		<b>434.7726</b>	<b>434.7726</b>	<b>0.0206</b>		<b>435.2043</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7602	16.1733	23.4403	0.0350		0.9906	0.9906		0.9906	0.9906	0.0000	3,439.8178	3,439.8178	0.6444		3,453.3503
<b>Total</b>	<b>0.7602</b>	<b>16.1733</b>	<b>23.4403</b>	<b>0.0350</b>		<b>0.9906</b>	<b>0.9906</b>		<b>0.9906</b>	<b>0.9906</b>	<b>0.0000</b>	<b>3,439.8178</b>	<b>3,439.8178</b>	<b>0.6444</b>		<b>3,453.3503</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0253	0.2625	0.3050	6.6000e-004	0.0187	4.1000e-003	0.0228	5.3200e-003	3.7700e-003	9.1000e-003		66.0662	66.0662	4.8000e-004		66.0764
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201		369.1279
<b>Total</b>	<b>0.1589</b>	<b>0.4307</b>	<b>2.3861</b>	<b>5.0200e-003</b>	<b>0.3540</b>	<b>7.2700e-003</b>	<b>0.3613</b>	<b>0.0943</b>	<b>6.6800e-003</b>	<b>0.1010</b>		<b>434.7726</b>	<b>434.7726</b>	<b>0.0206</b>		<b>435.2043</b>

**3.4 Soil Nailing - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.7732	23.3073	21.1142	0.0350		1.4620	1.4620		1.4323	1.4323		3,418.1954	3,418.1954	0.6223			3,431.2627
<b>Total</b>	<b>2.7732</b>	<b>23.3073</b>	<b>21.1142</b>	<b>0.0350</b>		<b>1.4620</b>	<b>1.4620</b>		<b>1.4323</b>	<b>1.4323</b>		<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>			<b>3,431.2627</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0231	0.2393	0.2864	6.6000e-004	0.0187	3.6600e-003	0.0224	5.3300e-003	3.3600e-003	8.6900e-003		65.0112	65.0112	4.7000e-004			65.0210
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186			355.2978
<b>Total</b>	<b>0.1432</b>	<b>0.3914</b>	<b>2.1719</b>	<b>5.0200e-003</b>	<b>0.3541</b>	<b>6.7000e-003</b>	<b>0.3607</b>	<b>0.0943</b>	<b>6.1600e-003</b>	<b>0.1004</b>		<b>419.9194</b>	<b>419.9194</b>	<b>0.0190</b>			<b>420.3189</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	0.7602	16.1733	23.4403	0.0350		0.9906	0.9906		0.9906	0.9906	0.0000	3,418.1954	3,418.1954	0.6223		3,431.2627
<b>Total</b>	<b>0.7602</b>	<b>16.1733</b>	<b>23.4403</b>	<b>0.0350</b>		<b>0.9906</b>	<b>0.9906</b>		<b>0.9906</b>	<b>0.9906</b>	<b>0.0000</b>	<b>3,418.1954</b>	<b>3,418.1954</b>	<b>0.6223</b>		<b>3,431.2627</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0231	0.2393	0.2864	6.6000e-004	0.0187	3.6600e-003	0.0224	5.3300e-003	3.3600e-003	8.6900e-003		65.0112	65.0112	4.7000e-004		65.0210
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.1432</b>	<b>0.3914</b>	<b>2.1719</b>	<b>5.0200e-003</b>	<b>0.3541</b>	<b>6.7000e-003</b>	<b>0.3607</b>	<b>0.0943</b>	<b>6.1600e-003</b>	<b>0.1004</b>		<b>419.9194</b>	<b>419.9194</b>	<b>0.0190</b>		<b>420.3189</b>

### 3.5 Shotcrete - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3201	16.1445	12.7484	0.0211		1.2369	1.2369		1.2369	1.2369		1,996.5973	1,996.5973	0.2091		2,000.9879
<b>Total</b>	<b>2.3201</b>	<b>16.1445</b>	<b>12.7484</b>	<b>0.0211</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1.2369</b>	<b>1.2369</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>		<b>2,000.9879</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0421	0.4375	0.5083	1.1000e-003	0.0312	6.8400e-003	0.0380	8.8700e-003	6.2900e-003	0.0152		110.1103	110.1103	8.1000e-004			110.1273
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201			369.1279
<b>Total</b>	<b>0.1758</b>	<b>0.6057</b>	<b>2.5894</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>0.0100</b>	<b>0.3765</b>	<b>0.0978</b>	<b>9.2000e-003</b>	<b>0.1070</b>		<b>478.8167</b>	<b>478.8167</b>	<b>0.0209</b>			<b>479.2552</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4216	9.6264	12.9992	0.0211		0.6746	0.6746		0.6746	0.6746	0.0000	1,996.5973	1,996.5973	0.2091			2,000.9879
<b>Total</b>	<b>0.4216</b>	<b>9.6264</b>	<b>12.9992</b>	<b>0.0211</b>		<b>0.6746</b>	<b>0.6746</b>		<b>0.6746</b>	<b>0.6746</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.2091</b>			<b>2,000.9879</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0421	0.4375	0.5083	1.1000e-003	0.0312	6.8400e-003	0.0380	8.8700e-003	6.2900e-003	0.0152		110.1103	110.1103	8.1000e-004			110.1273
Worker	0.1336	0.1682	2.0811	4.3600e-003	0.3353	3.1700e-003	0.3385	0.0889	2.9100e-003	0.0919		368.7064	368.7064	0.0201			369.1279
<b>Total</b>	<b>0.1758</b>	<b>0.6057</b>	<b>2.5894</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>0.0100</b>	<b>0.3765</b>	<b>0.0978</b>	<b>9.2000e-003</b>	<b>0.1070</b>		<b>478.8167</b>	<b>478.8167</b>	<b>0.0209</b>			<b>479.2552</b>

### 3.5 Shotcrete - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.0833	14.8911	12.6448	0.0211		1.0915	1.0915		1.0915	1.0915		1,996.5973	1,996.5973	0.1867			2,000.5175
<b>Total</b>	<b>2.0833</b>	<b>14.8911</b>	<b>12.6448</b>	<b>0.0211</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1.0915</b>	<b>1.0915</b>		<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>			<b>2,000.5175</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	0.3989	0.4773	1.1000e-003	0.0312	6.0900e-003	0.0373	8.8800e-003	5.6000e-003	0.0145		108.3520	108.3520	7.8000e-004		108.3684
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.1586</b>	<b>0.5510</b>	<b>2.3628</b>	<b>5.4600e-003</b>	<b>0.3665</b>	<b>9.1300e-003</b>	<b>0.3757</b>	<b>0.0978</b>	<b>8.4000e-003</b>	<b>0.1062</b>		<b>463.2602</b>	<b>463.2602</b>	<b>0.0193</b>		<b>463.6662</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4216	9.6264	12.9992	0.0211		0.6746	0.6746		0.6746	0.6746	0.0000	1,996.5973	1,996.5973	0.1867		2,000.5175
<b>Total</b>	<b>0.4216</b>	<b>9.6264</b>	<b>12.9992</b>	<b>0.0211</b>		<b>0.6746</b>	<b>0.6746</b>		<b>0.6746</b>	<b>0.6746</b>	<b>0.0000</b>	<b>1,996.5973</b>	<b>1,996.5973</b>	<b>0.1867</b>		<b>2,000.5175</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	0.3989	0.4773	1.1000e-003	0.0312	6.0900e-003	0.0373	8.8800e-003	5.6000e-003	0.0145		108.3520	108.3520	7.8000e-004		108.3684
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978

Total	0.1586	0.5510	2.3628	5.4600e-003	0.3665	9.1300e-003	0.3757	0.0978	8.4000e-003	0.1062		463.2602	463.2602	0.0193		463.6662
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### 3.6 Foundation/Structure - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216		4,963.8396	4,963.8396	1.3084		4,991.3155
Total	4.1360	41.8050	29.4873	0.0493		2.3673	2.3673		2.2216	2.2216		4,963.8396	4,963.8396	1.3084		4,991.3155

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3852	3.9888	4.7727	0.0110	0.3120	0.0609	0.3729	0.0888	0.0561	0.1448		1,083.5197	1,083.5197	7.8200e-003		1,083.6839
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
Total	0.5053	4.1408	6.6582	0.0153	0.6473	0.0640	0.7113	0.1777	0.0589	0.2365		1,438.4279	1,438.4279	0.0264		1,438.9817

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1642	23.9682	33.3893	0.0493		1.3102	1.3102		1.3102	1.3102	0.0000	4,963.8396	4,963.8396	1.3084		4,991.3155
<b>Total</b>	<b>1.1642</b>	<b>23.9682</b>	<b>33.3893</b>	<b>0.0493</b>		<b>1.3102</b>	<b>1.3102</b>		<b>1.3102</b>	<b>1.3102</b>	<b>0.0000</b>	<b>4,963.8396</b>	<b>4,963.8396</b>	<b>1.3084</b>		<b>4,991.3155</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3852	3.9888	4.7727	0.0110	0.3120	0.0609	0.3729	0.0888	0.0561	0.1448		1,083.5197	1,083.5197	7.8200e-003		1,083.6839
Worker	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
<b>Total</b>	<b>0.5053</b>	<b>4.1408</b>	<b>6.6582</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0640</b>	<b>0.7113</b>	<b>0.1777</b>	<b>0.0589</b>	<b>0.2365</b>		<b>1,438.4279</b>	<b>1,438.4279</b>	<b>0.0264</b>		<b>1,438.9817</b>

**3.6 Foundation/Structure - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					



Off-Road	3.5526	35.4556	28.3748	0.0492		1.9738	1.9738		1.8540	1.8540		4,891.8621	4,891.8621	1.2949		4,919.0554
<b>Total</b>	<b>3.5526</b>	<b>35.4556</b>	<b>28.3748</b>	<b>0.0492</b>		<b>1.9738</b>	<b>1.9738</b>		<b>1.8540</b>	<b>1.8540</b>		<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3629	3.6673	4.5590	0.0110	0.3120	0.0574	0.3694	0.0888	0.0528	0.1416		1,065.6234	1,065.6234	7.7800e-003		1,065.7868
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.4710</b>	<b>3.8054</b>	<b>6.2723</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0604</b>	<b>0.7077</b>	<b>0.1777</b>	<b>0.0555</b>	<b>0.2332</b>		<b>1,407.5442</b>	<b>1,407.5442</b>	<b>0.0250</b>		<b>1,408.0693</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1642	23.9682	33.3893	0.0492		1.3102	1.3102		1.3102	1.3102	0.0000	4,891.8621	4,891.8621	1.2949		4,919.0554
<b>Total</b>	<b>1.1642</b>	<b>23.9682</b>	<b>33.3893</b>	<b>0.0492</b>		<b>1.3102</b>	<b>1.3102</b>		<b>1.3102</b>	<b>1.3102</b>	<b>0.0000</b>	<b>4,891.8621</b>	<b>4,891.8621</b>	<b>1.2949</b>		<b>4,919.0554</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3629	3.6673	4.5590	0.0110	0.3120	0.0574	0.3694	0.0888	0.0528	0.1416		1,065.6234	1,065.6234	7.7800e-003			1,065.7868
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172			342.2826
<b>Total</b>	<b>0.4710</b>	<b>3.8054</b>	<b>6.2723</b>	<b>0.0153</b>	<b>0.6473</b>	<b>0.0604</b>	<b>0.7077</b>	<b>0.1777</b>	<b>0.0555</b>	<b>0.2332</b>		<b>1,407.5442</b>	<b>1,407.5442</b>	<b>0.0250</b>			<b>1,408.0693</b>

**3.7 Tower/Ramp - 2017**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000				0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000				0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000				0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>				<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

### 3.7 Tower/Ramp - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

### 3.8 Bridge - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5584	6.6732	2.4673	5.6400e-003		0.2888	0.2888		0.2657	0.2657		568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.5584</b>	<b>6.6732</b>	<b>2.4673</b>	<b>5.6400e-003</b>		<b>0.2888</b>	<b>0.2888</b>		<b>0.2657</b>	<b>0.2657</b>		<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826

<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1387	2.6818	3.0054	5.6400e-003		0.1017	0.1017		0.1017	0.1017	0.0000	568.0309	568.0309	0.1768		571.7444
<b>Total</b>	<b>0.1387</b>	<b>2.6818</b>	<b>3.0054</b>	<b>5.6400e-003</b>		<b>0.1017</b>	<b>0.1017</b>		<b>0.1017</b>	<b>0.1017</b>	<b>0.0000</b>	<b>568.0309</b>	<b>568.0309</b>	<b>0.1768</b>		<b>571.7444</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

**3.9 Streetwork - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4925	27.6327	17.9542	0.0282		1.3269	1.3269		1.2215	1.2215		2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4925</b>	<b>27.6327</b>	<b>17.9542</b>	<b>0.0282</b>		<b>1.3269</b>	<b>1.3269</b>		<b>1.2215</b>	<b>1.2215</b>		<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.6811	13.3934	17.6392	0.0282		0.6053	0.6053		0.6053	0.6053	0.0000	2,827.8594	2,827.8594	0.8732		2,846.1965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6811</b>	<b>13.3934</b>	<b>17.6392</b>	<b>0.0282</b>		<b>0.6053</b>	<b>0.6053</b>		<b>0.6053</b>	<b>0.6053</b>	<b>0.0000</b>	<b>2,827.8594</b>	<b>2,827.8594</b>	<b>0.8732</b>		<b>2,846.1965</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004		42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172		342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>		<b>384.9140</b>

**3.10 Sitework - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7365	8.3553	5.3155	0.0137		0.3713	0.3713		0.3416	0.3416		1,378.3741	1,378.3741	0.4291		1,387.3854
<b>Total</b>	<b>0.7365</b>	<b>8.3553</b>	<b>5.3155</b>	<b>0.0137</b>		<b>0.3713</b>	<b>0.3713</b>		<b>0.3416</b>	<b>0.3416</b>		<b>1,378.3741</b>	<b>1,378.3741</b>	<b>0.4291</b>		<b>1,387.3854</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004			42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172			342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>			<b>384.9140</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3391	6.7857	7.9496	0.0137		0.3057	0.3057		0.3057	0.3057	0.0000	1,378.3741	1,378.3741	0.4291			1,387.3854
<b>Total</b>	<b>0.3391</b>	<b>6.7857</b>	<b>7.9496</b>	<b>0.0137</b>		<b>0.3057</b>	<b>0.3057</b>		<b>0.3057</b>	<b>0.3057</b>	<b>0.0000</b>	<b>1,378.3741</b>	<b>1,378.3741</b>	<b>0.4291</b>			<b>1,387.3854</b>

**Mitigated Construction Off-Site**



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0145	0.1467	0.1824	4.4000e-004	0.0125	2.3000e-003	0.0148	3.5500e-003	2.1100e-003	5.6600e-003		42.6249	42.6249	3.1000e-004			42.6315
Worker	0.1081	0.1381	1.7133	4.3600e-003	0.3353	2.9400e-003	0.3383	0.0889	2.7200e-003	0.0917		341.9207	341.9207	0.0172			342.2826
<b>Total</b>	<b>0.1226</b>	<b>0.2847</b>	<b>1.8957</b>	<b>4.8000e-003</b>	<b>0.3478</b>	<b>5.2400e-003</b>	<b>0.3531</b>	<b>0.0925</b>	<b>4.8300e-003</b>	<b>0.0973</b>		<b>384.5457</b>	<b>384.5457</b>	<b>0.0175</b>			<b>384.9140</b>

### 3.10 Sitework - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.6708	7.3638	5.1579	0.0137		0.3210	0.3210		0.2953	0.2953		1,357.4181	1,357.4181	0.4295			1,366.4370
<b>Total</b>	<b>0.6708</b>	<b>7.3638</b>	<b>5.1579</b>	<b>0.0137</b>		<b>0.3210</b>	<b>0.3210</b>		<b>0.2953</b>	<b>0.2953</b>		<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>			<b>1,366.4370</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Vendor	0.0138	0.1353	0.1758	4.4000e-004	0.0125	2.1800e-003	0.0147	3.5500e-003	2.0100e-003	5.5600e-003		41.7508	41.7508	3.0000e-004		41.7572
Worker	0.0993	0.1266	1.5733	4.3400e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		328.5241	328.5241	0.0161		328.8623
<b>Total</b>	<b>0.1131</b>	<b>0.2619</b>	<b>1.7491</b>	<b>4.7800e-003</b>	<b>0.3478</b>	<b>5.0500e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6700e-003</b>	<b>0.0972</b>		<b>370.2749</b>	<b>370.2749</b>	<b>0.0164</b>		<b>370.6195</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3391	6.7857	7.9496	0.0137		0.3057	0.3057		0.3057	0.3057	0.0000	1,357.4181	1,357.4181	0.4295		1,366.4370
<b>Total</b>	<b>0.3391</b>	<b>6.7857</b>	<b>7.9496</b>	<b>0.0137</b>		<b>0.3057</b>	<b>0.3057</b>		<b>0.3057</b>	<b>0.3057</b>	<b>0.0000</b>	<b>1,357.4181</b>	<b>1,357.4181</b>	<b>0.4295</b>		<b>1,366.4370</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0138	0.1353	0.1758	4.4000e-004	0.0125	2.1800e-003	0.0147	3.5500e-003	2.0100e-003	5.5600e-003		41.7508	41.7508	3.0000e-004		41.7572
Worker	0.0993	0.1266	1.5733	4.3400e-003	0.3353	2.8700e-003	0.3382	0.0889	2.6600e-003	0.0916		328.5241	328.5241	0.0161		328.8623
<b>Total</b>	<b>0.1131</b>	<b>0.2619</b>	<b>1.7491</b>	<b>4.7800e-003</b>	<b>0.3478</b>	<b>5.0500e-003</b>	<b>0.3529</b>	<b>0.0925</b>	<b>4.6700e-003</b>	<b>0.0972</b>		<b>370.2749</b>	<b>370.2749</b>	<b>0.0164</b>		<b>370.6195</b>

## Harvard Westlake Parking Structure Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	750.00	Space	1.90	300,000.00	0
User Defined Parking	0.00	User Defined Unit	1.52	59,921.00	0
User Defined Recreational	64,350.00	User Defined Unit	0.00	64,350.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2019
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Athletic Field is under land use category of User defined recreational.

Roadway and landscape are under parking user defined

Construction Phase - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment -

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on equipment mix provided by the constructor

Off-road Equipment - based on construction plan

Off-road Equipment - based on equipment mix provided by the constructor



tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	230.00	290.00
tblConstructionPhase	NumDays	230.00	114.00
tblConstructionPhase	NumDays	230.00	82.00
tblConstructionPhase	NumDays	230.00	165.00
tblConstructionPhase	NumDays	8.00	245.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	3/6/2018	4/12/2017
tblConstructionPhase	PhaseEndDate	1/10/2018	4/26/2017
tblConstructionPhase	PhaseEndDate	6/6/2018	7/19/2018
tblConstructionPhase	PhaseEndDate	12/26/2018	3/23/2018
tblConstructionPhase	PhaseStartDate	6/7/2017	7/14/2016
tblConstructionPhase	PhaseStartDate	4/13/2017	7/28/2016
tblConstructionPhase	PhaseStartDate	4/27/2017	6/9/2017
tblConstructionPhase	PhaseStartDate	7/20/2018	10/17/2017
tblConstructionPhase	PhaseStartDate	3/24/2018	3/26/2018
tblEnergyUse	LightingElect	0.00	3.26
tblEnergyUse	NT24E	0.00	3.26
tblEnergyUse	T24E	0.00	3.26
tblGrading	AcresOfGrading	612.50	450.00
tblGrading	MaterialExported	0.00	140,000.00
tblLandUse	LandUseSquareFeet	0.00	59,921.00
tblLandUse	LandUseSquareFeet	0.00	64,350.00
tblLandUse	LotAcreage	6.75	1.90

tblLandUse	LotAcreage	0.00	1.52
tblOffRoadEquipment	HorsePower	162.00	330.00
tblOffRoadEquipment	HorsePower	255.00	207.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	349.00
tblOffRoadEquipment	HorsePower	97.00	84.00
tblOffRoadEquipment	HorsePower	97.00	96.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	205.00	160.00
tblOffRoadEquipment	HorsePower	361.00	185.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00
tblTripsAndVMT	VendorTripNumber	70.00	50.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	178.00	30.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.8730	8.9335	5.7299	0.0118	1.2422	0.4369	1.6791	0.5178	0.4135	0.9313	0.0000	1,069.5654	1,069.5654	0.1675	0.0000	1,073.0839

2017	0.9470	9.6863	6.8405	0.0138	1.2075	0.4737	1.6813	0.4916	0.4458	0.9374	0.0000	1,236.9222	1,236.9222	0.2146	0.0000	1,241.4288
2018	0.3875	3.8346	3.2787	6.2900e-003	0.0800	0.1905	0.2705	0.0217	0.1780	0.1997	0.0000	552.7437	552.7437	0.1216	0.0000	555.2970
2019	0.0258	0.2524	0.2265	6.0000e-004	0.0113	0.0108	0.0220	3.0000e-003	9.9000e-003	0.0129	0.0000	51.3134	51.3134	0.0134	0.0000	51.5937
<b>Total</b>	<b>2.2333</b>	<b>22.7069</b>	<b>16.0755</b>	<b>0.0325</b>	<b>2.5410</b>	<b>1.1118</b>	<b>3.6529</b>	<b>1.0341</b>	<b>1.0472</b>	<b>2.0813</b>	<b>0.0000</b>	<b>2,910.5446</b>	<b>2,910.5446</b>	<b>0.5171</b>	<b>0.0000</b>	<b>2,921.4033</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.2859	5.0001	6.0472	0.0118	0.6051	0.2076	0.8127	0.2338	0.2059	0.4398	0.0000	1,069.5646	1,069.5646	0.1675	0.0000	1,073.0830
2017	0.3382	5.8194	7.4772	0.0138	0.6071	0.2526	0.8597	0.2278	0.2509	0.4787	0.0000	1,236.9212	1,236.9212	0.2146	0.0000	1,241.4278
2018	0.1605	2.6238	3.7890	6.2900e-003	0.0800	0.1246	0.2046	0.0217	0.1242	0.1459	0.0000	552.7432	552.7432	0.1216	0.0000	555.2965
2019	0.0149	0.2333	0.3186	6.0000e-004	0.0113	0.0103	0.0215	3.0000e-003	0.0102	0.0132	0.0000	51.3133	51.3133	0.0134	0.0000	51.5936
<b>Total</b>	<b>0.7995</b>	<b>13.6766</b>	<b>17.6320</b>	<b>0.0325</b>	<b>1.3035</b>	<b>0.5951</b>	<b>1.8986</b>	<b>0.4863</b>	<b>0.5913</b>	<b>1.0776</b>	<b>0.0000</b>	<b>2,910.5423</b>	<b>2,910.5423</b>	<b>0.5171</b>	<b>0.0000</b>	<b>2,921.4009</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>64.20</b>	<b>39.77</b>	<b>-9.68</b>	<b>0.00</b>	<b>48.70</b>	<b>46.48</b>	<b>48.02</b>	<b>52.97</b>	<b>43.54</b>	<b>48.22</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2016	6/28/2016	5	20	
2	Grading	Grading	6/29/2016	6/6/2017	5	245	
3	Soil Nailing	Building Construction	7/14/2016	4/12/2017	5	195	
4	Shotcrete	Building Construction	7/28/2016	4/26/2017	5	195	
5	Foundation/Structure	Building Construction	6/9/2017	7/19/2018	5	290	
6	Tower/Ramp	Building Construction	10/17/2017	3/23/2018	5	114	
7	Bridge	Building Construction	3/26/2018	7/17/2018	5	82	
8	Streetwork	Paving	7/18/2018	8/14/2018	5	20	
9	Sitework	Building Construction	8/15/2018	4/2/2019	5	165	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 450**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	330	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	207	0.40
Grading	Scrapers	2	8.00	185	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	349	0.37

Grading	Tractors/Loaders/Backhoes	1	8.00	84	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	96	0.37
Soil Nailing	Air Compressors	2	8.00	78	0.48
Soil Nailing	Bore/Drill Rigs	2	8.00	160	0.50
Soil Nailing	Pumps	2	8.00	84	0.74
Shotcrete	Air Compressors	2	8.00	78	0.48
Shotcrete	Pumps	2	8.00	84	0.74
Foundation/Structure	Air Compressors	1	8.00	78	0.48
Foundation/Structure	Bore/Drill Rigs	1	8.00	160	0.50
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Other Construction Equipment	1	8.00	171	0.42
Foundation/Structure	Pumps	1	8.00	84	0.74
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	2	8.00	84	0.37
Foundation/Structure	Tractors/Loaders/Backhoes	1	8.00	96	0.37
Bridge	Cranes	1	8.00	226	0.29
Streetwork	Graders	1	8.00	174	0.41
Streetwork	Paving Equipment	1	8.00	130	0.36
Streetwork	Plate Compactors	1	8.00	8	0.43
Streetwork	Rollers	1	8.00	80	0.38
Streetwork	Scrapers	1	8.00	361	0.48
Sitework	Tractors/Loaders/Backhoes	1	8.00	349	0.37
Sitework	Tractors/Loaders/Backhoes	1	8.00	84	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tower/Ramp	0			0.00	14.70	6.90				
Bridge	1	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Streetwork	5	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sitework	2	30.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0602	0.0000	0.0602	0.0331	0.0000	0.0331	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1713	0.1290	1.2000e-004		8.9600e-003	8.9600e-003		8.2400e-003	8.2400e-003	0.0000	11.3136	11.3136	3.4100e-003	0.0000	11.3853
<b>Total</b>	<b>0.0158</b>	<b>0.1713</b>	<b>0.1290</b>	<b>1.2000e-004</b>	<b>0.0602</b>	<b>8.9600e-003</b>	<b>0.0692</b>	<b>0.0331</b>	<b>8.2400e-003</b>	<b>0.0413</b>	<b>0.0000</b>	<b>11.3136</b>	<b>11.3136</b>	<b>3.4100e-003</b>	<b>0.0000</b>	<b>11.3853</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.3300e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5346	0.5346	3.0000e-005	0.0000	0.5353
<b>Total</b>	<b>2.2000e-004</b>	<b>3.2000e-004</b>	<b>3.3300e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5346</b>	<b>0.5346</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5353</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0235	0.0000	0.0235	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9200e-003	0.0591	0.0702	1.2000e-004	2.8000e-003	2.8000e-003	2.8000e-003	2.8000e-003	2.8000e-003	2.8000e-003	0.0000	11.3136	11.3136	3.4100e-003	0.0000	11.3852
<b>Total</b>	<b>2.9200e-003</b>	<b>0.0591</b>	<b>0.0702</b>	<b>1.2000e-004</b>	<b>0.0235</b>	<b>2.8000e-003</b>	<b>0.0263</b>	<b>0.0129</b>	<b>2.8000e-003</b>	<b>0.0157</b>	<b>0.0000</b>	<b>11.3136</b>	<b>11.3136</b>	<b>3.4100e-003</b>	<b>0.0000</b>	<b>11.3852</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.3300e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5346	0.5346	3.0000e-005	0.0000	0.5353

<b>Total</b>	<b>2.2000e-004</b>	<b>3.2000e-004</b>	<b>3.3300e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5346</b>	<b>0.5346</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5353</b>
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### 3.3 Grading - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9842	0.0000	0.9842	0.4325	0.0000	0.4325	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4205	4.7591	2.0928	3.9400e-003		0.2342	0.2342		0.2155	0.2155	0.0000	371.2367	371.2367	0.1120	0.0000	373.5883
<b>Total</b>	<b>0.4205</b>	<b>4.7591</b>	<b>2.0928</b>	<b>3.9400e-003</b>	<b>0.9842</b>	<b>0.2342</b>	<b>1.2184</b>	<b>0.4325</b>	<b>0.2155</b>	<b>0.6479</b>	<b>0.0000</b>	<b>371.2367</b>	<b>371.2367</b>	<b>0.1120</b>	<b>0.0000</b>	<b>373.5883</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0877	1.4141	1.0717	3.5700e-003	0.1341	0.0199	0.1539	0.0353	0.0183	0.0536	0.0000	326.6137	326.6137	2.4300e-003	0.0000	326.6647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7100e-003	0.0127	0.1327	2.8000e-004	0.0219	2.1000e-004	0.0221	5.8100e-003	1.9000e-004	6.0000e-003	0.0000	21.3321	21.3321	1.2100e-003	0.0000	21.3576
<b>Total</b>	<b>0.0964</b>	<b>1.4268</b>	<b>1.2044</b>	<b>3.8500e-003</b>	<b>0.1559</b>	<b>0.0201</b>	<b>0.1760</b>	<b>0.0411</b>	<b>0.0185</b>	<b>0.0596</b>	<b>0.0000</b>	<b>347.9458</b>	<b>347.9458</b>	<b>3.6400e-003</b>	<b>0.0000</b>	<b>348.0223</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3839	0.0000	0.3839	0.1687	0.0000	0.1687	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0969	1.9234	2.3230	3.9400e-003		0.0855	0.0855		0.0855	0.0855	0.0000	371.2363	371.2363	0.1120	0.0000	373.5878
<b>Total</b>	<b>0.0969</b>	<b>1.9234</b>	<b>2.3230</b>	<b>3.9400e-003</b>	<b>0.3839</b>	<b>0.0855</b>	<b>0.4694</b>	<b>0.1687</b>	<b>0.0855</b>	<b>0.2542</b>	<b>0.0000</b>	<b>371.2363</b>	<b>371.2363</b>	<b>0.1120</b>	<b>0.0000</b>	<b>373.5878</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0877	1.4141	1.0717	3.5700e-003	0.1341	0.0199	0.1539	0.0353	0.0183	0.0536	0.0000	326.6137	326.6137	2.4300e-003	0.0000	326.6647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7100e-003	0.0127	0.1327	2.8000e-004	0.0219	2.1000e-004	0.0221	5.8100e-003	1.9000e-004	6.0000e-003	0.0000	21.3321	21.3321	1.2100e-003	0.0000	21.3576
<b>Total</b>	<b>0.0964</b>	<b>1.4268</b>	<b>1.2044</b>	<b>3.8500e-003</b>	<b>0.1559</b>	<b>0.0201</b>	<b>0.1760</b>	<b>0.0411</b>	<b>0.0185</b>	<b>0.0596</b>	<b>0.0000</b>	<b>347.9458</b>	<b>347.9458</b>	<b>3.6400e-003</b>	<b>0.0000</b>	<b>348.0223</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.9842	0.0000	0.9842	0.4325	0.0000	0.4325	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3310	3.7057	1.7039	3.3100e-003		0.1815	0.1815		0.1670	0.1670	0.0000	307.6366	307.6366	0.0943	0.0000	309.6160
<b>Total</b>	<b>0.3310</b>	<b>3.7057</b>	<b>1.7039</b>	<b>3.3100e-003</b>	<b>0.9842</b>	<b>0.1815</b>	<b>1.1657</b>	<b>0.4325</b>	<b>0.1670</b>	<b>0.5994</b>	<b>0.0000</b>	<b>307.6366</b>	<b>307.6366</b>	<b>0.0943</b>	<b>0.0000</b>	<b>309.6160</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0696	1.0937	0.8694	3.0100e-003	0.1309	0.0153	0.1462	0.0341	0.0141	0.0482	0.0000	270.5768	270.5768	2.0100e-003	0.0000	270.6190
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5700e-003	9.7000e-003	0.1009	2.3000e-004	0.0184	1.7000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.2907	17.2907	9.4000e-004	0.0000	17.3105
<b>Total</b>	<b>0.0762</b>	<b>1.1034</b>	<b>0.9703</b>	<b>3.2400e-003</b>	<b>0.1493</b>	<b>0.0155</b>	<b>0.1648</b>	<b>0.0390</b>	<b>0.0142</b>	<b>0.0533</b>	<b>0.0000</b>	<b>287.8675</b>	<b>287.8675</b>	<b>2.9500e-003</b>	<b>0.0000</b>	<b>287.9295</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3839	0.0000	0.3839	0.1687	0.0000	0.1687	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	1.6197	1.9562	3.3100e-003		0.0720	0.0720		0.0720	0.0720	0.0000	307.6362	307.6362	0.0943	0.0000	309.6157
<b>Total</b>	<b>0.0816</b>	<b>1.6197</b>	<b>1.9562</b>	<b>3.3100e-003</b>	<b>0.3839</b>	<b>0.0720</b>	<b>0.4559</b>	<b>0.1687</b>	<b>0.0720</b>	<b>0.2407</b>	<b>0.0000</b>	<b>307.6362</b>	<b>307.6362</b>	<b>0.0943</b>	<b>0.0000</b>	<b>309.6157</b>



**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0696	1.0937	0.8694	3.0100e-003	0.1309	0.0153	0.1462	0.0341	0.0141	0.0482	0.0000	270.5768	270.5768	2.0100e-003	0.0000	270.6190
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5700e-003	9.7000e-003	0.1009	2.3000e-004	0.0184	1.7000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.2907	17.2907	9.4000e-004	0.0000	17.3105
<b>Total</b>	<b>0.0762</b>	<b>1.1034</b>	<b>0.9703</b>	<b>3.2400e-003</b>	<b>0.1493</b>	<b>0.0155</b>	<b>0.1648</b>	<b>0.0390</b>	<b>0.0142</b>	<b>0.0533</b>	<b>0.0000</b>	<b>287.8675</b>	<b>287.8675</b>	<b>2.9500e-003</b>	<b>0.0000</b>	<b>287.9295</b>

**3.4 Soil Nailing - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1907	1.6072	1.2981	2.1300e-003		0.1033	0.1033		0.1011	0.1011	0.0000	190.3536	190.3536	0.0357	0.0000	191.1024
<b>Total</b>	<b>0.1907</b>	<b>1.6072</b>	<b>1.2981</b>	<b>2.1300e-003</b>		<b>0.1033</b>	<b>0.1033</b>		<b>0.1011</b>	<b>0.1011</b>	<b>0.0000</b>	<b>190.3536</b>	<b>190.3536</b>	<b>0.0357</b>	<b>0.0000</b>	<b>191.1024</b>

**Unmitigated Construction Off-Site**



Vendor	1.6500e-003	0.0167	0.0218	4.0000e-005	1.1200e-003	2.5000e-004	1.3700e-003	3.2000e-004	2.3000e-004	5.5000e-004	0.0000	3.6432	3.6432	3.0000e-005	0.0000	3.6438
Worker	7.9900e-003	0.0117	0.1217	2.6000e-004	0.0201	1.9000e-004	0.0203	5.3300e-003	1.8000e-004	5.5000e-003	0.0000	19.5678	19.5678	1.1100e-003	0.0000	19.5911
<b>Total</b>	<b>9.6400e-003</b>	<b>0.0284</b>	<b>0.1435</b>	<b>3.0000e-004</b>	<b>0.0212</b>	<b>4.4000e-004</b>	<b>0.0216</b>	<b>5.6500e-003</b>	<b>4.1000e-004</b>	<b>6.0500e-003</b>	<b>0.0000</b>	<b>23.2111</b>	<b>23.2111</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>23.2350</b>

### 3.4 Soil Nailing - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1012	0.8507	0.7707	1.2800e-003		0.0534	0.0534		0.0523	0.0523	0.0000	113.1841	113.1841	0.0206	0.0000	113.6168
<b>Total</b>	<b>0.1012</b>	<b>0.8507</b>	<b>0.7707</b>	<b>1.2800e-003</b>		<b>0.0534</b>	<b>0.0534</b>		<b>0.0523</b>	<b>0.0523</b>	<b>0.0000</b>	<b>113.1841</b>	<b>113.1841</b>	<b>0.0206</b>	<b>0.0000</b>	<b>113.6168</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-004	9.1300e-003	0.0123	2.0000e-005	6.7000e-004	1.3000e-004	8.1000e-004	1.9000e-004	1.2000e-004	3.1000e-004	0.0000	2.1451	2.1451	2.0000e-005	0.0000	2.1455
Worker	4.2800e-003	6.3200e-003	0.0658	1.5000e-004	0.0120	1.1000e-004	0.0121	3.1900e-003	1.0000e-004	3.2900e-003	0.0000	11.2698	11.2698	6.1000e-004	0.0000	11.2827
<b>Total</b>	<b>5.1800e-003</b>	<b>0.0155</b>	<b>0.0781</b>	<b>1.7000e-004</b>	<b>0.0127</b>	<b>2.4000e-004</b>	<b>0.0129</b>	<b>3.3800e-003</b>	<b>2.2000e-004</b>	<b>3.6000e-003</b>	<b>0.0000</b>	<b>13.4150</b>	<b>13.4150</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>13.4282</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0278	0.5903	0.8556	1.2800e-003		0.0362	0.0362		0.0362	0.0362	0.0000	113.1840	113.1840	0.0206	0.0000	113.6167
<b>Total</b>	<b>0.0278</b>	<b>0.5903</b>	<b>0.8556</b>	<b>1.2800e-003</b>		<b>0.0362</b>	<b>0.0362</b>		<b>0.0362</b>	<b>0.0362</b>	<b>0.0000</b>	<b>113.1840</b>	<b>113.1840</b>	<b>0.0206</b>	<b>0.0000</b>	<b>113.6167</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-004	9.1300e-003	0.0123	2.0000e-005	6.7000e-004	1.3000e-004	8.1000e-004	1.9000e-004	1.2000e-004	3.1000e-004	0.0000	2.1451	2.1451	2.0000e-005	0.0000	2.1455
Worker	4.2800e-003	6.3200e-003	0.0658	1.5000e-004	0.0120	1.1000e-004	0.0121	3.1900e-003	1.0000e-004	3.2900e-003	0.0000	11.2698	11.2698	6.1000e-004	0.0000	11.2827
<b>Total</b>	<b>5.1800e-003</b>	<b>0.0155</b>	<b>0.0781</b>	<b>1.7000e-004</b>	<b>0.0127</b>	<b>2.4000e-004</b>	<b>0.0129</b>	<b>3.3800e-003</b>	<b>2.2000e-004</b>	<b>3.6000e-003</b>	<b>0.0000</b>	<b>13.4150</b>	<b>13.4150</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>13.4282</b>

**3.5 Shotcrete - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1299	0.9041	0.7139	1.1800e-003		0.0693	0.0693		0.0693	0.0693	0.0000	101.4318	101.4318	0.0106	0.0000	101.6549
<b>Total</b>	<b>0.1299</b>	<b>0.9041</b>	<b>0.7139</b>	<b>1.1800e-003</b>		<b>0.0693</b>	<b>0.0693</b>		<b>0.0693</b>	<b>0.0693</b>	<b>0.0000</b>	<b>101.4318</b>	<b>101.4318</b>	<b>0.0106</b>	<b>0.0000</b>	<b>101.6549</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0256	0.0333	6.0000e-005	1.7200e-003	3.8000e-004	2.1000e-003	4.9000e-004	3.5000e-004	8.4000e-004	0.0000	5.5744	5.5744	4.0000e-005	0.0000	5.5752
Worker	7.3400e-003	0.0107	0.1117	2.3000e-004	0.0184	1.8000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.9639	17.9639	1.0200e-003	0.0000	17.9853
<b>Total</b>	<b>9.8600e-003</b>	<b>0.0363</b>	<b>0.1450</b>	<b>2.9000e-004</b>	<b>0.0201</b>	<b>5.6000e-004</b>	<b>0.0207</b>	<b>5.3800e-003</b>	<b>5.1000e-004</b>	<b>5.8900e-003</b>	<b>0.0000</b>	<b>23.5382</b>	<b>23.5382</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>23.5605</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0236	0.5391	0.7280	1.1800e-003		0.0378	0.0378		0.0378	0.0378	0.0000	101.4317	101.4317	0.0106	0.0000	101.6548

<b>Total</b>	<b>0.0236</b>	<b>0.5391</b>	<b>0.7280</b>	<b>1.1800e-003</b>		<b>0.0378</b>	<b>0.0378</b>		<b>0.0378</b>	<b>0.0378</b>	<b>0.0000</b>	<b>101.4317</b>	<b>101.4317</b>	<b>0.0106</b>	<b>0.0000</b>	<b>101.6548</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5200e-003	0.0256	0.0333	6.0000e-005	1.7200e-003	3.8000e-004	2.1000e-003	4.9000e-004	3.5000e-004	8.4000e-004	0.0000	5.5744	5.5744	4.0000e-005	0.0000	5.5752
Worker	7.3400e-003	0.0107	0.1117	2.3000e-004	0.0184	1.8000e-004	0.0186	4.8900e-003	1.6000e-004	5.0500e-003	0.0000	17.9639	17.9639	1.0200e-003	0.0000	17.9853
<b>Total</b>	<b>9.8600e-003</b>	<b>0.0363</b>	<b>0.1450</b>	<b>2.9000e-004</b>	<b>0.0201</b>	<b>5.6000e-004</b>	<b>0.0207</b>	<b>5.3800e-003</b>	<b>5.1000e-004</b>	<b>5.8900e-003</b>	<b>0.0000</b>	<b>23.5382</b>	<b>23.5382</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>23.5605</b>

**3.5 Shotcrete - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0865	0.6180	0.5248	8.7000e-004		0.0453	0.0453		0.0453	0.0453	0.0000	75.1682	75.1682	7.0300e-003	0.0000	75.3158
<b>Total</b>	<b>0.0865</b>	<b>0.6180</b>	<b>0.5248</b>	<b>8.7000e-004</b>		<b>0.0453</b>	<b>0.0453</b>		<b>0.0453</b>	<b>0.0453</b>	<b>0.0000</b>	<b>75.1682</b>	<b>75.1682</b>	<b>7.0300e-003</b>	<b>0.0000</b>	<b>75.3158</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-003	0.0173	0.0233	5.0000e-005	1.2700e-003	2.5000e-004	1.5300e-003	3.6000e-004	2.3000e-004	6.0000e-004	0.0000	4.0650	4.0650	3.0000e-005	0.0000	4.0656
Worker	4.8700e-003	7.1900e-003	0.0748	1.7000e-004	0.0136	1.3000e-004	0.0138	3.6200e-003	1.2000e-004	3.7400e-003	0.0000	12.8136	12.8136	7.0000e-004	0.0000	12.8283
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0245</b>	<b>0.0981</b>	<b>2.2000e-004</b>	<b>0.0149</b>	<b>3.8000e-004</b>	<b>0.0153</b>	<b>3.9800e-003</b>	<b>3.5000e-004</b>	<b>4.3400e-003</b>	<b>0.0000</b>	<b>16.8786</b>	<b>16.8786</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>16.8939</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0175	0.3995	0.5395	8.7000e-004		0.0280	0.0280		0.0280	0.0280	0.0000	75.1681	75.1681	7.0300e-003	0.0000	75.3157
<b>Total</b>	<b>0.0175</b>	<b>0.3995</b>	<b>0.5395</b>	<b>8.7000e-004</b>		<b>0.0280</b>	<b>0.0280</b>		<b>0.0280</b>	<b>0.0280</b>	<b>0.0000</b>	<b>75.1681</b>	<b>75.1681</b>	<b>7.0300e-003</b>	<b>0.0000</b>	<b>75.3157</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-003	0.0173	0.0233	5.0000e-005	1.2700e-003	2.5000e-004	1.5300e-003	3.6000e-004	2.3000e-004	6.0000e-004	0.0000	4.0650	4.0650	3.0000e-005	0.0000	4.0656
Worker	4.8700e-003	7.1900e-003	0.0748	1.7000e-004	0.0136	1.3000e-004	0.0138	3.6200e-003	1.2000e-004	3.7400e-003	0.0000	12.8136	12.8136	7.0000e-004	0.0000	12.8283
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0245</b>	<b>0.0981</b>	<b>2.2000e-004</b>	<b>0.0149</b>	<b>3.8000e-004</b>	<b>0.0153</b>	<b>3.9800e-003</b>	<b>3.5000e-004</b>	<b>4.3400e-003</b>	<b>0.0000</b>	<b>16.8786</b>	<b>16.8786</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>16.8939</b>

### 3.6 Foundation/Structure - 2017

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	0.3019	3.0518	2.1526	3.6000e-003		0.1728	0.1728		0.1622	0.1622	0.0000	328.7277	328.7277	0.0867	0.0000	330.5473
<b>Total</b>	<b>0.3019</b>	<b>3.0518</b>	<b>2.1526</b>	<b>3.6000e-003</b>		<b>0.1728</b>	<b>0.1728</b>		<b>0.1622</b>	<b>0.1622</b>	<b>0.0000</b>	<b>328.7277</b>	<b>328.7277</b>	<b>0.0867</b>	<b>0.0000</b>	<b>330.5473</b>

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0299	0.3043	0.4105	8.0000e-004	0.0224	4.4700e-003	0.0269	6.3900e-003	4.1100e-003	0.0105	0.0000	71.5048	71.5048	5.2000e-004	0.0000	71.5158



Worker	8.5700e-003	0.0126	0.1316	3.1000e-004	0.0240	2.2000e-004	0.0242	6.3700e-003	2.0000e-004	6.5800e-003	0.0000	22.5397	22.5397	1.2300e-003	0.0000	22.5655
<b>Total</b>	<b>0.0385</b>	<b>0.3169</b>	<b>0.5420</b>	<b>1.1100e-003</b>	<b>0.0464</b>	<b>4.6900e-003</b>	<b>0.0511</b>	<b>0.0128</b>	<b>4.3100e-003</b>	<b>0.0171</b>	<b>0.0000</b>	<b>94.0444</b>	<b>94.0444</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>94.0812</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0850	1.7497	2.4374	3.6000e-003		0.0957	0.0957		0.0957	0.0957	0.0000	328.7273	328.7273	0.0867	0.0000	330.5469
<b>Total</b>	<b>0.0850</b>	<b>1.7497</b>	<b>2.4374</b>	<b>3.6000e-003</b>		<b>0.0957</b>	<b>0.0957</b>		<b>0.0957</b>	<b>0.0957</b>	<b>0.0000</b>	<b>328.7273</b>	<b>328.7273</b>	<b>0.0867</b>	<b>0.0000</b>	<b>330.5469</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0299	0.3043	0.4105	8.0000e-004	0.0224	4.4700e-003	0.0269	6.3900e-003	4.1100e-003	0.0105	0.0000	71.5048	71.5048	5.2000e-004	0.0000	71.5158
Worker	8.5700e-003	0.0126	0.1316	3.1000e-004	0.0240	2.2000e-004	0.0242	6.3700e-003	2.0000e-004	6.5800e-003	0.0000	22.5397	22.5397	1.2300e-003	0.0000	22.5655
<b>Total</b>	<b>0.0385</b>	<b>0.3169</b>	<b>0.5420</b>	<b>1.1100e-003</b>	<b>0.0464</b>	<b>4.6900e-003</b>	<b>0.0511</b>	<b>0.0128</b>	<b>4.3100e-003</b>	<b>0.0171</b>	<b>0.0000</b>	<b>94.0444</b>	<b>94.0444</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>94.0812</b>

**3.6 Foundation/Structure - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2558	2.5528	2.0430	3.5400e-003		0.1421	0.1421		0.1335	0.1335	0.0000	319.5232	319.5232	0.0846	0.0000	321.2994
<b>Total</b>	<b>0.2558</b>	<b>2.5528</b>	<b>2.0430</b>	<b>3.5400e-003</b>		<b>0.1421</b>	<b>0.1421</b>		<b>0.1335</b>	<b>0.1335</b>	<b>0.0000</b>	<b>319.5232</b>	<b>319.5232</b>	<b>0.0846</b>	<b>0.0000</b>	<b>321.2994</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0277	0.2758	0.3886	7.9000e-004	0.0221	4.1500e-003	0.0262	6.3000e-003	3.8200e-003	0.0101	0.0000	69.3599	69.3599	5.1000e-004	0.0000	69.3707
Worker	7.5800e-003	0.0113	0.1175	3.0000e-004	0.0237	2.1000e-004	0.0239	6.2900e-003	2.0000e-004	6.4800e-003	0.0000	21.4162	21.4162	1.1300e-003	0.0000	21.4398
<b>Total</b>	<b>0.0353</b>	<b>0.2871</b>	<b>0.5061</b>	<b>1.0900e-003</b>	<b>0.0458</b>	<b>4.3600e-003</b>	<b>0.0501</b>	<b>0.0126</b>	<b>4.0200e-003</b>	<b>0.0166</b>	<b>0.0000</b>	<b>90.7761</b>	<b>90.7761</b>	<b>1.6400e-003</b>	<b>0.0000</b>	<b>90.8105</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>					<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.8 Bridge - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.2736	0.1012	2.3000e-004		0.0118	0.0118		0.0109	0.0109	0.0000	21.1277	21.1277	6.5800e-003	0.0000	21.2658
<b>Total</b>	<b>0.0229</b>	<b>0.2736</b>	<b>0.1012</b>	<b>2.3000e-004</b>		<b>0.0118</b>	<b>0.0118</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>21.1277</b>	<b>21.1277</b>	<b>6.5800e-003</b>	<b>0.0000</b>	<b>21.2658</b>

**Unmitigated Construction Off-Site**



Vendor	6.3000e-004	6.2800e-003	8.8500e-003	2.0000e-005	5.0000e-004	9.0000e-005	6.0000e-004	1.4000e-004	9.0000e-005	2.3000e-004	0.0000	1.5799	1.5799	1.0000e-005	0.0000	1.5801
Worker	4.3200e-003	6.4400e-003	0.0669	1.7000e-004	0.0135	1.2000e-004	0.0136	3.5800e-003	1.1000e-004	3.6900e-003	0.0000	12.1953	12.1953	6.4000e-004	0.0000	12.2088
<b>Total</b>	<b>4.9500e-003</b>	<b>0.0127</b>	<b>0.0758</b>	<b>1.9000e-004</b>	<b>0.0140</b>	<b>2.1000e-004</b>	<b>0.0142</b>	<b>3.7200e-003</b>	<b>2.0000e-004</b>	<b>3.9200e-003</b>	<b>0.0000</b>	<b>13.7752</b>	<b>13.7752</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>13.7889</b>

### 3.9 Streetwork - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0249	0.2763	0.1795	2.8000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	25.6539	25.6539	7.9200e-003	0.0000	25.8203
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0249</b>	<b>0.2763</b>	<b>0.1795</b>	<b>2.8000e-004</b>		<b>0.0133</b>	<b>0.0133</b>		<b>0.0122</b>	<b>0.0122</b>	<b>0.0000</b>	<b>25.6539</b>	<b>25.6539</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>25.8203</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	1.5300e-003	2.1600e-003	0.0000	1.2000e-004	2.0000e-005	1.5000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3853	0.3853	0.0000	0.0000	0.3854
Worker	1.0500e-003	1.5700e-003	0.0163	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	2.9745	2.9745	1.6000e-004	0.0000	2.9778
<b>Total</b>	<b>1.2000e-003</b>	<b>3.1000e-003</b>	<b>0.0185</b>	<b>4.0000e-005</b>	<b>3.4100e-003</b>	<b>5.0000e-005</b>	<b>3.4700e-003</b>	<b>9.1000e-004</b>	<b>5.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>3.3598</b>	<b>3.3598</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.3631</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8100e-003	0.1339	0.1764	2.8000e-004		6.0500e-003	6.0500e-003		6.0500e-003	6.0500e-003	0.0000	25.6539	25.6539	7.9200e-003	0.0000	25.8202
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.8100e-003</b>	<b>0.1339</b>	<b>0.1764</b>	<b>2.8000e-004</b>		<b>6.0500e-003</b>	<b>6.0500e-003</b>		<b>6.0500e-003</b>	<b>6.0500e-003</b>	<b>0.0000</b>	<b>25.6539</b>	<b>25.6539</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>25.8202</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	1.5300e-003	2.1600e-003	0.0000	1.2000e-004	2.0000e-005	1.5000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3853	0.3853	0.0000	0.0000	0.3854
Worker	1.0500e-003	1.5700e-003	0.0163	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	2.9745	2.9745	1.6000e-004	0.0000	2.9778
<b>Total</b>	<b>1.2000e-003</b>	<b>3.1000e-003</b>	<b>0.0185</b>	<b>4.0000e-005</b>	<b>3.4100e-003</b>	<b>5.0000e-005</b>	<b>3.4700e-003</b>	<b>9.1000e-004</b>	<b>5.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>3.3598</b>	<b>3.3598</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.3631</b>

**3.10 Sitework - 2018**

**Unmitigated Construction On-Site**



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0365	0.4136	0.2631	6.8000e-004		0.0184	0.0184		0.0169	0.0169	0.0000	61.8968	61.8968	0.0193	0.0000	62.3014
<b>Total</b>	<b>0.0365</b>	<b>0.4136</b>	<b>0.2631</b>	<b>6.8000e-004</b>		<b>0.0184</b>	<b>0.0184</b>		<b>0.0169</b>	<b>0.0169</b>	<b>0.0000</b>	<b>61.8968</b>	<b>61.8968</b>	<b>0.0193</b>	<b>0.0000</b>	<b>62.3014</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-004	7.5800e-003	0.0107	2.0000e-005	6.1000e-004	1.1000e-004	7.2000e-004	1.7000e-004	1.0000e-004	2.8000e-004	0.0000	1.9074	1.9074	1.0000e-005	0.0000	1.9077
Worker	5.2100e-003	7.7800e-003	0.0808	2.1000e-004	0.0163	1.5000e-004	0.0164	4.3200e-003	1.3000e-004	4.4600e-003	0.0000	14.7236	14.7236	7.7000e-004	0.0000	14.7399
<b>Total</b>	<b>5.9700e-003</b>	<b>0.0154</b>	<b>0.0915</b>	<b>2.3000e-004</b>	<b>0.0169</b>	<b>2.6000e-004</b>	<b>0.0171</b>	<b>4.4900e-003</b>	<b>2.3000e-004</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>16.6310</b>	<b>16.6310</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>16.6476</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0168	0.3359	0.3935	6.8000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	61.8967	61.8967	0.0193	0.0000	62.3014

<b>Total</b>	<b>0.0168</b>	<b>0.3359</b>	<b>0.3935</b>	<b>6.8000e-004</b>		<b>0.0151</b>	<b>0.0151</b>		<b>0.0151</b>	<b>0.0151</b>	<b>0.0000</b>	<b>61.8967</b>	<b>61.8967</b>	<b>0.0193</b>	<b>0.0000</b>	<b>62.3014</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-004	7.5800e-003	0.0107	2.0000e-005	6.1000e-004	1.1000e-004	7.2000e-004	1.7000e-004	1.0000e-004	2.8000e-004	0.0000	1.9074	1.9074	1.0000e-005	0.0000	1.9077
Worker	5.2100e-003	7.7800e-003	0.0808	2.1000e-004	0.0163	1.5000e-004	0.0164	4.3200e-003	1.3000e-004	4.4600e-003	0.0000	14.7236	14.7236	7.7000e-004	0.0000	14.7399
<b>Total</b>	<b>5.9700e-003</b>	<b>0.0154</b>	<b>0.0915</b>	<b>2.3000e-004</b>	<b>0.0169</b>	<b>2.6000e-004</b>	<b>0.0171</b>	<b>4.4900e-003</b>	<b>2.3000e-004</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>16.6310</b>	<b>16.6310</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>16.6476</b>

**3.10 Sitework - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2430	0.1702	4.5000e-004		0.0106	0.0106		9.7400e-003	9.7400e-003	0.0000	40.6372	40.6372	0.0129	0.0000	40.9072
<b>Total</b>	<b>0.0221</b>	<b>0.2430</b>	<b>0.1702</b>	<b>4.5000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>9.7400e-003</b>	<b>9.7400e-003</b>	<b>0.0000</b>	<b>40.6372</b>	<b>40.6372</b>	<b>0.0129</b>	<b>0.0000</b>	<b>40.9072</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	4.6600e-003	6.8900e-003	1.0000e-005	4.1000e-004	7.0000e-005	4.8000e-004	1.2000e-004	7.0000e-005	1.8000e-004	0.0000	1.2455	1.2455	1.0000e-005	0.0000	1.2457
Worker	3.1900e-003	4.7600e-003	0.0494	1.4000e-004	0.0109	9.0000e-005	0.0109	2.8800e-003	9.0000e-005	2.9700e-003	0.0000	9.4307	9.4307	4.8000e-004	0.0000	9.4408
<b>Total</b>	<b>3.6700e-003</b>	<b>9.4200e-003</b>	<b>0.0562</b>	<b>1.5000e-004</b>	<b>0.0113</b>	<b>1.6000e-004</b>	<b>0.0114</b>	<b>3.0000e-003</b>	<b>1.6000e-004</b>	<b>3.1500e-003</b>	<b>0.0000</b>	<b>10.6762</b>	<b>10.6762</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>10.6865</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0112	0.2239	0.2623	4.5000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	40.6371	40.6371	0.0129	0.0000	40.9071
<b>Total</b>	<b>0.0112</b>	<b>0.2239</b>	<b>0.2623</b>	<b>4.5000e-004</b>		<b>0.0101</b>	<b>0.0101</b>		<b>0.0101</b>	<b>0.0101</b>	<b>0.0000</b>	<b>40.6371</b>	<b>40.6371</b>	<b>0.0129</b>	<b>0.0000</b>	<b>40.9071</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	----------	-----------	-----	-----	------

Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	4.6600e-003	6.8900e-003	1.0000e-005	4.1000e-004	7.0000e-005	4.8000e-004	1.2000e-004	7.0000e-005	1.8000e-004	0.0000	1.2455	1.2455	1.0000e-005	0.0000	1.2457
Worker	3.1900e-003	4.7600e-003	0.0494	1.4000e-004	0.0109	9.0000e-005	0.0109	2.8800e-003	9.0000e-005	2.9700e-003	0.0000	9.4307	9.4307	4.8000e-004	0.0000	9.4408
<b>Total</b>	<b>3.6700e-003</b>	<b>9.4200e-003</b>	<b>0.0562</b>	<b>1.5000e-004</b>	<b>0.0113</b>	<b>1.6000e-004</b>	<b>0.0114</b>	<b>3.0000e-003</b>	<b>1.6000e-004</b>	<b>3.1500e-003</b>	<b>0.0000</b>	<b>10.6762</b>	<b>10.6762</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>10.6865</b>

## **Sub-Appendix d**

Localized Construction Equipment

AERMOD Output Files

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 9/2/2015
** FILE: C:\AERMOD\DISPERSION MODELING\LOCALIZED PM10\LOCALIZED PM10.ADI
**

```

```

*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

```

CO STARTING
TITLEONE HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT
TITLETWO LOCALIZED CONSTRUCTION EMISSIONS PM10
MODELOPT DFAULT CONC
AVERTIME 24
URBANOPT 9862049
POLLUTID PM_10
FLAGPOLE 2.00
RUNORNOT RUN
ERRORFIL "LOCALIZED PM10.ERR"

```

```

CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
LOCATION PAREA2 AREAPOLY 369660.257 3778556.833 213.640
** SOURCE PARAMETERS **
SRCPARAM PAREA2 8.4E-06 0.305 33 1.000
AREAVERT PAREA2 369660.257 3778556.833 369661.524 3778533.552
AREAVERT PAREA2 369664.830 3778478.969 369678.151 3778435.245
AREAVERT PAREA2 369711.086 3778364.454 369724.654 3778340.037
AREAVERT PAREA2 369717.873 3778335.178 369713.234 3778334.172
AREAVERT PAREA2 369706.397 3778332.087 369701.531 3778331.792
AREAVERT PAREA2 369687.817 3778333.634 369637.086 3778316.105
AREAVERT PAREA2 369633.277 3778317.953 369636.408 3778326.494
AREAVERT PAREA2 369625.824 3778322.169 369597.654 3778338.655
AREAVERT PAREA2 369577.640 3778350.454 369574.501 3778357.510
AREAVERT PAREA2 369577.747 3778364.184 369583.791 3778368.267
AREAVERT PAREA2 369593.280 3778363.256 369608.333 3778368.570
AREAVERT PAREA2 369586.854 3778427.846 369580.814 3778444.511
AREAVERT PAREA2 369593.897 3778459.096 369600.471 3778473.527
AREAVERT PAREA2 369615.050 3778479.995 369633.063 3778486.684
AREAVERT PAREA2 369642.601 3778498.204 369648.459 3778530.072
AREAVERT PAREA2 369650.951 3778547.224 369651.938 3778574.625
AREAVERT PAREA2 369660.093 3778574.426
URBANSRC ALL

```

```

** VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"
** VARIABLE EMISSION SCENARIO: "PM2.5"
EMISFACT PAREA2 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT PAREA2 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0

```

EMISFACT PAREA2 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT PAREA2 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL

SO FINISHED

\*\*
\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY
\*\*\*\*\*

\*\*
\*\*

RE STARTING
INCLUDED "LOCALIZED PM10.ROU"

RE FINISHED
\*\*
\*\*\*\*\*

\*\* AERMOD METEOROLOGY PATHWAY
\*\*\*\*\*

\*\*
\*\*

ME STARTING
SURFFILE ..\..\BURK8.SFC
PROFFILE ..\..\BURK8.PFL
SURFDATA 0 2008
UAIRDATA 3190 2008
PROFBASE 10.0 METERS

ME FINISHED
\*\*
\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY
\*\*\*\*\*

\*\*
\*\*

OU STARTING
RECTABLE ALLAVE 1ST
RECTABLE 24 1ST
\*\* AUTO-GENERATED PLOTFILES
PLOTFILE 24 ALL 1ST "LOCALIZED PM10.AD\24H1GALL.PLT" 31
SUMMFILE "LOCALIZED PM10.SUM"

OU FINISHED
\*\*\*\*\*

\*\*\* SETUP Finishes Successfully \*\*\*
\*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT
09/02/15
\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10 \*\*\*
13:58:40

PAGE 1
\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

-----
-----

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
\*\*NO GAS DEPOSITION Data Provided.
\*\*NO PARTICLE DEPOSITION Data Provided.
\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F
\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 1 Source(s),  
 for Total of 1 Urban Area(s):  
 Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:  
 1. Stack-tip Downwash.  
 2. Model Accounts for ELEVated Terrain Effects.  
 3. Use Calms Processing Routine.  
 4. Use Missing Data Processing Routine.  
 5. No Exponential Decay for URBAN/Non-SO2.  
 6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:  
 TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM10

\*\*Model Calculates 1 Short Term Average(s) of: 24-HR

\*\*This Run Includes: 1 Source(s); 1 Source Group(s); and 87 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:  
 Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)  
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)  
 Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
 m for Missing Hours  
 b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.

\*\*Detailed Error/Message File: LOCALIZED  
 PM10.ERR

\*\*File for Summary of Results: LOCALIZED  
 PM10.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10 \*\*\*  
 13:58:40

PAGE 2

\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER (GRAMS/SEC /METER**2)	EMISSION RATE	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
-----------	-------------	------------------------------	---------------	-----------------------------	------------	---------------------	-------------------------	------------------	-------------------	--------------	------------------------------



PAREA2 0 0.84000E-05 369660.3 3778556.8 213.6 0.31 33 1.00 YES HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT
09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10
13:58:40

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID SOURCE IDs
-----

ALL PAREA2 ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT
09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10
13:58:40

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID URBAN POP SOURCE IDs
-----

9862049. PAREA2 ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT
09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10
13:58:40

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

Table with 12 columns: HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR

SOURCE ID = PAREA2 ; SOURCE TYPE = AREAPOLY :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT
09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10
13:58:40

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

( 369697.9, 3778529.0, 212.4, 426.3, 2.0);	( 369691.9, 3778578.4, 208.0, 426.3, 2.0);
( 369709.4, 3778565.2, 207.9, 426.3, 2.0);	( 369733.8, 3778565.2, 206.8, 426.3, 2.0);
( 369760.4, 3778565.2, 209.8, 426.3, 2.0);	( 369685.0, 3778627.6, 207.3, 426.3, 2.0);
( 369709.4, 3778627.6, 206.1, 426.3, 2.0);	( 369733.8, 3778627.6, 205.9, 426.3, 2.0);
( 369760.4, 3778627.6, 208.0, 426.3, 2.0);	( 369684.6, 3778740.8, 205.0, 426.3, 2.0);
( 369709.0, 3778740.8, 204.7, 426.3, 2.0);	( 369733.4, 3778740.8, 205.0, 426.3, 2.0);
( 369760.0, 3778740.8, 206.1, 426.3, 2.0);	( 369684.6, 3778685.5, 206.1, 426.3, 2.0);
( 369709.0, 3778685.5, 205.9, 426.3, 2.0);	( 369733.5, 3778685.5, 206.0, 426.3, 2.0);
( 369760.1, 3778685.5, 207.0, 426.3, 2.0);	( 369682.1, 3778778.2, 203.7, 426.3, 2.0);
( 369724.7, 3778778.2, 203.5, 426.3, 2.0);	( 369767.3, 3778778.2, 203.7, 426.3, 2.0);
( 369809.9, 3778778.2, 204.9, 426.3, 2.0);	( 369852.5, 3778778.2, 205.7, 426.3, 2.0);
( 369983.6, 3778767.6, 207.8, 426.3, 2.0);	( 369914.4, 3778779.5, 206.1, 426.3, 2.0);
( 369883.8, 3778779.5, 205.9, 426.3, 2.0);	( 369949.4, 3778777.0, 207.0, 426.3, 2.0);
( 369810.6, 3778741.3, 207.2, 426.3, 2.0);	( 369828.2, 3778628.6, 224.8, 426.3, 2.0);
( 369867.0, 3778658.0, 228.7, 426.3, 2.0);	( 369904.5, 3778679.1, 227.4, 426.3, 2.0);
( 369858.7, 3778708.4, 217.4, 426.3, 2.0);	( 369905.7, 3778639.1, 232.6, 426.3, 2.0);
( 369885.8, 3778619.1, 237.9, 426.3, 2.0);	( 369638.6, 3778030.1, 238.1, 426.3, 2.0);
( 369698.0, 3778231.8, 263.9, 426.3, 2.0);	( 369682.8, 3778161.3, 253.7, 426.3, 2.0);
( 369653.8, 3778099.1, 245.0, 426.3, 2.0);	( 369666.2, 3778059.1, 234.8, 426.3, 2.0);
( 369722.9, 3778230.4, 255.5, 426.3, 2.0);	( 369716.0, 3778190.3, 251.0, 426.3, 2.0);
( 369703.6, 3778158.6, 247.5, 426.3, 2.0);	( 369687.0, 3778126.8, 246.3, 426.3, 2.0);
( 369675.9, 3778097.8, 240.9, 426.3, 2.0);	( 369703.6, 3778108.8, 232.4, 426.3, 2.0);
( 369727.0, 3778139.2, 227.8, 426.3, 2.0);	( 369903.9, 3778552.4, 260.0, 426.3, 2.0);
( 369866.6, 3778563.4, 256.9, 426.3, 2.0);	( 369873.5, 3778516.4, 252.2, 426.3, 2.0);
( 369887.3, 3778491.6, 249.0, 426.3, 2.0);	( 369859.7, 3778444.6, 244.8, 426.3, 2.0);
( 369854.2, 3778327.2, 240.5, 426.3, 2.0);	( 369643.4, 3778672.5, 208.0, 426.3, 2.0);
( 369644.1, 3778798.3, 203.3, 426.3, 2.0);	( 369649.7, 3779013.9, 197.0, 426.3, 2.0);
( 369649.7, 3778913.0, 199.6, 426.3, 2.0);	( 369580.6, 3779019.4, 196.0, 426.3, 2.0);
( 369573.7, 3778911.6, 200.4, 426.3, 2.0);	( 369575.1, 3778832.9, 202.2, 426.3, 2.0);
( 369591.6, 3778750.0, 208.6, 426.3, 2.0);	( 369640.0, 3778638.0, 208.3, 426.3, 2.0);
( 369590.3, 3778698.8, 212.4, 426.3, 2.0);	( 369569.5, 3778751.3, 209.4, 426.3, 2.0);



Surface file: ..\..\BURK8.SFC  
 Profile file: ..\..\BURK8.PFL  
 Surface format:  
 FREE  
 Profile format:  
 FREE  
 Surface station no.: 0  
 Name: UNKNOWN  
 Year: 2008

Upper air station no.: 3190  
 Name: UNKNOWN  
 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10 \*\*\*  
 13:58:40

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): PAREA2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC  
 (YYMMDDHH)

369697.92 (10090824)	3778529.05	4.82726m (11030124)	369691.90	3778578.43	3.52748m
369709.39 (09041024)	3778565.24	3.10673 (09041024)	369733.82	3778565.24	2.54754
369760.43 (10090824)	3778565.24	2.02490 (09041024)	369684.96	3778627.64	2.61101m
369709.39 (10121924)	3778627.64	1.99505m (10090824)	369733.82	3778627.64	1.70826
369760.43 (10090824)	3778627.64	1.51190 (10121924)	369684.56	3778740.79	1.16624m
369708.99 (10090824)	3778740.79	1.06702m (10090824)	369733.42	3778740.79	0.90686m
369760.02 (10090824)	3778740.79	0.81889 (12121424)	369684.59	3778685.54	1.65969m
369709.02 (10090824)	3778685.54	1.43216m (10090824)	369733.45	3778685.54	1.13755m
369760.06 (10090824)	3778685.54	1.13164 (10121924)	369682.12	3778778.17	0.94844m
369724.72 (12121424)	3778778.17	0.82448m (10090824)	369767.32	3778778.17	0.67150
369809.92 (12121424)	3778778.17	0.68756 (12121424)	369852.52	3778778.17	0.63514
369983.65 (12121424)	3778767.63	0.36483 (10112024)	369914.44	3778779.51	0.48847
369883.78 (10112024)	3778779.51	0.56644 (12121424)	369949.38	3778777.05	0.42956
369810.59 (10112024)	3778741.35	0.79310 (10121924)	369828.20	3778628.60	0.96467
369866.96 (10112024)	3778657.96	0.72569 (10112024)	369904.54	3778679.10	0.56507
369858.74 (09040324)	3778708.37	0.71035 (12121424)	369905.71	3778639.08	0.54595
369885.75 (11050124)	3778619.11	0.61570 (09040324)	369638.62	3778030.06	0.35341
369698.03 (08020424)	3778231.80	0.92387m (10102524)	369682.83	3778161.33	0.58005
369653.81 (11050124)	3778099.15	0.47836 (11050124)	369666.25	3778059.08	0.38142
369722.90 (10102524)	3778230.42	1.11610 (10112824)	369715.99	3778190.35	0.78561m
369703.56 (08020424)	3778158.57	0.62492 (08020424)	369686.98	3778126.79	0.52594
369675.92 (08020424)	3778097.77	0.44479 (08020424)	369703.56	3778108.82	0.54174
369727.05 (09122824)	3778139.22	0.68469 (10112824)	369903.91	3778552.37	0.62467
369866.61 (12121724)	3778563.43	0.65902 (09122824)	369873.52	3778516.45	0.84453
369887.33 (12121724)	3778491.57	0.97291 (12121724)	369859.70	3778444.59	1.33815
369854.17 (10090824)	3778327.22	1.52353 (08010724)	369643.37	3778672.46	1.86097m
369644.15 (10122224)	3778798.32	0.80463m (10090824)	369649.67	3779013.88	0.31431
369649.67 (10122224)	3778913.01	0.46748m (10090824)	369580.58	3779019.41	0.30613
369573.68 (11010824)	3778911.63	0.43951m (11010824)	369575.06	3778832.87	0.71494m
369591.64 (10090824)	3778749.96	1.11784m (11010824)	369640.00	3778638.03	2.52776m
369590.26 (11010824)	3778698.83	1.70126m (11010824)	369569.53	3778751.34	1.27676m
369552.95	3778835.63	0.81801m (11010824)	369547.42	3778906.10	0.56831m

(11010824)						
369619.40	3778570.86	4.49916m	(11010824)	369551.26	3778615.39	2.60085m
(11010824)						
369491.97	3778688.07	1.49586m	(09121124)	369486.23	3778783.69	1.00757m
(09121124)						
369554.34	3778511.60	3.09232m	(10102024)	369467.11	3778588.61	1.47457m
(10102024)						
369442.24	3778525.50	1.33628m	(10102024)	369426.94	3778653.64	0.92982m
(10102024)						
369430.77	3778596.26	1.26721m	(10102024)	369382.96	3778730.14	0.56635
(12112924)						
369384.87	3778676.59	0.78429m	(10102024)	369398.26	3778498.73	0.85905m
(11072424)						
369245.26	3778531.24	0.49124m	(12120524)	369245.26	3778441.35	0.47620
(09082024)						
369247.17	3778341.90	0.23739m	(12080524)	369803.41	3778176.93	1.05344
(10112824)						

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10 \*\*\*  
 13:58:40

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): PAREA2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

369381.69	3778367.12	0.47107m	(12080524)	369397.35	3778405.93	0.70232
(09082024)						
369486.97	3778466.99	1.14578m	(10102024)	369583.98	3778531.08	3.92854m
(11010824)						
369807.29	3778237.38	1.24538	(09112824)	369829.19	3778203.30	0.86579
(08052124)						
369819.96	3778183.97	0.90875				
(10112824)						

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10 \*\*\*  
 13:58:40

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

DATE  
 NETWORK

GROUP ID	AVERAGE CONC	(YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF
----------	--------------	------------	----------	-------------------------------	----

ALL HIGH 1ST HIGH VALUE IS 4.82726m ON 11030124: AT ( 369697.92, 3778529.05, 212.42, 426.30, 2.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD-WESTLAKE UPPER SCHOOL INFRASTRUCTURE PROJECT

\*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* LOCALIZED CONSTRUCTION EMISSIONS PM10

\*\*\*

13:58:40

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 1275 Informational Message(s)
A Total of 43848 Hours Were Processed
A Total of 13 Calm Hours Identified
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
\*\*\* NONE \*\*\*

\*\*\*\*\*
\*\*\* AERMOD Finishes Successfully \*\*\*
\*\*\*\*\*

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 9/2/2015
** File: C:\AERMOD\Dispersion Modeling\Localized PM25\Localized PM2.ADI
**

```

```

*****
**
**
*****
** AERMOD Control Pathway
*****
**
**

```

```

CO STARTING
TITLEONE Harvard-Westlake Upper School Infrastructure Project
TITLETWO Localized Construction Emissions PM2.2
MODELOPT DFAULT CONC
AVERTIME 24
URBANOPT 9862049
POLLUTID PM_2.5
FLAGPOLE 2.00
RUNORNOT RUN
ERRORFIL "Localized PM2.err"

```

```

CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**

```

```

SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION PAREA2 AREAPOLY 369660.257 3778556.833 213.640
** Source Parameters **
SRCPARAM PAREA2 3.734E-06 0.305 33 1.000
AREAVERT PAREA2 369660.257 3778556.833 369661.524 3778533.552
AREAVERT PAREA2 369664.830 3778478.969 369678.151 3778435.245
AREAVERT PAREA2 369711.086 3778364.454 369724.654 3778340.037
AREAVERT PAREA2 369717.873 3778335.178 369713.234 3778334.172
AREAVERT PAREA2 369706.397 3778332.087 369701.531 3778331.792
AREAVERT PAREA2 369687.817 3778333.634 369637.086 3778316.105
AREAVERT PAREA2 369633.277 3778317.953 369636.408 3778326.494
AREAVERT PAREA2 369625.824 3778322.169 369597.654 3778338.655
AREAVERT PAREA2 369577.640 3778350.454 369574.501 3778357.510
AREAVERT PAREA2 369577.747 3778364.184 369583.791 3778368.267
AREAVERT PAREA2 369593.280 3778363.256 369608.333 3778368.570
AREAVERT PAREA2 369586.854 3778427.846 369580.814 3778444.511
AREAVERT PAREA2 369593.897 3778459.096 369600.471 3778473.527
AREAVERT PAREA2 369615.050 3778479.995 369633.063 3778486.684
AREAVERT PAREA2 369642.601 3778498.204 369648.459 3778530.072
AREAVERT PAREA2 369650.951 3778547.224 369651.938 3778574.625
AREAVERT PAREA2 369660.093 3778574.426
URBANSRC ALL

```

```

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "PM2.5"
EMISFACT PAREA2 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT PAREA2 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT PAREA2 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0

```



```
EMISFACT PAREA2      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED "Localized PM2.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE ..\..\burk8.sfc
  PROFFILE ..\..\burk8.pfl
  SURFDATA 0 2008
  UAIRDATA 3190 2008
  PROFBASE 10.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 24 ALL 1ST "LOCALIZED PM2.AD\24H1GALL.PLT" 31
  SUMMFILE "Localized PM2.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

## **Sub-Appendix e**

Operational Emissions

AERMOD Output Files

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 9/2/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\ATHLETIC FIELD\ATHLETIC CO\ATHLETIC CO.ADI
**

```

```

*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

CO STARTING

```

TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO ATHLETIC STRUCTURE CO
MODELOPT DFAULT CONC
AVERTIME 1 8
URBANOPT 9862049
POLLUTID CO
FLAGPOLE 10.97
RUNORNOT RUN

```

CO FINISHED

```

**
*****
** AERMOD SOURCE PATHWAY
*****

```

SO STARTING

```

** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **

```

\*\*\*\*\*

\*\* LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES

\*\* LINE VOLUME SOURCE ID = ATHLETICSTRCT

\*\* DESCRSRC

\*\* PREFIX

\*\* LENGTH OF SIDE = 3.66

\*\* CONFIGURATION = SEPARATED

\*\* EMISSION RATE = 0.72

\*\* ELEVATED

\*\* BUILDING HEIGHT = 8.53

\*\* SZINIT = 3.97

\*\* NODES = 6

\*\* 369647.587, 3778507.055, 231.28, 0.00, 3.36

\*\* 369601.382, 3778486.158, 231.29, 0.00, 3.36

\*\* 369584.657, 3778440.862, 241.37, 0.00, 3.36

\*\* 369637.666, 3778320.526, 242.96, 0.00, 3.36

\*\* 369715.368, 3778357.865, 242.68, 0.00, 3.36

\*\* 369649.621, 3778507.830, 231.29, 0.00, 3.36

```

*****
LOCATION L0000001      VOLUME  369645.920 3778506.302 229.12
LOCATION L0000002      VOLUME  369639.338 3778503.325 229.50
LOCATION L0000003      VOLUME  369632.756 3778500.348 229.86
LOCATION L0000004      VOLUME  369626.174 3778497.371 230.20
LOCATION L0000005      VOLUME  369619.592 3778494.394 230.53
LOCATION L0000006      VOLUME  369613.010 3778491.417 230.86
LOCATION L0000007      VOLUME  369606.428 3778488.440 231.75
LOCATION L0000008      VOLUME  369600.798 3778484.576 232.61

```

LOCATION	L0000009	VOLUME	369598.296	3778477.800	233.43
LOCATION	L0000010	VOLUME	369595.793	3778471.023	234.23
LOCATION	L0000011	VOLUME	369593.291	3778464.246	235.01
LOCATION	L0000012	VOLUME	369590.789	3778457.469	235.78
LOCATION	L0000013	VOLUME	369588.287	3778450.692	236.52
LOCATION	L0000014	VOLUME	369585.784	3778443.916	237.25
LOCATION	L0000015	VOLUME	369586.257	3778437.230	237.76
LOCATION	L0000016	VOLUME	369589.169	3778430.619	238.13
LOCATION	L0000017	VOLUME	369592.081	3778424.008	238.52
LOCATION	L0000018	VOLUME	369594.993	3778417.397	238.94
LOCATION	L0000019	VOLUME	369597.905	3778410.786	239.38
LOCATION	L0000020	VOLUME	369600.818	3778404.175	239.83
LOCATION	L0000021	VOLUME	369603.730	3778397.564	240.32
LOCATION	L0000022	VOLUME	369606.642	3778390.953	240.47
LOCATION	L0000023	VOLUME	369609.554	3778384.342	240.56
LOCATION	L0000024	VOLUME	369612.467	3778377.731	240.62
LOCATION	L0000025	VOLUME	369615.379	3778371.120	240.78
LOCATION	L0000026	VOLUME	369618.291	3778364.509	240.95
LOCATION	L0000027	VOLUME	369621.203	3778357.898	241.13
LOCATION	L0000028	VOLUME	369624.116	3778351.287	241.32
LOCATION	L0000029	VOLUME	369627.028	3778344.676	241.53
LOCATION	L0000030	VOLUME	369629.940	3778338.065	241.74
LOCATION	L0000031	VOLUME	369632.852	3778331.454	241.97
LOCATION	L0000032	VOLUME	369635.765	3778324.843	242.20
LOCATION	L0000033	VOLUME	369639.925	3778321.611	242.31
LOCATION	L0000034	VOLUME	369646.437	3778324.740	242.14
LOCATION	L0000035	VOLUME	369652.948	3778327.869	241.96
LOCATION	L0000036	VOLUME	369659.459	3778330.998	241.77
LOCATION	L0000037	VOLUME	369665.970	3778334.127	241.57
LOCATION	L0000038	VOLUME	369672.481	3778337.256	241.35
LOCATION	L0000039	VOLUME	369678.993	3778340.385	241.13
LOCATION	L0000040	VOLUME	369685.504	3778343.514	240.89
LOCATION	L0000041	VOLUME	369692.015	3778346.643	240.66
LOCATION	L0000042	VOLUME	369698.526	3778349.772	240.44
LOCATION	L0000043	VOLUME	369705.038	3778352.901	240.24
LOCATION	L0000044	VOLUME	369711.549	3778356.030	240.03
LOCATION	L0000045	VOLUME	369714.168	3778360.600	239.79
LOCATION	L0000046	VOLUME	369711.268	3778367.216	239.47
LOCATION	L0000047	VOLUME	369708.367	3778373.833	239.14
LOCATION	L0000048	VOLUME	369705.467	3778380.449	238.81
LOCATION	L0000049	VOLUME	369702.566	3778387.065	238.47
LOCATION	L0000050	VOLUME	369699.665	3778393.681	238.13
LOCATION	L0000051	VOLUME	369696.765	3778400.297	237.68
LOCATION	L0000052	VOLUME	369693.864	3778406.913	237.18
LOCATION	L0000053	VOLUME	369690.964	3778413.529	236.69
LOCATION	L0000054	VOLUME	369688.063	3778420.145	236.22
LOCATION	L0000055	VOLUME	369685.162	3778426.761	235.77
LOCATION	L0000056	VOLUME	369682.262	3778433.378	235.31
LOCATION	L0000057	VOLUME	369679.361	3778439.994	234.84
LOCATION	L0000058	VOLUME	369676.461	3778446.610	234.36
LOCATION	L0000059	VOLUME	369673.560	3778453.226	233.87
LOCATION	L0000060	VOLUME	369670.660	3778459.842	233.37
LOCATION	L0000061	VOLUME	369667.759	3778466.458	232.85
LOCATION	L0000062	VOLUME	369664.858	3778473.074	232.33
LOCATION	L0000063	VOLUME	369661.958	3778479.690	231.79
LOCATION	L0000064	VOLUME	369659.057	3778486.306	231.24
LOCATION	L0000065	VOLUME	369656.157	3778492.923	230.57
LOCATION	L0000066	VOLUME	369653.256	3778499.539	229.83
LOCATION	L0000067	VOLUME	369650.355	3778506.155	229.10
**	END OF LINE	VOLUME	SOURCE ID = ATHLETICSTRCT		
LOCATION	PAREA1	AREAPOLY	369646.455	3778500.742	229.730
**	SOURCE PARAMETERS	**			
**	LINE VOLUME	SOURCE ID = ATHLETICSTRCT			
SRCPARAM	L0000001	0.0107462687	0.00	3.36	3.97



SRCPARAM	L0000066	0.0107462687	0.00	3.36	3.97
SRCPARAM	L0000067	0.0107462687	0.00	3.36	3.97

\*\*

SRCPARAM	PAREA1	0.0	0.305	5	
AREAVERT	PAREA1	369646.455	3778500.742	369606.351	3778482.323
AREAVERT	PAREA1	369593.528	3778439.654	369641.777	3778330.750
AREAVERT	PAREA1	369705.967	3778360.651		
URBANSRC	ALL				

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "CO"

EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000014	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT	L0000062	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000062	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000062	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0

CONCUNIT 873.2 GRAMS/SEC PPM

SRCGROUP ALL

SO FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

\*\*\*\*\*

\*\*

\*\*

RE STARTING

INCLUDED "ATHLETIC CO.ROU"

RE FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD METEOROLOGY PATHWAY

\*\*\*\*\*

\*\*

\*\*

ME STARTING

SURFFILE ..\..\..\BURK8.SFC

PROFFILE ..\..\..\BURK8.PFL

SURFDATA 0 2008

UAIRDATA 3190 2008

PROFBASE 10.0 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

RECTABLE 8 1ST

\*\* AUTO-GENERATED PLOTFILES

PLOTFILE 1 ALL 1ST "ATHLETIC CO.AD\01H1GALL.PLT" 31

PLOTFILE 8 ALL 1ST "ATHLETIC CO.AD\08H1GALL.PLT" 32

SUMMFILE "ATHLETIC CO.SUM"

OU FINISHED

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 1 Warning Message(s)  
 A Total of 0 Informational Message(s)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*  
 \*\*\* SETUP Finishes Successfully \*\*\*  
 \*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.

\*\*NO PARTICLE DEPOSITION Data Provided.

\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 68 Source(s),  
 for Total of 1 Urban Area(s):  
 Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: CO

\*\*Model Calculates 2 Short Term Average(s) of: 1-HR 8-HR

\*\*This Run Includes: 68 Source(s); 1 Source Group(s); and 22 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)  
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)  
 Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
 m for Missing Hours  
 b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 873.20  
 Output Units = PPM

\*\*Approximate Storage Requirements of Model = 3.6 MB of RAM.

\*\*File for Summary of Results: ATHLETIC

CO.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE CO \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE	RELEASE	INIT.	INIT.	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY BY
					ELEV. (METERS)	HEIGHT (METERS)	SY (METERS)	SZ (METERS)			
L0000001	0	0.10746E-01	369645.9	3778506.3	229.1	0.00	3.36	3.97	YES	HROFDY	
L0000002	0	0.10746E-01	369639.3	3778503.3	229.5	0.00	3.36	3.97	YES	HROFDY	
L0000003	0	0.10746E-01	369632.8	3778500.3	229.9	0.00	3.36	3.97	YES	HROFDY	
L0000004	0	0.10746E-01	369626.2	3778497.4	230.2	0.00	3.36	3.97	YES	HROFDY	
L0000005	0	0.10746E-01	369619.6	3778494.4	230.5	0.00	3.36	3.97	YES	HROFDY	
L0000006	0	0.10746E-01	369613.0	3778491.4	230.9	0.00	3.36	3.97	YES	HROFDY	
L0000007	0	0.10746E-01	369606.4	3778488.4	231.8	0.00	3.36	3.97	YES	HROFDY	
L0000008	0	0.10746E-01	369600.8	3778484.6	232.6	0.00	3.36	3.97	YES	HROFDY	
L0000009	0	0.10746E-01	369598.3	3778477.8	233.4	0.00	3.36	3.97	YES	HROFDY	
L0000010	0	0.10746E-01	369595.8	3778471.0	234.2	0.00	3.36	3.97	YES	HROFDY	
L0000011	0	0.10746E-01	369593.3	3778464.2	235.0	0.00	3.36	3.97	YES	HROFDY	
L0000012	0	0.10746E-01	369590.8	3778457.5	235.8	0.00	3.36	3.97	YES	HROFDY	
L0000013	0	0.10746E-01	369588.3	3778450.7	236.5	0.00	3.36	3.97	YES	HROFDY	
L0000014	0	0.10746E-01	369585.8	3778443.9	237.2	0.00	3.36	3.97	YES	HROFDY	
L0000015	0	0.10746E-01	369586.3	3778437.2	237.8	0.00	3.36	3.97	YES	HROFDY	
L0000016	0	0.10746E-01	369589.2	3778430.6	238.1	0.00	3.36	3.97	YES	HROFDY	
L0000017	0	0.10746E-01	369592.1	3778424.0	238.5	0.00	3.36	3.97	YES	HROFDY	
L0000018	0	0.10746E-01	369595.0	3778417.4	238.9	0.00	3.36	3.97	YES	HROFDY	
L0000019	0	0.10746E-01	369597.9	3778410.8	239.4	0.00	3.36	3.97	YES	HROFDY	
L0000020	0	0.10746E-01	369600.8	3778404.2	239.8	0.00	3.36	3.97	YES	HROFDY	
L0000021	0	0.10746E-01	369603.7	3778397.6	240.3	0.00	3.36	3.97	YES	HROFDY	
L0000022	0	0.10746E-01	369606.6	3778391.0	240.5	0.00	3.36	3.97	YES	HROFDY	
L0000023	0	0.10746E-01	369609.6	3778384.3	240.6	0.00	3.36	3.97	YES	HROFDY	
L0000024	0	0.10746E-01	369612.5	3778377.7	240.6	0.00	3.36	3.97	YES	HROFDY	
L0000025	0	0.10746E-01	369615.4	3778371.1	240.8	0.00	3.36	3.97	YES	HROFDY	

CO	VERSION	CONC	ELEV	FLGPOL	BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY
L0000026	0	0.10746E-01	369618.3	3778364.5	241.0	0.00	3.36	3.97	YES	HROFDY	
L0000027	0	0.10746E-01	369621.2	3778357.9	241.1	0.00	3.36	3.97	YES	HROFDY	
L0000028	0	0.10746E-01	369624.1	3778351.3	241.3	0.00	3.36	3.97	YES	HROFDY	
L0000029	0	0.10746E-01	369627.0	3778344.7	241.5	0.00	3.36	3.97	YES	HROFDY	
L0000030	0	0.10746E-01	369629.9	3778338.1	241.7	0.00	3.36	3.97	YES	HROFDY	
L0000031	0	0.10746E-01	369632.9	3778331.5	242.0	0.00	3.36	3.97	YES	HROFDY	
L0000032	0	0.10746E-01	369635.8	3778324.8	242.2	0.00	3.36	3.97	YES	HROFDY	
L0000033	0	0.10746E-01	369639.9	3778321.6	242.3	0.00	3.36	3.97	YES	HROFDY	
L0000034	0	0.10746E-01	369646.4	3778324.7	242.1	0.00	3.36	3.97	YES	HROFDY	
L0000035	0	0.10746E-01	369652.9	3778327.9	242.0	0.00	3.36	3.97	YES	HROFDY	
L0000036	0	0.10746E-01	369659.5	3778331.0	241.8	0.00	3.36	3.97	YES	HROFDY	
L0000037	0	0.10746E-01	369666.0	3778334.1	241.6	0.00	3.36	3.97	YES	HROFDY	
L0000038	0	0.10746E-01	369672.5	3778337.3	241.4	0.00	3.36	3.97	YES	HROFDY	
L0000039	0	0.10746E-01	369679.0	3778340.4	241.1	0.00	3.36	3.97	YES	HROFDY	
L0000040	0	0.10746E-01	369685.5	3778343.5	240.9	0.00	3.36	3.97	YES	HROFDY	

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\*

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY
L0000041	0	0.10746E-01	369692.0	3778346.6	240.7	0.00	3.36	3.97	YES	HROFDY	
L0000042	0	0.10746E-01	369698.5	3778349.8	240.4	0.00	3.36	3.97	YES	HROFDY	
L0000043	0	0.10746E-01	369705.0	3778352.9	240.2	0.00	3.36	3.97	YES	HROFDY	
L0000044	0	0.10746E-01	369711.5	3778356.0	240.0	0.00	3.36	3.97	YES	HROFDY	
L0000045	0	0.10746E-01	369714.2	3778360.6	239.8	0.00	3.36	3.97	YES	HROFDY	
L0000046	0	0.10746E-01	369711.3	3778367.2	239.5	0.00	3.36	3.97	YES	HROFDY	
L0000047	0	0.10746E-01	369708.4	3778373.8	239.1	0.00	3.36	3.97	YES	HROFDY	
L0000048	0	0.10746E-01	369705.5	3778380.4	238.8	0.00	3.36	3.97	YES	HROFDY	
L0000049	0	0.10746E-01	369702.6	3778387.1	238.5	0.00	3.36	3.97	YES	HROFDY	
L0000050	0	0.10746E-01	369699.7	3778393.7	238.1	0.00	3.36	3.97	YES	HROFDY	
L0000051	0	0.10746E-01	369696.8	3778400.3	237.7	0.00	3.36	3.97	YES	HROFDY	
L0000052	0	0.10746E-01	369693.9	3778406.9	237.2	0.00	3.36	3.97	YES	HROFDY	
L0000053	0	0.10746E-01	369691.0	3778413.5	236.7	0.00	3.36	3.97	YES	HROFDY	
L0000054	0	0.10746E-01	369688.1	3778420.1	236.2	0.00	3.36	3.97	YES	HROFDY	
L0000055	0	0.10746E-01	369685.2	3778426.8	235.8	0.00	3.36	3.97	YES	HROFDY	
L0000056	0	0.10746E-01	369682.3	3778433.4	235.3	0.00	3.36	3.97	YES	HROFDY	
L0000057	0	0.10746E-01	369679.4	3778440.0	234.8	0.00	3.36	3.97	YES	HROFDY	
L0000058	0	0.10746E-01	369676.5	3778446.6	234.4	0.00	3.36	3.97	YES	HROFDY	
L0000059	0	0.10746E-01	369673.6	3778453.2	233.9	0.00	3.36	3.97	YES	HROFDY	
L0000060	0	0.10746E-01	369670.7	3778459.8	233.4	0.00	3.36	3.97	YES	HROFDY	
L0000061	0	0.10746E-01	369667.8	3778466.5	232.9	0.00	3.36	3.97	YES	HROFDY	
L0000062	0	0.10746E-01	369664.9	3778473.1	232.3	0.00	3.36	3.97	YES	HROFDY	
L0000063	0	0.10746E-01	369662.0	3778479.7	231.8	0.00	3.36	3.97	YES	HROFDY	
L0000064	0	0.10746E-01	369659.1	3778486.3	231.2	0.00	3.36	3.97	YES	HROFDY	
L0000065	0	0.10746E-01	369656.2	3778492.9	230.6	0.00	3.36	3.97	YES	HROFDY	
L0000066	0	0.10746E-01	369653.3	3778499.5	229.8	0.00	3.36	3.97	YES	HROFDY	
L0000067	0	0.10746E-01	369650.4	3778506.2	229.1	0.00	3.36	3.97	YES	HROFDY	

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\*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
-----------	--------------------	--------------------------------------	-----------------------------	------------	---------------------	-------------------------	------------------	-------------------	--------------	------------------------------

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PAREAL      0  0.00000E+00  369646.5  3778500.7  229.7  0.31  5  0.00  YES
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\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 ,
L0000008	,
	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 ,
	L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 ,
	L0000024 ,
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 ,
	L0000032 ,
	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 ,
	L0000040 ,
	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 ,
	L0000048 ,
	L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 ,
	L0000056 ,
	L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 ,
	L0000064 ,
	L0000065 , L0000066 , L0000067 , PAREAL ,

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\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs							
-----	-----	-----							
L0000008	9862049. L0000007	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008
	L0000009	, L0000010	, L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016	, L0000017
	L0000017	, L0000018	, L0000019	, L0000020	, L0000021	, L0000022	, L0000023	, L0000024	, L0000025
	L0000025	, L0000026	, L0000027	, L0000028	, L0000029	, L0000030	, L0000031	, L0000032	, L0000033
	L0000033	, L0000034	, L0000035	, L0000036	, L0000037	, L0000038	, L0000039	, L0000040	, L0000041
	L0000041	, L0000042	, L0000043	, L0000044	, L0000045	, L0000046	, L0000047	, L0000048	, L0000049
	L0000049	, L0000050	, L0000051	, L0000052	, L0000053	, L0000054	, L0000055	, L0000056	, L0000057
	L0000057	, L0000058	, L0000059	, L0000060	, L0000061	, L0000062	, L0000063	, L0000064	, L0000065
	L0000065	, L0000066	, L0000067	, PAREAL	, L0000068	, L0000069	, L0000070	, L0000071	, L0000072

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SOURCE ID = L0000001 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000002 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000003 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000005 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000006 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000007 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000008 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000009 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000010 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00



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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000011 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000012 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000013 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000014 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000015 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-----											
-----											

SOURCE ID = L0000016 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000018 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000019 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000022 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000023 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE CO  
12:04:05

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000027 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000028 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000029 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000030 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
---	------------	---	------------	---	------------	---	------------	---	------------	---	------------

7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000031 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000032 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000033 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000034 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000035 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000036 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000037 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SOURCE ID = L0000041	; SOURCE TYPE = VOLUME :																						
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000045 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE CO
12:04:05

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR
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SOURCE ID = L0000046 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000047 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000049 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0000050 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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*** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
*** 09/02/15
*** AERMET - VERSION 14134 *** *** ATHLETIC STRUCTURE CO ***
12:04:05

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

```

SOURCE ID = L0000051 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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```

SOURCE ID = L0000052 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0000053 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000054 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0000055 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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*** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
*** 09/02/15
*** AERMET - VERSION 14134 *** *** ATHLETIC STRUCTURE CO ***
12:04:05

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000056 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000057 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000058 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000059 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000060 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000061 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00



SOURCE ID = L0000062 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000063 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000064 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000065 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000066 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000067 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*



Profile file: ..\..\..\BURK8.PFL

Surface format:

FREE

Profile format:

FREE

Surface station no.: 0

Upper air station no.: 3190

Name: UNKNOWN

Name: UNKNOWN

Year: 2008

Year: 2008

## First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

## First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE CO

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,  
 L0000005 ,  
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,  
 L0000013 ,  
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,  
 L0000021 ,  
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO		IN PPM		**	
X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
369613.66	3778475.94	0.19857	(12110517)	369607.08	3778456.46	0.19673	
(11122517)							
369601.65	3778438.83	0.19504	(12122517)	369644.69	3778341.41	0.18675	
(10122917)							
369621.56	3778391.97	0.18572	(12122517)	369670.92	3778416.16	0.18221	
(12110517)							
369694.12	3778364.81	0.19138	(10122917)	369670.92	3778353.11	0.19406	
(10122917)							
369642.34	3778490.88	0.19004	(10122917)	369628.30	3778483.43	0.19265	
(12110517)							
369657.66	3778455.07	0.18568	(12110517)	369649.93	3778474.12	0.18936	
(12110517)							
369666.40	3778433.87	0.18308	(12110517)	369683.14	3778392.51	0.18640	
(11122517)							
369630.87	3778452.19	0.18539	(10110417)	369650.11	3778405.99	0.17786	
(10110417)							
369624.53	3778423.64	0.19027	(10110417)	369649.91	3778436.33	0.18037	
(12110517)							
369647.33	3778373.28	0.19166	(12110517)	369671.12	3778383.79	0.18657	
(12110517)							
369611.16	3778418.77	0.19872	(12122517)	369633.23	3778365.93	0.19199	
(10122917)							

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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**MODELOPTs:	RegDFAULT	CONC	ELEV	FLGPOL	*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***					
					INCLUDING SOURCE(S):	L0000001	, L0000002	, L0000003	, L0000004	,
						L0000005	,			
	L0000006	,	L0000007	,	L0000008	,	L0000009	,	L0000010	,
	L0000013	,							L0000011	,
	L0000014	,	L0000015	,	L0000016	,	L0000017	,	L0000018	,
	L0000021	,							L0000019	,
	L0000022	,	L0000023	,	L0000024	,	L0000025	,	L0000026	,
		,							L0000027	,
		,							L0000028	,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO		IN PPM		**	
X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
369613.66	3778475.94	0.03522	(12122516)	369607.08	3778456.46	0.03293	
(12122516)							
369601.65	3778438.83	0.03450	(12122516)	369644.69	3778341.41	0.03874	
(08021616)							
369621.56	3778391.97	0.03177	(12122516)	369670.92	3778416.16	0.03014m	
(10102024)							
369694.12	3778364.81	0.03706	(08021616)	369670.92	3778353.11	0.03360	
(12122516)							
369642.34	3778490.88	0.04074	(08021616)	369628.30	3778483.43	0.03428	

(12122516)							
369657.66	3778455.07	0.03152	(12122516)	369649.93	3778474.12	0.03382	
(12122516)							
369666.40	3778433.87	0.03049	(12122516)	369683.14	3778392.51	0.03088	
(12122516)							
369630.87	3778452.19	0.03061m	(10102024)	369650.11	3778405.99	0.02934m	
(10102024)							
369624.53	3778423.64	0.03143m	(10102024)	369649.91	3778436.33	0.02979m	
(10102024)							
369647.33	3778373.28	0.03166m	(10102024)	369671.12	3778383.79	0.03082m	
(10102024)							
369611.16	3778418.77	0.03291m	(10102024)	369633.23	3778365.93	0.03294	
(12122516)							

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

DATE NETWORK

GROUP ID	AVERAGE CONC	(YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF
TYPE	GRID-ID				

ALL HIGH 1ST HIGH VALUE IS 0.19872 ON 12122517: AT ( 369611.16, 3778418.77, 237.97, 365.00, 10.97) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE CO \*\*\*  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 8-HR RESULTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

DATE NETWORK

GROUP ID	AVERAGE CONC	(YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF
TYPE	GRID-ID				

ALL HIGH 1ST HIGH VALUE IS 0.04074 ON 08021616: AT ( 369642.34, 3778490.88, 230.84, 365.00,

10.97) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
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\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE CO
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1275 Informational Message(s)
A Total of 43848 Hours Were Processed
A Total of 13 Calm Hours Identified
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*
\*\*\* AERMOD Finishes Successfully \*\*\*
\*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 9/2/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\ATHLETIC FIELD\ATHLETIC NO2\ATHLETIC NO2.ADI
**

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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

```

CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO ATHLETIC STRUCTURE NO2
MODELOPT DFAULT CONC
AVERTIME 1
URBANOPT 9862049
POLLUTID NO2
FLAGPOLE 10.97
RUNORNOT RUN

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```

CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**

```

```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = PARKINGSTRCT
** DESCRSRC
** PREFIX
** LENGTH OF SIDE = 3.66
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.006723
** ELEVATED
** BUILDING HEIGHT = 8.53
** SZINIT = 3.97
** NODES = 6
** 369647.587, 3778507.055, 231.28, 0.00, 3.36
** 369601.382, 3778486.158, 231.29, 0.00, 3.36
** 369584.657, 3778440.862, 241.37, 0.00, 3.36
** 369637.666, 3778320.526, 242.96, 0.00, 3.36
** 369715.368, 3778357.865, 242.68, 0.00, 3.36
** 369649.621, 3778507.830, 231.29, 0.00, 3.36
** -----

```

LOCATION	VOLUME	X COORD.	Y COORD.	HEIGHT
L0000001	369645.920	3778506.302	231.28	3.36
L0000002	369639.338	3778503.325	231.28	3.36
L0000003	369632.756	3778500.348	231.28	3.36
L0000004	369626.174	3778497.371	231.28	3.36
L0000005	369619.592	3778494.394	231.29	3.36
L0000006	369613.010	3778491.417	231.29	3.36
L0000007	369606.428	3778488.440	231.29	3.36
L0000008	369600.798	3778484.576	231.64	3.36

LOCATION	L0000009	VOLUME	369598.296	3778477.800	233.15
LOCATION	L0000010	VOLUME	369595.793	3778471.023	234.66
LOCATION	L0000011	VOLUME	369593.291	3778464.246	236.17
LOCATION	L0000012	VOLUME	369590.789	3778457.469	237.67
LOCATION	L0000013	VOLUME	369588.287	3778450.692	239.18
LOCATION	L0000014	VOLUME	369585.784	3778443.916	240.69
LOCATION	L0000015	VOLUME	369586.257	3778437.230	241.42
LOCATION	L0000016	VOLUME	369589.169	3778430.619	241.51
LOCATION	L0000017	VOLUME	369592.081	3778424.008	241.59
LOCATION	L0000018	VOLUME	369594.993	3778417.397	241.68
LOCATION	L0000019	VOLUME	369597.905	3778410.786	241.77
LOCATION	L0000020	VOLUME	369600.818	3778404.175	241.85
LOCATION	L0000021	VOLUME	369603.730	3778397.564	241.94
LOCATION	L0000022	VOLUME	369606.642	3778390.953	242.03
LOCATION	L0000023	VOLUME	369609.554	3778384.342	242.12
LOCATION	L0000024	VOLUME	369612.467	3778377.731	242.20
LOCATION	L0000025	VOLUME	369615.379	3778371.120	242.29
LOCATION	L0000026	VOLUME	369618.291	3778364.509	242.38
LOCATION	L0000027	VOLUME	369621.203	3778357.898	242.47
LOCATION	L0000028	VOLUME	369624.116	3778351.287	242.55
LOCATION	L0000029	VOLUME	369627.028	3778344.676	242.64
LOCATION	L0000030	VOLUME	369629.940	3778338.065	242.73
LOCATION	L0000031	VOLUME	369632.852	3778331.454	242.82
LOCATION	L0000032	VOLUME	369635.765	3778324.843	242.90
LOCATION	L0000033	VOLUME	369639.925	3778321.611	242.95
LOCATION	L0000034	VOLUME	369646.437	3778324.740	242.93
LOCATION	L0000035	VOLUME	369652.948	3778327.869	242.90
LOCATION	L0000036	VOLUME	369659.459	3778330.998	242.88
LOCATION	L0000037	VOLUME	369665.970	3778334.127	242.86
LOCATION	L0000038	VOLUME	369672.481	3778337.256	242.83
LOCATION	L0000039	VOLUME	369678.993	3778340.385	242.81
LOCATION	L0000040	VOLUME	369685.504	3778343.514	242.79
LOCATION	L0000041	VOLUME	369692.015	3778346.643	242.76
LOCATION	L0000042	VOLUME	369698.526	3778349.772	242.74
LOCATION	L0000043	VOLUME	369705.038	3778352.901	242.72
LOCATION	L0000044	VOLUME	369711.549	3778356.030	242.69
LOCATION	L0000045	VOLUME	369714.168	3778360.600	242.47
LOCATION	L0000046	VOLUME	369711.268	3778367.216	241.97
LOCATION	L0000047	VOLUME	369708.367	3778373.833	241.47
LOCATION	L0000048	VOLUME	369705.467	3778380.449	240.96
LOCATION	L0000049	VOLUME	369702.566	3778387.065	240.46
LOCATION	L0000050	VOLUME	369699.665	3778393.681	239.96
LOCATION	L0000051	VOLUME	369696.765	3778400.297	239.46
LOCATION	L0000052	VOLUME	369693.864	3778406.913	238.95
LOCATION	L0000053	VOLUME	369690.964	3778413.529	238.45
LOCATION	L0000054	VOLUME	369688.063	3778420.145	237.95
LOCATION	L0000055	VOLUME	369685.162	3778426.761	237.45
LOCATION	L0000056	VOLUME	369682.262	3778433.378	236.94
LOCATION	L0000057	VOLUME	369679.361	3778439.994	236.44
LOCATION	L0000058	VOLUME	369676.461	3778446.610	235.94
LOCATION	L0000059	VOLUME	369673.560	3778453.226	235.44
LOCATION	L0000060	VOLUME	369670.660	3778459.842	234.93
LOCATION	L0000061	VOLUME	369667.759	3778466.458	234.43
LOCATION	L0000062	VOLUME	369664.858	3778473.074	233.93
LOCATION	L0000063	VOLUME	369661.958	3778479.690	233.43
LOCATION	L0000064	VOLUME	369659.057	3778486.306	232.92
LOCATION	L0000065	VOLUME	369656.157	3778492.923	232.42
LOCATION	L0000066	VOLUME	369653.256	3778499.539	231.92
LOCATION	L0000067	VOLUME	369650.355	3778506.155	231.42
**	END OF LINE	VOLUME	SOURCE ID = PARKINGSTRCT		
LOCATION	PAREA1	AREAPOLY	369646.455	3778500.742	229.730
**	SOURCE PARAMETERS	**			
**	LINE VOLUME	SOURCE ID = PARKINGSTRCT			
SRCPARAM	L0000001	0.0001003433	0.00	3.36	3.97





SRCPARAM	L0000066	0.0001003433	0.00	3.36	3.97
SRCPARAM	L0000067	0.0001003433	0.00	3.36	3.97

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SRCPARAM	PAREA1	0.0	0.305	5	
AREAVERT	PAREA1	369646.455	3778500.742	369606.351	3778482.323
AREAVERT	PAREA1	369593.528	3778439.654	369641.777	3778330.750
AREAVERT	PAREA1	369705.967	3778360.651		
URBANSRC	ALL				

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "CO"

EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000014	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0







```

EMISFACT L0000062      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000062      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000062      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000063      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000063      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000063      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000063      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000064      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000064      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000064      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000064      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000065      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000065      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000065      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000065      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000066      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000066      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000066      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000066      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000067      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000067      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000067      HROFDY 0.0 0.0 1.0 1.0 0.0 0.0
EMISFACT L0000067      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
CONCUNIT 531.5 GRAMS/SEC PPM
SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD RECEPTOR PATHWAY
*****
**
**
RE STARTING
  INCLUDED "ATHLETIC NO2.ROU"
RE FINISHED
**
*****
** AERMOD METEOROLOGY PATHWAY
*****
**
**
ME STARTING
  SURFFILE ..\..\..\BURK8.SFC
  PROFFILE ..\..\..\BURK8.PFL
  SURFDATA 0 2008
  UAIRDATA 3190 2008
  PROFBASE 10.0 METERS
ME FINISHED
**
*****
** AERMOD OUTPUT PATHWAY
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
** AUTO-GENERATED PLOTFILES
  PLOTFILE 1 ALL 1ST "ATHLETIC NO2.AD\01H1GALL.PLT" 31
  SUMMFILE "ATHLETIC NO2.SUM"
OU FINISHED

```

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 1 Warning Message(s)  
 A Total of 0 Informational Message(s)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
 SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*  
 \*\*\* SETUP Finishes Successfully \*\*\*  
 \*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE NO2 \*\*\*  
 12:02:02

PAGE 1  
 \*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.  
 \*\*NO PARTICLE DEPOSITION Data Provided.  
 \*\*Model Uses NO DRY DEPLETION. DRYDPLT = F  
 \*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 68 Source(s),  
 for Total of 1 Urban Area(s):  
 Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:  
 1. Stack-tip Downwash.  
 2. Model Accounts for ELEVated Terrain Effects.  
 3. Use Calms Processing Routine.  
 4. Use Missing Data Processing Routine.  
 5. No Exponential Decay for URBAN/Non-SO2.  
 6. Full Conversion Assumed for NO2.  
 7. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:  
 TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: NO2

\*\*Note that special processing requirements apply for the 1-hour NO2 NAAQS - check available guidance.  
 Model will process user-specified ranks of daily maximum 1-hour values averaged across the number of years modeled.  
 For annual NO2 NAAQS modeling, the multi-year maximum of PERIOD values can be simulated using the MULTYEAR keyword.  
 Multi-year PERIOD and 1-hour values should only be done in a single model run using the MULTYEAR option with a  
 single multi-year meteorological data file using STARTEND keyword.

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR

\*\*This Run Includes: 68 Source(s); 1 Source Group(s); and 22 Receptor(s)

\*\*Model Set To Continue RUNNING After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values:

- c for Calm Hours
- m for Missing Hours
- b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 531.50

Output Units = PPM

\*\*Approximate Storage Requirements of Model = 3.6 MB of RAM.

\*\*File for Summary of Results: ATHLETIC

NO2.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE NO2

\*\*\*

12:02:02

PAGE 2

\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.10034E-03	369645.9	3778506.3	231.3	0.00	3.36	3.97	YES	HROFDY
L0000002	0	0.10034E-03	369639.3	3778503.3	231.3	0.00	3.36	3.97	YES	HROFDY
L0000003	0	0.10034E-03	369632.8	3778500.3	231.3	0.00	3.36	3.97	YES	HROFDY
L0000004	0	0.10034E-03	369626.2	3778497.4	231.3	0.00	3.36	3.97	YES	HROFDY
L0000005	0	0.10034E-03	369619.6	3778494.4	231.3	0.00	3.36	3.97	YES	HROFDY
L0000006	0	0.10034E-03	369613.0	3778491.4	231.3	0.00	3.36	3.97	YES	HROFDY
L0000007	0	0.10034E-03	369606.4	3778488.4	231.3	0.00	3.36	3.97	YES	HROFDY
L0000008	0	0.10034E-03	369600.8	3778484.6	231.6	0.00	3.36	3.97	YES	HROFDY
L0000009	0	0.10034E-03	369598.3	3778477.8	233.2	0.00	3.36	3.97	YES	HROFDY
L0000010	0	0.10034E-03	369595.8	3778471.0	234.7	0.00	3.36	3.97	YES	HROFDY
L0000011	0	0.10034E-03	369593.3	3778464.2	236.2	0.00	3.36	3.97	YES	HROFDY
L0000012	0	0.10034E-03	369590.8	3778457.5	237.7	0.00	3.36	3.97	YES	HROFDY
L0000013	0	0.10034E-03	369588.3	3778450.7	239.2	0.00	3.36	3.97	YES	HROFDY
L0000014	0	0.10034E-03	369585.8	3778443.9	240.7	0.00	3.36	3.97	YES	HROFDY
L0000015	0	0.10034E-03	369586.3	3778437.2	241.4	0.00	3.36	3.97	YES	HROFDY
L0000016	0	0.10034E-03	369589.2	3778430.6	241.5	0.00	3.36	3.97	YES	HROFDY
L0000017	0	0.10034E-03	369592.1	3778424.0	241.6	0.00	3.36	3.97	YES	HROFDY
L0000018	0	0.10034E-03	369595.0	3778417.4	241.7	0.00	3.36	3.97	YES	HROFDY
L0000019	0	0.10034E-03	369597.9	3778410.8	241.8	0.00	3.36	3.97	YES	HROFDY
L0000020	0	0.10034E-03	369600.8	3778404.2	241.9	0.00	3.36	3.97	YES	HROFDY



ID	NO2	CONC	X	Y	ELEV	RELEASE	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE
L0000021	0	0.10034E-03	369603.7	3778397.6	241.9	0.00	3.36	3.97	YES	HROFDY
L0000022	0	0.10034E-03	369606.6	3778391.0	242.0	0.00	3.36	3.97	YES	HROFDY
L0000023	0	0.10034E-03	369609.6	3778384.3	242.1	0.00	3.36	3.97	YES	HROFDY
L0000024	0	0.10034E-03	369612.5	3778377.7	242.2	0.00	3.36	3.97	YES	HROFDY
L0000025	0	0.10034E-03	369615.4	3778371.1	242.3	0.00	3.36	3.97	YES	HROFDY
L0000026	0	0.10034E-03	369618.3	3778364.5	242.4	0.00	3.36	3.97	YES	HROFDY
L0000027	0	0.10034E-03	369621.2	3778357.9	242.5	0.00	3.36	3.97	YES	HROFDY
L0000028	0	0.10034E-03	369624.1	3778351.3	242.6	0.00	3.36	3.97	YES	HROFDY
L0000029	0	0.10034E-03	369627.0	3778344.7	242.6	0.00	3.36	3.97	YES	HROFDY
L0000030	0	0.10034E-03	369629.9	3778338.1	242.7	0.00	3.36	3.97	YES	HROFDY
L0000031	0	0.10034E-03	369632.9	3778331.5	242.8	0.00	3.36	3.97	YES	HROFDY
L0000032	0	0.10034E-03	369635.8	3778324.8	242.9	0.00	3.36	3.97	YES	HROFDY
L0000033	0	0.10034E-03	369639.9	3778321.6	243.0	0.00	3.36	3.97	YES	HROFDY
L0000034	0	0.10034E-03	369646.4	3778324.7	242.9	0.00	3.36	3.97	YES	HROFDY
L0000035	0	0.10034E-03	369652.9	3778327.9	242.9	0.00	3.36	3.97	YES	HROFDY
L0000036	0	0.10034E-03	369659.5	3778331.0	242.9	0.00	3.36	3.97	YES	HROFDY
L0000037	0	0.10034E-03	369666.0	3778334.1	242.9	0.00	3.36	3.97	YES	HROFDY
L0000038	0	0.10034E-03	369672.5	3778337.3	242.8	0.00	3.36	3.97	YES	HROFDY
L0000039	0	0.10034E-03	369679.0	3778340.4	242.8	0.00	3.36	3.97	YES	HROFDY
L0000040	0	0.10034E-03	369685.5	3778343.5	242.8	0.00	3.36	3.97	YES	HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000041	0	0.10034E-03	369692.0	3778346.6	242.8	0.00	3.36	3.97	YES	HROFDY
L0000042	0	0.10034E-03	369698.5	3778349.8	242.7	0.00	3.36	3.97	YES	HROFDY
L0000043	0	0.10034E-03	369705.0	3778352.9	242.7	0.00	3.36	3.97	YES	HROFDY
L0000044	0	0.10034E-03	369711.5	3778356.0	242.7	0.00	3.36	3.97	YES	HROFDY
L0000045	0	0.10034E-03	369714.2	3778360.6	242.5	0.00	3.36	3.97	YES	HROFDY
L0000046	0	0.10034E-03	369711.3	3778367.2	242.0	0.00	3.36	3.97	YES	HROFDY
L0000047	0	0.10034E-03	369708.4	3778373.8	241.5	0.00	3.36	3.97	YES	HROFDY
L0000048	0	0.10034E-03	369705.5	3778380.4	241.0	0.00	3.36	3.97	YES	HROFDY
L0000049	0	0.10034E-03	369702.6	3778387.1	240.5	0.00	3.36	3.97	YES	HROFDY
L0000050	0	0.10034E-03	369699.7	3778393.7	240.0	0.00	3.36	3.97	YES	HROFDY
L0000051	0	0.10034E-03	369696.8	3778400.3	239.5	0.00	3.36	3.97	YES	HROFDY
L0000052	0	0.10034E-03	369693.9	3778406.9	239.0	0.00	3.36	3.97	YES	HROFDY
L0000053	0	0.10034E-03	369691.0	3778413.5	238.5	0.00	3.36	3.97	YES	HROFDY
L0000054	0	0.10034E-03	369688.1	3778420.1	238.0	0.00	3.36	3.97	YES	HROFDY
L0000055	0	0.10034E-03	369685.2	3778426.8	237.5	0.00	3.36	3.97	YES	HROFDY
L0000056	0	0.10034E-03	369682.3	3778433.4	236.9	0.00	3.36	3.97	YES	HROFDY
L0000057	0	0.10034E-03	369679.4	3778440.0	236.4	0.00	3.36	3.97	YES	HROFDY
L0000058	0	0.10034E-03	369676.5	3778446.6	235.9	0.00	3.36	3.97	YES	HROFDY
L0000059	0	0.10034E-03	369673.6	3778453.2	235.4	0.00	3.36	3.97	YES	HROFDY
L0000060	0	0.10034E-03	369670.7	3778459.8	234.9	0.00	3.36	3.97	YES	HROFDY
L0000061	0	0.10034E-03	369667.8	3778466.5	234.4	0.00	3.36	3.97	YES	HROFDY
L0000062	0	0.10034E-03	369664.9	3778473.1	233.9	0.00	3.36	3.97	YES	HROFDY
L0000063	0	0.10034E-03	369662.0	3778479.7	233.4	0.00	3.36	3.97	YES	HROFDY
L0000064	0	0.10034E-03	369659.1	3778486.3	232.9	0.00	3.36	3.97	YES	HROFDY
L0000065	0	0.10034E-03	369656.2	3778492.9	232.4	0.00	3.36	3.97	YES	HROFDY
L0000066	0	0.10034E-03	369653.3	3778499.5	231.9	0.00	3.36	3.97	YES	HROFDY
L0000067	0	0.10034E-03	369650.4	3778506.2	231.4	0.00	3.36	3.97	YES	HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.00000E+00	369646.5	3778500.7	229.7	0.31	5	0.00	YES	

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
ALL L0000008	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 , L0000065 , L0000066 , L0000067 , PAREA1 ,

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs									
-----	-----	-----									
L0000008	9862049. L0000007	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008	, L0000009	, L0000010
	L0000016	, L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016	, L0000017	, L0000018	, L0000019	
	L0000024	, L0000020	, L0000021	, L0000022	, L0000023	, L0000024	, L0000025	, L0000026	, L0000027	, L0000028	
	L0000032	, L0000029	, L0000030	, L0000031	, L0000032	, L0000033	, L0000034	, L0000035	, L0000036	, L0000037	
	L0000040	, L0000038	, L0000039	, L0000040	, L0000041	, L0000042	, L0000043	, L0000044	, L0000045	, L0000046	
	L0000048	, L0000047	, L0000048	, L0000049	, L0000050	, L0000051	, L0000052	, L0000053	, L0000054	, L0000055	
	L0000056	, L0000056	, L0000057	, L0000058	, L0000059	, L0000060	, L0000061	, L0000062	, L0000063	, L0000064	
	L0000064	, L0000065	, L0000066	, L0000067	, PAREA1	, PAREA1	, PAREA1	, PAREA1	, PAREA1	, PAREA1	

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SOURCE ID = L0000001	; SOURCE TYPE = VOLUME	:									
1 .00000E+00	2 .00000E+00	3 .00000E+00	4 .00000E+00	5 .00000E+00	6 .00000E+00	7 .00000E+00	8 .00000E+00	9 .10000E+01	10 .10000E+01	11 .00000E+00	12 .00000E+00
13 .00000E+00	14 .00000E+00	15 .10000E+01	16 .10000E+01	17 .00000E+00	18 .00000E+00	19 .00000E+00	20 .00000E+00	21 .00000E+00	22 .00000E+00	23 .00000E+00	24 .00000E+00
SOURCE ID = L0000002	; SOURCE TYPE = VOLUME	:									
1 .00000E+00	2 .00000E+00	3 .00000E+00	4 .00000E+00	5 .00000E+00	6 .00000E+00	7 .00000E+00	8 .00000E+00	9 .10000E+01	10 .10000E+01	11 .00000E+00	12 .00000E+00
13 .00000E+00	14 .00000E+00	15 .10000E+01	16 .10000E+01	17 .00000E+00	18 .00000E+00	19 .00000E+00	20 .00000E+00	21 .00000E+00	22 .00000E+00	23 .00000E+00	24 .00000E+00

SOURCE ID = L0000003 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000005 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000006 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000007 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000008 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000009 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000010 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000011 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000012 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000013 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000014 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000015 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = L0000016 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000018 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000019 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000022 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00

13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000023 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000027 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000028 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000029 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000030 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR
- - - - -

SOURCE ID = L0000031 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000032 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000033 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000034 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000035 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .10000E+01 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000036 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000037 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000041 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000045 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

SOURCE ID = L0000046 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000047 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000049 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000050 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000051 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000052 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000053 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000054 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000055 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* ATHLETIC STRUCTURE NO2  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000056 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000057 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000058 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000059 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000060 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000061 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00

7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000062 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000063 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000064 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000065 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000066 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000067 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE NO2 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA \*\*\*

Surface file: ..\..\..\BURK8.SFC

Met Version: 14134

Profile file: ..\..\..\BURK8.PFL

Surface format:

FREE

Profile format:

FREE

Surface station no.: 0

Upper air station no.: 3190

Name: UNKNOWN

Name: UNKNOWN

Year: 2008

Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-999999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-999999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-999999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-999999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-999999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-999999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-999999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-999999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE NO2

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP:

ALL \*\*\*

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,  
L0000005 ,  
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,  
L0000013 ,

L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,  
 L0000021 ,  
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369613.66	3778475.94	0.00066	369607.08	3778456.46	
0.00066					
369601.65	3778438.83	0.00075	369644.69	3778341.41	
0.00075					
369621.56	3778391.97	0.00062	369670.92	3778416.16	
0.00055					
369694.12	3778364.81	0.00077	369670.92	3778353.11	
0.00065					
369642.34	3778490.88	0.00079	369628.30	3778483.43	
0.00065					
369657.66	3778455.07	0.00061	369649.93	3778474.12	
0.00066					
369666.40	3778433.87	0.00059	369683.14	3778392.51	
0.00062					
369630.87	3778452.19	0.00051	369650.11	3778405.99	
0.00051					
369624.53	3778423.64	0.00057	369649.91	3778436.33	
0.00049					
369647.33	3778373.28	0.00053	369671.12	3778383.79	
0.00054					
369611.16	3778418.77	0.00066	369633.23	3778365.93	
0.00063					

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM 1ST-HIGHEST MAX DAILY 1-HR RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.00079 AT ( 369642.34, 3778490.88, 230.84, 365.00, 10.97)	DC	
	2ND HIGHEST VALUE IS	0.00077 AT ( 369694.12, 3778364.81, 239.68, 365.00, 10.97)	DC	
	3RD HIGHEST VALUE IS	0.00075 AT ( 369601.65, 3778438.83, 236.66, 365.00, 10.97)	DC	
	4TH HIGHEST VALUE IS	0.00075 AT ( 369644.69, 3778341.41, 241.45, 365.00, 10.97)	DC	
	5TH HIGHEST VALUE IS	0.00066 AT ( 369611.16, 3778418.77, 237.97, 365.00, 10.97)	DC	
	6TH HIGHEST VALUE IS	0.00066 AT ( 369607.08, 3778456.46, 234.66, 365.00, 10.97)	DC	
	7TH HIGHEST VALUE IS	0.00066 AT ( 369649.93, 3778474.12, 232.32, 365.00, 10.97)	DC	
	8TH HIGHEST VALUE IS	0.00066 AT ( 369613.66, 3778475.94, 232.35, 365.00, 10.97)	DC	
	9TH HIGHEST VALUE IS	0.00065 AT ( 369670.92, 3778353.11, 240.59, 365.00, 10.97)	DC	
	10TH HIGHEST VALUE IS	0.00065 AT ( 369628.30, 3778483.43, 231.58, 365.00, 10.97)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART



GP = GRIDPOLR  
DC = DISCCART  
DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
A Total of 1 Warning Message(s)  
A Total of 1275 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 13 Calm Hours Identified  
  
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

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** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 9/2/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\ATHLETIC FIELD\ATHLETIC PM10\ATHLETIC PM10.ADI
**

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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

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CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO ATHLETIC STRUCTURE PM10
MODELOPT DFAULT CONC
AVERTIME 24 ANNUAL
URBANOPT 9862049
POLLUTID PM_10
FLAGPOLE 10.97
RUNORNOT RUN

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CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

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```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = PARKINGSTRCT
** DESCRSRC
** PREFIX
** LENGTH OF SIDE = 3.66
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.034949
** ELEVATED
** BUILDING HEIGHT = 8.53
** SZINIT = 3.97
** NODES = 6
** 369647.587, 3778507.055, 231.28, 0.00, 3.36
** 369601.382, 3778486.158, 231.29, 0.00, 3.36
** 369584.657, 3778440.862, 241.37, 0.00, 3.36
** 369637.666, 3778320.526, 242.96, 0.00, 3.36
** 369715.368, 3778357.865, 242.68, 0.00, 3.36
** 369649.621, 3778507.830, 231.29, 0.00, 3.36
** -----

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LOCATION	VOLUME	X COORD.	Y COORD.	HEIGHT
L0000001	369645.920	3778506.302	231.28	3.36
L0000002	369639.338	3778503.325	231.28	3.36
L0000003	369632.756	3778500.348	231.28	3.36
L0000004	369626.174	3778497.371	231.28	3.36
L0000005	369619.592	3778494.394	231.29	3.36
L0000006	369613.010	3778491.417	231.29	3.36
L0000007	369606.428	3778488.440	231.29	3.36
L0000008	369600.798	3778484.576	231.64	3.36

LOCATION L0000009	VOLUME	369598.296	3778477.800	233.15
LOCATION L0000010	VOLUME	369595.793	3778471.023	234.66
LOCATION L0000011	VOLUME	369593.291	3778464.246	236.17
LOCATION L0000012	VOLUME	369590.789	3778457.469	237.67
LOCATION L0000013	VOLUME	369588.287	3778450.692	239.18
LOCATION L0000014	VOLUME	369585.784	3778443.916	240.69
LOCATION L0000015	VOLUME	369586.257	3778437.230	241.42
LOCATION L0000016	VOLUME	369589.169	3778430.619	241.51
LOCATION L0000017	VOLUME	369592.081	3778424.008	241.59
LOCATION L0000018	VOLUME	369594.993	3778417.397	241.68
LOCATION L0000019	VOLUME	369597.905	3778410.786	241.77
LOCATION L0000020	VOLUME	369600.818	3778404.175	241.85
LOCATION L0000021	VOLUME	369603.730	3778397.564	241.94
LOCATION L0000022	VOLUME	369606.642	3778390.953	242.03
LOCATION L0000023	VOLUME	369609.554	3778384.342	242.12
LOCATION L0000024	VOLUME	369612.467	3778377.731	242.20
LOCATION L0000025	VOLUME	369615.379	3778371.120	242.29
LOCATION L0000026	VOLUME	369618.291	3778364.509	242.38
LOCATION L0000027	VOLUME	369621.203	3778357.898	242.47
LOCATION L0000028	VOLUME	369624.116	3778351.287	242.55
LOCATION L0000029	VOLUME	369627.028	3778344.676	242.64
LOCATION L0000030	VOLUME	369629.940	3778338.065	242.73
LOCATION L0000031	VOLUME	369632.852	3778331.454	242.82
LOCATION L0000032	VOLUME	369635.765	3778324.843	242.90
LOCATION L0000033	VOLUME	369639.925	3778321.611	242.95
LOCATION L0000034	VOLUME	369646.437	3778324.740	242.93
LOCATION L0000035	VOLUME	369652.948	3778327.869	242.90
LOCATION L0000036	VOLUME	369659.459	3778330.998	242.88
LOCATION L0000037	VOLUME	369665.970	3778334.127	242.86
LOCATION L0000038	VOLUME	369672.481	3778337.256	242.83
LOCATION L0000039	VOLUME	369678.993	3778340.385	242.81
LOCATION L0000040	VOLUME	369685.504	3778343.514	242.79
LOCATION L0000041	VOLUME	369692.015	3778346.643	242.76
LOCATION L0000042	VOLUME	369698.526	3778349.772	242.74
LOCATION L0000043	VOLUME	369705.038	3778352.901	242.72
LOCATION L0000044	VOLUME	369711.549	3778356.030	242.69
LOCATION L0000045	VOLUME	369714.168	3778360.600	242.47
LOCATION L0000046	VOLUME	369711.268	3778367.216	241.97
LOCATION L0000047	VOLUME	369708.367	3778373.833	241.47
LOCATION L0000048	VOLUME	369705.467	3778380.449	240.96
LOCATION L0000049	VOLUME	369702.566	3778387.065	240.46
LOCATION L0000050	VOLUME	369699.665	3778393.681	239.96
LOCATION L0000051	VOLUME	369696.765	3778400.297	239.46
LOCATION L0000052	VOLUME	369693.864	3778406.913	238.95
LOCATION L0000053	VOLUME	369690.964	3778413.529	238.45
LOCATION L0000054	VOLUME	369688.063	3778420.145	237.95
LOCATION L0000055	VOLUME	369685.162	3778426.761	237.45
LOCATION L0000056	VOLUME	369682.262	3778433.378	236.94
LOCATION L0000057	VOLUME	369679.361	3778439.994	236.44
LOCATION L0000058	VOLUME	369676.461	3778446.610	235.94
LOCATION L0000059	VOLUME	369673.560	3778453.226	235.44
LOCATION L0000060	VOLUME	369670.660	3778459.842	234.93
LOCATION L0000061	VOLUME	369667.759	3778466.458	234.43
LOCATION L0000062	VOLUME	369664.858	3778473.074	233.93
LOCATION L0000063	VOLUME	369661.958	3778479.690	233.43
LOCATION L0000064	VOLUME	369659.057	3778486.306	232.92
LOCATION L0000065	VOLUME	369656.157	3778492.923	232.42
LOCATION L0000066	VOLUME	369653.256	3778499.539	231.92
LOCATION L0000067	VOLUME	369650.355	3778506.155	231.42
** END OF LINE VOLUME SOURCE ID = PARKINGSTRCT				
LOCATION PAREAL	AREAPOLY	369646.455	3778500.742	229.730
** SOURCE PARAMETERS **				
** LINE VOLUME SOURCE ID = PARKINGSTRCT				
SRCPARAM L0000001	0.0005216269	0.00	3.36	3.97



SRCPARAM	L0000066	0.0005216269	0.00	3.36	3.97
SRCPARAM	L0000067	0.0005216269	0.00	3.36	3.97

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SRCPARAM	PAREA1	0.0	0.305	5	
AREAVERT	PAREA1	369646.455	3778500.742	369606.351	3778482.323
AREAVERT	PAREA1	369593.528	3778439.654	369641.777	3778330.750
AREAVERT	PAREA1	369705.967	3778360.651		
URBANSRC	ALL				

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "CO"

EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000014	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT	L0000062	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000062	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000062	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	1.0	1.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	1.0	1.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0

SRCGROUP ALL

SO FINISHED

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\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

\*\*\*\*\*

\*\*

\*\*

RE STARTING

INCLUDED "ATHLETIC PM10.ROU"

RE FINISHED

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\*\*\*\*\*

\*\* AERMOD METEOROLOGY PATHWAY

\*\*\*\*\*

\*\*

\*\*

ME STARTING

SURFFILE ..\..\..\BURK8.SFC

PROFFILE ..\..\..\BURK8.PFL

SURFDATA 0 2008

UAIRDATA 3190 2008

PROFBASE 10.0 METERS

ME FINISHED

\*\*  
\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 24 1ST

\*\* AUTO-GENERATED PLOTFILES

PLOTFILE 24 ALL 1ST "ATHLETIC PM10.AD\24H1GALL.PLT" 31

PLOTFILE ANNUAL ALL "ATHLETIC PM10.AD\AN00GALL.PLT" 32

SUMMFILE "ATHLETIC PM10.SUM"

OU FINISHED

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

## ----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 1 Warning Message(s)  
 A Total of 0 Informational Message(s)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
 SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*  
 \*\*\* SETUP Finishes Successfully \*\*\*  
 \*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM10 \*\*\*  
 12:07:10

PAGE 1

\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.

\*\*NO PARTICLE DEPOSITION Data Provided.

\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 68 Source(s),  
 for Total of 1 Urban Area(s):  
 Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM\_10

\*\*Model Calculates 1 Short Term Average(s) of: 24-HR  
 and Calculates ANNUAL Averages

\*\*This Run Includes: 68 Source(s); 1 Source Group(s); and 22 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

- Model Outputs Tables of ANNUAL Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
 m for Missing Hours  
 b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.6 MB of RAM.

\*\*File for Summary of Results: ATHLETIC  
 PM10.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM10 \*\*\*  
 12:07:10

PAGE 2

\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE	RELEASE	INIT.	INIT.	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY BY
					ELEV. (METERS)	HEIGHT (METERS)	SY (METERS)	SZ (METERS)			
L0000001	0	0.52163E-03	369645.9	3778506.3	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000002	0	0.52163E-03	369639.3	3778503.3	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000003	0	0.52163E-03	369632.8	3778500.3	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000004	0	0.52163E-03	369626.2	3778497.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000005	0	0.52163E-03	369619.6	3778494.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000006	0	0.52163E-03	369613.0	3778491.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000007	0	0.52163E-03	369606.4	3778488.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000008	0	0.52163E-03	369600.8	3778484.6	231.6	0.00	3.36	3.97	YES	HROFDY	
L0000009	0	0.52163E-03	369598.3	3778477.8	233.2	0.00	3.36	3.97	YES	HROFDY	
L0000010	0	0.52163E-03	369595.8	3778471.0	234.7	0.00	3.36	3.97	YES	HROFDY	
L0000011	0	0.52163E-03	369593.3	3778464.2	236.2	0.00	3.36	3.97	YES	HROFDY	
L0000012	0	0.52163E-03	369590.8	3778457.5	237.7	0.00	3.36	3.97	YES	HROFDY	
L0000013	0	0.52163E-03	369588.3	3778450.7	239.2	0.00	3.36	3.97	YES	HROFDY	
L0000014	0	0.52163E-03	369585.8	3778443.9	240.7	0.00	3.36	3.97	YES	HROFDY	
L0000015	0	0.52163E-03	369586.3	3778437.2	241.4	0.00	3.36	3.97	YES	HROFDY	
L0000016	0	0.52163E-03	369589.2	3778430.6	241.5	0.00	3.36	3.97	YES	HROFDY	
L0000017	0	0.52163E-03	369592.1	3778424.0	241.6	0.00	3.36	3.97	YES	HROFDY	
L0000018	0	0.52163E-03	369595.0	3778417.4	241.7	0.00	3.36	3.97	YES	HROFDY	
L0000019	0	0.52163E-03	369597.9	3778410.8	241.8	0.00	3.36	3.97	YES	HROFDY	
L0000020	0	0.52163E-03	369600.8	3778404.2	241.9	0.00	3.36	3.97	YES	HROFDY	
L0000021	0	0.52163E-03	369603.7	3778397.6	241.9	0.00	3.36	3.97	YES	HROFDY	
L0000022	0	0.52163E-03	369606.6	3778391.0	242.0	0.00	3.36	3.97	YES	HROFDY	
L0000023	0	0.52163E-03	369609.6	3778384.3	242.1	0.00	3.36	3.97	YES	HROFDY	
L0000024	0	0.52163E-03	369612.5	3778377.7	242.2	0.00	3.36	3.97	YES	HROFDY	
L0000025	0	0.52163E-03	369615.4	3778371.1	242.3	0.00	3.36	3.97	YES	HROFDY	

L0000026	0	0.52163E-03	369618.3	3778364.5	242.4	0.00	3.36	3.97	YES	HROFDY
L0000027	0	0.52163E-03	369621.2	3778357.9	242.5	0.00	3.36	3.97	YES	HROFDY
L0000028	0	0.52163E-03	369624.1	3778351.3	242.6	0.00	3.36	3.97	YES	HROFDY
L0000029	0	0.52163E-03	369627.0	3778344.7	242.6	0.00	3.36	3.97	YES	HROFDY
L0000030	0	0.52163E-03	369629.9	3778338.1	242.7	0.00	3.36	3.97	YES	HROFDY
L0000031	0	0.52163E-03	369632.9	3778331.5	242.8	0.00	3.36	3.97	YES	HROFDY
L0000032	0	0.52163E-03	369635.8	3778324.8	242.9	0.00	3.36	3.97	YES	HROFDY
L0000033	0	0.52163E-03	369639.9	3778321.6	243.0	0.00	3.36	3.97	YES	HROFDY
L0000034	0	0.52163E-03	369646.4	3778324.7	242.9	0.00	3.36	3.97	YES	HROFDY
L0000035	0	0.52163E-03	369652.9	3778327.9	242.9	0.00	3.36	3.97	YES	HROFDY
L0000036	0	0.52163E-03	369659.5	3778331.0	242.9	0.00	3.36	3.97	YES	HROFDY
L0000037	0	0.52163E-03	369666.0	3778334.1	242.9	0.00	3.36	3.97	YES	HROFDY
L0000038	0	0.52163E-03	369672.5	3778337.3	242.8	0.00	3.36	3.97	YES	HROFDY
L0000039	0	0.52163E-03	369679.0	3778340.4	242.8	0.00	3.36	3.97	YES	HROFDY
L0000040	0	0.52163E-03	369685.5	3778343.5	242.8	0.00	3.36	3.97	YES	HROFDY

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY BY
L0000041	0	0.52163E-03	369692.0	3778346.6	242.8	0.00	3.36	3.97	YES	HROFDY	
L0000042	0	0.52163E-03	369698.5	3778349.8	242.7	0.00	3.36	3.97	YES	HROFDY	
L0000043	0	0.52163E-03	369705.0	3778352.9	242.7	0.00	3.36	3.97	YES	HROFDY	
L0000044	0	0.52163E-03	369711.5	3778356.0	242.7	0.00	3.36	3.97	YES	HROFDY	
L0000045	0	0.52163E-03	369714.2	3778360.6	242.5	0.00	3.36	3.97	YES	HROFDY	
L0000046	0	0.52163E-03	369711.3	3778367.2	242.0	0.00	3.36	3.97	YES	HROFDY	
L0000047	0	0.52163E-03	369708.4	3778373.8	241.5	0.00	3.36	3.97	YES	HROFDY	
L0000048	0	0.52163E-03	369705.5	3778380.4	241.0	0.00	3.36	3.97	YES	HROFDY	
L0000049	0	0.52163E-03	369702.6	3778387.1	240.5	0.00	3.36	3.97	YES	HROFDY	
L0000050	0	0.52163E-03	369699.7	3778393.7	240.0	0.00	3.36	3.97	YES	HROFDY	
L0000051	0	0.52163E-03	369696.8	3778400.3	239.5	0.00	3.36	3.97	YES	HROFDY	
L0000052	0	0.52163E-03	369693.9	3778406.9	239.0	0.00	3.36	3.97	YES	HROFDY	
L0000053	0	0.52163E-03	369691.0	3778413.5	238.5	0.00	3.36	3.97	YES	HROFDY	
L0000054	0	0.52163E-03	369688.1	3778420.1	238.0	0.00	3.36	3.97	YES	HROFDY	
L0000055	0	0.52163E-03	369685.2	3778426.8	237.5	0.00	3.36	3.97	YES	HROFDY	
L0000056	0	0.52163E-03	369682.3	3778433.4	236.9	0.00	3.36	3.97	YES	HROFDY	
L0000057	0	0.52163E-03	369679.4	3778440.0	236.4	0.00	3.36	3.97	YES	HROFDY	
L0000058	0	0.52163E-03	369676.5	3778446.6	235.9	0.00	3.36	3.97	YES	HROFDY	
L0000059	0	0.52163E-03	369673.6	3778453.2	235.4	0.00	3.36	3.97	YES	HROFDY	
L0000060	0	0.52163E-03	369670.7	3778459.8	234.9	0.00	3.36	3.97	YES	HROFDY	
L0000061	0	0.52163E-03	369667.8	3778466.5	234.4	0.00	3.36	3.97	YES	HROFDY	
L0000062	0	0.52163E-03	369664.9	3778473.1	233.9	0.00	3.36	3.97	YES	HROFDY	
L0000063	0	0.52163E-03	369662.0	3778479.7	233.4	0.00	3.36	3.97	YES	HROFDY	
L0000064	0	0.52163E-03	369659.1	3778486.3	232.9	0.00	3.36	3.97	YES	HROFDY	
L0000065	0	0.52163E-03	369656.2	3778492.9	232.4	0.00	3.36	3.97	YES	HROFDY	
L0000066	0	0.52163E-03	369653.3	3778499.5	231.9	0.00	3.36	3.97	YES	HROFDY	
L0000067	0	0.52163E-03	369650.4	3778506.2	231.4	0.00	3.36	3.97	YES	HROFDY	

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
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PAREA1      0  0.00000E+00  369646.5  3778500.7  229.7  0.31  5  0.00  YES
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 ,
L0000008	,
	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 ,
	L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 ,
	L0000024 ,
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 ,
	L0000032 ,
	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 ,
	L0000040 ,
	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 ,
	L0000048 ,
	L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 ,
	L0000056 ,
	L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 ,
	L0000064 ,
	L0000065 , L0000066 , L0000067 , PAREA1 ,

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs							
-----	-----	-----							
L0000008	9862049. L0000007	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008
	L0000009	, L0000010	, L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016	, L0000017
	L0000017	, L0000018	, L0000019	, L0000020	, L0000021	, L0000022	, L0000023	, L0000024	, L0000025
	L0000025	, L0000026	, L0000027	, L0000028	, L0000029	, L0000030	, L0000031	, L0000032	, L0000033
	L0000033	, L0000034	, L0000035	, L0000036	, L0000037	, L0000038	, L0000039	, L0000040	, L0000041
	L0000041	, L0000042	, L0000043	, L0000044	, L0000045	, L0000046	, L0000047	, L0000048	, L0000049
	L0000049	, L0000050	, L0000051	, L0000052	, L0000053	, L0000054	, L0000055	, L0000056	, L0000057
	L0000057	, L0000058	, L0000059	, L0000060	, L0000061	, L0000062	, L0000063	, L0000064	, L0000065
	L0000065	, L0000066	, L0000067	, PAREAL					

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 \*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SOURCE ID = L0000001 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000002 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000003 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000005 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000006 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000007 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000008 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000009 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000010 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000011 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000012 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000013 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000014 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000015 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-----											
-----											



SOURCE ID = L0000016 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000018 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000019 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000022 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000023 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000027 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000028 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000029 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000030 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
---	------------	---	------------	---	------------	---	------------	---	------------	---	------------

7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000031 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000032 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000033 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000034 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000035 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000036 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000037 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
SOURCE ID = L0000041	; SOURCE TYPE = VOLUME :																																														
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00	13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000045 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR
-----

SOURCE ID = L0000046 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000047 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000049 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0000050 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

```

SOURCE ID = L0000051 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000052 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000053 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000054 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000055 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM10 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = L0000056 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000057 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000058 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000059 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000060 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM10  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = L0000061 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000062 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000063 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000064 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000065 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000066 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000067 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*





Profile file: ..\..\..\BURK8.PFL

Surface format:

FREE

Profile format:

FREE

Surface station no.: 0

Upper air station no.: 3190

Name: UNKNOWN

Name: UNKNOWN

Year: 2008

Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM10 \*\*\*  
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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,  
 L0000005 ,  
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,  
 L0000013 ,  
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,  
 L0000021 ,  
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369613.66	3778475.94	0.39017	369607.08	3778456.46	
0.42173					
369601.65	3778438.83	0.46608	369644.69	3778341.41	
0.34614					
369621.56	3778391.97	0.38068	369670.92	3778416.16	
0.36277					
369694.12	3778364.81	0.40488	369670.92	3778353.11	
0.36490					
369642.34	3778490.88	0.41645	369628.30	3778483.43	
0.38673					
369657.66	3778455.07	0.38140	369649.93	3778474.12	
0.39561					
369666.40	3778433.87	0.37420	369683.14	3778392.51	
0.37839					
369630.87	3778452.19	0.35212	369650.11	3778405.99	
0.32410					
369624.53	3778423.64	0.36785	369649.91	3778436.33	
0.34343					
369647.33	3778373.28	0.34700	369671.12	3778383.79	
0.34707					
369611.16	3778418.77	0.42976	369633.23	3778365.93	
0.37299					

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,  
 L0000005 ,  
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,  
 L0000013 ,  
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,  
 L0000021 ,  
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369613.66	3778475.94	1.15551 (12122524)	369607.08	3778456.46	1.18777m
(10102024)					
369601.65	3778438.83	1.31712m (10102024)	369644.69	3778341.41	1.26766
(12122524)					
369621.56	3778391.97	1.17129m (10102024)	369670.92	3778416.16	1.07572m
(10102024)					
369694.12	3778364.81	1.36201 (12122524)	369670.92	3778353.11	1.22805
(12122524)					
369642.34	3778490.88	1.30359 (12122524)	369628.30	3778483.43	1.16096
(12122524)					

369657.66 (12122524)	3778455.07	1.13299m (10102024)	369649.93	3778474.12	1.19624
369666.40 (12122524)	3778433.87	1.10510m (10102024)	369683.14	3778392.51	1.13423
369630.87 (10102024)	3778452.19	1.03004m (10102024)	369650.11	3778405.99	0.96565m
369624.53 (10102024)	3778423.64	1.06433m (10102024)	369649.91	3778436.33	1.02531m
369647.33 (10102024)	3778373.28	1.06653m (10102024)	369671.12	3778383.79	1.03391m
369611.16 (12122524)	3778418.77	1.26519m (10102024)	369633.23	3778365.93	1.18520

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.46608 AT ( 369601.65, 3778438.83, 236.66, 365.00, 10.97)	DC	
	2ND HIGHEST VALUE IS	0.42976 AT ( 369611.16, 3778418.77, 237.97, 365.00, 10.97)	DC	
	3RD HIGHEST VALUE IS	0.42173 AT ( 369607.08, 3778456.46, 234.66, 365.00, 10.97)	DC	
	4TH HIGHEST VALUE IS	0.41645 AT ( 369642.34, 3778490.88, 230.84, 365.00, 10.97)	DC	
	5TH HIGHEST VALUE IS	0.40488 AT ( 369694.12, 3778364.81, 239.68, 365.00, 10.97)	DC	
	6TH HIGHEST VALUE IS	0.39561 AT ( 369649.93, 3778474.12, 232.32, 365.00, 10.97)	DC	
	7TH HIGHEST VALUE IS	0.39017 AT ( 369613.66, 3778475.94, 232.35, 365.00, 10.97)	DC	
	8TH HIGHEST VALUE IS	0.38673 AT ( 369628.30, 3778483.43, 231.58, 365.00, 10.97)	DC	
	9TH HIGHEST VALUE IS	0.38140 AT ( 369657.66, 3778455.07, 233.89, 365.00, 10.97)	DC	
	10TH HIGHEST VALUE IS	0.38068 AT ( 369621.56, 3778391.97, 239.93, 365.00, 10.97)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM10 \*\*\*  
 12:07:10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	DATE (YYMMDDHH)	NETWORK GRID-ID
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ALL HIGH 1ST HIGH VALUE IS 1.36201 ON 12122524: AT ( 369694.12, 3778364.81, 239.68, 365.00, 10.97) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART GP = GRIDPOLR DC = DISCCART DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM10 \*\*\* 12:07:10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1275 Informational Message(s)
A Total of 43848 Hours Were Processed
A Total of 13 Calm Hours Identified
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*
\*\*\* AERMOD Finishes Successfully \*\*\*
\*\*\*\*\*

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** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 9/2/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\ATHLETIC FIELD\ATHLETIC PM2\ATHLETIC PM2.ADI
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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
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CO STARTING
  TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
  TITLETWO ATHLETIC STRUCTURE PM2.5
  MODELOPT DFAULT CONC
  AVERTIME 24 ANNUAL
  URBANOPT 9862049
  POLLUTID PM_2.5
  FLAGPOLE 10.97
  RUNORNOT RUN

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CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

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SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = PARKINGSTRCT
** DESCRSRC
** PREFIX
** LENGTH OF SIDE = 3.66
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.014802
** ELEVATED
** BUILDING HEIGHT = 8.53
** SZINIT = 3.97
** NODES = 6
** 369647.587, 3778507.055, 231.28, 0.00, 3.36
** 369601.382, 3778486.158, 231.29, 0.00, 3.36
** 369584.657, 3778440.862, 241.37, 0.00, 3.36
** 369637.666, 3778320.526, 242.96, 0.00, 3.36
** 369715.368, 3778357.865, 242.68, 0.00, 3.36
** 369649.621, 3778507.830, 231.29, 0.00, 3.36
** -----

```

LOCATION	VOLUME	X COORD.	Y COORD.	HEIGHT
L0000001	369645.920	3778506.302	231.28	3.36
L0000002	369639.338	3778503.325	231.28	3.36
L0000003	369632.756	3778500.348	231.28	3.36
L0000004	369626.174	3778497.371	231.28	3.36
L0000005	369619.592	3778494.394	231.29	3.36
L0000006	369613.010	3778491.417	231.29	3.36
L0000007	369606.428	3778488.440	231.29	3.36
L0000008	369600.798	3778484.576	231.64	3.36

LOCATION L0000009	VOLUME	369598.296	3778477.800	233.15
LOCATION L0000010	VOLUME	369595.793	3778471.023	234.66
LOCATION L0000011	VOLUME	369593.291	3778464.246	236.17
LOCATION L0000012	VOLUME	369590.789	3778457.469	237.67
LOCATION L0000013	VOLUME	369588.287	3778450.692	239.18
LOCATION L0000014	VOLUME	369585.784	3778443.916	240.69
LOCATION L0000015	VOLUME	369586.257	3778437.230	241.42
LOCATION L0000016	VOLUME	369589.169	3778430.619	241.51
LOCATION L0000017	VOLUME	369592.081	3778424.008	241.59
LOCATION L0000018	VOLUME	369594.993	3778417.397	241.68
LOCATION L0000019	VOLUME	369597.905	3778410.786	241.77
LOCATION L0000020	VOLUME	369600.818	3778404.175	241.85
LOCATION L0000021	VOLUME	369603.730	3778397.564	241.94
LOCATION L0000022	VOLUME	369606.642	3778390.953	242.03
LOCATION L0000023	VOLUME	369609.554	3778384.342	242.12
LOCATION L0000024	VOLUME	369612.467	3778377.731	242.20
LOCATION L0000025	VOLUME	369615.379	3778371.120	242.29
LOCATION L0000026	VOLUME	369618.291	3778364.509	242.38
LOCATION L0000027	VOLUME	369621.203	3778357.898	242.47
LOCATION L0000028	VOLUME	369624.116	3778351.287	242.55
LOCATION L0000029	VOLUME	369627.028	3778344.676	242.64
LOCATION L0000030	VOLUME	369629.940	3778338.065	242.73
LOCATION L0000031	VOLUME	369632.852	3778331.454	242.82
LOCATION L0000032	VOLUME	369635.765	3778324.843	242.90
LOCATION L0000033	VOLUME	369639.925	3778321.611	242.95
LOCATION L0000034	VOLUME	369646.437	3778324.740	242.93
LOCATION L0000035	VOLUME	369652.948	3778327.869	242.90
LOCATION L0000036	VOLUME	369659.459	3778330.998	242.88
LOCATION L0000037	VOLUME	369665.970	3778334.127	242.86
LOCATION L0000038	VOLUME	369672.481	3778337.256	242.83
LOCATION L0000039	VOLUME	369678.993	3778340.385	242.81
LOCATION L0000040	VOLUME	369685.504	3778343.514	242.79
LOCATION L0000041	VOLUME	369692.015	3778346.643	242.76
LOCATION L0000042	VOLUME	369698.526	3778349.772	242.74
LOCATION L0000043	VOLUME	369705.038	3778352.901	242.72
LOCATION L0000044	VOLUME	369711.549	3778356.030	242.69
LOCATION L0000045	VOLUME	369714.168	3778360.600	242.47
LOCATION L0000046	VOLUME	369711.268	3778367.216	241.97
LOCATION L0000047	VOLUME	369708.367	3778373.833	241.47
LOCATION L0000048	VOLUME	369705.467	3778380.449	240.96
LOCATION L0000049	VOLUME	369702.566	3778387.065	240.46
LOCATION L0000050	VOLUME	369699.665	3778393.681	239.96
LOCATION L0000051	VOLUME	369696.765	3778400.297	239.46
LOCATION L0000052	VOLUME	369693.864	3778406.913	238.95
LOCATION L0000053	VOLUME	369690.964	3778413.529	238.45
LOCATION L0000054	VOLUME	369688.063	3778420.145	237.95
LOCATION L0000055	VOLUME	369685.162	3778426.761	237.45
LOCATION L0000056	VOLUME	369682.262	3778433.378	236.94
LOCATION L0000057	VOLUME	369679.361	3778439.994	236.44
LOCATION L0000058	VOLUME	369676.461	3778446.610	235.94
LOCATION L0000059	VOLUME	369673.560	3778453.226	235.44
LOCATION L0000060	VOLUME	369670.660	3778459.842	234.93
LOCATION L0000061	VOLUME	369667.759	3778466.458	234.43
LOCATION L0000062	VOLUME	369664.858	3778473.074	233.93
LOCATION L0000063	VOLUME	369661.958	3778479.690	233.43
LOCATION L0000064	VOLUME	369659.057	3778486.306	232.92
LOCATION L0000065	VOLUME	369656.157	3778492.923	232.42
LOCATION L0000066	VOLUME	369653.256	3778499.539	231.92
LOCATION L0000067	VOLUME	369650.355	3778506.155	231.42

\*\* END OF LINE VOLUME SOURCE ID = PARKINGSTRCT

LOCATION PAREA1	AREAPOLY	369646.455	3778500.742	229.730
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\*\* SOURCE PARAMETERS \*\*

\*\* LINE VOLUME SOURCE ID = PARKINGSTRCT

SRCPARAM L0000001	0.0002209254	0.00	3.36	3.97
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SRCPARAM	L0000066	0.0002209254	0.00	3.36	3.97
SRCPARAM	L0000067	0.0002209254	0.00	3.36	3.97

\*\*

SRCPARAM	PAREA1	0.0	0.305	5	
AREAVERT	PAREA1	369646.455	3778500.742	369606.351	3778482.323
AREAVERT	PAREA1	369593.528	3778439.654	369641.777	3778330.750
AREAVERT	PAREA1	369705.967	3778360.651		
URBANSRC	ALL				

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "CO"

EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000001	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000002	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000003	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000004	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000005	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000006	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000007	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000008	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000009	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000010	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000011	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000012	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000013	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000014	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0







EMISFACT	L0000062	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000062	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000062	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000063	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000064	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000065	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000066	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	1.0	1.0	1.0	0.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	1.0	1.0	1.0
EMISFACT	L0000067	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0

SRCGROUP ALL

SO FINISHED

\*\*  
 \*\*\*\*\*  
 \*\* AERMOD RECEPTOR PATHWAY  
 \*\*\*\*\*

\*\*  
 \*\*

RE STARTING

INCLUDED "ATHLETIC PM2.ROU"

RE FINISHED

\*\*  
 \*\*\*\*\*  
 \*\* AERMOD METEOROLOGY PATHWAY  
 \*\*\*\*\*

\*\*  
 \*\*

ME STARTING

SURFFILE ..\..\..\BURK8.SFC

PROFFILE ..\..\..\BURK8.PFL

SURFDATA 0 2008

UAIRDATA 3190 2008

PROFBASE 10.0 METERS

ME FINISHED

\*\*  
 \*\*\*\*\*  
 \*\* AERMOD OUTPUT PATHWAY  
 \*\*\*\*\*

\*\*  
 \*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 24 1ST

\*\* AUTO-GENERATED PLOTFILES

PLOTFILE 24 ALL 1ST "ATHLETIC PM2.AD\24H1GALL.PLT" 31

PLOTFILE ANNUAL ALL "ATHLETIC PM2.AD\AN00GALL.PLT" 32

SUMMFILE "ATHLETIC PM2.SUM"

OU FINISHED

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 0 Informational Message(s)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*
\*\*\* SETUP Finishes Successfully \*\*\*
\*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
\*\*\* 09/02/15
\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM2.5 \*\*\*
12:05:51

PAGE 1
\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.
\*\*NO PARTICLE DEPOSITION Data Provided.
\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F
\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 68 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:
TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM\_2.5

\*\*Model Calculates 1 Short Term Average(s) of: 24-HR
and Calculates ANNUAL Averages

\*\*This Run Includes: 68 Source(s); 1 Source Group(s); and 22 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

- Model Outputs Tables of ANNUAL Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
 m for Missing Hours  
 b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.6 MB of RAM.

\*\*File for Summary of Results: ATHLETIC  
 PM2.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5 \*\*\*  
 12:05:51

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE	
										SCALAR	VARY BY
L0000001	0	0.22093E-03	369645.9	3778506.3	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000002	0	0.22093E-03	369639.3	3778503.3	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000003	0	0.22093E-03	369632.8	3778500.3	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000004	0	0.22093E-03	369626.2	3778497.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000005	0	0.22093E-03	369619.6	3778494.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000006	0	0.22093E-03	369613.0	3778491.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000007	0	0.22093E-03	369606.4	3778488.4	231.3	0.00	3.36	3.97	YES	HROFDY	
L0000008	0	0.22093E-03	369600.8	3778484.6	231.6	0.00	3.36	3.97	YES	HROFDY	
L0000009	0	0.22093E-03	369598.3	3778477.8	233.2	0.00	3.36	3.97	YES	HROFDY	
L0000010	0	0.22093E-03	369595.8	3778471.0	234.7	0.00	3.36	3.97	YES	HROFDY	
L0000011	0	0.22093E-03	369593.3	3778464.2	236.2	0.00	3.36	3.97	YES	HROFDY	
L0000012	0	0.22093E-03	369590.8	3778457.5	237.7	0.00	3.36	3.97	YES	HROFDY	
L0000013	0	0.22093E-03	369588.3	3778450.7	239.2	0.00	3.36	3.97	YES	HROFDY	
L0000014	0	0.22093E-03	369585.8	3778443.9	240.7	0.00	3.36	3.97	YES	HROFDY	
L0000015	0	0.22093E-03	369586.3	3778437.2	241.4	0.00	3.36	3.97	YES	HROFDY	
L0000016	0	0.22093E-03	369589.2	3778430.6	241.5	0.00	3.36	3.97	YES	HROFDY	
L0000017	0	0.22093E-03	369592.1	3778424.0	241.6	0.00	3.36	3.97	YES	HROFDY	
L0000018	0	0.22093E-03	369595.0	3778417.4	241.7	0.00	3.36	3.97	YES	HROFDY	
L0000019	0	0.22093E-03	369597.9	3778410.8	241.8	0.00	3.36	3.97	YES	HROFDY	
L0000020	0	0.22093E-03	369600.8	3778404.2	241.9	0.00	3.36	3.97	YES	HROFDY	
L0000021	0	0.22093E-03	369603.7	3778397.6	241.9	0.00	3.36	3.97	YES	HROFDY	
L0000022	0	0.22093E-03	369606.6	3778391.0	242.0	0.00	3.36	3.97	YES	HROFDY	
L0000023	0	0.22093E-03	369609.6	3778384.3	242.1	0.00	3.36	3.97	YES	HROFDY	
L0000024	0	0.22093E-03	369612.5	3778377.7	242.2	0.00	3.36	3.97	YES	HROFDY	
L0000025	0	0.22093E-03	369615.4	3778371.1	242.3	0.00	3.36	3.97	YES	HROFDY	

L0000026	0	0.22093E-03	369618.3	3778364.5	242.4	0.00	3.36	3.97	YES	HROFDY
L0000027	0	0.22093E-03	369621.2	3778357.9	242.5	0.00	3.36	3.97	YES	HROFDY
L0000028	0	0.22093E-03	369624.1	3778351.3	242.6	0.00	3.36	3.97	YES	HROFDY
L0000029	0	0.22093E-03	369627.0	3778344.7	242.6	0.00	3.36	3.97	YES	HROFDY
L0000030	0	0.22093E-03	369629.9	3778338.1	242.7	0.00	3.36	3.97	YES	HROFDY
L0000031	0	0.22093E-03	369632.9	3778331.5	242.8	0.00	3.36	3.97	YES	HROFDY
L0000032	0	0.22093E-03	369635.8	3778324.8	242.9	0.00	3.36	3.97	YES	HROFDY
L0000033	0	0.22093E-03	369639.9	3778321.6	243.0	0.00	3.36	3.97	YES	HROFDY
L0000034	0	0.22093E-03	369646.4	3778324.7	242.9	0.00	3.36	3.97	YES	HROFDY
L0000035	0	0.22093E-03	369652.9	3778327.9	242.9	0.00	3.36	3.97	YES	HROFDY
L0000036	0	0.22093E-03	369659.5	3778331.0	242.9	0.00	3.36	3.97	YES	HROFDY
L0000037	0	0.22093E-03	369666.0	3778334.1	242.9	0.00	3.36	3.97	YES	HROFDY
L0000038	0	0.22093E-03	369672.5	3778337.3	242.8	0.00	3.36	3.97	YES	HROFDY
L0000039	0	0.22093E-03	369679.0	3778340.4	242.8	0.00	3.36	3.97	YES	HROFDY
L0000040	0	0.22093E-03	369685.5	3778343.5	242.8	0.00	3.36	3.97	YES	HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY BY
L0000041	0	0.22093E-03	369692.0	3778346.6	242.8	0.00	3.36	3.97	YES	HROFDY	
L0000042	0	0.22093E-03	369698.5	3778349.8	242.7	0.00	3.36	3.97	YES	HROFDY	
L0000043	0	0.22093E-03	369705.0	3778352.9	242.7	0.00	3.36	3.97	YES	HROFDY	
L0000044	0	0.22093E-03	369711.5	3778356.0	242.7	0.00	3.36	3.97	YES	HROFDY	
L0000045	0	0.22093E-03	369714.2	3778360.6	242.5	0.00	3.36	3.97	YES	HROFDY	
L0000046	0	0.22093E-03	369711.3	3778367.2	242.0	0.00	3.36	3.97	YES	HROFDY	
L0000047	0	0.22093E-03	369708.4	3778373.8	241.5	0.00	3.36	3.97	YES	HROFDY	
L0000048	0	0.22093E-03	369705.5	3778380.4	241.0	0.00	3.36	3.97	YES	HROFDY	
L0000049	0	0.22093E-03	369702.6	3778387.1	240.5	0.00	3.36	3.97	YES	HROFDY	
L0000050	0	0.22093E-03	369699.7	3778393.7	240.0	0.00	3.36	3.97	YES	HROFDY	
L0000051	0	0.22093E-03	369696.8	3778400.3	239.5	0.00	3.36	3.97	YES	HROFDY	
L0000052	0	0.22093E-03	369693.9	3778406.9	239.0	0.00	3.36	3.97	YES	HROFDY	
L0000053	0	0.22093E-03	369691.0	3778413.5	238.5	0.00	3.36	3.97	YES	HROFDY	
L0000054	0	0.22093E-03	369688.1	3778420.1	238.0	0.00	3.36	3.97	YES	HROFDY	
L0000055	0	0.22093E-03	369685.2	3778426.8	237.5	0.00	3.36	3.97	YES	HROFDY	
L0000056	0	0.22093E-03	369682.3	3778433.4	236.9	0.00	3.36	3.97	YES	HROFDY	
L0000057	0	0.22093E-03	369679.4	3778440.0	236.4	0.00	3.36	3.97	YES	HROFDY	
L0000058	0	0.22093E-03	369676.5	3778446.6	235.9	0.00	3.36	3.97	YES	HROFDY	
L0000059	0	0.22093E-03	369673.6	3778453.2	235.4	0.00	3.36	3.97	YES	HROFDY	
L0000060	0	0.22093E-03	369670.7	3778459.8	234.9	0.00	3.36	3.97	YES	HROFDY	
L0000061	0	0.22093E-03	369667.8	3778466.5	234.4	0.00	3.36	3.97	YES	HROFDY	
L0000062	0	0.22093E-03	369664.9	3778473.1	233.9	0.00	3.36	3.97	YES	HROFDY	
L0000063	0	0.22093E-03	369662.0	3778479.7	233.4	0.00	3.36	3.97	YES	HROFDY	
L0000064	0	0.22093E-03	369659.1	3778486.3	232.9	0.00	3.36	3.97	YES	HROFDY	
L0000065	0	0.22093E-03	369656.2	3778492.9	232.4	0.00	3.36	3.97	YES	HROFDY	
L0000066	0	0.22093E-03	369653.3	3778499.5	231.9	0.00	3.36	3.97	YES	HROFDY	
L0000067	0	0.22093E-03	369650.4	3778506.2	231.4	0.00	3.36	3.97	YES	HROFDY	

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREAPOLY SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
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PAREA1      0  0.00000E+00  369646.5  3778500.7  229.7  0.31  5  0.00  YES
*** AERMOD - VERSION 14134 ***   *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 ,
L0000008	,
	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 ,
	L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 ,
	L0000024 ,
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 ,
	L0000032 ,
	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 ,
	L0000040 ,
	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 ,
	L0000048 ,
	L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 ,
	L0000056 ,
	L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 ,
	L0000064 ,
	L0000065 , L0000066 , L0000067 , PAREA1 ,

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*** AERMOD - VERSION 14134 ***   *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs							
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L0000008	9862049. L0000007	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008
	L0000009	, L0000010	, L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016	, L0000017
	L0000017	, L0000018	, L0000019	, L0000020	, L0000021	, L0000022	, L0000023	, L0000024	, L0000025
	L0000025	, L0000026	, L0000027	, L0000028	, L0000029	, L0000030	, L0000031	, L0000032	, L0000033
	L0000033	, L0000034	, L0000035	, L0000036	, L0000037	, L0000038	, L0000039	, L0000040	, L0000041
	L0000041	, L0000042	, L0000043	, L0000044	, L0000045	, L0000046	, L0000047	, L0000048	, L0000049
	L0000049	, L0000050	, L0000051	, L0000052	, L0000053	, L0000054	, L0000055	, L0000056	, L0000057
	L0000057	, L0000058	, L0000059	, L0000060	, L0000061	, L0000062	, L0000063	, L0000064	, L0000065
	L0000065	, L0000066	, L0000067	, PAREAL	, L0000068	, L0000069	, L0000070	, L0000071	, L0000072

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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 \*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = L0000001 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000002 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000003 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000005 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000006 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000007 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000008 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000009 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000010 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000011 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000012 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000013 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000014 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000015 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000016 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000018 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000019 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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 \*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000022 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000023 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000027 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000028 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000029 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000030 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
---	------------	---	------------	---	------------	---	------------	---	------------	---	------------

7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000031 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000032 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000033 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000034 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000035 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000036 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000037 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SOURCE ID = L0000041	; SOURCE TYPE = VOLUME :																						
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01



19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000045 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM2.5
12:05:51

\*\*\*

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR HOURLY SCALAR
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SOURCE ID = L0000046 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000047 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000049 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0000050 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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*** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
*** 09/02/15

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*** AERMET - VERSION 14134 *** *** ATHLETIC STRUCTURE PM2.5 ***
12:05:51

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**MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

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\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

```

SOURCE ID = L0000051 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000052 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000053 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000054 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000055 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .00000E+00  9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .10000E+01 18 .10000E+01
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

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*** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
*** 09/02/15

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*** AERMET - VERSION 14134 *** *** ATHLETIC STRUCTURE PM2.5 ***
12:05:51

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**MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

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\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = L0000056 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000057 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000058 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000059 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000060 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = L0000061 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000062 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000063 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000064 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000065 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM2.5 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000066 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000067 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.10000E+01	18	.10000E+01
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM2.5 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*



Profile file: ..\..\..\BURK8.PFL

Surface format:

FREE

Profile format:

FREE

Surface station no.: 0

Upper air station no.: 3190

Name: UNKNOWN

Name: UNKNOWN

Year: 2008

Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 09/02/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5 \*\*\*  
 12:05:51

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,  
 L0000005 ,  
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,  
 L0000013 ,  
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,  
 L0000021 ,  
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369613.66	3778475.94	0.25972	369607.08	3778456.46	
0.28007					
369601.65	3778438.83	0.30558	369644.69	3778341.41	
0.21978					
369621.56	3778391.97	0.24674	369670.92	3778416.16	
0.24134					
369694.12	3778364.81	0.26020	369670.92	3778353.11	
0.23558					
369642.34	3778490.88	0.27367	369628.30	3778483.43	
0.25724					
369657.66	3778455.07	0.25288	369649.93	3778474.12	
0.26146					
369666.40	3778433.87	0.24833	369683.14	3778392.51	
0.24851					
369630.87	3778452.19	0.23854	369650.11	3778405.99	
0.21837					
369624.53	3778423.64	0.24709	369649.91	3778436.33	
0.23230					
369647.33	3778373.28	0.22910	369671.12	3778383.79	
0.23059					
369611.16	3778418.77	0.28162	369633.23	3778365.93	
0.24134					

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* ATHLETIC STRUCTURE PM2.5 \*\*  
 12:05:51

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,  
 L0000005 ,  
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,  
 L0000013 ,  
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,  
 L0000021 ,  
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369613.66 (12122524)	3778475.94	0.76020 (12122524)	369607.08	3778456.46	0.77758
369601.65 (12122524)	3778438.83	0.87039 (12122524)	369644.69	3778341.41	0.82904
369621.56 (12122524)	3778391.97	0.78329 (12122524)	369670.92	3778416.16	0.71277
369694.12 (12122524)	3778364.81	0.89950 (12122524)	369670.92	3778353.11	0.82184
369642.34 (12122524)	3778490.88	0.84795 (12122524)	369628.30	3778483.43	0.76565

369657.66 (12122524)	3778455.07	0.75247	(12122524)	369649.93	3778474.12	0.79095
369666.40 (12122524)	3778433.87	0.73656	(12122524)	369683.14	3778392.51	0.75940
369630.87 (12122524)	3778452.19	0.64073	(12122524)	369650.11	3778405.99	0.60119
369624.53 (12122524)	3778423.64	0.66359	(12122524)	369649.91	3778436.33	0.63695
369647.33 (12122524)	3778373.28	0.68321	(12122524)	369671.12	3778383.79	0.67082
369611.16 (12122524)	3778418.77	0.82088	(12122524)	369633.23	3778365.93	0.79164

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5 \*\*\*  
 12:05:51

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.30558 AT ( 369601.65, 3778438.83, 236.66, 365.00, 10.97)	DC	
	2ND HIGHEST VALUE IS	0.28162 AT ( 369611.16, 3778418.77, 237.97, 365.00, 10.97)	DC	
	3RD HIGHEST VALUE IS	0.28007 AT ( 369607.08, 3778456.46, 234.66, 365.00, 10.97)	DC	
	4TH HIGHEST VALUE IS	0.27367 AT ( 369642.34, 3778490.88, 230.84, 365.00, 10.97)	DC	
	5TH HIGHEST VALUE IS	0.26146 AT ( 369649.93, 3778474.12, 232.32, 365.00, 10.97)	DC	
	6TH HIGHEST VALUE IS	0.26020 AT ( 369694.12, 3778364.81, 239.68, 365.00, 10.97)	DC	
	7TH HIGHEST VALUE IS	0.25972 AT ( 369613.66, 3778475.94, 232.35, 365.00, 10.97)	DC	
	8TH HIGHEST VALUE IS	0.25724 AT ( 369628.30, 3778483.43, 231.58, 365.00, 10.97)	DC	
	9TH HIGHEST VALUE IS	0.25288 AT ( 369657.66, 3778455.07, 233.89, 365.00, 10.97)	DC	
	10TH HIGHEST VALUE IS	0.24851 AT ( 369683.14, 3778392.51, 238.35, 365.00, 10.97)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5 \*\*\*  
 12:05:51

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK	OF TYPE	GRID-ID
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ALL HIGH 1ST HIGH VALUE IS 0.89950 ON 12122524: AT ( 369694.12, 3778364.81, 239.68, 365.00, 10.97) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART GP = GRIDPOLR DC = DISCCART DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT 09/02/15

\*\*\* AERMET - VERSION 14134 \*\*\* ATHLETIC STRUCTURE PM2.5 \*\*\* 12:05:51

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1275 Informational Message(s)
A Total of 43848 Hours Were Processed
A Total of 13 Calm Hours Identified
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
SO W320 195 APPARM: Input Parameter May Be Out-of-Range for Parameter QS

\*\*\*\*\*
\*\*\* AERMOD Finishes Successfully \*\*\*
\*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\BUS CO\BUS CO.ADI
**

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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

CO STARTING

```

TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO OPERATIONAL SCHOOL BUS CO
MODELOPT DFAULT CONC
AVERTIME 1 8
URBANOPT 9862049
POLLUTID CO
FLAGPOLE 0.00
RUNORNOT RUN
ERRORFIL "BUS CO.ERR"

```

CO FINISHED

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**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

SO STARTING

```

** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC BUS TRAVEL FROM SB ON COLDWATER CANYON FROM US-101
** PREFIX
** LENGTH OF SIDE = 7.32
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.002721
** VERTICAL DIMENSION = 5.00
** SZINIT = 2.33
** NODES = 5
** 369659.167, 3778795.354, 213.00, 0.00, 6.60
** 369656.501, 3778635.361, 222.00, 0.00, 6.60
** 369659.167, 3778598.029, 222.00, 0.00, 6.60
** 369668.500, 3778550.031, 231.00, 0.00, 6.60
** 369672.500, 3778491.366, 240.00, 0.00, 6.60
** -----

```

LOCATION L0000504	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000505	VOLUME	369658.870	3778777.517	214.00
LOCATION L0000506	VOLUME	369658.634	3778763.337	214.80
LOCATION L0000507	VOLUME	369658.397	3778749.157	215.60
LOCATION L0000508	VOLUME	369658.161	3778734.976	216.40
LOCATION L0000509	VOLUME	369657.925	3778720.796	217.19
LOCATION L0000510	VOLUME	369657.688	3778706.616	217.99
LOCATION L0000511	VOLUME	369657.452	3778692.436	218.79
LOCATION L0000512	VOLUME	369657.216	3778678.256	219.59

LOCATION	VOLUME				
L0000513	369656.979	3778664.075	220.38		
L0000514	369656.743	3778649.895	221.18		
L0000515	369656.507	3778635.715	221.98		
L0000516	369657.486	3778621.568	222.00		
L0000517	369658.496	3778607.422	222.00		
L0000518	369660.077	3778593.351	222.88		
L0000519	369662.784	3778579.430	225.49		
L0000520	369665.491	3778565.509	228.10		
L0000521	369668.198	3778551.587	230.71		
L0000522	369669.357	3778537.463	232.93		
L0000523	369670.322	3778523.314	235.10		
L0000524	369671.287	3778509.165	237.27		
L0000525	369672.251	3778495.015	239.44		

\*\* END OF LINE VOLUME SOURCE ID = SLINE1

\*\* -----  
 \*\* LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES

\*\* LINE VOLUME SOURCE ID = SLINE2

\*\* DESCRSRC BUS TRAVEL NB FROM COLDWATER CANYON

\*\* PREFIX

\*\* LENGTH OF SIDE = 7.32

\*\* CONFIGURATION = SEPARATED

\*\* EMISSION RATE = 0.000907

\*\* VERTICAL DIMENSION = 5.00

\*\* SZINIT = 2.33

\*\* NODES = 6

\*\* 369678.850, 3778478.785, 238.00, 0.00, 6.52

\*\* 369680.183, 3778462.785, 238.00, 0.00, 6.52

\*\* 369722.848, 3778362.788, 243.00, 0.00, 6.52

\*\* 369765.514, 3778304.123, 243.00, 0.00, 6.52

\*\* 369774.847, 3778292.124, 243.00, 0.00, 6.52

\*\* 369786.847, 3778261.458, 243.00, 0.00, 6.52

\*\* -----  

LOCATION	VOLUME				
L0000526	369679.153	3778475.140	238.00		
L0000527	369680.815	3778461.304	238.07		
L0000528	369686.312	3778448.420	238.72		
L0000529	369691.809	3778435.537	239.36		
L0000530	369697.306	3778422.653	240.01		
L0000531	369702.803	3778409.769	240.65		
L0000532	369708.301	3778396.885	241.30		
L0000533	369713.798	3778384.001	241.94		
L0000534	369719.295	3778371.117	242.58		
L0000535	369725.761	3778358.783	243.00		
L0000536	369734.000	3778347.455	243.00		
L0000537	369742.239	3778336.126	243.00		
L0000538	369750.478	3778324.798	243.00		
L0000539	369758.717	3778313.469	243.00		
L0000540	369767.019	3778302.188	243.00		
L0000541	369775.305	3778290.953	243.00		
L0000542	369780.409	3778277.908	243.00		
L0000543	369785.514	3778264.864	243.00		

\*\* END OF LINE VOLUME SOURCE ID = SLINE2

LOCATION AREA	AREA				
	369794.871	3778265.530	242.640		

\*\* DESCRSRC BUS SOUTH LOT

\*\* SOURCE PARAMETERS \*\*

\*\* LINE VOLUME SOURCE ID = SLINE1

SRCPARAM					
L0000504	0.0001236818	0.00	6.60	2.33	
L0000505	0.0001236818	0.00	6.60	2.33	
L0000506	0.0001236818	0.00	6.60	2.33	
L0000507	0.0001236818	0.00	6.60	2.33	
L0000508	0.0001236818	0.00	6.60	2.33	
L0000509	0.0001236818	0.00	6.60	2.33	
L0000510	0.0001236818	0.00	6.60	2.33	
L0000511	0.0001236818	0.00	6.60	2.33	
L0000512	0.0001236818	0.00	6.60	2.33	

SRCPARAM	L0000513	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000514	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000515	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000516	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000517	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000518	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000519	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000520	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000521	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000522	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000523	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000524	0.0001236818	0.00	6.60	2.33
SRCPARAM	L0000525	0.0001236818	0.00	6.60	2.33

\*\*

\*\* LINE VOLUME SOURCE ID = SLINE2

SRCPARAM	L0000526	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000527	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000528	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000529	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000530	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000531	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000532	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000533	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000534	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000535	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000536	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000537	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000538	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000539	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000540	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000541	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000542	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000543	0.0000503889	0.00	6.52	2.33

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SRCPARAM	AREA	6.6002E-07	5.000	33.000	73.000	-27.850
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URBANSRC	L0000504
URBANSRC	L0000505
URBANSRC	L0000506
URBANSRC	L0000507
URBANSRC	L0000508
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URBANSRC	L0000530
URBANSRC	L0000531
URBANSRC	L0000532

URBANSRC L0000533  
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 URBANSRC L0000539  
 URBANSRC L0000540  
 URBANSRC L0000541  
 URBANSRC L0000542  
 URBANSRC L0000543  
 URBANSRC AREA

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "CO"

EMISFACT	L0000526	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000526	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000526	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000526	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000527	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000527	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000527	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000527	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000528	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000528	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000528	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000528	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000529	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000529	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000529	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000529	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000530	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000530	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000530	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000530	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000531	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000531	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000531	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000531	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000532	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000532	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000532	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000532	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000533	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000533	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000533	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000533	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000534	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000534	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000534	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000534	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000535	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000535	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000535	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000535	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000536	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000536	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000536	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000536	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000537	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000537	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000537	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000537	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000538	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	L0000514	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000514	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000514	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000515	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000515	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000515	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000515	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000515	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000516	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000516	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000516	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000516	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000517	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000517	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000517	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000517	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000518	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000518	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000518	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000518	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000519	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000519	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000519	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000519	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000520	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000520	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000520	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000520	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000521	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000521	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000521	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000521	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000522	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000522	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000522	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000522	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000523	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000523	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000523	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000523	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000524	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000524	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000524	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000524	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000525	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000525	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000525	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000525	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
CONCUNIT	873.2	GRAMS/SEC	PPM					
SRCGROUP	CO	L0000504	L0000505	L0000506	L0000507	L0000508	L0000509	
SRCGROUP	CO	L0000510	L0000511	L0000512	L0000513	L0000514	L0000515	
SRCGROUP	CO	L0000516	L0000517	L0000518	L0000519	L0000520	L0000521	
SRCGROUP	CO	L0000522	L0000523	L0000524	L0000525	L0000526	L0000527	
SRCGROUP	CO	L0000528	L0000529	L0000530	L0000531	L0000532	L0000533	
SRCGROUP	CO	L0000534	L0000535	L0000536	L0000537	L0000538	L0000539	
SRCGROUP	CO	L0000540	L0000541	L0000542	L0000543	AREA		
SRCGROUP	ALL							

SO FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

```
*****
**
**
RE STARTING
  INCLUDED "BUS CO.ROU"
RE FINISHED
**
```

```
*****
** AERMOD METEOROLOGY PATHWAY
*****
**
**
```

```
ME STARTING
  SURFFILE ..\..\BURK8.SFC
  PROFFILE ..\..\BURK8.PFL
  SURFDATA 0 2008
  UAIRDATA 3190 2008
  PROFBASE 10.0 METERS
ME FINISHED
**
```

```
*****
** AERMOD OUTPUT PATHWAY
*****
**
**
```

```
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 8 1ST
** AUTO-GENERATED PLOTFILES
  PLOTFILE 1 ALL 1ST "BUS CO.AD\01H1GALL.PLT" 31
  PLOTFILE 8 ALL 1ST "BUS CO.AD\08H1GALL.PLT" 32
  PLOTFILE 1 CO 1ST "BUS CO.AD\01H1G001.PLT" 33
  PLOTFILE 8 CO 1ST "BUS CO.AD\08H1G001.PLT" 34
  SUMMFILE "BUS CO.SUM"
OU FINISHED
```

```
*****
*** SETUP Finishes Successfully ***
*****
```

```
*** AERMOD - VERSION 14134 ***    *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
***      08/25/15
*** AERMET - VERSION 14134 ***    *** OPERATIONAL SCHOOL BUS CO                                ***
15:30:58
```

```
PAGE 1
**MODELOPTs:  RegDEFAULT CONC      ELEV      FLGPOL
```

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

```
-----
- - - -
```

\*\*Model Is Setup For Calculation of Average CONCentration Values.

```
-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT = F
**Model Uses NO WET DEPLETION.  WETDPLT = F
```

```
**Model Uses URBAN Dispersion Algorithm for the SBL for 41 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m
```



## \*\*Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

## \*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

## \*\*Model Accepts FLAGPOLE Receptor Heights.

## \*\*The User Specified a Pollutant Type of: CO

## \*\*Model Calculates 2 Short Term Average(s) of: 1-HR 8-HR

\*\*This Run Includes: 41 Source(s); 2 Source Group(s); and 70 Receptor(s)

## \*\*Model Set To Continue RUNNING After the Setup Testing.

## \*\*The AERMET Input Meteorological Data Version Date: 14134

## \*\*Output Options Selected:

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)  
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)  
 Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
 m for Missing Hours  
 b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle  
 = 0.0  
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 873.20  
 Output Units = PPM

\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.

\*\*Detailed Error/Message File: BUS

CO.ERR

\*\*File for Summary of Results: BUS

CO.SUM

```

*** AERMOD - VERSION 14134 ***      *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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***      08/25/15

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*** AERMET - VERSION 14134 ***      *** OPERATIONAL SCHOOL BUS CO

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

## \*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X Y		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
			(METERS)	(METERS)						
L0000504	0	0.12368E-03	369659.1	3778791.7	213.2	0.00	6.60	2.33	YES	HROFDY
L0000505	0	0.12368E-03	369658.9	3778777.5	214.0	0.00	6.60	2.33	YES	HROFDY
L0000506	0	0.12368E-03	369658.6	3778763.3	214.8	0.00	6.60	2.33	YES	HROFDY

L0000507	0	0.12368E-03	369658.4	3778749.2	215.6	0.00	6.60	2.33	YES	HROFDY
L0000508	0	0.12368E-03	369658.2	3778735.0	216.4	0.00	6.60	2.33	YES	HROFDY
L0000509	0	0.12368E-03	369657.9	3778720.8	217.2	0.00	6.60	2.33	YES	HROFDY
L0000510	0	0.12368E-03	369657.7	3778706.6	218.0	0.00	6.60	2.33	YES	HROFDY
L0000511	0	0.12368E-03	369657.5	3778692.4	218.8	0.00	6.60	2.33	YES	HROFDY
L0000512	0	0.12368E-03	369657.2	3778678.3	219.6	0.00	6.60	2.33	YES	HROFDY
L0000513	0	0.12368E-03	369657.0	3778664.1	220.4	0.00	6.60	2.33	YES	HROFDY
L0000514	0	0.12368E-03	369656.7	3778649.9	221.2	0.00	6.60	2.33	YES	HROFDY
L0000515	0	0.12368E-03	369656.5	3778635.7	222.0	0.00	6.60	2.33	YES	HROFDY
L0000516	0	0.12368E-03	369657.5	3778621.6	222.0	0.00	6.60	2.33	YES	HROFDY
L0000517	0	0.12368E-03	369658.5	3778607.4	222.0	0.00	6.60	2.33	YES	HROFDY
L0000518	0	0.12368E-03	369660.1	3778593.4	222.9	0.00	6.60	2.33	YES	HROFDY
L0000519	0	0.12368E-03	369662.8	3778579.4	225.5	0.00	6.60	2.33	YES	HROFDY
L0000520	0	0.12368E-03	369665.5	3778565.5	228.1	0.00	6.60	2.33	YES	HROFDY
L0000521	0	0.12368E-03	369668.2	3778551.6	230.7	0.00	6.60	2.33	YES	HROFDY
L0000522	0	0.12368E-03	369669.4	3778537.5	232.9	0.00	6.60	2.33	YES	HROFDY
L0000523	0	0.12368E-03	369670.3	3778523.3	235.1	0.00	6.60	2.33	YES	HROFDY
L0000524	0	0.12368E-03	369671.3	3778509.2	237.3	0.00	6.60	2.33	YES	HROFDY
L0000525	0	0.12368E-03	369672.3	3778495.0	239.4	0.00	6.60	2.33	YES	HROFDY
L0000526	0	0.50389E-04	369679.2	3778475.1	238.0	0.00	6.52	2.33	YES	HROFDY
L0000527	0	0.50389E-04	369680.8	3778461.3	238.1	0.00	6.52	2.33	YES	HROFDY
L0000528	0	0.50389E-04	369686.3	3778448.4	238.7	0.00	6.52	2.33	YES	HROFDY
L0000529	0	0.50389E-04	369691.8	3778435.5	239.4	0.00	6.52	2.33	YES	HROFDY
L0000530	0	0.50389E-04	369697.3	3778422.7	240.0	0.00	6.52	2.33	YES	HROFDY
L0000531	0	0.50389E-04	369702.8	3778409.8	240.7	0.00	6.52	2.33	YES	HROFDY
L0000532	0	0.50389E-04	369708.3	3778396.9	241.3	0.00	6.52	2.33	YES	HROFDY
L0000533	0	0.50389E-04	369713.8	3778384.0	241.9	0.00	6.52	2.33	YES	HROFDY
L0000534	0	0.50389E-04	369719.3	3778371.1	242.6	0.00	6.52	2.33	YES	HROFDY
L0000535	0	0.50389E-04	369725.8	3778358.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000536	0	0.50389E-04	369734.0	3778347.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000537	0	0.50389E-04	369742.2	3778336.1	243.0	0.00	6.52	2.33	YES	HROFDY
L0000538	0	0.50389E-04	369750.5	3778324.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000539	0	0.50389E-04	369758.7	3778313.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000540	0	0.50389E-04	369767.0	3778302.2	243.0	0.00	6.52	2.33	YES	HROFDY
L0000541	0	0.50389E-04	369775.3	3778291.0	243.0	0.00	6.52	2.33	YES	HROFDY
L0000542	0	0.50389E-04	369780.4	3778277.9	243.0	0.00	6.52	2.33	YES	HROFDY
L0000543	0	0.50389E-04	369785.5	3778264.9	243.0	0.00	6.52	2.33	YES	HROFDY

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\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS CO

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREA SOURCE DATA \*\*\*

SOURCE	PART.	EMISSION RATE (USER UNITS)	COORD (SW CORNER) X	COORD (SW CORNER) Y	BASE ELEV.	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ	URBAN SOURCE
AREA	0	0.66002E-06	369794.9	3778265.5	242.6	5.00	33.00	73.00	-27.85	0.00	YES
HROFDY											

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs													
-----	-----													
CO L0000511	L0000504	,	L0000505	,	L0000506	,	L0000507	,	L0000508	,	L0000509	,	L0000510	,
	L0000512	,	L0000513	,	L0000514	,	L0000515	,	L0000516	,	L0000517	,	L0000518	,
	L0000519	,												
	L0000520	,	L0000521	,	L0000522	,	L0000523	,	L0000524	,	L0000525	,	L0000526	,
	L0000527	,												
	L0000528	,	L0000529	,	L0000530	,	L0000531	,	L0000532	,	L0000533	,	L0000534	,
	L0000535	,												
	L0000536	,	L0000537	,	L0000538	,	L0000539	,	L0000540	,	L0000541	,	L0000542	,
	L0000543	,												
	AREA	,												
ALL L0000511	L0000504	,	L0000505	,	L0000506	,	L0000507	,	L0000508	,	L0000509	,	L0000510	,
	L0000512	,	L0000513	,	L0000514	,	L0000515	,	L0000516	,	L0000517	,	L0000518	,
	L0000519	,												
	L0000520	,	L0000521	,	L0000522	,	L0000523	,	L0000524	,	L0000525	,	L0000526	,
	L0000527	,												
	L0000528	,	L0000529	,	L0000530	,	L0000531	,	L0000532	,	L0000533	,	L0000534	,
	L0000535	,												
	L0000536	,	L0000537	,	L0000538	,	L0000539	,	L0000540	,	L0000541	,	L0000542	,
	L0000543	,												
	AREA	,												

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs												
-----	-----	-----												
L0000511	9862049.	L0000504	,	L0000505	,	L0000506	,	L0000507	,	L0000508	,	L0000509	,	
	L0000510	,												
	L0000512	,	L0000513	,	L0000514	,	L0000515	,	L0000516	,	L0000517	,	L0000518	,
	L0000519	,												

L0000520 , L0000521 , L0000522 , L0000523 , L0000524 , L0000525 , L0000526 ,  
 L0000527 ,  
 L0000528 , L0000529 , L0000530 , L0000531 , L0000532 , L0000533 , L0000534 ,  
 L0000535 ,  
 L0000536 , L0000537 , L0000538 , L0000539 , L0000540 , L0000541 , L0000542 ,  
 L0000543 ,

AREA ,

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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS CO

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000504 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000505 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000506 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000507 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000508 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000509 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000510 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000511 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000512 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000513 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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 \*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS CO \*\*\*  
 15:30:58

\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000514 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000515 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000516 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000517 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000518 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS CO

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

-----
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
-----

SOURCE ID = L0000519 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000520 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000521 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000522 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000523 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000524 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000525 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000526 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000527 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000528 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000529 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000530 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000531 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000532 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000533 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-----											
-----											



SOURCE ID = L0000534 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000535 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000536 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000537 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000538 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS CO \*\*\*  
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 \*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000539 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000540 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000541 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000542 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000543 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = AREA ; SOURCE TYPE = AREA :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

( 369670.5, 3778388.3, 238.9, 365.0, 0.0);	( 369686.2, 3778353.0, 240.4, 365.0, 0.0);
( 369701.7, 3778534.9, 224.8, 365.0, 0.0);	( 369685.0, 3778565.2, 221.3, 365.0, 0.0);
( 369709.4, 3778565.2, 220.8, 365.0, 0.0);	( 369733.8, 3778565.2, 220.3, 365.0, 0.0);
( 369760.4, 3778565.2, 219.9, 365.0, 0.0);	( 369685.0, 3778627.6, 216.1, 365.0, 0.0);
( 369709.4, 3778627.6, 215.9, 365.0, 0.0);	( 369733.8, 3778627.6, 215.7, 365.0, 0.0);
( 369760.4, 3778627.6, 215.5, 365.0, 0.0);	( 369684.6, 3778740.8, 212.4, 365.0, 0.0);

( 369709.0, 3778740.8, 212.3, 365.0, 0.0);	( 369733.4, 3778740.8, 212.3, 365.0, 0.0);
( 369760.0, 3778740.8, 212.3, 365.0, 0.0);	( 369684.6, 3778685.5, 212.9, 365.0, 0.0);
( 369709.0, 3778685.5, 212.9, 365.0, 0.0);	( 369733.5, 3778685.5, 212.9, 365.0, 0.0);
( 369760.1, 3778685.5, 212.9, 365.0, 0.0);	( 369810.6, 3778741.3, 212.1, 365.0, 0.0);
( 369828.2, 3778628.6, 214.6, 365.0, 0.0);	( 369867.0, 3778658.0, 212.8, 365.0, 0.0);
( 369904.5, 3778679.1, 212.0, 365.0, 0.0);	( 369858.7, 3778708.4, 212.0, 365.0, 0.0);
( 369905.7, 3778639.1, 214.2, 365.0, 0.0);	( 369885.8, 3778619.1, 215.4, 365.0, 0.0);
( 369638.6, 3778030.1, 269.3, 365.0, 0.0);	( 369698.0, 3778231.8, 243.0, 365.0, 0.0);
( 369682.8, 3778161.3, 247.8, 365.0, 0.0);	( 369653.8, 3778099.1, 252.5, 365.0, 0.0);
( 369666.2, 3778059.1, 259.1, 365.0, 0.0);	( 369722.9, 3778230.4, 242.9, 365.0, 0.0);
( 369716.0, 3778190.3, 244.4, 365.0, 0.0);	( 369703.6, 3778158.6, 247.2, 365.0, 0.0);
( 369687.0, 3778126.8, 251.1, 365.0, 0.0);	( 369675.9, 3778097.8, 253.5, 365.0, 0.0);
( 369703.6, 3778108.8, 251.0, 365.0, 0.0);	( 369727.0, 3778139.2, 247.0, 365.0, 0.0);
( 369903.9, 3778552.4, 223.0, 365.0, 0.0);	( 369866.6, 3778563.4, 219.9, 365.0, 0.0);
( 369873.5, 3778516.4, 227.5, 365.0, 0.0);	( 369887.3, 3778491.6, 232.5, 304.0, 0.0);
( 369859.7, 3778444.6, 236.3, 304.0, 0.0);	( 369849.6, 3778322.0, 243.9, 365.0, 0.0);
( 369643.4, 3778672.5, 213.2, 365.0, 0.0);	( 369644.1, 3778798.3, 212.1, 365.0, 0.0);
( 369591.6, 3778750.0, 213.4, 365.0, 0.0);	( 369640.0, 3778638.0, 216.2, 365.0, 0.0);
( 369590.3, 3778698.8, 214.8, 365.0, 0.0);	( 369569.5, 3778751.3, 213.8, 365.0, 0.0);
( 369621.8, 3778549.7, 225.0, 365.0, 0.0);	( 369608.6, 3778540.9, 226.6, 365.0, 0.0);
( 369492.0, 3778688.1, 228.6, 365.0, 0.0);	( 369551.4, 3778498.0, 236.0, 365.0, 0.0);
( 369467.1, 3778588.6, 240.7, 365.0, 0.0);	( 369442.2, 3778525.5, 243.2, 365.0, 0.0);
( 369426.9, 3778653.6, 236.6, 365.0, 0.0);	( 369430.8, 3778596.3, 241.5, 365.0, 0.0);
( 369384.9, 3778676.6, 233.1, 365.0, 0.0);	( 369398.3, 3778498.7, 243.2, 365.0, 0.0);
( 369245.3, 3778531.2, 233.6, 365.0, 0.0);	( 369245.3, 3778441.3, 240.3, 365.0, 0.0);
( 369484.6, 3778462.3, 244.4, 365.0, 0.0);	( 369629.2, 3778438.7, 235.7, 365.0, 17.4);
( 369814.8, 3778308.8, 242.5, 365.0, 0.0);	( 369781.3, 3778368.9, 239.6, 365.0, 0.0);
( 369811.0, 3778376.6, 240.3, 365.0, 0.0);	( 369853.0, 3778354.6, 243.2, 304.0, 0.0);
( 369860.8, 3778292.3, 246.5, 304.0, 0.0);	( 369856.2, 3778259.2, 245.7, 365.0, 0.0);

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS CO

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08 01 01	1 02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5
08 01 01	1 03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5
08 01 01	1 04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5
08 01 01	1 05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08 01 01	1 06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08 01 01	1 07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08 01 01	1 08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5
08 01 01	1 09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5
08 01 01	1 10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5
08 01 01	1 11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5
08 01 01	1 12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5
08 01 01	1 13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5
08 01 01	1 14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5
08 01 01	1 15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5
08 01 01	1 16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5
08 01 01	1 17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5
08 01 01	1 18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5
08 01 01	1 19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5
08 01 01	1 20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5
08 01 01	1 21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08 01 01	1 22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08 01 01	1 23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08 01 01	1 24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

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**MODELOPTs:	RegDFault	CONC	ELEV	FLGPOL
	*** THE	1ST HIGHEST	1-HR AVERAGE	CONCENTRATION
	INCLUDING SOURCE(S):	L0000504	L0000505	L0000506
		L0000507	L0000508	
	L0000509	L0000510	L0000511	L0000512
	L0000513	L0000514	L0000515	
	L0000516	L0000517	L0000518	L0000519
	L0000520	L0000521	L0000522	L0000523
	L0000524	L0000525	L0000526	L0000527
	L0000528	L0000529	L0000530	L0000531

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO	IN PPM			**
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00090	(12021508)	369686.20	3778352.98	0.00102
(12021508)						
369701.74	3778534.95	0.00123	(12021708)	369684.96	3778565.24	0.00169
(12021708)						
369709.39	3778565.24	0.00100	(12021708)	369733.82	3778565.24	0.00074
(12021708)						
369760.43	3778565.24	0.00055	(12021708)	369684.96	3778627.64	0.00132

(12021708)							
369709.39	3778627.64	0.00085	(12021708)	369733.82	3778627.64	0.00062	
(12021708)							
369760.43	3778627.64	0.00046	(12021708)	369684.56	3778740.79	0.00121	
(12021708)							
369708.99	3778740.79	0.00068	(12021708)	369733.42	3778740.79	0.00047	
(12021708)							
369760.02	3778740.79	0.00034	(12021708)	369684.59	3778685.54	0.00124	
(12021708)							
369709.02	3778685.54	0.00076	(12021708)	369733.45	3778685.54	0.00054	
(12021708)							
369760.06	3778685.54	0.00040	(12021708)	369810.59	3778741.35	0.00025	
(10012708)							
369828.20	3778628.60	0.00031	(12112808)	369866.96	3778657.96	0.00029	
(12112808)							
369904.54	3778679.10	0.00028	(12112808)	369858.74	3778708.37	0.00024	
(12112808)							
369905.71	3778639.08	0.00032	(12112808)	369885.75	3778619.11	0.00035	
(12112808)							
369638.62	3778030.06	0.00034	(11020208)	369698.03	3778231.80	0.00119	
(12112608)							
369682.83	3778161.33	0.00056	(09011108)	369653.81	3778099.15	0.00032	
(09121608)							
369666.25	3778059.08	0.00035	(09121608)	369722.90	3778230.42	0.00129	
(12112608)							
369715.99	3778190.35	0.00063	(09011108)	369703.56	3778158.57	0.00051	
(11112408)							
369686.98	3778126.79	0.00037	(09121608)	369675.92	3778097.77	0.00038	
(09121608)							
369703.56	3778108.82	0.00039	(11112408)	369727.05	3778139.22	0.00056	
(11012008)							
369903.91	3778552.37	0.00046	(12112808)	369866.61	3778563.43	0.00044	
(12112808)							
369873.52	3778516.45	0.00057	(12112808)	369887.33	3778491.57	0.00064	
(12112808)							
369859.70	3778444.59	0.00093	(12112808)	369849.63	3778322.03	0.00272	
(12122808)							
369643.37	3778672.46	0.00155	(12021708)	369644.15	3778798.32	0.00119	
(12021708)							
369591.64	3778749.96	0.00056	(12021708)	369640.00	3778638.03	0.00181	
(12021708)							
369590.26	3778698.83	0.00063	(12021708)	369569.53	3778751.34	0.00044	
(12021708)							
369621.84	3778549.71	0.00094	(12021708)	369608.62	3778540.93	0.00075	
(12021708)							
369491.97	3778688.07	0.00027	(12021708)	369551.43	3778498.04	0.00036	
(12021508)							
369467.11	3778588.61	0.00022	(11121608)	369442.24	3778525.50	0.00022	
(09011108)							
369426.94	3778653.64	0.00019	(11011108)	369430.77	3778596.26	0.00020	
(11121608)							
369384.87	3778676.59	0.00017	(11011108)	369398.26	3778498.73	0.00019	
(09011108)							
369245.26	3778531.24	0.00010	(09010908)	369245.26	3778441.35	0.00012	
(11121608)							
369484.59	3778462.33	0.00023	(09011108)	369629.21	3778438.68	0.00051	
(12021508)							
369814.80	3778308.83	0.00541	(11122408)	369781.29	3778368.86	0.00296	
(12021708)							
369811.05	3778376.63	0.00241	(12112808)	369852.96	3778354.56	0.00202	
(08021808)							
369860.75	3778292.26	0.00245	(11012408)	369856.21	3778259.16	0.00235	
(10020108)							

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S): L0000504 , L0000505 , L0000506 , L0000507 ,  
L0000508 ,

L0000509 , L0000510 , L0000511 , L0000512 , L0000513 , L0000514 , L0000515 ,  
L0000516 ,  
L0000517 , L0000518 , L0000519 , L0000520 , L0000521 , L0000522 , L0000523 ,  
L0000524 ,  
L0000525 , L0000526 , L0000527 , L0000528 , L0000529 , L0000530 , L0000531 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC  
(YYMMDDHH)

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52 (12021508)	3778388.27	0.00090 (12021508)	369686.20	3778352.98	0.00102
369701.74 (12021708)	3778534.95	0.00123 (12021708)	369684.96	3778565.24	0.00169
369709.39 (12021708)	3778565.24	0.00100 (12021708)	369733.82	3778565.24	0.00074
369760.43 (12021708)	3778565.24	0.00055 (12021708)	369684.96	3778627.64	0.00132
369709.39 (12021708)	3778627.64	0.00085 (12021708)	369733.82	3778627.64	0.00062
369760.43 (12021708)	3778627.64	0.00046 (12021708)	369684.56	3778740.79	0.00121
369708.99 (12021708)	3778740.79	0.00068 (12021708)	369733.42	3778740.79	0.00047
369760.02 (12021708)	3778740.79	0.00034 (12021708)	369684.59	3778685.54	0.00124
369709.02 (12021708)	3778685.54	0.00076 (12021708)	369733.45	3778685.54	0.00054
369760.06 (10012708)	3778685.54	0.00040 (12021708)	369810.59	3778741.35	0.00025
369828.20 (12112808)	3778628.60	0.00031 (12112808)	369866.96	3778657.96	0.00029
369904.54 (12112808)	3778679.10	0.00028 (12112808)	369858.74	3778708.37	0.00024
369905.71 (12112808)	3778639.08	0.00032 (12112808)	369885.75	3778619.11	0.00035
369638.62 (12112608)	3778030.06	0.00034 (11020208)	369698.03	3778231.80	0.00119
369682.83 (09121608)	3778161.33	0.00056 (09011108)	369653.81	3778099.15	0.00032
369666.25 (12112608)	3778059.08	0.00035 (09121608)	369722.90	3778230.42	0.00129
369715.99 (11112408)	3778190.35	0.00063 (09011108)	369703.56	3778158.57	0.00051
369686.98 (09121608)	3778126.79	0.00037 (09121608)	369675.92	3778097.77	0.00038
369703.56 (11012008)	3778108.82	0.00039 (11112408)	369727.05	3778139.22	0.00056
369903.91	3778552.37	0.00046 (12112808)	369866.61	3778563.43	0.00044

(12112808)	369873.52	3778516.45	0.00057	(12112808)	369887.33	3778491.57	0.00064
(12112808)	369859.70	3778444.59	0.00093	(12112808)	369849.63	3778322.03	0.00272
(12122808)	369643.37	3778672.46	0.00155	(12021708)	369644.15	3778798.32	0.00119
(12021708)	369591.64	3778749.96	0.00056	(12021708)	369640.00	3778638.03	0.00181
(12021708)	369590.26	3778698.83	0.00063	(12021708)	369569.53	3778751.34	0.00044
(12021708)	369621.84	3778549.71	0.00094	(12021708)	369608.62	3778540.93	0.00075
(12021508)	369491.97	3778688.07	0.00027	(12021708)	369551.43	3778498.04	0.00036
(12021508)	369467.11	3778588.61	0.00022	(11121608)	369442.24	3778525.50	0.00022
(09011108)	369426.94	3778653.64	0.00019	(11011108)	369430.77	3778596.26	0.00020
(11121608)	369384.87	3778676.59	0.00017	(11011108)	369398.26	3778498.73	0.00019
(09011108)	369245.26	3778531.24	0.00010	(09010908)	369245.26	3778441.35	0.00012
(11121608)	369484.59	3778462.33	0.00023	(09011108)	369629.21	3778438.68	0.00051
(12021508)	369814.80	3778308.83	0.00541	(11122408)	369781.29	3778368.86	0.00296
(12021708)	369811.05	3778376.63	0.00241	(12112808)	369852.96	3778354.56	0.00202
(08021808)	369860.75	3778292.26	0.00245	(11012408)	369856.21	3778259.16	0.00235
(10020108)							

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS CO \*\*\*  
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**MODELOPTs:	RegDFAULT	CONC	ELEV	FLGPOL	*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CO ***			
					INCLUDING SOURCE(S): L0000504 , L0000505 , L0000506 , L0000507 , L0000508 ,			
	L0000509	, L0000510	, L0000511	, L0000512	, L0000513	, L0000514	, L0000515	,
	L0000516	,						
	L0000517	, L0000518	, L0000519	, L0000520	, L0000521	, L0000522	, L0000523	,
	L0000524	,						
	L0000525	, L0000526	, L0000527	, L0000528	, L0000529	, L0000530	, L0000531	, . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO	IN PPM			**
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						
369670.52	3778388.27	0.00011	(12021508)	369686.20	3778352.98	0.00013
(12021508)						
369701.74	3778534.95	0.00015	(12021708)	369684.96	3778565.24	0.00023m
(12120108)						
369709.39	3778565.24	0.00013	(12021708)	369733.82	3778565.24	0.00009
(12021708)						
369760.43	3778565.24	0.00007	(12021708)	369684.96	3778627.64	0.00018m



(12120108)							
369709.39	3778627.64	0.00011	(12021708)	369733.82	3778627.64	0.00008	
(12021708)							
369760.43	3778627.64	0.00006	(12021708)	369684.56	3778740.79	0.00018m	
(12120108)							
369708.99	3778740.79	0.00009m	(12120108)	369733.42	3778740.79	0.00006m	
(12120108)							
369760.02	3778740.79	0.00004m	(12120108)	369684.59	3778685.54	0.00018m	
(12120108)							
369709.02	3778685.54	0.00010m	(12120108)	369733.45	3778685.54	0.00007	
(12021708)							
369760.06	3778685.54	0.00005	(12021708)	369810.59	3778741.35	0.00003	
(10012708)							
369828.20	3778628.60	0.00004	(12112808)	369866.96	3778657.96	0.00004	
(12112808)							
369904.54	3778679.10	0.00003	(12112808)	369858.74	3778708.37	0.00003	
(12112808)							
369905.71	3778639.08	0.00004	(12112808)	369885.75	3778619.11	0.00004	
(12112808)							
369638.62	3778030.06	0.00004	(11020208)	369698.03	3778231.80	0.00015	
(12112608)							
369682.83	3778161.33	0.00007	(09011108)	369653.81	3778099.15	0.00004	
(09121608)							
369666.25	3778059.08	0.00004	(09121608)	369722.90	3778230.42	0.00016	
(12112608)							
369715.99	3778190.35	0.00008	(09011108)	369703.56	3778158.57	0.00006	
(11112408)							
369686.98	3778126.79	0.00005	(09121608)	369675.92	3778097.77	0.00005	
(09121608)							
369703.56	3778108.82	0.00005	(11112408)	369727.05	3778139.22	0.00007	
(11012008)							
369903.91	3778552.37	0.00006	(12112808)	369866.61	3778563.43	0.00005	
(12112808)							
369873.52	3778516.45	0.00007	(12112808)	369887.33	3778491.57	0.00008	
(12112808)							
369859.70	3778444.59	0.00012	(12112808)	369849.63	3778322.03	0.00045m	
(12120108)							
369643.37	3778672.46	0.00022m	(12120108)	369644.15	3778798.32	0.00018m	
(12120108)							
369591.64	3778749.96	0.00007	(12021708)	369640.00	3778638.03	0.00026m	
(12120108)							
369590.26	3778698.83	0.00008	(12021708)	369569.53	3778751.34	0.00006	
(12021708)							
369621.84	3778549.71	0.00012	(12021708)	369608.62	3778540.93	0.00009	
(12021708)							
369491.97	3778688.07	0.00003	(12021708)	369551.43	3778498.04	0.00005	
(12021508)							
369467.11	3778588.61	0.00003	(11121608)	369442.24	3778525.50	0.00003	
(09011108)							
369426.94	3778653.64	0.00002	(11011108)	369430.77	3778596.26	0.00003	
(11121608)							
369384.87	3778676.59	0.00002	(11011108)	369398.26	3778498.73	0.00002	
(09011108)							
369245.26	3778531.24	0.00001	(09010908)	369245.26	3778441.35	0.00001	
(11121608)							
369484.59	3778462.33	0.00003	(09011108)	369629.21	3778438.68	0.00006	
(12021508)							
369814.80	3778308.83	0.00089m	(12120108)	369781.29	3778368.86	0.00037	
(12021708)							
369811.05	3778376.63	0.00030	(12112808)	369852.96	3778354.56	0.00032m	
(12120108)							
369860.75	3778292.26	0.00031	(11012408)	369856.21	3778259.16	0.00029	
(10020108)							

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000504 , L0000505 , L0000506 , L0000507 ,  
 L0000508 ,  
 L0000509 , L0000510 , L0000511 , L0000512 , L0000513 , L0000514 , L0000515 ,  
 L0000516 ,  
 L0000517 , L0000518 , L0000519 , L0000520 , L0000521 , L0000522 , L0000523 ,  
 L0000524 ,  
 L0000525 , L0000526 , L0000527 , L0000528 , L0000529 , L0000530 , L0000531 , . . .

## \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO		IN PPM		**	
X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
369670.52	3778388.27	0.00011	(12021508)	369686.20	3778352.98	0.00013	
(12021508)							
369701.74	3778534.95	0.00015	(12021708)	369684.96	3778565.24	0.00023m	
(12120108)							
369709.39	3778565.24	0.00013	(12021708)	369733.82	3778565.24	0.00009	
(12021708)							
369760.43	3778565.24	0.00007	(12021708)	369684.96	3778627.64	0.00018m	
(12120108)							
369709.39	3778627.64	0.00011	(12021708)	369733.82	3778627.64	0.00008	
(12021708)							
369760.43	3778627.64	0.00006	(12021708)	369684.56	3778740.79	0.00018m	
(12120108)							
369708.99	3778740.79	0.00009m	(12120108)	369733.42	3778740.79	0.00006m	
(12120108)							
369760.02	3778740.79	0.00004m	(12120108)	369684.59	3778685.54	0.00018m	
(12120108)							
369709.02	3778685.54	0.00010m	(12120108)	369733.45	3778685.54	0.00007	
(12021708)							
369760.06	3778685.54	0.00005	(12021708)	369810.59	3778741.35	0.00003	
(10012708)							
369828.20	3778628.60	0.00004	(12112808)	369866.96	3778657.96	0.00004	
(12112808)							
369904.54	3778679.10	0.00003	(12112808)	369858.74	3778708.37	0.00003	
(12112808)							
369905.71	3778639.08	0.00004	(12112808)	369885.75	3778619.11	0.00004	
(12112808)							
369638.62	3778030.06	0.00004	(11020208)	369698.03	3778231.80	0.00015	
(12112608)							
369682.83	3778161.33	0.00007	(09011108)	369653.81	3778099.15	0.00004	
(09121608)							
369666.25	3778059.08	0.00004	(09121608)	369722.90	3778230.42	0.00016	
(12112608)							
369715.99	3778190.35	0.00008	(09011108)	369703.56	3778158.57	0.00006	
(11112408)							
369686.98	3778126.79	0.00005	(09121608)	369675.92	3778097.77	0.00005	
(09121608)							
369703.56	3778108.82	0.00005	(11112408)	369727.05	3778139.22	0.00007	
(11012008)							
369903.91	3778552.37	0.00006	(12112808)	369866.61	3778563.43	0.00005	

(12112808)							
369873.52	3778516.45	0.00007	(12112808)	369887.33	3778491.57	0.00008	
(12112808)							
369859.70	3778444.59	0.00012	(12112808)	369849.63	3778322.03	0.00045m	
(12120108)							
369643.37	3778672.46	0.00022m	(12120108)	369644.15	3778798.32	0.00018m	
(12120108)							
369591.64	3778749.96	0.00007	(12021708)	369640.00	3778638.03	0.00026m	
(12120108)							
369590.26	3778698.83	0.00008	(12021708)	369569.53	3778751.34	0.00006	
(12021708)							
369621.84	3778549.71	0.00012	(12021708)	369608.62	3778540.93	0.00009	
(12021708)							
369491.97	3778688.07	0.00003	(12021708)	369551.43	3778498.04	0.00005	
(12021508)							
369467.11	3778588.61	0.00003	(11121608)	369442.24	3778525.50	0.00003	
(09011108)							
369426.94	3778653.64	0.00002	(11011108)	369430.77	3778596.26	0.00003	
(11121608)							
369384.87	3778676.59	0.00002	(11011108)	369398.26	3778498.73	0.00002	
(09011108)							
369245.26	3778531.24	0.00001	(09010908)	369245.26	3778441.35	0.00001	
(11121608)							
369484.59	3778462.33	0.00003	(09011108)	369629.21	3778438.68	0.00006	
(12021508)							
369814.80	3778308.83	0.00089m	(12120108)	369781.29	3778368.86	0.00037	
(12021708)							
369811.05	3778376.63	0.00030	(12112808)	369852.96	3778354.56	0.00032m	
(12120108)							
369860.75	3778292.26	0.00031	(11012408)	369856.21	3778259.16	0.00029	
(10020108)							

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

GROUP ID	AVERAGE CONC	DATE	NETWORK	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF
TYPE GRID-ID		(YYMMDDHH)				
CO HIGH 1ST HIGH VALUE IS	0.00541	ON 11122408	AT (	369814.80,	3778308.83,	242.46, 365.00,
0.00) DC						
ALL HIGH 1ST HIGH VALUE IS	0.00541	ON 11122408	AT (	369814.80,	3778308.83,	242.46, 365.00,
0.00) DC						

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 8-HR RESULTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	NETWORK	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF
TYPE GRID-ID					
-----					
-----					

CO HIGH 1ST HIGH VALUE IS 0.00089m ON 12120108: AT ( 369814.80, 3778308.83, 242.46, 365.00, 0.00) DC

ALL HIGH 1ST HIGH VALUE IS 0.00089m ON 12120108: AT ( 369814.80, 3778308.83, 242.46, 365.00, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
GP = GRIDPOLR  
DC = DISCCART  
DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

- A Total of 0 Fatal Error Message(s)
- A Total of 0 Warning Message(s)
- A Total of 1275 Informational Message(s)
- A Total of 43848 Hours Were Processed
- A Total of 13 Calm Hours Identified
- A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*

\*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\BUS NO2\BUS NO2.ADI
**

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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

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CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO OPERATIONAL SCHOOL BUS NO2
MODELOPT DFAULT CONC
AVERTIME 1
URBANOPT 9862049
POLLUTID NO2
FLAGPOLE 0.00
RUNORNOT RUN
ERRORFIL "BUS NO2.ERR"

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CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

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SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC BUS TRAVEL FROM SB ON COLDWATER CANYON FROM US-101
** PREFIX
** LENGTH OF SIDE = 7.32
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.001601
** VERTICAL DIMENSION = 5.00
** SZINIT = 2.33
** NODES = 5
** 369659.167, 3778795.354, 213.00, 0.00, 6.60
** 369656.501, 3778635.361, 222.00, 0.00, 6.60
** 369659.167, 3778598.029, 222.00, 0.00, 6.60
** 369668.500, 3778550.031, 231.00, 0.00, 6.60
** 369672.500, 3778491.366, 240.00, 0.00, 6.60
** -----

```

LOCATION	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000544	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000545	VOLUME	369658.870	3778777.517	214.00
LOCATION L0000546	VOLUME	369658.634	3778763.337	214.80
LOCATION L0000547	VOLUME	369658.397	3778749.157	215.60
LOCATION L0000548	VOLUME	369658.161	3778734.976	216.40
LOCATION L0000549	VOLUME	369657.925	3778720.796	217.19
LOCATION L0000550	VOLUME	369657.688	3778706.616	217.99
LOCATION L0000551	VOLUME	369657.452	3778692.436	218.79
LOCATION L0000552	VOLUME	369657.216	3778678.256	219.59

LOCATION	VOLUME	369656.979	3778664.075	220.38
LOCATION L0000553	VOLUME	369656.979	3778664.075	220.38
LOCATION L0000554	VOLUME	369656.743	3778649.895	221.18
LOCATION L0000555	VOLUME	369656.507	3778635.715	221.98
LOCATION L0000556	VOLUME	369657.486	3778621.568	222.00
LOCATION L0000557	VOLUME	369658.496	3778607.422	222.00
LOCATION L0000558	VOLUME	369660.077	3778593.351	222.88
LOCATION L0000559	VOLUME	369662.784	3778579.430	225.49
LOCATION L0000560	VOLUME	369665.491	3778565.509	228.10
LOCATION L0000561	VOLUME	369668.198	3778551.587	230.71
LOCATION L0000562	VOLUME	369669.357	3778537.463	232.93
LOCATION L0000563	VOLUME	369670.322	3778523.314	235.10
LOCATION L0000564	VOLUME	369671.287	3778509.165	237.27
LOCATION L0000565	VOLUME	369672.251	3778495.015	239.44

\*\* END OF LINE VOLUME SOURCE ID = SLINE1

\*\* -----  
 \*\* LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES

\*\* LINE VOLUME SOURCE ID = SLINE2

\*\* DESCRSRC BUS TRAVEL NB FROM COLDWATER CANYON

\*\* PREFIX

\*\* LENGTH OF SIDE = 7.32

\*\* CONFIGURATION = SEPARATED

\*\* EMISSION RATE = 0.000907

\*\* VERTICAL DIMENSION = 5.00

\*\* SZINIT = 2.33

\*\* NODES = 6

\*\* 369678.850, 3778478.785, 238.00, 0.00, 6.52

\*\* 369680.183, 3778462.785, 238.00, 0.00, 6.52

\*\* 369722.848, 3778362.788, 243.00, 0.00, 6.52

\*\* 369765.514, 3778304.123, 243.00, 0.00, 6.52

\*\* 369774.847, 3778292.124, 243.00, 0.00, 6.52

\*\* 369786.847, 3778261.458, 243.00, 0.00, 6.52

\*\* -----  
 \*\* LOCATION L0000566 VOLUME 369679.153 3778475.140 238.00  
 \*\* LOCATION L0000567 VOLUME 369680.815 3778461.304 238.07  
 \*\* LOCATION L0000568 VOLUME 369686.312 3778448.420 238.72  
 \*\* LOCATION L0000569 VOLUME 369691.809 3778435.537 239.36  
 \*\* LOCATION L0000570 VOLUME 369697.306 3778422.653 240.01  
 \*\* LOCATION L0000571 VOLUME 369702.803 3778409.769 240.65  
 \*\* LOCATION L0000572 VOLUME 369708.301 3778396.885 241.30  
 \*\* LOCATION L0000573 VOLUME 369713.798 3778384.001 241.94  
 \*\* LOCATION L0000574 VOLUME 369719.295 3778371.117 242.58  
 \*\* LOCATION L0000575 VOLUME 369725.761 3778358.783 243.00  
 \*\* LOCATION L0000576 VOLUME 369734.000 3778347.455 243.00  
 \*\* LOCATION L0000577 VOLUME 369742.239 3778336.126 243.00  
 \*\* LOCATION L0000578 VOLUME 369750.478 3778324.798 243.00  
 \*\* LOCATION L0000579 VOLUME 369758.717 3778313.469 243.00  
 \*\* LOCATION L0000580 VOLUME 369767.019 3778302.188 243.00  
 \*\* LOCATION L0000581 VOLUME 369775.305 3778290.953 243.00  
 \*\* LOCATION L0000582 VOLUME 369780.409 3778277.908 243.00  
 \*\* LOCATION L0000583 VOLUME 369785.514 3778264.864 243.00

\*\* END OF LINE VOLUME SOURCE ID = SLINE2

LOCATION AREA AREA 369794.871 3778265.530 242.640

\*\* DESCRSRC BUS SOUTH LOT

\*\* SOURCE PARAMETERS \*\*

\*\* LINE VOLUME SOURCE ID = SLINE1

SRCPARAM	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000544	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000545	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000546	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000547	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000548	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000549	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000550	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000551	0.0000727727	0.00	6.60	2.33
SRCPARAM L0000552	0.0000727727	0.00	6.60	2.33

SRCPARAM	L0000553	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000554	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000555	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000556	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000557	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000558	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000559	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000560	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000561	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000562	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000563	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000564	0.0000727727	0.00	6.60	2.33
SRCPARAM	L0000565	0.0000727727	0.00	6.60	2.33

\*\*

\*\* LINE VOLUME SOURCE ID = SLINE2

SRCPARAM	L0000566	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000567	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000568	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000569	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000570	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000571	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000572	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000573	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000574	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000575	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000576	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000577	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000578	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000579	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000580	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000581	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000582	0.0000503889	0.00	6.52	2.33
SRCPARAM	L0000583	0.0000503889	0.00	6.52	2.33

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SRCPARAM	AREA	9.3815E-08	5.000	33.000	73.000	-27.850
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URBANSRC	L0000544
URBANSRC	L0000545
URBANSRC	L0000546
URBANSRC	L0000547
URBANSRC	L0000548
URBANSRC	L0000549
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URBANSRC	L0000564
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URBANSRC	L0000566
URBANSRC	L0000567
URBANSRC	L0000568
URBANSRC	L0000569
URBANSRC	L0000570
URBANSRC	L0000571
URBANSRC	L0000572



URBANSRC L0000573  
 URBANSRC L0000574  
 URBANSRC L0000575  
 URBANSRC L0000576  
 URBANSRC L0000577  
 URBANSRC L0000578  
 URBANSRC L0000579  
 URBANSRC L0000580  
 URBANSRC L0000581  
 URBANSRC L0000582  
 URBANSRC L0000583  
 URBANSRC AREA

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "NO2"

EMISFACT	L0000566	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000566	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000566	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000566	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000567	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000567	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000567	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000567	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000568	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000568	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000568	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000568	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000569	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000569	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000569	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000569	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000570	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000570	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000570	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000570	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000571	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000571	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000571	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000571	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000572	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000572	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000572	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000572	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000573	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000573	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000573	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000573	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000574	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000574	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000574	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000574	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000575	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000575	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000575	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000575	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000576	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000576	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000576	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000576	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000577	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000577	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000577	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000577	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000578	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	L0000554	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000554	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000554	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000555	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000555	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000555	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000555	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000555	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000556	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000556	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000556	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000556	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000557	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000557	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000557	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000557	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000558	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000558	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000558	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000558	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000559	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000559	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000559	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000559	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000560	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000560	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000560	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000560	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000561	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000561	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000561	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000561	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000562	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000562	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000562	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000562	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000563	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000563	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000563	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000563	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000564	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000564	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000564	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000564	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000565	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000565	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000565	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000565	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
CONCUNIT	531.5 GRAMS/SEC PPM							
SRCGROUP	NO2	L0000544	L0000545	L0000546	L0000547	L0000548	L0000549	
SRCGROUP	NO2	L0000550	L0000551	L0000552	L0000553	L0000554	L0000555	
SRCGROUP	NO2	L0000556	L0000557	L0000558	L0000559	L0000560	L0000561	
SRCGROUP	NO2	L0000562	L0000563	L0000564	L0000565	L0000566	L0000567	
SRCGROUP	NO2	L0000568	L0000569	L0000570	L0000571	L0000572	L0000573	
SRCGROUP	NO2	L0000574	L0000575	L0000576	L0000577	L0000578	L0000579	
SRCGROUP	NO2	L0000580	L0000581	L0000582	L0000583	AREA		
SRCGROUP	ALL							

SO FINISHED

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\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

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\*\*

RE STARTING  
INCLUDED "BUS NO2.ROU"

RE FINISHED  
\*\*

\*\*\*\*\*

\*\* AERMOD METEOROLOGY PATHWAY

\*\*\*\*\*

\*\*  
\*\*

ME STARTING  
SURFFILE ..\..\BURK8.SFC  
PROFFILE ..\..\BURK8.PFL  
SURFDATA 0 2008  
UAIRDATA 3190 2008  
PROFBASE 10.0 METERS

ME FINISHED  
\*\*

\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY

\*\*\*\*\*

\*\*  
\*\*

OU STARTING  
RECTABLE ALLAVE 1ST  
RECTABLE 1 1ST

\*\* AUTO-GENERATED PLOTFILES  
PLOTFILE 1 ALL 1ST "BUS NO2.AD\01H1GALL.PLT" 31  
PLOTFILE 1 NO2 1ST "BUS NO2.AD\01H1G001.PLT" 32  
SUMMFILE "BUS NO2.SUM"

OU FINISHED

\*\*\*\*\*  
\*\*\* SETUP Finishes Successfully \*\*\*  
\*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15  
\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS NO2 \*\*\*  
15:33:10

PAGE 1  
\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

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\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --  
\*\*NO GAS DEPOSITION Data Provided.  
\*\*NO PARTICLE DEPOSITION Data Provided.  
\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F  
\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 41 Source(s),  
for Total of 1 Urban Area(s):  
Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:  
1. Stack-tip Downwash.

- 2. Model Accounts for ELEVated Terrain Effects.
- 3. Use Calms Processing Routine.
- 4. Use Missing Data Processing Routine.
- 5. No Exponential Decay for URBAN/Non-SO2.
- 6. Full Conversion Assumed for NO2.
- 7. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: NO2

\*\*Note that special processing requirements apply for the 1-hour NO2 NAAQS - check available guidance.

Model will process user-specified ranks of daily maximum 1-hour values averaged across the number of years modeled. For annual NO2 NAAQS modeling, the multi-year maximum of PERIOD values can be simulated using the MULTYEAR keyword. Multi-year PERIOD and 1-hour values should only be done in a single model run using the MULTYEAR option with a single multi-year meteorological data file using STARTEND keyword.

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR

\*\*This Run Includes: 41 Source(s); 2 Source Group(s); and 70 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 531.50  
Output Units = PPM

\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.

\*\*Detailed Error/Message File: BUS

NO2.ERR

\*\*File for Summary of Results: BUS

NO2.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
08/25/15  
\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2 \*\*\*  
15:33:10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
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L0000544	0	0.72773E-04	369659.1	3778791.7	213.2	0.00	6.60	2.33	YES	HROFDY
L0000545	0	0.72773E-04	369658.9	3778777.5	214.0	0.00	6.60	2.33	YES	HROFDY
L0000546	0	0.72773E-04	369658.6	3778763.3	214.8	0.00	6.60	2.33	YES	HROFDY
L0000547	0	0.72773E-04	369658.4	3778749.2	215.6	0.00	6.60	2.33	YES	HROFDY
L0000548	0	0.72773E-04	369658.2	3778735.0	216.4	0.00	6.60	2.33	YES	HROFDY
L0000549	0	0.72773E-04	369657.9	3778720.8	217.2	0.00	6.60	2.33	YES	HROFDY
L0000550	0	0.72773E-04	369657.7	3778706.6	218.0	0.00	6.60	2.33	YES	HROFDY
L0000551	0	0.72773E-04	369657.5	3778692.4	218.8	0.00	6.60	2.33	YES	HROFDY
L0000552	0	0.72773E-04	369657.2	3778678.3	219.6	0.00	6.60	2.33	YES	HROFDY
L0000553	0	0.72773E-04	369657.0	3778664.1	220.4	0.00	6.60	2.33	YES	HROFDY
L0000554	0	0.72773E-04	369656.7	3778649.9	221.2	0.00	6.60	2.33	YES	HROFDY
L0000555	0	0.72773E-04	369656.5	3778635.7	222.0	0.00	6.60	2.33	YES	HROFDY
L0000556	0	0.72773E-04	369657.5	3778621.6	222.0	0.00	6.60	2.33	YES	HROFDY
L0000557	0	0.72773E-04	369658.5	3778607.4	222.0	0.00	6.60	2.33	YES	HROFDY
L0000558	0	0.72773E-04	369660.1	3778593.4	222.9	0.00	6.60	2.33	YES	HROFDY
L0000559	0	0.72773E-04	369662.8	3778579.4	225.5	0.00	6.60	2.33	YES	HROFDY
L0000560	0	0.72773E-04	369665.5	3778565.5	228.1	0.00	6.60	2.33	YES	HROFDY
L0000561	0	0.72773E-04	369668.2	3778551.6	230.7	0.00	6.60	2.33	YES	HROFDY
L0000562	0	0.72773E-04	369669.4	3778537.5	232.9	0.00	6.60	2.33	YES	HROFDY
L0000563	0	0.72773E-04	369670.3	3778523.3	235.1	0.00	6.60	2.33	YES	HROFDY
L0000564	0	0.72773E-04	369671.3	3778509.2	237.3	0.00	6.60	2.33	YES	HROFDY
L0000565	0	0.72773E-04	369672.3	3778495.0	239.4	0.00	6.60	2.33	YES	HROFDY
L0000566	0	0.50389E-04	369679.2	3778475.1	238.0	0.00	6.52	2.33	YES	HROFDY
L0000567	0	0.50389E-04	369680.8	3778461.3	238.1	0.00	6.52	2.33	YES	HROFDY
L0000568	0	0.50389E-04	369686.3	3778448.4	238.7	0.00	6.52	2.33	YES	HROFDY
L0000569	0	0.50389E-04	369691.8	3778435.5	239.4	0.00	6.52	2.33	YES	HROFDY
L0000570	0	0.50389E-04	369697.3	3778422.7	240.0	0.00	6.52	2.33	YES	HROFDY
L0000571	0	0.50389E-04	369702.8	3778409.8	240.7	0.00	6.52	2.33	YES	HROFDY
L0000572	0	0.50389E-04	369708.3	3778396.9	241.3	0.00	6.52	2.33	YES	HROFDY
L0000573	0	0.50389E-04	369713.8	3778384.0	241.9	0.00	6.52	2.33	YES	HROFDY
L0000574	0	0.50389E-04	369719.3	3778371.1	242.6	0.00	6.52	2.33	YES	HROFDY
L0000575	0	0.50389E-04	369725.8	3778358.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000576	0	0.50389E-04	369734.0	3778347.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000577	0	0.50389E-04	369742.2	3778336.1	243.0	0.00	6.52	2.33	YES	HROFDY
L0000578	0	0.50389E-04	369750.5	3778324.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000579	0	0.50389E-04	369758.7	3778313.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000580	0	0.50389E-04	369767.0	3778302.2	243.0	0.00	6.52	2.33	YES	HROFDY
L0000581	0	0.50389E-04	369775.3	3778291.0	243.0	0.00	6.52	2.33	YES	HROFDY
L0000582	0	0.50389E-04	369780.4	3778277.9	243.0	0.00	6.52	2.33	YES	HROFDY
L0000583	0	0.50389E-04	369785.5	3778264.9	243.0	0.00	6.52	2.33	YES	HROFDY

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\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2

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\*\*MODELOPts: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREA SOURCE DATA \*\*\*

SOURCE	PART.	EMISSION RATE (USER UNITS)	COORD (SW CORNER) X	COORD (SW CORNER) Y	BASE ELEV.	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ	URBAN SOURCE
AREA	0	0.93815E-07	369794.9	3778265.5	242.6	5.00	33.00	73.00	-27.85	0.00	YES

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

Operational-Bus Activity

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
-----	-----
NO2 L0000551	L0000544 , L0000545 , L0000546 , L0000547 , L0000548 , L0000549 , L0000550 , L0000551 ,
	L0000552 , L0000553 , L0000554 , L0000555 , L0000556 , L0000557 , L0000558 , L0000559 ,
	L0000560 , L0000561 , L0000562 , L0000563 , L0000564 , L0000565 , L0000566 , L0000567 ,
	L0000568 , L0000569 , L0000570 , L0000571 , L0000572 , L0000573 , L0000574 , L0000575 ,
	L0000576 , L0000577 , L0000578 , L0000579 , L0000580 , L0000581 , L0000582 , L0000583 ,
	AREA ,
ALL L0000551	L0000544 , L0000545 , L0000546 , L0000547 , L0000548 , L0000549 , L0000550 , L0000551 ,
	L0000552 , L0000553 , L0000554 , L0000555 , L0000556 , L0000557 , L0000558 , L0000559 ,
	L0000560 , L0000561 , L0000562 , L0000563 , L0000564 , L0000565 , L0000566 , L0000567 ,
	L0000568 , L0000569 , L0000570 , L0000571 , L0000572 , L0000573 , L0000574 , L0000575 ,
	L0000576 , L0000577 , L0000578 , L0000579 , L0000580 , L0000581 , L0000582 , L0000583 ,
	AREA ,

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
	9862049.	L0000544 , L0000545 , L0000546 , L0000547 , L0000548 , L0000549 , L0000550 ,

L0000551 ,  
 L0000552 , L0000553 , L0000554 , L0000555 , L0000556 , L0000557 , L0000558 ,  
 L0000559 ,  
 L0000560 , L0000561 , L0000562 , L0000563 , L0000564 , L0000565 , L0000566 ,  
 L0000567 ,  
 L0000568 , L0000569 , L0000570 , L0000571 , L0000572 , L0000573 , L0000574 ,  
 L0000575 ,  
 L0000576 , L0000577 , L0000578 , L0000579 , L0000580 , L0000581 , L0000582 ,  
 L0000583 ,

AREA ,

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000544 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000545 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000546 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000547 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000548 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00



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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000549 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000550 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000551 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000552 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000553 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-----											
-----											

SOURCE ID = L0000554 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000555 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000556 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000557 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000558 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000559 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000560 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000561 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000562 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000563 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000564 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000565 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000566 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000567 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000568 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
---	------------	---	------------	---	------------	---	------------	---	------------	---	------------

7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000569 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000570 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000571 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000572 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000573 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000574 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000575 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000576 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000577 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000578 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS NO2 \*\*\*  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SOURCE ID = L0000579	; SOURCE TYPE = VOLUME :																						
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000580 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000581 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000582 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000583 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS NO2 \*\*\*  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = AREA ; SOURCE TYPE = AREA :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
 (METERS)

( 369670.5, 3778388.3,	238.9,	365.0,	0.0);	( 369686.2, 3778353.0,	240.4,	365.0,	0.0);
( 369701.7, 3778534.9,	224.8,	365.0,	0.0);	( 369685.0, 3778565.2,	221.3,	365.0,	0.0);
( 369709.4, 3778565.2,	220.8,	365.0,	0.0);	( 369733.8, 3778565.2,	220.3,	365.0,	0.0);
( 369760.4, 3778565.2,	219.9,	365.0,	0.0);	( 369685.0, 3778627.6,	216.1,	365.0,	0.0);

( 369709.4, 3778627.6, 215.9, 365.0, 0.0);	( 369733.8, 3778627.6, 215.7, 365.0, 0.0);
( 369760.4, 3778627.6, 215.5, 365.0, 0.0);	( 369684.6, 3778740.8, 212.4, 365.0, 0.0);
( 369709.0, 3778740.8, 212.3, 365.0, 0.0);	( 369733.4, 3778740.8, 212.3, 365.0, 0.0);
( 369760.0, 3778740.8, 212.3, 365.0, 0.0);	( 369684.6, 3778685.5, 212.9, 365.0, 0.0);
( 369709.0, 3778685.5, 212.9, 365.0, 0.0);	( 369733.5, 3778685.5, 212.9, 365.0, 0.0);
( 369760.1, 3778685.5, 212.9, 365.0, 0.0);	( 369810.6, 3778741.3, 212.1, 365.0, 0.0);
( 369828.2, 3778628.6, 214.6, 365.0, 0.0);	( 369867.0, 3778658.0, 212.8, 365.0, 0.0);
( 369904.5, 3778679.1, 212.0, 365.0, 0.0);	( 369858.7, 3778708.4, 212.0, 365.0, 0.0);
( 369905.7, 3778639.1, 214.2, 365.0, 0.0);	( 369885.8, 3778619.1, 215.4, 365.0, 0.0);
( 369638.6, 3778030.1, 269.3, 365.0, 0.0);	( 369698.0, 3778231.8, 243.0, 365.0, 0.0);
( 369682.8, 3778161.3, 247.8, 365.0, 0.0);	( 369653.8, 3778099.1, 252.5, 365.0, 0.0);
( 369666.2, 3778059.1, 259.1, 365.0, 0.0);	( 369722.9, 3778230.4, 242.9, 365.0, 0.0);
( 369716.0, 3778190.3, 244.4, 365.0, 0.0);	( 369703.6, 3778158.6, 247.2, 365.0, 0.0);
( 369687.0, 3778126.8, 251.1, 365.0, 0.0);	( 369675.9, 3778097.8, 253.5, 365.0, 0.0);
( 369703.6, 3778108.8, 251.0, 365.0, 0.0);	( 369727.0, 3778139.2, 247.0, 365.0, 0.0);
( 369903.9, 3778552.4, 223.0, 365.0, 0.0);	( 369866.6, 3778563.4, 219.9, 365.0, 0.0);
( 369873.5, 3778516.4, 227.5, 365.0, 0.0);	( 369887.3, 3778491.6, 232.5, 365.0, 0.0);
( 369859.7, 3778444.6, 236.3, 304.0, 0.0);	( 369849.6, 3778322.0, 243.9, 365.0, 0.0);
( 369643.4, 3778672.5, 213.2, 365.0, 0.0);	( 369644.1, 3778798.3, 212.1, 365.0, 0.0);
( 369591.6, 3778750.0, 213.4, 365.0, 0.0);	( 369640.0, 3778638.0, 216.2, 365.0, 0.0);
( 369590.3, 3778698.8, 214.8, 365.0, 0.0);	( 369569.5, 3778751.3, 213.8, 365.0, 0.0);
( 369621.8, 3778549.7, 225.0, 365.0, 0.0);	( 369608.6, 3778540.9, 226.6, 365.0, 0.0);
( 369492.0, 3778688.1, 228.6, 365.0, 0.0);	( 369551.4, 3778498.0, 236.0, 365.0, 0.0);
( 369467.1, 3778588.6, 240.7, 365.0, 0.0);	( 369442.2, 3778525.5, 243.2, 365.0, 0.0);
( 369426.9, 3778653.6, 236.6, 365.0, 0.0);	( 369430.8, 3778596.3, 241.5, 365.0, 0.0);
( 369384.9, 3778676.6, 233.1, 365.0, 0.0);	( 369398.3, 3778498.7, 243.2, 365.0, 0.0);
( 369245.3, 3778531.2, 233.6, 365.0, 0.0);	( 369245.3, 3778441.3, 240.3, 365.0, 0.0);
( 369484.6, 3778462.3, 244.4, 365.0, 0.0);	( 369629.2, 3778438.7, 235.7, 365.0, 17.4);
( 369814.8, 3778308.8, 242.5, 365.0, 0.0);	( 369781.3, 3778368.9, 239.6, 365.0, 0.0);
( 369811.0, 3778376.6, 240.3, 365.0, 0.0);	( 369853.0, 3778354.6, 243.2, 365.0, 0.0);
( 369860.8, 3778292.3, 246.5, 304.0, 0.0);	( 369856.2, 3778259.2, 245.7, 365.0, 0.0);





YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2  
 15:33:10

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE 1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP:  
 NO2 \*\*\*

INCLUDING SOURCE(S):		L0000544	L0000545	L0000546	L0000547
L0000549	L0000550	L0000551	L0000552	L0000553	L0000554
L0000556	L0000557	L0000558	L0000559	L0000560	L0000561
L0000564	L0000565	L0000566	L0000567	L0000568	L0000569
				L0000570	L0000571

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00027	369686.20	3778352.98	0.00027
369701.74	3778534.95	0.00032	369684.96	3778565.24	

0.00049				
369709.39	3778565.24	0.00026	369733.82	3778565.24
0.00017				
369760.43	3778565.24	0.00013	369684.96	3778627.64
0.00039				
369709.39	3778627.64	0.00023	369733.82	3778627.64
0.00016				
369760.43	3778627.64	0.00012	369684.56	3778740.79
0.00038				
369708.99	3778740.79	0.00020	369733.42	3778740.79
0.00013				
369760.02	3778740.79	0.00010	369684.59	3778685.54
0.00037				
369709.02	3778685.54	0.00022	369733.45	3778685.54
0.00015				
369760.06	3778685.54	0.00011	369810.59	3778741.35
0.00006				
369828.20	3778628.60	0.00007	369866.96	3778657.96
0.00005				
369904.54	3778679.10	0.00004	369858.74	3778708.37
0.00005				
369905.71	3778639.08	0.00005	369885.75	3778619.11
0.00005				
369638.62	3778030.06	0.00005	369698.03	3778231.80
0.00014				
369682.83	3778161.33	0.00008	369653.81	3778099.15
0.00006				
369666.25	3778059.08	0.00007	369722.90	3778230.42
0.00017				
369715.99	3778190.35	0.00013	369703.56	3778158.57
0.00011				
369686.98	3778126.79	0.00008	369675.92	3778097.77
0.00007				
369703.56	3778108.82	0.00009	369727.05	3778139.22
0.00012				
369903.91	3778552.37	0.00006	369866.61	3778563.43
0.00007				
369873.52	3778516.45	0.00007	369887.33	3778491.57
0.00008				
369859.70	3778444.59	0.00011	369849.63	3778322.03
0.00027				
369643.37	3778672.46	0.00047	369644.15	3778798.32
0.00037				
369591.64	3778749.96	0.00015	369640.00	3778638.03
0.00056				
369590.26	3778698.83	0.00017	369569.53	3778751.34
0.00011				
369621.84	3778549.71	0.00025	369608.62	3778540.93
0.00020				
369491.97	3778688.07	0.00006	369551.43	3778498.04
0.00009				
369467.11	3778588.61	0.00006	369442.24	3778525.50
0.00006				
369426.94	3778653.64	0.00005	369430.77	3778596.26
0.00005				
369384.87	3778676.59	0.00004	369398.26	3778498.73
0.00005				
369245.26	3778531.24	0.00002	369245.26	3778441.35
0.00003				
369484.59	3778462.33	0.00006	369629.21	3778438.68
0.00009				
369814.80	3778308.83	0.00055	369781.29	3778368.86
0.00032				
369811.05	3778376.63	0.00023	369852.96	3778354.56

0.00020  
 369860.75 3778292.26 0.00023 369856.21 3778259.16  
 0.00025

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2 \*\*\*  
 15:33:10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP:  
 ALL \*\*\*

INCLUDING SOURCE(S): L0000544 , L0000545 , L0000546 , L0000547 ,  
 L0000548 ,  
 L0000549 , L0000550 , L0000551 , L0000552 , L0000553 , L0000554 , L0000555 ,  
 L0000556 ,  
 L0000557 , L0000558 , L0000559 , L0000560 , L0000561 , L0000562 , L0000563 ,  
 L0000564 ,  
 L0000565 , L0000566 , L0000567 , L0000568 , L0000569 , L0000570 , L0000571 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00027	369686.20	3778352.98	
0.00027					
369701.74	3778534.95	0.00032	369684.96	3778565.24	
0.00049					
369709.39	3778565.24	0.00026	369733.82	3778565.24	
0.00017					
369760.43	3778565.24	0.00013	369684.96	3778627.64	
0.00039					
369709.39	3778627.64	0.00023	369733.82	3778627.64	
0.00016					
369760.43	3778627.64	0.00012	369684.56	3778740.79	
0.00038					
369708.99	3778740.79	0.00020	369733.42	3778740.79	
0.00013					
369760.02	3778740.79	0.00010	369684.59	3778685.54	
0.00037					
369709.02	3778685.54	0.00022	369733.45	3778685.54	
0.00015					
369760.06	3778685.54	0.00011	369810.59	3778741.35	
0.00006					
369828.20	3778628.60	0.00007	369866.96	3778657.96	
0.00005					
369904.54	3778679.10	0.00004	369858.74	3778708.37	
0.00005					
369905.71	3778639.08	0.00005	369885.75	3778619.11	
0.00005					
369638.62	3778030.06	0.00005	369698.03	3778231.80	
0.00014					
369682.83	3778161.33	0.00008	369653.81	3778099.15	
0.00006					
369666.25	3778059.08	0.00007	369722.90	3778230.42	
0.00017					
369715.99	3778190.35	0.00013	369703.56	3778158.57	
0.00011					
369686.98	3778126.79	0.00008	369675.92	3778097.77	

0.00007					
369703.56	3778108.82	0.00009		369727.05	3778139.22
0.00012					
369903.91	3778552.37	0.00006		369866.61	3778563.43
0.00007					
369873.52	3778516.45	0.00007		369887.33	3778491.57
0.00008					
369859.70	3778444.59	0.00011		369849.63	3778322.03
0.00027					
369643.37	3778672.46	0.00047		369644.15	3778798.32
0.00037					
369591.64	3778749.96	0.00015		369640.00	3778638.03
0.00056					
369590.26	3778698.83	0.00017		369569.53	3778751.34
0.00011					
369621.84	3778549.71	0.00025		369608.62	3778540.93
0.00020					
369491.97	3778688.07	0.00006		369551.43	3778498.04
0.00009					
369467.11	3778588.61	0.00006		369442.24	3778525.50
0.00006					
369426.94	3778653.64	0.00005		369430.77	3778596.26
0.00005					
369384.87	3778676.59	0.00004		369398.26	3778498.73
0.00005					
369245.26	3778531.24	0.00002		369245.26	3778441.35
0.00003					
369484.59	3778462.33	0.00006		369629.21	3778438.68
0.00009					
369814.80	3778308.83	0.00055		369781.29	3778368.86
0.00032					
369811.05	3778376.63	0.00023		369852.96	3778354.56
0.00020					
369860.75	3778292.26	0.00023		369856.21	3778259.16
0.00025					

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2 \*\*\*  
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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM 1ST-HIGHEST MAX DAILY 1-HR RESULTS AVERAGED OVER 5 YEARS \*\*\*

		** CONC OF NO2	IN PPM				**	
GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
NO2	1ST HIGHEST VALUE IS	0.00056	AT (	369640.00,	3778638.03,	216.15,	365.00,	0.00) DC
	2ND HIGHEST VALUE IS	0.00055	AT (	369814.80,	3778308.83,	242.46,	365.00,	0.00) DC
	3RD HIGHEST VALUE IS	0.00049	AT (	369684.96,	3778565.24,	221.28,	365.00,	0.00) DC
	4TH HIGHEST VALUE IS	0.00047	AT (	369643.37,	3778672.46,	213.15,	365.00,	0.00) DC
	5TH HIGHEST VALUE IS	0.00039	AT (	369684.96,	3778627.64,	216.12,	365.00,	0.00) DC
	6TH HIGHEST VALUE IS	0.00038	AT (	369684.56,	3778740.79,	212.36,	365.00,	0.00) DC
	7TH HIGHEST VALUE IS	0.00037	AT (	369684.59,	3778685.54,	212.89,	365.00,	0.00) DC
	8TH HIGHEST VALUE IS	0.00037	AT (	369644.15,	3778798.32,	212.09,	365.00,	0.00) DC
	9TH HIGHEST VALUE IS	0.00032	AT (	369781.29,	3778368.86,	239.64,	365.00,	0.00) DC
	10TH HIGHEST VALUE IS	0.00032	AT (	369701.74,	3778534.95,	224.77,	365.00,	0.00) DC
ALL	1ST HIGHEST VALUE IS	0.00056	AT (	369640.00,	3778638.03,	216.15,	365.00,	0.00) DC

Rank	Value	IS	AT	(	X	,	Y	,	Z	,	DC
2ND HIGHEST	0.00055	AT	(	369814.80,	3778308.83,	242.46,	365.00,	0.00)	DC		
3RD HIGHEST	0.00049	AT	(	369684.96,	3778565.24,	221.28,	365.00,	0.00)	DC		
4TH HIGHEST	0.00047	AT	(	369643.37,	3778672.46,	213.15,	365.00,	0.00)	DC		
5TH HIGHEST	0.00039	AT	(	369684.96,	3778627.64,	216.12,	365.00,	0.00)	DC		
6TH HIGHEST	0.00038	AT	(	369684.56,	3778740.79,	212.36,	365.00,	0.00)	DC		
7TH HIGHEST	0.00037	AT	(	369684.59,	3778685.54,	212.89,	365.00,	0.00)	DC		
8TH HIGHEST	0.00037	AT	(	369644.15,	3778798.32,	212.09,	365.00,	0.00)	DC		
9TH HIGHEST	0.00032	AT	(	369781.29,	3778368.86,	239.64,	365.00,	0.00)	DC		
10TH HIGHEST	0.00032	AT	(	369701.74,	3778534.95,	224.77,	365.00,	0.00)	DC		

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS NO2  
 15:33:10

\*\*\*

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 0 Warning Message(s)  
 A Total of 1275 Informational Message(s)  
 A Total of 43848 Hours Were Processed  
 A Total of 13 Calm Hours Identified  
 A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

\*\*\*\*\*  
 \*\*\* AERMOD Finishes Successfully \*\*\*  
 \*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\BUS PM10\BUS PM10.ADI
**

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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

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CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO OPERATIONAL SCHOOL BUS PM10
MODELOPT DFAULT CONC
AVERTIME 24 ANNUAL
URBANOPT 9862049
POLLUTID PM_10
FLAGPOLE 0.00
RUNORNOT RUN
ERRORFIL "BUS PM10.ERR"

```

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CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC BUS TRAVEL FROM SB ON COLDWATER CANYON FROM US-101
** PREFIX
** LENGTH OF SIDE = 7.32
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.000091
** VERTICAL DIMENSION = 5.00
** SZINIT = 2.33
** NODES = 5
** 369659.167, 3778795.354, 213.00, 0.00, 6.60
** 369656.501, 3778635.361, 222.00, 0.00, 6.60
** 369659.167, 3778598.029, 222.00, 0.00, 6.60
** 369668.500, 3778550.031, 231.00, 0.00, 6.60
** 369672.500, 3778491.366, 240.00, 0.00, 6.60
** -----

```

LOCATION	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000380	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000381	VOLUME	369658.870	3778777.517	214.00
LOCATION L0000382	VOLUME	369658.634	3778763.337	214.80
LOCATION L0000383	VOLUME	369658.397	3778749.157	215.60
LOCATION L0000384	VOLUME	369658.161	3778734.976	216.40
LOCATION L0000385	VOLUME	369657.925	3778720.796	217.19
LOCATION L0000386	VOLUME	369657.688	3778706.616	217.99
LOCATION L0000387	VOLUME	369657.452	3778692.436	218.79
LOCATION L0000388	VOLUME	369657.216	3778678.256	219.59

LOCATION	VOLUME				
L0000389	369656.979	3778664.075	220.38		
L0000390	369656.743	3778649.895	221.18		
L0000391	369656.507	3778635.715	221.98		
L0000392	369657.486	3778621.568	222.00		
L0000393	369658.496	3778607.422	222.00		
L0000394	369660.077	3778593.351	222.88		
L0000395	369662.784	3778579.430	225.49		
L0000396	369665.491	3778565.509	228.10		
L0000397	369668.198	3778551.587	230.71		
L0000398	369669.357	3778537.463	232.93		
L0000399	369670.322	3778523.314	235.10		
L0000400	369671.287	3778509.165	237.27		
L0000401	369672.251	3778495.015	239.44		

\*\* END OF LINE VOLUME SOURCE ID = SLINE1

\*\* -----

\*\* LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES

\*\* LINE VOLUME SOURCE ID = SLINE2

\*\* DESCRSRC BUS TRAVEL SB FROM COLDWATER CANYON

\*\* PREFIX

\*\* LENGTH OF SIDE = 7.32

\*\* CONFIGURATION = SEPARATED

\*\* EMISSION RATE = 0.00003

\*\* VERTICAL DIMENSION = 5.00

\*\* SZINIT = 2.33

\*\* NODES = 6

- \*\* 369678.850, 3778478.785, 238.00, 0.00, 6.52
- \*\* 369680.183, 3778462.785, 238.00, 0.00, 6.52
- \*\* 369722.848, 3778362.788, 243.00, 0.00, 6.52
- \*\* 369765.514, 3778304.123, 243.00, 0.00, 6.52
- \*\* 369774.847, 3778292.124, 243.00, 0.00, 6.52
- \*\* 369786.847, 3778261.458, 243.00, 0.00, 6.52

\*\* -----

LOCATION	VOLUME				
L0000424	369679.153	3778475.140	238.00		
L0000425	369680.815	3778461.304	238.07		
L0000426	369686.312	3778448.420	238.72		
L0000427	369691.809	3778435.537	239.36		
L0000428	369697.306	3778422.653	240.01		
L0000429	369702.803	3778409.769	240.65		
L0000430	369708.301	3778396.885	241.30		
L0000431	369713.798	3778384.001	241.94		
L0000432	369719.295	3778371.117	242.58		
L0000433	369725.761	3778358.783	243.00		
L0000434	369734.000	3778347.455	243.00		
L0000435	369742.239	3778336.126	243.00		
L0000436	369750.478	3778324.798	243.00		
L0000437	369758.717	3778313.469	243.00		
L0000438	369767.019	3778302.188	243.00		
L0000439	369775.305	3778290.953	243.00		
L0000440	369780.409	3778277.908	243.00		
L0000441	369785.514	3778264.864	243.00		

\*\* END OF LINE VOLUME SOURCE ID = SLINE2

LOCATION AREA	AREA				
	369794.871	3778265.530	242.640		

\*\* DESCRSRC BUS SOUTH LOT

\*\* SOURCE PARAMETERS \*\*

\*\* LINE VOLUME SOURCE ID = SLINE1

SRCPARAM					
L0000380	0.000004136	0.00	6.60	2.33	
L0000381	0.000004136	0.00	6.60	2.33	
L0000382	0.000004136	0.00	6.60	2.33	
L0000383	0.000004136	0.00	6.60	2.33	
L0000384	0.000004136	0.00	6.60	2.33	
L0000385	0.000004136	0.00	6.60	2.33	
L0000386	0.000004136	0.00	6.60	2.33	
L0000387	0.000004136	0.00	6.60	2.33	
L0000388	0.000004136	0.00	6.60	2.33	

SRCPARAM	L0000389	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000390	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000391	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000392	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000393	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000394	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000395	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000396	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000397	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000398	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000399	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000400	0.000004136	0.00	6.60	2.33
SRCPARAM	L0000401	0.000004136	0.00	6.60	2.33

\*\* -----

\*\* LINE VOLUME SOURCE ID = SLINE2

SRCPARAM	L0000424	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000425	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000426	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000427	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000428	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000429	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000430	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000431	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000432	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000433	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000434	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000435	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000436	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000437	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000438	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000439	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000440	0.000001667	0.00	6.52	2.33
SRCPARAM	L0000441	0.000001667	0.00	6.52	2.33

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SRCPARAM	AREA	1.2453E-09	5.000	33.000	73.000	-27.850
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- URBANSRC L0000380
- URBANSRC L0000381
- URBANSRC L0000382
- URBANSRC L0000383
- URBANSRC L0000384
- URBANSRC L0000385
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- URBANSRC L0000400
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- URBANSRC L0000424
- URBANSRC L0000425
- URBANSRC L0000426
- URBANSRC L0000427
- URBANSRC L0000428
- URBANSRC L0000429
- URBANSRC L0000430



URBANSRC L0000431  
 URBANSRC L0000432  
 URBANSRC L0000433  
 URBANSRC L0000434  
 URBANSRC L0000435  
 URBANSRC L0000436  
 URBANSRC L0000437  
 URBANSRC L0000438  
 URBANSRC L0000439  
 URBANSRC L0000440  
 URBANSRC L0000441  
 URBANSRC AREA

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "BUS"

EMISFACT	L0000424	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000424	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000424	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000424	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000425	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000425	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000425	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000425	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000426	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000426	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000426	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000426	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000427	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000427	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000427	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000427	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000428	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000428	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000428	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000428	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000429	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000429	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000429	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000429	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000430	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000430	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000430	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000430	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000431	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000431	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000431	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000431	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000432	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000432	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000432	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000432	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000433	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000433	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000433	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000433	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000434	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000434	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000434	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000434	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000435	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000435	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000435	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000435	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000436	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	L0000390	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000390	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000390	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000391	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000391	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000391	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000391	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000392	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000392	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000392	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000392	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000393	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000393	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000393	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000393	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000394	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000394	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000394	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000394	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000395	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000395	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000395	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000395	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000396	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000396	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000396	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000396	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000397	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000397	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000397	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000397	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000398	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000398	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000398	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000398	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000399	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000399	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000399	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000399	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000400	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000400	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000400	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000400	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000401	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000401	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000401	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000401	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
SRCGROUP	PM10	L0000380	L0000381	L0000382	L0000383	L0000384	L0000385	
SRCGROUP	PM10	L0000386	L0000387	L0000388	L0000389	L0000390	L0000391	
SRCGROUP	PM10	L0000392	L0000393	L0000394	L0000395	L0000396	L0000397	
SRCGROUP	PM10	L0000398	L0000399	L0000400	L0000401	L0000424	L0000425	
SRCGROUP	PM10	L0000426	L0000427	L0000428	L0000429	L0000430	L0000431	
SRCGROUP	PM10	L0000432	L0000433	L0000434	L0000435	L0000436	L0000437	
SRCGROUP	PM10	L0000438	L0000439	L0000440	L0000441	AREA		
SRCGROUP	ALL							

SO FINISHED

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\*\* AERMOD RECEPTOR PATHWAY

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\*\*  
 \*\*  
 RE STARTING  
   INCLUDED "BUS PM10.ROU"  
 RE FINISHED  
 \*\*

\*\*\*\*\*  
 \*\* AERMOD METEOROLOGY PATHWAY  
 \*\*\*\*\*  
 \*\*  
 \*\*

ME STARTING  
   SURFFILE ..\..\BURK8.SFC  
   PROFFILE ..\..\BURK8.PFL  
   SURFDATA 0 2008  
   UAIRDATA 3190 2008  
   PROFBASE 10.0 METERS

ME FINISHED  
 \*\*  
 \*\*\*\*\*  
 \*\* AERMOD OUTPUT PATHWAY  
 \*\*\*\*\*  
 \*\*  
 \*\*

OU STARTING  
   RECTABLE ALLAVE 1ST  
   RECTABLE 24 1ST  
 \*\* AUTO-GENERATED PLOTFILES  
   PLOTFILE 24 ALL 1ST "BUS PM10.AD\24H1GALL.PLT" 31  
   PLOTFILE 24 PM10 1ST "BUS PM10.AD\24H1G001.PLT" 32  
   PLOTFILE ANNUAL ALL "BUS PM10.AD\AN00GALL.PLT" 33  
   PLOTFILE ANNUAL PM10 "BUS PM10.AD\AN00G000.PLT" 34  
   SUMMFILE "BUS PM10.SUM"  
 OU FINISHED

\*\*\*\*\*  
 \*\*\* SETUP Finishes Successfully \*\*\*  
 \*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\*   \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\*           08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\*   \*\*\* OPERATIONAL SCHOOL BUS PM10                           \*\*\*  
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 \*\*MODELOPTs:   RegDEFAULT CONC           ELEV           FLGPOL

\*\*\*                   MODEL SETUP OPTIONS SUMMARY                   \*\*\*

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 ---  
 \*\*Model Is Setup For Calculation of Average CONcentration Values.

-- DEPOSITION LOGIC --  
 \*\*NO GAS DEPOSITION Data Provided.  
 \*\*NO PARTICLE DEPOSITION Data Provided.  
 \*\*Model Uses NO DRY DEPLETION.   DRYDPLT = F  
 \*\*Model Uses NO WET DEPLETION.   WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for   41 Source(s),  
 for Total of    1 Urban Area(s):  
   Urban Population =   9862049.0 ;   Urban Roughness Length =   1.000 m

\*\*Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM10

\*\*Model Calculates 1 Short Term Average(s) of: 24-HR  
and Calculates ANNUAL Averages

\*\*This Run Includes: 41 Source(s); 2 Source Group(s); and 70 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

- Model Outputs Tables of ANNUAL Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.

\*\*Detailed Error/Message File: BUS  
PM10.ERR

\*\*File for Summary of Results: BUS  
PM10.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000380	0	0.41360E-05	369659.1	3778791.7	213.2	0.00	6.60	2.33	YES	HROFDY
L0000381	0	0.41360E-05	369658.9	3778777.5	214.0	0.00	6.60	2.33	YES	HROFDY
L0000382	0	0.41360E-05	369658.6	3778763.3	214.8	0.00	6.60	2.33	YES	HROFDY

L0000383	0	0.41360E-05	369658.4	3778749.2	215.6	0.00	6.60	2.33	YES	HROFDY
L0000384	0	0.41360E-05	369658.2	3778735.0	216.4	0.00	6.60	2.33	YES	HROFDY
L0000385	0	0.41360E-05	369657.9	3778720.8	217.2	0.00	6.60	2.33	YES	HROFDY
L0000386	0	0.41360E-05	369657.7	3778706.6	218.0	0.00	6.60	2.33	YES	HROFDY
L0000387	0	0.41360E-05	369657.5	3778692.4	218.8	0.00	6.60	2.33	YES	HROFDY
L0000388	0	0.41360E-05	369657.2	3778678.3	219.6	0.00	6.60	2.33	YES	HROFDY
L0000389	0	0.41360E-05	369657.0	3778664.1	220.4	0.00	6.60	2.33	YES	HROFDY
L0000390	0	0.41360E-05	369656.7	3778649.9	221.2	0.00	6.60	2.33	YES	HROFDY
L0000391	0	0.41360E-05	369656.5	3778635.7	222.0	0.00	6.60	2.33	YES	HROFDY
L0000392	0	0.41360E-05	369657.5	3778621.6	222.0	0.00	6.60	2.33	YES	HROFDY
L0000393	0	0.41360E-05	369658.5	3778607.4	222.0	0.00	6.60	2.33	YES	HROFDY
L0000394	0	0.41360E-05	369660.1	3778593.4	222.9	0.00	6.60	2.33	YES	HROFDY
L0000395	0	0.41360E-05	369662.8	3778579.4	225.5	0.00	6.60	2.33	YES	HROFDY
L0000396	0	0.41360E-05	369665.5	3778565.5	228.1	0.00	6.60	2.33	YES	HROFDY
L0000397	0	0.41360E-05	369668.2	3778551.6	230.7	0.00	6.60	2.33	YES	HROFDY
L0000398	0	0.41360E-05	369669.4	3778537.5	232.9	0.00	6.60	2.33	YES	HROFDY
L0000399	0	0.41360E-05	369670.3	3778523.3	235.1	0.00	6.60	2.33	YES	HROFDY
L0000400	0	0.41360E-05	369671.3	3778509.2	237.3	0.00	6.60	2.33	YES	HROFDY
L0000401	0	0.41360E-05	369672.3	3778495.0	239.4	0.00	6.60	2.33	YES	HROFDY
L0000424	0	0.16670E-05	369679.2	3778475.1	238.0	0.00	6.52	2.33	YES	HROFDY
L0000425	0	0.16670E-05	369680.8	3778461.3	238.1	0.00	6.52	2.33	YES	HROFDY
L0000426	0	0.16670E-05	369686.3	3778448.4	238.7	0.00	6.52	2.33	YES	HROFDY
L0000427	0	0.16670E-05	369691.8	3778435.5	239.4	0.00	6.52	2.33	YES	HROFDY
L0000428	0	0.16670E-05	369697.3	3778422.7	240.0	0.00	6.52	2.33	YES	HROFDY
L0000429	0	0.16670E-05	369702.8	3778409.8	240.7	0.00	6.52	2.33	YES	HROFDY
L0000430	0	0.16670E-05	369708.3	3778396.9	241.3	0.00	6.52	2.33	YES	HROFDY
L0000431	0	0.16670E-05	369713.8	3778384.0	241.9	0.00	6.52	2.33	YES	HROFDY
L0000432	0	0.16670E-05	369719.3	3778371.1	242.6	0.00	6.52	2.33	YES	HROFDY
L0000433	0	0.16670E-05	369725.8	3778358.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000434	0	0.16670E-05	369734.0	3778347.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000435	0	0.16670E-05	369742.2	3778336.1	243.0	0.00	6.52	2.33	YES	HROFDY
L0000436	0	0.16670E-05	369750.5	3778324.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000437	0	0.16670E-05	369758.7	3778313.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000438	0	0.16670E-05	369767.0	3778302.2	243.0	0.00	6.52	2.33	YES	HROFDY
L0000439	0	0.16670E-05	369775.3	3778291.0	243.0	0.00	6.52	2.33	YES	HROFDY
L0000440	0	0.16670E-05	369780.4	3778277.9	243.0	0.00	6.52	2.33	YES	HROFDY
L0000441	0	0.16670E-05	369785.5	3778264.9	243.0	0.00	6.52	2.33	YES	HROFDY

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREA SOURCE DATA \*\*\*

SOURCE	PART.	EMISSION RATE (GRAMS/SEC)	COORD (SW CORNER) X	COORD (SW CORNER) Y	BASE ELEV.	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ	URBAN SOURCE
--------	-------	---------------------------	---------------------	---------------------	------------	-------------------------	------------------------	------------------------	------------------------	----------	--------------

AREA	0	0.12453E-08	369794.9	3778265.5	242.6	5.00	33.00	73.00	-27.85	0.00	YES
------	---	-------------	----------	-----------	-------	------	-------	-------	--------	------	-----

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\*\*\*

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs													
-----	-----													
PM10 L0000387	L0000380	,	L0000381	,	L0000382	,	L0000383	,	L0000384	,	L0000385	,	L0000386	,
	L0000388	,	L0000389	,	L0000390	,	L0000391	,	L0000392	,	L0000393	,	L0000394	,
	L0000396	,	L0000397	,	L0000398	,	L0000399	,	L0000400	,	L0000401	,	L0000424	,
	L0000426	,	L0000427	,	L0000428	,	L0000429	,	L0000430	,	L0000431	,	L0000432	,
	L0000434	,	L0000435	,	L0000436	,	L0000437	,	L0000438	,	L0000439	,	L0000440	,
AREA		,		,		,		,		,		,		,
ALL L0000387	L0000380	,	L0000381	,	L0000382	,	L0000383	,	L0000384	,	L0000385	,	L0000386	,
	L0000388	,	L0000389	,	L0000390	,	L0000391	,	L0000392	,	L0000393	,	L0000394	,
	L0000396	,	L0000397	,	L0000398	,	L0000399	,	L0000400	,	L0000401	,	L0000424	,
	L0000426	,	L0000427	,	L0000428	,	L0000429	,	L0000430	,	L0000431	,	L0000432	,
	L0000434	,	L0000435	,	L0000436	,	L0000437	,	L0000438	,	L0000439	,	L0000440	,
AREA		,		,		,		,		,		,		,

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs												
-----	-----	-----												
L0000387	9862049.	L0000380	,	L0000381	,	L0000382	,	L0000383	,	L0000384	,	L0000385	,	
	L0000386		,		,		,		,		,		,	
	L0000388	,	L0000389	,	L0000390	,	L0000391	,	L0000392	,	L0000393	,	L0000394	,
	L0000395		,		,		,		,		,		,	

L0000396 , L0000397 , L0000398 , L0000399 , L0000400 , L0000401 , L0000424 ,  
 L0000425 ,

L0000426 , L0000427 , L0000428 , L0000429 , L0000430 , L0000431 , L0000432 ,  
 L0000433 ,

L0000434 , L0000435 , L0000436 , L0000437 , L0000438 , L0000439 , L0000440 ,  
 L0000441 ,

AREA ,

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
SOURCE ID = L0000380 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000381 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000382 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000383 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000384 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000385 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000386 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000387 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000388 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000389 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000390 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000391 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000392 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000393 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000394 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

-----
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
-----

SOURCE ID = L0000395 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000396 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000397 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000398 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000399 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------	--------

SOURCE ID = L0000400 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000401 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000424 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000425 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000426 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000427 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000428 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000429 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000430 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000431 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-----											
-----											

SOURCE ID = L0000432 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000433 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000434 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000435 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000436 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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 \*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = L0000437 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000438 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000439 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000440 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000441 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

SOURCE ID = AREA ; SOURCE TYPE = AREA :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOT - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

( 369670.5, 3778388.3, 238.9, 365.0, 0.0);	( 369686.2, 3778353.0, 240.4, 365.0, 0.0);
( 369701.7, 3778534.9, 224.8, 365.0, 0.0);	( 369685.0, 3778565.2, 221.3, 365.0, 0.0);
( 369709.4, 3778565.2, 220.8, 365.0, 0.0);	( 369733.8, 3778565.2, 220.3, 365.0, 0.0);
( 369760.4, 3778565.2, 219.9, 365.0, 0.0);	( 369685.0, 3778627.6, 216.1, 365.0, 0.0);
( 369709.4, 3778627.6, 215.9, 365.0, 0.0);	( 369733.8, 3778627.6, 215.7, 365.0, 0.0);
( 369760.4, 3778627.6, 215.5, 365.0, 0.0);	( 369684.6, 3778740.8, 212.4, 365.0, 0.0);

( 369709.0, 3778740.8, 212.3, 365.0, 0.0);	( 369733.4, 3778740.8, 212.3, 365.0, 0.0);
( 369760.0, 3778740.8, 212.3, 365.0, 0.0);	( 369684.6, 3778685.5, 212.9, 365.0, 0.0);
( 369709.0, 3778685.5, 212.9, 365.0, 0.0);	( 369733.5, 3778685.5, 212.9, 365.0, 0.0);
( 369760.1, 3778685.5, 212.9, 365.0, 0.0);	( 369810.6, 3778741.3, 212.1, 365.0, 0.0);
( 369828.2, 3778628.6, 214.6, 365.0, 0.0);	( 369867.0, 3778658.0, 212.8, 365.0, 0.0);
( 369904.5, 3778679.1, 212.0, 365.0, 0.0);	( 369858.7, 3778708.4, 212.0, 365.0, 0.0);
( 369905.7, 3778639.1, 214.2, 365.0, 0.0);	( 369885.8, 3778619.1, 215.4, 365.0, 0.0);
( 369638.6, 3778030.1, 269.3, 365.0, 0.0);	( 369698.0, 3778231.8, 243.0, 365.0, 0.0);
( 369682.8, 3778161.3, 247.8, 365.0, 0.0);	( 369653.8, 3778099.1, 252.5, 365.0, 0.0);
( 369666.2, 3778059.1, 259.1, 365.0, 0.0);	( 369722.9, 3778230.4, 242.9, 365.0, 0.0);
( 369716.0, 3778190.3, 244.4, 365.0, 0.0);	( 369703.6, 3778158.6, 247.2, 365.0, 0.0);
( 369687.0, 3778126.8, 251.1, 365.0, 0.0);	( 369675.9, 3778097.8, 253.5, 365.0, 0.0);
( 369703.6, 3778108.8, 251.0, 365.0, 0.0);	( 369727.0, 3778139.2, 247.0, 365.0, 0.0);
( 369903.9, 3778552.4, 223.0, 365.0, 0.0);	( 369866.6, 3778563.4, 219.9, 365.0, 0.0);
( 369873.5, 3778516.4, 227.5, 365.0, 0.0);	( 369887.3, 3778491.6, 232.5, 304.0, 0.0);
( 369859.7, 3778444.6, 236.3, 304.0, 0.0);	( 369849.6, 3778322.0, 243.9, 365.0, 0.0);
( 369643.4, 3778672.5, 213.2, 365.0, 0.0);	( 369644.1, 3778798.3, 212.1, 365.0, 0.0);
( 369591.6, 3778750.0, 213.4, 365.0, 0.0);	( 369640.0, 3778638.0, 216.2, 365.0, 0.0);
( 369590.3, 3778698.8, 214.8, 365.0, 0.0);	( 369569.5, 3778751.3, 213.8, 365.0, 0.0);
( 369621.8, 3778549.7, 225.0, 365.0, 0.0);	( 369608.6, 3778540.9, 226.6, 365.0, 0.0);
( 369492.0, 3778688.1, 228.6, 365.0, 0.0);	( 369551.4, 3778498.0, 236.0, 365.0, 0.0);
( 369467.1, 3778588.6, 240.7, 365.0, 0.0);	( 369442.2, 3778525.5, 243.2, 365.0, 0.0);
( 369426.9, 3778653.6, 236.6, 365.0, 0.0);	( 369430.8, 3778596.3, 241.5, 365.0, 0.0);
( 369384.9, 3778676.6, 233.1, 365.0, 0.0);	( 369398.3, 3778498.7, 243.2, 365.0, 0.0);
( 369245.3, 3778531.2, 233.6, 365.0, 0.0);	( 369245.3, 3778441.3, 240.3, 365.0, 0.0);
( 369484.6, 3778462.3, 244.4, 365.0, 0.0);	( 369629.2, 3778438.7, 235.7, 365.0, 17.4);
( 369814.8, 3778308.8, 242.5, 365.0, 0.0);	( 369781.3, 3778368.9, 239.6, 365.0, 0.0);
( 369811.0, 3778376.6, 240.3, 365.0, 0.0);	( 369853.0, 3778354.6, 243.2, 304.0, 0.0);
( 369860.8, 3778292.3, 246.5, 304.0, 0.0);	( 369856.2, 3778259.2, 245.7, 365.0, 0.0);

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08 01 01	1 02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5
08 01 01	1 03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5
08 01 01	1 04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5
08 01 01	1 05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08 01 01	1 06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08 01 01	1 07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08 01 01	1 08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5
08 01 01	1 09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5
08 01 01	1 10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5
08 01 01	1 11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5
08 01 01	1 12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5
08 01 01	1 13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5
08 01 01	1 14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5
08 01 01	1 15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5
08 01 01	1 16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5
08 01 01	1 17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5
08 01 01	1 18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5
08 01 01	1 19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5
08 01 01	1 20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5
08 01 01	1 21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08 01 01	1 22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08 01 01	1 23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08 01 01	1 24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5

First hour of profile data

YR MO DY HR HEIGHT F WDIR	WSPD AMB_TMP	sigmaA	sigmaW	sigmaV
08 01 01 01 5.5 0 -999.	-99.00 281.0	99.0	-99.00	-99.00
08 01 01 01 9.1 1 -999.	-99.00 -999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

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**MODELOPTs:	RegDFault	CONC	ELEV	FLGPOL
*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: PM10 ***				
INCLUDING SOURCE(S): L0000380 , L0000381 , L0000382 , L0000383 , L0000384 ,				
L0000385	, L0000386	, L0000387	, L0000388	, L0000389 , L0000390 , L0000391 ,
L0000392	,			
L0000393	, L0000394	, L0000395	, L0000396	, L0000397 , L0000398 , L0000399 ,
L0000400	,			
L0000401	, L0000424	, L0000425	, L0000426	, L0000427 , L0000428 , L0000429 , . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

** CONC OF PM_10 IN MICROGRAMS/M**3 **					
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00032	369686.20	3778352.98	
0.00030					
369701.74	3778534.95	0.00070	369684.96	3778565.24	
0.00125					
369709.39	3778565.24	0.00055	369733.82	3778565.24	
0.00033					
369760.43	3778565.24	0.00022	369684.96	3778627.64	
0.00096					

369709.39	3778627.64	0.00050	369733.82	3778627.64
0.00032				
369760.43	3778627.64	0.00021	369684.56	3778740.79
0.00097				
369708.99	3778740.79	0.00046	369733.42	3778740.79
0.00028				
369760.02	3778740.79	0.00019	369684.59	3778685.54
0.00095				
369709.02	3778685.54	0.00049	369733.45	3778685.54
0.00031				
369760.06	3778685.54	0.00021	369810.59	3778741.35
0.00010				
369828.20	3778628.60	0.00010	369866.96	3778657.96
0.00007				
369904.54	3778679.10	0.00005	369858.74	3778708.37
0.00007				
369905.71	3778639.08	0.00006	369885.75	3778619.11
0.00006				
369638.62	3778030.06	0.00001	369698.03	3778231.80
0.00007				
369682.83	3778161.33	0.00003	369653.81	3778099.15
0.00002				
369666.25	3778059.08	0.00001	369722.90	3778230.42
0.00009				
369715.99	3778190.35	0.00005	369703.56	3778158.57
0.00003				
369686.98	3778126.79	0.00002	369675.92	3778097.77
0.00002				
369703.56	3778108.82	0.00002	369727.05	3778139.22
0.00003				
369903.91	3778552.37	0.00006	369866.61	3778563.43
0.00008				
369873.52	3778516.45	0.00007	369887.33	3778491.57
0.00007				
369859.70	3778444.59	0.00009	369849.63	3778322.03
0.00013				
369643.37	3778672.46	0.00127	369644.15	3778798.32
0.00102				
369591.64	3778749.96	0.00032	369640.00	3778638.03
0.00150				
369590.26	3778698.83	0.00035	369569.53	3778751.34
0.00022				
369621.84	3778549.71	0.00052	369608.62	3778540.93
0.00037				
369491.97	3778688.07	0.00010	369551.43	3778498.04
0.00012				
369467.11	3778588.61	0.00006	369442.24	3778525.50
0.00004				
369426.94	3778653.64	0.00005	369430.77	3778596.26
0.00005				
369384.87	3778676.59	0.00004	369398.26	3778498.73
0.00003				
369245.26	3778531.24	0.00002	369245.26	3778441.35
0.00001				
369484.59	3778462.33	0.00005	369629.21	3778438.68
0.00011				
369814.80	3778308.83	0.00034	369781.29	3778368.86
0.00028				
369811.05	3778376.63	0.00017	369852.96	3778354.56
0.00011				
369860.75	3778292.26	0.00011	369856.21	3778259.16
0.00010				

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS PM10  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000380 , L0000381 , L0000382 , L0000383 ,  
 L0000384 ,  
 L0000385 , L0000386 , L0000387 , L0000388 , L0000389 , L0000390 , L0000391 ,  
 L0000392 ,  
 L0000393 , L0000394 , L0000395 , L0000396 , L0000397 , L0000398 , L0000399 ,  
 L0000400 ,  
 L0000401 , L0000424 , L0000425 , L0000426 , L0000427 , L0000428 , L0000429 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00032	369686.20	3778352.98	
0.00030					
369701.74	3778534.95	0.00070	369684.96	3778565.24	
0.00125					
369709.39	3778565.24	0.00055	369733.82	3778565.24	
0.00033					
369760.43	3778565.24	0.00022	369684.96	3778627.64	
0.00096					
369709.39	3778627.64	0.00050	369733.82	3778627.64	
0.00032					
369760.43	3778627.64	0.00021	369684.56	3778740.79	
0.00097					
369708.99	3778740.79	0.00046	369733.42	3778740.79	
0.00028					
369760.02	3778740.79	0.00019	369684.59	3778685.54	
0.00095					
369709.02	3778685.54	0.00049	369733.45	3778685.54	
0.00031					
369760.06	3778685.54	0.00021	369810.59	3778741.35	
0.00010					
369828.20	3778628.60	0.00010	369866.96	3778657.96	
0.00007					
369904.54	3778679.10	0.00005	369858.74	3778708.37	
0.00007					
369905.71	3778639.08	0.00006	369885.75	3778619.11	
0.00006					
369638.62	3778030.06	0.00001	369698.03	3778231.80	
0.00007					
369682.83	3778161.33	0.00003	369653.81	3778099.15	
0.00002					
369666.25	3778059.08	0.00001	369722.90	3778230.42	
0.00009					
369715.99	3778190.35	0.00005	369703.56	3778158.57	
0.00003					
369686.98	3778126.79	0.00002	369675.92	3778097.77	
0.00002					
369703.56	3778108.82	0.00002	369727.05	3778139.22	
0.00003					
369903.91	3778552.37	0.00006	369866.61	3778563.43	
0.00008					
369873.52	3778516.45	0.00007	369887.33	3778491.57	

0.00007					
369859.70	3778444.59	0.00009		369849.63	3778322.03
0.00013					
369643.37	3778672.46	0.00127		369644.15	3778798.32
0.00102					
369591.64	3778749.96	0.00032		369640.00	3778638.03
0.00150					
369590.26	3778698.83	0.00035		369569.53	3778751.34
0.00022					
369621.84	3778549.71	0.00052		369608.62	3778540.93
0.00037					
369491.97	3778688.07	0.00010		369551.43	3778498.04
0.00012					
369467.11	3778588.61	0.00006		369442.24	3778525.50
0.00004					
369426.94	3778653.64	0.00005		369430.77	3778596.26
0.00005					
369384.87	3778676.59	0.00004		369398.26	3778498.73
0.00003					
369245.26	3778531.24	0.00002		369245.26	3778441.35
0.00001					
369484.59	3778462.33	0.00005		369629.21	3778438.68
0.00011					
369814.80	3778308.83	0.00034		369781.29	3778368.86
0.00028					
369811.05	3778376.63	0.00017		369852.96	3778354.56
0.00011					
369860.75	3778292.26	0.00011		369856.21	3778259.16
0.00010					

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PM10 \*\*\*

INCLUDING SOURCE(S): L0000380 , L0000381 , L0000382 , L0000383 ,

L0000384 ,

L0000385 , L0000386 , L0000387 , L0000388 , L0000389 , L0000390 , L0000391 ,

L0000392 ,

L0000393 , L0000394 , L0000395 , L0000396 , L0000397 , L0000398 , L0000399 ,

L0000400 ,

L0000401 , L0000424 , L0000425 , L0000426 , L0000427 , L0000428 , L0000429 , . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00133 (09121624)	369686.20	3778352.98	0.00116
(11112424)					
369701.74	3778534.95	0.00198m (12112624)	369684.96	3778565.24	0.00335m
(12112624)					
369709.39	3778565.24	0.00160 (12121424)	369733.82	3778565.24	0.00105
(12121424)					
369760.43	3778565.24	0.00081m (10120724)	369684.96	3778627.64	0.00263m
(12112624)					
369709.39	3778627.64	0.00147 (12121424)	369733.82	3778627.64	0.00101

(12121424)						
369760.43	3778627.64	0.00079m	(10120724)	369684.56	3778740.79	0.00269
(12112824)						
369708.99	3778740.79	0.00144	(12112824)	369733.42	3778740.79	0.00095
(12112824)						
369760.02	3778740.79	0.00067m	(12120124)	369684.59	3778685.54	0.00258
(12112824)						
369709.02	3778685.54	0.00148	(12112824)	369733.45	3778685.54	0.00100
(12112824)						
369760.06	3778685.54	0.00075m	(10120724)	369810.59	3778741.35	0.00040m
(08010224)						
369828.20	3778628.60	0.00046m	(10120724)	369866.96	3778657.96	0.00033m
(10120724)						
369904.54	3778679.10	0.00025	(12121724)	369858.74	3778708.37	0.00031
(12121724)						
369905.71	3778639.08	0.00027m	(10120724)	369885.75	3778619.11	0.00032m
(10120724)						
369638.62	3778030.06	0.00053	(11020224)	369698.03	3778231.80	0.00061
(11112424)						
369682.83	3778161.33	0.00052	(09121624)	369653.81	3778099.15	0.00050
(09121624)						
369666.25	3778059.08	0.00054	(09121624)	369722.90	3778230.42	0.00066
(09011324)						
369715.99	3778190.35	0.00058	(09011324)	369703.56	3778158.57	0.00054
(11112424)						
369686.98	3778126.79	0.00053	(09121624)	369675.92	3778097.77	0.00057
(09121624)						
369703.56	3778108.82	0.00052	(11112424)	369727.05	3778139.22	0.00053
(09011324)						
369903.91	3778552.37	0.00032m	(10120724)	369866.61	3778563.43	0.00038m
(10120724)						
369873.52	3778516.45	0.00038m	(10120724)	369887.33	3778491.57	0.00038m
(08010224)						
369859.70	3778444.59	0.00064m	(08010224)	369849.63	3778322.03	0.00073m
(08010224)						
369643.37	3778672.46	0.00338m	(12112624)	369644.15	3778798.32	0.00285m
(11010824)						
369591.64	3778749.96	0.00109m	(11010824)	369640.00	3778638.03	0.00399m
(12112624)						
369590.26	3778698.83	0.00114m	(11010824)	369569.53	3778751.34	0.00081m
(11010824)						
369621.84	3778549.71	0.00159	(12121424)	369608.62	3778540.93	0.00127
(10113024)						
369491.97	3778688.07	0.00044m	(08121824)	369551.43	3778498.04	0.00057
(10113024)						
369467.11	3778588.61	0.00041	(09011124)	369442.24	3778525.50	0.00039
(09011124)						
369426.94	3778653.64	0.00035	(11121624)	369430.77	3778596.26	0.00037
(11121624)						
369384.87	3778676.59	0.00027	(11011124)	369398.26	3778498.73	0.00033
(09011124)						
369245.26	3778531.24	0.00016	(11121624)	369245.26	3778441.35	0.00019
(11121624)						
369484.59	3778462.33	0.00041	(09011124)	369629.21	3778438.68	0.00052
(10113024)						
369814.80	3778308.83	0.00126m	(10120724)	369781.29	3778368.86	0.00096
(12112824)						
369811.05	3778376.63	0.00080m	(08010224)	369852.96	3778354.56	0.00075m
(08010224)						
369860.75	3778292.26	0.00071	(09121524)	369856.21	3778259.16	0.00073m
(12123124)						

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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**MODELOPTs:  RegDFAULT CONC      ELEV      FLGPOL

                *** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
                INCLUDING SOURCE(S):  L0000380 , L0000381 , L0000382 , L0000383 ,
                L0000384 ,
                L0000385 , L0000386 , L0000387 , L0000388 , L0000389 , L0000390 , L0000391 ,
                L0000392 ,
                L0000393 , L0000394 , L0000395 , L0000396 , L0000397 , L0000398 , L0000399 ,
                L0000400 ,
                L0000401 , L0000424 , L0000425 , L0000426 , L0000427 , L0000428 , L0000429 , . .
                . ,
    
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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF PM_10		IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
(YYMMDDHH)							
369670.52	3778388.27	0.00133	(09121624)	369686.20	3778352.98	0.00116	
(11112424)							
369701.74	3778534.95	0.00198m	(12112624)	369684.96	3778565.24	0.00335m	
(12112624)							
369709.39	3778565.24	0.00160	(12121424)	369733.82	3778565.24	0.00105	
(12121424)							
369760.43	3778565.24	0.00081m	(10120724)	369684.96	3778627.64	0.00263m	
(12112624)							
369709.39	3778627.64	0.00147	(12121424)	369733.82	3778627.64	0.00101	
(12121424)							
369760.43	3778627.64	0.00079m	(10120724)	369684.56	3778740.79	0.00269	
(12112824)							
369708.99	3778740.79	0.00144	(12112824)	369733.42	3778740.79	0.00095	
(12112824)							
369760.02	3778740.79	0.00067m	(12120124)	369684.59	3778685.54	0.00258	
(12112824)							
369709.02	3778685.54	0.00148	(12112824)	369733.45	3778685.54	0.00100	
(12112824)							
369760.06	3778685.54	0.00075m	(10120724)	369810.59	3778741.35	0.00040m	
(08010224)							
369828.20	3778628.60	0.00046m	(10120724)	369866.96	3778657.96	0.00033m	
(10120724)							
369904.54	3778679.10	0.00025	(12121724)	369858.74	3778708.37	0.00031	
(12121724)							
369905.71	3778639.08	0.00027m	(10120724)	369885.75	3778619.11	0.00032m	
(10120724)							
369638.62	3778030.06	0.00053	(11020224)	369698.03	3778231.80	0.00061	
(11112424)							
369682.83	3778161.33	0.00052	(09121624)	369653.81	3778099.15	0.00050	
(09121624)							
369666.25	3778059.08	0.00054	(09121624)	369722.90	3778230.42	0.00066	
(09011324)							
369715.99	3778190.35	0.00058	(09011324)	369703.56	3778158.57	0.00054	
(11112424)							
369686.98	3778126.79	0.00053	(09121624)	369675.92	3778097.77	0.00057	
(09121624)							
369703.56	3778108.82	0.00052	(11112424)	369727.05	3778139.22	0.00053	
(09011324)							
369903.91	3778552.37	0.00032m	(10120724)	369866.61	3778563.43	0.00038m	
(10120724)							
369873.52	3778516.45	0.00038m	(10120724)	369887.33	3778491.57	0.00038m	

(08010224)	369859.70	3778444.59	0.00064m (08010224)	369849.63	3778322.03	0.00073m
(08010224)	369643.37	3778672.46	0.00338m (12112624)	369644.15	3778798.32	0.00285m
(11010824)	369591.64	3778749.96	0.00109m (11010824)	369640.00	3778638.03	0.00399m
(12112624)	369590.26	3778698.83	0.00114m (11010824)	369569.53	3778751.34	0.00081m
(11010824)	369621.84	3778549.71	0.00159 (12121424)	369608.62	3778540.93	0.00127
(10113024)	369491.97	3778688.07	0.00044m (08121824)	369551.43	3778498.04	0.00057
(10113024)	369467.11	3778588.61	0.00041 (09011124)	369442.24	3778525.50	0.00039
(09011124)	369426.94	3778653.64	0.00035 (11121624)	369430.77	3778596.26	0.00037
(11121624)	369384.87	3778676.59	0.00027 (11011124)	369398.26	3778498.73	0.00033
(09011124)	369245.26	3778531.24	0.00016 (11121624)	369245.26	3778441.35	0.00019
(11121624)	369484.59	3778462.33	0.00041 (09011124)	369629.21	3778438.68	0.00052
(10113024)	369814.80	3778308.83	0.00126m (10120724)	369781.29	3778368.86	0.00096
(12112824)	369811.05	3778376.63	0.00080m (08010224)	369852.96	3778354.56	0.00075m
(08010224)	369860.75	3778292.26	0.00071 (09121524)	369856.21	3778259.16	0.00073m
(12123124)						

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM10

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF PM10 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
PM10	1ST HIGHEST VALUE IS	0.00150 AT ( 369640.00, 3778638.03, 216.15, 365.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.00127 AT ( 369643.37, 3778672.46, 213.15, 365.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.00125 AT ( 369684.96, 3778565.24, 221.28, 365.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.00102 AT ( 369644.15, 3778798.32, 212.09, 365.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.00097 AT ( 369684.56, 3778740.79, 212.36, 365.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.00096 AT ( 369684.96, 3778627.64, 216.12, 365.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.00095 AT ( 369684.59, 3778685.54, 212.89, 365.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.00070 AT ( 369701.74, 3778534.95, 224.77, 365.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.00055 AT ( 369709.39, 3778565.24, 220.76, 365.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.00052 AT ( 369621.84, 3778549.71, 224.96, 365.00, 0.00)	DC	
ALL	1ST HIGHEST VALUE IS	0.00150 AT ( 369640.00, 3778638.03, 216.15, 365.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.00127 AT ( 369643.37, 3778672.46, 213.15, 365.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.00125 AT ( 369684.96, 3778565.24, 221.28, 365.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.00102 AT ( 369644.15, 3778798.32, 212.09, 365.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.00097 AT ( 369684.56, 3778740.79, 212.36, 365.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.00096 AT ( 369684.96, 3778627.64, 216.12, 365.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.00095 AT ( 369684.59, 3778685.54, 212.89, 365.00, 0.00)	DC	

8TH HIGHEST VALUE IS 0.00070 AT ( 369701.74, 3778534.95, 224.77, 365.00, 0.00) DC  
 9TH HIGHEST VALUE IS 0.00055 AT ( 369709.39, 3778565.24, 220.76, 365.00, 0.00) DC  
 10TH HIGHEST VALUE IS 0.00052 AT ( 369621.84, 3778549.71, 224.96, 365.00, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM10 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	NETWORK	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF
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PM10 HIGH 1ST HIGH VALUE IS	0.00399m	ON 12112624	AT ( 369640.00, 3778638.03, 216.15, 365.00,		
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ALL HIGH 1ST HIGH VALUE IS	0.00399m	ON 12112624	AT ( 369640.00, 3778638.03, 216.15, 365.00,		
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\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 0 Warning Message(s)  
 A Total of 1275 Informational Message(s)  
 A Total of 43848 Hours Were Processed  
 A Total of 13 Calm Hours Identified  
 A Total of 1262 Missing Hours Identified ( 2.88 Percent)



\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

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** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\BUS PM2\BUS PM2.ADI
**

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**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
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CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO OPERATIONAL SCHOOL BUS PM2.5
MODELOPT DFAULT CONC
AVERTIME 24 ANNUAL
URBANOPT 9862049
POLLUTID PM_2.5
FLAGPOLE 0.00
RUNORNOT RUN
ERRORFIL "BUS PM2.ERR"

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CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
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SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----
** LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC BUS TRAVEL FROM SB ON COLDWATER CANYON FROM US-101
** PREFIX
** LENGTH OF SIDE = 7.32
** CONFIGURATION = SEPARATED
** EMISSION RATE = 0.000087
** VERTICAL DIMENSION = 5.00
** SZINIT = 2.33
** NODES = 5
** 369659.167, 3778795.354, 213.00, 0.00, 6.60
** 369656.501, 3778635.361, 222.00, 0.00, 6.60
** 369659.167, 3778598.029, 222.00, 0.00, 6.60
** 369668.500, 3778550.031, 231.00, 0.00, 6.60
** 369672.500, 3778491.366, 240.00, 0.00, 6.60
** -----

```

LOCATION	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000442	VOLUME	369659.106	3778791.697	213.21
LOCATION L0000443	VOLUME	369658.870	3778777.517	214.00
LOCATION L0000444	VOLUME	369658.634	3778763.337	214.80
LOCATION L0000445	VOLUME	369658.397	3778749.157	215.60
LOCATION L0000446	VOLUME	369658.161	3778734.976	216.40
LOCATION L0000447	VOLUME	369657.925	3778720.796	217.19
LOCATION L0000448	VOLUME	369657.688	3778706.616	217.99
LOCATION L0000449	VOLUME	369657.452	3778692.436	218.79
LOCATION L0000450	VOLUME	369657.216	3778678.256	219.59

LOCATION	VOLUME				
L0000451	369656.979	3778664.075	220.38		
L0000452	369656.743	3778649.895	221.18		
L0000453	369656.507	3778635.715	221.98		
L0000454	369657.486	3778621.568	222.00		
L0000455	369658.496	3778607.422	222.00		
L0000456	369660.077	3778593.351	222.88		
L0000457	369662.784	3778579.430	225.49		
L0000458	369665.491	3778565.509	228.10		
L0000459	369668.198	3778551.587	230.71		
L0000460	369669.357	3778537.463	232.93		
L0000461	369670.322	3778523.314	235.10		
L0000462	369671.287	3778509.165	237.27		
L0000463	369672.251	3778495.015	239.44		

\*\* END OF LINE VOLUME SOURCE ID = SLINE1

\*\* -----

\*\* LINE SOURCE REPRESENTED BY SEPARATED VOLUME SOURCES

\*\* LINE VOLUME SOURCE ID = SLINE2

\*\* DESCRSRC BUS TRAVEL SB FROM COLDWATER CANYON

\*\* PREFIX

\*\* LENGTH OF SIDE = 7.32

\*\* CONFIGURATION = SEPARATED

\*\* EMISSION RATE = 0.000029

\*\* VERTICAL DIMENSION = 5.00

\*\* SZINIT = 2.33

\*\* NODES = 6

\*\* 369678.850, 3778478.785, 238.00, 0.00, 6.52

\*\* 369680.183, 3778462.785, 238.00, 0.00, 6.52

\*\* 369722.848, 3778362.788, 243.00, 0.00, 6.52

\*\* 369765.514, 3778304.123, 243.00, 0.00, 6.52

\*\* 369774.847, 3778292.124, 243.00, 0.00, 6.52

\*\* 369786.847, 3778261.458, 243.00, 0.00, 6.52

\*\* -----

LOCATION	VOLUME				
L0000486	369679.153	3778475.140	238.00		
L0000487	369680.815	3778461.304	238.07		
L0000488	369686.312	3778448.420	238.72		
L0000489	369691.809	3778435.537	239.36		
L0000490	369697.306	3778422.653	240.01		
L0000491	369702.803	3778409.769	240.65		
L0000492	369708.301	3778396.885	241.30		
L0000493	369713.798	3778384.001	241.94		
L0000494	369719.295	3778371.117	242.58		
L0000495	369725.761	3778358.783	243.00		
L0000496	369734.000	3778347.455	243.00		
L0000497	369742.239	3778336.126	243.00		
L0000498	369750.478	3778324.798	243.00		
L0000499	369758.717	3778313.469	243.00		
L0000500	369767.019	3778302.188	243.00		
L0000501	369775.305	3778290.953	243.00		
L0000502	369780.409	3778277.908	243.00		
L0000503	369785.514	3778264.864	243.00		

\*\* END OF LINE VOLUME SOURCE ID = SLINE2

LOCATION AREA            AREA            369794.871    3778265.530            242.640

\*\* DESCRSRC BUS SOUTH LOT

\*\* SOURCE PARAMETERS \*\*

\*\* LINE VOLUME SOURCE ID = SLINE1

SRCPARAM					
L0000442	0.000003955	0.00	6.60	2.33	
L0000443	0.000003955	0.00	6.60	2.33	
L0000444	0.000003955	0.00	6.60	2.33	
L0000445	0.000003955	0.00	6.60	2.33	
L0000446	0.000003955	0.00	6.60	2.33	
L0000447	0.000003955	0.00	6.60	2.33	
L0000448	0.000003955	0.00	6.60	2.33	
L0000449	0.000003955	0.00	6.60	2.33	
L0000450	0.000003955	0.00	6.60	2.33	

SRCPARAM	L0000451	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000452	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000453	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000454	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000455	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000456	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000457	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000458	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000459	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000460	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000461	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000462	0.000003955	0.00	6.60	2.33
SRCPARAM	L0000463	0.000003955	0.00	6.60	2.33

\*\*

\*\* LINE VOLUME SOURCE ID = SLINE2

SRCPARAM	L0000486	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000487	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000488	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000489	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000490	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000491	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000492	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000493	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000494	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000495	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000496	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000497	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000498	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000499	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000500	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000501	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000502	0.000001611	0.00	6.52	2.33
SRCPARAM	L0000503	0.000001611	0.00	6.52	2.33

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SRCPARAM	AREA	4.1511E-10	5.000	33.000	73.000	-27.850
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URBANSRC	L0000442
URBANSRC	L0000443
URBANSRC	L0000444
URBANSRC	L0000445
URBANSRC	L0000446
URBANSRC	L0000447
URBANSRC	L0000448
URBANSRC	L0000449
URBANSRC	L0000450
URBANSRC	L0000451
URBANSRC	L0000452
URBANSRC	L0000453
URBANSRC	L0000454
URBANSRC	L0000455
URBANSRC	L0000456
URBANSRC	L0000457
URBANSRC	L0000458
URBANSRC	L0000459
URBANSRC	L0000460
URBANSRC	L0000461
URBANSRC	L0000462
URBANSRC	L0000463
URBANSRC	L0000486
URBANSRC	L0000487
URBANSRC	L0000488
URBANSRC	L0000489
URBANSRC	L0000490
URBANSRC	L0000491
URBANSRC	L0000492

URBANSRC L0000493  
 URBANSRC L0000494  
 URBANSRC L0000495  
 URBANSRC L0000496  
 URBANSRC L0000497  
 URBANSRC L0000498  
 URBANSRC L0000499  
 URBANSRC L0000500  
 URBANSRC L0000501  
 URBANSRC L0000502  
 URBANSRC L0000503  
 URBANSRC AREA

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

\*\* VARIABLE EMISSION SCENARIO: "PM2.5"

EMISFACT	L0000486	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000486	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000486	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000486	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000487	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000487	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000487	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000487	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000488	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000488	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000488	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000488	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000489	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000489	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000489	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000489	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000490	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000490	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000490	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000490	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000491	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000491	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000491	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000491	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000492	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000492	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000492	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000492	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000493	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000493	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000493	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000493	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000494	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000494	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000494	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000494	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000495	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000495	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000495	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000495	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000496	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000496	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000496	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000496	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000497	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000497	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000497	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000497	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000498	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	L0000452	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000452	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000452	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000453	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000453	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000453	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000453	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000454	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000454	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000454	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000454	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000455	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000455	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000455	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000455	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000456	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000456	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000456	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000456	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000457	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000457	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000457	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000457	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000458	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000458	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000458	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000458	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000459	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000459	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000459	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000459	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000460	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000460	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000460	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000460	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000461	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000461	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000461	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000461	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000462	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000462	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000462	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000462	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000463	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	L0000463	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	L0000463	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	L0000463	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	1.0	0.0	0.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	1.0	0.0	0.0
EMISFACT	AREA	HROFDY	0.0	0.0	0.0	0.0	0.0	0.0
SRCGROUP	PM2.5	L0000442	L0000443	L0000444	L0000445	L0000446	L0000447	
SRCGROUP	PM2.5	L0000448	L0000449	L0000450	L0000451	L0000452	L0000453	
SRCGROUP	PM2.5	L0000454	L0000455	L0000456	L0000457	L0000458	L0000459	
SRCGROUP	PM2.5	L0000460	L0000461	L0000462	L0000463	L0000486	L0000487	
SRCGROUP	PM2.5	L0000488	L0000489	L0000490	L0000491	L0000492	L0000493	
SRCGROUP	PM2.5	L0000494	L0000495	L0000496	L0000497	L0000498	L0000499	
SRCGROUP	PM2.5	L0000500	L0000501	L0000502	L0000503	AREA		
SRCGROUP	ALL							

SO FINISHED

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\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

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**
**
RE STARTING
  INCLUDED "BUS PM2.ROU"
RE FINISHED
**

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*****
** AERMOD METEOROLOGY PATHWAY
*****
**
**

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ME STARTING
  SURFFILE ..\..\BURK8.SFC
  PROFFILE ..\..\BURK8.PFL
  SURFDATA 0 2008
  UAIRDATA 3190 2008
  SITEDATA 99999 2008
  PROFBASE 10.0 METERS
ME FINISHED

```

```

**
*****
** AERMOD OUTPUT PATHWAY
*****
**
**

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```

OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 24 1ST
** AUTO-GENERATED PLOTFILES
  PLOTFILE 24 ALL 1ST "BUS PM2.AD\24H1GALL.PLT" 31
  PLOTFILE 24 PM2.5 1ST "BUS PM2.AD\24H1G001.PLT" 32
  PLOTFILE ANNUAL ALL "BUS PM2.AD\AN00GALL.PLT" 33
  PLOTFILE ANNUAL PM2.5 "BUS PM2.AD\AN00G000.PLT" 34
  SUMMFILE "BUS PM2.SUM"
OU FINISHED

```

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*****
*** SETUP Finishes Successfully ***
*****

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[RF] *** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
*** 08/25/15
*** AERMET - VERSION 14134 *** *** OPERATIONAL SCHOOL BUS PM2.5 ***
15:34:28

```

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**MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

```

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

-----

\*\*Model Is Setup For Calculation of Average CONcentration Values.

```

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

```

```

**Model Uses URBAN Dispersion Algorithm for the SBL for 41 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

```



\*\*Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM\_2.5

\*\*Model Calculates 1 Short Term Average(s) of: 24-HR and Calculates ANNUAL Averages

\*\*This Run Includes: 41 Source(s); 2 Source Group(s); and 70 Receptor(s)

\*\*Model Set To Continue RUNNING After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

- Model Outputs Tables of ANNUAL Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.

\*\*Detailed Error/Message File: BUS  
PM2.ERR

\*\*File for Summary of Results: BUS  
PM2.SUM

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000442	0	0.39550E-05	369659.1	3778791.7	213.2	0.00	6.60	2.33	YES	HROFDY
L0000443	0	0.39550E-05	369658.9	3778777.5	214.0	0.00	6.60	2.33	YES	HROFDY

L0000444	0	0.39550E-05	369658.6	3778763.3	214.8	0.00	6.60	2.33	YES	HROFDY
L0000445	0	0.39550E-05	369658.4	3778749.2	215.6	0.00	6.60	2.33	YES	HROFDY
L0000446	0	0.39550E-05	369658.2	3778735.0	216.4	0.00	6.60	2.33	YES	HROFDY
L0000447	0	0.39550E-05	369657.9	3778720.8	217.2	0.00	6.60	2.33	YES	HROFDY
L0000448	0	0.39550E-05	369657.7	3778706.6	218.0	0.00	6.60	2.33	YES	HROFDY
L0000449	0	0.39550E-05	369657.5	3778692.4	218.8	0.00	6.60	2.33	YES	HROFDY
L0000450	0	0.39550E-05	369657.2	3778678.3	219.6	0.00	6.60	2.33	YES	HROFDY
L0000451	0	0.39550E-05	369657.0	3778664.1	220.4	0.00	6.60	2.33	YES	HROFDY
L0000452	0	0.39550E-05	369656.7	3778649.9	221.2	0.00	6.60	2.33	YES	HROFDY
L0000453	0	0.39550E-05	369656.5	3778635.7	222.0	0.00	6.60	2.33	YES	HROFDY
L0000454	0	0.39550E-05	369657.5	3778621.6	222.0	0.00	6.60	2.33	YES	HROFDY
L0000455	0	0.39550E-05	369658.5	3778607.4	222.0	0.00	6.60	2.33	YES	HROFDY
L0000456	0	0.39550E-05	369660.1	3778593.4	222.9	0.00	6.60	2.33	YES	HROFDY
L0000457	0	0.39550E-05	369662.8	3778579.4	225.5	0.00	6.60	2.33	YES	HROFDY
L0000458	0	0.39550E-05	369665.5	3778565.5	228.1	0.00	6.60	2.33	YES	HROFDY
L0000459	0	0.39550E-05	369668.2	3778551.6	230.7	0.00	6.60	2.33	YES	HROFDY
L0000460	0	0.39550E-05	369669.4	3778537.5	232.9	0.00	6.60	2.33	YES	HROFDY
L0000461	0	0.39550E-05	369670.3	3778523.3	235.1	0.00	6.60	2.33	YES	HROFDY
L0000462	0	0.39550E-05	369671.3	3778509.2	237.3	0.00	6.60	2.33	YES	HROFDY
L0000463	0	0.39550E-05	369672.3	3778495.0	239.4	0.00	6.60	2.33	YES	HROFDY
L0000486	0	0.16110E-05	369679.2	3778475.1	238.0	0.00	6.52	2.33	YES	HROFDY
L0000487	0	0.16110E-05	369680.8	3778461.3	238.1	0.00	6.52	2.33	YES	HROFDY
L0000488	0	0.16110E-05	369686.3	3778448.4	238.7	0.00	6.52	2.33	YES	HROFDY
L0000489	0	0.16110E-05	369691.8	3778435.5	239.4	0.00	6.52	2.33	YES	HROFDY
L0000490	0	0.16110E-05	369697.3	3778422.7	240.0	0.00	6.52	2.33	YES	HROFDY
L0000491	0	0.16110E-05	369702.8	3778409.8	240.7	0.00	6.52	2.33	YES	HROFDY
L0000492	0	0.16110E-05	369708.3	3778396.9	241.3	0.00	6.52	2.33	YES	HROFDY
L0000493	0	0.16110E-05	369713.8	3778384.0	241.9	0.00	6.52	2.33	YES	HROFDY
L0000494	0	0.16110E-05	369719.3	3778371.1	242.6	0.00	6.52	2.33	YES	HROFDY
L0000495	0	0.16110E-05	369725.8	3778358.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000496	0	0.16110E-05	369734.0	3778347.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000497	0	0.16110E-05	369742.2	3778336.1	243.0	0.00	6.52	2.33	YES	HROFDY
L0000498	0	0.16110E-05	369750.5	3778324.8	243.0	0.00	6.52	2.33	YES	HROFDY
L0000499	0	0.16110E-05	369758.7	3778313.5	243.0	0.00	6.52	2.33	YES	HROFDY
L0000500	0	0.16110E-05	369767.0	3778302.2	243.0	0.00	6.52	2.33	YES	HROFDY
L0000501	0	0.16110E-05	369775.3	3778291.0	243.0	0.00	6.52	2.33	YES	HROFDY
L0000502	0	0.16110E-05	369780.4	3778277.9	243.0	0.00	6.52	2.33	YES	HROFDY
L0000503	0	0.16110E-05	369785.5	3778264.9	243.0	0.00	6.52	2.33	YES	HROFDY

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* AREA SOURCE DATA \*\*\*

SOURCE	PART.	EMISSION RATE (GRAMS/SEC)	COORD (SW CORNER) X	COORD (SW CORNER) Y	BASE ELEV.	RELEASE HEIGHT	X-DIM OF AREA	Y-DIM OF AREA	ORIENT. OF AREA	INIT. SZ	URBAN SOURCE
SCALAR VARY	ID	CATS. /METER**2	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(DEG.)		
AREA	0	0.41511E-09	369794.9	3778265.5	242.6	5.00	33.00	73.00	-27.85	0.00	YES
HROFDY											

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs													
-----	-----													
PM2.5 L0000449	L0000442	,	L0000443	,	L0000444	,	L0000445	,	L0000446	,	L0000447	,	L0000448	,
	L0000450	,	L0000451	,	L0000452	,	L0000453	,	L0000454	,	L0000455	,	L0000456	,
	L0000457	,												
	L0000458	,	L0000459	,	L0000460	,	L0000461	,	L0000462	,	L0000463	,	L0000486	,
	L0000487	,												
	L0000488	,	L0000489	,	L0000490	,	L0000491	,	L0000492	,	L0000493	,	L0000494	,
	L0000495	,												
	L0000496	,	L0000497	,	L0000498	,	L0000499	,	L0000500	,	L0000501	,	L0000502	,
	L0000503	,												
	AREA	,												
ALL L0000449	L0000442	,	L0000443	,	L0000444	,	L0000445	,	L0000446	,	L0000447	,	L0000448	,
	L0000450	,	L0000451	,	L0000452	,	L0000453	,	L0000454	,	L0000455	,	L0000456	,
	L0000457	,												
	L0000458	,	L0000459	,	L0000460	,	L0000461	,	L0000462	,	L0000463	,	L0000486	,
	L0000487	,												
	L0000488	,	L0000489	,	L0000490	,	L0000491	,	L0000492	,	L0000493	,	L0000494	,
	L0000495	,												
	L0000496	,	L0000497	,	L0000498	,	L0000499	,	L0000500	,	L0000501	,	L0000502	,
	L0000503	,												
	AREA	,												

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs												
-----	-----	-----												
	9862049.	L0000442	,	L0000443	,	L0000444	,	L0000445	,	L0000446	,	L0000447	,	
L0000449	L0000448	,												
	L0000450	,	L0000451	,	L0000452	,	L0000453	,	L0000454	,	L0000455	,	L0000456	,

L0000457 ,  
 L0000458 , L0000459 , L0000460 , L0000461 , L0000462 , L0000463 , L0000486 ,  
 L0000487 ,  
 L0000488 , L0000489 , L0000490 , L0000491 , L0000492 , L0000493 , L0000494 ,  
 L0000495 ,  
 L0000496 , L0000497 , L0000498 , L0000499 , L0000500 , L0000501 , L0000502 ,  
 L0000503 ,

AREA ,

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
SOURCE ID = L0000442 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000443 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000444 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000445 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000446 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000447 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000448 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000449 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000450 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = L0000451 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
SOURCE ID = L0000452 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00

13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000453 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000454 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000455 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000456 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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 \*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -

SOURCE ID = L0000457 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000458 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000459 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000460 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000461 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

\*\*\* AERMOT - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

Table with 12 columns: HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR, HOUR, SCALAR. The table is mostly empty with dashes.

SOURCE ID = L0000462 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000463 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000486 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000487 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0000488 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

**FF** \*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* OPERATIONAL SCHOOL BUS PM2.5 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = L0000489 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000490 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000491 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000492 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000493 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------



SOURCE ID = L0000494 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000495 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000496 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000497 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000498 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
---	---	---	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---

SOURCE ID = L0000499 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0000500 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

```

SOURCE ID = L0000501 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .10000E+01  9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = L0000502 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .10000E+01  9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0000503 ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .10000E+01  9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

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*** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
*** 08/25/15

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*** AERMET - VERSION 14134 *** *** OPERATIONAL SCHOOL BUS PM2.5 ***
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR	HOURL	SCALAR
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

```

SOURCE ID = AREA ; SOURCE TYPE = AREA :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .10000E+01  9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

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*** AERMOD - VERSION 14134 *** *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
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*** AERMET - VERSION 14134 *** *** OPERATIONAL SCHOOL BUS PM2.5 ***
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

```

( 369670.5, 3778388.3, 238.9, 365.0, 0.0); ( 369686.2, 3778353.0, 240.4,
365.0, 0.0);
( 369701.7, 3778534.9, 224.8, 365.0, 0.0); ( 369685.0, 3778565.2, 221.3,
365.0, 0.0);
( 369709.4, 3778565.2, 220.8, 365.0, 0.0); ( 369733.8, 3778565.2, 220.3,
365.0, 0.0);
( 369760.4, 3778565.2, 219.9, 365.0, 0.0); ( 369685.0, 3778627.6, 216.1,
365.0, 0.0);
( 369709.4, 3778627.6, 215.9, 365.0, 0.0); ( 369733.8, 3778627.6, 215.7,
365.0, 0.0);
( 369760.4, 3778627.6, 215.5, 365.0, 0.0); ( 369684.6, 3778740.8, 212.4,

```

365.0,	0.0);							
( 369709.0,	3778740.8,	212.3,	365.0,	0.0);	( 369733.4,	3778740.8,	212.3,	
365.0,	0.0);							
( 369760.0,	3778740.8,	212.3,	365.0,	0.0);	( 369684.6,	3778685.5,	212.9,	
365.0,	0.0);							
( 369709.0,	3778685.5,	212.9,	365.0,	0.0);	( 369733.5,	3778685.5,	212.9,	
365.0,	0.0);							
( 369760.1,	3778685.5,	212.9,	365.0,	0.0);	( 369810.6,	3778741.3,	212.1,	
365.0,	0.0);							
( 369828.2,	3778628.6,	214.6,	365.0,	0.0);	( 369867.0,	3778658.0,	212.8,	
365.0,	0.0);							
( 369904.5,	3778679.1,	212.0,	365.0,	0.0);	( 369858.7,	3778708.4,	212.0,	
365.0,	0.0);							
( 369905.7,	3778639.1,	214.2,	365.0,	0.0);	( 369885.8,	3778619.1,	215.4,	
365.0,	0.0);							
( 369638.6,	3778030.1,	269.3,	365.0,	0.0);	( 369698.0,	3778231.8,	243.0,	
365.0,	0.0);							
( 369682.8,	3778161.3,	247.8,	365.0,	0.0);	( 369653.8,	3778099.1,	252.5,	
365.0,	0.0);							
( 369666.2,	3778059.1,	259.1,	365.0,	0.0);	( 369722.9,	3778230.4,	242.9,	
365.0,	0.0);							
( 369716.0,	3778190.3,	244.4,	365.0,	0.0);	( 369703.6,	3778158.6,	247.2,	
365.0,	0.0);							
( 369687.0,	3778126.8,	251.1,	365.0,	0.0);	( 369675.9,	3778097.8,	253.5,	
365.0,	0.0);							
( 369703.6,	3778108.8,	251.0,	365.0,	0.0);	( 369727.0,	3778139.2,	247.0,	
365.0,	0.0);							
( 369903.9,	3778552.4,	223.0,	365.0,	0.0);	( 369866.6,	3778563.4,	219.9,	
365.0,	0.0);							
( 369873.5,	3778516.4,	227.5,	365.0,	0.0);	( 369887.3,	3778491.6,	232.5,	
304.0,	0.0);							
( 369859.7,	3778444.6,	236.3,	304.0,	0.0);	( 369849.6,	3778322.0,	243.9,	
365.0,	0.0);							
( 369643.4,	3778672.5,	213.2,	365.0,	0.0);	( 369644.1,	3778798.3,	212.1,	
365.0,	0.0);							
( 369591.6,	3778750.0,	213.4,	365.0,	0.0);	( 369640.0,	3778638.0,	216.2,	
365.0,	0.0);							
( 369590.3,	3778698.8,	214.8,	365.0,	0.0);	( 369569.5,	3778751.3,	213.8,	
365.0,	0.0);							
( 369621.8,	3778549.7,	225.0,	365.0,	0.0);	( 369608.6,	3778540.9,	226.6,	
365.0,	0.0);							
( 369492.0,	3778688.1,	228.6,	365.0,	0.0);	( 369551.4,	3778498.0,	236.0,	
365.0,	0.0);							
( 369467.1,	3778588.6,	240.7,	365.0,	0.0);	( 369442.2,	3778525.5,	243.2,	
365.0,	0.0);							
( 369426.9,	3778653.6,	236.6,	365.0,	0.0);	( 369430.8,	3778596.3,	241.5,	
365.0,	0.0);							
( 369384.9,	3778676.6,	233.1,	365.0,	0.0);	( 369398.3,	3778498.7,	243.2,	
365.0,	0.0);							
( 369245.3,	3778531.2,	233.6,	365.0,	0.0);	( 369245.3,	3778441.3,	240.3,	
365.0,	0.0);							
( 369484.6,	3778462.3,	244.4,	365.0,	0.0);	( 369629.2,	3778438.7,	235.7,	365.0,
17.4);								
( 369814.8,	3778308.8,	242.5,	365.0,	0.0);	( 369781.3,	3778368.9,	239.6,	
365.0,	0.0);							
( 369811.0,	3778376.6,	240.3,	365.0,	0.0);	( 369853.0,	3778354.6,	243.2,	
304.0,	0.0);							
( 369860.8,	3778292.3,	246.5,	304.0,	0.0);	( 369856.2,	3778259.2,	245.7,	
365.0,	0.0);							

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5

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08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: PM2.5 \*\*\*  
 INCLUDING SOURCE(S): L0000442 , L0000443 , L0000444 , L0000445 ,  
 L0000446 ,  
 L0000447 , L0000448 , L0000449 , L0000450 , L0000451 , L0000452 , L0000453 ,  
 L0000454 ,  
 L0000455 , L0000456 , L0000457 , L0000458 , L0000459 , L0000460 , L0000461 ,  
 L0000462 ,  
 L0000463 , L0000486 , L0000487 , L0000488 , L0000489 , L0000490 , L0000491 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00031	369686.20	3778352.98	
0.00029					
369701.74	3778534.95	0.00067	369684.96	3778565.24	
0.00120					
369709.39	3778565.24	0.00052	369733.82	3778565.24	
0.00031					
369760.43	3778565.24	0.00021	369684.96	3778627.64	

0.00092				
369709.39	3778627.64	0.00048	369733.82	3778627.64
0.00030				
369760.43	3778627.64	0.00020	369684.56	3778740.79
0.00093				
369708.99	3778740.79	0.00044	369733.42	3778740.79
0.00027				
369760.02	3778740.79	0.00018	369684.59	3778685.54
0.00091				
369709.02	3778685.54	0.00047	369733.45	3778685.54
0.00029				
369760.06	3778685.54	0.00020	369810.59	3778741.35
0.00010				
369828.20	3778628.60	0.00010	369866.96	3778657.96
0.00007				
369904.54	3778679.10	0.00005	369858.74	3778708.37
0.00007				
369905.71	3778639.08	0.00005	369885.75	3778619.11
0.00006				
369638.62	3778030.06	0.00001	369698.03	3778231.80
0.00007				
369682.83	3778161.33	0.00003	369653.81	3778099.15
0.00002				
369666.25	3778059.08	0.00001	369722.90	3778230.42
0.00009				
369715.99	3778190.35	0.00005	369703.56	3778158.57
0.00003				
369686.98	3778126.79	0.00002	369675.92	3778097.77
0.00002				
369703.56	3778108.82	0.00002	369727.05	3778139.22
0.00003				
369903.91	3778552.37	0.00005	369866.61	3778563.43
0.00007				
369873.52	3778516.45	0.00007	369887.33	3778491.57
0.00006				
369859.70	3778444.59	0.00008	369849.63	3778322.03
0.00011				
369643.37	3778672.46	0.00121	369644.15	3778798.32
0.00098				
369591.64	3778749.96	0.00030	369640.00	3778638.03
0.00143				
369590.26	3778698.83	0.00033	369569.53	3778751.34
0.00021				
369621.84	3778549.71	0.00050	369608.62	3778540.93
0.00035				
369491.97	3778688.07	0.00009	369551.43	3778498.04
0.00011				
369467.11	3778588.61	0.00006	369442.24	3778525.50
0.00004				
369426.94	3778653.64	0.00005	369430.77	3778596.26
0.00004				
369384.87	3778676.59	0.00004	369398.26	3778498.73
0.00003				
369245.26	3778531.24	0.00002	369245.26	3778441.35
0.00001				
369484.59	3778462.33	0.00005	369629.21	3778438.68
0.00010				
369814.80	3778308.83	0.00024	369781.29	3778368.86
0.00024				
369811.05	3778376.63	0.00015	369852.96	3778354.56
0.00009				
369860.75	3778292.26	0.00008	369856.21	3778259.16
0.00008				

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* OPERATIONAL SCHOOL BUS PM2.5

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL \*\*\*

INCLUDING SOURCE(S): L0000442 , L0000443 , L0000444 , L0000445 ,  
L0000446 ,

L0000447 , L0000448 , L0000449 , L0000450 , L0000451 , L0000452 , L0000453 ,  
L0000454 ,

L0000455 , L0000456 , L0000457 , L0000458 , L0000459 , L0000460 , L0000461 ,  
L0000462 ,

L0000463 , L0000486 , L0000487 , L0000488 , L0000489 , L0000490 , L0000491 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00031	369686.20	3778352.98	
0.00029					
369701.74	3778534.95	0.00067	369684.96	3778565.24	
0.00120					
369709.39	3778565.24	0.00052	369733.82	3778565.24	
0.00031					
369760.43	3778565.24	0.00021	369684.96	3778627.64	
0.00092					
369709.39	3778627.64	0.00048	369733.82	3778627.64	
0.00030					
369760.43	3778627.64	0.00020	369684.56	3778740.79	
0.00093					
369708.99	3778740.79	0.00044	369733.42	3778740.79	
0.00027					
369760.02	3778740.79	0.00018	369684.59	3778685.54	
0.00091					
369709.02	3778685.54	0.00047	369733.45	3778685.54	
0.00029					
369760.06	3778685.54	0.00020	369810.59	3778741.35	
0.00010					
369828.20	3778628.60	0.00010	369866.96	3778657.96	
0.00007					
369904.54	3778679.10	0.00005	369858.74	3778708.37	
0.00007					
369905.71	3778639.08	0.00005	369885.75	3778619.11	
0.00006					
369638.62	3778030.06	0.00001	369698.03	3778231.80	
0.00007					
369682.83	3778161.33	0.00003	369653.81	3778099.15	
0.00002					
369666.25	3778059.08	0.00001	369722.90	3778230.42	
0.00009					
369715.99	3778190.35	0.00005	369703.56	3778158.57	
0.00003					
369686.98	3778126.79	0.00002	369675.92	3778097.77	
0.00002					
369703.56	3778108.82	0.00002	369727.05	3778139.22	
0.00003					
369903.91	3778552.37	0.00005	369866.61	3778563.43	
0.00007					

369873.52	3778516.45	0.00007	369887.33	3778491.57
0.00006				
369859.70	3778444.59	0.00008	369849.63	3778322.03
0.00011				
369643.37	3778672.46	0.00121	369644.15	3778798.32
0.00098				
369591.64	3778749.96	0.00030	369640.00	3778638.03
0.00143				
369590.26	3778698.83	0.00033	369569.53	3778751.34
0.00021				
369621.84	3778549.71	0.00050	369608.62	3778540.93
0.00035				
369491.97	3778688.07	0.00009	369551.43	3778498.04
0.00011				
369467.11	3778588.61	0.00006	369442.24	3778525.50
0.00004				
369426.94	3778653.64	0.00005	369430.77	3778596.26
0.00004				
369384.87	3778676.59	0.00004	369398.26	3778498.73
0.00003				
369245.26	3778531.24	0.00002	369245.26	3778441.35
0.00001				
369484.59	3778462.33	0.00005	369629.21	3778438.68
0.00010				
369814.80	3778308.83	0.00024	369781.29	3778368.86
0.00024				
369811.05	3778376.63	0.00015	369852.96	3778354.56
0.00009				
369860.75	3778292.26	0.00008	369856.21	3778259.16
0.00008				

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5

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**MODELOPTs:	RegDFAULT	CONC	ELEV	FLGPOL	*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PM2.5 ***					
					INCLUDING SOURCE(S):	L0000442	, L0000443	, L0000444	, L0000445	, L0000446
L0000447	, L0000448	, L0000449	, L0000450	, L0000451	, L0000452	, L0000453	, L0000454	, L0000455	, L0000456	, L0000457
L0000454	, L0000455	, L0000456	, L0000457	, L0000458	, L0000459	, L0000460	, L0000461	, L0000462	, L0000463	, L0000464
L0000455	, L0000456	, L0000457	, L0000458	, L0000459	, L0000460	, L0000461	, L0000462	, L0000463	, L0000464	, L0000465
L0000462	, L0000463	, L0000464	, L0000465	, L0000466	, L0000467	, L0000468	, L0000469	, L0000470	, L0000471	, L0000472
L0000463	, L0000464	, L0000465	, L0000466	, L0000467	, L0000468	, L0000469	, L0000470	, L0000471	, L0000472	, L0000473

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00126	(09121624)	369686.20	3778352.98	0.00111
(11112424)						
369701.74	3778534.95	0.00189m	(12112624)	369684.96	3778565.24	0.00320m
(12112624)						
369709.39	3778565.24	0.00153	(12121424)	369733.82	3778565.24	0.00101
(12121424)						
369760.43	3778565.24	0.00077m	(10120724)	369684.96	3778627.64	0.00251m
(12112624)						



369709.39 (10120724)	3778627.64	0.00141	(12121424)	369733.82	3778627.64	0.00097m
369760.43 (12112824)	3778627.64	0.00075m	(10120724)	369684.56	3778740.79	0.00257
369708.99 (12112824)	3778740.79	0.00138	(12112824)	369733.42	3778740.79	0.00091
369760.02 (12112824)	3778740.79	0.00064m	(12120124)	369684.59	3778685.54	0.00247
369709.02 (12112824)	3778685.54	0.00141	(12112824)	369733.45	3778685.54	0.00095
369760.06 (08010224)	3778685.54	0.00071m	(10120724)	369810.59	3778741.35	0.00038m
369828.20 (10120724)	3778628.60	0.00044m	(10120724)	369866.96	3778657.96	0.00032m
369904.54 (12121724)	3778679.10	0.00024	(12121724)	369858.74	3778708.37	0.00029
369905.71 (10120724)	3778639.08	0.00026m	(10120724)	369885.75	3778619.11	0.00031m
369638.62 (11112424)	3778030.06	0.00051	(11020224)	369698.03	3778231.80	0.00058
369682.83 (09121624)	3778161.33	0.00050	(09121624)	369653.81	3778099.15	0.00048
369666.25 (09011324)	3778059.08	0.00052	(09121624)	369722.90	3778230.42	0.00062
369715.99 (11112424)	3778190.35	0.00055	(09011324)	369703.56	3778158.57	0.00051
369686.98 (09121624)	3778126.79	0.00050	(09121624)	369675.92	3778097.77	0.00055
369703.56 (09011324)	3778108.82	0.00049	(11112424)	369727.05	3778139.22	0.00049
369903.91 (10120724)	3778552.37	0.00030m	(10120724)	369866.61	3778563.43	0.00036m
369873.52 (08010224)	3778516.45	0.00036m	(10120724)	369887.33	3778491.57	0.00036m
369859.70 (08010224)	3778444.59	0.00060m	(08010224)	369849.63	3778322.03	0.00065m
369643.37 (11010824)	3778672.46	0.00323m	(12112624)	369644.15	3778798.32	0.00273m
369591.64 (12112624)	3778749.96	0.00104m	(11010824)	369640.00	3778638.03	0.00381m
369590.26 (11010824)	3778698.83	0.00109m	(11010824)	369569.53	3778751.34	0.00078m
369621.84 (10113024)	3778549.71	0.00152	(12121424)	369608.62	3778540.93	0.00122
369491.97 (10113024)	3778688.07	0.00042m	(08121824)	369551.43	3778498.04	0.00055
369467.11 (09011124)	3778588.61	0.00039	(09011124)	369442.24	3778525.50	0.00038
369426.94 (11121624)	3778653.64	0.00033	(11121624)	369430.77	3778596.26	0.00036
369384.87 (09011124)	3778676.59	0.00026	(11011124)	369398.26	3778498.73	0.00032
369245.26 (11121624)	3778531.24	0.00015	(11121624)	369245.26	3778441.35	0.00018
369484.59 (10113024)	3778462.33	0.00039	(09011124)	369629.21	3778438.68	0.00050
369814.80 (08122924)	3778308.83	0.00084m	(12123124)	369781.29	3778368.86	0.00084
369811.05 (08010224)	3778376.63	0.00073m	(08010224)	369852.96	3778354.56	0.00069m
369860.75 (12123124)	3778292.26	0.00061m	(10120124)	369856.21	3778259.16	0.00062m

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL SCHOOL BUS PM2.5  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L0000442 , L0000443 , L0000444 , L0000445 ,  
 L0000446 ,

L0000447 , L0000448 , L0000449 , L0000450 , L0000451 , L0000452 , L0000453 ,  
 L0000454 ,  
 L0000455 , L0000456 , L0000457 , L0000458 , L0000459 , L0000460 , L0000461 ,  
 L0000462 ,  
 L0000463 , L0000486 , L0000487 , L0000488 , L0000489 , L0000490 , L0000491 , . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52 (11112424)	3778388.27	0.00126	(09121624)	369686.20	3778352.98	0.00111
369701.74 (12112624)	3778534.95	0.00189m	(12112624)	369684.96	3778565.24	0.00320m
369709.39 (12121424)	3778565.24	0.00153	(12121424)	369733.82	3778565.24	0.00101
369760.43 (12112624)	3778565.24	0.00077m	(10120724)	369684.96	3778627.64	0.00251m
369709.39 (10120724)	3778627.64	0.00141	(12121424)	369733.82	3778627.64	0.00097m
369760.43 (12112824)	3778627.64	0.00075m	(10120724)	369684.56	3778740.79	0.00257
369708.99 (12112824)	3778740.79	0.00138	(12112824)	369733.42	3778740.79	0.00091
369760.02 (12112824)	3778740.79	0.00064m	(12120124)	369684.59	3778685.54	0.00247
369709.02 (12112824)	3778685.54	0.00141	(12112824)	369733.45	3778685.54	0.00095
369760.06 (08010224)	3778685.54	0.00071m	(10120724)	369810.59	3778741.35	0.00038m
369828.20 (10120724)	3778628.60	0.00044m	(10120724)	369866.96	3778657.96	0.00032m
369904.54 (12121724)	3778679.10	0.00024	(12121724)	369858.74	3778708.37	0.00029
369905.71 (10120724)	3778639.08	0.00026m	(10120724)	369885.75	3778619.11	0.00031m
369638.62 (11112424)	3778030.06	0.00051	(11020224)	369698.03	3778231.80	0.00058
369682.83 (09121624)	3778161.33	0.00050	(09121624)	369653.81	3778099.15	0.00048
369666.25 (09011324)	3778059.08	0.00052	(09121624)	369722.90	3778230.42	0.00062
369715.99 (11112424)	3778190.35	0.00055	(09011324)	369703.56	3778158.57	0.00051
369686.98 (09121624)	3778126.79	0.00050	(09121624)	369675.92	3778097.77	0.00055
369703.56 (09011324)	3778108.82	0.00049	(11112424)	369727.05	3778139.22	0.00049
369903.91 (10120724)	3778552.37	0.00030m	(10120724)	369866.61	3778563.43	0.00036m

369873.52	3778516.45	0.00036m	(10120724)	369887.33	3778491.57	0.00036m
(08010224)						
369859.70	3778444.59	0.00060m	(08010224)	369849.63	3778322.03	0.00065m
(08010224)						
369643.37	3778672.46	0.00323m	(12112624)	369644.15	3778798.32	0.00273m
(11010824)						
369591.64	3778749.96	0.00104m	(11010824)	369640.00	3778638.03	0.00381m
(12112624)						
369590.26	3778698.83	0.00109m	(11010824)	369569.53	3778751.34	0.00078m
(11010824)						
369621.84	3778549.71	0.00152	(12121424)	369608.62	3778540.93	0.00122
(10113024)						
369491.97	3778688.07	0.00042m	(08121824)	369551.43	3778498.04	0.00055
(10113024)						
369467.11	3778588.61	0.00039	(09011124)	369442.24	3778525.50	0.00038
(09011124)						
369426.94	3778653.64	0.00033	(11121624)	369430.77	3778596.26	0.00036
(11121624)						
369384.87	3778676.59	0.00026	(11011124)	369398.26	3778498.73	0.00032
(09011124)						
369245.26	3778531.24	0.00015	(11121624)	369245.26	3778441.35	0.00018
(11121624)						
369484.59	3778462.33	0.00039	(09011124)	369629.21	3778438.68	0.00050
(10113024)						
369814.80	3778308.83	0.00084m	(12123124)	369781.29	3778368.86	0.00084
(08122924)						
369811.05	3778376.63	0.00073m	(08010224)	369852.96	3778354.56	0.00069m
(08010224)						
369860.75	3778292.26	0.00061m	(10120124)	369856.21	3778259.16	0.00062m
(12123124)						

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5 \*\*\*

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
PM2.5	1ST HIGHEST VALUE IS	0.00143 AT ( 369640.00, 3778638.03, 216.15, 365.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.00121 AT ( 369643.37, 3778672.46, 213.15, 365.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.00120 AT ( 369684.96, 3778565.24, 221.28, 365.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.00098 AT ( 369644.15, 3778798.32, 212.09, 365.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.00093 AT ( 369684.56, 3778740.79, 212.36, 365.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.00092 AT ( 369684.96, 3778627.64, 216.12, 365.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.00091 AT ( 369684.59, 3778685.54, 212.89, 365.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.00067 AT ( 369701.74, 3778534.95, 224.77, 365.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.00052 AT ( 369709.39, 3778565.24, 220.76, 365.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.00050 AT ( 369621.84, 3778549.71, 224.96, 365.00, 0.00)	DC	
ALL	1ST HIGHEST VALUE IS	0.00143 AT ( 369640.00, 3778638.03, 216.15, 365.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.00121 AT ( 369643.37, 3778672.46, 213.15, 365.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.00120 AT ( 369684.96, 3778565.24, 221.28, 365.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.00098 AT ( 369644.15, 3778798.32, 212.09, 365.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.00093 AT ( 369684.56, 3778740.79, 212.36, 365.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.00092 AT ( 369684.96, 3778627.64, 216.12, 365.00, 0.00)	DC	

7TH HIGHEST VALUE IS	0.00091 AT (	369684.59,	3778685.54,	212.89,	365.00,	0.00)	DC
8TH HIGHEST VALUE IS	0.00067 AT (	369701.74,	3778534.95,	224.77,	365.00,	0.00)	DC
9TH HIGHEST VALUE IS	0.00052 AT (	369709.39,	3778565.24,	220.76,	365.00,	0.00)	DC
10TH HIGHEST VALUE IS	0.00050 AT (	369621.84,	3778549.71,	224.96,	365.00,	0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF PM2.5 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	TYPE	GRID-ID	AVERAGE CONC	DATE (YYMMDDHH)	NETWORK	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF
PM2.5	HIGH	1ST HIGH VALUE IS	0.00381m	ON 12112624	AT (	369640.00, 3778638.03, 216.15, 365.00, 0.00)	DC
ALL	HIGH	1ST HIGH VALUE IS	0.00381m	ON 12112624	AT (	369640.00, 3778638.03, 216.15, 365.00, 0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL SCHOOL BUS PM2.5  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

- A Total of 0 Fatal Error Message(s)
- A Total of 0 Warning Message(s)
- A Total of 1275 Informational Message(s)
- A Total of 43848 Hours Were Processed
- A Total of 13 Calm Hours Identified
- A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\PARKING CO\PARKING CO.ADI
**

```

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*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

CO STARTING

```

TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO PARKING STRUCTURE CO
MODELOPT DFAULT CONC
AVERTIME 1 8
URBANOPT 9862049
POLLUTID CO
FLAGPOLE 0.00
RUNORNOT RUN

```

CO FINISHED

```

**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

SO STARTING

```

** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
LOCATION VOLGROUND VOLUME 369629.448 3778438.707 235.710
** DESCRSRC GROUND LEVEL
LOCATION VOLSECOND VOLUME 369629.448 3778438.707 235.710
** DESCRSRC SECOND FLOOR
LOCATION VOLTHIRD VOLUME 369629.448 3778438.707 235.710
** DESCRSRC THIRD FLOOR
** SOURCE PARAMETERS **
SRCPARAM VOLGROUND 0.184728 4.600 8.683 2.127
SRCPARAM VOLSECOND 0.281953 9.200 8.683 4.279
SRCPARAM VOLTHIRD 0.720438 13.800 8.683 6.419
URBANSRC VOLGROUND
URBANSRC VOLSECOND
URBANSRC VOLTHIRD

```

\*\* VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"

```

** VARIABLE EMISSION SCENARIO: "CO"
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 1.0 0.0 0.0

```

EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
CONCUNIT 873.2 GRAMS/SEC PPM
SRCGROUP CO VOLGROUND VOLSECOND VOLTHIRD
SRCGROUP ALL

SO FINISHED

\*\*
\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

\*\*\*\*\*
\*\*

RE STARTING

INCLUDED "PARKING CO.ROU"

RE FINISHED

\*\*
\*\*\*\*\*

\*\* AERMOD METEOROLOGY PATHWAY

\*\*\*\*\*
\*\*

ME STARTING

SURFFILE ..\..\BURK8.SFC
PROFFILE ..\..\BURK8.PFL
SURFDATA 0 2008
UAIRDATA 3190 2008
PROFBASE 10.0 METERS

ME FINISHED

\*\*
\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY

\*\*\*\*\*
\*\*

OU STARTING

RECTABLE ALLAVE 1ST
RECTABLE 1 1ST
RECTABLE 8 1ST

\*\* AUTO-GENERATED PLOTFILES

PLOTFILE 1 ALL 1ST "PARKING CO.AD\01H1GALL.PLT" 31
PLOTFILE 8 ALL 1ST "PARKING CO.AD\08H1GALL.PLT" 32
PLOTFILE 1 CO 1ST "PARKING CO.AD\01H1G001.PLT" 33
PLOTFILE 8 CO 1ST "PARKING CO.AD\08H1G001.PLT" 34
SUMMFILE "PARKING CO.SUM"

OU FINISHED

\*\*\*\*\*

\*\*\* SETUP Finishes Successfully \*\*\*

\*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE CO

\*\*\*

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

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-----

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

```

**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT = F
**Model Uses NO WET DEPLETION.  WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for      3 Source(s),
  for Total of      1 Urban Area(s):
  Urban Population =  9862049.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
  1. Stack-tip Downwash.
  2. Model Accounts for ELEVated Terrain Effects.
  3. Use Calms Processing Routine.
  4. Use Missing Data Processing Routine.
  5. No Exponential Decay for URBAN/Non-SO2.
  6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
  TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  CO

**Model Calculates  2 Short Term Average(s) of:  1-HR  8-HR

**This Run Includes:      3 Source(s);      2 Source Group(s); and      70 Receptor(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  14134

**Output Options Selected:
  Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
  Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
  Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                    m for Missing Hours
                                                    b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =  10.00 ;  Decay Coef. =  0.000      ;  Rot. Angle
=  0.0
                Emission Units = GRAMS/SEC                ;  Emission Rate Unit Factor =  873.20
                Output Units   = PPM

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**File for Summary of Results:  PARKING
CO.SUM
*** AERMOD - VERSION  14134 ***      *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
***      08/25/15
*** AERMET - VERSION  14134 ***      *** PARKING STRUCTURE CO      ***
15:37:49

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**MODELOPTs:  RegDEFAULT CONC      ELEV      FLGPOL

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*** VOLUME SOURCE DATA ***

```

SOURCE	NUMBER PART.	EMISSION RATE (USER UNITS)	X	Y	BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR	EMISSION RATE VARY
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)			BY



```

VOLGROUND      0  0.18473E+00  369629.4  3778438.7  235.7    4.60    8.68    2.13    YES  HROFDY
VOLSECOND      0  0.28195E+00  369629.4  3778438.7  235.7    9.20    8.68    4.28    YES  HROFDY
VOLTHIRD       0  0.72044E+00  369629.4  3778438.7  235.7   13.80    8.68    6.42    YES  HROFDY

```

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*** AERMOD - VERSION 14134 ***   *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
***      08/25/15

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*** AERMET - VERSION 14134 ***   *** PARKING STRUCTURE CO                               ***
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**MODELOPTs:  RegDEFAULT CONC      ELEV      FLGPOL

```

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

```

SRCGROUP ID          SOURCE IDs
-----

```

```

CO      VOLGROUND      , VOLSECOND      , VOLTHIRD      ,

```

```

ALL     VOLGROUND      , VOLSECOND      , VOLTHIRD      ,

```

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*** AERMOD - VERSION 14134 ***   *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
***      08/25/15

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*** AERMET - VERSION 14134 ***   *** PARKING STRUCTURE CO                               ***
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**MODELOPTs:  RegDEFAULT CONC      ELEV      FLGPOL

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\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

```

URBAN ID  URBAN POP          SOURCE IDs
-----

```

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9862049. VOLGROUND      , VOLSECOND      , VOLTHIRD      ,

```

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*** AERMOD - VERSION 14134 ***   *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
***      08/25/15

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*** AERMET - VERSION 14134 ***   *** PARKING STRUCTURE CO                               ***
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**MODELOPTs:  RegDEFAULT CONC      ELEV      FLGPOL

```

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

```

      HOUR      SCALAR      HOUR      SCALAR      HOUR      SCALAR      HOUR      SCALAR      HOUR      SCALAR      HOUR      SCALAR
-----

```

```

SOURCE ID = VOLGROUND ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00
  7 .00000E+00  8 .10000E+01  9 .00000E+00 10 .00000E+00 11 .00000E+00 12 .00000E+00
 13 .00000E+00 14 .00000E+00 15 .00000E+00 16 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

```

```

SOURCE ID = VOLSECOND ; SOURCE TYPE = VOLUME :
  1 .00000E+00  2 .00000E+00  3 .00000E+00  4 .00000E+00  5 .00000E+00  6 .00000E+00

```

7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLTHIRD ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* PARKING STRUCTURE CO

\*\*\*

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
 (METERS)

( 369670.5, 3778388.3,	238.9,	365.0,	0.0);	( 369686.2, 3778353.0,	240.4,		
365.0,	0.0);						
( 369701.7, 3778534.9,	224.8,	365.0,	0.0);	( 369685.0, 3778565.2,	221.3,		
365.0,	0.0);						
( 369709.4, 3778565.2,	220.8,	365.0,	0.0);	( 369733.8, 3778565.2,	220.3,		
365.0,	0.0);						
( 369760.4, 3778565.2,	219.9,	365.0,	0.0);	( 369685.0, 3778627.6,	216.1,		
365.0,	0.0);						
( 369709.4, 3778627.6,	215.9,	365.0,	0.0);	( 369733.8, 3778627.6,	215.7,		
365.0,	0.0);						
( 369760.4, 3778627.6,	215.5,	365.0,	0.0);	( 369684.6, 3778740.8,	212.4,		
365.0,	0.0);						
( 369709.0, 3778740.8,	212.3,	365.0,	0.0);	( 369733.4, 3778740.8,	212.3,		
365.0,	0.0);						
( 369760.0, 3778740.8,	212.3,	365.0,	0.0);	( 369684.6, 3778685.5,	212.9,		
365.0,	0.0);						
( 369709.0, 3778685.5,	212.9,	365.0,	0.0);	( 369733.5, 3778685.5,	212.9,		
365.0,	0.0);						
( 369760.1, 3778685.5,	212.9,	365.0,	0.0);	( 369810.6, 3778741.3,	212.1,		
365.0,	0.0);						
( 369828.2, 3778628.6,	214.6,	365.0,	0.0);	( 369867.0, 3778658.0,	212.8,		
365.0,	0.0);						
( 369904.5, 3778679.1,	212.0,	365.0,	0.0);	( 369858.7, 3778708.4,	212.0,		
365.0,	0.0);						
( 369905.7, 3778639.1,	214.2,	365.0,	0.0);	( 369885.8, 3778619.1,	215.4,		
365.0,	0.0);						
( 369638.6, 3778030.1,	269.3,	365.0,	0.0);	( 369698.0, 3778231.8,	243.0,		
365.0,	0.0);						
( 369682.8, 3778161.3,	247.8,	365.0,	0.0);	( 369653.8, 3778099.1,	252.5,		
365.0,	0.0);						
( 369666.2, 3778059.1,	259.1,	365.0,	0.0);	( 369722.9, 3778230.4,	242.9,		
365.0,	0.0);						
( 369716.0, 3778190.3,	244.4,	365.0,	0.0);	( 369703.6, 3778158.6,	247.2,		
365.0,	0.0);						
( 369687.0, 3778126.8,	251.1,	365.0,	0.0);	( 369675.9, 3778097.8,	253.5,		
365.0,	0.0);						
( 369703.6, 3778108.8,	251.0,	365.0,	0.0);	( 369727.0, 3778139.2,	247.0,		
365.0,	0.0);						
( 369903.9, 3778552.4,	223.0,	365.0,	0.0);	( 369866.6, 3778563.4,	219.9,		
365.0,	0.0);						
( 369873.5, 3778516.4,	227.5,	365.0,	0.0);	( 369887.3, 3778491.6,	232.5,		





08 01 01 01 5.5 0 -999. -99.00 281.0 99.0 -99.00 -99.00  
 08 01 01 01 9.1 1 -999. -99.00 -999.0 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE CO \*\*\*

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CO \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO		IN PPM		**	
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
(YYMMDDHH)							
369670.52	3778388.27	0.33674	(08120516)	369686.20	3778352.98	0.20179	
(08010208)							
369701.74	3778534.95	0.26238	(10121916)	369684.96	3778565.24	0.24126	
(10121916)							
369709.39	3778565.24	0.20559	(10121916)	369733.82	3778565.24	0.14629	
(10121916)							
369760.43	3778565.24	0.08800	(10121916)	369684.96	3778627.64	0.12200	
(10121916)							
369709.39	3778627.64	0.13069	(10121916)	369733.82	3778627.64	0.12145	
(10121916)							
369760.43	3778627.64	0.09875	(10121916)	369684.56	3778740.79	0.04377	
(10121916)							
369708.99	3778740.79	0.05408	(10121916)	369733.42	3778740.79	0.06097	
(10121916)							
369760.02	3778740.79	0.06341	(10121916)	369684.59	3778685.54	0.06925	
(10121916)							
369709.02	3778685.54	0.08177	(10121916)	369733.45	3778685.54	0.08620	
(10121916)							
369760.06	3778685.54	0.08200	(10121916)	369810.59	3778741.35	0.05497	
(10121916)							
369828.20	3778628.60	0.04146	(11111216)	369866.96	3778657.96	0.03351	
(08011308)							
369904.54	3778679.10	0.02825	(08011308)	369858.74	3778708.37	0.03684	
(10121916)							
369905.71	3778639.08	0.03158	(11111216)	369885.75	3778619.11	0.03673	
(11111216)							
369638.62	3778030.06	0.07767	(11112408)	369698.03	3778231.80	0.12966	
(10010408)							
369682.83	3778161.33	0.11840	(09011608)	369653.81	3778099.15	0.11088	
(11112408)							
369666.25	3778059.08	0.10186	(11112408)	369722.90	3778230.42	0.12334	
(10010308)							
369715.99	3778190.35	0.11527	(10010408)	369703.56	3778158.57	0.11104	
(09123108)							
369686.98	3778126.79	0.11706	(09011608)	369675.92	3778097.77	0.11138	
(11012008)							
369703.56	3778108.82	0.10672	(09011608)	369727.05	3778139.22	0.10441	
(10010408)							
369903.91	3778552.37	0.04715	(12121716)	369866.61	3778563.43	0.04726	
(11111216)							
369873.52	3778516.45	0.06753	(12121716)	369887.33	3778491.57	0.06565	

(12121716)							
369859.70	3778444.59	0.06396	(11112016)	369849.63	3778322.03	0.11745	
(09121008)							
369643.37	3778672.46	0.05424	(12112816)	369644.15	3778798.32	0.02736	
(12122608)							
369591.64	3778749.96	0.03238	(12111716)	369640.00	3778638.03	0.07053	
(12112816)							
369590.26	3778698.83	0.04583	(12111716)	369569.53	3778751.34	0.03545	
(12111716)							
369621.84	3778549.71	0.16243	(12111716)	369608.62	3778540.93	0.20787	
(12111716)							
369491.97	3778688.07	0.03913	(12111716)	369551.43	3778498.04	0.29082	
(12112916)							
369467.11	3778588.61	0.10928	(10011308)	369442.24	3778525.50	0.13864	
(09010908)							
369426.94	3778653.64	0.05018	(12112916)	369430.77	3778596.26	0.10151	
(10122108)							
369384.87	3778676.59	0.03989	(12112916)	369398.26	3778498.73	0.11528	
(10121408)							
369245.26	3778531.24	0.02969	(10121408)	369245.26	3778441.35	0.03921	
(11011108)							
369484.59	3778462.33	0.17068	(10121408)	369629.21	3778438.68	0.00000	
(00000000)							
369814.80	3778308.83	0.12238	(10121208)	369781.29	3778368.86	0.12980	
(08010308)							
369811.05	3778376.63	0.12019	(08020908)	369852.96	3778354.56	0.12079	
(08020908)							
369860.75	3778292.26	0.11876	(10120408)	369856.21	3778259.16	0.10969	
(10120808)							

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* PARKING STRUCTURE CO

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.33674 (08120516)	369686.20	3778352.98	0.20179
(08010208)					
369701.74	3778534.95	0.26238 (10121916)	369684.96	3778565.24	0.24126
(10121916)					
369709.39	3778565.24	0.20559 (10121916)	369733.82	3778565.24	0.14629
(10121916)					
369760.43	3778565.24	0.08800 (10121916)	369684.96	3778627.64	0.12200
(10121916)					
369709.39	3778627.64	0.13069 (10121916)	369733.82	3778627.64	0.12145
(10121916)					
369760.43	3778627.64	0.09875 (10121916)	369684.56	3778740.79	0.04377
(10121916)					
369708.99	3778740.79	0.05408 (10121916)	369733.42	3778740.79	0.06097
(10121916)					
369760.02	3778740.79	0.06341 (10121916)	369684.59	3778685.54	0.06925
(10121916)					

369709.02	3778685.54	0.08177	(10121916)	369733.45	3778685.54	0.08620
(10121916)						
369760.06	3778685.54	0.08200	(10121916)	369810.59	3778741.35	0.05497
(10121916)						
369828.20	3778628.60	0.04146	(11111216)	369866.96	3778657.96	0.03351
(08011308)						
369904.54	3778679.10	0.02825	(08011308)	369858.74	3778708.37	0.03684
(10121916)						
369905.71	3778639.08	0.03158	(11111216)	369885.75	3778619.11	0.03673
(11111216)						
369638.62	3778030.06	0.07767	(11112408)	369698.03	3778231.80	0.12966
(10010408)						
369682.83	3778161.33	0.11840	(09011608)	369653.81	3778099.15	0.11088
(11112408)						
369666.25	3778059.08	0.10186	(11112408)	369722.90	3778230.42	0.12334
(10010308)						
369715.99	3778190.35	0.11527	(10010408)	369703.56	3778158.57	0.11104
(09123108)						
369686.98	3778126.79	0.11706	(09011608)	369675.92	3778097.77	0.11138
(11012008)						
369703.56	3778108.82	0.10672	(09011608)	369727.05	3778139.22	0.10441
(10010408)						
369903.91	3778552.37	0.04715	(12121716)	369866.61	3778563.43	0.04726
(11111216)						
369873.52	3778516.45	0.06753	(12121716)	369887.33	3778491.57	0.06565
(12121716)						
369859.70	3778444.59	0.06396	(11112016)	369849.63	3778322.03	0.11745
(09121008)						
369643.37	3778672.46	0.05424	(12112816)	369644.15	3778798.32	0.02736
(12122608)						
369591.64	3778749.96	0.03238	(12111716)	369640.00	3778638.03	0.07053
(12112816)						
369590.26	3778698.83	0.04583	(12111716)	369569.53	3778751.34	0.03545
(12111716)						
369621.84	3778549.71	0.16243	(12111716)	369608.62	3778540.93	0.20787
(12111716)						
369491.97	3778688.07	0.03913	(12111716)	369551.43	3778498.04	0.29082
(12112916)						
369467.11	3778588.61	0.10928	(10011308)	369442.24	3778525.50	0.13864
(09010908)						
369426.94	3778653.64	0.05018	(12112916)	369430.77	3778596.26	0.10151
(10122108)						
369384.87	3778676.59	0.03989	(12112916)	369398.26	3778498.73	0.11528
(10121408)						
369245.26	3778531.24	0.02969	(10121408)	369245.26	3778441.35	0.03921
(11011108)						
369484.59	3778462.33	0.17068	(10121408)	369629.21	3778438.68	0.00000
(00000000)						
369814.80	3778308.83	0.12238	(10121208)	369781.29	3778368.86	0.12980
(08010308)						
369811.05	3778376.63	0.12019	(08020908)	369852.96	3778354.56	0.12079
(08020908)						
369860.75	3778292.26	0.11876	(10120408)	369856.21	3778259.16	0.10969
(10120808)						

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* PARKING STRUCTURE CO \*\*\*

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CO \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

## \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

		** CONC OF CO		IN PPM		**	
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
(YYMMDDHH)							
369670.52	3778388.27	0.04239m	(08010208)	369686.20	3778352.98	0.03363m	
(08010208)							
369701.74	3778534.95	0.03280	(10121916)	369684.96	3778565.24	0.03016	
(10121916)							
369709.39	3778565.24	0.02570	(10121916)	369733.82	3778565.24	0.01829	
(10121916)							
369760.43	3778565.24	0.01100	(10121916)	369684.96	3778627.64	0.01525	
(10121916)							
369709.39	3778627.64	0.01634	(10121916)	369733.82	3778627.64	0.01518	
(10121916)							
369760.43	3778627.64	0.01234	(10121916)	369684.56	3778740.79	0.00547	
(10121916)							
369708.99	3778740.79	0.00676	(10121916)	369733.42	3778740.79	0.00762	
(10121916)							
369760.02	3778740.79	0.00793	(10121916)	369684.59	3778685.54	0.00866	
(10121916)							
369709.02	3778685.54	0.01022	(10121916)	369733.45	3778685.54	0.01078	
(10121916)							
369760.06	3778685.54	0.01025	(10121916)	369810.59	3778741.35	0.00687	
(10121916)							
369828.20	3778628.60	0.00518	(11111216)	369866.96	3778657.96	0.00419	
(08011308)							
369904.54	3778679.10	0.00353	(08011308)	369858.74	3778708.37	0.00460	
(10121916)							
369905.71	3778639.08	0.00395	(11111216)	369885.75	3778619.11	0.00459	
(11111216)							
369638.62	3778030.06	0.00971	(11112408)	369698.03	3778231.80	0.01621	
(10010408)							
369682.83	3778161.33	0.01480	(09011608)	369653.81	3778099.15	0.01386	
(11112408)							
369666.25	3778059.08	0.01273	(11112408)	369722.90	3778230.42	0.01651m	
(08010208)							
369715.99	3778190.35	0.01441	(10010408)	369703.56	3778158.57	0.01388	
(09123108)							
369686.98	3778126.79	0.01463	(09011608)	369675.92	3778097.77	0.01392	
(11012008)							
369703.56	3778108.82	0.01334	(09011608)	369727.05	3778139.22	0.01305	
(10010408)							
369903.91	3778552.37	0.00589	(12121716)	369866.61	3778563.43	0.00591	
(11111216)							
369873.52	3778516.45	0.00844	(12121716)	369887.33	3778491.57	0.00821	
(12121716)							
369859.70	3778444.59	0.00799	(11112016)	369849.63	3778322.03	0.01580m	
(11020108)							
369643.37	3778672.46	0.00678	(12112816)	369644.15	3778798.32	0.00342	
(12122608)							
369591.64	3778749.96	0.00405	(12111716)	369640.00	3778638.03	0.00882	
(12112816)							
369590.26	3778698.83	0.00573	(12111716)	369569.53	3778751.34	0.00443	
(12111716)							
369621.84	3778549.71	0.02030	(12111716)	369608.62	3778540.93	0.02598	
(12111716)							
369491.97	3778688.07	0.00490m	(12120108)	369551.43	3778498.04	0.03635	
(12112916)							
369467.11	3778588.61	0.01366	(10011308)	369442.24	3778525.50	0.01733	



(09010908)							
369426.94	3778653.64	0.00627	(12112916)	369430.77	3778596.26	0.01269	
(10122108)							
369384.87	3778676.59	0.00499	(12112916)	369398.26	3778498.73	0.01441	
(10121408)							
369245.26	3778531.24	0.00371	(10121408)	369245.26	3778441.35	0.00490	
(11011108)							
369484.59	3778462.33	0.02133	(10121408)	369629.21	3778438.68	0.00000	
(00000000)							
369814.80	3778308.83	0.01530	(10121208)	369781.29	3778368.86	0.01674m	
(11020108)							
369811.05	3778376.63	0.01623m	(11020108)	369852.96	3778354.56	0.01735m	
(11020108)							
369860.75	3778292.26	0.01484	(10120408)	369856.21	3778259.16	0.01371	
(10120808)							

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* \*\* PARKING STRUCTURE CO \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

369670.52	3778388.27	0.04239m	(08010208)	369686.20	3778352.98	0.03363m
(08010208)						
369701.74	3778534.95	0.03280	(10121916)	369684.96	3778565.24	0.03016
(10121916)						
369709.39	3778565.24	0.02570	(10121916)	369733.82	3778565.24	0.01829
(10121916)						
369760.43	3778565.24	0.01100	(10121916)	369684.96	3778627.64	0.01525
(10121916)						
369709.39	3778627.64	0.01634	(10121916)	369733.82	3778627.64	0.01518
(10121916)						
369760.43	3778627.64	0.01234	(10121916)	369684.56	3778740.79	0.00547
(10121916)						
369708.99	3778740.79	0.00676	(10121916)	369733.42	3778740.79	0.00762
(10121916)						
369760.02	3778740.79	0.00793	(10121916)	369684.59	3778685.54	0.00866
(10121916)						
369709.02	3778685.54	0.01022	(10121916)	369733.45	3778685.54	0.01078
(10121916)						
369760.06	3778685.54	0.01025	(10121916)	369810.59	3778741.35	0.00687
(10121916)						
369828.20	3778628.60	0.00518	(11111216)	369866.96	3778657.96	0.00419
(08011308)						
369904.54	3778679.10	0.00353	(08011308)	369858.74	3778708.37	0.00460
(10121916)						
369905.71	3778639.08	0.00395	(11111216)	369885.75	3778619.11	0.00459
(11111216)						
369638.62	3778030.06	0.00971	(11112408)	369698.03	3778231.80	0.01621
(10010408)						
369682.83	3778161.33	0.01480	(09011608)	369653.81	3778099.15	0.01386
(11112408)						

369666.25	3778059.08	0.01273	(11112408)	369722.90	3778230.42	0.01651m
(08010208)						
369715.99	3778190.35	0.01441	(10010408)	369703.56	3778158.57	0.01388
(09123108)						
369686.98	3778126.79	0.01463	(09011608)	369675.92	3778097.77	0.01392
(11012008)						
369703.56	3778108.82	0.01334	(09011608)	369727.05	3778139.22	0.01305
(10010408)						
369903.91	3778552.37	0.00589	(12121716)	369866.61	3778563.43	0.00591
(11111216)						
369873.52	3778516.45	0.00844	(12121716)	369887.33	3778491.57	0.00821
(12121716)						
369859.70	3778444.59	0.00799	(11112016)	369849.63	3778322.03	0.01580m
(11020108)						
369643.37	3778672.46	0.00678	(12112816)	369644.15	3778798.32	0.00342
(12122608)						
369591.64	3778749.96	0.00405	(12111716)	369640.00	3778638.03	0.00882
(12112816)						
369590.26	3778698.83	0.00573	(12111716)	369569.53	3778751.34	0.00443
(12111716)						
369621.84	3778549.71	0.02030	(12111716)	369608.62	3778540.93	0.02598
(12111716)						
369491.97	3778688.07	0.00490m	(12120108)	369551.43	3778498.04	0.03635
(12112916)						
369467.11	3778588.61	0.01366	(10011308)	369442.24	3778525.50	0.01733
(09010908)						
369426.94	3778653.64	0.00627	(12112916)	369430.77	3778596.26	0.01269
(10122108)						
369384.87	3778676.59	0.00499	(12112916)	369398.26	3778498.73	0.01441
(10121408)						
369245.26	3778531.24	0.00371	(10121408)	369245.26	3778441.35	0.00490
(11011108)						
369484.59	3778462.33	0.02133	(10121408)	369629.21	3778438.68	0.00000
(00000000)						
369814.80	3778308.83	0.01530	(10121208)	369781.29	3778368.86	0.01674m
(11020108)						
369811.05	3778376.63	0.01623m	(11020108)	369852.96	3778354.56	0.01735m
(11020108)						
369860.75	3778292.26	0.01484	(10120408)	369856.21	3778259.16	0.01371
(10120808)						

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* \*\* PARKING STRUCTURE CO \*\*\*  
 15:37:49

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\*\*MODELOPTs: RegDEFAULT CONC

ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

DATE NETWORK

GROUP ID	AVERAGE CONC	(YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF
TYPE GRID-ID					
-----					
-----					

CO HIGH 1ST HIGH VALUE IS 0.33674 ON 08120516: AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00) DC

ALL HIGH 1ST HIGH VALUE IS 0.33674 ON 08120516: AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART GP = GRIDPOLR DC = DISCCART DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE CO 15:37:49

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 8-HR RESULTS \*\*\*

\*\* CONC OF CO IN PPM \*\*

Table with columns: GROUP ID, TYPE, GRID-ID, AVERAGE CONC, DATE, NETWORK, RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG), OF. Includes a dashed separator line.

CO HIGH 1ST HIGH VALUE IS 0.04239m ON 08010208: AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00) DC

ALL HIGH 1ST HIGH VALUE IS 0.04239m ON 08010208: AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART GP = GRIDPOLR DC = DISCCART DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE CO 15:37:49

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

- A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 1275 Informational Message(s)
A Total of 43848 Hours Were Processed
A Total of 13 Calm Hours Identified
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\PARKING NO2\PARKING NO2.ADI
**

```

```

*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

```

CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO PARKING STRUCTURE LOCALIZED NO2
MODELOPT DFAULT CONC
AVERTIME 1
URBANOPT 9862049
POLLUTID NO2
FLAGPOLE 0.00
RUNORNOT RUN

```

```

CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**

```

```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
LOCATION VOLGROUND VOLUME 369629.448 3778438.707 235.710
** DESCRSRC GROUND LEVEL
LOCATION VOLSECOND VOLUME 369629.448 3778438.707 235.710
** DESCRSRC SECOND FLOOR
LOCATION VOLTHIRD VOLUME 369629.448 3778438.707 235.710
** DESCRSRC THIRD FLOOR
** SOURCE PARAMETERS **
SRCPARAM VOLGROUND 0.001724 4.600 8.683 2.127
SRCPARAM VOLSECOND 0.002631 9.200 8.683 4.279
SRCPARAM VOLTHIRD 0.002368 13.800 8.683 6.419
URBANSRC VOLGROUND
URBANSRC VOLSECOND
URBANSRC VOLTHIRD

```

```

** VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"
** VARIABLE EMISSION SCENARIO: "NO2"
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 1.0 0.0 0.0

```

EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
CONCUNIT 531.5 GRAMS/SEC PPM
SRCGROUP NO2 VOLGROUND VOLSECOND VOLTHIRD
SRCGROUP ALL

SO FINISHED

\*\*
\*\*\*\*\*
\*\* AERMOD RECEPTOR PATHWAY
\*\*\*\*\*

\*\*
\*\*
RE STARTING
INCLUDED "PARKING NO2.ROU"
RE FINISHED

\*\*
\*\*\*\*\*
\*\* AERMOD METEOROLOGY PATHWAY
\*\*\*\*\*

\*\*
\*\*
ME STARTING

SURFFILE ..\..\BURK8.SFC
PROFFILE ..\..\BURK8.PFL
SURFDATA 0 2008
UAIRDATA 3190 2008
PROFBASE 10.0 METERS

ME FINISHED

\*\*
\*\*\*\*\*
\*\* AERMOD OUTPUT PATHWAY
\*\*\*\*\*

\*\*
\*\*
OU STARTING
RECTABLE ALLAVE 1ST
RECTABLE 1 1ST
\*\* AUTO-GENERATED PLOTFILES
PLOTFILE 1 ALL 1ST "PARKING NO2.AD\01H1GALL.PLT" 31
PLOTFILE 1 NO2 1ST "PARKING NO2.AD\01H1G001.PLT" 32
SUMMFILE "PARKING NO2.SUM"
OU FINISHED

\*\*\*\*\*
\*\*\* SETUP Finishes Successfully \*\*\*
\*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
08/25/15
\*\*\* AERMET - VERSION 14134 \*\*\* \*\* PARKING STRUCTURE LOCALIZED NO2 \*\*\*
15:39:51

PAGE 1
\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
\*\*NO GAS DEPOSITION Data Provided.
\*\*NO PARTICLE DEPOSITION Data Provided.
\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 3 Source(s),  
for Total of 1 Urban Area(s):  
Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Full Conversion Assumed for NO2.
7. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: NO2

\*\*Note that special processing requirements apply for the 1-hour NO2 NAAQS - check available guidance.

Model will process user-specified ranks of daily maximum 1-hour values averaged across the number of years modeled.  
For annual NO2 NAAQS modeling, the multi-year maximum of PERIOD values can be simulated using the MULTYEAR keyword.  
Multi-year PERIOD and 1-hour values should only be done in a single model run using the MULTYEAR option with a  
single multi-year meteorological data file using STARTEND keyword.

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR

\*\*This Run Includes: 3 Source(s); 2 Source Group(s); and 70 Receptor(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 14134

\*\*Output Options Selected:

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)  
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)  
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle  
= 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 531.50  
Output Units = PPM

\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.

\*\*File for Summary of Results: PARKING

NO2.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE LOCALIZED NO2

\*\*\*

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION	
ID	PART.	(USER	UNITS)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR
	CATS.			(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		VARY
											BY

VOLGROUND 0 0.17240E-02 369629.4 3778438.7 235.7 4.60 8.68 2.13 YES HROFDY  
VOLSECOND 0 0.26310E-02 369629.4 3778438.7 235.7 9.20 8.68 4.28 YES HROFDY  
VOLTHIRD 0 0.23680E-02 369629.4 3778438.7 235.7 13.80 8.68 6.42 YES HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
08/25/15  
\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE LOCALIZED NO2  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
-------------	------------

NO2 VOLGROUND , VOLSECOND , VOLTHIRD ,

ALL VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE LOCALIZED NO2  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs
----------	-----------	------------

9862049. VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
08/25/15  
\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE LOCALIZED NO2  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------	------	--------	------	--------

SOURCE ID = VOLGROUND ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00



SOURCE ID = VOLSECOND ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLTHIRD ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* PARKING STRUCTURE LOCALIZED NO2 \*\*\*  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
 (METERS)

( 369670.5, 3778388.3,	238.9,	365.0,	0.0);	( 369686.2, 3778353.0,	240.4,	
365.0,	0.0);					
( 369701.7, 3778534.9,	224.8,	365.0,	0.0);	( 369685.0, 3778565.2,	221.3,	
365.0,	0.0);					
( 369709.4, 3778565.2,	220.8,	365.0,	0.0);	( 369733.8, 3778565.2,	220.3,	
365.0,	0.0);					
( 369760.4, 3778565.2,	219.9,	365.0,	0.0);	( 369685.0, 3778627.6,	216.1,	
365.0,	0.0);					
( 369709.4, 3778627.6,	215.9,	365.0,	0.0);	( 369733.8, 3778627.6,	215.7,	
365.0,	0.0);					
( 369760.4, 3778627.6,	215.5,	365.0,	0.0);	( 369684.6, 3778740.8,	212.4,	
365.0,	0.0);					
( 369709.0, 3778740.8,	212.3,	365.0,	0.0);	( 369733.4, 3778740.8,	212.3,	
365.0,	0.0);					
( 369760.0, 3778740.8,	212.3,	365.0,	0.0);	( 369684.6, 3778685.5,	212.9,	
365.0,	0.0);					
( 369709.0, 3778685.5,	212.9,	365.0,	0.0);	( 369733.5, 3778685.5,	212.9,	
365.0,	0.0);					
( 369760.1, 3778685.5,	212.9,	365.0,	0.0);	( 369810.6, 3778741.3,	212.1,	
365.0,	0.0);					
( 369828.2, 3778628.6,	214.6,	365.0,	0.0);	( 369867.0, 3778658.0,	212.8,	
365.0,	0.0);					
( 369904.5, 3778679.1,	212.0,	365.0,	0.0);	( 369858.7, 3778708.4,	212.0,	
365.0,	0.0);					
( 369905.7, 3778639.1,	214.2,	365.0,	0.0);	( 369885.8, 3778619.1,	215.4,	
365.0,	0.0);					
( 369638.6, 3778030.1,	269.3,	365.0,	0.0);	( 369698.0, 3778231.8,	243.0,	
365.0,	0.0);					
( 369682.8, 3778161.3,	247.8,	365.0,	0.0);	( 369653.8, 3778099.1,	252.5,	
365.0,	0.0);					
( 369666.2, 3778059.1,	259.1,	365.0,	0.0);	( 369722.9, 3778230.4,	242.9,	
365.0,	0.0);					
( 369716.0, 3778190.3,	244.4,	365.0,	0.0);	( 369703.6, 3778158.6,	247.2,	
365.0,	0.0);					
( 369687.0, 3778126.8,	251.1,	365.0,	0.0);	( 369675.9, 3778097.8,	253.5,	
365.0,	0.0);					
( 369703.6, 3778108.8,	251.0,	365.0,	0.0);	( 369727.0, 3778139.2,	247.0,	





First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE LOCALIZED NO2

\*\*\*

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* THE 1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP:

NO2 \*\*\*

INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00104	369686.20	3778352.98	
0.00071					
369701.74	3778534.95	0.00054	369684.96	3778565.24	
0.00045					
369709.39	3778565.24	0.00039	369733.82	3778565.24	
0.00032					
369760.43	3778565.24	0.00025	369684.96	3778627.64	
0.00025					
369709.39	3778627.64	0.00024	369733.82	3778627.64	
0.00022					
369760.43	3778627.64	0.00019	369684.56	3778740.79	
0.00011					
369708.99	3778740.79	0.00012	369733.42	3778740.79	
0.00012					
369760.02	3778740.79	0.00012	369684.59	3778685.54	
0.00016					
369709.02	3778685.54	0.00016	369733.45	3778685.54	
0.00016					
369760.06	3778685.54	0.00015	369810.59	3778741.35	
0.00010					
369828.20	3778628.60	0.00013	369866.96	3778657.96	
0.00010					
369904.54	3778679.10	0.00008	369858.74	3778708.37	
0.00009					
369905.71	3778639.08	0.00008	369885.75	3778619.11	
0.00010					
369638.62	3778030.06	0.00020	369698.03	3778231.80	
0.00042					
369682.83	3778161.33	0.00042	369653.81	3778099.15	
0.00033					
369666.25	3778059.08	0.00030	369722.90	3778230.42	
0.00042					
369715.99	3778190.35	0.00037	369703.56	3778158.57	
0.00039					
369686.98	3778126.79	0.00040	369675.92	3778097.77	
0.00036					
369703.56	3778108.82	0.00037	369727.05	3778139.22	

0.00035				
369903.91	3778552.37	0.00012	369866.61	3778563.43
0.00014				
369873.52	3778516.45	0.00015	369887.33	3778491.57
0.00015				
369859.70	3778444.59	0.00018	369849.63	3778322.03
0.00040				
369643.37	3778672.46	0.00014	369644.15	3778798.32
0.00007				
369591.64	3778749.96	0.00009	369640.00	3778638.03
0.00019				
369590.26	3778698.83	0.00012	369569.53	3778751.34
0.00009				
369621.84	3778549.71	0.00046	369608.62	3778540.93
0.00055				
369491.97	3778688.07	0.00012	369551.43	3778498.04
0.00076				
369467.11	3778588.61	0.00030	369442.24	3778525.50
0.00039				
369426.94	3778653.64	0.00013	369430.77	3778596.26
0.00028				
369384.87	3778676.59	0.00010	369398.26	3778498.73
0.00028				
369245.26	3778531.24	0.00007	369245.26	3778441.35
0.00010				
369484.59	3778462.33	0.00048	369629.21	3778438.68
0.00000				
369814.80	3778308.83	0.00039	369781.29	3778368.86
0.00041				
369811.05	3778376.63	0.00039	369852.96	3778354.56
0.00042				
369860.75	3778292.26	0.00041	369856.21	3778259.16
0.00036				

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE LOCALIZED NO2

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15:39:51

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP:  
ALL \*\*\*

INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.00104	369686.20	3778352.98	
0.00071					
369701.74	3778534.95	0.00054	369684.96	3778565.24	
0.00045					
369709.39	3778565.24	0.00039	369733.82	3778565.24	
0.00032					
369760.43	3778565.24	0.00025	369684.96	3778627.64	
0.00025					
369709.39	3778627.64	0.00024	369733.82	3778627.64	
0.00022					
369760.43	3778627.64	0.00019	369684.56	3778740.79	
0.00011					

369708.99	3778740.79	0.00012	369733.42	3778740.79
0.00012				
369760.02	3778740.79	0.00012	369684.59	3778685.54
0.00016				
369709.02	3778685.54	0.00016	369733.45	3778685.54
0.00016				
369760.06	3778685.54	0.00015	369810.59	3778741.35
0.00010				
369828.20	3778628.60	0.00013	369866.96	3778657.96
0.00010				
369904.54	3778679.10	0.00008	369858.74	3778708.37
0.00009				
369905.71	3778639.08	0.00008	369885.75	3778619.11
0.00010				
369638.62	3778030.06	0.00020	369698.03	3778231.80
0.00042				
369682.83	3778161.33	0.00042	369653.81	3778099.15
0.00033				
369666.25	3778059.08	0.00030	369722.90	3778230.42
0.00042				
369715.99	3778190.35	0.00037	369703.56	3778158.57
0.00039				
369686.98	3778126.79	0.00040	369675.92	3778097.77
0.00036				
369703.56	3778108.82	0.00037	369727.05	3778139.22
0.00035				
369903.91	3778552.37	0.00012	369866.61	3778563.43
0.00014				
369873.52	3778516.45	0.00015	369887.33	3778491.57
0.00015				
369859.70	3778444.59	0.00018	369849.63	3778322.03
0.00040				
369643.37	3778672.46	0.00014	369644.15	3778798.32
0.00007				
369591.64	3778749.96	0.00009	369640.00	3778638.03
0.00019				
369590.26	3778698.83	0.00012	369569.53	3778751.34
0.00009				
369621.84	3778549.71	0.00046	369608.62	3778540.93
0.00055				
369491.97	3778688.07	0.00012	369551.43	3778498.04
0.00076				
369467.11	3778588.61	0.00030	369442.24	3778525.50
0.00039				
369426.94	3778653.64	0.00013	369430.77	3778596.26
0.00028				
369384.87	3778676.59	0.00010	369398.26	3778498.73
0.00028				
369245.26	3778531.24	0.00007	369245.26	3778441.35
0.00010				
369484.59	3778462.33	0.00048	369629.21	3778438.68
0.00000				
369814.80	3778308.83	0.00039	369781.29	3778368.86
0.00041				
369811.05	3778376.63	0.00039	369852.96	3778354.56
0.00042				
369860.75	3778292.26	0.00041	369856.21	3778259.16
0.00036				

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* PARKING STRUCTURE LOCALIZED NO2

\*\*\*

15:39:51

\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM 1ST-HIGHEST MAX DAILY 1-HR RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF NO2 IN PPM \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
NO2	1ST HIGHEST VALUE IS	0.00104 AT ( 369670.52, 3778388.27, 238.88, 365.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00076 AT ( 369551.43, 3778498.04, 235.98, 365.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.00071 AT ( 369686.20, 3778352.98, 240.37, 365.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00055 AT ( 369608.62, 3778540.93, 226.55, 365.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00054 AT ( 369701.74, 3778534.95, 224.77, 365.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00048 AT ( 369484.59, 3778462.33, 244.44, 365.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00046 AT ( 369621.84, 3778549.71, 224.96, 365.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.00045 AT ( 369684.96, 3778565.24, 221.28, 365.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00042 AT ( 369698.03, 3778231.80, 242.97, 365.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00042 AT ( 369722.90, 3778230.42, 242.90, 365.00,	0.00)	DC
ALL	1ST HIGHEST VALUE IS	0.00104 AT ( 369670.52, 3778388.27, 238.88, 365.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00076 AT ( 369551.43, 3778498.04, 235.98, 365.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.00071 AT ( 369686.20, 3778352.98, 240.37, 365.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00055 AT ( 369608.62, 3778540.93, 226.55, 365.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00054 AT ( 369701.74, 3778534.95, 224.77, 365.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00048 AT ( 369484.59, 3778462.33, 244.44, 365.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00046 AT ( 369621.84, 3778549.71, 224.96, 365.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.00045 AT ( 369684.96, 3778565.24, 221.28, 365.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00042 AT ( 369698.03, 3778231.80, 242.97, 365.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00042 AT ( 369722.90, 3778230.42, 242.90, 365.00,	0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* 08/25/15 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

\*\*\* AERMET - VERSION 14134 \*\*\* 15:39:51 \*\*\* PARKING STRUCTURE LOCALIZED NO2 \*\*\*

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 0 Warning Message(s)  
 A Total of 1275 Informational Message(s)  
 A Total of 43848 Hours Were Processed  
 A Total of 13 Calm Hours Identified  
 A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

```
***** WARNING MESSAGES *****  
*** NONE ***
```

```
*****  
*** AERMOD Finishes Successfully ***  
*****
```



```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\PARKING PM10\PARKING PM10.ADI
**

```

```

*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

```

CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO OPERATIONAL MOBILE
MODELOPT DFAULT CONC
AVERTIME 24 ANNUAL
URBANOPT 9862049
POLLUTID PM_10
FLAGPOLE 0.00
RUNORNOT RUN
ERRORFIL PARKING.ERR

```

```

CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
LOCATION VOLGROUND VOLUME 369629.448 3778438.707 240.000
** DESCRSRC GROUND LEVEL
LOCATION VOLSECOND VOLUME 369629.448 3778438.707 240.000
** DESCRSRC SECOND FLOOR
LOCATION VOLTHIRD VOLUME 369629.448 3778438.707 240.000
** DESCRSRC THIRD FLOOR
** SOURCE PARAMETERS **
SRCPARAM VOLGROUND 0.008961 4.600 8.683 2.127
SRCPARAM VOLSECOND 0.013678 9.200 8.683 4.279
SRCPARAM VOLTHIRD 0.01231 13.800 8.683 6.419
URBANSRC VOLGROUND
URBANSRC VOLSECOND
URBANSRC VOLTHIRD

```

```

** VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"
** VARIABLE EMISSION SCENARIO: "PM10"
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 1.0 0.0 0.0 0.0 0.0

```

EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP PM10 VOLGROUND VOLSECOND VOLTHIRD
SRCGROUP ALL

SO FINISHED

\*\*
\*\*\*\*\*
\*\* AERMOD RECEPTOR PATHWAY
\*\*\*\*\*

\*\*
\*\*
RE STARTING
INCLUDED "PARKING PM10.ROU"
RE FINISHED

\*\*
\*\*\*\*\*
\*\* AERMOD METEOROLOGY PATHWAY
\*\*\*\*\*

\*\*
\*\*
ME STARTING
SURFFILE ..\..\BURK8.SFC
PROFFILE ..\..\BURK8.PFL
SURFDATA 0 2008
UAIRDATA 3190 2008
PROFBASE 10.0 METERS

ME FINISHED
\*\*
\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY
\*\*\*\*\*
\*\*
\*\*

OU STARTING
RECTABLE ALLAVE 1ST
RECTABLE 24 1ST
\*\* AUTO-GENERATED PLOTFILES
PLOTFILE 24 ALL 1ST PARKING.AD\24H1GALL.PLT 31
PLOTFILE 24 PM10 1ST PARKING.AD\24H1G001.PLT 32
PLOTFILE ANNUAL ALL PARKING.AD\AN00GALL.PLT 33
PLOTFILE ANNUAL PM10 PARKING.AD\AN00G000.PLT 34
SUMMFILE PARKING.SUM

OU FINISHED
\*\*\*\*\*
\*\*\* SETUP Finishes Successfully \*\*\*
\*\*\*\*\*

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
\*\*\* 08/25/15
\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL MOBILE \*\*\*
15:48:29

PAGE 1
\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

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-----

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
\*\*NO GAS DEPOSITION Data Provided.

```

**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT = F
**Model Uses NO WET DEPLETION.  WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for      3 Source(s),
  for Total of      1 Urban Area(s):
  Urban Population =  9862049.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
  1. Stack-tip Downwash.
  2. Model Accounts for ELEVated Terrain Effects.
  3. Use Calms Processing Routine.
  4. Use Missing Data Processing Routine.
  5. No Exponential Decay for URBAN/Non-SO2.
  6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
  TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  PM_10

**Model Calculates  1 Short Term Average(s) of:  24-HR
  and Calculates ANNUAL Averages

**This Run Includes:      3 Source(s);      2 Source Group(s); and      70 Receptor(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  14134

**Output Options Selected:
  Model Outputs Tables of ANNUAL Averages by Receptor
  Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
  Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
  Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                    m for Missing Hours
                                                    b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   10.00 ;  Decay Coef. =   0.000      ;  Rot. Angle
=   0.0
                Emission Units = GRAMS/SEC                ;  Emission Rate Unit Factor =  0.10000E+07
                Output Units  = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Detailed Error/Message File:
PARKING.ERR
**File for Summary of Results:
PARKING.SUM
*** AERMOD - VERSION  14134 ***      *** HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
***      08/25/15
*** AERMET - VERSION  14134 ***      *** OPERATIONAL MOBILE
15:48:29

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**MODELOPTs:  RegDEFAULT CONC      ELEV      FLGPOL

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*** VOLUME SOURCE DATA ***

```

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
VOLGROUND	0	0.89610E-02	369629.4	3778438.7	240.0	4.60	8.68	2.13	YES		HROFDY
VOLSECOND	0	0.13678E-01	369629.4	3778438.7	240.0	9.20	8.68	4.28	YES		HROFDY
VOLTHIRD	0	0.12310E-01	369629.4	3778438.7	240.0	13.80	8.68	6.42	YES		HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL MOBILE \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
PM10	VOLGROUND , VOLSECOND , VOLTHIRD ,
ALL	VOLGROUND , VOLSECOND , VOLTHIRD ,

PM10 VOLGROUND , VOLSECOND , VOLTHIRD ,

ALL VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL MOBILE \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID	URBAN POP	SOURCE IDs
9862049.		VOLGROUND , VOLSECOND , VOLTHIRD ,

9862049. VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL MOBILE \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY SOURCE ID	SCALAR	HOURLY SOURCE ID	SCALAR	HOURLY SOURCE ID	SCALAR	HOURLY SOURCE ID	SCALAR	HOURLY SOURCE ID	SCALAR	HOURLY SOURCE ID	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLSECOND		; SOURCE TYPE = VOLUME		:							
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLTHIRD		; SOURCE TYPE = VOLUME		:							
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* \*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15

\*\*\* AERMET - VERSION 14134 \*\*\* \*\* OPERATIONAL MOBILE  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
 (METERS)

( 369670.5, 3778388.3, 238.9, 365.0, 0.0);	( 369686.2, 3778353.0, 240.4, 365.0, 0.0);
( 369701.7, 3778534.9, 224.8, 365.0, 0.0);	( 369685.0, 3778565.2, 221.3, 365.0, 0.0);
( 369709.4, 3778565.2, 220.8, 365.0, 0.0);	( 369733.8, 3778565.2, 220.3, 365.0, 0.0);
( 369760.4, 3778565.2, 219.9, 365.0, 0.0);	( 369685.0, 3778627.6, 216.1, 365.0, 0.0);
( 369709.4, 3778627.6, 215.9, 365.0, 0.0);	( 369733.8, 3778627.6, 215.7, 365.0, 0.0);
( 369760.4, 3778627.6, 215.5, 365.0, 0.0);	( 369684.6, 3778740.8, 212.4, 365.0, 0.0);
( 369709.0, 3778740.8, 212.3, 365.0, 0.0);	( 369733.4, 3778740.8, 212.3, 365.0, 0.0);
( 369760.0, 3778740.8, 212.3, 365.0, 0.0);	( 369684.6, 3778685.5, 212.9, 365.0, 0.0);
( 369709.0, 3778685.5, 212.9, 365.0, 0.0);	( 369733.5, 3778685.5, 212.9, 365.0, 0.0);
( 369760.1, 3778685.5, 212.9, 365.0, 0.0);	( 369810.6, 3778741.3, 212.1, 365.0, 0.0);
( 369828.2, 3778628.6, 214.6, 365.0, 0.0);	( 369867.0, 3778658.0, 212.8, 365.0, 0.0);
( 369904.5, 3778679.1, 212.0, 365.0, 0.0);	( 369858.7, 3778708.4, 212.0, 365.0, 0.0);
( 369905.7, 3778639.1, 214.2, 365.0, 0.0);	( 369885.8, 3778619.1, 215.4, 365.0, 0.0);
( 369638.6, 3778030.1, 269.3, 365.0, 0.0);	( 369698.0, 3778231.8, 243.0, 365.0, 0.0);
( 369682.8, 3778161.3, 247.8, 365.0, 0.0);	( 369653.8, 3778099.1, 252.5, 365.0, 0.0);
( 369666.2, 3778059.1, 259.1, 365.0, 0.0);	( 369722.9, 3778230.4, 242.9, 365.0, 0.0);
( 369716.0, 3778190.3, 244.4, 365.0, 0.0);	( 369703.6, 3778158.6, 247.2, 365.0, 0.0);
( 369687.0, 3778126.8, 251.1, 365.0, 0.0);	( 369675.9, 3778097.8, 253.5, 365.0, 0.0);
( 369703.6, 3778108.8, 251.0, 365.0, 0.0);	( 369727.0, 3778139.2, 247.0, 365.0, 0.0);





First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* OPERATIONAL MOBILE \*\*\*  
 15:48:29

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: PM10 \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.17916	369686.20	3778352.98	
0.08096					
369701.74	3778534.95	0.07384	369684.96	3778565.24	
0.06301					
369709.39	3778565.24	0.05193	369733.82	3778565.24	
0.04168					
369760.43	3778565.24	0.03263	369684.96	3778627.64	
0.03529					
369709.39	3778627.64	0.03184	369733.82	3778627.64	
0.02796					
369760.43	3778627.64	0.02379	369684.56	3778740.79	
0.01666					
369708.99	3778740.79	0.01598	369733.42	3778740.79	
0.01508					
369760.02	3778740.79	0.01393	369684.59	3778685.54	
0.02309					
369709.02	3778685.54	0.02171	369733.45	3778685.54	
0.01997					
369760.06	3778685.54	0.01788	369810.59	3778741.35	
0.01155					
369828.20	3778628.60	0.01537	369866.96	3778657.96	
0.01132					
369904.54	3778679.10	0.00893	369858.74	3778708.37	
0.01036					
369905.71	3778639.08	0.00968	369885.75	3778619.11	
0.01124					
369638.62	3778030.06	0.00277	369698.03	3778231.80	
0.01917					
369682.83	3778161.33	0.01069	369653.81	3778099.15	
0.00628					
369666.25	3778059.08	0.00450	369722.90	3778230.42	
0.01818					
369715.99	3778190.35	0.01366	369703.56	3778158.57	
0.01083					
369686.98	3778126.79	0.00822	369675.92	3778097.77	
0.00645					
369703.56	3778108.82	0.00769	369727.05	3778139.22	
0.00978					
369903.91	3778552.37	0.01176	369866.61	3778563.43	



0.01434					
369873.52	3778516.45	0.01542	369887.33	3778491.57	
0.01487					
369859.70	3778444.59	0.01900	369849.63	3778322.03	
0.01744					
369643.37	3778672.46	0.02648	369644.15	3778798.32	
0.01266					
369591.64	3778749.96	0.01571	369640.00	3778638.03	
0.03517					
369590.26	3778698.83	0.02126	369569.53	3778751.34	
0.01504					
369621.84	3778549.71	0.09521	369608.62	3778540.93	
0.10483					
369491.97	3778688.07	0.01815	369551.43	3778498.04	
0.11510					
369467.11	3778588.61	0.02903	369442.24	3778525.50	
0.03029					
369426.94	3778653.64	0.01690	369430.77	3778596.26	
0.02217					
369384.87	3778676.59	0.01267	369398.26	3778498.73	
0.02165					
369245.26	3778531.24	0.00870	369245.26	3778441.35	
0.00834					
369484.59	3778462.33	0.04876	369629.21	3778438.68	
0.00000					
369814.80	3778308.83	0.02015	369781.29	3778368.86	
0.03415					
369811.05	3778376.63	0.02666	369852.96	3778354.56	
0.01874					
369860.75	3778292.26	0.01586	369856.21	3778259.16	
0.01399					

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.17916	369686.20	3778352.98	
0.08096					
369701.74	3778534.95	0.07384	369684.96	3778565.24	
0.06301					
369709.39	3778565.24	0.05193	369733.82	3778565.24	
0.04168					
369760.43	3778565.24	0.03263	369684.96	3778627.64	
0.03529					
369709.39	3778627.64	0.03184	369733.82	3778627.64	
0.02796					
369760.43	3778627.64	0.02379	369684.56	3778740.79	
0.01666					
369708.99	3778740.79	0.01598	369733.42	3778740.79	
0.01508					
369760.02	3778740.79	0.01393	369684.59	3778685.54	

0.02309				
369709.02	3778685.54	0.02171	369733.45	3778685.54
0.01997				
369760.06	3778685.54	0.01788	369810.59	3778741.35
0.01155				
369828.20	3778628.60	0.01537	369866.96	3778657.96
0.01132				
369904.54	3778679.10	0.00893	369858.74	3778708.37
0.01036				
369905.71	3778639.08	0.00968	369885.75	3778619.11
0.01124				
369638.62	3778030.06	0.00277	369698.03	3778231.80
0.01917				
369682.83	3778161.33	0.01069	369653.81	3778099.15
0.00628				
369666.25	3778059.08	0.00450	369722.90	3778230.42
0.01818				
369715.99	3778190.35	0.01366	369703.56	3778158.57
0.01083				
369686.98	3778126.79	0.00822	369675.92	3778097.77
0.00645				
369703.56	3778108.82	0.00769	369727.05	3778139.22
0.00978				
369903.91	3778552.37	0.01176	369866.61	3778563.43
0.01434				
369873.52	3778516.45	0.01542	369887.33	3778491.57
0.01487				
369859.70	3778444.59	0.01900	369849.63	3778322.03
0.01744				
369643.37	3778672.46	0.02648	369644.15	3778798.32
0.01266				
369591.64	3778749.96	0.01571	369640.00	3778638.03
0.03517				
369590.26	3778698.83	0.02126	369569.53	3778751.34
0.01504				
369621.84	3778549.71	0.09521	369608.62	3778540.93
0.10483				
369491.97	3778688.07	0.01815	369551.43	3778498.04
0.11510				
369467.11	3778588.61	0.02903	369442.24	3778525.50
0.03029				
369426.94	3778653.64	0.01690	369430.77	3778596.26
0.02217				
369384.87	3778676.59	0.01267	369398.26	3778498.73
0.02165				
369245.26	3778531.24	0.00870	369245.26	3778441.35
0.00834				
369484.59	3778462.33	0.04876	369629.21	3778438.68
0.00000				
369814.80	3778308.83	0.02015	369781.29	3778368.86
0.03415				
369811.05	3778376.63	0.02666	369852.96	3778354.56
0.01874				
369860.75	3778292.26	0.01586	369856.21	3778259.16
0.01399				

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: PM10 \*\*\*

INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
369670.52 (08120524)	3778388.27	0.76848m	(10120724)	369686.20	3778352.98	0.38276
369701.74 (10121924)	3778534.95	0.37406	(10121924)	369684.96	3778565.24	0.33925
369709.39 (10121924)	3778565.24	0.29010	(10121924)	369733.82	3778565.24	0.21115
369760.43 (12112824)	3778565.24	0.15210	(12122324)	369684.96	3778627.64	0.18149
369709.39 (10121924)	3778627.64	0.18451	(10121924)	369733.82	3778627.64	0.17151
369760.43 (12112824)	3778627.64	0.14096	(10121924)	369684.56	3778740.79	0.09100
369708.99 (10121924)	3778740.79	0.09003	(12112824)	369733.42	3778740.79	0.08759
369760.02 (12112824)	3778740.79	0.09073	(10121924)	369684.59	3778685.54	0.12343
369709.02 (10121924)	3778685.54	0.11730	(12112824)	369733.45	3778685.54	0.12253
369760.06 (10121924)	3778685.54	0.11658	(10121924)	369810.59	3778741.35	0.07904
369828.20 (11120524)	3778628.60	0.08317	(11120524)	369866.96	3778657.96	0.06579
369904.54 (12122324)	3778679.10	0.05526	(11120524)	369858.74	3778708.37	0.05678
369905.71 (11120524)	3778639.08	0.06121	(11120524)	369885.75	3778619.11	0.06927
369638.62 (10120124)	3778030.06	0.12437	(11112424)	369698.03	3778231.80	0.12894m
369682.83 (09011324)	3778161.33	0.14814	(08122124)	369653.81	3778099.15	0.14501
369666.25 (10120124)	3778059.08	0.14925	(11112424)	369722.90	3778230.42	0.13864m
369715.99 (10010424)	3778190.35	0.11517m	(10120124)	369703.56	3778158.57	0.13373
369686.98 (09011324)	3778126.79	0.15177	(10011624)	369675.92	3778097.77	0.15034
369703.56 (10010424)	3778108.82	0.14084	(08122124)	369727.05	3778139.22	0.12232
369903.91 (12121724)	3778552.37	0.09292	(12121724)	369866.61	3778563.43	0.09086
369873.52 (12121724)	3778516.45	0.13081	(12121724)	369887.33	3778491.57	0.13253
369859.70 (10011524)	3778444.59	0.14175	(12121724)	369849.63	3778322.03	0.13297
369643.37 (12112824)	3778672.46	0.12413	(12112824)	369644.15	3778798.32	0.06084
369591.64 (12112824)	3778749.96	0.06332	(08021724)	369640.00	3778638.03	0.16078
369590.26 (12111724)	3778698.83	0.08622m	(12111724)	369569.53	3778751.34	0.06752m
369621.84 (11010824)	3778549.71	0.36273	(12112824)	369608.62	3778540.93	0.38755m
369491.97 (11121924)	3778688.07	0.09762m	(11010824)	369551.43	3778498.04	0.48346

369467.11 (10121424)	3778588.61	0.15586	(12112924)	369442.24	3778525.50	0.16508m
369426.94 (12112924)	3778653.64	0.09247	(12112924)	369430.77	3778596.26	0.12701
369384.87 (10121424)	3778676.59	0.07345	(12112924)	369398.26	3778498.73	0.14124m
369245.26 (12122924)	3778531.24	0.05522	(12122924)	369245.26	3778441.35	0.04476
369484.59 (00000000)	3778462.33	0.29313	(12122924)	369629.21	3778438.68	0.00000
369814.80 (10120724)	3778308.83	0.14273m	(10120724)	369781.29	3778368.86	0.24796m
369811.05 (08020924)	3778376.63	0.19365m	(10120724)	369852.96	3778354.56	0.14338m
369860.75 (10121224)	3778292.26	0.15866m	(10121224)	369856.21	3778259.16	0.13723m

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,


\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMDDHH) X-COORD (M) Y-COORD (M) CONC  
 (YYMDDHH)

-----						
-----						
369670.52 (08120524)	3778388.27	0.76848m	(10120724)	369686.20	3778352.98	0.38276
369701.74 (10121924)	3778534.95	0.37406	(10121924)	369684.96	3778565.24	0.33925
369709.39 (10121924)	3778565.24	0.29010	(10121924)	369733.82	3778565.24	0.21115
369760.43 (12112824)	3778565.24	0.15210	(12122324)	369684.96	3778627.64	0.18149
369709.39 (10121924)	3778627.64	0.18451	(10121924)	369733.82	3778627.64	0.17151
369760.43 (12112824)	3778627.64	0.14096	(10121924)	369684.56	3778740.79	0.09100
369708.99 (10121924)	3778740.79	0.09003	(12112824)	369733.42	3778740.79	0.08759
369760.02 (12112824)	3778740.79	0.09073	(10121924)	369684.59	3778685.54	0.12343
369709.02 (10121924)	3778685.54	0.11730	(12112824)	369733.45	3778685.54	0.12253
369760.06 (10121924)	3778685.54	0.11658	(10121924)	369810.59	3778741.35	0.07904
369828.20 (11120524)	3778628.60	0.08317	(11120524)	369866.96	3778657.96	0.06579
369904.54 (12122324)	3778679.10	0.05526	(11120524)	369858.74	3778708.37	0.05678
369905.71 (11120524)	3778639.08	0.06121	(11120524)	369885.75	3778619.11	0.06927
369638.62 (10120124)	3778030.06	0.12437	(11112424)	369698.03	3778231.80	0.12894m
369682.83	3778161.33	0.14814	(08122124)	369653.81	3778099.15	0.14501

(09011324)							
369666.25	3778059.08	0.14925	(11112424)	369722.90	3778230.42	0.13864m	
(10120124)							
369715.99	3778190.35	0.11517m	(10120124)	369703.56	3778158.57	0.13373	
(10010424)							
369686.98	3778126.79	0.15177	(10011624)	369675.92	3778097.77	0.15034	
(09011324)							
369703.56	3778108.82	0.14084	(08122124)	369727.05	3778139.22	0.12232	
(10010424)							
369903.91	3778552.37	0.09292	(12121724)	369866.61	3778563.43	0.09086	
(12121724)							
369873.52	3778516.45	0.13081	(12121724)	369887.33	3778491.57	0.13253	
(12121724)							
369859.70	3778444.59	0.14175	(12121724)	369849.63	3778322.03	0.13297	
(10011524)							
369643.37	3778672.46	0.12413	(12112824)	369644.15	3778798.32	0.06084	
(12112824)							
369591.64	3778749.96	0.06332	(08021724)	369640.00	3778638.03	0.16078	
(12112824)							
369590.26	3778698.83	0.08622m	(12111724)	369569.53	3778751.34	0.06752m	
(12111724)							
369621.84	3778549.71	0.36273	(12112824)	369608.62	3778540.93	0.38755m	
(11010824)							
369491.97	3778688.07	0.09762m	(11010824)	369551.43	3778498.04	0.48346	
(11121924)							
369467.11	3778588.61	0.15586	(12112924)	369442.24	3778525.50	0.16508m	
(10121424)							
369426.94	3778653.64	0.09247	(12112924)	369430.77	3778596.26	0.12701	
(12112924)							
369384.87	3778676.59	0.07345	(12112924)	369398.26	3778498.73	0.14124m	
(10121424)							
369245.26	3778531.24	0.05522	(12122924)	369245.26	3778441.35	0.04476	
(12122924)							
369484.59	3778462.33	0.29313	(12122924)	369629.21	3778438.68	0.00000	
(00000000)							
369814.80	3778308.83	0.14273m	(10120724)	369781.29	3778368.86	0.24796m	
(10120724)							
369811.05	3778376.63	0.19365m	(10120724)	369852.96	3778354.56	0.14338m	
(08020924)							
369860.75	3778292.26	0.15866m	(10121224)	369856.21	3778259.16	0.13723m	
(10121224)							

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
PM10	1ST HIGHEST VALUE IS	0.17916 AT ( 369670.52, 3778388.27, 238.88, 365.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.11510 AT ( 369551.43, 3778498.04, 235.98, 365.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.10483 AT ( 369608.62, 3778540.93, 226.55, 365.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.09521 AT ( 369621.84, 3778549.71, 224.96, 365.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.08096 AT ( 369686.20, 3778352.98, 240.37, 365.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.07384 AT ( 369701.74, 3778534.95, 224.77, 365.00,	0.00)	DC

	7TH HIGHEST VALUE IS	0.06301	AT ( 369684.96, 3778565.24, 221.28, 365.00, 0.00)	DC
	8TH HIGHEST VALUE IS	0.05193	AT ( 369709.39, 3778565.24, 220.76, 365.00, 0.00)	DC
	9TH HIGHEST VALUE IS	0.04876	AT ( 369484.59, 3778462.33, 244.44, 365.00, 0.00)	DC
	10TH HIGHEST VALUE IS	0.04168	AT ( 369733.82, 3778565.24, 220.34, 365.00, 0.00)	DC
ALL	1ST HIGHEST VALUE IS	0.17916	AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00)	DC
	2ND HIGHEST VALUE IS	0.11510	AT ( 369551.43, 3778498.04, 235.98, 365.00, 0.00)	DC
	3RD HIGHEST VALUE IS	0.10483	AT ( 369608.62, 3778540.93, 226.55, 365.00, 0.00)	DC
	4TH HIGHEST VALUE IS	0.09521	AT ( 369621.84, 3778549.71, 224.96, 365.00, 0.00)	DC
	5TH HIGHEST VALUE IS	0.08096	AT ( 369686.20, 3778352.98, 240.37, 365.00, 0.00)	DC
	6TH HIGHEST VALUE IS	0.07384	AT ( 369701.74, 3778534.95, 224.77, 365.00, 0.00)	DC
	7TH HIGHEST VALUE IS	0.06301	AT ( 369684.96, 3778565.24, 221.28, 365.00, 0.00)	DC
	8TH HIGHEST VALUE IS	0.05193	AT ( 369709.39, 3778565.24, 220.76, 365.00, 0.00)	DC
	9TH HIGHEST VALUE IS	0.04876	AT ( 369484.59, 3778462.33, 244.44, 365.00, 0.00)	DC
	10TH HIGHEST VALUE IS	0.04168	AT ( 369733.82, 3778565.24, 220.34, 365.00, 0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF PM\_10 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	NETWORK	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF
PM10 HIGH 1ST HIGH VALUE IS	0.76848m	ON 10120724	AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00)	DC	
ALL HIGH 1ST HIGH VALUE IS	0.76848m	ON 10120724	AT ( 369670.52, 3778388.27, 238.88, 365.00, 0.00)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
A Total of 0 Warning Message(s)  
A Total of 1275 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 13 Calm Hours Identified  
  
A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 8.8.9
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 8/25/2015
** FILE: C:\AERMOD\HW-OPERATIONAL\PARKING PM2\PARKING PM2.ADI
**

```

```

*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**

```

```

CO STARTING
TITLEONE HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
TITLETWO PARKING STRUCTURE PM2.5
MODELOPT DFAULT CONC
AVERTIME ANNUAL
URBANOPT 9862049
POLLUTID PM_2.5
FLAGPOLE 0.00
RUNORNOT RUN

```

```

CO FINISHED
**
*****
** AERMOD SOURCE PATHWAY
*****
**
**

```

```

SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
LOCATION VOLGROUND VOLUME 369629.448 3778438.707 235.710
** DESCRSRC GROUND LEVEL
LOCATION VOLSECOND VOLUME 369629.448 3778438.707 235.710
** DESCRSRC SECOND FLOOR
LOCATION VOLTHIRD VOLUME 369629.448 3778438.707 235.710
** DESCRSRC THIRD FLOOR
** SOURCE PARAMETERS **
SRCPARAM VOLGROUND 0.003795 4.600 8.683 2.127
SRCPARAM VOLSECOND 0.005793 9.200 8.683 4.279
SRCPARAM VOLTHIRD 0.005214 13.800 8.683 6.419
URBANSRC VOLGROUND
URBANSRC VOLSECOND
URBANSRC VOLTHIRD

```

```

** VARIABLE EMISSIONS TYPE: "BY HOUR-OF-DAY (HROFDY)"
** VARIABLE EMISSION SCENARIO: "PM2.5"
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLGROUND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 1.0 0.0 0.0
EMISFACT VOLSECOND HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 1.0 0.0 0.0 0.0 0.0
EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 1.0 0.0 0.0

```



EMISFACT VOLTHIRD HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP PM2.5 VOLGROUND VOLSECOND VOLTHIRD
SRCGROUP ALL

SO FINISHED
\*\*

\*\*\*\*\*

\*\* AERMOD RECEPTOR PATHWAY

\*\*\*\*\*

\*\*
\*\*

RE STARTING
INCLUDED "PARKING PM2.ROU"

RE FINISHED
\*\*

\*\*\*\*\*

\*\* AERMOD METEOROLOGY PATHWAY

\*\*\*\*\*

\*\*
\*\*

ME STARTING
SURFFILE ..\..\BURK8.SFC
PROFFILE ..\..\BURK8.PFL
SURFDATA 0 2008
UAIRDATA 3190 2008
PROFBASE 10.0 METERS

ME FINISHED
\*\*

\*\*\*\*\*

\*\* AERMOD OUTPUT PATHWAY

\*\*\*\*\*

\*\*
\*\*

OU STARTING
\*\* AUTO-GENERATED PLOTFILES
PLOTFILE ANNUAL ALL "PARKING PM2.AD\AN00GALL.PLT" 31
PLOTFILE ANNUAL PM2.5 "PARKING PM2.AD\AN00G001.PLT" 32
SUMMFILE "PARKING PM2.SUM"

OU FINISHED

\*\*\*\*\*
\*\*\* SETUP Finishes Successfully \*\*\*
\*\*\*\*\*

FF \*\*\* AERMOD - VERSION 14134 \*\*\* \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT
\*\*\* 08/25/15
\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* PARKING STRUCTURE PM2.5 \*\*\*
15:40:55

PAGE 1
\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

- - - - -
- - - - -

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
\*\*NO GAS DEPOSITION Data Provided.
\*\*NO PARTICLE DEPOSITION Data Provided.
\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F
\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 3 Source(s),

for Total of 1 Urban Area(s):  
 Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

**\*\*Model Uses Regulatory DEFAULT Options:**

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay for URBAN/Non-SO2.
6. Urban Roughness Length of 1.0 Meter Assumed.

**\*\*Other Options Specified:**

TEMP\_Sub - Meteorological data includes TEMP substitutions

**\*\*Model Accepts FLAGPOLE Receptor Heights.**

**\*\*The User Specified a Pollutant Type of: PM\_2.5**

**\*\*Model Calculates ANNUAL Averages Only**

**\*\*This Run Includes: 3 Source(s); 2 Source Group(s); and 70 Receptor(s)**

**\*\*Model Set To Continue RUNning After the Setup Testing.**

**\*\*The AERMET Input Meteorological Data Version Date: 14134**

**\*\*Output Options Selected:**

- Model Outputs Tables of ANNUAL Averages by Receptor
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**\*\*NOTE:** The Following Flags May Appear Following CONC Values: c for Calm Hours  
 m for Missing Hours  
 b for Both Calm and Missing Hours

**\*\*Misc. Inputs:** Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

**\*\*Approximate Storage Requirements of Model = 3.5 MB of RAM.**

**\*\*File for Summary of Results: PARKING**

PM2.SUM

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
 \*\*\* 08/25/15  
 \*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE PM2.5 \*\*\*  
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**\*\*MODELOPTs:** RegDEFAULT CONC ELEV FLGPOL

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X Y		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
			(METERS)	(METERS)						
VOLGROUND	0	0.37950E-02	369629.4	3778438.7	235.7	4.60	8.68	2.13	YES	HROFDY
VOLSECOND	0	0.57930E-02	369629.4	3778438.7	235.7	9.20	8.68	4.28	YES	HROFDY
VOLTHIRD	0	0.52140E-02	369629.4	3778438.7	235.7	13.80	8.68	6.42	YES	HROFDY

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID SOURCE IDs  
 -----

PM2.5 VOLGROUND , VOLSECOND , VOLTHIRD ,

ALL VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* SOURCE IDs DEFINED AS URBAN SOURCES \*\*\*

URBAN ID URBAN POP SOURCE IDs  
 -----

9862049. VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY \*

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLGROUND ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLSECOND ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOLTHIRD ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.00000E+00	10	.00000E+00	11	.00000E+00	12	.00000E+00
13	.00000E+00	14	.00000E+00	15	.00000E+00	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT

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\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE PM2.5

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\*\*MODELOPTs: RegDFault CONC ELEV FLGPOL

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
 (METERS)

( 369670.5, 3778388.3, 238.9, 365.0, 0.0);	( 369686.2, 3778353.0, 240.4, 365.0, 0.0);
( 369701.7, 3778534.9, 224.8, 365.0, 0.0);	( 369685.0, 3778565.2, 221.3, 365.0, 0.0);
( 369709.4, 3778565.2, 220.8, 365.0, 0.0);	( 369733.8, 3778565.2, 220.3, 365.0, 0.0);
( 369760.4, 3778565.2, 219.9, 365.0, 0.0);	( 369685.0, 3778627.6, 216.1, 365.0, 0.0);
( 369709.4, 3778627.6, 215.9, 365.0, 0.0);	( 369733.8, 3778627.6, 215.7, 365.0, 0.0);
( 369760.4, 3778627.6, 215.5, 365.0, 0.0);	( 369684.6, 3778740.8, 212.4, 365.0, 0.0);
( 369709.0, 3778740.8, 212.3, 365.0, 0.0);	( 369733.4, 3778740.8, 212.3, 365.0, 0.0);
( 369760.0, 3778740.8, 212.3, 365.0, 0.0);	( 369684.6, 3778685.5, 212.9, 365.0, 0.0);
( 369709.0, 3778685.5, 212.9, 365.0, 0.0);	( 369733.5, 3778685.5, 212.9, 365.0, 0.0);
( 369760.1, 3778685.5, 212.9, 365.0, 0.0);	( 369810.6, 3778741.3, 212.1, 365.0, 0.0);
( 369828.2, 3778628.6, 214.6, 365.0, 0.0);	( 369867.0, 3778658.0, 212.8, 365.0, 0.0);
( 369904.5, 3778679.1, 212.0, 365.0, 0.0);	( 369858.7, 3778708.4, 212.0, 365.0, 0.0);
( 369905.7, 3778639.1, 214.2, 365.0, 0.0);	( 369885.8, 3778619.1, 215.4, 365.0, 0.0);
( 369638.6, 3778030.1, 269.3, 365.0, 0.0);	( 369698.0, 3778231.8, 243.0, 365.0, 0.0);
( 369682.8, 3778161.3, 247.8, 365.0, 0.0);	( 369653.8, 3778099.1, 252.5, 365.0, 0.0);
( 369666.2, 3778059.1, 259.1, 365.0, 0.0);	( 369722.9, 3778230.4, 242.9, 365.0, 0.0);
( 369716.0, 3778190.3, 244.4, 365.0, 0.0);	( 369703.6, 3778158.6, 247.2, 365.0, 0.0);
( 369687.0, 3778126.8, 251.1, 365.0, 0.0);	( 369675.9, 3778097.8, 253.5, 365.0, 0.0);
( 369703.6, 3778108.8, 251.0, 365.0, 0.0);	( 369727.0, 3778139.2, 247.0, 365.0, 0.0);
( 369903.9, 3778552.4, 223.0, 365.0, 0.0);	( 369866.6, 3778563.4, 219.9, 365.0, 0.0);
( 369873.5, 3778516.4, 227.5, 365.0, 0.0);	( 369887.3, 3778491.6, 232.5, 304.0, 0.0);
( 369859.7, 3778444.6, 236.3, 304.0, 0.0);	( 369849.6, 3778322.0, 243.9, 365.0, 0.0);
( 369643.4, 3778672.5, 213.2, 365.0, 0.0);	( 369644.1, 3778798.3, 212.1, 365.0, 0.0);
( 369591.6, 3778750.0, 213.4, 365.0, 0.0);	( 369640.0, 3778638.0, 216.2, 365.0, 0.0);



\*\*\* UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES \*\*\*  
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* PARKING STRUCTURE PM2.5 \*\*\*  
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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA \*\*\*

Surface file: ..\..\BURK8.SFC Met Version: 14134  
Profile file: ..\..\BURK8.PFL  
Surface format:  
FREE  
Profile format:  
FREE  
Surface station no.: 0 Upper air station no.: 3190  
Name: UNKNOWN Name: UNKNOWN  
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	280.9	5.5			
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	279.2	5.5			
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	278.8	5.5			
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.56	999.00	999.	-9.0	281.4	5.5			
08	01	01	1	09	21.7	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.53	1.00	0.33	999.00	999.	-9.0	282.5	5.5			
08	01	01	1	10	70.5	-9.000	-9.000	-9.000	144.	-999.	-99999.0	0.53	1.00	0.25	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	11	105.7	-9.000	-9.000	-9.000	340.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	12	124.1	-9.000	-9.000	-9.000	559.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	294.9	5.5			
08	01	01	1	13	124.3	-9.000	-9.000	-9.000	709.	-999.	-99999.0	0.53	1.00	0.21	999.00	999.	-9.0	297.0	5.5			
08	01	01	1	14	104.3	-9.000	-9.000	-9.000	755.	-999.	-99999.0	0.53	1.00	0.22	999.00	999.	-9.0	294.2	5.5			
08	01	01	1	15	68.8	-9.000	-9.000	-9.000	786.	-999.	-99999.0	0.53	1.00	0.26	999.00	999.	-9.0	293.8	5.5			
08	01	01	1	16	19.1	-9.000	-9.000	-9.000	792.	-999.	-99999.0	0.53	1.00	0.34	999.00	999.	-9.0	292.0	5.5			
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	0.61	999.00	999.	-9.0	290.9	5.5			
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	288.8	5.5			
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	287.0	5.5			
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	286.4	5.5			
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.53	1.00	1.00	999.00	999.	-9.0	284.9	5.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	281.0	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 14134 \*\*\* HARVARD WESTLAKE UPPER SCHOOL PARKING INFRASTRUCTURE PROJECT  
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\*\*\* AERMET - VERSION 14134 \*\*\* \*\*\* PARKING STRUCTURE PM2.5

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: PM2.5 \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.06912	369686.20	3778352.98	
0.03135					
369701.74	3778534.95	0.03285	369684.96	3778565.24	
0.02780					
369709.39	3778565.24	0.02288	369733.82	3778565.24	
0.01833					
369760.43	3778565.24	0.01432	369684.96	3778627.64	
0.01545					
369709.39	3778627.64	0.01393	369733.82	3778627.64	
0.01222					
369760.43	3778627.64	0.01039	369684.56	3778740.79	
0.00724					
369708.99	3778740.79	0.00694	369733.42	3778740.79	
0.00655					
369760.02	3778740.79	0.00604	369684.59	3778685.54	
0.01006					
369709.02	3778685.54	0.00945	369733.45	3778685.54	
0.00869					
369760.06	3778685.54	0.00778	369810.59	3778741.35	
0.00500					
369828.20	3778628.60	0.00668	369866.96	3778657.96	
0.00491					
369904.54	3778679.10	0.00387	369858.74	3778708.37	
0.00449					
369905.71	3778639.08	0.00420	369885.75	3778619.11	
0.00488					
369638.62	3778030.06	0.00107	369698.03	3778231.80	
0.00780					
369682.83	3778161.33	0.00419	369653.81	3778099.15	
0.00237					
369666.25	3778059.08	0.00171	369722.90	3778230.42	
0.00767					
369715.99	3778190.35	0.00565	369703.56	3778158.57	
0.00437					
369686.98	3778126.79	0.00319	369675.92	3778097.77	
0.00247					
369703.56	3778108.82	0.00302	369727.05	3778139.22	
0.00404					
369903.91	3778552.37	0.00513	369866.61	3778563.43	
0.00625					
369873.52	3778516.45	0.00674	369887.33	3778491.57	
0.00648					
369859.70	3778444.59	0.00824	369849.63	3778322.03	
0.00809					
369643.37	3778672.46	0.01155	369644.15	3778798.32	
0.00548					
369591.64	3778749.96	0.00682	369640.00	3778638.03	
0.01539					

369590.26	3778698.83	0.00926	369569.53	3778751.34
0.00652				
369621.84	3778549.71	0.04244	369608.62	3778540.93
0.04698				
369491.97	3778688.07	0.00789	369551.43	3778498.04
0.05152				
369467.11	3778588.61	0.01179	369442.24	3778525.50
0.01194				
369426.94	3778653.64	0.00722	369430.77	3778596.26
0.00898				
369384.87	3778676.59	0.00546	369398.26	3778498.73
0.00838				
369245.26	3778531.24	0.00374	369245.26	3778441.35
0.00318				
369484.59	3778462.33	0.01839	369629.21	3778438.68
0.00000				
369814.80	3778308.83	0.00920	369781.29	3778368.86
0.01468				
369811.05	3778376.63	0.01185	369852.96	3778354.56
0.00870				
369860.75	3778292.26	0.00718	369856.21	3778259.16
0.00640				

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): VOLGROUND , VOLSECOND , VOLTHIRD ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM2.5 IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
369670.52	3778388.27	0.06912	369686.20	3778352.98	
0.03135					
369701.74	3778534.95	0.03285	369684.96	3778565.24	
0.02780					
369709.39	3778565.24	0.02288	369733.82	3778565.24	
0.01833					
369760.43	3778565.24	0.01432	369684.96	3778627.64	
0.01545					
369709.39	3778627.64	0.01393	369733.82	3778627.64	
0.01222					
369760.43	3778627.64	0.01039	369684.56	3778740.79	
0.00724					
369708.99	3778740.79	0.00694	369733.42	3778740.79	
0.00655					
369760.02	3778740.79	0.00604	369684.59	3778685.54	
0.01006					
369709.02	3778685.54	0.00945	369733.45	3778685.54	
0.00869					
369760.06	3778685.54	0.00778	369810.59	3778741.35	
0.00500					
369828.20	3778628.60	0.00668	369866.96	3778657.96	
0.00491					
369904.54	3778679.10	0.00387	369858.74	3778708.37	
0.00449					



369905.71	3778639.08	0.00420	369885.75	3778619.11
0.00488				
369638.62	3778030.06	0.00107	369698.03	3778231.80
0.00780				
369682.83	3778161.33	0.00419	369653.81	3778099.15
0.00237				
369666.25	3778059.08	0.00171	369722.90	3778230.42
0.00767				
369715.99	3778190.35	0.00565	369703.56	3778158.57
0.00437				
369686.98	3778126.79	0.00319	369675.92	3778097.77
0.00247				
369703.56	3778108.82	0.00302	369727.05	3778139.22
0.00404				
369903.91	3778552.37	0.00513	369866.61	3778563.43
0.00625				
369873.52	3778516.45	0.00674	369887.33	3778491.57
0.00648				
369859.70	3778444.59	0.00824	369849.63	3778322.03
0.00809				
369643.37	3778672.46	0.01155	369644.15	3778798.32
0.00548				
369591.64	3778749.96	0.00682	369640.00	3778638.03
0.01539				
369590.26	3778698.83	0.00926	369569.53	3778751.34
0.00652				
369621.84	3778549.71	0.04244	369608.62	3778540.93
0.04698				
369491.97	3778688.07	0.00789	369551.43	3778498.04
0.05152				
369467.11	3778588.61	0.01179	369442.24	3778525.50
0.01194				
369426.94	3778653.64	0.00722	369430.77	3778596.26
0.00898				
369384.87	3778676.59	0.00546	369398.26	3778498.73
0.00838				
369245.26	3778531.24	0.00374	369245.26	3778441.35
0.00318				
369484.59	3778462.33	0.01839	369629.21	3778438.68
0.00000				
369814.80	3778308.83	0.00920	369781.29	3778368.86
0.01468				
369811.05	3778376.63	0.01185	369852.96	3778354.56
0.00870				
369860.75	3778292.26	0.00718	369856.21	3778259.16
0.00640				

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\*\*MODELOPTs: RegDFAULT CONC ELEV FLGPOL

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS \*\*\*

\*\* CONC OF PM\_2.5 IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
PM2.5	1ST HIGHEST VALUE IS 0.06912 AT (	369670.52, 3778388.27,	238.88, 365.00,	0.00) DC

2ND HIGHEST VALUE IS	0.05152 AT (	369551.43,	3778498.04,	235.98,	365.00,	0.00)	DC
3RD HIGHEST VALUE IS	0.04698 AT (	369608.62,	3778540.93,	226.55,	365.00,	0.00)	DC
4TH HIGHEST VALUE IS	0.04244 AT (	369621.84,	3778549.71,	224.96,	365.00,	0.00)	DC
5TH HIGHEST VALUE IS	0.03285 AT (	369701.74,	3778534.95,	224.77,	365.00,	0.00)	DC
6TH HIGHEST VALUE IS	0.03135 AT (	369686.20,	3778352.98,	240.37,	365.00,	0.00)	DC
7TH HIGHEST VALUE IS	0.02780 AT (	369684.96,	3778565.24,	221.28,	365.00,	0.00)	DC
8TH HIGHEST VALUE IS	0.02288 AT (	369709.39,	3778565.24,	220.76,	365.00,	0.00)	DC
9TH HIGHEST VALUE IS	0.01839 AT (	369484.59,	3778462.33,	244.44,	365.00,	0.00)	DC
10TH HIGHEST VALUE IS	0.01833 AT (	369733.82,	3778565.24,	220.34,	365.00,	0.00)	DC

ALL	1ST HIGHEST VALUE IS	0.06912 AT (	369670.52,	3778388.27,	238.88,	365.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.05152 AT (	369551.43,	3778498.04,	235.98,	365.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.04698 AT (	369608.62,	3778540.93,	226.55,	365.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.04244 AT (	369621.84,	3778549.71,	224.96,	365.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.03285 AT (	369701.74,	3778534.95,	224.77,	365.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.03135 AT (	369686.20,	3778352.98,	240.37,	365.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.02780 AT (	369684.96,	3778565.24,	221.28,	365.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.02288 AT (	369709.39,	3778565.24,	220.76,	365.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.01839 AT (	369484.59,	3778462.33,	244.44,	365.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.01833 AT (	369733.82,	3778565.24,	220.34,	365.00,	0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

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\*\*MODELOPTs: RegDEFAULT CONC ELEV FLGPOL

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 0 Warning Message(s)  
 A Total of 1275 Informational Message(s)  
  
 A Total of 43848 Hours Were Processed  
  
 A Total of 13 Calm Hours Identified  
  
 A Total of 1262 Missing Hours Identified ( 2.88 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
 \*\*\* NONE \*\*\*

\*\*\*\*\*  
 \*\*\* AERMOD Finishes Successfully \*\*\*  
 \*\*\*\*\*

**Sub-Appendix f**

Greenhouse Gas Emissions

Operational Emissions

## Operational GHG Emission Calculations

General Electricity Usage : Greenhouse Gas Emissions (MT/year)

CO2 Intensity Factor (lb/MWh)	630.89
CH4 Intensity Factor (lb/MWh)	0.029
N2O Intensity Factor (lb/MWh)	0.006
Light Poles	10
# of light bulbs on each pole	6
Power rating of each light bulb	400 Watts
# of hours per day	12 hours/day
Energy usage per day	288 kWh/day
	0.288 MWh/day
CO2 emissions	30.08186 MT/year
CH4 emissions	0.001383 MT/year
N2O emissions	0.000286 MT/year
Total GHG	30.19639 MT/year

**Sub-Appendix g**

SCAQMD Rule 403

(Adopted May 7, 1976) (Amended November 6, 1992)  
(Amended July 9, 1993) (Amended February 14, 1997)  
(Amended December 11, 1998)(Amended April 2, 2004)  
(Amended June 3, 2005)

**RULE 403. FUGITIVE DUST**

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

- (1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.
- (2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.
- (3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.
- (4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.
- (5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

- (6) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (7) CEMENT MANUFACTURING FACILITY is any facility that has a cement kiln at the facility.
- (8) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (9) COMMERCIAL POULTRY RANCH means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.
- (10) CONFINED ANIMAL FACILITY means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (11) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (12) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.
- (13) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

- (14) **DISTURBED SURFACE AREA** means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
  - (A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
  - (B) been paved or otherwise covered by a permanent structure; or
  - (C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.
- (15) **DUST SUPPRESSANTS** are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (16) **EARTH-MOVING ACTIVITIES** means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.
- (17) **DUST CONTROL SUPERVISOR** means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.
- (18) **FUGITIVE DUST** means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (19) **HIGH WIND CONDITIONS** means that instantaneous wind speeds exceed 25 miles per hour.
- (20) **INACTIVE DISTURBED SURFACE AREA** means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.
- (21) **LARGE OPERATIONS** means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic



meters (5,000 cubic yards) or more three times during the most recent 365-day period.

- (22) OPEN STORAGE PILE is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (23) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (24) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- (25) PM<sub>10</sub> means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (26) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (27) RULE 403 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (28) SERVICE ROADS are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.
- (29) SIMULTANEOUS SAMPLING means the operation of two PM<sub>10</sub> samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- (30) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

- (31) **STABILIZED SURFACE** means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.
  - (32) **TRACK-OUT** means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
  - (33) **TYPICAL ROADWAY MATERIALS** means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.
  - (34) **UNPAVED ROADS** means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
  - (35) **VISIBLE ROADWAY DUST** means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
  - (36) **WIND-DRIVEN FUGITIVE DUST** means visible emissions from any disturbed surface area which is generated by wind action alone.
  - (37) **WIND GUST** is the maximum instantaneous wind speed as measured by an anemometer.
- (d) **Requirements**
- (1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

- (A) the dust remains visible in the atmosphere beyond the property line of the emission source; or
  - (B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- (2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- (3) No person shall cause or allow PM<sub>10</sub> levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM<sub>10</sub> monitoring. If sampling is conducted, samplers shall be:
- (A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM<sub>10</sub>.
  - (B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
- (4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.
- (5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.
- (A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
  - (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
  - (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
  - (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).
- (6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.
- (e) Additional Requirements for Large Operations
- (1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:
    - (A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;
    - (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
    - (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

- (D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;
  - (E) identify a dust control supervisor that:
    - (i) is employed by or contracted with the property owner or developer;
    - (ii) is on the site or available on-site within 30 minutes during working hours;
    - (iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;
    - (iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and
  - (F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).
- (2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).
- (f) **Compliance Schedule**  
The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

(1) The provisions of this Rule shall not apply to:

- (A) Dairy farms.
- (B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.
- (C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.
- (D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
  - (i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;
  - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and
  - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.
- (E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
  - (i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and
  - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and
  - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.

- (F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
  - (G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
  - (H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
  - (I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
  - (J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:
    - (i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and
    - (ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.
  - (K) sandblasting operations.
- (2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:
- (A) When wind gusts exceed 25 miles per hour, provided that:

- (i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;
    - (ii) records are maintained in accordance with subparagraph (e)(1)(C).
  - (B) To unpaved roads, provided such roads:
    - (i) are used solely for the maintenance of wind-generating equipment; or
    - (ii) are unpaved public alleys as defined in Rule 1186; or
    - (iii) are service roads that meet all of the following criteria:
      - (a) are less than 50 feet in width at all points along the road;
      - (b) are within 25 feet of the property line; and
      - (c) have a traffic volume less than 20 vehicle-trips per day.
  - (C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.
- (3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.
  - (4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:
    - (A) Blasting operations which have been permitted by the California Division of Industrial Safety; and
    - (B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.
  - (5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for



each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

- (6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.
- (7) The provisions of subdivision (e) shall not apply to:
  - (A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.
  - (B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.
  - (C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.
- (8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM<sub>10</sub> pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

**TABLE 1**  
**BEST AVAILABLE CONTROL MEASURES**  
**(Applicable to All Construction Activity Sources)**

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	<ul style="list-style-type: none"> <li>✓ Mix backfill soil with water prior to moving</li> <li>✓ Dedicate water truck or high capacity hose to backfilling equipment</li> <li>✓ Empty loader bucket slowly so that no dust plumes are generated</li> <li>✓ Minimize drop height from loader bucket</li> </ul>
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	<ul style="list-style-type: none"> <li>✓ Maintain live perennial vegetation where possible</li> <li>✓ Apply water in sufficient quantity to prevent generation of dust plumes</li> </ul>
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	<ul style="list-style-type: none"> <li>✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements</li> </ul>
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	<ul style="list-style-type: none"> <li>✓ Follow permit conditions for crushing equipment</li> <li>✓ Pre-water material prior to loading into crusher</li> <li>✓ Monitor crusher emissions opacity</li> <li>✓ Apply water to crushed material to prevent dust plumes</li> </ul>

**TABLE 1  
BEST AVAILABLE CONTROL MEASURES  
(Applicable to All Construction Activity Sources)**

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	<ul style="list-style-type: none"> <li>✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration</li> <li>✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts</li> </ul>
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	<ul style="list-style-type: none"> <li>✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and 07-2 Stabilize disturbed soil between structures	<ul style="list-style-type: none"> <li>✓ Limit vehicular traffic and disturbances on soils where possible</li> <li>✓ If interior block walls are planned, install as early as possible</li> <li>✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	<ul style="list-style-type: none"> <li>✓ Grade each project phase separately, timed to coincide with construction phase</li> <li>✓ Upwind fencing can prevent material movement on site</li> <li>✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>

**TABLE 1**  
**BEST AVAILABLE CONTROL MEASURES**  
**(Applicable to All Construction Activity Sources)**

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	<ul style="list-style-type: none"> <li>✓ Use tarps or other suitable enclosures on haul trucks</li> <li>✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage</li> <li>✓ Comply with track-out prevention/mitigation requirements</li> <li>✓ Provide water while loading and unloading to reduce visible dust plumes</li> </ul>
Landscaping	10-1 Stabilize soils, materials, slopes	<ul style="list-style-type: none"> <li>✓ Apply water to materials to stabilize</li> <li>✓ Maintain materials in a crusted condition</li> <li>✓ Maintain effective cover over materials</li> <li>✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes</li> <li>✓ Hydroseed prior to rain season</li> </ul>
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	<ul style="list-style-type: none"> <li>✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs</li> <li>✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs</li> </ul>

**TABLE 1**  
**BEST AVAILABLE CONTROL MEASURES**  
**(Applicable to All Construction Activity Sources)**

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	<ul style="list-style-type: none"> <li>✓ Dedicate water truck or high capacity hose to screening operation</li> <li>✓ Drop material through the screen slowly and minimize drop height</li> <li>✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point</li> </ul>
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	<ul style="list-style-type: none"> <li>✓ Limit size of staging area</li> <li>✓ Limit vehicle speeds to 15 miles per hour</li> <li>✓ Limit number and size of staging area entrances/exits</li> </ul>
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	<ul style="list-style-type: none"> <li>✓ Add or remove material from the downwind portion of the storage pile</li> <li>✓ Maintain storage piles to avoid steep sides or faces</li> </ul>

**TABLE 1  
BEST AVAILABLE CONTROL MEASURES  
(Applicable to All Construction Activity Sources)**

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	<ul style="list-style-type: none"> <li>✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas</li> <li>✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes</li> </ul>
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	<ul style="list-style-type: none"> <li>✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching</li> <li>✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment</li> </ul>
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	<ul style="list-style-type: none"> <li>✓ Empty loader bucket such that no visible dust plumes are created</li> <li>✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading</li> </ul>
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	<ul style="list-style-type: none"> <li>✓ Haul waste material immediately off-site</li> </ul>

**TABLE 1  
BEST AVAILABLE CONTROL MEASURES  
(Applicable to All Construction Activity Sources)**

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

**Table 2**  
**DUST CONTROL MEASURES FOR LARGE OPERATIONS**

<b>FUGITIVE DUST SOURCE CATEGORY</b>	<b>CONTROL ACTIONS</b>
<b>Earth-moving (except construction cutting and filling areas, and mining operations)</b>	<p>(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR</p> <p>(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.</p>
<b>Earth-moving: Construction fill areas:</b>	<p>(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.</p>



Table 2 (Continued)

<b>FUGITIVE DUST SOURCE CATEGORY</b>	<b>CONTROL ACTIONS</b>
<b>Earth-moving: Construction cut areas and mining operations:</b>	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
<b>Disturbed surface areas (except completed grading areas)</b>	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
<b>Disturbed surface areas: Completed grading areas</b>	(2c) Apply chemical stabilizers within five working days of grading completion; OR  (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
<b>Inactive disturbed surface areas</b>	(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR  (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR  (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR  (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

<b>FUGITIVE DUST SOURCE CATEGORY</b>	<b>CONTROL ACTIONS</b>
<b>Unpaved Roads</b>	<p>(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR</p> <p>(4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR</p> <p>(4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.</p>
<b>Open storage piles</b>	<p>(5a) Apply chemical stabilizers; OR</p> <p>(5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR</p> <p>(5c) Install temporary coverings; OR</p> <p>(5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.</p>
<b>All Categories</b>	<p>(6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.</p>

**TABLE 3**  
**CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS**

<b>FUGITIVE DUST SOURCE CATEGORY</b>	<b>CONTROL MEASURES</b>
<b>Earth-moving</b>	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
<b>Disturbed surface areas</b>	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
<b>Unpaved roads</b>	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
<b>Open storage piles</b>	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
<b>Paved road track-out</b>	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
<b>All Categories</b>	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

**Table 4**  
**(Conservation Management Practices for Confined Animal Facilities)**

<b>SOURCE CATEGORY</b>	<b>CONSERVATION MANAGEMENT PRACTICES</b>
<b>Manure Handling</b>  <b>(Only applicable to Commercial Poultry Ranches)</b>	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
<b>Feedstock Handling</b>	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
<b>Disturbed Surfaces</b>	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
<b>Unpaved Roads</b>	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
<b>Equipment Parking Areas</b>	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).