



## Project Description

This report presents the results of a second round of acoustical tests performed on Sonny's Car Wash dryer blowers and client-designed and installed prototype silencers. The first round of acoustical tests was described in a previous report, *Sonny's Car Wash Dryer Blowers Noise Assessment*, dated 2/16/18.

In this round of tests, the silencers were installed on the dryer blowers at Prestige Car Wash located at 4921 N. University Drive, Lauderhill, Florida. As shown in **Photos 1 and 2**, Prestige is an active car wash in commercial operation. The noise tests were performed after operating hours on 10/3/18 to minimize noise sources in the car wash not attributable to the blowers.



Photo 1. Prestige Car Wash Entry Portal



Photo 2. Prestige Car Wash Exit Portal

## Noise Measurement Procedure

The procedure followed in this second round of acoustical tests involved performing calibrated A-weighted broadband and third-octave band noise measurements both with and without the prototype silencers attached to the dryer blowers. As shown in **Figure 1**, noise measurements were performed at nine measurement positions (M0 thru M8) inside, outside and in the vicinity of Prestige Car Wash. The nine positions can be described as follows:



Figure 1. Noise Measurement Positions

- M0 - Inside tunnel towards exit
- M1 - Tunnel exit portal (east)
- M2 - Outside tunnel in direct line from exit
- M3 - Outside tunnel in direct line from exit
- M4 - Tunnel entrance portal (west)
- M5 - Building facade property to south
- M6 - Northern property line
- M7 - Outside tunnel in line from entrance
- M8 - Inside office/waiting room area