6603 Queen Ave So. ● Suite M ● Richfield, MN 55423 telephone: 612-331-4571

12 May 2022

Brittney Whitley Project Manager, Design Mister Car Wash 222 E. 5th Street Tucson, AZ 85705

Re: Sound Study - SUMMARY FINDINGS Mister Car Wash - Spring Lake Park, Minnesota

The memorandum summarizes findings from the sound study for the proposed Mister Car Wash in Spring Lake Park, Minnesota. The study included sound level measurements as well as predictions of sound levels at the nearest residential and commercial land uses

Background sound level measurements associated primarily with traffic on Highway 65 past the project site were taken on at the location shown in **Exhibit 1** over a two-hour period from 2:30 to 4:30 pm on Wednesday May 1, 2022. The median traffic sound level was close to 55 dBA.

An extensive data base of car wash equipment source sound levels from a facility in Houston, Texas, similar to the proposed car wash in Spring Lake Park, was taken by SLR International Corporation staff and provided for use in this study by Mister Car Wash staff. Mister Car Wash is also proposing to use the *Sealth Quiet Drying System* from International Drying Corporation of Prairie Grove, Illinois.

Since the facility will operate only during daytime yours, noise levels associated with the facility must with the Minnesota daytime noise standards. The most restrictive L50 standard is used to determine compliance of the car wash, 60 dBA for residential land uses, and 65 dBA for commercial land use.

Noise receptor sites closest to the car wash are identified in **Exhibit 2**. One receptor site per building is sufficient to determine compliance since if the closest unit is in compliance, the remainder are also in compliance. Predicted sound level with and with exterior sound walls are presented in the table below.

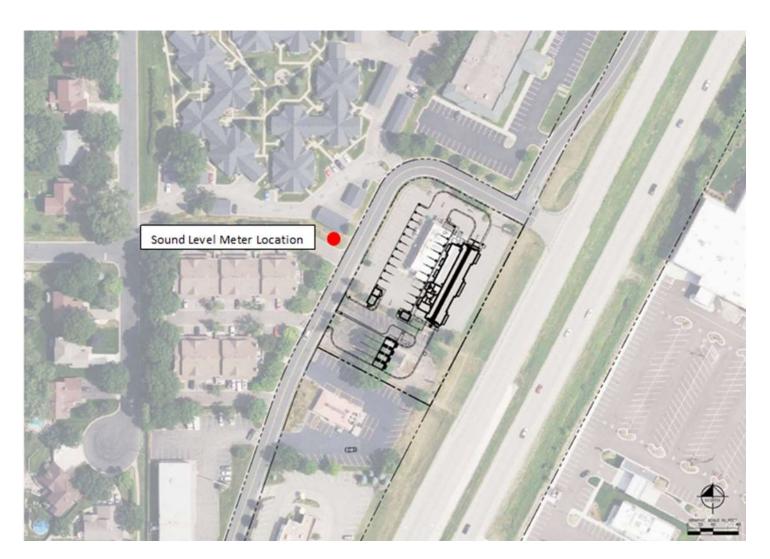
Receptor	Classification	L50 Standard	No Walls	With Walls
R1	NAC-1	60	63	54
R2	NAC-1	60 :	66	55
R3	NAC-1	60	63	46
R4	NAC-1	60	63	46
· · · C1 · · · ·	····NAC-2····	65	66	65
C2	NAC-2	65	63	49

It can be seen that except for R3 which is shielded by the Car Wash building itself and Taco Bell, which is some distance away from the exit, the other receptor sites are predicted to exceed the appropriate standard without any mitigation. The levels at receptors R1, R2 and C1 are determined by noise from the car wash entrance while the levels at receptors R3, R4 and C2 are determined by noise from the car wash exit. Therefore, mitigation measures to reduce these sound levels is needed.

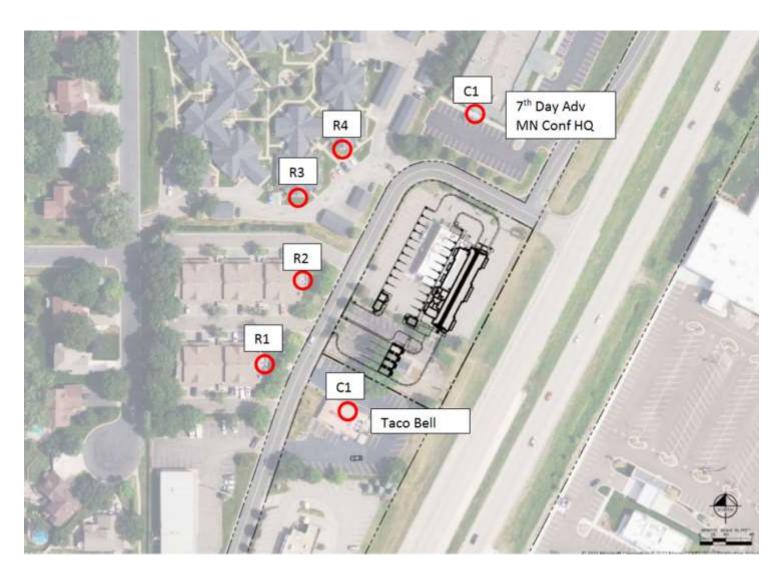
Because the entrance and exit are the primary contributing sources, the construction of sound walls extending from the building as part of the architecture is recommended. These are shown on the building plan in **Exhibit 3**. Suggested wall locations are shown on the building sections in **Exhibit 4**. With these walls and the quiet drying system, it can be seen in the table above that all of the nearest receptor sites are expected to be in compliance with the state noise standards.

Please direct questions to:

Dr. David Braslau. President David Braslau Associates, Inc. david@braslau.com



EXHIIT 1 NOISE MONITORING LOCATION



EXHIIT 2 NOISE RECEPTOR SITES

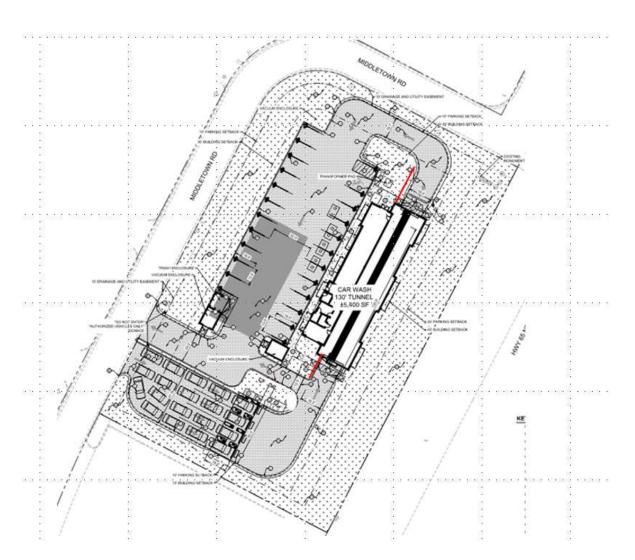


EXHIBIT 3 PROPOSED NOISE WALLS ON SITE PLAN



EXHIBIT 4 SUGGESTED WALL LOCATIONS