

Section 8.10

NOISE, VIBRATION AND SETTLEMENT ABATEMENT

8.10.1 Purpose

To set forth an internal procedure for monitoring contractor's performance in controlling noise and vibration in compliance with the Contract Documents and applicable Laws.

8.10.2 Authority

Sections 20.23(3)(a), and 334.048(3), Florida Statutes (F.S.)

8.10.3 REFERENCES

Section 335.17 Florida Statutes (F.S.)
Title 23, Part 772, Code of Federal Regulation
Section 108, Standard Specifications

8.10.4 General

This chapter emphasizes the enforcement of contract provisions requiring Districts and the State Construction Office to conduct Quality Assurance (QA) reviews of noise and vibration issues during construction.

8.10.5 Definitions

For the purpose of this procedure, all references to the Project Administrator (PA), the Resident Engineer (RE) or the Project/Program Manager (PM) who oversee Consultant CEI shall be either Florida Department of Transportation (Department) or Consultant personnel, whichever is applicable.

8.10.6 Resident Level Responsibilities

The RE (or PA) must ensure the Contractor performs the monitoring and inspection

requirements indicated in the Contract Documents. The RE (or PA) must ensure the Contractor submits to the CEI office records of settlement and vibration continuously during the monitoring period. The RE (or PA) must verify the vibration and threshold limits are not exceeded. When any of these limits are exceeded or damage is detected, the RE (or PA) must ensure the Contractor performs a corrective action in accordance with sub-articles 108-2.1 and 108-2.2 of the Standard Specifications. When the Contract Documents specify a maximum noise threshold level, the RE (or PA) must ensure the Contractor submits to the CEI Office records of noise measurements on a weekly basis or as otherwise required by the Contract Documents, during the monitoring period. The RE (or PA) must verify the noise threshold limit is not exceeded. When this limit is exceeded, the RE (or PA) must ensure a corrective action plan is followed to meet the contract requirements.

The RE (or PA) shall review the project construction schedule and the nature of the activities generating noise and/or vibration, which may disturb residents or businesses in the area. Some Contracts include Special Provisions, Technical Special Provisions or Plan notes requiring special monitoring for noise, vibration or settlement monitoring as well as inspection and documentation of adjacent structures. Also, there may be working time restrictions (for example, night or weekend work). The RE, PA, and the inspection staff should review and become familiar with these documents.

The RE (or PA) shall ensure that the Construction Inspection **QA Critical Requirements** are met. The **QA Critical Requirements** are located at the following web site:

<http://www.fdot.gov/construction/CONSTADM/Guidelist/GuideIndex.shtm>

The RE (or PA) shall document any complaints received during construction. Documentation should include, at a minimum:

- a. The nature of the complaint.
- b. The name and address of the individual making the complaint.
- c. The area affected by the problem.
- d. The type of construction operation generating the noise and/or vibration.

Upon receiving any verbal or written complaints for noise, vibration or settlement, the RE (or PA) shall promptly request the Contractor to address it. In addition, the RE (or PA) shall:

- a. Make sure the Contractor documents the alleged damage and addresses it.
- b. If necessary, request the Contractor to measure and record noise and/or vibration levels, and conduct settlement monitoring.

- c. Review and file any documentation and monitoring report submitted by the Contractor or Contractor's specialty consultant.
- d. Document any corrective action performed by the Contractor.

The RE (or PA) shall review any repeated noise or vibration complaints or any patterns of noise and vibration complaints including verbal complaints, particularly if the complaints are widespread or if a change of construction method is being proposed by the Contractor. The RE (or PA) shall also consider scheduling noise and/or vibration monitoring during construction operations utilizing a specialty consultant or the District Materials Office. Conduct the monitoring at noise and/or vibration sensitive sites or during specific operations for which complaints have been received. In addition, the RE (or PA) shall document any corrective action or modifications undertaken by the Contractor to its construction methods or schedule.

The RE (or PA) shall also contact property owners and arrange access to a property for inspection by the Contractor. The RE (or PA) shall prepare letters on behalf of the Department and deliver them to the property owners to allow inspection by personnel engaged by the Contractor. These letters shall be sent via Certified Mail. Property Inspection will be required in the following instances:

- To investigate a complaint by an owner that Contractor's activities have impacted or are impacting a property.
- To perform the inspections required in accordance with subarticle 108-2.1.4 of the Standard Specifications.

The RE (or PA) shall maintain, in the project files, the letters requesting access to properties and any responses received from the property owners in the project files. When an owner does not respond to a certified letter, the RE (or PA) shall document, in the project files, all attempts made to contact the owner to procure access to the property, including information showing whether the owner responded to the Department's requests.

8.10.7 District Level Responsibilities

The District Construction Office (DCO) shall perform QA reviews of the Residencies to verify that the Contractor is in compliance with all Contract Documents and with all applicable laws and commitments relating to noise and/or vibration mitigation. The DCO shall notify other appropriate State and Local Government Agencies in the event of complaints or non-compliance.

8.10.8 State Construction Responsibilities

State Construction Office shall perform Process Reviews of the Districts periodically.