

DATE: August 24, 2023
TO: Peter Schafer, Ares
FROM: Bill Lawson, Urban Crossroads
JOB NO: 14726-05 FTA Memo

BEECH LOGISTICS CENTER FOCUSED NOISE ASSESSMENT

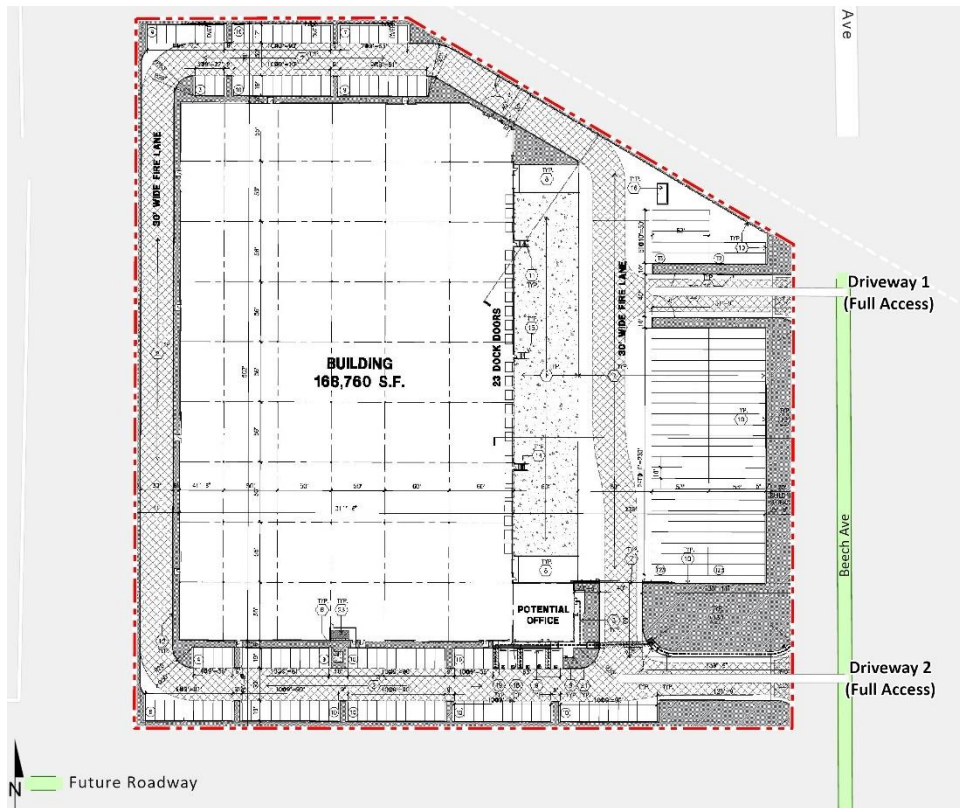
This letter has been prepared to document the findings for the focused traffic assessment for the proposed Beech Logistics Center development (Project) located north of Foothill Boulevard (SR-66) and west of Beech Avenue in the City of Fontana. The purpose of this focused noise assessment is to determine the potential off-site traffic noise level impacts associated with the proposed interim improvements to Beech Avenue and Foothill Boulevard (SR-66) which includes the construction of medians and other physical improvements to restrict the Project access to right-in/right-out/left-in access only.

PROPOSED PROJECT

The Project consists of the development of a single 168,760 square foot warehouse building and was evaluated in the Beech Logistics Center (MCN22-059) Traffic Analysis (dated January 17, 2023, **2023 Traffic Study**) assuming 42,190 square feet of General Light Industrial and 126,570 square feet of Warehousing use. Access to the site would be accommodated via two driveways on the northerly extension of Beech Avenue. Urban Crossroads, Inc. fully evaluated the off-site traffic noise impacts in the January 9, 2023, Beech Logistics Center Noise and Vibration Analysis , **2023 Noise Study**.

With the proposed interim access restriction at the intersection of Beech Avenue and Foothill Boulevard (SR-66), this would affect travel patterns for not only Project traffic but also existing traffic on Beech Avenue to the south of Foothill Boulevard (SR-66). The Project site plan and trip generation are consistent with that evaluated in the 2023 Traffic Study. Exhibit 1 shows the Project's preliminary site plan. The Project trip distribution patterns would change from those evaluated in the 2023 Traffic Study consistent with the Beech Logistics Center (MCN22-059) Focused Traffic Assessment.

EXHIBIT 1: PRELIMINARY SITE PLAN



EXISTING PROJECT TRAFFIC NOISE LEVEL INCREASES

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included in this report for informational purposes and to fully analyze all the existing traffic scenarios identified in the Traffic Study. However, the analysis of existing off-site traffic noise levels plus traffic noise generated by the proposed Project scenario will not actually occur since the Project would not be fully constructed and operational until 2024 conditions. The Existing without Project exterior noise levels range from 63.9 to 74.9 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. The Existing with Project conditions ranging from 63.9 to 75.2 dBA CNEL. Table 1 shows that the Project off-site traffic noise level increases range from 0.0 to 0.3 dBA CNEL on the study area roadway segments. Attachment A includes the traffic noise level contours worksheets.

Based on the significance criteria for off-site traffic noise presented in Section 4.1 of the Noise Study, land uses adjacent to the study area roadway segments would experience less than significant noise level impacts due to unmitigated Project-related traffic noise levels with the proposed interim access restriction.

TABLE 1: EXISTING WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

ID	Road	Segment	Receiving Land Use ¹	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Cherry Av.	n/o Foothill Bl. (SR-66)	Non-Sensitive	74.6	74.7	0.1	1.5	No
2	Cherry Av.	s/o Foothill Bl. (SR-66)	Sensitive	74.4	74.5	0.1	1.5	No
3	Redwood Av.	s/o Foothill Bl. (SR-66)	Sensitive	66.4	66.4	0.0	1.5	No
4	Hemlock Av.	s/o Foothill Bl. (SR-66)	Sensitive	63.9	63.9	0.0	3.0	No
5	Almeria Av.	n/o Foothill Bl. (SR-66)	Sensitive	67.1	67.2	0.1	1.5	No
6	Citrus Av.	n/o Foothill Bl. (SR-66)	Sensitive	73.5	73.6	0.1	1.5	No
7	Citrus Av.	s/o Foothill Bl. (SR-66)	Sensitive	73.9	74.0	0.1	1.5	No
8	Foothill Bl. (SR-66)	w/o Cherry Av.	Sensitive	74.9	74.9	0.0	1.5	No
9	Foothill Bl. (SR-66)	e/o Cherry Av.	Non-Sensitive	74.9	75.2	0.3	1.5	No
10	Foothill Bl. (SR-66)	w/o Hemlock Av.	Sensitive	74.4	74.6	0.2	1.5	No
11	Foothill Bl. (SR-66)	e/o Hemlock Av.	Sensitive	74.6	74.8	0.2	1.5	No
12	Foothill Bl. (SR-66)	e/o Beech Av.	Sensitive	74.4	74.5	0.1	1.5	No
13	Foothill Bl. (SR-66)	w/o Citrus Av.	Non-Sensitive	74.5	74.6	0.1	1.5	No
14	Foothill Bl. (SR-66)	e/o Citrus Av.	Sensitive	74.4	74.4	0.0	1.5	No

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

³ Does the Project create an incremental noise level increase exceeding the significance criteria?

OYC TRAFFIC NOISE LEVEL INCREASES

The Opening Year Cumulative (OYC) 2024 without Project exterior noise levels range from 64.3 to 76.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. The OYC 2024 with Project conditions will range from 64.3 to 76.2 dBA CNEL. Table 2 shows that the Project off-site traffic noise level increases range from 0.0 to 0.2 dBA CNEL on the study area roadway segments.

Based on the significance criteria for off-site traffic noise presented in Section 4.1 of the Noise Study, land uses adjacent to the study area roadway segments would experience less than significant noise level impacts due to unmitigated Project-related traffic noise levels with the proposed interim access restriction.

TABLE 2: EXISTING WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

ID	Road	Segment	Receiving Land Use ¹	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Cherry Av.	n/o Foothill Bl. (SR-66)	Non-Sensitive	75.2	75.2	0.0	1.5	No
2	Cherry Av.	s/o Foothill Bl. (SR-66)	Sensitive	74.9	75.0	0.1	1.5	No
3	Redwood Av.	s/o Foothill Bl. (SR-66)	Sensitive	66.7	66.7	0.0	1.5	No
4	Hemlock Av.	s/o Foothill Bl. (SR-66)	Sensitive	64.3	64.3	0.0	3.0	No
5	Almeria Av.	n/o Foothill Bl. (SR-66)	Sensitive	67.9	67.9	0.0	1.5	No
6	Citrus Av.	n/o Foothill Bl. (SR-66)	Sensitive	73.9	73.9	0.0	1.5	No
7	Citrus Av.	s/o Foothill Bl. (SR-66)	Sensitive	74.2	74.3	0.1	1.5	No
8	Foothill Bl. (SR-66)	w/o Cherry Av.	Sensitive	75.6	75.6	0.0	1.5	No
9	Foothill Bl. (SR-66)	e/o Cherry Av.	Non-Sensitive	76.1	76.2	0.1	1.5	No
10	Foothill Bl. (SR-66)	w/o Hemlock Av.	Sensitive	74.8	75.0	0.2	1.5	No
11	Foothill Bl. (SR-66)	e/o Hemlock Av.	Sensitive	75.3	75.5	0.2	1.5	No
12	Foothill Bl. (SR-66)	e/o Beech Av.	Sensitive	75.1	75.2	0.1	1.5	No
13	Foothill Bl. (SR-66)	w/o Citrus Av.	Non-Sensitive	75.4	75.4	0.0	1.5	No
14	Foothill Bl. (SR-66)	e/o Citrus Av.	Sensitive	75.2	75.2	0.0	1.5	No

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

³ Does the Project create an incremental noise level increase exceeding the significance criteria?

FINDINGS

As shown on Tables 1 and 2, the Project off-site traffic noise levels with the proposed interim access restriction will not exceed the significance criteria. Therefore, the land uses adjacent to the study area roadway segments would experience *less than significant* noise level impacts due Project-related traffic noise levels. If you have any questions or comments, I can be reached at blawson@urbanxroads.com

ATTACHMENT A: OFF-SITE TRAFFIC NOISE ANALYSIS

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Cherry Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 27,002 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,700 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.44	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.36	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.19	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.1	70.2	68.4	62.8	71.2	71.8
Medium Trucks:	66.0	64.4	56.7	57.2	65.3	65.5
Heavy Trucks:	69.1	67.1	57.7	63.0	70.0	70.1
Vehicle Noise:	74.5	72.6	69.0	66.5	74.3	74.6

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	127	274	590	1,271	
CNEL:	134	288	621	1,339	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Cherry Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 27,058 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,706 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.25% Medium Trucks: 84.5% 3.6% 11.9% 2.02% Heavy Trucks: 76.1% 2.2% 21.7% 1.73%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.45	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.33	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.01	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.1	70.2	68.4	62.8	71.2	71.8
Medium Trucks:	66.0	64.5	56.8	57.2	65.3	65.5
Heavy Trucks:	69.3	67.3	57.9	63.1	70.2	70.3
Vehicle Noise:	74.6	72.7	69.0	66.5	74.3	74.7

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	129	277	597	1,286	
CNEL:	135	292	628	1,353	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Cherry Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 30,847 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,085 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.02	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.78	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.61	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.7	70.7	69.0	63.4	71.8	72.4
Medium Trucks:	66.5	65.0	57.3	57.7	65.9	66.0
Heavy Trucks:	69.7	67.7	58.3	63.5	70.6	70.7
Vehicle Noise:	75.1	73.2	69.6	67.0	74.8	75.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	139	299	645	1,389	
CNEL:	146	315	679	1,463	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Cherry Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 30,898 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,090 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.27% Medium Trucks: 84.5% 3.6% 11.9% 2.02% Heavy Trucks: 76.1% 2.2% 21.7% 1.71%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.03	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.76	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.48	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.7	70.7	69.0	63.4	71.8	72.4
Medium Trucks:	66.6	65.0	57.3	57.8	65.9	66.1
Heavy Trucks:	69.8	67.8	58.4	63.7	70.7	70.8
Vehicle Noise:	75.1	73.3	69.6	67.1	74.9	75.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	140	302	650	1,400	
CNEL:	147	318	684	1,474	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Cherry Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,477 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,548 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.19	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.62	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.44	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.9	69.9	68.2	62.6	71.0	71.6	
Medium Trucks:	65.7	64.2	56.5	56.9	65.1	65.2	
Heavy Trucks:	68.9	66.9	57.5	62.7	69.8	69.8	
Vehicle Noise:	74.3	72.4	68.8	66.2	74.0	74.4	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			122	263	568	1,223	
CNEL:			129	277	598	1,288	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Cherry Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,579 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,558 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.14% Medium Trucks: 84.5% 3.6% 11.9% 2.04% Heavy Trucks: 76.1% 2.2% 21.7% 1.82%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.20	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.54	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.02	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.9	69.9	68.2	62.6	71.0	71.6	
Medium Trucks:	65.8	64.3	56.6	57.0	65.1	65.3	
Heavy Trucks:	69.3	67.3	57.9	63.1	70.2	70.3	
Vehicle Noise:	74.4	72.5	68.8	66.4	74.2	74.5	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			126	271	583	1,256	
CNEL:			132	285	613	1,321	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Cherry Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 28,966 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,897 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.75	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.06	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.88	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.4	70.5	68.7	63.1	71.5	72.1	
Medium Trucks:	66.3	64.7	57.0	57.5	65.6	65.8	
Heavy Trucks:	69.4	67.4	58.0	63.3	70.3	70.4	
Vehicle Noise:	74.8	72.9	69.3	66.8	74.6	74.9	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			133	287	618	1,332	
CNEL:			140	302	651	1,403	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Cherry Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 29,062 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,906 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.18% Medium Trucks: 84.5% 3.6% 11.9% 2.03% Heavy Trucks: 76.1% 2.2% 21.7% 1.78%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.76	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.00	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.56	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.4	70.5	68.7	63.2	71.5	72.1	
Medium Trucks:	66.3	64.8	57.1	57.5	65.7	65.8	
Heavy Trucks:	69.7	67.8	58.3	63.6	70.7	70.7	
Vehicle Noise:	74.9	73.0	69.4	66.9	74.7	75.0	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			136	293	631	1,360	
CNEL:			143	308	664	1,431	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Redwood Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 3,640 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 364 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-6.39	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-23.20	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-24.02	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	63.3	61.4	59.6	54.1	62.5	63.0	
Medium Trucks:	57.6	56.1	48.4	48.8	56.9	57.1	
Heavy Trucks:	61.6	59.6	50.2	55.4	62.5	62.5	
Vehicle Noise:	66.2	64.3	60.4	58.3	66.0	66.4	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	19	40	86	185		
	CNEL:	19	42	90	194		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Redwood Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 3,656 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 366 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.34% Medium Trucks: 84.5% 3.6% 11.9% 2.00% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-6.37	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-23.20	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-24.02	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	63.4	61.4	59.7	54.1	62.5	63.1	
Medium Trucks:	57.6	56.1	48.4	48.8	56.9	57.1	
Heavy Trucks:	61.6	59.6	50.2	55.4	62.5	62.5	
Vehicle Noise:	66.2	64.3	60.4	58.3	66.1	66.4	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	19	40	86	185		
	CNEL:	19	42	90	194		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Redwood Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 3,935 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 393 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-6.05	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-22.86	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-23.68	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	63.7	61.7	60.0	54.4	62.8	63.4	
Medium Trucks:	57.9	56.4	48.7	49.1	57.3	57.4	
Heavy Trucks:	61.9	59.9	50.5	55.7	62.8	62.9	
Vehicle Noise:	66.5	64.6	60.7	58.6	66.4	66.7	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	20	42	91	195		
	CNEL:	20	44	95	205		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Redwood Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 3,951 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 395 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.34% Medium Trucks: 84.5% 3.6% 11.9% 2.00% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-6.03	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-22.86	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-23.68	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	63.7	61.8	60.0	54.4	62.8	63.4	
Medium Trucks:	57.9	56.4	48.7	49.1	57.3	57.4	
Heavy Trucks:	61.9	59.9	50.5	55.7	62.8	62.9	
Vehicle Noise:	66.5	64.6	60.7	58.7	66.4	66.7	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	20	42	91	195		
	CNEL:	20	44	95	205		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Hemlock Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 2,048 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 205 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-8.89	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-25.69	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-26.52	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	60.9	58.9	57.1	51.6	60.0	60.5	
Medium Trucks:	55.1	53.6	45.9	46.3	54.4	54.6	
Heavy Trucks:	59.1	57.1	47.7	52.9	60.0	60.0	
Vehicle Noise:	63.7	61.8	57.9	55.8	63.5	63.9	

Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	13	27	59	126			
CNEL:	13	29	61	132			

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Hemlock Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 2,065 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 206 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.36% Medium Trucks: 84.5% 3.6% 11.9% 1.99% Heavy Trucks: 76.1% 2.2% 21.7% 1.65%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-8.85	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-25.69	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-26.52	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	60.9	58.9	57.2	51.6	60.0	60.6	
Medium Trucks:	55.1	53.6	45.9	46.3	54.4	54.6	
Heavy Trucks:	59.1	57.1	47.7	52.9	60.0	60.0	
Vehicle Noise:	63.7	61.8	57.9	55.8	63.6	63.9	

Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	13	27	59	127			
CNEL:	13	29	62	133			

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Hemlock Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 2,279 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 228 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-8.42	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-25.23	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-26.05	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	61.3	59.4	57.6	52.0	60.4	61.0	
Medium Trucks:	55.5	54.0	46.3	46.8	54.9	55.1	
Heavy Trucks:	59.5	57.5	48.1	53.4	60.4	60.5	
Vehicle Noise:	64.2	62.3	58.4	56.3	64.0	64.3	

Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	14	29	63	136			
CNEL:	14	31	66	142			

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Hemlock Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 2,296 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 230 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.35% Medium Trucks: 84.5% 3.6% 11.9% 2.00% Heavy Trucks: 76.1% 2.2% 21.7% 1.65%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-8.39	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-25.23	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-26.05	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	61.3	59.4	57.6	52.1	60.5	61.0	
Medium Trucks:	55.5	54.0	46.3	46.8	54.9	55.1	
Heavy Trucks:	59.5	57.5	48.1	53.4	60.4	60.5	
Vehicle Noise:	64.2	62.3	58.4	56.3	64.0	64.3	

Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	14	29	63	136			
CNEL:	14	31	66	142			

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Almeria Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 4,370 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 437 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-5.60	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-22.40	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-23.22	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	64.1	62.2	60.4	54.9	63.3	63.8	
Medium Trucks:	58.4	56.9	49.2	49.6	57.7	57.9	
Heavy Trucks:	62.4	60.4	51.0	56.2	63.3	63.3	
Vehicle Noise:	67.0	65.1	61.2	59.1	66.8	67.1	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:		21	45	97	209		
CNEL:		22	47	102	219		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Almeria Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 4,404 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 440 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.36% Medium Trucks: 84.5% 3.6% 11.9% 1.99% Heavy Trucks: 76.1% 2.2% 21.7% 1.65%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-5.56	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-22.40	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-23.22	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	64.2	62.2	60.5	54.9	63.3	63.9	
Medium Trucks:	58.4	56.9	49.2	49.6	57.7	57.9	
Heavy Trucks:	62.4	60.4	51.0	56.2	63.3	63.3	
Vehicle Noise:	67.0	65.1	61.2	59.1	66.9	67.2	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:		21	45	97	210		
CNEL:		22	47	102	220		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Almeria Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 5,207 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 521 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-4.83	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-21.64	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-22.46	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	64.9	63.0	61.2	55.6	64.0	64.6	
Medium Trucks:	59.1	57.6	49.9	50.3	58.5	58.7	
Heavy Trucks:	63.1	61.1	51.7	56.9	64.0	64.1	
Vehicle Noise:	67.8	65.9	61.9	59.9	67.6	67.9	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:		24	51	109	235		
CNEL:		25	53	114	247		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Almeria Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 5,240 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 524 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 14 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 34.0 feet Centerline Dist. to Observer: 34.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.35% Medium Trucks: 84.5% 3.6% 11.9% 2.00% Heavy Trucks: 76.1% 2.2% 21.7% 1.65%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 33.645 Medium Trucks: 33.381 Heavy Trucks: 33.407			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-4.81	2.48	-1.20	-4.53	0.000	0.000
Medium Trucks:	79.45	-21.64	2.53	-1.20	-4.86	0.000	0.000
Heavy Trucks:	84.25	-22.46	2.52	-1.20	-5.67	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	64.9	63.0	61.2	55.7	64.0	64.6	
Medium Trucks:	59.1	57.6	49.9	50.3	58.5	58.7	
Heavy Trucks:	63.1	61.1	51.7	56.9	64.0	64.1	
Vehicle Noise:	67.8	65.9	62.0	59.9	67.6	67.9	

Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:		24	51	109	236		
CNEL:		25	53	115	247		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Citrus Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 21,394 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,139 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.85	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.96	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.78	1.00	-1.20	-5.41	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	70.8	68.9	67.1	61.5	69.9	70.5	
Medium Trucks:	64.8	63.3	55.6	56.0	64.2	64.4	
Heavy Trucks:	68.4	66.4	57.0	62.2	69.3	69.4	
Vehicle Noise:	73.4	71.5	67.8	65.4	73.2	73.5	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			85	184	396	852	
CNEL:			90	193	416	896	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Citrus Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 21,453 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,145 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.30% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.69%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	0.86	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.94	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.69	1.00	-1.20	-5.41	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	70.8	68.9	67.1	61.6	69.9	70.5	
Medium Trucks:	64.9	63.3	55.6	56.1	64.2	64.4	
Heavy Trucks:	68.5	66.5	57.1	62.3	69.4	69.5	
Vehicle Noise:	73.5	71.6	67.8	65.5	73.3	73.6	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			86	185	398	858	
CNEL:			90	194	418	902	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Citrus Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 23,154 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,315 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.19	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.62	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.44	1.00	-1.20	-5.41	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.2	69.2	67.5	61.9	70.3	70.9	
Medium Trucks:	65.2	63.7	56.0	56.4	64.5	64.7	
Heavy Trucks:	68.7	66.8	57.3	62.6	69.6	69.7	
Vehicle Noise:	73.8	71.9	68.1	65.8	73.6	73.9	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			90	194	417	898	
CNEL:			94	203	438	944	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Citrus Av. Road Segment: n/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 23,214 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,321 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.30% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.69%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.20	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.60	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.36	1.00	-1.20	-5.41	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.2	69.2	67.5	61.9	70.3	70.9	
Medium Trucks:	65.2	63.7	56.0	56.4	64.6	64.7	
Heavy Trucks:	68.8	66.8	57.4	62.6	69.7	69.8	
Vehicle Noise:	73.8	71.9	68.1	65.8	73.6	73.9	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			90	195	420	904	
CNEL:			95	205	441	950	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Citrus Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 23,286 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,329 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.21	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.59	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.42	1.00	-1.20	-5.41	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.2	69.2	67.5	61.9	70.3	70.9
Medium Trucks:	65.2	63.7	56.0	56.4	64.6	64.7
Heavy Trucks:	68.8	66.8	57.4	62.6	69.7	69.7
Vehicle Noise:	73.8	71.9	68.2	65.8	73.6	73.9

Centerline Distance to Noise Contour (in feet)						
	70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	90	194	419	902		
CNEL:	95	204	440	948		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Citrus Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 23,366 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,337 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.28% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.70%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.23	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.57	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.29	1.00	-1.20	-5.41	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.2	69.2	67.5	61.9	70.3	70.9
Medium Trucks:	65.2	63.7	56.0	56.4	64.6	64.7
Heavy Trucks:	68.8	66.9	57.5	62.7	69.8	69.9
Vehicle Noise:	73.8	71.9	68.2	65.9	73.6	74.0

Centerline Distance to Noise Contour (in feet)						
	70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	91	196	422	910		
CNEL:	96	206	444	956		

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Citrus Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,070 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,507 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.53	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.27	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-16.09	1.00	-1.20	-5.41	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.5	69.6	67.8	62.2	70.6	71.2
Medium Trucks:	65.5	64.0	56.3	56.7	64.9	65.0
Heavy Trucks:	69.1	67.1	57.7	62.9	70.0	70.1
Vehicle Noise:	74.1	72.2	68.5	66.1	73.9	74.2

Centerline Distance to Noise Contour (in feet)						
	70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	95	204	440	947		
CNEL:	100	215	462	996		

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Citrus Av. Road Segment: s/o Foothill Bl. (SR-66)				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,151 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,515 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 61 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 52.0 feet Centerline Dist. to Observer: 52.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.29% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.70%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 42.412 Medium Trucks: 42.203 Heavy Trucks: 42.223			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	70.20	1.55	0.97	-1.20	-4.66	0.000	0.000
Medium Trucks:	81.00	-15.25	1.00	-1.20	-4.87	0.000	0.000
Heavy Trucks:	85.38	-15.98	1.00	-1.20	-5.41	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.5	69.6	67.8	62.2	70.6	71.2
Medium Trucks:	65.6	64.0	56.3	56.8	64.9	65.1
Heavy Trucks:	69.2	67.2	57.8	63.0	70.1	70.2
Vehicle Noise:	74.2	72.3	68.5	66.2	74.0	74.3

Centerline Distance to Noise Contour (in feet)						
	70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	96	206	443	955		
CNEL:	100	216	466	1,004		

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: w/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 29,038 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,904 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.76	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.05	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.87	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.4	70.5	68.7	63.2	71.5	72.1	
Medium Trucks:	66.3	64.7	57.1	57.5	65.6	65.8	
Heavy Trucks:	69.4	67.5	58.0	63.3	70.3	70.4	
Vehicle Noise:	74.8	72.9	69.3	66.8	74.6	74.9	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	133	287	619	1,334			
CNEL:	141	303	652	1,405			

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: w/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 29,077 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,908 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.32% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.67%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.76	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.04	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.84	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.4	70.5	68.7	63.2	71.6	72.1	
Medium Trucks:	66.3	64.8	57.1	57.5	65.6	65.8	
Heavy Trucks:	69.5	67.5	58.1	63.3	70.4	70.4	
Vehicle Noise:	74.9	73.0	69.4	66.8	74.6	74.9	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	134	288	621	1,338			
CNEL:	141	303	654	1,409			

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: w/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 33,692 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,369 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.40	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.40	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.22	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	73.1	71.1	69.4	63.8	72.2	72.8	
Medium Trucks:	66.9	65.4	57.7	58.1	66.3	66.4	
Heavy Trucks:	70.1	68.1	58.7	63.9	71.0	71.1	
Vehicle Noise:	75.5	73.6	70.0	67.4	75.2	75.6	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	147	317	684	1,473			
CNEL:	155	334	720	1,552			

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: w/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 33,730 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,373 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.32% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.67%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.41	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.40	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.20	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	73.1	71.1	69.4	63.8	72.2	72.8	
Medium Trucks:	66.9	65.4	57.7	58.1	66.3	66.4	
Heavy Trucks:	70.1	68.1	58.7	63.9	71.0	71.1	
Vehicle Noise:	75.5	73.6	70.0	67.4	75.2	75.6	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
Ldn:	148	318	685	1,476			
CNEL:	155	335	722	1,555			

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: e/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 29,143 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,914 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.77	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.03	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.85	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.4	70.5	68.7	63.2	71.6	72.1	
Medium Trucks:	66.3	64.8	57.1	57.5	65.6	65.8	
Heavy Trucks:	69.5	67.5	58.1	63.3	70.4	70.4	
Vehicle Noise:	74.9	73.0	69.4	66.8	74.6	74.9	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			134	288	621	1,338	
CNEL:			141	304	654	1,409	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 29,339 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,934 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.08% Medium Trucks: 84.5% 3.6% 11.9% 2.04% Heavy Trucks: 76.1% 2.2% 21.7% 1.87%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.79	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.93	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.31	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.5	70.5	68.8	63.2	71.6	72.2	
Medium Trucks:	66.4	64.9	57.2	57.6	65.7	65.9	
Heavy Trucks:	70.0	68.0	58.6	63.8	70.9	71.0	
Vehicle Noise:	75.0	73.2	69.4	67.1	74.8	75.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			139	299	644	1,386	
CNEL:			146	314	676	1,457	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: e/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 37,778 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,778 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.90	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-13.90	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-14.73	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	73.6	71.6	69.9	64.3	72.7	73.3	
Medium Trucks:	67.4	65.9	58.2	58.6	66.8	66.9	
Heavy Trucks:	70.6	68.6	59.2	64.4	71.5	71.6	
Vehicle Noise:	76.0	74.1	70.5	67.9	75.7	76.1	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			159	343	738	1,590	
CNEL:			167	361	777	1,675	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Cherry Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 37,963 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,796 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.17% Medium Trucks: 84.5% 3.6% 11.9% 2.03% Heavy Trucks: 76.1% 2.2% 21.7% 1.80%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.91	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-13.84	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-14.36	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	73.6	71.6	69.9	64.3	72.7	73.3	
Medium Trucks:	67.5	66.0	58.3	58.7	66.8	67.0	
Heavy Trucks:	70.9	69.0	59.5	64.8	71.9	71.9	
Vehicle Noise:	76.1	74.2	70.5	68.1	75.9	76.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			163	351	756	1,629	
CNEL:			171	369	795	1,713	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: w/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,529 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,553 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.20	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.61	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.43	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.9	69.9	68.2	62.6	71.0	71.6	
Medium Trucks:	65.7	64.2	56.5	56.9	65.1	65.2	
Heavy Trucks:	68.9	66.9	57.5	62.7	69.8	69.9	
Vehicle Noise:	74.3	72.4	68.8	66.2	74.0	74.4	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			122	264	568	1,225	
CNEL:			129	278	599	1,290	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: w/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,742 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,574 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.05% Medium Trucks: 84.5% 3.6% 11.9% 2.05% Heavy Trucks: 76.1% 2.2% 21.7% 1.90%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.22	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.49	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.81	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.9	69.9	68.2	62.6	71.0	71.6	
Medium Trucks:	65.8	64.3	56.6	57.0	65.2	65.3	
Heavy Trucks:	69.5	67.5	58.1	63.3	70.4	70.5	
Vehicle Noise:	74.5	72.6	68.9	66.5	74.3	74.6	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			128	275	592	1,276	
CNEL:			134	289	622	1,341	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: w/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 28,475 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,847 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.67	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.13	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.96	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.3	70.4	68.6	63.1	71.5	72.0	
Medium Trucks:	66.2	64.7	57.0	57.4	65.5	65.7	
Heavy Trucks:	69.4	67.4	58.0	63.2	70.3	70.3	
Vehicle Noise:	74.8	72.9	69.3	66.7	74.5	74.8	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			132	284	611	1,317	
CNEL:			139	299	644	1,387	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: w/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 28,677 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,868 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.12% Medium Trucks: 84.5% 3.6% 11.9% 2.04% Heavy Trucks: 76.1% 2.2% 21.7% 1.84%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.69	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.04	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.48	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.4	70.4	68.7	63.1	71.5	72.1	
Medium Trucks:	66.3	64.8	57.1	57.5	65.6	65.8	
Heavy Trucks:	69.8	67.9	58.4	63.7	70.7	70.8	
Vehicle Noise:	74.9	73.0	69.3	66.9	74.7	75.0	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			136	293	631	1,360	
CNEL:			143	308	664	1,430	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: e/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 26,742 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,674 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.40	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.41	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.23	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.1	70.1	68.4	62.8	71.2	71.8	
Medium Trucks:	65.9	64.4	56.7	57.1	65.3	65.4	
Heavy Trucks:	69.1	67.1	57.7	62.9	70.0	70.1	
Vehicle Noise:	74.5	72.6	69.0	66.4	74.2	74.6	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			126	272	586	1,263	
CNEL:			133	287	617	1,330	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 26,972 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,697 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.07% Medium Trucks: 84.5% 3.6% 11.9% 2.05% Heavy Trucks: 76.1% 2.2% 21.7% 1.89%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.43	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.29	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.64	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.1	70.1	68.4	62.8	71.2	71.8	
Medium Trucks:	66.0	64.5	56.8	57.2	65.4	65.5	
Heavy Trucks:	69.7	67.7	58.3	63.5	70.6	70.6	
Vehicle Noise:	74.7	72.8	69.1	66.7	74.5	74.8	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			131	283	610	1,314	
CNEL:			138	298	641	1,381	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: e/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 31,783 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,178 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.86%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.15	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.66	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.48	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.8	70.9	69.1	63.5	71.9	72.5	
Medium Trucks:	66.7	65.1	57.5	57.9	66.0	66.2	
Heavy Trucks:	69.8	67.9	58.4	63.7	70.7	70.8	
Vehicle Noise:	75.2	73.3	69.7	67.2	75.0	75.3	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			142	305	658	1,417	
CNEL:			149	322	693	1,493	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Hemlock Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 32,002 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,200 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.14% Medium Trucks: 84.5% 3.6% 11.9% 2.03% Heavy Trucks: 76.1% 2.2% 21.7% 1.82%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.17	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.57	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.05	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.8	70.9	69.1	63.6	72.0	72.5	
Medium Trucks:	66.7	65.2	57.5	57.9	66.1	66.3	
Heavy Trucks:	70.3	68.3	58.9	64.1	71.2	71.2	
Vehicle Noise:	75.4	73.5	69.8	67.4	75.2	75.5	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			146	314	677	1,459	
CNEL:			153	331	712	1,534	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: e/o Beech Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,764 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,576 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.24	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.57	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.39	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.9	70.0	68.2	62.6	71.0	71.6	
Medium Trucks:	65.8	64.2	56.5	57.0	65.1	65.3	
Heavy Trucks:	68.9	66.9	57.5	62.7	69.8	69.9	
Vehicle Noise:	74.3	72.4	68.8	66.2	74.1	74.4	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			123	265	572	1,232	
CNEL:			130	280	602	1,298	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Beech Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,960 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,596 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.31% Medium Trucks: 84.5% 3.6% 11.9% 2.00% Heavy Trucks: 76.1% 2.2% 21.7% 1.69%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.27	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.55	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.30	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	71.9	70.0	68.2	62.7	71.1	71.6	
Medium Trucks:	65.8	64.2	56.6	57.0	65.1	65.3	
Heavy Trucks:	69.0	67.0	57.6	62.8	69.9	70.0	
Vehicle Noise:	74.4	72.5	68.9	66.3	74.1	74.5	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			124	268	577	1,242	
CNEL:			131	282	607	1,308	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: e/o Beech Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 30,515 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,051 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.97	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.83	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.65	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.6	70.7	68.9	63.4	71.8	72.3	
Medium Trucks:	66.5	65.0	57.3	57.7	65.8	66.0	
Heavy Trucks:	69.7	67.7	58.3	63.5	70.6	70.6	
Vehicle Noise:	75.1	73.2	69.6	67.0	74.8	75.1	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			138	297	640	1,379	
CNEL:			145	313	674	1,453	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Beech Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 30,722 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,072 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.28% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.71%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.00	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.80	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.50	0.11	-1.20	-5.30	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	72.7	70.7	69.0	63.4	71.8	72.4	
Medium Trucks:	66.5	65.0	57.3	57.7	65.9	66.0	
Heavy Trucks:	69.8	67.8	58.4	63.6	70.7	70.8	
Vehicle Noise:	75.1	73.2	69.6	67.1	74.9	75.2	
Centerline Distance to Noise Contour (in feet)							
			70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:			140	301	648	1,395	
CNEL:			147	316	682	1,469	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: w/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 26,377 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,638 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.34	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.46	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.29	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.0	70.1	68.3	62.7	71.1	71.7
Medium Trucks:	65.9	64.3	56.6	57.1	65.2	65.4
Heavy Trucks:	69.0	67.0	57.6	62.9	69.9	70.0
Vehicle Noise:	74.4	72.5	68.9	66.3	74.2	74.5

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	125	270	581	1,252	
CNEL:	132	284	612	1,318	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: w/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 26,540 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,654 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.31% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.69%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.37	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.45	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.20	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.0	70.1	68.3	62.8	71.2	71.7
Medium Trucks:	65.9	64.3	56.7	57.1	65.2	65.4
Heavy Trucks:	69.1	67.1	57.7	62.9	70.0	70.1
Vehicle Noise:	74.5	72.6	69.0	66.4	74.2	74.6

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	126	272	585	1,261	
CNEL:	133	286	616	1,328	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: w/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 32,059 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,206 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.19	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.62	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.44	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.9	70.9	69.2	63.6	72.0	72.5
Medium Trucks:	66.7	65.2	57.5	57.9	66.1	66.2
Heavy Trucks:	69.9	67.9	58.5	63.7	70.8	70.8
Vehicle Noise:	75.3	73.4	69.8	67.2	75.0	75.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	143	307	662	1,425	
CNEL:	150	323	697	1,501	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: w/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 32,233 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,223 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.28% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.71%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.21	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.59	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.29	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.9	70.9	69.2	63.6	72.0	72.6
Medium Trucks:	66.7	65.2	57.5	57.9	66.1	66.2
Heavy Trucks:	70.0	68.0	58.6	63.8	70.9	71.0
Vehicle Noise:	75.3	73.4	69.8	67.3	75.1	75.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	144	310	669	1,441	
CNEL:	152	327	704	1,517	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Foothill Bl. (SR-66) Road Segment: e/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 25,973 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,597 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.27	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.53	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.35	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.9	70.0	68.2	62.7	71.1	71.6
Medium Trucks:	65.8	64.3	56.6	57.0	65.1	65.3
Heavy Trucks:	69.0	67.0	57.6	62.8	69.9	69.9
Vehicle Noise:	74.4	72.5	68.9	66.3	74.1	74.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	124	267	575	1,239	
CNEL:	130	281	606	1,305	

Thursday, August 24, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 26,006 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 2,601 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	1.28	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-15.53	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-16.35	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.0	70.0	68.2	62.7	71.1	71.6
Medium Trucks:	65.8	64.3	56.6	57.0	65.1	65.3
Heavy Trucks:	69.0	67.0	57.6	62.8	69.9	69.9
Vehicle Noise:	74.4	72.5	68.9	66.3	74.1	74.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	124	267	575	1,239	
CNEL:	131	281	606	1,305	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY Road Name: Foothill Bl. (SR-66) Road Segment: e/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 30,922 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,092 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.03	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.77	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.60	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.7	70.8	69.0	63.4	71.8	72.4
Medium Trucks:	66.5	65.0	57.3	57.7	65.9	66.1
Heavy Trucks:	69.7	67.7	58.3	63.5	70.6	70.7
Vehicle Noise:	75.1	73.2	69.6	67.0	74.9	75.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	139	300	646	1,391	
CNEL:	147	316	680	1,466	

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: OY+P Road Name: Foothill Bl. (SR-66) Road Segment: e/o Citrus Av.				Project Name: Beech Logistics Center Job Number: 14726			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)			
Average Daily Traffic (Adt): 30,956 vehicles Peak Hour Percentage: 10.00% Peak Hour Volume: 3,096 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 90 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
Site Data				Vehicle Mix			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 66.0 feet Centerline Dist. to Observer: 66.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 76.6% 12.8% 10.6% 96.33% Medium Trucks: 84.5% 3.6% 11.9% 2.01% Heavy Trucks: 76.1% 2.2% 21.7% 1.66%			
				Noise Source Elevations (in feet)			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				Lane Equivalent Distance (in feet)			
				Autos: 48.539 Medium Trucks: 48.356 Heavy Trucks: 48.374			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	71.78	2.04	0.09	-1.20	-4.71	0.000	0.000
Medium Trucks:	82.40	-14.77	0.11	-1.20	-4.88	0.000	0.000
Heavy Trucks:	86.40	-15.60	0.11	-1.20	-5.30	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	72.7	70.8	69.0	63.4	71.8	72.4
Medium Trucks:	66.5	65.0	57.3	57.7	65.9	66.1
Heavy Trucks:	69.7	67.7	58.3	63.5	70.6	70.7
Vehicle Noise:	75.1	73.2	69.6	67.0	74.9	75.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	139	300	646	1,392	
CNEL:	147	316	680	1,466	

Thursday, August 24, 2023