LSC TRANSPORTATION CONSULTANTS, INC.
102 S. Tejon Street, Suite 1100
Colorado Springs, CO 80903
(719) 633-2868
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provide the specifications for the noise BERM used to obtain the decimal readings- the PUD identifies a road not a berm; if no berm provide the specs for the fencing wall and locatuion

September 2, 2026

Matt and Bill Dunston
1230 Scarsbrook Ct
Monument, CO 80132-8487

RE: MA Subdivision Rezone
Tract B (PUD)
Noise Impact Study
El Paso County, Colorado
LSC #S254280

Dear Messrs. Dunston:

In response to your request, LSC Transportation Consultants, Inc. has completed a detailed analysis of the noise impacts of State Highway 83 (SH) 83 on the proposed residential development to be located on Tract B of the MA Subdivision. The site is located to the east of SH 83 and south of Pinehurst Circle in unincorporated El Paso County, Colorado. LSC has completed an evaluation of the noise exposure for submittal to El Paso County and the Colorado Department of Transportation (CDOT) in accordance with the Federal Highway Administration (FHWA) requirements. This report has been prepared as part of the PUD zoning application submittal to El Paso County.

LSC used the software program Traffic Noise Model Version 2.5 — developed by FHWA — to predict the noise levels at key locations ("receivers") within the proposed development. The receivers were placed at the anticipated location of the homes on the lots within the proposed development adjacent to SH 83. An elevation of five feet was assumed for the height of all receivers. The receiver locations are shown in Figure 1 of this report.

The input data for the noise predictions included traffic volumes, roadway geometry, traffic control, the existing topographic elevations, the proposed site-grading plan, and the locations of the receivers. The analysis was completed using 2045 afternoon peak hour volumes from the *Monument Academy South Residential Rezone Updated Traffic Impact Study* by LSC Transportation Consultants, Inc. dated August 14, 2026. The traffic volumes on SH 83 were assumed to include 2.9% single-unit trucks and 1.45% combination trucks, based on a two-day classification count on SH 83 south of SH 105/Walker Road done by CDOT in June 2016.

The results of the noise prediction were compared to the noise abatement criteria contained in Exhibit 1 of the *Colorado Department of Transportation Noise Analysis and Abatement Guidelines* dated September 21, 2020. The proposed residential development would be considered a

Category "B" land use. Based on the CDOT criteria the threshold for exterior noise levels for Category B is 66 decibels Leq(h).

The results of the noise prediction show that in the year 2045, the noise level at all of the locations modeled is predicted to be less than the 66-decibel Leq(h) threshold for Category "B" land uses. The noise-analysis inputs and outputs are attached.

* * * * * *

Please contact me if you have any questions or need further assistance.

Respectfully submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

COLORADO REGISTERED
KIRSTIN DAY FERRIN
38417
9-2-26
PROFESSIONAL ENGINEER

By: Kirstin D. Ferrin, P.E.
Senior Transportation Engineer

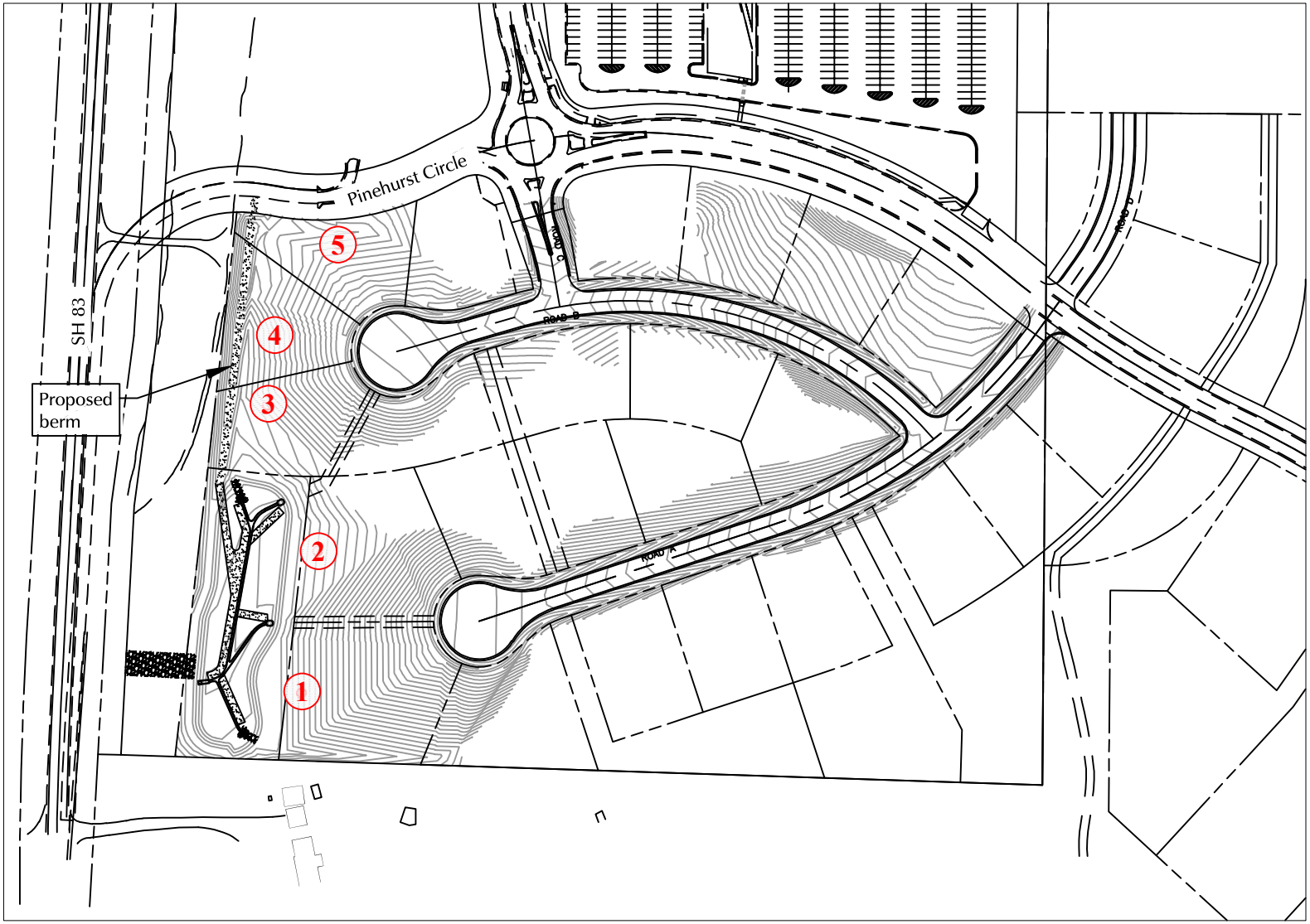
KDF:jas

Enclosures:

Figure 1
Noise Analysis Inputs/Outputs

Figure 1

TRANSPORTATION
CONSULTANTS, INC.



NTS

Legend:

Noise Receiver Modeled Location

XX Noise Receiver Reference Number

Figure 1

Noise Analysis Data

Monument Academy South Residential (LSC #S254261)

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Noise Analysis Inputs/Outputs

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CONSULTANTS, INC.

LSC Transportation Consultants, Inc. 2 September 2026
KDF TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: MA Subdivision
RUN: 2045 PM Peak Hour
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	58.9	66	58.9	10	----	58.9	0.0	8	-8.0
Receiver2	2	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0
Receiver3	3	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
Receiver4	4	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
Receiver5	5	1	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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KDF **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **MA Subdivision**
RUN: **2045 PM Peak Hour**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
SH 83 SB Adjacent to Accel Lane	point11	11	656	65	20	65	10	65	0	0	0	0
	point13	13	656	65	20	65	10	65	0	0	0	0
	point14	14	656	65	20	65	10	65	0	0	0	0
	point15	15	656	65	20	65	10	65	0	0	0	0
	point16	16	656	65	20	65	10	65	0	0	0	0
	point17	17	656	65	20	65	10	65	0	0	0	0
	point12	12										
SH 83/Walker EB to SB RT Accel	point18	18	163	65	5	65	2	65	0	0	0	0
	point20	20	163	65	5	65	2	65	0	0	0	0
	point21	21	163	65	5	65	2	65	0	0	0	0
	point22	22	163	65	5	65	2	65	0	0	0	0
	point23	23	163	65	5	65	2	65	0	0	0	0
	point24	24	163	65	5	65	2	65	0	0	0	0
	point25	25	163	65	5	65	2	65	0	0	0	0
	point26	26	163	65	5	65	2	65	0	0	0	0
	point27	27	163	65	5	65	2	65	0	0	0	0
	point19	19										
SH 83/Walker NB LT	point28	28	239	65	7	65	4	65	0	0	0	0
	point30	30	239	65	7	65	4	65	0	0	0	0
	point31	31	239	65	7	65	4	65	0	0	0	0
	point32	32	239	65	7	65	4	65	0	0	0	0
	point33	33	239	65	7	65	4	65	0	0	0	0
	point29	29										

SH 83/Walker NB TH	point34	34	426	65	13	65	6	65	0	0	0	0
	point36	36	426	65	13	65	6	65	0	0	0	0
	point37	37	426	65	13	65	6	65	0	0	0	0
	point38	38	426	65	13	65	6	65	0	0	0	0
	point35	35										
SH 83/Walker NB RT	point39	39	181	65	5	65	3	65	0	0	0	0
	point41	41	181	65	5	65	3	65	0	0	0	0
	point42	42	181	65	5	65	3	65	0	0	0	0
	point43	43	181	65	5	65	3	65	0	0	0	0
	point44	44	181	65	5	65	3	65	0	0	0	0
	point45	45	181	65	5	65	3	65	0	0	0	0
	point46	46	181	65	5	65	3	65	0	0	0	0
	point40	40										
SH 83 SB S/O Walker Accel Lane	point47	47	819	65	25	65	12	65	0	0	0	0
	point49	49	819	65	25	65	12	65	0	0	0	0
	point50	50	819	65	25	65	12	65	0	0	0	0
	point51	51	819	65	25	65	12	65	0	0	0	0
	point52	52	819	65	25	65	12	65	0	0	0	0
	point53	53	819	65	25	65	12	65	0	0	0	0
	point54	54	819	65	25	65	12	65	0	0	0	0
	point55	55	819	65	25	65	12	65	0	0	0	0
	point56	56	819	65	25	65	12	65	0	0	0	0
	point57	57	819	65	25	65	12	65	0	0	0	0
	point58	58	819	65	25	65	12	65	0	0	0	0
	point59	59	819	65	25	65	12	65	0	0	0	0
	point60	60	819	65	25	65	12	65	0	0	0	0
	point61	61	819	65	25	65	12	65	0	0	0	0
	point62	62	819	65	25	65	12	65	0	0	0	0
	point63	63	819	65	25	65	12	65	0	0	0	0
	point64	64	819	65	25	65	12	65	0	0	0	0
	point48	48										
SH 83 NB N/O Pinehurst Cir	point65	65	845	65	26	65	13	65	0	0	0	0
	point67	67	845	65	26	65	13	65	0	0	0	0
	point68	68	845	65	26	65	13	65	0	0	0	0
	point69	69	845	65	26	65	13	65	0	0	0	0
	point70	70	845	65	26	65	13	65	0	0	0	0

	point71	71	845	65	26	65	13	65	0	0	0	0
	point72	72	845	65	26	65	13	65	0	0	0	0
	point73	73	845	65	26	65	13	65	0	0	0	0
	point74	74	845	65	26	65	13	65	0	0	0	0
	point75	75	845	65	26	65	13	65	0	0	0	0
	point76	76	845	65	26	65	13	65	0	0	0	0
	point77	77	845	65	26	65	13	65	0	0	0	0
	point78	78	845	65	26	65	13	65	0	0	0	0
	point79	79	845	65	26	65	13	65	0	0	0	0
	point80	80	845	65	26	65	13	65	0	0	0	0
	point81	81	845	65	26	65	13	65	0	0	0	0
	point66	66										
SH 83 NB S/O Pinehurst Cir	point82	82	981	65	30	65	15	65	0	0	0	0
	point83	83										
SH 83/Pinehurst Cir NB RT	point84	84	136	65	4	65	2	65	0	0	0	0
	point86	86	136	65	4	65	2	65	0	0	0	0
	point87	87	136	65	4	65	2	65	0	0	0	0
	point88	88	136	65	4	65	2	65	0	0	0	0
	point89	89	136	65	4	65	2	65	0	0	0	0
	point90	90	136	65	4	65	2	65	0	0	0	0
	point91	91	136	65	4	65	2	65	0	0	0	0
	point92	92	136	65	4	65	2	65	0	0	0	0
	point93	93	136	65	4	65	2	65	0	0	0	0
	point94	94	136	65	4	65	2	65	0	0	0	0
	point95	95	136	65	4	65	2	65	0	0	0	0
	point96	96	136	65	4	65	2	65	0	0	0	0
	point97	97	136	65	4	65	2	65	0	0	0	0
	point98	98	136	65	4	65	2	65	0	0	0	0
	point99	99	136	65	4	65	2	65	0	0	0	0
	point100	100	136	65	4	65	2	65	0	0	0	0
	point101	101	136	65	4	65	2	65	0	0	0	0
	point102	102	136	65	4	65	2	65	0	0	0	0
	point103	103	136	65	4	65	2	65	0	0	0	0
	point104	104	136	65	4	65	2	65	0	0	0	0
	point105	105	136	65	4	65	2	65	0	0	0	0
	point106	106	136	65	4	65	2	65	0	0	0	0

	point107	107	136	65	4	65	2	65	0	0	0	0
	point108	108	136	65	4	65	2	65	0	0	0	0
	point109	109	136	65	4	65	2	65	0	0	0	0
	point110	110	136	65	4	65	2	65	0	0	0	0
	point85	85										

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INPUT: ROADWAYS
PROJECT/CONTRACT: MA Subdivision
RUN: 2045 PM Peak Hour

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
SH 83 SB Adjacent to Accel Lane	12.0	point11	11	18,138.9	12,278.0	7,363.00	Signal	0.00	100	Average	
		point13	13	18,146.6	12,114.9	7,364.00				Average	
		point14	14	18,148.2	12,038.5	7,365.00				Average	
		point15	15	18,149.3	11,966.9	7,366.00				Average	
		point16	16	18,149.4	11,914.4	7,367.00				Average	
		point17	17	18,148.3	11,842.5	7,368.00				Average	
		point12	12	18,146.9	11,790.3	7,369.00					
SH 83/Walker EB to SB RT Accel	12.0	point18	18	18,072.4	12,262.9	7,360.00	Onramp	0.00	100	Average	
		point20	20	18,093.4	12,251.9	7,361.00				Average	
		point21	21	18,106.0	12,239.3	7,362.00				Average	
		point22	22	18,124.7	12,205.9	7,363.00				Average	
		point23	23	18,136.1	12,085.2	7,364.00				Average	
		point24	24	18,137.4	12,012.6	7,365.00				Average	
		point25	25	18,138.1	11,946.9	7,366.00				Average	
		point26	26	18,137.9	11,896.1	7,367.00				Average	
		point27	27	18,136.6	11,828.4	7,368.00				Average	
		point19	19	18,134.9	11,765.8	7,369.00					
SH 83/Walker NB LT	12.0	point28	28	18,165.9	11,880.5	7,368.00				Average	
		point30	30	18,166.4	11,941.5	7,367.00				Average	
		point31	31	18,166.4	11,996.6	7,366.00				Average	
		point32	32	18,164.8	12,079.1	7,365.00				Average	
		point33	33	18,159.3	12,221.1	7,364.00				Average	
		point29	29	18,157.0	12,269.9	7,364.00					
SH 83/Walker NB TH	12.0	point34	34	18,177.6	11,900.3	7,368.00				Average	
		point36	36	18,177.9	11,965.7	7,367.00				Average	

		point37	37	18,177.4	12,035.1	7,366.00				Average	
		point38	38	18,175.5	12,111.7	7,365.00				Average	
		point35	35	18,169.7	12,270.0	7,364.00					
SH 83/Walker NB RT	12.0	point39	39	18,189.6	11,883.2	7,368.50				Average	
		point41	41	18,189.8	11,912.3	7,368.00				Average	
		point42	42	18,189.7	11,979.8	7,367.00				Average	
		point43	43	18,188.5	12,057.3	7,366.00				Average	
		point44	44	18,186.8	12,122.7	7,365.00				Average	
		point45	45	18,184.1	12,219.9	7,364.50				Average	
		point46	46	18,208.0	12,254.4	7,365.00				Average	
		point40	40	18,231.3	12,268.1	7,366.00					
SH 83 SB S/O Walker Accel Lane	12.0	point47	47	18,146.7	11,784.3	7,369.00				Average	
		point49	49	18,144.2	11,725.6	7,370.00				Average	
		point50	50	18,141.1	11,658.4	7,371.00				Average	
		point51	51	18,138.3	11,598.3	7,372.00				Average	
		point52	52	18,136.0	11,526.6	7,373.00				Average	
		point53	53	18,134.6	11,452.3	7,374.00				Average	
		point54	54	18,128.6	11,261.7	7,373.00				Average	
		point55	55	18,127.8	11,244.7	7,373.00				Average	
		point56	56	18,111.0	10,940.9	7,374.00				Average	
		point57	57	18,105.1	10,839.8	7,373.00				Average	
		point58	58	18,098.4	10,727.2	7,372.00				Average	
		point59	59	18,093.1	10,629.2	7,371.00				Average	
		point60	60	18,085.4	10,496.7	7,370.00				Average	
		point61	61	18,074.6	10,313.8	7,369.00				Average	
		point62	62	18,067.8	10,191.8	7,368.00				Average	
		point63	63	18,060.6	10,044.0	7,367.00				Average	
		point64	64	18,052.4	9,873.5	7,366.00				Average	
		point48	48	18,049.0	9,770.0	7,365.00					
SH 83 NB N/O Pinehurst Cir	12.0	point65	65	18,066.9	9,929.9	7,366.00				Average	
		point67	67	18,074.2	10,072.5	7,367.00				Average	
		point68	68	18,081.7	10,208.1	7,368.00				Average	
		point69	69	18,088.0	10,319.7	7,369.00				Average	
		point70	70	18,098.1	10,492.7	7,370.00				Average	
		point71	71	18,105.5	10,620.2	7,371.00				Average	
		point72	72	18,111.2	10,723.9	7,372.00				Average	
		point73	73	18,118.4	10,844.4	7,373.00				Average	
		point74	74	18,125.7	10,970.5	7,374.00				Average	
		point75	75	18,141.1	11,250.3	7,373.00				Average	

		point76	76	18,153.3	11,445.0	7,374.00				Average	
		point77	77	18,166.4	11,566.5	7,373.00				Average	
		point78	78	18,171.1	11,644.7	7,372.00				Average	
		point79	79	18,175.2	11,720.5	7,371.00				Average	
		point80	80	18,176.9	11,780.8	7,370.00				Average	
		point81	81	18,177.6	11,833.8	7,369.00				Average	
		point66	66	18,177.6	11,894.1	7,368.00					
SH 83 NB S/O Pinehurst Cir	12.0	point82	82	18,061.8	9,790.5	7,365.00				Average	
		point83	83	18,066.7	9,923.9	7,366.00					
SH 83/Pinehurst Cir NB RT	12.0	point84	84	18,078.9	9,929.9	7,365.00				Average	
		point86	86	18,083.1	10,012.2	7,366.00				Average	
		point87	87	18,092.5	10,171.1	7,367.00				Average	
		point88	88	18,102.2	10,333.8	7,368.00				Average	
		point89	89	18,108.2	10,426.3	7,369.00				Average	
		point90	90	18,119.9	10,466.4	7,370.00				Average	
		point91	91	18,133.3	10,491.4	7,371.00				Average	
		point92	92	18,145.6	10,508.7	7,372.00				Average	
		point93	93	18,158.7	10,523.6	7,373.00				Average	
		point94	94	18,169.9	10,534.2	7,374.00				Average	
		point95	95	18,181.6	10,543.5	7,375.00				Average	
		point96	96	18,192.8	10,551.1	7,376.00				Average	
		point97	97	18,204.9	10,557.6	7,377.00				Average	
		point98	98	18,215.5	10,563.5	7,378.00				Average	
		point99	99	18,226.7	10,568.4	7,379.00				Average	
		point100	100	18,237.6	10,572.3	7,380.00				Average	
		point101	101	18,248.8	10,575.4	7,381.00				Average	
		point102	102	18,260.4	10,577.9	7,382.00				Average	
		point103	103	18,272.4	10,579.7	7,383.00				Average	
		point104	104	18,284.8	10,580.8	7,384.00				Average	
		point105	105	18,298.1	10,580.6	7,385.00				Average	
		point106	106	18,310.6	10,580.1	7,386.00				Average	
		point107	107	18,324.6	10,578.6	7,387.00				Average	
		point108	108	18,337.9	10,576.3	7,388.00				Average	
		point109	109	18,351.9	10,574.1	7,389.00				Average	
		point110	110	18,366.9	10,572.3	7,390.00				Average	
		point85	85	18,381.8	10,571.2	7,391.00					

LSC Transportation Consultants, Inc.			2 September 2026	
KDF			TNM 2.5	
INPUT: TERRAIN LINES				
PROJECT/CONTRACT:	MA Subdivision			
RUN:	2045 PM Peak Hour			
Terrain Line	Points			
Name	No.	Coordinates (ground)		
		X	Y	Z
		ft	ft	ft
Berm	29	18,262.6	10,173.6	7,379.00
	31	18,266.9	10,193.4	7,380.00
	32	18,271.3	10,213.3	7,381.00
	33	18,277.1	10,269.5	7,382.00
	34	18,284.5	10,324.3	7,383.00
	35	18,293.5	10,397.6	7,384.00
	36	18,295.1	10,411.4	7,385.00
	37	18,296.5	10,421.8	7,386.00
	38	18,297.5	10,429.9	7,387.00
	39	18,298.0	10,438.6	7,388.00
	40	18,298.9	10,446.0	7,389.00
	41	18,310.4	10,537.4	7,389.00
	42	18,312.1	10,541.3	7,388.00
	43	18,314.1	10,545.2	7,387.00
	30	18,308.4	10,549.4	7,386.00

LSC Transportation Consultants, Inc. 2 September 2026
KDF TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: MA Subdivision
RUN: 2045 PM Peak Hour

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	18,374.8	9,919.9	7,382.50	4.92	0.00	66	10.0	8.0	Y
Receiver2	2	1	18,395.8	10,105.9	7,381.00	4.92	0.00	66	10.0	8.0	Y
Receiver3	3	1	18,330.2	10,297.5	7,384.00	4.92	0.00	66	10.0	8.0	Y
Receiver4	4	1	18,339.6	10,388.3	7,387.00	4.92	0.00	66	10.0	8.0	Y
Receiver5	5	1	18,423.1	10,508.7	7,391.50	4.92	0.00	66	10.0	8.0	Y