

 Office of Structures <i>Guidelines and Procedures</i> <i>Memorandum</i>	PLANS
	Number: OOS-GPM-P-402 <i>(Former P-93-37(4))</i>
	Date: 08-05-2026
Contract Plans for Noise Barriers	Approval: 

OVERVIEW

The Noise Barrier Program, including project development, inspection, and maintenance, is the responsibility of the Office of Highway Development. The Office of Structures is responsible for the development of SHA Standard Noise Barrier System, review and approval of Proprietary Noise Barrier systems, and review of proposed noise barriers at the typical structural milestones.

This document has been developed to provide guidelines on the development of plans for noise barriers to be included in Contract Documents. It is recommended that the Contract Documents include Plans and Special Provisions for the SHA Standard Noise Barrier System and provide opportunities for proprietary noise barrier alternates, when appropriate.

PLAN DEVELOPMENT

SHA has Structural Plans for ground mounted noise barriers and barriers mounted on top of retaining walls utilizing 12', 16', and 20' post spacings with stacked panels. The Contract Plans shall be prepared for only one spacing. The Contractor may be given the option to select one of the other two spacings if they are both acceptable or be given only one other option depending on the wall location and topography. The option selected for detailing should be the one that best fits the topography of the noise barrier location and meets the proposed aesthetics. The structural details for the other two spacings will be included in the Contract Plans. If the Contractor selects one of the other two options, the General Plan and Elevation for the post spacing on which the Contractor's bid was based as well as the final caisson chart for that option must be revised. The Contract Documents shall indicate who will be responsible for that work.

The Noise Barrier Plans shall contain the following information:

- A. Highway Plans showing all topography, drainage structures, noise barrier, etc.
- B. A structure key plan sheet showing all structures, including noises barriers and retaining walls, in the Contract.
- C. Plan and Elevation views of the proposed Noise Barrier based on the selected post spacing indicating the following data:
 1. Base line construction alignment data.
 2. Beginning and ending wall stations.
 3. Horizontal offsets to face of Noise Barrier.

 Office of Structures <i>Guidelines and Procedures</i> <i>Memorandum</i>	PLANS
	Number: OOS-GPM-P-402
	Date: 08-05-2026
Contract Plans for Noise Barriers	Approval: See Page 1

4. Right-of-way lines.
 5. Elevation on top and bottom of each wall panel.
 6. Original and proposed ground profiles, in front of and behind the Noise Barrier.
 7. Acoustic profile.
 8. Location and height of retaining walls, or Jersey barriers if applicable.
 9. Location of overhead signs or roadway lighting, if applicable.
 10. Location (horizontally and vertically) and size of any existing or proposed structures, utility lines or any other appurtenances which could affect the Noise Barrier.
 11. Caisson numbers for the selected post spacing.
- D. Chart showing each caisson number, station, offset, top of pad elevation, diameter and depth of all caissons. A view shall be provided explaining all data provided. See Attachment A. Additional columns shall be shown on the chart for other acceptable caisson spacings. In these columns a caisson depth shall be indicated every 100'± required for that particular location.
 - E. Any aesthetic treatment that will be used on the Noise Barrier. The designer shall evaluate the proposed treatment for its compatibility with other structures in or near the project.
 - F. Any Sequence of Construction requirements which will affect the construction of the Noise Barrier.
 - G. The logs and location of all borings taken at each Noise Barrier site.
 - H. Details for SHA Concrete Noise Barrier System for the selected spacing as well as other spacing(s) which may be allowed.
 - I. Details for Bridge Mounted Noise Barrier System, if required.

 Office of Structures <i>Guidelines and Procedures</i> <i>Memorandum</i>	PLANS
	Number: OOS-GPM-P-402
	Date: 08-05-2026
Contract Plans for Noise Barriers	Approval: See Page 1

- J. Any required special details such as grade beams, posts over the maximum standard height, special corner details, end treatment, retaining walls, Jersey barriers, etc.
- K. Soil parameters and safety factors used in the design of the caissons for the ground mounted noise barriers.

PROPRIETARY NOISE BARRIERS

To allow for the use of Proprietary Noise Barrier alternatives, the Contract Documents shall include, where applicable, the magnitude, location and direction of external loads due to bridges, overhead signs, traffic surcharge, etc., which must be accounted for in design, and a list of approved Proprietary Noise Barrier alternatives from which the Contractor may select and furnish for the Contract bid price.

In order for a proprietary noise barrier system to be considered for use on SHA right-of-way, the barrier system must be on the list of Approved Proprietary Noise Barriers maintained by the Office of Structures and posted on the Administration's website (www.roads.maryland.gov). It should be noted that the inclusion of a noise barrier system onto the Approved Proprietary Noise Barrier list does not guarantee that it will be used on all SHA projects. A system will only be used on projects where it is reviewed and approved by the Administration prior to advertisement and is specified in the Contract Documents. To be considered for placement on the Approved Proprietary Noise Barrier list, requestors must follow the process identified in the Office of Structures Guidelines and Procedures Memorandum No. D-94-45(4) – Proprietary Noise Barrier Approval Process.

If the Contractor selects to use a specified Proprietary Noise Barrier, the General Plan and Elevation and any other pertinent plans must be revised to reflect this change. The Contract Documents shall indicate who will be responsible for that work.

CROSS SECTIONS

Cross sections showing original groundline, proposed groundline and location of noise barriers for full length of barriers must be available for review by bidders at the time of advertisement.