APPENDIX F PRELIMINARY NOISE BARRIER ANALYSIS

Preliminary Noise Barrier Analysis Neighborhood Represented by Site M2-M.P. 54.6 Southbound New Jersey Turnpike Interchange 6-8A Widening Table

Note:	Total Cost	Number .	Number	Min	Average	RS47	RS46	RS44	RS43	RS42	RS41	RS40	RS38	RS36	RS35	RS34	RS32	RS31	RS30	RS29	RS37	RS27	RS26	RS24	RS23	RS22	RS21	RS20	RS19	RS17	RS16	RS15	RS14	RS12	RSII	RS10	RS9	RS8	RS6	RS5	RS4	RS3	RS1		Н	Sensitive Site	
Note: Total barrier cost	S	umber of Benefited Residences	umber of Impacted Residences			H		Residential	t	H	Residentia	Residential	t	Residentia	Н	+	Residential	Residential	Residential		\vdash	Residential	+	+	+	H	1	+	Residential	t.	l.	Residential	Residential	+	Residentia	H	Residentia	Residential	Residential	Residential	Residential	Residential	Residential	Height (ft)	Height (meter)	e Receptor Type	
Total barrier cost is calculated based on a factor of \$40,00 per square foot of barrier surface area according to NJ Turmpike Noise Policy.		esidences	sidences			al I	1	1 1	al 1	al 1	al I	1		1	al I	1 1		al I	al 1	al I	al I					al I	al I	al I		. 1	al 1	al I	1 1		al 1	al 1	1		al 1	al 1	al I	1				ype Residences Represented	, i
lated bases													+											-						-													+	0.0	0.0		No Barrier
d on a facto				61.1	64.9	61.5	61.9	62.8	64.8	63.4	62.7	62.0	61.3	63.3	64.2	64.8	66.0	66.5	67.2	67.2	62.1	65.5	64.8	63.3	63.5	64.6	65.2	66.4	67.8	69.2	67.7	66.5	65.3	62.4	62.4	62.6	64.4	65.3	68.6	69.6	68.7	66.6	64.5			Non-Abated Leq (dBA)	
s 29,031 r of \$40.00	\$885,440	30.5	15.0	56.7	60.7	57.4	57.8	58.5	60.7	59.3	58.6	57.8	56.7	59.6	60.5	61.3	62.3	62.8	63.6	63.6	57.5	61.1	60 1	38.5	58.7	59.6	60.2	61.7	63.4	65.0	63.3	61.9	60.5	57.5	57.7	58.5	59.9	60.7	64.5	65.8	65.0	62.8	60.5		2.4	Leq (dBA)	
0 per squa	8			3.0	4.2	4.1	4.1	4.3	4	4.1	4.1	4.2	3 4.6	3.7	3.7	3.5	3.7	3.7	3.6	3.6	4.6	4.4	4 4 5		4.8	5.0	5.0	\dashv	4 5	4.2	4.4	4.6	4.8	4.9	4.7	4.1	4.5	4.6	4	3.8	3.7	+	4.0	┿		IL	
re foot of	SI.			56.3	60.3	57.2	57.5	58.1	60.1	58.6	57.9	57.2	56.3	59.1	60.0	60.8	61.6	62.1	62.8	63.0	57.0	60.9	59.9	58.4	58.5	59.4	60.1	61.5	63.2	64.8	63.2	61.7	60.4	57.4	57.6	58.3	59.8	60.6	64.2	65.5	64.7	62.6	60.4			Leq (dBA)	
536,289 f barrier su	1,106,800	30.5	15.0	3.6	4.6	4.3	4.4	4.7	4.7	4.8	4.8	4.8	5.0	4.2	4.2	4.0	4.4	4.4	4.4	4.2	5.1	4.6	4 9	4.9	5.0	5.2	5.1	4.9	4.6	4.	4.5	4.8	4.9	5.0	4.8	4.3	4.6	4.7	4.4	4.1	4.0	4.0	4 4	10	3.0	I.F.	
rface area				0.1	0.3	0.2	0.3	0.4	+	0.7	0.7	0.6	0.4	0.5	0.5	0.5	0.7	0.7	0.8	0.6	H	+	0.2	+	╫		-	\dashv	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.3	0.2	0.1			Change 'in I.L.	
according	SI.			55.4	59.2	56.4	56.6	57.3	58.9	57.4	56.6	56.0	55.4	58.3	59.0	59.9	60.2	8.00	61.6	61.8	56.1	8 65	58.9	57.4	57.4	58.3	58.9	60.2	61.6	62.6	61.2	0.00	59.0	56.4	56.6	58.0	58.5	59.1	62.1	63.2	64.5	62.5	60.3	-		Leq (dBA)	
343,346 ag to NJ Tu	\$1,328,160	30.5	15.0	4.1	5.7	5.1	5.3	5.5	5.9	6.0	6.1	6.0	5.9	5.0	5.2	4.9	5.8	5.7	5.6	5.4	6.0	5.7	5 0.0	5.9	6.1	6.3	6.3	6.2	6.2	6.6	6.5	6.5	6.3	6.0	5.8	4.6	5.9	6.2	6.5	6.4	4.2	+	4.2		3.7	IL C	
mpike No				0.1	1.1	0.8	+	0.8	+	1.2	1.3	+	0.9	0.8	1.0	0.9	╁	H	1.2	1.2		+	0 0	+	╁	Н	1.2	+	1.6	+	2.0	1.7	1.4	1.0	1.0	0.3	+	1.5	2.1	2.3			0.1	+		Change in I.L. (
ise Policy	\$1,			55.1	58.4	55.8	56.1	56.8	t	57.0	56.3	55.8	55.1	57.8	58.5	59.3	59.6	60.1	60.8	60.8	55.6	$^{+}$	58.0	+	+	57.4	58.0	59.1	60.4	61.5	60.3	59.2	58.2	55.9	56.1	57.0	57.9	58.4	61.1	62.0	Н	+	58.9	1		Leq (dBA)	
350,804 2y.	\$1,549,520	30.5	15.0	5.1	6.5	5.7	-	6.0	+	6.4	6.4	6.2	6.2	5.5	5.7	5.5	6.4	+	6.4	6.4	H	+	6.0	ŀ	╁		7.2	7.3	7.4	7.7	7.4	7.3	7.1	6.5	6.3	5.6	+	6.9	7.5	7.6	7.1	6.2	5.6	-	43	IL. C	With Barrier
_				0.2	0.8	0.6	\dashv	0.5	+	H	0.3	0.2	0.3	0.5	0.5	0.6	+	╄	0.8	1.0	Н	+	0.0	+	+	Н	0.9	+	1.2	=	0.9	0.8	0.8	0.5	0.5	Н	+	0.7	1.0	1.2	2.9	+	7 1.4	+		Change in I.L.	4
5	\$1,			54.9	57.9	55.6	55.8	56.4	57.9	56.6	55.9	55.4	3 3 3	57.5	58.2	58.9	59.0	59.6	60.3	60.3	55.4	58.3	57.5	36.2	56.3	57.0	57.5	58.5	59.7	60.6	59.5	58.5	57.6	55.5	55.6	56.6	57.4	57.9	60.3	61.2	60.9	59.9	58.5			Leq (dBA)	
338,062	\$1,770,880	30.5	15.0	5.5	7.0	5.9	6.1	6.4	6.9	6.8	6.8	6.6	5.7	5.8	6.0	5.9	7.0	6.9	6.9	6.9	6.7	7.2	7.3	7.1	7.2	7.6	7.7	7.9	o	8.6	8.2	8.0	7.7	6.9	6.8	6.0	7.0	7.4	8.3	8.4	7.8	6.7	6.0	16	4.9	I.L. C	
_				0.9	0.5	0.2	0.3	0.4	+	0.4	0.4	-	0.2	0.3	0.3	0.4	Ĺ	╄	0.5	0.5	H	+	0.50	+	-	Н	4	+	0.7	+	8.0	0.7	0.0	0.4	0.5	0.4	-	0.5	+	8.0	Н	+	0.4	╀		Change in I.L.	
9	\$1,			54.8	57.5	55.4	55.6	56.1	57.5	56.3	55.7	55.2	54.8	57.2	57.9	58.6	58.6	59.1	59.7	59.8	55.1	57.9	57.2	56.0	56.1	56.7	57.2	58.1	59.2	۲	59.0	58.1	57.3	55.2	55.4	56.4	57.1	57.5	59.8	60.6	H		583	┨		Leq (dBA)	
365,319	\$1,992,240	30.5	15.0	5.8	7.4	6.1	6.3	6.7	7.3	7.1	7.0	6.8	6.5	6.1	6.3	6.2	7.4	7.4	7.5	7.4	7.0	7.6	7.6	7.3	7.4	7.9	8.0	8.3	8.6	9.1	8.7	8.4	8.0	7.2	7.0	6.2	7.3	7.8	0.00	9.0	8.3	+	6.2	4	5.5	I.L. C	
				0.1	+	0.2	+	0.3	+	H	0.2	+	0.1	0.3	0.3	0.3	+	╀	0.6	0.5	H	+	0.3	+	+	Н	+	\dashv	0.5	+	0.5	0.4	0.3	0.3	0.2	Н	+	0.4	+	0.6	Н	+	0.2	+		Change in I.L. (
9	\$2,			54.6	57.3	55.1	55.3	55.8	t	56.0	55.4	+	54.6	57.1	57.7	58.4	-	t	59.3	59.4	H	$^{+}$	26.9	+	+	Н	57.0	+	58.9	+	58.7	57.8	57.1	55.1	55.3	56.3	+	57.3	+	60.2	Н	+	58.2	-		Leq (dBA)	
3/25//	\$2,213,600	30.5	15.0	6.0	7.6	6.4	+	7.0	+	7.4	7.3	+	6.7	+	H	6.4	H	+	7.9		H	+	7.9	ł	+		-	+	8.9	╁		8.7	8.2	7.3	7.1	6.3	-	80	+	9.4	8.6		68		6.1	IL. C	-
				0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.4	0.5	0.4	0.4	0.2	0.3	2.0	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.4	0.4	0.3	0.1	0.1			Change in I.L.	

Teal barrier ons is calculated based on a factor of \$40.00 per square foot of barrier surface area according to N Tumpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited recognition seconding to NI Tumpike Noise Policy, impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-sedence calculation. Residences with 3 dBA or more noise level reduction but not impacted will also be commed as benefited but counted as one-half residence in the osst-per-residence calculation. The Louis Berger Group, Inc., June 2006.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M3-M.P. 55.2 Northbound

New Jersey Turnpike Interchange 6-8A Widening

		No Ba	rrier										With	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.												
Heig	tht (meter)	0.0)	2.	.4		3.0	-		3.7	-		4.3			4.9			5.5	•		6.1	•
Не	eight (ft)	0.0)	8	8		10			12			14			16			18			20	
RN1	Residential	75.6	69.9	5.7	69.6	6.0	0.3	66.6	9.0	3.0	65.8	9.8	0.8	65.2	10.4	0.6	64.8	10.8	0.4	64.4	11.2	0.4	
RN2	Residential	76.6	71.5	5.1	70.7	5.9	0.8	67.7	8.9	3.0	66.5	10.1	1.2	65.5	11.1	1.0	64.9	11.7	0.6	64.4	12.2	0.5	
RN3	Residential	74.5	69.2	5.3	68.5	6.0	0.7	65.6	8.9	2.9	64.4	10.1	1.2	63.6	10.9	0.8	63.1	11.4	0.5	62.6	11.9	0.5	
RN4	Residential	76.1	70.8	5.3	70.0	6.1	0.8	66.9	9.2	3.1	65.6	10.5	1.3	64.7	11.4	0.9	64.0	12.1	0.7	63.4	12.7	0.6	
RN5	Residential	77.2	71.6	5.6	70.8	6.4	0.8	67.0	10.2	3.8	65.7	11.5	1.3	64.7	12.5	1.0	64.0	13.2	0.7	63.3	13.9	0.7	
RN6	Residential	77.8	71.1	6.7	67.7	10.1	3.4	66.1	11.7	1.6	65.0	12.8	1.1	64.1	13.7	0.9	63.4	14.4	0.7	62.8	15.0	0.6	
Average			76.3	70.7	5.6	69.6	6.8	1.1	66.7	9.7	2.9	65.5	10.8	1.2	64.6	11.7	0.9	64.0	12.3	0.6	63.5	12.8	0.5
Max			77.8	71.6	6.7	70.8	10.1	3.4	67.7	11.7	3.8	66.5	12.8	1.3	65.5	13.7	1.0	64.9	14.4	0.7	64.4	15.0	0.7
Min			74.5	69.2	5.1	67.7	5.9	0.3	65.6	8.9	1.6	64.4	9.8	0.8	63.6	10.4	0.6	63.1	10.8	0.4	62.6	11.2	0.4
Number of	Impacted Resider		6.	.0		6.0			6.0			6.0			6.0			6.0			6.0		
Number of	Benefited Resider		6.	.0		6.0			6.0			6.0			6.0			6.0			6.0		
Total Cost			\$516	5,480		\$645,600			\$774,720)		\$903,840	1	\$	\$1,032,96	0	9	\$1,162,08	0	\$	1,291,20	0	
Cost per be	nefited residence	•		\$86.	,080		\$107,600			\$129,120)		\$150,640			\$172,160)		\$193,680			\$215,200)

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M4-M.P. 55.7 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Ba	rrier										With	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.												
Heig	ght (meter))	2.	.4		3.0			3.7			4.3			4.9			5.5			6.1		
He	eight (ft))	8	3		10			12			14			16			18			20		
RN7	Residential	68.5	63.9	4.6	63.7	4.8	0.2	60.9	7.6	2.8	60.0	8.5	0.9	59.4	9.1	0.6	58.9	9.6	0.5	58.5	10.0	0.4	
RN8	Residential	1	69.9	65.3	4.6	65.1	4.8	0.2	61.9	8.0	3.2	60.9	9.0	1.0	60.2	9.7	0.7	59.7	10.2	0.5	59.3	10.6	0.4
RN9	Residential	71.1	65.7	5.4	65.4	5.7	0.3	62.4	8.7	3.0	61.5	9.6	0.9	60.7	10.4	0.8	60.2	10.9	0.5	59.8	11.3	0.4	
RN10	Residential	1	72.6	66.9	5.7	66.6	6.0	0.3	63.3	9.3	3.3	62.3	10.3	1.0	61.5	11.1	0.8	60.9	11.7	0.6	60.5	12.1	0.4
RN11	Residential	1	73.0	67.3	5.7	67.0	6.0	0.3	63.9	9.1	3.1	62.9	10.1	1.0	62.1	10.9	0.8	61.6	11.4	0.5	61.2	11.8	0.4
RN12	Residential	77.8	71.1	6.7	67.0	10.8	4.1	65.6	12.2	1.4	64.5	13.3	1.1	63.7	14.1	0.8	63.0	14.8	0.7	62.3	15.5	0.7	
RN13	Residential	73.6	68.3	5.3	67.9	5.7	0.4	64.5	9.1	3.4	63.6	10.0	0.9	63.0	10.6	0.6	62.5	11.1	0.5	62.2	11.4	0.3	
Average		72.4	66.9	5.4	66.1	6.3	0.8	63.2	9.1	2.9	62.2	10.1	1.0	61.5	10.8	0.7	61.0	11.4	0.5	60.5	11.8	0.4	
Max		77.8	71.1	6.7	67.9	10.8	4.1	65.6	12.2	3.4	64.5	13.3	1.1	63.7	14.1	0.8	63.0	14.8	0.7	62.3	15.5	0.7	
Min		68.5	63.9	4.6	63.7	4.8	0.2	60.9	7.6	1.4	60.0	8.5	0.9	59.4	9.1	0.6	58.9	9.6	0.5	58.5	10.0	0.3	
Number of	Impacted Resider		7.	.0		7.0			7.0		_	7.0		_	7.0	_	_	7.0			7.0		
Number of	Benefited Resider		7.	.0		7.0	•		7.0			7.0			7.0			7.0			7.0		
Total Cost			\$640	,640		\$800,800	1		\$960,960)	5	\$1,121,12	0	\$	1,281,28	0		\$1,441,44	0		\$1,601,60	00	
Cost per be	enefited residence		\$91,	,520		\$114,400	1		\$137,280)		\$160,160)		\$183,040)		\$205,920)		\$228,800)	

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M5-M.P. 57.4 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Ba	rrier										With 1	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.															
Heig	ght (meter)	0.0)	2.	.4	·	3.0			3.7		,	4.3			4.9			5.5			6.1	·
Height (ft) 0.0)	8	3		10			12			14			16			18			20	
RN14	Residential	1	62.2	59.5	2.7	59.3	2.9	0.2	58.1	4.1	1.2	57.6	4.6	0.5	57.3	4.9	0.3	56.9	5.3	0.4	56.7	5.5	0.2
RN15	Residential	1	64.0	61.2	2.8	60.9	3.1	0.3	59.6	4.4	1.3	59.1	4.9	0.5	58.6	5.4	0.5	58.2	5.8	0.4	58.0	6.0	0.2
RN16	Residential	1	65.5	62.7	2.8	62.3	3.2	0.4	60.9	4.6	1.4	60.3	5.2	0.6	59.8	5.7	0.5	59.3	6.2	0.5	59.1	6.4	0.2
RN17	Residential	1	66.7	64.0	2.7	63.6	3.1	0.4	62.2	4.5	1.4	61.5	5.2	0.7	60.9	5.8	0.6	60.4	6.3	0.5	60.2	6.5	0.2
RN18	Residential	1	68.4	65.9	2.5	65.4	3.0	0.5	63.9	4.5	1.5	63.2	5.2	0.7	62.4	6.0	0.8	62.1	6.3	0.3	61.8	6.6	0.3
Average			65.4	62.7	2.7	62.3	3.1	0.4	60.9	4.4	1.4	60.3	5.0	0.6	59.8	5.6	0.5	59.4	6.0	0.4	59.2	6.2	0.2
Max			68.4	65.9	2.8	65.4	3.2	0.5	63.9	4.6	1.5	63.2	5.2	0.7	62.4	6.0	0.8	62.1	6.3	0.5	61.8	6.6	0.3
Min			62.2	59.5	2.5	59.3	2.9	0.2	58.1	4.1	1.2	57.6	4.6	0.5	57.3	4.9	0.3	56.9	5.3	0.3	56.7	5.5	0.2
Number of Impacted Residences				2.	.0		2.0			2.0			2.0			2.0			2.0			2.0	
Number of Benefited Residences				0.	.0		3.0			3.5			3.5			3.5			3.5			3.5	
Total Cost				\$587	,520		\$734,400)		\$881,280)	\$	1,028,16	0	\$	1,175,04	0	5	31,321,92	0	S	1,468,80	0
Cost per be	nefited residence			N/	/A		\$244,800)		\$251,794	1		\$293,760			\$335,726	5		\$377,691			\$419,657	1

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table
Preliminary Noise Barrier Analysis
Neighborhood Represented by Site M6 & M7-M.P. 57.5 & 57.6 Southbound
New Jersey Turnpike Interchange 6-8A Widening

		No Bar	rrier										With 1	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.
Heig	ght (meter)	0.0)	2	.4		3.0			3.7			4.3			4.9			5.5			6.1	
He	eight (ft)	0.0)	;	3		10			12			14			16			18			20	
RS48	Residential	1	62.2	60.8	1.4	60.1	2.1	0.7	58.9	3.3	1.2	58.7	3.5	0.2	58.5	3.7	0.2	58.3	3.9	0.2	58.2	4.0	0.1
RS49	Residential	1	60.0	58.6	1.4	58.5	1.5	0.1	57.1	2.9	1.4	56.8	3.2	0.3	56.7	3.3	0.1	56.5	3.5	0.2	56.4	3.6	0.1
RS50	Residential	1	58.6	57.3	1.3	57.1	1.5	0.2	56.0	2.6	1.1	55.7	2.9	0.3	55.5	3.1	0.2	55.4	3.2	0.1	55.3	3.3	0.1
RS51	Residential	1	57.4	56.0	1.4	55.9	1.5	0.1	54.9	2.5	1.0	54.6	2.8	0.3	54.4	3.0	0.2	54.3	3.1	0.1	54.1	3.3	0.2
RS52	Residential	1	58.8	57.6	1.2	57.5	1.3	0.1	56.5	2.3	1.0	56.2	2.6	0.3	56.1	2.7	0.1	55.9	2.9	0.2	55.8	3.0	0.1
RS53	Residential	1	60.9	59.7	1.2	59.5	1.4	0.2	58.5	2.4	1.0	58.2	2.7	0.3	58.0	2.9	0.2	57.9	3.0	0.1	57.8	3.1	0.1
RS54	Residential	1	66.7	64.5	2.2	64.3	2.4	0.2	63.5	3.2	0.8	63.3	3.4	0.2	63.1	3.6	0.2	63.0	3.7	0.1	62.9	3.8	0.1
RS55	Residential	1	64.3	62.4	1.9	62.1	2.2	0.3	61.4	2.9	0.7	61.1	3.2	0.3	60.9	3.4	0.2	60.8	3.5	0.1	60.7	3.6	0.1
RS56	Residential	1	61.1	59.4	1.7	59.1	2.0	0.3	58.4	2.7	0.7	58.0	3.1	0.4	57.8	3.3	0.2	57.6	3.5	0.2	57.5	3.6	0.1
RS57	Residential	1	58.4	56.8	1.6	56.7	1.7	0.1	56.3	2.1	0.4	55.9	2.5	0.4	55.8	2.6	0.1	55.7	2.7	0.1	55.5	2.9	0.2
RS58	Residential	1	57.9	55.9	2.0	55.5	2.4	0.4	55.1	2.8	0.4	54.6	3.3	0.5	54.3	3.6	0.3	54.2	3.7	0.1	54.0	3.9	0.2
RS59	Residential	1	63.6	61.4	2.2	60.9	2.7	0.5	60.2	3.4	0.7	59.8	3.8	0.4	59.6	4.0	0.2	59.4	4.2	0.2	59.3	4.3	0.1
RS60	Residential	1	68.3	65.2	3.1	64.5	3.8	0.7	63.4	4.9	1.1	62.9	5.4	0.5	62.6	5.7	0.3	62.4	5.9	0.2	62.2	6.1	0.2
RS61	Residential	1	72.1	68.2	3.9	67.2	4.9	1.0	66.0	6.1	1.2	65.5	6.6	0.5	65.2	6.9	0.3	65.0	7.1	0.2	64.8	7.3	0.2
RS64	Residential	1	61.2	58.8	2.4	58.2	3.0	0.6	57.7	3.5	0.5	57.2	4.0	0.5	57.0	4.2	0.2	56.8	4.4	0.2	56.6	4.6	0.2
RS65	Residential	1	59.9	57.4	2.5	57.0	2.9	0.4	56.5	3.4	0.5	56.1	3.8	0.4	55.8	4.1	0.3	55.6	4.3	0.2	55.5	4.4	0.1
Average			62.0	60.0	2.0	59.6	2.3	0.4	58.8	3.2	0.9	58.4	3.6	0.4	58.2	3.8	0.2	58.1	3.9	0.2	57.9	4.1	0.1
Max			72.1	68.2	3.9	67.2	4.9	1.0	66.0	6.1	1.4	65.5	6.6	0.5	65.2	6.9	0.3	65.0	7.1	0.2	64.8	7.3	0.2
Min			57.4	55.9	1.2	55.5	1.3	0.1	54.9	2.1	0.4	54.6	2.5	0.2	54.3	2.6	0.1	54.2	2.7	0.1	54.0	2.9	0.1
Number of	Impacted Resider	nces		3	.0		3.0			3.0			3.0			3.0			3.0			3.0	
Number of	Benefited Reside	nces		2	.0		2.5			5.0			7.0			8.0			8.5			9.0	
Total Cost				\$57€	,000		\$720,000)		\$864,000		5	1,008,00	0	S	1,152,00	0	:	\$1,296,00	0	5	\$1,440,00	0
Cost per be	enefited residence			\$288	3,000		\$288,000)		\$172,800			\$144,000			\$144,000			\$152,471			\$160,000)

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents Impacted Receptors.

Preliminary Noise Barrier Analysis Neighborhood Represented by Site M8-M.P. 60.8 Southbound New Jersey Turnpike Interchange 6-8A Widening **Table**

Cost	Total	Num	Num	Min	Max	Average	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		z l	<u>"</u>	R	R	R			Sen. X	Γ
per ben	fotal Cost	ber of B	ber of In			age	RS34	RS33	RS32	RS31	RS30	RS29	RS28	RS27	RS26	RS25	RS24	RS23	RS22	RS21	RS20	RS19	RS18	RS17	RS16	RS15	RS14	RS13	RS12	RS11	RS10	RS9	RS8	RS7	RSA	RS5	RS4	RS3	RS2	RS1	Heig	Height	Noise Sensitive I	
Cost per benefited residence		Number of Benefited Residences	Number of Impacted Residences				Residential	Height (ft)	Height (meter)	Receptor Type																																		
		nces	nces				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	_	-	1	1	1	1	1	0.0	0.0	Number of Residences Represented	No Barrier
				60.5	73.3	67.3	60.5	66.8	69.1	71.1	61.1	62.3	63.5	64.7	66.3	68.3	72.4	61.4	62.7	64.1	65.4	66.9	68.8	72.7	72.9	61.9	63.3	65.9	67.5	69.4	73.3	66.5	66.2	67.8	60.4	73.2	72.2	71.0	69.8	68.7			Non-Abated Leq (dBA)	rrier
\$56	\$45	~	2	59.1	70.3	65.2	59.1	64.1	65.9	67.5	59.7	60.7	61.7	62.7	63.9	65.4	68.6	60.1	61.2	62.3	63.4	64.6	66.1	69.2	69.6	60.7	62.0	64.3	65.6	67.0	70.3	65.6	65.0	66.5	67.5	70.3	70.2	69.6	68.7	67.9		2	Abated Leq (dBA)	
\$56,680	\$453,440	8.0	22.0	0.8	3.8	2.1	1.4	2.7	3.2	3.6	1.4	1.6	1.8	2.0	2.4	2.9	3.8	1.3	1.5	1.8	2.0	2.3	2.7	3.5	3.3	1.2	1.3	1.6	1.9	2.4	3.0	0.9	1.2	1.3	1 0	2.9	2.0	1.4	1.1	0.8	8	2.4	I.L.	
				59.1	69.9	64.9	59.1	63.9	65.4	65.9	59.7	60.6	61.6	62.6	63.8	65.0	67.0	60.1	61.1	62.2	63.3	64.5	65.7	68.5	68.1	60.7	62.0	64.3	65.5	66.7	69.5	65.6	64.9	66.4	67.4	69.2	69.9	69.5	68.7	67.8			Abated Leq (dBA)	
\$51,527	\$566,800	11.0	22.0	0.9	5.4	2.4	1.4	2.9	3.7	5.2	1.4	1.7	1.9	2.1	2.5	3.3	5.4	1.3	1.6	1.9	2.1	2.4	3.1	4.2	4.8	1.2	1.3	1.6	2.0	2.7	3.8	0.9	1.3	1.4	20	4.0	2.3	1.5	1.1	0.9	10	3.0	TT	
	0			0.0	1.6	0.3	0.0	0.2	0.5	1.6	0.0	0.1	0.1	0.1	0.1	0.4	1.6	0.0	0.1	0.1	0.1	0.1	0.4	0.7	1.5	0.0	0.0	0.0	0.1	0.3	0.8	0.0	0.1	0.1	0 1	Ε	0.3	0.1	0.0	0.1			Change in I.L.	
				58.8	69.2	64.2	58.8	62.6	63.8	64.7	59.5	60.3	61.0	61.8	62.6	63.6	65.8	59.8	60.9	61.7	62.6	63.5	64.5	66.6	67.1	60.4	61.7	63.8	64.8	65.8	68.2	65.4	64.7	66.0	8 99	68.6	69.2	69.1	68.4	67.7			Abated Leq (dBA)	
\$42,510	\$680,160	16.0	22.0	1.0	6.6	3.1	1.7	4.2	5.3	6.4	1.6	2.0	2.5	2.9	3.7	4.7	6.6	1.6	1.8	2.4	2.8	3.4	4.3	6.1	5.8	1.5	1.6	2.1	2.7	3.6	5.1	H	1.5	+	+	+	3.0	1.9	1.4	1.0	12	3.7	d II.	
0	60			0.1	1.9	0.7	0.3	1.3	1.6	1.2	0.2	0.3	0.6	0.8	1.2	1.4	1.2	0.3	0.2	0.5	0.7	1.0	1.2	1.9	1.0	0.3	0.3	0.5	0.7	0.9	1.3	0.2	0.2	0.4	0.6	0.6	0.7	0.4	0.3	0.1			Change in I.L.	
-				58.6	68.8	63.8	58.6	62.2	63.3	64.0	59.2	60.0	60.8	61.5	62.2	63.1	65.0	59.6	60.5		62.3	63.2	64.0	65.9			61.4	63.6	64.6	65.5	67.7	-	64.5	\dashv	+	+	4	68.8	68.3	67.6			ge Abated Leq (dBA)	
\$44,084	\$793,520	18.0	22.0	1.1	7.4	3.4	1.9	4.6	5.8	7.1	1.9	2.3	2.7	3.2	4.1	5.2	7.4	1.8	2.2	2.7	3.1	3.7	4.8	6.8	6.4	1.7	1.9	2.3	2.9	3.9	5.6	\dashv	1.7	\dashv	+	+	+	2.2	1.5	1.1	14	4.3	II.	Wi
84	520			0.1	0.8	0.3	0.2	0.4	0.5	0.7	0.3	0.3	0.2	Н	0.4	0.5	8.0	0.2	0.4	Н	0.3	0.3	0.5	0.7	0.6	0.2	0.3	0.2	0.2	0.3	0.5	\dashv	0.2	\dashv	+	0.5	\dashv	0.3	0.1	0.1			Change in I.L.	With Barrier
				58.4	68.7	63.5	58.4	61.8	62.7	63.4	Н	59.7	Н	Н	61.9	62.8	64.4	59.4	60.4		62.1	62.9	63.7	65.4			61.3	63.5	64.3	65.1	67.1		64.4	\dashv	+	+	4	4	68.2	67.5			ge Leq (dBA)	
\$43,185	\$906,880	21.0	22.0	1.2	7 8.0	5 3.7	1 2.1	3 5.0	7 6.4	1 7.7	2.1	7 2.6	5 3.0	2 3.5	9 4.4	3 5.5		1 2.0	1 2.3	2 2.9	3.3	9 4.0	7 5.1	1 7.3	7.0	1.8	3 2.0	5 2.4	3 3.2	4.3	1 6.2		1.8	5 2.2	+	+	3.6	7 2.3	2 1.6	5 1.2	16	4.9	V) I.T.	
85	380			0.1	0.6	0.3	0.2	0.4	. 0.6	0.6	0.2	0.3	0.3	0.3	0.3	0.3	0.6	0.2	0.1		0.2	0.3	0.3	0.5	0.6	0.1	0.1	0.1	0.3	0.4	0.6		0.1	\dashv	+	+	0.2	0.1	0.1	0.1			Change in I.L.	
-				58.3	68.4	63.3	58.3	61.4	62.3	62.9	58.9	59.6	Н	Н	61.7	62.4	63.8	59.3	60.3		61.9	62.7	63.4	64.7	65.4		61.2	63.2	64.1	64.9	66.7	\dashv	64.3	+	+	+	\dashv	\dashv	68.1	67.4			age Leq L. (dBA)	
\$46,375	\$1,020,240	22.0	22	.3 1.3	.4 8.6	.3 4.0	.3 2.2	.4 5.4	.3 6.8	.9 8.2	.9 2.2	.6 2.7	.3 3.2	.0 3.7	.7 4.6	.4 5.9	.8 8.6	.3 2.1	.3 2.4		.9 3.5	.7 4.2	.4 5.4	.7 8.0	.4 7.	.0 1.9	.2 2.1	.2 2.7	.1 3.4	.9 4.5	.7 6.6		.3 1.9	+	+	+	\forall	.4 2.6		.4 1.3	18	5.5	ted Q I.L A)	
375	0,240	:.0	.0	.3 0.0	.6 0.7	.0 0.2	.2 0.1	.4 0.4	.8 0.4	.2 0.5	.2 0.1	.7 0.1	.2 0.2	.7 0.2	.6 0.2	.9 0.4	.6 0.6	.1 0.1	.4 0.1		.5 0.2	.2 0.2	.4 0.3	.0 0.7	.5 0.5	.9 0.1	.1 0.1	.7 0.3	.4 0.2	.5 0.2	.6 0.4		.9 0.1	\dashv	+	+	\dashv	.6 0.3	1.7 0.1	.3 0	8	5	L. Change in I.L.	
												Н	Н	Н									_						Н			\dashv	-	\dashv	+	+	\dashv	-		.1 6				
\$51	\$1,1	2	2	58.1	68.2 9	63.1 4	58.1 2	61.1	61.8			59.4 2	Н	Н	61.4 4	62.0	63.3	59.2	60.2		61.8	62.4 4	63.0	64.2 8			61.0	63.1 2	64.0	64.7 4	66.3	\dashv	64.2	\dashv	+	+	+	+	67.9	67.4			Abated Leq I (dBA)	
\$51,527	\$1,133,600	22.0	2.0	1.3	9.1	4.2	2.4	5.7	7.3	8.7	2.4	2.9			4.9	6.3	9.1	2.2	2.5		3.6	4.5	5.8	8.5			2.3	2.8	3.5	4.7	7.0		2.0	+	+	+	+	2.8	9	1.3	20	6.1	I.L. Ch	
				0.0	0.5	0.2	0.2	0.3	0.5	0.5	0.2	0.2	0.1	0.2	0.3	0.4	0.5	0.1	0.1	0.1	0.1	0.3	0.4	0.5	0.4	0.1	0.2	0.1	0.1	0.2	0.4	0.1	0.1	0.1	r 0	0.4	0.2	0.2	0.2	0.0			Change in I.L.	

Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Tumpke Noise Policy.

Cost per residence is calculated based on each cost divided by the number of impacted and benefind receptors according to NJ Tumpke Noise Policy.

Impacted residence with SIRA or more noise level treatment with be considered as the benefind and counted as one residence in the consper residence calculation.

Residences with 3 siRA or more noise level reduction but not impacted will also be counted as benefined and counted as one-half residence in the cost-per-residence calculation.

Residences with 3 siRA or more noise level reduction but not impacted will also be counted as benefined but counted as one-half residence in the cost-per-residence calculation.

Residences in Impacted Receptors.

Table
Preliminary Noise Barrier Analysis
Neighborhood Represented by Site M10-M.P. 61.8 Southbound
New Jersey Turnpike Interchange 6-8A Widening

		No Ba	rrier										With I	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.
Heig	ght (meter)	0.0)	2	.4	` '	3.0	•	` '	3.7		` '	4.3		, ,	4.9	•		5.5	•		6.1	
Не	eight (ft)	0.0)	8	3		10			12			14			16			18			20	
M10	Residential		67.6	63.2	4.4	62.6	5.0	0.6	61.0	6.6	1.6	60.3	7.3	0.7	59.9	7.7	0.4	59.5	8.1	0.4	59.3	8.3	0.2
RS50"	Residential	1	61.9	58.5	3.4	57.6	4.3	0.9	57.4	4.5	0.2	56.4	5.5	1.0	55.8	6.1	0.6	55.3	6.6	0.5	54.9	7.0	0.4
RS51"	Residential	1	62.6	59.3	3.3	58.5	4.1	0.8	58.1	4.5	0.4	57.1	5.5	1.0	56.4	6.2	0.7	55.9	6.7	0.5	55.4	7.2	0.5
RS52"	Residential	1	63.5	60.1	3.4	59.4	4.1	0.7	59.0	4.5	0.4	57.9	5.6	1.1	57.1	6.4	0.8	56.5	7.0	0.6	56.0	7.5	0.5
RS53"	Residential	1	64.2	60.6	3.6	60.0	4.2	0.6	59.7	4.5	0.3	58.4	5.8	1.3	57.5	6.7	0.9	56.9	7.3	0.6	56.4	7.8	0.5
RS54"	Residential	1	64.6	60.8	3.8	60.3	4.3	0.5	59.5	5.1	0.8	58.7	5.9	0.8	57.7	6.9	1.0	57.1	7.5	0.6	56.7	7.9	0.4
RS55"	Residential	1	62.4	58.7	3.7	58.0	4.4	0.7	57.5	4.9	0.5	56.7	5.7	0.8	55.9	6.5	0.8	55.5	6.9	0.4	55.1	7.3	0.4
RS56"	Residential	1	62.4	58.5	3.9	57.9	4.5	0.6	57.1	5.3	0.8	56.5	5.9	0.6	55.7	6.7	0.8	55.3	7.1	0.4	55.0	7.4	0.3
RS57"	Residential	1	64.4	60.6	3.8	60.1	4.3	0.5	59.2	5.2	0.9	58.5	5.9	0.7	57.4	7.0	1.1	57.0	7.4	0.4	56.6	7.8	0.4
RS58"	Residential	1	63.8	59.7	4.1	59.2	4.6	0.5	58.2	5.6	1.0	57.6	6.2	0.6	56.8	7.0	0.8	56.4	7.4	0.4	56.0	7.8	0.4
RS59"	Residential	1	62.9	58.6	4.3	58.2	4.7	0.4	57.2	5.7	1.0	56.7	6.2	0.5	56.0	6.9	0.7	55.6	7.3	0.4	55.3	7.6	0.3
RS60"	Residential	1	62.8	58.5	4.3	58.1	4.7	0.4	57.1	5.7	1.0	56.6	6.2	0.5	55.9	6.9	0.7	55.6	7.2	0.3	55.3	7.5	0.3
RS61"	Residential	1	64.0	59.7	4.3	59.4	4.6	0.3	58.2	5.8	1.2	57.6	6.4	0.6	56.8	7.2	0.8	56.4	7.6	0.4	56.1	7.9	0.3
RS62"	Residential	1	64.7	60.3	4.4	60.0	4.7	0.3	58.8	5.9	1.2	58.1	6.6	0.7	57.3	7.4	0.8	56.9	7.8	0.4	56.6	8.1	0.3
RS63"	Residential	1	65.7	61.3	4.4	61.0	4.7	0.3	59.6	6.1	1.4	58.6	7.1	1.0	58.1	7.6	0.5	57.7	8.0	0.4	57.4	8.3	0.3
RS64"	Residential	1	66.6	62.1	4.5	61.7	4.9	0.4	60.2	6.4	1.5	59.3	7.3	0.9	58.8	7.8	0.5	58.4	8.2	0.4	58.1	8.5	0.3
RS65"	Residential	1	67.6	63.1	4.5	62.6	5.0	0.5	60.9	6.7	1.7	60.0	7.6	0.9	59.5	8.1	0.5	59.1	8.5	0.4	58.8	8.8	0.3
RS66"	Residential	1	67.7	63.2	4.5	62.7	5.0	0.5	61.0	6.7	1.7	60.3	7.4	0.7	59.8	7.9	0.5	59.4	8.3	0.4	59.2	8.5	0.2
RS67"	Residential	1	64.1	59.6	4.5	59.3	4.8	0.3	58.2	5.9	1.1	57.6	6.5	0.6	57.3	6.8	0.3	57.0	7.1	0.3	56.8	7.3	0.2
RS68"	Residential	1	63.3	58.9	4.4	58.6	4.7	0.3	57.5	5.8	1.1	56.9	6.4	0.6	56.5	6.8	0.4	56.3	7.0	0.2	56.1	7.2	0.2
RS69"	Residential	1	62.5	58.2	4.3	57.9	4.6	0.3	56.9	5.6	1.0	56.4	6.1	0.5	56.0	6.5	0.4	55.7	6.8	0.3	55.5	7.0	0.2
RS70"	Residential	1	63.3	58.8	4.5	58.5	4.8	0.3	57.4	5.9	1.1	56.9	6.4	0.5	56.3	7.0	0.6	56.0	7.3	0.3	55.8	7.5	0.2
RS71"	Residential	1	62.4	58.0	4.4	57.7	4.7	0.3	56.7	5.7	1.0	56.2	6.2	0.5	55.6	6.8	0.6	55.4	7.0	0.2	55.1	7.3	0.3
RS72"	Residential	1	61.9	58.0	3.9	57.7	4.2	0.3	56.9	5.0	0.8	56.5	5.4	0.4	56.3	5.6	0.2	56.1	5.8	0.2	55.9	6.0	0.2
RS73"	Residential	1	62.4	58.5	3.9	58.2	4.2	0.3	57.4	5.0	0.8	57.0	5.4	0.4	56.7	5.7	0.3	56.6	5.8	0.1	56.4	6.0	0.2
RS74"	Residential	1	63.5	59.4	4.1	59.0	4.5	0.4	58.1	5.4	0.9	57.6	5.9	0.5	57.4	6.1	0.2	57.2	6.3	0.2	57.0	6.5	0.2
Average			63.8	59.7	4.1	59.3	4.5	0.5	58.3	5.5	1.0	57.6	6.2	0.7	57.0	6.8	0.6	56.6	7.2	0.4	56.3	7.5	0.3
Max			67.7	63.2	4.5	62.7	5.0	0.9	61.0	6.7	1.7	60.3	7.6	1.3	59.8	8.1	1.1	59.4	8.5	0.6	59.2	8.8	0.5
Min			61.9	58.0	3.3	57.6	4.1	0.3	56.7	4.5	0.2	56.2	5.4	0.4	55.6	5.6	0.2	55.3	5.8	0.1	54.9	6.0	0.2
Number of	Impacted Reside		3	.0		3.0			3.0			3.0			3.0			3.0			3.0		
Number of	Benefited Reside		14	1.0		14.0			14.0			14.0			14.0			14.0			14.0		
Total Cost				\$689	,280		\$861,600		\$	1,033,920)		31,206,240)	S	1,378,56	0		\$1,550,88	0		1,723,20	0
Cost per be	enefited residence			\$49	,234		\$61,543			\$73,851			\$86,160			\$98,469			\$110,777	7		\$123,086	,

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents Impacted Receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M11-M.P. 63.1 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Ba	rrier										With	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.
Heig	ght (meter)	0.0)	2.	4		3.0			3.7			4.3			4.9			5.5			6.1	
H	eight (ft)	0.0)	8	3		10			12			14			16			18			20	
RN1	Residential	1	66.3	62.8	3.5	62.5	3.8	0.3	61.2	5.1	1.3	60.8	5.5	0.4	60.5	5.8	0.3	60.4	5.9	0.1	60.2	6.1	0.2
RN2			64.2	61.1	3.1	60.8	3.4	0.3	59.8	4.4	1.0	59.5	4.7	0.3	59.3	4.9	0.2	59.2	5.0	0.1	59.1	5.1	0.1
RN3 Residential 1		62.9	59.7	3.2	59.5	3.4	0.2	58.6	4.3	0.9	58.4	4.5	0.2	58.2	4.7	0.2	58.0	4.9	0.2	57.9	5.0	0.1	
RN4	Residential	1	62.9	59.9	3.0	59.7	3.2	0.2	58.9	4.0	0.8	58.7	4.2	0.2	58.5	4.4	0.2	58.4	4.5	0.1	58.3	4.6	0.1
RN5			63.8	60.8	3.0	60.6	3.2	0.2	59.7	4.1	0.9	59.4	4.4	0.3	59.2	4.6	0.2	59.1	4.7	0.1	59.0	4.8	0.1
RN6 Residential 1			63.1	60.2	2.9	60.2	2.9	0.0	59.3	3.8	0.9	59.1	4.0	0.2	58.9	4.2	0.2	58.8	4.3	0.1	58.7	4.4	0.1
Average			63.9	60.8	3.1	60.6	3.3	0.2	59.6	4.3	1.0	59.3	4.6	0.3	59.1	4.8	0.2	59.0	4.9	0.1	58.9	5.0	0.1
Max			66.3	62.8	3.5	62.5	3.8	0.3	61.2	5.1	1.3	60.8	5.5	0.4	60.5	5.8	0.3	60.4	5.9	0.2	60.2	6.1	0.2
Min			62.9	59.7	2.9	59.5	2.9	0.0	58.6	3.8	0.8	58.4	4.0	0.2	58.2	4.2	0.2	58.0	4.3	0.1	57.9	4.4	0.1
Number of Impacted Residences				1.	.0		1.0			1.0			1.0			1.0			1.0			1.0	
Number of Benefited Residences				3.	.0		3.0			3.5			3.5			3.5			3.5			3.5	
Total Cost				\$578	,560		\$723,200			\$867,840	1	\$	1,012,48	0	\$	31,157,12	0	5	\$1,301,76	0	5	1,446,40	0
Cost per be	enefited residence		\$192	,853		\$241,067			\$247,954			\$289,280)		\$330,606	5		\$371,931			\$413,257	1	

Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M12-M.P. 63.8 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Ba	rrier										With	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.									
Heig	ght (meter)	0.0	0	2.	4		3.0			3.7			4.3			4.9			5.5			6.1	
Не	eight (ft)	0.0	0	8	3		10			12			14			16			18			20	
RN7	Residential	1	68.1	64.3	3.8	64.1	4.0	0.2	62.4	5.7	1.7	62.0	6.1	0.4	61.7	6.4	0.3	61.4	6.7	0.3	61.3	6.8	0.1
RN8	Residential	1	65.3	61.6	3.7	61.3	4.0	0.3	60.1	5.2	1.2	59.7	5.6	0.4	59.5	5.8	0.2	59.3	6.0	0.2	59.2	6.1	0.1
RN9	Residential	1	65.2	60.7	4.5	60.4	4.8	0.3	58.8	6.4	1.6	58.3	6.9	0.5	57.9	7.3	0.4	57.7	7.5	0.2	57.5	7.7	0.2
RN10	Residential	1	70.3	65.8	4.5	65.7	4.6	0.1	63.1	7.2	2.6	62.1	8.2	1.0	61.4	8.9	0.7	60.8	9.5	0.6	60.4	9.9	0.4
RN11	Residential	1	68.8	64.3	4.5	64.2	4.6	0.1	61.8	7.0	2.4	60.9	7.9	0.9	60.3	8.5	0.6	59.8	9.0	0.5	59.5	9.3	0.3
RN12	Residential	1	65.4	61.2	4.2	61.0	4.4	0.2	59.5	5.9	1.5	58.8	6.6	0.7	58.5	6.9	0.3	58.2	7.2	0.3	58.0	7.4	0.2
RN13	Residential	1	69.7	65.1	4.6	64.6	5.1	0.5	62.4	7.3	2.2	61.6	8.1	0.8	61.0	8.7	0.6	60.6	9.1	0.4	60.3	9.4	0.3
RN14	Residential	1	62.8	58.7	4.1	58.6	4.2	0.1	57.3	5.5	1.3	56.9	5.9	0.4	56.6	6.2	0.3	56.4	6.4	0.2	56.3	6.5	0.1
RN15	Residential	1	62.7	58.7	4.0	58.6	4.1	0.1	57.4	5.3	1.2	57.1	5.6	0.3	56.8	5.9	0.3	56.6	6.1	0.2	56.5	6.2	0.1
RN16	Residential	1	61.2	57.5	3.7	57.4	3.8	0.1	56.4	4.8	1.0	56.0	5.2	0.4	55.8	5.4	0.2	55.6	5.6	0.2	55.5	5.7	0.1
Average			66.0	61.8	4.2	61.6	4.4	0.2	59.9	6.0	1.7	59.3	6.6	0.6	59.0	7.0	0.4	58.6	7.3	0.3	58.5	7.5	0.2
Max			70.3	65.8	4.6	65.7	5.1	0.5	63.1	7.3	2.6	62.1	8.2	1.0	61.7	8.9	0.7	61.4	9.5	0.6	61.3	9.9	0.4
Min			61.2	57.5	3.7	57.4	3.8	0.1	56.4	4.8	1.0	56.0	5.2	0.3	55.8	5.4	0.2	55.6	5.6	0.2	55.5	5.7	0.1
Number of	Impacted Resider		4.	.0		4.0			4.0			4.0			4.0			4.0			4.0		
Number of	Benefited Resider	nces		7.	.0		7.0			7.0			7.0			7.0			7.0			7.0	
Total Cost				\$800	,000	\$	1,000,00	0	\$	1,200,00	0	\$	1,400,00	0	\$	1,600,00	0	\$	\$1,800,00	0		\$2,000,00	0
Cost per be	enefited residence			\$114	,286		\$142,857	,		\$171,429)		\$200,000	•		\$228,571			\$257,143			\$285,714	1

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Preliminary Noise Barrier Analysis Neighborhood Represented by Site M13-M.P. 65.5 Southbound New Jersey Turnpike Interchange 6-8A Widening **Table**

RS106 Residential Average Max Min	RS106 Average Max Min Number of I:	Average Max Min Number of I	Average Max Min	RS106 Average Max	RS106 Average	RS106		RS105	RS104	RS103	RS102	RS101	RS100	RS99	RS98	RS97	RS96	RS95	RS94	RS93	RS92	RS91	RS90	RS89	RS88	RS87	RS86	RS85	RS84	RS83	RS82	RS81	RS80	RS79	RS78	RS77	RS76	RS75	Hei	Heigh	Noise Sensitive F	
	elicitied reside	enefited Reside	umber of Impacted Residences				Residential	Height (ft)	Height (meter)	Receptor Type																																
	lices	nces	nces				1	-	1	1	1	1	1	1	1	1	1	1	1	1	_	1	1	1	1	1	1	1	1	1	_	1	1	1	-	1	1	1	0.0	0.0	Number of Residences Represented	No Barrier
				61.7	79.9	65.1	61.7	62.6	63.1	62.0	62.2	62.6	63.3	63.0	64.0	62.0	61.8	62.3	63.0	64.3	64.6	64.8	64.9	65.2	61.9	62.6	63.3	64.2	64.9	66.0	66.4	66.9	67.1	67.0	70.8	71.2	74.5	79.9)		Non-Abated Leq (dBA)	rrier
3008,040	6600	19.0	9	58.6	74.7	61.9	58.7	59.4	60.0	58.8	59.0	59.5	60.2	60.4	60.9	58.7	58.6	59.1	59.9	61.1	61.4	61.6	61.8	62.1	58.8	59.5	60.2	60.9	61.5	62.4	62.8	63.3	63.7	63.8	66.8	68.5	71.2	74.7	8	2.4	Abated Leq (dBA)	
,040	640	0		2.6	5.2	3.3	3.0	3.2	3.1	3.2	3.2	3.1	3.1	2.6	3.1	3.3	3.2	3.2	3.1	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.3	3.4	3.6	3.6	3.6	3.4	3.2	4.0	2.7	3.3	5.2		4	I.L.	
				58.5	72.7	61.6	58.5	59.2	59.8	58.7	58.9	59.4	60.2	60.1	60.8	58.7	58.5	59.1	59.7	61.0	61.1	61.3	61.5	61.8	58.8	59.4	60.1	60.8	61.4	62.3	62.4	62.9	63.3	63.4	65.9	68.3	70.7	72.7			Abated Leq (dBA)	
\$760,800	19.0	19.0	9	2.9	7.2	3.5	3.2	3.4	3.3	3.3	3.3	3.2	3.1	2.9	3.2	3.3	3.3	3.2	3.3	3.3	3.5	3.5	3.4	3.4	3.1	3.2	3.2	3.4	3.5	3.7	4.0	4.0	3.8	3.6	4.9	2.9	3.8	7.2	10	3.0	T.L.	
				0.0	2.0	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.3	0.1	0.0	0.1	0.0	0.2	0.1	0.3	0.3	0.3	0.3	0.0	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	0.9	0.2	0.5	2.0			Change in I.L.	
				57.8	71.6	60.6	58.0	58.6	59.1	58.2	58.4	58.8	59.7	59.4	60.0	57.9	57.8	58.3	58.9	60.0	60.1	60.3	60.5	60.7	58.1	58.7	59.3	59.7	60.1	60.8	61.2	61.7	62.1	62.3	63.6	66.9	69.5	71.6			Abated Leq (dBA)	
\$912,960	20.0	20.5	9	3.6	8.3	4.5	3.7	4.0	4.0	3.8	3.8	3.8	3.6	3.6	4.0	4.1	4.0	4.0	4.1	4.3	4.5	4.5	4.4	4.5	3.8	3.9	4.0	4.5	4.8	5.2	5.2	5.2	5.0	4.7	7.2	4.3	5.0	8.3	12	3.7	I.L.	
				0.5	2.3	1.0	0.5	0.6	0.7	0.5	0.5	0.6	0.5	0.7	0.8	0.8	0.7	0.8	0.8	1.0	1.0	1.0	1.0	1.1	0.7	0.7	0.8	1.1	1.3	1.5	1.2	1.2	1.2	LI	2.3	1.4	1.2	1.1			Change in I.L.	
				57.5	71.0	60.2	57.7	58.3	58.8	57.8	58.0	58.4	59.3	59.0	9.65	57.7	57.5	58.0	58.6	9.65	59.7	0.00	1.09	6.03	57.8	58.4	1.65	59.3	59.6	60.3	60.7	61.2	61.7	61.9	62.7	66.4	69.2	0.17			Abated Leq (dBA)	
\$1,065,120	20.0	20.5	9	4.0	8.9	4.9	4.0	4.3	4.3	4.2	4.2	4.2	4.0	4.0	4.4	4.3	4.3	4.3	4.4	4.7	4.9	4.8	4.8	4.9	4.1	4.2	4.2	4.9	5.3	5.7	5.7	5.7	5.4	5.1	1.8	4.8	5.3	6.8	14	4.3	IT.	With I
				0.2	0.9	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.9	0.5	0.3	0.6			Change in I.L.	With Barrier
				57.3	70.6	60.0	57.5	58.1	58.6	57.6	57.7	58.1	59.0	58.8	59.3	57.4	57.3	57.9	58.5	59.5	59.6	59.8	60.0	60.1	57.7	58.3	59.0	59.1	59.4	60.0	60.5	61.0	61.5	61.7	62.0	66.1	68.9	70.6			Abated Leq (dBA)	
\$1,217,280	20.0	20.5	9	4.2	9.3	5.1	4.2	4.5	4.5	4.4	4.5	4.5	4.3	4.2	4.7	4.6	4.5	4.4	4.5	4.8	5.0	5.0	4.9	5.1	4.2	4.3	4.3	5.1	5.5	6.0	5.9	5.9	5.6	5.3	8.8	5.1	5.6	9.3	16	4.9	I.L.	
				0.1	0.7	0.2	0.2	0.2	0.2	0.2	0.3	6.0	6.0	0.2	6.0	0.3	0.2	0.1	1.0	1.0	0.1	0.2	1.0	0.2	0.1	1.0	1.0	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.7	0.3	6.0	0.4			Change in I.L.	
				57.2	70.3	59.9	57.3	58.0	58.5	57.4	57.5	58.0	58.9	58.6	59.1	57.3	57.2	57.8	58.3	59.5	59.5	59.7	59.9	0.00	57.6	58.2	58.9	59.0	59.3	59.8	60.3	60.8	61.3	61.6	61.6	65.9	8.89	70.3			Abated Leq (dBA)	
51,369,440	20.0	20.5	9	4.3	9.6	5.3	4.4	4.6	4.6	4.6	4.7	4.6	4.4	4.4	4.9	4.7	4.6	4.5	4.7	4.8	5.1	5.1	0.5	5.2	4.3	4.4	4.4	5.2	5.6	6.2	6.1	6.1	5.8	5.4	9.2	5.3	5.7	9.6	18	5.5	TT.	
				0.0	0.4	0.1	0.2	0.1	0.1	0.2	0.2	0.1	1.0	0.2	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.1	1.0	1.0	0.1	1.0	1.0	1.0	0.1	0.2	0.2	0.2	0.2	0.1	0.4	0.2	1.0	0.3			Change in I.L.	
				57.1	70.1	59.8	57.3	57.9	58.4	57.3	57.4	57.9	58.8	58.4	59.0	57.2	57.1	57.7	58.2	59.4	59.4	59.6	59.8	59.9	57.6	58.1	58.8	58.9	59.2	59.7	60.2	60.7	61.2	61.5	61.2	65.8	68.7	70.1			Abated Leq (dBA)	
74 224	20.3	20.5	9	4.3	9.8	5.4	4.4	4.7	4.7	4.7	4.8	4.7	4.5	4.6	5.0	4.8	4.7	4.6	4.8	4.9	5.2	5.2	5.1	5.3	4.3	4.5	4.5	5.3	5.7	6.3	6.2	6.2	5.9	5.5	9.6	5.4	5.8	8.6	20	6.1	I.L.	
٦				0.0	0.4	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.2			Change in I.L.	

Note:

Total barrier cost is calculated based on a factor of \$40,00 per square foot of barrier surface area according to NJ Turmpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turmpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

The Louis Berger Group, Inc., June 2006.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M14-M.P. 67.0 Southbound New Jersey Turnpike Interchange 6-8A Widening

		No Bar	rrier										With	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.
Heig	ght (meter)	0.0)	2.	.4		3.0			3.7			4.3			4.9			5.5			6.1	
He	eight (ft)	0.0)	8	3		10			12			14			16			18			20	
RS107	Residential	6	70.6	66.9	3.7	65.1	5.5	1.8	63.7	6.9	1.4	62.8	7.8	0.9	61.9	8.7	0.9	61.2	9.4	0.7	60.7	9.9	0.5
RS108	Residential	6	69.1	66.6	2.5	65.8	3.3	0.8	63.8	5.3	2.0	62.7	6.4	1.1	61.7	7.4	1.0	60.9	8.2	0.8	60.2	8.9	0.7
RS109	Residential	6	63.2	60.2	3.0	59.8	3.4	0.4	59.2	4.0	0.6	58.4	4.8	0.8	58.0	5.2	0.4	57.9	5.3	0.1	57.6	5.6	0.3
RS110	Residential	6	60.1	57.8	2.3	57.6	2.5	0.2	57.0	3.1	0.6	56.7	3.4	0.3	56.3	3.8	0.4	56.1	4.0	0.2	56.0	4.1	0.1
RS111	Residential	6	66.8	64.4	2.4	63.7	3.1	0.7	62.0	4.8	1.7	61.0	5.8	1.0	60.2	6.6	0.8	59.7	7.1	0.5	59.1	7.7	0.6
RS112	Residential	6	62.5	60.6	1.9	60.1	2.4	0.5	59.5	3.0	0.6	58.3	4.2	1.2	57.7	4.8	0.6	57.2	5.3	0.5	56.9	5.6	0.3
RS113	Residential	6	60.4	58.2	2.2	57.8	2.6	0.4	57.2	3.2	0.6	56.5	3.9	0.7	55.7	4.7	0.8	55.6	4.8	0.1	55.9	4.5	-0.3
RS114	Residential	6	61.4	58.7	2.7	58.4	3.0	0.3	57.8	3.6	0.6	57.0	4.4	0.8	56.5	4.9	0.5	56.7	4.7	-0.2	56.6	4.8	0.1
RS115	Residential	6	60.0	57.3	2.7	57.1	2.9	0.2	56.6	3.4	0.5	56.0	4.0	0.6	55.7	4.3	0.3	55.5	4.5	0.2	55.3	4.7	0.2
RS116	Residential	6	56.5	56.1	0.4	55.9	0.6	0.2	55.4	1.1	0.5	55.2	1.3	0.2	54.7	1.8	0.5	54.5	2.0	0.2	54.3	2.2	0.2
RS117	Residential	6	56.8	56.3	0.5	56.1	0.7	0.2	55.6	1.2	0.5	55.4	1.4	0.2	54.9	1.9	0.5	54.8	2.0	0.1	54.6	2.2	0.2
RS118	Residential	6	55.9	55.5	0.4	55.2	0.7	0.3	54.5	1.4	0.7	54.4	1.5	0.1	54.0	1.9	0.4	53.8	2.1	0.2	53.6	2.3	0.2
RS119	Residential	6	67.5	64.6	2.9	63.9	3.6	0.7	62.2	5.3	1.7	61.4	6.1	0.8	60.7	6.8	0.7	60.2	7.3	0.5	60.0	7.5	0.2
RS120	Residential	6	62.6	60.6	2.0	60.0	2.6	0.6	59.1	3.5	0.9	57.6	5.0	1.5	58.0	4.6	-0.4	57.4	5.2	0.6	57.1	5.5	0.3
RS121	Residential	6	59.2	57.6	1.6	57.1	2.1	0.5	56.5	2.7	0.6	55.6	3.6	0.9	54.9	4.3	0.7	54.7	4.5	0.2	54.6	4.6	0.1
RS122	Residential	6	58.2	56.2	2.0	56.0	2.2	0.2	55.6	2.6	0.4	55.1	3.1	0.5	54.6	3.6	0.5	54.3	3.9	0.3	54.1	4.1	0.2
RS123	Residential	6	58.8	57.3	1.5	57.0	1.8	0.3	56.2	2.6	0.8	55.7	3.1	0.5	55.4	3.4	0.3	55.5	3.3	-0.1	55.2	3.6	0.3
RS124	Residential	6	57.3	55.4	1.9	55.7	1.6	-0.3	55.0	2.3	0.7	54.2	3.1	0.8	53.6	3.7	0.6	53.3	4.0	0.3	53.4	3.9	-0.1
RS125	Residential	6	57.6	55.5	2.1	55.3	2.3	0.2	54.7	2.9	0.6	54.6	3.0	0.1	54.2	3.4	0.4	54.1	3.5	0.1	53.8	3.8	0.3
RS126	Residential	6	61.4	58.6	2.8	58.2	3.2	0.4	57.4	4.0	0.8	56.6	4.8	0.8	56.0	5.4	0.6	55.8	5.6	0.2	55.4	6.0	0.4
RS127				57.4	2.8	57.1	3.1	0.3	56.4	3.8	0.7	55.5	4.7	0.9	55.3	4.9	0.2	54.9	5.3	0.4	54.6	5.6	0.3
RS128 Residential 6			59.0	56.3	2.7	56.1	2.9	0.2	55.4	3.6	0.7	54.6	4.4	0.8	54.4	4.6	0.2	54.5	4.5	-0.1	54.2	4.8	0.3
Average			61.1	59.0	2.1	58.6	2.6	0.4	57.8	3.4	0.8	57.1	4.1	0.7	56.6	4.6	0.5	56.3	4.8	0.3	56.1	5.1	0.2
Max			70.6	66.9	3.7	65.8	5.5	1.8	63.8	6.9	2.0	62.8	7.8	1.5	61.9	8.7	1.0	61.2	9.4	0.8	60.7	9.9	0.7
Min			55.9	55.4	0.4	55.2	0.6	-0.3	54.5	1.1	0.4	54.2	1.3	0.1	53.6	1.8	-0.4	53.3	2.0	-0.2	53.4	2.2	-0.3
Number of Impacted Residences				2	4		24			24			24			24			24			24	
Number of	Benefited Reside	nces		9.	.0		36.0			54.0			63.0			63.0			63.0			63.0	
Total Cost				\$1,00	8,960	\$	1,261,20	0		\$1,513,44	0		31,765,68	0	\$	2,017,92	0	5	\$2,270,16	0		\$2,522,40	0
Cost per be	enefited residence			\$112	,107		\$35,033			\$28,027			\$28,027			\$32,030			\$36,034			\$40,038	

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M15-M.P. 67.0 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Bar	rrier										With 1	Barrier									
Noise Sensitive Site	Receptor Type		Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.															
Heig	tht (meter)	0.0)	2.	.4		3.0			3.7			4.3			4.9			5.5			6.1	
Не	eight (ft)	0.0)	8	3		10			12			14			16	_		18			20	_
RN17	Residential	77.6	73.4	4.2	72.8	4.8	0.6	71.0	6.6	1.8	70.4	7.2	0.6	70.0	7.6	0.4	69.8	7.8	0.2	69.6	8.0	0.2	
RN18	Residential	1	68.9	65.9	3.0	65.6	3.3	0.3	64.5	4.4	1.1	64.0	4.9	0.5	63.7	5.2	0.3	63.5	5.4	0.2	63.3	5.6	0.2
RN19	Residential	1	69.6	66.2	3.4	65.7	3.9	0.5	64.7	4.9	1.0	64.2	5.4	0.5	63.8	5.8	0.4	63.6	6.0	0.2	63.3	6.3	0.3
RN20	Residential	1	70.0	66.5	3.5	65.8	4.2	0.7	65.1	4.9	0.7	64.5	5.5	0.6	64.2	5.8	0.3	63.9	6.1	0.3	63.7	6.3	0.2
RN21	Residential	1	70.6	67.1	3.5	66.1	4.5	1.0	65.5	5.1	0.6	64.9	5.7	0.6	64.5	6.1	0.4	64.2	6.4	0.3	64.0	6.6	0.2
RN22	Residential	1	70.8	67.4	3.4	66.2	4.6	1.2	65.4	5.4	0.8	64.9	5.9	0.5	64.5	6.3	0.4	64.1	6.7	0.4	63.9	6.9	0.2
RN23	Residential	1	67.1	64.3	2.8	64.1	3.0	0.2	63.4	3.7	0.7	63.1	4.0	0.3	62.9	4.2	0.2	62.7	4.4	0.2	62.6	4.5	0.1
RN24	Residential	67.7	65.0	2.7	64.6	3.1	0.4	64.0	3.7	0.6	63.4	4.3	0.6	63.1	4.6	0.3	62.9	4.8	0.2	62.7	5.0	0.2	
RN25	Residential	1	68.0	65.7	2.3	65.1	2.9	0.6	64.3	3.7	0.8	63.9	4.1	0.4	63.5	4.5	0.4	63.3	4.7	0.2	63.1	4.9	0.2
RN26	Residential	1	68.4	66.4	2.0	65.8	2.6	0.6	64.8	3.6	1.0	64.4	4.0	0.4	64.0	4.4	0.4	63.7	4.7	0.3	63.5	4.9	0.2
Average			69.9	66.8	3.1	66.2	3.7	0.6	65.3	4.6	0.9	64.8	5.1	0.5	64.4	5.5	0.4	64.2	5.7	0.3	64.0	5.9	0.2
Max			77.6	73.4	4.2	72.8	4.8	1.2	71.0	6.6	1.8	70.4	7.2	0.6	70.0	7.6	0.4	69.8	7.8	0.4	69.6	8.0	0.3
Min			67.1	64.3	2.0	64.1	2.6	0.2	63.4	3.6	0.6	63.1	4.0	0.3	62.9	4.2	0.2	62.7	4.4	0.2	62.6	4.5	0.1
Number of	Impacted Resider	ices		10	0		10			10			10			10			10			10	
Number of	Benefited Resider	nces		6.	.0		8.0			10.0			10.0			10.0			10.0			10.0	
Total Cost				\$354	,560		\$443,200		:	\$531,840)	:	\$620,480			\$709,120)		\$797,760	1		\$886,400)
Cost per be	nefited residence			\$59,	,093		\$55,400			\$53,184		-	\$62,048			\$70,912			\$79,776			\$88,640	

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M16-M.P. 70.0 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Bai	rrier										With 1	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)	Abated Leq (dBA)	I.L.	Abated Leq (dBA)	I.L.	Change in I.L.															
Heig	ght (meter)	0.0)	2.	.4		3.0			3.7			4.3			4.9			5.5			6.1	
He	eight (ft)	0.0)	8	3		10			12			14			16			18			20	
RN3	Residential	1	73.6	71.0	2.6	68.2	5.4	2.8	67.3	6.3	0.9	66.8	6.8	0.5	66.4	7.2	0.4	66.1	7.5	0.3	65.9	7.7	0.2
RN4	Residential	1	69.9	67.9	2.0	66.9	3.0	1.0	66.0	3.9	0.9	65.7	4.2	0.3	65.4	4.5	0.3	65.3	4.6	0.1	65.2	4.7	0.1
RN5	Residential	1	69.5	67.1	2.4	66.9	2.6	0.2	65.2	4.3	1.7	64.8	4.7	0.4	64.5	5.0	0.3	64.3	5.2	0.2	64.2	5.3	0.1
RN6	Residential	1	62.7	62.4	0.3	62.4	0.3	0.0	62.3	0.4	0.1	62.1	0.6	0.2	62.1	0.6	0.0	62.1	0.6	0.0	62.0	0.7	0.1
RN7	Residential	1	63.2	63.0	0.2	63.0	0.2	0.0	63.0	0.2	0.0	62.9	0.3	0.1	62.9	0.3	0.0	62.8	0.4	0.1	62.8	0.4	0.0
RN8	Residential	1	64.4	64.3	0.1	64.2	0.2	0.1	64.2	0.2	0.0	64.2	0.2	0.0	64.1	0.3	0.1	64.1	0.3	0.0	64.1	0.3	0.0
RN9	Residential	1	63.6	63.4	0.2	63.4	0.2	0.0	63.4	0.2	0.0	63.3	0.3	0.1	63.3	0.3	0.0	63.3	0.3	0.0	63.3	0.3	0.0
RN10	Residential	1	62.3	62.1	0.2	62.0	0.3	0.1	62.0	0.3	0.0	61.9	0.4	0.1	61.8	0.5	0.1	61.8	0.5	0.0	61.8	0.5	0.0
RN11	Residential	1	62.5	62.3	0.2	62.3	0.2	0.0	62.3	0.2	0.0	62.2	0.3	0.1	62.1	0.4	0.1	62.1	0.4	0.0	62.1	0.4	0.0
RN12	Residential	1	62.9	62.8	0.1	62.8	0.1	0.0	62.8	0.1	0.0	62.7	0.2	0.1	62.7	0.2	0.0	62.7	0.2	0.0	62.6	0.3	0.1
Average			65.5	64.6	0.8	64.2	1.3	0.4	63.9	1.6	0.4	63.7	1.8	0.2	63.5	1.9	0.1	63.5	2.0	0.1	63.4	2.1	0.1
Max			73.6	71.0	2.6	68.2	5.4	2.8	67.3	6.3	1.7	66.8	6.8	0.5	66.4	7.2	0.4	66.1	7.5	0.3	65.9	7.7	0.2
Min			62.3	62.1	0.1	62.0	0.1	0.0	62.0	0.1	0.0	61.9	0.2	0.0	61.8	0.2	0.0	61.8	0.2	0.0	61.8	0.3	0.0
Number of	Impacted Resider	nces		3	3		3	•		3			3			3	•		3	•		3	
Number of	Benefited Residen	nces		0.	.0		2.0			3.0			3.0			3.0			3.0			3.0	
Total Cost				\$316	,800		\$396,000	1		\$475,200)		\$554,400			\$633,600)		\$712,800	1		\$792,000)
Cost per be	enefited residence			#DI	V/0!		\$198,000			\$158,400)		\$184,800			\$211,200			\$237,600			\$264,000)

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Table Preliminary Noise Barrier Analysis Neighborhood Represented by Site M17-M.P. 67.7 Northbound New Jersey Turnpike Interchange 6-8A Widening

		No Barr	ier										With	Barrier									
Noise Sensitive Site	Receptor Type	Number of Residences Represented	Non-Abated Leq (dBA)		I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.	Abated Leq (dBA)	I.L.	Change in I.L.
Heigh	nt (meter)	0.0		2.4	ļ		3.0			3.7			4.3			4.9			5.5			6.1	
Hei	ght (ft)	0.0		8			10			12			14			16			18			20	
RN47	Residential	1	61.6	58.7	2.9	58.5	3.1	0.2	56.7	4.9	1.8	56.1	5.5	0.6	55.7	5.9	0.4	55.4	6.2	0.3	55.1	6.5	0.3
RN48	Residential	1	68.5	63.6	4.9	62.7	5.8	0.9	59.7	8.8	3.0	58.8	9.7	0.9	58.2	10.3	0.6	57.7	10.8	0.5	57.3	11.2	0.4
RN49	Residential	1	63.3	59.9	3.4	59.7	3.6	0.2	57.5	5.8	2.2	56.7	6.6	0.8	56.2	7.1	0.5	55.8	7.5	0.4	55.5	7.8	0.3
RN50	Residential	1	60.1	57.4	2.7	57.3	2.8	0.1	55.7	4.4	1.6	55.1	5.0	0.6	54.8	5.3	0.3	54.5	5.6	0.3	54.3	5.8	0.2
RN51	Residential	1	58.7	56.4	2.3	56.1	2.6	0.3	54.7	4.0	1.4	54.2	4.5	0.5	53.9	4.8	0.3	53.7	5.0	0.2	53.5	5.2	0.2
RN52	Residential	1	58.2	56.1	2.1	55.9	2.3	0.2	54.6	3.6	1.3	54.0	4.2	0.6	53.8	4.4	0.2	53.6	4.6	0.2	53.4	4.8	0.2
RN53	Residential	1	57.0	55.3	1.7	55.1	1.9	0.2	54.0	3.0	1.1	53.5	3.5	0.5	53.2	3.8	0.3	53.0	4.0	0.2	52.8	4.2	0.2
RN54	Residential	1	57.7	56.0	1.7	55.6	2.1	0.4	54.8	2.9	0.8	54.0	3.7	0.8	53.7	4.0	0.3	53.5	4.2	0.2	53.3	4.4	0.2
RN55	Residential	1	58.0	55.9	2.1	55.6	2.4	0.3	54.2	3.8	1.4	53.7	4.3	0.5	53.4	4.6	0.3	53.2	4.8	0.2	53.0	5.0	0.2
RN56	Residential	1	58.5	56.4	2.1	55.9	2.6	0.5	54.6	3.9	1.3	54.1	4.4	0.5	53.7	4.8	0.4	53.5	5.0	0.2	53.3	5.2	0.2
RN57	Residential	1	58.8	56.6	2.2	55.8	3.0	0.8	55.0	3.8	0.8	54.6	4.2	0.4	54.0	4.8	0.6	53.6	5.2	0.4	53.4	5.4	0.2
Average			60.0	57.5	2.6	57.1	2.9	0.4	55.6	4.4	1.5	55.0	5.1	0.6	54.6	5.4	0.4	54.3	5.7	0.3	54.1	6.0	0.2
Max			68.5	63.6	4.9	62.7	5.8	0.9	59.7	8.8	3.0	58.8	9.7	0.9	58.2	10.3	0.6	57.7	10.8	0.5	57.3	11.2	0.4
Min			57.0	55.3	1.7	55.1	1.9	0.1	54.0	2.9	0.8	53.5	3.5	0.4	53.2	3.8	0.2	53.0	4.0	0.2	52.8	4.2	0.2
	pacted Residences			1			1			1			1			1			1			1	
	nefited Residences	5		1.5			2.5			5.5			6.0			6.0			6.0			6.0	
Total Cost				\$1,108		5	\$1,385,60		\$	1,662,72	0		1,939,84	0	\$	2,216,96	0		2,494,080)		\$2,771,20	0
Cost per benef	fited residence			738,9	987		554,240			302,313			323,307			369,493			415,680			461,867	

Note: Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Turnpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Turnpike Noise Policy.

Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

Preliminary Noise Barrier Analysis Neighborhood Represented by Forsgate Communities-M.P. 73.5 Northbound New Jersey Turnpike Interchange 6-8A Widening **Table**

) Leq Inser	Mith Barrier Loss Insertion Loss Ins	Clarge in Abated Leq Insertion Loss	Change in Abated Log Insertion Log (dBA) Insertion Log Insertion Log (dBA) Ins	Adaled Insertion Loss In	Change in Abated Leq Insertion Loss Change in Abated Leq Insertion Loss Insertion Loss Insertion Loss Change in Abated Leq Insertion Loss Change in I Abated Insertion Loss Change in I Abated Insertion Loss Insertion Lo
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Inser	With Barrier Change Change	With Barrier With Barrier Change in Abaned Insertion Loss Insertion Leq Change in Leq Ch	With Barrier Abated Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Loss Insertion Inse	With Barrier Change In Abade Log Insertion Loss Intertion Loss	With Barrier Insertion Loss Inflation Loss Inflati
	Trier Control Control	rrier Change in Abaned Insertion Leg Change in Leg Change in Leg Change in Leg Change in Loss (dBA) Constant in Leg Change in Leg Change in Leg Change in Leg Change in Loss (dBA) Constant in S7 Constant in S7 Constant in S7 Constant in S8 Constant	Trifer Change In Aband Insertion Los Insertion Leq Insertion Los Insert	Triber Change In Autal Change In Autal Leq Change In Autal Leq Change In Autal Leq Loss I Change In Serior Loss I Change In Autal Leq Loss I Change In Serior Change In Autal Leq Change In Serior Change In Autal Leq Change In Serior Change I	Triber Change in Abaned Insertion Leq Insertion Leq Insertion Loss Lo

Source:

Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface are a according to NJ Tumpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation.

Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation.

Represents impacted receptors.

The Louis Berger Group, Inc., June 2006.

Preliminary Noise Barrier Analysis
Neighborhood Represented by Pulte Homes Development-M.P. 79.1 Northbound
New Jersey Turnpike Interchange 6-8A Widening **Table**

		No Barrier					W	With Barrier			
Noise Sensitive Site	Receptor Type	Number of Represented Receptors	Non-Abated Leq (dBA)	Abated Leq (dBA)	Insertion Loss	Abated Leq (dBA)	Insertion Loss	Change In Insertion Loss	Abated Leq (dBA)	Insertion Loss	Change In Insertion Loss
Height (ft)					16		18			20	
R1	Residential	1	75	70	5	69	6	1	68	7	1
R2	Residential	1	74	69	5	68	6		67	7	
R3	Residential	.1	73	68	5	66	7	2	65	. 8	1
R4	Residential	1	73	67	6	66	7	1	64	9	2
R5	Residential	1	73	65	8	64	9	1	63	10	1
R6	Residential	1	71	66	5	65	6	1	64	7	1
R7	Residential	_	71	66	5	65	1 6		64	7	
RS RS	Residential	- -	70	65	6	64	6		64	7	- 0
R 10	Residential	- ,-	60	63	6	63	6	0 -	62	7	- -
RII	Residential	_ ,	71	63	∞ (63	∞ (0	62	9	,
R12	Residential	_	69	61	8	60	9	_	60	9	0
R13	Residential	1	67	60	7	60	7	0	60	7	0
R14	Residential	_	67	61	6	61	6	0	60	7	
RIS	Residential	- -	63	65	ń 0	61	6	- -	61	A 04	o -
R17	Residential	_ -	SS 9	63	5	62	6	_ -	62	6	0 0
R18	Residential	1	69	63	6	62	7	1	62	7	0
R19	Residential	1	68	63	5	62	6	1	62	6	0
R20	Residential		67	62	5	62	5	0	61	6	o 1
R22	Residential	, ,	67	61	6	60	7		60	7	0
R23	Residential	1	65	59	6	59	6	0	59	6	0
R24	Residential	0 1	24 66	60	0	59	9 7		59	7	- 0
ARI	Residential	_ 0	7 2	59	5 0	58	6	_ -	58	9	0 -
AR2	Residential	1	2	58	6	58	6	0	57	7	1
AR3	Residential	1	65	60	5	59	6	1	59	6	0
AR4	Residential	. 1	65	58	7	58	7	0	57	3 00	-
AR5	Residential	- -	67	60	7	60	7	0 -	59	× \	- 0
AR7	Residential	1	67	59	8	59	∞ -	0	58	9	
AR8	Residential	1	65	58	7	58	7	0	57	8	1
AR9	Residential		65	58	7	58	7	0	57		
AR12	Residential	_ [68 8	60	× ,	50 60	× -	0	59	90	- -
AR13	Residential	1	67	60	7	59	8	1	59	8	0
AR14	Residential	1	66	60	6	59	7	1	59	7	0
ARIS	Residential	- -	8 8	59	6	60	6	0 0	80	1 ×	- -
AR17	Residential	_ -	67	60	7	60	7	0	59	∞ -	
AR18	Residential	1	67	60	7	59	8	1	59	8	0
AR19	Residential	. 1	66	59	7	59	7	0	58	. 8	1
AR20	Residential	. ,	2 2	58	6	58	2 6	- 0	57	7	
AR22	Residential		67 24	61	6	61	6	0 -	60	7	_ 0
AR23	Residential		68	63	5	62	6	- 0	61	7	_,
AR24	Residential	1	68	63	5	62	6	1	62	6	0
AR25	Residential	1	68	62	6	61	7	1	60	8	1
AR26	Residential		67	61	6	60	7		60	7	0
AR28	Residential	_ -	8	59	6	58	7	_	58	7	0
Average			68	62	6	61	7	1	60	7	1
Max			75	70	8	69	9	2	68	10	2
Min			64	58	5	57	5	0	57	6	0
Number of Imp	umber of Impacted Residences				40		40			40	
Number of bene	efited residences				46		46			46	
Total Cost				\$76	\$769,920		\$866,160			\$962,400	
Cost per residence	nce	mice \$10,/3/ \$18,830		116	6,/3/	EE	\$18,830			\$20,922	
	lotal partier cost i	s calculated based on a	tactor of VAII (II) n	or compare toot of b	oregon contacts against	TO CONTRIBUTE TO A CONTRIBUTE OF A CONTRIBUTE	MING GOING MARKET	**			

Note:

Total barrier cost is calculated based on a factor of \$40.00 per square foot of barrier surface area according to NJ Tumpike Noise Policy.

Cost per residence is calculated based on total cost divided by the number of impacted and benefited receptors according to NJ Tumpike Noise Policy. Impacted residence with 3 dBA or more noise level reduction will be considered as benefited and counted as one residence in the cost-per-residence calculation. Residences with 3 dBA or more noise level reduction but not impacted will also be counted as benefited but counted as one-half residence in the cost-per-residence calculation. Represents impacted receptors.

The Louis Berger Group, Inc., June 2006.

Source: