

Appendix J  
HELIPAD NOISE ANALYSIS

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**Helicopter Noise Analysis For  
Henry Mayo Newhall Hospital**

City of Santa Clarita

Report # 2003-186  
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*Prepared For:*

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## Existing Environment

The hospital currently accommodates 15 to 17 operations each month, where an operation is one arrival and one departure from the heliport. The existing case has the heliport at the last known location which is between two existing towers, east of the emergency room adjacent to the parking lot. This location is shown in Figure A. This position will be used as a base condition against which future changes will be measured. The helicopter noise levels were calculated at several representative receptor locations around the hospital assuming an average of 16 operations a month, and the results are listed in Table A. In calculating the noise levels, the number of helicopter operations were evenly distributed between the Bell 412, the Sikorsky S70, and the H3. The representative receptor locations, along with the corresponding helicopter noise levels, are also presented in Figure A. The dark lines are the flight tracks leading to and from the helipad and represent the path the helicopters would fly either approaching or leaving the helipad from either the north or the south, depending upon the direction of the wind at the time.

**Table A**  
Existing Noise Levels (dB CNEL)

Site	Existing Level (CNEL)
2	63.0
3	62.0
4	64.2
A	60.4
C	56.6
E	56.8
G	61.6

## Short-Term Future Noise Levels

The hospital is in the process of relocating the heliport from this existing, albeit currently removed, location to the top of a proposed parking structure to be located near the entrance of the hospital campus adjacent to McBean Parkway. The helipad would be situated in the north corner of the proposed parking structure at an elevation of forty-four (44) feet above the surrounding ground elevation. The location of the proposed parking structure helipad and corresponding flight tracks is shown in Figure B, along with the projected noise levels at each of the representative receptor locations. These noise levels were calculated using the same number of operations and the same mix of helicopter types. The results of these calculations are presented in Table B. The change in the noise level from the existing location to the parking structure location was calculated, and the results are presented in Table C. As expected, as the helipad is moved closer to the homes along McBean Parkway, the noise levels at these receptors increases while the noise levels at the homes on the summit generally decrease.

**Table B**  
 Short-Term Future Noise Levels  
 (dB CNEL)

Site	Existing Level (CNEL)
2	64.3
3	63.7
4	62.5
A	59.4
C	54.8
E	56.1
G	61.6

**Table C**  
 Change in Noise Levels  
 Existing Location to Parking Structure  
 (dB CNEL)

Site	Existing Level (CNEL)
2	1.3
3	1.7
4	-1.7
A	-1.0
C	-1.7
E	-0.7
G	0.0

The representative receptor locations, along with the corresponding change in helicopter noise levels, are also presented in Figure C.

**Long-Term Future Noise Levels**

The long-term future case will have the helipad located on the top of the proposed hospital tower which will be constructed in the location of the existing helipad. The future helipad would be located in the same position but at an elevation of eighty-five (85) feet above the existing elevation. The helicopter noise levels for this case was calculated at each of the representative receptors, and the results are presented in Table D.



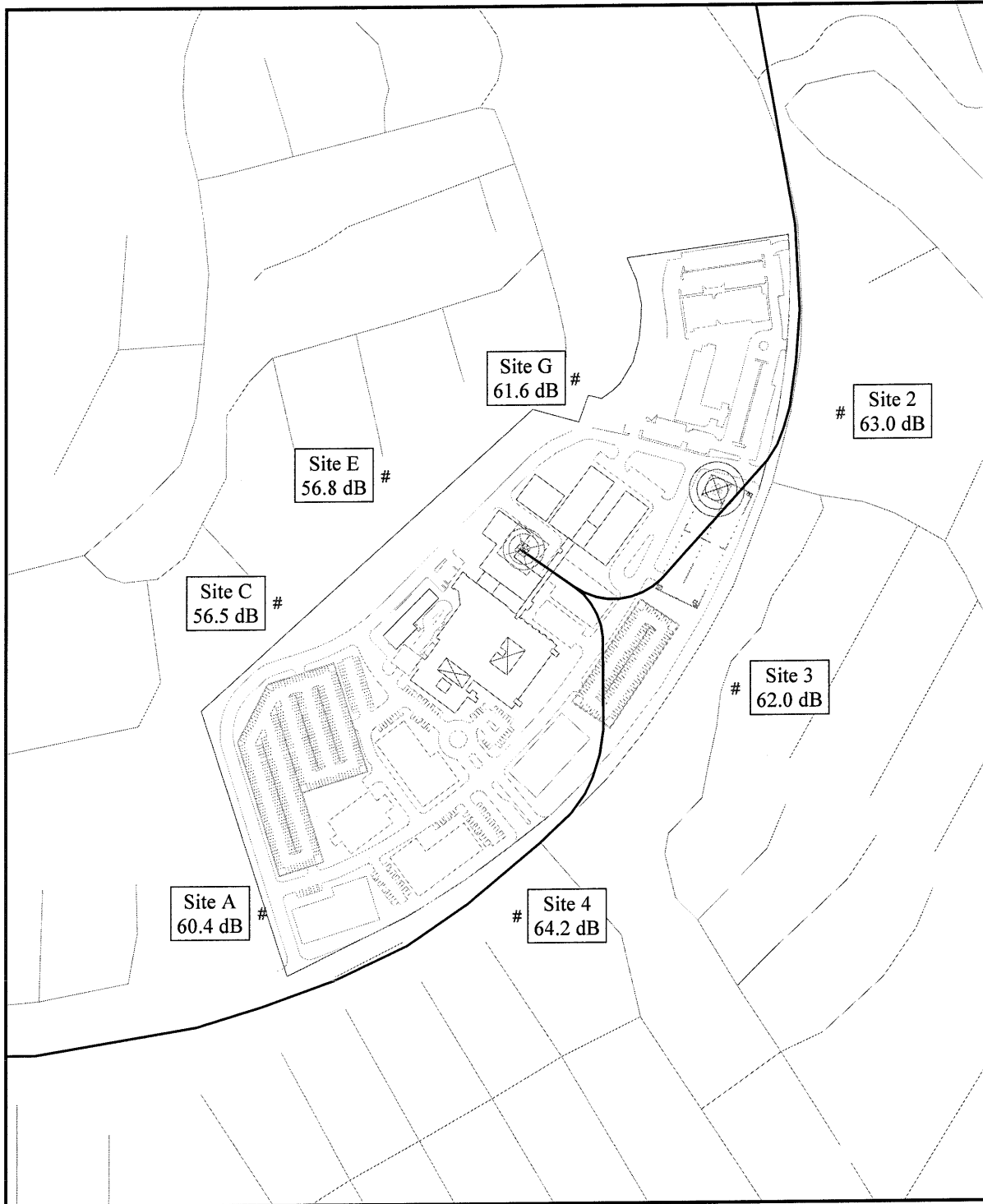
**Table D**  
 Long-Term Future Noise Levels  
 (dB CNEL)

Site	Existing Level (CNEL)
2	62.2
3	61.2
4	63.4
A	59.6
C	55.7
E	56.0
G	60.8

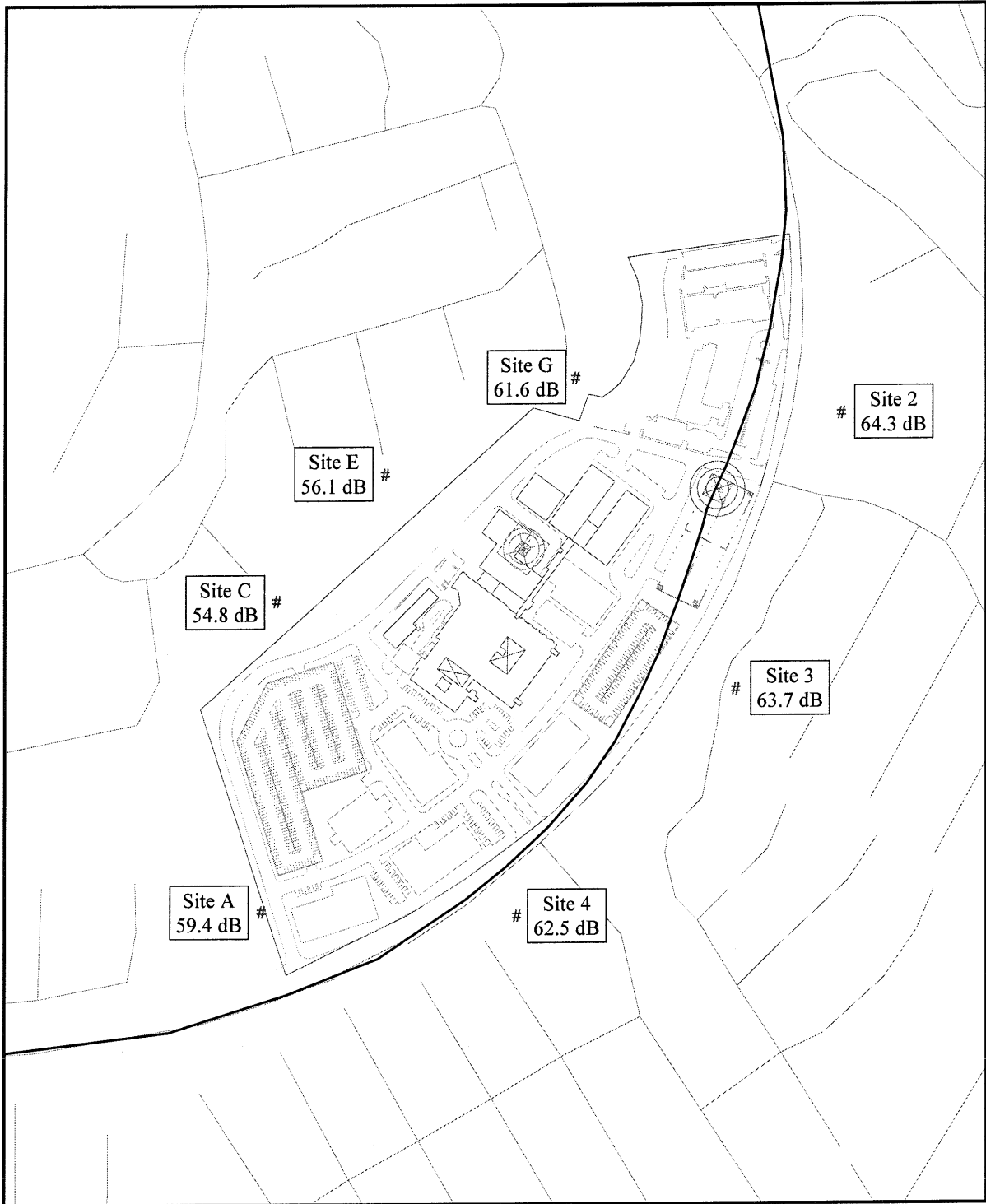
The location of the proposed future helipad and corresponding flight tracks are shown in Figure D, along with the projected noise levels at each of the representative receptor locations. These noise levels were calculated using the same number of operations and the same mix of helicopter types as in the previous cases. The change in noise level between operations at the proposed parking structure and on top of the proposed medical building were calculated at each of the receptor sites and the results are listed in Table E. The projected change in noise levels at each of the representative receptor locations is also presented in Exhibit E. As would be expected, as the helipad is moved back to the original site and elevated, the noise levels at the receptors on the summit will increase, while the noise level at the receptors along McBean parkway will correspondingly decrease. The noise levels at the receptor sites is expected to be less for the long-term future case than for the existing case due to the fact that the heliport will be elevated, thereby decreasing the event time of each departure and arrival to the helipad.

**Table E**  
 Change in Noise Levels  
 Parking Structure to Tower Location  
 (dB CNEL)

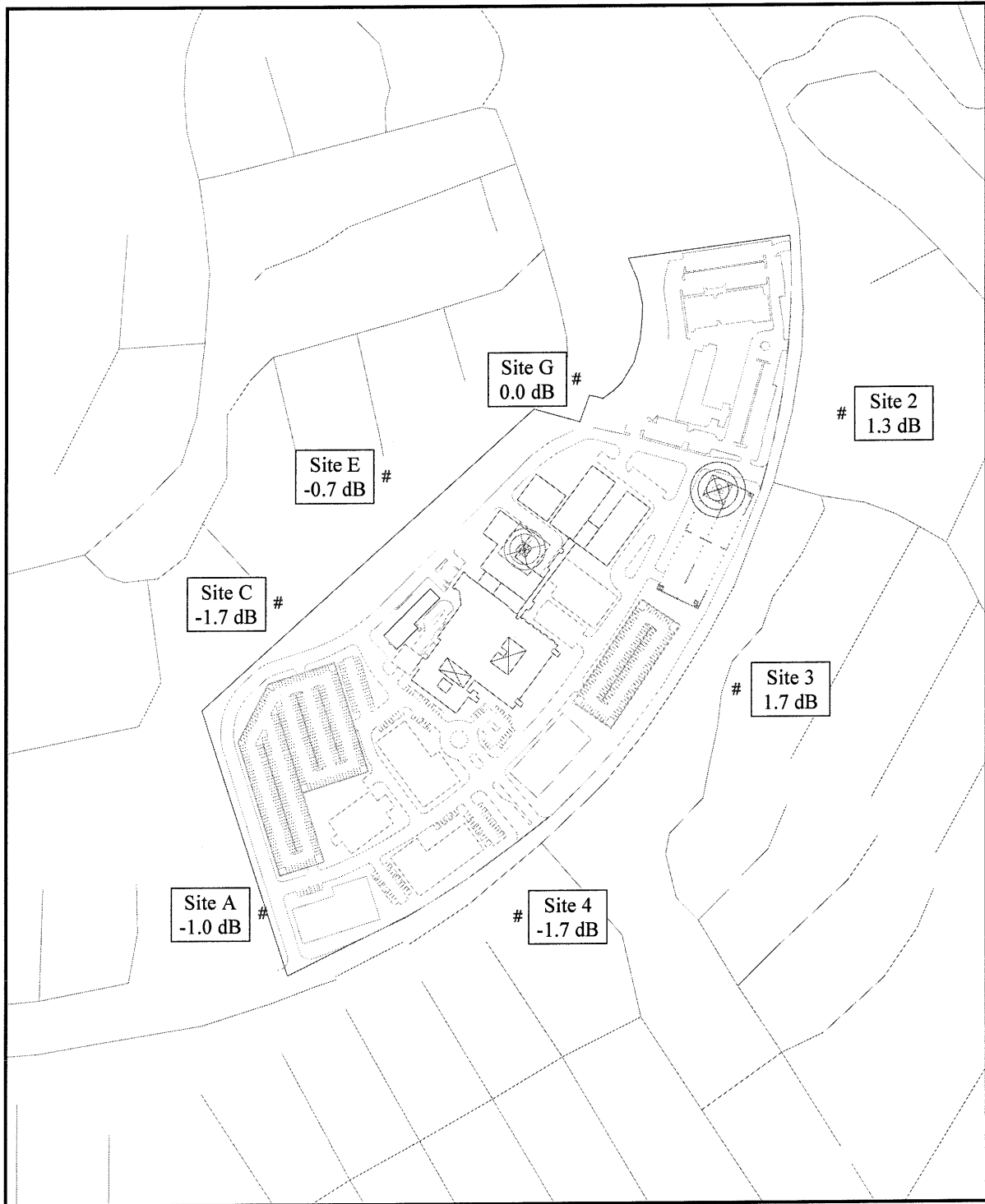
Site	Existing Level (CNEL)
2	-2.1
3	-2.5
4	0.9
A	0.2
C	0.9
E	-0.1
G	-0.8



**Figure A**  
 Representative Receptors and  
 Existing Helipad Noise Levels (dB CNEL)  
 Based on 16 Arrivals & Departures a Month

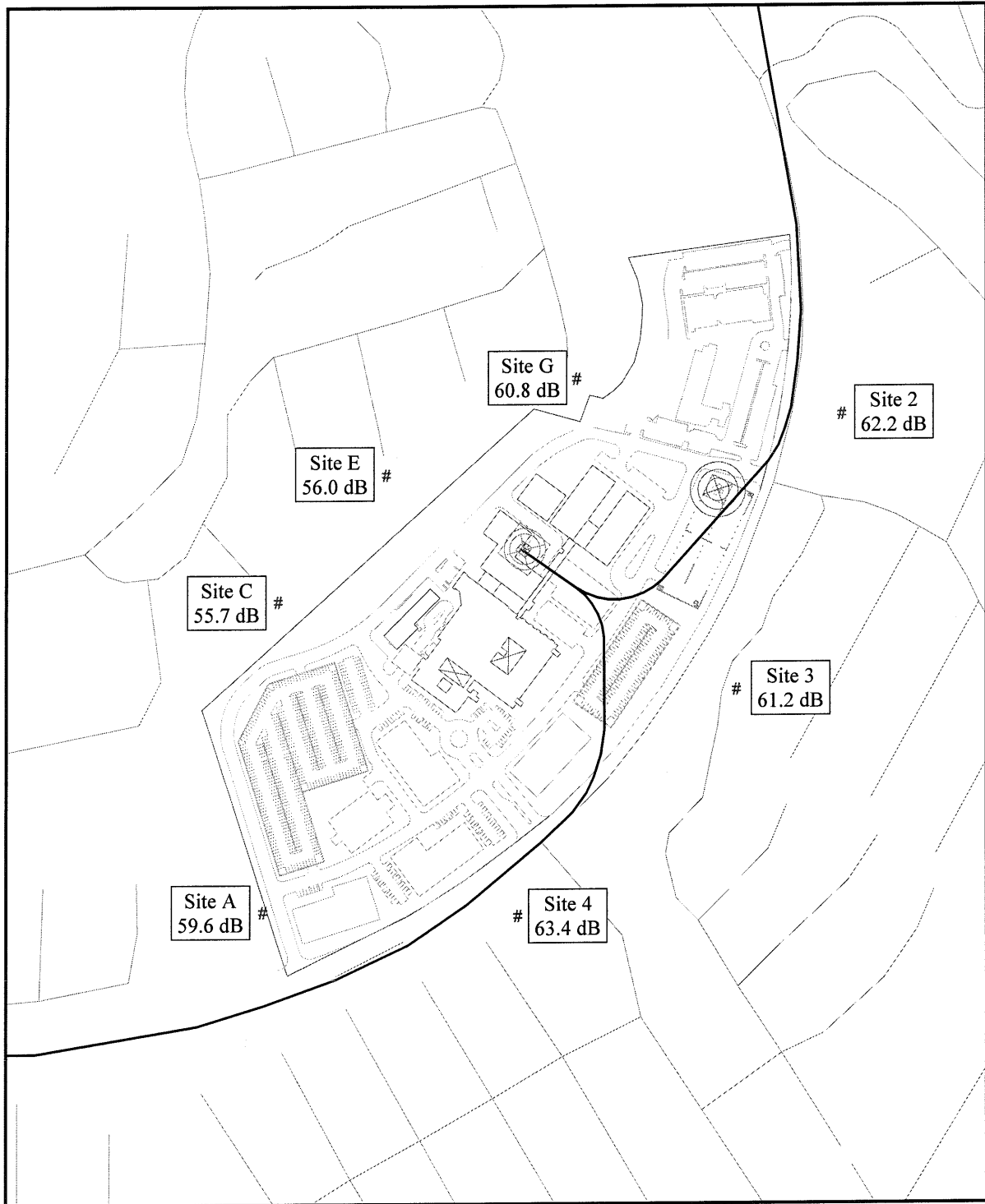


**Figure B**  
 Representative Receptors and  
 Corrected PS-1 Helipad Noise Levels (dB CNEL)  
 Based on 16 Arrivals & Departures a Month

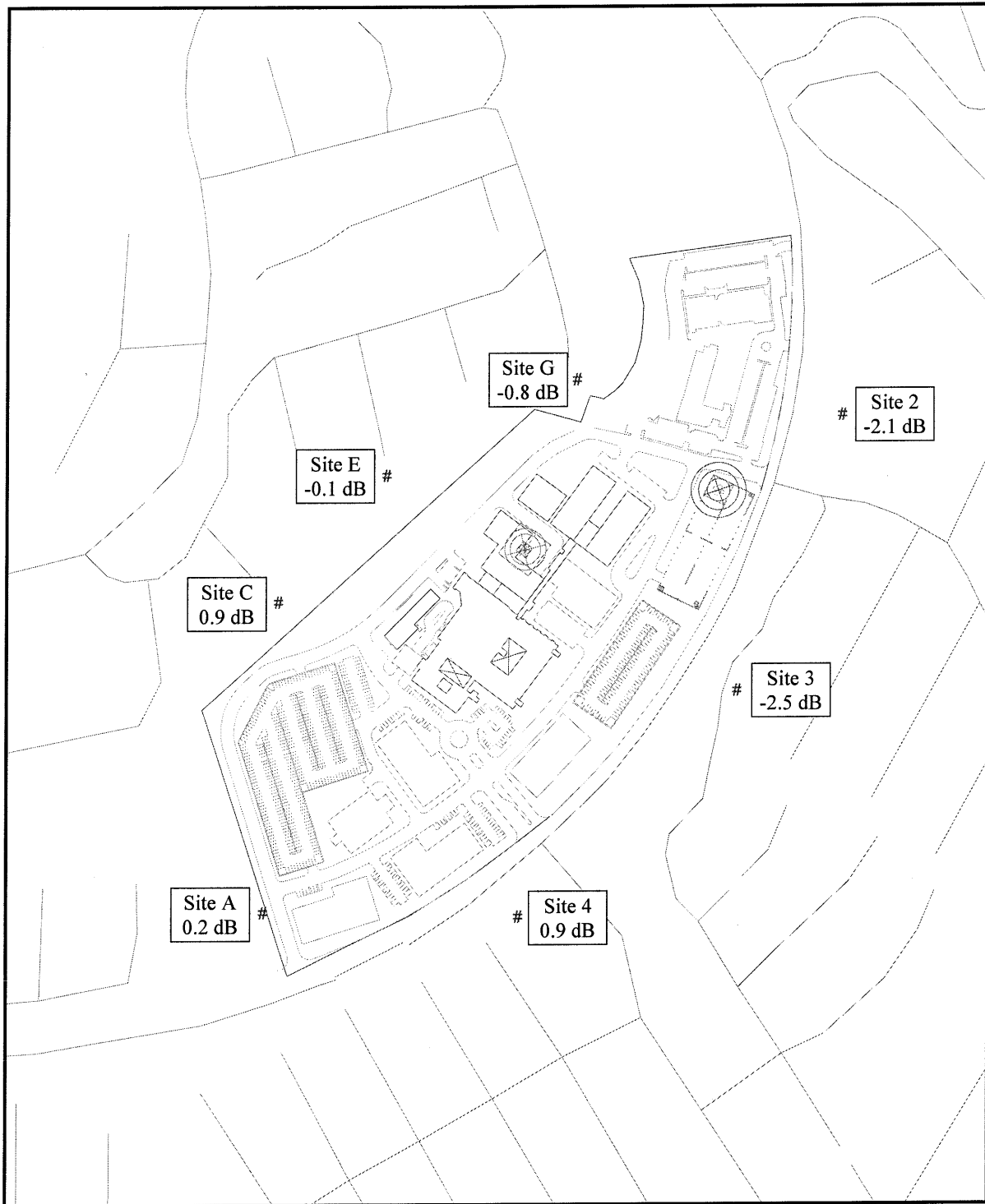


**Figure C**  
 Change in Noise Level from  
 Existing Helipad to PS-1 Helipad (dB CNEL)





**Figure D**  
 Representative Receptors and  
 Future Helipad Noise Levels (dB CNEL)  
 Based on 16 Arrivals & Departures a Month



**Figure E**  
 Change in Noise Level from  
 PS-1 Helipad to Future Helipad (dB CNEL)