COMMENT CARD RESPONSES (NOISE)

Purple Line Extension: La Cienega and Rodeo Monthly Update Meeting
November 7, 2018

Comments:

• Exactly how close is the staging area to the bungalows at the high school?

• Why is the sound wall needed?

• Is vibration caused by heavy equipment able to be measured and mitigated?

• What does it mean “limits” construction? What are the guidelines? Please define limits.

COMMENT CARD 1

1. Exactly how close is the staging area to the bungalows at the high school?

Response: The staging areas at 1940 and 1950 Century Park East are adjacent to the Beverly Hills High School property line where the portable classrooms are located. However, the closest truck loading area is located over 100 feet from BHHS. Sound walls will be surrounding the staging area.

2. Why is the sound wall needed?

Response: The noise barrier fence is needed to reduce the construction noise to the high school portable classrooms and to meet the City of Beverly Hills daytime construction noise limits.

3. Is vibration caused by heavy equipment able to be measured and mitigated?

Response: There is a continuous vibration monitoring station at the high school property line. The monitoring station will be operated for the full duration of construction. The vibration monitoring station automatically generates warnings and alarms if the vibration thresholds are exceeded. If there is an exceedance the work causing the exceedance will be halted. Mitigation will be implemented by relocating the construction activity farther from the high school or using different equipment and/or alternative methods of construction.

4. What does it mean “limits” construction? What are the guidelines? Please define limits.
Response: The City of Beverly Hills limits construction noise to no more than 5 dB above the existing ambient for daytime, evening, or nighttime hours. The vibration limits are the Federal Transit Administration (FTA) damage risk criteria to limit either architectural or structural building damage during construction. There are also Metro vibration annoyance criteria that are intended to limit ground vibration to occupied spaces in buildings that may result in interference with normal activities.

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November 7, 2018

Comments:

A school is being closed in Beverly Hills due to safety for the students. How in our right minds can we justify sending thousands of kids to school for 9 hours amidst vibration, air quality, noise and the danger of abandoned oil wells?

Response: A detailed, conservative air quality and health risk analysis was conducted on the construction phase of the project. The Health Risk Assessment conservatively assumed a 12-hour daily exposure to outside air, which would account for students being on campus that long. The results of the analysis were below the excess risk of 10 in a million. Please refer to response MR-A1 in Appendix J of the Final SEIS for a detailed discussion of the air quality and health risk assessment methodology.

Noise from construction activities planned for Section 2 of the Project will not interfere with academic or recreational activities on the BHHS campus, and BHHS will be able to continue to operate as it does under current conditions. No exceedances of the City of Beverly Hills noise limits were predicted at the existing classroom locations. Although the analysis predicted a daytime noise exceedance of the City of Beverly Hills daytime noise limits by up to
8 dB at the temporary classroom locations, with implementation of the proposed mitigation, noise levels are not predicted to exceed the City noise limits. The contractor will be required to construct a sound wall around Area 2 and Area 3 (see slide 53 of the November 7 presentation) and use low noise emission construction equipment. With these noise control measures, noise levels during construction are predicted not to exceed the City of Beverly Hills Municipal Code construction noise limit of existing ambient by +5 dBA at the BHHS temporary classrooms and school recreational facilities. In accordance with mitigation measures, noise levels will be monitored by the contractor during construction. If the measured construction levels exceed the applicable noise limits, the contractor will provide appropriate abatement measures and/or modify the activity responsible for the exceedance. Please also refer to response MR-A2 in Appendix J of the Final SEIS.

As indicated by the figures that were included with Metro’s presentation, there has been a significant amount of subsurface exploration and testing at BHHS. The subsurface conditions have been relatively well defined and significant concentrations or amounts of methane have not been found along the alignment at BHHS. Additional testing will be performed prior to, and during, the tunneling as a precautionary measure. The California Department of Conservation – Division of Oil, Gas, and Geothermal Resources (DOGGR) and its predecessor agencies (Division of Oil & Gas and State Mining Bureau), have regulated oil drilling and production activities in the State since the late 1800’s. These agencies have prepared and maintained maps of the historic oil well locations and they have overseen the abandonment of wells when those activities were performed. DOGGR has permitted and mapped the oil wells that have been drilled on the BHHS property. DOGGR’s records indicate there are six older wells on the property and one well offsite adjacent to the west property line. There are also 19 more recent wells that were operated by Venoco at the southwest corner of the site. As discussed during Metro’s presentation, Metro has retrieved and reviewed historic aerial photographs of BHHS going back to the early 1920’s to confirm the locations of the mapped wells and to look for evidence of other wells. Metro has also performed geophysical surveys to screen for the presence of oil wells along the alignment. No oil wells have been identified within the tunnel alignment. As discussed, Metro will also perform directionally-drilled magnetometer surveys in advance of the tunnel boring machines as an additional precautionary measure to screen for the presence of oil wells. Please also refer to responses MR-B1 and MR-B2 in Appendix J of the Final SEIS.
COMMENT CARD 3

1. How do you justify exposing kids to so much construction noise, limiting their learning comprehension?

Response: Noise from construction activities will not interfere with academic or recreational activities on the BHHS campus, and BHHS will be able to continue to operate as it does under current conditions. No exceedances of the City of Beverly Hills noise limits were predicted at the existing classroom locations. Although the analysis predicted a daytime noise exceedance of the City of Beverly Hills daytime noise limits by up to 8 dB at the temporary classroom locations, with implementation of Metro’s proposed mitigation, noise levels are not predicted to exceed the City noise limits. The contractor will be required to construct a sound wall around Area 2 and Area 3 and use low noise emission construction equipment (CON-92). With these noise control measures, noise levels during construction are predicted not to exceed the City of Beverly Hills Municipal Code construction noise limit of existing ambient by +5 dBA at the BHHS temporary classrooms and school recreational facilities. In accordance with mitigation measures, noise levels will be monitored by the contractor during construction. If the measured construction levels exceed the noise limits, the contractor will provide appropriate abatement measures and/or modify the activity responsible for the exceedance. Please also refer to response MR-A2 in Appendix J of the Final SEIS.
1. What level of noise is expected in the BHHS classrooms during boring and subsequently during subway operation?

**Response:** Per the American National Standards Institute (ANSI) S12.60-2003, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 1: Permanent Schools," the maximum allowable one-hour average sound level of exterior source background noise in furnished classrooms is 35 dBA. This standard is used in the design of new school buildings, and has been adopted by various school districts, the California Collaborative for High Performance Schools (CHPS), and the LEED rating system. The groundborne noise from train operations is not predicted to exceed the 35 dBA ANSI standard.

The groundborne noise levels are predicted to be in the range of 30 dBA to 33 dBA in the BHHS classrooms during train operations. The underground tunneling activities are predicted to result in groundborne noise levels of 30 dBA for the tunnel boring machine. The background noise level in the high school buildings due to the heating and air conditioning systems is typically 40 dBA to 45 dBA or higher.

2. Please discuss how metro will address increased pulmonary disease?

**Response:** A detailed, conservative air quality and health risk analysis was conducted on the construction phase of the project. Emissions from the Westside Purple Line project are not predicted to cause an exceedance of the ambient air quality levels, nor are they predicted to
cause an excess cancer risk. Please refer to response MR-A1 in Appendix J of the Final SEIS for a detailed discussion of the air quality and health risk assessment.

3. Under what context would Metro use electric vehicles?

**Response:** The use of electrically powered construction equipment will be put into place when feasible, such as for certain cranes and pumps.

4. At last meeting a woman complained of continuous (illegible/ cut off section) that was intrusive and debilitating.

**Response:** Metro and the contractor have provided additional mitigation measures, as referenced on slide 12 of the November 7 presentation.

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**Purple Line Extension: La Cienega and Rodeo Monthly Update Meeting**

**November 7, 2018**

Comments:

Spending some time right next to your current constellation construction; it sounds like a roller coaster collapsing every few minutes. How are you realistically expecting students to study in bungalows against the construction wall which is less than 15 feet away?

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**Metro**

**COMMENT CARD 5**

1. Spending some time right next to your current constellation construction; it sounds like a roller coaster collapsing every few minutes. How are you realistically expecting students to study in bungalows against the construction wall which is less than 15 feet away?

**Response:** Noise from construction activities will not interfere with academic or recreational activities on the BHHS campus, and BHHS will be able to continue to operate as it does under current conditions. No exceedances of the City of Beverly Hills noise limits were predicted at the existing classroom locations. Although the analysis predicted a daytime noise exceedance of the City of Beverly Hills daytime noise limits by up to 8 dB at the temporary classroom locations, with implementation of Metro’s proposed mitigation, noise levels are not predicted...
COMMENT CARD RESPONSES (NOISE)

to exceed the City noise limits. The contractor will construct a sound wall around Area 2 and Area 3 and use low noise emission construction equipment. With these noise control measures, noise levels during construction are predicted not to exceed the City of Beverly Hills Municipal Code construction noise limit of existing ambient by +5 dBA at the BHHS temporary classrooms and school recreational facilities. In accordance with mitigation measures, noise levels will be monitored by the contractor during construction. If the measured construction levels exceed the noise limits, the contractor will provide appropriate abatement measures and/or modify the activity responsible for the exceedance. Please also refer to response MR-A2 in Appendix J of the Final SEIS.

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November 7, 2018

Comments:

Move the staging area across the street!
Where are you putting the tunneling, football field or tennis court?
Why are you not moving the staging area away from the high school?

Response: Alternative construction approaches and alternative access shaft locations were considered in the Final SEIS. Due to the physical constraints and environmental impacts associated with placing the access shaft at the alternative sites identified, they were not determined to be feasible or prudent. Please refer to response MR-A3 in Appendix J of the Final SEIS.