APPENDIX W

Air Quality Modeling Results and Draft Conformity Determination

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-near term.urb
Project Name: Graton Alt A - Proposed Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.65	3.86	4.68	0.00	0.01
TOTALS (lbs/day, mitigated)	0.55	3.09	3.74	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	377.57	726.12	6,354.58	4.41	779.23
TOTALS (lbs/day, mitigated)	361.01	693.68	6,070.07	4.21	744.42

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	378.22	729.98	6,359.26	4.41	779.24
TOTALS (lbs/day, mitigated)	361.56	696.77	6,073.81	4.21	744.43

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-near term.urb
Project Name: Graton Alt A - Proposed Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.09	0.70	0.72	0.00	0.00
TOTALS (tpy, mitigated)	0.08	0.56	0.58	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.19	155.05	1,176.36	0.80	142.21
TOTALS (tpy, mitigated)	73.78	148.12	1,123.70	0.76	135.86

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.29	155.75	1,177.08	0.80	142.21
TOTALS (tpy, mitigated)	73.85	148.69	1,124.28	0.76	135.86

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-near term.urb
Project Name: Graton Alt A - Proposed Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.15	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.65	3.86	4.68	0.00	0.01

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.22	3.08	2.59	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.15	-	-	-	-
TOTALS (lbs/day, mitigated)	0.55	3.09	3.74	0.00	0.01

Area Source Mitigation Measures

Residential Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Industrial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Residential Electric Landscape Maintenance Equipment
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	356.05	691.07	6,047.82	4.20	741.61
Hotel	21.52	35.05	306.76	0.21	37.62
TOTAL EMISSIONS (lbs/day)	377.57	726.12	6,354.58	4.41	779.23

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	340.29	660.19	5,777.05	4.01	708.48
Hotel	20.72	33.49	293.03	0.20	35.94
TOTAL EMISSIONS (lbs/day)	361.01	693.68	6,070.07	4.21	744.42
PERCENTAGE REDUCTION %	4	4	4	4	4

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		37.68 trips/1000 sq. ft.	408.001	5,374.89
(Worker Trip Rate: 36.81)				
Hotel		2.60 trips/rooms	300.00	779.86
(Worker Trip Rate: 2.54)				
		Sum of Total Trips		16,154.75
		Total Vehicle Miles Traveled		491,790.79

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATION OPTIONS SELECTED

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.18%
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.24%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Showers/Changing Facilities Provided' measure was selected
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
Mitigation measure Residential Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Industrial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Residential Electric Landscape Maintenance Equipment
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-long term.urb
Project Name: Graton Alt A - Proposed Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.61	3.87	4.50	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	148.37	247.79	2,405.13	4.38	776.59

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	148.97	251.65	2,409.63	4.38	776.60

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-long term.urb
Project Name: Graton Alt A - Proposed Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.15	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.61	3.87	4.50	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	139.36	235.82	2,289.03	4.17	739.10
Hotel	9.01	11.96	116.11	0.21	37.49
TOTAL EMISSIONS (lbs/day)	148.37	247.79	2,405.13	4.38	776.59

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-near term con
Project Name: Graton Alt A - Proposed Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	12.59	79.87	106.82	0.00	67.17	3.16	64.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	71.54	57.50	86.94	0.01	2.66	2.17	0.49

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-near term con
Project Name: Graton Alt A - Proposed Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.59	3.68	4.93	0.00	1.10	0.16	0.94

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.11	2.24	3.30	0.00	0.10	0.09	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt A-near term con
Project Name: Graton Alt A - Proposed Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 25.6 acres
Maximum Acreage Disturbed Per Day: 6.4 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 558000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	64.00	-	64.00
Off-Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	12.59	79.87	106.82	0.00	67.17	3.16	64.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	1.33	0.81	17.14	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.57	40.73	55.86	0.00	2.03	1.79	0.24
Max lbs/day all phases	12.59	79.87	106.82	0.00	67.17	3.16	64.01
*** 2008***							
Phase 1 Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	1.23	0.76	15.98	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	59.95	-	-	-	-	-	-
Arch Coatings Worker Trips	1.10	0.52	13.12	0.00	0.25	0.01	0.24
Asphalt Off-Gas	1.52	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.39	5.49	1.44	0.01	0.17	0.16	0.01
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	71.54	57.50	86.94	0.01	2.66	2.17	0.49
Max lbs/day all phases	71.54	57.50	86.94	0.01	2.66	2.17	0.49

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 6.4
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0013
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0013
Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-near term.urb
Project Name: Graton Alt B - NW Stoney Point Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.60	3.86	4.68	0.00	0.01
TOTALS (lbs/day, mitigated)	2.50	3.09	3.74	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	377.57	726.12	6,354.58	4.41	779.23
TOTALS (lbs/day, mitigated)	361.01	693.68	6,070.07	4.21	744.42

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	380.18	729.98	6,359.26	4.41	779.24
TOTALS (lbs/day, mitigated)	363.52	696.77	6,073.81	4.21	744.43

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-near term.urb
Project Name: Graton Alt B - NW Stoney Point Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.35	0.70	0.72	0.00	0.00
TOTALS (tpy, mitigated)	0.33	0.56	0.58	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.19	155.05	1,176.36	0.80	142.21
TOTALS (tpy, mitigated)	73.78	148.12	1,123.70	0.76	135.86

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.54	155.75	1,177.08	0.80	142.21
TOTALS (tpy, mitigated)	74.11	148.69	1,124.28	0.76	135.86

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-near term.urb
Project Name: Graton Alt B - NW Stoney Point Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.60	3.86	4.68	0.00	0.01

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.22	3.08	2.59	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS (lbs/day, mitigated)	2.50	3.09	3.74	0.00	0.01

Area Source Mitigation Measures

Residential Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Industrial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Residential Electric Landscape Maintenance Equipment
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	356.05	691.07	6,047.82	4.20	741.61
Hotel	21.52	35.05	306.76	0.21	37.62
TOTAL EMISSIONS (lbs/day)	377.57	726.12	6,354.58	4.41	779.23

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	340.29	660.19	5,777.05	4.01	708.48
Hotel	20.72	33.49	293.03	0.20	35.94
TOTAL EMISSIONS (lbs/day)	361.01	693.68	6,070.07	4.21	744.42
PERCENTAGE REDUCTION %	4	4	4	4	4

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino (Worker Trip Rate: 36.81)		37.68 trips/1000 sq. ft.	408.001	5,374.89
Hotel (Worker Trip Rate: 2.54)		2.60 trips/rooms	300.00	779.86
		Sum of Total Trips		16,154.75
		Total Vehicle Miles Traveled		491,790.79

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATION OPTIONS SELECTED

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2 18%
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.24%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Showers/Changing Facilities Provided' measure was selected
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
Mitigation measure Residential Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Industrial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Residential Electric Landscape Maintenance Equipment
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-long term.urb
Project Name: Graton Alt B - NW Stoney Point Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.56	3.87	4.50	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	148.37	247.79	2,405.13	4.38	776.59

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	150.93	251.65	2,409.63	4.38	776.60

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-long term.urb
Project Name: Graton Alt B - NW Stoney Point Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.34	0.70	0.70	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	30.23	52.91	441.91	0.79	141.73

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	30.58	53.61	442.61	0.79	141.73

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-long term.urb
Project Name: Graton Alt B - NW Stoney Point Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.56	3.87	4.50	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	139.36	235.82	2,289.03	4.17	739.10
Hotel	9.01	11.96	116.11	0.21	37.49
TOTAL EMISSIONS (lbs/day)	148.37	247.79	2,405.13	4.38	776.59

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.001	6,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-near term con
Project Name: Graton Alt B - NW Stoney Point Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	12.59	79.87	106.82	0.00	67.17	3.16	64.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	864.73	57.50	86.94	0.01	2.66	2.17	0.49

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt B-near term con
Project Name. Graton Alt B - NW Stoney Point Near Term Const
Project Location: San Francisco Bay Area
On Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 25.6 acres
Maximum Acreage Disturbed Per Day: 6.4 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 558000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	64.00	-	64.00
Off Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	12.59	79.87	106.82	0.00	67.17	3.16	64.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	1.33	0.81	17.14	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.57	40.73	55.86	0.00	2.03	1.79	0.24
Max lbs/day all phases	12.59	79.87	106.82	0.00	67.17	3.16	64.01
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	1.23	0.76	15.98	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	853.14	-	-	-	-	-	-
Arch Coatings Worker Trips	1.10	0.52	13.12	0.00	0.25	0.01	0.24
Asphalt Off-Gas	1.52	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.39	5.49	1.44	0.01	0.17	0.16	0.01
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	864.73	57.50	86.94	0.01	2.66	2.17	0.49
Max lbs/day all phases	864.73	57.50	86.94	0.01	2.66	2.17	0.49

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 6.4
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-near term.urb
Project Name: Graton Alt C - NE Stoney Point Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.60	3.86	4.68	0.00	0.01
TOTALS (lbs/day, mitigated)	2.50	3.09	3.74	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	377.57	726.12	6,354.58	4.41	779.23
TOTALS (lbs/day, mitigated)	361.01	693.68	6,070.07	4.21	744.42

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	380.18	729.98	6,359.26	4.41	779.24
TOTALS (lbs/day, mitigated)	363.52	696.77	6,073.81	4.21	744.43

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-near term.urb
Project Name: Graton Alt C - NE Stoney Point Near Term
Project Location: San Francisco Bay Area
On Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.35	0.70	0.72	0.00	0.00
TOTALS (tpy, mitigated)	0.33	0.56	0.58	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.19	155.05	1,176.36	0.80	142.21
TOTALS (tpy, mitigated)	73.78	148.12	1,123.70	0.76	135.86

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.54	155.75	1,177.08	0.80	142.21
TOTALS (tpy, mitigated)	74.11	148.69	1,124.28	0.76	135.86

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-near term.urb
Project Name: Graton Alt C - NE Stoney Point Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.60	3.86	4.68	0.00	0.01

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.22	3.08	2.59	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS (lbs/day, mitigated)	2.50	3.09	3.74	0.00	0.01

Area Source Mitigation Measures

Residential Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Industrial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Residential Electric Landscape Maintenance Equipment
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	356.05	691.07	6,047.82	4.20	741.61
Hotel	21.52	35.05	306.76	0.21	37.62
TOTAL EMISSIONS (lbs/day)	377.57	726.12	6,354.58	4.41	779.23

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATED OPERATIONAL EMISSIONS

		ROG	NOx	CO	SO2	PM10
Casino		340.29	660.19	5,777.05	4.01	708.48
Hotel		20.72	33.49	293.03	0.20	35.94
TOTAL EMISSIONS (lbs/day)		361.01	693.68	6,070.07	4.21	744.42
PERCENTAGE REDUCTION	%	4	4	4	4	4

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		37.68 trips/1000 sq. ft.	408.001	5,374.89
(Worker Trip Rate: 36.81)				
Hotel		2.60 trips/rooms	300.00	779.86
(Worker Trip Rate: 2.54)				
		Sum of Total Trips		16,154.75
		Total Vehicle Miles Traveled		491,790.79

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATION OPTIONS SELECTED

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.18%
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.24%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Showers/Changing Facilities Provided' measure was selected
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
Mitigation measure Residential Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Industrial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Residential Electric Landscape Maintenance Equipment
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-long term.urb
Project Name: Graton Alt C - NE Stoney Point Long Term
Project Location: San Francisco Bay Area
On Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.56	3.87	4.50	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	148.37	247.79	2,405.13	4.38	776.59

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	150.93	251.65	2,409.63	4.38	776.60

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-long term.urb
Project Name: Graton Alt C - NE Stoney Point Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.34	0.70	0.70	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	30.23	52.91	441.91	0.79	141.73

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	30.58	53.61	442.61	0.79	141.73

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-long term.urb
Project Name: Graton Alt C - NE Stoney Point Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.56	3.87	4.50	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	139.36	235.82	2,289.03	4.17	739.10
Hotel	9.01	11.96	116.11	0.21	37.49
TOTAL EMISSIONS (lbs/day)	148.37	247.79	2,405.13	4.38	776.59

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-near term con
Project Name: Graton Alt C - NE Stoney Point Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	12.59	79.87	106.82	0.00	67.17	3.16	64.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	864.73	57.50	86.94	0.01	2.66	2.17	0.49

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-near term con
Project Name: Graton Alt C - NE Stoney Point Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.59	3.68	4.93	0.00	1.10	0.16	0.94

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	10.70	2.24	3.30	0.00	0.10	0.09	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt C-near term con:
Project Name: Graton Alt C - NE Stoney Point Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 25.6 acres
Maximum Acreage Disturbed Per Day: 6.4 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 558000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	64.00	-	64.00
Off-Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	12.59	79.87	106.82	0.00	67.17	3.16	64.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	1.33	0.81	17.14	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.57	40.73	55.86	0.00	2.03	1.79	0.24
Max lbs/day all phases	12.59	79.87	106.82	0.00	67.17	3.16	64.01
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	1.23	0.76	15.98	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	853.14	-	-	-	-	-	-
Arch Coatings Worker Trips	1.10	0.52	13.12	0.00	0.25	0.01	0.24
Asphalt Off-Gas	1.52	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.39	5.49	1.44	0.01	0.17	0.16	0.01
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	864.73	57.50	86.94	0.01	2.66	2.17	0.49
Max lbs/day all phases	864.73	57.50	86.94	0.01	2.66	2.17	0.49

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 6.4
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-near term.urb
Project Name: Graton Alt D - Reduced Density Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.36	1.29	2.52	0.00	0.01
TOTALS (lbs/day, mitigated)	0.30	1.03	2.02	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	262.87	507.97	4,445.42	3.09	545.12
TOTALS (lbs/day, mitigated)	251.28	485.27	4,246.39	2.95	520.77

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	263.23	509.26	4,447.94	3.09	545.13
TOTALS (lbs/day, mitigated)	251.58	486.31	4,248.40	2.95	520.77

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-near term.urb
Project Name: Graton Alt D - Reduced Density Near Term
Project Location: San Francisco Bay Area
On Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.04	0.23	0.33	0.00	0.00
TOTALS (tpy, mitigated)	0.04	0.19	0.26	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	53.85	108.47	822.94	0.56	99.48
TOTALS (tpy, mitigated)	51.46	103.62	786.10	0.53	95.04

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	53.89	108.70	823.26	0.56	99.49
TOTALS (tpy, mitigated)	51.49	103.81	786.36	0.53	95.04

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-near term.urb
Project Name: Graton Alt D - Reduced Density Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.09	1.28	1.08	0	0.00
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.05	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.36	1.29	2.52	0.00	0.01

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.07	1.03	0.86	0	0.00
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.05	-	-	-	-
TOTALS (lbs/day, mitigated)	0.30	1.03	2.02	0.00	0.01

Area Source Mitigation Measures

Residential Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Industrial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Residential Electric Landscape Maintenance Equipment
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	255.70	496.28	4,343.16	3.01	532.58
Hotel	7.17	11.68	102.25	0.07	12.54
TOTAL EMISSIONS (lbs/day)	262.87	507.97	4,445.42	3.09	545.12

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	293.001	1,552.99
Hotel		2.72 trips/rooms	100.00	272.00
		Sum of Total Trips		11,824.99
		Total Vehicle Miles Traveled		360,124.90

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	244.38	474.11	4,148.71	2.88	508.79
Hotel	6.91	11.16	97.68	0.07	11.98
TOTAL EMISSIONS (lbs/day)	251.28	485.27	4,246.39	2.95	520.77
PERCENTAGE REDUCTION %	4	4	4	4	4

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		37.68 trips/1000 sq. ft.	293.001	1,041.28
(Worker Trip Rate: 36.81)				
Hotel		2.60 trips/rooms	100.00	259.95
(Worker Trip Rate: 2.54)				
		Sum of Total Trips		11,301.23
		Total Vehicle Miles Traveled		344,037.73

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATION OPTIONS SELECTED

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.18%
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.24%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Showers/Changing Facilities Provided' measure was selected
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
Mitigation measure Residential Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Industrial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Residential Electric Landscape Maintenance Equipment
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name. C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-long term.urb
Project Name: Graton Alt D - Reduced Density Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.32	1.30	2.34	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	103.08	173.34	1,682.54	3.06	543.27

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	103.40	174.64	1,684.88	3.07	543.27

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-long term.urb
Project Name: Graton Alt D - Reduced Density Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.04	0.24	0.31	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	21.06	37.01	309.14	0.56	99.15

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	21.10	37.25	309.45	0.56	99.15

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-long term.urb
Project Name: Graton Alt D - Reduced Density Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.09	1.28	1.08	0	0.00
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.05	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.32	1.30	2.34	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	100.08	169.35	1,643.84	2.99	530.77
Hotel	3.00	3.99	38.70	0.07	12.50
TOTAL EMISSIONS (lbs/day)	103.08	173.34	1,682.54	3.06	543.27

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	293.001	1,552.99
Hotel		2.72 trips/rooms	100.00	272.00
		Sum of Total Trips		11,824.99
		Total Vehicle Miles Traveled		360,124.90

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-near term con
Project Name: Graton Alt D - Reduced Density Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	12.59	79.87	106.82	0.00	42.17	3.16	39.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	46.89	54.96	76.77	0.01	2.41	2.10	0.31

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-near term con
Project Name: Graton Alt D - Reduced Density Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.56	3.67	4.57	0.00	0.73	0.16	0.57

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.81	2.20	2.93	0.00	0.10	0.09	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt D-near term con
Project Name: Graton Alt D - Reduced Density Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 15.7 acres
Maximum Acreage Disturbed Per Day: 3.9 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 343000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	39.00	-	39.00
Off-Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	12.59	79.87	106.82	0.00	42.17	3.16	39.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	0.85	0.51	10.87	0.00	0.16	0.01	0.15
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.08	40.44	49.59	0.00	1.94	1.79	0.15
Max lbs/day all phases	12.59	79.87	106.82	0.00	42.17	3.16	39.01
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	0.78	0.48	10.13	0.00	0.16	0.01	0.15
Arch Coatings Off-Gas	36.85	-	-	-	-	-	-
Arch Coatings Worker Trips	0.70	0.33	8.32	0.00	0.16	0.01	0.15
Asphalt Off-Gas	0.93	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.24	3.35	0.88	0.01	0.10	0.10	0.00
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	46.89	54.96	76.77	0.01	2.41	2.10	0.31
Max lbs/day all phases	46.89	54.96	76.77	0.01	2.41	2.10	0.31

Phase 1 - Demolition Assumptions: **Phase Turned OFF**

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 3.9
Off-Road Equipment

No	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0013
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0013

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-near term.urb
Project Name: Graton Alt E- Business Park Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.84	1.78	2.93	0.00	0.01
TOTALS (lbs/day, mitigated)	0.77	1.42	2.34	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	60.23	68.04	718.45	0.49	69.52
TOTALS (lbs/day, mitigated)	57.42	64.48	680.71	0.47	65.85

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	61.07	69.82	721.38	0.49	69.52
TOTALS (lbs/day, mitigated)	58.19	65.90	683.06	0.47	65.85

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-near term.urb
Project Name: Graton Alt E- Business Park Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.11	0.32	0.40	0.00	0.00
TOTALS (tpy, mitigated)	0.10	0.26	0.32	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	11.49	14.53	135.21	0.08	12.69
TOTALS (tpy, mitigated)	10.93	13.77	128.14	0.08	12.02

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	11.60	14.85	135.61	0.08	12.69
TOTALS (tpy, mitigated)	11.03	14.03	128.46	0.08	12.02

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-near term.urb
Project Name: Graton Alt E- Business Park Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.13	1.77	1.49	0	0.00
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.49	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.84	1.78	2.93	0.00	0.01

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.10	1.42	1.19	0	0.00
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.49	-	-	-	-
TOTALS (lbs/day, mitigated)	0.77	1.42	2.34	0.00	0.01

Area Source Mitigation Measures

Residential Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Industrial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Residential Electric Landscape Maintenance Equipment
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Regnl shop. center	28.53	33.93	351.15	0.24	33.72
General light industry	31.71	34.10	367.30	0.25	35.80
TOTAL EMISSIONS (lbs/day)	60.23	68.04	718.45	0.49	69.52

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Regnl shop. center		42.94 trips/1000 sq. ft.	100.00	4,294.00
General light industry		6.97 trips/1000 sq. ft.	400.00	2,788.00
		Sum of Total Trips		7,082.00
		Total Vehicle Miles Traveled		45,473.18

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0
General light industry				50.0	25.0	25.0

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Regnl shop. center	27.29	32.40	335.25	0.23	32.19
General light industry	30.13	32.08	345.46	0.24	33.66
TOTAL EMISSIONS (lbs/day)	57.42	64.48	680.71	0.47	65.85
PERCENTAGE REDUCTION %	5	5	5	5	5

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Regnl shop. center (Worker Trip Rate: 40.09)		41.04 trips/1000 sq. ft.	100.00	4,103.81
General light industry (Worker Trip Rate: 6.51)		6.66 trips/1000 sq. ft.	400.00	2,664.51
		Sum of Total Trips		6,768.32
		Total Vehicle Miles Traveled		43,074.38

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0
General light industry				50.0	25.0	25.0

MITIGATION OPTIONS SELECTED

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.18%
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.24%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Secure Bike Parking' measure was selected
The 'Showers/Changing Facilities Provided' measure was selected
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
Mitigation measure Residential Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Industrial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Residential Electric Landscape Maintenance Equipment
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The pass by trips option switch changed from on to off.
The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping selection item changed from 7 to 6.
The home based other selection item changed from 7 to 6.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work selection item changed from 7 to 6.
The commercial based customer selection item changed from 7 to 6.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-long term.urb
Project Name: Graton Alt E- Business Park Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.80	1.79	2.75	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	24.22	23.80	273.96	0.49	69.21

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	25.02	25.59	276.71	0.49	69.22

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-long term.urb
Project Name: Graton Alt E- Business Park Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.10	0.33	0.39	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	4.49	5.08	51.04	0.08	12.63

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	4.60	5.40	51.42	0.08	12.63

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-long term.urb
Project Name: Graton Alt E- Business Park Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.13	1.77	1.49	0	0.00
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.49	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.80	1.79	2.75	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Regnl shop. center	11.40	11.92	133.76	0.24	33.57
General light industry	12.82	11.88	140.20	0.25	35.64
TOTAL EMISSIONS (lbs/day)	24.22	23.80	273.96	0.49	69.21

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Regnl shop. center		42.94 trips/1000 sq. ft.	100.00	4,294.00
General light industry		6.97 trips/1000 sq. ft.	400.00	2,788.00
		Sum of Total Trips		7,082.00
		Total Vehicle Miles Traveled		45,473.18

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0
General light industry				50.0	25.0	25.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.

Changes made to the default values for Operations

The pass by trips option switch changed from on to off.
The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping selection item changed from 7 to 6.
The home based other selection item changed from 7 to 6.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work selection item changed from 7 to 6.
The commercial based customer selection item changed from 7 to 6.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-near term con
Project Name: Graton Alt E- Business Park Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	12.59	79.87	106.82	0.00	60.17	3.16	57.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	64.91	56.80	84.48	0.01	2.60	2.15	0.45

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-near term con
Project Name: Graton Alt E- Business Park Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.58	3.68	4.85	0.00	0.99	0.16	0.83

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.03	2.23	3.20	0.00	0.10	0.09	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt E-near term con
Project Name: Graton Alt E- Business Park Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 23 acres
Maximum Acreage Disturbed Per Day: 5.7 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 500000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	57.00	-	57.00
Off-Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	12.59	79.87	106.82	0.00	60.17	3.16	57.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	1.22	0.74	15.63	0.00	0.23	0.01	0.22
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.45	40.66	54.35	0.00	2.01	1.79	0.22
Max lbs/day all phases	12.59	79.87	106.82	0.00	60.17	3.16	57.01
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	1.12	0.69	14.57	0.00	0.23	0.01	0.22
Arch Coatings Off-Gas	53.72	-	-	-	-	-	-
Arch Coatings Worker Trips	1.01	0.47	11.97	0.00	0.23	0.01	0.22
Asphalt Off-Gas	1.36	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.34	4.89	1.28	0.01	0.15	0.14	0.01
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	64.91	56.80	84.48	0.01	2.60	2.15	0.45
Max lbs/day all phases	64.91	56.80	84.48	0.01	2.60	2.15	0.45

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 5.7
Off Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0013
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0013

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-near term.urb
Project Name: Graton Alt F- Lakeview Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.60	3.86	4.68	0.00	0.01
TOTALS (lbs/day, mitigated)	2.50	3.09	3.74	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	377.57	726.12	6,354.58	4.41	779.23
TOTALS (lbs/day, mitigated)	361.67	694.97	6,081.33	4.22	745.80

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	380.18	729.98	6,359.26	4.41	779.24
TOTALS (lbs/day, mitigated)	364.17	698.05	6,085.08	4.22	745.81

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-near term.urb
Project Name: Graton Alt F- Lakeview Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.35	0.70	0.72	0.00	0.00
TOTALS (tpy, mitigated)	0.33	0.56	0.58	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.19	155.05	1,176.36	0.80	142.21
TOTALS (tpy, mitigated)	73.91	148.40	1,125.78	0.77	136.11

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	77.54	155.75	1,177.08	0.80	142.21
TOTALS (tpy, mitigated)	74.25	148.96	1,126.36	0.77	136.11

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-near term.urb
Project Name: Graton Alt F- Lakeview Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.60	3.86	4.68	0.00	0.01

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.22	3.08	2.59	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS (lbs/day, mitigated)	2.50	3.09	3.74	0.00	0.01

Area Source Mitigation Measures

Residential Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Industrial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Residential Electric Landscape Maintenance Equipment
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	356.05	691.07	6,047.82	4.20	741.61
Hotel	21.52	35.05	306.76	0.21	37.62
TOTAL EMISSIONS (lbs/day)	377.57	726.12	6,354.58	4.41	779.23

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	340.92	661.42	5,787.76	4.02	709.80
Hotel	20.75	33.55	293.57	0.20	36.00
TOTAL EMISSIONS (lbs/day)	361.67	694.97	6,081.33	4.22	745.80
PERCENTAGE REDUCTION %	4	4	4	4	4

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino (Worker Trip Rate: 36.89)		37.75 trips/1000 sq. ft.	408.00	15,403.35
Hotel (Worker Trip Rate: 2.54)		2.60 trips/rooms	300.00	781.30
		Sum of Total Trips		16,184.65
		Total Vehicle Miles Traveled		492,702.78

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

MITIGATION OPTIONS SELECTED

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.24%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.01%
Inputs Selected:
The Number of Intersections per Square Mile is 25
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.23%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
Mitigation measure Residential Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Industrial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Residential Electric Landscape Maintenance Equipment
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-long term.urb
Project Name: Graton Alt F- Lakeview Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.56	3.87	4.50	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	148.37	247.79	2,405.13	4.38	776.59

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	150.93	251.65	2,409.63	4.38	776.60

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-long term.urb
Project Name: Graton Alt F- Lakeview Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	0.34	0.70	0.70	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	30.23	52.91	441.91	0.79	141.73

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	30.58	53.61	442.61	0.79	141.73

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-long term.urb
Project Name: Graton Alt F- Lakeview Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.28	3.85	3.23	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.10	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.56	3.87	4.50	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Casino	139.36	235.82	2,289.03	4.17	739.10
Hotel	9.01	11.96	116.11	0.21	37.49
TOTAL EMISSIONS (lbs/day)	148.37	247.79	2,405.13	4.38	776.59

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Casino		39.43 trips/1000 sq. ft.	408.00	16,087.44
Hotel		2.72 trips/rooms	300.00	816.00
		Sum of Total Trips		16,903.44
		Total Vehicle Miles Traveled		514,786.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	35.5	35.5	11.8	35.5	35.5
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	35.5	35.5
Trip Speeds (mph)	30.0	50.0	50.0	30.0	50.0	50.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Casino				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 85
The Diverted Trip % for Blank changed from 10 to 15
The Primary Trip % for Hotel changed from 60 to 85
The Diverted Trip % for Hotel changed from 35 to 15
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping trip speed changed from 30 to 50.
The home based shopping selection item changed from 7 to 10.
The home based shopping urban trip length changed from 4.6 to 35.5.
The home based other trip speed changed from 30 to 50.
The home based other selection item changed from 7 to 10.
The home based other urban trip length changed from 6.1 to 35.5.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work trip speed changed from 30 to 50.
The commercial based non-work selection item changed from 7 to 10.
The commercial based non-work urban trip length changed from 5.0 to 35.5.
The commercial based non-work rural trip length changed from 10 to 35.5.
The commercial based customer trip speed changed from 30 to 50.
The commercial based customer selection item changed from 7 to 10.
The commercial based customer urban trip length changed from 5.0 to 35.5.
The commercial based customer rural trip length changed from 10 to 35.5.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-near term con
Project Name: Graton Alt F- Lakeview Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	16.08	130.17	119.80	0.11	68.88	4.63	64.25

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	71.54	57.50	86.94	0.01	2.66	2.17	0.49

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-near term con
Project Name: Graton Alt F- Lakeview Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.64	4.40	5.12	0.00	1.12	0.18	0.94

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.11	2.24	3.30	0.00	0.10	0.09	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt F-near term con
Project Name: Graton Alt F- Lakeview Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 25.6 acres
Maximum Acreage Disturbed Per Day: 6.4 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 558000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	64.00	-	64.00
Off-Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	3.49	50.30	12.98	0.11	1.71	1.47	0.24
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	16.08	130.17	119.80	0.11	68.88	4.63	64.25
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	1.33	0.81	17.14	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.57	40.73	55.86	0.00	2.03	1.79	0.24
Max lbs/day all phases	16.08	130.17	119.80	0.11	68.88	4.63	64.25
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	1.23	0.76	15.98	0.00	0.25	0.01	0.24
Arch Coatings Off-Gas	59.95	-	-	-	-	-	-
Arch Coatings Worker Trips	1.10	0.52	13.12	0.00	0.25	0.01	0.24
Asphalt Off-Gas	1.52	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.39	5.49	1.44	0.01	0.17	0.16	0.01
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	71.54	57.50	86.94	0.01	2.66	2.17	0.49
Max lbs/day all phases	71.54	57.50	86.94	0.01	2.66	2.17	0.49

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 2308
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 6.4
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0013
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0013

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-near term.urb
Project Name: Graton Alt G - NWSP Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	8.70	5.93	5.95	0.00	0.02
TOTALS (lbs/day, mitigated)	8.59	4.97	4.85	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	129.27	127.28	1,324.25	0.84	116.94
TOTALS (lbs/day, mitigated)	126.22	124.08	1,290.86	0.82	113.99

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	137.97	133.21	1,330.20	0.84	116.96
TOTALS (lbs/day, mitigated)	134.81	129.05	1,295.72	0.82	114.00

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-near term.urb
Project Name: Graton Alt G - NWSP Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	1.53	1.08	0.95	0.00	0.00
TOTALS (tpy, mitigated)	1.52	0.91	0.78	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	25.35	27.04	258.48	0.14	21.34
TOTALS (tpy, mitigated)	24.74	26.36	251.98	0.14	20.80

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	26.89	28.12	259.43	0.14	21.34
TOTALS (tpy, mitigated)	26.26	27.26	252.76	0.14	20.80

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-near term.urb
Project Name: Graton Alt G - NWSP Near Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.44	5.92	4.50	0	0.01
Hearth - No summer emissions					
Landscaping	0.22	0.01	1.44	0.00	0.00
Consumer Prdcts	7.39	-	-	-	-
Architectural Coatings	0.66	-	-	-	-
TOTALS(lbs/day,unmitigated)	8.70	5.93	5.95	0.00	0.02

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Mitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.37	4.97	3.70	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.01	1.15	0.00	0.00
Consumer Prdcts	7.39	-	-	-	-
Architectural Coatings	0.66	-	-	-	-
TOTALS (lbs/day, mitigated)	8.59	4.97	4.85	0.00	0.01

Area Source Mitigation Measures

Commercial Increase Efficiency Beyond Title 24
Percent Reduction: 20
Commercial/Industrial Electric Landscape Maintenance Equipment
Percent Reduction: 20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	10.48	10.11	110.46	0.07	10.24
Regnl shop. center	118.79	117.17	1,213.79	0.77	106.70
TOTAL EMISSIONS (lbs/day)	129.27	127.28	1,324.25	0.84	116.94

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 0.00 % reduction. Nonresidential trips: 0.00 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments low rise	9.44	6.90 trips/dwelling unit	151.00	1,041.90
Regnl shop. center		42.94 trips/1000 sq. ft.	495.00	21,255.30
		Sum of Total Trips		22,297.20
		Total Vehicle Miles Traveled		76,396.96

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	10.26	9.86	107.75	0.07	9.99
Regnl shop. center	115.96	114.22	1,183.12	0.75	104.00
TOTAL EMISSIONS (lbs/day)	126.22	124.08	1,290.86	0.82	113.99
PERCENTAGE REDUCTION %	2	3	3	3	3

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 0.00 % reduction. Nonresidential trips: 0.00 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments low rise	9.44	6.73 trips/dwelling unit	151.00	1,016.59
Regnl shop. center (Worker Trip Rate: 40.93)		41.90 trips/1000 sq. ft.	495.00	20,738.96
		Sum of Total Trips		21,755.55
		Total Vehicle Miles Traveled		74,467.29

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Regnl shop. center				2.0	1.0	97.0

MITIGATION OPTIONS SELECTED

Residential Mitigation Measures

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 0% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate
to get Mitigated Trips
Inputs Selected:
The Presence of Local-Serving Retail checkbox was NOT selected.

Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate
to get Mitigated Trips
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.18% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate
to get Mitigated Trips
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied ONLY to worker trips. And the 'double counting adjusted'
trip rate is used to get the number of Mitigated Trips
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 0%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was NOT selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.25%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 24
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 2.18%
Inputs Selected:
The Number of Intersections per Square Mile is 100
The Percent of Streets with Sidewalks on One Side is 50%
The Percent of Streets with Sidewalks on Both Sides is 10%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 30%

Non-Residential Free Transit Passes Mitigation

Percent Reduction in Trips is 0.06%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The Free Transit Passes checkbox was selected.

Non-Residential Other Transportation Demand Measures Mitigation

Percent Reduction in Trips is 2.24%
Note that the above percent is applied ONLY to worker trips.
Inputs Selected:
The 'Secure Bike Parking' measure was selected
The 'Showers/Changing Facilities Provided' measure was selected
The 'Guaranteed Ride Home Program Provided' measure was selected
The 'Information provided on Transportation Alternatives' measure was selected
The 'Dedicated Employee Transportation Coordinator' measure was selected
The 'Carpool Matching Programs' measure was selected
The 'Preferential Carpool/Vanpool Parking' measure was selected

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2005 to 2007.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
Mitigation measure Commercial Increase Efficiency Beyond Title 24
has been changed from off to on.
Mitigation measure Commercial/Industrial Electric Landscape Maintenance Equipment
has been changed from off to on.

Changes made to the default values for Operations

The double counting option switch changed from off to on.
The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2008.
The home based work selection item changed from 7 to 6.
The home based shopping selection item changed from 7 to 6.
The home based other selection item changed from 7 to 6.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work selection item changed from 7 to 6.
The commercial based customer selection item changed from 7 to 6.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.
The Res and Non-Res Trans Demand Mgmt Measures Mitigation changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-long term.urb
Project Name: Graton Alt G - NWSP Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	8.66	5.94	5.77	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	53.55	45.55	510.21	0.84	117.56

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	62.22	51.50	515.98	0.84	117.57

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-long term.urb
Project Name: Graton Alt G - NWSP Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	1.53	1.08	0.94	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	10.21	9.66	98.60	0.14	21.45

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	11.74	10.74	99.53	0.14	21.46

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-long term.urb
Project Name: Graton Alt G - NWSP Long Term
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.44	5.92	4.50	0	0.01
Hearth - No summer emissions					
Landscaping	0.18	0.02	1.26	0.00	0.00
Consumer Prdcts	7.39	-	-	-	-
Architectural Coatings	0.66	-	-	-	-
TOTALS(lbs/day,unmitigated)	8.66	5.94	5.77	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	4.72	3.93	46.96	0.08	11.33
Commercial	48.84	41.62	463.25	0.76	106.23
TOTAL EMISSIONS (lbs/day)	53.55	45.55	510.21	0.84	117.56

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 0.00 % reduction. Nonresidential trips: 0.00 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments low rise	15.30	7.67 trips/dwelling unit	151.00	1,158.17
Commercial		42.94 trips/1000 sq. ft.	495.00	21,255.30
		Sum of Total Trips		22,413.47
		Total Vehicle Miles Traveled		77,143.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Commercial				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/9.44 to 7.67/15.3
The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.
The residential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.
The nonresidential Arch. Coatings ROG emission factor changed from 0.0185 to 0.0013.

Changes made to the default values for Operations

The double counting option switch changed from off to on.
The operational emission year changed from 2005 to 2020.
The home based work selection item changed from 7 to 6.
The home based shopping selection item changed from 7 to 6.
The home based other selection item changed from 7 to 6.
The commercial based commute selection item changed from 7 to 6.
The commercial based non-work selection item changed from 7 to 6.
The commercial based customer selection item changed from 7 to 6.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-near term con
Project Name: Graton Alt G - NWSP Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	12.59	79.87	106.82	0.00	98.17	3.16	95.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	83.68	58.49	86.43	0.02	2.67	2.20	0.47

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-near term con
Project Name: Graton Alt G - NWSP Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.59	3.68	4.90	0.00	1.53	0.16	1.37

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.25	2.25	3.26	0.00	0.10	0.09	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Graton V2\Graton-Alt G-near term con
Project Name: Graton Alt G - NWSP Near Term Const
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 38 acres
Maximum Acreage Disturbed Per Day: 9.5 acres
Single Family Units: 0 Multi-Family Units: 151
Retail/Office/Institutional/Industrial Square Footage: 495000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	95.00	-	95.00
Off-Road Diesel	12.45	79.69	103.54	-	3.15	3.15	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.18	3.28	0.00	0.02	0.01	0.01
Maximum lbs/day	12.59	79.87	106.82	0.00	98.17	3.16	95.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	39.92	38.72	-	1.78	1.78	0.00
Bldg Const Worker Trips	1.29	0.79	16.63	0.00	0.24	0.01	0.23
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	6.53	40.71	55.35	0.00	2.02	1.79	0.23
Max lbs/day all phases	12.59	79.87	106.82	0.00	98.17	3.16	95.01
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.23	37.98	40.13	-	1.62	1.62	0.00
Bldg Const Worker Trips	1.19	0.73	15.50	0.00	0.24	0.01	0.23
Arch Coatings Off-Gas	71.80	-	-	-	-	-	-
Arch Coatings Worker Trips	1.07	0.50	12.73	0.00	0.24	0.01	0.23
Asphalt Off-Gas	1.81	-	-	-	-	-	-
Asphalt Off-Road Diesel	2.24	12.97	19.01	-	0.36	0.36	0.00
Asphalt On-Road Diesel	0.46	6.52	1.71	0.02	0.20	0.19	0.01
Asphalt Worker Trips	0.01	0.00	0.12	0.00	0.00	0.00	0.00
Maximum lbs/day	83.68	58.49	86.43	0.02	2.67	2.20	0.47
Max lbs/day all phases	83.68	58.49	86.43	0.02	2.67	2.20	0.47

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '07
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Crawler Tractors	143	0.575	8.0
1	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Scrapers	313	0.660	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
2	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '08
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '08
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 7.6
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/9.44 to 7.67/15.3
The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0
The Primary Trip % for Hotel changed from 60 to 100
The Diverted Trip % for Hotel changed from 35 to 0
The Pass-By Trip % for Hotel changed from 5 to 0
The Primary Trip % for Office park changed from 80 to 100
The Diverted Trip % for Office park changed from 15 to 0
The Pass-By Trip % for Office park changed from 5 to 0

Changes made to the default values for Construction

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0013
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0013

DRAFT GENERAL CONFORMITY DETERMINATION

FOR THE GRATON CASINO/HOTEL PROJECT

TABLE OF CONTENTS

GRATON HOTEL AND CASINO
DRAFT GENERAL CONFORMITY DETERMINATION

LIST OF TABLES

1.0 INTRODUCTION

An Environmental Impact Statement (EIS) is being prepared to assess the environmental consequences of the National Indian Gaming Commission's (NIGC) approval of a management contract between the Federated Indians of Graton Rancheria (Tribe) and SC Sonoma Management, LLC. The foreseeable consequence of this federal action will be the development of a casino/hotel resort either on the Wilfred site, the Stony Point site, or the Lakeville site in Sonoma County, California. The effects of seven alternatives, including an alternative use and a No Action alternative, are analyzed within the EIS.

The Bureau of Indian Affairs (BIA) will take the Wilfred site into trust for the Tribe (see EIS for site maps) if the proposed project is identified as the NIGC's preferred alternative. The Proposed Project (Alternative A) is planned for the northeast corner of the Wilfred site. The development consists of a casino/hotel resort, which would total approximately 762,300 square feet in area. The casino-hotel resort would include restaurants, a 300-room hotel, an entertainment venue, banquet/meeting space, and a pool and spa. The remainder of the Wilfred site would remain undeveloped and be used for open space, pasture, biological habitat, and recycled water sprayfields.

The Proposed Project is located adjacent to the City of Rohnert Park approximately 50 miles north of San Francisco and is located approximately 1 mile from Highway 101, which is the main north south artery in the region. The Bay Area Air Quality Management District (BAAQMD) has local jurisdiction over the region including, the Wilfred, Stony Point, and Lakeville sites, which are located within the San Francisco Bay Area Air Basin (SFAAB).

Alternative A was determined to have the highest potential to emit. Alternative A emissions are mainly due to mobile sources. Therefore, Alternative A will be the alternative analyzed for project level conformity.

2.0 GENERAL CONFORMITY – REGULATORY BACKGROUND

The United States Environmental Protection Agency (USEPA) promulgated the General Conformity Rule on November 30, 1993 to implement the conformity provision of Title I, Section 176 (c)(1) of the Federal Clean Air Act (CAA), which requires that the Federal government not engage, support or provide financial assistance for licensing or permitting, or approving any activity not conforming to an approved CAA implementation plan. CAA conformity is an issue that may be addressed during the NEPA process. The USEPA recommends that the conformity process be coupled with NEPA analysis.

GENERAL CONFORMITY PROCESS

The conformity process should be addressed in two phases. The first phase is the conformity applicability process, which evaluates whether the conformity regulations would apply to the Federal action (i.e. whether a determination is warranted). The second phase is the conformity determination process, which demonstrates how a Federal action conforms to the applicable State Implementation Plan (SIP).

Phase One

The purpose of a conformity review is to evaluate whether the conformity determination requirements would apply to a Federal action under 40 CFR 93.153. There are four steps in the review process. The first three steps can be preformed in any order; the four steps are shown below:

- Determine whether the proposed action causes emissions of criteria pollutants;
- Determine whether the emissions of a criteria pollutant or its precursor (i.e. NOx and VOCs for ozone) would occur in a non-attainment or maintenance area for that pollutant;
- Determine whether the Federal action is exempt from the conformity requirement as per 40 CFR 93.153 (c)(2)-(e).
- Estimate the total emissions of the pollutants of concern from the proposed action and compare the estimates to the de minimis threshold of 40 CFR 93.153 (b)(1) and (2) and to the non-attainment or maintenance area's emissions inventory for each criteria pollutant of concern.

Phase Two

The purpose of the conformity determination, if needed, is to show if the Proposed Project conforms to the SIP.

Conformity can be shown for NOx and ROGs (Ozone precursors) by one of following four options:

- The applicable SIP specifically includes an allowance for emissions of the Proposed Project, 40 CFR 93.158 (a)(1);
- Offset emission credits are purchased for the total direct and indirect emissions, which fully offsets within the same non-attainment or maintenance area so that there is no net increase in emissions, 40 CFR 93.158 (a)(2).

- Emission from the Proposed Project coupled with the current emissions in the non-attainment area would not exceed the emissions budget in the SIP, 40 CFR 93.158 (a)(5)(i)(A).
- The Proposed Project can request that the SIP be changed by the State Governor or the State Governor's designee to include the emissions budget of the Federal action 40 CFR 93.158 (a)(5)(i)(B).

Conformity can be shown for CO by one of following two options:

- The applicable SIP specifically includes an allowance for emissions of the Proposed Project, 40 CFR 93.158 (a)(1);
- Modeling of CO shows that the action does not: cause or contribute to any new violation of any standard in any area or increase the frequency or severity of any existing violation of any standard in any area, 40 CFR 93.159 (a)(4)(i) and (b).

Even if a project is shown to conform to the SIP by one of the above methods, the project may not be determined to conform to the applicable SIP unless the total of the direct and indirect emissions for the action is in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP, including but not limited to the use of baseline emissions that reflect the historical activity levels that occurred in the geographic area, reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements, 40 CFR 93.158 (c).

3.0 APPLICABILITY OF PROPOSED PROJECT

EMISSIONS

The Proposed Project's emissions are evaluated in two phases, construction and operation. The two phases would not overlap. Criteria pollutants will be produced during both phases. The pollutants of concern during construction are particulate matter (PM_{10}, $PM_{2.5}$), reactive organic gas (ROG), carbon monoxide (CO), and nitrogen oxides (NOx), which are generally a product of combustion, in this case from heavy equipment. PM_{10} and $PM_{2.5}$ are generated during site grading and though diesel exhaust. Operational emissions are mainly emitted from vehicles visiting the casino/hotel, while area emissions from stationary source are negligible. Pollutants of concern during operation of the casino/hotel are ROG, NOx (ozone precursors), and CO. The EIS gives a detailed account of both operation and construction emissions.

ATTAINMENT/NON-ATTAINMENT AREA

The Proposed Project would be constructed within the boundaries of the SFAAB. The SFAAB is currently designated marginal non-attainment for 8-hour ozone and is a maintenance area for CO.

EXEMPTION

The Federal action that is described in Section 1.0 does not result in emissions less than de minimus thresholds, does not have emissions that are associated with a conforming program, cannot be analyzed under certain other environmental regulation, and/or are not in response to an emergency or natural disaster. Thus, the Proposed Project is not exempt from a conformity determination under 40 CFR 93.153 (c)(2)-(e).

DE MINIMUS THRESHOLDS

Emissions were estimated for both construction and operation. The construction equipment emissions were estimated by using the USEPA and California Air Resource Board approved land use based Urban Emissions (URBEMIS) air model. Operational emissions were also estimated using URBEMIS. Because operation and construction would not overlap they were evaluated separately. Construction emissions were below the 100 tons per year (tpy) de minimis thresholds for all criteria pollutants. Operational emissions for NOx and CO exceeded the 100 tpy threshold establish under 40 CFR 93.153 (b)(1). **Table 1** shows the estimated emissions for pollutants of concern during operation. **Section 3.4, 4.4, and 5.2.3** of the EIS gives a more in-depth analysis.

Table 1

Unmitigated Operational Emissions of Significant Criteria Pollutants

SOURCES	NOx	ROG	CO
	tons per year		
MOBILE	155.05	77.19	1,176.36
AREA	0.70	0.09	0.72
Total	**155.75**	**77.29**	**1,177.08**
Applicable Conformity Threshold	100	100	100
Exceedance of Threshold	*Yes*	*No*	*Yes*

Note: NOx and ROG emissions values were estimated using URBEMIS air modeling program approved by the USEPA and CARB (see **Appendix W** of the DEIS)
Source AES, 2006

A conformity determination is required for NOx and CO. This is due to the Proposed Project being located in a non-attainment area for NOx and a maintenance area for CO, and the total NOx and CO emissions are greater then the de minimis level shown in **Table 1**.

4.0 GENERAL CONFORMITY DETERMINATION

CARBON MONOXIDE DETERMINATION

Analysis

Air modeling analysis was preformed for the EIS and the general conformity determination concurrently. The results of this analysis can be found in this EIS in **Sections 3.4, 4.4, 5.2.3, and Appendices Volume III, Appendix W**.

Modeling

Conformity can be shown by complying with the criteria detailed in Section 2.0, under phase two. According to the *Transportation Project-Level Carbon Monoxide Protocol* (CO-protocol), Institute of Transportation Studies, University of California at Davis, 1996, which is the recognized industry standard for modeling CO, if an intersection has a level of service (LOS) A, B, C, or D then the CO emissions will not cause a violation of any standard in any area. All intersections (measuring total intersections, not worst approach) within the project region operate at LOS A, B, C, or D, after the implementation of traffic mitigation measures detailed in the EIS. Thus, CO emissions would not cause a violation of the NAAQS.

On November 8, 2004, CARB submitted to the USEPA a second revision to the 1998, *San Francisco CO Attainment Plan* (SIP). When the USEPA upgraded the SFBAABs NAAQS status from moderate non-attainment to maintenance a revision to the SIP was needed. This revision to the SIP included a maintenance plan: *Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas* (Maintenance Plan). The Maintenance Plan is an amendment or update to the SIP and covers the SFBAAB. The Maintenance Plan outlines how the SFBAAB will continue to comply with the NAAQS for the next 10 years. The Proposed Project will not violate the NAAQS according to the CO-protocol discussed above; therefore, the Proposed Project supports the Maintenance Plan and conforms to the SIP, and is consistent with conformity determination criteria. 40 CFR 93.153 (b)(1) and (2)(i and ii).

NOX DETERMINATION

Analysis

Air modeling analysis was preformed for the EIS and the general conformity determination concurrently. The results of this analysis can be found in this EIS in **Sections 3.4, 4.4, 5.2.3, and Appendices Volume III, Appendix W**.

As shown above a general conformity determination is required for NOx. Conformity can be shown by complying with the criteria detailed in Section 2.0, under phase two.

Specific SIP Allowance

The SFAAB was designated as an 8- hour ozone marginal non-attainment area in June 2004. The applicable State Implementation Plan (SIP) for ozone in the SFBAAB, is the 2001, *Revised San Francisco Bay Area Ozone Attainment Plan for 1-hour National Ozone Standard.* Although the 1–hour National Ambient Air Quality Standard (NAAQS) was revoked on June 15, 2004, this plan is considered the latest air quality management plan for 8-hour ozone, per the BAAQMD. Therefore, the 2001 plan will be used to determine conformity for the Proposed Project. The following is a summary of how the 2001 plan became effective;

The California Air Resource Board (CARB) submitted to the USEPA a Bay Area Attainment Plan in August 1999 titled *San Francisco Bay Area Ozone Attainment Plan for 1-hour National Ozone Standard.* On November 1, 2001 a revised plan responding to the USEPA's disapproval of the Bay Area's 1999 Ozone Attainment Plan was adopted by the BAAQMD's Governing Board. The 2001 revised ozone attainment plan titled *Revised San Francisco Bay Area Ozone Attainment Plan for 1-hour National Ozone Standard* was submitted to the USEPA for their approval on November 30, 2001. The USEPA approved the ozone attainment plan in April 2004.

It should be noted that in April 2007 the SFBAAB is expected to archive attainment for 8-hour ozone. At that time the BAAQMD will petition the USEPA for upgrade ozone status. The SFBAAB is expected to be classified as an ozone maintenance area.

Emission control measures and regulations that have been included in the 2001 SIP do not include the estimated emissions of the Proposed Project. Therefore compliance cannot be determined though conformity to the most recent applicable SIP.

Offsets

Conformity can be determined by fully offsetting the Proposed Project's mitigated operational emissions through the acquisition of emission credits or an equally enforceable measure. The Proposed Project does not include the purchase of offset credits in the project description.

Emission Budget

The Proposed Project coupled with the most recent SFBAAB emissions inventory (2005) exceeds the applicable ozone SIPs emission budget.

Addendum to SIP

The Proposed Project does not anticipate that the Governor or State Governor designee will approve an addendum to the present applicable SIP, which would include the Proposed Project's estimated emissions. Therefore conformity will not be determined using this option.

Mitigation

Mitigation measures for the Proposed Project are outlined in **Section 5.2.3** of the EIS. Mitigation measures were also used to reduce project emissions estimated by URBEMIS air model. These mitigation measures can be found in EIS **Appendices Volume III, Appendix W**. The estimated mitigated emissions are shown in **Table 2**.

Table 2

Mitigated Operational Emissions of Significant Criteria Pollutants

SOURCES	NOx tons per year
MOBILE	148.12
AREA	0.56
Total	**148.69**
Applicable Conformity Threshold	100
Exceedance of Threshold	*Yes*

Note NOx emissions values were estimated using URBEMIS air modeling program approved by the USEPA and CARB (see **Appendix W** of the DEIS)
Source AES, 2006

The Tribe chooses to demonstrate conformity through the purchase of emissions credits to fully offset NOx emissions. The recommendation to purchase these credits has been included in the EIS. The Tribe would provide the USEPA and other agencies with documentation necessary to support the emissions reductions through offset purchase, such as certification of credit purchase. This information would be included in the final General Conformity Determination.

5.0 CONCLUSION

As of yet documentation supporting conformity has not been filed with the appropriate agencies and the NIGC has not selected a preferred alternative. Until the Tribe provides this information, the Proposed Project is deemed to not conform to the applicable SIP. This Draft Conformity Determination will serve as a submittal to the USEPA, CARB, BAAQMD, and BIA per 40 CFR 93.155 (a). After the comment period for the EIS and this Draft Conformity Determination, the NIGC will make a final conformity determination, which will include detailed information on the purchase of emission offset credits for NOx. At the time these credits are purchased the Proposed Project will have met the requirements of conformity and conformed to the applicable SIP.

The NIGC expects to receive documentation supporting conformity after selecting a preferred alternative and before issuing a Record of Decision approving the preferred alternative per 40 CFR 93.150. Upon receipt of documentation supporting conformity, the NIGC will issue a final Conformity Determination as part of the Record of Decision.