



May 21, 2014

Danielle Page
Lexcom Development
615 8th Avenue South
Seattle, WA 98104

Re: Acoustical Report – AT&T SB1738 Enatai Park
Site: Intersection of SE 27th Street & SE 27th Place

Dear Danielle,

This report presents a noise survey performed in the immediate vicinity of the proposed AT&T telecommunications facility at the intersection of SE 27th Street & SE 27th Place in Beaux Arts, Washington. This noise survey extends from the proposed equipment to the nearest properties. The purpose of this report is to document the existing conditions and the impacts of the acoustical changes due to the proposed equipment. This report contains data on the existing and predicted noise environments, impact criteria and an evaluation of the predicted sound levels as they relate to the criteria.

Ambient Conditions

Existing ambient noise levels were measured on site with a Svantek 971 sound level meter on May 16, 2014. Measurements were conducted as close to the proposed location as possible and the property lines in accordance with the State of Washington code for Maximum Environmental Noise Levels WAC 173-60-020. The average ambient noise level was 53 dB(A). The weather during the measurements was clear and the roads were dry.

Code Requirements

The site is located within the Beaux Arts Zoning jurisdiction on property with an SFR 10.0 (Residential) zoning designation. All of the receiving properties are Residential.

The proposed new equipment consists of equipment support cabinets, which are expected to run 24 hours a day. The equipment is housed within an equipment shelter.

King County Code Chapter 12.88.020, limits noise from equipment on a Residential property as follows:

Residential Receiver: Noise is limited to 55 dB(A) during daytime hours. During nighttime hours, between the hours of 10 p.m. and 7 a.m. on weekdays and between 10 p.m. and 9 a.m. on weekends, the maximum permissible sound level is decreased by 10 decibels. Since the support cabinets are expected to operate 24 hours a day, they must meet the 45 dB(A) nighttime limit.

SSA Acoustics, LLP

222 Etruria Street, Ste 100

Seattle, Washington 98109

t. 206.839.0819 f. 206.839.0824

Predicted Equipment Sound Levels

24-Hour Operation Equipment

The proposed equipment includes (2) Mitsubishi PUY-A36NHA units. According to manufacturer data, the units will each produce 48 dB(A) at 3 feet. The combined noise level from both units is 51 dBA at 3 feet.

To predict equipment noise levels at the receiving properties, this survey used the methods established by ARI Standard 275-97. Application factors such as location, height, and reflective surfaces are accounted for in predicting the sound level at the nearest receivers.

The nearest receiving property is approximately 11 feet north of the equipment location. The predicted sound level at the nearest property is shown in Table 1 below.

Table 1
Application Factors and Predicted Noise Levels
Proposed New Equipment

Line	Application Factor	North
1	Sound Pressure Level at 3 ft. (dB(A)), Lp1	51
2	Distance Factor (DF) Inverse-Square Law (Free Field): $DF = 20\log(d1/d2)$	-11 (11 ft)
3	Equipment Sound Pressure Level at Receiver, Lpr (Add lines 1 and 2)	40

As shown in Table 1, the combined sound pressure level from the proposed equipment cabinets at the nearest receiving property is 40 dB(A) meets the 45 dB(A) nighttime noise limit.

Please contact us if you have questions or need anything further.

Sincerely,
SSA Acoustics, LLP



Mack Stuart
Technician

Reviewed by:



Alan Burt, P.E.
ASSOCIATE PARTNER