

# 5.0 Introduction

Site development and stormwater management practice (SMP) construction require careful execution and inspection to ensure that SMP elements function properly and that impacts of construction activities on the surrounding environment are minimized. Chapter 5, Construction Guidance, provides guidance for developers, engineers, and contractors on construction-related topics, including construction inspections ([Section 5.1](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-1-construction-inspection)), commonly encountered construction issues ([Section 5.2](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-2-common-construction-issues)), and construction documentation ([Section 5.3](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-3-construction-documentation)). Specific construction guidelines for each SMP are provided in [Chapter 4](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-4).

The Philadelphia Water Department (PWD) provides construction oversight during SMP installation in order to verify that correct installation practices are used and to focus on the protection of infiltration areas from compaction by construction equipment. PWD construction oversight includes inspection reporting and enforcement activities.

[Section 5.1](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-1-construction-inspection) explains the purposes of construction inspections and provides guidance on the construction inspection process including PWD contact information, assignment of a PWD Stormwater Inspector (PWD Inspector), preconstruction meeting, documentation requirements during the construction process, final inspections, and post-construction submission requirements.

[Section 5.2](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-2-common-construction-issues) includes common construction issues associated with Erosion and Sediment Control (E&S) and SMP installation in order to help minimize or avoid them. [Section 5.2.1](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-2-common-construction-issues#5.2.1) describes common E&S-related construction issues including protection of City-owned inlets and other E&S-related construction issues.

[Section 5.2.2](https://water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-2-common-construction-issues#5.2.2) describes common SMP-related construction issues including protection of infiltration areas, use of clean stone, pipe loading, and inspection and documentation. PWD requires contractors to submit construction documentation at the close of the project to ensure that the SMP and its elements were constructed in general accordance with the Approved Post-Construction Stormwater Management Plan (PCSMP). Record Drawing(s) are required from the applicant for SMP verification and represent a key component of PWD's compliance reporting.