Final Noise Study Report

Florida Department of Transportation - District VII

County Line Road (C.R. 578)
Project Development and Environment Study
From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)

Work Program Item Segment Number: 257298 1
Federal-Aid Program Number: 7822 001 S
Pasco and Hernando Counties, Florida

The proposed project involves improving County Line Road (C.R. 578) to a multi-lane facility from U.S. 19 (S.R. 55) to east of U.S. 41 (S.R. 45) in Pasco and Hernando Counties, a distance of approximately 12.0 miles (19.3 kilometers). The project includes a segment of roadway along a new alignment. This segment is referred to as the Ayers Road Extension and extends from the interchange of C.R. 578 and the Suncoast Parkway to east of U.S. 41, a distance of approximately 3.5 miles (5.6 kilometers).

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Prepared by:

URS Corporation Southern

January 2003

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EXECUTIVE SUMMARY

This Noise Study Report was prepared as a part of the Project Development and Environment (PD&E) Study to evaluate capacity improvement alternatives for County Line Road (C.R. 578) in Pasco and Hernando Counties. The proposed project involves improving C.R. 578 from a primarily two-lane roadway to a four-lane facility from the vicinity of U.S. 19 (S.R. 55) to the vicinity of U.S. 41 (S.R. 45), a distance of approximately 12.0 miles (mi) (19.3 kilometers (km)). A segment of roadway on new alignment, referred to as the Ayers Road Extension, is being proposed from the C.R. 578/Suncoast Parkway interchange to the vicinity of U.S. 41 and Ayers Road (C.R. 576), a distance of approximately 3.5 mi (5.6 km). The Ayers Road Extension would provide a continuous travel route between U.S. 19 and C.R 581 and would also improve access to the Hernando County Airport with a new connection to the airport.

Two hundred twenty (220) noise-sensitive sites were identified as having the potential to be affected by traffic-related noise adjacent to the C.R. 578 project corridor from U.S. 19 to the Suncoast Parkway. Twenty-four (24) noise-sensitive sites were identified adjacent to the Ayers Road Extension.

In the year 2025 with the Build Alternative, predicted exterior traffic noise levels along C.R. 578 at the residential sites range from 53.7 to 69.9 dBA with levels above the Federal Highway Administration Noise Abatement Criteria (NAC) at 51 of the single-family residences. The predicted interior traffic noise levels at the religious and public/private meeting facilities range from 30.0 to 47.0 dBA, which are below the NAC.

All of the noise-sensitive sites along the Ayers Road Extension are single-family residences.

In the year 2025 with the Build Alternative, predicted exterior traffic noise levels along the Ayers Road Extension at the residential sites range from 49.2 to 67.3 dBA with levels above the NAC at five of the residences. Three of the single-family residences are predicted to experience traffic noise levels that substantially exceed existing levels.

Noise abatement measures were considered for the noise sensitive sites predicted to experience traffic noise levels that approach, meet, or exceed the NAC. None of the measures - traffic management, alternative roadway alignments, property acquisition, and noise barriers - were determined to be feasible and/or reasonable methods to reduce the predicted traffic noise levels with the C.R. 578 improvements.

In order to assist local officials in promoting compatibility between land development and highway, noise contours were developed for the proposed project. The results indicate that a traffic noise level of 66.0 dBA or more is predicted to extend 60 to 90 feet (ft) (18.0 to 27.4 meters (m)) from the edge-of-pavement of the improved roadway.

Section 1.0
INTRODUCTION

The Florida Department of Transportation (FDOT), in partnership with Pasco and Hernando Counties, is conducting a Project Development and Environment (PD&E) Study to evaluate capacity improvement alternatives for County Line Road (C.R. 578) in Pasco and Hernando Counties, as shown in Figure 2-1. The proposed project involves improving C.R. 578 from a primarily two-lane roadway to a multi-lane facility from the vicinity of U.S. 19 (S.R. 55) to the vicinity of U.S. 41 (S.R. 45), a distance of approximately 12.0 miles (mi) (19.3 kilometers (km)). A segment of roadway on new alignment, referred to as the Ayers Road Extension, is being proposed from the C.R. 578/Suncoast Parkway interchange to the vicinity of U.S. 41 and Ayers Road (C.R. 576), a distance of approximately 3.5 mi (5.6 km). The Ayers Road Extension would provide a continuous travel route between U.S. 19 and C.R 581 and would also improve access to the Hernando County Airport with a new connection to the airport.

The objective of the PD&E Study is to provide documented environmental and engineering analyses that will assist the FDOT and the Florida Highway Administration (FHWA) in reaching a decision on the location and conceptual design for improvements to C.R. 578. This Study also complies with the requirements of the National Environmental Policy Act (NEPA) and other Federal laws to qualify the proposed project for Federal-aid funding.

The objectives of the Noise Study Report (NSR) are:

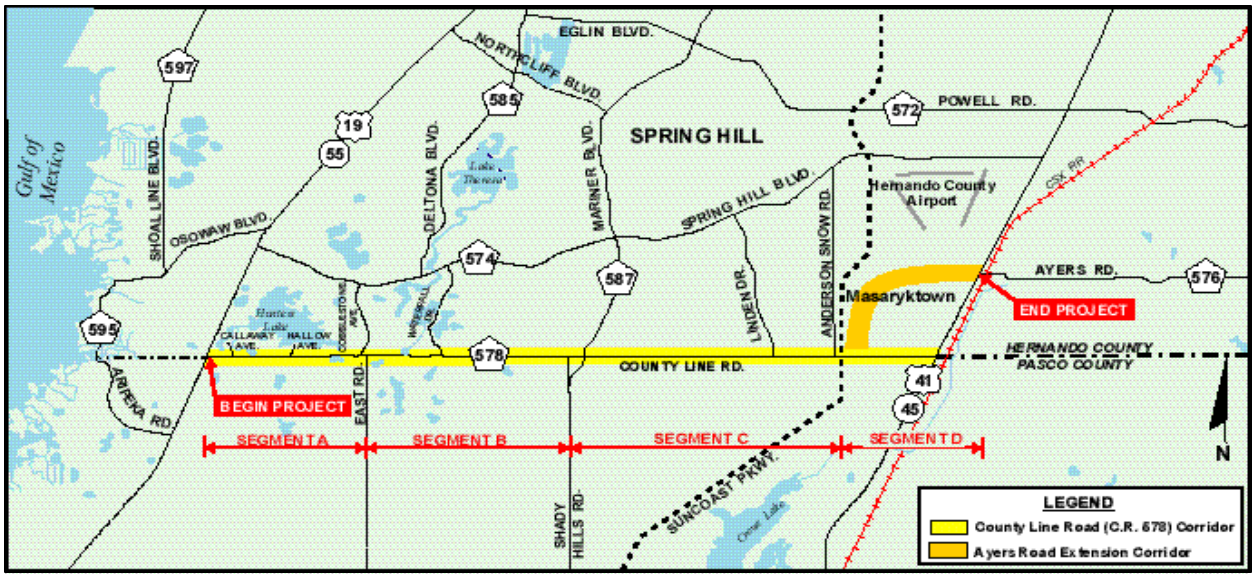
- To identify existing activities, developed lands, and undeveloped lands for which development is planned, designed, and programmed, which may be affected by noise from the roadway;
- To determine traffic noise levels (existing levels and future levels with and without the roadway improvements) and noise impacts; and
- To evaluate alternative noise abatement measures for reducing or eliminating any traffic noise impacts.

Additional objectives include the evaluation of construction noise impacts and the prediction of noise impact "contours" adjacent to the corridor.

Section 2.0
PROJECT DESCRIPTION

The C.R. 578 corridor is an east/west facility with a functional classification of a major collector. The proposed project extends from the vicinity of U.S. 19 (S.R. 55) to the vicinity of U.S. 41 (S.R. 45). C.R. 578 is currently a two-lane rural roadway from U.S. 19 to Callaway Avenue, from Hallow Avenue to west of the Suncoast Parkway, and from east of the Suncoast Parkway to U.S. 41. From Callaway Avenue to Hallow Avenue, C.R. 578 is a four-lane divided suburban facility with an open drainage system. In addition, for 0.5 mi (0.8 km) west and east of the interchange at the Suncoast Parkway, C.R. 578 has been improved to a four-lane divided rural facility. The existing posted speed limit along C.R. 578 ranges from 40 to 55 miles per hour (mph) (60 to 90 kilometers per hour (kph)). The existing right-of-way (ROW) width ranges from 50 to 170 feet (ft) (15.0 to 52.0 meters (m)) except at the Suncoast Parkway interchange where the ROW width is 254 ft (77.4 m). Additionally, a segment of roadway on new alignment, referred to as the Ayers Road Extension, is being proposed from the C.R. 578/Suncoast Parkway interchange to the vicinity of U.S. 41 and Ayers Road (C.R. 576).

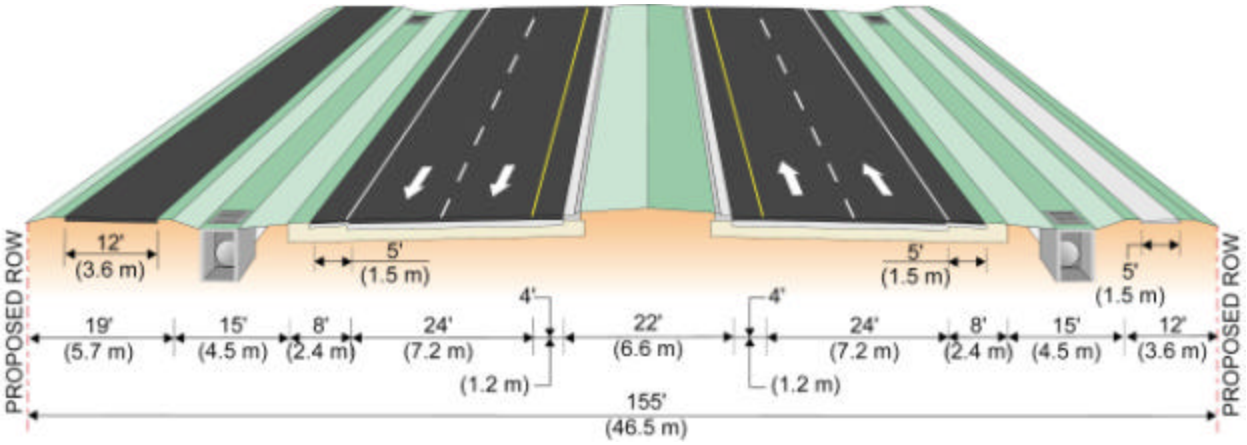
FIGURE 2-1
PROJECT LOCATION MAP



Primary land uses along C.R. 578 include numerous residential subdivisions, individual residences, commercial development, the Spring Hill Regional Hospital, the Suncoast Elementary School, and numerous religious facilities. Land uses along the Ayers Road Extension include the Hernando County Airport, residential subdivisions, individual residences, and agricultural and pasture lands.

The recommended typical section for the proposed improvements is a four-lane divided suburban facility, with a 30 ft (9.0 m) median in which 22 ft (6.6 m) is raised, two 12 ft (3.6 m) travel lanes in each direction, 8 ft (2.4 m) outside shoulders with 5 ft (1.5 m) of the shoulder paved, and 15 ft (4.5 m) drainage swales. A 12 ft (2.6 m) multi-use facility on the north side of the roadway and a 5 ft (1.5 m) sidewalk on the south side of the roadway are also being proposed. The proposed design speed for this typical section is 55 mph (90 kph). This typical section will require a minimum of approximately 155 ft (46.5 m) of ROW.

FIGURE 2-2
SUBURBAN TYPICAL SECTION

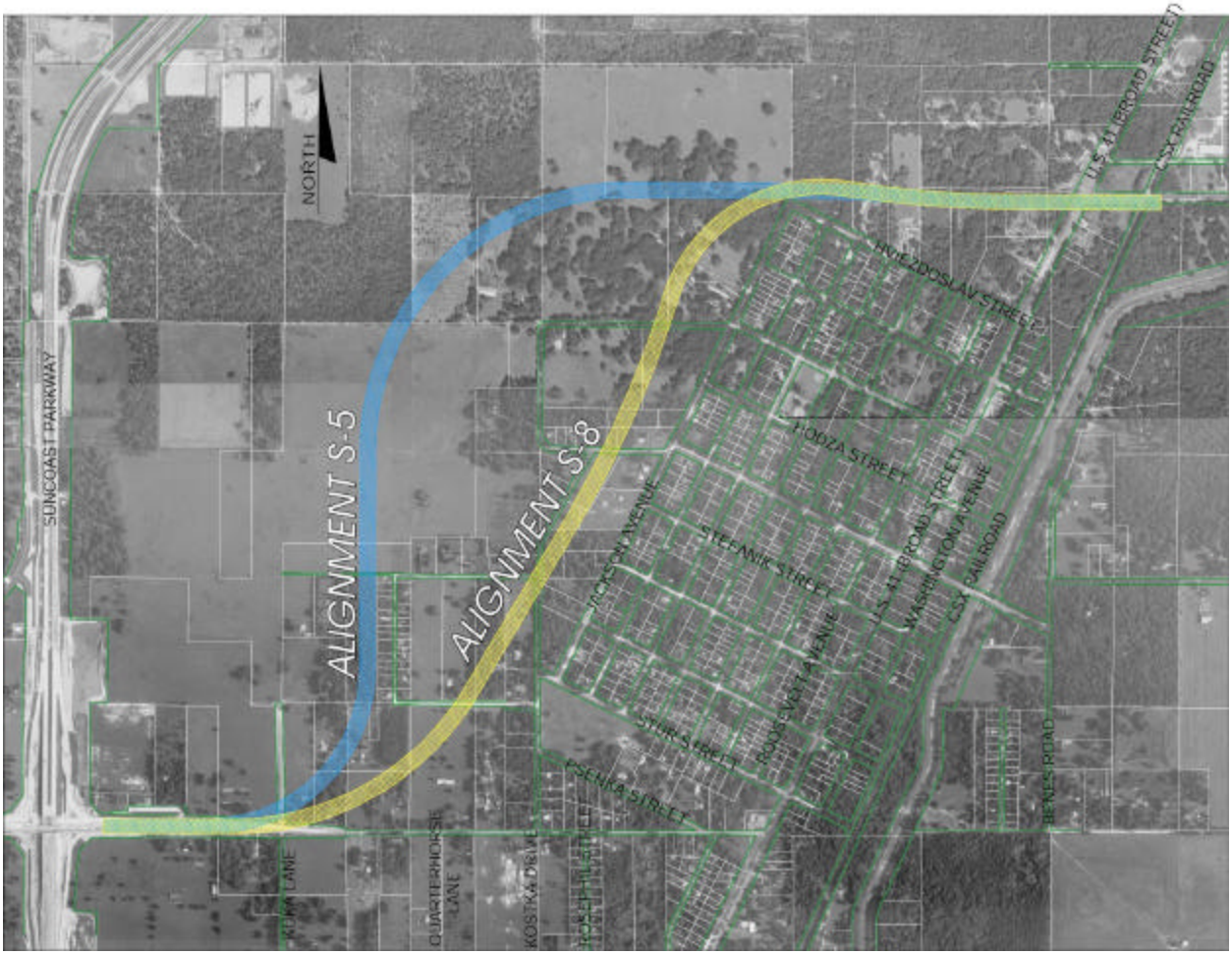


Southern, northern, and centered alignments were developed for the Build Alternative along C.R. 578. For the proposed Ayers Road Extension, two alignments were developed utilizing the suburban typical section (Alignments S-4 and S-5). Following the Public Workshop, recommended alignments were developed to be presented at the Public Hearing.

The recommended alignment for C.R. 578 from U.S. 19 to the Suncoast Parkway consists of the "best fit" of the alternatives developed (see Appendix A).

For the Ayers Road Extension, Alignment S-5 was selected as the recommended alternative. However, it was determined that because of potential cultural resource conflicts with Alignment S-5, further/ongoing cultural resource coordination with the FHWA and the State Historic Preservation Office (SHPO) was needed. Consequently, a new alignment, S-8, was developed. This alignment parallels the Masaryktown community and connects to the existing U.S. 41/Ayers Road intersection as shown in Figure 2-3. Both alignments were presented at the Public Hearing. Based on comments received at the Public Hearing and further consultation with SHPO, Alignment S-5 was selected as the preferred alternative for the Ayers Road Extension.

FIGURE 2-3
AYERS ROAD EXTENSION ALIGNMENTS



Section 3.0
TRAFFIC NOISE EVALUATION CRITERIA

The noise levels presented in this report, predicted and measured, are expressed in decibels (dB) on the "A" scale (dBA). This scale most closely approximates the response characteristics of the human ear to low level sound. All noise levels represent hourly equivalent sound levels (L_{Aeq1h}), values, which theoretically contain the same amount of acoustic energy as an actual time-varying A-weighted sound level over a period of one hour. The study was performed using methodology established by the FHWA in Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772) and the FDOT's PD&E Manual, Chapter 17 (January 2001).

Noise-sensitive sites are defined as properties where frequent human use occurs and where a lowered noise level would be of benefit. Noise abatement measures are considered when future predicted traffic noise levels "approach" or exceed the FHWA's Noise Abatement Criteria (NAC) or when the predicted traffic noise level substantially exceeds the existing noise level. As shown on Table 3-1, the criteria vary according to a property's activity category.

TABLE 3-1
FHWA NOISE ABATEMENT CRITERIA

Activity Category	Description	L_{Aeq1h}
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (Exterior)
C	Developed lands; properties or activities not included in Categories A or B above.	72 (Exterior)
D	Undeveloped lands.	N/A
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (Interior)

Source: 23 CFR 772 (April 1, 2001).

The PD&E Manual defines noise levels that "approach" NAC to mean within 1.0 dBA of the FHWA criteria. A substantial noise increase is defined as an increase of 15.0 dBA or more above the existing noise level as a direct result of the transportation improvement project. If either one of these criteria are met, the FHWA requires that noise abatement measures be considered.

Noise abatement measures considered for the study were traffic management measures (e.g., traffic control devices and reduced speed limits), alignment modifications, property acquisition (predominately unimproved properties) to serve as a buffer to preempt development that would be adversely affected by traffic noise, and construction of noise barriers.

Consideration is given to both the benefits and cost of the abatement measures. It is also necessary to consider the overall social, economic, and environmental effects of the measures. When abatement measures are evaluated, every reasonable effort is made to obtain a substantial noise reduction.

3.1 TRAFFIC NOISE ABATEMENT CONSIDERATIONS

The feasibility and reasonableness factors of each alternative abatement measure were evaluated. The following discusses the feasibility and reasonableness of the factors as outlined in Chapter 17 of the PD&E Manual.

3.1.1 FEASIBILITY FACTORS

Feasibility factors regarding noise abatement measures include issues that relate to the FDOT's ability to actually implement a noise measure. These issues are summarized below:

- Insertion loss (noise reduction) – This is the lowering of a noise level resulting from an abatement measure. A normal design goal is to reduce traffic noise levels 10 dBA or more with a minimum 5.0 dBA reduction in traffic noise required for the sites immediately adjacent to the roadway.

- Constructability – Constructability issues relate only to noise barriers and include an evaluation of factors that may affect the placement of a barrier in a desire location. These factors include terrain, utilities, bridges, and overpasses.

- Maintainability – Maintainability issues also relate only to noise barriers and involve an evaluation of barrier materials and any potential graffiti problems.

- Safety – Safety is a critical factor in determining whether a particular abatement measure is viable. Maintaining a clear recovery zone is critical, as is sight distance. While a noise barrier can be placed adjacent to the shoulder of the road in some locations, safety factors must be considered so that merging traffic can be seen and fire access, emergency, and disabled vehicles can be accommodated.

- Accessibility – Accessibility issues relate mainly to noise barriers and include an evaluation of access to/from local sidewalks and an evaluation of normal routes of travel for pedestrians.

- ROW Requirements – For noise barriers, ROW requirements include the need for access rights (air, light, view, and ingress/egress) from the affected property owners. For roadway realignments, ROW requirements would include any additional ROW purchases that are necessary and related directly to the abatement measure. The costs associated with ROW purchases are also considered in the evaluation.

- Utilities – The effect of noise barriers on utilities such as overhead power lines, underground water, sewer, gas, and oil lines must be considered and can have a significant impact on abatement costs and design options.

- Drainage – Drainage is another factor that generally relates only to noise barriers. Directing water along, under, or away from a noise barrier can be costly and cause construction and maintenance problems.

- Cost – For noise barriers, the cost includes the cost of construction (material and labor) and associated costs less the cost of designing the barrier. The cost also includes the cost of any additional ROW purchases that are necessary and related directly to the abatement measure. For purposes of evaluating the cost of an abatement measure, the FDOT uses a cost per benefited receiver guideline. A benefited receiver is a noise-sensitive site that realizes at least a 5.0 dBA reduction in noise due to an abatement measure. Currently, the FDOT considers a cost of $30,000 per benefited receiver as an upper limit for the use of public funds in providing noise abatement measures. The cost of a noise barrier is calculated using the current cost-per-square-foot factor for cost estimating purposes. Effective October 1, 2000, all FDOT noise studies use a cost factor of $25 per square foot ($ft^2$) for this purpose.

- Other Environmental Impacts – Other environmental impacts can include the effect of a noise barrier on animal migratory paths, bird/wall collisions, groundwater and surface water impacts, wetland destruction, and air quality.

3.1.2 REASONABLENESS FACTORS

Reasonableness factors are evaluated to determine if an abatement measure is a prudent use of public funds and can include:

- Relationship of the future noise levels to the NAC – Do the predicted future noise levels approach, meet, or far surpass the NAC?

- Community Desires – The desires of the community for the abatement measure is very important. In the case of noise barriers, communication with the affected property owners is required to determine their desires regarding the construction of a noise barrier.

- Future Build/No-Build Traffic Noise Levels – If the difference in predicted noise levels between the future Build and No-Build Alternatives is 1.0 to 2.0 dBA, an abatement measure may be considered less reasonable as differences of 1.0 to 2.0 dBA in traffic noise are inaudible to most people.

- Land Use Stability – The consideration of any abatement measure requires an evaluation of the stability of the land uses for the area where the measure is to be proposed. If the noise-sensitive land uses are not likely to remain in the area for a reasonable amount of time, the abatement measure would be considered unreasonable.

- Local Controls – This factor involves a review of local ordinances to determine what measures local zoning and planning agencies have taken to control noise-sensitive land uses adjacent to roadways.

- Views of Local Officials – Consideration is given to the views of local politicians who may be asked to represent the interests of concerned citizens within the area.

- Antiquity – Homes that are constructed after the "Date of Public Knowledge" for a project are given less consideration for abatement as it is generally considered that someone who builds or buys a noise-sensitive site along an existing highway probably did not consider noise a significant factor in choosing the location. A project's "Date of Public Knowledge" is the case when the PD&E Study's environmental document is approved by the FHWA.

- Aesthetics – This refers to the physical appearance of a noise barrier on both the highway side and the affected property side. This factor also incorporates the view of the property owner and local requirements relative to color, height, style, and materials.

- Additional considerations – Additional considerations are those that could seriously affect whether a noise barrier is reasonable at a given location. One example is the effect of a barrier on a nearby hospital heli-pad used for emergency medical transport.

Section 4.0
METHODOLOGY

4.1 COMPUTER MODEL

The noise analysis for the C.R. 578 PD&E Study was performed using the FHWA's computer model for highway traffic noise prediction and analysis - the Traffic Noise Model (TNM-Version 1.0b). The TNM propagates sound energy, in one-third octave bands, between highways and nearby receivers taking the intervening ground's acoustical characteristics and topography, rows of buildings, and heavy vegetation into account.

4.1.1 MODEL VALIDATION

Existing and future noise levels (with and without the proposed improvements) were modeled using the TNM. To ensure that these predictions are as accurate as possible, the computer model was validated using measured noise levels at locations adjacent to the project corridor. Traffic and meteorological data including motor vehicle volumes, vehicle mix, vehicle speeds, and wind/cloud conditions were recorded during each measurement period.

The field measurements for C.R. 578 were conducted in accordance with the FHWA's *Measurement of Highway-Related Noise*. Each field measurement was obtained using a Metrosonics dB 308 Sound Level Dosimeter. The Dosimeter was calibrated before and after each monitoring period.

The measured data was used as input for the TNM to determine if, given the topography and actual site conditions of the area, the computer model could "recreate" the measured levels. Following the FDOT guidelines, a noise prediction model is validated if measured and predicted noise levels are within a tolerance standard of 3.0 dBA.

Table 4-1 presents the field measurements and the validation results for C.R. 578. As shown, the ability of the model to accurately predict noise levels for the project was confirmed as the differences between the measured and modeled traffic noise levels were less than 3.0 dBA. Documentation in support of the validation is provided in the Technical Appendix of this report, under separate cover.

In addition to the validations, ambient field measurements were taken in the area of the new Ayers Road Extension corridor. Three ambient measurements were taken at a location on Korbus Road approximately 0.5 mi (0.15 km) from C.R. 578 Road. The average of the three measurements was 48.6 dBA.

TABLE 4-1
VALIDATION DATA

Location	Measurement Period	Time	Noise Level (dBA)			Valid
			Measured	Modeled	Difference	
C.R. 578, south side, West of Callaway Avenue	1	9:17-9:27 a.m.	69.9	67.8	2.1	Yes
	2	9:36-9:46 a.m.	69.3	67.3	2.0	Yes
C.R. 578, south side, East of Long Lake Drive	1	10:26-10:36 a.m.	68.6	68.7	0.1	Yes
	2	10:40-10:50 a.m.	68.6	69.1	0.5	Yes
	3	10:57-11:07 a.m.	69.3	69.8	0.5	Yes
C.R. 578, north side, West of Preston Hollow Road	1	1:42-1:52 p.m.	69.0	68.2	0.8	Yes
	2	1:56-2:06 p.m.	69.6	67.7	1.9	Yes
	3	2:10-2:20 p.m.	68.3	65.3	3.0	Yes

4.2 TRAFFIC DATA

The existing and forecast traffic data used in the TNM to predict traffic noise levels adjacent to C. R. 578 and the proposed Ayers Road Extension are presented in Table 4-2.

Noise levels are low when traffic volumes are low (Level of Service (LOS) A or B) or when traffic is so congested that movement is slow (LOS D, E, or F). The maximum hourly noise level occurs between these two conditions; therefore, traffic volumes used in the analysis reflect the demand volume (if forecast demand levels meet the LOS A or B criteria) or the design LOS C volumes, whichever is less.

Additionally, as shown in Table 4-2, the vehicle mix changed from the existing condition to the future conditions for the roadway segments between Mariner Boulevard and the Ayers Road Extension along C.R. 578. This is because the traffic model predicted that, in the future, the traffic mix will change to a lesser percentage of trucks as compared to cars in these segments.

TABLE 4-2
TRAFFIC DATA

Roadway Segment	Scenario	Demand/ LOS C	ADT	% K	% D	DHV % MT	DHV % HT	Posted Speed (mph)
C.R. 578 from U.S. 19 to Hamlet Circle	Existing	Demand	15,100	10	58	2	3	45
	Future No-Build	LOS C	19,800					
	Future Build							50
C.R. 578 from Hamlet Circle to Ruskin Avenue	Existing	Demand	15,100	10	58	2	3	45
	Future No-Build	LOS C	19,800					
	Future Build							50
C.R. 578 from Ruskin Avenue to Cobblestone Drive	Existing/ Future No-Build	LOS C	8,600	10	58	2	3	45
	Future Build	LOS C	19,800					50
C.R. 578 from Cobblestone Drive to East Road	Existing/ Future No-Build	LOS C	8,600	10	58	2	3	40
	Future Build	LOS C	19,800					50
C.R. 578 from East Road to Waterfall Drive	Existing/ Future No-Build	LOS C	8,600	10	58	2	3	50
	Future Build	LOS C	19,800					
C.R. 578 from Waterfall Drive to Mariner Boulevard	Existing/ Future No-Build	LOS C	8,600	10	58	2	3	50
	Future Build	LOS C	19,800					
C.R. 578 from Mariner Boulevard to Linden Drive	Existing	LOS C	8,600	10	58	3	4	55
	Future No-Build					2	3	
	Future Build	LOS C	19,800					50
C.R. 578 from Linden Drive to Anderson Snow Road	Existing	LOS C	8,600	10	58	3	4	50
	Future No-Build					2	3	
	Future Build	LOS C	19,800					
C.R. 578 from Anderson Snow Road to Suncoast Parkway	Existing	LOS C	8,600	10	58	3	4	50
	Future No-Build		19,800			2	3	
	Future Build							
C.R. 578 from Suncoast Parkway to Ayers Road Extension	Existing	Demand	7,400	10	58	3	4	50
	Future No-Build	Demand	19,000			2	3	
	Future Build	LOS C	19,800					
Ayers Road Extension from C.R. 578 to Airport entrance**	Future Build	Demand	15,550	10	58	2	3	50
Ayers Road Extension from Airport entrance to U.S. 41**	Future Build	Demand	11,110	10	58	2	3	50

* Existing traffic data provided by URS.

** New alignment, no Existing or No-Build traffic data.

Section 5.0
TRAFFIC NOISE ANALYSIS

5.1 NOISE-SENSITIVE SITES

Two hundred twenty (220) noise-sensitive sites were identified as having the potential to be affected by traffic-related noise adjacent to the C.R. 578 project corridor. Twenty-four (24) noise-sensitive sites were identified adjacent to the Ayers Road Extension. All but 20 are single-family residences. Of the 20 that are not single-family residences, 1 is a common, outside courtyard at an adult assisted-living facility, 12 are apartments, 5 are religious facilities, and 2 are public/private meeting facilities. The noise-sensitive sites are shown on the aerial maps in Appendix A of this report. It is anticipated that 27 of the single-family residences would be relocated as a result of the proposed construction. For the purpose of this analysis, the potential relocations were modeled in the Existing and Future No-Build scenarios, but were not modeled in the Future Build scenario.

The residential sites were evaluated as NAC Activity Category "B." For these sites, noise abatement was considered if the predicted exterior traffic noise levels with the proposed improvements were 66.0 dBA or higher. The religious and public/private meeting facilities were evaluated as Category "E," and abatement measures were considered if the predicted interior noise levels were 51.0 dBA or higher.

There is an existing privacy wall located behind the existing ROW line on private property adjacent to the south side of C.R. 578 from approximately 400 ft (122.0 m) west of Autumn Lake Boulevard to Winding Oaks Boulevard. The wall is 6.0 ft (1.8 m) in height and provides some attenuation of traffic noise. However, due to its proximity to C.R. 578, the privacy wall would be removed as a result of construction of the proposed improvements. For noise analysis purposes, it was assumed that the privacy wall would be replaced "in kind" at a location behind the proposed ROW line.

5.2 TRAFFIC NOISE LEVELS

Tables 5-1 and 5-2 present the predicted existing "worst-case" traffic noise levels and the predicted future traffic noise levels with and without the proposed improvements at the modeled noise-sensitive receivers along C.R. 578 and the Ayers Road Extension, respectively.

5.2.1 C.R. 578

Based on the results of the analysis, the existing exterior traffic noise levels at the residential sites along C.R. 578 range from 49.7 to 68.9 dBA with levels above the NAC at 13 of the single-family residences. The predicted interior traffic noise levels at the religious and public/private meeting facilities range from 30.0 to 41.3 dBA, which are below the NAC.

With the Future (2025) No-Build Alternative, predicted exterior traffic noise levels at the residential sites along C.R. 578 range from 49.7 to 68.6 dBA with levels above the NAC at 16 of the single-family residences. The predicted interior traffic noise levels at the religious and public/private meeting facilities range from 30.0 to 41.3 dBA, which are below the NAC.

With the Future (2025) Build Alternative, predicted exterior traffic noise levels along C.R. 578 at the residential sites range from 53.7 to 69.9 dBA with levels above the NAC at 51 of the single-family residences. The predicted interior traffic noise levels at the religious and public/private meeting facilities range from 30.0 to 47.0 dBA, which are below the NAC. When compared with existing levels, the predicted noise levels for the Build Alternative show that the maximum increase in either exterior or interior noise levels is 10.2 dBA. None of the single-family residences are predicted to experience traffic noise levels that substantially exceed existing levels.

5.2.2 AYERS ROAD EXTENSION

All of the noise-sensitive sites along the Ayers Road Extension are single-family residences. As indicated in Table 5-2, the existing exterior traffic noise levels at the residential sites along the Ayers Road Extension range from 48.6 (the measured background level) to 62.7 dBA with no levels above the NAC.

Since the Ayers Road Extension is a new corridor, the predicted exterior traffic noise levels for the Future (2025) No-Build Alternative varied from the existing noise levels only for those receivers that are in close proximity to the existing C.R. 578 (Sites 1, 2, and 24). Site 1 is predicted to experience noise levels above NAC with the No-Build Alternative.

With the Future (2025) Build Alternative, predicted exterior traffic noise levels at the residential sites range from 49.2 to 67.3 dBA with levels above the NAC at 5 of the single-family residences (Sites 1, 6, 7, 19, and 23). When compared with existing levels, the predicted noise levels for the Build Alternative show that the maximum increase in exterior noise levels would be 17.4 dBA. Three (3) of the single-family residences are predicted to experience traffic noise levels that substantially exceed existing levels.

TABLE 5 -1
PREDICTED TRAFFIC NOISE LEVELS FOR C.R. 578

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	Year 2000 Existing	Year 2025 No-Build	Year 2025 Build	Difference Between Build and Existing	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
Oakwood Village Apartments								
1	6	Apartment (1st floor)	61.3	61.3	64.6	3.3		4
2	6	Apartment (1st floor)	62.8	62.8	65.1	2.3		4
Arlington Woods Neighborhood								
3	9	SF Residence	51.8	51.9	55.8	4.0		5
Heritage Pines Neighborhood								
4	1	SF Residence	52.7	53.0	57.1	4.4		5
5	1	SF Residence	53.6	54.6	56.9	3.3		5
Residence 930 ft west of Orange Hill Drive								
6	1	SF Residence	51.0	51.1	58.4	7.4		7
Rolling Oak Estates Neighborhood								
7	1	SF Residence	62.8	62.8	NA	NA		8
8	1	SF Residence	55.4	55.4	63.2	7.8		8
9	1	SF Residence	61.6	61.6	NA	NA		8
10	1	SF Residence	55.5	55.5	64.1	8.6		8
11	1	SF Residence	54.8	54.8	61.9	7.1		8
12	1	SF Residence	64.1	64.1	NA	NA		8
13	1	SF Residence	53.7	53.7	60.3	6.6		8
14	1	SF Residence	61.9	61.9	NA	NA		8
15	1	SF Residence	54.1	54.1	62.0	7.9		8
Mobile Home Park at East Road								
16a	1	SF Residence	51.0	51.0	58.5	7.5		8
16b	1	SF Residence	53.8	53.8	59.8	6.0		8
17	1	SF Residence	52.8	52.8	58.9	6.1		9
Residences between Long Lake Road and Landsford Drive								
18	1	SF Residence	53.8	53.8	59.2	5.4		9
19	1	SF Residence	51.0	51.0	55.7	4.7		9
Residence 260 ft east of Landsford Drive								
20	1	SF Residence	49.7	49.7	55.2	5.5		9
"The Father's House" Church								
21	1	Church (interior noise level)	38.9	38.9	47.0	8.1		9
Neighborhood from Autumn Lake Boulevard to Winding Oaks Boulevard								
22	1	SF Residence	53.8	53.8	59.1	5.3		10
23	1	SF Residence	57.6	57.6	64.1	6.5		10
24	1	SF Residence	57.8	57.8	64.3	6.5		10
25	1	SF Residence	56.7	56.7	62.3	5.6		10
26	1	SF Residence	54.4	54.4	59.3	4.9		10
27	1	SF Residence	54.9	54.9	60.2	5.3		10
28	1	SF Residence	55.5	55.5	61.2	5.7		10

TABLE 5-1 (CONTINUED)
PREDICTED TRAFFIC NOISE LEVELS FOR C.R. 578

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	Year 2000 Existing	Year 2025 No-Build	Year 2025 Build	Difference Between Build and Existing	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
New Hope Baptist Church								
29	1	Church (interior noise level)	41.3	41.3	NA	NA		10
Residence at Jackson Street								
30	1	SF Residence	50.5	50.5	55.6	5.1		12
Residence at Furman Drive								
31	1	SF Residence	50.8	50.8	54.6	3.8		12
Residence 450 ft west of Monteverde Drive								
32	1	SF Residence	51.8	51.1	54.2	2.4		14
Residences between Runyon Drive and Drayton Street								
33	1	SF Residence	54.4	53.7	58.0	3.6		15
34	1	SF Residence	51.6	50.9	53.7	2.1		15
David G Snyder VFW								
35	1	Public/Private Meeting Room (interior noise level)	38.6	38.0	41.4	2.8		16
Residences between Alexson Street and 1.25 mi east of Alexson Street								
36	1	SF Residence	63.7	63.1	65.5	1.8		17
37	1	SF Residence	66.1	65.6	67.9	1.8	Yes	17
38	1	SF Residence	64.2	63.6	65.8	1.6		17
39	1	SF Residence	62.5	61.9	65.6	3.1		18
40	1	SF Residence	59.6	59.0	62.6	3.0		18
Hosanna Church								
41	1	Church (interior noise level)	39.2	38.5	42.6	3.4		19
Residences between Suncoast Parkway and 0.5 mi west of Suncoast Parkway								
42	1	SF Residence	63.1	64.8	64.9	1.8		20
43	1	SF Residence	61.3	63.5	63.7	2.4		20
44	1	SF Residence	65.3	67.1	67.3	2.0	Yes	20
Connerstone Christian Church								
45	1	Church (interior noise level)	34.7	37.5	37.6	2.9		20
Slovene American Club								
46	1	Public/Private Meeting Room (interior noise level)	30*	30*	37.0	7.0		19
Residences between Sparks Road and Linden Drive								
47	1	SF Residence	61.8	61.4	NA	NA		19
48	1	SF Residence	63.6	63.2	NA	NA		19
49	1	SF Residence	52.5	51.9	59.3	6.8		18
Topics RV Community								
50	1	SF Residence	62.5	62.1	NA	NA		18
51	1	SF Residence	61.6	61.3	NA	NA		18
52	1	SF Residence	62.0	61.6	NA	NA		18
53	1	SF Residence	56.9	56.5	64.0	7.1		18
54	1	SF Residence	56.8	56.3	64.1	7.3		18
55	1	SF Residence	56.4	55.9	62.1	5.7		18
56	1	SF Residence	52.4	51.9	59.9	7.5		17

TABLE 5-1 (CONTINUED)
PREDICTED TRAFFIC NOISE LEVELS FOR C.R. 578

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	Year 2000 Existing	Year 2025 No-Build	Year 2025 Build	Difference Between Build and Existing	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
Neighborhood at Preston Hollow Road								
57	1	SF Residence	55.2	54.7	62.9	7.7		17
58	2	SF Residence	54.5	54.0	62.7	8.2		17
59	1	SF Residence	54.4	53.9	61.5	7.1		17
Residences 800 ft west of Preston Hollow Road								
60	1	SF Residence	66.0	65.6	NA	NA		17
61	1	SF Residence	64.7	64.4	NA	NA		17
Residences between Preston Hollow Road and 0.9 mi west of Preston Hollow Road								
62	1	SF Residence	68.9	68.6	NA	NA		16
63	1	SF Residence	58.8	58.4	64.4	5.6		16
Crown Pointe Commercial Living Quarters								
64	1	MF Residence (exterior noise level)	59.6	55.7	62.2	2.6		15
Church at Spring Time Street								
65	1	Church (interior noise level)	30*	30*	35.3	5.3		13
Residence 500 ft east of Suncoast Boulevard								
66	1	SF Residence	59.2	59.2	67.7	8.5		11
Neighborhood from Oak Lake Drive to Cobblestone Drive								
67	1	SF Residence	54.5	54.5	61.3	6.8		10
68	1	SF Residence	64.6	64.6	67.8	3.2	Yes	10
69	1	SF Residence	60.3	60.3	63.7	3.4		10
70	1	SF Residence	64.4	64.4	67.7	3.3	Yes	10
71	1	SF Residence	65.0	65.0	67.9	2.9	Yes	10
72	1	SF Residence	58.5	58.5	62.4	3.9		10
73	1	SF Residence	67.6	67.6	68.7	1.1	Yes	10
74	1	SF Residence	66.8	66.8	68.5	1.7	Yes	10
75	1	SF Residence	60.3	60.3	63.0	2.7		10
76	1	SF Residence	58.5	58.5	61.6	3.1		10
77	2	SF Residence	57.5	57.5	60.7	3.2		10
78	1	SF Residence	58.1	58.1	61.6	3.5		10
79	1	SF Residence	64.9	64.9	67.8	2.9	Yes	10
80	1	SF Residence	59.4	59.4	61.5	2.1		10
81	1	SF Residence	60.4	60.4	63.3	2.9		10
82	1	SF Residence	55.0	55.0	59.4	4.4		10
83	1	SF Residence	66.3	66.3	69.2	2.9	Yes	10
84	1	SF Residence	54.3	54.3	59.2	4.8		10
85	1	SF Residence	57.2	57.2	61.1	3.9		10
86	1	SF Residence	61.3	61.3	64.1	2.9		9
87	1	SF Residence	58.3	58.3	62.0	3.7		9
88	1	SF Residence	61.5	61.5	64.9	3.4		9
89	1	SF Residence	57.7	57.7	61.4	3.7		9
90	1	SF Residence	62.8	62.8	66.0	3.2	Yes	9
91	1	SF Residence	56.7	56.7	60.8	4.1		9
92	1	SF Residence	64.1	64.1	67.0	2.9	Yes	9
93	1	SF Residence	58.3	58.3	62.2	3.9		9
94	1	SF Residence	64.7	64.7	66.8	2.1	Yes	9

TABLE 5-1 (CONTINUED)
PREDICTED TRAFFIC NOISE LEVELS FOR C.R. 578

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	Year 2000 Existing	Year 2025 No-Build	Year 2025 Build	Difference Between Build and Existing	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
95	1	SF Residence	57.1	57.1	61.6	4.5		9
96	1	SF Residence	57.4	57.4	61.4	4.0		9
97	1	SF Residence	59.4	59.4	63.0	3.6		9
98	1	SF Residence	60.0	60.0	64.5	4.5		8
99	1	SF Residence	65.0	65.0	NA	NA		8
100	1	SF Residence	57.6	57.6	59.3	1.7		8
101	1	SF Residence	58.2	58.2	64.0	5.8		8
102	1	SF Residence	57.4	57.4	60.1	2.7		8
103	1	SF Residence	62.0	62.0	66.9	4.9	Yes	8
Neighborhood from Canby Circle to Austin Avenue								
104	1	SF Residence	58.1	58.1	59.9	1.8		8
105	1	SF Residence	55.1	55.2	58.2	3.1		8
106	1	SF Residence	65.6	65.6	69.1	3.5	Yes	8
107	1	SF Residence	65.4	65.4	69.2	3.8	Yes	8
108	1	SF Residence	64.3	64.3	68.6	4.3	Yes	8
109	1	SF Residence	65.4	65.4	69.5	4.1	Yes	8
110	1	SF Residence	57.8	57.8	60.6	2.8		8
111	1	SF Residence	63.4	63.4	66.5	3.1	Yes	8
112	1	SF Residence	57.8	57.8	60.8	3.0		8
113	1	SF Residence	54.4	54.4	61.1	6.7		7
114	1	SF Residence	55.4	55.4	61.9	6.5		7
115	1	SF Residence	55.0	55.0	61.1	6.1		7
116	1	SF Residence	59.0	59.0	64.0	5.0		7
117	1	SF Residence	58.2	58.2	64.5	6.3		7
118	1	SF Residence	57.5	57.5	63.8	6.3		7
119	1	SF Residence	66.1	66.1	69.9	3.8	Yes	7
120	1	SF Residence	64.4	64.4	69.2	4.8	Yes	7
121	1	SF Residence	59.4	59.4	64.5	5.1		7
122	1	SF Residence	64.7	64.7	69.2	4.5	Yes	7
123	1	SF Residence	59.3	59.3	61.4	2.1		7
124	1	SF Residence	63.2	63.2	NA	NA		7
125	1	SF Residence	55.5	55.6	62.6	7.1		7
126	1	SF Residence	66.8	66.8	NA	NA		7
127	1	SF Residence	59.5	59.5	65.8	6.3		7
128	1	SF Residence	63.2	63.2	67.4	4.2	Yes	7
129	1	SF Residence	56.2	56.2	61.9	5.7		7
130	1	SF Residence	60.9	60.9	65.3	4.4		7
131	1	SF Residence	62.0	62.0	66.5	4.5	Yes	7
132	1	SF Residence	57.4	57.4	63.6	6.2		7
133	1	SF Residence	64.2	64.2	69.4	5.2	Yes	7
134	1	SF Residence	63.3	63.3	67.9	4.6	Yes	6
135	1	SF Residence	59.7	59.7	65.0	5.3		6
136	1	SF Residence	63.7	63.8	67.9	4.2	Yes	6
137	2	SF Residence	63.9	64.0	68.3	4.4	Yes	6
138	1	SF Residence	57.4	57.5	62.5	5.1		6
139	1	SF Residence	57.4	57.5	63.0	5.6		6
140	2	SF Residence	63.7	63.8	69.1	5.4	Yes	6

TABLE 5-1 (CONTINUED)
PREDICTED TRAFFIC NOISE LEVELS FOR C.R. 578

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	Year 2000 Existing	Year 2025 No-Build	Year 2025 Build	Difference Between Build and Existing	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
141	1	SF Residence	61.5	61.6	65.8	4.3		6
142	1	SF Residence	57.8	58.3	62.5	4.7		6
143	1	SF Residence	57.9	58.6	62.6	4.7		6
144	2	SF Residence	65.8	66.7	67.7	1.9	Yes	6
145	1	SF Residence	58.4	59.3	61.7	3.3		6
146	1	SF Residence	66.7	67.8	68.1	1.4	Yes	6
147	1	SF Residence	60.5	61.6	62.9	2.4		6
148	1	SF Residence	66.8	67.9	68.2	1.4	Yes	6
149	1	SF Residence	59.7	60.8	62.2	2.5		6
150	1	SF Residence	64.9	66.1	66.5	1.6	Yes	6
151	1	SF Residence	58.5	59.7	62.6	4.1		6
152	1	SF Residence	59.8	60.9	64.4	4.6		6
153	1	SF Residence	61.0	62.2	67.2	6.2	Yes	6
154	1	SF Residence	62.0	63.2	66.7	4.7	Yes	5
155	1	SF Residence	67.1	68.3	69.2	2.1	Yes	5
156	1	SF Residence	59.4	60.5	63.9	4.5		5
157	1	SF Residence	58.4	59.6	61.8	3.4		5
158	1	SF Residence	65.8	66.9	68.2	2.4	Yes	5
159	1	SF Residence	63.1	64.2	65.5	2.4		5
160	1	SF Residence	65.0	66.0	67.9	2.9	Yes	5
161	1	SF Residence	59.5	60.5	63.0	3.5		5
162	1	SF Residence	63.9	64.3	68.5	4.6	Yes	5
163	1	SF Residence	59.0	59.6	63.7	4.7		5
164	1	SF Residence	64.4	64.6	68.2	3.8	Yes	5
165	1	SF Residence	64.6	64.7	69.2	4.6	Yes	5
166	1	SF Residence	57.9	58.1	64.0	6.1		5
167	1	SF Residence	63.5	63.5	69.6	6.1	Yes	5
168	1	SF Residence	57.7	57.8	62.3	4.6		5
169	1	SF Residence	64.8	64.8	NA	NA		5
170	1	SF Residence	60.1	60.1	66.0	5.9	Yes	5
171	1	SF Residence	55.9	56.1	59.3	3.4		5
172	1	SF Residence	65.0	65.1	NA	NA		5
173	1	SF Residence	59.7	59.8	66.6	6.9	Yes	5
174	1	SF Residence	56.3	56.4	63.8	7.5		5
175	1	SF Residence	64.5	64.5	NA	NA		5
176	1	SF Residence	60.5	60.5	68.1	7.6	Yes	5
177	1	SF Residence	56.8	56.9	64.9	8.1		5
178	1	SF Residence	65.2	65.2	NA	NA		5
179	1	SF Residence	60.3	60.3	67.2	6.9	Yes	5
180	1	SF Residence	57.2	57.3	64.6	7.4		5
181	1	SF Residence	65.0	65.1	NA	NA		5
182	1	SF Residence	58.3	58.3	66.1	7.8	Yes	5
183	1	SF Residence	64.7	64.7	NA	NA		5
184	1	SF Residence	57.1	57.1	65.2	8.1		5
185	1	SF Residence	56.3	56.3	65.3	9.0		5
186	1	SF Residence	51.9	52.0	60.9	9.0		5
187	1	SF Residence	65.7	65.7	NA	NA		4

TABLE 5-1 (CONTINUED)
PREDICTED TRAFFIC NOISE LEVELS FOR C.R. 578

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	Year 2000 Existing	Year 2025 No-Build	Year 2025 Build	Difference Between Build and Existing	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
188	1	SF Residence	56.1	56.1	65.5	9.4		4
189	1	SF Residence	66.1	66.1	NA	NA		4
190	1	SF Residence	56.2	56.2	64.7	8.5		4
191	1	SF Residence	66.1	66.1	NA	NA		4
192	1	SF Residence	56.6	56.6	65.8	9.2		4
193	1	SF Residence	63.5	63.5	NA	NA		4
194	1	SF Residence	63.8	63.8	NA	NA		4
195	1	SF Residence	57.6	57.6	67.8	10.2	Yes	4
196	1	SF Residence	55.1	55.1	63.6	8.5		4
Total	**220**						**51**	

NA Residence is anticipated to be relocated as a result of construction of the project.

* Interior noise levels were reported as 30.0 dBA in cases where the model predicted a noise level below 30.0 dBA.

TABLE 5-2
PREDICTED TRAFFIC NOISE LEVELS FOR AYERS ROAD EXTENSION

Receiver ID #	# of Noise Sensitive Sites Represented	Type of Noise Sensitive Site	LA eq1h (dBA)			Difference Between Existing and Build	Approaches, Meets, Exceeds NAC?	Aerial Sheet #
			Existing	2025 No-Build	2025 Build			
1	1	SF Residence	62.7	67.6	67.3	4.6	Yes	21
2	1	SF Residence	54.2	57.9	56.4	2.2		22
3	1	SF Residence	48.6*	48.6*	63.1	14.5		23
4	1	SF Residence	48.6*	48.6*	56.8	8.2		23
5	1	SF Residence	48.6*	48.6*	57.5	8.9		23
6	1	SF Residence	48.6*	48.6*	66.0	17.4	Yes**	23
7	1	SF Residence	48.6*	48.6*	64.2	15.6	Yes**	23
8	1	SF Residence	48.6*	48.6*	58.1	9.5		23
9	1	SF Residence	48.6*	48.6*	56.4	7.8		26
10	1	SF Residence	48.6*	48.6*	55.1	6.5		26
11	1	SF Residence	48.6*	48.6*	52.2	3.6		26
12	1	SF Residence	48.6*	48.6*	58.8	10.2		26
13	1	SF Residence	48.6*	48.6*	60.4	11.8		26
14	1	SF Residence	48.6*	48.6*	56.5	7.9		26
15	1	SF Residence	48.6*	48.6*	50.3	1.7		27
16	1	SF Residence	48.6*	48.6*	49.5	0.9		27
17	1	SF Residence	48.6*	48.6*	49.2	0.6		27
18	1	SF Residence	48.6*	48.6*	55.5	6.9		27
19	1	SF Residence	48.6*	48.6*	64.2	15.6	Yes**	26
20	1	SF Residence	48.6*	48.6*	58.2	9.6		23
21	1	SF Residence	48.6*	48.6*	53.9	5.3		23
22	1	SF Residence	48.6*	48.6*	57.7	9.1		23
23	1	SF Residence	48.6*	48.6*	64.4	15.8	Yes**	22
24	1	SF Residence	53.5	58.8	60.0	6.5		21
Total	**24**						**5**	

* Measured background noise level.
** Predicted traffic noise levels substantially exceed the existing (background) noise level of 48.6 dBA.

Section 6.0
EVALUATION OF ABATEMENT ALTERNATIVES

According to 23 CFR, Part 772, the FHWA requires that noise abatement measures be evaluated if noise levels at a noise-sensitive site are predicted to approach or exceed the NAC. Abatement measures include traffic management, alignment modifications, property acquisition, and noise barriers. The following discusses the feasibility (engineering considerations) and reasonableness (amount of noise reduction provided, number of noise-sensitive sites benefited, absolute noise levels, cost, etc.) of each measure.

6.1 TRAFFIC MANAGEMENT

Traffic management measures that limit motor vehicle speeds and reduce volumes can be effective noise mitigation measures. However, these measures also negate a project's ability to accommodate forecast traffic volumes. For example, if the posted speed on C.R. 578 and the Ayers Road Extension were reduced, the capacity of the roadway to handle the forecast motor vehicle demand would also be reduced. Therefore, reducing traffic speeds and/or traffic volumes is inconsistent with the goal of improving the ability of the roadway to handle the forecast volumes. Although feasible, traffic management measures are not considered a reasonable noise mitigation measure for the project.

6.2 ALIGNMENT MODIFICATIONS

The proposed alignment seeks to minimize the need for additional ROW within the project corridor. Although feasible, a shift in the roadway alignment would not provide a positive benefit, since noise-sensitive sites are located both north and south of the roadway. Along the Ayers Road Extension, the 2 alternative alignments were developed to minimize environmental, physical (e.g., traffic noise), and social effects that may occur as a result of the proposed construction. Therefore, an alternative roadway alignment is not considered a reasonable noise mitigation measure for the project.

6.3 PROPERTY ACQUISITION

To be considered reasonable, FDOT guidelines suggest that the amount of public funds to be used for noise abatement should not exceed $30,000 per benefited receiver. The cost of property and homes within this area likely exceed this guideline; therefore, property acquisition is not considered a reasonable abatement measure.

6.4 NOISE BARRIER ANALYSIS

To be effective in reducing traffic noise impacts, a noise barrier must be relatively long, continuous (with no intermittent openings), and sufficiently high to provide a reasonable reduction in noise levels. To be considered a reasonable traffic noise abatement measure, the FDOT requires that a noise barrier be predicted to provide minimum 5.0 dBA insertion loss (reduction in noise) with a design goal of 10.0 dBA or more being desirable.

Noise barriers must also be economically reasonable. As previously stated, the FDOT established a cost guideline that indicates the funds to be expended for noise abatement should not exceed $30,000 per benefited receiver (a benefited receiver is a site that receives at least a 5.0 dBA reduction in noise from the barrier). The current estimated cost to construct a noise barrier (materials and labor) is $25.00 per ft^2.

During the year 2025 with the proposed improvements (the Build Alternative), noise levels are predicted to increase substantially from existing levels or approach/exceed the NAC at 50 sites along C.R. 578 and 5 sites along the Ayers Road Extension. The following discusses the feasibility and reasonableness of providing noise barriers for the affected noise-sensitive sites. A total of 24 noise barriers were evaluated. The barriers were limited in length because of required property access (driveways), intersecting roadways, and property line and line-of-sight limitations. It should be noted that a barrier was not evaluated for 2 of the affected sites, Receivers 153 and 154, since they are second row receivers with vacant residential lots between them and the roadway.

As discussed previously in Section 4.2, the automobile volume is predicted to increase at a faster rate than the truck volume in the segments between Mariner Boulevard/Shady Hills Road and the Ayers Road Extension. Because of this, the Future No-Build levels for various receivers between Mariner Boulevard and the Ayers Road Extension are predicted to be lower than the existing noise levels.

For the purpose of presenting the results of the barrier analysis, the project has been divided into 2 areas. Area 1 consists of C.R. 578 between U.S. 19 and the Suncoast Parkway. Area 2 is the proposed Ayers Road Extension from the Suncoast Parkway to U.S. 41.

Area 1

Fifty (50) of the affected noise-sensitive sites are located on C.R. 578 between U.S. 19 and the Suncoast Parkway. All of the sites are single-family residences. A total of 20 barriers were evaluated for Area 1.

Barrier S1

Barrier S1 was analyzed for 1 affected single-family residence on the south side of C.R. 578 at Preston Hollow Road (Receiver 37). A noise barrier consisting of 2 segments due to driveway access with a cumulative length of 310 ft (94.5 m) was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss could not be achieved with the barrier. Therefore, a noise barrier is not a feasible noise mitigation measure to reduce predicted traffic noise for the residence.

Barrier S2

Barrier S2 was analyzed for 1 affected single-family residence on the south side of C.R. 578 at Anderson Snow Road (Receiver 44). A noise barrier with a cumulative length of 401 ft (122.2 m) was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved at Receiver 44 with a barrier height of 12 ft (3.6 m). The cost per benefited receiver is $120,300, which exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for this residence. Barrier heights from 14 to 22 ft (4.2 to 6.6 m) were also evaluated. At these heights, Receivers 44 and 43 were predicted to receive a 5.0 to 6.0 dBA reduction. The cost per benefited receiver ranged between $70,175 and $110,275, which also exceeds the FDOT cost reasonable guideline.

Barrier N1

Barrier N1 was analyzed for 1 affected single-family residence on the north side of C.R. 578 east of Suncoast Boulevard (Receiver 66). A noise barrier consisting of 2 segments due to driveway access with a cumulative length of 318 ft (97.0 m) was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved with a barrier height of 22 ft (6.6 m). The cost per benefited receiver at this height ($174,900) exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for the residence.

Barrier N2

Barrier N2 was evaluated for the 5 affected residences in the neighborhood on the north side of C.R. 578 between Oak Lake Drive and Waterfall Drive (Receivers 68, 70, 71, 73, and 74). A noise barrier consisting of 3 segments due to intersecting roadways and a cumulative length of 640 ft (195.0 m) was evaluated for the residences. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved for 4 of the affected residences with a barrier height of 20 to 22 ft (6.1 to 6.6 m). The cost per benefited receiver at these heights ($80,000 to $88,000) exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for the residences.

Barriers N3 through N16 and N18

Fifteen (15) barriers were evaluated for 29 affected single-family residences on the north side of C.R. 578 between Waterfall Drive and Dartmouth Avenue and between Austin Avenue and U.S. 19 (Receivers 79, 83, 90, 92, 94, 103, 106-109, 111, 119, 120, 122, 128, 131, 133, 134, 136, 137, 140 (2 residences), 144 (2 residences), 146, 148, 150, 155, and 195). The heights of the barriers were evaluated from 8 to 22 ft (2.4 to 6.6 m). Due to intervening driveways and property lines, the minimum required 5.0 dBA insertion loss could not be achieved with any of the barriers. Therefore, noise barriers are not a feasible noise mitigation measure to reduce predicted traffic noise for these residences.

Barrier N17

Barrier N17 was analyzed for 11 affected single-family residences in the neighborhood on the north side of C.R. 578 between Dartmouth Avenue and Dandelion Court (Receivers 158, 160, 162, 164, 165, 167, 170, 173, 176, 179, and 182). A noise barrier consisting of 6 segments due to intersecting roadways and a cumulative length of 1,386 ft (422.5 m) was evaluated for the residences. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved for 5 of the 11 residences with barrier heights of 20 to 22 ft (6.1 to 6.6 m). The cost per benefited receiver at these heights ($138,600 to $152,400) exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for the residences.

Area 2

Five (5) of the affected noise-sensitive sites are located on the Ayers Road Extension from the Suncoast Parkway to U.S. 41. One (1) of the 5 affected noise-sensitive sites is a mobile home. The remaining sites are single-family residences. Four (4) barriers were evaluated for Area 2.

Barrier S5S1

Barrier S5S1 was analyzed for 1 affected single-family residence on the south side of C.R. 578 east of Suncoast Parkway (Receiver 1). A noise barrier 532 ft (162.0 m) in length was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved for the residence with barrier heights of 10 to 22 ft (3.0 to 6.6 m). The cost per benefited receiver at these heights ($133,000 to $292,600) exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for the residence.

Barrier S5S2

Barrier S5S2 was analyzed for 2 affected single-family residences, one of which is a mobile home, on the south side of the proposed Ayers Road Extension between Boynton Road and Korbus Road (Receivers 6 and 7). A noise barrier 630 ft (192.0 m) in length was evaluated for the residences. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved for 1 of the residences with barrier heights of 14 to 22 ft (4.2 to 6.6 m). The cost per benefited receiver at these heights ($220,500 to $346,500) exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for this residence.

Barrier S5N1

Barrier S5N1 was analyzed for 1 affected single-family residence on the north side of the proposed Ayers Road Extension north of the Hviezdoslav Street and Monroe Avenue intersection (Receiver 19). A noise barrier 421 ft (128.3 m) in length was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss was predicted to be achieved for the residence with barrier heights of 14 to 22 ft (4.2 to 6.6 m). The cost per benefited receiver at these heights ($147,350 to

$231,550) exceeds the FDOT cost reasonable guideline of $30,000 per benefited receiver. Although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for this residence.

Barrier S5N2

Barrier S5N2 was analyzed for 1 affected single-family residence on the north side of C.R. 578 east of Suncoast Parkway (Receiver 23). A noise barrier 284 ft (86.6 m) in length was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft (2.4 to 6.6 m). The minimum required 5.0 dBA insertion loss could not be achieved with the barrier. Therefore, a noise barrier is not a feasible noise mitigation measure to reduce predicted traffic noise for the residence.

6.5 CONCLUSIONS

Although feasible, traffic management, alternative roadway alignments, and property acquisition were determined to be unreasonable methods to reduce the predicted traffic noise impacts for the affected sites. Noise barriers were also evaluated to determine if barriers would be a feasible and reasonable noise abatement measure. Twenty-four (24) barriers were analyzed for the affected noise-sensitive sites. The results of the analysis indicate that none of the barriers are reasonable and feasible to reduce predicted traffic noise levels. Depending on the location, this finding is based on one or more of the following:

- The minimum required insertion loss would not be provided by a noise barrier.
- The cost of a barrier would exceed the FDOT's cost reasonable guideline.

Notably, in most cases, the barriers were determined to be unreasonable or unfeasible due to limitations on barrier length because of required property access (driveways), intersecting roadways, and property line and line-of-sight limitations.

Section 7.0
CONSTRUCTION NOISE

During the construction phase of the proposed project, short-term noise may occur in the immediate vicinity of the project corridor. Trucks, earth moving equipment, pumps, and generators are construction noise and vibration sources. The effects will be controlled in accordance with FDOT's Standard Specifications for Road and Bridge Construction.

Section 8.0
COORDINATION WITH LOCAL OFFICIALS

In accordance with 23 CFR, Part 772, FDOT will provide local officials with information, such as the 66.0 dBA noise contours, to aid local governments in planning future development along the project corridor, and to minimize future traffic noise effects. Coordination with local officials is ongoing and once finalized, a copy of this report will be provided to appropriate local planning authorities.

Section 9.0
NOISE CONTOURS

Land uses such as residences, motels, schools, churches, recreation areas, and parks are considered incompatible with highway noise levels above 66.0 dBA. In order to reduce the possibility of additional noise related impacts, noise contours were developed for the future improved roadway facility. These noise contours delineate the distance from the improved roadway edge of pavement where the FDOT and FHWA Activity Category B NAC is expected to occur in the year 2025 with the C.R. 578 improvements.

As shown in Table 9-1, a traffic noise level of 66.0 dBA or more is predicted to extend 60 to 90 ft (18 to 27.4 m) from the improved roadway edge-of-pavement for County Line Road and the proposed Ayers Road Extension.

TABLE 9-1
66 dBA NOISE CONTOUR

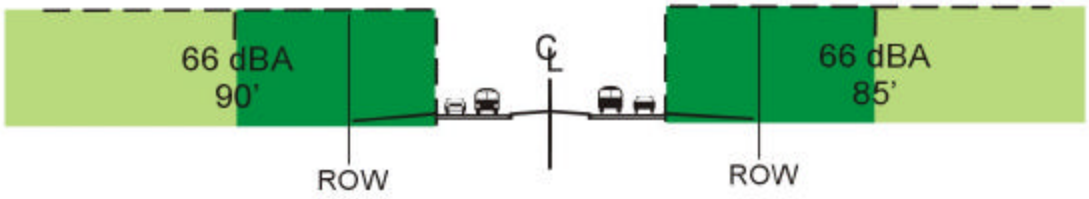
Roadway Segment	Distance to 66 dBA* from Edge-of-Pavement (ft / m)
North Side of County Line Road from U.S. 19 to Ayers Road Extension	90.0 / 27.4
South Side of County Line Road from U.S. 19 to Ayers Road Extension	85.0 / 25.9
North Side of Ayers Road Extension from County Line Road to Airport Entrance	75.0 / 22.9
South Side of Ayers Road Extension from County Line Road to Airport Entrance	75.0 / 22.9
North Side of Ayers Road Extension from Airport Entrance to U.S. 41	60.0 / 18.0
South Side of Ayers Road Extension from Airport Entrance to U.S. 41	60.0 / 18.0

* Distances do not reflect any reduction in noise levels that would result from existing structures (shielding).

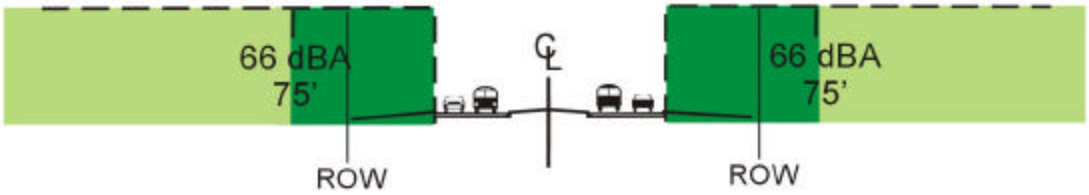
Figure 9-1 illustrates the noise contours.

FIGURE 9-1
NOISE CONTOURS

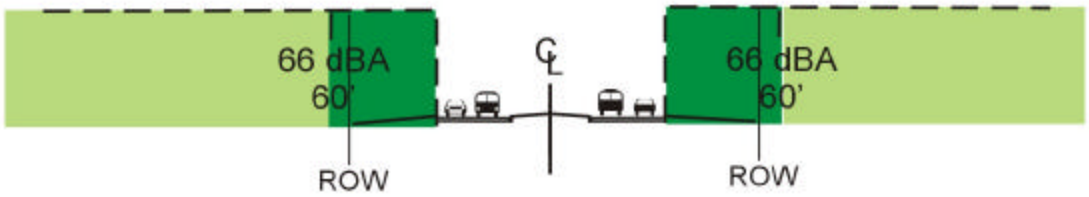
C.R. 578 From U.S. 19 To Ayers Road Extension



Ayers Road Extension From C.R. 578 to Airport Entrance (Proposed)



Ayers Road Extension From Airport Entrance (Proposed) to U.S. 41



* The distance to the 66dBA noise isopleth does not reflect any reduction in noise levels that would result from sheilding provided by existing structures.

* The distance to the ROW varies.

Section 10.0
REFERENCES

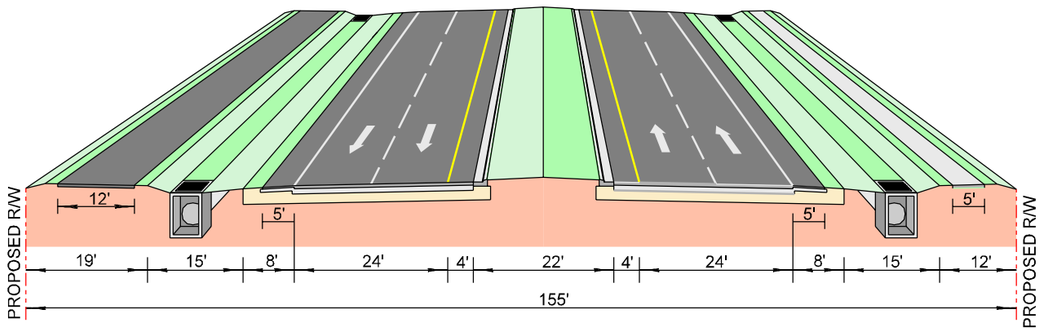
23 CFR 772 (April 1, 2001). Federal Highway Administration, U.S. Department of Transportation, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." *U.S. Code of Federal Regulations.*

Federal Highway Administration (May 1996). "Measurement of Highway Related Noise."

Florida Department of Transportation (January 10. 2001). *Project Development and Environment Manual,* Part 2, Chapter 17 – Noise.

Florida Department of Transportation (2000). *Standard Specifications for Road and Bridge Construction*.

APPENDIX A
PROJECT AERIALS



SUBURBAN TYPICAL SECTION
From U.S. 19 to U.S. 41 (S.R. 45)

LEGEND

- EXISTING RIGHT-OF-WAY
- EXISTING L/A RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- PROPERTY LINES
- PROPOSED EDGE OF PAVEMENT
- 50 — CENTERLINE OF CONSTRUCTION
- 83 — NOISE RECEPTOR SITE
- 83 — NOISE RECEPTOR SITE / RESIDENTIAL RELOCATION
- N2F — NOISE BARRIER WALL
- PRIVACY WALL — PRIVACY WALL
- 5' SIDEWALK
- 12' MULTI-USE FACILITY

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
PROJECT DEVELOPMENT & ENVIRONMENT STUDY
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)

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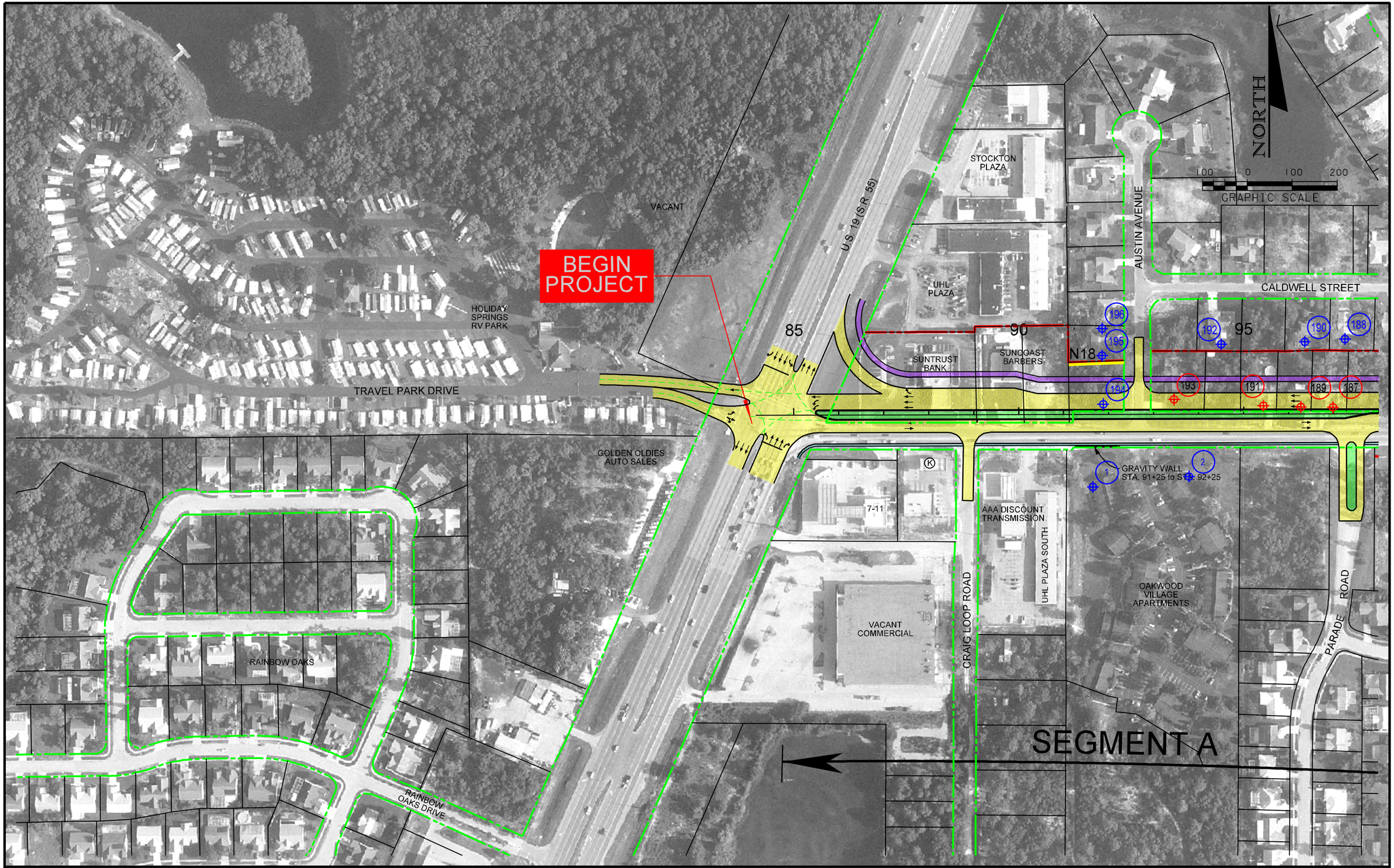

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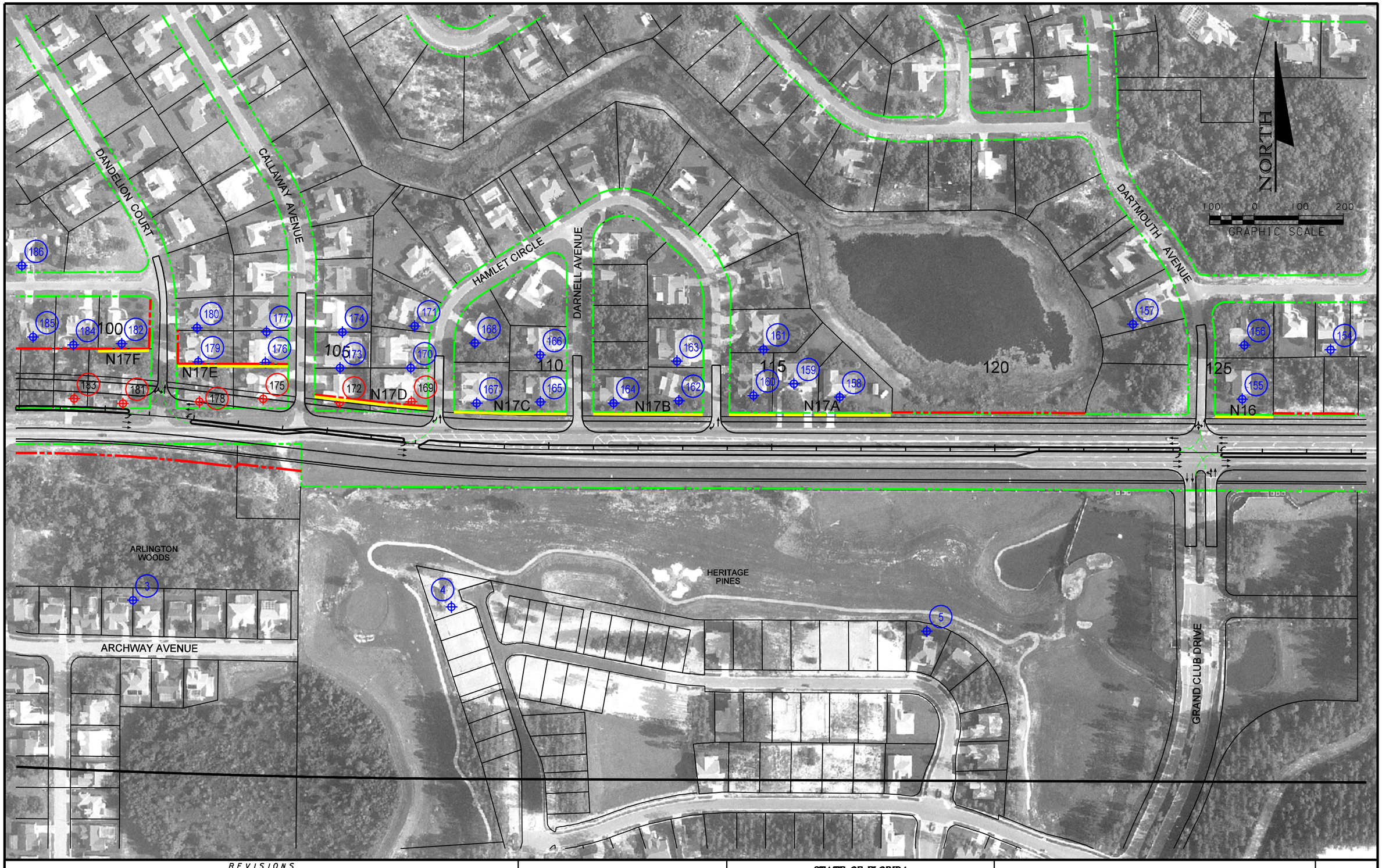

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CACTUS CIRCLE
RUSKIN AVENUE
HALLOW AVENUE
FOUNTAIN COURT
NORTH
100 0 100 200
GRAPHIC SCALE
130
135
140
145
150
155
N15C
N15B
N15A
N14B
N14A
VACANT
GRUBB CONSTRUCTION

SEGMENT A

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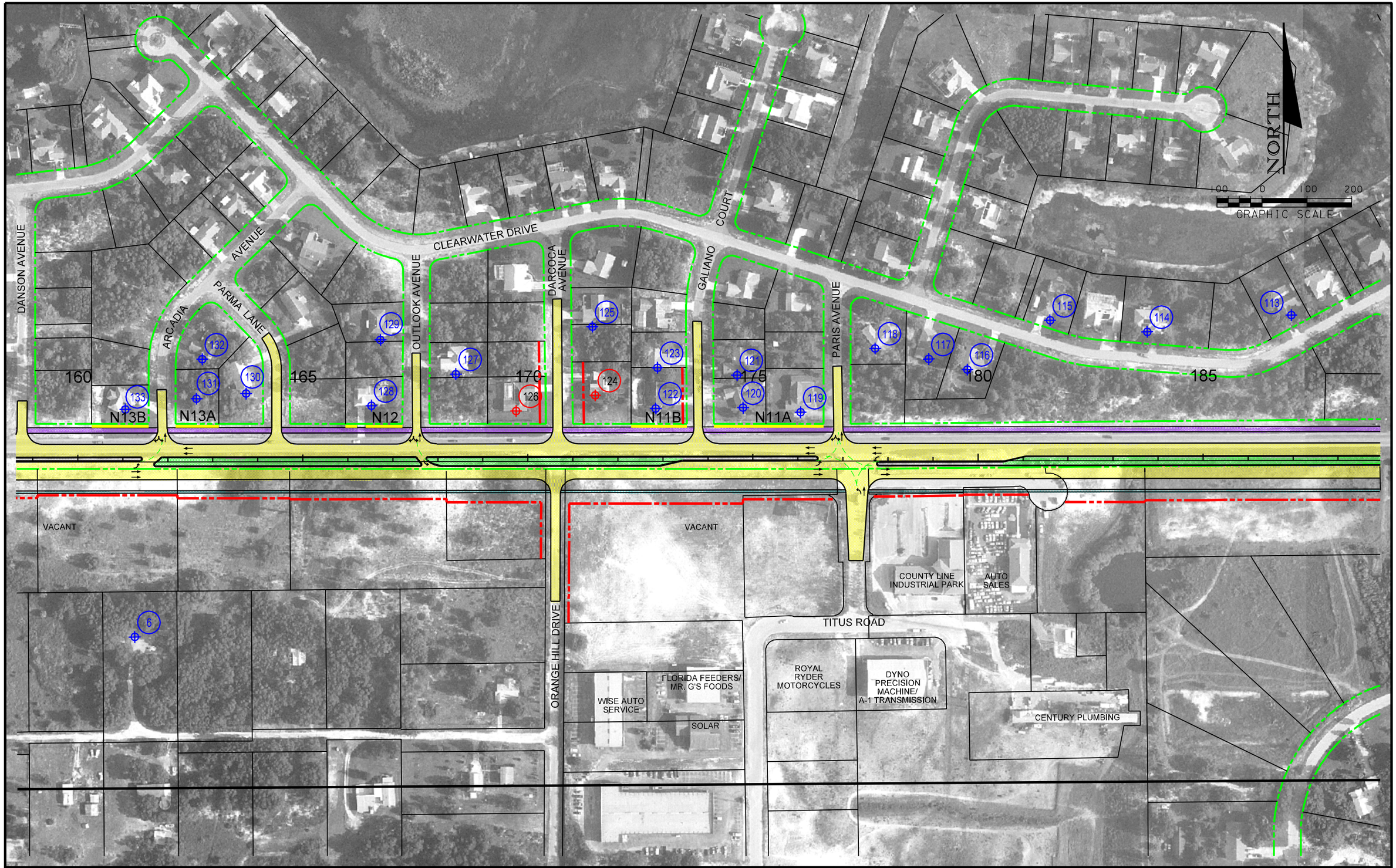

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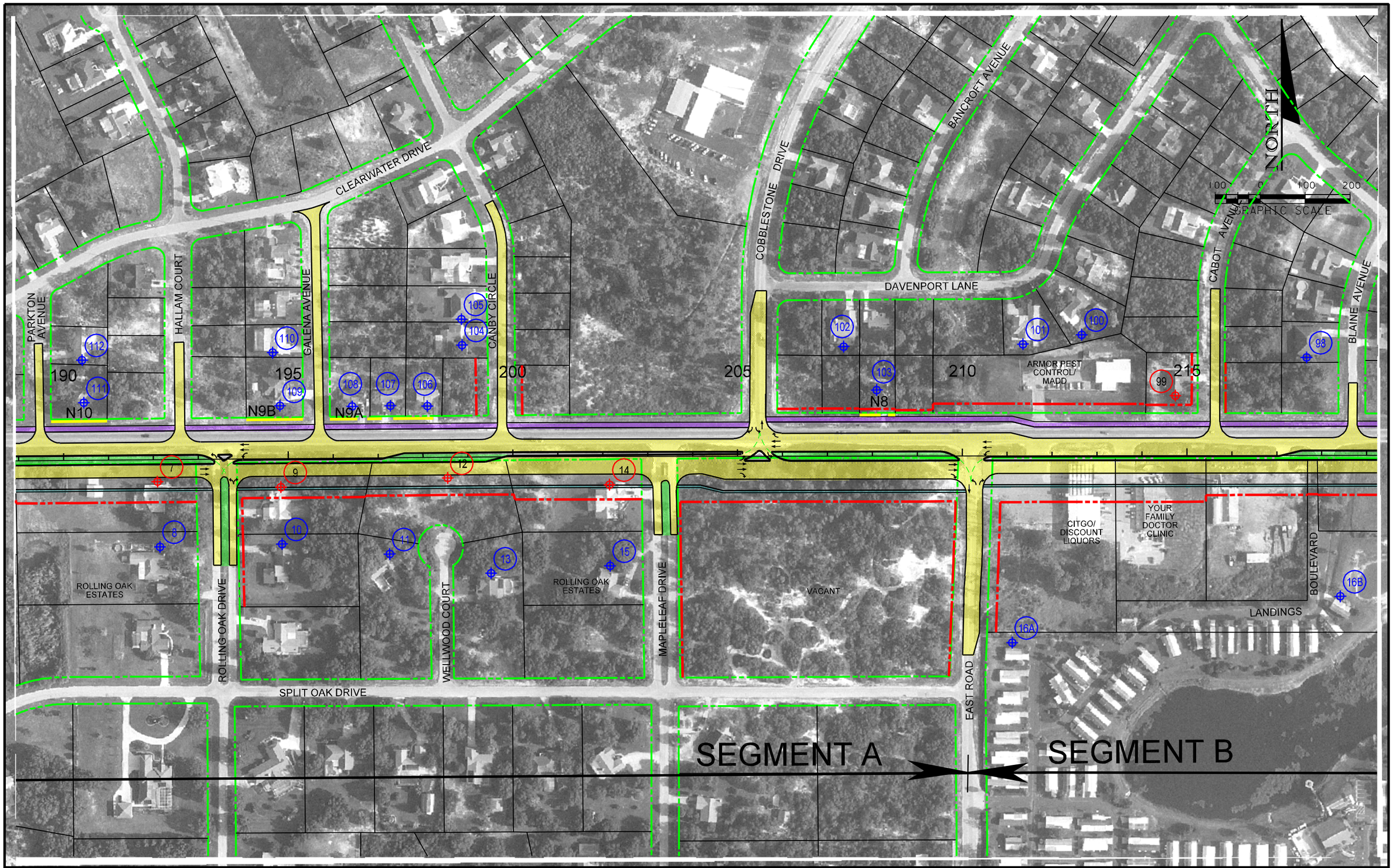

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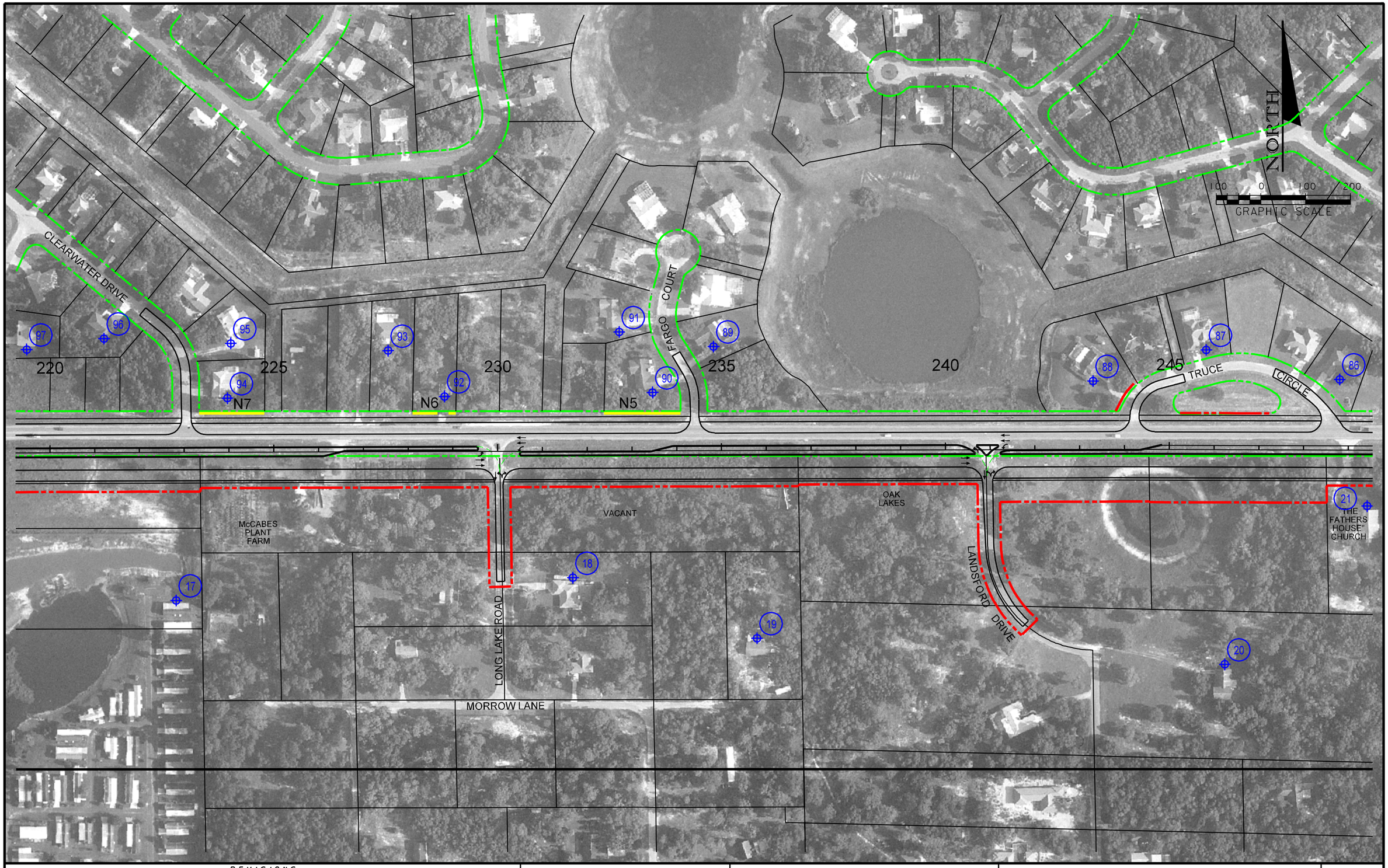

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BATON AVENUE
ROSEDALE AVENUE
RANDOLPH AVENUE
PLACID STREET
WATERFALL DRIVE
PEBBLE STREET
SHELBY AVENUE
CANDLEWICK AVENUE
OAK LAKE DRIVE
NORTH
100 0 100 200
GRAPHIC SCALE
ROY SHUSTER PEST CONTROL
250
255
260
265
270
275
N4
N3
N2C
N2B
N2A
80
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PRIVACY WALL
PRIVACY WALL
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HIDDEN VALLEY COURT
AUTUMN LAKE BOULEVARD
ECHO
MOUNTAIN
DRIVE
WINDING OAKS BOULEVARD
FOREST RIDGE COURT
SUMMERDALE LANDSCAPING
NEW HOPE BAPTIST CHURCH
SEGMENT B

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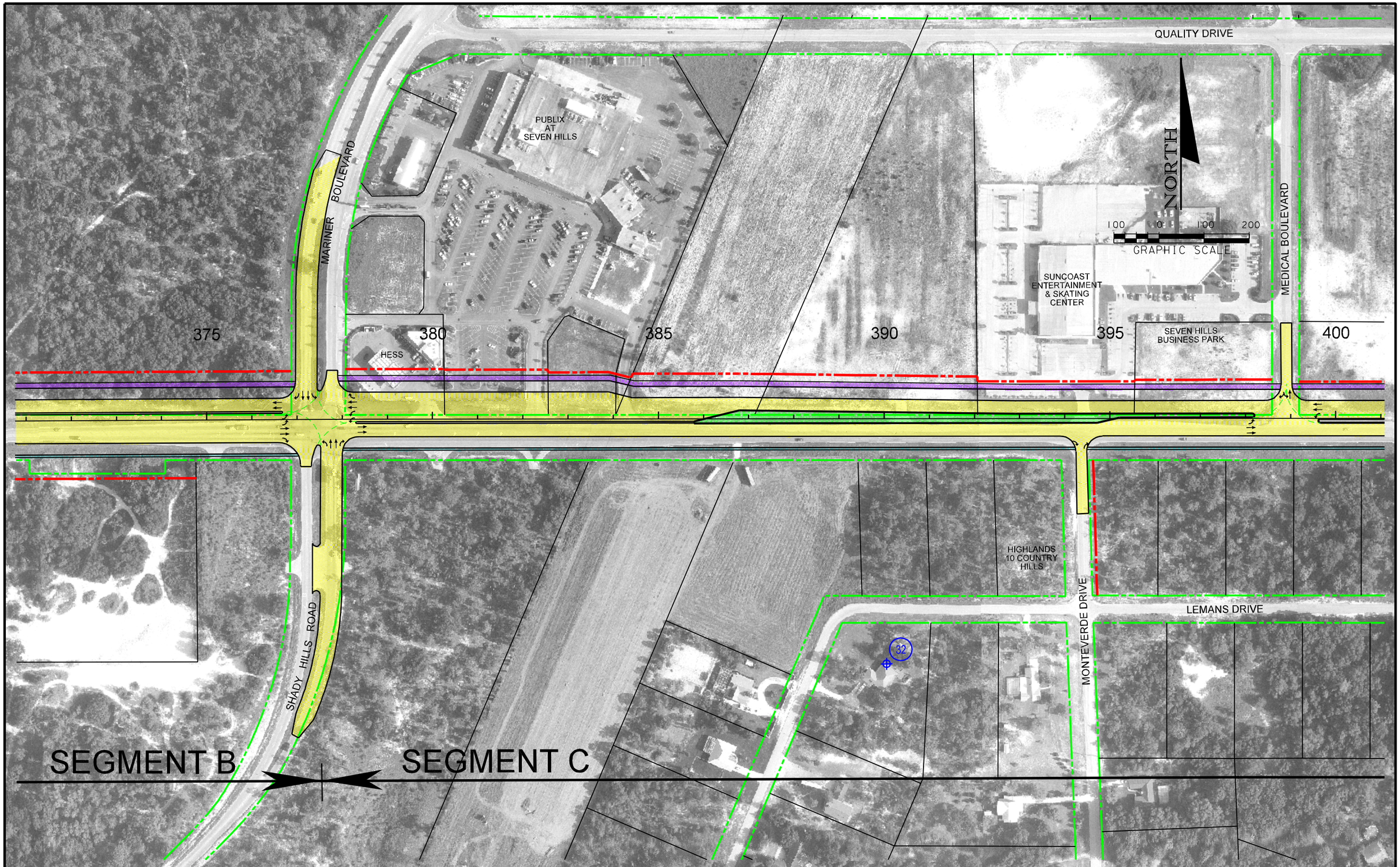

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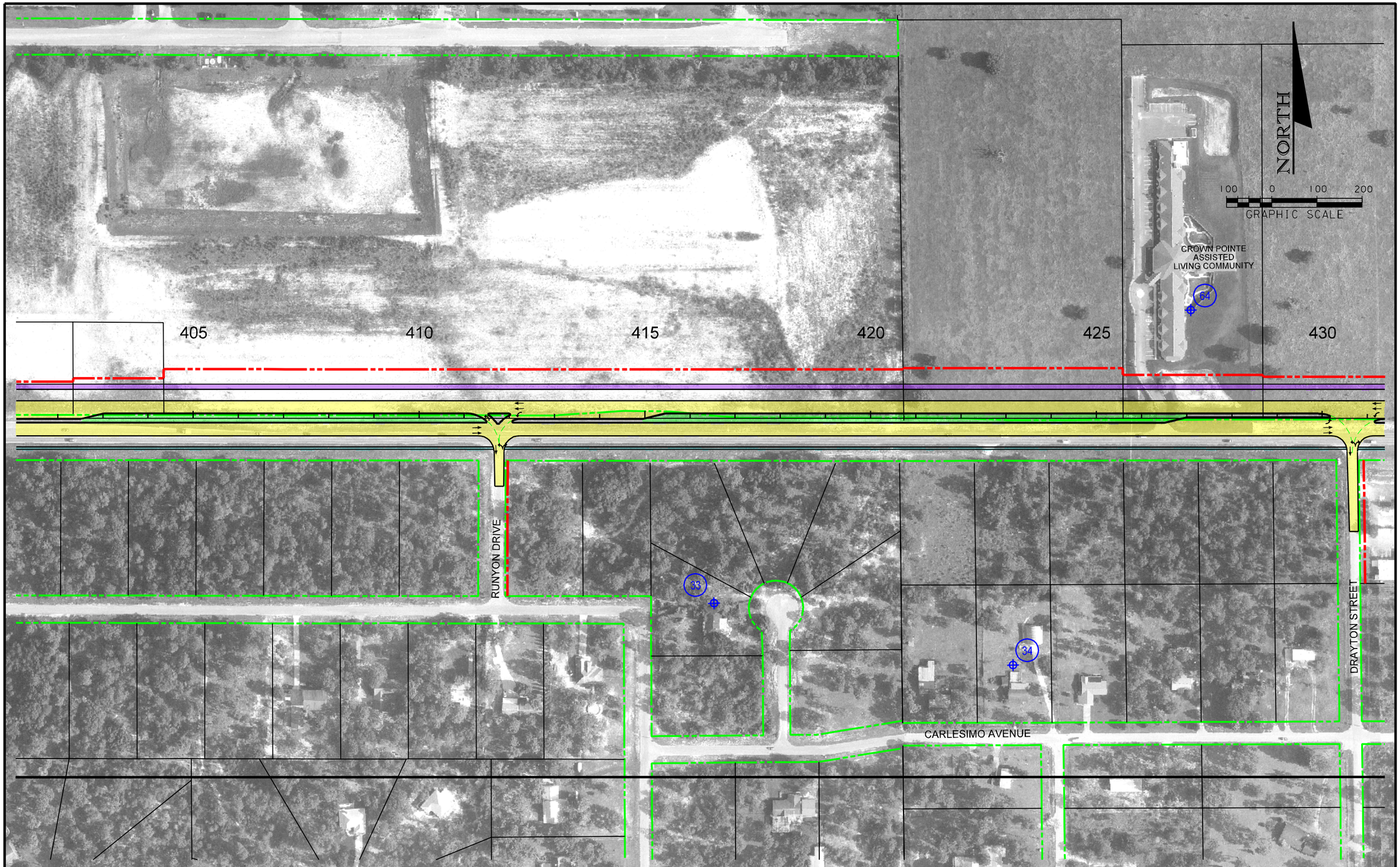

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435 440 445 450 455 460

63 62 35

NORTH

100 0 100 200

GRAPHIC SCALE

DAVID G. SNYDER V.F.W.

ALEXSON STREET

CARLESIMO AVENUE

SEGMENT C

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-8

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REVISIONS					
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09/13/99		DATE OF FLIGHT			

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COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-8

SHEET NO. 17

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JOSIES DRIVE

TOPICS RV COMMUNITY

PYTHIA PLACE

LINDEN DRIVE

LINDEN RETREAT

55 54 53 52 51 50 49

495 500 505 510 515 520

NORTH

100 0 100 200

GRAPHIC SCALE

KEYS CONCRETE INDUSTRY

39 40

LINUS SECURITY

SEGMENT C

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09/13/99		DATE OF FLIGHT			

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COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-8

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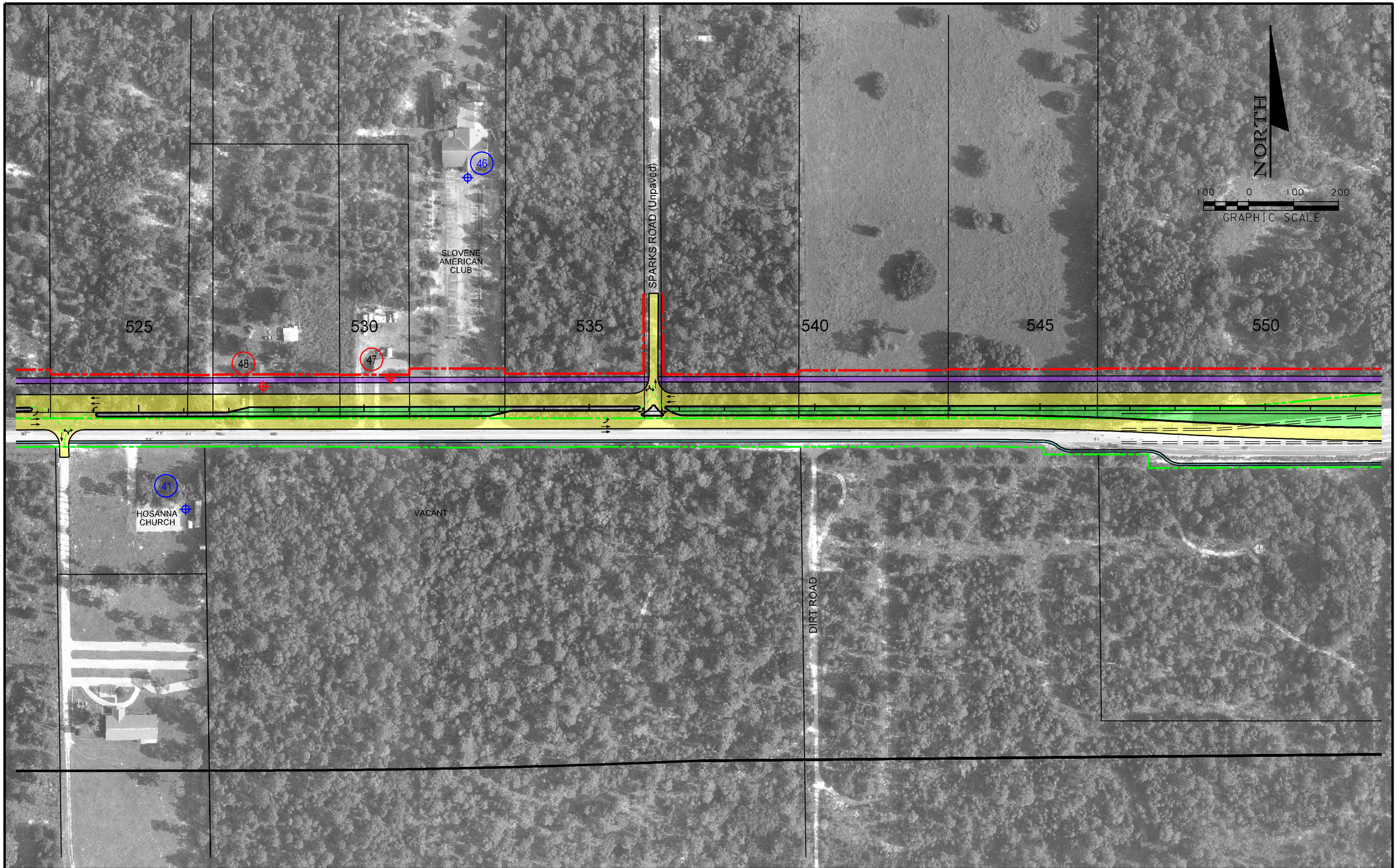

REVISIONS					
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09/13/99		DATE OF FLIGHT			

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No. 00000002

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-8

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09/13/99		DATE OF FLIGHT			

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-8

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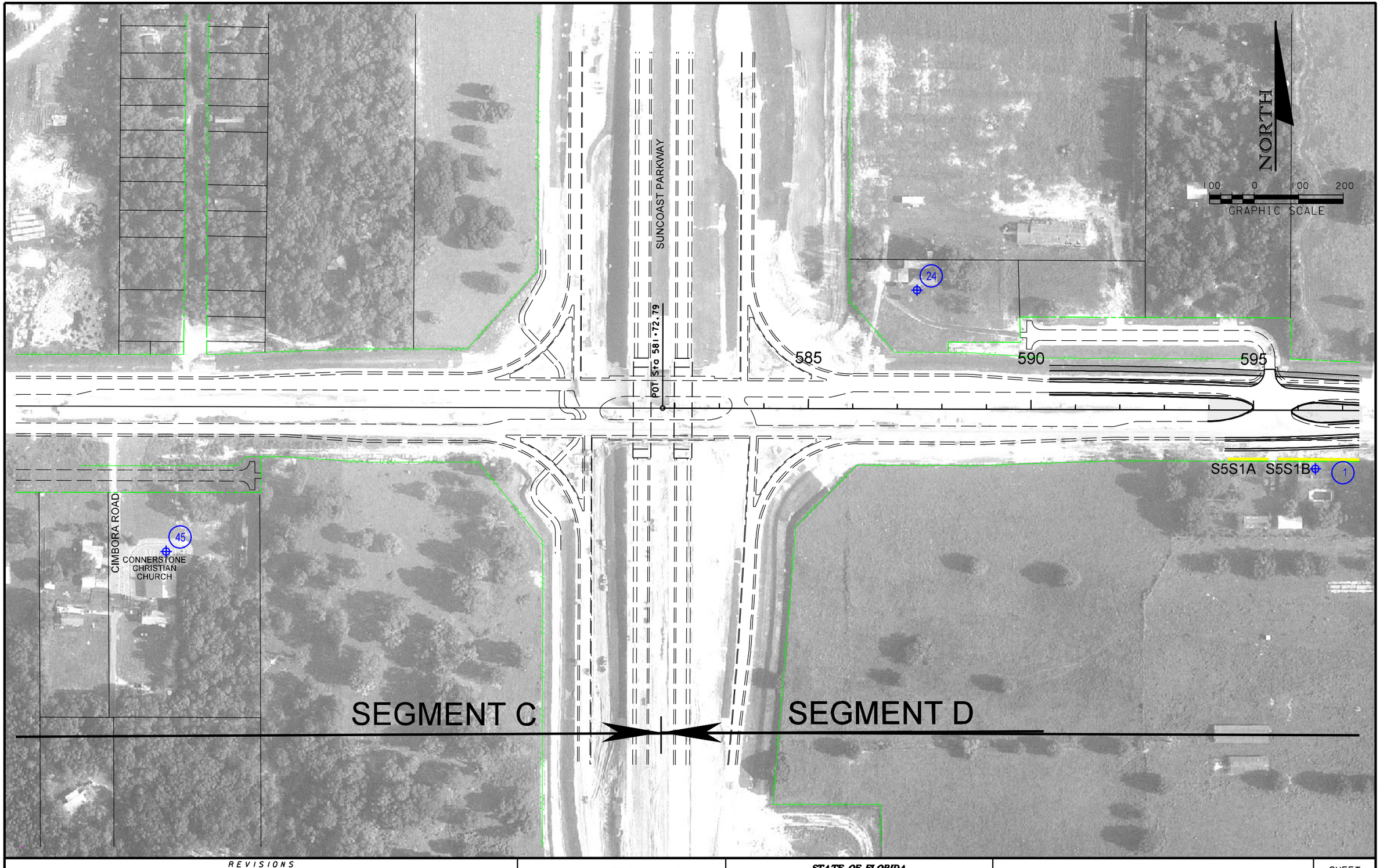
AYERS ROAD EXTENSION



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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No. 00000002

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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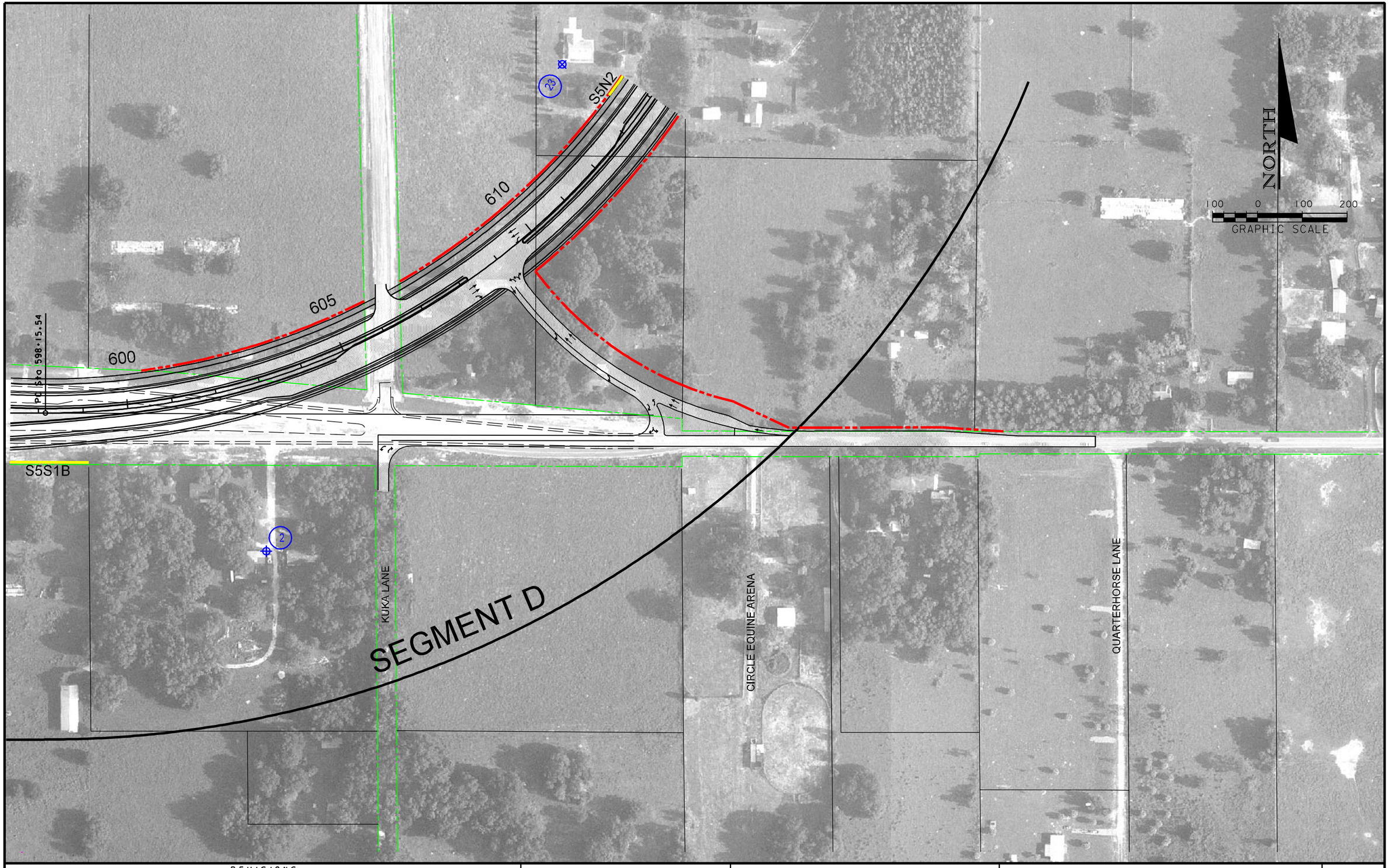

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
No. 00000002

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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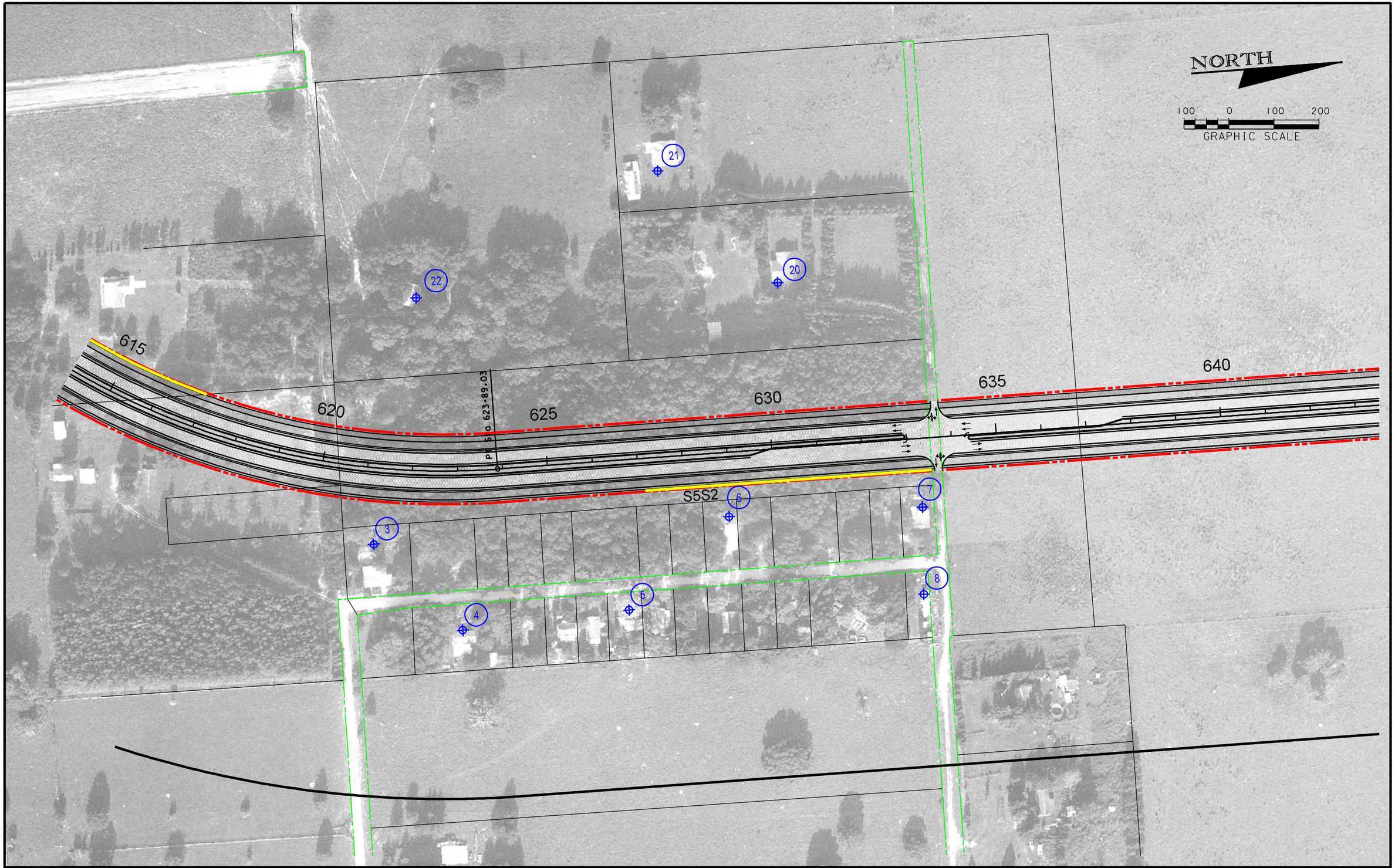

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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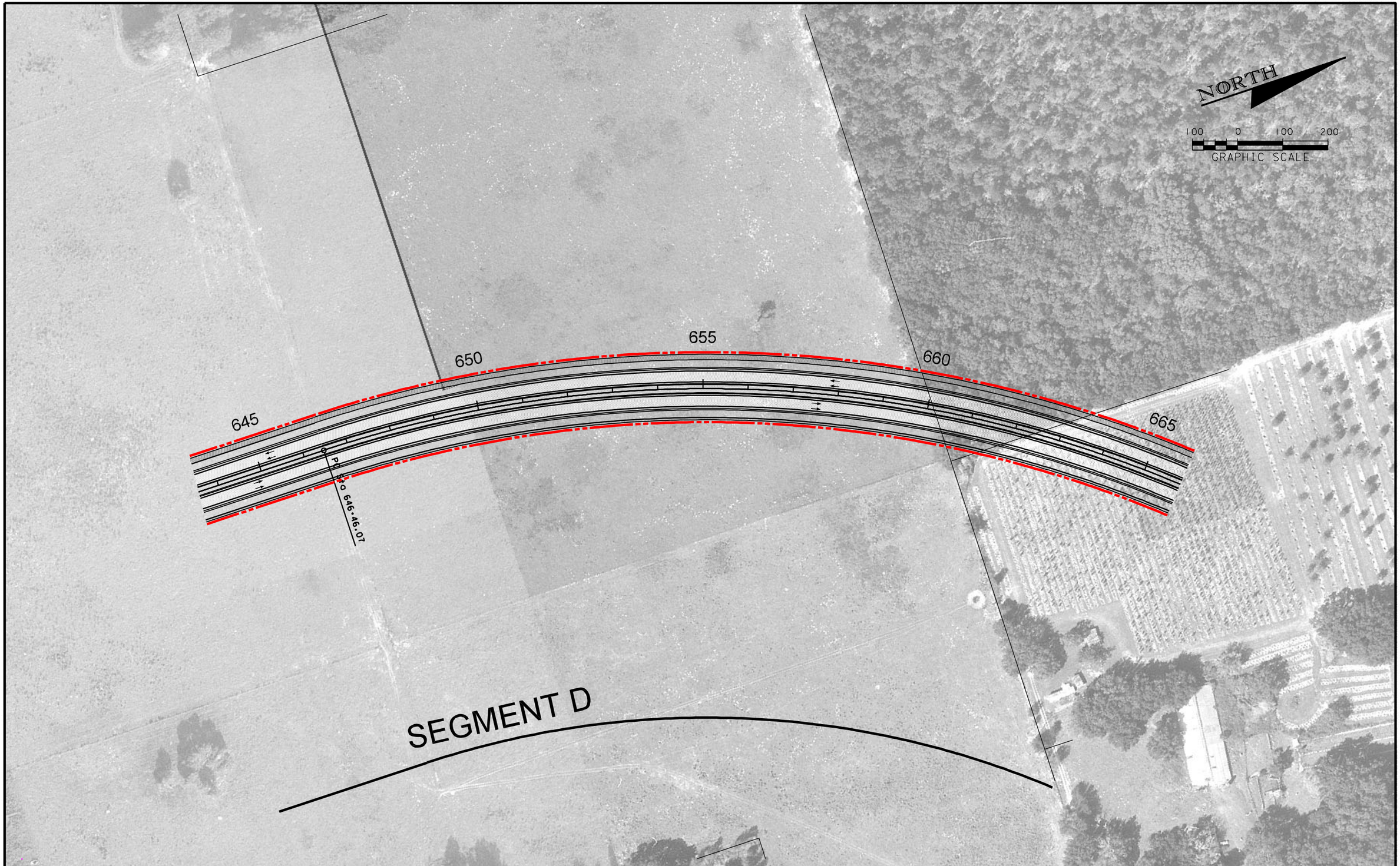

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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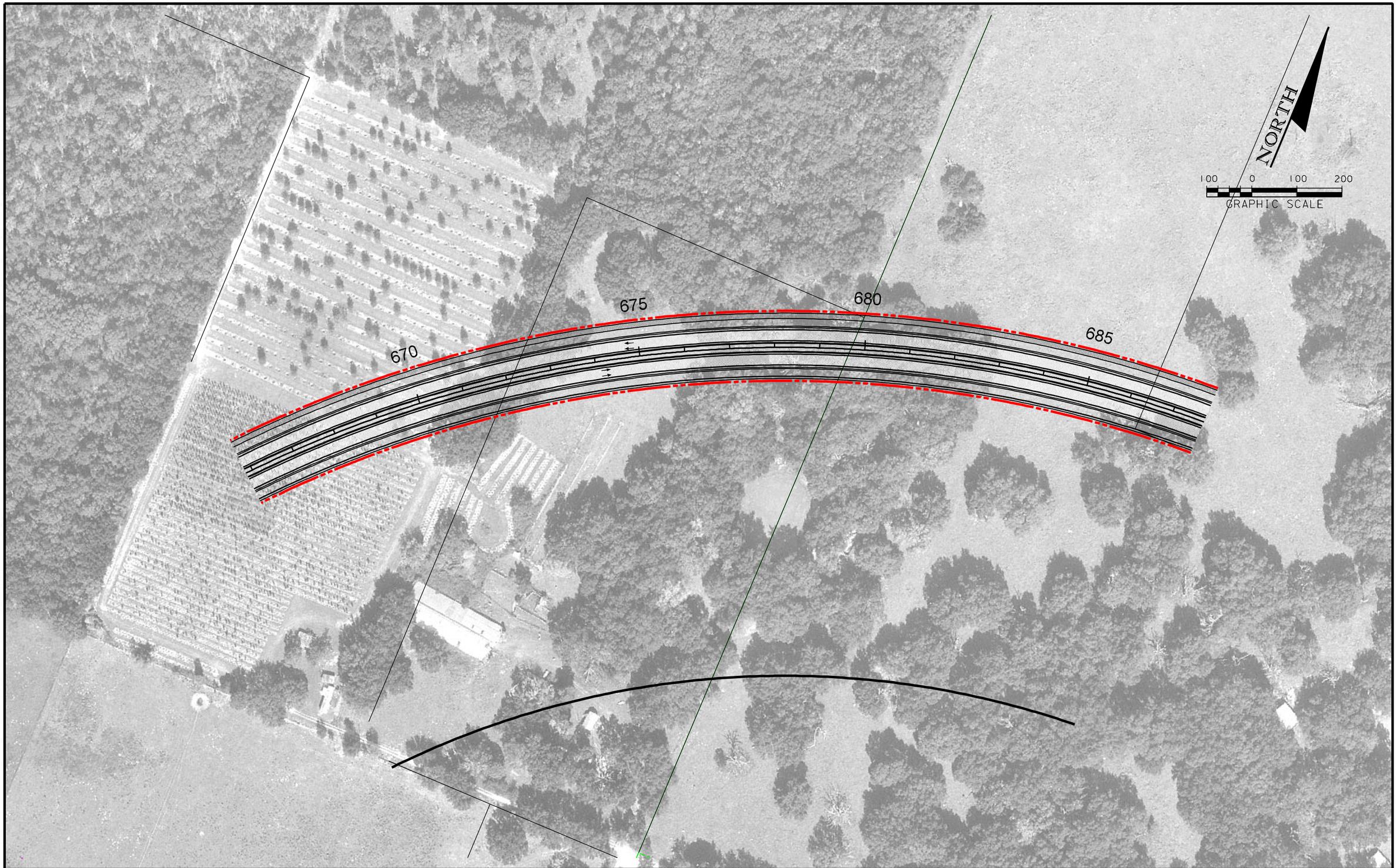

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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Tampa, FL 33607-1462
No. 00000002

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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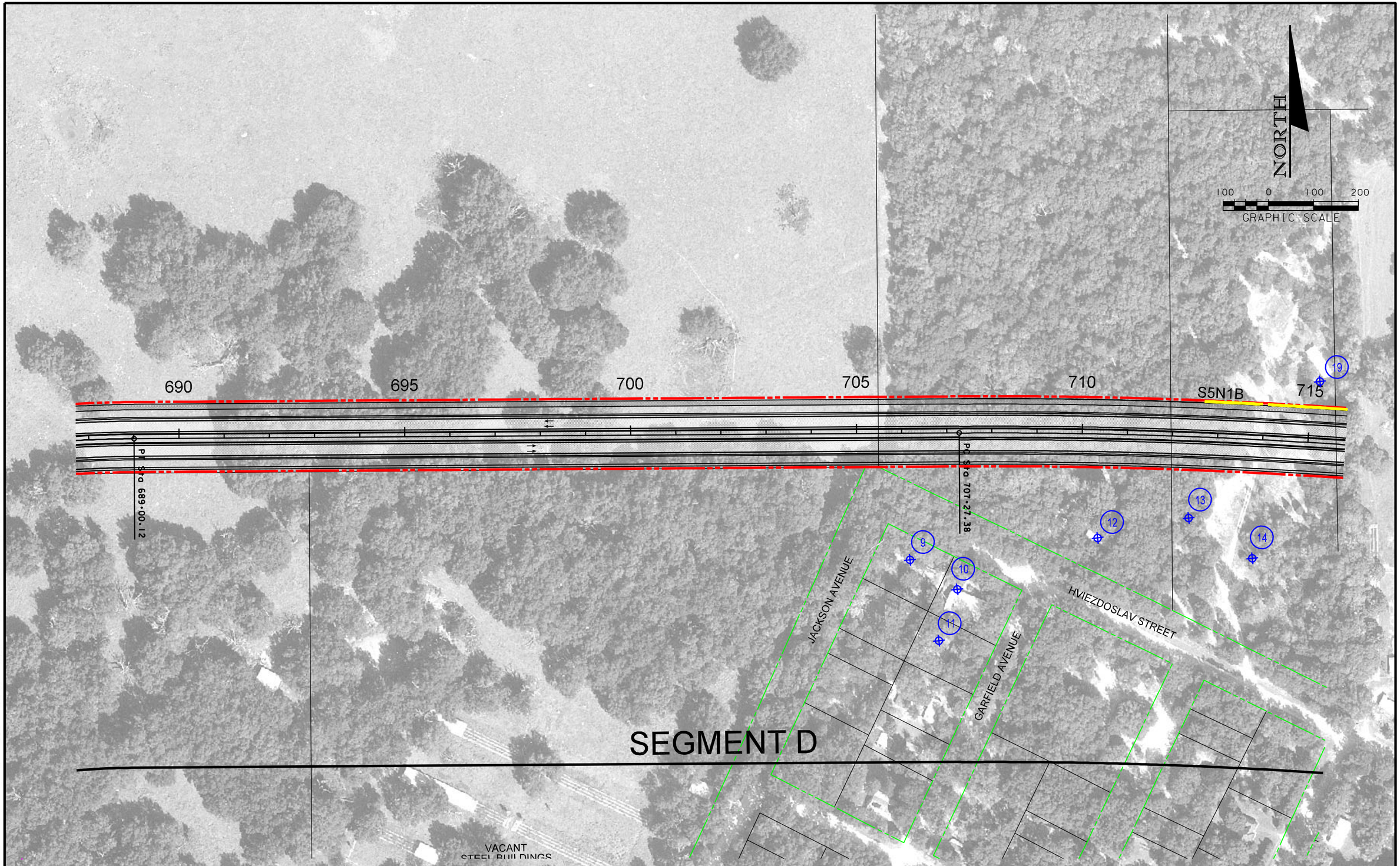

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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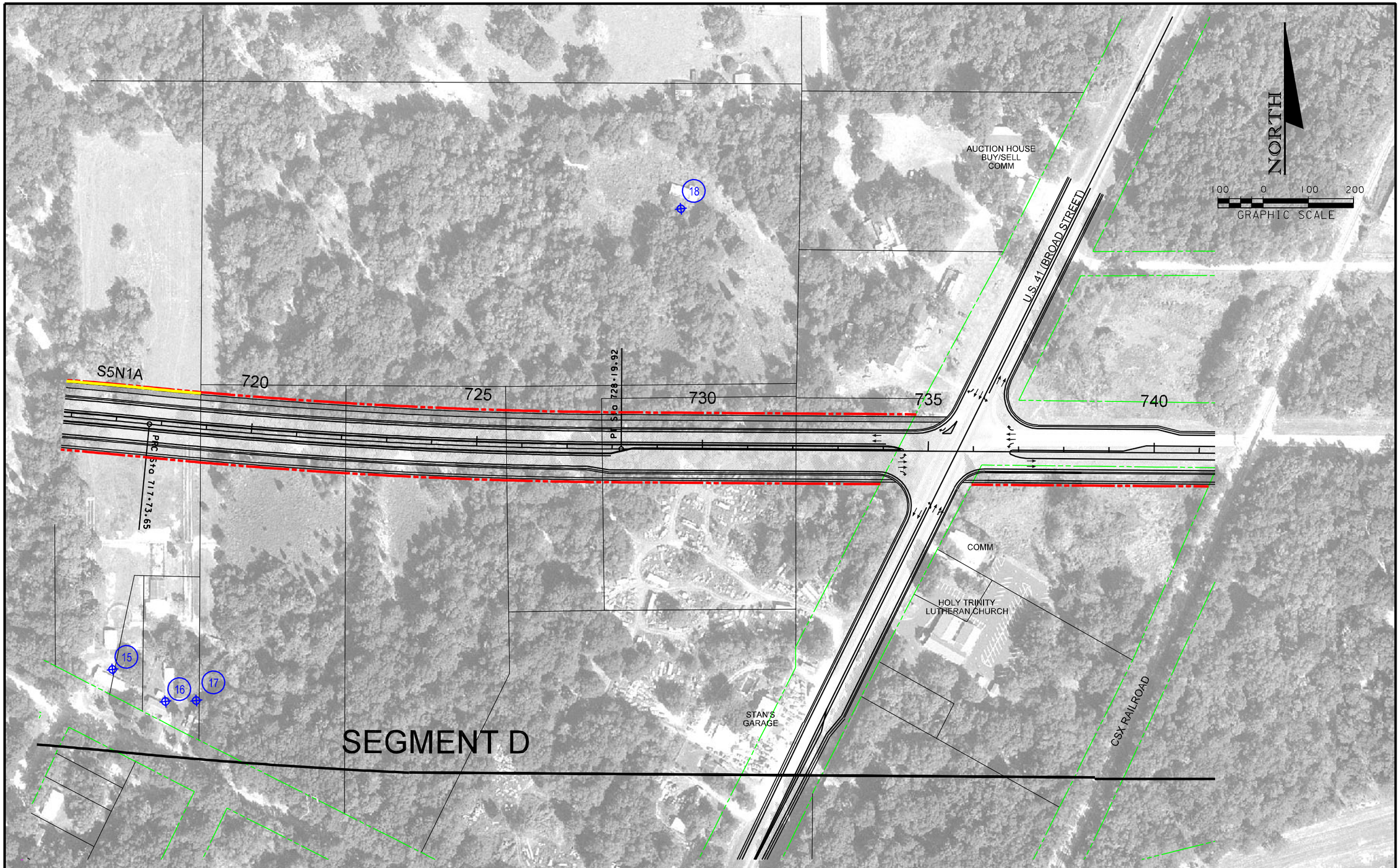

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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STATE OF FLORIDA
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C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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REVISIONS					
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09/13/99		DATE OF FLIGHT			

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

URS Corporation Southern
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)
NOISE STUDY REPORT
From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)
ALIGNMENT S-5 (AYERS ROAD)

SHEET NO. 29

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ASSUMPTIONS

The following assumptions were made and utilized for this noise analysis:

1. Roadway and receiver elevations for County Line Road, from U.S. 19 to Suncoast Parkway, were obtained from topographic maps. This was necessary since the elevation for this portion of the project ranged from 16 feet at U.S. 19 to a maximum of 92 feet (ft) at Preston Hollow Road. However, the portion of the project east of Suncoast Parkway was relatively flat. For both proposed Ayers Road Extensions, from the Suncoast Parkway to U.S. 41, the elevation of the receivers was set to "0" ft and the roadway elevation was set to "2" ft to account for base fill.

2. Directional factors were used to place the heaviest traffic closest to the noise sensitive receivers in order to obtain "worst-case" conditions. When noise sensitive receivers were located opposite each other on both sides of the roadway, the computer analysis was done twice in order to model the heaviest traffic on each side of the roadway.

3. Receiver points were placed at the edge of the dwelling unit closest to the roadway for determining project affect.

4. TNM sometimes predicts inconsistent traffic noise levels when modeling roadways with grass medians. To compensate for these situations, the analyst has input "ground zones" in the model between simulated roadways. For the C.R. 578 analysis, ground zones were used to reflect the future grass median between the westbound and eastbound lanes and the 12-ft multi-use facility on the north side of the roadway. It appeared that in some cases, TNM was still predicting inconsistent results for some of the receivers. Since only 9 receivers were affected, the traffic noise levels at those receivers were adjusted for this report. A memorandum discussing the affected receivers and the methodology/results of the adjustments is provided in Appendix E.

5. The privacy wall, located at Autumn Lake Boulevard, was assumed to be replaced "in-kind" in the "Build" scenario.

6. Breaks in barrier continuity were allowed for driveways and intersecting roadways.

7. Line-of-sight evaluations were conducted for all barriers.

8. Barriers did not extend beyond the property line of the last affected receiver.

9. For affected dwelling units, receivers were placed at both corners of the edge furthest from the roadway to determine the reasonableness of a barrier.

10. For C.R. 578 from U.S. 19 to the Suncoast Parkway, the x-coordinates are the roadway station numbers. The y-coordinates are relative to zero in which the origin is identified on the working maps. It is located 400 ft south of station number 84+15. For the Ayers Road Extension from Suncoast Parkway to U.S. 41, the x- and y-coordinates are based relative to "0" with the origin arbitrarily set at station number 580 in the center of the eastbound lane.

APPENDIX A
COMPUTER MODEL VALIDATION DATA

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 1, Run 1
C.R. 578, South Side, West of Callaway Avenue

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE Flat to slight grade eastbound

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 9:17 – 9:27 (AM) (~~PM~~)

TRAFFIC:	WB	EB	WB	EB		
CARS=	129	63	40	42	MPH	POSTED SPEED
MT=	2	6	40	38	MPH	45 MPH
HT=	8	5	31	39	MPH	

UNUSUAL EVENTS: 70° F, 83% RH, 6 mph wind from the north, 40% cloud cover

RESULTS:

Lav (Leq) 69.9 dB

Lpk (peak) 86.4 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ___ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 1, Run 2
C.R. 578, South Side, West of Callaway Avenue

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE Flat to slight grade eastbound

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 9:36 – 9:46 (AM) (~~PM~~)

TRAFFIC:	WB	EB	WB	EB		
CARS=	100	64	42	45	MPH	POSTED SPEED
MT=	7	3	37	44	MPH	45 MPH
HT=	7	2	37	37	MPH	

UNUSUAL EVENTS: 70° F, 83% RH, 6 mph wind from the north, 40% cloud cover

RESULTS:

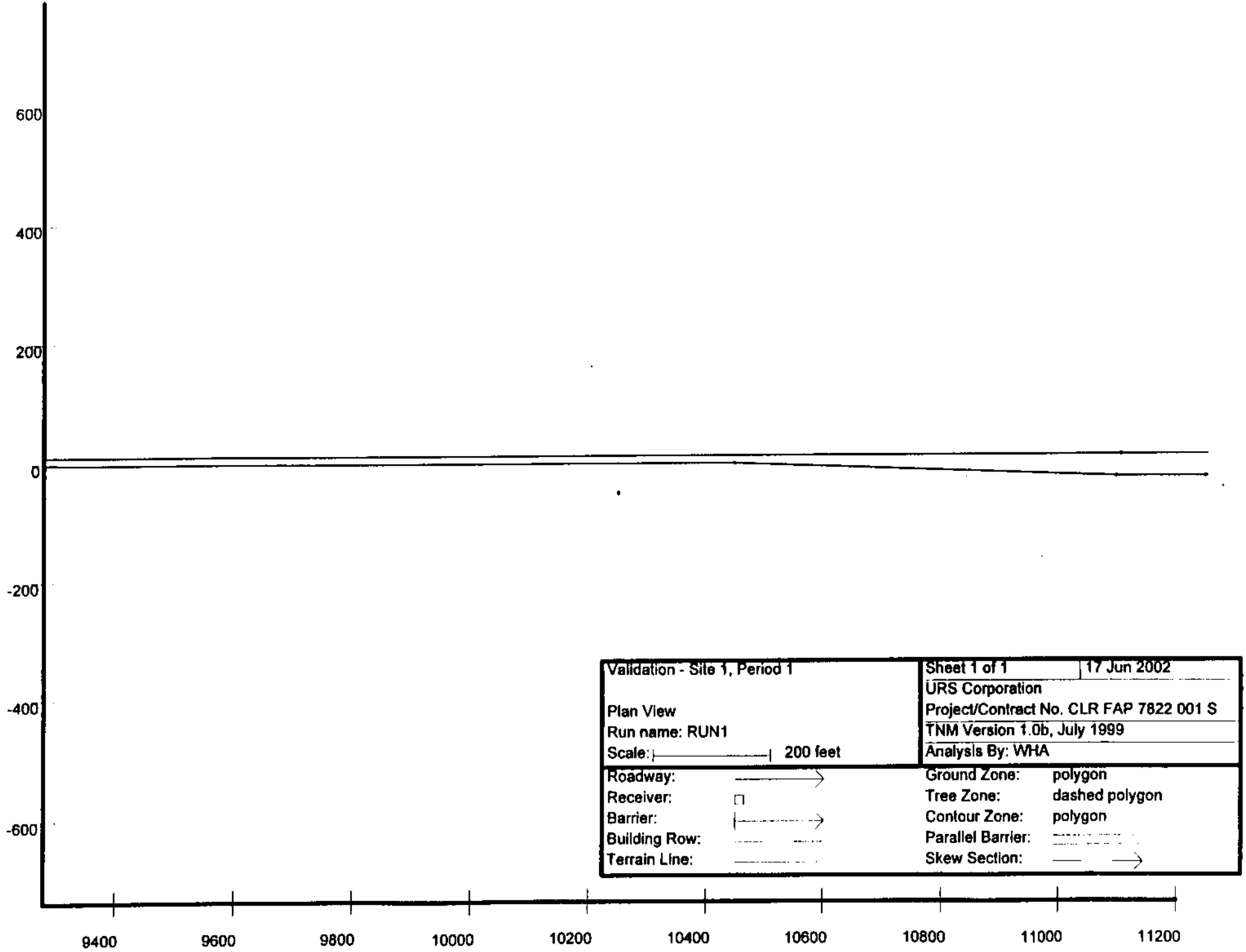
Lav (Leq) 69.3 dB

Lpk (peak) 83.2 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No


600
400
200
0
-200
-400
-600
9400
9600
9800
10000
10200
10400
10600
10800
11000
11200
Validation - Site 1, Period 1
Plan View
Run name: RUN1
Scale: 200 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 1, Period 1

Roadway	Points		Segment									
Name	Name	No.	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
CLR EB from sta 92.5 until sta 104.5	point5	5	378	42	36	38	30	39	0	0	0	0
	point6	6										
CLR EB from sta 104.5 to sta 111	point7	7	378	42	36	38	30	39	0	0	0	0
	point8	8										
CLR EB from sta 111 to sta 112.5	point9	9	378	42	36	38	30	39	0	0	0	0
	point10	10										
CLR WB from sta 112.5 to sta 111	point11	11	774	40	12	40	48	31	0	0	0	0
	point12	12										
CLR WB from sta 111 to 92.5	point13	13	774	40	12	40	48	31	0	0	0	0
	point14	14										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 1, Period 1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 1	1	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 1, Period 2

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
CLR EB from sta 92.5 until sta 104.5	point5	5	384	45	18	44	12	37	0	0	0	0
	point6	6										
CLR EB from sta 104.5 to sta 111	point7	7	384	45	18	44	12	37	0	0	0	0
	point8	8										
CLR EB from sta 111 to sta 112.5	point9	9	384	45	18	44	12	37	0	0	0	0
	point10	10										
CLR WB from sta 112.5 to sta 111	point11	11	600	42	42	37	42	37	0	0	0	0
	point12	12										
CLR WB from sta 111 to 92.5	point13	13	600	42	42	37	42	37	0	0	0	0
	point14	14										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 1, Period 2
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 1	1	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 1, Period 3

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
CLR EB from sta 92.5 until sta 104.5	point5	5	438	46	18	40	24	38	0	0	0	0
	point6	6										
CLR EB from sta 104.5 to sta 111	point7	7	438	46	18	40	24	38	0	0	0	0
	point8	8										
CLR EB from sta 111 to sta 112.5	point9	9	438	46	18	40	24	38	0	0	0	0
	point10	10										
CLR WB from sta 112.5 to sta 111	point11	11	570	42	30	43	18	38	0	0	6	40
	point12	12										
CLR WB from sta 111 to 92.5	point13	13	570	42	30	43	18	38	0	0	6	40
	point14	14										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 1, Period 3
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 1	1	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Figure 1

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 2, Run 1
C.R. 578, South Side, East of Long Lake Drive

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE None

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 10:26 – 10:36 (AM) (~~PM~~)

TRAFFIC:	WB	EB	WB	EB		
CARS=	89	73	49	46	MPH	POSTED SPEED
MT=	4	8	44	51	MPH	50 MPH
HT=	3	4	45	44	MPH	

UNUSUAL EVENTS: 75° F, 61% RH, 9 mph wind from the north, clear

RESULTS:

Lav (Leq) 68.6 dB

Lpk (peak) 86.1 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ___ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 2, Run 2
C.R. 578, South Side, East of Long Lake Drive

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE None

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 10:40 – 10:50 (AM) (~~PM~~)

TRAFFIC:	WB	EB	WB	EB		
CARS=	88	85	46	49	MPH	POSTED SPEED
MT=	7	2	45	49	MPH	50 MPH
HT=	3	5	46	51	MPH	

UNUSUAL EVENTS: 75° F, 61% RH, 9 mph wind from the north, clear

RESULTS:

Lav (Leq) 68.6 dB

Lpk (peak) 84.5 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ___ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 2, Run 3
C.R. 578, South Side, East of Long Lake Drive

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE None

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 10:57 – 11:07 (AM) (~~PM~~)

TRAFFIC:	WB	EB	WB	EB		
CARS=	96	72	48	49	MPH	POSTED SPEED
MT=	2	4	44	44	MPH	50 MPH
HT=	7	5	49	50	MPH	

UNUSUAL EVENTS: 75° F, 61% RH, 9 mph wind from the north, clear

RESULTS:

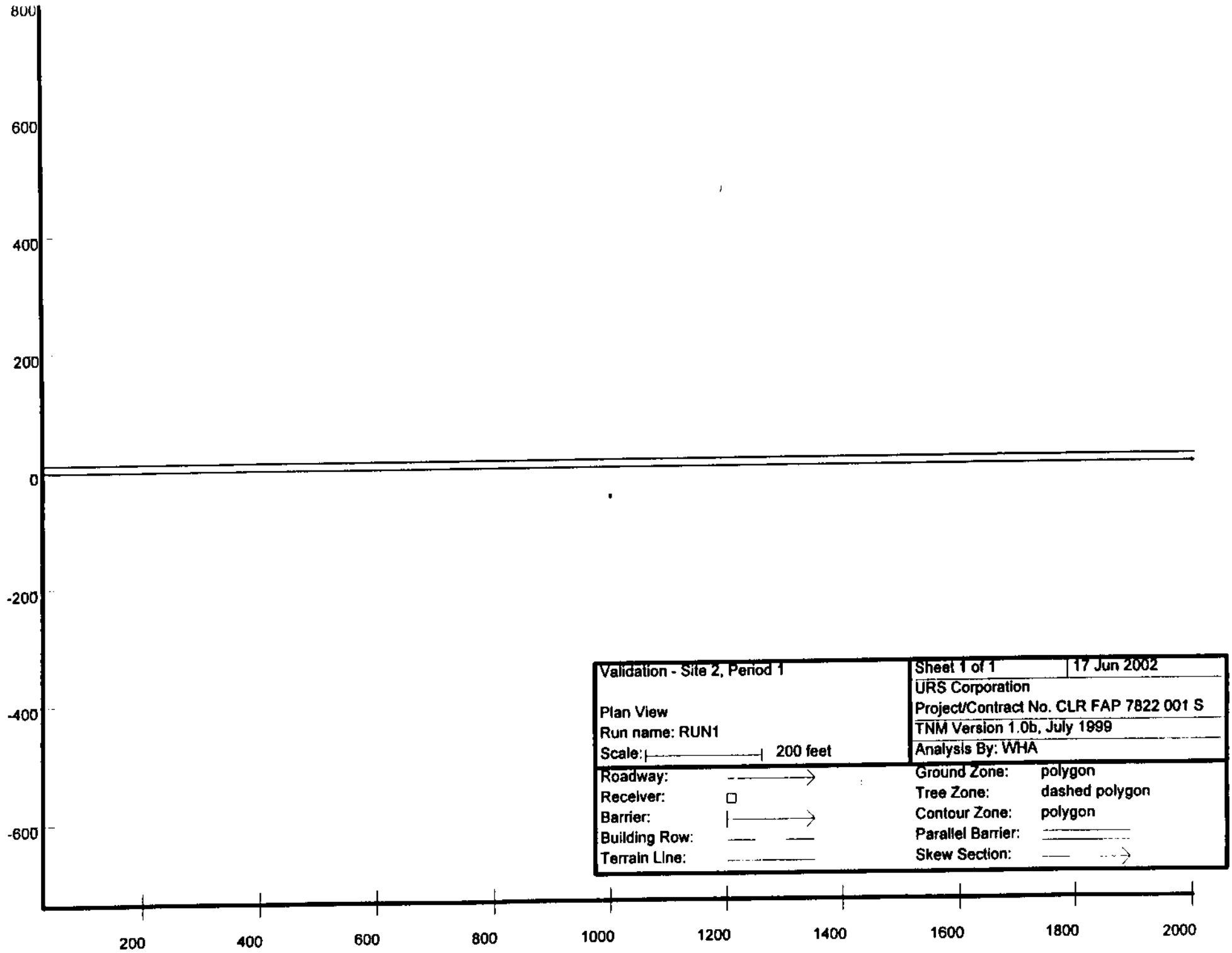
Lav (Leq) 69.3 dB

Lpk (peak) 83.3 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ___ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No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-600
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800
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1200
1400
1600
1800
2000
Validation - Site 2, Period 1
Plan View
Run name: RUN1
Scale: 200 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 2, Period 1

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
CLR EB from sta 222 to sta 242	point1	1	438	46	48	51	24	44	0	0	0	0
	point2	2										
CLR WB from sta 242 to sta 222	point3	3	534	49	24	44	18	45	0	0	0	0
	point4	4										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 2, Period 1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 2 (sta 232)	1	1	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 2, Period 2

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
CLR EB from sta 222 to sta 242	point1	1	510	49	12	49	30	51	0	0	0	0
	point2	2										
CLR WB from sta 242 to sta 222	point3	3	528	46	42	45	18	46	0	0	0	0
	point4	4										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 2, Period 2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 2 (sta 232)	1	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 2, Period 3

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
CLR EB from sta 222 to sta 242	point1	1	432	49	24	44	30	50	0	0	12	53
	point2	2										
CLR WB from sta 242 to sta 222	point3	3	576	48	12	44	42	49	0	0	0	0
	point4	4										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 2, Period 3
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 2 (sta 232)	1	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Figure 2

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 3, Run 1
C.R. 578, North Side, West of Preston Hollow Road

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE Upgrade eastbound

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 1:42 – 1:52 (~~AM~~) (PM)

TRAFFIC:	WB	EB	WB	EB		
CARS=	71	40	57	58	MPH	POSTED SPEED
MT=	1	2	50	50	MPH	55 MPH
HT=	4	3	50	50	MPH	

UNUSUAL EVENTS: 79° F, 42% RH, 10 mph wind from the north, clear

RESULTS:

Lav (Leq) 68.2 dB

Lpk (peak) 79.0 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ___ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 3, Run 2
C.R. 578, North Side, West of Preston Hollow Road

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE Upgrade eastbound

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 1:56 – 2:06 (~~AM~~) (PM)

TRAFFIC:	WB	EB	WB	EB	
CARS=	57	60	53	57	MPH
MT=	2	8	52	52	MPH
HT=	4	6	46	54	MPH

POSTED SPEED 55 MPH

UNUSUAL EVENTS: 79° F, 42% RH, 10 mph wind from the north, clear

RESULTS:

Lav (Leq) 67.7 dB

Lpk (peak) 81.3 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ___ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No

NOISE DATA

FIELD VALIDATION

DATE 4/5/02

PROJECT C.R. 578 PD&E Study

SPN

LOCATION Site 3, Run 3
C.R. 578, North Side, West of Preston Hollow Road

DISTANCE FROM CENTER OF NEARLANE 50 FT.

WIDTH OF ROADWAY/LANES 12 FT. 12 FT. 2 #LANES

BARRIER/BUFFER None

TERRAIN Flat, grass GRADE Upgrade eastbound

HEIGHT OF NOISE RECEIVER 5 FT.

LENGTH OF RUN 10 MIN.

TIME OF DAY 2:10 – 2:20 ~~(AM)~~ (PM)

TRAFFIC:	WB	EB	WB	EB		
CARS=	56	57	57	53	MPH	POSTED SPEED
MT=	7	2	53	46	MPH	55 MPH
HT=	1	2	47	50	MPH	

UNUSUAL EVENTS: 79° F, 42% RH, 10 mph wind from the north, clear

RESULTS:

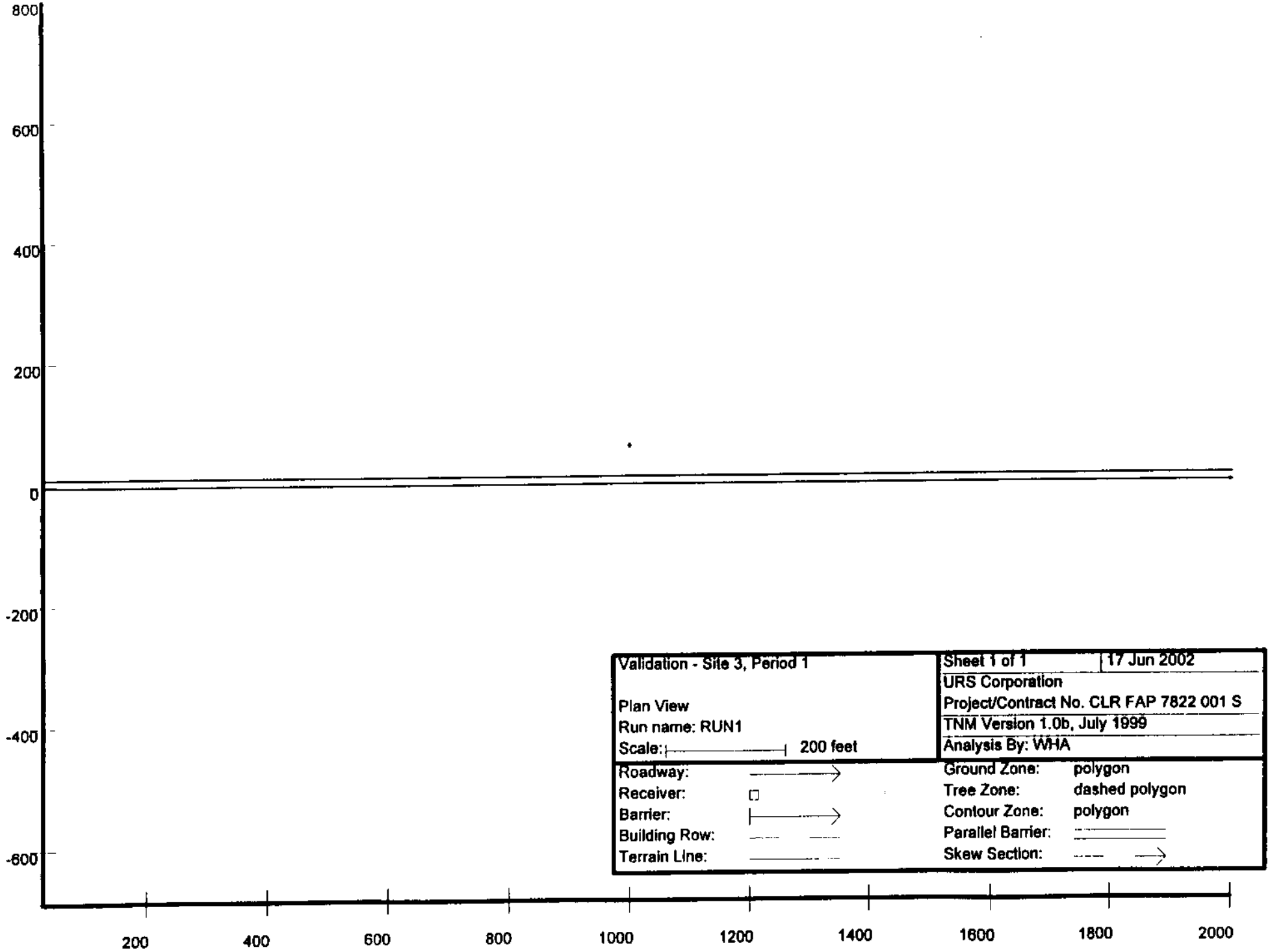
Lav (Leq) 65.3 dB

Lpk (peak) 82.6 dB

FIELD STAFF:

Robin R, Dan D, Wayne A, Vickie S

Equipment: Sound Level Meter: Type: Metrosonics dB 308 Serial Number:
Did you check the battery? Yes X No Calibration Reading: Start 102 End 102
Response Settings: Fast ____ Slow X Weighting: A X Other (Identify)
Calibrator: Type: CL-304 Serial Number:
Did you check the battery? Yes X No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1400
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1800
2000
Validation - Site 3, Period 1
Plan View
Run name: RUN1
Scale: 200 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 3, Period 1

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
CLR EB from sta 450 to sta 470	point1	1	240	58	12	50	18	50	0	0	0	0
	point2	2										
CLR WB from sta 470 to sta 450	point3	3	426	57	6	50	24	50	0	0	0	0
	point4	4										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 3, Period 1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 3 (sta 460)	1	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 3, Period 2

Roadway	Points		Segment									
Name	Name	No.	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
CLR EB from sta 450 to sta 470	point1	1	360	57	48	52	36	54	0	0	0	0
	point2	2										
CLR WB from sta 470 to sta 450	point3	3	342	53	12	52	24	46	0	0	0	0
	point4	4										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 3, Period 2
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 3 (sta 460)	1	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS Corporation
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 3, Period 3

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
CLR EB from sta 450 to sta 470	point1	1	342	53	12	46	12	50	0	0	0	0
	point2	2										
CLR WB from sta 470 to sta 450	point3	3	336	57	42	53	6	47	0	0	0	0
	point4	4										

URS Corporation
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Validation - Site 3, Period 3
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

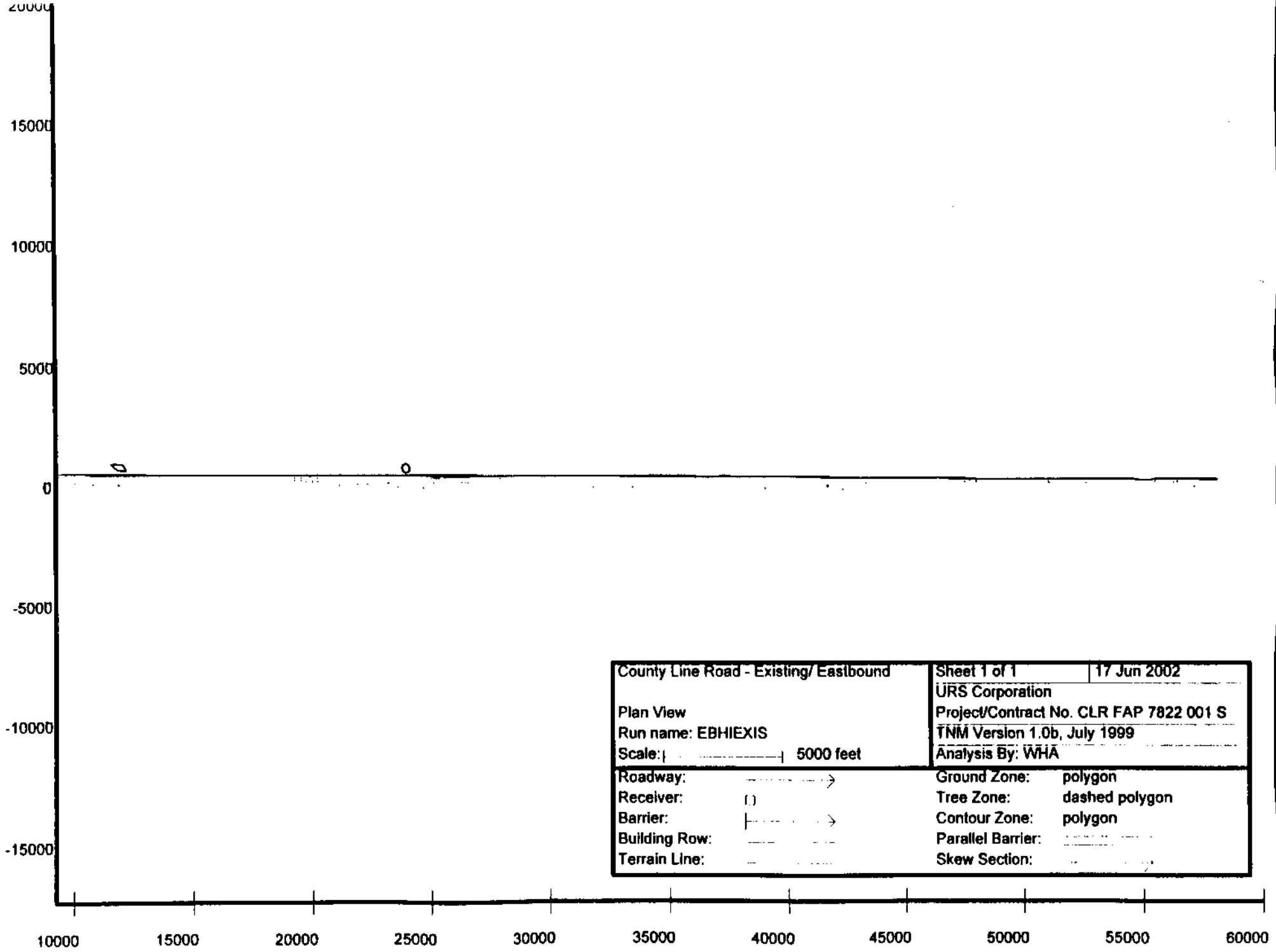
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Validation Site 3 (sta 460)	1	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Figure 2

APPENDIX B
TNM INPUT/OUTPUT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County Line Road - Existing/ Eastbound
Plan View
Run name: EBHIEXIS
Scale: 5000 feet
Sheet 1 of 1
17 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

2 July 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing/ Eastbound

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - US19 to Hamlet Circle	15.5	sta85	1	8500.0	345.0	16.50				Average	
		sta96	2	9600.0	345.0	29.00				Average	
		sta105	3	10500.0	338.0	33.00				Average	
		sta107	127	10700.0	320.0	35.00				Average	
		sta111	6	11100.0	295.0	35.00				Average	
		sta113+75	4	11375.0	295.0	33.50					
EB - Hamlet Circle to Ruskin Avenue	31.0	sta113+75	7	11375.0	295.0	33.50				Average	
		sta120	9	12000.0	295.0	22.50				Average	
		sta127	10	12700.0	290.0	35.00				Average	
		sta138+75	8	13875.0	285.0	26.50					
EB - Ruskin Avenue to Cobblestone Drive	15.5	sta138+75	11	13875.0	285.0	26.50				Average	
		sta144	12	14400.0	290.0	23.00				Average	
		sta152	129	15200.0	315.0	33.00				Average	
		sta160	130	16000.0	315.0	40.00				Average	
		sta166	131	16600.0	310.0	35.00				Average	
		sta173	132	17300.0	310.0	47.00				Average	
		sta182	128	18200.0	310.0	30.00				Average	
		sta190	133	19000.0	310.0	22.00				Average	
		sta205+50	13	20550.0	310.0	30.50					
EB - Cobblestone Road to East Road	15.5	sta205+50	134	20550.0	310.0	30.50				Average	
		sta208	135	20800.0	310.0	36.00				Average	

INPUT: ROADWAYS

		sta210+25	136	21025.0	310.0	47.50					
EB - East Road to Mariner Boulevard	15.5	sta210+25	137	21025.0	310.0	47.50				Average	
		sta213	138	21300.0	307.0	51.00				Average	
		sta220	139	22000.0	302.0	28.00				Average	
		sta225	140	22500.0	300.0	28.00				Average	
		sta230	141	23000.0	295.0	31.00				Average	
		sta239	142	23900.0	288.0	28.00				Average	
		sta251	143	25100.0	280.0	28.00				Average	
		sta260	144	26000.0	270.0	32.00				Average	
		sta265	145	26500.0	265.0	30.00				Average	
		sta285	146	28500.0	260.0	39.00				Average	
		sta321	147	32100.0	243.0	40.00				Average	
		sta345	148	34500.0	225.0	46.00				Average	
		sta358	149	35800.0	218.0	56.00				Average	
		sta363	150	36300.0	213.0	52.00				Average	
		sta369	151	36900.0	208.0	62.00				Average	
		sta373	152	37300.0	208.0	59.00				Average	
		sta377+50	153	37750.0	200.0	59.00					
EB - Mariner Boulevard to Linden Drive	15.5	sta377+50	154	37750.0	200.0	59.00				Average	
		sta391	155	39100.0	185.0	59.00				Average	
		sta399	156	39900.0	180.0	50.00				Average	
		sta414	157	41400.0	163.0	50.00				Average	
		sta422	158	42200.0	153.0	58.00				Average	
		sta438	159	43800.0	140.0	59.00				Average	
		sta449	160	44900.0	135.0	67.00				Average	
		sta463	161	46300.0	123.0	67.50				Average	
		sta469	162	46900.0	118.0	81.00				Average	
		sta473	163	47300.0	118.0	89.00				Average	
		sta480	164	48000.0	105.0	92.00				Average	
		sta485	165	48500.0	105.0	86.00				Average	
		sta488	166	48800.0	103.0	78.00				Average	
		sta491	167	49100.0	102.0	76.00				Average	
		sta498	168	49800.0	100.0	81.00				Average	
		sta506+75	169	50675.0	95.0	76.00					
EB - Linden Drive to Anderson Snow Road	15.5	sta506+75	170	50675.0	95.0	76.00				Average	

		sta512	171	51200.0	95.0	74.00				Average	
		sta518	172	51800.0	92.0	76.00				Average	
		sta531	173	53100.0	88.0	68.00				Average	
		sta545	174	54500.0	78.0	68.00				Average	
		sta548	175	54800.0	50.0	68.00				Average	
		sta552	176	55200.0	48.0	68.00				Average	
		sta554+50	177	55450.0	75.0	68.00				Average	
		sta565+50	178	56550.0	75.0	66.00					
EB - Anderson Snow Rd to Suncoast Pkwy	15.5	sta565+50	179	56550.0	75.0	66.00				Average	
		sta580	180	58000.0	65.0	66.50					
WB - Suncoast Pkwy to Anderson Snow Rd	15.5	sta580	181	58000.0	77.0	66.50				Average	
		sta565+50	182	56550.0	87.0	66.00					
WB - Anderson Snow Road to Linden Drive	15.5	sta565+50	183	56550.0	87.0	66.00				Average	
		sta554+50	184	55450.0	87.0	68.00				Average	
		sta552	185	55200.0	60.0	68.00				Average	
		sta548	186	54800.0	62.0	68.00				Average	
		sta545	187	54500.0	90.0	68.00				Average	
		sta531	188	53100.0	100.0	68.00				Average	
		sta518	189	51800.0	104.0	76.00				Average	
		sta512	190	51200.0	107.0	74.00				Average	
		sta506+75	191	50675.0	107.0	76.00					
WB - Linden Drive to Mariner Boulevard	15.5	sta506+75	192	50675.0	107.0	76.00				Average	
		sta498	193	49800.0	112.0	81.00				Average	
		sta491	194	49100.0	114.0	76.00				Average	
		sta488	195	48800.0	115.0	78.00				Average	
		sta485	196	48500.0	117.0	86.00				Average	
		sta480	197	48000.0	117.0	92.00				Average	
		sta473	198	47300.0	130.0	89.00				Average	
		sta469	199	46900.0	130.0	81.00				Average	
		sta463	200	46300.0	135.0	67.50				Average	
		sta449	201	44900.0	147.0	67.00				Average	
		sta438	202	43800.0	152.0	59.00				Average	
		sta422	203	42200.0	165.0	58.00				Average	
		sta414	204	41400.0	175.0	50.00				Average	
		sta402+50	205	40250.0	195.0	50.50				Average	

		sta399	206	39900.0	204.0	50.00				Average	
		sta391	207	39100.0	209.0	59.00				Average	
		sta377+50	208	37750.0	224.0	59.00					
WB - Mariner Boulevard to East Road	15.5	sta377+50	209	37750.0	224.0	59.00				Average	
		sta373	210	37300.0	232.0	59.00				Average	
		sta372+50	211	37250.0	230.0	59.00				Average	
		sta369	212	36900.0	220.0	62.00				Average	
		sta363	213	36300.0	225.0	52.00				Average	
		sta358	214	35800.0	230.0	56.00				Average	
		sta345	215	34500.0	237.0	46.00				Average	
		sta321	216	32100.0	255.0	40.00				Average	
		sta285	217	28500.0	272.0	39.00				Average	
		sta271	218	27100.0	280.0	34.00				Average	
		sta268+50	219	26850.0	285.0	33.00				Average	
		sta264	220	26400.0	288.0	30.50				Average	
		sta260	221	26000.0	282.0	32.00				Average	
		sta251	222	25100.0	292.0	28.00				Average	
		sta239	223	23900.0	300.0	28.00				Average	
		sta230	224	23000.0	307.0	31.00				Average	
		sta225	225	22500.0	312.0	28.00				Average	
		sta220	228	22000.0	314.0	28.00				Average	
		sta213	227	21300.0	319.0	51.00				Average	
		sta210+25	226	21025.0	322.0	47.50					
WB - East Road to Cobblestone Drive	15.5	sta210+25	229	21025.0	322.0	47.50				Average	
		sta208	230	20800.0	322.0	36.00				Average	
		sta205+50	231	20550.0	322.0	30.50					
WB - Cobblestone Dr to west of Hallow Ave	15.5	sta205+50	232	20550.0	322.0	30.50				Average	
		sta190	233	19000.0	322.0	22.00				Average	
		sta182	234	18200.0	322.0	30.00				Average	
		sta173	235	17300.0	322.0	47.00				Average	
		sta166	236	16600.0	322.0	35.00				Average	
		sta160	237	16000.0	327.0	40.00				Average	
		sta152	238	15200.0	327.0	33.00				Average	
		sta143+50	239	14350.0	330.0	24.00					
WB - West of Hallow Ave to Hamlet Circle	31.0	sta143+50	240	14350.0	330.0	24.00				Average	

		sta138+75	241	13875.0	330.0	26.50				Average	
		sta127	242	12700.0	338.0	35.00				Average	
		sta120	243	12000.0	340.0	22.50				Average	
		sta113+75	244	11375.0	348.0	33.50					
WB - Hamlet Circle to US19	15.5	sta113+75	245	11375.0	348.0	33.50				Average	
		sta111	246	11100.0	350.0	35.00				Average	
		sta107	247	10700.0	353.0	35.00				Average	
		sta105	248	10500.0	350.0	33.00				Average	
		sta96	249	9600.0	357.0	29.00				Average	
		sta85	250	8500.0	357.0	16.50					
WB - Cobblestone Dr to west of Hallow Ave	County Line Road westbound from Cobblestone Drive to sta143+50 is 1-lane. Station 143+50 is between Ruskin A										
WB - West of Hallow Ave to Hamlet Circle	County Line Road westbound from sta143+50 to Hamlet Circle is 2-lanes.										

INPUT: TRAFFIC FOR LAeq1h Volumes

URS Corporation
WHA

2 July 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing/ Eastbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - US19 to Hamlet Circle	sta85	1	473	45	10	45	15	45	0	0	0	0
	sta96	2	473	45	10	45	15	45	0	0	0	0
	sta105	3	473	45	10	45	15	45	0	0	0	0
	sta107	127	473	45	10	45	15	45	0	0	0	0
	sta111	6	473	45	10	45	15	45	0	0	0	0
	sta113+75	4										
EB - Hamlet Circle to Ruskin Avenue	sta113+75	7	831	45	17	45	26	45	0	0	0	0
	sta120	9	831	45	17	45	26	45	0	0	0	0
	sta127	10	831	45	17	45	26	45	0	0	0	0
	sta138+75	8										
EB - Ruskin Avenue to Cobblestone Drive	sta138+75	11	473	45	10	45	15	45	0	0	0	0
	sta144	12	473	45	10	45	15	45	0	0	0	0
	sta152	129	473	45	10	45	15	45	0	0	0	0
	sta160	130	473	45	10	45	15	45	0	0	0	0
	sta166	131	473	45	10	45	15	45	0	0	0	0
	sta173	132	473	45	10	45	15	45	0	0	0	0
	sta182	128	473	45	10	45	15	45	0	0	0	0
	sta190	133	473	45	10	45	15	45	0	0	0	0
	sta205+50	13										
EB - Cobblestone Road to East Road	sta205+50	134	473	40	10	40	15	40	0	0	0	0
	sta208	135	473	40	10	40	15	40	0	0	0	0
	sta210+25	136										

EB - East Road to Mariner Boulevard	sta210+25	137	473	50	10	50	15	50	0	0	0	0
	sta213	138	473	50	10	50	15	50	0	0	0	0
	sta220	139	473	50	10	50	15	50	0	0	0	0
	sta225	140	473	50	10	50	15	50	0	0	0	0
	sta230	141	473	50	10	50	15	50	0	0	0	0
	sta239	142	473	50	10	50	15	50	0	0	0	0
	sta251	143	473	50	10	50	15	50	0	0	0	0
	sta260	144	473	50	10	50	15	50	0	0	0	0
	sta265	145	473	50	10	50	15	50	0	0	0	0
	sta285	146	473	50	10	50	15	50	0	0	0	0
	sta321	147	473	50	10	50	15	50	0	0	0	0
	sta345	148	473	50	10	50	15	50	0	0	0	0
	sta358	149	473	50	10	50	15	50	0	0	0	0
	sta363	150	473	50	10	50	15	50	0	0	0	0
	sta369	151	473	50	10	50	15	50	0	0	0	0
	sta373	152	473	50	10	50	15	50	0	0	0	0
	sta377+50	153										
EB - Mariner Boulevard to Linden Drive	sta377+50	154	463	55	15	55	20	55	0	0	0	0
	sta391	155	463	55	15	55	20	55	0	0	0	0
	sta399	156	463	55	15	55	20	55	0	0	0	0
	sta414	157	463	55	15	55	20	55	0	0	0	0
	sta422	158	463	55	15	55	20	55	0	0	0	0
	sta438	159	463	55	15	55	20	55	0	0	0	0
	sta449	160	463	55	15	55	20	55	0	0	0	0
	sta463	161	463	55	15	55	20	55	0	0	0	0
	sta469	162	463	55	15	55	20	55	0	0	0	0
	sta473	163	463	55	15	55	20	55	0	0	0	0
	sta480	164	463	55	15	55	20	55	0	0	0	0
	sta485	165	463	55	15	55	20	55	0	0	0	0
	sta488	166	463	55	15	55	20	55	0	0	0	0
	sta491	167	463	55	15	55	20	55	0	0	0	0
	sta498	168	463	55	15	55	20	55	0	0	0	0
	sta506+75	169										
EB - Linden Drive to Anderson Snow Road	sta506+75	170	462	50	15	50	20	50	0	0	0	0

	sta512	171	462	50	15	50	20	50	0	0	0	0
	sta518	172	462	50	15	50	20	50	0	0	0	0
	sta531	173	462	50	15	50	20	50	0	0	0	0
	sta545	174	462	50	15	50	20	50	0	0	0	0
	sta548	175	462	50	15	50	20	50	0	0	0	0
	sta552	176	462	50	15	50	20	50	0	0	0	0
	sta554+50	177	462	50	15	50	20	50	0	0	0	0
	sta565+50	178										
EB - Anderson Snow Rd to Suncoast Pkwy	sta565+50	179	398	50	13	50	17	50	0	0	0	0
	sta580	180										
WB - Suncoast Pkwy to Anderson Snow R	sta580	181	290	50	9	50	12	50	0	0	0	0
	sta565+50	182										
WB - Anderson Snow Road to Linden Drive	sta565+50	183	336	50	11	50	14	50	0	0	0	0
	sta554+50	184	336	50	11	50	14	50	0	0	0	0
	sta552	185	336	50	11	50	14	50	0	0	0	0
	sta548	186	336	50	11	50	14	50	0	0	0	0
	sta545	187	336	50	11	50	14	50	0	0	0	0
	sta531	188	336	50	11	50	14	50	0	0	0	0
	sta518	189	336	50	11	50	14	50	0	0	0	0
	sta512	190	336	50	11	50	14	50	0	0	0	0
	sta506+75	191										
WB - Linden Drive to Mariner Boulevard	sta506+75	192	337	55	11	55	14	55	0	0	0	0
	sta498	193	337	55	11	55	14	55	0	0	0	0
	sta491	194	337	55	11	55	14	55	0	0	0	0
	sta488	195	337	55	11	55	14	55	0	0	0	0
	sta485	196	337	55	11	55	14	55	0	0	0	0
	sta480	197	337	55	11	55	14	55	0	0	0	0
	sta473	198	337	55	11	55	14	55	0	0	0	0
	sta469	199	337	55	11	55	14	55	0	0	0	0
	sta463	200	337	55	11	55	14	55	0	0	0	0
	sta449	201	337	55	11	55	14	55	0	0	0	0
	sta438	202	337	55	11	55	14	55	0	0	0	0
	sta422	203	337	55	11	55	14	55	0	0	0	0
	sta414	204	337	55	11	55	14	55	0	0	0	0

	sta402+50	205	337	55	11	55	14	55	0	0	0	0
	sta399	206	337	55	11	55	14	55	0	0	0	0
	sta391	207	337	55	11	55	14	55	0	0	0	0
	sta377+50	208										
WB - Mariner Boulevard to East Road	sta377+50	209	344	50	7	50	11	50	0	0	0	0
	sta373	210	344	50	7	50	11	50	0	0	0	0
	sta372+50	211	344	50	7	50	11	50	0	0	0	0
	sta369	212	344	50	7	50	11	50	0	0	0	0
	sta363	213	344	50	7	50	11	50	0	0	0	0
	sta358	214	344	50	7	50	11	50	0	0	0	0
	sta345	215	344	50	7	50	11	50	0	0	0	0
	sta321	216	344	50	7	50	11	50	0	0	0	0
	sta285	217	344	50	7	50	11	50	0	0	0	0
	sta271	218	344	50	7	50	11	50	0	0	0	0
	sta268+50	219	344	50	7	50	11	50	0	0	0	0
	sta264	220	344	50	7	50	11	50	0	0	0	0
	sta260	221	344	50	7	50	11	50	0	0	0	0
	sta251	222	344	50	7	50	11	50	0	0	0	0
	sta239	223	344	50	7	50	11	50	0	0	0	0
	sta230	224	344	50	7	50	11	50	0	0	0	0
	sta225	225	344	50	7	50	11	50	0	0	0	0
	sta220	228	344	50	7	50	11	50	0	0	0	0
	sta213	227	344	50	7	50	11	50	0	0	0	0
	sta210+25	226										
WB - East Road to Cobblestone Drive	sta210+25	229	344	40	7	40	11	40	0	0	0	0
	sta208	230	344	40	7	40	11	40	0	0	0	0
	sta205+50	231										
WB - Cobblestone Dr to west of Hallow Av	sta205+50	232	344	45	7	45	11	45	0	0	0	0
	sta190	233	344	45	7	45	11	45	0	0	0	0
	sta182	234	344	45	7	45	11	45	0	0	0	0
	sta173	235	344	45	7	45	11	45	0	0	0	0
	sta166	236	344	45	7	45	11	45	0	0	0	0
	sta160	237	344	45	7	45	11	45	0	0	0	0
	sta152	238	344	45	7	45	11	45	0	0	0	0

	sta143+50	239										
WB - West of Hallow Ave to Hamlet Circle	sta143+50	240	604	45	13	45	19	45	0	0	0	0
	sta138+75	241	604	45	13	45	19	45	0	0	0	0
	sta127	242	604	45	13	45	19	45	0	0	0	0
	sta120	243	604	45	13	45	19	45	0	0	0	0
	sta113+75	244										
WB - Hamlet Circle to US19	sta113+75	245	344	45	7	45	11	45	0	0	0	0
	sta111	246	344	45	7	45	11	45	0	0	0	0
	sta107	247	344	45	7	45	11	45	0	0	0	0
	sta105	248	344	45	7	45	11	45	0	0	0	0
	sta96	249	344	45	7	45	11	45	0	0	0	0
	sta85	250										

URS Corporation
WHA

2 July 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing/ Eastbound

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria SubT Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
1	3	1	9160.0	240.0	22.00	5.00	0	66	10	8
2	4	1	9380.0	260.0	27.00	5.00	0	66	10	8
3	5	1	10060.0	-28.0	29.00	5.00	0	66	10	8
4	6	1	10780.0	-45.0	36.00	5.00	0	66	10	8
5	7	1	11850.0	-95.0	26.00	5.00	0	66	10	8
6	8	1	16130.0	-100.0	32.00	5.00	0	66	10	8
7	9	1	19205.0	225.0	23.00	5.00	0	66	10	8
8	10	1	19205.0	80.0	23.00	5.00	0	66	10	8
9	12	1	19480.0	210.0	25.00	5.00	0	66	10	8
10	13	1	19480.0	85.0	24.00	5.00	0	66	10	8
11	15	1	19715.0	60.0	30.00	5.00	0	66	10	8
12	16	1	19850.0	230.0	33.00	5.00	0	66	10	8
13	17	1	19955.0	20.0	29.00	5.00	0	66	10	8
14	18	1	20210.0	215.0	27.50	5.00	0	66	10	8
15	19	1	20210.0	35.0	26.00	5.00	0	66	10	8
16a	20	1	21115.0	-145.0	49.00	5.00	0	66	10	8
16b	21	1	21845.0	-50.0	28.00	5.00	0	66	10	8
17	22	1	22280.0	-65.0	26.00	5.00	0	66	10	8
18	23	1	23165.0	-20.0	31.00	5.00	0	66	10	8
19	24	1	23575.0	-155.0	32.00	5.00	0	66	10	8
20	26	1	24620.0	-230.0	25.00	5.00	0	66	10	8

21	27	1	24940.0	125.0	32.00	5.00	0	66	10	8
22	28	1	25070.0	5.0	31.00	5.00	0	66	10	8
23	29	1	25160.0	140.0	31.00	5.00	0	66	10	8
24	30	1	25275.0	130.0	32.50	5.00	0	66	10	8
25	31	1	25540.0	100.0	33.00	5.00	0	66	10	8
26	32	1	26270.0	0.0	33.00	5.00	0	66	10	8
27	33	1	26390.0	0.0	33.00	5.00	0	66	10	8
28	34	1	26515.0	0.0	30.00	5.00	0	66	10	8
29	35	1	27855.0	140.0	36.00	5.00	0	66	10	8
33	36	1	41645.0	-200.0	48.00	5.00	0	66	10	8
34	37	1	42310.0	-345.0	60.00	5.00	0	66	10	8
35	38	1	43275.0	-65.0	57.50	5.00	0	66	10	8
36	39	1	47425.0	0.0	88.50	5.00	0	66	10	8
37	40	1	47630.0	30.0	89.50	5.00	0	66	10	8
38	41	1	47905.0	0.0	92.50	5.00	0	66	10	8
39	42	1	50965.0	-15.0	76.00	5.00	0	66	10	8
40	43	1	51045.0	-65.0	75.50	5.00	0	66	10	8
41	44	1	52605.0	-80.0	70.00	5.00	0	66	10	8
42	45	1	55425.0	-30.0	67.00	5.00	0	66	10	8
43	46	1	56200.0	-50.0	67.00	5.00	0	66	10	8
44	47	1	56320.0	0.0	67.00	5.00	0	66	10	8
45	48	1	57055.0	-205.0	63.00	5.00	0	66	10	8
30	53	1	31760.0	-225.0	36.00	5.00	0	66	10	8
31	54	1	33420.0	-220.0	42.00	5.00	0	66	10	8
32	55	1	39000.0	-305.0	55.00	5.00	0	66	10	8

URS Corporation
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INPUT: BARRIERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing/ Eastbound

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height at Point	Segment				
		Min	Max	$ per unit area	$ per unit volume	Top Width	Run:Rise	$ per unit length			X	Y	Z		Seg Rt Perturba Increment	#Up	#Dn	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Privacy Wall1	W	0.00	99.99	0.00				0.00	point1	1	25000.0	225.0	29.50	5.00	1.00	1	0		
									point2	2	25350.0	225.0	31.00	5.00					
Privacy Wall2	W	0.00	99.99	0.00				0.00	point3	3	25500.0	223.0	32.50	5.00	1.00	1	0		
									point4	4	26150.0	215.0	32.00	5.00	1.00	1	0		
									point5	5	26575.0	213.0	30.00	5.00					

URS Corporation **17 June 2002**
WHA **TNM 1.0b**

INPUT: GROUND ZONES
PROJECT/CONTRACT: **CLR FAP 7822 001 S**
RUN: **County Line Road - Existing/ Eastbound**

Ground Zone Name	Type	Flow Resistivity	Points No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Ground Zone8	Water	20000	101	12170.0	500.0
			102	11860.0	500.0
			103	11700.0	620.0
			104	11530.0	800.0
			105	12020.0	780.0
Ground Zone9	Water	20000	106	23910.0	405.0
			107	23770.0	490.0
			108	23735.0	610.0
			109	23770.0	720.0
			110	23900.0	770.0
			111	24015.0	740.0
			112	24075.0	625.0
			113	24060.0	490.0
Ground Zone29	Pavement	20000	114	10500.0	339.0
			115	10700.0	321.0
			116	11100.0	296.0
			117	11129.9	296.8
			118	11129.9	348.3
			119	11100.0	349.0
			120	10700.0	352.0
			121	10500.0	349.0
Ground Zone30	Lawn	300	122	11131.7	296.5
			123	11375.0	296.0
			124	12000.0	296.0
			125	12101.6	295.8
			126	12101.6	338.5
			127	12000.0	339.0
			128	11375.0	347.0
			129	11131.7	348.2
Ground Zone31	Pavement	20000	130	12103.6	296.3
			131	12700.0	289.0
			132	12901.9	291.4
			133	12901.9	334.4
			134	12700.0	337.0

			135	12103.6	338.1
Ground Zone32	Lawn	300	136	12903.8	291.4
			137	13500.4	288.9
			138	13500.4	329.5
			139	12903.8	334.4
Ground Zone33	Pavement	20000	140	13503.2	288.9
			141	13875.0	286.0
			142	14400.0	291.0
			143	15101.0	313.5
			144	15101.0	326.0
			145	14350.0	329.0
			146	13875.0	329.0
			147	13503.2	329.5
Ground Zone34	Pavement	20000	148	26400.6	266.6
			149	26500.0	266.0
			151	27199.9	264.0
			152	27199.9	279.0
			153	27100.0	279.0
			154	26850.0	284.0
			155	26401.0	287.0
Ground Zone35	Pavement	20000	156	37100.2	210.0
			157	37300.0	209.0
			158	37750.0	201.0
			159	39100.0	186.0
			160	39900.0	181.0
			162	40502.0	175.0
			163	40502.0	190.0
			164	40250.0	194.0
			165	39900.0	203.0
			166	39100.0	208.0
			167	37750.0	223.0
			168	37300.0	231.0
			169	37250.0	229.0
			171	37100.2	224.3

URS Corporation
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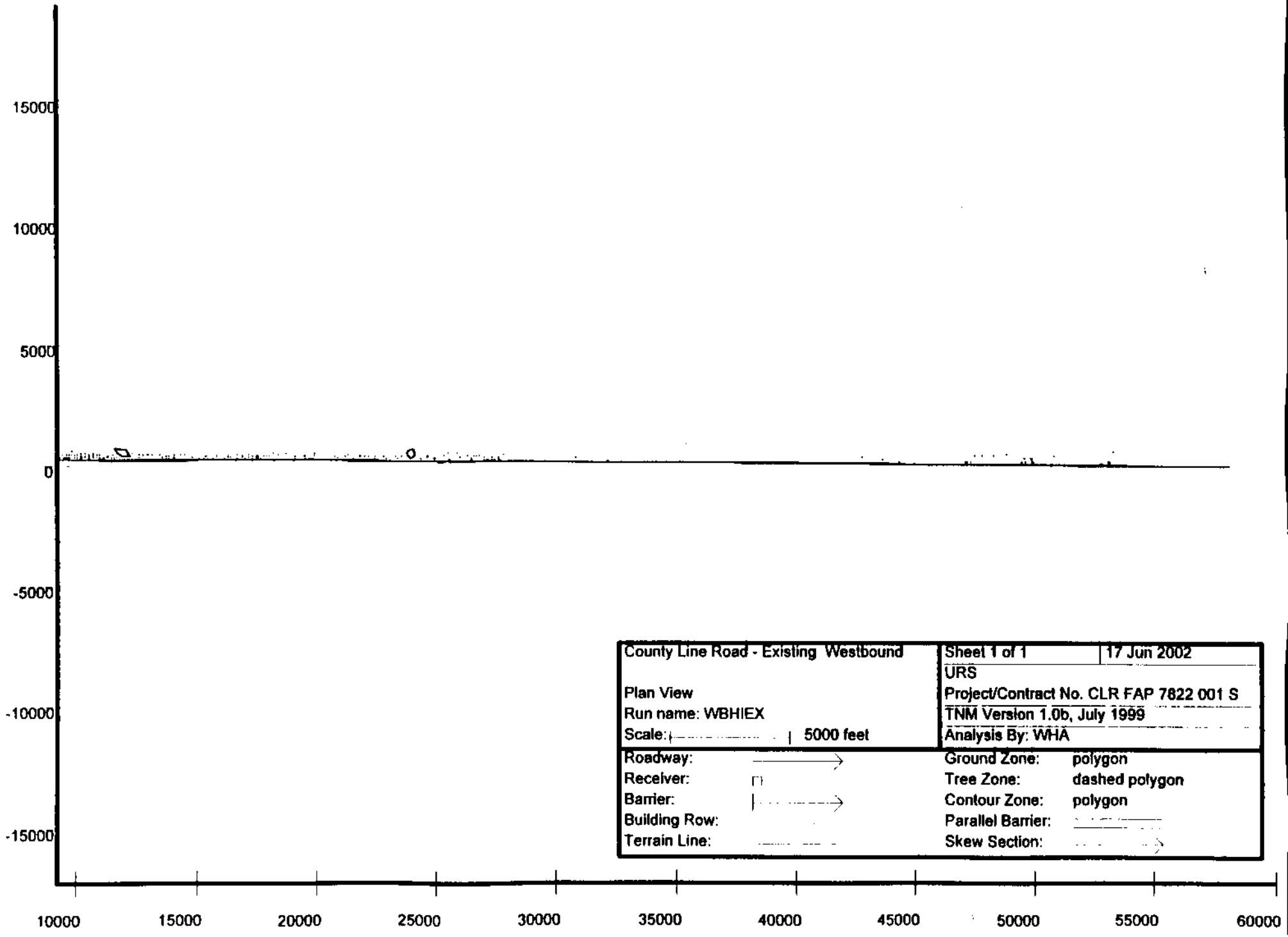
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing/ Eastbound
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1	3	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
2	4	1	0.0	62.8	66	62.8	10	---	62.8	0.0	8	-8.0
3	5	1	0.0	51.8	66	51.8	10	---	51.8	0.0	8	-8.0
4	6	1	0.0	52.7	66	52.7	10	---	52.7	0.0	8	-8.0
5	7	1	0.0	53.6	66	53.6	10	---	53.6	0.0	8	-8.0
6	8	1	0.0	51.0	66	51.0	10	---	51.0	0.0	8	-8.0
7	9	1	0.0	62.8	66	62.8	10	---	62.8	0.0	8	-8.0
8	10	1	0.0	55.4	66	55.4	10	---	55.4	0.0	8	-8.0
9	12	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0
10	13	1	0.0	55.5	66	55.5	10	---	55.5	0.0	8	-8.0
11	15	1	0.0	54.8	66	54.8	10	---	54.8	0.0	8	-8.0
12	16	1	0.0	64.1	66	64.1	10	---	64.1	0.0	8	-8.0
13	17	1	0.0	53.7	66	53.7	10	---	53.7	0.0	8	-8.0
14	18	1	0.0	61.9	66	61.9	10	---	61.9	0.0	8	-8.0
15	19	1	0.0	54.1	66	54.1	10	---	54.1	0.0	8	-8.0
16a	20	1	0.0	51.0	66	51.0	10	---	51.0	0.0	8	-8.0
16b	21	1	0.0	53.8	66	53.8	10	---	53.8	0.0	8	-8.0
17	22	1	0.0	52.8	66	52.8	10	---	52.8	0.0	8	-8.0
18	23	1	0.0	53.8	66	53.8	10	---	53.8	0.0	8	-8.0
19	24	1	0.0	51.1	66	51.1	10	---	51.0	0.1	8	-7.9
20	26	1	0.0	50.0	66	50.0	10	---	49.7	0.3	8	-7.7
21	27	1	0.0	59.2	66	59.2	10	---	58.9	0.3	8	-7.7
22	28	1	0.0	55.0	66	55.0	10	---	53.8	1.2	8	-6.8
23	29	1	0.0	60.1	66	60.1	10	---	57.6	2.5	8	-5.5

24	30	1	0.0	59.7	66	59.7	10	---	57.8	1.9	8	-6.1
25	31	1	0.0	58.6	66	58.6	10	---	56.7	1.9	8	-6.1
26	32	1	0.0	56.2	66	56.2	10	---	54.4	1.8	8	-6.2
27	33	1	0.0	56.5	66	56.5	10	---	54.9	1.6	8	-6.4
28	34	1	0.0	57.0	66	57.0	10	---	55.5	1.5	8	-6.5
29	35	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
33	36	1	0.0	54.4	66	54.4	10	---	54.4	0.0	8	-8.0
34	37	1	0.0	51.6	66	51.6	10	---	51.6	0.0	8	-8.0
35	38	1	0.0	58.6	66	58.6	10	---	58.6	0.0	8	-8.0
36	39	1	0.0	63.7	66	63.7	10	---	63.7	0.0	8	-8.0
37	40	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
38	41	1	0.0	64.2	66	64.2	10	---	64.2	0.0	8	-8.0
39	42	1	0.0	62.5	66	62.5	10	---	62.5	0.0	8	-8.0
40	43	1	0.0	59.6	66	59.6	10	---	59.6	0.0	8	-8.0
41	44	1	0.0	59.2	66	59.2	10	---	59.2	0.0	8	-8.0
42	45	1	0.0	63.1	66	63.1	10	---	63.1	0.0	8	-8.0
43	46	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
44	47	1	0.0	65.3	66	65.3	10	---	65.3	0.0	8	-8.0
45	48	1	0.0	54.7	66	54.7	10	---	54.7	0.0	8	-8.0
30	53	1	0.0	50.5	66	50.5	10	---	50.5	0.0	8	-8.0
31	54	1	0.0	50.8	66	50.8	10	---	50.8	0.0	8	-8.0
32	55	1	0.0	51.8	66	51.8	10	---	51.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	46	0.0	0.3	2.5
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0


15000
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County Line Road - Existing Westbound
Plan View
Run name: WBHIEX
Scale: 5000 feet
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

INPUT: ROADWAYS

URS
WHA

2 July 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing Westbound

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - US19 to Hamlet Circle	15.5	sta85	1	8500.0	345.0	16.50				Average	
		sta96	2	9600.0	345.0	29.00				Average	
		sta105	3	10500.0	338.0	33.00				Average	
		sta107	127	10700.0	320.0	35.00				Average	
		sta111	6	11100.0	295.0	35.00				Average	
		sta113+75	4	11375.0	295.0	33.50					
EB - Hamlet Circle to Ruskin Avenue	31.0	sta113+75	7	11375.0	295.0	33.50				Average	
		sta120	9	12000.0	295.0	22.50				Average	
		sta127	10	12700.0	290.0	35.00				Average	
		sta138+75	8	13875.0	285.0	26.50					
EB - Ruskin Avenue to Cobblestone Drive	15.5	sta138+75	11	13875.0	285.0	26.50				Average	
		sta144	12	14400.0	290.0	23.00				Average	
		sta152	129	15200.0	315.0	33.00				Average	
		sta160	130	16000.0	315.0	40.00				Average	
		sta166	131	16600.0	310.0	35.00				Average	
		sta173	132	17300.0	310.0	47.00				Average	
		sta182	128	18200.0	310.0	30.00				Average	
		sta190	133	19000.0	310.0	22.00				Average	
		sta205+50	13	20550.0	310.0	30.50					
EB - Cobblestone Road to East Road	15.5	sta205+50	134	20550.0	310.0	30.50				Average	
		sta208	135	20800.0	310.0	36.00				Average	

		sta210+25	136	21025.0	310.0	47.50					
EB - East Road to Mariner Boulevard	15.5	sta210+25	137	21025.0	310.0	47.50				Average	
		sta213	138	21300.0	307.0	51.00				Average	
		sta220	139	22000.0	302.0	28.00				Average	
		sta225	140	22500.0	300.0	28.00				Average	
		sta230	141	23000.0	295.0	31.00				Average	
		sta239	142	23900.0	288.0	28.00				Average	
		sta251	143	25100.0	280.0	28.00				Average	
		sta260	144	26000.0	270.0	32.00				Average	
		sta265	145	26500.0	265.0	30.00				Average	
		sta285	146	28500.0	260.0	39.00				Average	
		sta321	147	32100.0	243.0	40.00				Average	
		sta345	148	34500.0	225.0	46.00				Average	
		sta358	149	35800.0	218.0	56.00				Average	
		sta363	150	36300.0	213.0	52.00				Average	
		sta369	151	36900.0	208.0	62.00				Average	
		sta373	152	37300.0	208.0	59.00				Average	
		sta377+50	153	37750.0	200.0	59.00					
EB - Mariner Boulevard to Linden Drive	15.5	sta377+50	154	37750.0	200.0	59.00				Average	
		sta391	155	39100.0	185.0	59.00				Average	
		sta399	156	39900.0	180.0	50.00				Average	
		sta414	157	41400.0	163.0	50.00				Average	
		sta422	158	42200.0	153.0	58.00				Average	
		sta438	159	43800.0	140.0	59.00				Average	
		sta449	160	44900.0	135.0	67.00				Average	
		sta463	161	46300.0	123.0	67.50				Average	
		sta469	162	46900.0	118.0	81.00				Average	
		sta473	163	47300.0	116.0	89.00				Average	
		sta480	164	48000.0	105.0	92.00				Average	
		sta485	165	48500.0	105.0	86.00				Average	
		sta488	166	48800.0	103.0	78.00				Average	
		sta491	167	49100.0	102.0	78.00				Average	
		sta498	168	49800.0	100.0	81.00				Average	
		sta506+75	169	50675.0	95.0	76.00					
EB - Linden Drive to Anderson Snow Road	15.5	sta506+75	170	50675.0	95.0	76.00				Average	

		sta512	171	51200.0	95.0	74.00				Average	
		sta518	172	51800.0	92.0	76.00				Average	
		sta531	173	53100.0	88.0	68.00				Average	
		sta545	174	54500.0	78.0	68.00				Average	
		sta548	175	54800.0	50.0	68.00				Average	
		sta552	176	55200.0	48.0	68.00				Average	
		sta554+50	177	55450.0	75.0	68.00				Average	
		sta565+50	178	56550.0	75.0	66.00					
EB - Anderson Snow Rd to Suncoast Pkwy	15.5	sta565+50	179	56550.0	75.0	66.00				Average	
		sta580	180	58000.0	65.0	66.50					
WB - Suncoast Pkwy to Anderson Snow Rd	15.5	sta580	181	58000.0	77.0	66.50				Average	
		sta565+50	182	56550.0	87.0	66.00					
WB - Anderson Snow Road to Linden Drive	15.5	sta565+50	183	56550.0	87.0	66.00				Average	
		sta554+50	184	55450.0	87.0	68.00				Average	
		sta552	185	55200.0	60.0	68.00				Average	
		sta548	186	54800.0	62.0	68.00				Average	
		sta545	187	54500.0	90.0	68.00				Average	
		sta531	188	53100.0	100.0	68.00				Average	
		sta518	189	51800.0	104.0	76.00				Average	
		sta512	190	51200.0	107.0	74.00				Average	
		sta508+75	191	50675.0	107.0	76.00					
WB - Linden Drive to Mariner Boulevard	15.5	sta506+75	192	50675.0	107.0	76.00				Average	
		sta498	193	49800.0	112.0	81.00				Average	
		sta491	194	49100.0	114.0	76.00				Average	
		sta488	195	48800.0	115.0	78.00				Average	
		sta485	196	48500.0	117.0	86.00				Average	
		sta480	197	48000.0	117.0	92.00				Average	
		sta473	198	47300.0	130.0	89.00				Average	
		sta469	199	46900.0	130.0	81.00				Average	
		sta463	200	46300.0	135.0	67.50				Average	
		sta449	201	44900.0	147.0	67.00				Average	
		sta438	202	43800.0	152.0	59.00				Average	
		sta422	203	42200.0	165.0	58.00				Average	
		sta414	204	41400.0	175.0	50.00				Average	
		sta402+50	205	40250.0	195.0	50.50				Average	

		sta399	206	39900.0	204.0	50.00				Average	
		sta391	207	39100.0	209.0	59.00				Average	
		sta377+50	208	37750.0	224.0	59.00					
WB - Mariner Boulevard to East Road	15.5	sta377+50	209	37750.0	224.0	59.00				Average	
		sta373	210	37300.0	232.0	59.00				Average	
		sta372+50	211	37250.0	230.0	59.00				Average	
		sta369	212	36900.0	220.0	62.00				Average	
		sta363	213	36300.0	225.0	52.00				Average	
		sta358	214	35800.0	230.0	56.00				Average	
		sta345	215	34500.0	237.0	46.00				Average	
		sta321	216	32100.0	255.0	40.00				Average	
		sta285	217	28500.0	272.0	39.00				Average	
		sta271	218	27100.0	280.0	34.00				Average	
		sta268+50	219	26850.0	285.0	33.00				Average	
		sta264	220	26400.0	288.0	30.50				Average	
		sta260	221	26000.0	282.0	32.00				Average	
		sta251	222	25100.0	292.0	28.00				Average	
		sta239	223	23900.0	300.0	28.00				Average	
		sta230	224	23000.0	307.0	31.00				Average	
		sta225	225	22500.0	312.0	28.00				Average	
		sta220	228	22000.0	314.0	28.00				Average	
		sta213	227	21300.0	319.0	51.00				Average	
		sta210+25	226	21025.0	322.0	47.50					
WB - East Road to Cobblestone Drive	15.5	sta210+25	229	21025.0	322.0	47.50				Average	
		sta208	230	20800.0	322.0	36.00				Average	
		sta205+50	231	20550.0	322.0	30.50					
WB - Cobblestone Dr to west of Hallow Ave	15.5	sta205+50	232	20550.0	322.0	30.50				Average	
		sta190	233	19000.0	322.0	22.00				Average	
		sta182	234	18200.0	322.0	30.00				Average	
		sta173	235	17300.0	322.0	47.00				Average	
		sta166	236	16600.0	322.0	35.00				Average	
		sta160	237	16000.0	327.0	40.00				Average	
		sta152	238	15200.0	327.0	33.00				Average	
		sta143+50	239	14350.0	330.0	24.00					
WB - West of Hallow Ave to Hamlet Circle	31.0	sta143+50	240	14350.0	330.0	24.00				Average	

		sta138+75	241	13875.0	330.0	26.50				Average	
		sta127	242	12700.0	338.0	35.00				Average	
		sta120	243	12000.0	340.0	22.50				Average	
		sta113+75	244	11375.0	348.0	33.50					
WB - Hamlet Circle to US19	15.5	sta113+75	245	11375.0	348.0	33.50				Average	
		sta111	246	11100.0	350.0	35.00				Average	
		sta107	247	10700.0	353.0	35.00				Average	
		sta105	248	10500.0	350.0	33.00				Average	
		sta96	249	9600.0	357.0	29.00				Average	
		sta85	250	8500.0	357.0	16.50					
WB - Cobblestone Dr to west of Hallow Ave County Line Road westbound from Cobblestone Drive to sta143+50 is 1-lane. Station 143+50 is between Ruskin Av											
WB - West of Hallow Ave to Hamlet Circle County Line Road westbound from sta143+50 to Hamlet Circle is 2-lanes.											

URS
WHA

2 July 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing Westbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - US19 to Hamlet Circle	sta85	1	344	45	7	45	11	45	0	0	0	0
	sta96	2	344	45	7	45	11	45	0	0	0	0
	sta105	3	344	45	7	45	11	45	0	0	0	0
	sta107	127	344	45	7	45	11	45	0	0	0	0
	sta111	6	344	45	7	45	11	45	0	0	0	0
	sta113+75	4										
EB - Hamlet Circle to Ruskin Avenue	sta113+75	7	604	45	13	45	19	45	0	0	0	0
	sta120	9	604	45	13	45	19	45	0	0	0	0
	sta127	10	604	45	13	45	19	45	0	0	0	0
	sta138+75	8										
EB - Ruskin Avenue to Cobblestone Drive	sta138+75	11	344	45	7	45	11	45	0	0	0	0
	sta144	12	344	45	7	45	11	45	0	0	0	0
	sta152	129	344	45	7	45	11	45	0	0	0	0
	sta160	130	344	45	7	45	11	45	0	0	0	0
	sta166	131	344	45	7	45	11	45	0	0	0	0
	sta173	132	344	45	7	45	11	45	0	0	0	0
	sta182	128	344	45	7	45	11	45	0	0	0	0
	sta190	133	344	45	7	45	11	45	0	0	0	0
	sta205+50	13										
EB - Cobblestone Road to East Road	sta205+50	134	344	40	7	40	11	40	0	0	0	0
	sta208	135	344	40	7	40	11	40	0	0	0	0
	sta210+25	136										

INPUT: TRAFFIC FOR LAeq1h Volumes												
EB - East Road to Mariner Boulevard	sta210+25	137	344	50	7	50	11	50	0	0	0	0
	sta213	138	344	50	7	50	11	50	0	0	0	0
	sta220	139	344	50	7	50	11	50	0	0	0	0
	sta225	140	344	50	7	50	11	50	0	0	0	0
	sta230	141	344	50	7	50	11	50	0	0	0	0
	sta239	142	344	50	7	50	11	50	0	0	0	0
	sta251	143	344	50	7	50	11	50	0	0	0	0
	sta260	144	344	50	7	50	11	50	0	0	0	0
	sta265	145	344	50	7	50	11	50	0	0	0	0
	sta285	146	344	50	7	50	11	50	0	0	0	0
	sta321	147	344	50	7	50	11	50	0	0	0	0
	sta345	148	344	50	7	50	11	50	0	0	0	0
	sta358	149	344	50	7	50	11	50	0	0	0	0
	sta363	150	344	50	7	50	11	50	0	0	0	0
	sta369	151	344	50	7	50	11	50	0	0	0	0
	sta373	152	344	50	7	50	11	50	0	0	0	0
	sta377+50	153										
EB - Mariner Boulevard to Linden Drive	sta377+50	154	344	55	7	55	11	55	0	0	0	0
	sta391	155	344	55	7	55	11	55	0	0	0	0
	sta399	156	344	55	7	55	11	55	0	0	0	0
	sta414	157	344	55	7	55	11	55	0	0	0	0
	sta422	158	344	55	7	55	11	55	0	0	0	0
	sta438	159	344	55	7	55	11	55	0	0	0	0
	sta449	160	344	55	7	55	11	55	0	0	0	0
	sta463	161	344	55	7	55	11	55	0	0	0	0
	sta469	162	344	55	7	55	11	55	0	0	0	0
	sta473	163	344	55	7	55	11	55	0	0	0	0
	sta480	164	344	55	7	55	11	55	0	0	0	0
	sta485	165	344	55	7	55	11	55	0	0	0	0
	sta488	166	344	55	7	55	11	55	0	0	0	0
	sta491	167	344	55	7	55	11	55	0	0	0	0
	sta498	168	344	55	7	55	11	55	0	0	0	0
	sta506+75	169										
EB - Linden Drive to Anderson Snow Road	sta506+75	170	336	50	11	50	14	50	0	0	0	0

	sta512	171	336	50	11	50	14	50	0	0	0	0
	sta518	172	336	50	11	50	14	50	0	0	0	0
	sta531	173	336	50	11	50	14	50	0	0	0	0
	sta545	174	336	50	11	50	14	50	0	0	0	0
	sta548	175	336	50	11	50	14	50	0	0	0	0
	sta552	176	336	50	11	50	14	50	0	0	0	0
	sta554+50	177	336	50	11	50	14	50	0	0	0	0
	sta565+50	178										
EB - Anderson Snow Rd to Suncoast Pkwy	sta565+50	179	290	50	9	50	12	50	0	0	0	0
	sta580	180										
WB - Suncoast Pkwy to Anderson Snow R	sta580	181	398	50	13	50	17	50	0	0	0	0
	sta565+50	182										
WB - Anderson Snow Road to Linden Drive	sta565+50	183	462	50	15	50	20	50	0	0	0	0
	sta554+50	184	462	50	15	50	20	50	0	0	0	0
	sta552	185	462	50	15	50	20	50	0	0	0	0
	sta548	186	462	50	15	50	20	50	0	0	0	0
	sta545	187	462	50	15	50	20	50	0	0	0	0
	sta531	188	462	50	15	50	20	50	0	0	0	0
	sta518	189	462	50	15	50	20	50	0	0	0	0
	sta512	190	462	50	15	50	20	50	0	0	0	0
	sta506+75	191										
WB - Linden Drive to Mariner Boulevard	sta506+75	192	463	55	15	55	20	55	0	0	0	0
	sta498	193	463	55	15	55	20	55	0	0	0	0
	sta491	194	463	55	15	55	20	55	0	0	0	0
	sta488	195	463	55	15	55	20	55	0	0	0	0
	sta485	196	463	55	15	55	20	55	0	0	0	0
	sta480	197	463	55	15	55	20	55	0	0	0	0
	sta473	198	463	55	15	55	20	55	0	0	0	0
	sta469	199	463	55	15	55	20	55	0	0	0	0
	sta463	200	463	55	15	55	20	55	0	0	0	0
	sta449	201	463	55	15	55	20	55	0	0	0	0
	sta438	202	463	55	15	55	20	55	0	0	0	0
	sta422	203	463	55	15	55	20	55	0	0	0	0
	sta414	204	463	55	15	55	20	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

	sta402+50	205	463	55	15	55	20	55	0	0	0	0
	sta399	206	463	55	15	55	20	55	0	0	0	0
	sta391	207	463	55	15	55	20	55	0	0	0	0
	sta377+50	208										
WB - Mariner Boulevard to East Road	sta377+50	209	473	50	10	50	15	50	0	0	0	0
	sta373	210	473	50	10	50	15	50	0	0	0	0
	sta372+50	211	473	50	10	50	15	50	0	0	0	0
	sta369	212	473	50	10	50	15	50	0	0	0	0
	sta363	213	473	50	10	50	15	50	0	0	0	0
	sta358	214	473	50	10	50	15	50	0	0	0	0
	sta345	215	473	50	10	50	15	50	0	0	0	0
	sta321	216	473	50	10	50	15	50	0	0	0	0
	sta285	217	473	50	10	50	15	50	0	0	0	0
	sta271	218	473	50	10	50	15	50	0	0	0	0
	sta268+50	219	473	50	10	50	15	50	0	0	0	0
	sta264	220	473	50	10	50	15	50	0	0	0	0
	sta260	221	473	50	10	50	15	50	0	0	0	0
	sta251	222	473	50	10	50	15	50	0	0	0	0
	sta239	223	473	50	10	50	15	50	0	0	0	0
	sta230	224	473	50	10	50	15	50	0	0	0	0
	sta225	225	473	50	10	50	15	50	0	0	0	0
	sta220	228	473	50	10	50	15	50	0	0	0	0
	sta213	227	473	50	10	50	15	50	0	0	0	0
	sta210+25	226										
WB - East Road to Cobblestone Drive	sta210+25	229	473	40	10	40	15	40	0	0	0	0
	sta208	230	473	40	10	40	15	40	0	0	0	0
	sta205+50	231										
WB - Cobblestone Dr to west of Hallow Av	sta205+50	232	473	45	10	45	15	45	0	0	0	0
	sta190	233	473	45	10	45	15	45	0	0	0	0
	sta182	234	473	45	10	45	15	45	0	0	0	0
	sta173	235	473	45	10	45	15	45	0	0	0	0
	sta166	236	473	45	10	45	15	45	0	0	0	0
	sta160	237	473	45	10	45	15	45	0	0	0	0
	sta152	238	473	45	10	45	15	45	0	0	0	0

	sta143+50	239										
WB - West of Hallow Ave to Hamlet Circle	sta143+50	240	831	45	17	45	26	45	0	0	0	0
	sta138+75	241	831	45	17	45	26	45	0	0	0	0
	sta127	242	831	45	17	45	26	45	0	0	0	0
	sta120	243	831	45	17	45	26	45	0	0	0	0
	sta113+75	244										
WB - Hamlet Circle to US19	sta113+75	245	473	45	10	45	15	45	0	0	0	0
	sta111	246	473	45	10	45	15	45	0	0	0	0
	sta107	247	473	45	10	45	15	45	0	0	0	0
	sta105	248	473	45	10	45	15	45	0	0	0	0
	sta96	249	473	45	10	45	15	45	0	0	0	0
	sta85	250										

INPUT: RECEIVERS

URS
WHA

2 July 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing Westbound

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
46	51	1	53230.0	670.0	70.00	5.00	0	66	10	8
47	53	1	53045.0	220.0	69.50	5.00	0	66	10	8
48	55	1	52760.0	195.0	72.00	5.00	0	66	10	8
49	56	1	50780.0	520.0	80.00	5.00	0	66	10	8
50	57	1	49880.0	245.0	87.50	5.00	0	66	10	8
51	58	1	49570.0	250.0	83.00	5.00	0	66	10	8
52	59	1	49400.0	245.0	82.00	5.00	0	66	10	8
53	61	1	49840.0	365.0	85.00	5.00	0	66	10	8
54	62	1	49800.0	370.0	85.00	5.00	0	66	10	8
55	63	1	49540.0	380.0	83.00	5.00	0	66	10	8
56	67	1	48790.0	570.0	77.00	5.00	0	66	10	8
57	68	1	48240.0	485.0	76.00	5.00	0	66	10	8
58	69	1	47780.0	490.0	84.00	5.00	0	66	10	8
59	70	1	47440.0	510.0	88.00	5.00	0	66	10	8
60	71	1	47280.0	215.0	92.00	5.00	0	66	10	8
61	73	1	47090.0	230.0	87.00	5.00	0	66	10	8
62	74	1	44280.0	205.0	60.00	5.00	0	66	10	8
63	75	1	43580.0	350.0	59.00	5.00	0	66	10	8
65	77	1	35360.0	1000.0	40.00	5.00	0	66	10	8
66	78	1	30770.0	420.0	37.00	5.00	0	66	10	8
67	79	1	27760.0	570.0	30.00	5.00	0	66	10	8

68	80	1	27570.0	355.0	35.00	5.00	0	66	10	8
69	81	1	27540.0	415.0	36.00	5.00	0	66	10	8
70	82	1	27390.0	360.0	35.00	5.00	0	66	10	8
71	83	1	27265.0	360.0	36.00	5.00	0	66	10	8
72	84	1	27250.0	450.0	35.00	5.00	0	66	10	8
73	85	1	27080.0	345.0	35.00	5.00	0	66	10	8
74	86	1	26970.0	345.0	34.00	5.00	0	66	10	8
75	87	1	26950.0	430.0	34.00	5.00	0	66	10	8
76	88	1	26750.0	480.0	34.00	5.00	0	66	10	8
77	89	1	26625.0	505.0	32.00	5.00	0	66	10	8
78	90	1	26515.0	490.0	30.00	5.00	0	66	10	8
79	91	1	26425.0	365.0	30.00	5.00	0	66	10	8
80	92	1	26225.0	480.0	31.00	5.00	0	66	10	8
81	94	1	25950.0	430.0	33.00	5.00	0	66	10	8
82	95	1	25800.0	595.0	31.00	5.00	0	66	10	8
83	96	1	25490.0	350.0	31.00	5.00	0	66	10	8
84	97	1	25425.0	590.0	30.00	5.00	0	66	10	8
85	98	1	25260.0	495.0	29.00	5.00	0	66	10	8
86	99	1	24880.0	410.0	29.00	5.00	0	66	10	8
87	100	1	24575.0	470.0	28.00	5.00	0	66	10	8
88	101	1	24330.0	410.0	29.00	5.00	0	66	10	8
89	102	1	23490.0	492.0	30.00	5.00	0	66	10	8
90	104	1	23350.0	400.0	32.00	5.00	0	66	10	8
91	105	1	23270.0	520.0	30.00	5.00	0	66	10	8
92	106	1	22880.0	390.0	32.00	5.00	0	66	10	8
93	107	1	22760.0	485.0	32.00	5.00	0	66	10	8
94	108	1	22390.0	390.0	30.00	5.00	0	66	10	8
95	109	1	22400.0	520.0	31.00	5.00	0	66	10	8
96	111	1	22125.0	520.0	29.00	5.00	0	66	10	8
97	112	1	21950.0	490.0	29.00	5.00	0	66	10	8
98	113	1	21770.0	477.0	32.50	5.00	0	66	10	8
99	116	1	21475.0	398.0	48.00	5.00	0	66	10	8
100	117	1	21260.0	535.0	53.00	5.00	0	66	10	8
101	118	1	21140.0	515.0	46.00	5.00	0	66	10	8

INPUT: RECEIVERS

102	120	1	20740.0	510.0	41.00	5.00	0	66	10	8
103	121	1	20820.0	420.0	41.00	5.00	0	66	10	8
104	122	1	19885.0	520.0	43.00	5.00	0	66	10	8
105	123	1	19885.0	580.0	40.00	5.00	0	66	10	8
106	124	1	19810.0	390.0	32.00	5.00	0	66	10	8
107	125	1	19730.0	387.0	30.00	5.00	0	66	10	8
108	126	1	19655.0	392.0	28.00	5.00	0	66	10	8
109	127	1	19485.0	390.0	30.00	5.00	0	66	10	8
110	128	1	19465.0	500.0	35.00	5.00	0	66	10	8
111	129	1	19045.0	400.0	25.00	5.00	0	66	10	8
112	130	1	19045.0	495.0	31.00	5.00	0	66	10	8
113	132	1	18700.0	590.0	30.00	5.00	0	66	10	8
114	133	1	18380.0	562.0	34.00	5.00	0	66	10	8
115	134	1	18160.0	585.0	32.00	5.00	0	66	10	8
116	135	1	17970.0	480.0	36.00	5.00	0	66	10	8
117	136	1	17890.0	500.0	39.00	5.00	0	66	10	8
118	137	1	17775.0	520.0	37.00	5.00	0	66	10	8
119	138	1	17600.0	380.0	40.00	5.00	0	66	10	8
120	140	1	17480.0	397.0	46.00	5.00	0	66	10	8
121	141	1	17480.0	470.0	44.00	5.00	0	66	10	8
122	142	1	17290.0	397.0	50.00	5.00	0	66	10	8
123	143	1	17290.0	485.0	52.00	5.00	0	66	10	8
124	144	1	17150.0	427.0	55.00	5.00	0	66	10	8
125	145	1	17150.0	575.0	40.00	5.00	0	66	10	8
126	146	1	16975.0	391.0	50.00	5.00	0	66	10	8
127	147	1	16840.0	470.0	44.00	5.00	0	66	10	8
128	148	1	16650.0	407.0	38.00	5.00	0	66	10	8
129	149	1	16670.0	550.0	35.00	5.00	0	66	10	8
130	151	1	16370.0	435.0	37.00	5.00	0	66	10	8
131	152	1	16250.0	420.0	40.00	5.00	0	66	10	8
132	153	1	16270.0	505.0	33.00	5.00	0	66	10	8
133	154	1	16100.0	398.0	42.00	5.00	0	66	10	8
134	155	1	15650.0	407.0	38.00	5.00	0	66	10	8
135	156	1	15780.0	480.0	31.50	5.00	0	66	10	8

136	158	1	15390.0	402.0	34.00	5.00	0	66	10	8
137	159	1	15235.0	402.0	34.00	5.00	0	66	10	8
138	160	1	15370.0	510.0	37.00	5.00	0	66	10	8
139	162	1	15310.0	510.0	37.00	5.00	0	66	10	8
140	163	1	15030.0	412.0	35.00	5.00	0	66	10	8
141	164	1	14790.0	440.0	27.00	5.00	0	66	10	8
142	167	1	14460.0	560.0	20.00	5.00	0	66	10	8
143	168	1	14290.0	530.0	29.00	5.00	0	66	10	8
144	170	1	14000.0	415.0	27.50	5.00	0	66	10	8
145	171	1	14040.0	530.0	29.00	5.00	0	66	10	8
146	172	1	13790.0	410.0	26.50	5.00	0	66	10	8
147	173	1	13790.0	520.0	25.00	5.00	0	66	10	8
148	174	1	13700.0	410.0	27.00	5.00	0	66	10	8
149	175	1	13700.0	520.0	27.00	5.00	0	66	10	8
150	176	1	13540.0	430.0	30.50	5.00	0	66	10	8
151	177	1	13440.0	540.0	33.00	5.00	0	66	10	8
152	178	1	13100.0	550.0	40.00	5.00	0	66	10	8
153	179	1	12920.0	550.0	46.00	5.00	0	66	10	8
154	180	1	12750.0	530.0	45.00	5.00	0	66	10	8
155	181	1	12550.0	425.0	36.00	5.00	0	66	10	8
156	183	1	12550.0	540.0	36.00	5.00	0	66	10	8
157	184	1	12310.0	590.0	27.00	5.00	0	66	10	8
158	186	1	11650.0	427.0	28.00	5.00	0	66	10	8
159	187	1	11550.0	460.0	29.00	5.00	0	66	10	8
160	188	1	11460.0	430.0	32.00	5.00	0	66	10	8
161	189	1	11480.0	530.0	28.00	5.00	0	66	10	8
162	190	1	11280.0	420.0	33.00	5.00	0	66	10	8
163	191	1	11280.0	507.0	30.00	5.00	0	66	10	8
164	192	1	11140.0	415.0	34.00	5.00	0	66	10	8
165	193	1	10980.0	415.0	33.00	5.00	0	66	10	8
166	194	1	10980.0	530.0	28.00	5.00	0	66	10	8
167	195	1	10830.0	420.0	27.00	5.00	0	66	10	8
168	196	1	10830.0	550.0	32.50	5.00	0	66	10	8
169	197	1	10690.0	420.0	34.00	5.00	0	66	10	8

INPUT: RECEIVERS

170	198	1	10690.0	490.0	32.00	5.00	0	66	10	8
171	199	1	10690.0	590.0	27.00	5.00	0	66	10	8
172	200	1	10525.0	415.0	32.00	5.00	0	66	10	8
173	201	1	10525.0	495.0	29.00	5.00	0	66	10	8
174	202	1	10525.0	575.0	27.00	5.00	0	66	10	8
175	203	1	10360.0	425.0	27.00	5.00	0	66	10	8
176	204	1	10360.0	500.0	24.50	5.00	0	66	10	8
177	205	1	10360.0	580.0	23.00	5.00	0	66	10	8
178	206	1	10210.0	415.0	26.00	5.00	0	66	10	8
179	207	1	10210.0	505.0	23.00	5.00	0	66	10	8
180	208	1	10210.0	580.0	22.00	5.00	0	66	10	8
181	209	1	10040.0	420.0	26.00	5.00	0	66	10	8
182	210	1	10040.0	555.0	22.00	5.00	0	66	10	8
183	211	1	9940.0	424.0	27.50	5.00	0	66	10	8
184	212	1	9940.0	570.0	22.00	5.00	0	66	10	8
185	213	1	9840.0	570.0	24.00	5.00	0	66	10	8
186	214	1	9840.0	725.0	24.00	5.00	0	66	10	8
187	215	1	9700.0	415.0	31.00	5.00	0	66	10	8
188	216	1	9720.0	570.0	25.00	5.00	0	66	10	8
189	217	1	9630.0	415.0	32.00	5.00	0	66	10	8
190	218	1	9640.0	560.0	29.00	5.00	0	66	10	8
191	219	1	9540.0	415.0	31.00	5.00	0	66	10	8
192	220	1	9450.0	550.0	27.00	5.00	0	66	10	8
193	222	1	9340.0	435.0	25.00	5.00	0	66	10	8
194	224	1	9180.0	430.0	23.00	5.00	0	66	10	8
195	225	1	9180.0	530.0	22.50	5.00	0	66	10	8
196	226	1	9180.0	595.0	22.50	5.00	0	66	10	8
64	228	1	42710.0	440.0	56.00	15.00	0	66	10	8

URS
WHA

17 June 2002
TNM 1.0b

INPUT: BARRIERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing Westbound

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height at Point	Segment				
		Min	Max	$ per unit area	$ per unit volume	Top Width	Run:Rise	$ per unit length			X	Y	Z		Seg Ht Increment	Perturbe #Up	Perturbe #On	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Privacy Wall1	W	0.00	99.99	0.00				0.00	point1	1	25000.0	225.0	29.50	5.00	1.00	1	0		
									point2	2	25350.0	225.0	31.00	5.00					
Privacy Wall2	W	0.00	99.99	0.00				0.00	point3	3	25500.0	223.0	32.50	5.00	1.00	1	0		
									point4	4	26150.0	215.0	32.00	5.00	1.00	1	0		
									point5	5	26575.0	213.0	30.00	5.00					

URS 17 June 2002
WHA TNM 1.0b

INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing Westbound

Ground Zone			Points		
Name	Type	Flow Resistivity	No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Ground Zone8	Water	20000	101	12170.0	500.0
			102	11860.0	500.0
			103	11700.0	620.0
			104	11530.0	800.0
			105	12020.0	780.0
Ground Zone9	Water	20000	106	23910.0	405.0
			107	23770.0	490.0
			108	23735.0	610.0
			109	23770.0	720.0
			110	23900.0	770.0
			111	24015.0	740.0
			112	24075.0	625.0
			113	24060.0	490.0
Ground Zone29	Pavement	20000	114	10500.0	339.0
			115	10700.0	321.0
			116	11100.0	296.0
			117	11129.9	296.8
			118	11129.9	348.3
			119	11100.0	349.0
			120	10700.0	352.0
			121	10500.0	349.0
Ground Zone30	Lawn	300	122	11131.7	296.5
			123	11375.0	296.0
			124	12000.0	296.0
			125	12101.6	295.8
			126	12101.6	338.5
			127	12000.0	339.0
			128	11375.0	347.0
			129	11131.7	348.2
Ground Zone31	Pavement	20000	130	12103.6	296.3
			131	12700.0	289.0
			132	12901.9	291.4
			133	12901.9	334.4
			134	12700.0	337.0

			135	12103.6	338.1
Ground Zone32	Lawn	300	136	12903.8	291.4
			137	13500.4	288.9
			138	13500.4	329.5
			139	12903.8	334.4
Ground Zone33	Pavement	20000	140	13503.2	288.9
			141	13875.0	286.0
			142	14400.0	291.0
			143	15101.0	313.5
			144	15101.0	326.0
			145	14350.0	329.0
			146	13875.0	329.0
			147	13503.2	329.5
Ground Zone34	Pavement	20000	148	26400.6	266.6
			149	26500.0	266.0
			150	27199.9	264.0
			151	27199.9	279.0
			152	27100.0	279.0
			153	26850.0	284.0
			154	26401.0	287.0
Ground Zone35	Pavement	20000	155	37100.2	210.0
			156	37300.0	209.0
			157	37750.0	201.0
			158	39100.0	186.0
			159	39900.0	181.0
			160	40502.0	175.0
			161	40502.0	190.0
			162	40250.0	194.0
			163	39900.0	203.0
			164	39100.0	208.0
			165	37750.0	223.0
			166	37300.0	231.0
			167	37250.0	229.0
			168	37100.2	224.3

URS
WHA

2 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Existing Westbound
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
46	51	1	0.0	49.5	66	49.5	10	---	49.5	0.0	8	-8.0
47	53	1	0.0	61.8	66	61.8	10	---	61.8	0.0	8	-8.0
48	55	1	0.0	63.6	66	63.6	10	---	63.6	0.0	8	-8.0
49	56	1	0.0	52.5	66	52.5	10	---	52.5	0.0	8	-8.0
50	57	1	0.0	62.5	66	62.5	10	---	62.5	0.0	8	-8.0
51	58	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0
52	59	1	0.0	62.0	66	62.0	10	---	62.0	0.0	8	-8.0
53	61	1	0.0	56.9	66	56.9	10	---	56.9	0.0	8	-8.0
54	62	1	0.0	56.8	66	56.8	10	---	56.8	0.0	8	-8.0
55	63	1	0.0	56.4	66	56.4	10	---	56.4	0.0	8	-8.0
56	67	1	0.0	52.4	66	52.4	10	---	52.4	0.0	8	-8.0
57	68	1	0.0	55.2	66	55.2	10	---	55.2	0.0	8	-8.0
58	69	1	0.0	54.5	66	54.5	10	---	54.5	0.0	8	-8.0
59	70	1	0.0	54.4	66	54.4	10	---	54.4	0.0	8	-8.0
60	71	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
61	73	1	0.0	64.7	66	64.7	10	---	64.7	0.0	8	-8.0
62	74	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
63	75	1	0.0	58.8	66	58.8	10	---	58.8	0.0	8	-8.0
65	77	1	0.0	46.8	66	46.8	10	---	46.8	0.0	8	-8.0
66	78	1	0.0	59.2	66	59.2	10	---	59.2	0.0	8	-8.0
67	79	1	0.0	54.5	66	54.5	10	---	54.5	0.0	8	-8.0
68	80	1	0.0	64.6	66	64.6	10	---	64.6	0.0	8	-8.0
69	81	1	0.0	60.3	66	60.3	10	---	60.3	0.0	8	-8.0
70	82	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0

71	83	1	0.0	65.0	66	65.0	10	---	65.0	0.0	8	-8.0
72	84	1	0.0	58.5	66	58.5	10	---	58.5	0.0	8	-8.0
73	85	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
74	86	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
75	87	1	0.0	60.3	66	60.3	10	---	60.3	0.0	8	-8.0
76	88	1	0.0	58.5	66	58.5	10	---	58.5	0.0	8	-8.0
77	89	1	0.0	57.5	66	57.5	10	---	57.5	0.0	8	-8.0
78	90	1	0.0	58.1	66	58.1	10	---	58.1	0.0	8	-8.0
79	91	1	0.0	64.9	66	64.9	10	---	64.9	0.0	8	-8.0
80	92	1	0.0	59.4	66	59.4	10	---	59.4	0.0	8	-8.0
81	94	1	0.0	60.4	66	60.4	10	---	60.4	0.0	8	-8.0
82	95	1	0.0	55.0	66	55.0	10	---	55.0	0.0	8	-8.0
83	96	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
84	97	1	0.0	54.3	66	54.3	10	---	54.3	0.0	8	-8.0
85	98	1	0.0	57.2	66	57.2	10	---	57.2	0.0	8	-8.0
86	99	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
87	100	1	0.0	58.3	66	58.3	10	---	58.3	0.0	8	-8.0
88	101	1	0.0	61.5	66	61.5	10	---	61.5	0.0	8	-8.0
89	102	1	0.0	57.7	66	57.7	10	---	57.7	0.0	8	-8.0
90	104	1	0.0	62.8	66	62.8	10	---	62.8	0.0	8	-8.0
91	105	1	0.0	56.7	66	56.7	10	---	56.7	0.0	8	-8.0
92	106	1	0.0	64.1	66	64.1	10	---	64.1	0.0	8	-8.0
93	107	1	0.0	58.3	66	58.3	10	---	58.3	0.0	8	-8.0
94	108	1	0.0	64.7	66	64.7	10	---	64.7	0.0	8	-8.0
95	109	1	0.0	57.1	66	57.1	10	---	57.1	0.0	8	-8.0
96	111	1	0.0	57.4	66	57.4	10	---	57.4	0.0	8	-8.0
97	112	1	0.0	59.4	66	59.4	10	---	59.4	0.0	8	-8.0
98	113	1	0.0	60.0	66	60.0	10	---	60.0	0.0	8	-8.0
99	116	1	0.0	65.0	66	65.0	10	---	65.0	0.0	8	-8.0
100	117	1	0.0	57.6	66	57.6	10	---	57.6	0.0	8	-8.0
101	118	1	0.0	58.2	66	58.2	10	---	58.2	0.0	8	-8.0
102	120	1	0.0	57.4	66	57.4	10	---	57.4	0.0	8	-8.0
103	121	1	0.0	62.0	66	62.0	10	---	62.0	0.0	8	-8.0
104	122	1	0.0	58.1	66	58.1	10	---	58.1	0.0	8	-8.0
105	123	1	0.0	55.1	66	55.1	10	---	55.1	0.0	8	-8.0
106	124	1	0.0	65.6	66	65.6	10	---	65.6	0.0	8	-8.0
107	125	1	0.0	65.4	66	65.4	10	---	65.4	0.0	8	-8.0
108	126	1	0.0	64.3	66	64.3	10	---	64.3	0.0	8	-8.0
109	127	1	0.0	65.4	66	65.4	10	---	65.4	0.0	8	-8.0
110	128	1	0.0	57.8	66	57.8	10	---	57.8	0.0	8	-8.0
111	129	1	0.0	63.4	66	63.4	10	---	63.4	0.0	8	-8.0

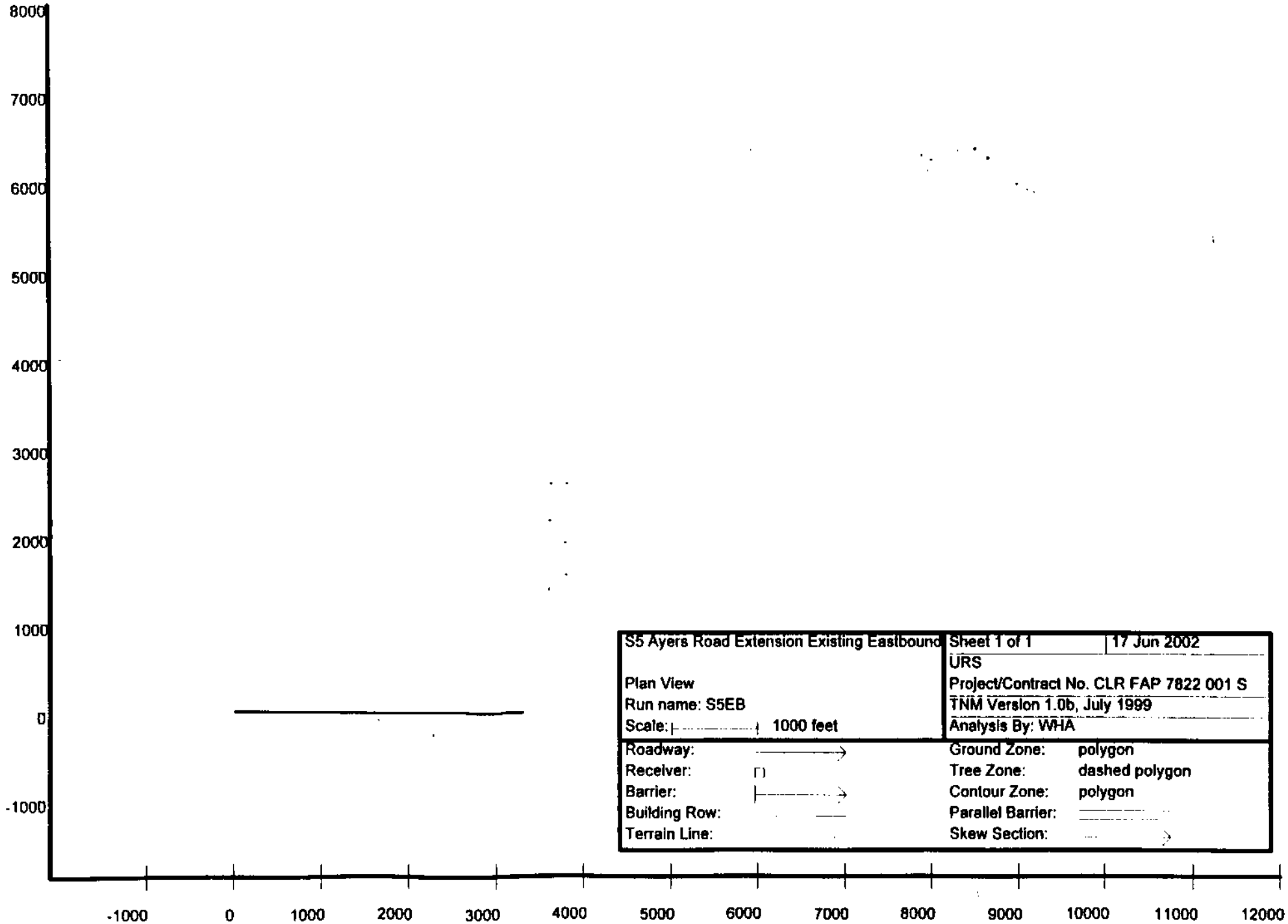
112	130	1	0.0	57.8	66	57.8	10	---	57.8	0.0	8	-8.0
113	132	1	0.0	54.4	66	54.4	10	---	54.4	0.0	8	-8.0
114	133	1	0.0	55.4	66	55.4	10	---	55.4	0.0	8	-8.0
115	134	1	0.0	55.0	66	55.0	10	---	55.0	0.0	8	-8.0
116	135	1	0.0	59.0	66	59.0	10	---	59.0	0.0	8	-8.0
117	136	1	0.0	58.2	66	58.2	10	---	58.2	0.0	8	-8.0
118	137	1	0.0	57.5	66	57.5	10	---	57.5	0.0	8	-8.0
119	138	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
120	140	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0
121	141	1	0.0	59.4	66	59.4	10	---	59.4	0.0	8	-8.0
122	142	1	0.0	64.7	66	64.7	10	---	64.7	0.0	8	-8.0
123	143	1	0.0	59.3	66	59.3	10	---	59.3	0.0	8	-8.0
124	144	1	0.0	63.2	66	63.2	10	---	63.2	0.0	8	-8.0
125	145	1	0.0	55.5	66	55.5	10	---	55.5	0.0	8	-8.0
126	146	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
127	147	1	0.0	59.5	66	59.5	10	---	59.5	0.0	8	-8.0
128	148	1	0.0	63.2	66	63.2	10	---	63.2	0.0	8	-8.0
129	149	1	0.0	56.2	66	56.2	10	---	56.2	0.0	8	-8.0
130	151	1	0.0	60.9	66	60.9	10	---	60.9	0.0	8	-8.0
131	152	1	0.0	62.0	66	62.0	10	---	62.0	0.0	8	-8.0
132	153	1	0.0	57.4	66	57.4	10	---	57.4	0.0	8	-8.0
133	154	1	0.0	64.2	66	64.2	10	---	64.2	0.0	8	-8.0
134	155	1	0.0	63.3	66	63.3	10	---	63.3	0.0	8	-8.0
135	156	1	0.0	59.7	66	59.7	10	---	59.7	0.0	8	-8.0
136	158	1	0.0	63.7	66	63.7	10	---	63.7	0.0	8	-8.0
137	159	1	0.0	63.9	66	63.9	10	---	63.9	0.0	8	-8.0
138	160	1	0.0	57.4	66	57.4	10	---	57.4	0.0	8	-8.0
139	162	1	0.0	57.4	66	57.4	10	---	57.4	0.0	8	-8.0
140	163	1	0.0	63.7	66	63.7	10	---	63.7	0.0	8	-8.0
141	164	1	0.0	61.5	66	61.5	10	---	61.5	0.0	8	-8.0
142	167	1	0.0	57.8	66	57.8	10	---	57.8	0.0	8	-8.0
143	168	1	0.0	57.9	66	57.9	10	---	57.9	0.0	8	-8.0
144	170	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0
145	171	1	0.0	58.4	66	58.4	10	---	58.4	0.0	8	-8.0
146	172	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
147	173	1	0.0	60.5	66	60.5	10	---	60.5	0.0	8	-8.0
148	174	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
149	175	1	0.0	59.7	66	59.7	10	---	59.7	0.0	8	-8.0
150	176	1	0.0	64.9	66	64.9	10	---	64.9	0.0	8	-8.0
151	177	1	0.0	58.5	66	58.5	10	---	58.5	0.0	8	-8.0
152	178	1	0.0	59.8	66	59.8	10	---	59.8	0.0	8	-8.0

153	179	1	0.0	61.0	---	61.0	10	---	61.0	0.0	8	-8.0
154	180	1	0.0	62.0	66	62.0	10	---	62.0	0.0	8	-8.0
155	181	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
156	183	1	0.0	59.4	66	59.4	10	---	59.4	0.0	8	-8.0
157	184	1	0.0	58.4	66	58.4	10	---	58.4	0.0	8	-8.0
158	186	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0
159	187	1	0.0	63.1	66	63.1	10	---	63.1	0.0	8	-8.0
160	188	1	0.0	65.0	66	65.0	10	---	65.0	0.0	8	-8.0
161	189	1	0.0	59.5	66	59.5	10	---	59.5	0.0	8	-8.0
162	190	1	0.0	63.9	66	63.9	10	---	63.9	0.0	8	-8.0
163	191	1	0.0	59.0	66	59.0	10	---	59.0	0.0	8	-8.0
164	192	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0
165	193	1	0.0	64.6	66	64.6	10	---	64.6	0.0	8	-8.0
166	194	1	0.0	57.9	66	57.9	10	---	57.9	0.0	8	-8.0
167	195	1	0.0	63.5	66	63.5	10	---	63.5	0.0	8	-8.0
168	196	1	0.0	57.7	66	57.7	10	---	57.7	0.0	8	-8.0
169	197	1	0.0	64.8	66	64.8	10	---	64.8	0.0	8	-8.0
170	198	1	0.0	60.1	66	60.1	10	---	60.1	0.0	8	-8.0
171	199	1	0.0	55.9	66	55.9	10	---	55.9	0.0	8	-8.0
172	200	1	0.0	65.0	66	65.0	10	---	65.0	0.0	8	-8.0
173	201	1	0.0	59.7	66	59.7	10	---	59.7	0.0	8	-8.0
174	202	1	0.0	56.3	66	56.3	10	---	56.3	0.0	8	-8.0
175	203	1	0.0	64.5	66	64.5	10	---	64.5	0.0	8	-8.0
176	204	1	0.0	60.5	66	60.5	10	---	60.5	0.0	8	-8.0
177	205	1	0.0	56.8	66	56.8	10	---	56.8	0.0	8	-8.0
178	206	1	0.0	65.2	66	65.2	10	---	65.2	0.0	8	-8.0
179	207	1	0.0	60.3	66	60.3	10	---	60.3	0.0	8	-8.0
180	208	1	0.0	57.2	66	57.2	10	---	57.2	0.0	8	-8.0
181	209	1	0.0	65.0	66	65.0	10	---	65.0	0.0	8	-8.0
182	210	1	0.0	58.3	66	58.3	10	---	58.3	0.0	8	-8.0
183	211	1	0.0	64.7	66	64.7	10	---	64.7	0.0	8	-8.0
184	212	1	0.0	57.1	66	57.1	10	---	57.1	0.0	8	-8.0
185	213	1	0.0	56.3	66	56.3	10	---	56.3	0.0	8	-8.0
186	214	1	0.0	51.9	66	51.9	10	---	51.9	0.0	8	-8.0
187	215	1	0.0	65.7	66	65.7	10	---	65.7	0.0	8	-8.0
188	216	1	0.0	56.1	66	56.1	10	---	56.1	0.0	8	-8.0
189	217	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
190	218	1	0.0	56.2	66	56.2	10	---	56.2	0.0	8	-8.0
191	219	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
192	220	1	0.0	56.6	66	56.6	10	---	56.6	0.0	8	-8.0
193	222	1	0.0	63.5	66	63.5	10	---	63.5	0.0	8	-8.0

RESULTS SOUND LEVELS

194	224	1	0 0	63 8	66	63.8	10	----	63.8	0.0	8	-8.0
195	225	1	0 0	57.6	66	57.6	10	----	57 6	0.0	8	-8.0
196	226	1	0.0	55.1	66	55.1	10	----	55.1	0.0	8	-8.0
64	228	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8 0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	151	0.0	0.0	0.0
All Impacted	12	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0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11000
12000
S5 Ayers Road Extension Existing Eastbound
Plan View
Run name: S5EB
Scale: 1000 feet
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS 17 June 2002
WHA TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Extension Existing Eastbound

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - Suncoast Pkwy to Ayers Rd Extension	15.5	sta580	1	0.0	0.0	2.00				Average	
		sta595	49	1507.0	-12.0	2.00				Average	
		point50	50	2607.0	-12.0	2.00				Average	
		point51	51	2787.0	-27.0	2.00				Average	
		point52	52	3007.0	-27.0	2.00				Average	
		point53	53	3107.0	-12.0	2.00				Average	
		point54	5	3307.0	-12.0	2.00					
WB - Ayers Rd Extension to Suncoast Pkw	15.5	point61	61	3307.7	0.0	2.00				Average	
		point60	60	3107.7	0.0	2.00				Average	
		point59	59	3007.7	-15.0	2.00				Average	
		point58	58	2787.7	-15.0	2.00				Average	
		point57	57	2607.7	0.0	2.00				Average	
		point56	56	1507.7	0.0	2.00				Average	
		point55	55	0.7	12.0	2.00					

URS 17 June 2002
WHA TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Extension Existing Eastbound

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	
EB - Suncoast Pkwy to Ayers Rd Extensio	sta580	1	398	50	13	50	17	50	0	0	0	0	
	sta595	49	370	45	12	45	16	45	0	0	0	0	
	point50	50	370	45	12	45	16	45	0	0	0	0	
	point51	51	370	45	12	45	16	45	0	0	0	0	
	point52	52	370	45	12	45	16	45	0	0	0	0	
	point53	53	370	45	12	45	16	45	0	0	0	0	
	point54	5											
WB - Ayers Rd Extension to Suncoast Pkw	point61	61	269	45	9	45	12	45	0	0	0	0	
	point60	60	269	45	9	45	12	45	0	0	0	0	
	point59	59	269	45	9	45	12	45	0	0	0	0	
	point58	58	269	45	9	45	12	45	0	0	0	0	
	point57	57	269	45	9	45	12	45	0	0	0	0	
	point56	56	290	50	9	50	12	50	0	0	0	0	
	point55	55											

URS
WHA

17 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Extension Existing Eastbound

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria SubT Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
1	1	1	1646.0	-93.0	0.00	5.00	0	66	10	8
2	2	1	2277.0	-265.0	0.00	5.00	0	66	10	8
3	3	1	3607.0	1396.0	0.00	5.00	0	66	10	8
4	4	1	3793.0	1558.0	0.00	5.00	0	66	10	8
5	5	1	3788.0	1931.0	0.00	5.00	0	66	10	8
6	6	1	3608.0	2178.0	0.00	5.00	0	66	10	8
7	7	1	3625.0	2603.0	0.00	5.00	0	66	10	8
8	8	1	3804.0	2603.0	0.00	5.00	0	66	10	8
9	9	1	7886.0	6325.0	0.00	5.00	0	66	10	8
10	10	1	8003.0	6276.0	0.00	5.00	0	66	10	8
11	11	1	7964.0	6150.0	0.00	5.00	0	66	10	8
12	12	1	8307.0	6379.0	0.00	5.00	0	66	10	8
13	13	1	8511.0	6403.0	0.00	5.00	0	66	10	8
14	14	1	8662.0	6295.0	0.00	5.00	0	66	10	8
15	15	1	8988.0	6003.0	0.00	5.00	0	66	10	8
16	16	1	9119.0	5945.0	0.00	5.00	0	66	10	8
17	17	1	9192.0	5921.0	0.00	5.00	0	66	10	8

URS
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Extension Existing Eastbound
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

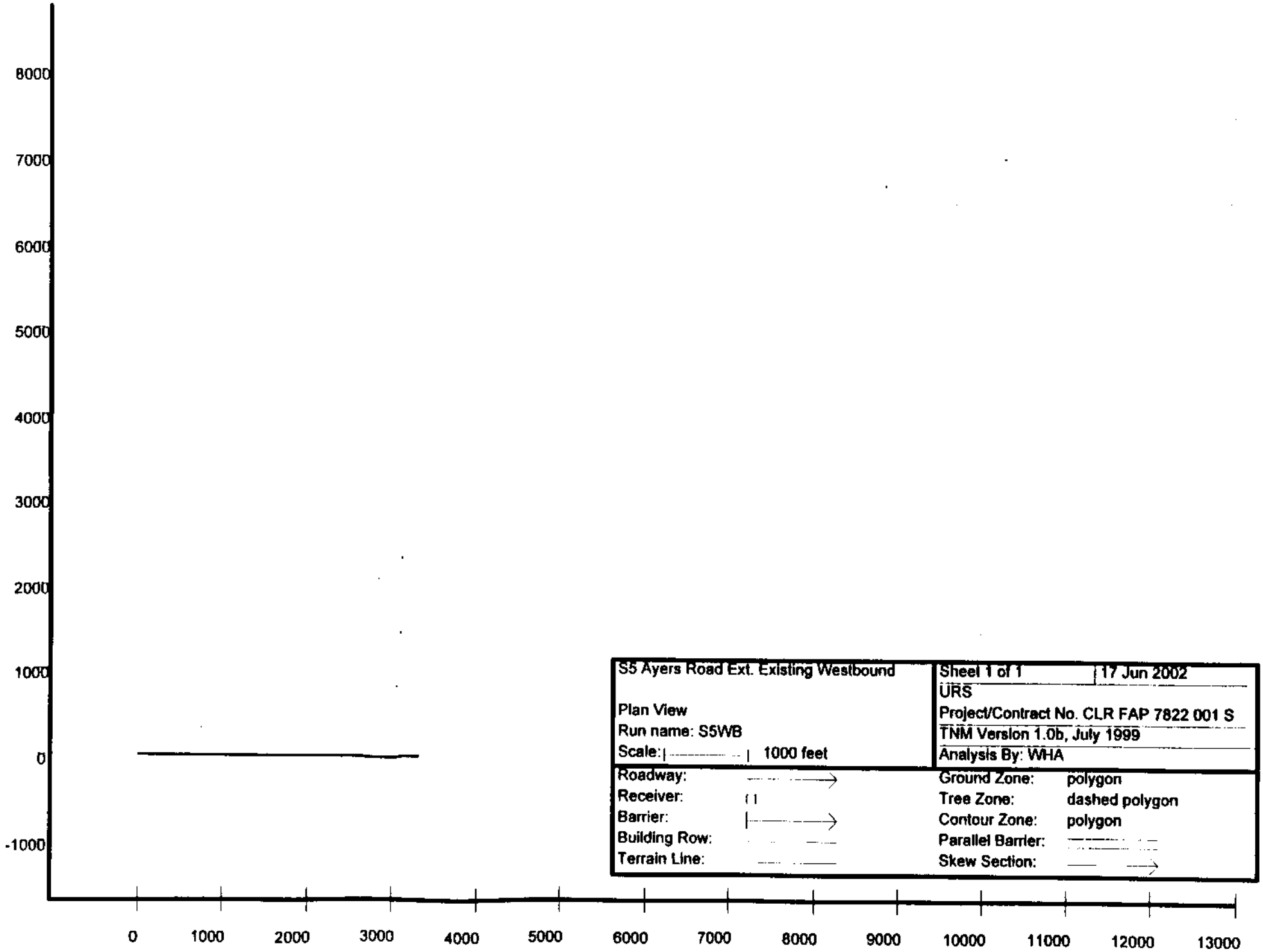
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1	1	1	0.0	62.7	66	62.7	10	---	62.7	0.0	8	-8.0
2	2	1	0.0	54.2	66	54.2	10	---	54.2	0.0	8	-8.0
3	3	1	0.0	36.8	66	36.8	10	---	36.8	0.0	8	-8.0
4	4	1	0.0	35.7	66	35.7	10	---	35.7	0.0	8	-8.0
5	5	1	0.0	34.5	66	34.5	10	---	34.5	0.0	8	-8.0
6	6	1	0.0	34.1	66	34.1	10	---	34.1	0.0	8	-8.0
7	7	1	0.0	32.9	66	32.9	10	---	32.9	0.0	8	-8.0
8	8	1	0.0	32.7	66	32.7	10	---	32.7	0.0	8	-8.0
9	9	1	0.0	24.1	66	24.1	10	---	24.1	0.0	8	-8.0
10	10	1	0.0	24.1	66	24.1	10	---	24.1	0.0	8	-8.0
11	11	1	0.0	24.2	66	24.2	10	---	24.2	0.0	8	-8.0
12	12	1	0.0	23.8	66	23.8	10	---	23.8	0.0	8	-8.0
13	13	1	0.0	23.6	66	23.6	10	---	23.6	0.0	8	-8.0
14	14	1	0.0	23.6	66	23.6	10	---	23.6	0.0	8	-8.0
15	15	1	0.0	23.6	66	23.6	10	---	23.6	0.0	8	-8.0
16	16	1	0.0	23.5	66	23.5	10	---	23.5	0.0	8	-8.0
17	17	1	0.0	23.5	66	23.5	10	---	23.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	17	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0

RESULTS: SOUND LEVELS

All that meet NR Goal	0	0.0	0.0	0.0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S5 Ayers Road Ext. Existing Westbound
Plan View
Run name: S5WB
Scale: 1000 feet
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

17 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Ext. Existing Westbound

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - Suncoast Pkwy to Ayers Rd Extension	15.5	sta580	1	0.0	0.0	2.00				Average	
		sta595	49	1507.0	-12.0	2.00				Average	
		point50	50	2607.0	-12.0	2.00				Average	
		point51	51	2787.0	-27.0	2.00				Average	
		point52	52	3007.0	-27.0	2.00				Average	
		point53	53	3107.0	-12.0	2.00				Average	
		point54	5	3307.0	-12.0	2.00					
WB - Ayers Rd Extension to Suncoast Pkw	15.5	point61	61	3307.7	0.0	2.00				Average	
		point60	60	3107.7	0.0	2.00				Average	
		point59	59	3007.7	-15.0	2.00				Average	
		point58	58	2787.7	-15.0	2.00				Average	
		point57	57	2607.7	0.0	2.00				Average	
		point56	56	1507.7	0.0	2.00				Average	
		point55	55	0.7	12.0	2.00					

URS 17 June 2002
WHA TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Ext. Existing Westbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - Suncoast Pkwy to Ayers Rd Extensio	sta580	1	290	50	9	50	12	50	0	0	0	0
	sta595	49	269	45	9	45	12	45	0	0	0	0
	point50	50	269	45	9	45	12	45	0	0	0	0
	point51	51	269	45	9	45	12	45	0	0	0	0
	point52	52	269	45	9	45	12	45	0	0	0	0
	point53	53	269	45	9	45	12	45	0	0	0	0
	point54	5										
WB - Ayers Rd Extension to Suncoast Pkw	point61	61	370	45	12	45	16	45	0	0	0	0
	point60	60	370	45	12	45	16	45	0	0	0	0
	point59	59	370	45	12	45	16	45	0	0	0	0
	point58	58	370	45	12	45	16	45	0	0	0	0
	point57	57	370	45	12	45	16	45	0	0	0	0
	point56	56	398	50	13	50	17	50	0	0	0	0
	point55	55										

URS 17 June 2002
WHA TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Ext. Existing Westbound

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
18	13	1	10236.0	7034.0	0.00	5.00	0	66	10	8
19	14	1	8813.0	6706.0	0.00	5.00	0	66	10	8
20	15	1	3110.0	2331.0	0.00	5.00	0	66	10	8
21	16	1	2830.0	2079.0	0.00	5.00	0	66	10	8
22	19	1	3086.0	1444.0	0.00	5.00	0	66	10	8
23	20	1	3040.0	813.0	0.00	5.00	0	66	10	8
24	21	1	740.0	319.0	0.00	5.00	0	66	10	8

URS
WHA

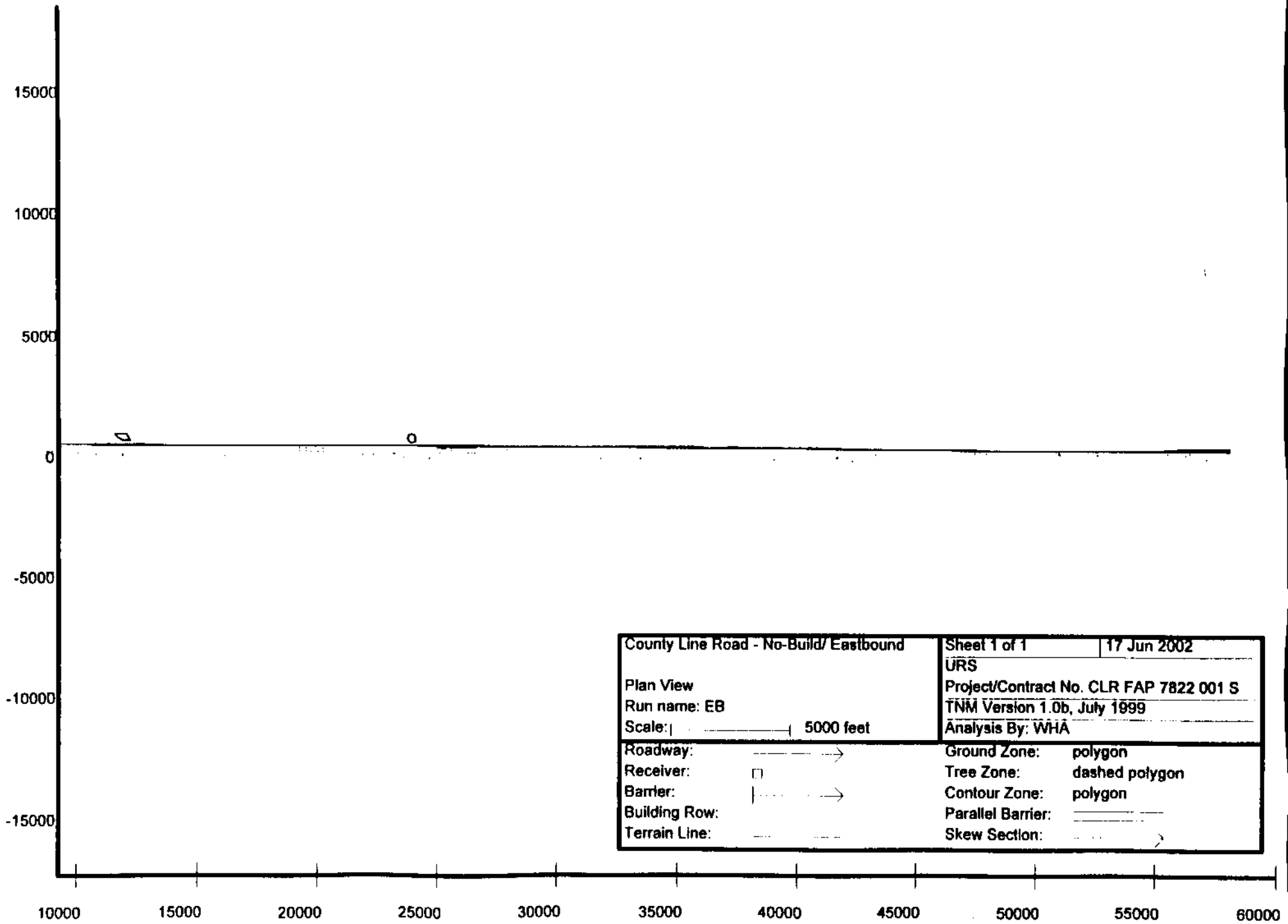
3 September 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: S5 Ayers Road Ext. Existing Westbound
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc		LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
18	13	1	0.0	22.1	66	22.1	10	----	22.1	0.0	8	-8.0
19	14	1	0.0	23.2	66	23.2	10	----	23.2	0.0	8	-8.0
20	15	1	0.0	34.4	66	34.4	10	----	34.4	0.0	8	-8.0
21	16	1	0.0	35.6	66	35.6	10	----	35.6	0.0	8	-8.0
22	19	1	0.0	38.0	66	38.0	10	----	38.0	0.0	8	-8.0
23	20	1	0.0	43.0	66	43.0	10	----	43.0	0.0	8	-8.0
24	21	1	0.0	53.5	66	53.5	10	----	53.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	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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60000
County Line Road - No-Build/ Eastbound
Plan View
Run name: EB
Scale: 5000 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

2 July 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build/ Eastbound

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - US19 to Hamlet Circle	15.5	sta85	1	8500.0	345.0	16.50				Average	
		sta96	2	9600.0	345.0	29.00				Average	
		sta105	3	10500.0	338.0	33.00				Average	
		sta107	127	10700.0	320.0	35.00				Average	
		sta111	6	11100.0	295.0	35.00				Average	
		sta113+75	4	11375.0	295.0	33.50					
EB - Hamlet Circle to Ruskin Avenue	31.0	sta113+75	7	11375.0	295.0	33.50				Average	
		sta120	9	12000.0	295.0	22.50				Average	
		sta127	10	12700.0	290.0	35.00				Average	
		sta138+75	8	13875.0	285.0	26.50					
EB - Ruskin Avenue to Cobblestone Drive	15.5	sta138+75	11	13875.0	285.0	26.50				Average	
		sta144	12	14400.0	290.0	23.00				Average	
		sta152	129	15200.0	315.0	33.00				Average	
		sta160	130	16000.0	315.0	40.00				Average	
		sta166	131	16600.0	310.0	35.00				Average	
		sta173	132	17300.0	310.0	47.00				Average	
		sta182	128	18200.0	310.0	30.00				Average	
		sta190	133	19000.0	310.0	22.00				Average	
		sta205+50	13	20550.0	310.0	30.50					
EB - Cobblestone Road to East Road	15.5	sta205+50	134	20550.0	310.0	30.50				Average	
		sta208	135	20800.0	310.0	36.00				Average	

		sta210+25	136	21025.0	310.0	47.50				Average	
EB - East Road to Mariner Boulevard	15.5	sta210+25	137	21025.0	310.0	47.50				Average	
		sta213	138	21300.0	307.0	51.00				Average	
		sta220	139	22000.0	302.0	28.00				Average	
		sta225	140	22500.0	300.0	28.00				Average	
		sta230	141	23000.0	295.0	31.00				Average	
		sta239	142	23900.0	288.0	28.00				Average	
		sta251	143	25100.0	280.0	28.00				Average	
		sta260	144	26000.0	270.0	32.00				Average	
		sta265	145	26500.0	265.0	30.00				Average	
		sta285	146	28500.0	260.0	39.00				Average	
		sta321	147	32100.0	243.0	40.00				Average	
		sta345	148	34500.0	225.0	46.00				Average	
		sta358	149	35800.0	218.0	56.00				Average	
		sta363	150	36300.0	213.0	52.00				Average	
		sta369	151	36900.0	208.0	62.00				Average	
		sta373	152	37300.0	208.0	59.00				Average	
		sta377+50	153	37750.0	200.0	59.00					
EB - Mariner Boulevard to Linden Drive	15.5	sta377+50	154	37750.0	200.0	59.00				Average	
		sta391	155	39100.0	185.0	59.00				Average	
		sta399	156	39900.0	180.0	50.00				Average	
		sta414	157	41400.0	163.0	50.00				Average	
		sta422	158	42200.0	153.0	58.00				Average	
		sta438	159	43800.0	140.0	59.00				Average	
		sta449	160	44900.0	135.0	67.00				Average	
		sta463	161	46300.0	123.0	67.50				Average	
		sta469	162	46900.0	118.0	81.00				Average	
		sta473	163	47300.0	118.0	89.00				Average	
		sta480	164	48000.0	105.0	92.00				Average	
		sta485	165	48500.0	105.0	86.00				Average	
		sta488	166	48800.0	103.0	78.00				Average	
		sta491	167	49100.0	102.0	76.00				Average	
		sta498	168	49800.0	100.0	81.00				Average	
		sta506+75	169	50675.0	95.0	76.00					
EB - Linden Drive to east of Sparks Rd	15.5	sta506+75	170	50675.0	95.0	76.00				Average	

		sta512	171	51200.0	95.0	74.00				Average	
		sta518	172	51800.0	92.0	76.00				Average	
		sta531	173	53100.0	88.0	68.00				Average	
		sta547	174	54700.0	78.0	68.00					
EB- East of Sparks Rd to Anderson Snow R	31.0	sta551	179	55100.0	80.0	68.00				Average	
		sta552	275	55200.0	80.0	68.00				Average	
		sta553	276	55300.0	80.0	68.00				Average	
		sta554	277	55400.0	80.0	68.00				Average	
		sta555	278	55500.0	80.0	68.00				Average	
		sta556	279	55600.0	80.0	68.00				Average	
		sta557	280	55700.0	80.0	68.00				Average	
		sta558	281	55800.0	80.0	68.00				Average	
		sta559	282	55900.0	80.0	68.00				Average	
		sta560	283	56000.0	80.0	68.00				Average	
		sta561	284	56100.0	80.0	68.00				Average	
		sta565+50	285	56550.0	80.0	68.00					
WB - Suncoast to east of Anderson Snow	31.0	sta580	181	58000.0	175.0	68.00				Average	
		sta576	255	57600.0	175.0	68.00				Average	
		sta574	256	57400.0	175.0	68.00				Average	
		sta572	251	57200.0	175.0	68.00					
WB - Between Anderson Snow and Sparks	15.5	sta558	183	55800.0	170.0	68.00				Average	
		sta557	267	55700.0	160.0	68.00				Average	
		sta556	266	55600.0	150.0	68.00				Average	
		sta555	184	55500.0	145.0	68.00				Average	
		sta554	185	55400.0	135.0	68.00				Average	
		sta553	262	55300.0	125.0	68.00				Average	
		sta552	263	55200.0	115.0	68.00				Average	
		sta551	264	55100.0	110.0	68.00				Average	
		sta550	265	55000.0	100.0	68.00				Average	
		sta549	186	54900.0	95.0	68.00				Average	
		sta547	187	54700.0	92.0	68.00					
WB - Linden Drive to Mariner Boulevard	15.5	sta506+75	192	50675.0	107.0	76.00				Average	
		sta498	193	49800.0	112.0	81.00				Average	
		sta491	194	49100.0	114.0	76.00				Average	
		sta488	195	48800.0	115.0	78.00				Average	

		sta485	196	48500.0	117.0	86.00				Average	
		sta480	197	48000.0	117.0	92.00				Average	
		sta473	198	47300.0	130.0	89.00				Average	
		sta469	199	46900.0	130.0	81.00				Average	
		sta463	200	46300.0	135.0	67.50				Average	
		sta449	201	44900.0	147.0	67.00				Average	
		sta438	202	43800.0	152.0	59.00				Average	
		sta422	203	42200.0	165.0	58.00				Average	
		sta414	204	41400.0	175.0	50.00				Average	
		sta402+50	205	40250.0	195.0	50.50				Average	
		sta399	206	39900.0	204.0	50.00				Average	
		sta391	207	39100.0	209.0	59.00				Average	
		sta377+50	208	37750.0	224.0	59.00					
WB - Mariner Boulevard to East Road	15.5	sta377+50	209	37750.0	224.0	59.00				Average	
		sta373	210	37300.0	232.0	59.00				Average	
		sta372+50	211	37250.0	230.0	59.00				Average	
		sta369	212	36900.0	220.0	62.00				Average	
		sta363	213	36300.0	225.0	52.00				Average	
		sta358	214	35800.0	230.0	56.00				Average	
		sta345	215	34500.0	237.0	46.00				Average	
		sta321	216	32100.0	255.0	40.00				Average	
		sta285	217	28500.0	272.0	39.00				Average	
		sta271	218	27100.0	280.0	34.00				Average	
		sta268+50	219	26850.0	285.0	33.00				Average	
		sta264	220	26400.0	288.0	30.50				Average	
		sta260	221	26000.0	282.0	32.00				Average	
		sta251	222	25100.0	292.0	28.00				Average	
		sta239	223	23900.0	300.0	28.00				Average	
		sta230	224	23000.0	307.0	31.00				Average	
		sta225	225	22500.0	312.0	28.00				Average	
		sta220	228	22000.0	314.0	28.00				Average	
		sta213	227	21300.0	319.0	51.00				Average	
		sta210+25	226	21025.0	322.0	47.50					
WB - East Road to Cobblestone Drive	15.5	sta210+25	229	21025.0	322.0	47.50				Average	
		sta208	230	20800.0	322.0	36.00				Average	

		sta205+50	231	20550.0	322.0	30.50					
WB - Cobblestone Dr to west of Hallow Ave	15.5	sta205+50	232	20550.0	322.0	30.50				Average	
		sta190	233	19000.0	322.0	22.00				Average	
		sta182	234	18200.0	322.0	30.00				Average	
		sta173	235	17300.0	322.0	47.00				Average	
		sta166	236	16600.0	322.0	35.00				Average	
		sta160	237	16000.0	327.0	40.00				Average	
		sta152	238	15200.0	327.0	33.00				Average	
		sta143+50	239	14350.0	330.0	24.00					
WB - West of Hallow Ave to Hamlet Circle	31.0	sta143+50	240	14350.0	330.0	24.00				Average	
		sta138+75	241	13875.0	330.0	26.50				Average	
		sta127	242	12700.0	338.0	35.00				Average	
		sta120	243	12000.0	340.0	22.50				Average	
		sta113+75	244	11375.0	348.0	33.50					
WB - Hamlet Circle to US19	15.5	sta113+75	245	11375.0	348.0	33.50				Average	
		sta111	246	11100.0	350.0	35.00				Average	
		sta107	247	10700.0	353.0	35.00				Average	
		sta105	248	10500.0	350.0	33.00				Average	
		sta96	249	9600.0	357.0	29.00				Average	
		sta85	250	8500.0	357.0	16.50					
WB - west of Suncoast to Anderson Snow	31.0	sta572	253	57200.0	175.0	68.00				Average	
		sta568	257	56800.0	175.0	68.00				Average	
		sta565+50	258	56550.0	180.0	68.00					
WB - east of Sparks Rd to Linden Drive	15.5	sta547	254	54700.0	92.0	68.00				Average	
		sta531	188	53100.0	100.0	68.00				Average	
		sta518	189	51800.0	104.0	76.00				Average	
		sta512	190	51200.0	107.0	74.00				Average	
		sta506+75	191	50675.0	107.0	76.00					
EB - Between Sparks and Anderson Snow	15.5	sta547	268	54700.0	78.0	68.00				Average	
		sta548	175	54800.0	80.0	68.00				Average	
		sta549	176	54900.0	80.0	68.00				Average	
		sta550	177	55000.0	80.0	68.00				Average	
		sta551	178	55100.0	80.0	68.00					
EB - East of Anderson Snow to Suncoast	31.0	sta572	272	57200.0	78.0	68.00				Average	
		sta574	273	57400.0	78.0	68.00				Average	

INPUT: ROADWAYS

		sta576	274	57600.0	78.0	68.00				Average	
		sta580	180	58000.0	75.0	68.00					
EB - Anderson Snow to west of Suncoast	31.0	sta565+50	287	56550.0	80.0	68.00				Average	
		sta568	286	56800.0	78.0	68.00				Average	
		sta572	269	57200.0	78.0	68.00					
WB - Anderson Snow to east of Sparks Rd	31.0	sta565+50	288	56550.0	180.0	68.00				Average	
		sta561	259	56100.0	180.0	68.00				Average	
		sta560	260	56000.0	180.0	68.00				Average	
		sta559	261	55900.0	175.0	68.00				Average	
		sta558	182	55800.0	170.0	68.00					
WB - Cobblestone Dr to west of Hallow Ave County Line Road westbound from Cobblestone Drive to sta143+50 is 1-lane. Station 143+50 is between Ruskin Av											
WB - West of Hallow Ave to Hamlet Circle County Line Road westbound from sta143+50 to Hamlet Circle is 2-lanes.											

URS
WHA

2 July 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build/ Eastbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - US19 to Hamlet Circle	sta85	1	473	45	10	45	15	45	0	0	0	0
	sta96	2	473	45	10	45	15	45	0	0	0	0
	sta105	3	473	45	10	45	15	45	0	0	0	0
	sta107	127	473	45	10	45	15	45	0	0	0	0
	sta111	6	473	45	10	45	15	45	0	0	0	0
	sta113+75	4										
EB - Hamlet Circle to Ruskin Avenue	sta113+75	7	1089	45	23	45	34	45	0	0	0	0
	sta120	9	1089	45	23	45	34	45	0	0	0	0
	sta127	10	1089	45	23	45	34	45	0	0	0	0
	sta138+75	8										
EB - Ruskin Avenue to Cobblestone Drive	sta138+75	11	473	45	10	45	15	45	0	0	0	0
	sta144	12	473	45	10	45	15	45	0	0	0	0
	sta152	129	473	45	10	45	15	45	0	0	0	0
	sta160	130	473	45	10	45	15	45	0	0	0	0
	sta166	131	473	45	10	45	15	45	0	0	0	0
	sta173	132	473	45	10	45	15	45	0	0	0	0
	sta182	128	473	45	10	45	15	45	0	0	0	0
	sta190	133	473	45	10	45	15	45	0	0	0	0
	sta205+50	13										
EB - Cobblestone Road to East Road	sta205+50	134	473	40	10	40	15	40	0	0	0	0
	sta208	135	473	40	10	40	15	40	0	0	0	0
	sta210+25	136										

INPUT: TRAFFIC FOR LAeq1h Volumes

EB - East Road to Mariner Boulevard	sta210+25	137	473	50	10	50	15	50	0	0	0	0
	sta213	138	473	50	10	50	15	50	0	0	0	0
	sta220	139	473	50	10	50	15	50	0	0	0	0
	sta225	140	473	50	10	50	15	50	0	0	0	0
	sta230	141	473	50	10	50	15	50	0	0	0	0
	sta239	142	473	50	10	50	15	50	0	0	0	0
	sta251	143	473	50	10	50	15	50	0	0	0	0
	sta260	144	473	50	10	50	15	50	0	0	0	0
	sta265	145	473	50	10	50	15	50	0	0	0	0
	sta285	146	473	50	10	50	15	50	0	0	0	0
	sta321	147	473	50	10	50	15	50	0	0	0	0
	sta345	148	473	50	10	50	15	50	0	0	0	0
	sta358	149	473	50	10	50	15	50	0	0	0	0
	sta363	150	473	50	10	50	15	50	0	0	0	0
	sta369	151	473	50	10	50	15	50	0	0	0	0
	sta373	152	473	50	10	50	15	50	0	0	0	0
	sta377+50	153										
EB - Mariner Boulevard to Linden Drive	sta377+50	154	473	55	10	55	15	55	0	0	0	0
	sta391	155	473	55	10	55	15	55	0	0	0	0
	sta399	156	473	55	10	55	15	55	0	0	0	0
	sta414	157	473	55	10	55	15	55	0	0	0	0
	sta422	158	473	55	10	55	15	55	0	0	0	0
	sta438	159	473	55	10	55	15	55	0	0	0	0
	sta449	160	473	55	10	55	15	55	0	0	0	0
	sta463	161	473	55	10	55	15	55	0	0	0	0
	sta469	162	473	55	10	55	15	55	0	0	0	0
	sta473	163	473	55	10	55	15	55	0	0	0	0
	sta480	164	473	55	10	55	15	55	0	0	0	0
	sta485	165	473	55	10	55	15	55	0	0	0	0
	sta488	166	473	55	10	55	15	55	0	0	0	0
	sta491	167	473	55	10	55	15	55	0	0	0	0
	sta498	168	473	55	10	55	15	55	0	0	0	0
	sta506+75	169										
EB - Linden Drive to east of Sparks Rd	sta506+75	170	473	50	10	50	15	50	0	0	0	0

	sta512	171	473	50	10	50	15	50	0	0	0	0
	sta518	172	473	50	10	50	15	50	0	0	0	0
	sta531	173	473	50	10	50	15	50	0	0	0	0
	sta547	174										
EB- East of Sparks Rd to Anderson Snow R	sta551	179	1089	50	23	50	34	50	0	0	0	0
	sta552	275	1089	50	23	50	34	50	0	0	0	0
	sta553	276	1089	50	23	50	34	50	0	0	0	0
	sta554	277	1089	50	23	50	34	50	0	0	0	0
	sta555	278	1089	50	23	50	34	50	0	0	0	0
	sta556	279	1089	50	23	50	34	50	0	0	0	0
	sta557	280	1089	50	23	50	34	50	0	0	0	0
	sta558	281	1089	50	23	50	34	50	0	0	0	0
	sta559	282	1089	50	23	50	34	50	0	0	0	0
	sta560	283	1089	50	23	50	34	50	0	0	0	0
	sta561	284	1089	50	23	50	34	50	0	0	0	0
	sta565+50	285										
WB - Suncoast to east of Anderson Snow	sta580	181	792	50	17	50	25	50	0	0	0	0
	sta576	255	792	50	17	50	25	50	0	0	0	0
	sta574	256	792	50	17	50	25	50	0	0	0	0
	sta572	251										
WB - Belween Anderson Snow and Sparks	sta558	183	344	50	7	50	11	50	0	0	0	0
	sta557	267	344	50	7	50	11	50	0	0	0	0
	sta556	266	344	50	7	50	11	50	0	0	0	0
	sta555	184	344	50	7	50	11	50	0	0	0	0
	sta554	185	344	50	7	50	11	50	0	0	0	0
	sta553	262	344	50	7	50	11	50	0	0	0	0
	sta552	263	344	50	7	50	11	50	0	0	0	0
	sta551	264	344	50	7	50	11	50	0	0	0	0
	sta550	265	344	50	7	50	11	50	0	0	0	0
	sta549	186	344	50	7	50	11	50	0	0	0	0
	sta547	187										
WB - Linden Drive to Mariner Boulevard	sta506+75	192	344	55	7	55	11	55	0	0	0	0
	sta498	193	344	55	7	55	11	55	0	0	0	0
	sta491	194	344	55	7	55	11	55	0	0	0	0

	sta488	195	344	55	7	55	11	55	0	0	0	0
	sta485	196	344	55	7	55	11	55	0	0	0	0
	sta480	197	344	55	7	55	11	55	0	0	0	0
	sta473	198	344	55	7	55	11	55	0	0	0	0
	sta469	199	344	55	7	55	11	55	0	0	0	0
	sta463	200	344	55	7	55	11	55	0	0	0	0
	sta449	201	344	55	7	55	11	55	0	0	0	0
	sta438	202	344	55	7	55	11	55	0	0	0	0
	sta422	203	344	55	7	55	11	55	0	0	0	0
	sta414	204	344	55	7	55	11	55	0	0	0	0
	sta402+50	205	344	55	7	55	11	55	0	0	0	0
	sta399	206	344	55	7	55	11	55	0	0	0	0
	sta391	207	344	55	7	55	11	55	0	0	0	0
	sta377+50	208										
WB - Mariner Boulevard to East Road	sta377+50	209	344	50	7	50	11	50	0	0	0	0
	sta373	210	344	50	7	50	11	50	0	0	0	0
	sta372+50	211	344	50	7	50	11	50	0	0	0	0
	sta369	212	344	50	7	50	11	50	0	0	0	0
	sta363	213	344	50	7	50	11	50	0	0	0	0
	sta358	214	344	50	7	50	11	50	0	0	0	0
	sta345	215	344	50	7	50	11	50	0	0	0	0
	sta321	216	344	50	7	50	11	50	0	0	0	0
	sta285	217	344	50	7	50	11	50	0	0	0	0
	sta271	218	344	50	7	50	11	50	0	0	0	0
	sta268+50	219	344	50	7	50	11	50	0	0	0	0
	sta264	220	344	50	7	50	11	50	0	0	0	0
	sta260	221	344	50	7	50	11	50	0	0	0	0
	sta251	222	344	50	7	50	11	50	0	0	0	0
	sta239	223	344	50	7	50	11	50	0	0	0	0
	sta230	224	344	50	7	50	11	50	0	0	0	0
	sta225	225	344	50	7	50	11	50	0	0	0	0
	sta220	228	344	50	7	50	11	50	0	0	0	0
	sta213	227	344	50	7	50	11	50	0	0	0	0
	sta210+25	226										

WB - East Road to Cobblestone Drive	sta210+25	229	344	40	7	40	11	40	0	0	0	0
	sta208	230	344	40	7	40	11	40	0	0	0	0
	sta205+50	231										
WB - Cobblestone Dr to west of Hallow Av	sta205+50	232	344	45	7	45	11	45	0	0	0	0
	sta190	233	344	45	7	45	11	45	0	0	0	0
	sta182	234	344	45	7	45	11	45	0	0	0	0
	sta173	235	344	45	7	45	11	45	0	0	0	0
	sta166	236	344	45	7	45	11	45	0	0	0	0
	sta160	237	344	45	7	45	11	45	0	0	0	0
	sta152	238	344	45	7	45	11	45	0	0	0	0
	sta143+50	239										
WB - West of Hallow Ave to Hamlet Circle	sta143+50	240	792	45	17	45	25	45	0	0	0	0
	sta138+75	241	792	45	17	45	25	45	0	0	0	0
	sta127	242	792	45	17	45	25	45	0	0	0	0
	sta120	243	792	45	17	45	25	45	0	0	0	0
	sta113+75	244										
WB - Hamlet Circle to US19	sta113+75	245	344	45	7	45	11	45	0	0	0	0
	sta111	246	344	45	7	45	11	45	0	0	0	0
	sta107	247	344	45	7	45	11	45	0	0	0	0
	sta105	248	344	45	7	45	11	45	0	0	0	0
	sta96	249	344	45	7	45	11	45	0	0	0	0
	sta85	250										
WB - west of Suncoast to Anderson Snow	sta572	253	792	50	17	50	25	50	0	0	0	0
	sta568	257	792	50	17	50	25	50	0	0	0	0
	sta565+50	258										
WB - east of Sparks Rd to Linden Drive	sta547	254	344	50	7	50	11	50	0	0	0	0
	sta531	188	344	50	7	50	11	50	0	0	0	0
	sta518	189	344	50	7	50	11	50	0	0	0	0
	sta512	190	344	50	7	50	11	50	0	0	0	0
	sta506+75	191										
EB - Between Sparks and Anderson Snow	sta547	268	1089	50	23	50	34	50	0	0	0	0
	sta548	175	1089	50	23	50	34	50	0	0	0	0
	sta549	176	1089	50	23	50	34	50	0	0	0	0
	sta550	177	1089	50	23	50	34	50	0	0	0	0

	sta551	178										
EB - East of Anderson Snow to Suncoast	sta572	272	1089	50	23	50	34	50	0	0	0	0
	sta574	273	1089	50	23	50	34	50	0	0	0	0
	sta576	274	1089	50	23	50	34	50	0	0	0	0
	sta580	180										
EB - Anderson Snow to west of Suncoast	sta565+50	287	1089	50	23	50	34	50	0	0	0	0
	sta568	286	1089	50	23	50	34	50	0	0	0	0
	sta572	269										
WB - Anderson Snow to east of Sparks Rd	sta565+50	288	792	50	17	50	25	50	0	0	0	0
	sta561	259	792	50	17	50	25	50	0	0	0	0
	sta560	260	792	50	17	50	25	50	0	0	0	0
	sta559	261	792	50	17	50	25	50	0	0	0	0
	sta558	182										

URS
WHA

2 July 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build/ Eastbound

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
1	179	1	9160.0	240.0	22.00	5.00	0	66	10	8
2	180	1	9380.0	260.0	27.00	5.00	0	66	10	8
3	181	1	10060.0	-28.0	29.00	5.00	0	66	10	8
4	183	1	10780.0	-45.0	36.00	5.00	0	66	10	8
5	184	1	11850.0	-95.0	26.00	5.00	0	66	10	8
6	185	1	16130.0	-100.0	32.00	5.00	0	66	10	8
7	186	1	19205.0	225.0	23.00	5.00	0	66	10	8
8	187	1	19205.0	80.0	23.00	5.00	0	66	10	8
9	189	1	19480.0	210.0	25.00	5.00	0	66	10	8
10	190	1	19480.0	85.0	24.00	5.00	0	66	10	8
11	192	1	19715.0	60.0	30.00	5.00	0	66	10	8
12	193	1	19850.0	230.0	33.00	5.00	0	66	10	8
13	194	1	19955.0	20.0	29.00	5.00	0	66	10	8
14	195	1	20210.0	215.0	27.50	5.00	0	66	10	8
15	196	1	20210.0	35.0	26.00	5.00	0	66	10	8
16a	197	1	21115.0	-145.0	49.00	5.00	0	66	10	8
16b	198	1	21845.0	-50.0	28.00	5.00	0	66	10	8
17	199	1	22280.0	-65.0	26.00	5.00	0	66	10	8
18	200	1	23165.0	-20.0	31.00	5.00	0	66	10	8
19	201	1	23575.0	-155.0	32.00	5.00	0	66	10	8
20	203	1	24620.0	-230.0	25.00	5.00	0	66	10	8

21	204	1	24940.0	125.0	32.00	5.00	0	66	10	8
22	205	1	25070.0	5.0	31.00	5.00	0	66	10	8
23	206	1	25160.0	140.0	31.00	5.00	0	66	10	8
24	207	1	25275.0	130.0	32.50	5.00	0	66	10	8
25	208	1	25540.0	100.0	33.00	5.00	0	66	10	8
26	209	1	26270.0	0.0	33.00	5.00	0	66	10	8
27	210	1	26390.0	0.0	33.00	5.00	0	66	10	8
28	211	1	26515.0	0.0	30.00	5.00	0	66	10	8
29	212	1	27855.0	140.0	36.00	5.00	0	66	10	8
33	213	1	41645.0	-200.0	48.00	5.00	0	66	10	8
34	214	1	42310.0	-345.0	60.00	5.00	0	66	10	8
35	215	1	43275.0	-65.0	57.50	5.00	0	66	10	8
36	216	1	47425.0	0.0	88.50	5.00	0	66	10	8
37	217	1	47630.0	30.0	89.50	5.00	0	66	10	8
38	218	1	47905.0	0.0	92.50	5.00	0	66	10	8
39	219	1	50965.0	-15.0	76.00	5.00	0	66	10	8
40	220	1	51045.0	-65.0	75.50	5.00	0	66	10	8
41	221	1	52605.0	-80.0	70.00	5.00	0	66	10	8
42	222	1	55425.0	-30.0	67.00	5.00	0	66	10	8
43	224	1	56200.0	-50.0	67.00	5.00	0	66	10	8
44	225	1	56320.0	0.0	67.00	5.00	0	66	10	8
45	226	1	57055.0	-205.0	63.00	5.00	0	66	10	8
30	230	1	31760.0	-225.0	36.00	5.00	0	66	10	8
31	231	1	33420.0	-220.0	42.00	5.00	0	66	10	8
32	232	1	39000.0	-305.0	55.00	5.00	0	66	10	8

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17 June 2002
TNM 1.0b

INPUT: BARRIERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No Build/ Eastbound

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height at Point	Segment				
		Min	Max	$ per unit area	$ per unit volume	Top Width	Run:Rise	$ per unit length			X	Y	Z		Seg Ht Increment	Perturbs #Up	Perturbs #On	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Privacy Wall1	W	0.00	99.99	0.00				0.00	point1	1	25000.0	225.0	29.50	5.00	1.00	1	0		
									point2	2	25350.0	225.0	31.00	5.00					
Privacy Wall2	W	0.00	99.99	0.00				0.00	point3	3	25500.0	223.0	32.50	5.00	1.00	1	0		
									point4	4	26150.0	215.0	32.00	5.00	1.00	1	0		
									point5	5	26575.0	213.0	30.00	5.00					

URS **17 June 2002**
WHA **TNM 1.0b**

INPUT: GROUND ZONES
PROJECT/CONTRACT: **CLR FAP 7822 001 S**
RUN: **County Line Road - No-Build/ Eastbound**

Ground Zone Name	Type	Flow Resistivity cgs rayls	Points No.	Coordinates X ft	Y ft
Default Ground Zone	Lawn	300			
Ground Zone8	Water	20000	101	12170.0	500.0
			102	11860.0	500.0
			103	11700.0	620.0
			104	11530.0	800.0
			105	12020.0	780.0
Ground Zone9	Water	20000	106	23910.0	405.0
			107	23770.0	490.0
			108	23735.0	610.0
			109	23770.0	720.0
			110	23900.0	770.0
			111	24015.0	740.0
			112	24075.0	625.0
			113	24060.0	490.0
Ground Zone29	Pavement	20000	114	10500.0	339.0
			115	10700.0	321.0
			116	11100.0	296.0
			117	11129.9	296.8
			118	11129.9	348.3
			119	11100.0	349.0
			120	10700.0	352.0
			121	10500.0	349.0
Ground Zone30	Lawn	300	122	11131.7	296.5
			123	11375.0	296.0
			124	12000.0	296.0
			125	12101.6	295.8
			126	12101.6	338.5
			127	12000.0	339.0
			128	11375.0	347.0
			129	11131.7	348.2
Ground Zone31	Pavement	20000	130	12103.6	296.3
			131	12700.0	289.0
			132	12901.9	291.4
			133	12901.9	334.4
			134	12700.0	337.0

			135	12103.6	338.1
Ground Zone32	Lawn	300	136	12903.8	291.4
			137	13500.4	288.9
			138	13500.4	329.5
			139	12903.8	334.4
Ground Zone33	Pavement	20000	140	13503.2	288.9
			141	13875.0	286.0
			142	14400.0	291.0
			143	15101.0	313.5
			144	15101.0	326.0
			145	14350.0	329.0
			146	13875.0	329.0
			147	13503.2	329.5
Ground Zone34	Pavement	20000	148	26400.6	266.6
			149	26500.0	266.0
			150	27199.9	264.0
			151	27199.9	279.0
			152	27100.0	279.0
			153	26850.0	284.0
			154	26401.0	287.0
Ground Zone35	Pavement	20000	155	37100.2	210.0
			156	37300.0	209.0
			157	37750.0	201.0
			158	39100.0	186.0
			159	39900.0	181.0
			160	40502.0	175.0
			161	40502.0	190.0
			162	40250.0	194.0
			163	39900.0	203.0
			164	39100.0	208.0
			165	37750.0	223.0
			166	37300.0	231.0
			167	37250.0	229.0
			168	37100.2	224.3
Ground Zone36	Pavement	20000	169	55100.0	81.0
			170	55200.0	81.0
			171	55300.0	81.0
			172	55400.0	81.0
			173	55400.0	134.0
			174	55300.0	124.0
			175	55200.0	114.0
			176	55100.0	109.0
Ground Zone38	Lawn	300	177	55401.0	81.0
			178	55500.0	81.0
			179	55600.0	81.0
			180	55700.0	81.0

			181	55800.0	81.0
			182	55900.0	81.0
			183	56000.0	81.0
			184	56100.0	81.0
			185	56550.0	81.0
			186	56800.0	79.0
			187	57200.0	79.0
			188	57400.0	79.0
			189	57600.0	79.0
			190	58000.0	76.0
			191	58000.0	174.0
			192	57600.0	174.0
			193	57400.0	174.0
			194	57200.0	174.0
			195	56800.0	174.0
			196	56550.0	179.0
			197	56100.0	179.0
			198	56000.0	179.0
			199	55900.0	174.0
			200	55800.0	169.0
			201	55700.0	159.0
			202	55600.0	149.0
			203	55500.0	144.0
			204	55401.0	134.0

RESULTS: SOUND LEVELS

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2 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build/ Eastbound
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

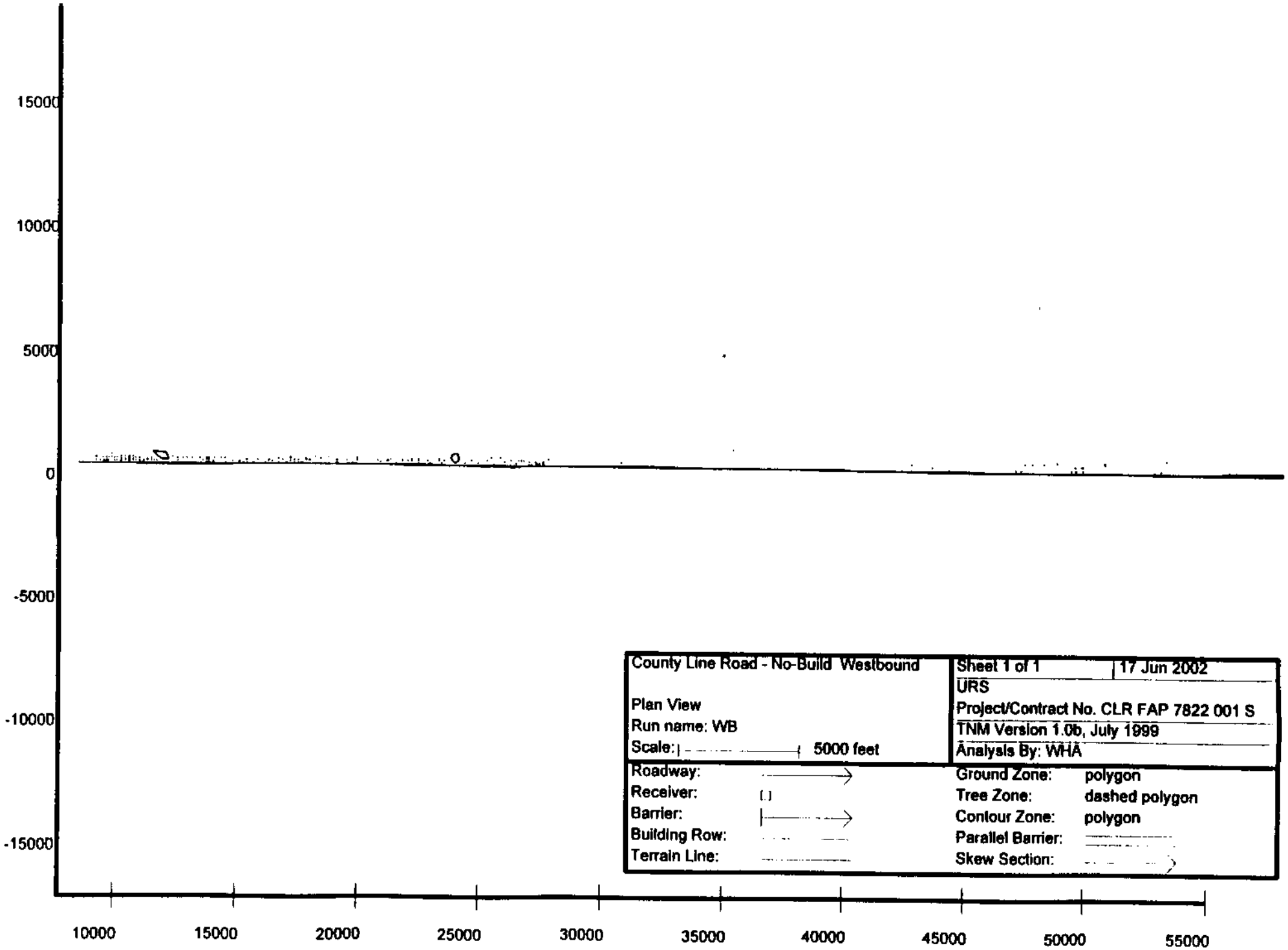
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1	179	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
2	180	1	0.0	62.8	66	62.8	10	---	62.8	0.0	8	-8.0
3	181	1	0.0	51.9	66	51.9	10	---	51.9	0.0	8	-8.0
4	183	1	0.0	53.0	66	53.0	10	---	53.0	0.0	8	-8.0
5	184	1	0.0	54.6	66	54.6	10	---	54.6	0.0	8	-8.0
6	185	1	0.0	51.1	66	51.1	10	---	51.1	0.0	8	-8.0
7	186	1	0.0	62.8	66	62.8	10	---	62.8	0.0	8	-8.0
8	187	1	0.0	55.4	66	55.4	10	---	55.4	0.0	8	-8.0
9	189	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0
10	190	1	0.0	55.5	66	55.5	10	---	55.5	0.0	8	-8.0
11	192	1	0.0	54.8	66	54.8	10	---	54.8	0.0	8	-8.0
12	193	1	0.0	64.1	66	64.1	10	---	64.1	0.0	8	-8.0
13	194	1	0.0	53.7	66	53.7	10	---	53.7	0.0	8	-8.0
14	195	1	0.0	61.9	66	61.9	10	---	61.9	0.0	8	-8.0
15	196	1	0.0	54.1	66	54.1	10	---	54.1	0.0	8	-8.0
16a	197	1	0.0	51.0	66	51.0	10	---	51.0	0.0	8	-8.0
16b	198	1	0.0	53.8	66	53.8	10	---	53.8	0.0	8	-8.0
17	199	1	0.0	52.8	66	52.8	10	---	52.8	0.0	8	-8.0
18	200	1	0.0	53.8	66	53.8	10	---	53.8	0.0	8	-8.0
19	201	1	0.0	51.1	66	51.1	10	---	51.0	0.1	8	-7.9
20	203	1	0.0	50.0	66	50.0	10	---	49.7	0.3	8	-7.7
21	204	1	0.0	59.2	66	59.2	10	---	58.9	0.3	8	-7.7
22	205	1	0.0	55.0	66	55.0	10	---	53.8	1.2	8	-6.8
23	206	1	0.0	60.1	66	60.1	10	---	57.6	2.5	8	-5.5

RESULTS: SOUND LEVELS

24	207	1	0.0	59.7	66	59.7	10	---	57.8	1.9	8	-6.1
25	208	1	0.0	58.6	66	58.6	10	---	56.7	1.9	8	-6.1
26	209	1	0.0	56.2	66	56.2	10	---	54.4	1.8	8	-6.2
27	210	1	0.0	56.5	66	56.5	10	---	54.9	1.6	8	-6.4
28	211	1	0.0	57.0	66	57.0	10	---	55.5	1.5	8	-6.5
29	212	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
33	213	1	0.0	53.7	66	53.7	10	---	53.7	0.0	8	-8.0
34	214	1	0.0	50.9	66	50.9	10	---	50.9	0.0	8	-8.0
35	215	1	0.0	58.0	66	58.0	10	---	58.0	0.0	8	-8.0
36	216	1	0.0	63.1	66	63.1	10	---	63.1	0.0	8	-8.0
37	217	1	0.0	65.6	66	65.6	10	---	65.6	0.0	8	-8.0
38	218	1	0.0	63.6	66	63.6	10	---	63.6	0.0	8	-8.0
39	219	1	0.0	61.9	66	61.9	10	---	61.9	0.0	8	-8.0
40	220	1	0.0	59.0	66	59.0	10	---	59.0	0.0	8	-8.0
41	221	1	0.0	58.5	66	58.5	10	---	58.5	0.0	8	-8.0
42	222	1	0.0	64.8	66	64.8	10	---	64.8	0.0	8	-8.0
43	224	1	0.0	63.5	66	63.5	10	---	63.5	0.0	8	-8.0
44	225	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
45	226	1	0.0	57.5	66	57.5	10	---	57.5	0.0	8	-8.0
30	230	1	0.0	50.5	66	50.5	10	---	50.5	0.0	8	-8.0
31	231	1	0.0	50.8	66	50.8	10	---	50.8	0.0	8	-8.0
32	232	1	0.0	51.1	66	51.1	10	---	51.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	46	0.0	0.3	2.5
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0


15000
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55000
County Line Road - No-Build Westbound
Plan View
Run name: WB
Scale: 5000 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

2 July 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build Westbound

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - US19 to Hamlet Circle	15.5	sta85	1	8500.0	345.0	16.50				Average	
		sta96	2	9600.0	345.0	29.00				Average	
		sta105	3	10500.0	338.0	33.00				Average	
		sta107	127	10700.0	320.0	35.00				Average	
		sta111	5	11100.0	295.0	35.00				Average	
		sta113+75	4	11375.0	295.0	33.50					
EB - Hamlet Circle to Ruskin Avenue	31.0	sta113+75	7	11375.0	295.0	33.50				Average	
		sta120	9	12000.0	295.0	22.50				Average	
		sta127	10	12700.0	290.0	35.00				Average	
		sta138+75	8	13875.0	285.0	26.50					
EB - Ruskin Avenue to Cobblestone Drive	15.5	sta138+75	11	13875.0	285.0	26.50				Average	
		sta144	12	14400.0	290.0	23.00				Average	
		sta152	129	15200.0	315.0	33.00				Average	
		sta160	130	16000.0	315.0	40.00				Average	
		sta166	131	16600.0	310.0	35.00				Average	
		sta173	132	17300.0	310.0	47.00				Average	
		sta182	128	18200.0	310.0	30.00				Average	
		sta190	133	19000.0	310.0	22.00				Average	
		sta205+50	13	20550.0	310.0	30.50					
EB - Cobblestone Road to East Road	15.5	sta205+50	134	20550.0	310.0	30.50				Average	
		sta208	135	20800.0	310.0	36.00				Average	

		sta210+25	136	21025.0	310.0	47.50					
EB - East Road to Mariner Boulevard	15.5	sta210+25	137	21025.0	310.0	47.50				Average	
		sta213	138	21300.0	307.0	51.00				Average	
		sta220	139	22000.0	302.0	28.00				Average	
		sta225	140	22500.0	300.0	28.00				Average	
		sta230	141	23000.0	295.0	31.00				Average	
		sta239	142	23900.0	288.0	28.00				Average	
		sta251	143	25100.0	280.0	28.00				Average	
		sta260	144	26000.0	270.0	32.00				Average	
		sta265	145	26500.0	265.0	30.00				Average	
		sta285	146	28500.0	260.0	39.00				Average	
		sta321	147	32100.0	243.0	40.00				Average	
		sta345	148	34500.0	225.0	46.00				Average	
		sta358	149	35800.0	218.0	56.00				Average	
		sta363	150	36300.0	213.0	52.00				Average	
		sta369	151	36900.0	208.0	62.00				Average	
		sta373	152	37300.0	208.0	59.00				Average	
		sta377+50	153	37750.0	200.0	59.00					
EB - Mariner Boulevard to Linden Drive	15.5	sta377+50	154	37750.0	200.0	59.00				Average	
		sta391	155	39100.0	185.0	59.00				Average	
		sta399	156	39900.0	180.0	50.00				Average	
		sta414	157	41400.0	163.0	50.00				Average	
		sta422	158	42200.0	153.0	58.00				Average	
		sta438	159	43800.0	140.0	59.00				Average	
		sta449	160	44900.0	135.0	67.00				Average	
		sta463	161	46300.0	123.0	67.50				Average	
		sta469	162	46900.0	118.0	81.00				Average	
		sta473	163	47300.0	118.0	89.00				Average	
		sta480	164	48000.0	105.0	92.00				Average	
		sta485	165	48500.0	105.0	86.00				Average	
		sta488	166	48800.0	103.0	78.00				Average	
		sta491	167	49100.0	102.0	76.00				Average	
		sta498	168	49800.0	100.0	81.00				Average	
		sta506+75	169	50675.0	95.0	76.00					
EB - Linden Drive to east of Sparks Rd	15.5	sta506+75	170	50675.0	95.0	76.00				Average	

		sta512	171	51200.0	95.0	74.00				Average	
		sta518	172	51800.0	92.0	76.00				Average	
		sta531	173	53100.0	88.0	68.00				Average	
		sta547	174	54700.0	78.0	68.00					
EB - east of Sparks Rd to Anderson Snow	31.0	sta551	179	55100.0	80.0	68.00				Average	
		sta552	275	55200.0	80.0	68.00				Average	
		sta553	276	55300.0	80.0	68.00				Average	
		sta554	277	55400.0	80.0	68.00				Average	
		sta555	278	55500.0	80.0	68.00				Average	
		sta556	279	55600.0	80.0	68.00				Average	
		sta557	280	55700.0	80.0	68.00				Average	
		sta558	281	55800.0	80.0	68.00				Average	
		sta559	282	55900.0	80.0	68.00				Average	
		sta560	283	56000.0	80.0	68.00				Average	
		sta561	284	56100.0	80.0	68.00				Average	
		sta565+50	285	56550.0	80.0	68.00					
WB - Suncoast to east of Anderson Snow	31.0	sta580	181	58000.0	175.0	68.00				Average	
		sta576	255	57600.0	175.0	68.00				Average	
		sta574	256	57400.0	175.0	68.00				Average	
		sta572	251	57200.0	175.0	68.00					
WB - Between Sparks and Anderson Snow	15.5	sta558	183	55800.0	170.0	68.00				Average	
		sta557	267	55700.0	160.0	68.00				Average	
		sta556	266	55600.0	150.0	68.00				Average	
		sta555	184	55500.0	145.0	68.00				Average	
		sta554	185	55400.0	135.0	68.00				Average	
		sta553	262	55300.0	125.0	68.00				Average	
		sta552	263	55200.0	115.0	68.00				Average	
		sta551	264	55100.0	110.0	68.00				Average	
		sta550	265	55000.0	100.0	68.00				Average	
		sta549	186	54900.0	95.0	68.00				Average	
		sta547	187	54700.0	92.0	68.00					
WB - Linden Drive to Mariner Boulevard	15.5	sta506+75	192	50675.0	107.0	76.00				Average	
		sta498	193	49800.0	112.0	81.00				Average	
		sta491	194	49100.0	114.0	76.00				Average	
		sta488	195	48800.0	115.0	78.00				Average	

		sta485	196	48500.0	117.0	86.00				Average	
		sta480	197	48000.0	117.0	92.00				Average	
		sta473	198	47300.0	130.0	89.00				Average	
		sta469	199	46900.0	130.0	81.00				Average	
		sta463	200	46300.0	135.0	67.50				Average	
		sta449	201	44900.0	147.0	67.00				Average	
		sta438	202	43800.0	152.0	59.00				Average	
		sta422	203	42200.0	165.0	58.00				Average	
		sta414	204	41400.0	175.0	50.00				Average	
		sta402+50	205	40250.0	195.0	50.50				Average	
		sta399	206	39900.0	204.0	50.00				Average	
		sta391	207	39100.0	209.0	59.00				Average	
		sta377+50	208	37750.0	224.0	59.00					
WB - Mariner Boulevard to East Road	15.5	sta377+50	209	37750.0	224.0	59.00				Average	
		sta373	210	37300.0	232.0	59.00				Average	
		sta372+50	211	37250.0	230.0	59.00				Average	
		sta369	212	36900.0	220.0	62.00				Average	
		sta363	213	36300.0	225.0	52.00				Average	
		sta358	214	35800.0	230.0	56.00				Average	
		sta345	215	34500.0	237.0	46.00				Average	
		sta321	216	32100.0	255.0	40.00				Average	
		sta285	217	28500.0	272.0	39.00				Average	
		sta271	218	27100.0	280.0	34.00				Average	
		sta268+50	219	26850.0	285.0	33.00				Average	
		sta264	220	26400.0	288.0	30.50				Average	
		sta260	221	26000.0	282.0	32.00				Average	
		sta251	222	25100.0	292.0	28.00				Average	
		sta239	223	23900.0	300.0	28.00				Average	
		sta230	224	23000.0	307.0	31.00				Average	
		sta225	225	22500.0	312.0	28.00				Average	
		sta220	228	22000.0	314.0	28.00				Average	
		sta213	227	21300.0	319.0	51.00				Average	
		sta210+25	226	21025.0	322.0	47.50					
WB - East Road to Cobblestone Drive	15.5	sta210+25	229	21025.0	322.0	47.50				Average	
		sta208	230	20800.0	322.0	36.00				Average	

		sta205+50	231	20550.0	322.0	30.50					
WB - Cobblestone Dr to west of Hallow Ave	15.5	sta205+50	232	20550.0	322.0	30.50				Average	
		sta190	233	19000.0	322.0	22.00				Average	
		sta182	234	18200.0	322.0	30.00				Average	
		sta173	235	17300.0	322.0	47.00				Average	
		sta166	236	16600.0	322.0	35.00				Average	
		sta160	237	16000.0	327.0	40.00				Average	
		sta152	238	15200.0	327.0	33.00				Average	
		sta143+50	239	14350.0	330.0	24.00					
WB - West of Hallow Ave to Hamlet Circle	31.0	sta143+50	240	14350.0	330.0	24.00				Average	
		sta138+75	241	13875.0	330.0	26.50				Average	
		sta127	242	12700.0	338.0	35.00				Average	
		sta120	243	12000.0	340.0	22.50				Average	
		sta113+75	244	11375.0	348.0	33.50					
WB - Hamlet Circle to US19	15.5	sta113+75	245	11375.0	348.0	33.50				Average	
		sta111	246	11100.0	350.0	35.00				Average	
		sta107	247	10700.0	353.0	35.00				Average	
		sta105	248	10500.0	350.0	33.00				Average	
		sta96	249	9600.0	357.0	29.00				Average	
		sta85	250	8500.0	357.0	16.50					
WB - West of Suncoast to Anderson Snow	31.0	sta572	253	57200.0	175.0	68.00				Average	
		sta568	257	56800.0	175.0	68.00				Average	
		sta565+50	258	56550.0	180.0	68.00					
WB - East of Sparks Rd to Linden Drive	15.5	sta547	254	54700.0	92.0	68.00				Average	
		sta531	188	53100.0	100.0	68.00				Average	
		sta518	189	51800.0	104.0	76.00				Average	
		sta512	190	51200.0	107.0	74.00				Average	
		sta506+75	191	50675.0	107.0	76.00					
EB - Between Sparks and Anderson Snow	15.5	sta547	268	54700.0	78.0	68.00				Average	
		sta548	175	54800.0	80.0	68.00				Average	
		sta549	176	54900.0	80.0	68.00				Average	
		sta550	177	55000.0	80.0	68.00				Average	
		sta551	178	55100.0	80.0	68.00					
EB - East of Anderson Snow to Suncoast	31.0	sta572	272	57200.0	78.0	68.00				Average	
		sta574	273	57400.0	78.0	68.00				Average	

INPUT: ROADWAYS

		sta576	274	57600.0	78.0	68.00				Average		
		sta580	180	58000.0	75.0	68.00						
EB - Anderson Snow to west of Suncoast	31.0	sta565+50	287	56550.0	80.0	68.00				Average		
		sta568	286	56800.0	78.0	68.00				Average		
		sta572	269	57200.0	78.0	68.00						
WB- Between Sparks and Anderson Snow	31.0	sta565+50	288	56550.0	180.0	68.00				Average		
		sta561	259	56100.0	180.0	68.00				Average		
		sta560	260	56000.0	180.0	68.00				Average		
		sta559	261	55900.0	175.0	68.00				Average		
		sta558	182	55800.0	170.0	68.00						
WB - Cobblestone Dr to west of Hallow Ave	County Line Road westbound from Cobblestone Drive to sta143+50 is 1-lane. Station 143+50 is between Ruskin A											
WB - West of Hallow Ave to Hamlet Circle	County Line Road westbound from sta143+50 to Hamlet Circle is 2-lanes.											

URS 2 July 2002
WHA TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build Westbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - US19 to Hamlet Circle	sta85	1	344	45	7	45	11	45	0	0	0	0
	sta96	2	344	45	7	45	11	45	0	0	0	0
	sta105	3	344	45	7	45	11	45	0	0	0	0
	sta107	127	344	45	7	45	11	45	0	0	0	0
	sta111	6	344	45	7	45	11	45	0	0	0	0
	sta113+75	4										
EB - Hamlet Circle to Ruskin Avenue	sta113+75	7	792	45	17	45	25	45	0	0	0	0
	sta120	9	792	45	17	45	25	45	0	0	0	0
	sta127	10	792	45	17	45	25	45	0	0	0	0
	sta138+75	8										
EB - Ruskin Avenue to Cobblestone Drive	sta138+75	11	344	45	7	45	11	45	0	0	0	0
	sta144	12	344	45	7	45	11	45	0	0	0	0
	sta152	129	344	45	7	45	11	45	0	0	0	0
	sta160	130	344	45	7	45	11	45	0	0	0	0
	sta166	131	344	45	7	45	11	45	0	0	0	0
	sta173	132	344	45	7	45	11	45	0	0	0	0
	sta182	128	344	45	7	45	11	45	0	0	0	0
	sta190	133	344	45	7	45	11	45	0	0	0	0
	sta205+50	13										
EB - Cobblestone Road to East Road	sta205+50	134	344	40	7	40	11	40	0	0	0	0
	sta208	135	344	40	7	40	11	40	0	0	0	0
	sta210+25	136										

EB - East Road to Mariner Boulevard	sta210+25	137	344	50	7	50	11	50	0	0	0	0	
	sta213	138	344	50	7	50	11	50	0	0	0	0	
	sta220	139	344	50	7	50	11	50	0	0	0	0	
	sta225	140	344	50	7	50	11	50	0	0	0	0	
	sta230	141	344	50	7	50	11	50	0	0	0	0	
	sta239	142	344	50	7	50	11	50	0	0	0	0	
	sta251	143	344	50	7	50	11	50	0	0	0	0	
	sta260	144	344	50	7	50	11	50	0	0	0	0	
	sta265	145	344	50	7	50	11	50	0	0	0	0	
	sta285	146	344	50	7	50	11	50	0	0	0	0	
	sta321	147	344	50	7	50	11	50	0	0	0	0	
	sta345	148	344	50	7	50	11	50	0	0	0	0	
	sta358	149	344	50	7	50	11	50	0	0	0	0	
	sta363	150	344	50	7	50	11	50	0	0	0	0	
	sta369	151	344	50	7	50	11	50	0	0	0	0	
	sta373	152	344	50	7	50	11	50	0	0	0	0	
	sta377+50	153											
EB - Mariner Boulevard to Linden Drive	sta377+50	154	344	55	7	55	11	55	0	0	0	0	
	sta391	155	344	55	7	55	11	55	0	0	0	0	
	sta399	156	344	55	7	55	11	55	0	0	0	0	
	sta414	157	344	55	7	55	11	55	0	0	0	0	
	sta422	158	344	55	7	55	11	55	0	0	0	0	
	sta438	159	344	55	7	55	11	55	0	0	0	0	
	sta449	160	344	55	7	55	11	55	0	0	0	0	
	sta463	161	344	55	7	55	11	55	0	0	0	0	
	sta469	162	344	55	7	55	11	55	0	0	0	0	
	sta473	163	344	55	7	55	11	55	0	0	0	0	
	sta480	164	344	55	7	55	11	55	0	0	0	0	
	sta485	165	344	55	7	55	11	55	0	0	0	0	
	sta488	166	344	55	7	55	11	55	0	0	0	0	
	sta491	167	344	55	7	55	11	55	0	0	0	0	
	sta498	168	344	55	7	55	11	55	0	0	0	0	
	sta506+75	169											
EB - Linden Drive to east of Sparks Rd	sta506+75	170	344	50	7	50	11	50	0	0	0	0	

	sta512	171	336	50	11	50	14	50	0	0	0	0
	sta518	172	336	50	11	50	14	50	0	0	0	0
	sta531	173	336	50	11	50	14	50	0	0	0	0
	sta547	174										
EB - east of Sparks Rd to Anderson Snow	sta551	179	344	50	7	50	11	50	0	0	0	0
	sta552	275	344	50	7	50	11	50	0	0	0	0
	sta553	276	344	50	7	50	11	50	0	0	0	0
	sta554	277	344	50	7	50	11	50	0	0	0	0
	sta555	278	344	50	7	50	11	50	0	0	0	0
	sta556	279	344	50	7	50	11	50	0	0	0	0
	sta557	280	344	50	7	50	11	50	0	0	0	0
	sta558	281	344	50	7	50	11	50	0	0	0	0
	sta559	282	344	50	7	50	11	50	0	0	0	0
	sta560	283	344	50	7	50	11	50	0	0	0	0
	sta561	284	344	50	7	50	11	50	0	0	0	0
	sta565+50	285										
WB - Suncoast to east of Anderson Snow	sta580	181	1089	50	23	50	34	50	0	0	0	0
	sta576	255	1089	50	23	50	34	50	0	0	0	0
	sta574	256	1089	50	23	50	34	50	0	0	0	0
	sta572	251										
WB - Between Sparks and Anderson Snow	sta558	183	473	50	10	50	15	50	0	0	0	0
	sta557	267	473	50	10	50	15	50	0	0	0	0
	sta556	266	473	50	10	50	15	50	0	0	0	0
	sta555	184	473	50	10	50	15	50	0	0	0	0
	sta554	185	473	50	10	50	15	50	0	0	0	0
	sta553	262	473	50	10	50	15	50	0	0	0	0
	sta552	263	473	50	10	50	15	50	0	0	0	0
	sta551	264	473	50	10	50	15	50	0	0	0	0
	sta550	265	473	50	10	50	15	50	0	0	0	0
	sta549	186	473	50	10	50	15	50	0	0	0	0
	sta547	187										
WB - Linden Drive to Mariner Boulevard	sta506+75	192	473	55	10	55	15	55	0	0	0	0
	sta498	193	473	55	10	55	15	55	0	0	0	0
	sta491	194	473	55	10	55	15	55	0	0	0	0

	sta488	195	473	55	10	55	15	55	0	0	0	0
	sta485	196	473	55	10	55	15	55	0	0	0	0
	sta480	197	473	55	10	55	15	55	0	0	0	0
	sta473	198	473	55	10	55	15	55	0	0	0	0
	sta469	199	473	55	10	55	15	55	0	0	0	0
	sta463	200	473	55	10	55	15	55	0	0	0	0
	sta449	201	473	55	10	55	15	55	0	0	0	0
	sta438	202	473	55	10	55	15	55	0	0	0	0
	sta422	203	473	55	10	55	15	55	0	0	0	0
	sta414	204	473	55	10	55	15	55	0	0	0	0
	sta402+50	205	473	55	10	55	15	55	0	0	0	0
	sta399	206	473	55	10	55	15	55	0	0	0	0
	sta391	207	473	55	10	55	15	55	0	0	0	0
	sta377+50	208										
WB - Mariner Boulevard to East Road	sta377+50	209	473	50	10	50	15	50	0	0	0	0
	sta373	210	473	50	10	50	15	50	0	0	0	0
	sta372+50	211	473	50	10	50	15	50	0	0	0	0
	sta369	212	473	50	10	50	15	50	0	0	0	0
	sta363	213	473	50	10	50	15	50	0	0	0	0
	sta358	214	473	50	10	50	15	50	0	0	0	0
	sta345	215	473	50	10	50	15	50	0	0	0	0
	sta321	216	473	50	10	50	15	50	0	0	0	0
	sta285	217	473	50	10	50	15	50	0	0	0	0
	sta271	218	473	50	10	50	15	50	0	0	0	0
	sta268+50	219	473	50	10	50	15	50	0	0	0	0
	sta264	220	473	50	10	50	15	50	0	0	0	0
	sta260	221	473	50	10	50	15	50	0	0	0	0
	sta251	222	473	50	10	50	15	50	0	0	0	0
	sta239	223	473	50	10	50	15	50	0	0	0	0
	sta230	224	473	50	10	50	15	50	0	0	0	0
	sta225	225	473	50	10	50	15	50	0	0	0	0
	sta220	228	473	50	10	50	15	50	0	0	0	0
	sta213	227	473	50	10	50	15	50	0	0	0	0
	sta210+25	226										

WB - East Road to Cobblestone Drive	sta210+25	229	473	40	10	40	15	40	0	0	0	0
	sta208	230	473	40	10	40	15	40	0	0	0	0
	sta205+50	231										
WB - Cobblestone Dr to west of Hallow Av	sta205+50	232	473	45	10	45	15	45	0	0	0	0
	sta190	233	473	45	10	45	15	45	0	0	0	0
	sta182	234	473	45	10	45	15	45	0	0	0	0
	sta173	235	473	45	10	45	15	45	0	0	0	0
	sta166	236	473	45	10	45	15	45	0	0	0	0
	sta160	237	473	45	10	45	15	45	0	0	0	0
	sta152	238	473	45	10	45	15	45	0	0	0	0
	sta143+50	239										
WB - West of Hallow Ave to Hamlet Circle	sta143+50	240	1089	45	23	45	34	45	0	0	0	0
	sta138+75	241	1089	45	23	45	34	45	0	0	0	0
	sta127	242	1089	45	23	45	34	45	0	0	0	0
	sta120	243	1089	45	23	45	34	45	0	0	0	0
	sta113+75	244										
WB - Hamlet Circle to US19	sta113+75	245	473	45	10	45	15	45	0	0	0	0
	sta111	246	473	45	10	45	15	45	0	0	0	0
	sta107	247	473	45	10	45	15	45	0	0	0	0
	sta105	248	473	45	10	45	15	45	0	0	0	0
	sta96	249	473	45	10	45	15	45	0	0	0	0
	sta85	250										
WB - West of Suncoast to Anderson Snow	sta572	253	1089	50	23	50	34	50	0	0	0	0
	sta568	257	1089	50	23	50	34	50	0	0	0	0
	sta565+50	258										
WB - East of Sparks Rd to Linden Drive	sta547	254	473	50	10	50	15	50	0	0	0	0
	sta531	188	473	50	10	50	15	50	0	0	0	0
	sta518	189	473	50	10	50	15	50	0	0	0	0
	sta512	190	473	50	10	50	15	50	0	0	0	0
	sta506+75	191										
EB - Between Sparks and Anderson Snow	sta547	268	336	50	11	50	14	50	0	0	0	0
	sta548	175	336	50	11	50	14	50	0	0	0	0
	sta549	176	336	50	11	50	14	50	0	0	0	0
	sta550	177	336	50	11	50	14	50	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

	sta551	178										
EB - East of Anderson Snow to Suncoast	sta572	272	792	50	17	50	25	50	0	0	0	0
	sta574	273	792	50	17	50	25	50	0	0	0	0
	sta576	274	792	50	17	50	25	50	0	0	0	0
	sta580	180										
EB - Anderson Snow to west of Suncoast	sta565+50	287	792	50	17	50	25	50	0	0	0	0
	sta568	286	792	50	17	50	25	50	0	0	0	0
	sta572	269										
WB- Between Sparks and Anderson Snow	sta565+50	288	1089	50	23	50	34	50	0	0	0	0
	sta561	259	1089	50	23	50	34	50	0	0	0	0
	sta560	260	1089	50	23	50	34	50	0	0	0	0
	sta559	261	1089	50	23	50	34	50	0	0	0	0
	sta558	182										

URS
WHA

2 July 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build Westbound

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
46	51	1	53230.0	670.0	70.00	5.00	0	66	10	8
47	53	1	53045.0	220.0	69.50	5.00	0	66	10	8
48	55	1	52760.0	195.0	72.00	5.00	0	66	10	8
49	56	1	50780.0	520.0	80.00	5.00	0	66	10	8
50	57	1	49880.0	245.0	87.50	5.00	0	66	10	8
51	58	1	49570.0	250.0	83.00	5.00	0	66	10	8
52	59	1	49400.0	245.0	82.00	5.00	0	66	10	8
53	61	1	49840.0	365.0	85.00	5.00	0	66	10	8
54	62	1	49800.0	370.0	85.00	5.00	0	66	10	8
55	63	1	49540.0	380.0	83.00	5.00	0	66	10	8
56	67	1	48790.0	570.0	77.00	5.00	0	66	10	8
57	68	1	48240.0	485.0	76.00	5.00	0	66	10	8
58	69	1	47780.0	490.0	84.00	5.00	0	66	10	8
59	70	1	47440.0	510.0	88.00	5.00	0	66	10	8
60	71	1	47280.0	215.0	92.00	5.00	0	66	10	8
61	73	1	47090.0	230.0	87.00	5.00	0	66	10	8
62	74	1	44280.0	205.0	60.00	5.00	0	66	10	8
63	75	1	43580.0	350.0	59.00	5.00	0	66	10	8
65	77	1	35360.0	1000.0	40.00	5.00	0	66	10	8
66	78	1	30770.0	420.0	37.00	5.00	0	66	10	8
67	79	1	27760.0	570.0	30.00	5.00	0	66	10	8

INPUT: RECEIVERS

68	80	1	27570.0	355.0	35.00	5.00	0	66	10	8
69	81	1	27540.0	415.0	36.00	5.00	0	66	10	8
70	82	1	27390.0	360.0	35.00	5.00	0	66	10	8
71	83	1	27265.0	360.0	36.00	5.00	0	66	10	8
72	84	1	27250.0	450.0	35.00	5.00	0	66	10	8
73	85	1	27080.0	345.0	35.00	5.00	0	66	10	8
74	86	1	26970.0	345.0	34.00	5.00	0	66	10	8
75	87	1	26950.0	430.0	34.00	5.00	0	66	10	8
76	88	1	26750.0	480.0	34.00	5.00	0	66	10	8
77	89	1	26625.0	505.0	32.00	5.00	0	66	10	8
78	90	1	26515.0	490.0	30.00	5.00	0	66	10	8
79	91	1	26425.0	365.0	30.00	5.00	0	66	10	8
80	92	1	26225.0	480.0	31.00	5.00	0	66	10	8
81	94	1	25950.0	430.0	33.00	5.00	0	66	10	8
82	95	1	25800.0	595.0	31.00	5.00	0	66	10	8
83	96	1	25490.0	350.0	31.00	5.00	0	66	10	8
84	97	1	25425.0	590.0	30.00	5.00	0	66	10	8
85	98	1	25260.0	495.0	29.00	5.00	0	66	10	8
86	99	1	24880.0	410.0	29.00	5.00	0	66	10	8
87	100	1	24575.0	470.0	28.00	5.00	0	66	10	8
88	101	1	24330.0	410.0	29.00	5.00	0	66	10	8
89	102	1	23490.0	492.0	30.00	5.00	0	66	10	8
90	104	1	23350.0	400.0	32.00	5.00	0	66	10	8
91	105	1	23270.0	520.0	30.00	5.00	0	66	10	8
92	106	1	22880.0	390.0	32.00	5.00	0	66	10	8
93	107	1	22760.0	485.0	32.00	5.00	0	66	10	8
94	108	1	22390.0	390.0	30.00	5.00	0	66	10	8
95	109	1	22400.0	520.0	31.00	5.00	0	66	10	8
96	111	1	22125.0	520.0	29.00	5.00	0	66	10	8
97	112	1	21950.0	490.0	29.00	5.00	0	66	10	8
98	113	1	21770.0	477.0	32.50	5.00	0	66	10	8
99	116	1	21475.0	398.0	48.00	5.00	0	66	10	8
100	117	1	21260.0	535.0	53.00	5.00	0	66	10	8
101	118	1	21140.0	515.0	46.00	5.00	0	66	10	8

102	120	1	20740.0	510.0	41.00	5.00	0	66	10	8
103	121	1	20820.0	420.0	41.00	5.00	0	66	10	8
104	122	1	19885.0	520.0	43.00	5.00	0	66	10	8
105	123	1	19885.0	580.0	40.00	5.00	0	66	10	8
106	124	1	19810.0	390.0	32.00	5.00	0	66	10	8
107	125	1	19730.0	387.0	30.00	5.00	0	66	10	8
108	126	1	19655.0	392.0	28.00	5.00	0	66	10	8
109	127	1	19485.0	390.0	30.00	5.00	0	66	10	8
110	128	1	19465.0	500.0	35.00	5.00	0	66	10	8
111	129	1	19045.0	400.0	25.00	5.00	0	66	10	8
112	130	1	19045.0	495.0	31.00	5.00	0	66	10	8
113	132	1	18700.0	590.0	30.00	5.00	0	66	10	8
114	133	1	18380.0	562.0	34.00	5.00	0	66	10	8
115	134	1	18160.0	585.0	32.00	5.00	0	66	10	8
116	135	1	17970.0	480.0	36.00	5.00	0	66	10	8
117	136	1	17890.0	500.0	39.00	5.00	0	66	10	8
118	137	1	17775.0	520.0	37.00	5.00	0	66	10	8
119	138	1	17600.0	380.0	40.00	5.00	0	66	10	8
120	140	1	17480.0	397.0	46.00	5.00	0	66	10	8
121	141	1	17480.0	470.0	44.00	5.00	0	66	10	8
122	142	1	17290.0	397.0	50.00	5.00	0	66	10	8
123	143	1	17290.0	485.0	52.00	5.00	0	66	10	8
124	144	1	17150.0	427.0	55.00	5.00	0	66	10	8
125	145	1	17150.0	575.0	40.00	5.00	0	66	10	8
126	146	1	16975.0	391.0	50.00	5.00	0	66	10	8
127	147	1	16840.0	470.0	44.00	5.00	0	66	10	8
128	148	1	16650.0	407.0	38.00	5.00	0	66	10	8
129	149	1	16670.0	550.0	35.00	5.00	0	66	10	8
130	151	1	16370.0	435.0	37.00	5.00	0	66	10	8
131	152	1	16250.0	420.0	40.00	5.00	0	66	10	8
132	153	1	16270.0	505.0	33.00	5.00	0	66	10	8
133	154	1	16100.0	398.0	42.00	5.00	0	66	10	8
134	155	1	15650.0	407.0	38.00	5.00	0	66	10	8
135	156	1	15780.0	480.0	31.50	5.00	0	66	10	8

136	158	1	15390.0	402.0	34.00	5.00	0	66	10	8	
137	159	1	15235.0	402.0	34.00	5.00	0	66	10	8	
138	160	1	15370.0	510.0	37.00	5.00	0	66	10	8	
139	162	1	15310.0	510.0	37.00	5.00	0	66	10	8	
140	163	1	15030.0	412.0	35.00	5.00	0	66	10	8	
141	164	1	14790.0	440.0	27.00	5.00	0	66	10	8	
142	167	1	14460.0	560.0	20.00	5.00	0	66	10	8	
143	168	1	14290.0	530.0	29.00	5.00	0	66	10	8	
144	170	1	14000.0	415.0	27.50	5.00	0	66	10	8	
145	171	1	14040.0	530.0	29.00	5.00	0	66	10	8	
146	172	1	13790.0	410.0	26.50	5.00	0	66	10	8	
147	173	1	13790.0	520.0	25.00	5.00	0	66	10	8	
148	174	1	13700.0	410.0	27.00	5.00	0	66	10	8	
149	175	1	13700.0	520.0	27.00	5.00	0	66	10	8	
150	176	1	13540.0	430.0	30.50	5.00	0	66	10	8	
151	177	1	13440.0	540.0	33.00	5.00	0	66	10	8	
152	178	1	13100.0	550.0	40.00	5.00	0	66	10	8	
153	179	1	12920.0	550.0	46.00	5.00	0	66	10	8	
154	180	1	12750.0	530.0	45.00	5.00	0	66	10	8	
155	181	1	12550.0	425.0	36.00	5.00	0	66	10	8	
156	183	1	12550.0	540.0	36.00	5.00	0	66	10	8	
157	184	1	12310.0	590.0	27.00	5.00	0	66	10	8	
158	186	1	11650.0	427.0	26.00	5.00	0	66	10	8	
159	187	1	11550.0	460.0	29.00	5.00	0	66	10	8	
160	188	1	11460.0	430.0	32.00	5.00	0	66	10	8	
161	189	1	11480.0	530.0	28.00	5.00	0	66	10	8	
162	190	1	11280.0	420.0	33.00	5.00	0	66	10	8	
163	191	1	11280.0	507.0	30.00	5.00	0	66	10	8	
164	192	1	11140.0	415.0	34.00	5.00	0	66	10	8	
165	193	1	10980.0	415.0	33.00	5.00	0	66	10	8	
166	194	1	10980.0	530.0	28.00	5.00	0	66	10	8	
167	195	1	10830.0	420.0	27.00	5.00	0	66	10	8	
168	196	1	10830.0	550.0	32.50	5.00	0	66	10	8	
169	197	1	10690.0	420.0	34.00	5.00	0	66	10	8	

INPUT RECEIVERS

170	198	1	10690.0	490.0	32.00	5.00	0	66	10	8
171	199	1	10690.0	590.0	27.00	5.00	0	66	10	8
172	200	1	10525.0	415.0	32.00	5.00	0	66	10	8
173	201	1	10525.0	495.0	29.00	5.00	0	66	10	8
174	202	1	10525.0	575.0	27.00	5.00	0	66	10	8
175	203	1	10360.0	425.0	27.00	5.00	0	66	10	8
176	204	1	10360.0	500.0	24.50	5.00	0	66	10	8
177	205	1	10360.0	580.0	23.00	5.00	0	66	10	8
178	206	1	10210.0	415.0	26.00	5.00	0	66	10	8
179	207	1	10210.0	505.0	23.00	5.00	0	66	10	8
180	208	1	10210.0	580.0	22.00	5.00	0	66	10	8
181	209	1	10040.0	420.0	26.00	5.00	0	66	10	8
182	210	1	10040.0	555.0	22.00	5.00	0	66	10	8
183	211	1	9940.0	424.0	27.50	5.00	0	66	10	8
184	212	1	9940.0	570.0	22.00	5.00	0	66	10	8
185	213	1	9840.0	570.0	24.00	5.00	0	66	10	8
186	214	1	9840.0	725.0	24.00	5.00	0	66	10	8
187	215	1	9700.0	415.0	31.00	5.00	0	66	10	8
188	216	1	9720.0	570.0	25.00	5.00	0	66	10	8
189	217	1	9630.0	415.0	32.00	5.00	0	66	10	8
190	218	1	9640.0	560.0	29.00	5.00	0	66	10	8
191	219	1	9540.0	415.0	31.00	5.00	0	66	10	8
192	220	1	9450.0	550.0	27.00	5.00	0	66	10	8
193	222	1	9340.0	435.0	25.00	5.00	0	66	10	8
194	224	1	9180.0	430.0	23.00	5.00	0	66	10	8
195	225	1	9180.0	530.0	22.50	5.00	0	66	10	8
196	226	1	9180.0	595.0	22.50	5.00	0	66	10	8
64	228	1	42710.0	440.0	56.00	5.00	0	66	10	8

URS
WHA

17 June 2002
TNM 1.0b

INPUT: BARRIERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build Westbound

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height at Point	Segment				
		Min	Max	$ per unit area	$ per unit volume	Top Width	Run:Rise	$ per unit length			X	Y	Z		Seg Ht Increment	Perturbs #Up	#Dn	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Privacy Wall1	W	0.00	99.99	0.00				0.00	point1	1	25000.0	225.0	29.50	5.00	1.00	1	0		
									point2	2	25350.0	225.0	31.00	5.00					
Privacy Wall2	W	0.00	99.99	0.00				0.00	point3	3	25500.0	223.0	32.50	5.00	1.00	1	0		
									point4	4	28150.0	215.0	32.00	5.00	1.00	1	0		
									point5	5	28575.0	213.0	30.00	5.00					

URS
WHA

17 June 2002
TNM 1.0b

INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build Westbound

Ground Zone Name	Type	Flow Resistivity cgs rayls	Points No.	Coordinates X ft	Y ft
Default Ground Zone	Lawn	300			
Ground Zone8	Water	20000	101	12170.0	500.0
			102	11860.0	500.0
			103	11700.0	620.0
			104	11530.0	800.0
			105	12020.0	780.0
Ground Zone9	Water	20000	106	23910.0	405.0
			107	23770.0	490.0
			108	23735.0	610.0
			109	23770.0	720.0
			110	23900.0	770.0
			111	24015.0	740.0
			112	24075.0	625.0
			113	24060.0	490.0
Ground Zone29	Pavement	20000	114	10500.0	339.0
			115	10700.0	321.0
			116	11100.0	296.0
			117	11129.9	296.8
			118	11129.9	348.3
			119	11100.0	349.0
			120	10700.0	352.0
			121	10500.0	349.0
Ground Zone30	Lawn	300	122	11131.7	296.5
			123	11375.0	296.0
			124	12000.0	296.0
			125	12101.6	295.8
			126	12101.6	338.5
			127	12000.0	339.0
			128	11375.0	347.0
			129	11131.7	348.2
Ground Zone31	Pavement	20000	130	12103.6	296.3
			131	12700.0	289.0
			132	12901.9	291.4
			133	12901.9	334.4
			134	12700.0	337.0

			135	12103.6	338.1
Ground Zone32	Lawn	300	136	12903.8	291.4
			137	13500.4	288.9
			138	13500.4	329.5
			139	12903.8	334.4
Ground Zone33	Pavement	20000	140	13503.2	288.9
			141	13875.0	286.0
			142	14400.0	291.0
			143	15101.0	313.5
			144	15101.0	326.0
			145	14350.0	329.0
			146	13875.0	329.0
			147	13503.2	329.5
Ground Zone34	Pavement	20000	148	26400.6	266.6
			149	26500.0	266.0
			150	27199.9	264.0
			151	27199.9	279.0
			152	27100.0	279.0
			153	26850.0	284.0
			154	26401.0	287.0
Ground Zone35	Pavement	20000	155	37100.2	210.0
			156	37300.0	209.0
			157	37750.0	201.0
			158	39100.0	186.0
			159	39900.0	181.0
			160	40502.0	175.0
			161	40502.0	190.0
			162	40250.0	194.0
			163	39900.0	203.0
			164	39100.0	208.0
			165	37750.0	223.0
			166	37300.0	231.0
			167	37250.0	229.0
			168	37100.2	224.3
Ground Zone36	Pavement	20000	169	55100.0	81.0
			170	55200.0	81.0
			171	55300.0	81.0
			172	55400.0	81.0
			173	55400.0	134.0
			174	55300.0	124.0
			175	55200.0	114.0
			176	55100.0	109.0
Ground Zone37	Lawn	300	177	55500.0	81.0
			178	55600.0	81.0
			179	55700.0	81.0
			180	55800.0	81.0

			181	55900.0	81.0
			182	56000.0	81.0
			183	56100.0	81.0
			184	56550.0	81.0
			185	56800.0	79.0
			186	57200.0	79.0
			187	57400.0	79.0
			188	57600.0	79.0
			189	58000.0	76.0
			190	58000.0	174.0
			191	57600.0	174.0
			192	57400.0	174.0
			193	57200.0	174.0
			194	56800.0	174.0
			195	56550.0	179.0
			196	56100.0	179.0
			197	56000.0	179.0
			198	55900.0	174.0
			199	55800.0	169.0
			200	55700.0	159.0
			201	55600.0	149.0
			202	55500.0	144.0
			203	55401.0	134.0
			204	55401.0	82.0

RESULTS: SOUND LEVELS

URS
WHA

2 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - No-Build Westbound
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
46	51	1	0.0	49.2	66	49.2	10	---	49.2	0.0	8	-8.0
47	53	1	0.0	61.4	66	61.4	10	---	61.4	0.0	8	-8.0
48	55	1	0.0	63.2	66	63.2	10	---	63.2	0.0	8	-8.0
49	56	1	0.0	51.9	66	51.9	10	---	51.9	0.0	8	-8.0
50	57	1	0.0	62.1	66	62.1	10	---	62.1	0.0	8	-8.0
51	58	1	0.0	61.3	66	61.3	10	---	61.3	0.0	8	-8.0
52	59	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0
53	61	1	0.0	56.5	66	56.5	10	---	56.5	0.0	8	-8.0
54	62	1	0.0	56.3	66	56.3	10	---	56.3	0.0	8	-8.0
55	63	1	0.0	55.9	66	55.9	10	---	55.9	0.0	8	-8.0
56	67	1	0.0	51.9	66	51.9	10	---	51.9	0.0	8	-8.0
57	68	1	0.0	54.7	66	54.7	10	---	54.7	0.0	8	-8.0
58	69	1	0.0	54.0	66	54.0	10	---	54.0	0.0	8	-8.0
59	70	1	0.0	53.9	66	53.9	10	---	53.9	0.0	8	-8.0
60	71	1	0.0	65.6	66	65.6	10	---	65.6	0.0	8	-8.0
61	73	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0
62	74	1	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
63	75	1	0.0	58.4	66	58.4	10	---	58.4	0.0	8	-8.0
65	77	1	0.0	46.8	66	46.8	10	---	46.8	0.0	8	-8.0
66	78	1	0.0	59.2	66	59.2	10	---	59.2	0.0	8	-8.0
67	79	1	0.0	54.5	66	54.5	10	---	54.5	0.0	8	-8.0
68	80	1	0.0	64.6	66	64.6	10	---	64.6	0.0	8	-8.0
69	81	1	0.0	60.3	66	60.3	10	---	60.3	0.0	8	-8.0
70	82	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0

71	83	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
72	84	1	0.0	58.5	66	58.5	10	----	58.5	0.0	8	-8.0
73	85	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
74	86	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
75	87	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
76	88	1	0.0	58.5	66	58.5	10	----	58.5	0.0	8	-8.0
77	89	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
78	90	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
79	91	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
80	92	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
81	94	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
82	95	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
83	96	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
84	97	1	0.0	54.3	66	54.3	10	----	54.3	0.0	8	-8.0
85	98	1	0.0	57.2	66	57.2	10	----	57.2	0.0	8	-8.0
86	99	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0
87	100	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
88	101	1	0.0	61.5	66	61.5	10	----	61.5	0.0	8	-8.0
89	102	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
90	104	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
91	105	1	0.0	56.7	66	56.7	10	----	56.7	0.0	8	-8.0
92	106	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
93	107	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
94	108	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
95	109	1	0.0	57.1	66	57.1	10	----	57.1	0.0	8	-8.0
96	111	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
97	112	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
98	113	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
99	116	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
100	117	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
101	118	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
102	120	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
103	121	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
104	122	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
105	123	1	0.0	55.2	66	55.2	10	----	55.2	0.0	8	-8.0
106	124	1	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
107	125	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
108	126	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
109	127	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
110	128	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
111	129	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0

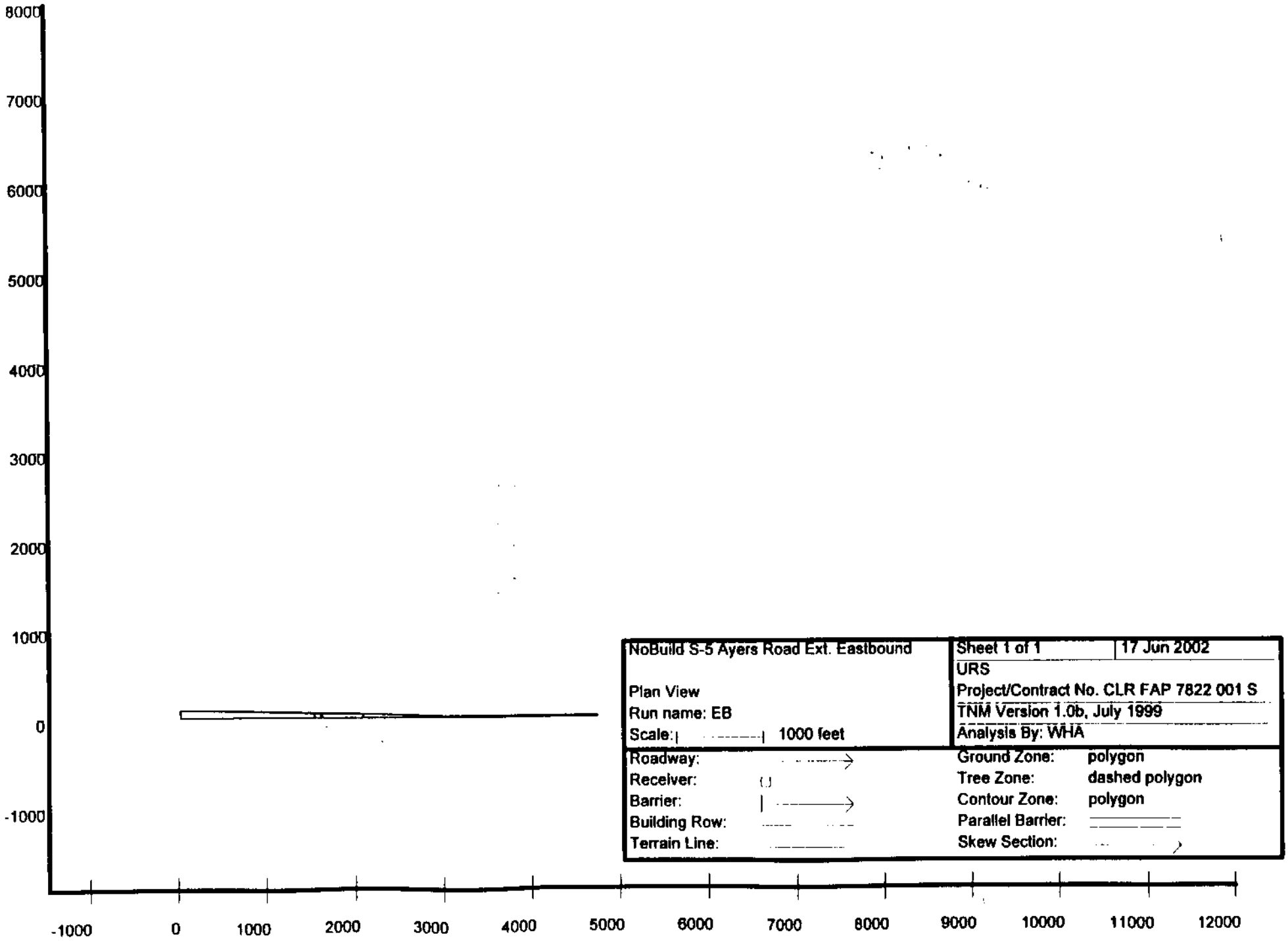
112	130	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
113	132	1	0.0	54.4	66	54.4	10	----	54.4	0.0	8	-8.0
114	133	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
115	134	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
116	135	1	0.0	59.0	66	59.0	10	----	59.0	0.0	8	-8.0
117	136	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
118	137	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
119	138	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
120	140	1	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
121	141	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
122	142	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
123	143	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
124	144	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
125	145	1	0.0	55.6	66	55.6	10	----	55.6	0.0	8	-8.0
126	146	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
127	147	1	0.0	59.5	66	59.5	10	----	59.5	0.0	8	-8.0
128	148	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
129	149	1	0.0	56.2	66	56.2	10	----	56.2	0.0	8	-8.0
130	151	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0
131	152	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
132	153	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
133	154	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
134	155	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
135	156	1	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
136	158	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
137	159	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
138	160	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
139	162	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
140	163	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
141	164	1	0.0	61.6	66	61.6	10	----	61.6	0.0	8	-8.0
142	167	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
143	168	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0
144	170	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
145	171	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
146	172	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
147	173	1	0.0	61.6	66	61.6	10	----	61.6	0.0	8	-8.0
148	174	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
149	175	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
150	176	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
151	177	1	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
152	178	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0

153	179	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
154	180	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
155	181	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
156	183	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
157	184	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
158	186	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
159	187	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
160	188	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
161	189	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
162	190	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
163	191	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
164	192	1	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
165	193	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
166	194	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
167	195	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
168	196	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
169	197	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
170	198	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
171	199	1	0.0	56.1	66	56.1	10	----	56.1	0.0	8	-8.0
172	200	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
173	201	1	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
174	202	1	0.0	56.4	66	56.4	10	----	56.4	0.0	8	-8.0
175	203	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
176	204	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
177	205	1	0.0	56.9	66	56.9	10	----	56.9	0.0	8	-8.0
178	206	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
179	207	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
180	208	1	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0
181	209	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
182	210	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
183	211	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
184	212	1	0.0	57.1	66	57.1	10	----	57.1	0.0	8	-8.0
185	213	1	0.0	56.3	66	56.3	10	----	56.3	0.0	8	-8.0
186	214	1	0.0	52.0	66	52.0	10	----	52.0	0.0	8	-8.0
187	215	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
188	216	1	0.0	56.1	66	56.1	10	----	56.1	0.0	8	-8.0
189	217	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
190	218	1	0.0	56.2	66	56.2	10	----	56.2	0.0	8	-8.0
191	219	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
192	220	1	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0
193	222	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0

RESULTS: SOUND LEVELS

194	224	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
195	225	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
196	226	1	0.0	55.1	66	55.1	10	----	55.1	0.0	8	-8.0
64	228	1	0.0	55.7	66	55.7	10	----	55.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	151	0.0	0.0	0.0
All Impacted	15	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0


8000
7000
6000
5000
4000
3000
2000
1000
0
-1000
-1000
0
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2000
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4000
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6000
7000
8000
9000
10000
11000
12000
NoBuild S-5 Ayers Road Ext. Eastbound
Plan View
Run name: EB
Scale: 1000 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS 17 June 2002
WHA TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S-5 Ayers Road Ext. Eastbound

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - Suncoast Pkwy to Ayers Rd Extension	33.0	sta580	1	0.0	0.0	2.00				Average	
		sta600+50	5	2525.0	5.0	2.00					
WB - Ayers Rd Extension to Suncoast Pkw	33.0	sta600+50	32	2525.0	35.0	2.00				Average	
		point33	33	2065.0	54.0	2.00				Average	
		sta580	4	0.0	91.0	2.00					
EB - Ayers Road Extension to US 41	15.5	point34	34	2525.0	5.0	2.00				Average	
		point35	35	4730.0	5.0	2.00					
WB - US 41 to Ayers Road Extension	15.5	point36	36	4730.0	17.0	2.00				Average	
		point37	37	3000.0	17.0	2.00				Average	
		point38	38	2525.0	35.0	2.00					

URS
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S-5 Ayers Road Ext. Eastbound

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
EB - Suncoast Pkwy to Ayers Rd Extensio	sta580	1	1045	50	22	50	33	50	0	0	0	0
	sta600+50	5										
WB - Ayers Rd Extension to Suncoast Pkw	sta600+50	32	760	50	16	50	24	50	0	0	0	0
	point33	33	760	50	16	50	24	50	0	0	0	0
	sta580	4										
EB - Ayers Road Extension to US 41	point34	34	473	45	10	45	15	45	0	0	0	0
	point35	35										
WB - US 41 to Ayers Road Extension	point36	36	344	45	7	45	11	45	0	0	0	0
	point37	37	344	45	7	45	11	45	0	0	0	0
	point38	38										

URS
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INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S-5 Ayers Road Ext. Eastbound

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
1	3	1	1646.0	-93.0	0.00	5.00	0	66	10	8
2	5	1	2277.0	-265.0	0.00	5.00	0	66	10	8
3	6	1	3607.0	1396.0	0.00	5.00	0	66	10	8
4	7	1	3793.0	1558.0	0.00	5.00	0	66	10	8
5	8	1	3788.0	1931.0	0.00	5.00	0	66	10	8
6	9	1	3608.0	2178.0	0.00	5.00	0	66	10	8
7	11	1	3625.0	2603.0	0.00	5.00	0	66	10	8
8	12	1	3804.0	2603.0	0.00	5.00	0	66	10	8
9	13	1	7886.0	6325.0	0.00	5.00	0	66	10	8
10	14	1	8003.0	6276.0	0.00	5.00	0	66	10	8
11	15	1	7964.0	6150.0	0.00	5.00	0	66	10	8
12	16	1	8307.0	6379.0	0.00	5.00	0	66	10	8
13	17	1	8511.0	6403.0	0.00	5.00	0	66	10	8
14	18	1	8662.0	6295.0	0.00	5.00	0	66	10	8
15	19	1	8988.0	6003.0	0.00	5.00	0	66	10	8
16	21	1	9119.0	5945.0	0.00	5.00	0	66	10	8
17	22	1	9192.0	5921.0	0.00	5.00	0	66	10	8

URS 17 June 2002
WHA TNM 1.0b

INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S-5 Ayers Road Ext. Eastbound

Ground Zone			Points		
Name	Type	Flow Resistivity	No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Ground Zone18	Lawn	300	138	0.0	0.0
			139	1507.0	9.0
			140	1507.0	56.7
			141	0.0	91.0
Ground Zone19	Pavement	20000	142	1511.6	6.6
			143	1594.9	6.6
			144	1594.9	57.3
			145	1510.0	58.9
Ground Zone20	Lawn	300	146	1599.4	9.8
			147	2065.0	6.0
			154	2065.0	53.0
			155	1599.4	56.4
Ground Zone31	Lawn	300	234	2066.8	6.3
			235	2522.0	7.3
			236	2522.0	33.0
			237	2066.8	52.5
Ground Zone33	Pavement	20000	241	2522.6	6.3
			243	2996.2	6.3
			244	2996.2	15.8
			245	2523.1	33.2

URS
WHA

17 June 2002
TNM 1.0b

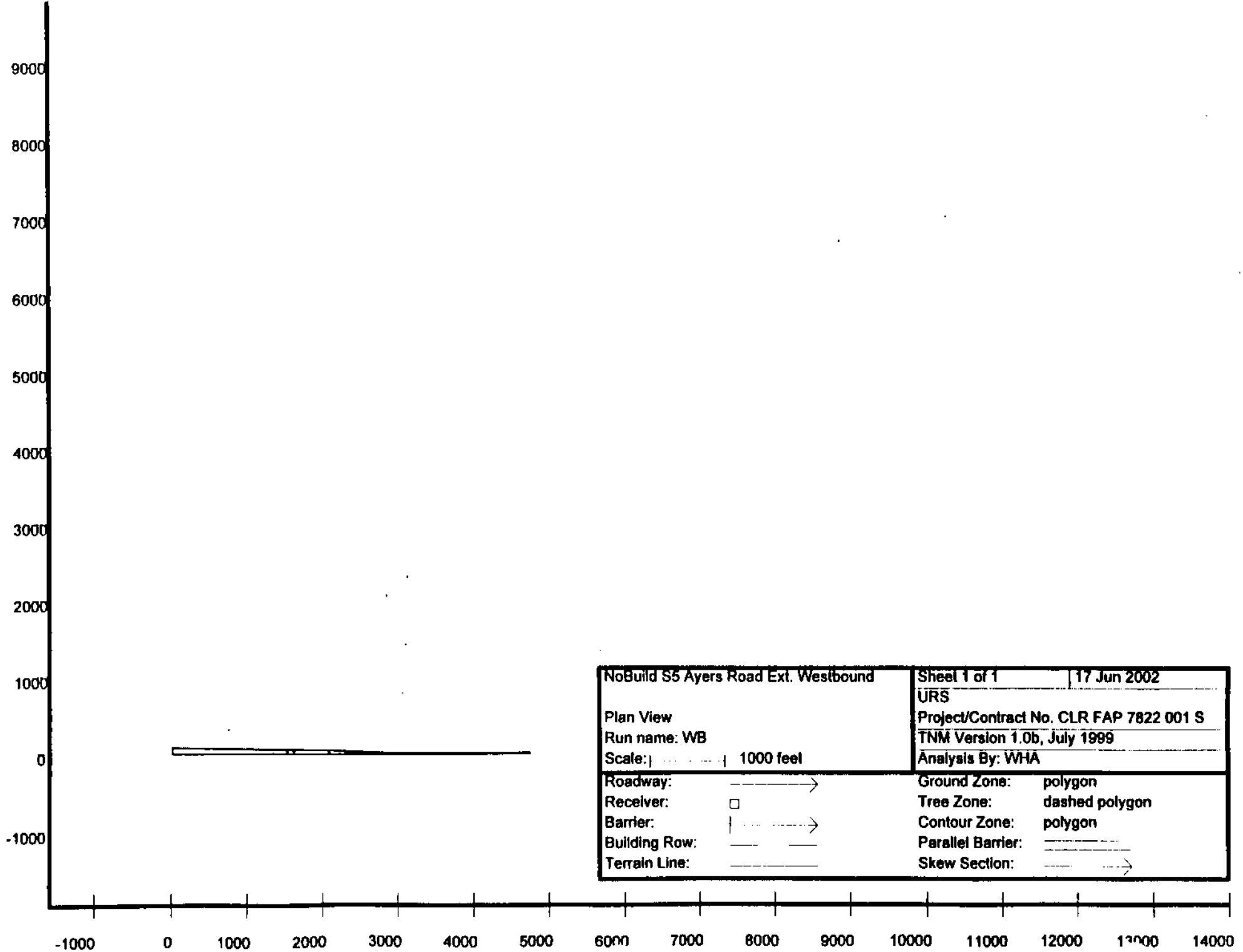
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S-5 Ayers Road Ext. Eastbound
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1	3	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
2	5	1	0.0	57.9	66	57.9	10	---	57.9	0.0	8	-8.0
3	6	1	0.0	41.4	66	41.4	10	---	41.4	0.0	8	-8.0
4	7	1	0.0	40.4	66	40.4	10	---	40.4	0.0	8	-8.0
5	8	1	0.0	38.9	66	38.9	10	---	38.9	0.0	8	-8.0
6	9	1	0.0	38.4	66	38.4	10	---	38.4	0.0	8	-8.0
7	11	1	0.0	37.1	66	37.1	10	---	37.1	0.0	8	-8.0
8	12	1	0.0	36.9	66	36.9	10	---	36.9	0.0	8	-8.0
9	13	1	0.0	28.3	66	28.3	10	---	28.3	0.0	8	-8.0
10	14	1	0.0	28.3	66	28.3	10	---	28.3	0.0	8	-8.0
11	15	1	0.0	28.4	66	28.4	10	---	28.4	0.0	8	-8.0
12	16	1	0.0	28.0	66	28.0	10	---	28.0	0.0	8	-8.0
13	17	1	0.0	27.8	66	27.8	10	---	27.8	0.0	8	-8.0
14	18	1	0.0	27.8	66	27.8	10	---	27.8	0.0	8	-8.0
15	19	1	0.0	27.7	66	27.7	10	---	27.7	0.0	8	-8.0
16	21	1	0.0	27.7	66	27.7	10	---	27.7	0.0	8	-8.0
17	22	1	0.0	27.7	66	27.7	10	---	27.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	17	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0

All that meet NR Goal	0	0.0	0.0	0.0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8000
9000
10000
11000
12000
14000
NoBuild S5 Ayers Road Ext. Westbound
Plan View
Run name: WB
Scale: 1000 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

17 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S5 Ayers Road Ext. Westbound

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - Suncoast Pkwy to Ayers Rd Extension	33.0	sta580	1	0.0	0.0	2.00				Average	
		sta600+50	5	2525.0	5.0	2.00					
WB - Ayers Rd Extension to Suncoast Pkw	33.0	sta600+50	32	2525.0	35.0	2.00				Average	
		point33	33	2065.0	54.0	2.00				Average	
		sta580	4	0.0	91.0	2.00					
EB - Ayers Road Extension to US 41	15.5	point34	34	2525.0	5.0	2.00				Average	
		point35	35	4730.0	5.0	2.00					
WB - US 41 to Ayers Road Extension	15.5	point36	36	4730.0	17.0	2.00				Average	
		point37	37	3000.0	17.0	2.00				Average	
		point38	38	2525.0	35.0	2.00					

URS
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S5 Ayers Road Ext. Westbound

Roadway	Points		Segment									
Name	Name	No.	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
EB - Suncoast Pkwy to Ayers Rd Extensio	sta580	1	760	50	16	50	24	50	0	0	0	0
	sta600+50	5										
WB - Ayers Rd Extension to Suncoast Pkw	sta600+50	32	1045	50	22	50	33	50	0	0	0	0
	point33	33	1045	50	22	50	33	50	0	0	0	0
	sta580	4										
EB - Ayers Road Extension to US 41	point34	34	344	45	7	45	11	45	0	0	0	0
	point35	35										
WB - US 41 to Ayers Road Extension	point36	36	473	45	10	45	15	45	0	0	0	0
	point37	37	473	45	10	45	15	45	0	0	0	0
	point38	38										

URS
WHA

17 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S5 Ayers Road Ext. Westbound

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
18	25	1	10236.0	7034.0	0.00	5.00	0	66	10	8
19	26	1	8813.0	6706.0	0.00	5.00	0	66	10	8
20	27	1	3110.0	2331.0	0.00	5.00	0	66	10	8
21	28	1	2830.0	2079.0	0.00	5.00	0	66	10	8
22	29	1	3086.0	1444.0	0.00	5.00	0	66	10	8
23	30	1	3040.0	813.0	0.00	5.00	0	66	10	8
24	31	1	740.0	319.0	0.00	5.00	0	66	10	8

URS 17 June 2002
WHA TNM 1.0b

INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S5 Ayers Road Ext. Westbound

Ground Zone			Points		
Name	Type	Flow Resistivity	No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Ground Zone18	Lawn	300	138	0.0	0.0
			139	1507.0	9.0
			140	1507.0	56.7
			141	0.0	91.0
Ground Zone19	Pavement	20000	142	1511.6	6.6
			143	1594.9	6.6
			144	1594.9	57.3
			145	1510.0	58.9
Ground Zone20	Lawn	300	146	1599.4	9.8
			147	2065.0	6.0
			154	2065.0	53.0
			155	1599.4	56.4
Ground Zone31	Lawn	300	234	2066.8	6.3
			235	2522.0	7.3
			236	2522.0	33.0
			237	2066.8	52.5
Ground Zone33	Pavement	20000	241	2522.6	6.3
			243	2996.2	6.3
			244	2996.2	15.8
			245	2523.1	33.2

URS
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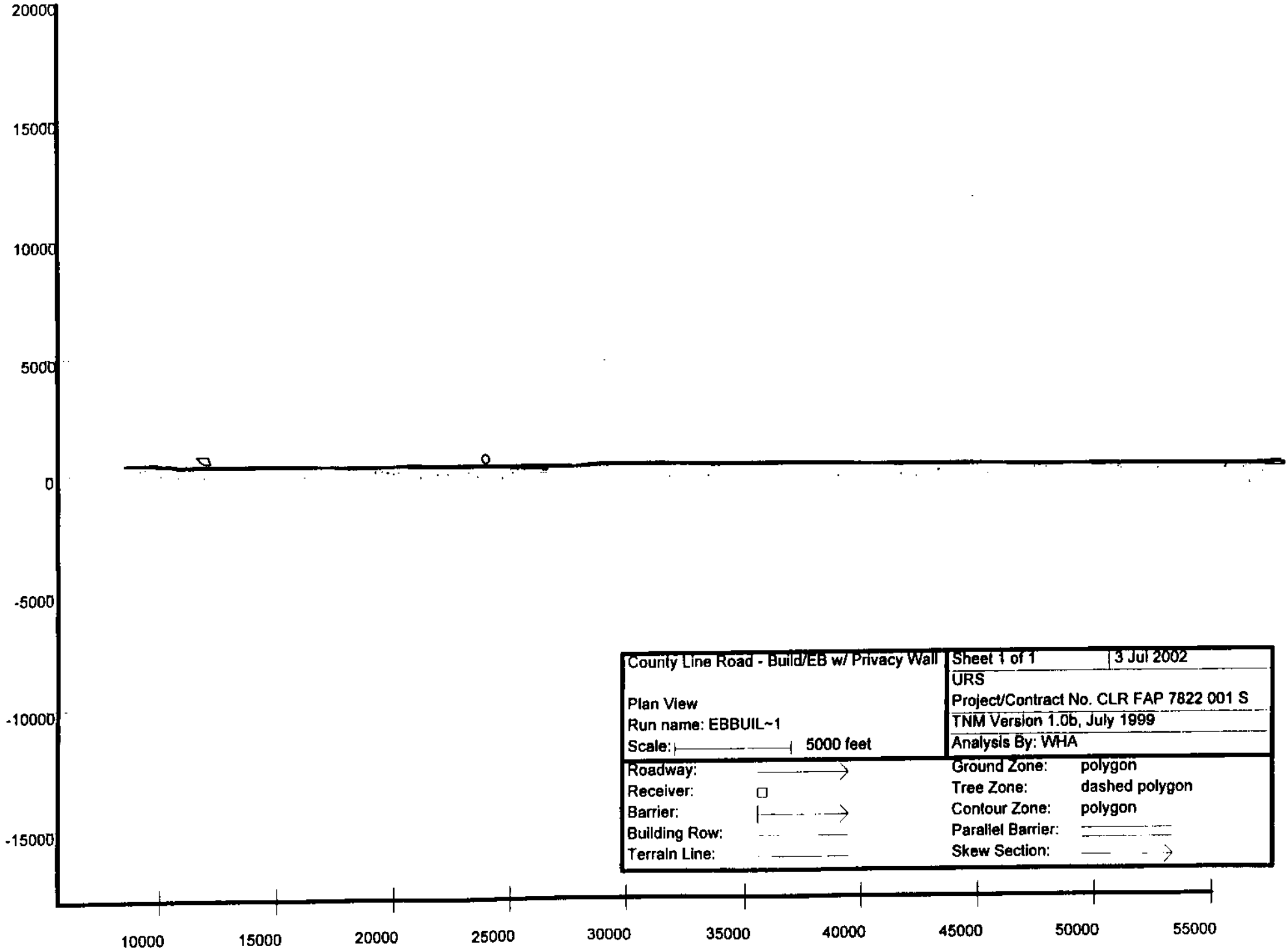
3 September 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: NoBuild S5 Ayers Road Ext. Westbound
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
18	25	1	0.0	26.3	66	26.3	10	----	26.3	0.0	8	-8.0
19	26	1	0.0	27.4	66	27.4	10	----	27.4	0.0	8	-8.0
20	27	1	0.0	38.4	66	38.4	10	----	38.4	0.0	8	-8.0
21	28	1	0.0	39.5	66	39.5	10	----	39.5	0.0	8	-8.0
22	29	1	0.0	41.9	66	41.9	10	----	41.9	0.0	8	-8.0
23	30	1	0.0	46.4	66	46.4	10	----	46.4	0.0	8	-8.0
24	31	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	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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25000
30000
35000
40000
45000
50000
55000
County Line Road - Build/EB w/ Privacy Wall
Plan View
Run name: EBBUIL~1
Scale: 5000 feet
Sheet 1 of 1
3 Jul 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

3 July 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB w/ Privacy Wall

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - US19 to Dandelion Court	33.0	sta85	251	8500.0	375.0	16.50				Average	
		sta96	252	9600.0	380.0	29.00				Average	
		sta102+50	253	10250.0	345.0	30.50					
EB - Dandelion Court to Balboa Avenue	33.0	sta102+50	254	10250.0	345.0	30.50				Average	
		sta105	255	10500.0	330.0	33.00				Average	
		sta107	256	10700.0	300.0	35.00				Average	
		sta111	257	11100.0	285.0	35.00				Average	
		sta120	258	12000.0	280.0	22.50				Average	
		sta127	259	12700.0	275.0	35.00				Average	
		sta130	260	13000.0	275.0	33.00					
EB - Balboa Avenue to Paris Avenue	33.0	sta130	261	13000.0	275.0	33.00				Average	
		sta138+75	262	13875.0	265.0	26.50				Average	
		sta145	263	14500.0	265.0	23.50				Average	
		sta152	264	15200.0	260.0	33.00				Average	
		sta160	265	16000.0	255.0	40.00				Average	
		sta166	266	16600.0	250.0	35.00				Average	
		sta173	267	17300.0	250.0	47.00				Average	
		sta180	268	18000.0	245.0	34.50					
EB - Paris Avenue to Maple Leaf Drive	33.0	sta180	269	18000.0	245.0	34.50				Average	
		sta189	270	18900.0	245.0	22.00				Average	
		sta202	271	20200.0	250.0	29.00				Average	

		sta204	272	20400.0	250.0	29.50						
EB - Maple Leaf Drive to East Road	33.0	sta204	273	20400.0	250.0	29.50					Average	
		sta210	274	21000.0	240.0	46.00						
EB - East Road to east of Blaine Ave	33.0	sta210	275	21000.0	240.0	46.00					Average	
		sta212	276	21200.0	245.0	51.00					Average	
		sta220	277	22000.0	240.0	28.00						
EB - East of Blaine Ave to Landsford Drive	33.0	sta220	278	22000.0	240.0	28.00					Average	
		sta 223	279	22300.0	240.0	28.00					Average	
		sta229	280	22900.0	235.0	31.00					Average	
		sta240	281	24000.0	235.0	28.00						
EB - Landsford Drive to Baton Ave	33.0	sta240	282	24000.0	235.0	28.00					Average	
		sta253	283	25300.0	220.0	29.50					Average	
		sta260	284	26000.0	215.0	32.00						
EB - Baton Ave to Waterfall Drive	33.0	sta260	285	26000.0	215.0	32.00					Average	
		sta265	286	26500.0	205.0	30.00					Average	
		sta 268+50	287	26850.0	200.0	33.00						
EB - Waterfall Drive to east of Oak Lake Dr	33.0	sta268+50	288	26850.0	200.0	33.00					Average	
		sta269	289	26900.0	205.0	33.50					Average	
		sta279	290	27900.0	205.0	37.00					Average	
		sta281	291	28100.0	220.0	38.00					Average	
		sta283	292	28300.0	240.0	38.00					Average	
		sta285	293	28500.0	260.0	39.00					Average	
		sta287	294	28700.0	270.0	39.00					Average	
		sta289	295	28900.0	270.0	39.00						
EB- East of Oak Lake Dr to Old Shady Hills	33.0	sta289	296	28900.0	270.0	39.00					Average	
		sta300	297	30000.0	260.0	40.00					Average	
		sta324	298	32400.0	250.0	41.00					Average	
		sta335	299	34000.0	240.0	44.00					Average	
		sta345	300	34500.0	235.0	46.00					Average	
		sta356	301	35600.0	230.0	56.00					Average	
		sta362	302	36200.0	225.0	52.00					Average	
		sta368	303	36800.0	225.0	62.00						
EB - Old Shady Hills Rd to Mariner Blvd	33.0	sta368	304	36800.0	225.0	62.00					Average	
		sta377+50	305	37750.0	220.0	59.00						
EB - Mariner Blvd to east of Monteverde Dr	33.0	sta377+50	306	37750.0	220.0	59.00					Average	

		sta391	307	39100.0	210.0	59.00				Average	
		sta398	308	39800.0	200.0	51.00				Average	
		sta405	309	40500.0	195.0	51.00					
EB - East of Monteverde Dr to Alexson St	33.0	sta405	310	40500.0	195.0	51.00				Average	
		sta415	311	41500.0	185.0	51.00				Average	
		sta422	312	42200.0	180.0	58.00				Average	
		sta433	313	43300.0	170.0	59.00				Average	
		sta445	314	44500.0	165.0	64.00					
EB - Alexson St to west of Preston Hollow	33.0	sta445	315	44500.0	165.0	64.00				Average	
		sta455	316	45500.0	150.0	66.00				Average	
		sta461	317	46100.0	145.0	66.00				Average	
		sta465	318	46500.0	135.0	71.00					
EB-West of Preston Hollow to W. of Josies	33.0	sta465	319	46500.0	135.0	71.00				Average	
		sta475	320	47500.0	130.0	90.50				Average	
		sta480	321	48000.0	130.0	92.00				Average	
		sta485	322	48500.0	130.0	86.00				Average	
		sta489	323	48900.0	140.0	77.00					
EB - West of Josies Dr to West of Linden D	33.0	sta489	324	48900.0	140.0	77.00				Average	
		sta500	325	50000.0	130.0	81.00					
EB - West of Linden Dr to west of Sparks R	33.0	sta500	326	50000.0	130.0	81.00				Average	
		sta520	327	52000.0	120.0	76.00					
EB - West of Sparks Rd to east of Sparks R	33.0	sta520	328	52000.0	120.0	76.00				Average	
		sta533	330	53300.0	110.0	68.00				Average	
		sta535+50	331	53550.0	110.0	68.00				Average	
		sta545	329	54500.0	110.0	68.00					
EB - East of Sparks Rd to Suncoast Parkwa	33.0	sta545	332	54500.0	110.0	68.00				Average	
		sta548	333	54800.0	105.0	68.00				Average	
		sta550	334	55000.0	90.0	68.00				Average	
		sta555	335	55500.0	80.0	68.00				Average	
		sta565	336	56500.0	80.0	68.00				Average	
		sta575	337	57500.0	78.0	68.00				Average	
		sta578	338	57800.0	75.0	68.00				Average	
		sta580	339	58000.0	75.0	68.00					
WB - Suncoast Pkway to east of Sparks Rd	33.0	sta580	340	58000.0	175.0	68.00				Average	
		sta578	341	57800.0	175.0	68.00				Average	

		sta575	342	57500.0	175.0	68.00				Average	
		sta565	343	56500.0	175.0	68.00				Average	
		sta555	344	55500.0	165.0	68.00				Average	
		sta550	345	55000.0	165.0	68.00				Average	
		sta548	346	54800.0	170.0	68.00				Average	
		sta545	347	54500.0	165.0	68.00					
WB - East of Sparks Rd to east of Linden D	33.0	sta545	348	54500.0	165.0	68.00				Average	
		sta535+50	349	53550.0	170.0	68.00				Average	
		sta533	350	53300.0	170.0	68.00				Average	
		sta520	351	52000.0	175.0	76.00					
WB - East of Linden Dr to east of Josies Dr	33.0	sta520	352	52000.0	175.0	76.00				Average	
		sta500	353	50000.0	180.0	81.00					
WB-East of Josies to east of Preston Hollow	33.0	sta520	354	50000.0	180.0	81.00				Average	
		sta489	355	48900.0	175.0	77.00					
WB - E. of Preston Hollow to W. of Preston	33.0	sta489	356	48900.0	175.0	77.00				Average	
		sta485	357	48500.0	180.0	86.00				Average	
		sta480	358	48000.0	170.0	92.00				Average	
		sta475	359	47500.0	175.0	90.50				Average	
		sta465	360	46500.0	185.0	71.00					
WB - W. of Preston Hollow to Alexson St	33.0	sta465	361	46500.0	185.0	71.00				Average	
		sta461	362	46100.0	190.0	66.00				Average	
		sta455	363	45500.0	195.0	66.00				Average	
		sta445	364	44500.0	205.0	64.00					
WB - Alexson St to east of Monteverde Dr	33.0	sta445	365	44500.0	205.0	64.00				Average	
		sta433	366	43300.0	215.0	59.00				Average	
		sta422	367	42200.0	230.0	58.00				Average	
		sta415	368	41500.0	240.0	51.00				Average	
		sta405	369	40500.0	240.0	51.00					
WB - East of Monteverde Dr to Mariner Blvd	33.0	sta405	370	40500.0	240.0	51.00				Average	
		sta398	371	39800.0	250.0	51.00				Average	
		sta391	372	39100.0	260.0	59.00				Average	
		sta377+50	373	37750.0	280.0	59.00					
WB - Mariner Blvd to Old Shady Hills Rd	33.0	sta377+50	374	37750.0	280.0	59.00				Average	
		sta368	375	36800.0	285.0	62.00					
WB-Old Shady Hills Rd to east of Old Lake	33.0	sta368	376	36800.0	285.0	62.00				Average	

		sta362	377	36200.0	280.0	52.00				Average	
		sta356	378	35600.0	280.0	56.00				Average	
		sta345	379	34500.0	285.0	46.00				Average	
		sta335	380	33500.0	290.0	44.00				Average	
		sta324	381	32400.0	300.0	41.00				Average	
		sta300	382	30000.0	315.0	40.00				Average	
		sta289	383	28900.0	320.0	39.00					
WB - East of Old Lake Dr to Waterfall Dr	33.0	sta289	384	28900.0	320.0	39.00				Average	
		sta287	385	28700.0	320.0	39.00				Average	
		sta285	386	28500.0	320.0	39.00				Average	
		sta283	387	28300.0	290.0	38.00				Average	
		sta281	388	28100.0	270.0	38.00				Average	
		sta279	389	27900.0	255.0	37.00				Average	
		sta269	390	26900.0	260.0	33.50				Average	
		sta268+50	391	26850.0	260.0	33.00					
WB - Waterfall Dr to Baton Ave	33.0	sta268+50	392	26850.0	260.0	33.00				Average	
		sta265	393	26500.0	260.0	30.00				Average	
		sta260	394	26000.0	270.0	32.00					
WB - Baton Ave to Landsford Drive	33.0	sta260	395	26000.0	270.0	32.00				Average	
		sta253	396	25300.0	270.0	29.50				Average	
		sta240	397	24000.0	285.0	28.00					
WB - Landsford Drive to east of Blaine Ave	33.0	sta240	398	24000.0	285.0	28.00				Average	
		sta229	399	22900.0	285.0	31.00				Average	
		sta223	400	22300.0	290.0	28.00				Average	
		sta220	401	22000.0	295.0	28.00					
WB - East of Blaine Ave to East Road	33.0	sta220	402	22000.0	295.0	28.00				Average	
		sta212	403	21200.0	290.0	51.00				Average	
		sta210	404	21000.0	295.0	46.00					
WB - East Road to Maple Leaf Drive	33.0	sta210	405	21000.0	295.0	46.00				Average	
		sta204	406	20400.0	300.0	29.50					
WB - Maple Leaf Drive to Paris Avenue	33.0	sta204	407	20400.0	300.0	29.50				Average	
		sta202	408	20200.0	300.0	29.00				Average	
		sta189	409	18900.0	290.0	22.00				Average	
		sta180	410	18000.0	300.0	34.50					
WB - Paris Avenue to Balboa Avenue	33.0	sta180	411	18000.0	300.0	34.50				Average	

		sta173	412	17300.0	300.0	47.00				Average	
		sta166	413	16600.0	305.0	35.00				Average	
		sta160	414	16000.0	315.0	40.00				Average	
		sta152	415	15200.0	310.0	33.00				Average	
		sta145	416	14500.0	310.0	23.50				Average	
		sta138+75	417	13875.0	315.0	26.50				Average	
		sta130	418	13000.0	325.0	33.00					
WB - Balboa Avenue to Dandelion Court	33.0	sta130	419	13000.0	325.0	33.00				Average	
		sta127	420	12700.0	325.0	35.00				Average	
		sta120	421	12000.0	330.0	22.50				Average	
		sta111	422	11100.0	335.0	35.00				Average	
		sta107	423	10700.0	350.0	35.00				Average	
		sta105	424	10500.0	370.0	33.00				Average	
		sta102+50	425	10250.0	390.0	30.50					
WB - Dandelion Court to US19	33.0	sta102+50	426	10250.0	390.0	30.50				Average	
		sta96	427	9600.0	430.0	29.00				Average	
		sta85	428	8500.0	435.0	16.50					

URS
WHA

3 July 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB w/ Privacy Wall

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - US19 to Dandelion Court	sta85	251	1089	50	23	50	34	50	0	0	0	0
	sta96	252	1089	50	23	50	34	50	0	0	0	0
	sta102+50	253										
EB - Dandelion Court to Balboa Avenue	sta102+50	254	1089	50	23	50	34	50	0	0	0	0
	sta105	255	1089	50	23	50	34	50	0	0	0	0
	sta107	256	1089	50	23	50	34	50	0	0	0	0
	sta111	257	1089	50	23	50	34	50	0	0	0	0
	sta120	258	1089	50	23	50	34	50	0	0	0	0
	sta127	259	1089	50	23	50	34	50	0	0	0	0
	sta130	260										
EB - Balboa Avenue to Paris Avenue	sta130	261	1089	50	23	50	34	50	0	0	0	0
	sta138+75	262	1089	50	23	50	34	50	0	0	0	0
	sta145	263	1089	50	23	50	34	50	0	0	0	0
	sta152	264	1089	50	23	50	34	50	0	0	0	0
	sta160	265	1089	50	23	50	34	50	0	0	0	0
	sta166	266	1089	50	23	50	34	50	0	0	0	0
	sta173	267	1089	50	23	50	34	50	0	0	0	0
	sta180	268										
EB - Paris Avenue to Maple Leaf Drive	sta180	269	1089	50	23	50	34	50	0	0	0	0
	sta189	270	1089	50	23	50	34	50	0	0	0	0
	sta202	271	1089	50	23	50	34	50	0	0	0	0
	sta204	272										

INPUT: TRAFFIC FOR LAeq1h Volumes												
EB - Maple Leaf Drive to East Road	sta204	273	1089	50	23	50	34	50	0	0	0	0
	sta210	274										
EB - East Road to east of Blaine Ave	sta210	275	1089	50	23	50	34	50	0	0	0	0
	sta212	276	1089	50	23	50	34	50	0	0	0	0
	sta220	277										
EB - East of Blaine Ave to Landsford Drive	sta220	278	1089	50	23	50	34	50	0	0	0	0
	sta 223	279	1089	50	23	50	34	50	0	0	0	0
	sta229	280	1089	50	23	50	34	50	0	0	0	0
	sta240	281										
EB - Landsford Drive to Baton Ave	sta240	282	1089	50	23	50	34	50	0	0	0	0
	sta253	283	1089	50	23	50	34	50	0	0	0	0
	sta260	284										
EB - Baton Ave to Waterfall Drive	sta260	285	1089	50	23	50	34	50	0	0	0	0
	sta265	286	1089	50	23	50	34	50	0	0	0	0
	sta 268+50	287										
EB - Waterfall Drive to east of Oak Lake D	sta268+50	288	1089	50	23	50	34	50	0	0	0	0
	sta269	289	1089	50	23	50	34	50	0	0	0	0
	sta279	290	1089	50	23	50	34	50	0	0	0	0
	sta281	291	1089	50	23	50	34	50	0	0	0	0
	sta283	292	1089	50	23	50	34	50	0	0	0	0
	sta285	293	1089	50	23	50	34	50	0	0	0	0
	sta287	294	1089	50	23	50	34	50	0	0	0	0
	sta289	295										
EB- East of Oak Lake Dr to Old Shady Hills	sta289	296	1089	50	23	50	34	50	0	0	0	0
	sta300	297	1089	50	23	50	34	50	0	0	0	0
	sta324	298	1089	50	23	50	34	50	0	0	0	0
	sta335	299	1089	50	23	50	34	50	0	0	0	0
	sta345	300	1089	50	23	50	34	50	0	0	0	0
	sta356	301	1089	50	23	50	34	50	0	0	0	0
	sta362	302	1089	50	23	50	34	50	0	0	0	0
	sta368	303										
EB - Old Shady Hills Rd to Mariner Blvd	sta368	304	1089	50	23	50	34	50	0	0	0	0
	sta377+50	305										
EB - Mariner Blvd to east of Monteverde D	sta377+50	306	1089	50	23	50	34	50	0	0	0	0

	sta391	307	1089	50	23	50	34	50	0	0	0	0
	sta398	308	1089	50	23	50	34	50	0	0	0	0
	sta405	309										
EB - East of Monteverde Dr to Alexson St	sta405	310	1089	50	23	50	34	50	0	0	0	0
	sta415	311	1089	50	23	50	34	50	0	0	0	0
	sta422	312	1089	50	23	50	34	50	0	0	0	0
	sta433	313	1089	50	23	50	34	50	0	0	0	0
	sta445	314										
EB - Alexson St to west of Preston Hollow	sta445	315	1089	50	23	50	34	50	0	0	0	0
	sta455	316	1089	50	23	50	34	50	0	0	0	0
	sta461	317	1089	50	23	50	34	50	0	0	0	0
	sta465	318										
EB-West of Preston Hollow to W. of Josies	sta465	319	1089	50	23	50	34	50	0	0	0	0
	sta475	320	1089	50	23	50	34	50	0	0	0	0
	sta480	321	1089	50	23	50	34	50	0	0	0	0
	sta485	322	1089	50	23	50	34	50	0	0	0	0
	sta489	323										
EB - West of Josies Dr to West of Linden D	sta489	324	1089	50	23	50	34	50	0	0	0	0
	sta500	325										
EB - West of Linden Dr to west of Sparks R	sta500	326	1089	50	23	50	34	50	0	0	0	0
	sta520	327										
EB - West of Sparks Rd to east of Sparks R	sta520	328	1089	50	23	50	34	50	0	0	0	0
	sta533	330	1089	50	23	50	34	50	0	0	0	0
	sta535+50	331	1089	50	23	50	34	50	0	0	0	0
	sta545	329										
EB - East of Sparks Rd to Suncoast Parkw	sta545	332	1089	50	23	50	34	50	0	0	0	0
	sta548	333	1089	50	23	50	34	50	0	0	0	0
	sta550	334	1089	50	23	50	34	50	0	0	0	0
	sta555	335	1089	50	23	50	34	50	0	0	0	0
	sta565	336	1089	50	23	50	34	50	0	0	0	0
	sta575	337	1089	50	23	50	34	50	0	0	0	0
	sta578	338	1089	50	23	50	34	50	0	0	0	0
	sta580	339										
WB - Suncoast Pkway to east of Sparks Rd	sta580	340	792	50	17	50	25	50	0	0	0	0

	sta578	341	792	50	17	50	25	50	0	0	0	0
	sta575	342	792	50	17	50	25	50	0	0	0	0
	sta565	343	792	50	17	50	25	50	0	0	0	0
	sta555	344	792	50	17	50	25	50	0	0	0	0
	sta550	345	792	50	17	50	25	50	0	0	0	0
	sta548	346	792	50	17	50	25	50	0	0	0	0
	sta545	347										
WB - East of Sparks Rd to east of Linden D	sta545	348	792	50	17	50	25	50	0	0	0	0
	sta535+50	349	792	50	17	50	25	50	0	0	0	0
	sta533	350	792	50	17	50	25	50	0	0	0	0
	sta520	351										
WB - East of Linden Dr to east of Josies D	sta520	352	792	50	17	50	25	50	0	0	0	0
	sta500	353										
WB-East of Josies to east of Preston Hollo	sta520	354	792	50	17	50	25	50	0	0	0	0
	sta489	355										
WB - E. of Preston Hollow to W. of Preston	sta489	356	792	50	17	50	25	50	0	0	0	0
	sta485	357	792	50	17	50	25	50	0	0	0	0
	sta480	358	792	50	17	50	25	50	0	0	0	0
	sta475	359	792	50	17	50	25	50	0	0	0	0
	sta465	360										
WB - W. of Preston Hollow to Alexson St	sta465	361	792	50	17	50	25	50	0	0	0	0
	sta461	362	792	50	17	50	25	50	0	0	0	0
	sta455	363	792	50	17	50	25	50	0	0	0	0
	sta445	364										
WB - Alexson St to east of Monteverde Dr	sta445	365	792	50	17	50	25	50	0	0	0	0
	sta433	366	792	50	17	50	25	50	0	0	0	0
	sta422	367	792	50	17	50	25	50	0	0	0	0
	sta415	368	792	50	17	50	25	50	0	0	0	0
	sta405	369										
WB - East of Monteverde Dr to Mariner Blv	sta405	370	792	50	17	50	25	50	0	0	0	0
	sta398	371	792	50	17	50	25	50	0	0	0	0
	sta391	372	792	50	17	50	25	50	0	0	0	0
	sta377+50	373										
WB - Mariner Blvd to Old Shady Hills Rd	sta377+50	374	792	50	17	50	25	50	0	0	0	0

	sta368	375										
WB-Old Shady Hills Rd to east of Old Lake	sta368	376	792	50	17	50	25	50	0	0	0	0
	sta362	377	792	50	17	50	25	50	0	0	0	0
	sta356	378	792	50	17	50	25	50	0	0	0	0
	sta345	379	792	50	17	50	25	50	0	0	0	0
	sta335	380	792	50	17	50	25	50	0	0	0	0
	sta324	381	792	50	17	50	25	50	0	0	0	0
	sta300	382	792	50	17	50	25	50	0	0	0	0
	sta289	383										
WB - East of Old Lake Dr to Waterfall Dr	sta289	384	792	50	17	50	25	50	0	0	0	0
	sta287	385	792	50	17	50	25	50	0	0	0	0
	sta285	386	792	50	17	50	25	50	0	0	0	0
	sta283	387	792	50	17	50	25	50	0	0	0	0
	sta281	388	792	50	17	50	25	50	0	0	0	0
	sta279	389	792	50	17	50	25	50	0	0	0	0
	sta269	390	792	50	17	50	25	50	0	0	0	0
	sta268+50	391										
WB - Waterfall Dr to Baton Ave	sta268+50	392	792	50	17	50	25	50	0	0	0	0
	sta265	393	792	50	17	50	25	50	0	0	0	0
	sta260	394										
WB - Baton Ave to Landsford Drive	sta260	395	792	50	17	50	25	50	0	0	0	0
	sta253	396	792	50	17	50	25	50	0	0	0	0
	sta240	397										
WB - Landsford Drive to east of Blaine Ave	sta240	398	792	50	17	50	25	50	0	0	0	0
	sta229	399	792	50	17	50	25	50	0	0	0	0
	sta223	400	792	50	17	50	25	50	0	0	0	0
	sta220	401										
WB - East of Blaine Ave to East Road	sta220	402	792	50	17	50	25	50	0	0	0	0
	sta212	403	792	50	17	50	25	50	0	0	0	0
	sta210	404										
WB - East Road to Maple Leaf Drive	sta210	405	792	50	17	50	25	50	0	0	0	0
	sta204	406										
WB - Maple Leaf Drive to Paris Avenue	sta204	407	792	50	17	50	25	50	0	0	0	0
	sta202	408	792	50	17	50	25	50	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

	sta189	409	792	50	17	50	25	50	0	0	0	0
	sta180	410										
WB - Paris Avenue to Balboa Avenue	sta180	411	792	50	17	50	25	50	0	0	0	0
	sta173	412	792	50	17	50	25	50	0	0	0	0
	sta166	413	792	50	17	50	25	50	0	0	0	0
	sta160	414	792	50	17	50	25	50	0	0	0	0
	sta152	415	792	50	17	50	25	50	0	0	0	0
	sta145	416	792	50	17	50	25	50	0	0	0	0
	sta138+75	417	792	50	17	50	25	50	0	0	0	0
	sta130	418										
WB - Balboa Avenue to Dandelion Court	sta130	419	792	50	17	50	25	50	0	0	0	0
	sta127	420	792	50	17	50	25	50	0	0	0	0
	sta120	421	792	50	17	50	25	50	0	0	0	0
	sta111	422	792	50	17	50	25	50	0	0	0	0
	sta107	423	792	50	17	50	25	50	0	0	0	0
	sta105	424	792	50	17	50	25	50	0	0	0	0
	sta102+50	425										
WB - Dandelion Court to US19	sta102+50	426	792	50	17	50	25	50	0	0	0	0
	sta96	427	792	50	17	50	25	50	0	0	0	0
	sta85	428										

URS
WHA

3 July 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB w/ Privacy Wall

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
1	3	1	9160.0	240.0	22.00	5.00	0	66	10	8
2	4	1	9380.0	260.0	27.00	5.00	0	66	10	8
3	5	1	10060.0	-28.0	29.00	5.00	0	66	10	8
4	6	1	10780.0	-45.0	36.00	5.00	0	66	10	8
5	7	1	11850.0	-95.0	26.00	5.00	0	66	10	8
6	8	1	16130.0	-100.0	32.00	5.00	0	66	10	8
8	10	1	19205.0	80.0	23.00	5.00	0	66	10	8
10	13	1	19480.0	85.0	24.00	5.00	0	66	10	8
11	15	1	19715.0	60.0	30.00	5.00	0	66	10	8
13	17	1	19955.0	20.0	29.00	5.00	0	66	10	8
15	19	1	20210.0	35.0	26.00	5.00	0	66	10	8
16a	20	1	21115.0	-145.0	49.00	5.00	0	66	10	8
16b	21	1	21845.0	-50.0	28.00	5.00	0	66	10	8
17	22	1	22280.0	-65.0	26.00	5.00	0	66	10	8
18	23	1	23165.0	-20.0	31.00	5.00	0	66	10	8
19	24	1	23575.0	-155.0	32.00	5.00	0	66	10	8
20	26	1	24620.0	-230.0	25.00	5.00	0	66	10	8
21	27	1	24940.0	125.0	32.00	5.00	0	66	10	8
22	28	1	25070.0	5.0	31.00	5.00	0	66	10	8
23	29	1	25160.0	140.0	31.00	5.00	0	66	10	8
24	30	1	25275.0	130.0	32.50	5.00	0	66	10	8

INPUT: RECEIVERS

25	31	1	25540.0	100.0	33.00	5.00	0	66	10	8
26	32	1	26270.0	0.0	33.00	5.00	0	66	10	8
27	33	1	26390.0	0.0	33.00	5.00	0	66	10	8
28	34	1	26515.0	0.0	30.00	5.00	0	66	10	8
33	36	1	41645.0	-200.0	48.00	5.00	0	66	10	8
34	37	1	42310.0	-345.0	60.00	5.00	0	66	10	8
35	38	1	43275.0	-65.0	57.50	5.00	0	66	10	8
36	39	1	47425.0	0.0	88.50	5.00	0	66	10	8
37	40	1	47630.0	30.0	89.50	5.00	0	66	10	8
38	41	1	47905.0	0.0	92.50	5.00	0	66	10	8
39	42	1	50965.0	-15.0	76.00	5.00	0	66	10	8
40	43	1	51045.0	-65.0	75.50	5.00	0	66	10	8
41	44	1	52605.0	-80.0	70.00	5.00	0	66	10	8
42	45	1	55425.0	-30.0	67.00	5.00	0	66	10	8
43	46	1	56200.0	-50.0	67.00	5.00	0	66	10	8
44	47	1	56320.0	0.0	67.00	5.00	0	66	10	8
45	48	1	57055.0	-205.0	63.00	5.00	0	66	10	8
30	52	1	31760.0	-225.0	36.00	5.00	0	66	10	8
31	53	1	33420.0	-220.0	42.00	5.00	0	66	10	8
32	54	1	39000.0	-305.0	55.00	5.00	0	66	10	8

INPUT: BARRIERS

URS
WHA

3 July 2002
TNM 1.0b

INPUT: BARRIERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB w/ Privacy Wall

Barrier Name	Type	Height Min	Height Max	If Wall $ per unit area	If Berm $ per unit volume	If Berm Top Width	If Berm Run:Rise	Add'tnl $ per unit length
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft
Privacy Wall 1	W	4.00	6.00	25.00				0.00
Privacy Wall 2	W	4.00	6.00	25.00				0.00

Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Increment	Perturbs #Up	#Dn	On Struct?	Important Reflections?
		ft	ft	ft	ft	ft				
point6	6	25000.0	170.0	30.00	5.00	1.00	1	1		
point7	7	25370.0	170.0	32.00	5.00					
point8	8	25475.0	160.0	33.00	5.00	1.00	1	1		
point9	9	26330.0	148.0	33.00	5.00	1.00	1	1		
point10	10	26330.0	133.0	33.00	5.00	1.00	1	1		
point11	11	26575.0	133.0	28.00	5.00					

URS 17 June 2002
WHA TNM 1.0b

INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build Eastbound

Ground Zone Name	Type	Flow Resistivity cgs rayls	Points No.	Coordinates X ft	Y ft
Default Ground Zone	Lawn	300			
Ground Zone Pond1	Water	20000	106	23910.0	405.0
			107	23770.0	490.0
			108	23735.0	610.0
			109	23770.0	720.0
			110	23900.0	770.0
			111	24015.0	740.0
			112	24075.0	625.0
			113	24060.0	490.0
Ground Zone Pond2	Water	20000	114	12170.0	500.0
			115	11860.0	500.0
			116	11700.0	620.0
			117	11530.0	800.0
			118	12020.0	780.0
Ground Zone31	Pavement	20000	125	9753.0	375.4
			126	10250.0	346.0
			127	10500.0	331.0
			128	10700.0	301.0
			129	10700.0	349.0
			130	10500.0	369.0
			131	10250.0	389.0
			132	9753.0	416.4
Ground Zone32	Lawn	300	133	10701.0	301.0
			134	11100.0	286.0
			135	12000.0	281.0
			136	12100.1	283.4
			137	12100.1	324.8
			138	12000.0	329.0
			139	11100.0	334.0
			140	10701.0	349.0
Ground Zone33	Pavement	20000	141	12103.8	285.0
			142	12700.0	276.0
			143	12901.5	278.8
			144	12899.4	320.3
			145	12700.0	324.0

			146	12103.8	326.6
Ground Zone34	Lawn	300	147	12904.2	278.0
			148	13530.5	271.4
			149	13530.5	314.8
			150	12904.2	321.5
Ground Zone35	Pavement	20000	151	13533.3	273.0
			152	13875.0	266.0
			153	13900.7	268.0
			154	13900.7	311.4
			155	13875.0	314.0
			156	13533.3	314.8
Ground Zone36	Lawn	300	157	13903.8	267.1
			158	14500.0	266.0
			159	14550.8	268.5
			160	14550.8	306.7
			161	14500.0	309.0
			162	13903.8	312.4
Ground Zone37	Pavement	20000	163	14554.6	267.9
			164	15200.0	261.0
			165	15250.7	262.9
			166	15250.7	306.6
			167	15200.0	309.0
			168	14554.6	306.6
Ground Zone38	Lawn	300	169	15254.3	262.9
			170	15800.7	259.5
			171	15800.7	310.0
			172	15254.3	304.9
Ground Zone39	Pavement	20000	173	15804.5	259.5
			174	16000.0	255.0
			175	16150.8	256.2
			176	16150.8	308.3
			177	16000.0	315.0
			178	15804.5	310.0
Ground Zone40	Lawn	300	179	16153.1	256.2
			180	16600.0	251.0
			181	17300.0	251.0
			182	17300.0	299.0
			183	16600.0	304.0
			184	16154.8	308.3
Ground Zone41	Pavement	20000	185	17302.7	252.3
			186	18000.0	246.0
			187	18050.3	248.2
			188	18050.3	297.6
			189	18000.0	299.0
			190	17302.7	297.6
Ground Zone42	Lawn	300	191	18052.7	248.2

			192	18900.0	246.0
			193	19340.8	249.0
			194	19340.8	290.7
			195	18900.0	289.0
			196	18052.7	296.2
Ground Zone43	Pavement	20000	197	19343.2	248.3
			198	19731.0	250.9
			199	19731.0	294.1
			200	19343.2	291.6
Ground Zone44	Lawn	300	201	19733.3	250.9
			202	20000.3	250.9
			203	20000.3	296.7
			204	19733.3	294.1
Ground Zone45	Pavement	20000	205	20002.9	252.1
			206	20200.0	251.0
			207	20400.0	251.0
			208	20600.5	248.3
			209	20600.5	296.7
			210	20400.0	299.0
			211	20200.0	299.0
			212	20002.9	296.7
Ground Zone46	Lawn	300	213	20603.4	248.3
			214	21000.0	241.0
			215	21000.0	294.0
			216	20603.4	295.4
Ground Zone47	Pavement	20000	217	21002.9	242.0
			218	21200.0	246.0
			219	21700.9	244.5
			220	21700.9	291.6
			221	21200.0	289.0
			222	21002.9	292.8
Ground Zone48	Lawn	300	223	21702.7	245.6
			224	22000.0	241.0
			225	22300.0	241.0
			226	22650.9	239.8
			227	22650.9	284.5
			228	22300.0	289.0
			229	22000.0	294.0
			230	21702.7	291.4
Ground Zone49	Pavement	20000	231	22653.1	240.2
			232	22900.0	236.0
			233	23350.7	237.4
			234	23350.7	282.5
			235	22900.0	284.0
			236	22653.1	285.2
Ground Zone50	Lawn	300	237	23353.4	237.4

			238	24000.0	236.0
			239	24060.5	237.4
			240	24060.5	281.1
			241	24000.0	284.0
			242	23353.4	282.5
Ground Zone51	Pavement	20000	243	24063.2	236.1
			244	24450.9	232.0
			245	24450.9	277.0
			246	24063.2	281.1
Ground Zone52	Lawn	300	247	24453.2	232.0
			248	25051.1	225.2
			249	25051.1	270.2
			250	24453.2	277.0
Ground Zone54	Pavement	20000	252	25053.4	226.5
			253	25300.0	221.0
			254	25800.1	219.7
			255	25800.1	267.5
			256	25300.0	269.0
			257	25053.4	268.8
Ground Zone55	Lawn	300	258	25802.8	219.7
			259	26000.0	216.0
			260	26051.3	217.0
			261	26051.3	266.1
			262	25802.8	267.5
Ground Zone58	Pavement	20000	273	26054.4	216.2
			274	26500.0	206.0
			275	26850.0	201.0
			276	26900.0	206.0
			277	27601.4	207.8
			278	27601.4	252.8
			279	26900.0	259.0
			280	26850.0	259.0
			281	26500.0	259.0
			282	26052.7	264.4
Ground Zone59	Lawn	300	283	27605.3	207.8
			284	27900.0	206.0
			285	28100.0	221.0
			286	28150.9	227.8
			287	28150.9	271.1
			288	28100.0	269.0
			289	27900.0	254.0
			290	27605.3	252.8
Ground Zone60	Pavement	20000	291	28153.8	227.8
			292	28300.0	241.0
			293	28500.0	261.0
			294	28549.7	264.4

			295	28549.7	316.0
			296	28500.0	319.0
			297	28300.0	289.0
			298	28153.8	271.1
Ground Zone61	Lawn	300	299	28552.8	266.1
			300	28695.8	272.7
			301	28893.8	272.7
			302	29900.2	264.4
			303	29900.2	311.0
			304	28902.1	316.0
			305	28702.5	316.0
			306	28552.8	316.0
Ground Zone62	Pavement	20000	307	29904.1	264.4
			308	29997.2	264.4
			309	30641.0	259.4
			310	30641.0	307.6
			311	30002.2	311.0
			312	29904.1	311.0
Ground Zone63	Lawn	300	313	30643.8	259.4
			314	31540.4	256.1
			315	31540.4	301.0
			316	30643.8	307.6
Ground Zone64	Pavement	20000	317	31543.0	256.1
			318	32250.0	252.8
			319	32250.0	297.7
			320	31543.0	301.0
Ground Zone65	Lawn	300	321	32252.8	252.8
			322	32850.0	249.4
			323	32850.0	292.7
			324	32252.8	297.7
Ground Zone66	Pavement	20000	325	32852.9	249.4
			326	33549.8	246.1
			327	33549.8	286.0
			328	32852.9	291.0
Ground Zone67	Lawn	300	329	33553.6	244.0
			330	34000.0	241.0
			331	34500.0	236.0
			332	35200.4	236.5
			333	35200.4	279.0
			334	34500.0	284.0
			335	33551.0	286.0
Ground Zone68	Pavement	20000	336	35203.6	235.7
			337	35600.0	231.0
			338	35950.1	229.6
			339	35950.1	277.0
			340	35600.0	279.0

			341	35203.6	278.6
Ground Zone69	Lawn	300	342	35952.8	229.6
			343	36180.7	228.1
			344	36180.7	277.0
			345	35952.8	277.0
Ground Zone70	Pavement	20000	346	36184.1	228.1
			347	36549.7	228.1
			348	36549.7	280.1
			349	36184.1	277.0
Ground Zone71	Lawn	300	350	36552.6	228.1
			351	36901.3	228.1
			352	36901.3	281.6
			353	36552.6	280.1
Ground Zone72	Pavement	20000	354	36904.8	230.0
			355	37750.0	221.0
			356	38600.3	218.5
			357	38600.3	262.1
			358	37750.0	279.0
			359	36904.8	280.5
Ground Zone73	Lawn	300	360	38603.2	216.6
			361	39095.5	213.5
			362	39500.6	207.2
			363	39500.6	250.9
			364	39103.3	257.1
			365	38603.2	264.9
Ground Zone74	Pavement	20000	366	39503.1	208.8
			367	39796.0	202.6
			368	40251.0	199.4
			369	40251.0	240.0
			370	39802.2	246.2
			371	39503.1	250.9
Ground Zone75	Lawn	300	372	40253.5	199.4
			373	40500.0	196.0
			374	41049.6	193.2
			375	41049.6	238.4
			376	40500.0	239.0
			377	40253.5	240.0
Ground Zone76	Pavement	20000	378	41053.4	193.2
			379	41500.0	186.0
			380	41500.0	239.0
			381	41051.8	236.8
Ground Zone77	Lawn	300	382	41501.0	187.0
			383	42200.0	181.0
			384	42669.7	179.2
			385	42669.7	221.3
			386	42200.0	229.0

			387	41501.0	239.0
Ground Zone78	Pavement	20000	388	42671.9	179.0
			389	43300.0	171.0
			390	43450.8	171.2
			391	43450.8	211.3
			392	43300.0	214.0
			393	42671.9	221.3
Ground Zone79	Lawn	300	395	43453.0	171.2
			396	44350.0	167.8
			397	44350.0	203.5
			398	43453.0	211.3
Ground Zone80	Pavement	20000	399	44352.3	167.8
			400	44500.0	166.0
			401	44730.0	163.4
			402	44730.0	200.1
			403	44500.0	204.0
			404	44352.3	203.5
Ground Zone81	Lawn	300	405	44732.7	165.5
			406	45500.0	151.0
			407	46100.0	146.0
			408	46500.0	136.0
			409	47500.0	131.0
			410	47602.3	132.4
			411	47598.6	173.0
			412	47500.0	174.0
			413	46500.0	184.0
			414	46100.0	189.0
			415	45500.0	194.0
			416	44732.7	200.4
Ground Zone82	Pavement	20000	417	47604.6	131.8
			418	48000.0	131.0
			419	48370.8	131.8
			420	48370.8	175.4
			421	48000.0	169.0
			422	47601.0	171.9
Ground Zone83	Lawn	300	423	48373.4	131.9
			424	48500.0	131.0
			425	48900.0	141.0
			426	48900.0	174.0
			427	48500.0	179.0
			428	48373.4	175.7
Ground Zone84	Pavement	20000	429	48901.8	142.0
			430	49200.8	139.8
			431	49200.8	173.5
			432	48901.8	172.4
Ground Zone85	Lawn	300	433	49202.6	139.8

			434	49669.1	135.3
			435	49669.1	175.7
			436	49202.6	173.5
Ground Zone86	Pavement	20000	437	49671.8	136.6
			438	50000.0	131.0
			439	51049.6	127.4
			440	51049.6	174.6
			441	50000.0	179.0
			442	49671.8	175.1
Ground Zone87	Lawn	300	443	51052.6	127.9
			445	51950.8	122.9
			446	51950.8	171.9
			447	51052.6	174.4
Ground Zone90	Pavement	20000	454	51954.6	125.7
			455	52698.1	120.0
			456	52698.1	167.2
			457	51954.6	171.0
Ground Zone91	Lawn	300	458	52701.2	119.6
			459	53300.0	111.0
			460	53300.0	169.0
			461	52701.2	167.5
Ground Zone92	Pavement	20000	462	53301.0	112.0
			463	53550.0	111.0
			464	53670.4	112.7
			465	53670.4	165.9
			466	53550.0	169.0
			467	53301.0	168.0
Ground Zone93	Lawn	300	468	53674.3	113.6
			469	54500.0	111.0
			470	54800.0	106.0
			471	55000.0	91.0
			472	55500.0	81.0
			473	56500.0	81.0
			474	57500.0	79.0
			475	57800.0	76.0
			476	58000.0	76.0
			477	58000.0	174.0
			478	57800.0	174.0
			479	57500.0	174.0
			480	56500.0	174.0
			481	55500.0	164.0
			482	55000.0	164.0
			483	54800.0	169.0
			484	54500.0	164.0
			485	53671.4	165.9
Ground Zone94	Lawn	300	486	8550.1	377.6

			487	9600.0	381.0
			488	9748.5	374.9
			489	9748.5	417.2
			490	9600.0	429.0
			491	8550.1	432.2
Ground Zone95	Pavement	20000	492	8500.0	376.0
			493	8548.0	376.9
			494	8548.0	433.5
			495	8500.0	434.0
Ground Zone97	Pavement	20000	498	8600.0	500.0
			499	8760.0	483.0
			500	9000.0	483.0
			501	9040.0	470.0
			502	9255.0	470.0
			503	9885.0	470.0
			504	10115.0	450.0
			505	10430.0	418.0
			506	10740.0	383.0
			507	11050.0	373.0
			508	12450.0	365.0
			509	13860.0	360.0
			510	15550.0	350.0
			511	17050.0	340.0
			512	18500.0	335.0
			513	20000.0	335.0
			514	20525.0	335.0
			515	20525.0	347.0
			516	20000.0	347.0
			517	18500.0	347.0
			518	17050.0	352.0
			519	15550.0	362.0
			520	13860.0	372.0
			521	12450.0	377.0
			522	11050.0	385.0
			523	10740.0	395.0
			524	10430.0	430.0
			525	10115.0	462.0
			526	9885.0	482.0
			527	9255.0	482.0
			528	9040.0	482.0
			529	9000.0	495.0
			530	8760.0	495.0
			531	8600.0	512.0
Ground Zone98	Pavement	20000	532	20565.0	345.0
			533	21110.0	345.0
			534	21160.0	330.0

			535	23000.0	325.0
			536	24500.0	318.0
			537	26000.0	303.0
			538	27575.0	298.0
			539	27625.0	285.0
			540	28000.0	298.0
			541	28500.0	350.0
			542	30000.0	350.0
			543	31500.0	345.0
			544	33000.0	335.0
			545	34500.0	325.0
			546	36000.0	318.0
			547	37500.0	318.0
			548	38390.0	323.0
			549	38445.0	310.0
			550	40000.0	288.0
			551	41500.0	270.0
			552	43000.0	260.0
			553	44500.0	243.0
			554	46000.0	230.0
			555	47500.0	215.0
			556	48000.0	210.0
			557	48500.0	218.0
			558	49000.0	225.0
			559	49500.0	225.0
			560	50000.0	220.0
			561	51320.0	228.0
			562	51370.0	215.0
			563	53000.0	210.0
			564	54500.0	208.0
			565	56000.0	225.0
			566	57200.0	230.0
			567	57500.0	240.0
			568	57800.0	240.0
			569	57800.0	252.0
			570	57500.0	252.0
			571	57200.0	242.0
			572	56000.0	237.0
			573	54500.0	220.0
			574	53000.0	222.0
			575	51370.0	227.0
			576	51320.0	240.0
			577	50000.0	232.0
			578	49500.0	237.0
			579	49000.0	237.0
			580	48500.0	230.0

			581	48000.0	222.0
			582	47500.0	227.0
			583	46000.0	242.0
			584	44500.0	255.0
			585	43000.0	272.0
			586	41500.0	282.0
			587	40000.0	300.0
			588	38445.0	322.0
			589	38390.0	335.0
			590	37500.0	330.0
			591	36000.0	330.0
			592	34500.0	337.0
			593	33000.0	347.0
			594	31500.0	357.0
			595	30000.0	362.0
			596	28500.0	362.0
			597	28000.0	310.0
			598	27625.0	297.0
			599	27575.0	310.0
			600	26000.0	315.0
			601	24500.0	330.0
			602	23000.0	337.0
			603	21160.0	342.0
			604	21110.0	357.0
			605	20565.0	357.0

URS
WHA

3 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB w/ Privacy Wall
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

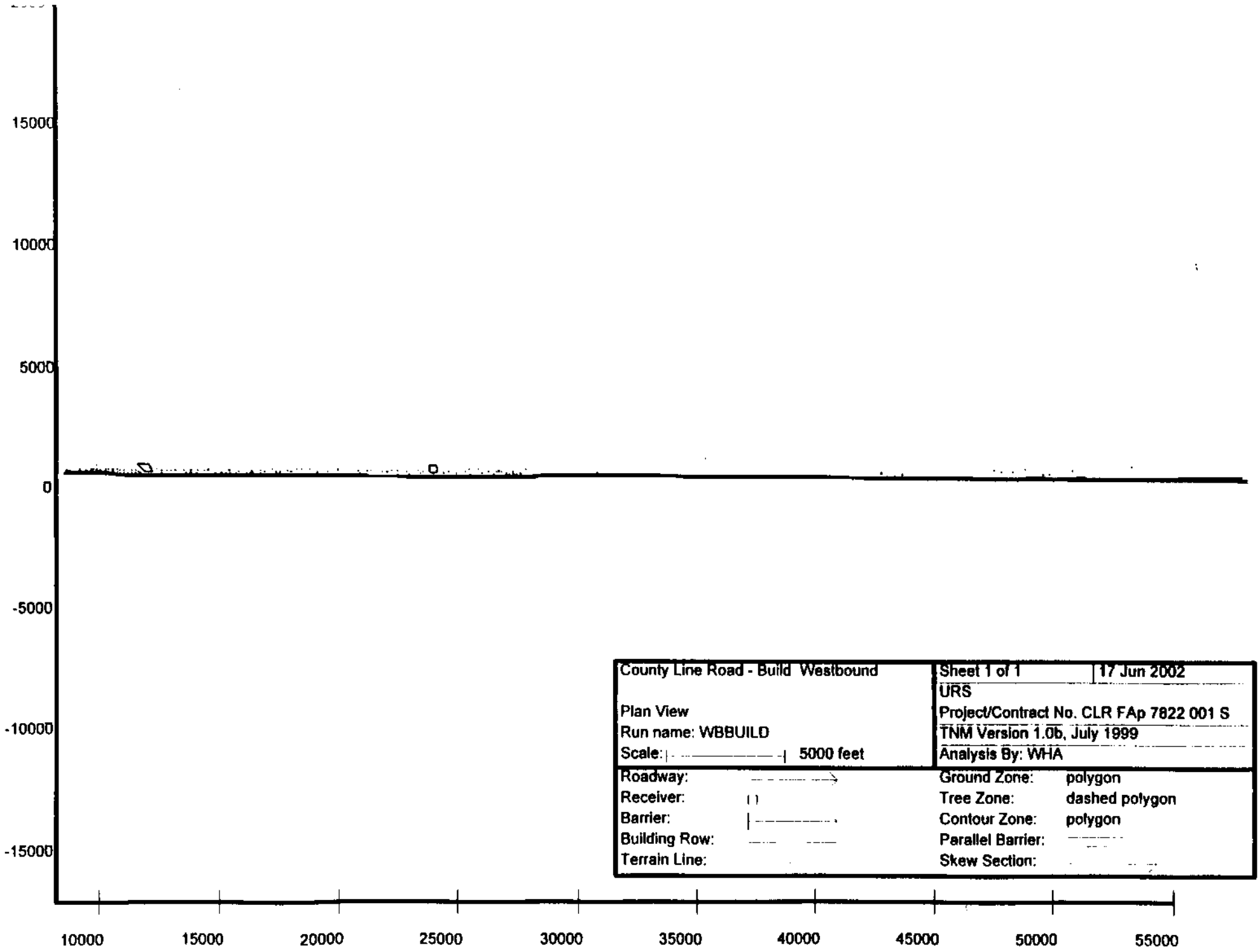
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1	3	1	0.0	64.6	66	64.6	10	---	64.6	0.0	8	-8.0
2	4	1	0.0	65.1	66	65.1	10	---	65.1	0.0	8	-8.0
3	5	1	0.0	55.8	66	55.8	10	---	55.8	0.0	8	-8.0
4	6	1	0.0	57.1	66	57.1	10	---	57.1	0.0	8	-8.0
5	7	1	0.0	56.9	66	56.9	10	---	56.9	0.0	8	-8.0
6	8	1	0.0	58.4	66	58.4	10	---	58.4	0.0	8	-8.0
8	10	1	0.0	63.2	66	63.2	10	---	63.2	0.0	8	-8.0
10	13	1	0.0	64.1	66	64.1	10	---	64.1	0.0	8	-8.0
11	15	1	0.0	61.9	66	61.9	10	---	61.9	0.0	8	-8.0
13	17	1	0.0	60.3	66	60.3	10	---	60.3	0.0	8	-8.0
15	19	1	0.0	62.0	66	62.0	10	---	62.0	0.0	8	-8.0
16a	20	1	0.0	58.5	66	58.5	10	---	58.5	0.0	8	-8.0
16b	21	1	0.0	59.8	66	59.8	10	---	59.8	0.0	8	-8.0
17	22	1	0.0	58.9	66	58.9	10	---	58.9	0.0	8	-8.0
18	23	1	0.0	59.2	66	59.2	10	---	59.2	0.0	8	-8.0
19	24	1	0.0	55.8	66	55.8	10	---	55.7	0.1	8	-7.9
20	26	1	0.0	55.8	66	55.8	10	---	55.2	0.6	8	-7.4
21	27	1	0.0	67.1	66	67.1	10	Snd Lvl	67.0	0.1	8	-7.9
22	28	1	0.0	60.4	66	60.4	10	---	59.1	1.3	8	-6.7
23	29	1	0.0	69.2	66	69.2	10	Snd Lvl	64.1	5.1	8	-2.9
24	30	1	0.0	69.0	66	69.0	10	Snd Lvl	64.3	4.7	8	-3.3
25	31	1	0.0	66.2	66	66.2	10	Snd Lvl	62.2	4.0	8	-4.0
26	32	1	0.0	61.0	66	61.0	10	---	59.2	1.8	8	-6.2
27	33	1	0.0	61.2	66	61.2	10	---	60.1	1.1	8	-6.9

RESULTS SOUND LEVELS

28	34	1	0.0	61.7	66	61.7	10	---	60.9	0.8	8	-7.2
33	35	1	0.0	58.0	66	58.0	10	---	58.0	0.0	8	-8.0
34	37	1	0.0	53.7	66	53.7	10	---	53.7	0.0	8	-8.0
35	38	1	0.0	61.4	66	61.4	10	---	61.4	0.0	8	-8.0
36	39	1	0.0	65.5	66	65.5	10	---	65.5	0.0	8	-8.0
37	40	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
38	41	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0
39	42	1	0.0	65.6	66	65.6	10	---	65.6	0.0	8	-8.0
40	43	1	0.0	62.6	66	62.6	10	---	62.6	0.0	8	-8.0
41	44	1	0.0	62.6	66	62.6	10	---	62.6	0.0	8	-8.0
42	45	1	0.0	64.9	66	64.9	10	---	64.9	0.0	8	-8.0
43	46	1	0.0	63.7	66	63.7	10	---	63.7	0.0	8	-8.0
44	47	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0
45	48	1	0.0	57.6	66	57.6	10	---	57.6	0.0	8	-8.0
30	52	1	0.0	55.6	66	55.6	10	---	55.6	0.0	8	-8.0
31	53	1	0.0	54.6	66	54.6	10	---	54.6	0.0	8	-8.0
32	54	1	0.0	54.2	66	54.2	10	---	54.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	41	0.0	0.5	5.1
All Impacted	6	0.0	2.3	5.1
All that meet NR Goal	0	0.0	0.0	0.0


15000
10000
5000
0
-5000
-10000
-15000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
County Line Road - Build Westbound
Plan View
Run name: WBBUILD
Scale: 5000 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAp 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

3 July 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAp 7822 001 S
RUN: County Line Road - Build Westbound

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - US19 to Dandelion Court	33.0	sta85	251	8500.0	375.0	16.50				Average	
		sta96	252	9600.0	380.0	29.00				Average	
		sta102+50	253	10250.0	345.0	30.50					
EB - Dandelion Court to Balboa Avenue	33.0	sta102+50	254	10250.0	345.0	30.50				Average	
		sta105	255	10500.0	330.0	33.00				Average	
		sta107	256	10700.0	300.0	35.00				Average	
		sta111	257	11100.0	285.0	35.00				Average	
		sta120	258	12000.0	280.0	22.50				Average	
		sta127	259	12700.0	275.0	35.00				Average	
		sta130	260	13000.0	275.0	33.00					
EB - Balboa Avenue to Paris Avenue	33.0	sta130	261	13000.0	275.0	33.00				Average	
		sta138+75	262	13875.0	265.0	26.50				Average	
		sta145	263	14500.0	265.0	23.50				Average	
		sta152	264	15200.0	260.0	33.00				Average	
		sta160	265	16000.0	255.0	40.00				Average	
		sta166	266	16600.0	250.0	35.00				Average	
		sta173	267	17300.0	250.0	47.00				Average	
		sta180	268	18000.0	245.0	34.50					
EB - Paris Avenue to Maple Leaf Drive	33.0	sta180	269	18000.0	245.0	34.50				Average	
		sta189	270	18900.0	245.0	22.00				Average	
		sta202	271	20200.0	250.0	29.00				Average	

INPUT: ROADWAYS

		sta204	272	20400.0	250.0	29.50						
EB - Maple Leaf Drive to East Road	33.0	sta204	273	20400.0	250.0	29.50					Average	
		sta210	274	21000.0	240.0	46.00						
EB - East Road to east of Blaine Avenue	33.0	sta210	275	21000.0	240.0	46.00					Average	
		sta212	276	21200.0	245.0	51.00					Average	
		sta220	277	22000.0	240.0	28.00						
EB - East of Blaine Ave to Landsford Drive	33.0	sta220	278	22000.0	240.0	28.00					Average	
		sta 223	279	22300.0	240.0	28.00					Average	
		sta229	280	22900.0	235.0	31.00					Average	
		sta240	281	24000.0	235.0	28.00						
EB - Landsford Drive to Balon Ave	33.0	sta240	282	24000.0	235.0	28.00					Average	
		sta253	283	25300.0	220.0	29.50					Average	
		sta260	284	26000.0	215.0	32.00						
EB - Balon Ave to Waterfall Drive	33.0	sta260	285	26000.0	215.0	32.00					Average	
		sta265	286	26500.0	205.0	30.00					Average	
		sta 268+50	287	26850.0	200.0	33.00						
EB - Waterfall Dr to east of Oak Lake Dr	33.0	sta268+50	288	26850.0	200.0	33.00					Average	
		sta269	289	26900.0	205.0	33.50					Average	
		sta279	290	27900.0	205.0	37.00					Average	
		sta281	291	28100.0	220.0	38.00					Average	
		sta283	292	28300.0	240.0	38.00					Average	
		sta285	293	28500.0	260.0	39.00					Average	
		sta287	294	28700.0	270.0	39.00					Average	
		sta289	295	28900.0	270.0	39.00						
EB - East of Oak Lake Dr to Old Shady Hills	33.0	sta289	296	28900.0	270.0	39.00					Average	
		sta300	297	30000.0	260.0	40.00					Average	
		sta324	298	32400.0	250.0	41.00					Average	
		sta335	299	34000.0	240.0	44.00					Average	
		sta345	300	34500.0	235.0	46.00					Average	
		sta356	301	35600.0	230.0	56.00					Average	
		sta362	302	36200.0	225.0	52.00						
		sta368	303	36800.0	225.0	62.00					Average	
EB - Old Shady Hills to Mariner Blvd	33.0	sta368	304	36800.0	225.0	62.00						
		sta377+50	305	37750.0	220.0	59.00					Average	
EB - Mariner Blvd to east of Monterverde D	33.0	sta377+50	306	37750.0	220.0	59.00						

INPUT: ROADWAYS

		sta391	307	39100.0	210.0	59.00				Average
		sta398	308	39800.0	200.0	51.00				Average
		sta405	309	40500.0	195.0	51.00				
EB - East of Monteverde Dr to Alexson St	33.0	sta405	310	40500.0	195.0	51.00				Average
		sta415	311	41500.0	185.0	51.00				Average
		sta422	312	42200.0	180.0	58.00				Average
		sta433	313	43300.0	170.0	59.00				Average
		sta445	314	44500.0	165.0	64.00				
EB - Alexson St to west of Preston Hollow	33.0	sta445	315	44500.0	165.0	64.00				Average
		sta455	316	45500.0	150.0	66.00				Average
		sta461	317	46100.0	145.0	66.00				Average
		sta465	318	46500.0	135.0	71.00				
EB - West of Preston Hollow to west Josies	33.0	sta465	319	46500.0	135.0	71.00				Average
		sta475	320	47500.0	130.0	90.50				Average
		sta480	321	48000.0	130.0	92.00				Average
		sta485	322	48500.0	130.0	86.00				Average
		sta489	323	48900.0	140.0	77.00				
EB - West of Josies Dr to East of Josies Dr	33.0	sta489	324	48900.0	140.0	77.00				Average
		sta500	325	50000.0	130.0	81.00				
EB - East of Josies Dr to east of Linden Dr	33.0	sta500	326	50000.0	130.0	81.00				Average
		sta520	327	52000.0	120.0	76.00				
EB - East of Linden Dr to east of Sparks Rd	33.0	sta520	328	52000.0	120.0	76.00				Average
		sta533	330	53300.0	110.0	68.00				Average
		sta535+50	331	53550.0	110.0	68.00				Average
		sta545	329	54500.0	110.0	68.00				
EB - East of Sparks Rd to Suncoast Parkwa	33.0	sta545	332	54500.0	110.0	68.00				Average
		sta548	333	54800.0	105.0	68.00				Average
		sta550	334	55000.0	90.0	68.00				Average
		sta555	335	55500.0	80.0	68.00				Average
		sta565	336	56500.0	80.0	68.00				Average
		sta575	337	57500.0	78.0	68.00				Average
		sta578	338	57800.0	75.0	68.00				Average
		sta580	339	58000.0	75.0	68.00				
WB - Suncoast Parkway to East of Sparks R	33.0	sta580	340	58000.0	175.0	68.00				Average
		sta578	341	57800.0	175.0	68.00				Average

		sta575	342	57500.0	175.0	68.00				Average	
		sta565	343	56500.0	175.0	68.00				Average	
		sta555	344	55500.0	165.0	68.00				Average	
		sta550	345	55000.0	165.0	68.00				Average	
		sta548	346	54800.0	170.0	68.00				Average	
		sta545	347	54500.0	165.0	68.00					
WB - East of Sparks Rd to east of Linden D	33.0	sta545	348	54500.0	165.0	68.00				Average	
		sta535+50	349	53550.0	170.0	68.00				Average	
		sta533	350	53300.0	170.0	68.00				Average	
		sta520	351	52000.0	175.0	76.00					
WB - East of Linden Dr to east of Josies Dr	33.0	sta520	352	52000.0	175.0	76.00				Average	
		sta500	353	50000.0	180.0	81.00					
WB - East of Josies Dr to west of Josies Dr	33.0	sta520	354	50000.0	180.0	81.00				Average	
		sta489	355	48900.0	175.0	77.00					
WB - West of Josies to west Preston Hollow	33.0	sta489	356	48900.0	175.0	77.00				Average	
		sta485	357	48500.0	180.0	86.00				Average	
		sta480	358	48000.0	170.0	92.00				Average	
		sta475	359	47500.0	175.0	90.50				Average	
		sta465	360	46500.0	185.0	71.00					
WB - West of Preston Hollow to Alexson St	33.0	sta465	361	46500.0	185.0	71.00				Average	
		sta461	362	46100.0	190.0	66.00				Average	
		sta455	363	45500.0	195.0	66.00				Average	
		sta445	364	44500.0	205.0	64.00					
WB - Alexson St to east of Monteverde Dr	33.0	sta445	365	44500.0	205.0	64.00				Average	
		sta433	366	43300.0	215.0	59.00				Average	
		sta422	367	42200.0	230.0	58.00				Average	
		sta415	368	41500.0	240.0	51.00				Average	
		sta405	369	40500.0	240.0	51.00					
WB - East of Monteverde Dr to Mariner Blvd	33.0	sta405	370	40500.0	240.0	51.00				Average	
		sta398	371	39800.0	250.0	51.00				Average	
		sta391	372	39100.0	260.0	59.00				Average	
		sta377+50	373	37750.0	280.0	59.00					
WB - Mariner Blvd to Old Shady Hills Rd	33.0	sta377+50	374	37750.0	280.0	59.00				Average	
		sta368	375	36800.0	285.0	62.00					
WB - Old Shady Hills to east of Old Lake D	33.0	sta368	376	36800.0	285.0	62.00				Average	

		sta362	377	36200.0	280.0	52.00				Average	
		sta356	378	35600.0	280.0	56.00				Average	
		sta345	379	34500.0	285.0	46.00				Average	
		sta335	380	33500.0	290.0	44.00				Average	
		sta324	381	32400.0	300.0	41.00				Average	
		sta300	382	30000.0	315.0	40.00				Average	
		sta289	383	28900.0	320.0	39.00					
WB - East of Old Lake Dr to Waterfall Dr	33.0	sta289	384	28900.0	320.0	39.00				Average	
		sta287	385	28700.0	320.0	39.00				Average	
		sta285	386	28500.0	320.0	39.00				Average	
		sta283	387	28300.0	290.0	38.00				Average	
		sta281	388	28100.0	270.0	38.00				Average	
		sta279	389	27900.0	255.0	37.00				Average	
		sta269	390	26900.0	260.0	33.50				Average	
		sta268+50	391	26850.0	260.0	33.00					
WB - Waterfall Dr to Baton Ave	33.0	sta268+50	392	26850.0	260.0	33.00				Average	
		sta265	393	26500.0	260.0	30.00				Average	
		sta260	394	26000.0	270.0	32.00					
WB - Baton Ave to Landsford Drive	33.0	sta260	395	26000.0	270.0	32.00				Average	
		sta253	396	25300.0	270.0	29.50				Average	
		sta240	397	24000.0	285.0	28.00					
WB - Landsford Drive to east of Blaine Ave	33.0	sta240	398	24000.0	285.0	28.00				Average	
		sta229	399	22900.0	285.0	31.00				Average	
		sta223	400	22300.0	290.0	28.00				Average	
		sta220	401	22000.0	295.0	28.00					
WB - East of Blaine Ave to East Road	33.0	sta220	402	22000.0	295.0	28.00				Average	
		sta212	403	21200.0	290.0	51.00				Average	
		sta210	404	21000.0	295.0	46.00					
WB - East Road to Maple Leaf Drive	33.0	sta210	405	21000.0	295.0	46.00				Average	
		sta204	406	20400.0	300.0	29.50					
WB - Maple Leaf Drive to Paris Avenue	33.0	sta204	407	20400.0	300.0	29.50				Average	
		sta202	408	20200.0	300.0	29.00				Average	
		sta189	409	18900.0	290.0	22.00				Average	
		sta180	410	18000.0	300.0	34.50					
WB - Paris Avenue to Balboa Avenue	33.0	sta180	411	18000.0	300.0	34.50				Average	

		sta173	412	17300.0	300.0	47.00				Average	
		sta166	413	16600.0	305.0	35.00				Average	
		sta160	414	16000.0	315.0	40.00				Average	
		sta152	415	15200.0	310.0	33.00				Average	
		sta145	416	14500.0	310.0	23.50				Average	
		sta138+75	417	13875.0	315.0	26.50				Average	
		sta130	418	13000.0	325.0	33.00					
WB - Balboa Avenue to Dandelion Court	33.0	sta130	419	13000.0	325.0	33.00				Average	
		sta127	420	12700.0	325.0	35.00				Average	
		sta120	421	12000.0	330.0	22.50				Average	
		sta111	422	11100.0	335.0	35.00				Average	
		sta107	423	10700.0	350.0	35.00				Average	
		sta105	424	10500.0	370.0	33.00				Average	
		sta102+50	425	10250.0	390.0	30.50					
WB - Dandelion Court to US19	33.0	sta102+50	426	10250.0	390.0	30.50				Average	
		sta96	427	9600.0	430.0	29.00				Average	
		sta85	428	8500.0	435.0	16.50					

INPUT: TRAFFIC FOR LAeq1h Volumes

URS
WHA

3 July 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAp 7822 001 S
RUN: County Line Road - Build Westbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - US19 to Dandelion Court	sta85	251	792	50	17	50	25	50	0	0	0	0
	sta96	252	792	50	17	50	25	50	0	0	0	0
	sta102+50	253										
EB - Dandelion Court to Balboa Avenue	sta102+50	254	792	50	17	50	25	50	0	0	0	0
	sta105	255	792	50	17	50	25	50	0	0	0	0
	sta107	256	792	50	17	50	25	50	0	0	0	0
	sta111	257	792	50	17	50	25	50	0	0	0	0
	sta120	258	792	50	17	50	25	50	0	0	0	0
	sta127	259	792	50	17	50	25	50	0	0	0	0
	sta130	260										
EB - Balboa Avenue to Paris Avenue	sta130	261	792	50	17	50	25	50	0	0	0	0
	sta138+75	262	792	50	17	50	25	50	0	0	0	0
	sta145	263	792	50	17	50	25	50	0	0	0	0
	sta152	264	792	50	17	50	25	50	0	0	0	0
	sta160	265	792	50	17	50	25	50	0	0	0	0
	sta166	266	792	50	17	50	25	50	0	0	0	0
	sta173	267	792	50	17	50	25	50	0	0	0	0
	sta180	268										
EB - Paris Avenue to Maple Leaf Drive	sta180	269	792	50	17	50	25	50	0	0	0	0
	sta189	270	792	50	17	50	25	50	0	0	0	0
	sta202	271	792	50	17	50	25	50	0	0	0	0
	sta204	272										

INPUT: TRAFFIC FOR LAeq1h Volumes

EB - Maple Leaf Drive to East Road	sta204	273	792	50	17	50	25	50	0	0	0	0
	sta210	274										
EB - East Road to east of Blaine Avenue	sta210	275	792	50	17	50	25	50	0	0	0	0
	sta212	276	792	50	17	50	25	50	0	0	0	0
	sta220	277										
EB - East of Blaine Ave to Landsford Drive	sta220	278	792	50	17	50	25	50	0	0	0	0
	sta 223	279	792	50	17	50	25	50	0	0	0	0
	sta229	280	792	50	17	50	25	50	0	0	0	0
	sta240	281										
EB - Landsford Drive to Baton Ave	sta240	282	792	50	17	50	25	50	0	0	0	0
	sta253	283	792	50	17	50	25	50	0	0	0	0
	sta260	284										
EB - Baton Ave to Waterfall Drive	sta260	285	792	50	17	50	25	50	0	0	0	0
	sta265	286	792	50	17	50	25	50	0	0	0	0
	sta 268+50	287										
EB - Waterfall Dr to east of Oak Lake Dr	sta268+50	288	792	50	17	50	25	50	0	0	0	0
	sta269	289	792	50	17	50	25	50	0	0	0	0
	sta279	290	792	50	17	50	25	50	0	0	0	0
	sta281	291	792	50	17	50	25	50	0	0	0	0
	sta283	292	792	50	17	50	25	50	0	0	0	0
	sta285	293	792	50	17	50	25	50	0	0	0	0
	sta287	294	792	50	17	50	25	50	0	0	0	0
	sta289	295										
EB - East of Oak Lake Dr to Old Shady Hi	sta289	296	792	50	17	50	25	50	0	0	0	0
	sta300	297	792	50	17	50	25	50	0	0	0	0
	sta324	298	792	50	17	50	25	50	0	0	0	0
	sta335	299	792	50	17	50	25	50	0	0	0	0
	sta345	300	792	50	17	50	25	50	0	0	0	0
	sta356	301	792	50	17	50	25	50	0	0	0	0
	sta362	302	792	50	17	50	25	50	0	0	0	0
	sta368	303										
EB - Old Shady Hills to Mariner Blvd	sta368	304	792	50	17	50	25	50	0	0	0	0
	sta377+50	305										
EB - Mariner Blvd to east of Monterverde D	sta377+50	306	792	50	17	50	25	50	0	0	0	0

	sta391	307	792	50	17	50	25	50	0	0	0	0
	sta398	308	792	50	17	50	25	50	0	0	0	0
	sta405	309										
EB - East of Monteverde Dr to Alexson St	sta405	310	792	50	17	50	25	50	0	0	0	0
	sta415	311	792	50	17	50	25	50	0	0	0	0
	sta422	312	792	50	17	50	25	50	0	0	0	0
	sta433	313	792	50	17	50	25	50	0	0	0	0
	sta445	314										
EB - Alexson St to west of Preston Hollow	sta445	315	792	50	17	50	25	50	0	0	0	0
	sta455	316	792	50	17	50	25	50	0	0	0	0
	sta461	317	792	50	17	50	25	50	0	0	0	0
	sta465	318										
EB - West of Preston Hollow to west Josies	sta465	319	792	50	17	50	25	50	0	0	0	0
	sta475	320	792	50	17	50	25	50	0	0	0	0
	sta480	321	792	50	17	50	25	50	0	0	0	0
	sta485	322	792	50	17	50	25	50	0	0	0	0
	sta489	323										
EB - West of Josies Dr to East of Josies Dr	sta489	324	792	50	17	50	25	50	0	0	0	0
	sta500	325										
EB - East of Josies Dr to east of Linden Dr	sta500	326	792	50	17	50	25	50	0	0	0	0
	sta520	327										
EB - East of Linden Dr to east of Sparks Rd	sta520	328	792	50	17	50	25	50	0	0	0	0
	sta533	330	792	50	17	50	25	50	0	0	0	0
	sta535+50	331	792	50	17	50	25	50	0	0	0	0
	sta545	329										
EB - East of Sparks Rd to Suncoast Parkw	sta545	332	792	50	17	50	25	50	0	0	0	0
	sta548	333	792	50	17	50	25	50	0	0	0	0
	sta550	334	792	50	17	50	25	50	0	0	0	0
	sta555	335	792	50	17	50	25	50	0	0	0	0
	sta565	336	792	50	17	50	25	50	0	0	0	0
	sta575	337	792	50	17	50	25	50	0	0	0	0
	sta578	338	792	50	17	50	25	50	0	0	0	0
	sta580	339										
WB - Suncoast Parkway to East of Sparks	sta580	340	1089	50	23	50	34	50	0	0	0	0

	sta578	341	1089	50	23	50	34	50	0	0	0	0
	sta575	342	1089	50	23	50	34	50	0	0	0	0
	sta565	343	1089	50	23	50	34	50	0	0	0	0
	sta555	344	1089	50	23	50	34	50	0	0	0	0
	sta550	345	1089	50	23	50	34	50	0	0	0	0
	sta548	346	1089	50	23	50	34	50	0	0	0	0
	sta545	347										
WB - East of Sparks Rd to east of Linden I	sta545	348	1089	50	23	50	34	50	0	0	0	0
	sta535+50	349	1089	50	23	50	34	50	0	0	0	0
	sta533	350	1089	50	23	50	34	50	0	0	0	0
	sta520	351										
WB - East of Linden Dr to east of Josies D	sta520	352	1089	50	23	50	34	50	0	0	0	0
	sta500	353										
WB - East of Josies Dr to west of Josies D	sta520	354	1089	50	23	50	34	50	0	0	0	0
	sta489	355										
WB - West of Josies to west Preston Hollo	sta489	356	1089	50	23	50	34	50	0	0	0	0
	sta485	357	1089	50	23	50	34	50	0	0	0	0
	sta480	358	1089	50	23	50	34	50	0	0	0	0
	sta475	359	1089	50	23	50	34	50	0	0	0	0
	sta465	360										
WB - West of Preston Hollow to Alexson S	sta465	361	1089	50	23	50	34	50	0	0	0	0
	sta461	362	1089	50	23	50	34	50	0	0	0	0
	sta455	363	1089	50	23	50	34	50	0	0	0	0
	sta445	364										
WB - Alexson St to east of Monteverde Dr	sta445	365	1089	50	23	50	34	50	0	0	0	0
	sta433	366	1089	50	23	50	34	50	0	0	0	0
	sta422	367	1089	50	23	50	34	50	0	0	0	0
	sta415	368	1089	50	23	50	34	50	0	0	0	0
	sta405	369										
WB - East of Monteverde Dr to Mariner Blv	sta405	370	1089	50	23	50	34	50	0	0	0	0
	sta398	371	1089	50	23	50	34	50	0	0	0	0
	sta391	372	1089	50	23	50	34	50	0	0	0	0
	sta377+50	373										
WB - Mariner Blvd to Old Shady Hills Rd	sta377+50	374	1089	50	23	50	34	50	0	0	0	0

	sta368	375										
WB - Old Shady Hills to east of Old Lake D	sta368	376	1089	50	23	50	34	50	0	0	0	0
	sta362	377	1089	50	23	50	34	50	0	0	0	0
	sta356	378	1089	50	23	50	34	50	0	0	0	0
	sta345	379	1089	50	23	50	34	50	0	0	0	0
	sta335	380	1089	50	23	50	34	50	0	0	0	0
	sta324	381	1089	50	23	50	34	50	0	0	0	0
	sta300	382	1089	50	23	50	34	50	0	0	0	0
	sta289	383										
WB - East of Old Lake Dr to Waterfall Dr	sta289	384	1089	50	23	50	34	50	0	0	0	0
	sta287	385	1089	50	23	50	34	50	0	0	0	0
	sta285	386	1089	50	23	50	34	50	0	0	0	0
	sta283	387	1089	50	23	50	34	50	0	0	0	0
	sta281	388	1089	50	23	50	34	50	0	0	0	0
	sta279	389	1089	50	23	50	34	50	0	0	0	0
	sta269	390	1089	50	23	50	34	50	0	0	0	0
	sta268+50	391										
WB - Waterfall Dr to Baton Ave	sta268+50	392	1089	50	23	50	34	50	0	0	0	0
	sta265	393	1089	50	23	50	34	50	0	0	0	0
	sta260	394										
WB - Baton Ave to Landsford Drive	sta260	395	1089	50	23	50	34	50	0	0	0	0
	sta253	396	1089	50	23	50	34	50	0	0	0	0
	sta240	397										
WB - Landsford Drive to east of Blaine Ave	sta240	398	1089	50	23	50	34	50	0	0	0	0
	sta229	399	1089	50	23	50	34	50	0	0	0	0
	sta223	400	1089	50	23	50	34	50	0	0	0	0
	sta220	401										
WB - East of Blaine Ave to East Road	sta220	402	1089	50	23	50	34	50	0	0	0	0
	sta212	403	1089	50	23	50	34	50	0	0	0	0
	sta210	404										
WB - East Road to Maple Leaf Drive	sta210	405	1089	50	23	50	34	50	0	0	0	0
	sta204	406										
WB - Maple Leaf Drive to Paris Avenue	sta204	407	1089	50	23	50	34	50	0	0	0	0
	sta202	408	1089	50	23	50	34	50	0	0	0	0

	sta189	409	1089	50	23	50	34	50	0	0	0	0
	sta180	410										
WB - Paris Avenue to Balboa Avenue	sta180	411	1089	50	23	50	34	50	0	0	0	0
	sta173	412	1089	50	23	50	34	50	0	0	0	0
	sta166	413	1089	50	23	50	34	50	0	0	0	0
	sta160	414	1089	50	23	50	34	50	0	0	0	0
	sta152	415	1089	50	23	50	34	50	0	0	0	0
	sta145	416	1089	50	23	50	34	50	0	0	0	0
	sta138+75	417	1089	50	23	50	34	50	0	0	0	0
	sta130	418										
WB - Balboa Avenue to Dandelion Court	sta130	419	1089	50	23	50	34	50	0	0	0	0
	sta127	420	1089	50	23	50	34	50	0	0	0	0
	sta120	421	1089	50	23	50	34	50	0	0	0	0
	sta111	422	1089	50	23	50	34	50	0	0	0	0
	sta107	423	1089	50	23	50	34	50	0	0	0	0
	sta105	424	1089	50	23	50	34	50	0	0	0	0
	sta102+50	425										
WB - Dandelion Court to US19	sta102+50	426	1089	50	23	50	34	50	0	0	0	0
	sta96	427	1089	50	23	50	34	50	0	0	0	0
	sta85	428										

INPUT: RECEIVERS

URS
WHA

3 July 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAp 7822 001 S
RUN: County Line Road - Build Westbound

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria: LAeq1h	Impact Criteria: SubT Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
46	52	1	53230.0	670.0	70.00	5.00	0	66	10	8
49	57	1	50780.0	520.0	80.00	5.00	0	66	10	8
53	61	1	49840.0	365.0	85.00	5.00	0	66	10	8
54	62	1	49800.0	370.0	85.00	5.00	0	66	10	8
55	63	1	49540.0	380.0	83.00	5.00	0	66	10	8
56	68	1	48790.0	570.0	77.00	5.00	0	66	10	8
57	69	1	48240.0	485.0	76.00	5.00	0	66	10	8
58	70	1	47780.0	490.0	84.00	5.00	0	66	10	8
59	71	1	47440.0	510.0	88.00	5.00	0	66	10	8
63	76	1	43580.0	350.0	59.00	5.00	0	66	10	8
65	78	1	35360.0	1000.0	40.00	5.00	0	66	10	8
66	79	1	30770.0	420.0	37.00	5.00	0	66	10	8
67	80	1	27760.0	570.0	30.00	5.00	0	66	10	8
68	81	1	27570.0	355.0	35.00	5.00	0	66	10	8
69	82	1	27540.0	415.0	36.00	5.00	0	66	10	8
70	83	1	27390.0	360.0	35.00	5.00	0	66	10	8
71	84	1	27265.0	360.0	36.00	5.00	0	66	10	8
72	85	1	27250.0	450.0	35.00	5.00	0	66	10	8
73	86	1	27080.0	345.0	35.00	5.00	0	66	10	8
74	87	1	26970.0	345.0	34.00	5.00	0	66	10	8
75	88	1	26950.0	430.0	34.00	5.00	0	66	10	8

76	89	1	26750.0	480.0	34.00	5.00	0	66	10	8
77	90	1	26625.0	505.0	32.00	5.00	0	66	10	8
78	91	1	26515.0	490.0	30.00	5.00	0	66	10	8
79	92	1	26425.0	365.0	30.00	5.00	0	66	10	8
80	93	1	26225.0	480.0	31.00	5.00	0	66	10	8
81	95	1	25950.0	430.0	33.00	5.00	0	66	10	8
82	96	1	25800.0	595.0	31.00	5.00	0	66	10	8
83	98	1	25490.0	350.0	31.00	5.00	0	66	10	8
84	99	1	25425.0	590.0	30.00	5.00	0	66	10	8
85	100	1	25260.0	495.0	29.00	5.00	0	66	10	8
86	101	1	24880.0	410.0	29.00	5.00	0	66	10	8
87	102	1	24575.0	470.0	28.00	5.00	0	66	10	8
88	103	1	24330.0	410.0	29.00	5.00	0	66	10	8
89	104	1	23490.0	492.0	30.00	5.00	0	66	10	8
90	106	1	23350.0	400.0	32.00	5.00	0	66	10	8
91	107	1	23270.0	520.0	30.00	5.00	0	66	10	8
92	108	1	22880.0	390.0	32.00	5.00	0	66	10	8
93	109	1	22760.0	485.0	32.00	5.00	0	66	10	8
94	110	1	22390.0	390.0	30.00	5.00	0	66	10	8
95	111	1	22400.0	520.0	31.00	5.00	0	66	10	8
96	113	1	22125.0	520.0	29.00	5.00	0	66	10	8
97	114	1	21950.0	490.0	29.00	5.00	0	66	10	8
98	115	1	21770.0	477.0	32.50	5.00	0	66	10	8
100	118	1	21260.0	535.0	53.00	5.00	0	66	10	8
101	119	1	21140.0	515.0	46.00	5.00	0	66	10	8
102	121	1	20740.0	510.0	41.00	5.00	0	66	10	8
103	122	1	20820.0	420.0	41.00	5.00	0	66	10	8
104	123	1	19885.0	520.0	43.00	5.00	0	66	10	8
105	124	1	19885.0	580.0	40.00	5.00	0	66	10	8
106	125	1	19810.0	390.0	32.00	5.00	0	66	10	8
107	126	1	19730.0	387.0	30.00	5.00	0	66	10	8
108	127	1	19655.0	392.0	28.00	5.00	0	66	10	8
109	128	1	19485.0	390.0	30.00	5.00	0	66	10	8
110	129	1	19465.0	500.0	35.00	5.00	0	66	10	8

111	130	1	19045.0	400.0	25.00	5.00	0	66	10	8
112	131	1	19045.0	495.0	31.00	5.00	0	66	10	8
113	133	1	18700.0	590.0	30.00	5.00	0	66	10	8
114	134	1	18380.0	562.0	34.00	5.00	0	66	10	8
115	135	1	18160.0	585.0	32.00	5.00	0	66	10	8
116	136	1	17970.0	480.0	36.00	5.00	0	66	10	8
117	137	1	17890.0	500.0	39.00	5.00	0	66	10	8
118	138	1	17775.0	520.0	37.00	5.00	0	66	10	8
119	139	1	17600.0	380.0	40.00	5.00	0	66	10	8
120	141	1	17480.0	397.0	46.00	5.00	0	66	10	8
121	142	1	17480.0	470.0	44.00	5.00	0	66	10	8
122	143	1	17290.0	397.0	50.00	5.00	0	66	10	8
123	144	1	17290.0	485.0	52.00	5.00	0	66	10	8
125	146	1	17150.0	575.0	40.00	5.00	0	66	10	8
127	149	1	16840.0	470.0	44.00	5.00	0	66	10	8
128	150	1	16650.0	407.0	38.00	5.00	0	66	10	8
129	151	1	16670.0	550.0	35.00	5.00	0	66	10	8
130	153	1	16370.0	435.0	37.00	5.00	0	66	10	8
131	154	1	16250.0	420.0	40.00	5.00	0	66	10	8
132	155	1	16270.0	505.0	33.00	5.00	0	66	10	8
133	156	1	16100.0	398.0	42.00	5.00	0	66	10	8
134	157	1	15650.0	407.0	38.00	5.00	0	66	10	8
135	158	1	15780.0	480.0	31.50	5.00	0	66	10	8
136	160	1	15390.0	402.0	34.00	5.00	0	66	10	8
137	161	1	15235.0	402.0	34.00	5.00	0	66	10	8
138	162	1	15370.0	510.0	37.00	5.00	0	66	10	8
139	163	1	15310.0	510.0	37.00	5.00	0	66	10	8
140	164	1	15030.0	412.0	35.00	5.00	0	66	10	8
141	165	1	14790.0	440.0	27.00	5.00	0	66	10	8
142	167	1	14460.0	560.0	20.00	5.00	0	66	10	8
143	168	1	14290.0	530.0	29.00	5.00	0	66	10	8
144	170	1	14000.0	415.0	27.50	5.00	0	66	10	8
145	171	1	14040.0	530.0	29.00	5.00	0	66	10	8
146	172	1	13790.0	410.0	26.50	5.00	0	66	10	8

INPUT: RECEIVERS

147	173	1	13790.0	520.0	25.00	5.00	0	66	10	8
148	174	1	13700.0	410.0	27.00	5.00	0	66	10	8
149	175	1	13700.0	520.0	27.00	5.00	0	66	10	8
150	176	1	13540.0	430.0	30.50	5.00	0	66	10	8
151	177	1	13440.0	540.0	33.00	5.00	0	66	10	8
152	178	1	13100.0	550.0	40.00	5.00	0	66	10	8
153	179	1	12920.0	550.0	46.00	5.00	0	66	10	8
154	180	1	12750.0	530.0	45.00	5.00	0	66	10	8
155	181	1	12550.0	425.0	36.00	5.00	0	66	10	8
156	182	1	12550.0	540.0	36.00	5.00	0	66	10	8
157	183	1	12310.0	590.0	27.00	5.00	0	66	10	8
158	185	1	11650.0	427.0	26.00	5.00	0	66	10	8
159	186	1	11550.0	460.0	29.00	5.00	0	66	10	8
160	187	1	11460.0	430.0	32.00	5.00	0	66	10	8
161	188	1	11480.0	530.0	28.00	5.00	0	66	10	8
162	189	1	11280.0	420.0	33.00	5.00	0	66	10	8
163	190	1	11280.0	507.0	30.00	5.00	0	66	10	8
164	191	1	11140.0	415.0	34.00	5.00	0	66	10	8
165	192	1	10980.0	415.0	33.00	5.00	0	66	10	8
166	193	1	10980.0	530.0	28.00	5.00	0	66	10	8
167	194	1	10830.0	420.0	27.00	5.00	0	66	10	8
168	195	1	10830.0	550.0	32.50	5.00	0	66	10	8
170	197	1	10690.0	490.0	32.00	5.00	0	66	10	8
171	198	1	10690.0	590.0	27.00	5.00	0	66	10	8
173	201	1	10525.0	495.0	29.00	5.00	0	66	10	8
174	202	1	10525.0	575.0	27.00	5.00	0	66	10	8
176	204	1	10360.0	500.0	24.50	5.00	0	66	10	8
177	205	1	10360.0	580.0	23.00	5.00	0	66	10	8
179	207	1	10210.0	505.0	23.00	5.00	0	66	10	8
180	208	1	10210.0	580.0	22.00	5.00	0	66	10	8
182	210	1	10040.0	555.0	22.00	5.00	0	66	10	8
184	212	1	9940.0	570.0	22.00	5.00	0	66	10	8
185	213	1	9840.0	570.0	24.00	5.00	0	66	10	8
186	214	1	9840.0	725.0	24.00	5.00	0	66	10	8

188	216	1	9720.0	570.0	25.00	5.00	0	66	10	8
190	218	1	9640.0	560.0	29.00	5.00	0	66	10	8
192	220	1	9450.0	550.0	27.00	5.00	0	66	10	8
195	224	1	9180.0	530.0	22.50	5.00	0	66	10	8
196	225	1	9180.0	595.0	22.50	5.00	0	66	10	8
64	227	1	42710.0	440.0	56.00	5.00	0	66	10	8

URS 17 June 2002
WHA TNM 1.0b

INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAp 7822 001 S
RUN: County Line Road - Build Westbound

Ground Zone Name	Type	Flow Resistivity	Points No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Ground Zone Pond1	Water	20000	106	23910.0	405.0
			107	23770.0	490.0
			108	23735.0	610.0
			109	23770.0	720.0
			110	23900.0	770.0
			111	24015.0	740.0
			112	24075.0	625.0
			113	24060.0	490.0
Ground Zone Pond2	Water	20000	114	12170.0	500.0
			115	11860.0	500.0
			116	11700.0	620.0
			117	11530.0	800.0
			118	12020.0	780.0
Ground Zone30	Pavement	20000	119	9753.0	375.4
			120	10250.0	346.0
			121	10500.0	331.0
			122	10700.0	301.0
			123	10700.0	349.0
			124	10500.0	369.0
			125	10250.0	389.0
			126	9753.0	416.4
Ground Zone31	Lawn	300	127	10701.0	301.0
			128	11100.0	286.0
			129	12000.0	281.0
			130	12100.1	283.4
			131	12100.1	324.8
			132	12000.0	329.0
			133	11100.0	334.0
			134	10701.0	349.0
Ground Zone32	Pavement	20000	135	12103.8	285.0
			136	12700.0	276.0
			137	12901.5	278.8
			138	12899.4	320.3
			139	12700.0	324.0

			140	12103.8	326.6
Ground Zone33	Lawn	300	141	12904.2	278.0
			142	13530.5	271.4
			143	13530.5	314.8
			144	12904.2	321.5
Ground Zone34	Pavement	20000	145	13533.3	273.0
			146	13875.0	266.0
			147	13900.7	268.0
			148	13900.7	311.4
			149	13875.0	314.0
			150	13533.3	314.8
Ground Zone35	Lawn	300	151	13903.8	267.1
			152	14500.0	266.0
			153	14550.8	268.5
			154	14550.8	306.7
			155	14500.0	309.0
			156	13903.8	312.4
Ground Zone36	Pavement	20000	157	14554.6	267.9
			158	15200.0	261.0
			159	15250.7	262.9
			160	15250.7	306.6
			161	15200.0	309.0
			162	14554.6	306.6
Ground Zone37	Lawn	300	163	15254.3	262.9
			164	15800.7	259.5
			165	15800.7	310.0
			166	15254.3	304.9
Ground Zone38	Pavement	20000	167	15804.5	259.5
			168	16000.0	255.0
			169	16150.8	256.2
			170	16150.8	308.3
			171	16000.0	315.0
			172	15804.5	310.0
Ground Zone39	Lawn	300	173	16153.1	256.2
			174	16600.0	251.0
			175	17300.0	251.0
			176	17300.0	299.0
			177	16600.0	304.0
			178	16154.8	308.0
Ground Zone40	Pavement	20000	179	17302.7	252.3
			180	18000.0	246.0
			181	18050.3	248.2
			182	18050.3	297.6
			183	18000.0	299.0
			184	17302.7	297.6
Ground Zone42	Lawn	300	186	18052.7	248.2

			187	18900.0	246.0
			188	19340.8	249.0
			189	19340.8	290.7
			190	18900.0	289.0
			191	18052.7	296.2
Ground Zone43	Pavement	20000	192	19343.2	248.3
			193	19731.0	250.9
			194	19731.0	294.1
			195	19343.2	291.6
Ground Zone44	Lawn	300	196	19733.3	250.9
			197	20000.3	250.9
			198	20000.3	296.7
			199	19733.3	294.1
Ground Zone45	Pavement	20000	200	20002.9	252.1
			201	20200.0	251.0
			202	20400.0	251.0
			203	20600.0	248.3
			204	20600.5	296.7
			205	20400.0	299.0
			206	20200.0	299.0
			207	20002.9	296.7
Ground Zone46	Lawn	300	208	20603.4	248.3
			209	21000.0	241.0
			210	21000.0	294.0
			211	20603.4	295.4
Ground Zone47	Pavement	20000	212	21002.9	242.0
			213	21200.0	246.0
			214	21700.9	244.5
			215	21700.9	291.6
			216	21200.0	289.0
			217	21002.9	292.8
Ground Zone48	Lawn	300	218	21702.7	245.6
			219	22000.0	241.0
			220	22300.0	241.0
			221	22650.9	239.8
			222	22650.9	284.5
			223	22300.0	289.0
			224	22000.0	294.0
			225	21702.7	291.4
Ground Zone49	Pavement	20000	226	22653.1	240.2
			227	22900.0	236.0
			228	23350.7	237.4
			229	23350.7	282.5
			230	22900.0	284.0
			231	22653.1	285.2
Ground Zone50	Lawn	300	232	23353.4	237.4

			233	24000.0	236.0
			234	24060.5	237.4
			235	24060.5	281.1
			236	24000.0	284.0
			237	23353.4	282.5
Ground Zone51	Pavement	20000	238	24063.2	236.1
			239	24450.9	232.0
			240	24450.9	277.0
			241	24063.5	281.1
Ground Zone52	Lawn	300	242	24453.2	232.0
			243	25051.1	225.2
			244	25051.1	270.2
			245	24453.2	277.0
Ground Zone53	Pavement	20000	246	25053.4	226.5
			247	25300.0	221.0
			248	25800.1	219.7
			249	25800.1	267.5
			250	25300.0	269.0
			251	25053.4	268.8
Ground Zone54	Lawn	300	252	25802.8	219.7
			253	26000.0	216.0
			254	26051.3	217.0
			255	26051.3	266.1
			256	25802.8	267.5
Ground Zone55	Pavement	20000	257	26054.4	216.2
			258	26500.0	206.0
			259	26850.0	201.0
			260	26900.0	206.0
			261	27601.4	207.8
			262	27601.4	252.8
			263	26900.0	259.0
			264	26850.0	259.0
			265	26500.0	259.0
			266	26052.7	264.4
Ground Zone57	Lawn	300	267	27605.3	207.8
			268	27900.0	206.0
			269	28100.0	221.0
			270	28150.9	227.8
			271	28150.9	271.1
			272	28100.0	269.0
			273	27900.0	254.0
			274	27605.3	252.8
Ground Zone58	Pavement	20000	275	28153.8	227.8
			276	28300.0	241.0
			277	28500.0	261.0
			278	28549.7	264.4

			279	28549.7	316.0
			280	28500.0	319.0
			281	28300.0	289.0
			282	28153.8	271.1
Ground Zone59	Lawn	300	283	28552.8	266.1
			284	28695.8	272.7
			285	28893.8	272.7
			286	29900.2	264.4
			287	29900.2	311.0
			288	28902.1	316.0
			289	28702.5	316.0
			290	28552.8	316.0
Ground Zone60	Pavement	20000	291	29904.1	264.4
			292	29997.2	264.4
			293	30641.0	259.4
			294	30641.0	307.6
			295	30002.2	311.0
			296	29904.1	311.0
Ground Zone61	Lawn	300	297	30643.8	259.4
			298	31540.4	256.1
			299	31540.4	301.0
			300	30643.8	307.6
Ground Zone62	Pavement	20000	301	31543.0	256.1
			302	32250.0	252.8
			303	32250.0	297.7
			304	31543.0	301.0
Ground Zone63	Lawn	300	305	32252.8	252.8
			306	32850.0	249.4
			307	32850.0	292.7
			308	32252.8	297.7
Ground Zone64	Pavement	20000	309	32852.9	249.4
			310	33549.8	246.1
			311	33549.8	286.0
			312	32852.9	291.0
Ground Zone65	Lawn	300	313	33553.6	244.0
			314	34000.0	241.0
			315	34500.0	236.0
			316	35200.4	236.5
			317	35200.4	279.0
			318	34500.0	284.0
			319	33551.0	286.0
Ground Zone66	Pavement	20000	320	35203.6	235.7
			321	35600.0	231.0
			322	35950.1	229.6
			323	35950.1	277.0
			324	35600.0	279.0

			325	35203.6	278.6
Ground Zone67	Lawn	300	326	35952.8	229.6
			327	36180.7	228.1
			328	36180.7	277.0
			329	35952.8	277.0
Ground Zone68	Pavement	20000	330	36184.1	228.1
			331	36549.7	228.1
			332	36549.7	280.1
			333	36184.1	277.0
Ground Zone69	Lawn	300	334	36552.6	228.1
			335	36901.3	228.1
			336	36901.3	281.6
			337	36552.6	280.1
Ground Zone70	Pavement	20000	338	36904.8	230.0
			339	37750.0	221.0
			340	38600.3	218.5
			341	38600.3	262.1
			342	37750.0	279.0
			343	36904.8	280.5
Ground Zone71	Lawn	300	344	38603.2	216.6
			345	39095.5	213.5
			346	39500.6	207.2
			347	39500.6	250.9
			348	39103.3	257.1
			349	38603.2	264.9
Ground Zone72	Pavement	20000	350	39503.1	208.8
			351	39796.0	202.6
			352	40251.0	199.4
			353	40251.0	240.0
			354	39802.2	246.2
			355	39503.1	250.9
Ground Zone73	Lawn	300	356	40253.5	199.4
			357	40500.0	196.0
			358	41049.6	193.2
			359	41049.6	238.4
			360	40500.0	239.0
			361	40253.5	240.0
Ground Zone74	Pavement	20000	362	41053.4	193.2
			363	41500.0	186.0
			364	41500.0	239.0
			365	41051.8	236.8
Ground Zone75	Lawn	300	366	41501.0	187.0
			367	42200.0	181.0
			368	42669.7	179.2
			369	42669.7	221.3
			370	42200.0	229.0

			371	41501.0	239.0
Ground Zone76	Pavement	20000	372	42671.9	179.0
			373	43300.0	171.0
			374	43450.8	171.2
			375	43450.8	211.3
			376	43300.0	214.0
			377	42671.9	221.3
Ground Zone77	Lawn	300	378	43453.0	171.2
			379	44350.0	167.8
			380	44350.0	203.5
			381	43453.0	211.3
Ground Zone78	Pavement	20000	382	44352.3	167.8
			383	44500.0	166.0
			384	44730.0	163.4
			385	44730.0	200.1
			386	44500.0	204.0
			387	44352.3	203.5
Ground Zone79	Lawn	300	388	44732.7	165.5
			389	45500.0	151.0
			390	46100.0	146.0
			391	46500.0	136.0
			392	47500.0	131.0
			393	47602.3	132.4
			394	47598.6	173.0
			395	47500.0	174.0
			396	46500.0	184.0
			397	46100.0	189.0
			398	45500.0	194.0
			399	44732.7	200.4
Ground Zone80	Pavement	20000	400	47604.6	131.8
			401	48000.0	131.0
			402	48370.8	131.8
			403	48370.8	175.4
			404	48000.0	169.0
			405	47601.0	171.9
Ground Zone81	Lawn	300	406	48373.4	131.9
			407	48500.0	131.0
			408	48900.0	141.0
			409	48900.0	174.0
			410	48500.0	179.0
			411	48373.4	175.7
Ground Zone82	Pavement	20000	412	48901.8	142.0
			413	49200.8	139.8
			414	49200.8	173.5
			415	48901.8	172.4
Ground Zone83	Lawn	300	416	49202.6	139.8

			417	49669.1	135.3
			418	49669.1	175.7
			419	49202.6	173.5
Ground Zone84	Pavement	20000	420	49671.8	136.6
			421	50000.0	131.0
			422	51049.6	127.4
			423	51049.6	174.6
			424	50000.0	179.0
			425	49671.8	175.1
Ground Zone85	Lawn	300	426	51052.6	127.9
			427	51950.8	122.9
			428	51950.8	171.9
			429	51052.6	174.4
Ground Zone86	Pavement	20000	430	51954.6	125.7
			431	52698.1	120.0
			432	52698.1	167.2
			433	51954.6	171.0
Ground Zone87	Lawn	300	434	52701.2	119.6
			435	53300.0	111.0
			436	53300.0	169.0
			437	52701.2	167.5
Ground Zone88	Pavement	20000	438	53301.0	112.0
			439	53550.0	111.0
			440	53670.4	112.7
			441	53670.4	165.9
			442	53550.0	169.0
			443	53301.0	168.0
Ground Zone89	Lawn	300	444	53674.3	113.6
			445	54500.0	111.0
			446	54800.0	106.0
			447	55000.0	91.0
			448	55500.0	81.0
			449	56500.0	81.0
			450	57500.0	79.0
			451	57800.0	76.0
			452	58000.0	76.0
			453	58000.0	174.0
			454	57800.0	174.0
			455	57500.0	174.0
			456	56500.0	174.0
			457	55500.0	164.0
			458	55000.0	164.0
			459	54800.0	169.0
			460	54500.0	164.0
			461	53671.4	165.9
Ground Zone90	Lawn	300	462	8550.1	377.6

			463	9600.0	381.0
			464	9748.5	374.9
			465	9748.5	417.2
			466	9600.0	429.0
			467	8550.1	432.2
Ground Zone91	Pavement	20000	468	8500.0	376.0
			469	8548.0	376.9
			470	8548.0	433.5
			471	8500.0	434.0
Ground Zone93	Pavement	20000	473	8600.0	500.0
			474	8760.0	483.0
			475	9000.0	483.0
			476	9040.0	470.0
			477	9255.0	470.0
			478	9885.0	470.0
			479	10115.0	450.0
			480	10430.0	418.0
			481	10740.0	383.0
			482	11050.0	373.0
			483	12450.0	365.0
			484	13860.0	360.0
			485	15550.0	350.0
			486	17050.0	340.0
			487	18500.0	335.0
			488	20000.0	335.0
			489	20525.0	335.0
			490	20525.0	347.0
			491	20000.0	347.0
			492	18500.0	347.0
			493	17050.0	352.0
			494	15550.0	362.0
			495	13860.0	372.0
			496	12450.0	377.0
			497	11050.0	385.0
			498	10740.0	395.0
			499	10430.0	430.0
			500	10115.0	462.0
			501	9885.0	482.0
			502	9255.0	482.0
			503	9040.0	482.0
			504	9000.0	495.0
			505	8760.0	495.0
			506	8600.0	512.0
Ground Zone94	Pavement	20000	507	20565.0	345.0
			508	21110.0	345.0
			509	21160.0	330.0

			510	23000.0	325.0
			511	24500.0	318.0
			512	26000.0	303.0
			513	27575.0	298.0
			514	27625.0	285.0
			515	28000.0	298.0
			516	28500.0	350.0
			517	30000.0	350.0
			518	31500.0	345.0
			519	33000.0	335.0
			520	34500.0	325.0
			521	36000.0	318.0
			522	37500.0	318.0
			523	38390.0	323.0
			524	38445.0	310.0
			525	40000.0	288.0
			526	41500.0	270.0
			527	43000.0	260.0
			528	44500.0	243.0
			529	46000.0	230.0
			530	47500.0	215.0
			531	48000.0	210.0
			532	48500.0	218.0
			533	49000.0	225.0
			534	49500.0	225.0
			535	50000.0	220.0
			536	51320.0	228.0
			537	51370.0	215.0
			538	53000.0	210.0
			539	54500.0	208.0
			540	56000.0	225.0
			541	57200.0	230.0
			542	57500.0	240.0
			543	57800.0	240.0
			544	57800.0	252.0
			545	57500.0	252.0
			546	57200.0	242.0
			547	56000.0	237.0
			548	54500.0	220.0
			549	53000.0	222.0
			550	51370.0	227.0
			551	51320.0	240.0
			552	50000.0	232.0
			553	49500.0	237.0
			554	49000.0	237.0
			555	48500.0	230.0

			556	48000.0	222.0
			557	47500.0	227.0
			558	46000.0	242.0
			559	44500.0	255.0
			560	43000.0	272.0
			561	41500.0	282.0
			562	40000.0	300.0
			563	38445.0	322.0
			564	38390.0	335.0
			565	37500.0	330.0
			566	36000.0	330.0
			567	34500.0	337.0
			568	33000.0	347.0
			569	31500.0	357.0
			570	30000.0	362.0
			571	28500.0	362.0
			572	28000.0	310.0
			573	27625.0	297.0
			574	27575.0	310.0
			575	26000.0	315.0
			576	24500.0	330.0
			577	23000.0	337.0
			578	21160.0	342.0
			579	21110.0	357.0
			580	20565.0	357.0

RESULTS: SOUND LEVELS

URS
WHA

3 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAp 7822 001 S
RUN: County Line Road - Build Westbound
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.

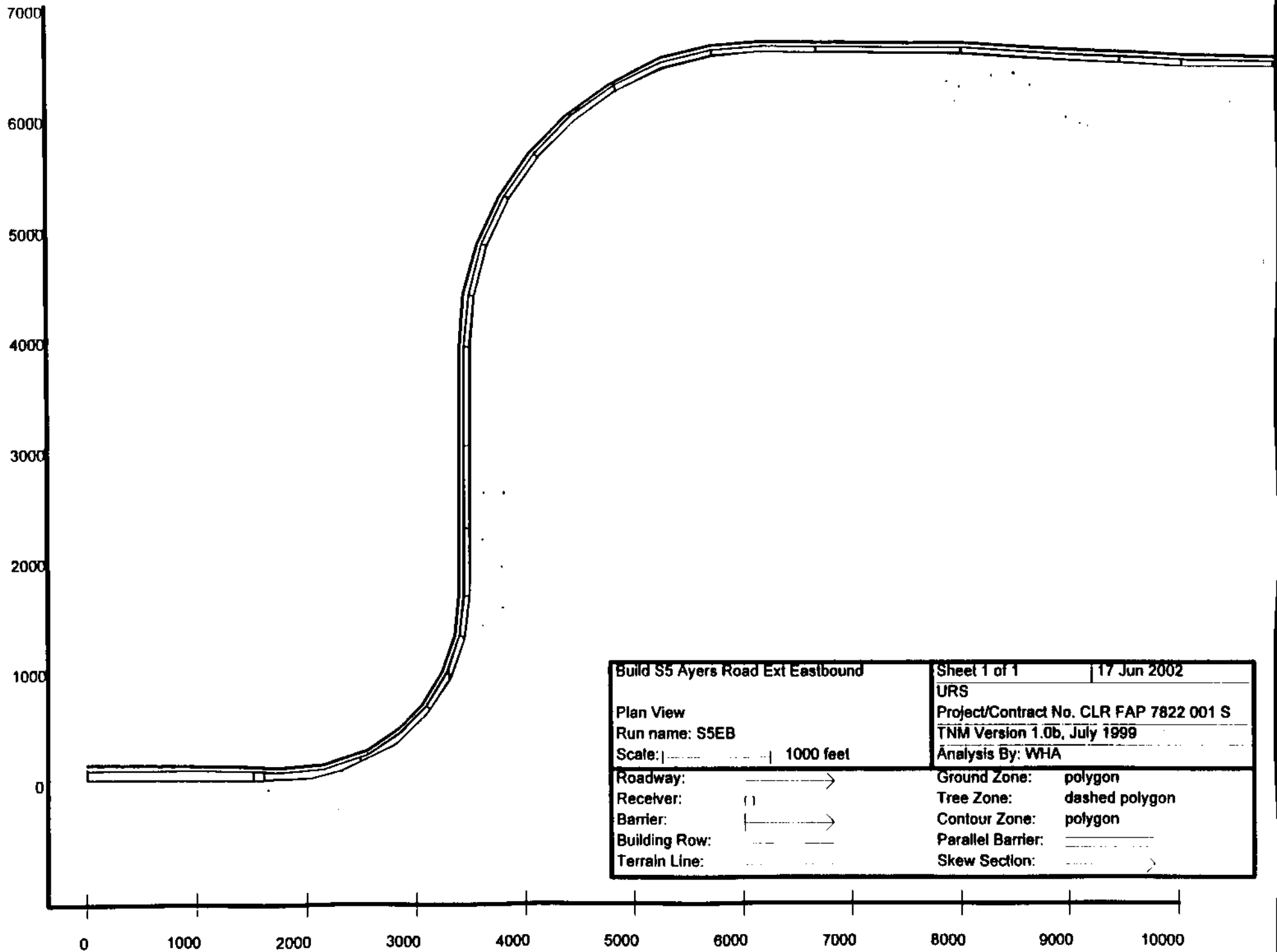
Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
46	52	1	0.0	57.0	66	57.0	10	---	57.0	0.0	8	-8.0
49	57	1	0.0	59.3	66	59.3	10	---	59.3	0.0	8	-8.0
53	61	1	0.0	64.0	66	64.0	10	---	64.0	0.0	8	-8.0
54	62	1	0.0	64.1	66	64.1	10	---	64.1	0.0	8	-8.0
55	63	1	0.0	62.1	66	62.1	10	---	62.1	0.0	8	-8.0
56	68	1	0.0	59.9	66	59.9	10	---	59.9	0.0	8	-8.0
57	69	1	0.0	62.9	66	62.9	10	---	62.9	0.0	8	-8.0
58	70	1	0.0	62.7	66	62.7	10	---	62.7	0.0	8	-8.0
59	71	1	0.0	61.5	66	61.5	10	---	61.5	0.0	8	-8.0
63	76	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0
65	78	1	0.0	56.8	66	56.8	10	---	56.8	0.0	8	-8.0
66	79	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
67	80	1	0.0	61.4	66	61.4	10	---	61.4	0.0	8	-8.0
68	81	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
69	82	1	0.0	63.6	66	63.6	10	---	63.6	0.0	8	-8.0
70	83	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
71	84	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
72	85	1	0.0	62.4	66	62.4	10	---	62.4	0.0	8	-8.0
73	86	1	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0
74	87	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
75	88	1	0.0	63.0	66	63.0	10	---	63.0	0.0	8	-8.0
76	89	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0
77	90	1	0.0	60.7	66	60.7	10	---	60.7	0.0	8	-8.0
78	91	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0

79	92	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
80	93	1	0.0	61.5	66	61.5	10	---	61.5	0.0	8	-8.0
81	95	1	0.0	63.3	66	63.3	10	---	63.3	0.0	8	-8.0
82	96	1	0.0	59.4	66	59.4	10	---	59.4	0.0	8	-8.0
83	98	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
84	99	1	0.0	59.2	66	59.2	10	---	59.2	0.0	8	-8.0
85	100	1	0.0	61.1	66	61.1	10	---	61.1	0.0	8	-8.0
86	101	1	0.0	64.1	66	64.1	10	---	64.1	0.0	8	-8.0
87	102	1	0.0	62.0	66	62.0	10	---	62.0	0.0	8	-8.0
88	103	1	0.0	64.9	66	64.9	10	---	64.9	0.0	8	-8.0
89	104	1	0.0	61.4	66	61.4	10	---	61.4	0.0	8	-8.0
90	106	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
91	107	1	0.0	60.8	66	60.8	10	---	60.8	0.0	8	-8.0
92	108	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
93	109	1	0.0	62.2	66	62.2	10	---	62.2	0.0	8	-8.0
94	110	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
95	111	1	0.0	61.6	66	61.6	10	---	61.6	0.0	8	-8.0
96	113	1	0.0	61.4	66	61.4	10	---	61.4	0.0	8	-8.0
97	114	1	0.0	63.0	66	63.0	10	---	63.0	0.0	8	-8.0
98	115	1	0.0	64.5	66	64.5	10	---	64.5	0.0	8	-8.0
100	118	1	0.0	64.9	66	64.9	10	---	64.9	0.0	8	-8.0
101	119	1	0.0	64.0	66	64.0	10	---	64.0	0.0	8	-8.0
102	121	1	0.0	64.7	66	64.7	10	---	64.7	0.0	8	-8.0
103	122	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
104	123	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
105	124	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
106	125	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
107	126	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
108	127	1	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
109	128	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
110	129	1	0.0	64.9	66	64.9	10	---	64.9	0.0	8	-8.0
111	130	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
112	131	1	0.0	65.7	66	65.7	10	---	65.7	0.0	8	-8.0
113	133	1	0.0	61.1	66	61.1	10	---	61.1	0.0	8	-8.0
114	134	1	0.0	61.9	66	61.9	10	---	61.9	0.0	8	-8.0
115	135	1	0.0	61.1	66	61.1	10	---	61.1	0.0	8	-8.0
116	136	1	0.0	64.0	66	64.0	10	---	64.0	0.0	8	-8.0
117	137	1	0.0	64.5	66	64.5	10	---	64.5	0.0	8	-8.0
118	138	1	0.0	63.8	66	63.8	10	---	63.8	0.0	8	-8.0
119	139	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
120	141	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0

121	142	1	0.0	64.5	66	64.5	10	---	64.5	0.0	8	-8.0
122	143	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
123	144	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
125	146	1	0.0	62.6	66	62.6	10	---	62.6	0.0	8	-8.0
127	149	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0
128	150	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
129	151	1	0.0	61.9	66	61.9	10	---	61.9	0.0	8	-8.0
130	153	1	0.0	65.3	66	65.3	10	---	65.3	0.0	8	-8.0
131	154	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
132	155	1	0.0	63.6	66	63.6	10	---	63.6	0.0	8	-8.0
133	156	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
134	157	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
135	158	1	0.0	65.0	66	65.0	10	---	65.0	0.0	8	-8.0
136	160	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
137	161	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
138	162	1	0.0	62.5	66	62.5	10	---	62.5	0.0	8	-8.0
139	163	1	0.0	63.0	66	63.0	10	---	63.0	0.0	8	-8.0
140	164	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
141	165	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0
142	167	1	0.0	62.5	66	62.5	10	---	62.5	0.0	8	-8.0
143	168	1	0.0	62.6	66	62.6	10	---	62.6	0.0	8	-8.0
144	170	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
145	171	1	0.0	61.7	66	61.7	10	---	61.7	0.0	8	-8.0
146	172	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
147	173	1	0.0	62.9	66	62.9	10	---	62.9	0.0	8	-8.0
148	174	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
149	175	1	0.0	62.2	66	62.2	10	---	62.2	0.0	8	-8.0
150	176	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
151	177	1	0.0	62.6	66	62.6	10	---	62.6	0.0	8	-8.0
152	178	1	0.0	64.4	66	64.4	10	---	64.4	0.0	8	-8.0
153	179	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
154	180	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
155	181	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
156	182	1	0.0	63.9	66	63.9	10	---	63.9	0.0	8	-8.0
157	183	1	0.0	61.8	66	61.8	10	---	61.8	0.0	8	-8.0
158	185	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
159	186	1	0.0	65.5	66	65.5	10	---	65.5	0.0	8	-8.0
160	187	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
161	188	1	0.0	63.0	66	63.0	10	---	63.0	0.0	8	-8.0
162	189	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
163	190	1	0.0	63.7	66	63.7	10	---	63.7	0.0	8	-8.0

164	191	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
165	192	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
166	193	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
167	194	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
168	195	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
170	197	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
171	198	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
173	201	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
174	202	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
176	204	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
177	205	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
179	207	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
180	208	1	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
182	210	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
184	212	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
185	213	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0
186	214	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0
188	216	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
190	218	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
192	220	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
195	224	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
196	225	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
64	227	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	129	0.0	0.0	0.0
All Impacted	49	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0


7000
6000
5000
4000
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2000
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Build S5 Ayers Road Ext Eastbound
Plan View
Run name: S5EB
Scale: 1000 feet
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS
WHA

17 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext Eastbound

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - Suncoast Parkway to Airport Entrance	33.0	sta580	1	0.0	0.0	2.00				Average	
		sta595	5	1507.0	-12.0	2.00				Average	
		sta600	6	2026.0	18.0	2.00				Average	
		sta603	7	2313.0	80.0	2.00				Average	
		sta608	8	2806.0	325.0	2.00				Average	
		sta612+50	9	3093.0	587.0	2.00				Average	
		sta616	10	3310.0	915.0	2.00				Average	
		sta620	11	3446.0	1280.0	2.00				Average	
		sta624	12	3492.0	1661.0	2.00				Average	
		sta646+50	13	3498.0	3926.0	2.00				Average	
		sta651	14	3539.0	4391.0	2.00				Average	
		sta656	19	3661.0	4842.0	2.00				Average	
		sta660	15	3861.0	5265.0	2.00				Average	
		sta665+50	16	4130.0	5645.0	2.00				Average	
		sta670	17	4461.0	5974.0	2.00				Average	
		sta675	18	4845.0	6241.0	2.00				Average	
		sta679+50	2	5271.0	6436.0	2.00					
EB - Airport Entrance to US41	33.0	sta679+50	3	5271.0	6436.0	2.00				Average	
		sta684+50	20	5723.0	6554.0	2.00				Average	
		sta689	21	6187.0	6591.0	2.00				Average	
		sta707+25	22	8018.0	6579.0	2.00				Average	

		sta727+50	23	10026.0	6470.0	2.00				Average	
		sta736	4	10885.0	6464.0	2.00					
WB - US41 to Airport Road	33.0	sta736	24	10885.0	6518.0	2.00				Average	
		sta727+50	28	10105.0	6524.0	2.00				Average	
		sta707+25	29	8020.0	6633.0	2.00				Average	
		sta689	30	6187.0	6646.0	2.00				Average	
		sta684+25	31	5714.0	6607.0	2.00				Average	
		sta679+50	25	5254.0	6487.0	2.00					
WB - Airport Road to Suncoast Parkway	33.0	sta679+50	26	5254.0	6487.0	2.00				Average	
		sta675	32	4819.0	6288.0	2.00				Average	
		sta670	33	4428.0	6016.0	2.00				Average	
		sta665+50	34	4089.4	5681.0	2.00				Average	
		sta660+75	35	3814.0	5292.0	2.00				Average	
		sta656	36	3610.0	4860.0	2.00				Average	
		sta651+20	37	3486.0	4400.0	2.00				Average	
		sta646+50	38	3443.0	3925.0	2.00				Average	
		sta624	39	3438.0	1666.0	2.00				Average	
		sta620+25	40	3398.0	1314.0	2.00				Average	
		sta616+60	41	3282.0	978.0	2.00				Average	
		sta613	42	3095.0	676.0	2.00				Average	
		sta609+50	43	2845.0	422.0	2.00				Average	
		sta605+75	44	2546.0	230.0	2.00				Average	
		sta601+50	45	2149.0	93.0	2.00				Average	
		sta597+20	46	1724.0	65.0	2.00				Average	
		sta595	47	1507.0	75.0	2.00				Average	
		sta590+40	48	1048.0	87.0	2.00				Average	
		sta580	27	0.0	91.0	2.00					

URS
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext Eastbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - Suncoast Parkway to Airport Entrance	sta580	1	1089	50	23	50	34	50	0	0	0	0
	sta595	5	855	50	18	50	27	50	0	0	0	0
	sta600	6	855	50	18	50	27	50	0	0	0	0
	sta603	7	855	50	18	50	27	50	0	0	0	0
	sta608	8	855	50	18	50	27	50	0	0	0	0
	sta612+50	9	855	50	18	50	27	50	0	0	0	0
	sta616	10	855	50	18	50	27	50	0	0	0	0
	sta620	11	855	50	18	50	27	50	0	0	0	0
	sta624	12	855	50	18	50	27	50	0	0	0	0
	sta646+50	13	855	50	18	50	27	50	0	0	0	0
	sta651	14	855	50	18	50	27	50	0	0	0	0
	sta656	19	855	50	18	50	27	50	0	0	0	0
	sta660	15	855	50	18	50	27	50	0	0	0	0
	sta665+50	16	855	50	18	50	27	50	0	0	0	0
	sta670	17	855	50	18	50	27	50	0	0	0	0
	sta675	18	855	50	18	50	27	50	0	0	0	0
	sta679+50	2										
EB - Airport Entrance to US41	sta679+50	3	611	50	13	50	19	50	0	0	0	0
	sta684+50	20	611	50	13	50	19	50	0	0	0	0
	sta689	21	611	50	13	50	19	50	0	0	0	0
	sta707+25	22	611	50	13	50	19	50	0	0	0	0
	sta727+50	23	611	50	13	50	19	50	0	0	0	0

	sta736	4										
WB - US41 to Airport Road	sta736	24	444	50	9	50	14	50	0	0	0	0
	sta727+50	28	444	50	9	50	14	50	0	0	0	0
	sta707+25	29	444	50	9	50	14	50	0	0	0	0
	sta689	30	444	50	9	50	14	50	0	0	0	0
	sta684+25	31	444	50	9	50	14	50	0	0	0	0
	sta679+50	25										
WB - Airport Road to Suncoast Parkway	sta679+50	26	622	50	13	50	20	50	0	0	0	0
	sta675	32	622	50	13	50	20	50	0	0	0	0
	sta670	33	622	50	13	50	20	50	0	0	0	0
	sta665+50	34	622	50	13	50	20	50	0	0	0	0
	sta660+75	35	622	50	13	50	20	50	0	0	0	0
	sta656	36	622	50	13	50	20	50	0	0	0	0
	sta651+20	37	622	50	13	50	20	50	0	0	0	0
	sta646+50	38	622	50	13	50	20	50	0	0	0	0
	sta624	39	622	50	13	50	20	50	0	0	0	0
	sta620+25	40	622	50	13	50	20	50	0	0	0	0
	sta616+60	41	622	50	13	50	20	50	0	0	0	0
	sta613	42	622	50	13	50	20	50	0	0	0	0
	sta609+50	43	622	50	13	50	20	50	0	0	0	0
	sta605+75	44	622	50	13	50	20	50	0	0	0	0
	sta601+50	45	622	50	13	50	20	50	0	0	0	0
	sta597+20	46	622	50	13	50	20	50	0	0	0	0
	sta595	47	622	50	13	50	20	50	0	0	0	0
	sta590+40	48	792	50	17	50	25	50	0	0	0	0
	sta580	27										

URS 17 June 2002
WHA TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext Eastbound

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
1	1	1	1646.0	-93.0	0.00	5.00	0	66	10	8
2	2	1	2277.0	-265.0	0.00	5.00	0	66	10	8
3	3	1	3607.0	1396.0	0.00	5.00	0	66	10	8
4	4	1	3793.0	1558.0	0.00	5.00	0	66	10	8
5	5	1	3788.0	1931.0	0.00	5.00	0	66	10	8
6	6	1	3608.0	2178.0	0.00	5.00	0	66	10	8
7	7	1	3625.0	2603.0	0.00	5.00	0	66	10	8
8	8	1	3804.0	2603.0	0.00	5.00	0	66	10	8
9	9	1	7886.0	6325.0	0.00	5.00	0	66	10	8
10	10	1	8003.0	6276.0	0.00	5.00	0	66	10	8
11	11	1	7964.0	6150.0	0.00	5.00	0	66	10	8
12	12	1	8307.0	6379.0	0.00	5.00	0	66	10	8
13	13	1	8511.0	6403.0	0.00	5.00	0	66	10	8
14	14	1	8662.0	6295.0	0.00	5.00	0	66	10	8
15	15	1	8988.0	6003.0	0.00	5.00	0	66	10	8
16	16	1	9119.0	5945.0	0.00	5.00	0	66	10	8
17	17	1	9192.0	5921.0	0.00	5.00	0	66	10	8

URS 17 June 2002
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INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext Eastbound

Ground Zone			Points		
Name	Type	Flow Resistivity	No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Ground Zone2	Lawn	300	50	0.0	1.0
			51	1507.0	-11.0
			52	1507.0	74.0
			53	1048.0	86.0
			54	0.0	90.0
Ground Zone4	Pavement	20000	56	1508.0	-11.0
			57	1607.4	-4.8
			58	1607.4	68.5
			59	1508.0	74.0
Ground Zone5	Lawn	300	60	1609.7	-3.3
			61	2026.0	19.0
			62	2313.0	81.0
			63	2491.7	171.2
			64	2473.9	202.0
			65	2149.0	92.0
			66	1724.0	64.0
			67	1609.7	67.9
Ground Zone6	Pavement	20000	68	2493.4	172.4
			69	2806.0	326.0
			70	3093.0	588.0
			71	3123.4	636.8
			72	3087.6	664.8
			73	2845.0	421.0
			74	2546.0	229.0
			75	2476.6	202.6
Ground Zone15	Pavement	20000	196	0.0	128.0
			197	1048.0	124.0
			198	1507.0	112.0
			199	1724.0	102.0
			200	2149.0	130.0
			201	2546.0	267.0
			202	2845.0	459.0
			203	3055.0	676.0
			204	3242.0	978.0

			205	3361.0	1314.0
			206	3401.0	1666.0
			207	3406.0	3925.0
			208	3449.0	4400.0
			209	3573.0	4860.0
			210	3777.0	5292.0
			211	4052.0	5681.0
			212	4391.0	6016.0
			213	4782.0	6288.0
			214	5254.0	6524.0
			215	5714.0	6644.0
			216	6187.0	6683.0
			217	8020.0	6670.0
			218	10105.0	6561.0
			219	10885.0	6555.0
			220	10885.0	6567.0
			221	10105.0	6573.0
			222	8020.0	6682.0
			223	6187.0	6695.0
			224	5714.0	6656.0
			225	5254.0	6536.0
			226	4782.0	6300.0
			227	4379.0	6016.0
			228	4040.0	5681.0
			229	3765.0	5292.0
			230	3561.0	4860.0
			231	3437.0	4400.0
			232	3394.0	3925.0
			233	3389.0	1666.0
			234	3346.0	1314.0
			235	3230.0	978.0
			236	3046.0	676.0
			237	2845.0	471.0
			238	2546.0	279.0
			239	2149.0	142.0
			240	1724.0	114.0
			241	1507.0	124.0
			242	1048.0	136.0
			243	0.0	140.0
Ground Zone16	Lawn	300	244	3123.9	643.5
			245	3304.0	916.5
			246	3287.1	978.4
			247	3095.7	666.1
Ground Zone17	Lawn	300	248	3309.6	925.0
			249	3439.1	1279.6
			250	3399.7	1307.7

			251	3289.9	986.9
Ground Zone18	Lawn	300	252	3439.1	1285.2
			253	3486.9	1662.3
			254	3444.7	1665.1
			255	3402.5	1310.5
Ground Zone19	Lawn	300	256	3486.9	1665.1
			257	3486.9	2278.6
			258	3444.7	2281.5
			259	3444.7	1667.9
Ground Zone20	Pavement	20000	260	3487.5	2282.3
			261	3491.5	3029.4
			262	3445.8	3029.4
			263	3443.8	2286.3
Ground Zone21	Lawn	300	264	3487.5	3034.4
			265	3491.1	3934.4
			266	3447.9	3934.4
			267	3447.9	3038.0
Ground Zone22	Lawn	300	268	3495.0	3936.2
			269	3536.1	4393.4
			270	3489.7	4401.9
			271	3447.4	3937.3
Ground Zone23	Lawn	300	272	3536.9	4395.8
			273	3659.4	4847.7
			274	3614.0	4862.5
			275	3490.5	4405.3
Ground Zone24	Lawn	300	276	3661.3	4850.4
			277	3858.7	5269.7
			278	3819.6	5293.9
			279	3614.8	4865.2
Ground Zone25	Lawn	300	280	3861.3	5272.0
			281	4127.4	5646.8
			282	4091.5	5680.6
			283	3820.2	5297.3
Ground Zone26	Lawn	300	284	4129.8	5647.7
			285	4457.1	5975.0
			286	4840.4	6242.2
			287	4821.4	6285.5
			288	4430.7	6015.2
			289	4092.8	5681.5
Ground Zone27	Lawn	300	290	4842.5	6243.5
			291	5267.0	6438.8
			292	5720.0	6557.1
			293	5715.8	6604.6
			294	5258.6	6486.3
			295	4823.5	6286.8
Ground Zone28	Lawn	300	296	5722.6	6555.8

			297	6185.1	6592.8
			298	6676.1	6590.7
			299	6671.9	6640.3
			300	6188.3	6643.5
			301	5719.4	6604.4
Ground Zone29	Lawn	300	302	6678.8	6591.2
			303	8012.5	6580.1
			304	8018.8	6629.2
			305	6675.7	6638.7
Ground Zone30	Lawn	300	306	8016.4	6581.7
			307	9478.3	6502.5
			308	9479.9	6553.2
			309	8022.7	6627.6
Ground Zone31	Lawn	300	310	9482.2	6502.5
			311	10036.6	6472.4
			312	10041.3	6524.7
			313	9482.2	6553.2
Ground Zone32	Pavement	20000	314	10039.4	6472.4
			315	10882.0	6469.2
			316	10882.0	6515.2
			317	10105.9	6519.9
			318	10045.7	6523.1

URS
WHA

17 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS

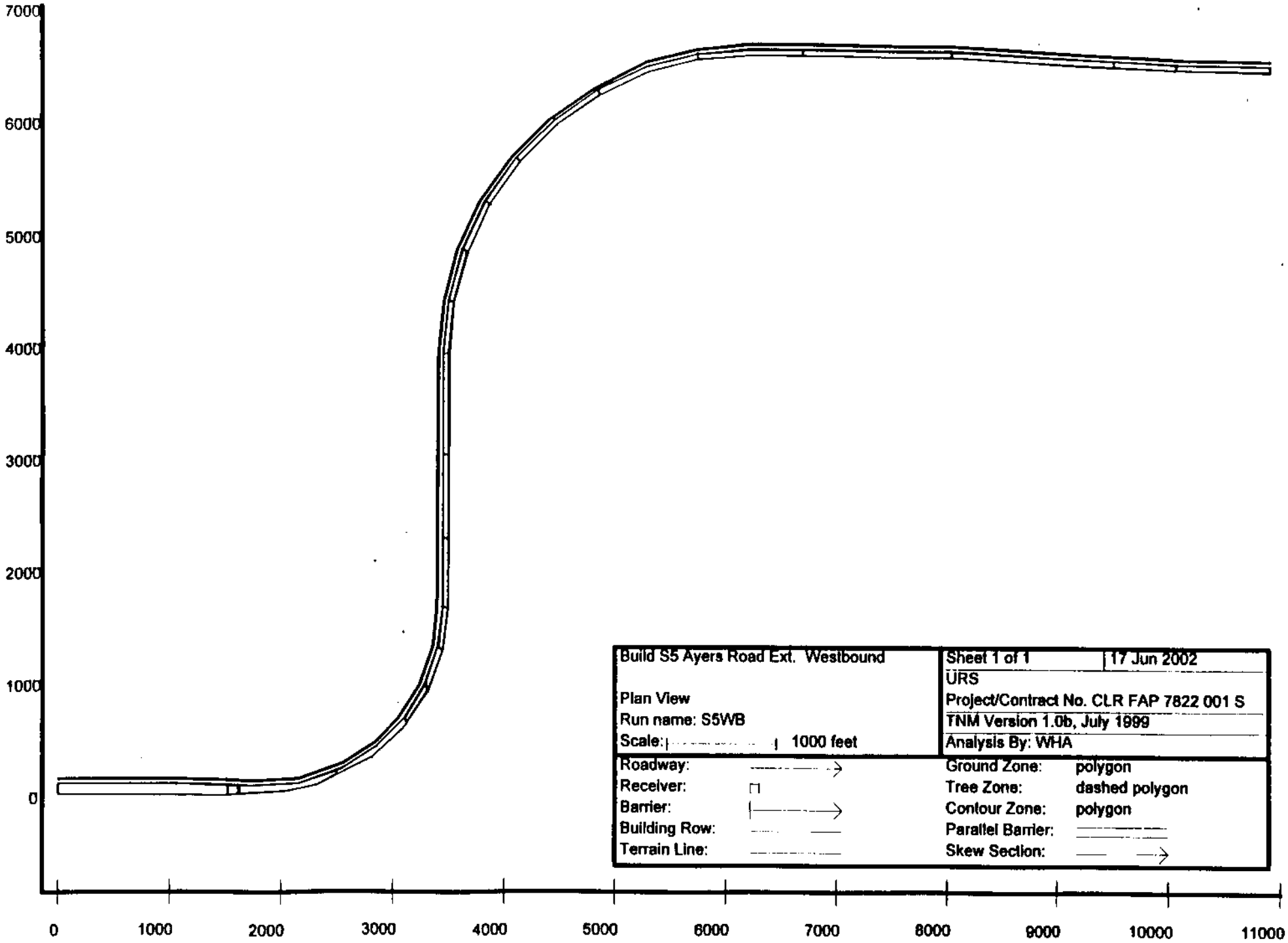
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext Eastbound
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1	1	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0
2	2	1	0.0	56.4	66	56.4	10	—	56.4	0.0	8	-8.0
3	3	1	0.0	63.1	66	63.1	10	—	63.1	0.0	8	-8.0
4	4	1	0.0	56.8	66	56.8	10	—	56.8	0.0	8	-8.0
5	5	1	0.0	57.5	66	57.5	10	—	57.5	0.0	8	-8.0
6	6	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
7	7	1	0.0	64.2	66	64.2	10	—	64.2	0.0	8	-8.0
8	8	1	0.0	58.1	66	58.1	10	—	58.1	0.0	8	-8.0
9	9	1	0.0	56.4	66	56.4	10	—	56.4	0.0	8	-8.0
10	10	1	0.0	55.1	66	55.1	10	—	55.1	0.0	8	-8.0
11	11	1	0.0	52.2	66	52.2	10	—	52.2	0.0	8	-8.0
12	12	1	0.0	58.8	66	58.8	10	—	58.8	0.0	8	-8.0
13	13	1	0.0	60.4	66	60.4	10	—	60.4	0.0	8	-8.0
14	14	1	0.0	56.5	66	56.5	10	—	56.5	0.0	8	-8.0
15	15	1	0.0	50.3	66	50.3	10	—	50.3	0.0	8	-8.0
16	16	1	0.0	49.5	66	49.5	10	—	49.5	0.0	8	-8.0
17	17	1	0.0	49.2	66	49.2	10	—	49.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	17	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0

All that meet NR Goal	0	0.0	0.0	0.0


7000
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11000
Build S5 Ayers Road Ext. Westbound
Plan View
Run name: S5WB
Scale: 1000 feet
Sheet 1 of 1
17 Jun 2002
URS
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS

WHA

17 June 2002

TNM 1.0b

INPUT: ROADWAYS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: Build S5 Ayers Road Ext. Westbound

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB - Suncoast Parkway to Airport Entrance	33.0	sta580	1	0.0	0.0	2.00				Average	
		sta595	5	1507.0	-12.0	2.00				Average	
		sta600	6	2026.0	18.0	2.00				Average	
		sta603	7	2313.0	80.0	2.00				Average	
		sta608	8	2806.0	325.0	2.00				Average	
		sta612+50	9	3093.0	587.0	2.00				Average	
		sta616	10	3310.0	915.0	2.00				Average	
		sta620	11	3446.0	1280.0	2.00				Average	
		sta624	12	3492.0	1661.0	2.00				Average	
		sta646+50	13	3498.0	3926.0	2.00				Average	
		sta651	14	3539.0	4391.0	2.00				Average	
		sta656	19	3661.0	4842.0	2.00				Average	
		sta660	15	3861.0	5265.0	2.00				Average	
		sta665+50	16	4130.0	5645.0	2.00				Average	
		sta670	17	4461.0	5974.0	2.00				Average	
		sta675	18	4845.0	6241.0	2.00				Average	
		sta679+50	2	5271.0	6436.0	2.00					
EB - Airport Entrance to US41	33.0	sta679+50	3	5271.0	6436.0	2.00				Average	
		sta684+50	20	5723.0	6554.0	2.00				Average	
		sta689	21	6187.0	6591.0	2.00				Average	
		sta707+25	22	8018.0	6579.0	2.00				Average	

		sta727+50	23	10026.0	6470.0	2.00				Average	
		sta736	4	10885.0	6464.0	2.00					
WB - US41 to Airport Road	33.0	sta736	24	10885.0	6518.0	2.00				Average	
		sta727+50	28	10105.0	6524.0	2.00				Average	
		sta707+25	29	8020.0	6633.0	2.00				Average	
		sta689	30	6187.0	6646.0	2.00				Average	
		sta684+25	31	5714.0	6607.0	2.00				Average	
		sta679+50	25	5254.0	6487.0	2.00					
WB - Airport Road to Suncoast Parkway	33.0	sta679+50	26	5254.0	6487.0	2.00				Average	
		sta675	32	4819.0	6288.0	2.00				Average	
		sta670	33	4428.0	6016.0	2.00				Average	
		sta665+50	34	4089.4	5681.0	2.00				Average	
		sta660+75	35	3814.0	5292.0	2.00				Average	
		sta656	36	3610.0	4860.0	2.00				Average	
		sta651+20	37	3486.0	4400.0	2.00				Average	
		sta646+50	38	3443.0	3925.0	2.00				Average	
		sta624	39	3438.0	1666.0	2.00				Average	
		sta620+25	40	3398.0	1314.0	2.00				Average	
		sta616+60	41	3282.0	976.0	2.00				Average	
		sta613	42	3095.0	676.0	2.00				Average	
		sta609+50	43	2845.0	422.0	2.00				Average	
		sta605+75	44	2546.0	230.0	2.00				Average	
		sta601+50	45	2149.0	93.0	2.00				Average	
		sta597+20	46	1724.0	65.0	2.00				Average	
		sta595	47	1507.0	75.0	2.00				Average	
		sta590+40	48	1048.0	87.0	2.00				Average	
		sta580	27	0.0	91.0	2.00					

URS
WHA

17 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext. Westbound

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB - Suncoast Parkway to Airport Entrance	sta580	1	792	50	17	50	25	50	0	0	0	0
	sta595	5	622	50	13	50	20	50	0	0	0	0
	sta600	6	622	50	13	50	20	50	0	0	0	0
	sta603	7	622	50	13	50	20	50	0	0	0	0
	sta608	8	622	50	13	50	20	50	0	0	0	0
	sta612+50	9	622	50	13	50	20	50	0	0	0	0
	sta616	10	622	50	13	50	20	50	0	0	0	0
	sta620	11	622	50	13	50	20	50	0	0	0	0
	sta624	12	622	50	13	50	20	50	0	0	0	0
	sta646+50	13	622	50	13	50	20	50	0	0	0	0
	sta651	14	622	50	13	50	20	50	0	0	0	0
	sta656	19	622	50	13	50	20	50	0	0	0	0
	sta660	15	622	50	13	50	20	50	0	0	0	0
	sta665+50	16	622	50	13	50	20	50	0	0	0	0
	sta670	17	622	50	13	50	20	50	0	0	0	0
	sta675	18	622	50	13	50	20	50	0	0	0	0
	sta679+50	2										
EB - Airport Entrance to US41	sta679+50	3	444	50	9	50	14	50	0	0	0	0
	sta684+50	20	444	50	9	50	14	50	0	0	0	0
	sta689	21	444	50	9	50	14	50	0	0	0	0
	sta707+25	22	444	50	9	50	14	50	0	0	0	0
	sta727+50	23	444	50	9	50	14	50	0	0	0	0

	sta736	4										
WB - US41 to Airport Road	sta736	24	611	50	13	50	19	50	0	0	0	0
	sta727+50	28	611	50	13	50	19	50	0	0	0	0
	sta707+25	29	611	50	13	50	19	50	0	0	0	0
	sta689	30	611	50	13	50	19	50	0	0	0	0
	sta684+25	31	611	50	13	50	19	50	0	0	0	0
	sta679+50	25										
WB - Airport Road to Suncoast Parkway	sta679+50	26	855	50	18	50	27	50	0	0	0	0
	sta675	32	855	50	18	50	27	50	0	0	0	0
	sta670	33	855	50	18	50	27	50	0	0	0	0
	sta665+50	34	855	50	18	50	27	50	0	0	0	0
	sta660+75	35	855	50	18	50	27	50	0	0	0	0
	sta656	36	855	50	18	50	27	50	0	0	0	0
	sta651+20	37	855	50	18	50	27	50	0	0	0	0
	sta646+50	38	855	50	18	50	27	50	0	0	0	0
	sta624	39	855	50	18	50	27	50	0	0	0	0
	sta620+25	40	855	50	18	50	27	50	0	0	0	0
	sta616+60	41	855	50	18	50	27	50	0	0	0	0
	sta613	42	855	50	18	50	27	50	0	0	0	0
	sta609+50	43	855	50	18	50	27	50	0	0	0	0
	sta605+75	44	855	50	18	50	27	50	0	0	0	0
	sta601+50	45	855	50	18	50	27	50	0	0	0	0
	sta597+20	46	855	50	18	50	27	50	0	0	0	0
	sta595	47	855	50	18	50	27	50	0	0	0	0
	sta590+40	48	1089	50	23	50	34	50	0	0	0	0
	sta580	27										

URS 17 June 2002
WHA TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext. Westbound

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
18	1	1	10236.0	7034.0	0.00	5.00	0	66	10	8
19	3	1	8813.0	6706.0	0.00	5.00	0	66	10	8
20	4	1	3110.0	2331.0	0.00	5.00	0	66	10	8
21	5	1	2630.0	2079.0	0.00	5.00	0	66	10	8
22	6	1	3086.0	1444.0	0.00	5.00	0	66	10	8
23	7	1	3040.0	813.0	0.00	5.00	0	66	10	8
24	8	1	740.0	319.0	0.00	5.00	0	66	10	8

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INPUT: GROUND ZONES
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext. Westbound

Ground Zone			Points		
Name	Type	Flow Resistivity	No.	Coordinates X	Y
		cgs rayls		ft	ft
Default Ground Zone	Lawn	300			
Bike Path	Pavement	20000	1	0.0	128.0
			2	1048.0	124.0
			3	1507.0	112.0
			4	1724.0	102.0
			5	2149.0	130.0
			6	2546.0	267.0
			7	2845.0	459.0
			8	3055.0	676.0
			9	3242.0	978.0
			10	3361.0	1314.0
			11	3401.0	1666.0
			12	3406.0	3925.0
			13	3449.0	4400.0
			14	3573.0	4860.0
			15	3777.0	5292.0
			16	4052.0	5681.0
			17	4391.0	6016.0
			18	4782.0	6288.0
			19	5254.0	6524.0
			20	5714.0	6644.0
			21	6187.0	6683.0
			22	8020.0	6670.0
			23	10105.0	6561.0
			24	10885.0	6555.0
			25	10885.0	6567.0
			26	10105.0	6573.0
			27	8020.0	6682.0
			28	6187.0	6695.0
			29	5714.0	6656.0
			30	5254.0	6536.0
			31	4782.0	6300.0
			32	4379.0	6016.0
			33	4040.0	5681.0
			34	3765.0	5292.0

			35	3561.0	4860.0
			36	3437.0	4400.0
			37	3394.0	3925.0
			38	3389.0	1666.0
			39	3346.0	1314.0
			40	3230.0	978.0
			41	3046.0	676.0
			42	2845.0	471.0
			43	2546.0	279.0
			44	2149.0	142.0
			45	1724.0	114.0
			46	1507.0	124.0
			47	1048.0	136.0
			48	0.0	140.0
Ground Zone2	Lawn	300	49	0.0	1.0
			50	1507.0	-11.0
			51	1507.0	74.0
			52	1048.0	86.0
			53	0.0	90.0
Ground Zone3	Pavement	20000	54	1508.0	-11.0
			55	1607.4	-4.8
			56	1607.4	68.5
			57	1508.0	74.0
Ground Zone4	Lawn	300	58	1609.7	-3.3
			59	2026.0	19.0
			60	2313.0	81.0
			61	2491.7	171.2
			62	2473.9	202.0
			63	2149.0	92.0
			64	1724.0	64.0
			65	1609.7	67.9
Ground Zone5	Pavement	20000	66	2493.4	172.4
			67	2806.0	326.0
			68	3093.0	588.0
			69	3123.4	636.8
			70	3087.6	664.8
			71	2845.0	421.0
			72	2546.0	229.0
			73	2476.6	202.6
Ground Zone12	Lawn	300	113	3123.9	643.5
			114	3304.0	916.5
			115	3287.1	978.4
			116	3095.7	666.1
Ground Zone13	Lawn	300	117	3309.6	925.0
			118	3439.1	1279.6
			119	3399.7	1307.7

			120	3289.9	986.9
Ground Zone14	Lawn	300	121	3439.1	1285.2
			122	3486.9	1662.3
			123	3444.7	1665.1
			124	3402.5	1310.5
Ground Zone15	Lawn	300	125	3486.9	1665.1
			126	3486.9	2278.6
			127	3444.7	2281.5
			128	3444.7	1667.9
Ground Zone16	Pavement	20000	129	3487.5	2282.3
			130	3491.5	3029.4
			131	3445.8	3029.4
			132	3443.8	2286.3
Ground Zone17	Lawn	300	133	3487.5	3034.4
			134	3491.1	3934.4
			135	3447.9	3934.4
			136	3447.9	3038.0
Ground Zone18	Lawn	300	137	3495.0	3936.2
			138	3536.1	4393.4
			139	3489.7	4401.9
			140	3447.4	3937.3
Ground Zone19	Lawn	300	141	3536.9	4395.8
			142	3659.4	4847.7
			143	3614.0	4862.5
			144	3490.5	4405.3
Ground Zone21	Lawn	300	146	3661.3	4850.4
			147	3858.7	5269.7
			148	3819.6	5293.9
			149	3614.8	4865.2
Ground Zone22	Lawn	300	150	3861.3	5272.0
			151	4127.4	5646.8
			152	4091.5	5680.6
			153	3820.2	5297.3
Ground Zone24	Lawn	300	154	4129.8	5647.7
			155	4457.1	5975.0
			156	4840.4	6242.2
			157	4821.4	6285.5
			158	4430.7	6015.2
			159	4092.8	5681.5
Ground Zone25	Lawn	300	160	4842.5	6243.5
			161	5267.0	6438.8
			162	5720.0	6557.1
			163	5715.8	6604.6
			164	5258.6	6486.3
			165	4823.5	6286.8
Ground Zone26	Lawn	300	166	5722.6	6555.8

			167	6185.1	6592.8
			168	6676.1	6590.7
			169	6671.9	6640.3
			170	6188.3	6643.5
			171	5719.4	6604.4
Ground Zone28	Lawn	300	172	6678.8	6591.2
			173	8012.5	6580.1
			174	8018.8	6629.2
			175	6675.7	6638.7
Ground Zone29	Lawn	300	176	8016.4	6581.7
			177	9478.3	6502.5
			178	9479.9	6553.2
			179	8022.7	6627.6
Ground Zone30	Lawn	300	180	9482.2	6502.5
			181	10036.6	6472.4
			182	10041.3	6524.7
			183	9482.2	6553.2
Ground Zone31	Pavement	20000	184	10039.4	6472.4
			185	10882.0	6469.2
			186	10882.0	6515.2
			187	10105.9	6519.9
			188	10045.7	6523.1

URS
WHA

3 September 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Build S5 Ayers Road Ext. Westbound
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
18	1	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
19	3	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
20	4	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
21	5	1	0.0	53.9	66	53.9	10	----	53.9	0.0	8	-8.0
22	6	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
23	7	1	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
24	8	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	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

APPENDIX C
TNM RESULTS – NOISE BARRIERS

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	62.7	3.0	8	-5.0
66R	230	1	0.0	65.7	66	65.7	10	---	62.7	3.0	8	-5.0

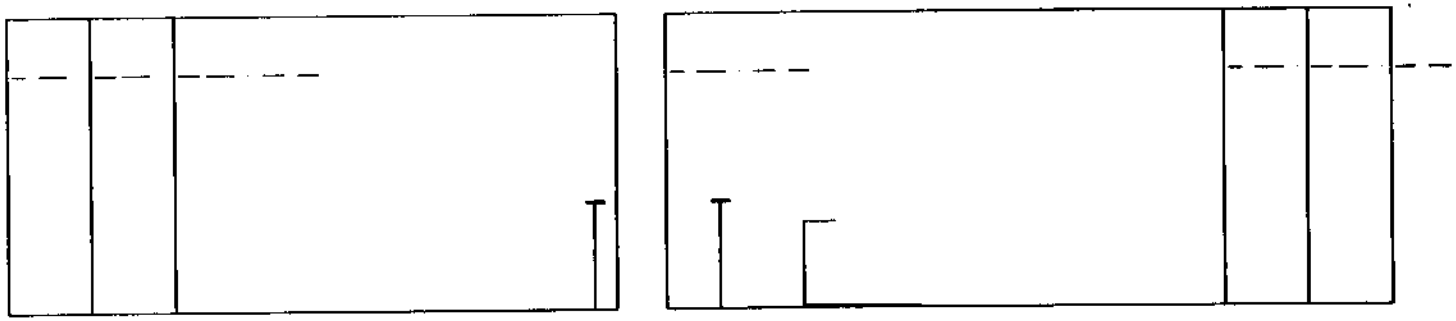
Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	3.0	3.0	3.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	10.00	10.00	10.00	173	1730				0
N1A	W	10.00	10.00	10.00	145	1450				36300
									Total Cost	36300



County Line Road - Build/WB BarrierN1	Sheet 1 of 1 | 10 Jul 2002
	URS
Barrier View-N1	Project/Contract No. CLR FAP 7822 001 S
Run name: N01	TNM Version 1.0b, July 1999
Scale: <DNA - due to perspective>	Analysis By: WHA
Roadway:	Ground Zone: polygon
Receiver:	Tree Zone: dashed polygon
Barrier:	Contour Zone: polygon
Building Row:	Parallel Barrier:
Terrain Line:	Skew Section:

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	8.00	8.00	8.00	173	1384				0
N1A	W	8.00	8.00	8.00	145	1160				29000
									Total Cost	29000

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	22.00	22.00	22.00	148	3256				0
S2A	W	22.00	22.00	22.00	120	2640				66000
S2B	W	22.00	22.00	22.00	133	2926				0
									Total Cost	66000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	—	56.7	6.9	8	-1.1
44L	57	1	0.0	63.6	66	63.6	10	—	56.7	6.9	8	-1.1
43B	46	1	0.0	61.6	66	61.6	10	—	55.7	5.9	8	-2.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	5.9	6.6	6.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	20.00	20.00	20.00	148	2960				0
S2A	W	20.00	20.00	20.00	120	2400				60000
S2B	W	20.00	20.00	20.00	133	2660				0
									Total Cost	60000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	----	56.9	6.7	8	-1.3
44L	57	1	0.0	63.6	66	63.6	10	----	56.9	6.7	8	-1.3
43B	46	1	0.0	61.6	66	61.6	10	----	55.8	5.8	8	-2.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	5.8	6.4	6.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	18.00	18.00	18.00	148	2664				0
S2A	W	18.00	18.00	18.00	120	2160				54000
S2B	W	18.00	18.00	18.00	133	2394				0
									Total Cost	54000

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	—	57.1	6.5	8	-1.5
44L	57	1	0.0	63.6	66	63.6	10	—	57.1	6.5	8	-1.5
43B	46	1	0.0	61.6	66	61.6	10	—	56.0	5.6	8	-2.4

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	3	5.6	6.2	6.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	16.00	16.00	16.00	148	2368				0
S2A	W	16.00	16.00	16.00	120	1920				48000
S2B	W	16.00	16.00	16.00	133	2128				0
									Total Cost	48000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	---	57.4	6.2	8	-1.8
44L	57	1	0.0	63.6	66	63.6	10	---	57.4	6.2	8	-1.8
43B	46	1	0.0	61.6	66	61.6	10	---	56.3	5.3	8	-2.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	3	5.3	5.9	6.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	14.00	14.00	14.00	148	2072				0
S2A	W	14.00	14.00	14.00	120	1680				42000
S2B	W	14.00	14.00	14.00	133	1862				0
									Total Cost	42000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	----	57.7	5.9	8	-2.1
44L	57	1	0.0	63.6	66	63.6	10	----	57.6	6.0	8	-2.0
43B	46	1	0.0	61.6	66	61.6	10	----	56.5	5.1	8	-2.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	5.1	5.7	6.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	12.00	12.00	12.00	148	1776				0
S2A	W	12.00	12.00	12.00	120	1440				36000
S2B	W	12.00	12.00	12.00	133	1596				0
									Total Cost	36000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	----	58.1	5.5	8	-2.5
44L	57	1	0.0	63.6	66	63.6	10	----	58.1	5.5	8	-2.5
43B	46	1	0.0	61.6	66	61.6	10	----	57.0	4.6	8	-3.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	4.6	5.2	5.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS **10 July 2002**
WHA **TNM 1.0b**

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: **CLR FAP 7822 001 S**
RUN: **County Line Road - Build/EB BarrierS2**
BARRIER DESIGN: **S2**

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	10.00	10.00	10.00	148	1480				0
S2A	W	10.00	10.00	10.00	120	1200				30000
S2B	W	10.00	10.00	10.00	133	1330				0
									Total Cost	30000

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	----	58.9	4.7	8	-3.3
44L	57	1	0.0	63.6	66	63.6	10	----	58.8	4.8	8	-3.2
43B	46	1	0.0	61.6	66	61.6	10	----	57.7	3.9	8	-4.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	3.9	4.5	4.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S2C	W	8.00	8.00	8.00	148	1184				0
S2A	W	8.00	8.00	8.00	120	960				24000
S2B	W	8.00	8.00	8.00	133	1064				0
									Total Cost	24000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS2
BARRIER DESIGN: S2

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
44R	56	1	0.0	63.6	66	63.6	10	----	59.9	3.7	8	-4.3
44L	57	1	0.0	63.6	66	63.6	10	----	59.9	3.7	8	-4.3
43B	46	1	0.0	61.6	66	61.6	10	----	58.8	2.8	8	-5.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	2.8	3.4	3.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 9 July 2002
WHA TNM 1.0b

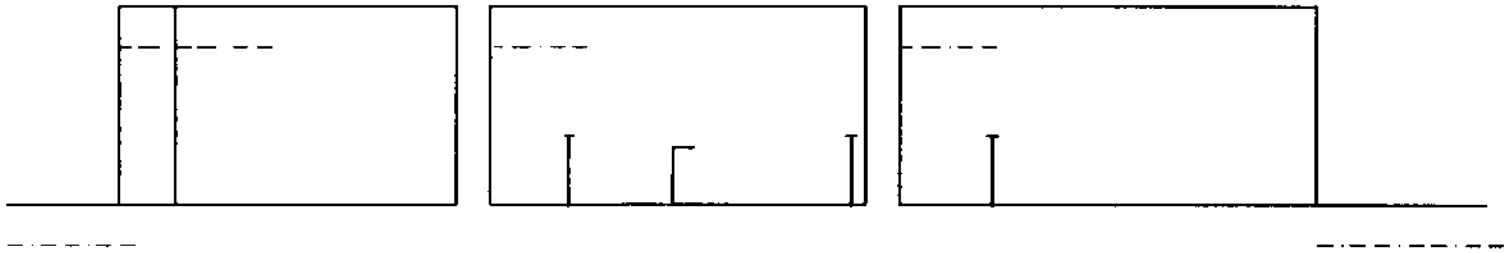
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	---	60.4	4.6	8	-3.4
37L	57	1	0.0	65.1	66	65.1	10	---	61.9	3.2	8	-4.8
36B	39	1	0.0	63.5	66	63.5	10	---	59.9	3.6	8	-4.4

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	3	3.2	3.8	4.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/EB BarrierS2	Sheet 1 of 1 | 10 Jul 2002
	URS
Barrier View-S2	Project/Contract No. CLR FAP 7822 001 S
Run name: S2	TNM Version 1.0b, July 1999
Scale: <DNA - due to perspective>	Analysis By: WHA

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS
WHA

9 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	----	60.5	4.5	8	-3.5
37L	57	1	0.0	65.1	66	65.1	10	----	61.9	3.2	8	-4.8
36B	39	1	0.0	63.5	66	63.5	10	----	59.9	3.6	8	-4.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	3.2	3.8	4.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 9 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	22.00	22.00	22.00	185	4070				0
S1A	W	22.00	22.00	22.00	125	2750				68800
									Total Cost	68800

URS 9 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	---	60.6	4.4	8	-3.6
37L	57	1	0.0	65.1	66	65.1	10	---	62.0	3.1	8	-4.9
36B	39	1	0.0	63.5	66	63.5	10	---	60.0	3.5	8	-4.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	3.1	3.7	4.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/EB BarrierS1

BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	20.00	20.00	20.00	185	3700				0
S1A	W	20.00	20.00	20.00	125	2500				62500
									Total Cost	62500

URS
WHA

9 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	----	60.7	4.3	8	-3.7
37L	57	1	0.0	65.1	66	65.1	10	----	62.1	3.0	8	-5.0
36B	39	1	0.0	63.5	66	63.5	10	----	60.1	3.4	8	-4.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	3	3.0	3.6	4.3
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	18.00	18.00	18.00	185	3330				0
S1A	W	18.00	18.00	18.00	125	2250				56300
									Total Cost	56300

URS 9 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	---	60.8	4.2	8	-3.8
37L	57	1	0.0	65.1	66	65.1	10	---	62.2	2.9	8	-5.1
36B	39	1	0.0	63.5	66	63.5	10	---	60.2	3.3	8	-4.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	2.9	3.5	4.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

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TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/EB BarrierS1

BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	16.00	16.00	16.00	185	2960				0
S1A	W	16.00	16.00	16.00	125	2000				50000
									Total Cost	50000

URS
WHA

9 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	—	61.0	4.0	8	-4.0
37L	57	1	0.0	65.1	66	65.1	10	—	62.3	2.8	8	-5.2
36B	39	1	0.0	63.5	66	63.5	10	---	60.4	3.1	8	-4.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	3	2.8	3.3	4.0
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	14.00	14.00	14.00	185	2590				0
S1A	W	14.00	14.00	14.00	125	1750				43800
									Total Cost	43800

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	---	61.4	3.6	8	-4.4
37L	57	1	0.0	65.1	66	65.1	10	---	62.5	2.6	8	-5.4
36B	39	1	0.0	63.5	66	63.5	10	---	60.6	2.9	8	-5.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	3	2.6	3.0	3.6
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	12.00	12.00	12.00	185	2220				0
S1A	W	12.00	12.00	12.00	125	1500				37500
									Total Cost	37500

URS
WHA

9 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
37R	56	1	0.0	65.0	66	65.0	10	---	62.0	3.0	8	-5.0
37L	57	1	0.0	65.1	66	65.1	10	---	62.9	2.2	8	-5.8
36B	39	1	0.0	63.5	66	63.5	10	---	61.1	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	3	2.2	2.5	3.0
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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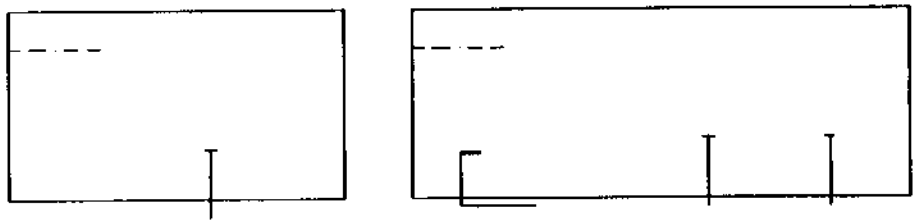
RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	10.00	10.00	10.00	185	1850				0
S1A	W	10.00	10.00	10.00	125	1250				31300
									Total Cost	31300



County Line Road - Build/EB BarrierS1		Sheet 1 of 1	9 Jul 2002
		URS	
Barrier View-S1		Project/Contract No. CLR FAP 7822 001 S	
Run name: S1		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:	[ ]	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/EB BarrierS1
BARRIER DESIGN: S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S1B	W	8.00	8.00	8.00	185	1480				0
S1A	W	8.00	8.00	8.00	125	1000				25000
									Total Cost	25000

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S8N2
Receiver 24
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	363
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
24R	-	63.9	60.9	3.0	60	3.9	59.2	4.7	58.7	5.2	58.5	5.4	58.3	5.6	58.2	5.7	58.2	5.7
24L	-	63.4	61.3	2.1	60.8	2.6	60.4	3.0	60.1	3.3	60	3.4	59.9	3.5	59.8	3.6	59.8	3.6
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		$145,200		$163,350		$181,500		$199,650
Barrier Cost - Materials and Labor				$72,600		$90,750		$108,900		$127,050		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S8N3
Receiver 28
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	409
Cost/sq ft	$25

REC	REC ID	Build (Leq(1)h	TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
			Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
28R	-	65.4	60.2	5.2	59	6.4	58.3	7.1	57.8	7.6	57.5	7.9	57.2	8.2	57	8.4	56.7	8.7
28L	-	65.2	60.2	5.0	59.2	6.0	58.6	6.6	58.1	7.1	57.8	7.4	57.6	7.6	57.4	7.8	57.2	8.0
Number of Benefited Sites		IL 5-5.9		1		0		0		0		0		0		0		0
		IL 6-6.9		0		1		1		0		0		0		0		0
		IL 7-7.9		0		0		0		1		1		1		1		1
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		1		1		1		1		1		1		1		1
Average IL of Benefited				5		6.0		6.6		7.1		7.4		7.6		7.8		8.0
Barrier Cost - Materials and Labor				$81,800		$102,250		$122,700		$143,150		$163,600		$184,050		$204,500		$224,950
Cost/Benefited Site				$81,800		$102,250		$122,700		$143,150		$163,600		$184,050		$204,500		$224,950
				Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S8S1
Receiver 1
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	475
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
1R	-	62 5	59 8	2.7	58.8	3 7	58 1	4.4	57.5	5.0	57.2	5.3	57	5.5	56.8	5.7	56.6	5 9
1L	-	62 5	59 3	3.2	58 2	4 3	57 2	5.3	56.5	6.0	56	6.5	55.7	6.8	55.5	7.0	55.2	7.3
Number of Benefited Sites	IL 5-5.9			0		0		0		1		1		1		1		1
	IL 6-6.9			0		0		0		0		0		0		0		0
	IL 7-7.9			0		0		0		0		0		0		0		0
	IL 8-8.9			0		0		0		0		0		0		0		0
	IL 9-9.9			0		0		0		0		0		0		0		0
	IL 10 or >			0		0		0		0		0		0		0		0
	Total			0		0		0		1		1		1		1		1
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		5.0		5.3		5.5		5.7		5.9
Barrier Cost - Materials and Labor				$95,000		$118,750		$142,500		$166,250		$190,000		$213,750		$237,500		$261,250
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		$166,250		$190,000		$213,750		$237,500		$261,250
				#DIV/0!		#DIV/0!		#DIV/0!		Cost		Cost		Cost		Cost		Cost
				#DIV/0!		#DIV/0!		#DIV/0!		Exceeds		Exceeds		Exceeds		Exceeds		Exceeds
				#DIV/0!		#DIV/0!		#DIV/0!		Guideline		Guideline		Guideline		Guideline		Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S8N1
Receiver 17
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	616
Cost/sq ft	$25

REC	REC ID	Build (Leq(1)h	TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
			Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
17R	-	65 0	59 7	5 3	58	7.0	56 8	6.2	56	9.0	55.4	9.6	54.9	10.1	54.5	10.5	54.1	10.9
17L	-	62 3	59 4	2 9	58.1	4.2	57.2	5.1	56.6	5.7	56.2	6.1	55.9	6.4	55.6	6.7	55.4	6.9
Number of Benefited Sites		IL 5-5 9		0		0		1		1		0		0		0		0
		IL 6-6 9		0		0		0		0		1		1		1		1
		IL 7-7 9		0		0		0		0		0		0		0		0
		IL 8-8 9		0		0		0		0		0		0		0		0
		IL 9-9 9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		1		1		1		1		1		1
Average IL of Benefited				#DIV/0!		#DIV/0!		5.1		5.7		6.1		6.4		6.7		6.9
Barrier Cost - Materials and Labor				$123,200		$154,000		$164,800		$215,600		$246,400		$277,200		$308,000		$338,800
Cost/Benefited Site				#DIV/0!		#DIV/0!		$164,800		$215,600		$246,400		$277,200		$308,000		$338,800
				#DIV/0! #DIV/0! #DIV/0!		#DIV/0! #DIV/0! #DIV/0!		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S5N1
Receiver 19
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	421
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
19L	-	60.2	57.5	2.7	56.4	3.8	55.6	4.6	55.1	5.1	54.8	5.4	54.5	5.7	54.4	5.8	54.2	6.0
19R	-	62.4	57.9	4.5	56.8	5.6	56.0	6.4	55.4	7.0	55.0	7.4	54.7	7.7	54.5	7.9	54.2	8.2
Number of Benefited Sites		IL 5-5.9		0		0		0		1		1		1		1		0
		IL 6-6.9		0		0		0		0		0		0		0		1
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		1		1		1		1		1
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		5.1		5.4		5.7		5.8		6.0
Barrier Cost - Materials and Labor				$84,200		$105,250		$126,300		$147,350		$168,400		$189,450		$210,500		$231,550
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		$147,350		$168,400		$189,450		$210,500		$231,550
				#DIV/0!		#DIV/0!		#DIV/0!		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline
				#DIV/0!		#DIV/0!		#DIV/0!										
				#DIV/0!		#DIV/0!		#DIV/0!										

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S5N2
Receiver 23
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	284
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	8		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
23L	-	62.2	61.3	0.9	61.0	1.2	60.7	1.5	60.6	1.6	60.5	1.7	60.5	1.7	60.4	1.8	60.4	1.8
23R	-	63.0	61	2.0	60.3	2.7	59.9	3.1	59.6	3.4	59.4	3.6	59.3	3.7	59.2	3.8	59.2	3.8
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$56,800		$71,000		$85,200		$99,400		$113,600		$127,800		$142,000		$156,200
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

Cou ne Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S5S1
Receiver 1
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	532
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
1R	-	62.6	58.8	3.8	57.4	5.2	56.4	6.2	55.6	7.0	55.1	7.5	54.7	7.9	54.4	8.2	54	8.6
1L	-	62.3	58.6	3.7	57.3	5.0	56.3	6.0	55.5	6.8	55	7.3	54.6	7.7	54.2	8.1	53.9	8.4
Number of Benefited Sites		IL 5-5.9		0		1		0		0		0		0		0		0
		IL 6-6.9		0		0		1		1		0		0		0		0
		IL 7-7.9		0		0		0		0		1		1		1		1
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		1		1		1		1		1		1		1
Average IL of Benefited				#DIV/0!		5.0		6.0		6.8		7.3		7.7		8.1		8.4
Barrier Cost - Materials and Labor				$106,400		$133,000		$159,600		$186,200		$212,800		$239,400		$266,000		$292,600
Cost/Benefited Site				#DIV/0!		$133,000		$159,600		$186,200		$212,800		$239,400		$266,000		$292,600
				#DIV/0! #DIV/0! #DIV/0!		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S5S2
Receivers 6-8
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	2
Barrier Length (feet)	630
Cost/sq ft	$25

REC	REC ID	Build (Leq(1)h	TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF 8 Leq(1)h	8 IL	10 Leq(1)h	10 IL	12 Leq(1)h	12 IL	14 Leq(1)h	14 IL	16 Leq(1)h	16 IL	18 Leq(1)h	18 IL	20 Leq(1)h	20 IL	22 Leq(1)h	22 IL
6R	-	61	58.4	2.6	57.2	3.8	56.3	4.7	55.7	5.3	55.2	5.8	54.9	6.1	54.6	6.4	54.4	6.6
7L	-	62.2	60.5	1.7	60	2.2	59.7	2.5	59.5	2.7	59.4	2.8	59.3	2.9	59.3	2.9	59.2	3.0
8B	-	57.2	55.7	1.5	55.4	1.8	55	2.2	54.8	2.4	54.6	2.6	54.5	2.7	54.5	2.7	54.4	2.8
Number of Benefited Sites	IL 5-5.9			0		0		0		1		1		0		0		0
	IL 6-6.9			0		0		0		0		0		1		1		1
	IL 7-7.9			0		0		0		0		0		0		0		0
	IL 8-8.9			0		0		0		0		0		0		0		0
	IL 9-9.9			0		0		0		0		0		0		0		0
	IL 10 or >			0		0		0		0		0		0		0		0
	Total			0		0		0		1		1		1		1		1
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		5.3		5.8		6.1		6.4		6.6
Barrier Cost - Materials and Labor				$126,000		$157,500		$189,000		$220,500		$252,000		$283,500		$315,000		$346,500
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		$220,500		$252,000		$283,500		$315,000		$346,500
				#DIV/0! #DIV/0! #DIV/0!		#DIV/0! #DIV/0! #DIV/0!		#DIV/0! #DIV/0! #DIV/0!		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

Cour[illegible]ne Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N17
Receivers 158-182
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	11
Barrier Length (feet)	1,386
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
158R	-	65 3	62	3 3	61.6	3 7	61.3	4.0	61.2	4.1	61.1	4.2	61	4.3	60.9	4.4	60.9	4.4
159B	-	63.8	61.4	2 4	61 1	2.7	60 8	3.0	60.6	3.2	60.5	3.3	60.4	3.4	60.3	3.5	60.3	3.5
160L	-	63 7	60 9	2.8	60.5	3.2	60 2	3.5	60	3.7	59.8	3.9	59.7	4.0	59.6	4.1	59.5	4.2
162R	-	65 5	61.7	3.8	61.2	4 3	60 8	4.7	60.5	5.0	60.3	5.2	60.2	5.3	60.1	5.4	60	5.5
164L	-	65.1	62	3.1	61.3	3 8	60.8	4.3	60.5	4.6	60.3	4.8	60.1	5.0	60	5.1	59.9	5.2
165R	-	65 6	61 8	3.8	60 9	4 7	60.3	5.3	60	5.6	59.7	5.9	59.6	6.0	59.4	6.2	59.3	6.3
167L	-	66 3	62.4	3 9	62.1	4 2	62	4.3	61.8	4.5	61.7	4.6	61.7	4.6	61.6	4.7	61.6	4.7
170R	-	62 5	60	2 5	59.1	3 4	58.5	4.0	58.1	4.4	57.8	4.7	57.6	4.9	57.5	5.0	57.3	5.2
176R	-	64.7	59.6	5.1	59 4	5.3	59.2	5.5	59	5.7	58 9	5.8	58.8	5.9	58.7	6.0	58.6	6.1
173L	-	64	61	3.0	60.5	3.5	60.2	3 8	60	4.0	59 9	4.1	59.8	4.2	59.7	4.3	59.6	4.4
179L	-	65.4	61 9	3.5	61.8	3 6	61.7	3.7	61.7	3.7	61.6	3.8	61.6	3.8	61.6	3.8	61.5	3.9
182L	-	64.4	62.1	2.3	61.8	2.6	61.6	2.8	61.5	2.9	61.4	3.0	61.4	3.0	61.3	3.1	61.3	3.1
182R	-	64 6	61.3	3.3	60.9	3.7	60.7	3.9	60.6	4.0	60.5	4.1	60.4	4.2	60.3	4.3	60.2	4.4
181L	-	60 7	58 3	2 4	58	2.7	57.8	2.9	57.8	3.1	57.5	3.2	57.4	3.3	57.3	3.4	57.3	3.4
183R	-	61 6	58.9	2.7	58.5	3.1	58.2	3.4	58	3.6	57.8	3.8	57.7	3.9	57.6	4.0	57.5	4.1
166R	-	62.8	59.3	3.5	58.8	4.0	58.5	4.3	58.3	4.5	58.2	4.6	58	4.8	58	4.8	57.9	4.9
168L	-	61.1	58.9	2.2	58.2	2.9	57.7	3.4	57.3	3.8	57	4.1	56.8	4.3	56.7	4.4	56.6	4.5
171R	-	62	59	3 0	58.6	3.4	58.3	3.7	58.1	3.9	57.9	4.1	57.8	4.2	57.7	4.3	57.7	4.3
174L	-	62.1	59.3	2 8	58.8	3.3	58.5	3.6	58.3	3.8	58.2	3.9	58.1	4.0	58	4.1	57.9	4.2
177R	-	63	59.2	3 8	59	4.0	58.8	4.2	58.6	4.4	58.5	4.5	58.5	4.5	58.4	4.6	58.3	4.7
180L	-	63 3	59.9	3 4	59 6	3.7	59.5	3.8	59.4	3.9	59.3	4.0	59.2	4.1	59.1	4.2	59.1	4.2
Number of Benefited Sites	IL 5-5 9			1		1		2		3		3		3		3		3
	IL 6-6.9			0		0		0		0		0		1		2		2
	IL 7-7.9			0		0		0		0		0		0		0		0
	IL 8-8.9			0		0		0		0		0		0		0		0
	IL 9-9.9			0		0		0		0		0		0		0		0
	IL 10 or >			0		0		0		0		0		0		0		0
	Total			1		1		2		3		3		4		5		5
Average IL of Benefited				5.1		5.3		5.4		5.4		5.6		5.6		5.5		5.7
Barrier Cost - Materials and Labor				$277,200		$346,500		$415,800		$485,100		$554,400		$623,700		$693,000		$762,300
Cost/Benefited Site				$277,200		$346,500		$207,900		$161,700		$184,800		$155,925		$138,600		$152,460
				Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N18
Receiver 195
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	115
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
195L	-	64 6	62.2	2 4	61 9	2.7	61 7	2 9	61.6	3.0	61 5	3.0	61.5	3.1	61.5	3.1	61.4	3 2
195R	-	64 5	63 1	1 4	62 9	1 6	62.7	1 8	62.7	1.8	62 6	1.9	62.6	1.9	62.5	2.0	62.5	2.0
Number of Benefited Sites		IL 5-5 9		0		0		0		0		0		0		0		0
		IL 6-6 9		0		0		0		0		0		0		0		0
		IL 7-7 9		0		0		0		0		0		0		0		0
		IL 8-8 9		0		0		0		0		0		0		0		0
		IL 9-9 9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$23,000		$28,750		$34,500		$40,250		$46,000		$51,750		$57,500		$63,250
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N15
Receivers 144,146-150
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	4
Barrier Length (feet)	375
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
146R	-	64.1	61.8	2.3	61.3	2.8	61.1	3.0	61	3.1	60.9	3.2	60.8	3.3	60.7	3.4	60.7	3.4
144R	-	64.4	63.2	1.2	63.1	1.3	63	1.4	62.9	1.5	62.9	1.5	62.9	1.5	62.8	1.6	62.8	1.6
144L	-	64.6	62.6	2.0	62.4	2.2	62.2	2.4	62.1	2.5	62	2.6	62	2.6	61.9	2.7	61.9	2.7
147R	-	60.7	59.2	1.5	58.9	1.8	58.7	2.0	58.6	2.1	58.5	2.2	58.5	2.2	58.4	2.3	58.4	2.3
148L	-	65.5	63.4	2.1	63.1	2.4	63	2.5	62.9	2.6	62.9	2.6	62.8	2.7	62.8	2.7	62.7	2.8
150L	-	64.6	63.3	1.3	63.2	1.4	63.1	1.5	63.1	1.5	63	1.6	63	1.6	63	1.6	63	1.6
149L	-	60.3	59.3	1.0	59.1	1.2	58.9	1.4	58.9	1.4	58.8	1.5	58.7	1.6	58.7	1.6	58.7	1.6
150R	-	64.6	63.8	1.0	63.4	1.2	63.3	1.3	63.3	1.3	63.2	1.4	63.2	1.4	63.2	1.4	63.2	1.4
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$75,000		$93,750		$112,500		$131,250		$150,000		$168,750		$187,500		$206,250
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N16
Receiver 155
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	135
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	8		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
155L	-	66 2	65 1	1 1	64 9	1 3	64 8	1.4	64.8	1.4	64.8	1.4	64.7	1.5	64.7	1.5	64.7	1.5
155R	-	65 6	64.1	1.5	63.9	1.7	63.9	1.7	63 8	1.8	63.8	1.8	63.7	1.9	63.7	1.9	63.7	1.9
Number of Benefited Sites		IL 5-5 9		0		0		0		0		0		0		0		0
		IL 6-6 9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$27,000		$33,750		$40,500		$47,250		$54,000		$60,750		$67,500		$74,250
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

Cou ..ine Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N13
Receivers 131&133
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	2
Barrier Length (feet)	215
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
131L	-	64.3	63.2	1.1	62.6	1.7	62.3	2.0	62.1	2.2	62	2.3	61.9	2.4	61.8	2.5	61.8	2.5
131R	-	64.3	63.4	0.9	62.9	1.4	62.6	1.7	62.4	1.9	62.3	2.0	62.2	2.1	62.2	2.1	62.1	2.2
133L	-	66.3	64.2	2.1	63.8	2.5	63.6	2.7	63.5	2.8	63.4	2.9	63.4	2.9	63.3	3.0	63.3	3.0
133R	-	66.3	64.2	2.1	63.8	2.5	63.5	2.8	63.4	2.9	63.3	3.0	63.2	3.1	63.2	3.1	63.1	3.2
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$43,000		$53,750		$64,500		$75,250		$86,000		$96,750		$107,500		$118,250
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N14
Receivers 134,136-140
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	4
Barrier Length (feet)	610
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
139B	-	61 6	60.1	1.5	59 6	1.8	59 6	2.0	59 4	2.2	59.3	2.3	59.3	2.3	59.2	2.4	59.2	2.4
138R	-	61 6	60	1.6	59 6	2 0	59 4	2.2	59 2	2.4	59.1	2.5	59	2.6	58.9	2.7	58.9	2.7
134R	-	63 8	61.6	2 2	61.3	2.5	61 1	2.7	60 9	2.9	60.9	2.9	60.8	3.0	60.7	3.1	60.7	3.1
134L	-	65	62 3	2.7	62	3.0	61 7	3.3	61.6	3.4	61.5	3.5	61.4	3.6	61.3	3.7	61.3	3.7
136R	-	65 1	61 9	3 2	61.4	3.7	61	4.1	60.9	4.2	60.7	4.4	60 6	4.5	60.5	4.6	60.4	4.7
137B	-	65	61.9	3.1	61.4	3 6	61 1	3.9	60.9	4.1	60.8	4.2	60.7	4.3	60.6	4.4	60.5	4.5
140L	-	66.1	64.3	1 8	64.2	1.9	64 2	1.9	64.1	2.0	64.1	2.0	64.1	2.0	64	2.1	64	2.1
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6 9		0		0		0		0		0		0		0		0
		IL 7-7 9		0		0		0		0		0		0		0		0
		IL 8-8 9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$122,000		$152,500		$183,000		$213,500		$244,000		$274,500		$305,000		$335,500
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

Coun.. ..ine Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N11
Receivers 119-123
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	3
Barrier Length (feet)	360
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
119R	-	65 4	63 1	2 3	63	2.4	62.9	2.5	62.8	2.6	62.8	2.6	62.7	2.7	62.7	2.7	62.7	2.7
120L	-	66.1	63.2	2 9	62.9	3.2	62.7	3.4	62.5	3.6	62.4	3.7	62.3	3.8	62.3	3.8	62.2	3.9
122L	-	66 6	65.2	1.4	65	1.6	64.8	1.8	64.7	1.9	64.7	1.9	64.7	1.9	64.6	2.0	64.6	2.0
123L	-	64 8	63.4	1.4	63.3	1.5	63.2	1.6	63.1	1.7	63.1	1.7	63.1	1.7	63	1.8	63	1.8
121L	-	62 9	61	1 9	60.7	2.2	60.6	2.3	60.5	2.4	60.4	2.5	60.3	2.6	60.3	2.6	60.2	2.7
122R	-	66 8	65	1 8	64.7	2 1	64.5	2.3	64.4	2.4	64.3	2.5	64.3	2.5	64.2	2.6	64.2	2.6
123R	-	65.3	63.4	1.9	63.2	2.1	63.1	2.2	63	2.3	63	2.3	63	2.3	62.9	2.4	62.9	2.4
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$72,000		$90,000		$108,000		$126,000		$144,000		$162,000		$180,000		$198,000
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N12
Receiver 128
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	105
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
128R	-	64.9	63.7	1.2	63.6	1.3	63.5	1.4	63.4	1.5	63.4	1.5	63.4	1.5	63.4	1.5	63.3	1.6
128L	-	65.4	64.1	1.3	63.9	1.5	63.8	1.6	63.7	1.7	63.7	1.7	63.6	1.8	63.6	1.8	63.6	1.8
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$21,000		$26,250		$31,500		$36,750		$42,000		$47,250		$52,500		$57,750
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N9
Receivers 106-110
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	4
Barrier Length (feet)	334
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
106R	-	69.4	67.2	2.2	67.0	2.4	67.0	2.4	66.9	2.5	66.9	2.5	66.9	2.5	66.8	2.6	66.8	2.6
107B	-	65.7	62.1	3.6	61.8	3.9	61.6	4.1	61.5	4.2	61.4	4.3	61.4	4.3	61.3	4.4	61.2	4.5
108L	-	66.4	62.9	3.5	62.7	3.7	62.5	3.9	62.4	4.0	62.3	4.1	62.3	4.1	62.2	4.2	62.2	4.2
109L	-	65.7	63.3	2.4	63.2	2.5	63.1	2.6	63.1	2.6	63.0	2.7	63.0	2.7	63.0	2.7	62.9	2.8
110L	-	63.3	61.9	1.4	61.8	1.5	61.8	1.5	61.7	1.6	61.7	1.6	61.7	1.6	61.7	1.6	61.6	1.7
109R	-	65.4	62.8	2.6	62.7	2.7	62.6	2.6	62.5	2.9	62.5	2.9	62.4	3.0	62.4	3.0	62.4	3.0
110R	-	63.1	61.2	1.9	61.1	2.0	61.0	2.1	61.0	2.1	61.0	2.1	60.9	2.2	60.9	2.2	60.9	2.2
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$66,800		$83,500		$100,200		$116,900		$133,600		$150,300		$167,000		$183,700
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N10
Receivers 111-112
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	125
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
111L	-	62.9	61.3	1.6	61.1	1.8	61.0	1.9	60.9	2.0	60.9	2.0	60.8	2.1	60.8	2.1	60.8	2.1
112L	-	62.5	61.7	0.8	61.6	0.9	61.6	0.9	61.5	1.0	61.5	1.0	61.5	1.0	61.5	1.0	61.4	1.1
111R	-	64.1	62.4	1.7	62.3	1.8	62.2	1.9	62.1	2.0	62.1	2.0	62.0	2.1	62.0	2.1	62.0	2.1
112R	-	62.5	61.7	0.8	61.6	0.9	61.5	1.0	61.5	1.0	61.5	1.0	61.4	1.1	61.4	1.1	61.4	1.1
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$25,000		$31,250		$37,500		$43,750		$50,000		$56,250		$62,500		$68,750
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

Coun . .ne Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N7
Receiver 94
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	150
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	8		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
94R	-	63.4	61.3	2.1	61.1	2.3	60.9	2.5	60.8	2.6	60.8	2.6	60.7	2.7	60.7	2.7	60.6	2.8
94L	-	64.0	62.1	1.9	61.8	2.2	61.7	2.3	61.6	2.4	61.6	2.4	61.5	2.5	61.5	2.5	61.4	2.6
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$30,000		$37,500		$45,000		$52,500		$60,000		$67,500		$75,000		$82,500
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N8
Receiver 103
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	68
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	6		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
103L	-	65.7	65.3	0.4	65.0	0.7	64.8	0.9	64.7	1.0	64.7	1.0	64.6	1.1	64.6	1.1	64.6	1.1
103R	-	65.8	65.3	0.5	65.1	0.7	65.0	0.8	64.9	0.9	64.9	0.9	64.8	1.0	64.8	1.0	64.8	1.0
Number of Benefited		IL 5-5.9		0		0		0		0		0		0		0		0
Sites		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$13,600		$17,000		$20,400		$23,800		$27,200		$30,600		$34,000		$37,400
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N6
Receiver 92
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	85
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	8		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
92L	-	63 9	62 7	1 2	62.4	1.5	62 2	1 7	62.1	1.8	62.1	1.8	62.1	1.8	62.0	1.9	62.0	1.9
92R	-	64.0	62 6	1.2	62.5	1.5	62 4	1.6	62.3	1.7	62.3	1.7	62.2	1.8	62.2	1.8	62.2	1.8
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$17,000		$21,250		$25,500		$29,750		$34,000		$38,250		$42,500		$46,750
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

Coun e Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N5
Receiver 90
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	160
Cost/sq ft	$25

REC	REC ID	Build (Leq(1)h	TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
			Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
90R	-	62.5	60.6	1.9	60.3	2.2	60.2	2.3	60.1	2.4	60.0	2.5	59.9	2.6	59.9	2.6	59.9	2.6
90L	-	62.8	60.7	2.1	60.5	2.3	60.3	2.5	60.2	2.6	60.2	2.6	60.1	2.7	60.1	2.7	60.0	2.8
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$32,000		$40,000		$48,000		$56,000		$64,000		$72,000		$80,000		$88,000
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N3
Receiver 79
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	78
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
79R	-	64.1	63.1	1.0	62.9	1.2	62.8	1.3	62.8	1.3	62.7	1.4	62.7	1.4	62.7	1.4	62.7	1.4
79L	-	64.4	63.4	1.0	63.2	1.2	63.1	1.3	63.1	1.3	63.0	1.4	63.0	1.4	63.0	1.4	63.0	1.4
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$15,600		$19,500		$23,400		$27,300		$31,200		$35,100		$39,000		$42,900
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N4
Receiver B3
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	125
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	8		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
B3R	-	63.9	62	1.9	61.7	2.2	61.6	2.3	61.5	2.4	61.4	2.5	61.4	2.5	61.4	2.5	61.3	2.6
B3L	-	64.5	62.5	2.0	62.2	2.3	62.1	2.4	62.0	2.5	62.0	2.5	61.9	2.6	61.9	2.6	61.9	2.6
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$25,000		$31,250		$37,500		$43,750		$50,000		$56,250		$62,500		$68,750
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N2
Receivers 68-75
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	5
Barrier Length (feet)	640
Cost/sq ft	$25

REC	REC ID	Build (Leq(1)h	TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
			Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
68R	-	65.8	62.2	3.6	61.7	4.1	61.4	4.4	61.2	4.6	61	4.8	60.9	4.9	60.8	5.0	60.7	5.1
69R	-	61.2	59.6	1.6	59.1	2.1	58.8	2.4	58.6	2.6	58.5	2.7	58.4	2.8	58.3	2.9	58.2	3.0
70R	-	65.1	61.5	3.6	60.8	4.3	60.3	4.8	60	5.1	59.7	5.4	59.6	5.5	59.4	5.7	59.3	5.8
71L	-	63.2	60.7	2.5	60	3.2	59.6	3.6	59.3	3.9	59	4.2	58.9	4.3	58.8	4.4	58.7	4.5
72L	-	60.5	58.4	2.1	57.9	2.6	57.6	2.9	57.3	3.2	57.1	3.4	57	3.5	56.8	3.7	56.7	3.8
73R	-	64.1	60.8	3.3	60.2	3.9	59.8	4.3	59.5	4.6	59.3	4.8	59.2	4.9	59.1	5.0	59	5.1
74L	-	63.8	60.2	3.6	59.7	4.1	59.3	4.5	59.1	4.7	58.9	4.9	58.8	5.0	58.7	5.1	58.6	5.2
75L	-	61.1	59.4	1.7	59.1	2.0	58.9	2.2	58.8	2.3	58.7	2.4	58.6	2.5	58.6	2.5	58.5	2.6
68L	-	65.5	61.8	3.7	61.2	4.3	60.8	4.7	60.5	5.0	60.4	5.1	60.2	5.3	60.1	5.4	60	5.5
69L	-	61.2	59.5	1.7	59	2.2	58.7	2.5	58.4	2.8	58.3	2.9	58.2	3.0	58.1	3.1	58	3.2
Number of Benefited Sites		IL 5-5.9		0		0		0		1		1		2		4		4
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		1		1		2		4		4
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		5.1		5.4		5.3		5.2		5.3
Barrier Cost - Materials and Labor				$128,000		$160,000		$192,000		$224,000		$256,000		$288,000		$320,000		$352,000
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		$224,000		$256,000		$144,000		$80,000		$88,000
				#DIV/0! #DIV/0! #DIV/0!		#DIV/0! #DIV/0! #DIV/0!		#DIV/0! #DIV/0! #DIV/0!		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

Cou ne Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier N1
Receiver 66
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	318
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
		Build	8		10		12		14		16		18		20		22	
REC	REC ID	(Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
66L	-	65.7	62.7	3.0	62.0	3.7	61.4	4.3	61.1	4.6	61.0	4.7	60.9	4.8	60.8	4.9	60.7	5.0
66R	-	65.7	62.7	3.0	61.9	3.8	61.4	4.3	61.1	4.6	60.9	4.8	60.8	4.9	60.7	5.0	60.6	5.1
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		1
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		1
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		5.0
Barrier Cost - Materials and Labor				$63,600		$79,500		$95,400		$111,300		$127,200		$143,100		$159,000		$174,900
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		$174,900
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		Cost
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		Exceeds
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S2
Receivers 43-44
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	401
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			6		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
43B	-	61.6	56.7	2.9	57.5	4.1	56.7	4.9	56.5	5.1	56.3	5.3	56.0	5.6	55.8	5.8	55.7	5.9
44R	-	63.6	59.8	3.8	58.7	4.9	57.9	5.7	57.7	5.9	57.4	6.2	57.1	6.5	56.9	6.7	56.7	6.9
44L	-	63.6	59.7	3.9	58.5	5.1	57.6	6.0	57.6	6.0	57.4	6.2	57.1	6.5	56.9	6.7	56.7	6.9
Number of Benefited Sites		IL 5-5.9		0		0		1		2		1		1		1		1
		IL 6-6.9		0		0		0		0		1		1		1		1
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		1		2		2		2		2		2
Average IL of Benefited				#DIV/0!		#DIV/0!		5.7		5.5		5.8		6.1		6.3		6.4
Barrier Cost - Materials and Labor				$80,200		$100,250		$120,300		$140,350		$160,400		$180,450		$200,500		$220,550
Cost/Benefited Site				#DIV/0!		#DIV/0!		$120,300		$70,175		$80,200		$90,225		$100,250		$110,275
				#DIV/0! #DIV/0! #DIV/0!		#DIV/0! #DIV/0! #DIV/0!		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline		Cost Exceeds Guideline

County Line Road -Noise Reduction Wall - Cost Reasonable Evaluation
Barrier S1
Receivers 36-37
Barrier Location: 5 ft Within FDOT ROW

Number of Affected Residences	1
Barrier Length (feet)	310
Cost/sq ft	$25

			TRAFFIC NOISE LEVEL WITH BARRIER HEIGHT OF															
			8		10		12		14		16		18		20		22	
REC	REC ID	Build (Leq(1)h	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL	Leq(1)h	IL
36B	-	63.5	61.1	2.4	60.6	2.9	60.4	3.1	60.2	3.3	60.1	3.4	60.0	3.5	59.9	3.6	59.9	3.6
37L	-	65.1	62.9	2.2	62.5	2.6	62.3	2.8	62.2	2.9	62.1	3.0	62.0	3.1	61.9	3.2	61.9	3.2
37R	-	65.0	62	3.0	61.4	3.6	61.0	4.0	60.8	4.2	60.7	4.3	60.6	4.4	60.5	4.5	60.4	4.6
Number of Benefited Sites		IL 5-5.9		0		0		0		0		0		0		0		0
		IL 6-6.9		0		0		0		0		0		0		0		0
		IL 7-7.9		0		0		0		0		0		0		0		0
		IL 8-8.9		0		0		0		0		0		0		0		0
		IL 9-9.9		0		0		0		0		0		0		0		0
		IL 10 or >		0		0		0		0		0		0		0		0
		Total		0		0		0		0		0		0		0		0
Average IL of Benefited				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Barrier Cost - Materials and Labor				$62,000		$77,500		$93,000		$108,500		$124,000		$139,500		$155,000		$170,500
Cost/Benefited Site				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	12.00	12.00	12.00	173	2076				0
N1A	W	12.00	12.00	12.00	145	1740				43500
									Total Cost	43500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	62.0	3.7	8	-4.3
66R	230	1	0.0	65.7	66	65.7	10	---	61.9	3.8	8	-4.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	3.7	3.7	3.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

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TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrierN1

BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	14.00	14.00	14.00	173	2422				0
N1A	W	14.00	14.00	14.00	145	2030				50800
									Total Cost	50800

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	61.4	4.3	8	-3.7
66R	230	1	0.0	65.7	66	65.7	10	---	61.4	4.3	8	-3.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	4.3	4.3	4.3
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	16.00	16.00	16.00	173	2768				0
N1A	W	16.00	16.00	16.00	145	2320				58000
									Total Cost	58000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	61.1	4.6	8	-3.4
66R	230	1	0.0	65.7	66	65.7	10	---	61.1	4.6	8	-3.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	4.6	4.6	4.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	18.00	18.00	18.00	173	3114				0
N1A	W	18.00	18.00	18.00	145	2610				65300
									Total Cost	65300

URS
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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	61.0	4.7	8	-3.3
66R	230	1	0.0	65.7	66	65.7	10	---	60.9	4.8	8	-3.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	4.7	4.7	4.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	20.00	20.00	20.00	173	3460				0
N1A	W	20.00	20.00	20.00	145	2900				72500
									Total Cost	72500

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	60.9	4.8	8	-3.2
66R	230	1	0.0	65.7	66	65.7	10	---	60.8	4.9	8	-3.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	4.8	4.8	4.9
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N1B	W	22.00	22.00	22.00	173	3806				0
N1A	W	22.00	22.00	22.00	145	3190				79800
									Total Cost	79800

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	---	60.8	4.9	8	-3.1
66R	230	1	0.0	65.7	66	65.7	10	---	60.7	5.0	8	-3.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	4.9	4.9	5.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS
WHA

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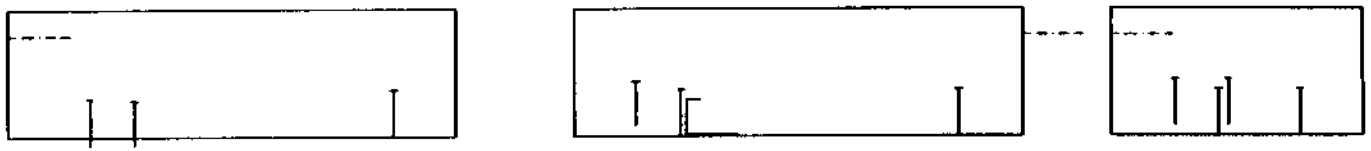
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN1
BARRIER DESIGN: N1

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc		LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
66L	229	1	0.0	65.7	66	65.7	10	—	60.7	5.0	8	-3.0
66R	230	1	0.0	65.7	66	65.7	10	—	60.6	5.1	8	-2.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	5.0	5.0	5.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN2		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N2		Project/Contract No. CLR FAP 7822 001 S	
Run name: N02		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS **10 July 2002**
WHA **TNM 1.0b**

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: **CLR FAP 7822 001 S**
RUN: **County Line Road - Build/WB BarrierN2**
BARRIER DESIGN: **N2**

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	8.00	8.00	8.00	250	2000				50000
N2B	W	8.00	8.00	8.00	250	2000				50000
N2A	W	8.00	8.00	8.00	140	1120				28000
									Total Cost	128000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	----	62.2	3.6	8	-4.4
68L	81	1	0.0	65.5	66	65.5	10	----	61.8	3.7	8	-4.3
69L	229	1	0.0	61.2	66	61.2	10	----	59.5	1.7	8	-6.3
69R	230	1	0.0	61.2	66	61.2	10	----	59.6	1.6	8	-6.4
70R	83	1	0.0	65.1	66	65.1	10	----	61.5	3.6	8	-4.4
71L	84	1	0.0	63.2	66	63.2	10	----	60.7	2.5	8	-5.5
72L	99	1	0.0	60.5	66	60.5	10	----	58.4	2.1	8	-5.9
73R	86	1	0.0	64.1	66	64.1	10	----	60.8	3.3	8	-4.7
74L	89	1	0.0	63.8	66	63.8	10	----	60.2	3.6	8	-4.4
75L	92	1	0.0	61.1	66	61.1	10	----	59.4	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	10	1.6	2.7	3.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	10.00	10.00	10.00	250	2500				62500
N2B	W	10.00	10.00	10.00	250	2500				62500
N2A	W	10.00	10.00	10.00	140	1400				35000
									Total Cost	160000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	----	61.7	4.1	8	-3.9
68L	81	1	0.0	65.5	66	65.5	10	----	61.2	4.3	8	-3.7
69L	229	1	0.0	61.2	66	61.2	10	----	59.0	2.2	8	-5.8
69R	230	1	0.0	61.2	66	61.2	10	----	59.1	2.1	8	-5.9
70R	83	1	0.0	65.1	66	65.1	10	----	60.8	4.3	8	-3.7
71L	84	1	0.0	63.2	66	63.2	10	----	60.0	3.2	8	-4.8
72L	99	1	0.0	60.5	66	60.5	10	----	57.9	2.6	8	-5.4
73R	86	1	0.0	64.1	66	64.1	10	----	60.2	3.9	8	-4.1
74L	89	1	0.0	63.8	66	63.8	10	----	59.7	4.1	8	-3.9
75L	92	1	0.0	61.1	66	61.1	10	----	59.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	10	2.0	3.3	4.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	12.00	12.00	12.00	250	3000				75000
N2B	W	12.00	12.00	12.00	250	3000				75000
N2A	W	12.00	12.00	12.00	140	1680				42000
									Total Cost	192000

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	---	61.4	4.4	8	-3.6
68L	81	1	0.0	65.5	66	65.5	10	---	60.8	4.7	8	-3.3
69L	229	1	0.0	61.2	66	61.2	10	---	58.7	2.5	8	-5.5
69R	230	1	0.0	61.2	66	61.2	10	---	58.8	2.4	8	-5.6
70R	83	1	0.0	65.1	66	65.1	10	---	60.3	4.8	8	-3.2
71L	84	1	0.0	63.2	66	63.2	10	---	59.6	3.6	8	-4.4
72L	99	1	0.0	60.5	66	60.5	10	---	57.6	2.9	8	-5.1
73R	86	1	0.0	64.1	66	64.1	10	---	59.8	4.3	8	-3.7
74L	89	1	0.0	63.8	66	63.8	10	---	59.3	4.5	8	-3.5
75L	92	1	0.0	61.1	66	61.1	10	---	58.9	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	10	2.2	3.6	4.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	14.00	14.00	14.00	250	3500				87500
N2B	W	14.00	14.00	14.00	250	3500				87500
N2A	W	14.00	14.00	14.00	140	1960				49000
									Total Cost	224000

URS
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10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	---	61.2	4.6	8	-3.4
68L	81	1	0.0	65.5	66	65.5	10	---	60.5	5.0	8	-3.0
69L	229	1	0.0	61.2	66	61.2	10	---	58.4	2.8	8	-5.2
69R	230	1	0.0	61.2	66	61.2	10	---	58.6	2.6	8	-5.4
70R	83	1	0.0	65.1	66	65.1	10	---	60.0	5.1	8	-2.9
71L	84	1	0.0	63.2	66	63.2	10	---	59.3	3.9	8	-4.1
72L	99	1	0.0	60.5	66	60.5	10	---	57.3	3.2	8	-4.8
73R	86	1	0.0	64.1	66	64.1	10	---	59.5	4.6	8	-3.4
74L	89	1	0.0	63.8	66	63.8	10	---	59.1	4.7	8	-3.3
75L	92	1	0.0	61.1	66	61.1	10	---	58.8	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	10	2.3	3.9	5.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	16.00	16.00	16.00	250	4000				100000
N2B	W	16.00	16.00	16.00	250	4000				100000
N2A	W	16.00	16.00	16.00	140	2240				56000
									Total Cost	256000

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	----	61.0	4.8	8	-3.2
68L	81	1	0.0	65.5	66	65.5	10	----	60.4	5.1	8	-2.9
69L	229	1	0.0	61.2	66	61.2	10	----	56.3	2.9	8	-5.1
69R	230	1	0.0	61.2	66	61.2	10	----	56.5	2.7	8	-5.3
70R	83	1	0.0	65.1	66	65.1	10	----	59.7	5.4	8	-2.6
71L	84	1	0.0	63.2	66	63.2	10	----	59.0	4.2	8	-3.8
72L	99	1	0.0	60.5	66	60.5	10	----	57.1	3.4	8	-4.6
73R	86	1	0.0	64.1	66	64.1	10	----	59.3	4.8	8	-3.2
74L	89	1	0.0	63.8	66	63.8	10	----	58.9	4.9	8	-3.1
75L	92	1	0.0	61.1	66	61.1	10	----	58.7	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	10	2.4	4.1	5.4
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	18.00	18.00	18.00	250	4500				112500
N2B	W	18.00	18.00	18.00	250	4500				112500
N2A	W	18.00	18.00	18.00	140	2520				63000
									Total Cost	288000

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	----	60.9	4.9	8	-3.1
68L	81	1	0.0	65.5	66	65.5	10	----	60.2	5.3	8	-2.7
69L	229	1	0.0	61.2	66	61.2	10	----	58.2	3.0	8	-5.0
69R	230	1	0.0	61.2	66	61.2	10	----	58.4	2.8	8	-5.2
70R	83	1	0.0	65.1	66	65.1	10	----	59.6	5.5	8	-2.5
71L	84	1	0.0	63.2	66	63.2	10	----	58.9	4.3	8	-3.7
72L	99	1	0.0	60.5	66	60.5	10	----	57.0	3.5	8	-4.5
73R	86	1	0.0	64.1	66	64.1	10	----	59.2	4.9	8	-3.1
74L	89	1	0.0	63.8	66	63.8	10	----	58.8	5.0	8	-3.0
75L	92	1	0.0	61.1	66	61.1	10	----	58.6	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	10	2.5	4.2	5.5
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	20.00	20.00	20.00	250	5000				125000
N2B	W	20.00	20.00	20.00	250	5000				125000
N2A	W	20.00	20.00	20.00	140	2800				70000
									Total Cost	320000

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	---	60.8	5.0	8	-3.0
68L	81	1	0.0	65.5	66	65.5	10	---	60.1	5.4	8	-2.6
69L	229	1	0.0	61.2	66	61.2	10	---	58.1	3.1	8	-4.9
69R	230	1	0.0	61.2	66	61.2	10	---	58.3	2.9	8	-5.1
70R	83	1	0.0	65.1	66	65.1	10	---	59.4	5.7	8	-2.3
71L	84	1	0.0	63.2	66	63.2	10	---	58.8	4.4	8	-3.6
72L	99	1	0.0	60.5	66	60.5	10	---	56.8	3.7	8	-4.3
73R	86	1	0.0	64.1	66	64.1	10	---	59.1	5.0	8	-3.0
74L	89	1	0.0	63.8	66	63.8	10	---	58.7	5.1	8	-2.9
75L	92	1	0.0	61.1	66	61.1	10	---	58.6	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	10	2.5	4.3	5.7
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N2C	W	22.00	22.00	22.00	250	5500				137500
N2B	W	22.00	22.00	22.00	250	5500				137500
N2A	W	22.00	22.00	22.00	140	3080				77000
									Total Cost	352000

URS
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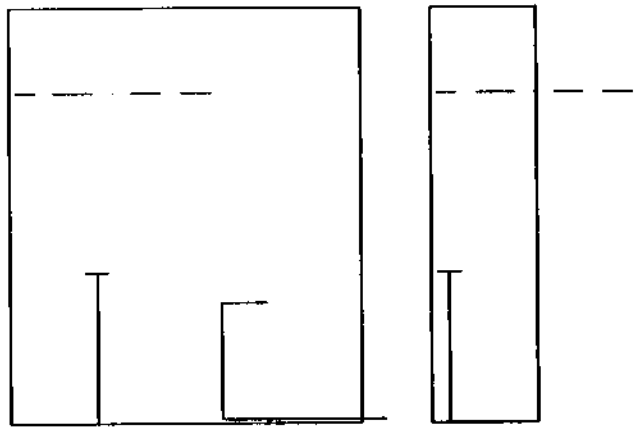
10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN2
BARRIER DESIGN: N2
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
68R	80	1	0.0	65.8	66	65.8	10	----	60.7	5.1	8	-2.9
68L	81	1	0.0	65.5	66	65.5	10	----	60.0	5.5	8	-2.5
69L	229	1	0.0	61.2	66	61.2	10	----	58.0	3.2	8	-4.8
69R	230	1	0.0	61.2	66	61.2	10	----	58.2	3.0	8	-5.0
70R	83	1	0.0	65.1	66	65.1	10	----	59.3	5.8	8	-2.2
71L	84	1	0.0	63.2	66	63.2	10	----	58.7	4.5	8	-3.5
72L	99	1	0.0	60.5	66	60.5	10	----	56.7	3.8	8	-4.2
73R	86	1	0.0	64.1	66	64.1	10	----	59.0	5.1	8	-2.9
74L	89	1	0.0	63.8	66	63.8	10	----	58.6	5.2	8	-2.8
75L	92	1	0.0	61.1	66	61.1	10	----	58.5	2.6	8	-5.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	10	2.6	4.4	5.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN3	Sheet 1 of 1 | 10 Jul 2002
	URS
Barrier View-N3	Project/Contract No. CLR FAP 7822 001 S
Run name: N03N	TNM Version 1.0b, July 1999
Scale: <DNA - due to perspective>	Analysis By: WHA
Roadway:	Ground Zone: polygon
Receiver:	Tree Zone: dashed polygon
Barrier:	Contour Zone: polygon
Building Row:	Parallel Barrier:
Terrain Line:	Skew Section:

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	8.00	8.00	8.00	60	480				0
N3B	W	8.00	8.00	8.00	18	144				0
									Total Cost	0

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TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	---	63.4	1.0	8	-7.0
79R	234	1	0.0	64.1	66	64.1	10	---	63.1	1.0	8	-7.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.0	1.0	1.0
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	10.00	10.00	10.00	60	600				0
N3B	W	10.00	10.00	10.00	18	180				0
									Total Cost	0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	---	63.2	1.2	8	-6.8
79R	234	1	0.0	64.1	66	64.1	10	---	62.9	1.2	8	-6.8

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.2	1.2	1.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	12.00	12.00	12.00	60	720				0
N3B	W	12.00	12.00	12.00	18	216				0
									Total Cost	0

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	----	63.1	1.3	8	-6.7
79R	234	1	0.0	64.1	66	64.1	10	----	62.8	1.3	8	-6.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.3	1.3	1.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	14.00	14.00	14.00	60	840				0
N3B	W	14.00	14.00	14.00	18	252				0
									Total Cost	0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	---	63.1	1.3	8	-6.7
79R	234	1	0.0	64.1	66	64.1	10	---	62.8	1.3	8	-6.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.3	1.3	1.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	16.00	16.00	16.00	60	960				0
N3B	W	16.00	16.00	16.00	18	288				0
									Total Cost	0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	—	63.0	1.4	8	-6.6
79R	234	1	0.0	64.1	66	64.1	10	—	62.7	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.4	1.4	1.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	18.00	18.00	18.00	60	1080				0
N3B	W	18.00	18.00	18.00	18	324				0
									Total Cost	0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	—	63.0	1.4	8	-6.6
79R	234	1	0.0	64.1	66	64.1	10	—	62.7	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.4	1.4	1.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	20.00	20.00	20.00	60	1200				0
N3B	W	20.00	20.00	20.00	18	360				0
									Total Cost	0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing 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
79L	233	1	0.0	64.4	66	64.4	10	—	63.0	1.4	8	-6.6
79R	234	1	0.0	64.1	66	64.1	10	—	62.7	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.4	1.4	1.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N3A	W	22.00	22.00	22.00	60	1320				0
N3B	W	22.00	22.00	22.00	18	396				0
									Total Cost	0

URS
WHA

10 July 2002
TNM 1.0b

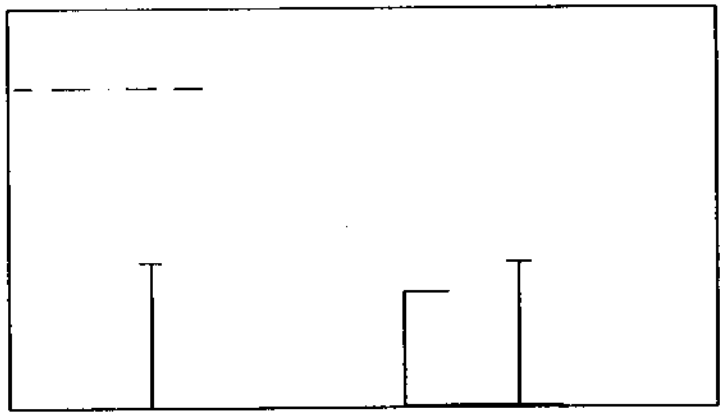
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN3
BARRIER DESIGN: N3

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
79L	233	1	0.0	64.4	66	64.4	10	—	63.0	1.4	8	-6.6
79R	234	1	0.0	64.1	66	64.1	10	—	62.7	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.4	1.4	1.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN4	Sheet 1 of 1 | 10 Jul 2002
	URS
Barrier View-N4	Project/Contract No. CLR FAP 7822 001 S
Run name: N04N	TNM Version 1.0b, July 1999
Scale: <DNA - due to perspective>	Analysis By: WHA
Roadway:	Ground Zone: polygon
Receiver:	Tree Zone: dashed polygon
Barrier:	Contour Zone: polygon
Building Row:	Parallel Barrier:
Terrain Line:	Skew Section:

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	8.00	8.00	8.00	125	1000				25000
									Total Cost	25000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	---	62.5	2.0	8	-6.0
83R	234	1	0.0	63.9	66	63.9	10	---	62.0	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.9	2.0	2.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	10.00	10.00	10.00	125	1250				31300
									Total Cost	31300

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

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

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	----	62.2	2.3	8	-5.7
83R	234	1	0.0	63.9	66	63.9	10	----	61.7	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	2.2	2.2	2.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	12.00	12.00	12.00	125	1500				37500
									Total Cost	37500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	---	62.1	2.4	8	-5.6
83R	234	1	0.0	63.9	66	63.9	10	---	61.6	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.3	2.4	2.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	14.00	14.00	14.00	125	1750				43800
									Total Cost	43800

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	---	62.0	2.5	8	-5.5
83R	234	1	0.0	63.9	66	63.9	10	---	61.5	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.4	2.5	2.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	16.00	16.00	16.00	125	2000				50000
									Total Cost	50000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	---	62.0	2.5	8	-5.5
83R	234	1	0.0	63.9	66	63.9	10	---	61.4	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.5	2.5	2.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	18.00	18.00	18.00	125	2250				56300
									Total Cost	56300

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	----	61.9	2.6	8	-5.4
83R	234	1	0.0	63.9	66	63.9	10	----	61.4	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.5	2.5	2.6
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	20.00	20.00	20.00	125	2500				62500
									Total Cost	62500

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	---	61.9	2.6	8	-5.4
83R	234	1	0.0	63.9	66	63.9	10	---	61.4	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.5	2.5	2.6
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N4	W	22.00	22.00	22.00	125	2750				68800
									Total Cost	68800

URS
WHA

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TNM 1.0b

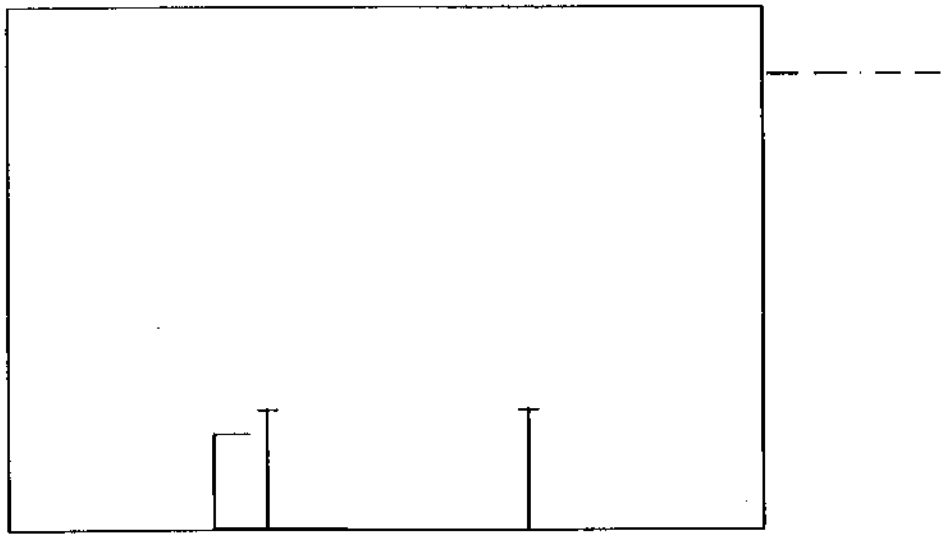
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN4
BARRIER DESIGN: N4

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
83L	233	1	0.0	64.5	66	64.5	10	---	61.9	2.6	8	-5.4
83R	234	1	0.0	63.9	66	63.9	10	---	61.3	2.6	8	-5.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.6	2.6	2.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrrierN5		Sheet 1 of 1 | 10 Jul 2002	
		URS	
Barrier View-N5		Project/Contract No. CLR FAP 7822 001 S	
Run name: N05N		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	8.00	8.00	8.00	160	1280				32000
									Total Cost	32000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	---	60.6	1.9	8	-6.1
90L	229	1	0.0	62.8	66	62.8	10	---	60.7	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.9	2.0	2.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	10.00	10.00	10.00	160	1600				40000
									Total Cost	40000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	----	60.3	2.2	8	-5.8
90L	229	1	0.0	62.8	66	62.8	10	----	60.5	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	2.2	2.2	2.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

10 July 2002

TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrrierN5

BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	12.00	12.00	12.00	160	1920				48000
									Total Cost	48000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	----	60.2	2.3	8	-5.7
90L	229	1	0.0	62.8	66	62.8	10	----	60.3	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	2.3	2.4	2.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	14.00	14.00	14.00	160	2240				56000
									Total Cost	56000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	----	60.1	2.4	8	-5.6
90L	229	1	0.0	62.8	66	62.8	10	----	60.2	2.6	8	-5.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.4	2.5	2.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	16.00	16.00	16.00	160	2560				64000
									Total Cost	64000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	----	60.0	2.5	8	-5.5
90L	229	1	0.0	62.8	66	62.8	10	----	60.2	2.6	8	-5.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.5	2.5	2.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	18.00	18.00	18.00	160	2880				72000
									Total Cost	72000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	---	59.9	2.6	8	-5.4
90L	229	1	0.0	62.8	66	62.8	10	---	60.1	2.7	8	-5.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.6	2.6	2.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

10 July 2002

TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrrierN5

BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	20.00	20.00	20.00	160	3200				80000
									Total Cost	80000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	---	59.9	2.6	8	-5.4
90L	229	1	0.0	62.8	66	62.8	10	---	60.1	2.7	8	-5.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.6	2.6	2.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5	W	22.00	22.00	22.00	160	3520				88000
									Total Cost	88000

URS
WHA

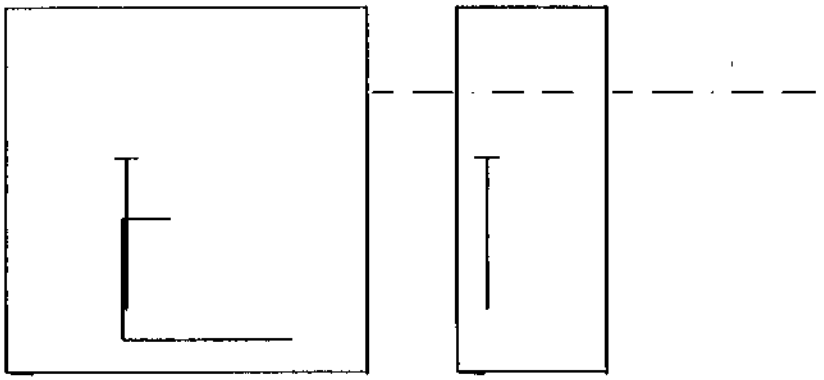
10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN5
BARRIER DESIGN: N5
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
90R	107	1	0.0	62.5	66	62.5	10	----	59.9	2.6	8	-5.4
90L	229	1	0.0	62.8	66	62.8	10	----	60.0	2.8	8	-5.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.6	2.7	2.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrrierN6		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N6		Project/Contract No. CLR FAP 7822 001 S	
Run name: N06N		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:	( )	Tree Zone:	dashed polygon
Barrier:	|	Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	8.00	8.00	8.00	60	480				0
N6A	W	8.00	8.00	8.00	25	200				5000
									Total Cost	5000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	----	62.7	1.2	8	-6.8
92R	108	1	0.0	64.0	66	64.0	10	----	62.8	1.2	8	-6.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.2	1.2	1.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	10.00	10.00	10.00	60	600				0
N6A	W	10.00	10.00	10.00	25	250				6300
									Total Cost	6300

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	---	62.4	1.5	8	-6.5
92R	108	1	0.0	64.0	66	64.0	10	---	62.5	1.5	8	-6.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.5	1.5	1.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	12.00	12.00	12.00	60	720				0
N6A	W	12.00	12.00	12.00	25	300				7500
									Total Cost	7500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	---	62.2	1.7	8	-6.3
92R	108	1	0.0	64.0	66	64.0	10	---	62.4	1.6	8	-6.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.6	1.6	1.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	14.00	14.00	14.00	60	840				0
N6A	W	14.00	14.00	14.00	25	350				8800
									Total Cost	8800

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	----	62.1	1.8	8	-6.2
92R	108	1	0.0	64.0	66	64.0	10	----	62.3	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.7	1.8	1.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

10 July 2002

WHA

TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrrierN6

BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	16.00	16.00	16.00	60	960				0
N6A	W	16.00	16.00	16.00	25	400				10000
									Total Cost	10000

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	----	62.1	1.8	8	-6.2
92R	108	1	0.0	64.0	66	64.0	10	----	62.3	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.7	1.8	1.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	18.00	18.00	18.00	60	1080				0
N6A	W	18.00	18.00	18.00	25	450				11300
									Total Cost	11300

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	---	62.1	1.8	8	-6.2
92R	108	1	0.0	64.0	66	64.0	10	---	62.2	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.8	1.8	1.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	20.00	20.00	20.00	60	1200				0
N6A	W	20.00	20.00	20.00	25	500				12500
									Total Cost	12500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	----	62.0	1.9	8	-6.1
92R	108	1	0.0	64.0	66	64.0	10	----	62.2	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.8	1.9	1.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Road - Build/WB BarrrierN6
BARRIER DESIGN: N6

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N6B	W	22.00	22.00	22.00	60	1320				0
N6A	W	22.00	22.00	22.00	25	550				13800
									Total Cost	13800

URS
WHA

10 July 2002
TNM 1.0b

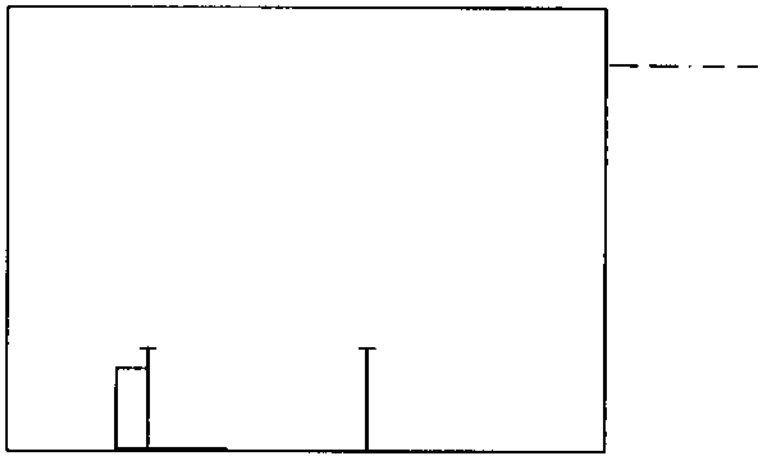
RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN6
BARRIER DESIGN: N6
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
92L	229	1	0.0	63.9	66	63.9	10	----	62.0	1.9	8	-6.1
92R	108	1	0.0	64.0	66	64.0	10	----	62.2	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.8	1.9	1.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrrierN7		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N7		Project/Contract No. CLR FAP 7822 001 S	
Run name: N07		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	8.00	8.00	8.00	150	1200				30000
									Total Cost	30000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	---	61.3	2.1	8	-5.9
94L	111	1	0.0	64.0	66	64.0	10	---	62.1	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.9	2.0	2.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	10.00	10.00	10.00	150	1500				37500
									Total Cost	37500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	----	61.1	2.3	8	-5.7
94L	111	1	0.0	64.0	66	64.0	10	----	61.8	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.2	2.3	2.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS **10 July 2002**
WHA **TNM 1.0b**

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: **CLR FAP 7822 001 S**
RUN: **County Line Road - Build/WB BarrrierN7**
BARRIER DESIGN: **N7**

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	12.00	12.00	12.00	150	1800				45000
									Total Cost	45000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	----	60.9	2.5	8	-5.5
94L	111	1	0.0	64.0	66	64.0	10	----	61.7	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	2.3	2.4	2.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	14.00	14.00	14.00	150	2100				52500
									Total Cost	52500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	---	60.8	2.6	8	-5.4
94L	111	1	0.0	64.0	66	64.0	10	---	61.6	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.4	2.5	2.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	16.00	16.00	16.00	150	2400				60000
									Total Cost	60000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	---	60.8	2.6	8	-5.4
94L	111	1	0.0	64.0	66	64.0	10	---	61.6	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	2.4	2.5	2.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	18.00	18.00	18.00	150	2700				67500
									Total Cost	67500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	---	60.7	2.7	8	-5.3
94L	111	1	0.0	64.0	66	64.0	10	---	61.5	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.5	2.6	2.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	20.00	20.00	20.00	150	3000				75000
									Total Cost	75000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	----	60.7	2.7	8	-5.3
94L	111	1	0.0	64.0	66	64.0	10	----	61.5	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.5	2.6	2.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N7	W	22.00	22.00	22.00	150	3300				82500
									Total Cost	82500

URS
WHA

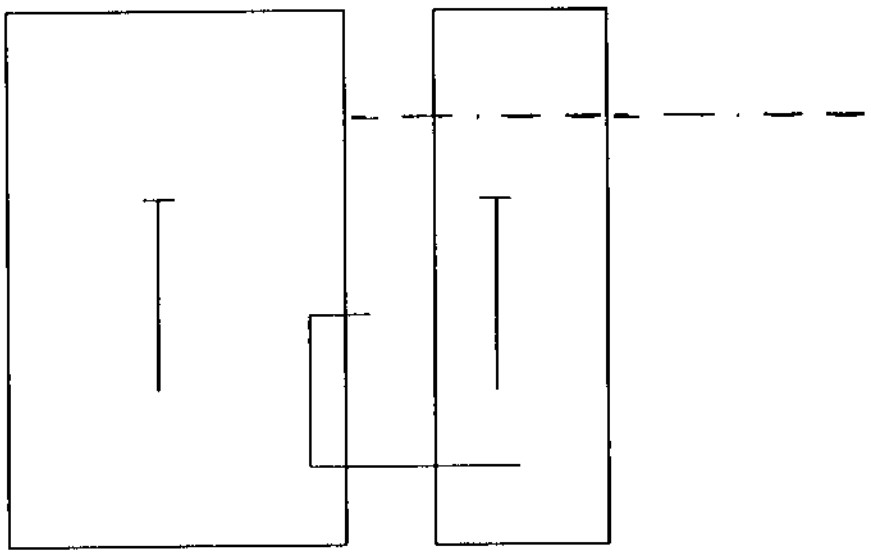
10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrrierN7
BARRIER DESIGN: N7
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
94R	110	1	0.0	63.4	66	63.4	10	----	60.6	2.8	8	-5.2
94L	111	1	0.0	64.0	66	64.0	10	----	61.4	2.6	8	-5.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.6	2.7	2.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN8		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N8		Project/Contract No. CLR FAP 7822 001 S	
Run name: N08		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:	——→	Ground Zone:	polygon
Receiver:	[ ]	Tree Zone:	dashed polygon
Barrier:	| —	Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	8.00	8.00	8.00	45	360				0
N8A	W	8.00	8.00	8.00	23	184				4600
									Total Cost	4600

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	---	65.3	0.5	8	-7.5
103L	122	1	0.0	65.7	66	65.7	10	---	65.3	0.4	8	-7.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	0.4	0.4	0.5
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	10.00	10.00	10.00	45	450				0
N8A	W	10.00	10.00	10.00	23	230				5800
									Total Cost	5800

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	----	65.1	0.7	8	-7.3
103L	122	1	0.0	65.7	66	65.7	10	----	65.0	0.7	8	-7.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	0.7	0.7	0.7
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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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrierN8

BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	12.00	12.00	12.00	45	540				0
N8A	W	12.00	12.00	12.00	23	276				6900
									Total Cost	6900

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	----	65.0	0.8	8	-7.2
103L	122	1	0.0	65.7	66	65.7	10	----	64.8	0.9	8	-7.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	0.8	0.8	0.9
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	14.00	14.00	14.00	45	630				0
N8A	W	14.00	14.00	14.00	23	322				8100
									Total Cost	8100

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	---	64.9	0.9	8	-7.1
103L	122	1	0.0	65.7	66	65.7	10	---	64.7	1.0	8	-7.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.9	1.0	1.0
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	16.00	16.00	16.00	45	720				0
N8A	W	16.00	16.00	16.00	23	368				9200
									Total Cost	9200

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	---	64.9	0.9	8	-7.1
103L	122	1	0.0	65.7	66	65.7	10	---	64.7	1.0	8	-7.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.9	1.0	1.0
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	18.00	18.00	18.00	45	810				0
N8A	W	18.00	18.00	18.00	23	414				10400
									Total Cost	10400

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing 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
103R	123	1	0.0	65.8	66	65.8	10	---	64.8	1.0	8	-7.0
103L	122	1	0.0	65.7	66	65.7	10	---	64.6	1.1	8	-6.9

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.0	1.0	1.1
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	20.00	20.00	20.00	45	900				0
N8A	W	20.00	20.00	20.00	23	460				11500
									Total Cost	11500

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	---	64.8	1.0	8	-7.0
103L	122	1	0.0	65.7	66	65.7	10	---	64.6	1.1	8	-6.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.0	1.0	1.1
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N8B	W	22.00	22.00	22.00	45	990				0
N8A	W	22.00	22.00	22.00	23	506				12700
									Total Cost	12700

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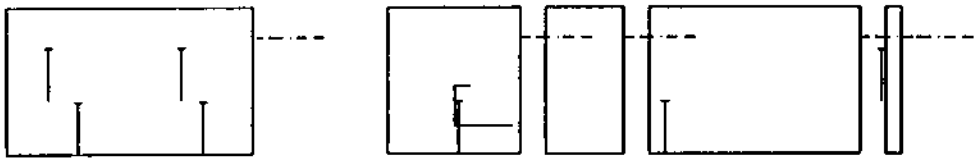
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN8
BARRIER DESIGN: N8

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
103R	123	1	0.0	65.8	66	65.8	10	---	64.8	1.0	8	-7.0
103L	122	1	0.0	65.7	66	65.7	10	---	64.6	1.1	8	-6.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.0	1.0	1.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN9	Sheet 1 of 1 | 10 Jul 2002
	URS
Barrier View-N9	Project/Contract No. CLR FAP 7822 001 S
Run name: N09	TNM Version 1.0b, July 1999
Scale: <DNA - due to perspective>	Analysis By: WHA

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	8.00	8.00	8.00	120	960				24000
N9A4	W	8.00	8.00	8.00	65	520				13000
N9A3	W	8.00	8.00	8.00	38	304				0
N9A2	W	8.00	8.00	8.00	103	824				0
N9A1	W	8.00	8.00	8.00	8	64				0
									Total Cost	37000

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	----	62.8	2.6	8	-5.4
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.9	3.5	8	-4.5
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	67.2	2.2	8	-5.8
107B	232	1	0.0	65.7	66	65.7	10	----	62.1	3.6	8	-4.4
109L	128	1	0.0	65.7	66	65.7	10	----	63.3	2.4	8	-5.6
110L	231	1	0.0	63.3	66	63.3	10	----	61.9	1.4	8	-6.6
110R	233	1	0.0	63.1	66	63.1	10	----	61.2	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.4	2.5	3.6
All Impacted	2	2.2	2.9	3.5
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	10.00	10.00	10.00	120	1200				30000
N9A4	W	10.00	10.00	10.00	65	650				16300
N9A3	W	10.00	10.00	10.00	38	380				0
N9A2	W	10.00	10.00	10.00	103	1030				0
N9A1	W	10.00	10.00	10.00	8	80				0
									Total Cost	46300

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing 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
109R	129	1	0.0	65.4	66	65.4	10	---	62.7	2.7	8	-5.3
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.7	3.7	8	-4.3
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	67.0	2.4	8	-5.6
107B	232	1	0.0	65.7	66	65.7	10	---	61.8	3.9	8	-4.1
109L	128	1	0.0	65.7	66	65.7	10	---	63.2	2.5	8	-5.5
110L	231	1	0.0	63.3	66	63.3	10	---	61.8	1.5	8	-6.5
110R	233	1	0.0	63.1	66	63.1	10	---	61.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	1.5	2.7	3.9
All Impacted	2	2.4	3.1	3.7
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	12.00	12.00	12.00	120	1440				36000
N9A4	W	12.00	12.00	12.00	65	780				19500
N9A3	W	12.00	12.00	12.00	38	456				0
N9A2	W	12.00	12.00	12.00	103	1236				0
N9A1	W	12.00	12.00	12.00	8	96				0
									Total Cost	55500

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	---	62.6	2.8	8	-5.2
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.5	3.9	8	-4.1
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	67.0	2.4	8	-5.6
107B	232	1	0.0	65.7	66	65.7	10	---	61.6	4.1	8	-3.9
109L	128	1	0.0	65.7	66	65.7	10	---	63.1	2.6	8	-5.4
110L	231	1	0.0	63.3	66	63.3	10	---	61.8	1.5	8	-6.5
110R	233	1	0.0	63.1	66	63.1	10	---	61.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	1.5	2.8	4.1
All Impacted	2	2.4	3.2	3.9
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	14.00	14.00	14.00	120	1680				42000
N9A4	W	14.00	14.00	14.00	65	910				22800
N9A3	W	14.00	14.00	14.00	38	532				0
N9A2	W	14.00	14.00	14.00	103	1442				0
N9A1	W	14.00	14.00	14.00	8	112				0
									Total Cost	64800

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	---	62.5	2.9	8	-5.1
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.4	4.0	8	-4.0
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	66.9	2.5	8	-5.5
107B	232	1	0.0	65.7	66	65.7	10	---	61.5	4.2	8	-3.8
109L	128	1	0.0	65.7	66	65.7	10	---	63.1	2.6	8	-5.4
110L	231	1	0.0	63.3	66	63.3	10	---	61.7	1.6	8	-6.4
110R	233	1	0.0	63.1	66	63.1	10	---	61.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.6	2.8	4.2
All Impacted	2	2.5	3.2	4.0
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	16.00	16.00	16.00	120	1920				48000
N9A4	W	16.00	16.00	16.00	65	1040				26000
N9A3	W	16.00	16.00	16.00	38	608				0
N9A2	W	16.00	16.00	16.00	103	1648				0
N9A1	W	16.00	16.00	16.00	8	128				0
									Total Cost	74000

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	—	62.5	2.9	8	-5.1
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.3	4.1	8	-3.9
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	66.9	2.5	8	-5.5
107B	232	1	0.0	65.7	66	65.7	10	—	61.4	4.3	8	-3.7
109L	128	1	0.0	65.7	66	65.7	10	—	63.0	2.7	8	-5.3
110L	231	1	0.0	63.3	66	63.3	10	—	61.7	1.6	8	-6.4
110R	233	1	0.0	63.1	66	63.1	10	—	61.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.6	2.9	4.3
All Impacted	2	2.5	3.3	4.1
All that meet NR Goal	0	0.0	0.0	0.0

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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	18.00	18.00	18.00	120	2160				54000
N9A4	W	18.00	18.00	18.00	65	1170				29300
N9A3	W	18.00	18.00	18.00	38	684				0
N9A2	W	18.00	18.00	18.00	103	1854				0
N9A1	W	18.00	18.00	18.00	8	144				0
									Total Cost	83300

URS
WHA

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TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	---	62.4	3.0	8	-5.0
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.3	4.1	8	-3.9
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	66.9	2.5	8	-5.5
107B	232	1	0.0	65.7	66	65.7	10	---	61.4	4.3	8	-3.7
109L	128	1	0.0	65.7	66	65.7	10	---	63.0	2.7	8	-5.3
110L	231	1	0.0	63.3	66	63.3	10	---	61.7	1.6	8	-6.4
110R	233	1	0.0	63.1	66	63.1	10	---	60.9	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	1.6	2.9	4.3
All Impacted	2	2.5	3.3	4.1
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	20.00	20.00	20.00	120	2400				60000
N9A4	W	20.00	20.00	20.00	65	1300				32500
N9A3	W	20.00	20.00	20.00	38	760				0
N9A2	W	20.00	20.00	20.00	103	2060				0
N9A1	W	20.00	20.00	20.00	8	160				0
									Total Cost	92500

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	---	62.4	3.0	8	-5.0
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.2	4.2	8	-3.8
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	66.8	2.6	8	-5.4
107B	232	1	0.0	65.7	66	65.7	10	---	61.3	4.4	8	-3.6
109L	128	1	0.0	65.7	66	65.7	10	---	63.0	2.7	8	-5.3
110L	231	1	0.0	63.3	66	63.3	10	---	61.7	1.6	8	-6.4
110R	233	1	0.0	63.1	66	63.1	10	---	60.9	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	1.6	3.0	4.4
All Impacted	2	2.6	3.4	4.2
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N9B	W	22.00	22.00	22.00	120	2640				66000
N9A4	W	22.00	22.00	22.00	65	1430				35800
N9A3	W	22.00	22.00	22.00	38	836				0
N9A2	W	22.00	22.00	22.00	103	2266				0
N9A1	W	22.00	22.00	22.00	8	176				0
									Total Cost	101800

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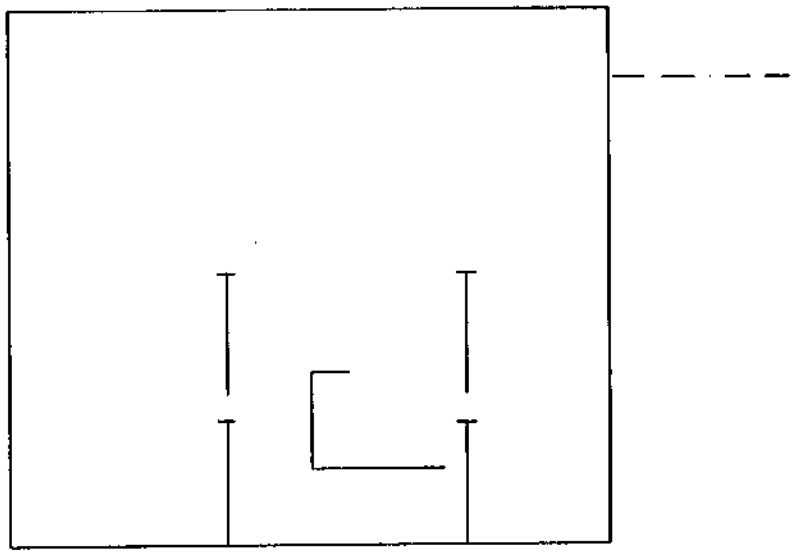
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN9
BARRIER DESIGN: N9
ATMOSPHERICS: 68 deg F, 50% RH

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
109R	129	1	0.0	65.4	66	65.4	10	----	62.4	3.0	8	-5.0
108L	235	1	0.0	66.4	66	66.4	10	Snd Lvl	62.2	4.2	8	-3.8
106R	234	1	0.0	69.4	66	69.4	10	Snd Lvl	66.8	2.6	8	-5.4
107B	232	1	0.0	65.7	66	65.7	10	----	61.2	4.5	8	-3.5
109L	128	1	0.0	65.7	66	65.7	10	----	62.9	2.8	8	-5.2
110L	231	1	0.0	63.3	66	63.3	10	----	61.6	1.7	8	-6.3
110R	233	1	0.0	63.1	66	63.1	10	----	60.9	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.7	3.0	4.5
All Impacted	2	2.6	3.4	4.2
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN10		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N10		Project/Contract No. CLR FAP 7822 001 S	
Run name: N10		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	8.00	8.00	8.00	125	1000				25000
									Total Cost	25000

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	---	61.7	0.8	8	-7.2
112L	237	1	0.0	62.5	66	62.5	10	---	61.7	0.8	8	-7.2
111L	131	1	0.0	62.9	66	62.9	10	---	61.3	1.6	8	-6.4
111R	130	1	0.0	64.1	66	64.1	10	---	62.4	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	0.8	1.2	1.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	10.00	10.00	10.00	125	1250				31300
									Total Cost	31300

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	----	61.6	0.9	8	-7.1
112L	237	1	0.0	62.5	66	62.5	10	----	61.6	0.9	8	-7.1
111L	131	1	0.0	62.9	66	62.9	10	----	61.1	1.8	8	-6.2
111R	130	1	0.0	64.1	66	64.1	10	----	62.3	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	0.9	1.4	1.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	12.00	12.00	12.00	125	1500				37500
									Total Cost	37500

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	---	61.5	1.0	8	-7.0
112L	237	1	0.0	62.5	66	62.5	10	---	61.6	0.9	8	-7.1
111L	131	1	0.0	62.9	66	62.9	10	---	61.0	1.9	8	-6.1
111R	130	1	0.0	64.1	66	64.1	10	---	62.2	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	0.9	1.4	1.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	14.00	14.00	14.00	125	1750				43800
									Total Cost	43800

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	----	61.5	1.0	8	-7.0
112L	237	1	0.0	62.5	66	62.5	10	----	61.5	1.0	8	-7.0
111L	131	1	0.0	62.9	66	62.9	10	----	60.9	2.0	8	-6.0
111R	130	1	0.0	64.1	66	64.1	10	----	62.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	1.0	1.5	2.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	16.00	16.00	16.00	125	2000				50000
									Total Cost	50000

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	---	61.5	1.0	8	-7.0
112L	237	1	0.0	62.5	66	62.5	10	---	61.5	1.0	8	-7.0
111L	131	1	0.0	62.9	66	62.9	10	---	60.9	2.0	8	-6.0
111R	130	1	0.0	64.1	66	64.1	10	---	62.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	1.0	1.5	2.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrierN10

BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	18.00	18.00	18.00	125	2250				56300
									Total Cost	56300

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	---	61.4	1.1	8	-6.9
112L	237	1	0.0	62.5	66	62.5	10	---	61.5	1.0	8	-7.0
111L	131	1	0.0	62.9	66	62.9	10	---	60.8	2.1	8	-5.9
111R	130	1	0.0	64.1	66	64.1	10	---	62.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	4	1.0	1.6	2.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	20.00	20.00	20.00	125	2500				62500
									Total Cost	62500

URS
WHA

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TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	—	61.4	1.1	8	-6.9
112L	237	1	0.0	62.5	66	62.5	10	—	61.5	1.0	8	-7.0
111L	131	1	0.0	62.9	66	62.9	10	---	60.8	2.1	8	-5.9
111R	130	1	0.0	64.1	66	64.1	10	---	62.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	4	1.0	1.6	2.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N10	W	22.00	22.00	22.00	125	2750				68800
									Total Cost	68800

URS 10 July 2002
WHA TNM 1.0b

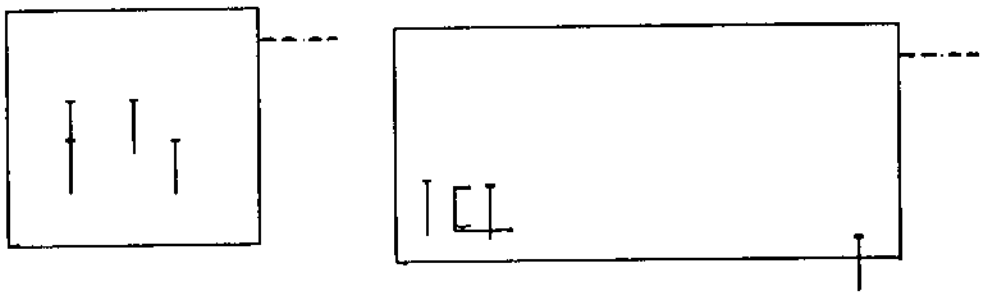
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN10
BARRIER DESIGN: N10

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
112R	238	1	0.0	62.5	66	62.5	10	----	61.4	1.1	8	-6.9
112L	237	1	0.0	62.5	66	62.5	10	----	61.4	1.1	8	-6.9
111L	131	1	0.0	62.9	66	62.9	10	----	60.8	2.1	8	-5.9
111R	130	1	0.0	64.1	66	64.1	10	----	62.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	4	1.1	1.6	2.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN11		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N11		Project/Contract No. CLR FAP 7822 001 S	
Run name: N11		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	8.00	8.00	8.00	120	960				24000
N11A	W	8.00	8.00	8.00	240	1920				48000
									Total Cost	72000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	---	63.1	2.3	8	-5.7
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	63.2	2.9	8	-5.1
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	65.2	1.4	8	-6.6
123L	144	1	0.0	64.8	66	64.8	10	---	63.4	1.4	8	-6.6
121L	139	1	0.0	62.9	66	62.9	10	---	61.0	1.9	8	-6.1
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	65.0	1.8	8	-6.2
123R	232	1	0.0	65.3	66	65.3	10	---	63.4	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	1.4	1.9	2.9
All Impacted	3	1.4	2.0	2.9
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	10.00	10.00	10.00	120	1200				30000
N11A	W	10.00	10.00	10.00	240	2400				60000
									Total Cost	90000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	----	63.0	2.4	8	-5.6
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.9	3.2	8	-4.8
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	65.0	1.6	8	-6.4
123L	144	1	0.0	64.8	66	64.8	10	----	63.3	1.5	8	-6.5
121L	139	1	0.0	62.9	66	62.9	10	----	60.7	2.2	8	-5.8
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.7	2.1	8	-5.9
123R	232	1	0.0	65.3	66	65.3	10	----	63.2	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	1.5	2.2	3.2
All Impacted	3	1.6	2.3	3.2
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	12.00	12.00	12.00	120	1440				36000
N11A	W	12.00	12.00	12.00	240	2880				72000
									Total Cost	108000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	---	62.9	2.5	8	-5.5
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.7	3.4	8	-4.6
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	64.8	1.8	8	-6.2
123L	144	1	0.0	64.8	66	64.8	10	---	63.2	1.6	8	-6.4
121L	139	1	0.0	62.9	66	62.9	10	---	60.6	2.3	8	-5.7
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.5	2.3	8	-5.7
123R	232	1	0.0	65.3	66	65.3	10	---	63.1	2.2	8	-5.8

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.6	2.3	3.4
All Impacted	3	1.8	2.5	3.4
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	14.00	14.00	14.00	120	1680				42000
N11A	W	14.00	14.00	14.00	240	3360				84000
									Total Cost	126000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	---	62.8	2.6	8	-5.4
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.5	3.6	8	-4.4
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	64.7	1.9	8	-6.1
123L	144	1	0.0	64.8	66	64.8	10	---	63.1	1.7	8	-6.3
121L	139	1	0.0	62.9	66	62.9	10	---	60.5	2.4	8	-5.6
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.4	2.4	8	-5.6
123R	232	1	0.0	65.3	66	65.3	10	---	63.0	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	1.7	2.4	3.6
All Impacted	3	1.9	2.6	3.6
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	16.00	16.00	16.00	120	1920				48000
N11A	W	16.00	16.00	16.00	240	3840				96000
									Total Cost	144000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	----	62.8	2.6	8	-5.4
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.4	3.7	8	-4.3
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	64.7	1.9	8	-6.1
123L	144	1	0.0	64.8	66	64.8	10	----	63.1	1.7	8	-6.3
121L	139	1	0.0	62.9	66	62.9	10	----	60.4	2.5	8	-5.5
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.3	2.5	8	-5.5
123R	232	1	0.0	65.3	66	65.3	10	----	63.0	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.7	2.5	3.7
All Impacted	3	1.9	2.7	3.7
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	18.00	18.00	18.00	120	2160				54000
N11A	W	18.00	18.00	18.00	240	4320				108000
									Total Cost	162000

URS
WHA

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TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	----	62.7	2.7	8	-5.3
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.3	3.8	8	-4.2
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	64.7	1.9	8	-6.1
123L	144	1	0.0	64.8	66	64.8	10	----	63.1	1.7	8	-6.3
121L	139	1	0.0	62.9	66	62.9	10	----	60.3	2.6	8	-5.4
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.3	2.5	8	-5.5
123R	232	1	0.0	65.3	66	65.3	10	----	63.0	2.3	8	-5.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	1.7	2.5	3.8
All Impacted	3	1.9	2.7	3.8
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	20.00	20.00	20.00	120	2400				60000
N11A	W	20.00	20.00	20.00	240	4800				120000
									Total Cost	180000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	---	62.7	2.7	8	-5.3
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.3	3.8	8	-4.2
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	64.6	2.0	8	-6.0
123L	144	1	0.0	64.8	66	64.8	10	---	63.0	1.8	8	-6.2
121L	139	1	0.0	62.9	66	62.9	10	---	60.3	2.6	8	-5.4
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.2	2.6	8	-5.4
123R	232	1	0.0	65.3	66	65.3	10	---	62.9	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.8	2.6	3.8
All Impacted	3	2.0	2.8	3.8
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N11B	W	22.00	22.00	22.00	120	2640				66000
N11A	W	22.00	22.00	22.00	240	5280				132000
									Total Cost	198000

URS
WHA

10 July 2002
TNM 1.0b

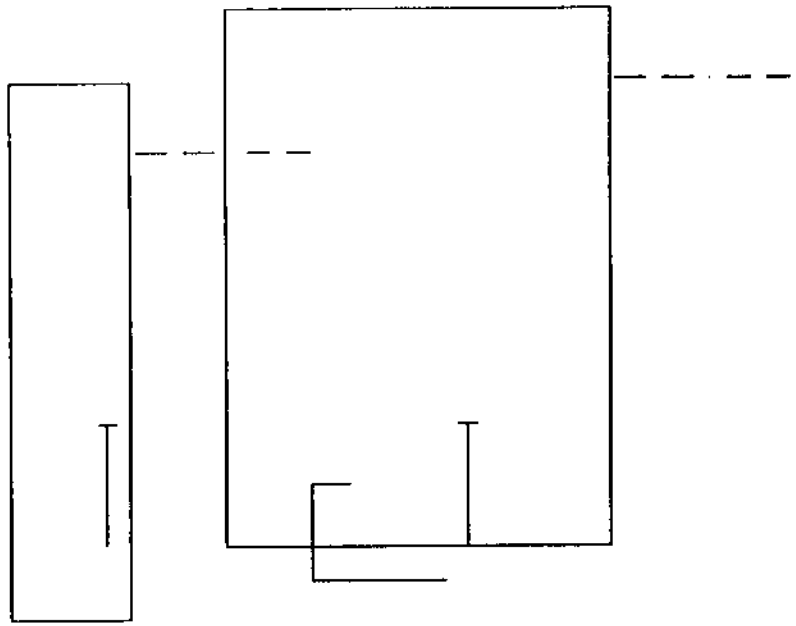
RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN11
BARRIER DESIGN: N11
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
119R	138	1	0.0	65.4	66	65.4	10	---	62.7	2.7	8	-5.3
120L	141	1	0.0	66.1	66	66.1	10	Snd Lvl	62.2	3.9	8	-4.1
122L	143	1	0.0	66.6	66	66.6	10	Snd Lvl	64.6	2.0	8	-6.0
123L	144	1	0.0	64.8	66	64.8	10	---	63.0	1.8	8	-6.2
121L	139	1	0.0	62.9	66	62.9	10	---	60.2	2.7	8	-5.3
122R	231	1	0.0	66.8	66	66.8	10	Snd Lvl	64.2	2.6	8	-5.4
123R	232	1	0.0	65.3	66	65.3	10	---	62.9	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	1.8	2.6	3.9
All Impacted	3	2.0	2.8	3.9
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN5		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N12		Project/Contract No. CLR FAP 7822 001 S	
Run name: N12		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	8.00	8.00	8.00	25	200				5000
N12	W	8.00	8.00	8.00	80	640				16000
									Total Cost	21000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	----	63.7	1.2	8	-6.8
128L	153	1	0.0	65.4	66	65.4	10	----	64.1	1.3	8	-6.7

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.2	1.3	1.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	10.00	10.00	10.00	25	250				6300
N12	W	10.00	10.00	10.00	80	800				20000
									Total Cost	26300

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	---	63.6	1.3	8	-6.7
128L	153	1	0.0	65.4	66	65.4	10	---	63.9	1.5	8	-6.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.3	1.4	1.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS
WHA

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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	12.00	12.00	12.00	25	300				7500
N12	W	12.00	12.00	12.00	80	960				24000
									Total Cost	31500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	---	63.5	1.4	8	-6.6
128L	153	1	0.0	65.4	66	65.4	10	---	63.8	1.6	8	-6.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.4	1.5	1.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	14.00	14.00	14.00	25	350				8800
N12	W	14.00	14.00	14.00	80	1120				28000
									Total Cost	36800

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	----	63.4	1.5	8	-6.5
128L	153	1	0.0	65.4	66	65.4	10	----	63.7	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.5	1.6	1.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	16.00	16.00	16.00	25	400				10000
N12	W	16.00	16.00	16.00	80	1280				32000
									Total Cost	42000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	---	63.4	1.5	8	-6.5
128L	153	1	0.0	65.4	66	65.4	10	---	63.7	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.5	1.6	1.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	18.00	18.00	18.00	25	450				11300
N12	W	18.00	18.00	18.00	80	1440				36000
									Total Cost	47300

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	----	63.4	1.5	8	-6.5
128L	153	1	0.0	65.4	66	65.4	10	----	63.6	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.5	1.7	1.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	20.00	20.00	20.00	25	500				12500
N12	W	20.00	20.00	20.00	80	1600				40000
									Total Cost	52500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	---	63.4	1.5	8	-6.5
128L	153	1	0.0	65.4	66	65.4	10	---	63.6	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.5	1.7	1.8
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N12 left of driveway	W	22.00	22.00	22.00	25	550				13800
N12	W	22.00	22.00	22.00	80	1760				44000
									Total Cost	57800

URS
WHA

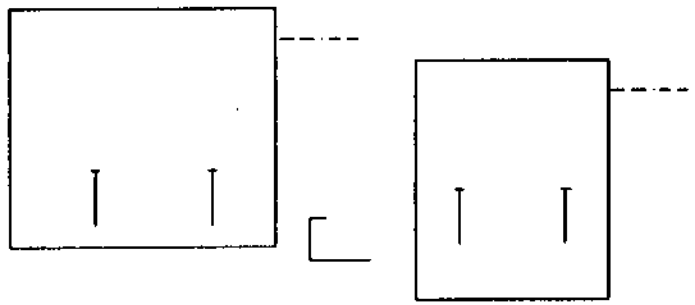
10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN12
BARRIER DESIGN: N12
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
128R	151	1	0.0	64.9	66	64.9	10	—	63.3	1.6	8	-6.4
128L	153	1	0.0	65.4	66	65.4	10	—	63.6	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.6	1.7	1.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN13		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N13		Project/Contract No. CLR FAP 7822 001 S	
Run name: N13		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	8.00	8.00	8.00	125	1000				25000
N13A	W	8.00	8.00	8.00	90	720				18000
									Total Cost	43000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	----	63.2	1.1	8	-6.9
131R	156	1	0.0	64.3	66	64.3	10	----	63.4	0.9	8	-7.1
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	64.2	2.1	8	-5.9
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	64.2	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	0.9	1.6	2.1
All Impacted	2	2.1	2.1	2.1
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	10.00	10.00	10.00	125	1250				31300
N13A	W	10.00	10.00	10.00	90	900				22500
									Total Cost	53800

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	----	62.6	1.7	8	-6.3
131R	156	1	0.0	64.3	66	64.3	10	----	62.9	1.4	8	-6.6
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.8	2.5	8	-5.5
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.8	2.5	8	-5.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	1.4	2.0	2.5
All Impacted	2	2.5	2.5	2.5
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	12.00	12.00	12.00	125	1500				37500
N13A	W	12.00	12.00	12.00	90	1080				27000
									Total Cost	64500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	—	62.3	2.0	8	-6.0
131R	156	1	0.0	64.3	66	64.3	10	—	62.6	1.7	8	-6.3
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.6	2.7	8	-5.3
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.5	2.8	8	-5.2

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	4	1.7	2.3	2.8
All Impacted	2	2.7	2.8	2.8
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	14.00	14.00	14.00	125	1750				43800
N13A	W	14.00	14.00	14.00	90	1260				31500
									Total Cost	75300

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	----	62.1	2.2	8	-5.8
131R	156	1	0.0	64.3	66	64.3	10	----	62.4	1.9	8	-6.1
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.5	2.8	8	-5.2
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.4	2.9	8	-5.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	1.9	2.5	2.9
All Impacted	2	2.8	2.9	2.9
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	16.00	16.00	16.00	125	2000				50000
N13A	W	16.00	16.00	16.00	90	1440				36000
									Total Cost	86000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	---	62.0	2.3	8	-5.7
131R	156	1	0.0	64.3	66	64.3	10	---	62.3	2.0	8	-6.0
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.4	2.9	8	-5.1
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.3	3.0	8	-5.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	2.0	2.6	3.0
All Impacted	2	2.9	3.0	3.0
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	18.00	18.00	18.00	125	2250				56300
N13A	W	18.00	18.00	18.00	90	1620				40500
									Total Cost	96800

URS
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10 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	---	61.9	2.4	8	-5.6
131R	156	1	0.0	64.3	66	64.3	10	---	62.2	2.1	8	-5.9
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.4	2.9	8	-5.1
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.2	3.1	8	-4.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	2.1	2.6	3.1
All Impacted	2	2.9	3.0	3.1
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	20.00	20.00	20.00	125	2500				62500
N13A	W	20.00	20.00	20.00	90	1800				45000
									Total Cost	107500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	----	61.8	2.5	8	-5.5
131R	156	1	0.0	64.3	66	64.3	10	----	62.2	2.1	8	-5.9
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.3	3.0	8	-5.0
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.2	3.1	8	-4.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	2.1	2.7	3.1
All Impacted	2	3.0	3.1	3.1
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N13B	W	22.00	22.00	22.00	125	2750				68800
N13A	W	22.00	22.00	22.00	90	1980				49500
									Total Cost	118300

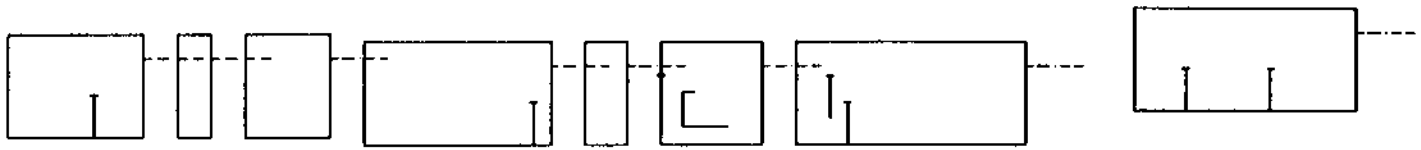
URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN13
BARRIER DESIGN: N13
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
131L	154	1	0.0	64.3	66	64.3	10	----	61.8	2.5	8	-5.5
131R	156	1	0.0	64.3	66	64.3	10	----	62.1	2.2	8	-5.8
133L	231	1	0.0	66.3	66	66.3	10	Snd Lvl	63.3	3.0	8	-5.0
133R	232	1	0.0	66.3	66	66.3	10	Snd Lvl	63.1	3.2	8	-4.8

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	2.2	2.7	3.2
All Impacted	2	3.0	3.1	3.2
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN14		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N14		Project/Contract No. CLR FAP 7822 001 S	
Run name: N14		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	8.00	8.00	8.00	130	1040				26000
N5i	W	8.00	8.00	8.00	135	1080				27000
N5J	W	8.00	8.00	8.00	60	480				12000
N5k	W	8.00	8.00	8.00	25	200				5000
N5L	W	8.00	8.00	8.00	110	880				22000
N5m	W	8.00	8.00	8.00	50	400				10000
N5n	W	8.00	8.00	8.00	20	160				4000
N5o	W	8.00	8.00	8.00	80	640				16000
									Total Cost	122000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	----	60.1	1.5	8	-6.5
138R	165	1	0.0	61.6	66	61.6	10	----	60.0	1.6	8	-6.4
134R	160	1	0.0	63.8	66	63.8	10	----	61.6	2.2	8	-5.8
134L	157	1	0.0	65.0	66	65.0	10	----	62.3	2.7	8	-5.3
136R	161	1	0.0	65.1	66	65.1	10	----	61.9	3.2	8	-4.8
137B	164	1	0.0	65.0	66	65.0	10	----	61.9	3.1	8	-4.9
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.3	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	1.5	2.3	3.2
All Impacted	1	1.8	1.8	1.8
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	10.00	10.00	10.00	130	1300				32500
N5i	W	10.00	10.00	10.00	135	1350				33800
N5J	W	10.00	10.00	10.00	60	600				15000
N5k	W	10.00	10.00	10.00	25	250				6300
N5L	W	10.00	10.00	10.00	110	1100				27500
N5m	W	10.00	10.00	10.00	50	500				12500
N5n	W	10.00	10.00	10.00	20	200				5000
N5o	W	10.00	10.00	10.00	80	800				20000
									Total Cost	152600

URS
WHA

10 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	----	59.8	1.8	8	-6.2
138R	165	1	0.0	61.6	66	61.6	10	----	59.6	2.0	8	-6.0
134R	160	1	0.0	63.8	66	63.8	10	----	61.3	2.5	8	-5.5
134L	157	1	0.0	65.0	66	65.0	10	----	62.0	3.0	8	-5.0
136R	161	1	0.0	65.1	66	65.1	10	----	61.4	3.7	8	-4.3
137B	164	1	0.0	65.0	66	65.0	10	----	61.4	3.6	8	-4.4
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.2	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	1.8	2.6	3.7
All Impacted	1	1.9	1.9	1.9
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	12.00	12.00	12.00	130	1560				39000
N5i	W	12.00	12.00	12.00	135	1620				40500
N5J	W	12.00	12.00	12.00	60	720				18000
N5k	W	12.00	12.00	12.00	25	300				7500
N5L	W	12.00	12.00	12.00	110	1320				33000
N5m	W	12.00	12.00	12.00	50	600				15000
N5n	W	12.00	12.00	12.00	20	240				6000
N5o	W	12.00	12.00	12.00	80	960				24000
									Total Cost	183000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	----	59.6	2.0	8	-6.0
138R	165	1	0.0	61.6	66	61.6	10	----	59.4	2.2	8	-5.8
134R	160	1	0.0	63.8	66	63.8	10	----	61.1	2.7	8	-5.3
134L	157	1	0.0	65.0	66	65.0	10	----	61.7	3.3	8	-4.7
136R	161	1	0.0	65.1	66	65.1	10	----	61.0	4.1	8	-3.9
137B	164	1	0.0	65.0	66	65.0	10	----	61.1	3.9	8	-4.1
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.2	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	1.9	2.9	4.1
All Impacted	1	1.9	1.9	1.9
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	14.00	14.00	14.00	130	1820				45500
N5i	W	14.00	14.00	14.00	135	1890				47300
N5J	W	14.00	14.00	14.00	60	840				21000
N5k	W	14.00	14.00	14.00	25	350				8800
N5L	W	14.00	14.00	14.00	110	1540				38500
N5m	W	14.00	14.00	14.00	50	700				17500
N5n	W	14.00	14.00	14.00	20	280				7000
N5o	W	14.00	14.00	14.00	80	1120				28000
									Total Cost	213600

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	---	59.4	2.2	8	-5.8
138R	165	1	0.0	61.6	66	61.6	10	---	59.2	2.4	8	-5.6
134R	160	1	0.0	63.8	66	63.8	10	---	60.9	2.9	8	-5.1
134L	157	1	0.0	65.0	66	65.0	10	---	61.6	3.4	8	-4.6
136R	161	1	0.0	65.1	66	65.1	10	---	60.9	4.2	8	-3.8
137B	164	1	0.0	65.0	66	65.0	10	---	60.9	4.1	8	-3.9
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	2.0	3.0	4.2
All Impacted	1	2.0	2.0	2.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

10 July 2002

TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Road - Build/WB BarrierN14

BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	16.00	16.00	16.00	130	2080				52000
N5i	W	16.00	16.00	16.00	135	2160				54000
N5J	W	16.00	16.00	16.00	60	960				24000
N5k	W	16.00	16.00	16.00	25	400				10000
N5L	W	16.00	16.00	16.00	110	1760				44000
N5m	W	16.00	16.00	16.00	50	800				20000
N5n	W	16.00	16.00	16.00	20	320				8000
N5o	W	16.00	16.00	16.00	80	1280				32000
									Total Cost	244000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	----	59.3	2.3	8	-5.7
138R	165	1	0.0	61.6	66	61.6	10	----	59.1	2.5	8	-5.5
134R	160	1	0.0	63.8	66	63.8	10	----	60.9	2.9	8	-5.1
134L	157	1	0.0	65.0	66	65.0	10	----	61.5	3.5	8	-4.5
136R	161	1	0.0	65.1	66	65.1	10	----	60.7	4.4	8	-3.6
137B	164	1	0.0	65.0	66	65.0	10	----	60.8	4.2	8	-3.8
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	2.0	3.1	4.4
All Impacted	1	2.0	2.0	2.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	18.00	18.00	18.00	130	2340				58500
N5i	W	18.00	18.00	18.00	135	2430				60800
N5J	W	18.00	18.00	18.00	60	1080				27000
N5k	W	18.00	18.00	18.00	25	450				11300
N5L	W	18.00	18.00	18.00	110	1980				49500
N5m	W	18.00	18.00	18.00	50	900				22500
N5n	W	18.00	18.00	18.00	20	360				9000
N5o	W	18.00	18.00	18.00	80	1440				36000
									Total Cost	274600

URS 10 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	—	59.3	2.3	8	-5.7
138R	165	1	0.0	61.6	66	61.6	10	—	59.0	2.6	8	-5.4
134R	160	1	0.0	63.8	66	63.8	10	—	60.8	3.0	8	-5.0
134L	157	1	0.0	65.0	66	65.0	10	—	61.4	3.6	8	-4.4
136R	161	1	0.0	65.1	66	65.1	10	—	60.6	4.5	8	-3.5
137B	164	1	0.0	65.0	66	65.0	10	—	60.7	4.3	8	-3.7
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.1	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	2.0	3.2	4.5
All Impacted	1	2.0	2.0	2.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	20.00	20.00	20.00	130	2600				65000
N5i	W	20.00	20.00	20.00	135	2700				67500
N5J	W	20.00	20.00	20.00	60	1200				30000
N5k	W	20.00	20.00	20.00	25	500				12500
N5L	W	20.00	20.00	20.00	110	2200				55000
N5m	W	20.00	20.00	20.00	50	1000				25000
N5n	W	20.00	20.00	20.00	20	400				10000
N5o	W	20.00	20.00	20.00	80	1600				40000
									Total Cost	305000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	---	59.2	2.4	8	-5.6
138R	165	1	0.0	61.6	66	61.6	10	---	58.9	2.7	8	-5.3
134R	160	1	0.0	63.8	66	63.8	10	---	60.7	3.1	8	-4.9
134L	157	1	0.0	65.0	66	65.0	10	---	61.3	3.7	8	-4.3
136R	161	1	0.0	65.1	66	65.1	10	---	60.5	4.6	8	-3.4
137B	164	1	0.0	65.0	66	65.0	10	---	60.6	4.4	8	-3.6
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	7	2.1	3.3	4.6
All Impacted	1	2.1	2.1	2.1
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N5h	W	22.00	22.00	22.00	130	2860				71500
N5i	W	22.00	22.00	22.00	135	2970				74300
N5J	W	22.00	22.00	22.00	60	1320				33000
N5k	W	22.00	22.00	22.00	25	550				13800
N5L	W	22.00	22.00	22.00	110	2420				60500
N5m	W	22.00	22.00	22.00	50	1100				27500
N5n	W	22.00	22.00	22.00	20	440				11000
N5o	W	22.00	22.00	22.00	80	1760				44000
									Total Cost	335600

URS
WHA

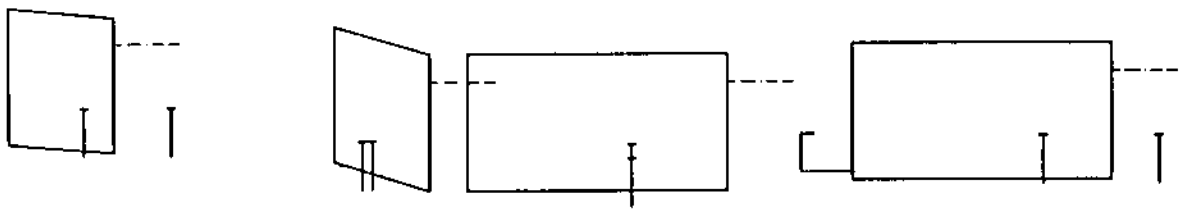
10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN14
BARRIER DESIGN: N14
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
139B	167	1	0.0	61.6	66	61.6	10	---	59.2	2.4	8	-5.6
138R	165	1	0.0	61.6	66	61.6	10	---	58.9	2.7	8	-5.3
134R	160	1	0.0	63.8	66	63.8	10	---	60.7	3.1	8	-4.9
134L	157	1	0.0	65.0	66	65.0	10	---	61.3	3.7	8	-4.3
136R	161	1	0.0	65.1	66	65.1	10	---	60.4	4.7	8	-3.3
137B	164	1	0.0	65.0	66	65.0	10	---	60.5	4.5	8	-3.5
140L	231	1	0.0	66.1	66	66.1	10	Snd Lvl	64.0	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	7	2.1	3.3	4.7
All Impacted	1	2.1	2.1	2.1
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN15		Sheet 1 of 1	10 Jul 2002
		URS	
Barrier View-N15		Project/Contract No. CLR FAP 7822 001 S	
Run name: N15		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	8.00	8.00	8.00	55	440				11000
N15B-2	W	8.00	8.00	8.00	50	400				10000
N15B-1	W	8.00	8.00	8.00	135	1080				27000
N15A	W	8.00	8.00	8.00	135	1080				27000
									Total Cost	75000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	---	61.8	2.3	8	-5.7
144R	170	1	0.0	64.4	66	64.4	10	---	63.2	1.2	8	-6.8
144L	231	1	0.0	64.6	66	64.6	10	---	62.6	2.0	8	-6.0
147R	172	1	0.0	60.7	66	60.7	10	---	59.2	1.5	8	-6.5
148L	174	1	0.0	65.5	66	65.5	10	---	63.4	2.1	8	-5.9
150L	176	1	0.0	64.6	66	64.6	10	---	63.3	1.3	8	-6.7
149L	229	1	0.0	60.3	66	60.3	10	---	59.3	1.0	8	-7.0
150R	233	1	0.0	64.6	66	64.6	10	---	63.6	1.0	8	-7.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	1.0	1.5	2.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	10.00	10.00	10.00	55	550				13800
N15B-2	W	10.00	10.00	10.00	50	500				12500
N15B-1	W	10.00	10.00	10.00	135	1350				33800
N15A	W	10.00	10.00	10.00	135	1350				33800
									Total Cost	93900

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	----	61.3	2.8	8	-5.2
144R	170	1	0.0	64.4	66	64.4	10	----	63.1	1.3	8	-6.7
144L	231	1	0.0	64.6	66	64.6	10	----	62.4	2.2	8	-5.8
147R	172	1	0.0	60.7	66	60.7	10	----	58.9	1.8	8	-6.2
148L	174	1	0.0	65.5	66	65.5	10	----	63.1	2.4	8	-5.6
150L	176	1	0.0	64.6	66	64.6	10	----	63.2	1.4	8	-6.6
149L	229	1	0.0	60.3	66	60.3	10	----	59.1	1.2	8	-6.8
150R	233	1	0.0	64.6	66	64.6	10	----	63.4	1.2	8	-6.8

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	1.2	1.8	2.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	12.00	12.00	12.00	55	660				16500
N15B-2	W	12.00	12.00	12.00	50	600				15000
N15B-1	W	12.00	12.00	12.00	135	1620				40500
N15A	W	12.00	12.00	12.00	135	1620				40500
									Total Cost	112500

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	----	61.1	3.0	8	-5.0
144R	170	1	0.0	64.4	66	64.4	10	----	63.0	1.4	8	-6.6
144L	231	1	0.0	64.6	66	64.6	10	----	62.2	2.4	8	-5.6
147R	172	1	0.0	60.7	66	60.7	10	----	58.7	2.0	8	-6.0
148L	174	1	0.0	65.5	66	65.5	10	----	63.0	2.5	8	-5.5
150L	176	1	0.0	64.6	66	64.6	10	----	63.1	1.5	8	-6.5
149L	229	1	0.0	60.3	66	60.3	10	----	58.9	1.4	8	-6.6
150R	233	1	0.0	64.6	66	64.6	10	----	63.3	1.3	8	-6.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	1.3	1.9	3.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	14.00	14.00	14.00	55	770				19300
N15B-2	W	14.00	14.00	14.00	50	700				17500
N15B-1	W	14.00	14.00	14.00	135	1890				47300
N15A	W	14.00	14.00	14.00	135	1890				47300
									Total Cost	131400

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	----	61.0	3.1	8	-4.9
144R	170	1	0.0	64.4	66	64.4	10	----	62.9	1.5	8	-6.5
144L	231	1	0.0	64.6	66	64.6	10	----	62.1	2.5	8	-5.5
147R	172	1	0.0	60.7	66	60.7	10	----	58.6	2.1	8	-5.9
148L	174	1	0.0	65.5	66	65.5	10	----	62.9	2.6	8	-5.4
150L	176	1	0.0	64.6	66	64.6	10	----	63.1	1.5	8	-6.5
149L	229	1	0.0	60.3	66	60.3	10	----	58.9	1.4	8	-6.6
150R	233	1	0.0	64.6	66	64.6	10	----	63.3	1.3	8	-6.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	8	1.3	2.0	3.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	16.00	16.00	16.00	55	880				22000
N15B-2	W	16.00	16.00	16.00	50	800				20000
N15B-1	W	16.00	16.00	16.00	135	2161				54000
N15A	W	16.00	16.00	16.00	135	2160				54000
									Total Cost	150000

URS
WHA

10 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	—	60.9	3.2	8	-4.8
144R	170	1	0.0	64.4	66	64.4	10	—	62.9	1.5	8	-6.5
144L	231	1	0.0	64.6	66	64.6	10	----	62.0	2.6	8	-5.4
147R	172	1	0.0	60.7	66	60.7	10	----	58.5	2.2	8	-5.8
148L	174	1	0.0	65.5	66	65.5	10	—	62.9	2.6	8	-5.4
150L	176	1	0.0	64.6	66	64.6	10	—	63.0	1.6	8	-6.4
149L	229	1	0.0	60.3	66	60.3	10	----	58.8	1.5	8	-6.5
150R	233	1	0.0	64.8	66	64.6	10	----	63.2	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	1.4	2.1	3.2
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	18.00	18.00	18.00	55	990				24800
N15B-2	W	18.00	18.00	18.00	50	900				22500
N15B-1	W	18.00	18.00	18.00	135	2431				60800
N15A	W	18.00	18.00	18.00	135	2430				60800
									Total Cost	168900

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	---	60.8	3.3	8	-4.7
144R	170	1	0.0	64.4	66	64.4	10	---	62.9	1.5	8	-6.5
144L	231	1	0.0	64.6	66	64.6	10	---	62.0	2.6	8	-5.4
147R	172	1	0.0	60.7	66	60.7	10	---	58.5	2.2	8	-5.8
148L	174	1	0.0	65.5	66	65.5	10	---	62.8	2.7	8	-5.3
150L	176	1	0.0	64.6	66	64.6	10	---	63.0	1.6	8	-6.4
149L	229	1	0.0	60.3	66	60.3	10	---	58.7	1.6	8	-6.4
150R	233	1	0.0	64.6	66	64.6	10	---	63.2	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	8	1.4	2.1	3.3
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	20.00	20.00	20.00	55	1100				27500
N15B-2	W	20.00	20.00	20.00	50	1000				25000
N15B-1	W	20.00	20.00	20.00	135	2701				67500
N15A	W	20.00	20.00	20.00	135	2700				67500
									Total Cost	187500

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	---	60.7	3.4	8	-4.6
144R	170	1	0.0	64.4	66	64.4	10	---	62.8	1.6	8	-6.4
144L	231	1	0.0	64.6	66	64.6	10	---	61.9	2.7	8	-5.3
147R	172	1	0.0	60.7	66	60.7	10	---	58.4	2.3	8	-5.7
148L	174	1	0.0	65.5	66	65.5	10	---	62.8	2.7	8	-5.3
150L	176	1	0.0	64.6	66	64.6	10	---	63.0	1.6	8	-6.4
149L	229	1	0.0	60.3	66	60.3	10	---	58.7	1.6	8	-6.4
150R	233	1	0.0	64.6	66	64.6	10	---	63.2	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	1.4	2.2	3.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 10 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N15C	W	22.00	22.00	22.00	55	1210				30300
N15B-2	W	22.00	22.00	22.00	50	1100				27500
N15B-1	W	22.00	22.00	22.00	135	2971				74300
N15A	W	22.00	22.00	22.00	135	2970				74300
									Total Cost	206400

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WHA

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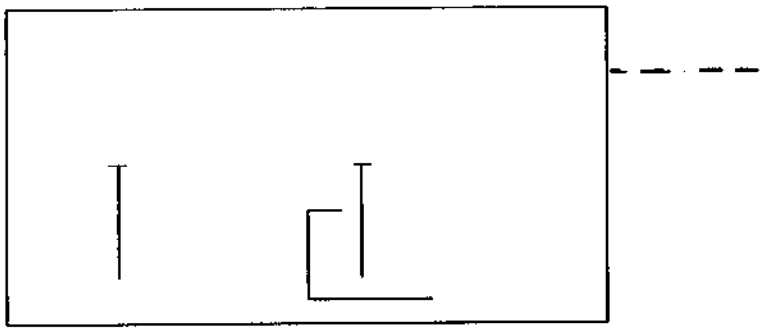
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN15
BARRIER DESIGN: N15
ATMOSPHERICS: 68 deg F, 50% RH

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
146R	173	1	0.0	64.1	66	64.1	10	----	60.7	3.4	8	-4.6
144R	170	1	0.0	64.4	66	64.4	10	----	62.8	1.6	8	-6.4
144L	231	1	0.0	64.6	66	64.6	10	----	61.9	2.7	8	-5.3
147R	172	1	0.0	60.7	66	60.7	10	----	58.4	2.3	8	-5.7
148L	174	1	0.0	65.5	66	65.5	10	----	62.7	2.8	8	-5.2
150L	176	1	0.0	64.6	66	64.6	10	----	63.0	1.6	8	-6.4
149L	229	1	0.0	60.3	66	60.3	10	----	58.7	1.6	8	-6.4
150R	233	1	0.0	64.6	66	64.6	10	----	63.2	1.4	8	-6.6

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	8	1.4	2.2	3.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN16		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-N16		Project/Contract No. CLR FAP 7822 001 S	
Run name: N16		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	8.00	8.00	8.00	135	1080				27000
									Total Cost	27000

URS
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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing 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
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	65.1	1.1	8	-6.9
155R	181	1	0.0	65.6	66	65.6	10	----	64.1	1.5	8	-6.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.1	1.3	1.5
All Impacted	1	1.1	1.1	1.1
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	10.00	10.00	10.00	135	1350				33800
									Total Cost	33800

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.9	1.3	8	-6.7
155R	181	1	0.0	65.6	66	65.6	10	---	63.9	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.3	1.5	1.7
All Impacted	1	1.3	1.3	1.3
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	12.00	12.00	12.00	135	1620				40500
									Total Cost	40500

URS 11 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.8	1.4	8	-6.6
155R	181	1	0.0	65.6	66	65.6	10	---	63.9	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.4	1.5	1.7
All Impacted	1	1.4	1.4	1.4
All that meet NR Goal	0	0.0	0.0	0.0

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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	14.00	14.00	14.00	135	1890				47300
									Total Cost	47300

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.8	1.4	8	-6.6
155R	181	1	0.0	65.6	66	65.6	10	---	63.8	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.4	1.6	1.8
All Impacted	1	1.4	1.4	1.4
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	16.00	16.00	16.00	135	2160				54000
									Total Cost	54000

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.8	1.4	8	-6.6
155R	181	1	0.0	65.6	66	65.6	10	---	63.8	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.4	1.6	1.8
All Impacted	1	1.4	1.4	1.4
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	18.00	18.00	18.00	135	2430				60800
									Total Cost	60800

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.7	1.5	8	-6.5
155R	181	1	0.0	65.6	66	65.6	10	----	63.7	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.5	1.7	1.9
All Impacted	1	1.5	1.5	1.5
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	20.00	20.00	20.00	135	2700				67500
									Total Cost	67500

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.7	1.5	8	-6.5
155R	181	1	0.0	65.6	66	65.6	10	----	63.7	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.5	1.7	1.9
All Impacted	1	1.5	1.5	1.5
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N16	W	22.00	22.00	22.00	135	2970				74300
									Total Cost	74300

URS
WHA

11 July 2002
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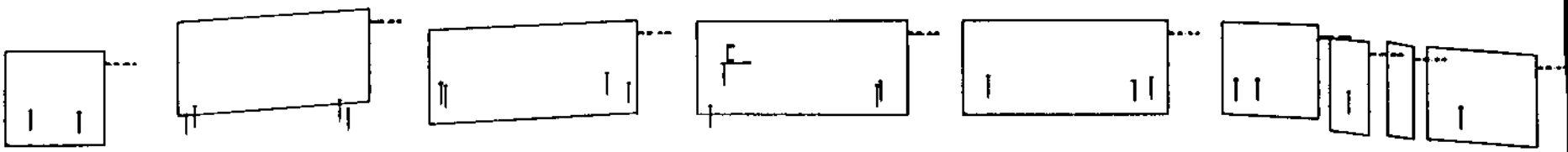
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN16
BARRIER DESIGN: N16

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
155L	182	1	0.0	66.2	66	66.2	10	Snd Lvl	64.7	1.5	8	-6.5
155R	181	1	0.0	65.6	66	65.6	10	----	63.7	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.5	1.7	1.9
All Impacted	1	1.5	1.5	1.5
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN17	Sheet 1 of 1 | 11 Jul 2002
	URS
Barrier View-N17	Project/Contract No. CLR FAP 7822 001 S
Run name: N17	TNM Version 1.0b, July 1999
Scale: <DNA - due to perspective>	Analysis By: WHA

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 11 July 2002
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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	8.00	8.00	8.00	115	920				23000
N17E	W	8.00	8.00	8.00	225	1800				45000
N17A	W	8.00	8.00	8.00	130	1040				26000
N17A-2	W	8.00	8.00	8.00	30	240				6000
N17A-3	W	8.00	8.00	8.00	45	360				9000
N17A-4	W	8.00	8.00	8.00	110	880				22000
N17B	W	8.00	8.00	8.00	240	1920				48000
N17C	W	8.00	8.00	8.00	245	1960				49000
N17D	W	8.00	8.00	8.00	246	1970				49300
									Total Cost	277300

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	---	62.0	3.3	8	-4.7
159B	185	1	0.0	63.8	66	63.8	10	---	61.4	2.4	8	-5.6
160L	187	1	0.0	63.7	66	63.7	10	---	60.9	2.8	8	-5.2
162R	189	1	0.0	65.5	66	65.5	10	---	61.7	3.8	8	-4.2
164L	191	1	0.0	65.1	66	65.1	10	---	62.0	3.1	8	-4.9
165R	192	1	0.0	65.6	66	65.6	10	---	61.8	3.8	8	-4.2
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	62.4	3.9	8	-4.1
170R	197	1	0.0	62.5	66	62.5	10	---	60.0	2.5	8	-5.5
176R	204	1	0.0	64.7	66	64.7	10	---	59.6	5.1	8	-2.9
173L	205	1	0.0	64.0	66	64.0	10	---	61.0	3.0	8	-5.0
179L	207	1	0.0	65.4	66	65.4	10	---	61.9	3.5	8	-4.5
182L	210	1	0.0	64.4	66	64.4	10	---	62.1	2.3	8	-5.7
182R	212	1	0.0	64.6	66	64.6	10	---	61.3	3.3	8	-4.7
161L	229	1	0.0	60.7	66	60.7	10	---	58.3	2.4	8	-5.6
163R	231	1	0.0	61.6	66	61.6	10	---	58.9	2.7	8	-5.3
166R	233	1	0.0	62.8	66	62.8	10	---	59.3	3.5	8	-4.5
168L	235	1	0.0	61.1	66	61.1	10	---	58.9	2.2	8	-5.8
171R	237	1	0.0	62.0	66	62.0	10	---	59.0	3.0	8	-5.0
174L	239	1	0.0	62.1	66	62.1	10	---	59.3	2.8	8	-5.2
177R	241	1	0.0	63.0	66	63.0	10	---	59.2	3.8	8	-4.2
180L	243	1	0.0	63.3	66	63.3	10	---	59.9	3.4	8	-4.6

Dwelling Units	# DUs	Noise Reduction

		Min	Avg	Max
		dB	dB	dB
All Selected	21	2.2	3.2	5.1
All Impacted	1	3.9	3.9	3.9
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	10.00	10.00	10.00	115	1150				28800
N17E	W	10.00	10.00	10.00	225	2250				56300
N17A	W	10.00	10.00	10.00	130	1300				32500
N17A-2	W	10.00	10.00	10.00	30	300				7500
N17A-3	W	10.00	10.00	10.00	45	450				11300
N17A-4	W	10.00	10.00	10.00	110	1100				27500
N17B	W	10.00	10.00	10.00	240	2400				60000
N17C	W	10.00	10.00	10.00	245	2451				61300
N17D	W	10.00	10.00	10.00	246	2463				61600
									Total Cost	346800

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	---	61.6	3.7	8	-4.3
159B	185	1	0.0	63.8	66	63.8	10	---	61.1	2.7	8	-5.3
160L	187	1	0.0	63.7	66	63.7	10	---	60.5	3.2	8	-4.8
162R	189	1	0.0	65.5	66	65.5	10	---	61.2	4.3	8	-3.7
164L	191	1	0.0	65.1	66	65.1	10	----	61.3	3.8	8	-4.2
165R	192	1	0.0	65.6	66	65.6	10	----	60.9	4.7	8	-3.3
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	62.1	4.2	8	-3.8
170R	197	1	0.0	62.5	66	62.5	10	----	59.1	3.4	8	-4.6
176R	204	1	0.0	64.7	66	64.7	10	----	59.4	5.3	8	-2.7
173L	205	1	0.0	64.0	66	64.0	10	----	60.5	3.5	8	-4.5
179L	207	1	0.0	65.4	66	65.4	10	---	61.8	3.6	8	-4.4
182L	210	1	0.0	64.4	66	64.4	10	---	61.8	2.6	8	-5.4
182R	212	1	0.0	64.6	66	64.6	10	---	60.9	3.7	8	-4.3
161L	229	1	0.0	60.7	66	60.7	10	----	58.0	2.7	8	-5.3
163R	231	1	0.0	61.6	66	61.6	10	---	58.5	3.1	8	-4.9
166R	233	1	0.0	62.8	66	62.8	10	---	58.8	4.0	8	-4.0
168L	235	1	0.0	61.1	66	61.1	10	---	58.2	2.9	8	-5.1
171R	237	1	0.0	62.0	66	62.0	10	----	58.6	3.4	8	-4.6
174L	239	1	0.0	62.1	66	62.1	10	----	58.8	3.3	8	-4.7
177R	241	1	0.0	63.0	66	63.0	10	----	59.0	4.0	8	-4.0
180L	243	1	0.0	63.3	66	63.3	10	----	59.6	3.7	8	-4.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max

		dB	dB	dB
All Selected	21	2.6	3.6	5.3
All Impacted	1	4.2	4.2	4.2
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	12.00	12.00	12.00	115	1380				34500
N17E	W	12.00	12.00	12.00	225	2700				67500
N17A	W	12.00	12.00	12.00	130	1560				39000
N17A-2	W	12.00	12.00	12.00	30	360				9000
N17A-3	W	12.00	12.00	12.00	45	540				13500
N17A-4	W	12.00	12.00	12.00	110	1320				33000
N17B	W	12.00	12.00	12.00	240	2880				72000
N17C	W	12.00	12.00	12.00	245	2941				73500
N17D	W	12.00	12.00	12.00	246	2955				73900
									Total Cost	415900

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	----	61.3	4.0	8	-4.0
159B	185	1	0.0	63.8	66	63.8	10	----	60.8	3.0	8	-5.0
160L	187	1	0.0	63.7	66	63.7	10	----	60.2	3.5	8	-4.5
162R	189	1	0.0	65.5	66	65.5	10	----	60.8	4.7	8	-3.3
164L	191	1	0.0	65.1	66	65.1	10	----	60.8	4.3	8	-3.7
165R	192	1	0.0	65.6	66	65.6	10	----	60.3	5.3	8	-2.7
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	62.0	4.3	8	-3.7
170R	197	1	0.0	62.5	66	62.5	10	----	58.5	4.0	8	-4.0
176R	204	1	0.0	64.7	66	64.7	10	----	59.2	5.5	8	-2.5
173L	205	1	0.0	64.0	66	64.0	10	----	60.2	3.8	8	-4.2
179L	207	1	0.0	65.4	66	65.4	10	----	61.7	3.7	8	-4.3
182L	210	1	0.0	64.4	66	64.4	10	----	61.6	2.8	8	-5.2
182R	212	1	0.0	64.6	66	64.6	10	----	60.7	3.9	8	-4.1
161L	229	1	0.0	60.7	66	60.7	10	----	57.8	2.9	8	-5.1
163R	231	1	0.0	61.6	66	61.6	10	----	58.2	3.4	8	-4.6
166R	233	1	0.0	62.8	66	62.8	10	----	58.5	4.3	8	-3.7
168L	235	1	0.0	61.1	66	61.1	10	----	57.7	3.4	8	-4.6
171R	237	1	0.0	62.0	66	62.0	10	----	58.3	3.7	8	-4.3
174L	239	1	0.0	62.1	66	62.1	10	----	58.5	3.6	8	-4.4
177R	241	1	0.0	63.0	66	63.0	10	----	58.8	4.2	8	-3.8
180L	243	1	0.0	63.3	66	63.3	10	----	59.5	3.8	8	-4.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max

		dB	dB	dB
All Selected	21	2.8	3.9	5.5
All Impacted	1	4.3	4.3	4.3
All that meet NR Goal	0	0.0	0.0	0.0

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	14.00	14.00	14.00	115	1610				40300
N17E	W	14.00	14.00	14.00	225	3150				78800
N17A	W	14.00	14.00	14.00	130	1820				45500
N17A-2	W	14.00	14.00	14.00	30	420				10500
N17A-3	W	14.00	14.00	14.00	45	630				15800
N17A-4	W	14.00	14.00	14.00	110	1540				38500
N17B	W	14.00	14.00	14.00	240	3360				84000
N17C	W	14.00	14.00	14.00	245	3431				85800
N17D	W	14.00	14.00	14.00	246	3448				86200
									Total Cost	485400

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	---	61.2	4.1	8	-3.9
159B	185	1	0.0	63.8	66	63.8	10	---	60.6	3.2	8	-4.8
160L	187	1	0.0	63.7	66	63.7	10	---	60.0	3.7	8	-4.3
162R	189	1	0.0	65.5	66	65.5	10	---	60.5	5.0	8	-3.0
164L	191	1	0.0	65.1	66	65.1	10	---	60.5	4.6	8	-3.4
165R	192	1	0.0	65.6	66	65.6	10	---	60.0	5.6	8	-2.4
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	61.8	4.5	8	-3.5
170R	197	1	0.0	62.5	66	62.5	10	---	58.1	4.4	8	-3.8
176R	204	1	0.0	64.7	66	64.7	10	---	59.0	5.7	8	-2.3
173L	205	1	0.0	64.0	66	64.0	10	---	60.0	4.0	8	-4.0
179L	207	1	0.0	65.4	66	65.4	10	---	61.7	3.7	8	-4.3
182L	210	1	0.0	64.4	66	64.4	10	---	61.5	2.9	8	-5.1
182R	212	1	0.0	64.6	66	64.6	10	---	60.6	4.0	8	-4.0
161L	229	1	0.0	60.7	66	60.7	10	---	57.6	3.1	8	-4.9
163R	231	1	0.0	61.6	66	61.6	10	---	58.0	3.6	8	-4.4
166R	233	1	0.0	62.8	66	62.8	10	---	58.3	4.5	8	-3.5
168L	235	1	0.0	61.1	66	61.1	10	---	57.3	3.8	8	-4.2
171R	237	1	0.0	62.0	66	62.0	10	---	58.1	3.9	8	-4.1
174L	239	1	0.0	62.1	66	62.1	10	---	58.3	3.8	8	-4.2
177R	241	1	0.0	63.0	66	63.0	10	---	58.6	4.4	8	-3.6
180L	243	1	0.0	63.3	66	63.3	10	---	59.4	3.9	8	-4.1

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max

RESULTS: SOUND LEVELS

		dB	dB	dB
All Selected	21	2.9	4.1	5.7
All Impacted	1	4.5	4.5	4.5
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	16.00	16.00	16.00	115	1840				46000
N17E	W	16.00	16.00	16.00	225	3600				90000
N17A	W	16.00	16.00	16.00	130	2080				52000
N17A-2	W	16.00	16.00	16.00	30	480				12000
N17A-3	W	16.00	16.00	16.00	45	720				18000
N17A-4	W	16.00	16.00	16.00	110	1760				44000
N17B	W	16.00	16.00	16.00	240	3840				96000
N17C	W	16.00	16.00	16.00	245	3921				98000
N17D	W	16.00	16.00	16.00	246	3940				98500
									Total Cost	554500

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	----	61.1	4.2	8	-3.8
159B	185	1	0.0	63.8	66	63.8	10	----	60.5	3.3	8	-4.7
160L	187	1	0.0	63.7	66	63.7	10	----	59.8	3.9	8	-4.1
162R	189	1	0.0	65.5	66	65.5	10	----	60.3	5.2	8	-2.8
164L	191	1	0.0	65.1	66	65.1	10	----	60.3	4.8	8	-3.2
165R	192	1	0.0	65.6	66	65.6	10	----	59.7	5.9	8	-2.1
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	61.7	4.6	8	-3.4
170R	197	1	0.0	62.5	66	62.5	10	----	57.8	4.7	8	-3.3
176R	204	1	0.0	64.7	66	64.7	10	----	58.9	5.8	8	-2.2
173L	205	1	0.0	64.0	66	64.0	10	----	59.9	4.1	8	-3.9
179L	207	1	0.0	65.4	66	65.4	10	----	61.6	3.8	8	-4.2
182L	210	1	0.0	64.4	66	64.4	10	----	61.4	3.0	8	-5.0
182R	212	1	0.0	64.6	66	64.6	10	----	60.5	4.1	8	-3.9
161L	229	1	0.0	60.7	66	60.7	10	----	57.5	3.2	8	-4.8
163R	231	1	0.0	61.6	66	61.6	10	----	57.8	3.8	8	-4.2
166R	233	1	0.0	62.8	66	62.8	10	----	58.2	4.6	8	-3.4
168L	235	1	0.0	61.1	66	61.1	10	----	57.0	4.1	8	-3.9
171R	237	1	0.0	62.0	66	62.0	10	----	57.9	4.1	8	-3.9
174L	239	1	0.0	62.1	66	62.1	10	----	58.2	3.9	8	-4.1
177R	241	1	0.0	63.0	66	63.0	10	----	58.5	4.5	8	-3.5
180L	243	1	0.0	63.3	66	63.3	10	----	59.3	4.0	8	-4.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max

		dB	dB	dB
All Selected	21	3.0	4.3	5.9
All Impacted	1	4.6	4.6	4.6
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	18.00	18.00	18.00	115	2070				51800
N17E	W	18.00	18.00	18.00	225	4050				101300
N17A	W	18.00	18.00	18.00	130	2340				58500
N17A-2	W	18.00	18.00	18.00	30	540				13500
N17A-3	W	18.00	18.00	18.00	45	810				20300
N17A-4	W	18.00	18.00	18.00	110	1980				49500
N17B	W	18.00	18.00	18.00	240	4320				108000
N17C	W	18.00	18.00	18.00	245	4411				110300
N17D	W	18.00	18.00	18.00	246	4433				110800
									Total Cost	624000

URS
WHA

11 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	----	61.0	4.3	8	-3.7
159B	185	1	0.0	63.8	66	63.8	10	----	60.4	3.4	8	-4.6
160L	187	1	0.0	63.7	66	63.7	10	----	59.7	4.0	8	-4.0
162R	189	1	0.0	65.5	66	65.5	10	----	60.2	5.3	8	-2.7
164L	191	1	0.0	65.1	66	65.1	10	----	60.1	5.0	8	-3.0
165R	192	1	0.0	65.6	66	65.6	10	----	59.6	6.0	8	-2.0
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	61.7	4.6	8	-3.4
170R	197	1	0.0	62.5	66	62.5	10	----	57.6	4.9	8	-3.1
176R	204	1	0.0	64.7	66	64.7	10	----	58.8	5.9	8	-2.1
173L	205	1	0.0	64.0	66	64.0	10	----	59.8	4.2	8	-3.8
179L	207	1	0.0	65.4	66	65.4	10	----	61.6	3.8	8	-4.2
182L	210	1	0.0	64.4	66	64.4	10	----	61.4	3.0	8	-5.0
182R	212	1	0.0	64.6	66	64.6	10	----	60.4	4.2	8	-3.8
161L	229	1	0.0	60.7	66	60.7	10	----	57.4	3.3	8	-4.7
163R	231	1	0.0	61.6	66	61.6	10	----	57.7	3.9	8	-4.1
166R	233	1	0.0	62.8	66	62.8	10	----	58.0	4.8	8	-3.2
168L	235	1	0.0	61.1	66	61.1	10	----	56.8	4.3	8	-3.7
171R	237	1	0.0	62.0	66	62.0	10	----	57.8	4.2	8	-3.8
174L	239	1	0.0	62.1	66	62.1	10	----	58.1	4.0	8	-4.0
177R	241	1	0.0	63.0	66	63.0	10	----	58.5	4.5	8	-3.5
180L	243	1	0.0	63.3	66	63.3	10	----	59.2	4.1	8	-3.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max

		dB	dB	dB
All Selected	21	3.0	4.4	6.0
All Impacted	1	4.6	4.6	4.6
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	20.00	20.00	20.00	115	2300				57500
N17E	W	20.00	20.00	20.00	225	4500				112500
N17A	W	20.00	20.00	20.00	130	2600				65000
N17A-2	W	20.00	20.00	20.00	30	600				15000
N17A-3	W	20.00	20.00	20.00	45	900				22500
N17A-4	W	20.00	20.00	20.00	110	2200				55000
N17B	W	20.00	20.00	20.00	240	4800				120000
N17C	W	20.00	20.00	20.00	245	4901				122500
N17D	W	20.00	20.00	20.00	246	4925				123100
									Total Cost	693100

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	----	60.9	4.4	8	-3.6
159B	185	1	0.0	63.8	66	63.8	10	----	60.3	3.5	8	-4.5
160L	187	1	0.0	63.7	66	63.7	10	----	59.6	4.1	8	-3.9
162R	189	1	0.0	65.5	66	65.5	10	----	60.1	5.4	8	-2.6
164L	191	1	0.0	65.1	66	65.1	10	----	60.0	5.1	8	-2.9
165R	192	1	0.0	65.6	66	65.6	10	----	59.4	6.2	8	-1.8
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	61.6	4.7	8	-3.3
170R	197	1	0.0	62.5	66	62.5	10	----	57.5	5.0	8	-3.0
176R	204	1	0.0	64.7	66	64.7	10	----	58.7	6.0	8	-2.0
173L	205	1	0.0	64.0	66	64.0	10	----	59.7	4.3	8	-3.7
179L	207	1	0.0	65.4	66	65.4	10	----	61.6	3.8	8	-4.2
182L	210	1	0.0	64.4	66	64.4	10	----	61.3	3.1	8	-4.9
182R	212	1	0.0	64.6	66	64.6	10	----	60.3	4.3	8	-3.7
161L	229	1	0.0	60.7	66	60.7	10	----	57.3	3.4	8	-4.6
163R	231	1	0.0	61.6	66	61.6	10	----	57.6	4.0	8	-4.0
166R	233	1	0.0	62.8	66	62.8	10	----	58.0	4.8	8	-3.2
168L	235	1	0.0	61.1	66	61.1	10	----	56.7	4.4	8	-3.6
171R	237	1	0.0	62.0	66	62.0	10	----	57.7	4.3	8	-3.7
174L	239	1	0.0	62.1	66	62.1	10	----	58.0	4.1	8	-3.9
177R	241	1	0.0	63.0	66	63.0	10	----	58.4	4.6	8	-3.4
180L	243	1	0.0	63.3	66	63.3	10	----	59.1	4.2	8	-3.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max

		dB	dB	dB
All Selected	21	3.1	4.5	6.2
All Impacted	1	4.7	4.7	4.7
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N17F	W	22.00	22.00	22.00	115	2530				63300
N17E	W	22.00	22.00	22.00	225	4950				123800
N17A	W	22.00	22.00	22.00	130	2860				71500
N17A-2	W	22.00	22.00	22.00	30	660				16500
N17A-3	W	22.00	22.00	22.00	45	990				24800
N17A-4	W	22.00	22.00	22.00	110	2420				60500
N17B	W	22.00	22.00	22.00	240	5280				132000
N17C	W	22.00	22.00	22.00	245	5391				134800
N17D	W	22.00	22.00	22.00	246	5418				135400
									Total Cost	762600

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11 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN17
BARRIER DESIGN: N17

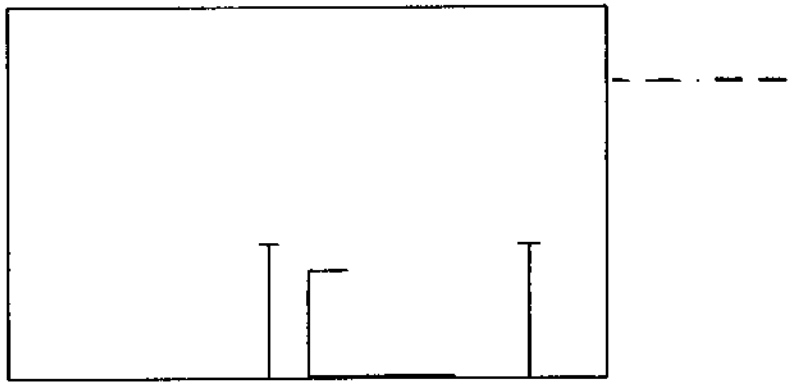
ATMOSPHERICS: 68 deg F, 50% RH

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
158R	183	1	0.0	65.3	66	65.3	10	---	60.9	4.4	8	-3.6
159B	185	1	0.0	63.8	66	63.8	10	---	60.3	3.5	8	-4.5
160L	187	1	0.0	63.7	66	63.7	10	---	59.5	4.2	8	-3.8
162R	189	1	0.0	65.5	66	65.5	10	---	60.0	5.5	8	-2.5
164L	191	1	0.0	65.1	66	65.1	10	---	59.9	5.2	8	-2.8
165R	192	1	0.0	65.6	66	65.6	10	---	59.3	6.3	8	-1.7
167L	194	1	0.0	66.3	66	66.3	10	Snd Lvl	61.6	4.7	8	-3.3
170R	197	1	0.0	62.5	66	62.5	10	---	57.3	5.2	8	-2.8
176R	204	1	0.0	64.7	66	64.7	10	---	58.6	6.1	8	-1.9
173L	205	1	0.0	64.0	66	64.0	10	---	59.6	4.4	8	-3.6
179L	207	1	0.0	65.4	66	65.4	10	---	61.5	3.9	8	-4.1
182L	210	1	0.0	64.4	66	64.4	10	---	61.3	3.1	8	-4.9
182R	212	1	0.0	64.6	66	64.6	10	---	60.2	4.4	8	-3.6
161L	229	1	0.0	60.7	66	60.7	10	---	57.3	3.4	8	-4.6
163R	231	1	0.0	61.6	66	61.6	10	---	57.5	4.1	8	-3.9
166R	233	1	0.0	62.8	66	62.8	10	---	57.9	4.9	8	-3.1
168L	235	1	0.0	61.1	66	61.1	10	---	56.6	4.5	8	-3.5
171R	237	1	0.0	62.0	66	62.0	10	---	57.7	4.3	8	-3.7
174L	239	1	0.0	62.1	66	62.1	10	---	57.9	4.2	8	-3.8
177R	241	1	0.0	63.0	66	63.0	10	---	58.3	4.7	8	-3.3
180L	243	1	0.0	63.3	66	63.3	10	---	59.1	4.2	8	-3.8

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max

		dB	dB	dB
All Selected	21	3.1	4.5	6.3
All Impacted	1	4.7	4.7	4.7
All that meet NR Goal	0	0.0	0.0	0.0



County Line Road - Build/WB BarrierN18		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-N18		Project/Contract No. CLR FAP 7822 001 S	
Run name: N18		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	8.00	8.00	8.00	115	920				23000
									Total Cost	23000

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	---	63.1	1.4	8	-6.6
195L	225	1	0.0	64.6	66	64.6	10	---	62.2	2.4	8	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.4	1.9	2.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	10.00	10.00	10.00	115	1150				28800
									Total Cost	28800

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	----	62.9	1.6	8	-6.4
195L	225	1	0.0	64.6	66	64.6	10	----	61.9	2.7	8	-5.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.6	2.1	2.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	12.00	12.00	12.00	115	1380				34500
									Total Cost	34500

URS
WHA

11 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	—	62.7	1.8	8	-6.2
195L	225	1	0.0	64.6	66	64.6	10	—	61.7	2.9	8	-5.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.8	2.3	2.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	14.00	14.00	14.00	115	1610				40300
									Total Cost	40300

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	---	62.7	1.8	8	-6.2
195L	225	1	0.0	64.6	66	64.6	10	---	61.6	3.0	8	-5.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.8	2.4	3.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	16.00	16.00	16.00	115	1840				46000
									Total Cost	46000

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	---	62.6	1.9	8	-6.1
195L	225	1	0.0	64.6	66	64.6	10	---	61.6	3.0	8	-5.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.9	2.5	3.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	18.00	18.00	18.00	115	2070				51800
									Total Cost	51800

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	----	62.6	1.9	8	-6.1
195L	225	1	0.0	64.6	66	64.6	10	----	61.5	3.1	8	-4.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.9	2.5	3.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	20.00	20.00	20.00	115	2300				57500
									Total Cost	57500

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
195R	224	1	0.0	64.5	66	64.5	10	---	62.5	2.0	8	-6.0
195L	225	1	0.0	64.6	66	64.6	10	---	61.5	3.1	8	-4.9

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.0	2.5	3.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
N18	W	22.00	22.00	22.00	115	2530				63300
									Total Cost	63300

URS
WHA

11 July 2002
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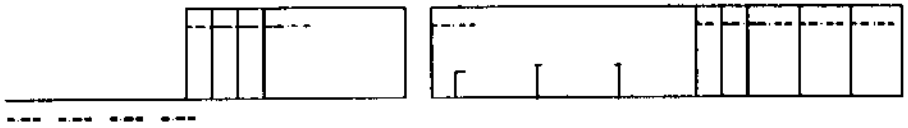
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Road - Build/WB BarrierN18
BARRIER DESIGN: N18
ATMOSPHERICS: 68 deg F, 50% RH

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing 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
195R	224	1	0.0	64.5	66	64.5	10	----	62.5	2.0	8	-6.0
195L	225	1	0.0	64.6	66	64.6	10	----	61.4	3.2	8	-4.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.0	2.6	3.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Rd S5 Ayers Road BarrierS5S1		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S5S1		Project/Contract No. CLR FAP 7822 001 S	
Run name: S5S1		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	8.00	8.00	8.00	168	1344				33600
S5S1b	W	8.00	8.00	8.00	364	2912				72800
									Total Cost	106400

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	---	58.8	3.8	8	-4.2
1L	3	1	0.0	62.3	66	62.3	10	---	58.6	3.7	8	-4.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	3.7	3.8	3.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	10.00	10.00	10.00	168	1680				42000
S5S1b	W	10.00	10.00	10.00	364	3640				91000
									Total Cost	133000

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	----	57.4	5.2	8	-2.8
1L	3	1	0.0	62.3	66	62.3	10	----	57.3	5.0	8	-3.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.0	5.1	5.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	12.00	12.00	12.00	168	2016				50400
S5S1b	W	12.00	12.00	12.00	364	4368				109200
									Total Cost	159600

URS
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	—	56.4	6.2	8	-1.8
1L	3	1	0.0	62.3	66	62.3	10	—	56.3	6.0	8	-2.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	6.0	6.1	6.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	14.00	14.00	14.00	168	2352				58800
S5S1b	W	14.00	14.00	14.00	364	5096				127400
									Total Cost	186200

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	—	55.6	7.0	8	-1.0
1L	3	1	0.0	62.3	66	62.3	10	—	55.5	6.8	8	-1.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	6.8	6.9	7.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	16.00	16.00	16.00	168	2688				67200
S5S1b	W	16.00	16.00	16.00	364	5824				145600
									Total Cost	212800

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	---	55.1	7.5	8	-0.5
1L	3	1	0.0	62.3	66	62.3	10	---	55.0	7.3	8	-0.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	7.3	7.4	7.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	18.00	18.00	18.00	168	3024				75600
S5S1b	W	18.00	18.00	18.00	364	6552				163800
									Total Cost	239400

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	—	54.7	7.9	8	-0.1
1L	3	1	0.0	62.3	66	62.3	10	—	54.6	7.7	8	-0.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	7.7	7.8	7.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	20.00	20.00	20.00	168	3360				84000
S5S1b	W	20.00	20.00	20.00	364	7280				182000
									Total Cost	266000

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	----	54.4	8.2	8	0.2
1L	3	1	0.0	62.3	66	62.3	10	----	54.2	8.1	8	0.1

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	8.1	8.1	8.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	2	8.1	8.1	8.2

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S1a	W	22.00	22.00	22.00	168	3696				92400
S5S1b	W	22.00	22.00	22.00	364	8008				200200
									Total Cost	292600

URS
WHA

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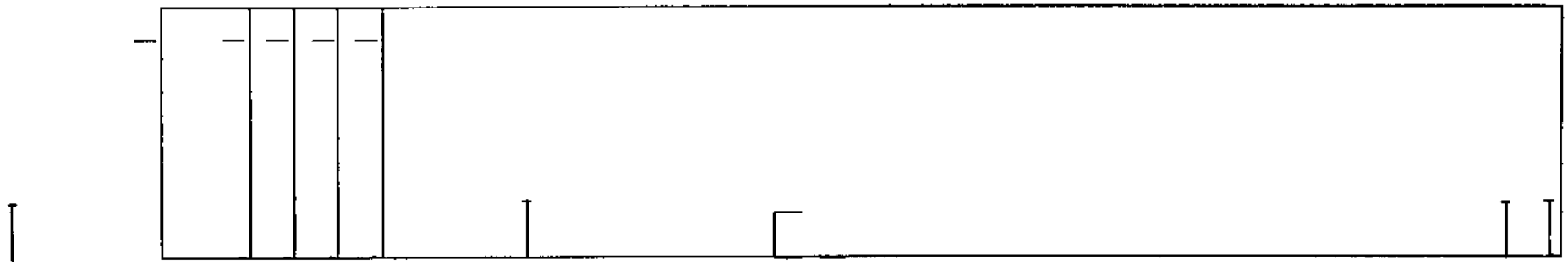
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5S1
BARRIER DESIGN: S5S1
ATMOSPHERICS: 68 deg F, 50% RH

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	2	1	0.0	62.6	66	62.6	10	---	54.0	8.6	8	0.6
1L	3	1	0.0	62.3	66	62.3	10	---	53.9	8.4	8	0.4

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	8.4	8.5	8.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	2	8.4	8.5	8.6



County Line Rd S5 Ayers Ext Barrier S5S2		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S5S2		Project/Contract No. CLR FAP 7822 001 S	
Run name: S5S2		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	8.00	8.00	8.00	630	5040				126000
									Total Cost	126000

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	----	58.4	2.6	8	-5.4
7L	8	1	0.0	62.2	66	62.2	10	----	60.5	1.7	8	-6.3
8B	19	1	0.0	57.2	66	57.2	10	----	55.7	1.5	8	-6.5
5B	22	1	0.0	56.4	66	56.4	10	----	55.3	1.1	8	-6.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	4	1.1	1.7	2.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	10.00	10.00	10.00	630	6300				157500
									Total Cost	157500

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	---	57.2	3.8	8	-4.2
7L	8	1	0.0	62.2	66	62.2	10	---	60.0	2.2	8	-5.8
8B	19	1	0.0	57.2	66	57.2	10	---	55.4	1.8	8	-6.2
5B	22	1	0.0	56.4	66	56.4	10	---	55.1	1.3	8	-6.7

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	1.3	2.3	3.8
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	12.00	12.00	12.00	630	7560				189000
									Total Cost	189000

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	---	56.3	4.7	8	-3.3
7L	8	1	0.0	62.2	66	62.2	10	---	59.7	2.5	8	-5.5
8B	19	1	0.0	57.2	66	57.2	10	---	55.0	2.2	8	-5.8
5B	22	1	0.0	56.4	66	56.4	10	---	54.8	1.6	8	-6.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	1.6	2.8	4.7
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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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Rd S5 Ayers Ext Barrier S5S2

BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	14.00	14.00	14.00	630	8820				220500
									Total Cost	220500

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	---	55.7	5.3	8	-2.7
7L	8	1	0.0	62.2	66	62.2	10	---	59.5	2.7	8	-5.3
8B	19	1	0.0	57.2	66	57.2	10	---	54.8	2.4	8	-5.6
5B	22	1	0.0	56.4	66	56.4	10	---	54.6	1.8	8	-6.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	1.8	3.1	5.3
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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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	16.00	16.00	16.00	630	10080				252000
									Total Cost	252000

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	---	55.2	5.8	8	-2.2
7L	8	1	0.0	62.2	66	62.2	10	---	59.4	2.8	8	-5.2
8B	19	1	0.0	57.2	66	57.2	10	---	54.6	2.6	8	-5.4
5B	22	1	0.0	56.4	66	56.4	10	---	54.5	1.9	8	-6.1

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	1.9	3.3	5.8
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	18.00	18.00	18.00	630	11340				283500
									Total Cost	283500

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	----	54.9	6.1	8	-1.9
7L	8	1	0.0	62.2	66	62.2	10	----	59.3	2.9	8	-5.1
8B	19	1	0.0	57.2	66	57.2	10	----	54.5	2.7	8	-5.3
5B	22	1	0.0	56.4	66	56.4	10	----	54.4	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	2.0	3.4	6.1
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	20.00	20.00	20.00	630	12600				315000
									Total Cost	315000

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	---	54.6	6.4	8	-1.6
7L	8	1	0.0	62.2	66	62.2	10	---	59.3	2.9	8	-5.1
8B	19	1	0.0	57.2	66	57.2	10	---	54.5	2.7	8	-5.3
5B	22	1	0.0	56.4	66	56.4	10	---	54.3	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	2.1	3.5	6.4
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5S2	W	22.00	22.00	22.00	630	13860				346500
									Total Cost	346500

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WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Ext Barrier S5S2
BARRIER DESIGN: S5S2

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
6R	4	1	0.0	61.0	66	61.0	10	---	54.4	6.6	8	-1.4
7L	8	1	0.0	62.2	66	62.2	10	---	59.2	3.0	8	-5.0
8B	19	1	0.0	57.2	66	57.2	10	---	54.4	2.8	8	-5.2
5B	22	1	0.0	56.4	66	56.4	10	---	54.3	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	4	2.1	3.6	6.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

County Line Rd S5 Ayers Road BarrierS5N1		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S5N1		Project/Contract No. CLR FAP 7822 001 S	
Run name: S5N1		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	8.00	8.00	8.00	125	1002				25100
S5N1A	W	8.00	8.00	8.00	296	2372				0
									Total Cost	25100

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	---	57.9	4.5	8	-3.5
19L	4	1	0.0	60.2	66	60.2	10	---	57.5	2.7	8	-5.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.7	3.6	4.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	10.00	10.00	10.00	125	1253				31300
S5N1A	W	10.00	10.00	10.00	296	2965				0
									Total Cost	31300

URS 11 July 2002
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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	—	56.8	5.6	8	-2.4
19L	4	1	0.0	60.2	66	60.2	10	—	56.4	3.8	8	-4.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	3.8	4.7	5.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	12.00	12.00	12.00	125	1503				37600
S5N1A	W	12.00	12.00	12.00	296	3558				0
									Total Cost	37600

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	---	56.0	6.4	8	-1.6
19L	4	1	0.0	60.2	66	60.2	10	---	55.6	4.8	8	-3.4

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	4.6	5.5	6.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	14.00	14.00	14.00	125	1754				43800
S5N1A	W	14.00	14.00	14.00	296	4151				0
									Total Cost	43800

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	----	55.4	7.0	8	-1.0
19L	4	1	0.0	60.2	66	60.2	10	----	55.1	5.1	8	-2.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.1	6.1	7.0
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	16.00	16.00	16.00	125	2004				50100
S5N1A	W	16.00	16.00	16.00	296	4744				0
									Total Cost	50100

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	----	55.0	7.4	8	-0.6
19L	4	1	0.0	60.2	66	60.2	10	----	54.8	5.4	8	-2.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.4	6.4	7.4
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	18.00	18.00	18.00	125	2255				56400
S5N1A	W	18.00	18.00	18.00	296	5337				0
									Total Cost	56400

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	—	54.7	7.7	8	-0.3
19L	4	1	0.0	60.2	66	60.2	10	—	54.5	5.7	8	-2.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.7	6.7	7.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	20.00	20.00	20.00	125	2505				62600
S5N1A	W	20.00	20.00	20.00	296	5930				0
									Total Cost	62600

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing 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
19R	1	1	0.0	62.4	66	62.4	10	---	54.5	7.9	8	-0.1
19L	4	1	0.0	60.2	66	60.2	10	---	54.4	5.8	8	-2.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.8	6.9	7.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5N1B	W	22.00	22.00	22.00	125	2756				68900
S5N1A	W	22.00	22.00	22.00	296	6523				0
									Total Cost	68900

URS
WHA

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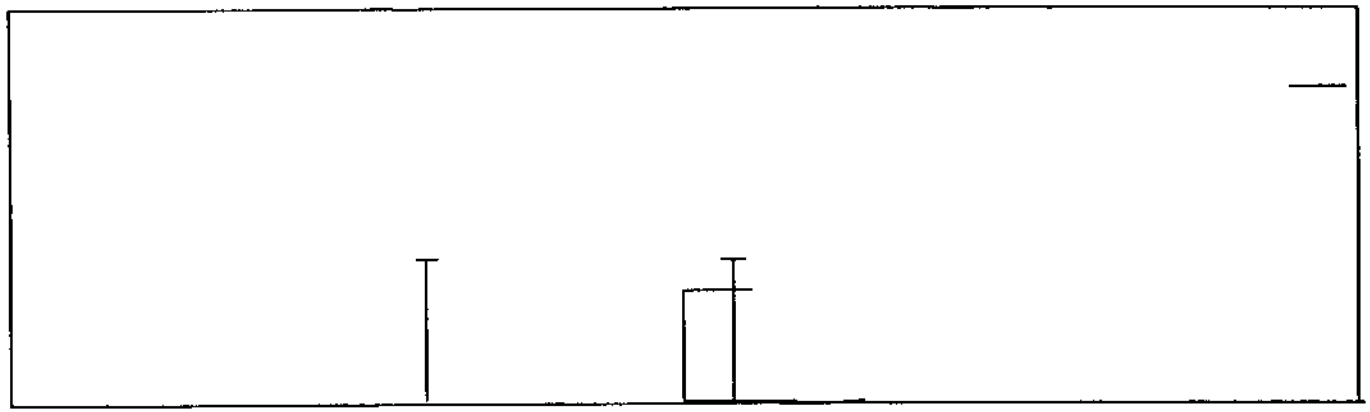
RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S5 Ayers Road BarrierS5N1
BARRIER DESIGN: S5N1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
19R	1	1	0.0	62.4	66	62.4	10	---	54.2	8.2	8	0.2
19L	4	1	0.0	60.2	66	60.2	10	---	54.2	6.0	8	-2.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	6.0	7.1	8.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	8.2	8.2	8.2



County Line Rd S5 Ayers Road BarrierN2		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S5N2		Project/Contract No.	
Run name: S5N2		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By:	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	8.00	8.00	8.00	284	2269				56700
									Total Cost	56700

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	---	61.3	0.9	8	-7.1
23R	8	1	0.0	63.0	66	63.0	10	---	61.0	2.0	8	-6.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	0.9	1.5	2.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	10.00	10.00	10.00	284	2836				70900
									Total Cost	70900

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	---	61.0	1.2	8	-6.8
23R	8	1	0.0	63.0	66	63.0	10	---	60.3	2.7	8	-5.3

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.2	2.0	2.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	12.00	12.00	12.00	284	3404				85100
									Total Cost	85100

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	---	60.7	1.5	8	-6.5
23R	8	1	0.0	63.0	66	63.0	10	---	59.9	3.1	8	-4.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.5	2.3	3.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	14.00	14.00	14.00	284	3971				99300
									Total Cost	99300

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	---	60.6	1.6	8	-6.4
23R	8	1	0.0	63.0	66	63.0	10	---	59.6	3.4	8	-4.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.6	2.5	3.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	16.00	16.00	16.00	284	4538				113500
									Total Cost	113500

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	----	60.5	1.7	8	-6.3
23R	8	1	0.0	63.0	66	63.0	10	----	59.4	3.6	8	-4.4

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.7	2.6	3.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	18.00	18.00	18.00	284	5106				127600
									Total Cost	127600

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	----	60.5	1.7	8	-6.3
23R	8	1	0.0	63.0	66	63.0	10	----	59.3	3.7	8	-4.3

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.7	2.7	3.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	20.00	20.00	20.00	284	5673				141800
									Total Cost	141800

URS
<Analysis By?>

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	---	60.4	1.8	8	-6.2
23R	8	1	0.0	63.0	66	63.0	10	---	59.2	3.8	8	-4.2

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.8	2.8	3.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
<Analysis By?> TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S5n2	W	22.00	22.00	22.00	284	6240				156000
									Total Cost	156000

URS
<Analysis By?>

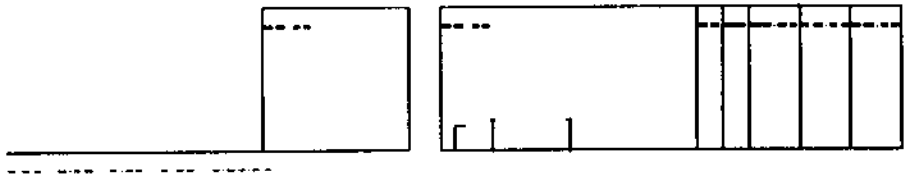
11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: County Line Rd S5 Ayers Road BarrierN2
BARRIER DESIGN: S5N2
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
23L	6	1	0.0	62.2	66	62.2	10	---	60.4	1.8	8	-6.2
23R	8	1	0.0	63.0	66	63.0	10	---	59.2	3.8	8	-4.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.8	2.8	3.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Rd S8 Ayers Rd Ext BarrrierS8S1		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S8S1		Project/Contract No. CLR FAP 7822 001 S	
Run name: S8S1		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	8.00	8.00	8.00	360	2880				72000
S8S1a	W	8.00	8.00	8.00	115	920				23000
									Total Cost	95000

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	—	59.8	2.7	8	-5.3
1L	6	1	0.0	62.5	66	62.5	10	—	59.3	3.2	8	-4.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	2.7	3.0	3.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	10.00	10.00	10.00	360	3600				90000
S8S1a	W	10.00	10.00	10.00	115	1150				28800
									Total Cost	118800

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrlerS8S1
BARRIER DESIGN: S8S1
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	---	58.8	3.7	8	-4.3
1L	6	1	0.0	62.5	66	62.5	10	---	58.2	4.3	8	-3.7

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	3.7	4.0	4.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

11 July 2002

WHA

TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1

BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	12.00	12.00	12.00	360	4320				108000
S8S1a	W	12.00	12.00	12.00	115	1380				34500
									Total Cost	142500

URS
WHA

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TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S6 Ayers Rd Ext BarrrierS6S1
BARRIER DESIGN: S8S1

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	----	58.1	4.4	8	-3.6
1L	6	1	0.0	62.5	66	62.5	10	----	57.2	5.3	8	-2.7

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	4.4	4.9	5.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	14.00	14.00	14.00	360	5040				126000
S8S1a	W	14.00	14.00	14.00	115	1610				40300
									Total Cost	166300

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	—	57.5	5.0	8	-3.0
1L	6	1	0.0	62.5	66	62.5	10	—	56.5	6.0	8	-2.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.0	5.5	6.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	16.00	16.00	16.00	360	5760				144000
S8S1a	W	16.00	16.00	16.00	115	1840				46000
									Total Cost	190000

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	----	57.2	5.3	8	-2.7
1L	6	1	0.0	62.5	66	62.5	10	----	56.0	6.5	8	-1.5

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.3	5.9	6.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

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TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1

BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	18.00	18.00	18.00	360	6480				162000
S8S1a	W	18.00	18.00	18.00	115	2070				51800
									Total Cost	213800

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	---	57.0	5.5	8	-2.5
1L	6	1	0.0	62.5	66	62.5	10	---	55.7	6.8	8	-1.2

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.5	6.1	6.8
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	20.00	20.00	20.00	360	7200				180000
S8S1a	W	20.00	20.00	20.00	115	2300				57500
									Total Cost	237500

URS
WHA

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RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	---	56.8	5.7	8	-2.3
1L	6	1	0.0	62.5	66	62.5	10	---	55.5	7.0	8	-1.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	5.7	6.4	7.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS

WHA

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TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S

RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1

BARRIER DESIGN: S8S1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8S1b	W	22.00	22.00	22.00	360	7920				198000
S8S1a	W	22.00	22.00	22.00	115	2530				63300
									Total Cost	261300

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WHA

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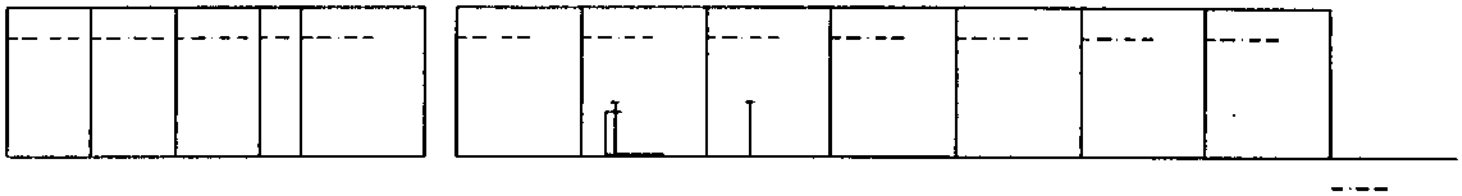
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Rd Ext BarrrierS8S1
BARRIER DESIGN: S8S1

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1R	5	1	0.0	62.5	66	62.5	10	---	56.6	5.9	8	-2.1
1L	6	1	0.0	62.5	66	62.5	10	---	55.2	7.3	8	-0.7

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	5.9	6.6	7.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Rd S8 Ayers Road BarrierS8N1		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S8N1		Project/Contract No. CLR FAP 7822 001 S	
Run name: S8N1		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	8.00	8.00	8.00	416	3329				0
S8N1B	W	8.00	8.00	8.00	200	1597				39900
									Total Cost	39900

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WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	—	59.7	5.3	8	-2.7
17L	6	1	0.0	62.3	66	62.3	10	—	59.4	2.9	8	-5.1

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.9	4.1	5.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	10.00	10.00	10.00	416	4162				0
S8N1B	W	10.00	10.00	10.00	200	1996				49900
									Total Cost	49900

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	---	58.0	7.0	8	-1.0
17L	6	1	0.0	62.3	66	62.3	10	---	58.1	4.2	8	-3.8

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	4.2	5.6	7.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	12.00	12.00	12.00	416	4994				0
S8N1B	W	12.00	12.00	12.00	200	2396				59900
									Total Cost	59900

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	---	56.8	8.2	8	0.2
17L	6	1	0.0	62.3	66	62.3	10	---	57.2	5.1	8	-2.9

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	5.1	6.6	8.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	8.2	8.2	8.2

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	14.00	14.00	14.00	416	5826				0
S8N1B	W	14.00	14.00	14.00	200	2795				69900
									Total Cost	69900

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	—	56.0	9.0	8	1.0
17L	6	1	0.0	62.3	66	62.3	10	—	56.6	5.7	8	-2.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.7	7.4	9.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	9.0	9.0	9.0

URS 11 July 2002
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RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	16.00	16.00	16.00	416	6658				0
S8N1B	W	16.00	16.00	16.00	200	3194				79900
									Total Cost	79900

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	----	55.4	9.6	8	1.6
17L	6	1	0.0	62.3	66	62.3	10	----	56.2	6.1	8	-1.9

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	6.1	7.8	9.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	9.6	9.6	9.6

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	18.00	18.00	18.00	416	7491				0
S8N1B	W	18.00	18.00	18.00	200	3594				89800
									Total Cost	89800

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	---	54.9	10.1	8	2.1
17L	6	1	0.0	62.3	66	62.3	10	---	55.9	6.4	8	-1.6

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	6.4	8.2	10.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	10.1	10.1	10.1

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	20.00	20.00	20.00	416	8323				0
S8N1B	W	20.00	20.00	20.00	200	3993				99800
									Total Cost	99800

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	----	54.5	10.5	8	2.5
17L	6	1	0.0	62.3	66	62.3	10	----	55.6	6.7	8	-1.3

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	6.7	8.6	10.5
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	10.5	10.5	10.5

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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N1A	W	22.00	22.00	22.00	416	9155				0
S8N1B	W	22.00	22.00	22.00	200	4392				109800
									Total Cost	109800

URS
WHA

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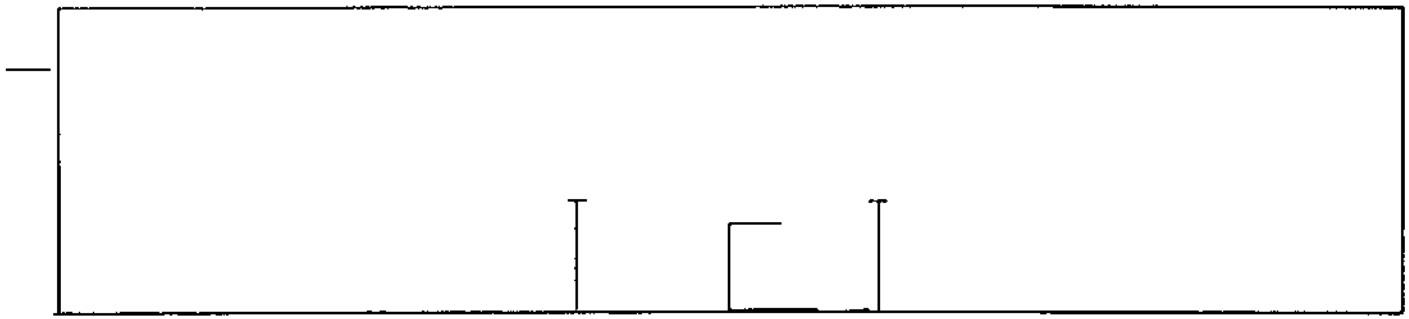
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N1
BARRIER DESIGN: S8N1
ATMOSPHERICS: 68 deg F, 50% RH

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
17R	3	1	0.0	65.0	66	65.0	10	----	54.1	10.9	8	2.9
17L	6	1	0.0	62.3	66	62.3	10	----	55.4	6.9	8	-1.1

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	6.9	8.9	10.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	10.9	10.9	10.9



County Line Rd S8 Ayers Road BarrierS8N2		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S8N2		Project/Contract No. CLR FAP 7822 001 S	
Run name: S8N2		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	8.00	8.00	8.00	363	2902				72600
									Total Cost	72600

URS
WHA

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TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	---	60.9	3.0	8	-5.0
24L	13	1	0.0	63.4	66	63.4	10	---	61.3	2.1	8	-5.9

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	2.1	2.6	3.0
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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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	10.00	10.00	10.00	363	3628				90700
									Total Cost	90700

URS
WHA

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TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7622 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	----	60.0	3.9	8	-4.1
24L	13	1	0.0	63.4	66	63.4	10	----	60.8	2.6	8	-5.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	2.6	3.3	3.9
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	12.00	12.00	12.00	363	4353				108800
									Total Cost	108800

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	----	59.2	4.7	8	-3.3
24L	13	1	0.0	63.4	66	63.4	10	----	60.4	3.0	8	-5.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	3.0	3.9	4.7
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	14.00	14.00	14.00	363	5079				127000
									Total Cost	127000

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2
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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	---	58.7	5.2	8	-2.8
24L	13	1	0.0	63.4	66	63.4	10	---	60.1	3.3	8	-4.7

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	3.3	4.3	5.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	16.00	16.00	16.00	363	5804				145100
									Total Cost	145100

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	----	58.5	5.4	8	-2.6
24L	13	1	0.0	63.4	66	63.4	10	----	60.0	3.4	8	-4.6

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	3.4	4.4	5.4
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	18.00	18.00	18.00	363	6530				163200
									Total Cost	163200

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	---	58.3	5.6	8	-2.4
24L	13	1	0.0	63.4	66	63.4	10	---	59.9	3.5	8	-4.5

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	3.5	4.6	5.6
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	20.00	20.00	20.00	363	7255				181400
									Total Cost	181400

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	----	58.2	5.7	8	-2.3
24L	13	1	0.0	63.4	66	63.4	10	----	59.8	3.6	8	-4.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	3.6	4.7	5.7
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8n2	W	22.00	22.00	22.00	363	7981				199500
									Total Cost	199500

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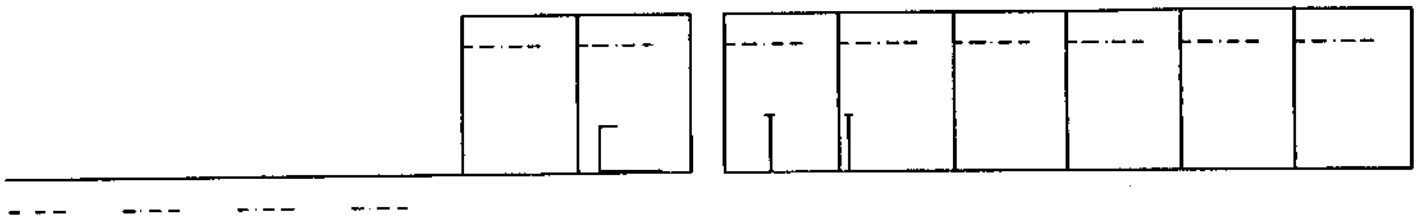
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N2
BARRIER DESIGN: S8N2
ATMOSPHERICS: 68 deg F, 50% RH

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	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
24R	11	1	0.0	63.9	66	63.9	10	---	58.2	5.7	8	-2.3
24L	13	1	0.0	63.4	66	63.4	10	---	59.8	3.6	8	-4.4

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	3.6	4.7	5.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0



County Line Rd S8 Ayers Road BarrierS8N3		Sheet 1 of 1	11 Jul 2002
		URS	
Barrier View-S8N3		Project/Contract No. CLR FAP 7822 001 S	
Run name: S8N3		TNM Version 1.0b, July 1999	
Scale: <DNA - due to perspective>		Analysis By: WHA	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

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WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	8.00	8.00	8.00	307	2456				0
S8N3B	W	8.00	8.00	8.00	102	818				20400
									Total Cost	20400

URS
WHA

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	---	60.2	5.2	8	-2.8
28L	17	1	0.0	65.2	66	65.2	10	---	60.2	5.0	8	-3.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	5.0	5.1	5.2
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	10.00	10.00	10.00	307	3070				0
S8N3B	W	10.00	10.00	10.00	102	1022				25600
									Total Cost	25600

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County LIne Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3
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	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	----	59.0	6.4	8	-1.6
28L	17	1	0.0	65.2	66	65.2	10	----	59.2	6.0	8	-2.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	6.0	6.2	6.4
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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RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	12.00	12.00	12.00	307	3684				0
S8N3B	W	12.00	12.00	12.00	102	1227				30700
									Total Cost	30700

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RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

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

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	—	58.3	7.1	8	-0.9
28L	17	1	0.0	65.2	66	65.2	10	—	58.6	6.6	8	-1.4

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	6.6	6.9	7.1
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	14.00	14.00	14.00	307	4298				0
S8N3B	W	14.00	14.00	14.00	102	1431				35800
									Total Cost	35800

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	----	57.8	7.6	8	-0.4
28L	17	1	0.0	65.2	66	65.2	10	----	58.1	7.1	8	-0.9

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	7.1	7.4	7.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	16.00	16.00	16.00	307	4912				0
S8N3B	W	16.00	16.00	16.00	102	1635				40900
									Total Cost	40900

URS 11 July 2002
WHA TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	----	57.5	7.9	8	-0.1
28L	17	1	0.0	65.2	66	65.2	10	----	57.8	7.4	8	-0.6

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	7.4	7.6	7.9
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	18.00	18.00	18.00	307	5526				0
S8N3B	W	18.00	18.00	18.00	102	1840				46000
									Total Cost	46000

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	—	57.2	8.2	8	0.2
28L	17	1	0.0	65.2	66	65.2	10	—	57.6	7.6	8	-0.4

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	7.6	7.9	8.2
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	8.2	8.2	8.2

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	20.00	20.00	20.00	307	6140				0
S8N3B	W	20.00	20.00	20.00	102	2044				51100
									Total Cost	51100

URS
WHA

11 July 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	—	57.0	8.4	8	0.4
28L	17	1	0.0	65.2	66	65.2	10	—	57.4	7.8	8	-0.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	7.8	8.1	8.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	8.4	8.4	8.4

URS 11 July 2002
WHA TNM 1.0b

RESULTS: BARRIER DESCRIPTIONS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3

Barriers

Name	Type	Heights along Barrier			Length	If Wall	If Berm			Cost
		Min	Avg	Max		Area	Volume	Top Width	Run:Rise	
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	$
S8N3A	W	22.00	22.00	22.00	307	6754				0
S8N3B	W	22.00	22.00	22.00	102	2249				56200
									Total Cost	56200

URS 11 July 2002
WHA TNM 1.0b

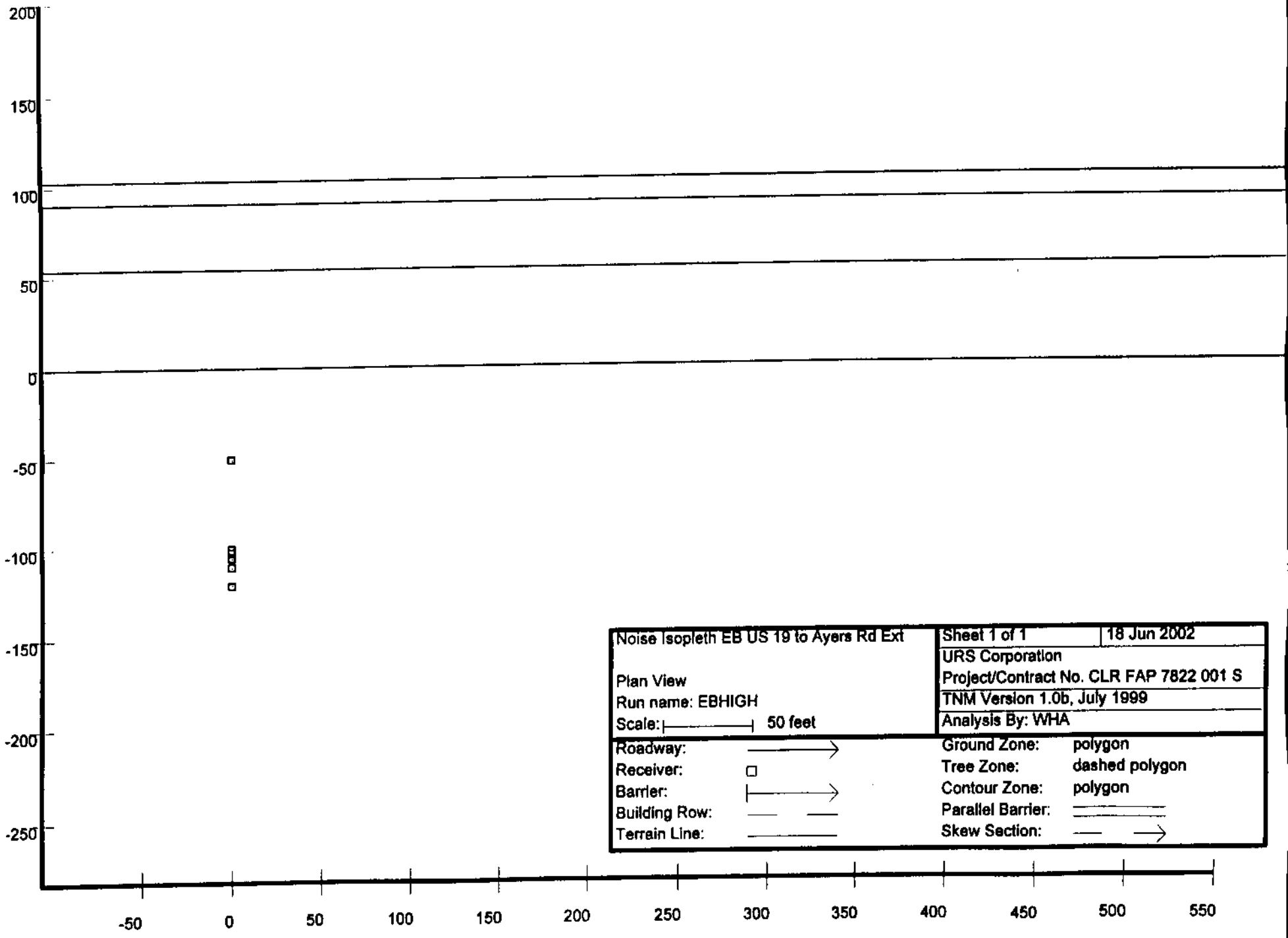
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: County Line Rd S8 Ayers Road BarrierS8N3
BARRIER DESIGN: S8N3
ATMOSPHERICS: 68 deg F, 50% RH

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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
28R	15	1	0.0	65.4	66	65.4	10	---	56.7	8.7	8	0.7
28L	17	1	0.0	65.2	66	65.2	10	---	57.2	8.0	8	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	8.0	8.3	8.7
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	8.7	8.7	8.7

APPENDIX D
TNM RESULTS – NOISE CONTOURS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100
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200
250
300
350
400
450
500
550
Noise Isopleth EB US 19 to Ayers Rd Ext
Plan View
Run name: EBHIGH
Scale: 50 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB US 19 to Ayers Rd Ext

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB	33.0	point1	1	-2000.0	0.0	0.00				Average	
		point2	2	2000.0	0.0	0.00					
WB	33.0	point3	3	2000.0	54.0	0.00				Average	
		point4	4	-2000.0	54.0	0.00					

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB US 19 to Ayers Rd Ext

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
EB	point1	1	1089	50	23	50	34	50	0	0	0	0
	point2	2										
WB	point3	3	792	50	17	50	25	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB US 19 to Ayers Rd Ext

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
50 ft	42	1	0.0	-50.0	0.00	5.00	0	66	10	8
100 ft	43	1	0.0	-100.0	0.00	5.00	0	66	10	8
110 ft	44	1	0.0	-110.0	0.00	5.00	0	66	10	8
120 ft	45	1	0.0	-120.0	0.00	5.00	0	66	10	8
102 ft	46	1	0.0	-102.0	0.00	5.00	0	66	10	8
105 ft	47	1	0.0	-105.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

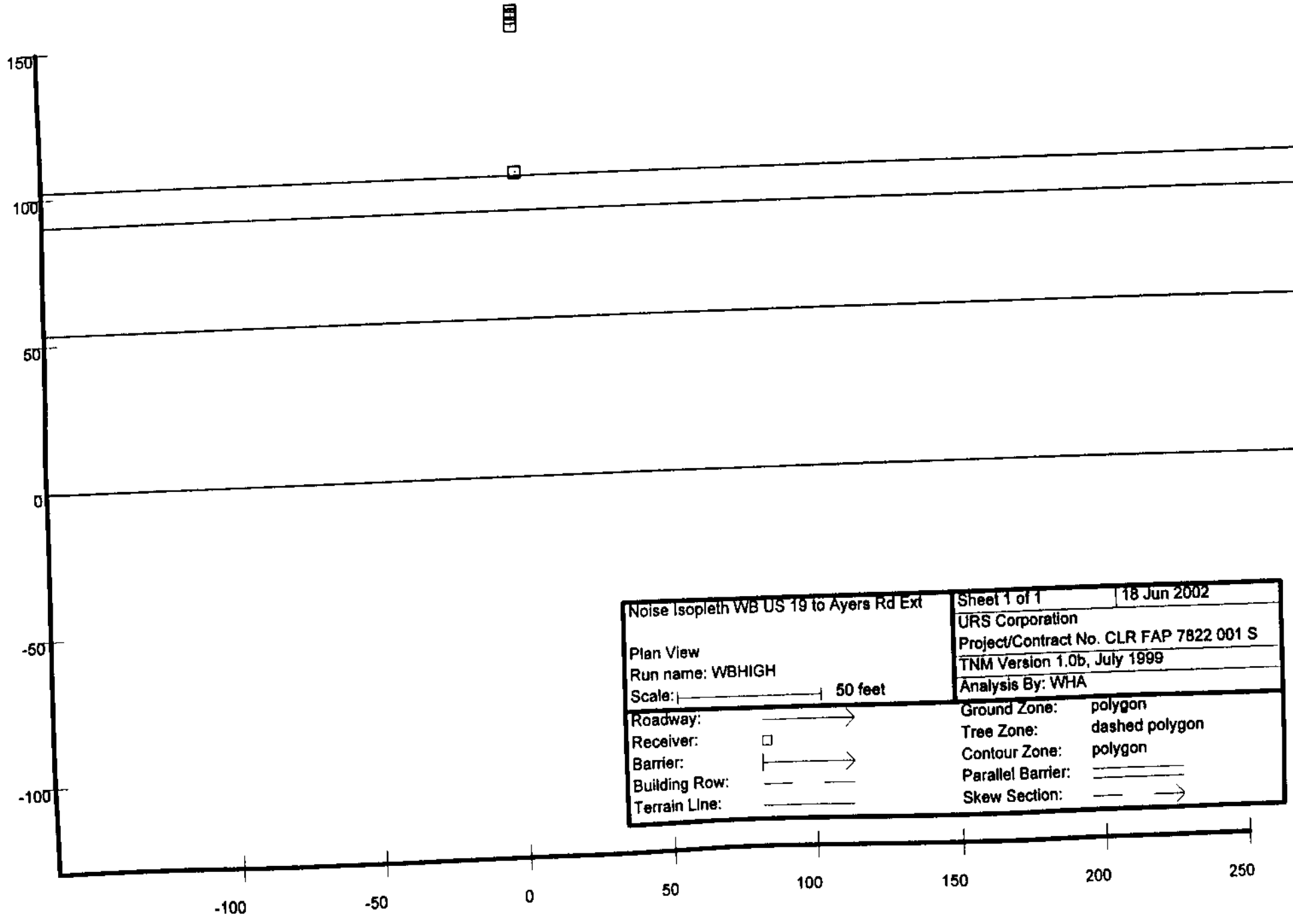
18 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB US 19 to Ayers Rd Ext
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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 ft	42	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
100 ft	43	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
110 ft	44	1	0.0	65.4	66	65.4	10	---	65.4	0.0	8	-8.0
120 ft	45	1	0.0	64.7	66	64.7	10	---	64.7	0.0	8	-8.0
102 ft	46	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
105 ft	47	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0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-100
-100
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50
100
150
200
250
Noise Isopleth WB US 19 to Ayers Rd Ext
Plan View
Run name: WBHIGH
Scale: 50 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB US 19 to Ayers Rd Ext

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
EB	point1	1	792	50	17	50	25	50	0	0	0	0
	point2	2										
WB	point3	3	1089	50	23	50	34	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB US 19 to Ayers Rd Ext

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
50 ft	51	1	0.0	104.0	0.00	5.00	0	66	10	8
100 ft	52	1	0.0	154.0	0.00	5.00	0	66	10	8
105 ft	53	1	0.0	159.0	0.00	5.00	0	66	10	8
104 ft	54	1	0.0	158.0	0.00	5.00	0	66	10	8
103 ft	55	1	0.0	157.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

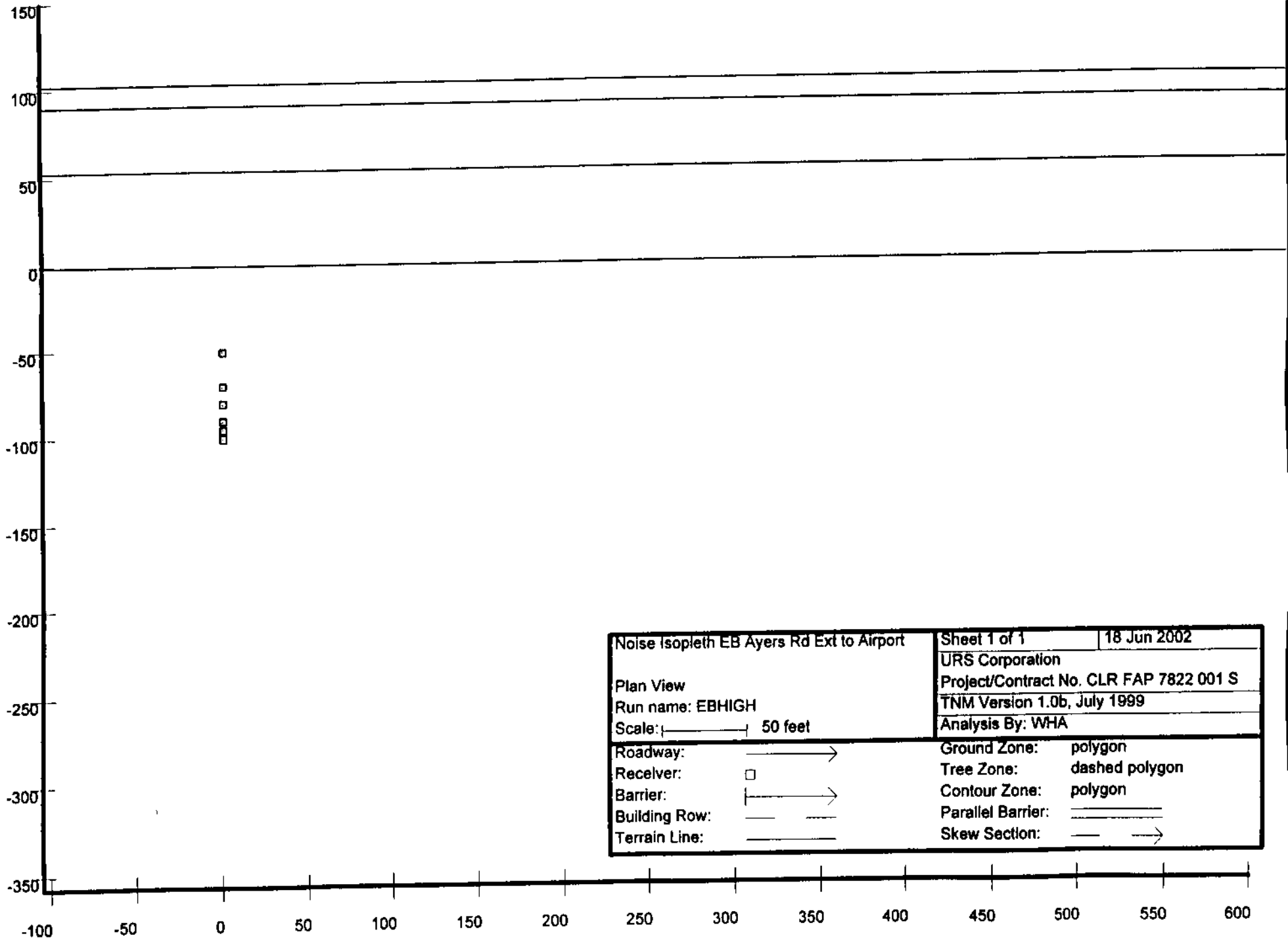
18 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB US 19 to Ayers Rd Ext
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 66 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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 ft	51	1	0.0	72.1	66	72.1	10	Snd Lvl	72.1	0.0	8	-8.0
100 ft	52	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
105 ft	53	1	0.0	65.9	66	65.9	10	---	65.9	0.0	8	-8.0
104 ft	54	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
103 ft	55	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	4	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0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150
200
250
300
350
400
450
500
550
600
Noise Isopleth EB Ayers Rd Ext to Airport
Plan View
Run name: EBHIGH
Scale: 50 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Ext to Airport

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB	33.0	point1	1	-2000.0	0.0	0.00				Average	
		point2	2	2000.0	0.0	0.00					
WB	33.0	point3	3	2000.0	54.0	0.00				Average	
		point4	4	-2000.0	54.0	0.00					

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Ext to Airport

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
EB	point1	1	855	50	18	50	27	50	0	0	0	0
	point2	2										
WB	point3	3	622	50	13	50	20	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Ext to Airport

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
50 ft	42	1	0.0	-50.0	0.00	5.00	0	66	10	8
100 ft	43	1	0.0	-100.0	0.00	5.00	0	66	10	8
90 ft	44	1	0.0	-90.0	0.00	5.00	0	66	10	8
80 ft	45	1	0.0	-80.0	0.00	5.00	0	66	10	8
70 ft	46	1	0.0	-70.0	0.00	5.00	0	66	10	8
95 ft	47	1	0.0	-95.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

18 June 2002
TNM 1.0b

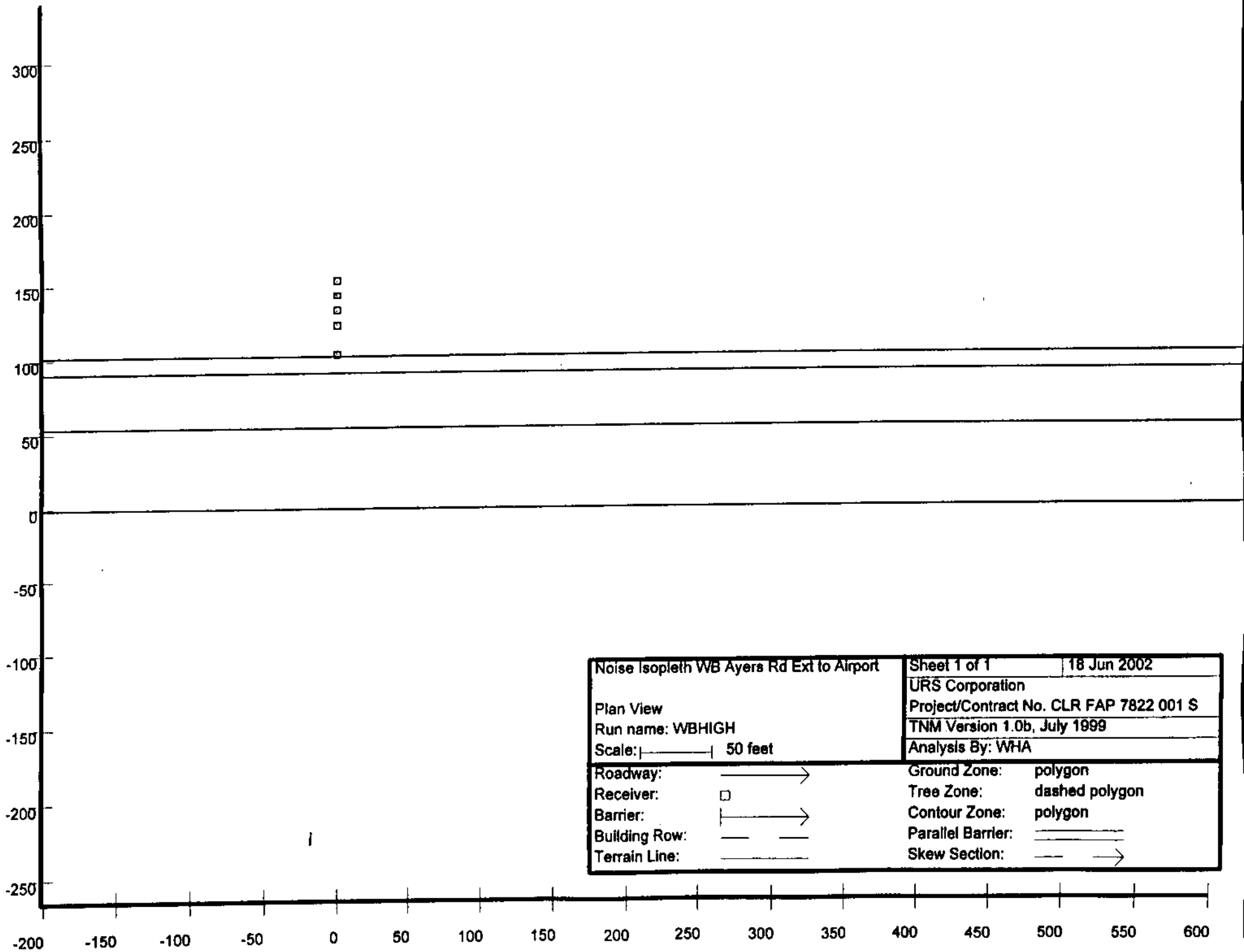
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Ext to Airport
BARRIER DESIGN: INPUT HEIGHTS

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		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 ft	42	1	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
100 ft	43	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
90 ft	44	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
80 ft	45	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
70 ft	46	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
95 ft	47	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	4	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0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200
150
100
50
0
-50
-100
-150
-200
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
450
500
550
600
Noise Isopleth WB Ayers Rd Ext to Airport
Plan View
Run name: WBHIGH
Scale: 50 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Ext to Airport

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB	33.0	point1	1	-2000.0	0.0	0.00				Average	
		point2	2	2000.0	0.0	0.00					
WB	33.0	point3	3	2000.0	54.0	0.00				Average	
		point4	4	-2000.0	54.0	0.00					

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Ext to Airport

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
EB	point1	1	622	50	13	50	20	50	0	0	0	0
	point2	2										
WB	point3	3	855	50	18	50	27	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Ext to Airport

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
50 ft	51	1	0.0	104.0	0.00	5.00	0	66	10	8
100 ft	52	1	0.0	154.0	0.00	5.00	0	66	10	8
90 ft	53	1	0.0	144.0	0.00	5.00	0	66	10	8
80 ft	54	1	0.0	134.0	0.00	5.00	0	66	10	8
70 ft	55	1	0.0	124.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

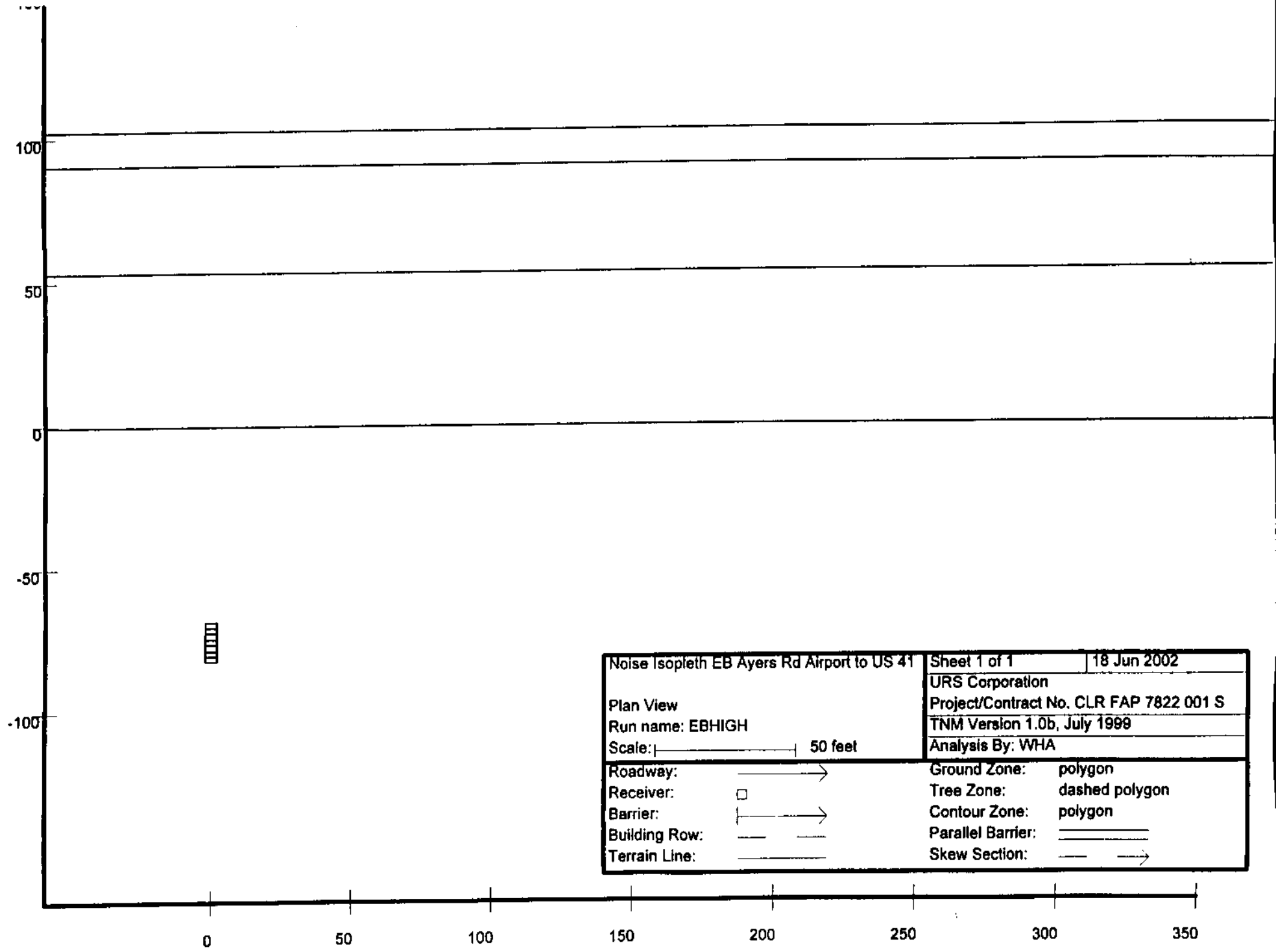
18 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Ext to Airport
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 ft	51	1	0.0	71.0	66	71.0	10	Snd Lvl	71.0	0.0	8	-8.0
100 ft	52	1	0.0	65.3	66	65.3	10	---	65.3	0.0	8	-8.0
90 ft	53	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
80 ft	54	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
70 ft	55	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	4	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0


100
50
0
-50
-100
0
50
100
150
200
250
300
350
Noise Isopleth EB Ayers Rd Airport to US 41
Plan View
Run name: EBHIGH
Scale: 50 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Airport to US 41

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB	33.0	point1	1	-2000.0	0.0	0.00				Average	
		point2	2	2000.0	0.0	0.00					
WB	33.0	point3	3	2000.0	54.0	0.00				Average	
		point4	4	-2000.0	54.0	0.00					

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Airport to US 41

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB	point1	1	611	50	13	50	19	50	0	0	0	0
	point2	2										
WB	point3	3	444	50	9	50	14	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Airport to US 41

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
72 ft	42	1	0.0	-72.0	0.00	5.00	0	66	10	8
74 ft	43	1	0.0	-74.0	0.00	5.00	0	66	10	8
76 ft	44	1	0.0	-76.0	0.00	5.00	0	66	10	8
70 ft	45	1	0.0	-70.0	0.00	5.00	0	66	10	8
80 ft	46	1	0.0	-80.0	0.00	5.00	0	66	10	8
78 ft	47	1	0.0	-78.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

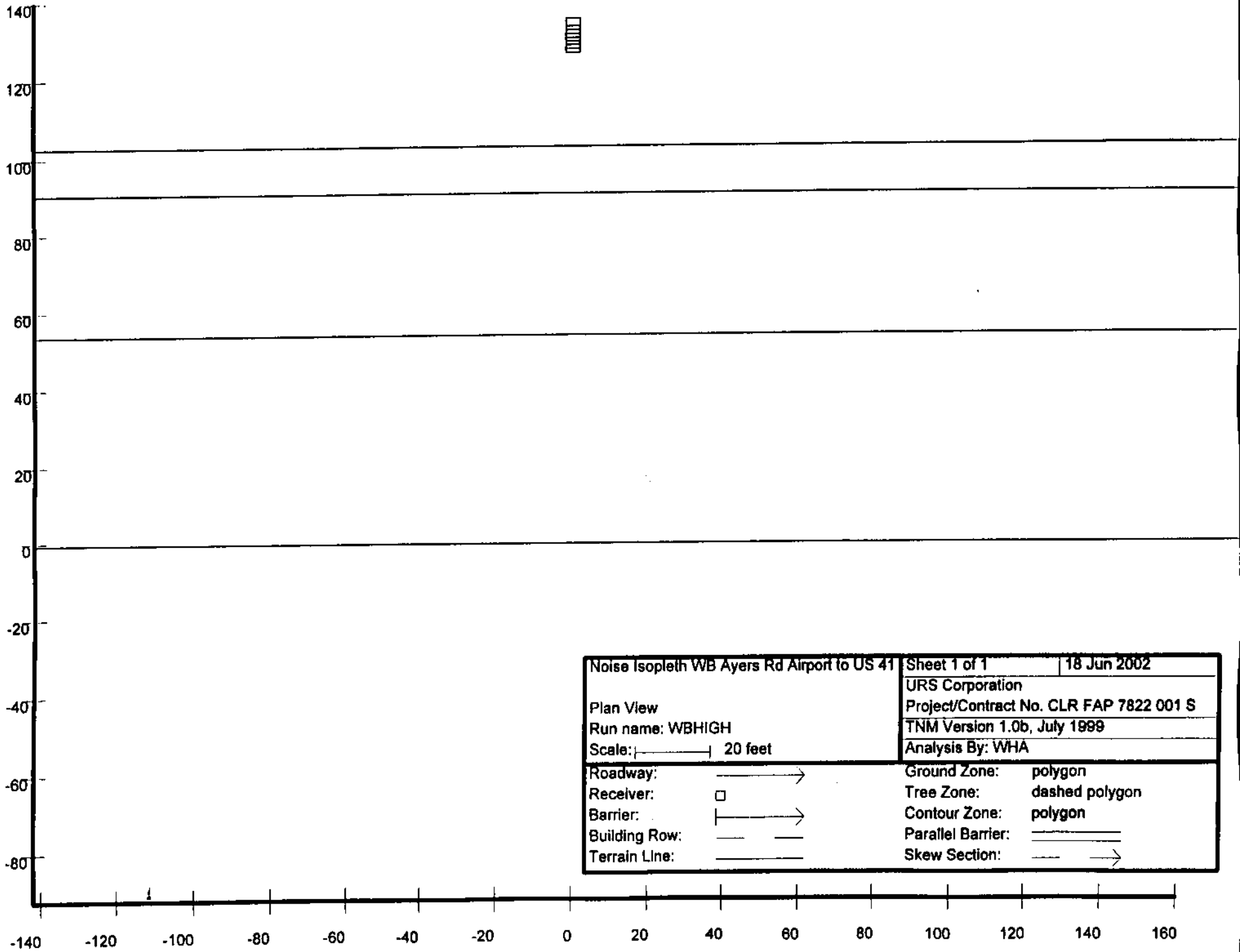
18 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth EB Ayers Rd Airport to US 41
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
72 ft	42	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
74 ft	43	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
76 ft	44	1	0.0	65.7	66	65.7	10	—	65.7	0.0	8	-8.0
70 ft	45	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
80 ft	46	1	0.0	65.3	66	65.3	10	—	65.3	0.0	8	-8.0
78 ft	47	1	0.0	65.5	66	65.5	10	—	65.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0


140
120
100
80
60
40
20
0
-20
-40
-60
-80
-140
-120
-100
-80
-60
-40
-20
0
20
40
60
80
100
120
140
160
Noise Isopleth WB Ayers Rd Airport to US 41
Plan View
Run name: WBHIGH
Scale: 20 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Airport to US 41

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

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB	33.0	point1	1	-2000.0	0.0	0.00				Average	
		point2	2	2000.0	0.0	0.00					
WB	33.0	point3	3	2000.0	54.0	0.00				Average	
		point4	4	-2000.0	54.0	0.00					

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Airport to US 41

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
EB	point1	1	444	50	9	50	14	50	0	0	0	0
	point2	2										
WB	point3	3	611	50	13	50	19	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Airport to US 41

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
76 ft	51	1	0.0	130.0	0.00	5.00	0	66	10	8
77 ft	52	1	0.0	131.0	0.00	5.00	0	66	10	8
78 ft	53	1	0.0	132.0	0.00	5.00	0	66	10	8
75 ft	54	1	0.0	129.0	0.00	5.00	0	66	10	8
80 ft	55	1	0.0	134.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

18 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Noise Isopleth WB Ayers Rd Airport to US 41
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					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
76 ft	51	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
77 ft	52	1	0.0	65.9	66	65.9	10	---	65.9	0.0	8	-8.0
78 ft	53	1	0.0	65.8	66	65.8	10	---	65.8	0.0	8	-8.0
75 ft	54	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
80 ft	55	1	0.0	65.6	66	65.6	10	---	65.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX E
RECEIVER ADJUSTMENTS

M E M O R A N D U M

To: File

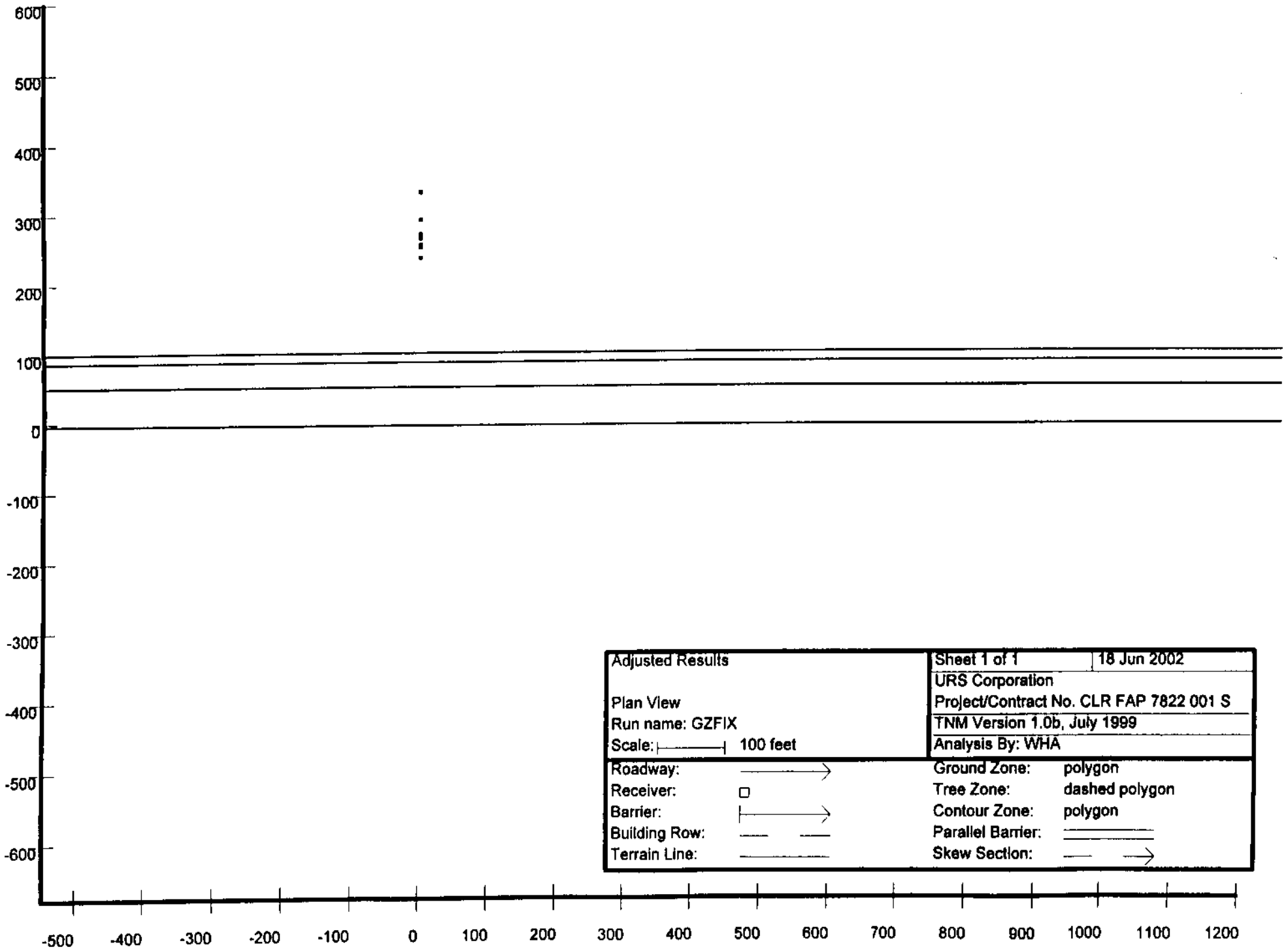
From: Wayne Arner/Vickie Scott

Date: August 28, 2002

Subject: **WPI Segment Number 257298 1/FAP Number 7822 001 S County Line Road (C.R. 578) PD&E Study/Pasco and Hernando Counties**

During this noise analysis, inconsistent results were noted for Receivers 65, 100, 102, 104, 105, 110, 112, 123 and 171. TNM sometimes predicts random inconsistent results when modeling multi-lane roadways with grass medians. In the case of C.R. 578, the 12-foot paved multi-use pathway may also have attributed to the random inconsistent results. As stated, this is random and only affects a small number of receivers (in this case only 9 of over 200 receivers).

The results were determined to be inconsistent because the predicted traffic noise level increase for the noted receivers was greater than the increase predicted for adjacent receivers that were closer to the roadway. The receivers were "adjusted" by modeling the "Future Build" scenario without ground zones for the medians and with all receivers at an elevation of 5 feet above the roadway, and calculating the differences in noise levels of receivers at varying distances from the roadway. After checking for consistency, those differences were then applied to the noted receivers to adjust the results to what was determined to be consistent with their location to the roadway. The adjusted "Future Build" results were reported as the predicted traffic noise levels shown in Table 5-1 of the Noise Study Report.


600
500
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300
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-100
-200
-300
-400
-500
-600
-500
-400
-300
-200
-100
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
Adjusted Results
Plan View
Run name: GZFIX
Scale: 100 feet
Sheet 1 of 1
18 Jun 2002
URS Corporation
Project/Contract No. CLR FAP 7822 001 S
TNM Version 1.0b, July 1999
Analysis By: WHA
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: ROADWAYS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Adjusted Results

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
EB	33.0	point1	1	-2000.0	0.0	0.00				Average	
		point2	2	2000.0	0.0	0.00					
WB	33.0	point3	3	2000.0	54.0	0.00				Average	
		point4	4	-2000.0	54.0	0.00					

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Adjusted Results

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
EB	point1	1	792	50	17	50	25	50	0	0	0	0
	point2	2										
WB	point3	3	1089	50	23	50	34	50	0	0	0	0
	point4	4										

URS Corporation
WHA

18 June 2002
TNM 1.0b

INPUT: RECEIVERS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Adjusted Results

Receiver Name	No.	# DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l Inc	NR Goal
			ft	ft	ft	ft	dBA	dBA	dB	dB
65	40	1	0.0	774.0	0.00	5.00	0	66	10	8
100 & 171	41	1	0.0	294.0	0.00	5.00	0	66	10	8
102	42	1	0.0	269.0	0.00	5.00	0	66	10	8
104	43	1	0.0	274.0	0.00	5.00	0	66	10	8
105	44	1	0.0	334.0	0.00	5.00	0	66	10	8
110	45	1	0.0	259.0	0.00	5.00	0	66	10	8
112	46	1	0.0	254.0	0.00	5.00	0	66	10	8
123	47	1	0.0	239.0	0.00	5.00	0	66	10	8

URS Corporation
WHA

18 June 2002
TNM 1.0b

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: CLR FAP 7822 001 S
RUN: Adjusted Results
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	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	With Barrier Noise Reduction Calculated	With Barrier Noise Reduction Goal	With Barrier Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
65	40	1	0.0	55.3	66	55.3	10	—	55.3	0.0	8	-8.0
100 & 171	41	1	0.0	59.3	66	59.3	10	—	59.3	0.0	8	-8.0
102	42	1	0.0	60.1	66	60.1	10	—	60.1	0.0	8	-8.0
104	43	1	0.0	59.9	66	59.9	10	—	59.9	0.0	8	-8.0
105	44	1	0.0	58.2	66	58.2	10	—	58.2	0.0	8	-8.0
110	45	1	0.0	60.6	66	60.6	10	—	60.6	0.0	8	-8.0
112	46	1	0.0	60.8	66	60.8	10	—	60.8	0.0	8	-8.0
123	47	1	0.0	61.4	66	61.4	10	—	61.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	8	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

APPENDIX F
NOISE BARRIER RESULTS TABLES

NOISE BARRIER RESULTS

BARRIER N2

Barrier Height (ft)	Receivers with Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	Other*	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	0	0	0	0	0	0	0	0	0	--	--
12	0	0	0	0	0	0	0	0	0	--	--
14	1	0	0	0	0	0	1	0	1	$224,000	$224,000
16	1	0	0	0	0	0	1	0	1	$256,000	$256,000
18	2	0	0	0	0	0	2	0	2	$288,000	$144,000
20	4	0	0	0	0	0	4	0	4	$320,000	$80,000
22	4	0	0	0	0	0	4	0	4	$352,000	$88,000

BARRIER N17

Barrier Height (ft)	Receivers with Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	Other*	Total		
8	1	0	0	0	0	0	1	0	1	$277,200	$277,200
10	1	0	0	0	0	0	1	0	1	$346,500	$346,500
12	2	0	0	0	0	0	2	0	2	$415,800	$207,900
14	3	0	0	0	0	0	3	0	3	$485,100	$161,700
16	3	0	0	0	0	0	3	0	3	$554,400	$184,800
18	3	1	0	0	0	0	4	0	4	$623,700	$155,925
20	3	2	0	0	0	0	5	0	5	$693,000	$138,600
22	3	2	0	0	0	0	5	0	5	$762,300	$152,460

BARRIER S5S1

Barrier Height (ft)	Receivers with Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	Other*	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	1	0	0	0	0	0	1	0	1	$133,000	$133,000
12	0	1	0	0	0	0	1	0	1	$159,600	$159,600
14	0	1	0	0	0	0	1	0	1	$186,200	$186,200
16	0	0	1	0	0	0	1	0	1	$212,800	$212,800
18	0	0	1	0	0	0	1	0	1	$239,400	$239,400
20	0	0	0	1	0	0	1	0	1	$266,000	$266,000
22	0	0	0	1	0	0	1	0	1	$292,600	$292,600

* Receivers determined to be unaffected by the project (traffic noise levels less than 66.0 dBA) but benefited by the noise barrier.

BARRIER S5S2

Barrier Height (ft)	Receivers with Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	Other*	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	0	0	0	0	0	0	0	0	0	--	--
12	0	0	0	0	0	0	0	0	0	--	--
14	1	0	0	0	0	0	1	0	1	$220,500	$220,500
16	1	0	0	0	0	0	1	0	1	$252,000	$252,000
18	0	1	0	0	0	0	1	0	1	$283,500	$283,500
20	0	1	0	0	0	0	1	0	1	$315,000	$315,000
22	0	1	0	0	0	0	1	0	1	$346,500	$346,500

BARRIER S5N1

Barrier Height (ft)	Receivers with Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	Other*	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	0	0	0	0	0	0	0	0	0	--	--
12	0	0	0	0	0	0	0	0	0	--	--
14	1	0	0	0	0	0	1	0	1	$147,350	$147,350
16	1	0	0	0	0	0	1	0	1	$168,400	$168,400
18	1	0	0	0	0	0	1	0	1	$189,450	$189,450
20	1	0	0	0	0	0	1	0	1	$210,500	$210,500
22	0	1	0	0	0	0	1	0	1	$231,550	$231,550

* Receivers determined to be unaffected by the project (traffic noise levels less than 66.0 dBA) but benefited by the noise barrier.

APPENDIX G
WORKING AERIALS