CALUCULATION FOR UNSIGNALIZED FOUR-LEG INTERSECTION WITH MINOR STREET STOPPING

Intersection: Conditions: 2001 Average Month W/o Project
MAJOR STREET: North Shore Drive (EW)
MINOR STREET: Stanfield Cutoff (NS)

EVENING PEAK HOUR

PASSENGER CAR PEAK HOUR ADJUSTMENT FACTOR (1/PHF) = 1.07

SHARED-LANE CAPACITY

$$Csh = \frac{Vi+Vj}{(Vi/Cmi)+(Vj/Cmj)}$$ where 2 movements share a lane

$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	55	640	640	585	A
--- SHARED ---			640	585	A
PM 8 NT	0	710	710	710	A
PM 9 NR	143	1080	1080	937	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

PM 10 SL	0	460	460	460	A
--- SHARED ---			550	550	A
PM 11 ST	0	680	680	680	A
PM 12 SR	0	1164	1164	1164	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1308	1308	A
PM 4 WL	165	1260	1095	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	134	51	0	0	0	61	67	0	37	0	154
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

CALUCULATION FOR UNSIGNALIZED FOUR-LEG INTERSECTION WITH MINOR STREET STOPPING

Intersection: Conditions: 2001 Average Month W/ Project
MAJOR STREET: North Shore Drive (EW)
MINOR STREET: Stanfield Cutoff (NS)

MORNING PEAK HOUR

PASSENGER CAR PEAK HOUR ADJUSTMENT FACTOR (1/PHF) = 1.37

SHARED-LANE CAPACITY

$$Csh = \frac{Vi+Vj}{(Vi/Cmi)+(Vj/Cmj)}$$ where 2 movements share a lane

$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	82	580	580	498	A
--- SHARED ---					
AM 8 NT	0	650	650	650	A
AM 9 NR	73	1116	1116	1043	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 10 SL	0	480	480	480	A
--- SHARED ---					
AM 11 ST	0	600	600	600	A
AM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1308	1308	A
AM 4 WL	426	1272	846	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	53	60	0	0	0	19	98	0	45	0	311
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

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EVENING PEAK HOUR

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SHARED-LANE CAPACITY

$$Csh = \frac{Vi+Vj}{(Vi/Cmi)+(Vj/Cmj)}$$ where 2 movements share a lane

$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	103	630	630	527	A
--- SHARED ---			630	527	A
PM 8 NT	0	700	700	700	A
PM 9 NR	143	1068	1068	925	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 10 SL	0	440	440	440	A
--- SHARED ---			530	530	A
PM 11 ST	0	660	660	660	A
PM 12 SR	0	1164	1164	1164	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1308	1308	A
PM 4 WL	165	1236	1071	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	134	96	0	0	0	61	92	0	37	0	154
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

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Intersection: Conditions: 2001 Peak Month W/o Project
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MORNING PEAK HOUR

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SHARED-LANE CAPACITY

$$Csh = \frac{Vi+Vj}{(Vi/Cmi)+(Vj/Cmj)} \quad \text{where 2 movements share a lane}$$

$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)} \quad \text{where 3 movements share a lane}$$

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	81	500	500	419	A
--- SHARED ---			500	419	A
AM 8 NT	0	580	580	580	A
AM 9 NR	90	1128	1128	1038	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

AM 10 SL	0	410	410	410	A
--- SHARED ---			470	470	A
AM 11 ST	0	550	550	550	A
AM 12 SR	0	1140	1140	1140	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1320	1320	A
AM 4 WL	533	1284	751	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	66	59	0	0	0	24	74	0	56	0	389
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	68	560	560	492	A
--- SHARED ---	---	---	560	491	A
PM 8 NT	0	620	620	620	A
PM 9 NR	180	1056	1056	876	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 10 SL	0	360	360	360	B
--- SHARED ---	---	---	450	450	A
PM 11 ST	0	590	590	590	A
PM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1308	1308	A
PM 4 WL	207	1224	1017	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	168	64	0	0	0	76	84	0	46	0	193
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	99	490	490	391	B
--- SHARED ---			490	391	B
AM 8 NT	0	560	560	560	A
AM 9 NR	90	1104	1104	1014	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

AM 10 SL	0	390	390	390	B
--- SHARED ---			450	450	A
AM 11 ST	0	520	520	520	A
AM 12 SR	0	1140	1140	1140	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1320	1320	A
AM 4 WL	533	1248	715	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	66	72	0	0	0	24	113	0	56	0	389
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	117	550	550	433	A
--- SHARED ---			550	433	A
PM 8 NT	0	610	610	610	A
PM 9 NR	180	1032	1032	852	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

PM 10 SL	0	340	340	340	B
--- SHARED ---			430	430	A
PM 11 ST	0	570	570	570	A
PM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1308	1308	A
PM 4 WL	207	1200	993	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	168	109	0	0	0	76	109	0	46	0	193
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

CALUCULATION FOR UNSIGNALIZED FOUR-LEG INTERSECTION WITH MINOR STREET STOPPING

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MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	67	580	580	513	A
--- SHARED ---			580	513	A
AM 8 NT	0	650	650	650	A
AM 9 NR	77	1152	1152	1075	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

AM 10 SL	0	480	480	480	A
--- SHARED ---			540	540	A
AM 11 ST	0	620	620	620	A
AM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1308	1308	A
AM 4 WL	448	1308	860	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	56	49	0	0	0	20	62	0	47	0	327
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	58	630	630	572	A
--- SHARED ---	---	---	630	572	A
PM 8 NT	0	700	700	700	A
PM 9 NR	151	1080	1080	929	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 10 SL	0	440	440	440	A
--- SHARED ---	---	---	530	530	A
PM 11 ST	0	670	670	670	A
PM 12 SR	0	1164	1164	1164	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1308	1308	A
PM 4 WL	173	1260	1087	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	141	54	0	0	0	64	70	0	39	0	162
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	85	560	560	475	A
--- SHARED ---			560	475	A
AM 8 NT	0	620	620	620	A
AM 9 NR	77	1116	1116	1039	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

AM 10 SL	0	460	460	460	A
--- SHARED ---			520	520	A
AM 11 ST	0	590	590	590	A
AM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1308	1308	A
AM 4 WL	448	1272	824	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	56	62	0	0	0	20	101	0	47	0	327
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	106	620	620	514	A
--- SHARED ---			620	514	A
PM 8 NT	0	690	690	690	A
PM 9 NR	151	1056	1056	905	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 10 SL	0	420	420	420	A
--- SHARED ---			510	510	A
PM 11 ST	0	640	640	640	A
PM 12 SR	0	1164	1164	1164	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1308	1308	A
PM 4 WL	173	1224	1051	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	141	99	0	0	0	64	95	0	39	0	162
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	85	490	490	405	A
--- SHARED ---			490	405	A
AM 8 NT	0	550	550	550	A
AM 9 NR	96	1128	1128	1032	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

AM 10 SL	0	400	400	400	B
--- SHARED ---			460	460	A
AM 11 ST	0	530	530	530	A
AM 12 SR	0	1140	1140	1140	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1308	1308	A
AM 4 WL	559	1284	725	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	70	62	0	0	0	25	77	0	59	0	408
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

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MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	72	550	550	478	A
--- SHARED ---			550	478	A
PM 8 NT	0	610	610	610	A
PM 9 NR	188	1044	1044	856	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

PM 10 SL	0	340	340	340	B
--- SHARED ---			430	430	A
PM 11 ST	0	570	570	570	A
PM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1320	1320	A
PM 4 WL	216	1212	996	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	176	67	0	0	0	80	88	0	49	0	202
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

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$$Csh = \frac{Vi+Vj}{(Vi/Cmi)+(Vj/Cmj)}$$ where 2 movements share a lane

$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 7 NL	103	480	480	377	B
--- SHARED ---			480	377	B
AM 8 NT	0	540	540	540	A
AM 9 NR	96	1104	1104	1008	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
AM 10 SL	0	360	360	360	B
--- SHARED ---			420	420	A
AM 11 ST	0	500	500	500	A
AM 12 SR	0	1140	1140	1140	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
AM 1 EL	0	1308	1308	A
AM 4 WL	559	1248	689	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	70	75	0	0	0	25	116	0	59	0	408
PM	0	0	0	0	0	0	0	0	0	0	0	0
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

CALUCULATION FOR UNSIGNALIZED FOUR-LEG INTERSECTION WITH MINOR STREET STOPPING

Intersection: Conditions: 2006 Peak Month W/ Project
MAJOR STREET: North Shore Drive (EW)
MINOR STREET: Stanfield Cutoff (NS)

EVENING PEAK HOUR

PASSENGER CAR PEAK HOUR ADJUSTMENT FACTOR (1/PHF) = 1.07

SHARED-LANE CAPACITY

$$Csh = \frac{Vi+Vj}{(Vi/Cmi)+(Vj/Cmj)}$$ where 2 movements share a lane

$$Csh = \frac{Vi+Vj+Vk}{(Vi/Cmi)+(Vj/Cmj)+(Vk/Cmk)}$$ where 3 movements share a lane

MINOR STREET APPROACH MOVEMENTS 7,8,9

Movement	V(pcph)	Cm(pcph)	Csh(pcph)	Cr=Csh-V	LOS
PM 7 NL	120	530	530	410	A
--- SHARED ---	---	---	530	410	A
PM 8 NT	0	600	600	600	A
PM 9 NR	188	1032	1032	844	A

MINOR STREET APPROACH MOVEMENTS 10,11,12

PM 10 SL	0	330	330	330	B
--- SHARED ---	---	---	410	410	A
PM 11 ST	0	540	540	540	A
PM 12 SR	0	1152	1152	1152	A

MAJOR STREET LEFT TURNS 1,4

Movement	V(pcph)	Cm(pcph)	Cr=Csh-V	LOS
PM 1 EL	0	1320	1320	A
PM 4 WL	216	1188	972	A

TURNING MOVEMENT VOLUMES AND LANE GEOMETRICS:

	NT	NR	NL	ST	SR	SL	ET	ER	EL	WT	WR	WL
AM	0	0	0	0	0	0	0	0	0	0	0	0
PM	0	176	112	0	0	0	80	113	0	49	0	202
GEOMETRICS	1	1	0	1	1	0	1	1	0	1	0	0

Fawnskin 92 Single Family Homes

APPENDIX C

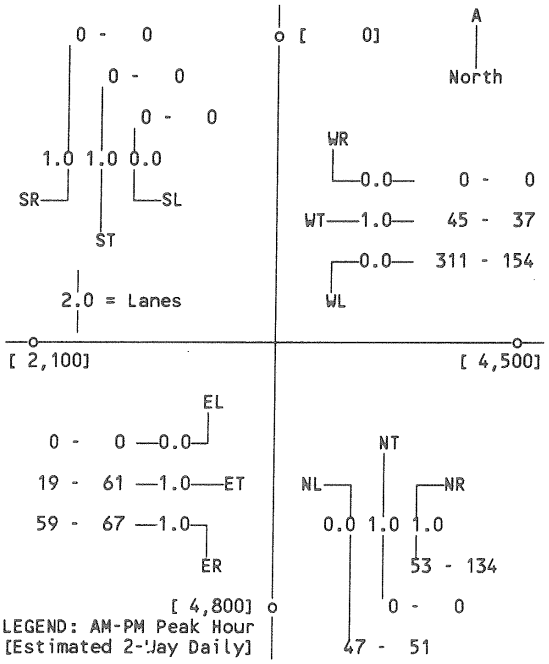
Existing Intersection Turning Movement Counts, Plots, and Estimation of Daily Volumes

INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

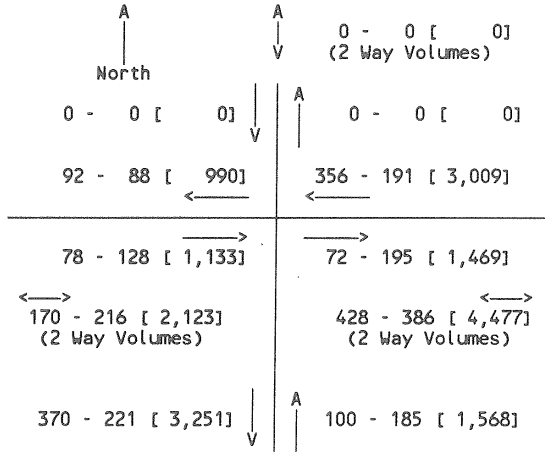
INTERSECTION: 1. Stanfield Cutoff (NS) and North Shore (EW)
LAND USE: 2001 Average Month Without Project

COUNT DATE: 3-20-2001
GEOMETRICS: Existing

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES



PLOT OF INTERSECTION LEG VOLUMES



LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
470 - 406 [4,818]
(2 Way Volumes)

Leg:	North	South	East	West
% Entering (AM-PM)	0 - 0	21 - 46	83 - 49	46 - 59
% of Daily in Peak Hour (AM-PM)	0 - 0	10 - 8	10 - 9	8 - 10

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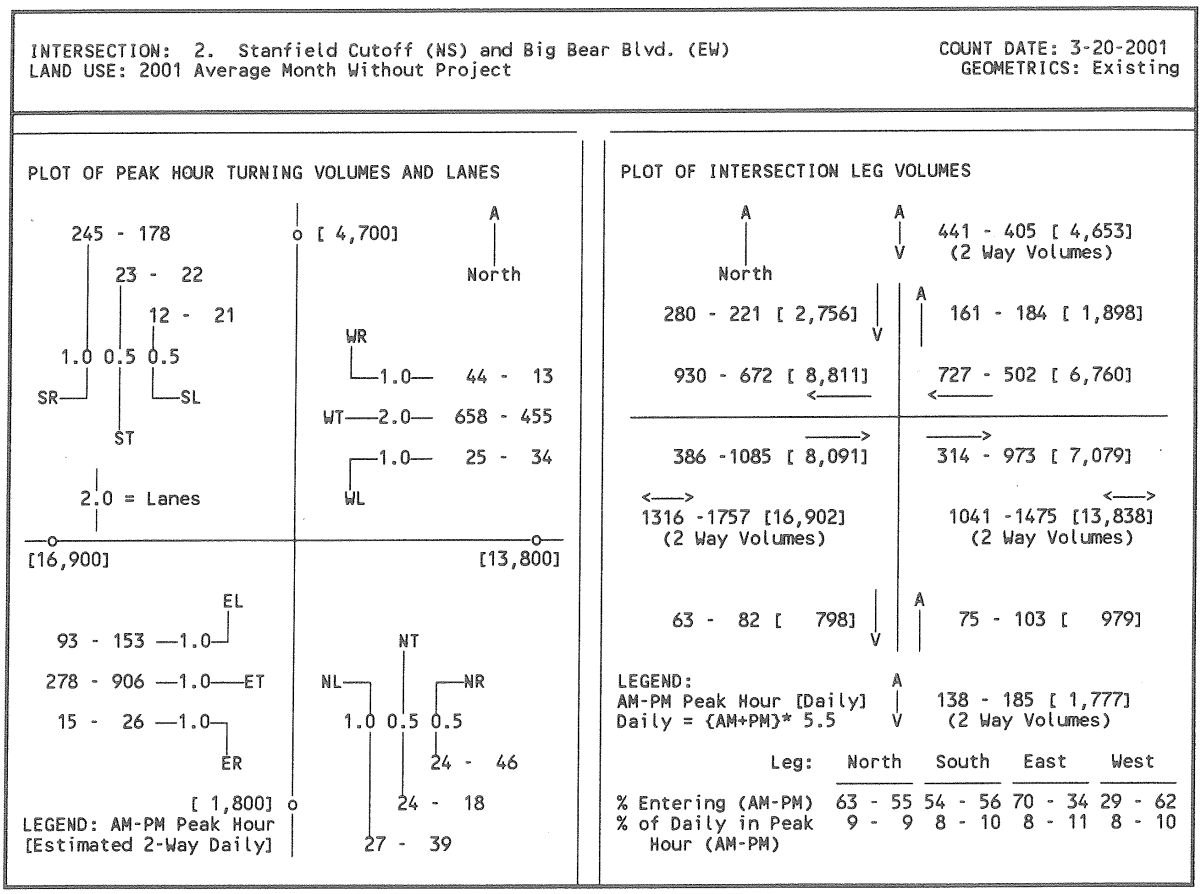
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

INTERSECTION: 2. Stanfield Cutoff (NS) and Big Bear Blvd. (EW)
LAND USE: 2001 Average Month Without Project

COUNT DATE: 3-20-2001
GEOMETRICS: Existing



Leg:	North	South	East	West
% Entering (AM-PM)	63 - 55	54 - 56	70 - 34	29 - 62
% of Daily in Peak Hour (AM-PM)	9 - 9	8 - 10	8 - 11	8 - 10

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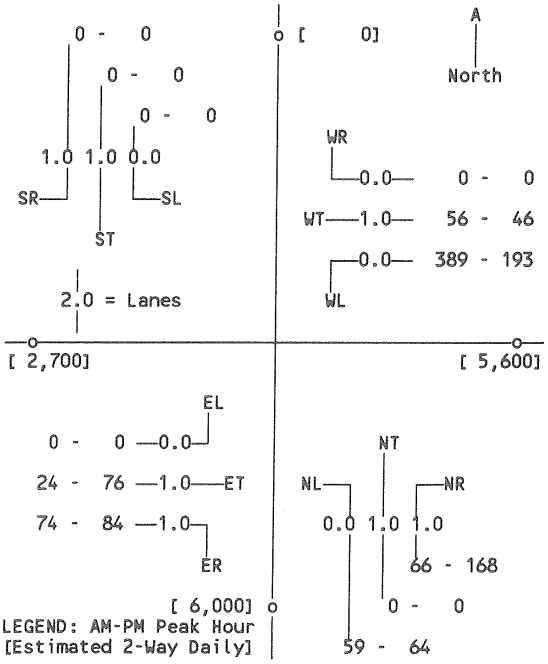
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

INTERSECTION: 1. Stanfield Cutoff (NS) and North Shore (EW)
LAND USE: 2001 Peak Month Without Project

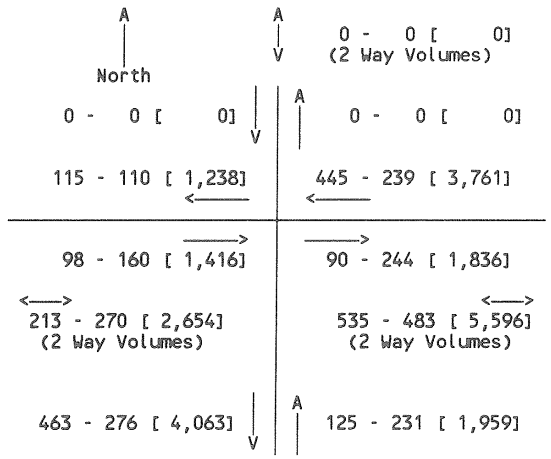
COUNT DATE: 3-20-2001
GEOMETRICS: Existing

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES



LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES



LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
588 - 508 [6,023]
(2 Way Volumes)

Leg:	North	South	East	West
% Entering (AM-PM)	0 - 0	21 - 46	83 - 49	46 - 59
% of Daily in Peak Hour (AM-PM)	0 - 0	10 - 8	10 - 9	8 - 10

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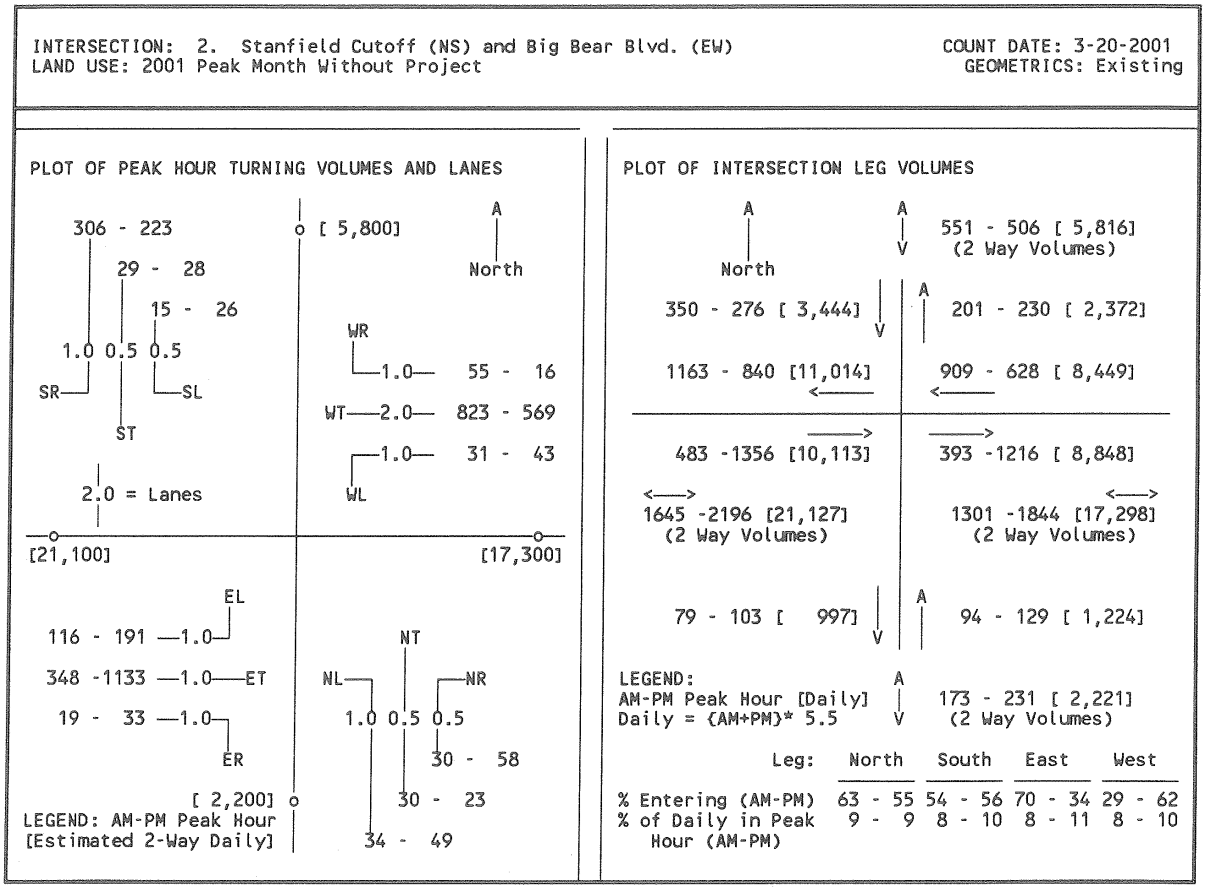
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

INTERSECTION: 2. Stanfield Cutoff (NS) and Big Bear Blvd. (EW)
LAND USE: 2001 Peak Month Without Project

COUNT DATE: 3-20-2001
GEOMETRICS: Existing



Leg:	North	South	East	West
% Entering (AM-PM)	63 - 55	54 - 56	70 - 34	29 - 62
% of Daily in Peak Hour (AM-PM)	9 - 9	8 - 10	8 - 11	8 - 10

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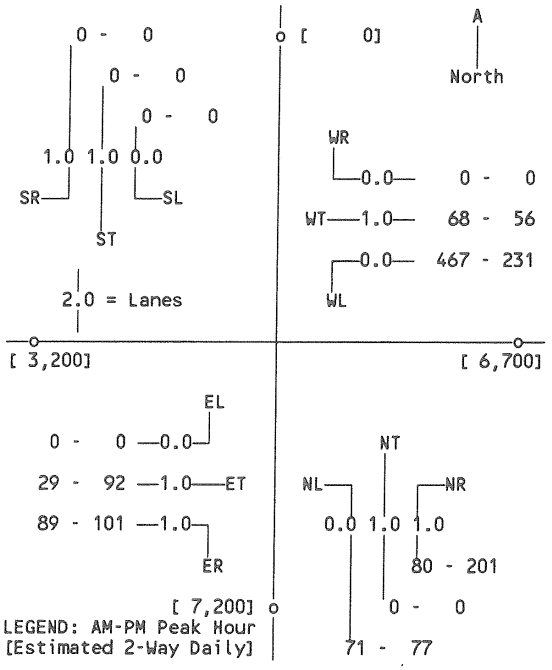
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

INTERSECTION: 1. Stanfield Cutoff (NS) and North Shore (EW)
LAND USE: 2006 Average Month Without Project

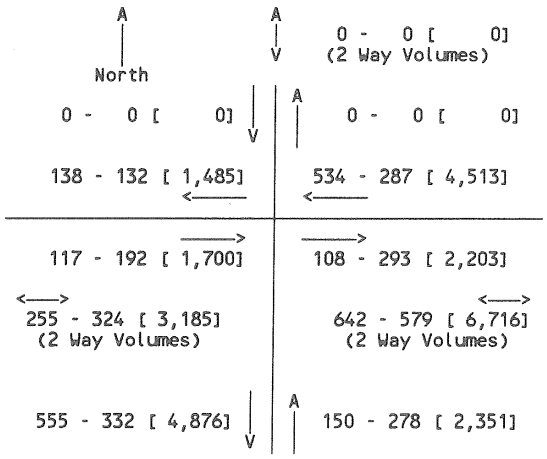
COUNT DATE: 3-20-2001
GEOMETRICS: Existing

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES



LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES



LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

705 - 609 [7,227]
(2 Way Volumes)

Leg:	North	South	East	West
% Entering (AM-PM)	0 - 0	21 - 46	83 - 49	46 - 59
% of Daily in Peak Hour (AM-PM)	0 - 0	10 - 8	10 - 9	8 - 10

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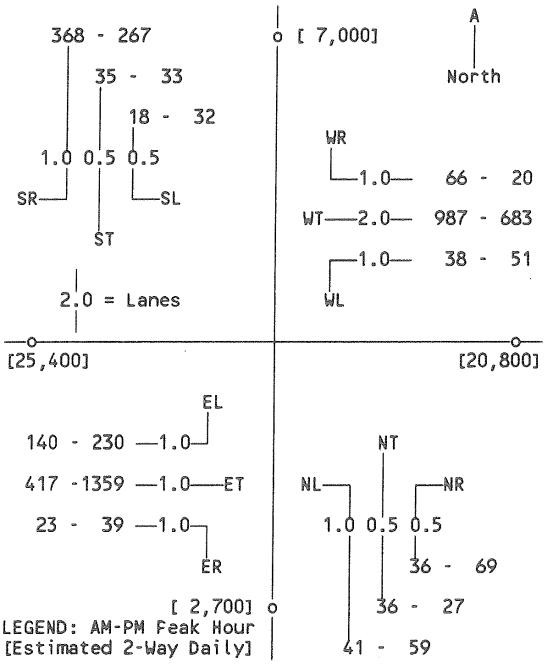
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

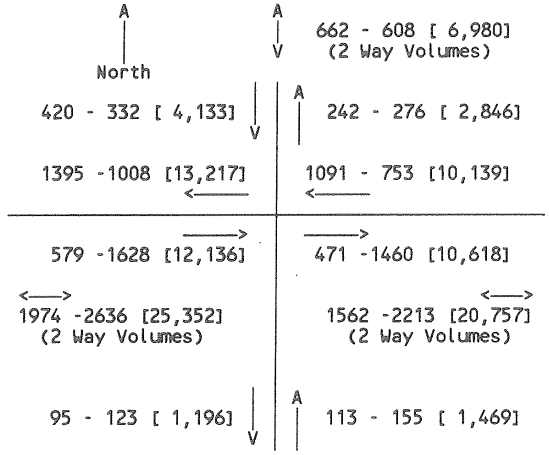
INTERSECTION: 2. Stanfield Cutoff (NS) and Big Bear Blvd. (EW)
LAND USE: 2006 Average Month Without Project

COUNT DATE: 3-20-2001
GEOMETRICS: Existing

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES



PLOT OF INTERSECTION LEG VOLUMES



LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
V
207 - 278 [2,665]
(2 Way Volumes)

Leg:	North	South	East	West
% Entering (AM-PM)	63 - 55	54 - 56	70 - 34	29 - 62
% of Daily in Peak Hour (AM-PM)	9 - 9	8 - 10	8 - 11	8 - 10

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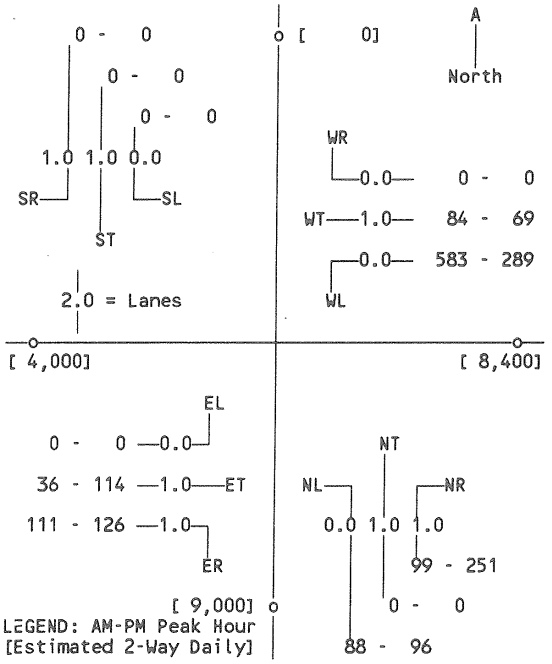
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

INTERSECTION: 1. Stanfield Cutoff (NS) and North Shore (EW)
LAND USE: 2006 Peak Month Without Project

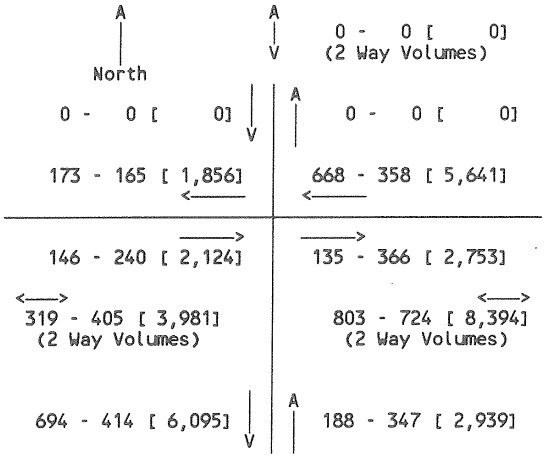
COUNT DATE: 3-20-2001
GEOMETRICS: Existing

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES



LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES



LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

Leg:	North	South	East	West
% Entering (AM-PM)	0 - 0	21 - 46	83 - 49	46 - 59
% of Daily in Peak Hour (AM-PM)	0 - 0	10 - 8	10 - 9	8 - 10

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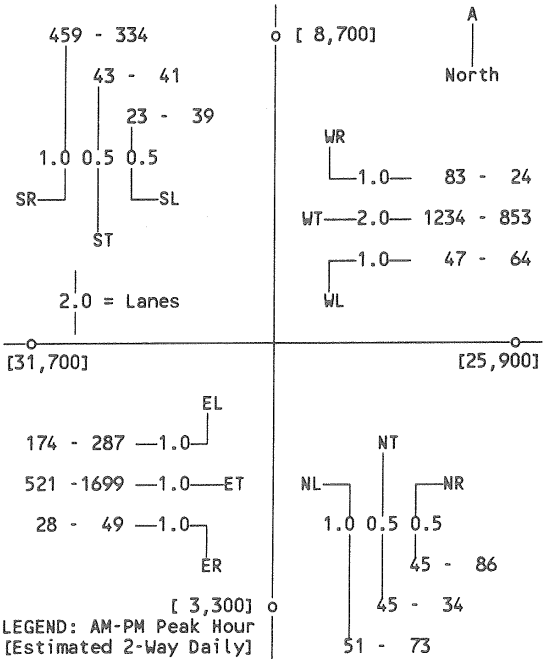
INTERSECTION TURNING MOVEMENT VOLUMES, LEG VOLUMES, AND LANES

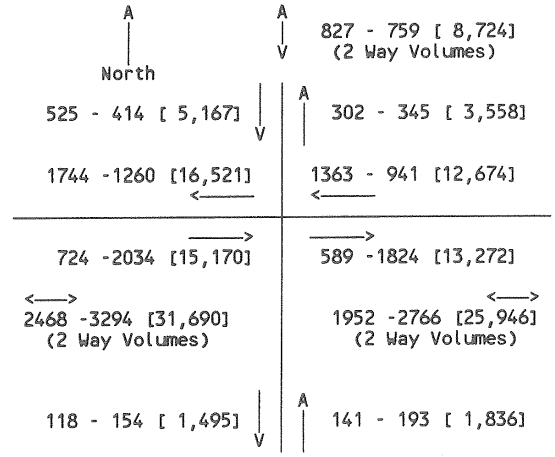
INTERSECTION: 2. Stanfield Cutoff (NS) and Big Bear Blvd. (EW)
LAND USE: 2006 Peak Month Without Project

COUNT DATE: 3-20-2001
GEOMETRICS: Existing

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES



PLOT OF INTERSECTION LEG VOLUMES



LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
259 - 347 [3,331]
(2 Way Volumes)

Leg:	North	South	East	West
% Entering (AM-PM)	63 - 55	54 - 56	70 - 34	29 - 62
% of Daily in Peak Hour (AM-PM)	9 - 9	8 - 10	8 - 11	8 - 10

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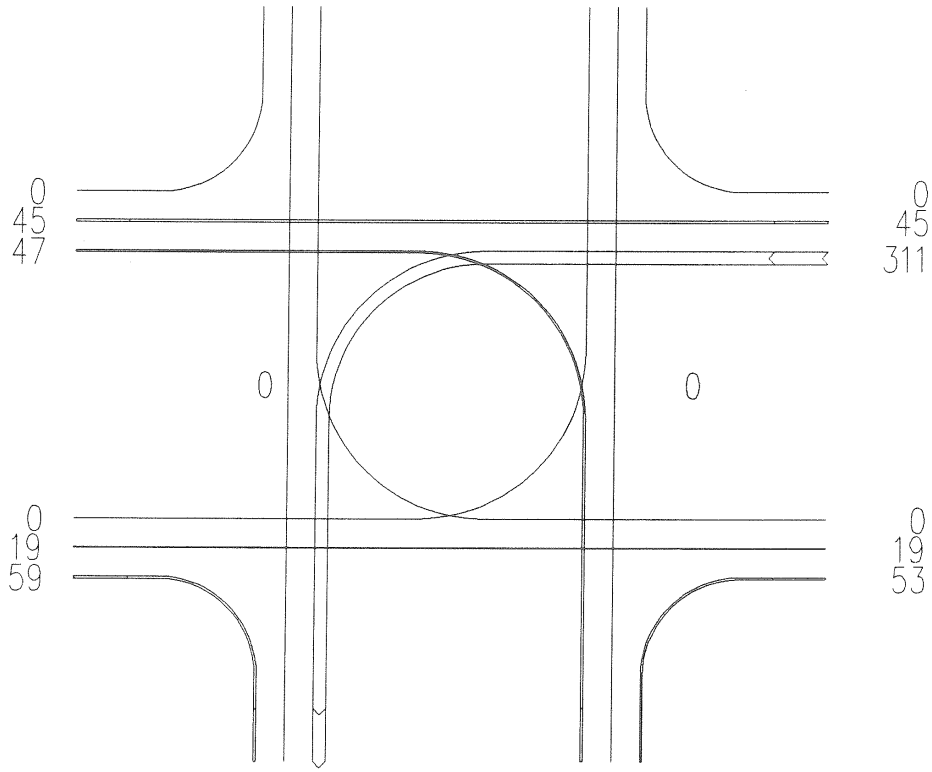
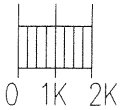
Intersection Peak Hour Turning Movement Volumes

INTERSECTION: 1. Stanfield Cutoff (NS) and North Shore Drive (EW)

Peak Hour = MORNING Day = Tuesday Date = 3-20-2001



SCALE: Volume in 1000s



Leg	Inbound	Outbound	Total	% Inbound
North Leg	0	0	0	.0000
South Leg	100	370	470	21.27
East Leg	356	72	428	83.17
West Leg	78	92	170	45.88
Total	534	534		

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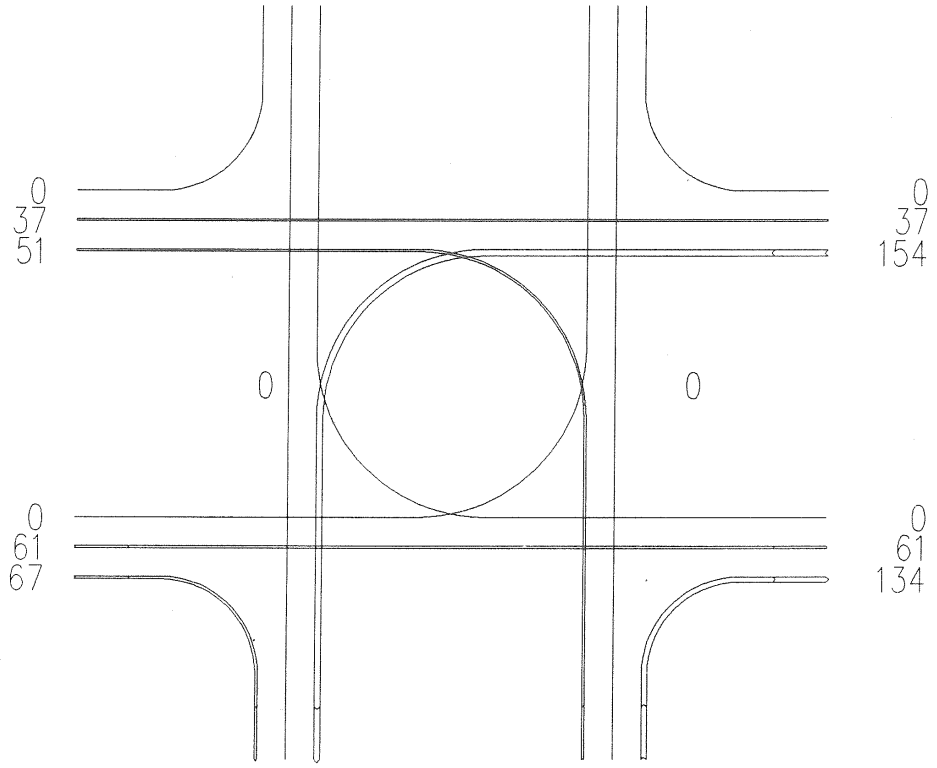
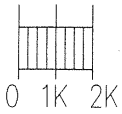
Intersection Peak Hour Turning Movement Volumes

INTERSECTION: 1. Stanfield Cutoff (NS) and North Shore Drive (EW)

Peak Hour = EVENING Day = Tuesday Date = 3-20-2001



SCALE: Volume in 1000s



Leg	Inbound	Outbound	Total	% Inbound
North Leg	0	0	0	.0000
South Leg	185	221	406	45.56
East Leg	191	195	386	49.48
West Leg	128	88	216	59.25
Total	504	504		

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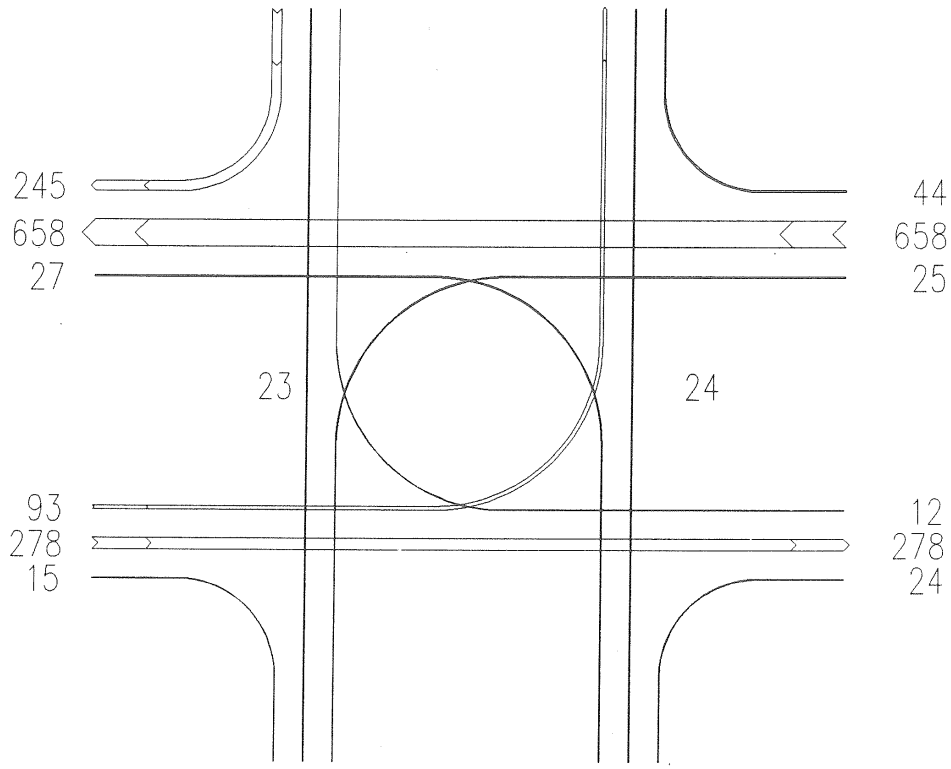
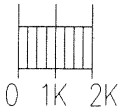
Intersection Peak Hour Turning Movement Volumes

INTERSECTION: 2. Stanfield Cutoff (NS) and Big Bear Boulevard (EW)

Peak Hour = MORNING Day = Tuesday Date = 3-20-2001



SCALE: Volume in 1000s



Leg	Inbound	Outbound	Total	% Inbound
North Leg	280	161	441	63.49
South Leg	75	63	138	54.34
East Leg	727	314	1041	69.83
West Leg	386	930	1316	29.33
Total	1468	1468		

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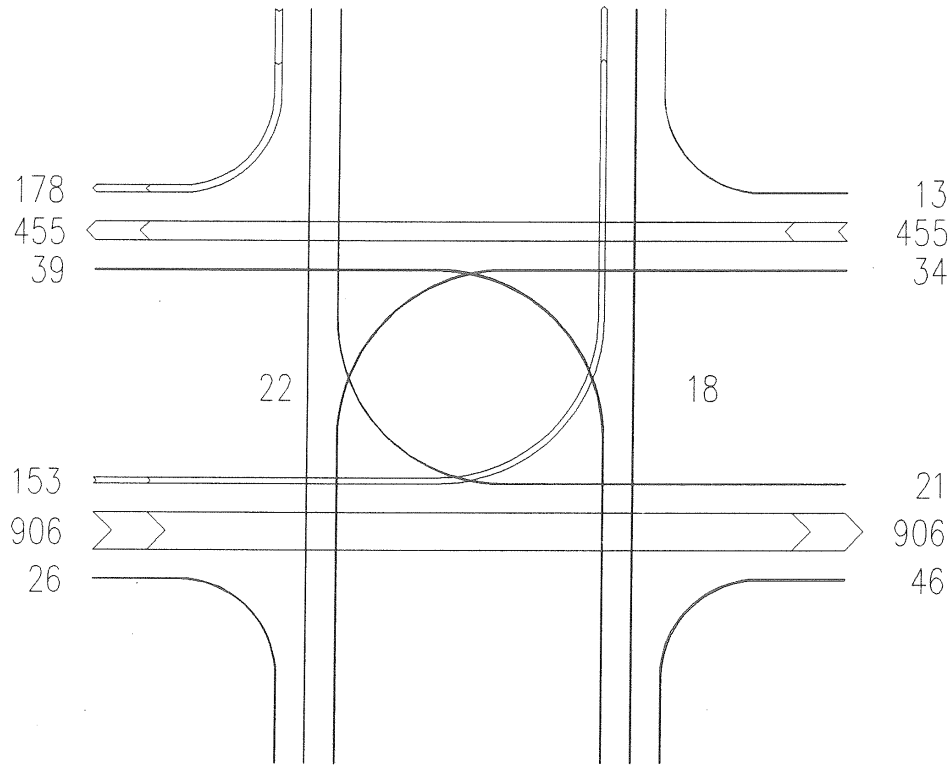
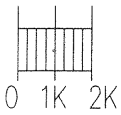
Intersection Peak Hour Turning Movement Volumes

INTERSECTION: 2. Stanfield Cutoff (NS) and Big Bear Boulevard (EW)

Peak Hour = EVENING Day = Tuesday Date = 3-20-2001



SCALE: Volume in 1000s



Leg	Inbound	Outbound	Total	% Inbound
North Leg	221	184	405	54.56
South Leg	103	82	185	55.67
East Leg	502	973	1475	34.03
West Leg	1085	672	1757	61.75
Total	1911	1911		

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SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: STANFIELD CUTOFF
E-W STREET: NORTH SHORE

DATE: 3/20/2001
DAY: TUESDAY

CITY: BIG BEAR LAKE
PROJECT# 0314001A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0					1	0	0	1		
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	8		7					8	5	40	13		81
15 AM	7		9					5	12	46	7		86
30 AM	11		12					4	12	45	15		99
45 AM	5		13					2	7	93	11		131
8:00 AM	8		15					2	8	51	12		96
15 AM	8		6					1	16	72	8		111
30 AM	15		15					8	21	109	14		182
45 AM	16		17					8	14	79	11		145
9:00 AM													
15 AM													
30 AM													
45 AM													
10:00 AM													
15 AM													
30 AM													
45 AM													
TOTAL VOLUMES =	78	0	94	0	0	0	0	38	95	535	91	0	931
PEAK VOLUMES =	47	0	53	0	0	0	0	19	59	311	45	0	534

AM Peak Hr Begins at 800 AM

ADDITIONS:1-WAY STOP N/B

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: STANFIELD CUTOFF
E-W STREET: NORTH SHORE

DATE: 3/20/2001
DAY: TUESDAY

CITY: BIG BEAR LAKE
PROJECT# 0314001P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0					1	0	0	1		
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	10		22					8	15	26	9		90
15 PM	9		28					11	14	34	11		107
30 PM	14		37					16	18	39	10		134
45 PM	13		36					19	16	31	7		122
5:00 PM	14		34					15	19	45	12		139
15 PM	10		27					11	14	39	8		109
30 PM	6		22					14	10	36	10		98
45 PM	12		19					11	14	30	7		93
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL VOLUMES =	88	0	225	0	0	0	0	105	120	280	74	0	892

PM Peak Hr Begins at 430 PM

PEAK VOLUMES =	51	0	134	0	0	0	0	61	67	154	37	0	504

ADDITIONS:1-WAY STOP N/B

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: STANFIELD CUTOFF
E-W STREET: BIG BEAR BL
DATE: 3/20/2001
DAY: TUESDAY
CITY: BIG BEAR LAKE
PROJECT# 0314002A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	0.5	0.5	1	1	1	1	1	2	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	6	4	7	2	0	38	13	72	4	8	111	2	267
15 AM	2	5	2	1	2	53	19	83	5	8	172	3	355
30 AM	12	8	4	3	2	29	19	52	0	8	151	8	296
45 AM	3	7	6	0	5	86	24	72	2	3	213	7	428
8:00 AM	10	9	5	1	2	52	16	57	5	7	162	4	330
15 AM	6	5	5	1	6	53	18	69	4	5	150	13	335
30 AM	6	2	3	5	6	55	26	67	3	7	147	21	348
45 AM	5	8	11	5	9	85	33	85	3	6	199	6	455
9:00 AM													
15 AM													
30 AM													
45 AM													
10:00 AM													
15 AM													
30 AM													
45 AM													
TOTAL VOLUMES =	50	48	43	18	32	451	168	557	26	52	1305	64	2814
PEAK VOLUMES =	27	24	24	12	23	245	93	278	15	25	658	44	1468

AM Peak Hr Begins at 800 AM

ADDITIONS:1-WAY STOP N/B

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: STANFIELD CUTOFF
E-W STREET: BIG BEAR BL

DATE: 3/20/2001
DAY: TUESDAY

CITY: BIG BEAR LAKE
PROJECT# 0314002P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	0.5	0.5	1	1	1	1	1	2	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	9	7	11	6	5	43	29	195	12	9	101	8	435
15 PM	12	5	9	7	6	51	37	211	8	11	111	5	473
30 PM	9	7	12	8	7	48	46	226	3	10	117	2	495
45 PM	10	4	14	5	5	42	39	239	7	8	123	4	500
5:00 PM	8	2	11	1	4	37	31	230	8	5	104	2	443
15 PM	6	1	12	5	6	44	35	217	6	7	110	3	452
30 PM	4	1	15	9	3	38	38	203	4	6	92	1	414
45 PM	6	0	9	5	2	33	32	187	5	5	86	1	371
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL VOLUMES =	64	27	93	46	38	336	287	1708	53	61	844	26	3583

PM Peak Hr Begins at 415 PM

PEAK VOLUMES =	39	18	46	21	22	178	153	906	26	34	455	13	1911

ADDITIONS:1-WAY STOP N/B

15.4 Air Quality Data

Parenthetical URBEMIS2002 Assumptions
For: Moon Camp
Date: 7/1/2003

LAND USES

Amount	Land Use Type	Trip Rate	Unit Type
92	SF Units	9.57	-

CONSTRUCTION SOURCES

Overall Construction Settings:

Construction Start Year

Year	Month	Working Days/Month
2005	January	22 (assumed normal average)

Length of Construction Periods (Months) – Default (12 months)

Length of Phase I (Demolition) – 0.6 months
Length of Phase 2 (Site Grading) – 1.2 Months
Length of Phase 3 (Building) – 10.2 Months
Length of Subphase 3
Building - 10.2 Months
Architectural Coatings – 1 Month
Asphalt – 0.5 Months
Mitigation (On/Off)
Phase 1 - On
Phase 2 - On
Phase 3 - On

Phase 1 - Demolition:

Demolition and On Road Emissions Settings

Total Volume – 10,896 cubic feet

Maximum Daily Volume – 1089.6 cubic feet

Equipment Exhaust

1 Off-Highway Trucks	8 hour operation
2 Tractor/Loader Backhoe	8 hour operation

Phase 2 - Site Grading:

Maximum Daily Acreage Disturbed

Total Acres – 18.4

Total Disturbed – 4.5

Fugitive Dust:

(URBEMIS2002 default all phases)

Soil Hauling

(URBEMIS2002 default all phases)

Equipment Exhaust:

1 Grader	8 hour operation
1 Off-Highway Trucks	8 hour operation
1 Rough Terrain Forklift	8 hour operation
1 Scraper	8 hour operation
1 Tractor/Loader Backhoe	8 hour operation

Phase 3 – Building Equipment:

Equipment Exhaust:

1 Off-Highway Tractor
2 Off-Highway Trucks
1 Rough Terrain Forklift
1 Trencher

Phase 3 – Architectural Coatings:

(URBEMIS2002 default all phases)

Phase 3 – Asphalt

Asphalt Paving Emissions

Total Acres – 2.5

Equipment Exhaust

1 Off-Highway Truck	8 hour operation
1 Paver	8 hour operation
2 Paving Equipment	8 hour operation
1 Roller	8 hour operation
1 Surfacing Equipment	8 hour operation

Phase 3 - Worker Commute

(URBEMIS2002 default all phases)

Construction Mitigation:

Refer to URBEMIS2002 file output.

AREA SOURCES

Natural Gas Fuel Combustion:

(URBEMIS2002 default all phases)

Wood Stoves Fuel Combustion:

Off

Fireplaces:

On

Landscape Maintenance Equipment:

Year 2010 at 180 days

Consumer Products:

(URBEMIS2002 default all phases)

Area Source Mitigation:

Refer to URBEMIS2002 file output.

OPERATIONAL SOURCES

Vehicle Fleet %:

(URBEMIS2002 default all phases)

Year:

Year of Completion – 2010

Trip Characteristics:

(URBEMIS2002 Default all phases)

Temperature Data:

30 to 90 degrees Fahrenheit

Variable Starts:

(URBEMIS2002 default all phases)

Road Dust:

Paved – 100%
Unpaved – 0%

Pass By Trips (On/Off):

Off

Double-Counting(On/Off):

Off

Operational Mitigation Measures:

Refer to URBEMIS2002 file output.

URBEMIS 2002 For Windows 7.4.2

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\Moon Camp.urb
Project Name: Moon Camp
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	400.31	162.54	192.59	0.06	52.12	7.11	45.01
TOTALS (lbs/day, mitigated)	400.31	162.54	192.59	0.06	20.42	7.11	13.31

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	4.64	1.17	1.02	0.02	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	9.15	10.57	119.16	0.09	14.26
TOTALS (lbs/day, mitigated)	9.01	10.37	116.97	0.09	14.00

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	13.79	11.73	120.18	0.11	14.26

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

URBEMIS 2002 For Windows 7.4.2

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\Moon Camp.urb
Project Name: Moon Camp
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	400.31	162.54	192.59	0.06	52.12	7.11	45.01
TOTALS (lbs/day, mitigated)	400.31	162.54	192.59	0.06	20.42	7.11	13.31

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,035.07	12.85	1,137.17	1.80	155.70

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	10.11	17.39	127.81	0.08	14.26
TOTALS (lbs/day, mitigated)	9.92	17.08	125.47	0.08	14.00

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,045.18	30.25	1,264.98	1.88	169.96

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

URBEMIS 2002 For Windows 7.4.2

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\Moon Camp.urb
Project Name: Moon Camp
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	5.62	9.62	12.40	0.00	5.09	0.38	0.60
TOTALS (tpy, mitigated)	5.62	9.62	12.40	0.00	3.41	0.38	0.18

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	43.09	0.69	46.74	0.08	6.38

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	1.73	2.34	22.27	0.02	2.60
TOTALS (tpy, mitigated)	1.70	2.30	21.86	0.02	2.55

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	44.82	3.03	69.01	0.09	8.99

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

URBEMIS 2002 For Windows 7.4.2

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\Moon Camp.urb
Project Name: Moon Camp
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

Construction Start Month and Year: January, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 18.4 acres
Maximum Acreage Disturbed Per Day: 4.5 acres
Single Family Units: 92 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source *** 2005***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.46	-	0.46
Off-Road Diesel	4.90	33.70	39.47	-	1.51	1.51	0.00
On-Road Diesel	0.09	1.84	0.34	0.03	0.05	0.04	0.01
Worker Trips	0.06	0.22	1.86	0.00	0.01	0.00	0.01
Maximum lbs/day	5.05	35.76	41.67	0.03	2.03	1.55	0.48
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	45.00	-	45.00
Off-Road Diesel	8.68	63.31	66.97	-	2.86	2.86	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.35	3.35	0.00	0.01	0.00	0.01
Maximum lbs/day	8.82	63.66	70.32	0.00	47.87	2.86	45.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.83	72.17	89.05	-	3.16	3.16	0.00
Bldg Const Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Arch Coatings Off-Gas	375.99	-	-	-	-	-	-
Arch Coatings Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Asphalt Off-Gas	0.60	-	-	-	-	-	-
Asphalt Off-Road Diesel	11.68	85.69	89.66	-	3.85	3.85	0.00
Asphalt On-Road Diesel	0.20	4.09	0.76	0.06	0.09	0.09	0.00
Asphalt Worker Trips	0.06	0.03	0.75	0.00	0.01	0.00	0.01
Maximum lbs/day	400.31	162.54	192.59	0.06	7.33	7.11	0.22
Max lbs/day all phases	400.31	162.54	192.59	0.06	52.12	7.11	45.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 10896
Building Volume Daily (cubic feet): 1089.6
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Off Highway Tractors	255	0.410	8.0
1	Rough Terrain Forklifts	94	0.475	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: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Tractors	255	0.410	8.0
2	Off Highway Trucks	417	0.490	8.0
1	Rough Terrain Forklifts	94	0.475	8.0
1	Trenchers	82	0.695	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 2.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
2	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Surfacing Equipment	437	0.490	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2005***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.46	-	0.46
Off-Road Diesel	4.90	33.70	39.47	-	1.51	1.51	0.00
On-Road Diesel	0.09	1.84	0.34	0.03	0.05	0.04	0.01
Worker Trips	0.06	0.22	1.86	0.00	0.01	0.00	0.01
Maximum lbs/day	5.05	35.76	41.67	0.03	2.03	1.55	0.48
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	13.30	-	13.30
Off-Road Diesel	8.68	63.31	66.97	-	2.86	2.86	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.35	3.35	0.00	0.01	0.00	0.01
Maximum lbs/day	8.82	63.66	70.32	0.00	16.17	2.86	13.31
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.83	72.17	89.05	-	3.16	3.16	0.00
Bldg Const Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Arch Coatings Off-Gas	375.99	-	-	-	-	-	-
Arch Coatings Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Asphalt Off-Gas	0.60	-	-	-	-	-	-
Asphalt Off-Road Diesel	11.68	85.69	89.66	-	3.85	3.85	0.00
Asphalt On-Road Diesel	0.20	4.09	0.76	0.06	0.09	0.09	0.00
Asphalt Worker Trips	0.06	0.03	0.75	0.00	0.01	0.00	0.01
Maximum lbs/day	400.31	162.54	192.59	0.06	7.33	7.11	0.22
Max lbs/day all phases	400.31	162.54	192.59	0.06	20.42	7.11	13.31

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 10896
Building Volume Daily (cubic feet): 1089.6
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months

On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Off Highway Tractors	255	0.410	8.0
1	Rough Terrain Forklifts	94	0.475	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: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Tractors	255	0.410	8.0
2	Off Highway Trucks	417	0.490	8.0
1	Rough Terrain Forklifts	94	0.475	8.0
1	Trenchers	82	0.695	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 2.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
2	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Surfacing Equipment	437	0.490	8.0

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

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.09	1.15	0.49	-	0.00
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	1,030.48	11.70	1,136.68	1.80	155.70
Landscaping - No winter emissions					
Consumer Prdcts	4.50	-	-	-	-
TOTALS(lbs/day,unmitigated)	1,035.07	12.85	1,137.17	1.80	155.70

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	10.11	17.39	127.81	0.08	14.26
TOTAL EMISSIONS (lbs/day)	10.11	17.39	127.81	0.08	14.26

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 30 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.57 trips / dwelling units	92.00	880.44

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
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	0.90	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	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	9.92	17.08	125.47	0.08	14.00
TOTAL EMISSIONS (lbs/day)	9.92	17.08	125.47	0.08	14.00

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 30 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.57 trips / dwelling units	92.00	880.44

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
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	0.90	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	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0.0	Side Walks/Paths: No Sidewalks
0.0	Street Trees Provide Shade: No Coverage
0.0	Pedestrian Circulation Access: No Destinations
0.0	Visually Interesting Uses: No Uses within Walking Distance
0.0	Street System Enhances Safety: No Streets
0.0	Pedestrian Safety from Crime: No Degree of Safety
0.0	Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.2 <- Pedestrian Effectiveness Factor

Transit Service

0.0	Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness Credit
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.0 <-Transit Effectiveness Factor

Bicycle Environment

0.0	Interconnected Bikeways: No Bikeway Coverage
0.0	Bike Routes Provide Paved Shoulders: No Routes
0.0	Safe Vehicle Speed Limits: No Routes Provided
0.0	Safe School Routes: No Schools
0.0	Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0.0	Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.2 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15.0	Credit for Existing or Planned Community Transit Service
15.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
2.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
2.0 <- Totals	

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7.0	Credit for Surrounding Bicycle Environment
7.0 <- Totals	

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5.0	Credit for Surrounding Area Bike Environment
5.0 <- Totals	

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0.0	Park and Ride Lots
0.0 <- Totals	

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0.0 <- Totals	

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.04	0.18	0.18
Transit	0.52	0.11	0.14
Bicycle	1.40	1.40	1.40
Totals	0.00	0.00	0.00

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.04	0.40	0.40
Transit	0.52	0.01	0.52
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	0.00	0.00	0.00

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

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.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplace percentage of residential units changed from 10 to 100.
The landscape year changed from 2004 to 2010.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2010.
The operational winter temperature changed from 40 to 30.
The operational winter selection item changed from 2 to 0.
The operational summer temperature changed from 60 to 90.
The operational summer selection item changed from 4 to 7.
The travel mode environment settings changed from both to: residential
The default/nodefault travel setting changed from nodefault to: default
Visually Interesting Uses: No Uses Within Walking Distance
changed to:Visually Interesting Uses: No Uses within Walking Distance

URBEMIS 2002 For Windows 7.4.2

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\Moon Camp.urb
Project Name: Moon Camp
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: January, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 18.4 acres
Maximum Acreage Disturbed Per Day: 4.5 acres
Single Family Units: 92 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source *** 2005***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.46	-	0.46
Off-Road Diesel	4.90	33.70	39.47	-	1.51	1.51	0.00
On-Road Diesel	0.09	1.84	0.34	0.03	0.05	0.04	0.01
Worker Trips	0.06	0.22	1.86	0.00	0.01	0.00	0.01
Maximum lbs/day	5.05	35.76	41.67	0.03	2.03	1.55	0.48
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	45.00	-	45.00
Off-Road Diesel	8.68	63.31	66.97	-	2.86	2.86	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.35	3.35	0.00	0.01	0.00	0.01
Maximum lbs/day	8.82	63.66	70.32	0.00	47.87	2.86	45.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.83	72.17	89.05	-	3.16	3.16	0.00
Bldg Const Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Arch Coatings Off-Gas	375.99	-	-	-	-	-	-
Arch Coatings Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Asphalt Off-Gas	0.60	-	-	-	-	-	-
Asphalt Off-Road Diesel	11.68	85.69	89.66	-	3.85	3.85	0.00
Asphalt On-Road Diesel	0.20	4.09	0.76	0.06	0.09	0.09	0.00
Asphalt Worker Trips	0.06	0.03	0.75	0.00	0.01	0.00	0.01
Maximum lbs/day	400.31	162.54	192.59	0.06	7.33	7.11	0.22
Max lbs/day all phases	400.31	162.54	192.59	0.06	52.12	7.11	45.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 10896
Building Volume Daily (cubic feet): 1089.6
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Off Highway Tractors	255	0.410	8.0
1	Rough Terrain Forklifts	94	0.475	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: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Tractors	255	0.410	8.0
2	Off Highway Trucks	417	0.490	8.0
1	Rough Terrain Forklifts	94	0.475	8.0
1	Trenchers	82	0.695	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 2.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
2	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Surfacing Equipment	437	0.490	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2005***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.46	-	0.46
Off-Road Diesel	4.90	33.70	39.47	-	1.51	1.51	0.00
On-Road Diesel	0.09	1.84	0.34	0.03	0.05	0.04	0.01
Worker Trips	0.06	0.22	1.86	0.00	0.01	0.00	0.01
Maximum lbs/day	5.05	35.76	41.67	0.03	2.03	1.55	0.48
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	13.30	-	13.30
Off-Road Diesel	8.68	63.31	66.97	-	2.86	2.86	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.35	3.35	0.00	0.01	0.00	0.01
Maximum lbs/day	8.82	63.66	70.32	0.00	16.17	2.86	13.31
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.83	72.17	89.05	-	3.16	3.16	0.00
Bldg Const Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Arch Coatings Off-Gas	375.99	-	-	-	-	-	-
Arch Coatings Worker Trips	0.47	0.28	6.19	0.00	0.10	0.00	0.10
Asphalt Off-Gas	0.60	-	-	-	-	-	-
Asphalt Off-Road Diesel	11.68	85.69	89.66	-	3.85	3.85	0.00
Asphalt On-Road Diesel	0.20	4.09	0.76	0.06	0.09	0.09	0.00
Asphalt Worker Trips	0.06	0.03	0.75	0.00	0.01	0.00	0.01
Maximum lbs/day	400.31	162.54	192.59	0.06	7.33	7.11	0.22
Max lbs/day all phases	400.31	162.54	192.59	0.06	20.42	7.11	13.31

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 10896
Building Volume Daily (cubic feet): 1089.6
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months

On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Off Highway Tractors	255	0.410	8.0
1	Rough Terrain Forklifts	94	0.475	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: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Tractors	255	0.410	8.0
2	Off Highway Trucks	417	0.490	8.0
1	Rough Terrain Forklifts	94	0.475	8.0
1	Trenchers	82	0.695	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 2.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
2	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Surfacing Equipment	437	0.490	8.0

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

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.09	1.15	0.49	-	0.00
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.05	0.01	0.53	0.02	0.00
Consumer Prdcts	4.50	-	-	-	-
TOTALS(lbs/day,unmitigated)	4.64	1.17	1.02	0.02	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	9.15	10.57	119.16	0.09	14.26
TOTAL EMISSIONS (lbs/day)	9.15	10.57	119.16	0.09	14.26

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.57 trips / dwelling units	92.00	880.44

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
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	0.90	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	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	9.01	10.37	116.97	0.09	14.00
TOTAL EMISSIONS (lbs/day)	9.01	10.37	116.97	0.09	14.00

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.57 trips / dwelling units	92.00	880.44

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
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	0.90	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	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0.0 Side Walks/Paths: No Sidewalks
0.0 Street Trees Provide Shade: No Coverage
0.0 Pedestrian Circulation Access: No Destinations
0.0 Visually Interesting Uses: No Uses within Walking Distance
0.0 Street System Enhances Safety: No Streets
0.0 Pedestrian Safety from Crime: No Degree of Safety
0.0 Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.2 <- Pedestrian Effectiveness Factor

Transit Service

0.0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness Credit
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.0 <-Transit Effectiveness Factor

Bicycle Environment

0.0 Interconnected Bikeways: No Bikeway Coverage
0.0 Bike Routes Provide Paved Shoulders: No Routes
0.0 Safe Vehicle Speed Limits: No Routes Provided
0.0 Safe School Routes: No Schools
0.0 Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0.0 Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.2 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15.0	Credit for Existing or Planned Community Transit Service
15.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
2.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
2.0 <- Totals	

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7.0	Credit for Surrounding Bicycle Environment
7.0 <- Totals	

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5.0	Credit for Surrounding Area Bike Environment
5.0 <- Totals	

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0.0	Park and Ride Lots
0.0 <- Totals	

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0.0 <- Totals	

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.04	0.18	0.18
Transit	0.52	0.11	0.14
Bicycle	1.40	1.40	1.40
Totals	0.00	0.00	0.00

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.04	0.40	0.40
Transit	0.52	0.01	0.52
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	0.00	0.00	0.00

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

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.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplace percentage of residential units changed from 10 to 100.
The landscape year changed from 2004 to 2010.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2010.
The operational winter temperature changed from 40 to 30.
The operational winter selection item changed from 2 to 0.
The operational summer temperature changed from 60 to 90.
The operational summer selection item changed from 4 to 7.
The travel mode environment settings changed from both to: residential
The default/nodefault travel setting changed from nodefault to: default
Visually Interesting Uses: No Uses Within Walking Distance
changed to:Visually Interesting Uses: No Uses within Walking Distance

URBEMIS 2002 For Windows 7.4.2

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\Moon Camp.urb
Project Name: Moon Camp
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 18.4 acres
Maximum Acreage Disturbed Per Day: 4.5 acres
Single Family Units: 92 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source *** 2005***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.03	0.22	0.26	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.03	0.23	0.27	0.00	0.03	0.01	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.60	-	0.60
Off-Road Diesel	0.12	0.84	0.88	-	0.04	0.04	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	0.04	0.00	0.00	0.00	0.00
Total tons/year	0.12	0.84	0.92	0.00	2.52	0.04	0.60
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.22	8.06	10.00	-	0.31	0.31	0.00
Bldg Const Worker Trips	0.04	0.00	0.65	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	4.14	-	-	-	-	-	-
Arch Coatings Worker Trips	0.01	0.00	0.07	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.06	0.47	0.49	-	0.02	0.02	0.00
Asphalt On-Road Diesel	0.00	0.02	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
Total tons/year	5.47	8.55	11.21	0.00	2.54	0.33	0.00
Total all phases tons/yr	5.62	9.62	12.40	0.00	5.09	0.38	0.60

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 10896
Building Volume Daily (cubic feet): 1089.6
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Off Highway Tractors	255	0.410	8.0
1	Rough Terrain Forklifts	94	0.475	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: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Tractors	255	0.410	8.0
2	Off Highway Trucks	417	0.490	8.0
1	Rough Terrain Forklifts	94	0.475	8.0
1	Trenchers	82	0.695	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 2.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
2	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Surfacing Equipment	437	0.490	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2005***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.03	0.22	0.26	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.03	0.23	0.27	0.00	0.03	0.01	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.18	-	0.18
Off-Road Diesel	0.12	0.84	0.88	-	0.04	0.04	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	0.04	0.00	0.00	0.00	0.00
Total tons/year	0.12	0.84	0.92	0.00	0.84	0.04	0.18
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.22	8.06	10.00	-	0.31	0.31	0.00
Bldg Const Worker Trips	0.04	0.00	0.65	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	4.14	-	-	-	-	-	-
Arch Coatings Worker Trips	0.01	0.00	0.07	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.06	0.47	0.49	-	0.02	0.02	0.00
Asphalt On-Road Diesel	0.00	0.02	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
Total tons/year	5.47	8.55	11.21	0.00	2.54	0.33	0.00
Total all phases tons/yr	5.62	9.62	12.40	0.00	3.41	0.38	0.18

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 10896
Building Volume Daily (cubic feet): 1089.6
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months

On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Off Highway Tractors	255	0.410	8.0
1	Rough Terrain Forklifts	94	0.475	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: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Tractors	255	0.410	8.0
2	Off Highway Trucks	417	0.490	8.0
1	Rough Terrain Forklifts	94	0.475	8.0
1	Trenchers	82	0.695	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 2.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
2	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Surfacing Equipment	437	0.490	8.0

AREA SOURCE EMISSION ESTIMATES

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.02	0.21	0.09	-	0.00
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	42.25	0.48	46.60	0.07	6.38
Landscaping	0.00	0.00	0.05	0.00	0.00
Consumer Prdcts	0.82	-	-	-	-
TOTALS (tpy, unmitigated)	43.09	0.69	46.74	0.08	6.38

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	1.73	2.34	22.27	0.02	2.60
TOTAL EMISSIONS (tons/yr)	1.73	2.34	22.27	0.02	2.60

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 90 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.57 trips / dwelling units	92.00	880.44

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
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	0.90	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	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	1.70	2.30	21.86	0.02	2.55
TOTAL EMISSIONS (tons/yr)	1.70	2.30	21.86	0.02	2.55

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 90 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.57 trips / dwelling units	92.00	880.44

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
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	0.90	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	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0.0 Side Walks/Paths: No Sidewalks
0.0 Street Trees Provide Shade: No Coverage
0.0 Pedestrian Circulation Access: No Destinations
0.0 Visually Interesting Uses: No Uses within Walking Distance
0.0 Street System Enhances Safety: No Streets
0.0 Pedestrian Safety from Crime: No Degree of Safety
0.0 Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.2 <- Pedestrian Effectiveness Factor

Transit Service

0.0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness Credit
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.0 <-Transit Effectiveness Factor

Bicycle Environment

0.0 Interconnected Bikeways: No Bikeway Coverage
0.0 Bike Routes Provide Paved Shoulders: No Routes
0.0 Safe Vehicle Speed Limits: No Routes Provided
0.0 Safe School Routes: No Schools
0.0 Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0.0 Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.2 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15.0	Credit for Existing or Planned Community Transit Service
15.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
2.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
2.0 <- Totals	

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7.0	Credit for Surrounding Bicycle Environment
7.0 <- Totals	

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5.0	Credit for Surrounding Area Bike Environment
5.0 <- Totals	

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0.0	Park and Ride Lots
0.0 <- Totals	

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0.0 <- Totals	

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.04	0.18	0.18
Transit	0.52	0.11	0.14
Bicycle	1.40	1.40	1.40
Totals	0.00	0.00	0.00

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.04	0.40	0.40
Transit	0.52	0.01	0.52
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	0.00	0.00	0.00

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

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.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplace percentage of residential units changed from 10 to 100.
The landscape year changed from 2004 to 2010.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2010.
The operational winter temperature changed from 40 to 30.
The operational winter selection item changed from 2 to 0.
The operational summer temperature changed from 60 to 90.
The operational summer selection item changed from 4 to 7.
The travel mode environment settings changed from both to: residential
The default/nodefault travel setting changed from nodefault to: default
Visually Interesting Uses: No Uses Within Walking Distance
changed to:Visually Interesting Uses: No Uses within Walking Distance

15.5 Noise Data

Picture of Location

Site Number: 1	Date: 1/23/02	By: Mike Harden
Time: 10:15 am to 10:35 am		JN 10-101901 - Moon
General Location: end of cul-de-sac on Flicker Drive.		
Noise Readings	Conditions: Variable Winds, Clear/Sunny, 15°	
LEQ = 57.3 dBA		
LDN-a = 57.3 dBA	S CNEL = 57.3 dBA	
LDL-a: LEQ = 57.3 dBA	TH 20 EXRT 3 dBA	
Ln-a L(5) = 64.3 dBA	Slow L (10) = 56.5 dBA	
Source of Peak Noise: Automobile		
Setback Distance		
Medians:	Sidewalks:	
Roadway:	Bicycle:	
Orientation and Type of Sensitive Receptor:	Direction:	
	Setbacks from ROW (feet):	
Noise Attenuation Measures: (include approx. height of sound walls)		

Directions:
1. Mount noise meter to tri-pod.
2. Turn On (lower left button) - wait for "S" to stop blinking.
3. Press "Leq"
4. Press "R/S"
5. Let stand for noise reading to occur (10-30 min.) Be QUIET
6. Press "R/S"
7. Write down noise readings (Starts with LEQ)
8. Press "Shift", then press "Ldn"- Write down noise reading.
9. Press "Shift", then press "LDL"- Write down noise reading.
10. Press "Shift", then press "Lmin"- Write down noise reading.
11. Press "Lmax"- Write down noise reading.
12. Press "PEAK" - Write down noise reading.
13. Press "Ln" - Write down noise reading.
14. Press "Shift", then Press "Reset"
15. Press "Reset" again. Go to next site. (Start at #3)

Picture of Location

Site Number: 2	Date: 1/23/02	By: Mike Harden
Time: 10:55 am to 11:20 am		Jn 10-101901 Moon Camp
General Location: Oriole Drive, near N. Shore Drive		
Noise Readings	Conditions: Variable Winds, Clear/Sunny, 15°	
LEQ = 59.3 dBA		
LDN-a = 59.3 dBA	S CNEL = 62.8 dBA	
LDL-a: LEQ = 59.2 dBA	TH 20 EXRT 3 dBA	
Ln-a L(5) = 65.1 dBA	Slow L (10) = 63.3 dBA	
Source of Peak Noise: Truck		
Setback Distance		
Medians:	Sidewalks:	
Roadway:	Bicycle:	
Orientation and Type of Sensitive Receptor:	Direction:	
	Setbacks from ROW (feet):	
Noise Attenuation Measures: (include approx. height of sound walls)		

Directions:
1. Mount noise meter to tri-pod.
2. Turn On (lower left button) - wait for "S" to stop blinking.
3. Press "Leq"
4. Press "R/S"
5. Let stand for noise reading to occur (10-30 min.) Be QUIET
6. Press "R/S"
7. Write down noise readings (Starts with LEQ)
8. Press "Shift", then press "Ldn"- Write down noise reading.
9. Press "Shift", then press "LDL"- Write down noise reading.
10. Press "Shift", then press "Lmin"- Write down noise reading.
11. Press "Lmax"- Write down noise reading.
12. Press "PEAK" - Write down noise reading.
13. Press "Ln" - Write down noise reading.
14. Press "Shift", then Press "Reset"
15. Press "Reset" again. Go to next site. (Start at #3)

Picture of Location

Site Number: 3	Date: 1/23/02	By: Mike Harden
Time: 11:35 am to 11:55 am	Jn 10-101901 Moon Camp	
General Location: N. Shore Drive, eastern portion of site, on loop		
Noise Readings	Conditions: Variable Winds, Clear/Sunny, 15°	
LEQ = 66.6 dBA		
LDN-a = 66.6 dBA	S CNEL = 71.4 dBA	
LDL-a: LEQ = 66.6 dBA	TH 20 EXRT 3 dBA	
Source of Peak Noise: Truck		
Setback Distance		
Medians:	Sidewalks:	
Roadway:	Bicycle:	
Orientation and Type of Sensitive Receptor:	Direction:	
	Setbacks from ROW (feet):	
Noise Attenuation Measures: (include approx. height of sound walls)		

Directions:
1. Mount noise meter to tri-pod.
2. Turn On (lower left button) - wait for "S" to stop blinking.
3. Press "Leq"
4. Press "R/S"
5. Let stand for noise reading to occur (10-30 min.) Be QUIET
6. Press "R/S"
7. Write down noise readings (Starts with LEQ)
8. Press "Shift", then press "Ldn"- Write down noise reading.
9. Press "Shift", then press "LDL"- Write down noise reading.
10. Press "Shift", then press "Lmin"- Write down noise reading.
11. Press "Lmax"- Write down noise reading.
12. Press "PEAK" - Write down noise reading.
13. Press "Ln" - Write down noise reading.
14. Press "Shift", then Press "Reset"
15. Press "Reset" again. Go to next site. (Start at #3)

Picture of Location

Site Number: 4	Date: 1/23/02	By: Mike Harden
Time: 1:20 pm to 1:40 pm	JN 10-101901 Moon Camp	
General Location: Moon Lane		
Noise Readings	Conditions: Variable Winds, Clear/Sunny, 15°	
LEQ = 63.8 dBA		
LDN-a = 63.8 dBA	S CNEL = 68.5 dBA	
LDL-a: LEQ = 63.8 dBA	TH 20 EXRT 3 dBA	
Ln-a L(5) = 71.5 dBA	Slow L (10) = 68.7 dBA	
Source of Peak Noise: Truck		
Setback Distance		
Medians:	Sidewalks:	
Roadway:	Bicycle:	
Orientation and Type of Sensitive Receptor:	Direction:	
	Setbacks from ROW (feet):	
Noise Attenuation Measures: (include approx. height of sound walls)		

Directions:
1. Mount noise meter to tri-pod.
2. Turn On (lower left button) - wait for "S" to stop blinking.
3. Press "Leq"
4. Press "R/S"
5. Let stand for noise reading to occur (10-30 min.) Be QUIET
6. Press "R/S"
7. Write down noise readings (Starts with LEQ)
8. Press "Shift", then press "Ldn"- Write down noise reading.
9. Press "Shift", then press "LDL"- Write down noise reading.
10. Press "Shift", then press "Lmin"- Write down noise reading.
11. Press "Lmax"- Write down noise reading.
12. Press "PEAK" - Write down noise reading.
13. Press "Ln" - Write down noise reading.
14. Press "Shift", then Press "Reset"
15. Press "Reset" again. Go to next site. (Start at #3)

North Shore Drive: West of Stanfield Cutoff: Existing

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**57.17**
VOL		TOTAL Vehicle Volume (two-way)	**4,750**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
106	70	**<-- hard 60 CNEL soft --->**	**69**	**33**
34	-3	**65 CNEL**	**32**	**-4**
11	-26	**70 CNEL**	**15**	**-21**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: West of Stanfield Cutoff: 2006 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**57.38**
VOL		TOTAL Vehicle Volume (two-way)	**4,988**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
112	75	**<-- hard 60 CNEL soft --->**	**71**	**35**
35	-1	**65 CNEL**	**33**	**-3**
11	-25	**70 CNEL**	**15**	**-21**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: West of Stanfield Cutoff: 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	**57.92**
VOL		TOTAL Vehicle Volume (two-way)	**5,655**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
127	90	**<-- hard 60 CNEL soft --->**	**77**	**41**
40	4	**65 CNEL**	**36**	**-0**
13	-24	**70 CNEL**	**17**	**-20**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: West of Stanfield Cutoff: 2025 Without Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	**58.1**
VOL		TOTAL Vehicle Volume (two-way)	**5,890**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
132	95	**<-- hard 60 CNEL soft --->**	**79**	**43**
42	5	**65 CNEL**	**37**	**1**
13	-23	**70 CNEL**	**17**	**-19**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: West of Stanfield Cutoff: 2025 - With Project

Speed	Vehicle Speed (mph, 0 to 100)	40
Grad	Road Gradient (%, 0 to 6)	
Sep1	Centerline Separation (feet)	13
with >>	(Usually 23' for 2-lane, 38'	
median >>	for 4-lane, 50' for 6-lane)	
Dist1	Distance from observer to the	100
	nearest lane centerline (>50')	
	(used in calculations)	
Dist2	Dist. from ROW to NLC	30
	*** CNEL @ 100' **(SOFT)**	**58.57**
VOL	TOTAL Vehicle Volume (two-way)	**6,557**
ALPHA	Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
147	110	**<-- hard 60 CNEL soft --->**	**85**	**49**
46	10	**65 CNEL**	**40**	**3**
15	-22	**70 CNEL**	**18**	**-18**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

North Shore Drive: East of Stanfield Cutoff: Existing

Speed	Vehicle Speed (mph, 0 to 100)	40
Grad	Road Gradient (%, 0 to 6)	
Sep1	Centerline Separation (feet)	13
with >>	(Usually 23' for 2-lane, 38'	
median >>	for 4-lane, 50' for 6-lane)	
Dist1	Distance from observer to the	100
	nearest lane centerline (>50')	
	(used in calculations)	
Dist2	Dist. from ROW to NLC	30
	*** CNEL @ 100' **(SOFT)**	**54.24**
VOL	TOTAL Vehicle Volume (two-way)	**2,420**
ALPHA	Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
54	18	**<-- hard 60 CNEL soft --->**	**44**	**8**
17	-19	**65 CNEL**	**20**	**-16**
5	-31	**70 CNEL**	**9**	**-27**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

North Shore Drive: East of Stanfield Cutoff: 2006 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	59
VOL		TOTAL Vehicle Volume (two-way)	7,245
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
162	126	**<-- hard 60 CNEL soft --->**	**91**	**55**
51	15	**65 CNEL**	**42**	**6**
16	-20	**70 CNEL**	**20**	**-17**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: East of Stanfield Cutoff: 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	59
VOL		TOTAL Vehicle Volume (two-way)	7,245
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
162	126	**<-- hard 60 CNEL soft --->**	**91**	**55**
51	15	**65 CNEL**	**42**	**6**
16	-20	**70 CNEL**	**20**	**-17**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: East of Stanfield Cutoff: 2025 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	**59.72**
VOL		TOTAL Vehicle Volume (two-way)	**8,556**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
191	155	**<-- hard 60 CNEL soft --->**	**102**	**66**
60	24	**65 CNEL**	**47**	**11**
19	-17	**70 CNEL**	**22**	**-14**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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North Shore Drive: East of Stanfield Cutoff: 2025 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	**59.72**
VOL		TOTAL Vehicle Volume (two-way)	**8,556**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
191	155	**<-- hard 60 CNEL soft --->**	**102**	**66**
60	24	**65 CNEL**	**47**	**11**
19	-17	**70 CNEL**	**22**	**-14**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: North of N. Shore Drive: Existing

Speed		Vehicle Speed (mph, 0 to 100)	15
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	32.22
VOL		TOTAL Vehicle Volume (two-way)	125
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
0	-36	**<-- hard 60 CNEL soft --->**	**2**	**-35**
0	-36	**65 CNEL**	**1**	**-36**
0	-36	**70 CNEL**	**0**	**-36**

View		View Angle of Observer (180)	180
		SHIELDING (adjust output by hand)	
		~~	
Woods		Thickness of woodland between observer and road (feet)	0
Cover		Percent view coverage between observer and road (0-100)	0
Rows		Building rows between observer and roadway (0-4).	0

Stanfield Cutoff: North of N. Shore Drive: 2006 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	15
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	32.42
VOL		TOTAL Vehicle Volume (two-way)	131
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
0	-36	**<-- hard 60 CNEL soft --->**	**2**	**-35**
0	-36	**65 CNEL**	**1**	**-36**
0	-36	**70 CNEL**	**0**	**-36**

View		View Angle of Observer (180)	180
		SHIELDING (adjust output by hand)	
		~~	
Woods		Thickness of woodland between observer and road (feet)	0
Cover		Percent view coverage between observer and road (0-100)	0
Rows		Building rows between observer and roadway (0-4).	0

Stanfield Cutoff: North of N. Shore Drive: 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	15
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	32.42
VOL		TOTAL Vehicle Volume (two-way)	131
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
0	-36	**<-- hard 60 CNEL soft --->**	**2**	**-35**
0	-36	**65 CNEL**	**1**	**-36**
0	-36	**70 CNEL**	**0**	**-36**

View		View Angle of Observer (180)	180
		SHIELDING (adjust output by hand)	
		~~	
Woods		Thickness of woodland between observer and road (feet)	0
Cover		Percent view coverage between observer and road (0-100)	0
Rows		Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: North of N. Shore Drive: 2025 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	15
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	13
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	33.16
VOL		TOTAL Vehicle Volume (two-way)	155
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
0	-36	**<-- hard 60 CNEL soft --->**	**2**	**-35**
0	-36	**65 CNEL**	**1**	**-36**
0	-36	**70 CNEL**	**0**	**-36**

View		View Angle of Observer (180)	180
		SHIELDING (adjust output by hand)	
		~~	
Woods		Thickness of woodland between observer and road (feet)	0
Cover		Percent view coverage between observer and road (0-100)	0
Rows		Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: North of N. Shore Drive: 2025 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**15**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**33.16**
VOL		TOTAL Vehicle Volume (two-way)	**155**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
0	-36	**<-- hard 60 CNEL soft --->**	**2**	**-35**
0	-36	**65 CNEL**	**1**	**-36**
0	-36	**70 CNEL**	**0**	**-36**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: N. Shore Drive to Big Bear Blvd.: Existing

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**57.9**
VOL		TOTAL Vehicle Volume (two-way)	**5,625**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
126	89	**<-- hard 60 CNEL soft --->**	**77**	**41**
40	3	**65 CNEL**	**36**	**-1**
13	-24	**70 CNEL**	**17**	**-20**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: N. Shore Drive to Big Bear Blvd.: 2006 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**58.11**
VOL		TOTAL Vehicle Volume (two-way)	**5,906**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
132	96	**<-- hard 60 CNEL soft --->**	**80**	**43**
42	5	**65 CNEL**	**37**	**1**
13	-23	**70 CNEL**	**17**	**-19**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: N. Shore Drive to Big Bear Blvd.: 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**58.58**
VOL		TOTAL Vehicle Volume (two-way)	**6,573**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
147	111	**<-- hard 60 CNEL soft --->**	**86**	**49**
47	10	**65 CNEL**	**40**	**3**
15	-22	**70 CNEL**	**18**	**-18**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: N. Shore Drive to Big Bear Blvd.: 2025 -Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**58.83**
VOL		TOTAL Vehicle Volume (two-way)	**6,975**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	R E S U L T S	DISTANCE FROM **Centerline**	**ROW**
156	120	**<-- hard 60 CNEL soft --->**	**89**	**53**
49	13	**65 CNEL**	**41**	**5**
16	-21	**70 CNEL**	**19**	**-17**

View		View Angle of Observer (180)	180
		SHIELDING (adjust output by hand)	
		~~	
Woods		Thickness of woodland between observer and road (feet)	0
Cover		Percent view coverage between observer and road (0-100)	0
Rows		Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: N. Shore Drive to Big Bear Blvd.: 2025 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**59.23**
VOL		TOTAL Vehicle Volume (two-way)	**7,642**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	R E S U L T S	DISTANCE FROM **Centerline**	**ROW**
171	135	**<-- hard 60 CNEL soft --->**	**94**	**58**
54	18	**65 CNEL**	**44**	**8**
17	-19	**70 CNEL**	**20**	**-16**

View		View Angle of Observer (180)	180
		SHIELDING (adjust output by hand)	
		~~	
Woods		Thickness of woodland between observer and road (feet)	0
Cover		Percent view coverage between observer and road (0-100)	0
Rows		Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: South of Big Bear Blvd.: Existing

Speed		Vehicle Speed (mph, 0 to 100)	**25**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**49.15**
VOL		TOTAL Vehicle Volume (two-way)	**2,250**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
17	-20	**<-- hard 60 CNEL soft --->**	**20**	**-16**
5	-31	**65 CNEL**	**9**	**-27**
2	-35	**70 CNEL**	**4**	**-32**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: South of Big Bear Blvd.: 2006 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**25**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**49.36**
VOL		TOTAL Vehicle Volume (two-way)	**2,363**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
18	-19	**<-- hard 60 CNEL soft --->**	**21**	**-16**
6	-31	**65 CNEL**	**10**	**-27**
2	-35	**70 CNEL**	**4**	**-32**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Stanfield Cutoff: South of Big Bear Blvd.: 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**25**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**49.36**
VOL		TOTAL Vehicle Volume (two-way)	**2,363**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
18	-19	**<-- hard 60 CNEL soft --->**	**21**	**-16**
6	-31	**65 CNEL**	**10**	**-27**
2	-35	**70 CNEL**	**4**	**-32**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

Stanfield Cutoff: South of Big Bear Blvd.: 2025 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**25**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**50.09**
VOL		TOTAL Vehicle Volume (two-way)	**2,790**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
21	-15	**<-- hard 60 CNEL soft --->**	**23**	**-13**
7	-30	**65 CNEL**	**11**	**-26**
2	-34	**70 CNEL**	**5**	**-31**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

Stanfield Cutoff: South of Big Bear Blvd.: 2025 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**25**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**13**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**50.09**
VOL		TOTAL Vehicle Volume (two-way)	**2,790**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
21	-15	**<-- hard 60 CNEL soft --->**	**23**	**-13**
7	-30	**65 CNEL**	**11**	**-26**
2	-34	**70 CNEL**	**5**	**-31**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: West of Stanfield Cutoff - Existing

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**38**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**62.87**
VOL		TOTAL Vehicle Volume (two-way)	**20,500**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
458	411	**<-- hard 60 CNEL soft --->**	**183**	**135**
145	97	**65 CNEL**	**85**	**37**
46	-2	**70 CNEL**	**39**	**-8**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: West of Stanfield Cutoff - 2006 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**38**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**63.08**
VOL		TOTAL Vehicle Volume (two-way)	**21,525**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
482	434	**<-- hard 60 CNEL soft --->**	**188**	**141**
152	105	**65 CNEL**	**88**	**40**
48	1	**70 CNEL**	**41**	**-7**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: West of Stanfield Cutoff - 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**38**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**63.13**
VOL		TOTAL Vehicle Volume (two-way)	**21,792**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
487	440	**<-- hard 60 CNEL soft --->**	**190**	**142**
154	107	**65 CNEL**	**88**	**41**
49	1	**70 CNEL**	**41**	**-7**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: West of Stanfield Cutoff - 2025 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	38
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	**63.8**
VOL		TOTAL Vehicle Volume (two-way)	**25,420**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
569	521	**<-- hard 60 CNEL soft --->**	**211**	**163**
180	132	**65 CNEL**	**98**	**50**
57	9	**70 CNEL**	**45**	**-2**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: West of Stanfield Cutoff - 2025 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	40
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	38
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	30
		*** CNEL @ 100' **(SOFT)**	**63.85**
VOL		TOTAL Vehicle Volume (two-way)	**25,687**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
574	527	**<-- hard 60 CNEL soft --->**	**212**	**165**
182	134	**65 CNEL**	**98**	**51**
57	10	**70 CNEL**	**46**	**-2**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: East of Stanfield Cutoff - Existing

Speed	Vehicle Speed (mph, 0 to 100)	40
Grad	Road Gradient (%, 0 to 6)	
Sep1	Centerline Separation (feet)	38
with >>	(Usually 23' for 2-lane, 38'	
median >>	for 4-lane, 50' for 6-lane)	
Dist1	Distance from observer to the	100
	nearest lane centerline (>50')	
	(used in calculations)	
Dist2	Dist. from ROW to NLC	30
	*** CNEL @ 100' **(SOFT)**	**62.32**
VOL	TOTAL Vehicle Volume (two-way)	**18,100**
ALPHA	Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
405	357	**<-- hard 60 CNEL soft --->**	**168**	**120**
128	80	**65 CNEL**	**78**	**30**
40	-7	**70 CNEL**	**36**	**-11**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: East of Stanfield Cutoff - 2006 - Without Project

Speed	Vehicle Speed (mph, 0 to 100)	40
Grad	Road Gradient (%, 0 to 6)	
Sep1	Centerline Separation (feet)	38
with >>	(Usually 23' for 2-lane, 38'	
median >>	for 4-lane, 50' for 6-lane)	
Dist1	Distance from observer to the	100
	nearest lane centerline (>50')	
	(used in calculations)	
Dist2	Dist. from ROW to NLC	30
	*** CNEL @ 100' **(SOFT)**	**62.54**
VOL	TOTAL Vehicle Volume (two-way)	**19,005**
ALPHA	Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
426	378	**<-- hard 60 CNEL soft --->**	**173**	**126**
135	87	**65 CNEL**	**81**	**33**
43	-5	**70 CNEL**	**37**	**-10**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: East of Stanfield Cutoff - 2006 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**38**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**62.63**
VOL		TOTAL Vehicle Volume (two-way)	**19,405**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
434	387	**<-- hard 60 CNEL soft --->**	**176**	**128**
137	90	**65 CNEL**	**82**	**34**
43	-4	**70 CNEL**	**38**	**-10**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: East of Stanfield Cutoff - 2025 - Without Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**38**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**63.26**
VOL		TOTAL Vehicle Volume (two-way)	**22,444**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	**ROW**
502	455	**<-- hard 60 CNEL soft --->**	**194**	**146**
159	111	**65 CNEL**	**90**	**42**
50	3	**70 CNEL**	**42**	**-6**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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Big Bear Blvd.: East of Stanfield Cutoff - 2025 - With Project

Speed		Vehicle Speed (mph, 0 to 100)	**40**
Grad		Road Gradient (%, 0 to 6)	
Sep1		Centerline Separation (feet)	**38**
	with >>	(Usually 23' for 2-lane, 38'	
	median >>	for 4-lane, 50' for 6-lane)	
Dist1		Distance from observer to the	100
		nearest lane centerline (>50')	
		(used in calculations)	
Dist2		Dist. from ROW to NLC	**30**
		*** CNEL @ 100' **(SOFT)**	**63.34**
VOL		TOTAL Vehicle Volume (two-way)	**22,844**
ALPHA		Hard site=0, Soft site=0.5	0.5

DISTANCE FROM Cntrline	DISTANCE FROM ROW	RESULTS	DISTANCE FROM **Centerline**	DISTANCE FROM **ROW**
510	463	**<-- hard 60 CNEL soft --->**	**196**	**149**
161	114	**65 CNEL**	**91**	**44**
51	4	**70 CNEL**	**42**	**-5**

View	View Angle of Observer (180)	180
	SHIELDING (adjust output by hand)	
	~~	
Woods	Thickness of woodland between observer and road (feet)	0
Cover	Percent view coverage between observer and road (0-100)	0
Rows	Building rows between observer and roadway (0-4).	0

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15.6 Biological Resources Information

MOON CAMP – TENTATIVE TRACT 16136
DRAFT BIOLOGICAL TECHNICAL REPORT

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