Noise Wall Construction Plan Preparation/Review Checklist

- The bottom panel of a ground mounted noise wall is buried a minimum of 6”, in accordance with our noise barrier specs. Maximum buried depth of the bottom panel is preferably 1’-1.5’ if the ground is flat. There is no gap between the bottom of wall and the finished ground surface. Barrier elevation sheets adhere to this requirement when giving bottom of wall elevation and finished ground elevation. Noise wall cross sections sheets and profile sheets adhere to this requirement as well.

- 4’ step downs for end of the wall transitions are used. When a noise wall approaches an overpass or structure, ODOT prefers no transition.

- When barriers must be placed behind existing guardrail, the proposed noise wall is placed as close to the guardrail as possible in order to maximize wall height and acoustic protection. Utilize a guardrail system that allows for minimum deflection.

- ODOT prefers not to have large strips of ROW between the noise wall and L/A that ODOT would have to maintain. Where possible, proposed noise walls are placed as close as possible to the L/A fenceline and the existing L/A fence removed. The need for a concrete parapet wall or guard rail in front of a proposed noise wall is eliminated, where possible, since this is a potentially significant added cost.

- ODOT strongly desires a smooth top of wall profile for aesthetic purposes. It is acceptable for the noise wall construction plan preparer to raise the wall height of certain bays by 1’ or 2’ to achieve this goal. In some cases, it may be acceptable for the noise wall construction plan preparer to lower the wall height slightly below the acoustical profile of certain bays by 1’ or 2’ to achieve this goal. Consultation with OES should occur in these cases to ensure that noise reductions are not substantially negatively affected.

- The "valleys" in the TOW profile that follow the existing topography are eliminated, where possible, in order to create a smooth top of wall profile as much as possible. Relative to the top of wall profile, changes in the top of wall elevation (from bay to bay) are limited to increments of 1’-0”.

- In addition to the showing the bottom and top of wall profiles and acoustic profile, show the roadway profile. If the proposed noise wall is along a ramp, show the ramp and mainline profiles.

- Unnecessary tree clearing to construct a noise wall and, in general, for that matter, is avoided.

- For aesthetic reasons, 8’-10’ post spacings are placed at or near the ends of the wall where possible.

- All Noise Wall Construction Plans (conventional or design build) are reviewed by District and OES staff and comments addressed.

- Overhead and underground utilities are fully evaluated during plan preparation to ensure the wall can be constructed as designed and to avoid running into a utility issue during construction.

- The noise wall is stated as absorptive or reflective per ODOT’s 2013 Traffic Noise Manual.

- The color and texture on either side of the noise wall are what was voted on by the public and local officials and/or decided by ODOT.

- Post spacings are preferably 24’, where possible.

- New noise walls on existing structures/bridges is discouraged by ODOT. It will be rare for ODOT to construct a noise wall on an existing bridge/structure, hence, if the design calls for a noise wall on an existing bridge/structure, this must confirmed with ODOT to be required.

- The noise wall limits and dimensions match the Noise Barrier Design Table (NBDT). Noise wall heights equal or exceed the acoustic profile.

- Any roadway vertical or horizontal changes that occur after the approval of a noise analysis report are critical changes and could significantly affect the noise wall design. These changes are brought to the attention of the ODOT project manager immediately because the noise analysis would need to be redone and the noise wall redesigned.