Chapter 2 Submission, Review, and Approval Procedures

2.0 Introduction

Chapter 2, Submission, Review, and Approval Procedures, outlines the steps required to obtain a Philadelphia Water Department (PWD) Stormwater Plan Review or a Stormwater Billing and Incentives approval, where PWD certifies that a project complies with, or is exempt from, the **PWD Stormwater Regulations** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/c-pwd-stormwater-regulations (Stormwater Regulations). Before using Chapter 2, the applicant must review **Chapter 1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1 to learn the basics of the Stormwater Regulations and understand the applicability factors that determine if the Stormwater Regulations apply to the project and, if so, which specific requirement(s) apply.

Using the three Stormwater Regulation applicability factors described in **Section 1.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-1-applicability-factors along with the guidance in this chapter, the applicant can determine a project's required submission and review process to obtain stormwater management approval or exemption.

2.0.1 Understanding PWD's stormwater review process

Basic terms used in this chapter

Review Path – A linear series of submission, review, and approval/exemption procedures the applicant will navigate to demonstrate a project's compliance with, or exemption from, the Stormwater Regulations.

Review Phase – A step in a Review Path. Each Review Path has one or more Phases. Each Phase corresponds to one or more submissions of information for PWD's review.

Submission Package – A set of documents, such as plans, reports, calculations, worksheets, and forms, submitted to PWD at each Review Phase of each Review Path.

As stated in **Chapter 1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1, PWD reviews all projects in the City of Philadelphia that generate earth disturbance of 5,000 square feet or more. A project's Review Path varies depending on the type of project, the project's location, and the project's earth disturbance area. Projects will fall under one of four major Review Paths:

- **Development Compliance**
- **Development Exemption**
- **Demolition**
- **Stormwater Retrofit**

These Review Paths each have one or more Review Phases, and each Review Phase consists of the following:

1. A submission package from the applicant to PWD containing required information about the project
2. A PWD review of the applicant's submission package
3. Issuance of approval by PWD for the applicant to proceed to the next Review Phase or final approval if in the terminal phase
   OR
   Issuance of review comments by PWD to the applicant that must be addressed through resubmission by the applicant to PWD

2.0.2 How to use this chapter

Chapter 2 consists of seven sections, which are listed and described below. A first-time applicant is encouraged to read all sections sequentially, while others should feel free to use only the sections of Chapter 2 that are most appropriate for a given project.

- **Section 2.0 – Introduction** ☛ p. 1: The applicant can use this section to obtain general information on the PWD Stormwater Plan Review process, understand how to use Chapter 2, and to learn about ways to contact PWD Stormwater Plan Review and Stormwater Billing and Incentives, if necessary, throughout the process.
- **Section 2.1 – Existing Resources and Site Analysis** ☛ p. 4: The applicant can use this section to understand the submission requirements for an Existing Resources and Site Analysis (ERSA) Application, which is the starting point for every applicant submitting to PWD Stormwater Plan Review. The applicant must use this section first to determine which of four Review Paths is required for the project before proceeding to the following sections of this chapter.
- **Section 2.2 – Review Paths** ☛ p. 10: Once a project's Review Path has been determined, the applicant can use this section to find out more about the project's Review Path, including all Review Phases within the Review Path.
- **Section 2.3 – Review Phases** ☛ p. 16: The applicant can use this section to determine what materials need to be submitted to PWD at each Review Phase for each Review Path.
- **Section 2.4 – Expedited Post-Construction Stormwater Management Plan (PCSMP) Reviews** ☛ p. 57: The applicant can use this section to determine if, and how, their project can obtain approval more quickly.
- **Section 2.5 – PWD's Development Review Process** ☛ p. 63: The applicant can use this section to understand how other PWD units and PWD permit requirements may interact with the project's PWD Stormwater Plan Review approval.
- **Section 2.6 – PWD's Role in Philadelphia's Development Process** ☛ p. 64: The applicant can use this section to understand how other City departments and Zoning and Building Permit requirements may interact with the project's PWD Stormwater Plan Review approval.
- **Section 2.7 – PWD and Pennsylvania Department of Environmental Protection** ☛ p. 69: The applicant can use this section to understand how Pennsylvania Department of Environmental Protection (PA DEP) requirements interact with the project's PWD Stormwater Plan Review approval.

Having worked through Chapter 2 to gain an understanding of the applicable Review Path and submission requirements, the applicant may use **Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3 to develop a stormwater management strategy that meets the project's stormwater management requirements.

If the applicant's project is a Stormwater Retrofit, Chapter 2 can be used to understand the review process for the project, which varies from the other Review Paths. Applicants are also encouraged to review **Section 1.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-3-stormwater-retrofits of this Manual for more information on Stormwater Retrofit projects. They can also contact **Stormwater Billing and Incentives** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction#4 with any questions on how to apply this Manual to their project.

2.1 Existing Resources and Site Analysis

Every new regulated project, regardless of its Review Path, begins with the submission of the Existing Resources and Site Analysis (ERSA) Application to Philadelphia Water Department (PWD) Stormwater Plan Review.

Stormwater Grant projects begin with the Stormwater Grant Application, but need to follow the steps listed below in submitting an ERSA Application after notice of grant award for tracking purposes.

Section 2.1 describes the ERSA Application, lists all ERSA Application Submission Package components, and details the submission process. Furthermore, this section assists the applicant in determining their project's applicable Review Path, which is a necessary step in the completion of an ERSA Application.

2.1.1 ERSA Application

The ERSA Application is the first submission for all projects that require PWD Stormwater Plan Review approval or exemption. The ERSA Application is also the first submission for non-grant-funded Stormwater Retrofits. For grant-funded Stormwater Retrofits, the first submission will be the Stormwater Grant Application to Stormwater Billing and Incentives, not an ERSA Application.

The development of the ERSA Application requires the applicant to identify existing project site features, describe the proposed development site, identify all applicable **PWD Stormwater Regulations** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/c-pwd-stormwater-regulations (Stormwater Regulations), and determine the appropriate Review Path for the project. PWD Stormwater Plan Review uses the ERSA Application to define the existing conditions of the project site, to confirm the project's applicability within, or exemption from, the Stormwater Regulations, and to confirm the project's Review Path with the applicant. The applicant must note that design decisions that may occur after submission of the ERSA Application may impact a project's applicability to, or exemption from, the Stormwater Regulations, as well as the project's Review Path. If major changes are made to the project after the applicant submits an ERSA Application, the applicant must contact **PWD Stormwater Plan Review** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction/#4 to determine if a revised ERSA Application is needed before proceeding.

To assist in identifying stormwater regulatory requirements, PWD has made available to the applicant a **Reg Finder** ☛ www.pwdplanreview.org/reg_finder application, which provides useful project characteristic and applicability information at this early stage in the project's design.

ERSA Application Submission Package components

A complete ERSA Application Submission Package consists of the following components:

Figure 2.1-1: ERSA Application Submission Package components checklist

ERSA APPLICATION SUBMISSION PACKAGE Submission Package components checklist	
	ERSA Worksheet
	Site photographs
	Existing Conditions Plan
	Conceptual Review Phase Submission Package*

* Refer to **Section 2.3** ☛ p. 16 for Conceptual Review Phase Submission Package Requirements by Review Path

Stormwater Retrofit projects that already have Conceptual Approval may include the PCSMP Review Phase Submission Package instead. The applicant is referred to **Section 2.3** ☛ p. 16 for PCSMP Review Phase requirements.

ERSA Worksheet

- When submitting the ERSA application, the applicant must complete an online **ERSA Worksheet** ☛ www.pwdplanreview.org/apply/login/portal_signup via the Plan Review portal (First-time applicants may need to create a new user account). This worksheet provides interactive guidance to assist the applicant in providing all required project, contact, and owner information.
- The online ERSA Worksheet also guides the applicant through the process of determining the project's Review Path. Detailed information on determining a project's Review Path is included in **Section 2.1.2** ☛ p. 8.
- If the applicant intends for the project to be considered for an Expedited PCSMP Review or a stormwater management based zoning height or density bonus, this intent is declared as part of the ERSA Worksheet. The applicant is referred to **Section 2.4** ☛ p. 57 for more information on Expedited PCSMP Reviews and **Section 2.6** ☛ p. 64 for zoning bonuses.

Site photographs

A minimum of one color photograph from each accessible face of the parcel(s) looking into the site is required. The applicant is encouraged to submit additional photos as needed to best illustrate project site conditions to PWD.

Existing Conditions Plan

The Existing Conditions Plan contains information regarding the predevelopment state of the project site (i.e., site conditions at the time of ERSA Application). Proposed site and stormwater improvements are not depicted on the Existing Conditions Plan, as these are shown on the Conceptual Stormwater Management Plan. The specific requirements for Existing Conditions Plans are shown in **Appendix E, Table E-2** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-2-existing-conditions-plan-requirements. Existing Conditions Plans must also meet all PWD general plan sheet requirements listed in **Appendix E, Table E-1** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.

Redevelopment projects that propose modifications to an existing project area that was subject to Stormwater Regulations or received Stormwater Grant funding for a Stormwater Retrofit project are advised to contact **PWD Stormwater Plan Review** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction/#4 as early as possible in the design process to ensure the Redevelopment will not impede regulatory compliance of the existing project or impact the project's Review Path (**Section 2.2** ☛ p. 10). Even if no modifications are proposed to an existing SMP, changes in cover type, such as converting area that was previously constructed as landscape to hardscape, can have significant impacts on the site's regulatory compliance. Applicants who are unsure whether their project site was previously subject to Stormwater Regulations or has an SMP on-site may check the **Green Stormwater Infrastructure Projects Map** ☛ water.phila.gov/green-projects-map.

Conceptual Review Phase Submission Package

Requirements of a Conceptual Review Phase Submission Package differ based on a project's Review Path. The applicant must first determine the project's Review Path, using **Section 2.1.2** ☛ p. 8, and then is referred to **Section 2.3** ☛ p. 16 for Conceptual Review Phase Submission Package requirements.

Submission process

The ERSA Application submission is initiated through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. The online form guides the applicant through the ERSA Application submission process and allows the applicant to upload all necessary digital files: site photos, Existing Conditions Plan, and other plans required as part of the Conceptual Review Phase Submission Package.

Once projects are initiated online, a project tracking number is assigned, which is used by the applicant and PWD to track the review process as it proceeds. The applicant must reference this project tracking number for all subsequent correspondence.

Project tracking number

An example of a project tracking number is "FY16-EXAM-1234.01" where "FY16" is an abbreviation for the fiscal year in which the ERSA Application submission was made, "EXAM" is the first four letters of the project's name, "1234" is a unique numeric value, and "01" is associated with an initial project phase.

Throughout the submission process, the applicant is invited to contact **PWD Stormwater Plan Review** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction/#4 for assistance. For Stormwater Retrofits (**Section 2.3.4** ☛ p. 42), the applicant should contact **Stormwater Billing and Incentives** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction/#6.

2.1.2 Determining project Review Path

The path to obtaining a PWD Stormwater Plan Review approval varies depending on project characteristics. Determining whether an approval is required, and, if so, which of the four Review Paths is applicable, represents a critical step for every project and must be completed by the applicant prior to submission of an ERSA Application.

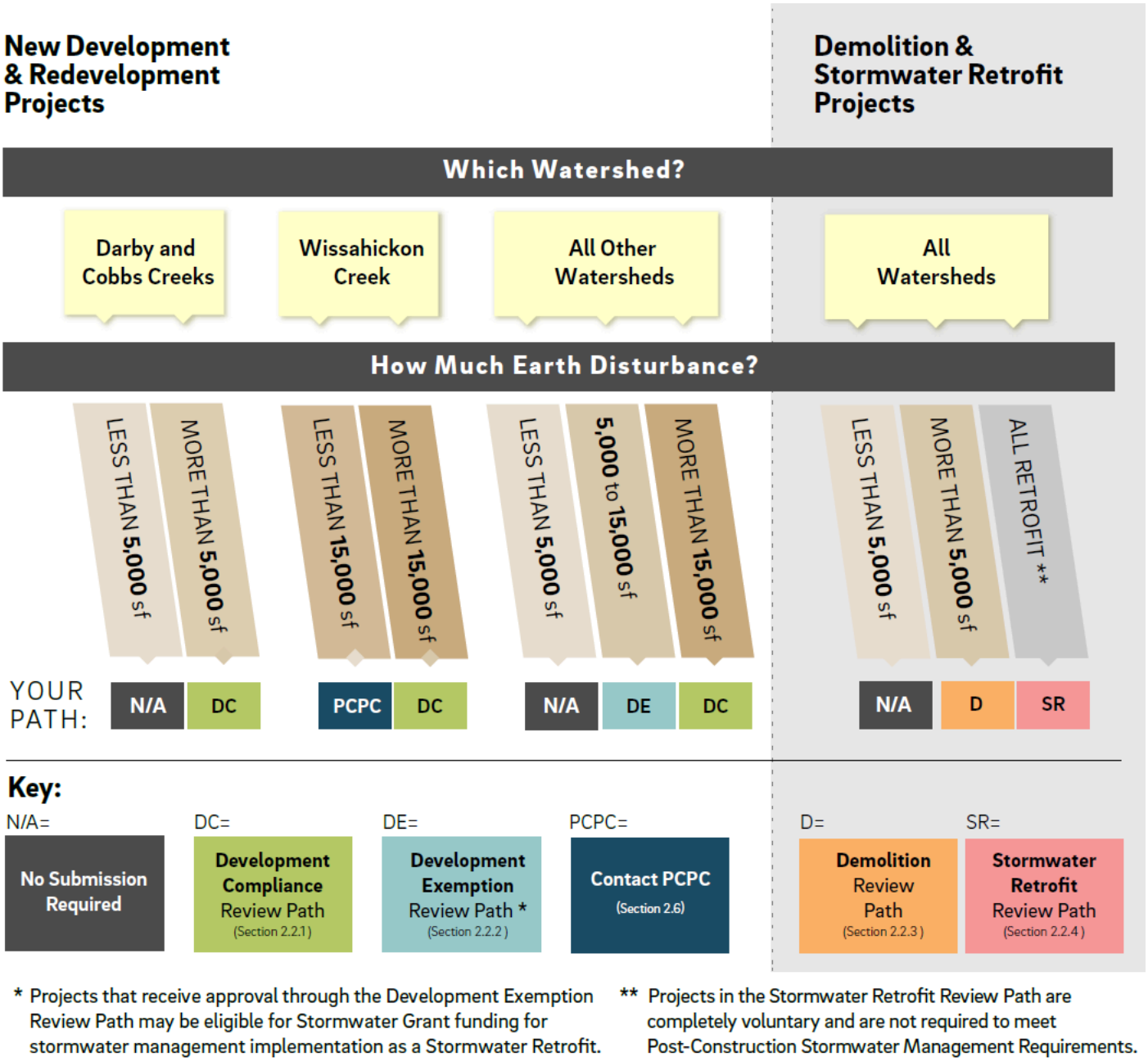
The applicant must identify the following three project characteristics to determine the appropriate review and submission requirements. These characteristics, used along with Figure 2.1-2 below, allow the applicant to determine the Review Path for their project. The applicant must input these characteristics when filling out the online ERSA Worksheet as part of the ERSA Application.

1. **Development type –** Projects fall into one of four development types: New Development, Redevelopment, Demolition, or Stormwater Retrofit. The applicant is referred to **Section 1.1.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-1-applicability-factors#1.1.1 for the complete definition of each development type. If an applicant is uncertain which development type best defines a project, they can contact **PWD Stormwater Plan Review** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction/#4 for additional guidance. If the applicant incorporates voluntary stormwater management into their project, Stormwater Billing and Incentives can also provide additional guidance.
2. **Watershed –** Seven major watersheds exist in Philadelphia: Darby and Cobbs Creeks Watershed, Delaware Direct Watershed, Lower Schuylkill River Watershed, Pennypack Creek Watershed, Poquessing Creek Watershed, Tookany/Tacony-Frankford Watershed, and Wissahickon Creek Watershed. The applicant is referred to **Section 1.1.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-1-applicability-factors#1.1.2 for more information on watersheds and to **Appendix D** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/d-watershed-and-phs-release-rate-maps for Watershed Maps.
3. **Earth disturbance –** PWD must review any project whose earth disturbance exceeds 5,000 square feet to ensure that an Erosion and Sediment Control (E&S) Plan has been prepared in accordance with Pennsylvania Department of Environmental Protection guidelines (**Section 2.3** ☛ p. 16). In addition, PWD must ensure that the limit of disturbance is correctly delineated and that the project is not part of a larger phased development that will trigger additional Stormwater Regulations.

   There are some earth disturbance activities that do not require post-construction stormwater management and/or should not be counted toward the regulatory threshold for triggering the Stormwater Regulations. The applicant is referred to **Section 1.1.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-1-applicability-factors#1.1.3 for more information on earth disturbance.

After answering these questions, the applicant can use Figure 2.1-2 to determine a project's Review Path. Review Paths are color-coded throughout Chapter 2.

Figure 2.1-2: Project Review Path determination flow chart



* Projects that receive approval through the Development Exemption Review Path may be eligible for Stormwater Grant funding for stormwater management implementation as a Stormwater Retrofit.

** Projects in the Stormwater Retrofit Review Path are completely voluntary and are not required to meet Post-Construction Stormwater Management Requirements.

After determining a Review Path, the applicant can proceed to **Section 2.2** ☛ p. 10 and **Section 2.3** ☛ p. 16 to learn more about the requirements and Review Phases of their project's Review Path. The applicant should review these sections before final submission of their ERSA Application, as the ERSA Application submission will occur concurrently with the Conceptual Review Phase Submission (except for Stormwater Grant-funded Stormwater Retrofits).

If unable to determine the appropriate Review Path, the applicant should contact **PWD Stormwater Plan Review** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction/#4.

2.2 Review Paths

Section 2.2 describes each of the four Review Paths to demonstrate a project's compliance with, or exemption from, the Philadelphia Water Department (PWD) Stormwater Regulations (Stormwater Regulations), including the steps, or Review Phases, within each Review Path. Each Review Path has its own individual set of requirements and criteria for approvals.

Once a project's Review Path is identified, the applicant must follow the steps in this section that correspond with the color-coded Review Path. Because some of the steps between Review Paths are identical, there is some repetition in the descriptions below. The applicant need only refer to the set of steps corresponding to the project's determined Review Path.

Each project will follow one of the four following Review Paths:

Development Compliance – **Section 2.2.1** ☛ p. 11

Development Exemption – **Section 2.2.2** ☛ p. 12

Demolition – **Section 2.2.3** ☛ p. 13

Stormwater Retrofit – **Section 2.2.4** ☛ p. 14

If the proposed limit of earth disturbance for the project changes at any point in the development process, the applicant must refer back to **Section 2.1.2** ☛ p. 8 to confirm the project's Review Path.

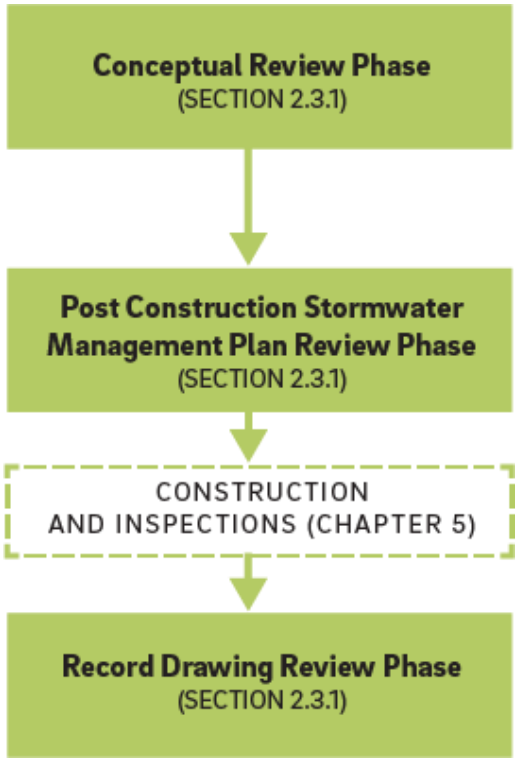
Projects may be subject to State or Federal permit requirements, or other PWD requirements aside from the Stormwater Regulations. It is the applicant's responsibility to determine whether their project must comply with other PWD, City, State, or Federal permit requirements. The applicant is referred to **Section 2.5** ☛ p. 63, **Section 2.6** ☛ p. 64, and **Section 2.7** ☛ p. 69 for more information. If uncertain about how to proceed, the applicant is encouraged to contact Stormwater Plan Review at any point during the submission and review process.

2.2.1 Development Compliance Review Path

The majority of development projects reviewed by Stormwater Plan Review fall into the Development Compliance Review Path and are subject to Post-Construction Stormwater Management (PCSM) Requirements (**Section 1.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-2-stormwater-regulations#1.2.1). PCSM Requirements apply to most projects that propose 15,000 square feet or more of earth disturbance (5,000 square feet or more in the Darby and Cobbs Creek Watershed). Stormwater Retrofits may have earth disturbance above 15,000 square feet and not be required to meet Stormwater Regulations.

The Development Compliance Review Path includes three Review Phases, as detailed in Figure 2.2-1.

Figure 2.2-1: Development Compliance Review Path flow chart



Projects in the Development Compliance Review Path must obtain both Conceptual and Post-Construction Stormwater Management Plan (PCSMP) approvals from Stormwater Plan Review. **Section 2.3** ☛ p. 16 provides detailed submission requirements for projects in this Review Path.

For the Development Compliance Review Path, PWD offers incentives to developers proposing the use of disconnected impervious cover (DIC) and green stormwater practices, such as bioinfiltration/bioretention basins and green roofs, by providing Expedited PCSMP Reviews. To determine if a project qualifies for one of PWD's Expedited PCSMP Reviews, the applicant is referred to **Section 2.4** ☛ p. 57. The applicant must clearly state the intent to qualify for an Expedited PCSMP Review in the Conceptual Review Phase submission (**Section 2.3.1** ☛ p. 18).

If, during the course of construction, additional area is disturbed which changes the applicable requirements, the applicant must notify PWD and other appropriate agencies immediately. PWD often observes earth disturbances in the field that exceed initial estimates provided on plans. To avoid costly delays, change orders, and enforcement actions, PWD recommends that the applicant be conservative when estimating the disturbance area at each stage of the review process.

2.2.2 Development Exemption Review Path

The Development Exemption Review Path applies to most development projects with earth disturbances that are less than 15,000 square feet. Projects with earth disturbances of 5,000 square feet or more in the Darby and Cobbs Creeks Watershed should follow the Development Compliance Review Path (**Section 2.2.1** ☛ p. 11). Certain projects with earth disturbances greater than 15,000 square feet may still fall into the Development Exemption Review Path if the earth disturbance activities do not count toward the regulatory disturbance threshold (**Section 1.1.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-1-applicability-factors/#1.1.3). The review and approval process for projects in the Development Exemption Review Path takes place in a single Review Phase. Specifically, the applicant will need to prepare a Conceptual Review Phase submission where PWD can review the proposed limits of disturbance (LOD) and verify that an Erosion and Sediment Control (E&S) Plan has been developed for the project. At the conclusion of the Conceptual Review Phase, all projects in the Development Exemption Review Path will be issued a Conceptual Approval Letter from Stormwater Plan Review. The Conceptual Approval Letter can be used as a Zoning Permit prerequisite. For most projects, the applicant can also use the Conceptual Approval Letter to satisfy their Building Permit prerequisite requirements, except for projects over one acre of earth disturbance, which may also require review from the Pennsylvania Department of Environmental Protection (PA DEP) (**Section 2.7** ☛ p. 69). Once the Development Exemption Review Path is complete, the applicant can proceed to construction upon receipt of their Building Permit.

If, during the course of construction, additional area is disturbed that changes the applicable requirements, the applicant must notify PWD and other appropriate agencies immediately. PWD often observes earth disturbances in the field that exceed initial estimates on plans. To avoid costly delays, change orders, and enforcement actions, PWD recommends that the applicant be conservative when estimating the disturbance area at each stage of the review process.

2.2.3 Demolition Review Path

Many development projects may have a demolition component; however, the Demolition Review Path applies only to projects that are limited to *the razing or destruction, whether entirely or in significant part, of a building, structure, site, or object (including the removal of a building, structure, site, or object from its site or the removal of destruction of the façade or surface)*, when no redevelopment is planned. If redevelopment is planned, the applicant may choose to submit an Existing Resources and Site Analysis (ERSA) Application (**Section 2.1** ☛ p. 4) limited to the demolition phase of work, allowing demolition to begin prior to completion of the Development Compliance or Development Exemption Review Paths. Applicants who wish to proceed with this option are advised to contact Stormwater Plan Review prior to making this additional ERSA Application submission.

In most cases, if the demolition activity will result in less than 15,000 square feet of earth disturbance (5,000 square feet in the Darby and Cobbs Creeks Watershed) the review and approval process takes place in a single Review Phase. Specifically, the applicant will need to prepare a Conceptual Review Phase submission where PWD can review the LOD and verify that an E&S Plan has been developed for the project. At the conclusion of this Conceptual Review Phase, PWD will issue a Conceptual Approval. The Conceptual Approval Letter can be used as a Zoning Permit prerequisite. For most projects, the applicant can also use the Conceptual Approval Letter to satisfy their Demolition Permit prerequisite requirements, except for projects over one acre of earth disturbance, which may also require review from PA DEP (**Section 2.7** ☛ p. 69). Once the Development Exemption Review Path is complete, the applicant can proceed to demolition upon receipt of their Demolition Permit.

If, during the course of demolition, additional area is disturbed that may change the project's Review Path or trigger additional stormwater management requirements, the applicant must contact PWD immediately to determine whether the current Review Path is still valid. PWD often observes earth disturbances in the field that exceed initial estimates on plans. To avoid costly delays, change orders, and enforcement actions, PWD recommends that the applicant be conservative when estimating the disturbance area at each stage of the review process.

If the project requires a full Building Permit, the applicant must contact Stormwater Plan Review to determine if a different Review Path is more appropriate for the project.

2.2.4 Stormwater Retrofit Review Path

The Stormwater Retrofit Review Path is administered by Stormwater Billing and Incentives to evaluate stormwater management designs proposed on private property for a purpose other than regulatory compliance (e.g., voluntary installations). An applicant who submits in the Stormwater Retrofit Review Path is typically looking to install stormwater management practices (SMPs) on their site to reduce their monthly stormwater bill, often with the assistance of **PWD Stormwater Grants** ☛ water.phila.gov/stormwater/incentives/grants. Other voluntary installations may be motivated by other City incentives, triple bottom line benefits, or completing Regulations-exempt development work. For additional guidance on Stormwater Retrofit projects, the applicant is referred to **Section 1.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-3-stormwater-retrofits.

Quick tip

Stormwater Billing and Incentives can be reached at (215) 685-6070 or **pwd.stormwatercredits@phila.gov**

Stormwater Retrofit projects that are awarded Stormwater Grant funding should follow the Stormwater Retrofit Review Path flow chart for grant applicants (Figure 2.2-2). Other Stormwater Retrofit projects that are not awarded Stormwater Grant funding, as well as Stormwater Grant projects that vary considerably from their approved Stormwater Grant Application, should follow the Stormwater Retrofit Review Path flow chart, alternative (Figure 2.2-3), and its applicant should contact Stormwater Billing and Incentives as soon as possible. The applicant is referred to **Section 2.3.4** ☛ p. 42 for more information on the different Conceptual Review Phases for the Stormwater Retrofit Review Path.

Figure 2.2-2: Stormwater Retrofit Review Path flow chart for grant applicants

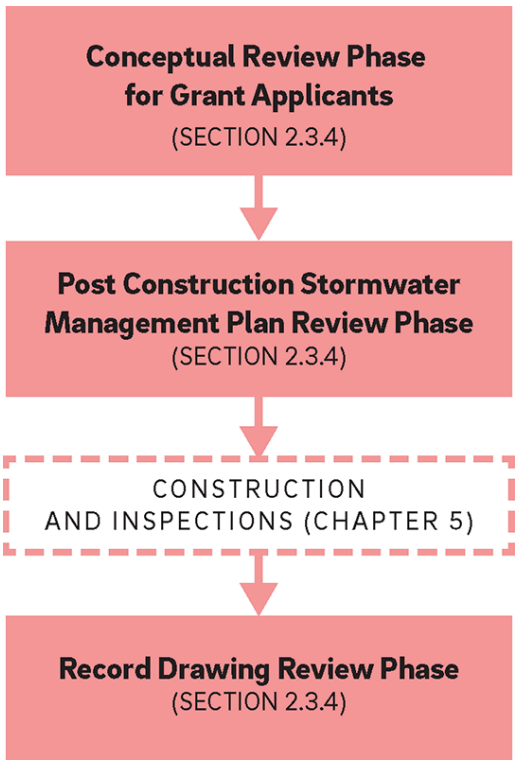
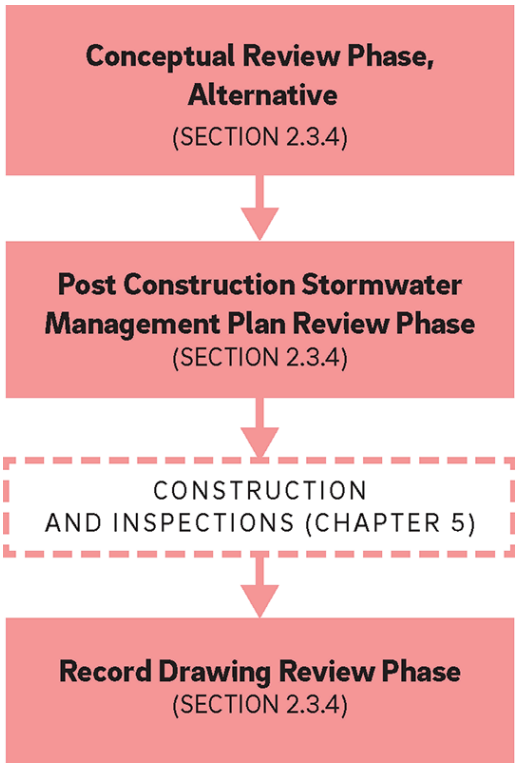


Figure 2.2-3: Stormwater Retrofit Review Path flow chart, alternative



If a project is for a purpose other than voluntary stormwater management, or if a project involves a development or demolition component, the applicant should contact Stormwater Billing and Incentives to confirm that they are proceeding through the correct Review Path.

The applicant is encouraged to meet with PWD early in the Stormwater Retrofit decision-making process to help determine eligibility for financial assistance through its **Stormwater Grant Program** ☛ water.phila.gov/stormwater/incentives/grants.

2.3 Review Phases

Section 2.3 describes the Review Phases associated with the Development Compliance, Development Exemption, Demolition, and Stormwater Retrofit Review Paths. The applicant should use this section after the applicable Review Path has been determined for their project (**Section 2.1.2** ☛ p. 8) and an understanding is achieved of which Review Phases and the Philadelphia Water Department (PWD) Stormwater Plan Review or Stormwater Billing and Incentives approvals are required for the project's Review Path (**Section 2.2** ☛ p. 10). The three possible Review Phases for a project include the Conceptual Review Phase, Post-Construction Stormwater Management Plan (PCSMP) Review Phase, and Record Drawing Review Phase.

Development Compliance Review Path (Section 2.3.1 ☛ p. 18)

- Conceptual Review Phase
- PCSMP Review Phase
- Record Drawing Review Phase

Development Exemption Review Path (Section 2.3.2 ☛ p. 35)

- Conceptual Review Phase

Demolition Review Path (Section 2.3.3 ☛ p. 38)

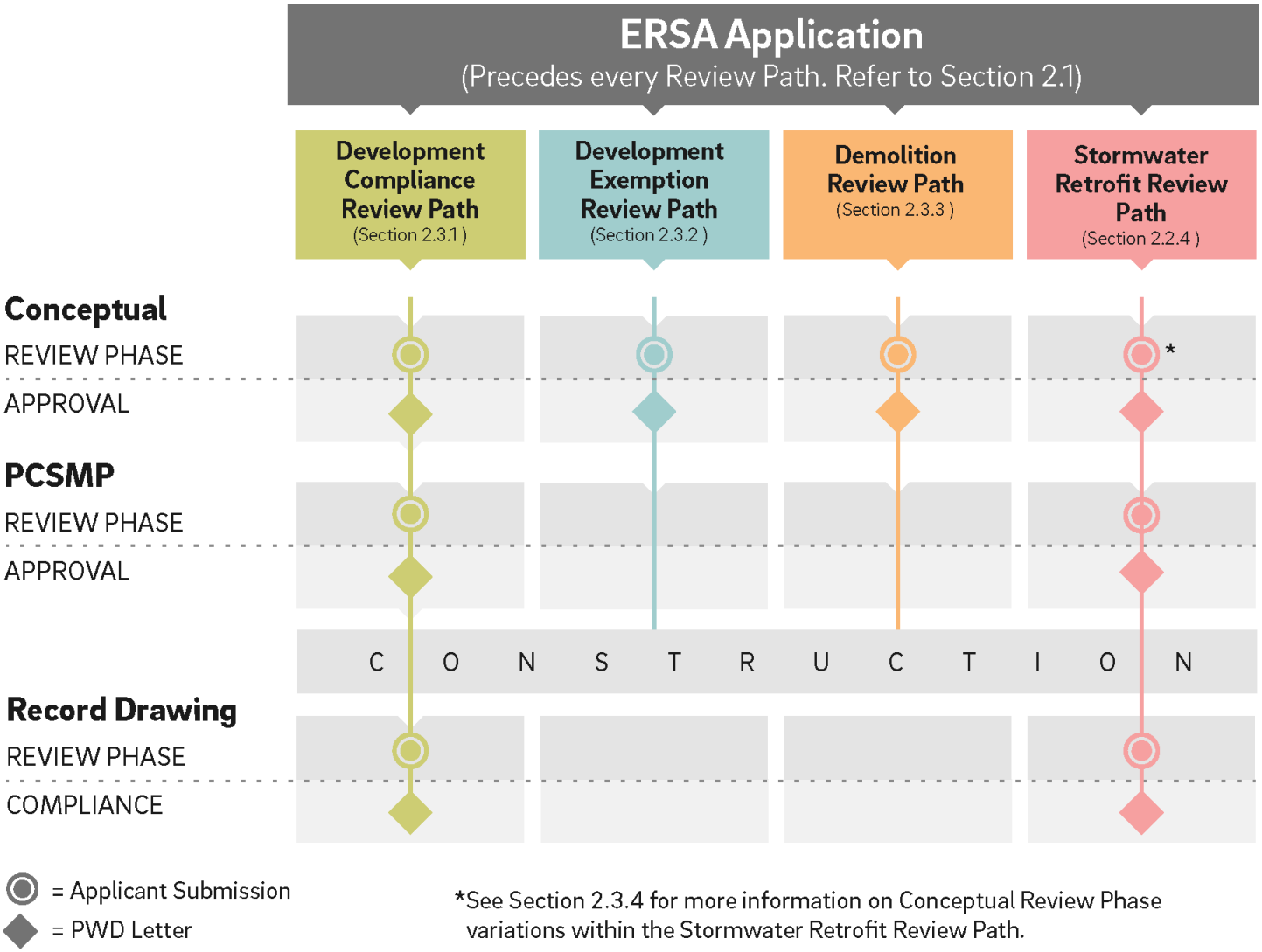
- Conceptual Review Phase

Stormwater Retrofit Review Path (Section 2.3.4 ☛ p. 42)

- Conceptual Review Phase
- PCSMP Review Phase
- Record Drawing Review Phase

Figure 2.3-1 summarizes the relevant Review Phases for the different Review Paths. For each Review Phase, this section describes Submission Package components, the submission and review process, and the project expiration policy.

Figure 2.3-1: Summary of Review Phases for each Review Path



☛ water.phila.gov/wp-content/uploads/images/swmg-figure-2-3-1-summary-path-review-phases.png

It is important for the applicant to note that while some Review Paths have similar Review Phases, specific Submission Package components, review processes, and approval documentation differ among Review Paths. These differences are described in detail within the following sections.

2.3.1 Development Compliance Review Path

Conceptual Review Phase

The Conceptual Review Phase is the first Review Phase of the Stormwater Plan Review process for the Development Compliance Review Path. A project is initiated with the submission of the Existing Resources and Site Analysis (ERSA) Application to PWD through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org, which includes a Conceptual Review Phase Submission Package.

Submission Package components

The Conceptual Review Phase Submission Package for the Development Compliance Review Path contains a Conceptual Stormwater Management Plan and Approval Fee. Projects on public land (local, State, and Federal) or projects sponsored by a government entity (unless PWD is the sole entity) must still pay review fees.

The process of developing a Conceptual Stormwater Management Plan will help the applicant develop a stormwater management strategy that minimizes impacts to existing critical features and responds to key site constraints and opportunities. PWD uses the Conceptual Stormwater Management Plan to gain a preliminary idea of what is proposed at the project site, to confirm the proposed project limits of disturbance (LOD), to assess the proposed stormwater management strategy, including evaluation of stormwater management practice (SMP) loading ratios and drainage areas (**Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3), and to verify the project's applicability for an Expedited PCSMP Review (**Section 2.4** ☛ p. 57).

A complete Conceptual Review Phase Submission Package for the Development Compliance Review Path consists of the materials listed in Figure 2.3-2.

Figure 2.3-2: Development Compliance Review Path Conceptual Review Phase Submission Package checklist

DEVELOPMENT COMPLIANCE REVIEW PATH Conceptual Review Phase Submission Package checklist	
	Conceptual Stormwater Management Plan
	Conceptual Stormwater Management Plan Approval Fee

Conceptual Stormwater Management Plan

- The Conceptual Stormwater Management Plan must meet all requirements listed in **Appendix E, Table E-3: Conceptual Stormwater Management Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-3-conceptual-stormwater-management-plan-requirements as well as general plan sheet requirements listed in **Appendix E, Table E-1** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.
- In preparing the proposed stormwater management strategy for the project site, the applicant must use the stormwater management design process detailed in **Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3.
- Construction details should not be submitted with the Conceptual Stormwater Management Plan.
- If Small Residential Development (SRD) is proposed, the applicant must clearly identify on the Conceptual Stormwater Management Plan the footprints of any buildings used exclusively as one- or two-family dwellings and the resultant total areas of SRD, which is exempt from PCSM Requirement applicability, and On-Site LOD, which is subject to PCSM Requirements if 15,000 square feet or more (5,000 square feet or more in the Darby and Cobbs Creeks Watershed). This site area information can be easily conveyed as a table; an example of which is provided below:

Total LOD	38,600 SF
Right-of-Way/Street Maintenance Activity	900 SF
Small Residential Development	5,100 SF
On-Site LOD	**32,600 SF**

If the entirety of the project is determined to be exempt from PCSM Requirement applicability, and, therefore, applicable to the Development Exemption Review Path (**Section 2.3.2** ☛ p. 35), the plan information regarding SRD described above must be included on the required E&S Plan.

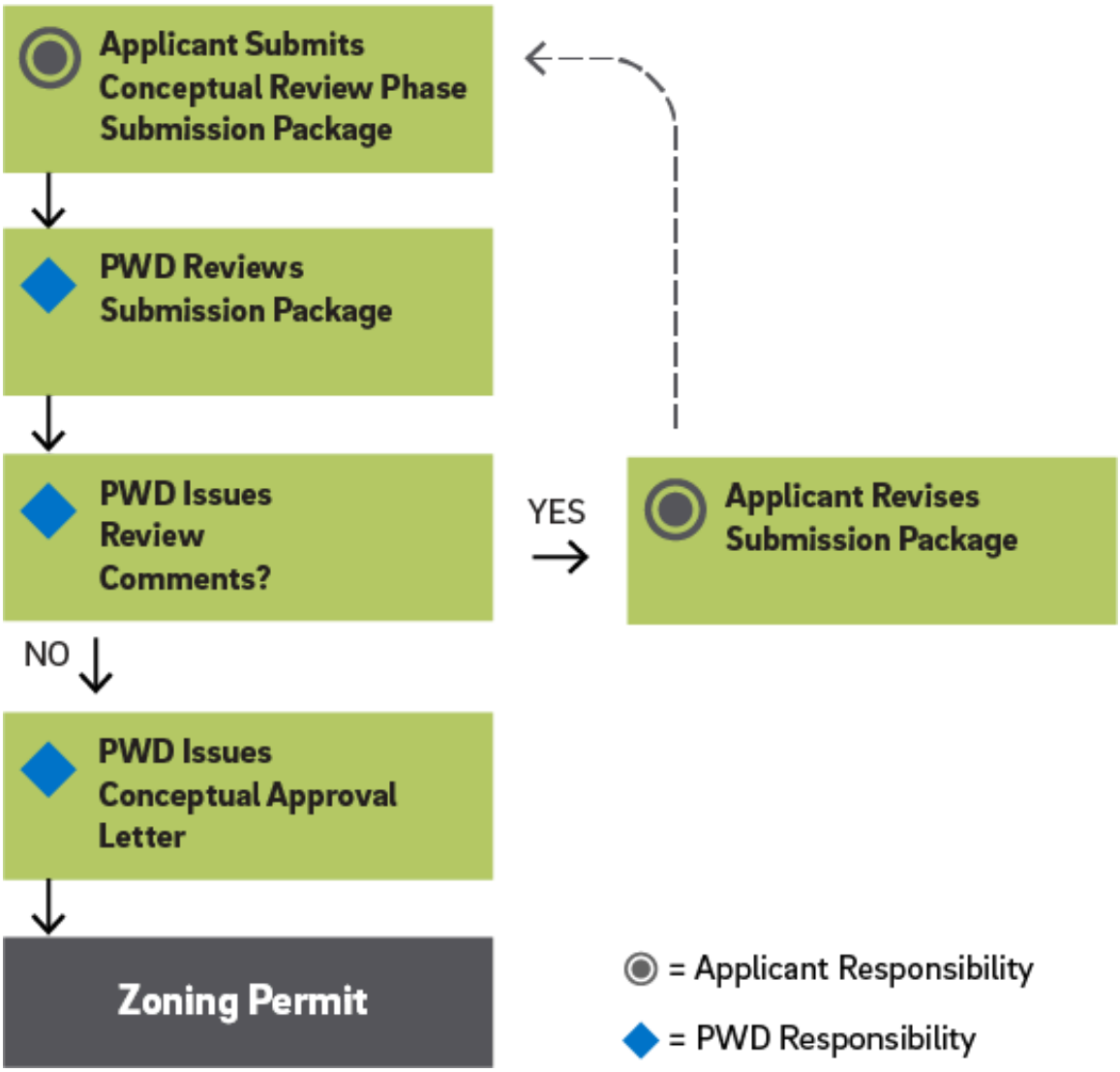
Conceptual Stormwater Management Plan Approval Fee

- For up-to-date fee information, the applicant is referred to the current **Rates and Charges** ☛ water.phila.gov/rates in the appendix of the PWD Regulations.
- PWD accepts payment in the form of a cashier's check, business check, or money order made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments.
- Because fees must be mailed or hand delivered, PWD will begin the Conceptual Review prior to receipt of the fee but cannot issue the Conceptual Approval Letter until the fee is received.
- The PWD project tracking number must be listed on the check and included in an accompanying transmittal letter.

Submission and review process

- The applicant submits the Conceptual Review Phase Submission Package as a component of a complete ERSA Application Submission Package (**Section 2.1.1** ☛ p. 5) through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
- The applicant will receive an automatic email confirmation that the submission has been received.
- PWD reviews the ERSA Application Submission Package, including the Conceptual Review Phase Submission Package, within five calendar days.
  - PWD reviews the submitted plans and documentation by analyzing the proposed development and its stormwater management strategy. At a conceptual level, preliminary determinations are made regarding compliance with the Stormwater Regulations, as well as eligibility for an Expedited PCSMP Review. Examples of specific review items evaluated by PWD include loading ratios for SMPs and management of 100% of post-development directly connected impervious area (DCIA). The applicant is referred to **Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3 for stormwater management design guidance.
  - PWD performs an initial review of proposed water and sewer connections and possible conflicts with PWD infrastructure. However, this represents only a preliminary review, and more comprehensive reviews will take place with other PWD units (**Section 2.5** ☛ p. 63).
- If PWD has comments on the submission, comments will be issued to the applicant via email.
- The applicant resubmits to PWD, through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org, a revised Conceptual Review Phase Submission Package that addresses the comments. A response letter addressing each review comment and outlining any major plan or design changes must be included with each re-submission. This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- If PWD has no comments, or if the comments have been addressed sufficiently by the applicant, PWD issues an email confirming Conceptual Approval of the project, including an electronic copy of a Conceptual Approval Letter.
- The applicant may use the Conceptual Approval Letter in filing for a Zoning Permit. Building Permits, however, cannot be obtained, nor can earth disturbance activities begin, until the PCSMP Review Phase is complete.

Figure 2.3-3: Development Compliance Review Path Conceptual Review Phase flow chart



Expiration policy

For the Conceptual Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis. No extensions will be given for projects whose project tracking numbers begin with "20-".

Conceptual Approvals are valid for one year with an automatic one-year extension. This means an applicant has two years from the date of Conceptual Approval to apply for a Zoning Permit or submit the PCSMP Review Phase Submission Package to begin the PCSMP Review Phase. Past two years, a new Conceptual Approval must be obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the Conceptual Stormwater Management Plan can be resubmitted under the existing project tracking number or if a new ERSA Application will be required. Projects whose project tracking numbers begin with "20-'" must submit a new ERSA Application.

PCSMP Review Phase

The PCSMP Review Phase is the second Review Phase in the Stormwater Plan Review process for the Development Compliance Review Path. A project is eligible to submit for the PCSMP Review Phase after receiving a Conceptual Approval Letter from PWD.

The PCSMP Review Phase is PWD's final review before construction. At the end of this Review Phase, PWD will issue a PCSMP Approval Letter. PCSMP Approval is not a permit, but rather one of many prerequisites that must be obtained in order to receive sign-off on a Building Permit (**Section 2.5** ☛ p. 63 and **Section 2.6** ☛ p. 64). For projects that do not require a Building Permit, PCSMP Approval must be obtained before earth disturbance activities can begin.

The site layout and stormwater management design included with the PCSMP Review Phase Submission Package must be consistent with the design that was approved during the Conceptual Review Phase. If major changes are made to the project after PWD issues a Conceptual Approval Letter, the applicant must contact PWD to determine if a revised Conceptual Approval Letter is needed before proceeding to the PCSMP Review Phase. Examples of major changes that would require a new Conceptual Approval include, but are not limited to:

- Changes in proposed LOD;
- Changes in proposed impervious area (such as building footprint or location);
- Changes in stormwater routing; and
- Changes in the type, placement, sizing, and/or location of SMPs or changes to the stormwater management strategy.

If the stormwater management design changes during the PCSMP Review Phase, and the applicant would like to pursue an Expedited PCSMP Review, they must contact PWD before resubmitting to discuss specific design and submission requirements. The applicant is referred to **Section 2.4** ☛ p. 57 for more information on Expedited PCSMP Reviews.

Some projects may plan to complete their project construction in phases. Applicants must state in their PCSMP Review Phase Submission if they are proposing a phased project. Each phase of construction must be individually compliant with the Stormwater Regulations as they are constructed. Vegetated components must be established before each phase close-out, so the growing seasons must be considered when planning phased construction. The applicant is referred to Chapter 5 for more information on project closeout procedures for phased construction.

Submission Package components

A complete PCSMP Review Phase Submission Package for the Development Compliance Review Path consists of the materials listed in Figure 2.3-4.

Figure 2.3-4: Development Compliance Review Path PCSMP Review Phase Submission Package checklist

DEVELOPMENT COMPLIANCE REVIEW PATH Post-Construction Stormwater Management Plan Review Phase Submission Package checklist	
	Final Construction Drawings
	Post-Construction Stormwater Management Plan (PCSMP) Package
	Proof of Application for Applicable State and Federal Permits
	PCSMP Submittal Fee
	Transmittal Letter

Final Construction Drawings

- All plans must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
- All plans must meet general plan sheet requirements listed in **Appendix E, Table E-1** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.
- The following items must be incorporated into the Final Construction Drawings:
  - Existing Conditions Plan that meets all requirements listed in **Section 2.1.1** ☛ p. 5,
  - Demolition Plan,
  - Site Plan,
  - Grading and utility information,
  - Landscaping information, and
  - Construction details.

Post-Construction Stormwater Management Plan Package

- Post-Construction Stormwater Management Plan
  - The PCSMP is a set of engineering drawings depicting the post-development conditions and post-construction stormwater management design of a project. The PCSMP drawings and Final Construction Drawings do not necessarily have to be separate plans; they may be combined into a singular plan set.
  - The PCSMP must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
  - Drawings must contain appropriate sequences of construction for each SMP (**Chapter 4** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4). Any proposed phasing must be documented in the PCSMP.
  - Grading and utility information, landscaping information, and SMP construction details, must be either incorporated into PCSMP drawings or provided as separate plan sheets.

- E&S Plan
  - The E&S Plan displays the post-construction condition along with other site characteristics related to the earth disturbance activities and proposed E&S measures for a project site.
  - The E&S Plan must include a LOD line type which is drawn around all proposed site features, E&S controls, and other areas that may be disturbed over the course of construction for activities such as construction staging, re-grading, demolition, etc. The applicant is advised to be conservative when estimating the LOD to avoid proceeding along the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
  - The E&S Plan must be prepared in accordance with the ***Pennsylvania Department of Environmental Protection (PA DEP) Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 – Required E&S Plan Content. E&S measures are referred to as E&S Best Management Practices (BMPs) in the PA DEP Manual.
  - The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
    - All requirements listed in **Appendix E, Table E-4: Erosion and Sediment Control Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
    - All Standard E&S Notes listed in **Appendix E, Table E-5: Standard Erosion and Sediment Control Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
    - All Standard Sequence of Construction Notes listed in **Appendix E, Table E-6: Standard Sequence of Construction Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
    - Standard construction details must be included from the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided as a note on the E&S Plan.
- Post-Construction Stormwater Management Plan Report
  - The PCSMP Report contains a detailed discussion of the proposed development and its impacts to the volume, rate, and quality of stormwater runoff from the site. It also contains descriptions of the project site, stormwater management criteria, calculations, maps, and other supporting documentation. The applicant may refer to **Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3 for information on stormwater management criteria and calculations.
  - The PCSMP Report must be electronically signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.
  - Specific requirements for the PCSMP Report are listed in **Appendix E, Table E-7** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-7-post-construction-stormwater-management-plan-report-requirements.

- Operations and Maintenance Agreement Information
  - An O&M Agreement between the property owner and PWD is a component of PCSMP Approval and required of any project subject to the Stormwater Regulations. This Agreement requires the property owner at the time of development to construct SMPs on the listed parcel(s) in strict accordance with the Approved PCSMP and to maintain the SMPs such that they will adequately perform their designed functions. It also requires the property owner to maintain the site in accordance with the Approved PCSMP, prohibiting alterations including the conversion of pervious areas to impervious cover without authorization from PWD. It does not require the property owner to construct the SMPs if the development project associated with the SMPs does not commence or if no earth disturbance takes place. The Agreement is recorded against the property and runs with the land, if and when the property is sold or otherwise conveyed.
  - The "Operations and Maintenance Agreement Information" section of the Online Technical Worksheet must be filled out with current property(ies) and ownership information including the subject property's(ies') addresses(es), OPA Account Number(s), owner name(s), and name(s), business title(s), address(es), and email address(es) of the Agreement's proposed signatory(ies). The "Notes" text field, in addition to supplemental pages, may be used for the additional property and owner information required of projects involving multiple properties.
  - The following signatory business titles are acceptable. For all others, the business title must be listed, and a letter of authorization from the acceptable business title for the signatory confirming their ability to bind the owner organization in legal agreements must be submitted.
    - Corporations: President or Vice President
    - Limited Partnership (LP): General Partner
    - Limited Liability Corporation (LLC): Member or Manager
  - The most recent executed deed(s) demonstrating the current ownership of the property(ies) must be submitted.
  - The most recent legal description(s) of the property(ies) in an electronically editable (Word document) format must be submitted.
  - For further details regarding when and how this part of the process is completed, the applicant is referred to the Submission and Review Process section below.
- SMP Maintenance Guide
  - Prepared by the project's designer and submitted to PWD as part of the PCSMP Review Phase.
  - SMP Maintenance Guides are SMP- and site-specific and should be provided to and implemented by the property owner as a guide for long-term operations and maintenance of the SMPs on-site.
  - The SMP Maintenance Guide must include a Site Map and a separate Maintenance Schedule Form for each SMP to allow the property owner to track all maintenance activities for their site.
  - The SMP Maintenance Guide must be updated and resubmitted with all field changes.
  - The applicant is referred to **Appendix G** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/g-smp-maintenance-guide-documents for an SMP Maintenance Guide sample and associated template documents.

Proof of application for applicable State and Federal permits

Proof of issuance is required for PWD sign-off on a Building Permit; however, the applicant must only prove that they have applied for all applicable permits within the initial submission for PCSMP Review to proceed. To provide proof of application, the applicant must submit copies of permit applications, application receipts, or notification letters from relevant agencies.

- Applicable permits include various State and Federal permits that may be required for development on a given site.
- If the project will involve earth disturbance of more than one acre, the applicant may need to obtain a PA DEP General (PAG-02) National Pollutant Discharge Elimination System (NPDES) Permit or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities.
- For Pennsylvania Land Recycling Program (Act 2) sites, proof of notice to PA DEP for both an intent to remediate and notification of work to an existing Act 2 site is required.
  - The applicant can submit notification correspondence through **PA DEP's OnBase form upload system** ☛ https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx.
  - The PA DEP Environmental Cleanup and Brownfields program's resource account email address is **RA-EP-SEROECB@pa.gov**.
- It is the applicant's responsibility to determine which permits are required by other regulatory agencies for a project. The applicant is referred to **Section 2.6** ☛ p. 64 for information on Zoning Code requirements and to **Section 2.7** ☛ p. 69 for information on NPDES Permit requirements.

Post-Construction Stormwater Management Plan submittal fee

- For up-to-date fee information, the applicant is referred to the current **Rates and Charges** ☛ water.phila.gov/rates of the appendix of the PWD Regulations.
- Payment must come in the form of a cashier's check, business check, or money order, made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments.
- The PWD project tracking number must be listed on the check and included in an accompanying transmittal letter.

Submission and review process

- The applicant submits a complete PCSMP Review Phase Submission Package to PWD through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
- PWD conducts an initial PCSMP administrative screening of the submitted materials to confirm that all necessary components are included. If any of the PCSMP Review Phase Submission Package components are found to be missing or incomplete, PWD will contact the applicant by email.
- Once PWD's PCSMP administrative screening is complete, and PWD has verified the inclusion of all components, PWD contacts the applicant via email and begins the 15-day review period (five-day period for Expedited PCSMP Reviews, **Section 2.4** ☛ p. 57). During the review, PWD examines the submittal to determine if all applicable Stormwater Regulations are met for the project. PWD verifies that all plans, documents, and calculations are legible, accurate, and consistent.

- If PWD has comments on the submission, PWD issues the comments to the applicant via email. PWD issues all comments in a PCSMP Review letter, which is sent as an attachment to the email. In this email, the reviewer provides their contact information, and the applicant is encouraged to contact the reviewer directly if they have any questions about a particular comment.
- The applicant resubmits to PWD a revised PCSMP Review Phase Submission Package that addresses the comments through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
  - Each re-submission initiates the 15-day review period (five-day period for Expedited PCSMP Reviews).
  - Revised submittals must include all required revisions and new material, as well as a response letter addressing each review comment and indicating where the new information can be found.
  - A response letter is required that describes any changes to the design that may not be included within the comment response letter.
  - This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.

Quick tip

The applicant can reduce the length of a PCSMP Review by being responsive to PWD-issued review comments, addressing comments and resubmitting quickly, performing quality assurance / quality control on all submission materials, and using this Manual to ensure the applicable Stormwater Regulations are being met and compliance is clearly documented.

- As described in the introduction of **Chapter 2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-2, Stormwater Plan Review is part of a larger development review process, and there may be circumstances where Stormwater Plan Review cannot issue PCSMP Approval until comments from another PWD unit, local, State, or Federal agency have been addressed. It is the applicant's responsibility to determine whether the project must comply with other PWD, local, State, or Federal requirements. The applicant is referred to **Section 2.5** ☛ p. 63, **Section 2.6** ☛ p. 64, and **Section 2.7** ☛ p. 69 for more information.
  - The standard O&M Agreement consists of:
    - Agreement with signature pages;
    - Signatory acknowledgement sections;
    - Exhibit A, legal description(s) of the property(ies);
    - Exhibit B, a list of SMPs to be installed on the listed parcel(s); and
    - Exhibit C, legal description of the SMP area

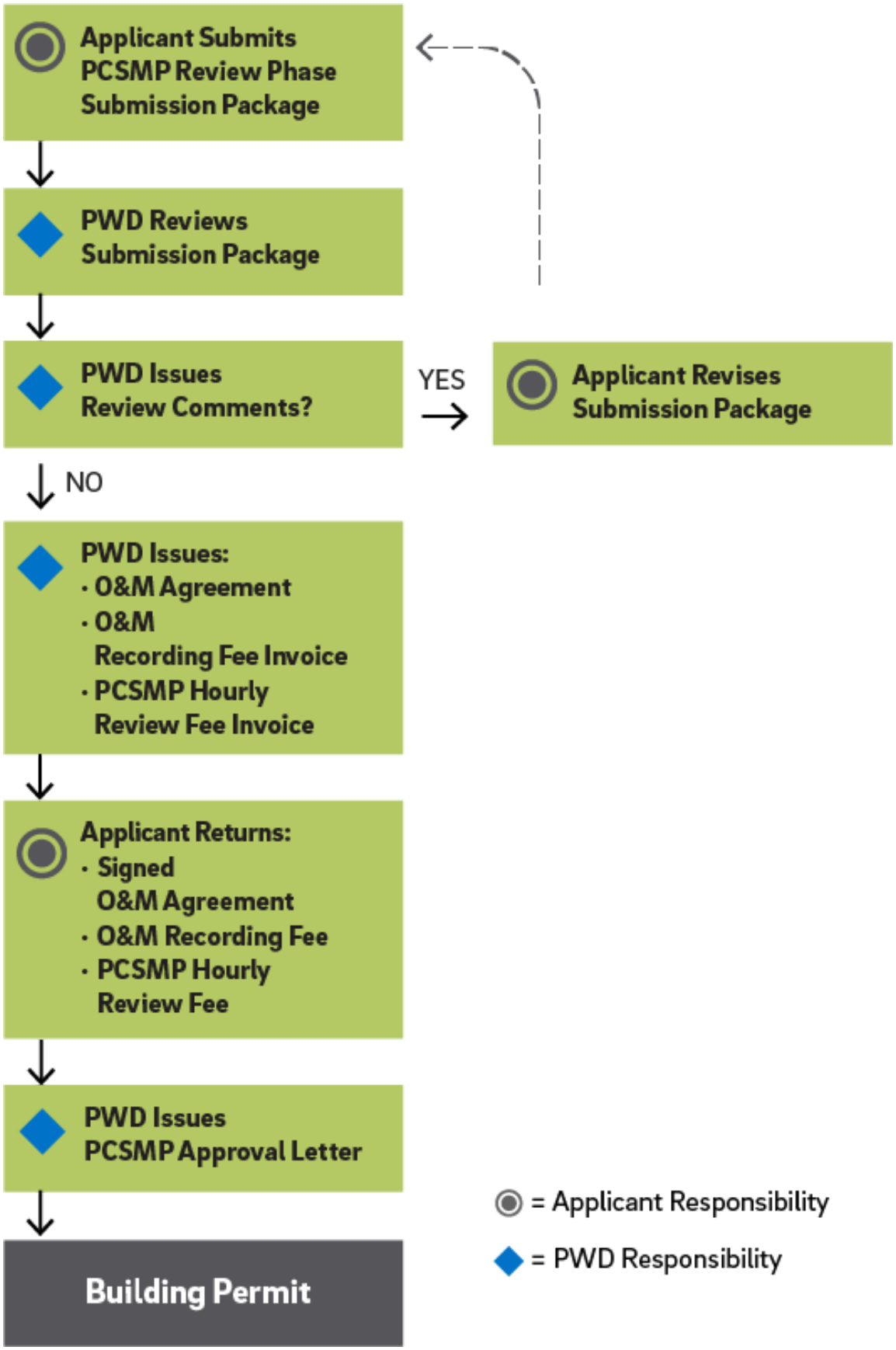
- PWD compiles the signatory sections, the signatory acknowledgement sections, and Exhibit A, based on the information provided by the applicant within the Online Technical Worksheet, which must be completed and submitted as part of the PCSMP Review Phase Submission Package. Incomplete and/or incorrect information within the Online Technical Worksheet will prevent the issuance of a PCSMP Approval Letter until all omissions and/or discrepancies are addressed. Signatory(ies) of the property owner(s) must be authorized to bind the property owner(s) to legal agreements. The signatory acknowledgement sections must be notarized and serve to verify the identities of all parties signing the agreement. Exhibit A contains metes-and-bounds descriptions for each parcel in its entirety, on which earth disturbance is proposed. Exhibit B lists all SMPs to be constructed on the listed parcel(s). Exhibit C can be either the property description listed in Exhibit A or a specific surveyed area of the property directly included in SMP design. Should amendments to the O&M Agreement become necessary after execution, the O&M Amendments will be sequentially numbered and will replace and supersede any and all of the project's previous O&M Agreements and Amendments.
- For up-to-date information on the PCSMP Hourly Review Fee and fee in lieu, the applicant is referred to the current **Rates and Charges** ☛ water.phila.gov/rates in the appendix of the PWD Regulations.
- The O&M Agreement Fee is determined by the **fee schedule** ☛ www.phila.gov/departments/department-of-records/document-recording-and-service-fees established with the City of Philadelphia Department of Records.
- The applicant submits fee payments in the form of a cashier's check, business check, or money order, made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments. The PWD project tracking number must be listed on all checks or included in an accompanying transmittal letter.

Quick tip

As described in the introduction of **Chapter 2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-2, Stormwater Plan Review is part of a larger development review process, and there may be circumstances where Stormwater Plan Review cannot issue PCSMP Approval until comments from another PWD unit, local, State, or Federal agency have been addressed. It is the applicant's responsibility to determine whether the project must comply with other PWD, local, State, or Federal requirements. The applicant is referred to **Section 2.5** ☛ p. 63, **Section 2.6** ☛ p. 64, and **Section 2.7** ☛ p. 69 for more information.

- Upon receipt of fee check(s) and two original, signed, and notarized copies of each O&M Agreement, PWD issues a PCSMP Approval Letter via email.
- After issuance of the PCSMP Approval Letter, a representative of PWD will sign the O&M Agreement(s), and the O&M Agreement(s) are then recorded with the City of Philadelphia Department of Records on behalf of the property owner. A copy of the signed, fully executed O&M Agreement(s) will be mailed to the signatory at the conclusion of the recording process.
- The PCSMP Approval Letter can be used to obtain sign-off on the Building Permit.

Figure 2.3-5: Development Compliance Review Path PCSMP Review Phase flow chart



Field changes

PWD recognizes that design changes may be necessary after PWD issues the PCSMP Approval Letter. If construction must deviate from approved plans, the applicant must contact PWD immediately. Deviations include, but are not limited to:

- Location, size, and/or type of SMPs;
- Infiltration feasibility; and/or
- Other changes in the stormwater conveyance system.

Depending on the extent of the deviation, PWD may request that the applicant submit formally for field change approval. Field changes are given priority in the PCSMP Review queue and will be reviewed as soon as possible. The applicant must speak directly to the assigned reviewer to determine what must be included in the field change submittal. An additional hourly review fee may be applied to the review of all field changes.

Field changes should be submitted through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. All field changes should include a short narrative describing the deviations from the originally approved PCSMP.

At the completion of construction, PWD's Inspections Coordinator must be contacted to schedule a final inspection (**Chapter 5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-5). This will initiate the Record Drawings Review Phase.

Post-construction field change

PWD periodically inspects properties to check the functionality of the SMPs and associated drainage areas (**Section 6.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-2-post-construction-stormwater-management-maintenance-inspections-and-enforcement/#6.2.1). If the site is found to be non-compliant either because the SMP is not functioning as intended or has been modified without prior PWD approval, the project may be referred to Post-Construction Enforcement (**Section 6.2.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-2-post-construction-stormwater-management-maintenance-inspections-and-enforcement/#6.2.2) and directed to submit a field change to address the non-compliant site condition. The submission process and requirements for a post-construction field change may vary slightly. Property Owners should discuss the submission requirements with the Enforcement Case Coordinator before proceeding with a field change submission.

Expiration policy

For the PCSMP Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis. No extensions will be given for projects whose project tracking numbers begin with "20-".

A PCSMP Approval is valid for two years from the date it is issued unless a valid Building or Site Permit is in place. Projects that did not require Building or Site Permits from L&I will remain active if the projects have advanced to active construction. Past two years, a new PCSMP Approval must obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the PCSMP can be resubmitted under the existing project tracking number or if an

Record Drawing Review Phase

The Record Drawing Review Phase is the final Review Phase of the Stormwater Plan Review process for the Development Compliance Review Path. A project is eligible to submit for the Record Drawing Review Phase once construction activities are substantially complete.

PWD uses a project's Record Drawings to verify compliance of the constructed site with the Stormwater Regulations and to document and verify the quantity of stormwater managed on a site. As part of the Record Drawing Review Phase, an updated SMP Maintenance Guide may be required if the location of SMPs and associated structures differs from the Approved PCSMP. If compliance issues were observed during construction, PWD may request that L&I hold the Certificate of Occupancy until the Record Drawing Review Phase or final inspection is complete. It is critical that the Record Drawings reflect any changes from the Approved PCSMP design, approved field changes or otherwise, that may affect the performance of the SMPs. The Record Drawing Review Phase is complete when the applicant receives a letter confirming that the Record Drawing(s) are in general accordance with the Approved PCSMP.

Throughout construction, the contractor or engineer must document all SMP installations as described in the Construction Certification Package (CCP). The contractor must also keep the Approved PCSMP on-site at all times throughout the construction process and document all changes from the Approved PSCMP as they occur. PWD recommends marking up and tracking changes on an actual copy of the Approved PCSMP to simplify preparation of the Record Drawings. Using the Approved PCSMP as a base, the Record Drawings should highlight information confirmed to be in accordance with the Approved PCSMP in yellow and identify any deviations in red ink. The Record Drawings must be clear and legible.

Submission Package components

The Record Drawing Review Phase Submission Package consists of materials listed in Figure 2.3-6, which must be submitted to PWD for review after the final inspection has been completed. All submissions must be made through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. All submissions should include the applicant's contact information if the submission is being made by a different engineering firm than that of the original ERSA Application.

Figure 2.3-6: Development Compliance Review Path Record Drawing Review Phase Submission Package checklist

DEVELOPMENT COMPLIANCE REVIEW PATH Record Drawing Review Phase Submission Package checklist	
	Record Drawings
	Construction Certification Package
	Transmittal Letter

Record Drawings

- The Record Drawings may be prepared by Professional Engineers, Registered Architects, Landscape Architects, Professional Land Surveyors, Professional Geologists, and Contractors licensed in the Commonwealth of Pennsylvania. The preparer of the plan must display prominently their signature and professional seal, or, in the case of Licensed Contractors, their signature and L&I Contractor License Number, on each Record Drawing plan sheet. (PA DEP may have different requirements concerning the types of professionals who may prepare Record Drawings. For projects that require a NPDES Permit, the applicant is strongly encouraged to refer to PA DEP's requirements for Record Drawings before selecting a professional to prepare Record Drawing(s) for PWD.)
- If the Record Drawings are determined to be in general accordance with the Approved PCSMP, PWD will issue a letter via email stating as such. Once the closeout process is complete, in accordance with **Appendix M** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/m-pcsmp-project-closeout, PWD will resolve the "Hold Permit Completion" on the "PWD Stormwater Mgmt. Review" for the associated L&I building permit(s) in **eCLIPSE** ☛ www.phila.gov/departments/department-of-licenses-and-inspections/eclipse-faqs.
- The Record Drawing(s) must meet all requirements listed in **Appendix E, Table E-8** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-8-record-drawing-requirements.
- The applicant is referred to **Appendix K** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/k-record-drawing-sample for a sample Record Drawing.
- The applicant is referred to **Section 5.3.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-3-construction-documentation#5.3.2 for more information on Record Drawing construction documentation.

Construction Certification Package

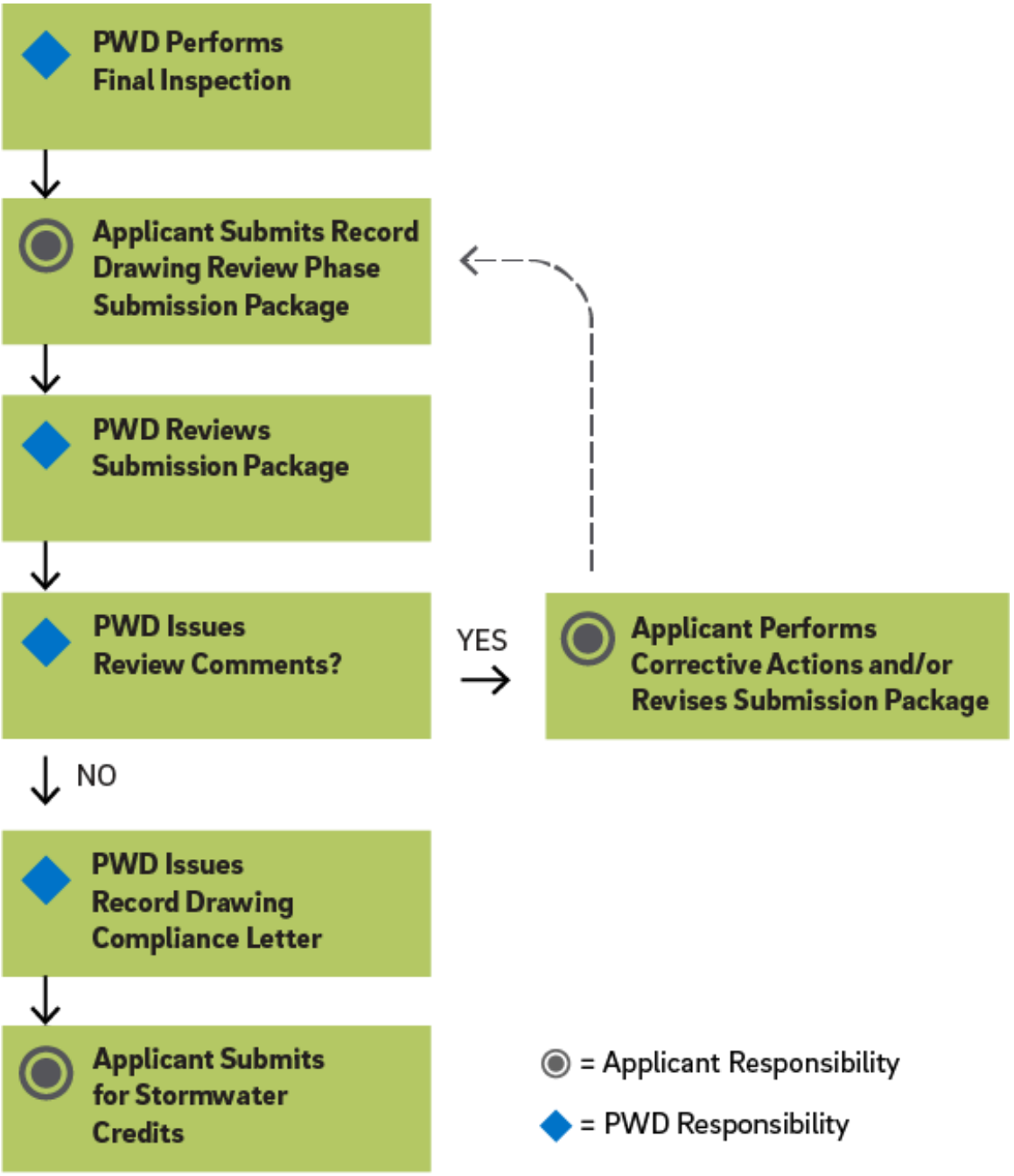
- The applicant is referred to **Appendix J** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/j-construction-certification-package for the CCP Template and instructions.
- The applicant can submit the CCP with the Record Drawing or as a separate submission using the "assorted files" option in the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
- The applicant is referred to **Section 5.3.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-3-construction-documentation#5.3.1 for more information on CCP documentation during construction.

Submission and review process

- The applicant submits a complete Record Drawing Review Phase Submission Package to PWD through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. The submission must also include a narrative identifying the PWD project tracking number and the applicant's contact information if the submission is being made by a different engineering firm than that of the original ERSA Application.
- PWD reviews the submitted Record Drawing(s) and CCP to ensure that the project has been constructed in accordance with the project's Approved PCSMP.
- Upon review, PWD will issue comments on the submission via email.
  - If the submitted Record Drawing Review Phase Submission Package is determined to be incomplete, the applicant must modify and/or add to the Record Drawings and/or CCP per the comments contained in the letter, and resubmit through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. The applicant must include a response letter addressing each review comment.
  - If the submitted Record Drawings are determined to be complete, but constructed conditions differ from the Approved PCSMP, PWD may require the applicant to submit calculations prepared by a qualified design professional demonstrating compliance with Stormwater Regulations. Specifically, PWD may check the SMP storage volume, release rate, drainage areas, and other items that affect a site's compliance with the Stormwater Regulations (**Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3). If the applicant cannot demonstrate compliance with the Stormwater Regulations, PWD will request that the applicant outline corrective actions to bring the project into compliance. Once corrective actions have been performed, the applicant must contact PWD to re-inspect. If necessary, the applicant must submit requested materials that address PWD's comments through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
  - If the Record Drawings are determined to be in general accordance with the Approved PCSMP, PWD will issue a letter via email stating as such. Once the closeout process is complete, in accordance with **Appendix M** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/m-pcsmp-project-closeout, PWD will resolve the "Hold Permit Completion" on the "PWD Stormwater Mgmt. Review" for the associated L&I building permit(s) in **eCLIPSE** ☛ www.phila.gov/departments/department-of-licenses-and-inspections/eclipse-faqs.

Most non-residential and condominium projects that comply with Stormwater Regulations per a Record Drawing review and final inspection may be eligible for stormwater credits. A **Stormwater Credits Application (Form B)** ☛ water.phila.gov/wp-content/uploads/files/form-b.pdf may be submitted to Stormwater Billing and Incentives for review. For additional information on stormwater credits, the applicant is referred to **Section 6.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-3-stormwater-credits.

Figure 2.3-7: Development Compliance Review Path Record Drawing Review Phase flow chart



2.3.2 Development Exemption Review Path

Conceptual Review Phase

The Conceptual Review Phase is the first Review Phase of the Stormwater Plan Review process for the Development Exemption Review Path. A project is initiated with the submission of the ERSA Application to PWD through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org, which includes a Conceptual Review Phase Submission Package.

Submission Package components

The Conceptual Review Phase Submission Package for the Development Exemption Review Path contains an E&S Plan which PWD will use to verify the proposed project LOD and to confirm the E&S Plan has been prepared in accordance with the E&S requirements of the PA DEP as specified in 25 Pa. Code §102.4.

A complete Conceptual Review Phase Submission Package for the Development Exemption Review Path consists of the materials listed in Figure 2.3-8.

Figure 2.3-8: Development Exemption Review Path Conceptual Review Phase Submission Package checklist

DEVELOPMENT EXEMPTION REVIEW PATH Conceptual Review Phase Submission Package checklist	
	Erosion and Sediment Control (E&S) Plan

Erosion and Sediment Control Plan

- The E&S Plan displays the post-construction condition along with other site characteristics related to the earth disturbance activities and proposed E&S measures for a project site.
- The E&S Plan must include a LOD line type which is drawn around all proposed site features, E&S controls, and other areas that may be disturbed over the course of construction for activities such as construction staging, re-grading, demolition, etc. The applicant is advised to be conservative when estimating the LOD to avoid proceeding along the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
- The E&S Plan must be prepared in accordance with the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 – Required E&S Plan Content. E&S measures are referred to as E&S BMPs in the PA DEP Manual.

- The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
  - All requirements listed in **Appendix E, Table E-4: Erosion and Sediment Control Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
  - All Standard E&S Notes listed in **Appendix E, Table E-5: Standard Erosion and Sediment Control Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
  - All Standard Sequence of Construction Notes listed in **Appendix E, Table E-6: Standard Sequence of Construction Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
  - Standard construction details must be included from the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided as a note on the E&S Plan.
  - Electronic signature (for projects that propose more than 5,000 square feet of earth disturbance).
- If Small Residential Development (SRD) is proposed, the applicant must clearly identify on the E&S Plan the footprints of any buildings used exclusively as one- or two-family dwellings and the resultant total areas of SRD, which is exempt from PCSM Requirement applicability, and On-Site LOD, which is subject to PCSM Requirements if 15,000 square feet or more (5,000 square feet or more in the Darby and Cobbs Creeks Watershed). This site area information can be easily conveyed as a table; an example of which is provided below:

Total LOD	34,800 SF
Right-of-Way/Street Maintenance Activity	9,100 SF
Small Residential Development	12,200 SF
On-Site LOD	**13,500 SF**

If the project (all or any portion of it) is determined to be applicable to the Development Compliance Review Path (**Section 2.3.1** ☛ p. 18), the plan information regarding SRD described above must also be included on the required Conceptual Stormwater Management Plan.

Submission and review process

- The applicant submits the Conceptual Review Phase Submission Package as a component of a complete ERSA Application Submission Package (**Section 2.1.1** ☛ p. 5) through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
- The applicant will receive an automatic email confirmation that the submission has been received.
- PWD reviews the ERSA Application Submission Package, including the Conceptual Review Phase Submission Package, within five calendar days.
  - PWD reviews the submitted plans and documentation by analyzing the proposed development and LOD to confirm exemption from the Stormwater Regulations and by confirming the development of an E&S Plan. PWD performs an initial review of proposed water and sewer connections and possible conflicts with PWD infrastructure. However, this represents only a preliminary review, and the applicant will still need to obtain separate connection permits outside of this Conceptual Review Phase (**Section 2.5** ☛ p. 63).
- If PWD has comments on the submission, PWD issues the comments to the applicant via email.
- The applicant resubmits to PWD, through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org, a revised Conceptual Review Phase Submission Package that addresses the comments. A response letter addressing each review comment and outlining any major plan or design changes must be submitted with each resubmission. This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- If PWD has no comments, or if the comments have been addressed sufficiently by the applicant, PWD issues an email confirming Conceptual Approval of the project, including an electronic copy of the Conceptual Approval Letter.
  - For projects whose earth disturbance will exceed one acre, PWD may defer the E&S review to PA DEP. If PWD does defer a review to PA DEP, this will be stated in the Conceptual Approval Letter. In this circumstance, earth disturbance activities cannot begin until PA DEP approves the E&S Plan and/or issues the NPDES Permit (if required). The applicant must also send an electronic copy of plans approved by PA DEP to PWD.
- The applicant may use the Conceptual Approval Letter when filing a Zoning Application or Building Permit.

Expiration policy

For the Conceptual Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis.

For Development Exemption projects, a Conceptual Approval Letter is valid for two years from the date of issuance unless a valid Building or Site Permit is in place. Projects that did not require Building or Site Permits from L&I will remain active if the projects have advanced to active construction. Past two years, a new Conceptual Approval must be obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the Conceptual Stormwater Management Plan can be resubmitted under the existing project tracking number or if a new ERSA Application will be required.

2.3.3 Demolition Review Path

Conceptual Review Phase

The Conceptual Review Phase is the first Review Phase of the Stormwater Plan Review process for the Demolition Review Path. A project is initiated with the submission of the ERSA Application to PWD through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org, which includes a Conceptual Review Phase Submission Package.

Submission Package components

The Conceptual Review Phase Submission Package for the Demolition Review Path contains a Demolition Plan and an E&S Plan. PWD uses these components to confirm the proposed project LOD, that the project is limited to just demolition, and to confirm that the E&S Plan has been prepared with the E&S requirements of the PA DEP as specified in 25 Pa. Code §102.4.

A complete Conceptual Review Phase Submission Package for the Demolition Review Path consists of the materials listed in Figure 2.3-9.

Figure 2.3-9: Demolition Review Path Conceptual Review Phase Submission Package checklist

DEMOLITION REVIEW PATH Conceptual Review Phase Submission Package checklist	
	Erosion and Sediment Control (E&S) Plan
	Demolition Plan

Erosion and Sediment Control Plan

- The E&S Plan is representative of the stabilized post demolition site condition and displays site characteristics related to the earth disturbance activities and proposed E&S measures. The E&S Plan must show that the site will be left in a stabilized condition that does not create a public health and safety concern. Further, site preparation for future development activities including foundation work associated with an L&I Foundation-Only Building Permit, is not permitted as part of the Demolition Review Path. In order for the project to complete the Demolition Review Path, all disturbed areas must be stabilized with pervious cover (e.g., grass, gravel, etc.).
- The E&S plan must include a LOD line type which is drawn around all proposed site features, structures to be removed, E&S controls, and other areas that may be disturbed over the course of demolition. The applicant is advised to be conservative when estimating the LOD so as to avoid continuing down the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
- The E&S Plan must be prepared in accordance with the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 – Required E&S Plan Content. E&S measures are referred to as E&S BMPs in the PA DEP Manual.

- The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
  - All requirements listed in **Appendix E, Table E-4: Erosion and Sediment Control Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
  - All Standard E&S Notes listed in **Appendix E, Table E-5: Standard Erosion and Sediment Control Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
  - All Standard Sequence of Construction Notes listed in **Appendix E, Table E-6: Standard Sequence of Construction Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
  - Standard construction details must be included from the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided in the notes on the E&S Plan.

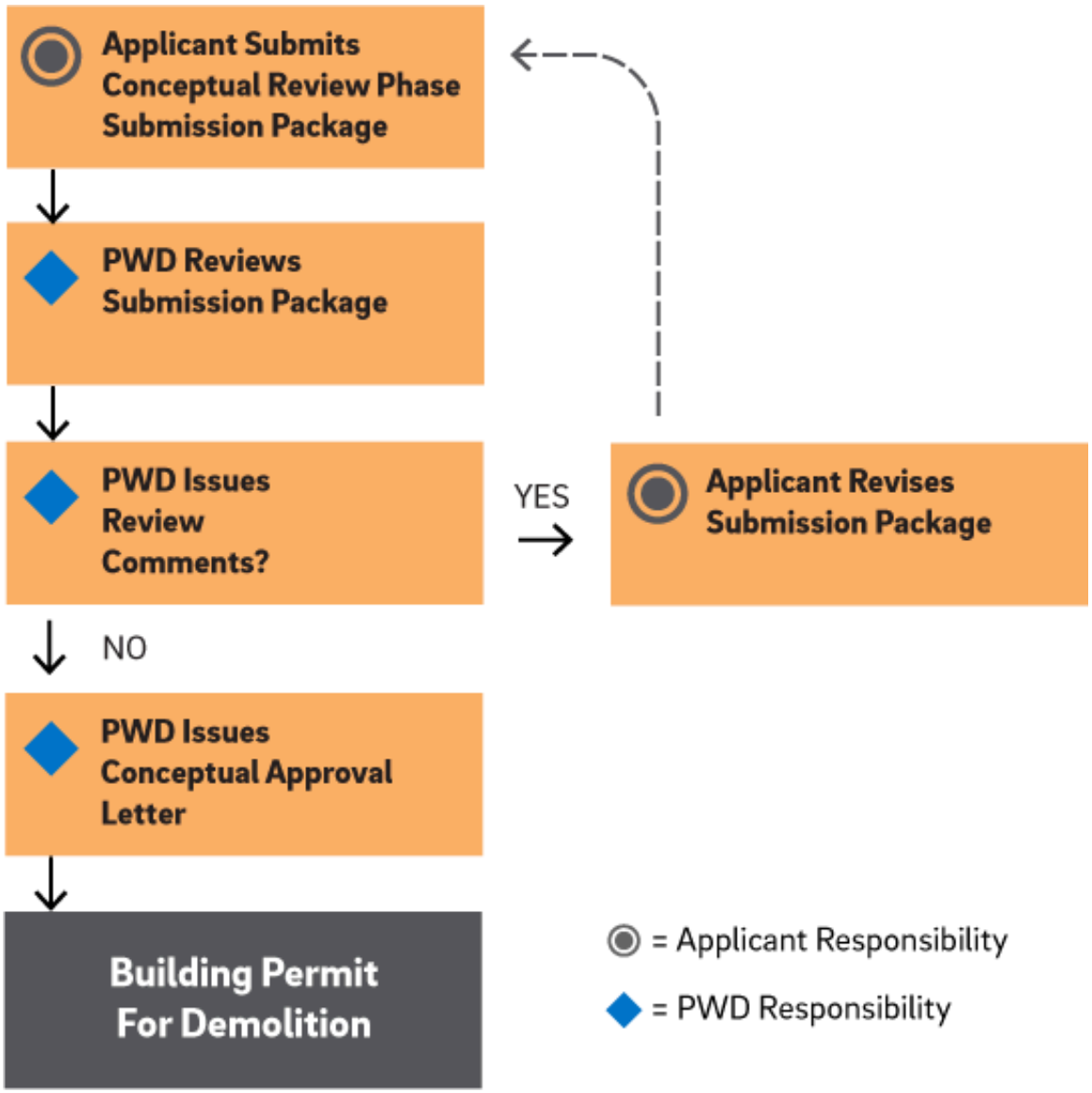
Demolition Plan

- The Demolition Plan is representative of existing conditions and identifies all site features to be removed during demolition
- The Demolition Plan identifies all utilities and lateral connections that will be abandoned including cut and plug locations.
- All requirements listed in **Appendix E, Table E-2: Existing Conditions Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-2-existing-conditions-plan-requirements must be met.

Submission and review process

- The applicant submits the Conceptual Review Phase Submission Package as a component of a complete ERSA Application Submission Package (**Section 2.1.1** ☛ p. 5) through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
- The applicant will receive an automatic email confirmation that the submission has been received.
- PWD reviews the ERSA Application Submission Package, including the Conceptual Review Phase Submission Package, within five calendar days.
  - PWD reviews the submitted plans and documentation by analyzing the proposed development and LOD to confirm exemption from the Stormwater Regulations and by confirming the development of an E&S Plan prepared by a Professional Engineer licensed in the Commonwealth of Pennsylvania.
- If PWD has comments on the submission, PWD issues the comments to the applicant via email.
- The applicant resubmits to PWD, a revised Conceptual Review Phase Submission Package that addresses the comments through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- If PWD has no comments, or if the comments have been addressed sufficiently by the applicant, PWD issues an email confirming Conceptual Approval of the project, including an electronic copy of the Conceptual Approval Letter.
  - For projects whose earth disturbance will exceed one acre, PWD may defer the E&S review to PA DEP. If PWD does defer a review to PA DEP, this will be stated in the Conceptual Approval Letter. In this circumstance, demolition or earth disturbance activities cannot begin until PA DEP approves the E&S Plan and/or issues the NPDES Permit (if required). The applicant must also send an electronic copy of plans approved by PA DEP to PWD.
- The applicant may use the Conceptual Approval Letter in the process of obtaining Building Permit sign-off for Demolition from PWD. The applicant is referred to **Section 2.5** ☛ p. 63 for more information on other reviews for Building Permit sign-off.
  - If the project requires a Building Permit, the applicant must contact PWD to determine if a different Review Path is more appropriate for the project.
  - If the Demolition project involves the removal of impervious surfaces, the applicant may be eligible for stormwater credits. A **Stormwater Credits Application (Form B)** ☛ water.phila.gov/wp-content/uploads/files/form-b.pdf may be submitted to Stormwater Billing and Incentives for review. For additional information on stormwater credits, the applicant is referred to **Section 6.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-3-stormwater-credits.

Figure 2.3-10: Demolition Review Path Conceptual Review Phase flow chart



Expiration policy

For the Conceptual Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis.

For Demolition Review Path projects, a Conceptual Approval Letter is valid for two years from the date of issuance unless a valid Demolition Permit is in place. Projects that did not require Demolition Permits from L&I will remain active if the projects have advanced to active demolition. Past two years, a new Conceptual Approval must be obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the Conceptual Stormwater Management Plan can be resubmitted under the existing project tracking number or if a new ERSA Application will be required.

2.3.4 Stormwater Retrofit Review Path

Conceptual Review Phase

Stormwater Retrofits can follow one of two Conceptual Review Phase categories. The category selection depends on if the project is seeking a Stormwater Grant for design and construction funding. If the project is applying for grant funding, they will fall into the Application Review category.

Application Review (Stormwater Grant recipients only)

Most projects under the Stormwater Retrofit Review Path will be Stormwater Grant recipients. Stormwater Grant projects require a Conceptual Stormwater Management Plan as part of their applications for grant funding. The applicant is referred to the **Stormwater Grants Application Guide** ☛ water.phila.gov/wp-content/uploads/files/stormwater-grants-application-guide.pdf on the **Stormwater Grants** ☛ water.phila.gov/stormwater/incentives/grants page for a full review of requirements for application review and completion. Stormwater Billing and Incentives reviews Stormwater Grant Applications and provides technical assistance for determining Stormwater Grant award recipients.

Alternative Conceptual Review

Most projects that receive this type of review fall into the two following groups:

Stormwater Retrofit projects not funded by Stormwater Grants

Stormwater Retrofit projects that are not Stormwater Grant recipients should contact Stormwater Billing and Incentives as soon as possible. These projects will submit an ERSA Application (**Section 2.1** ☛ p. 4) and be reviewed by Stormwater Billing and Incentives.

Significant changes to approved application Conceptual Stormwater Management Plan

All Stormwater Grant recipients should design their project according to their Conceptual Stormwater Management Plan submitted with their Stormwater Grant Application. If significant changes are made from the awarded conceptual design, applicants should contact Stormwater Billing and Incentives as soon as possible. Projects are awarded based on the Conceptual Stormwater Management Plan provided in an application and are expected to match these plans as closely as technically possible. If the project must be altered significantly due to technical challenges or any other reason, Stormwater Billing and Incentives may re-evaluate the effectiveness and scope of the project.

Submission Package components

Projects applying for a Stormwater Grant should follow the procedures outlined in the **Stormwater Grants Application Guide** ☛ water.phila.gov/wp-content/uploads/files/stormwater-grants-application-guide.pdf.

No Conceptual Stormwater Management Plan Approval Fee is required for Stormwater Retrofits.

Below are requirements for projects under the Alternative Conceptual Review category.

Conceptual Stormwater Management Plan

- The Conceptual Stormwater Management Plan must meet all requirements listed in **Appendix E, Table E-3: Conceptual Stormwater Management Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-3-conceptual-stormwater-management-plan-requirements as well as general plan sheet requirements listed in **Appendix E, Table E-1** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.
- In preparing the proposed stormwater management strategy for the project site, the applicant must use the stormwater management design process detailed in **Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3.
- Construction details should not be submitted with the Conceptual Stormwater Management Plan.

Submission and review process

- Projects applying for a Stormwater Grant should hold a pre-application meeting with Stormwater Billing and Incentives at least one month before the grant deadline. These meetings provide Stormwater Billing and Incentives with the opportunity to issue any comments on the draft Conceptual Stormwater Management Plan and application presented. Applicants can then modify their Conceptual Stormwater Management Plans and application accordingly and submit by the posted Stormwater Grant deadline. Stormwater Billing and Incentives will review the applications and present their findings to a PWD Review Board who will ultimately decide the Stormwater Grant recipients.
- Stormwater Retrofit projects that are not applying for a Stormwater Grant should submit their Conceptual Review Phase Submission as a component of a complete ERSA Application Submission Package (**Section 2.1.1** ☛ p. 5) through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
- The applicant will receive an automatic email confirmation that the submission has been received.

Figure 2.3-11: Stormwater Retrofit Review Path Conceptual Review Phase flow chart for grant applicants

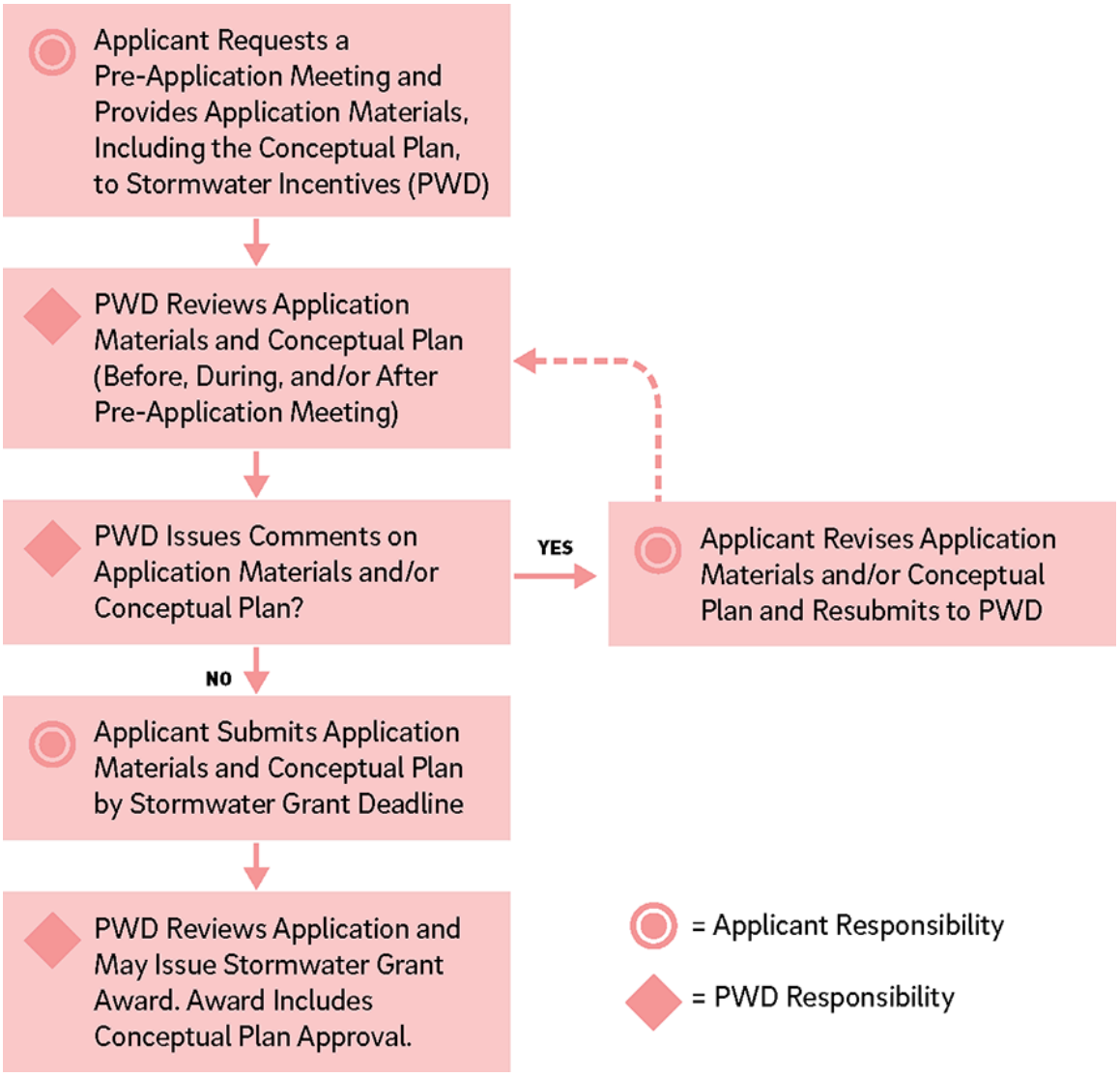
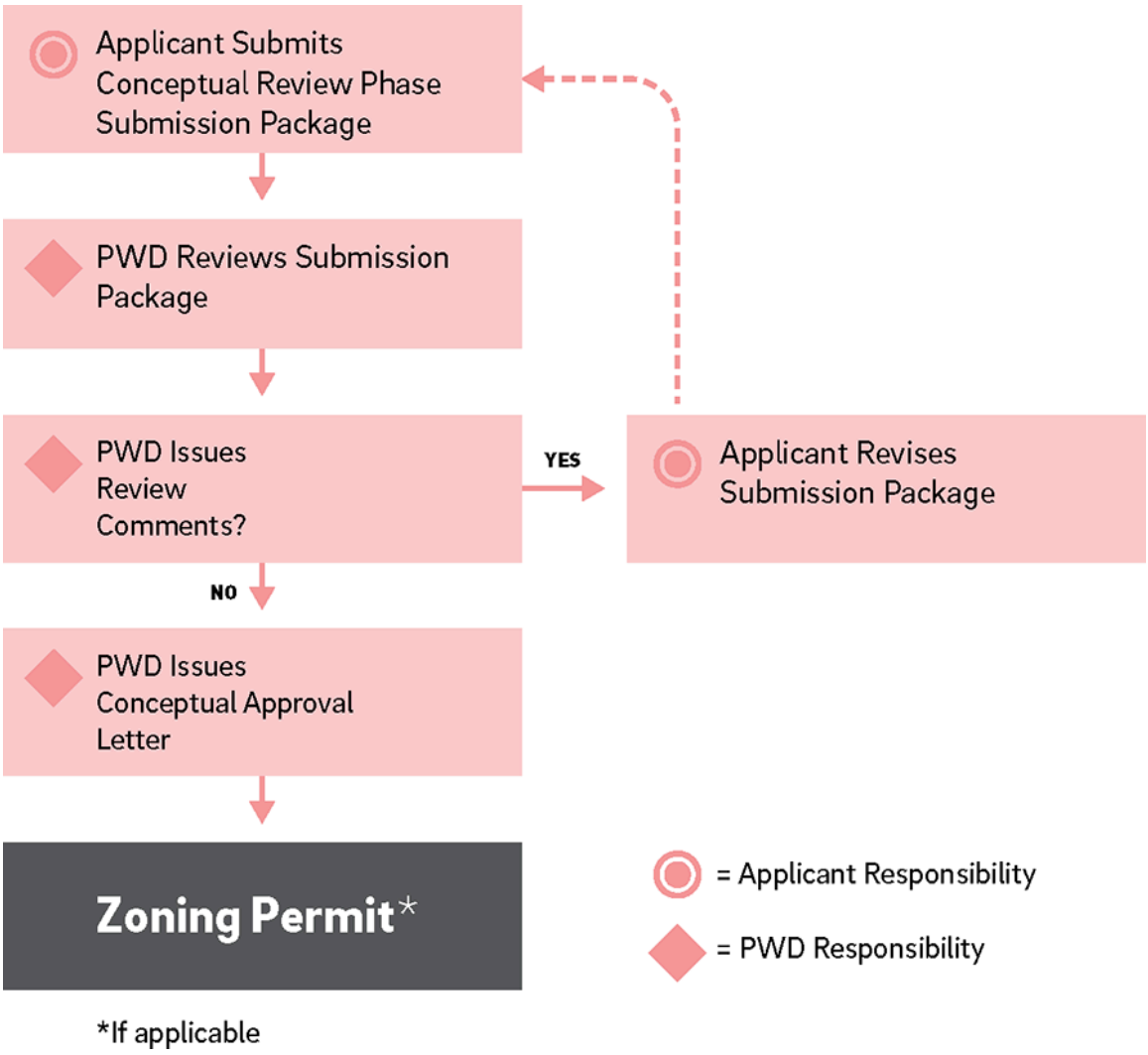


Figure 2.3-12: Stormwater Retrofit Review Path Conceptual Review Phase flow chart, alternative



Expiration policy

For Stormwater Grant-funded Stormwater Retrofits, a Conceptual Approval, which is automatic with notice of a Stormwater Grant award, is valid for six months after the grant manager signs the Subgrant Agreement. If a PCSMP Review Phase Submission Package cannot be submitted within six months of signing the Subgrant Agreement, the applicant must contact Stormwater Billing and Incentives as soon as possible. Applicants for Stormwater Retrofits that are not funded by Stormwater Grants should contact **Stormwater Billing and Incentives** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction#6 for more information on expiration policies.

PCSMP Review Phase

The PCSMP Review Phase follows approval of a Stormwater Retrofit Conceptual Stormwater Management Plan, either by notice of award of a Stormwater Grant or Conceptual Approval through the Alternative Concept Review Path. This is PWD's final review before construction. At the end of this Review Phase, PWD will issue a PCSMP Approval Letter. PCSMP Approval is not a permit, but rather one of many prerequisite materials that must be presented for obtaining permits, such as a required plumbing permit. PCSMP Approval must be obtained before earth disturbance activities can begin.

The site layout and stormwater management design included with the PCSMP Review Phase Submission Package must be consistent with the design that was approved during the Conceptual Review Phase. If major changes are made to the project after PWD issues a Conceptual Approval Letter, the applicant must contact PWD to determine if a revised Conceptual Approval Letter is needed before proceeding to the PCSMP Review Phase. Stormwater Billing and Incentives may re-evaluate Stormwater Grant funding awarded for projects with PCSMP Review Phase submissions that significantly vary from their awarded Conceptual Stormwater Management Plan in their Stormwater Grant Application. Examples of major changes that would require a new Conceptual Approval include, but are not limited to:

- Changes in proposed LOD;
- Changes in proposed impervious area (such as building footprint or location);
- Changes in stormwater routing; and
- Changes in the type, placement, sizing, and/or location of SMPs or changes to the stormwater management strategy.

There are no expedited reviews for Stormwater Retrofits. Reviews can be expected within two weeks from submission.

No PCSMP Submittal Fee is required for Stormwater Retrofits.

Quick tip

It is the applicant's responsibility to determine whether their project must comply with other PWD, City, State, or Federal permit requirements. At a minimum, Stormwater Retrofit Projects must apply for an L&I Plumbing permit. The applicant is referred to **Section 2.5** ☛ p. 63, **Section 2.6** ☛ p. 64, and **Section 2.7** ☛ p. 69 for more information. If uncertain about how to proceed, the applicant is encouraged to contact **Stormwater Billing and Incentives** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction#6 at any point in the submission and review process.

Submission Package components

Final Construction Drawings

- All plans must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
- All plans must meet general plan sheet requirements listed in **Appendix E, Table E-1** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.
- The following items must be incorporated into the Final Construction Drawings:
  - Existing Conditions Plan that meets all requirements listed in **Section 2.1.1** ☛ p. 5,
  - Demolition Plan (if applicable),
  - Site Plan,
  - Grading and utility information,
  - Landscaping information, and
  - Construction details.

Post-Construction Stormwater Management Plan Package

- Post-Construction Stormwater Management Plan
  - The PCSMP is a set of engineering drawings depicting the post-development conditions and post-construction stormwater management design of a project. The PCSMP drawings and Final Construction Drawings do not necessarily have to be separate plans; they may be combined into a singular plan set.
  - The PCSMP must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
  - Drawings must contain appropriate sequences of construction for each SMP (**Chapter 4** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4).
  - Grading and utility information, landscaping information, and SMP construction details, must be either incorporated into PCSMP drawings or provided as separate plan sheets.
- E&S Plan
  - The E&S Plan displays the post-construction condition along with other site characteristics related to the earth disturbance activities and proposed E&S measures for a project site.
  - The E&S Plan must include a LOD line type which is drawn around all proposed site features, E&S controls, and other areas that may be disturbed over the course of construction for activities such as construction staging, re-grading, demolition, etc. The applicant is advised to be conservative when estimating the LOD to avoid proceeding along the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
  - The E&S Plan must be prepared in accordance with the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 – Required E&S Plan Content. E&S measures are referred to as E&S Best Management Practices (BMPs) in the PA DEP Manual.
  - The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
    - All requirements listed in **Appendix E, Table E-4: Erosion and Sediment Control Plan Requirements** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
    - All Standard E&S Notes listed in **Appendix E, Table E-5: Standard Erosion and Sediment Control Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
    - All Standard Sequence of Construction Notes listed in **Appendix E, Table E-6: Standard Sequence of Construction Notes** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.

    - Standard construction details must be included from the ***PA DEP Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided as a note on the E&S Plan.

- Post-Construction Stormwater Management Plan Report
  - The PCSMP Report contains a detailed discussion of the proposed Stormwater Retrofit and its impacts to the volume, rate, and quality of stormwater runoff from the site. It also contains descriptions of the project site, stormwater management criteria, calculations, maps, and other supporting documentation. The applicant may refer to **Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3 for information on stormwater management criteria and calculations.
  - The PCSMP Report must be electronically signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.
  - Specific requirements for the PCSMP Report are listed in **Appendix E, Table E-7** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-7-post-construction-stormwater-management-plan-report-requirements.
  - Stormwater Retrofit projects have more limited project scopes for the PCSMP Report than other development projects. If an applicant has any questions on the requirements, they are encouraged to contact **Stormwater Billing and Incentives** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction#6.
- Operations and Maintenance Agreement information
  - An O&M Agreement between the property owner and PWD is a component of PCSMP Approval and required of any project receiving Stormwater Grant funding to implement a Stormwater Retrofit. This Agreement requires the property owner at the time of development to construct SMPs on the listed parcel(s) in strict accordance with the Approved PCSMP and to maintain the SMPs such that they will adequately perform their designed functions. It also requires the property owner to maintain the site in accordance with the Approved PCSMP, prohibiting alterations including the conversion of pervious areas to impervious cover without authorization from PWD. It does not require the property owner to construct the SMPs if the development project associated with the SMPs does not commence or if no earth disturbance takes place. The Agreement is recorded against the property and runs with the land, if and when the property is sold or otherwise conveyed.
  - The “Operations and Maintenance Agreement Information” section of the Online Technical Worksheet must be filled out with current property(ies) and ownership information including the subject property’s(ies’) address(es), OPA Account Number(s), owner name(s), and the name(s), business title(s), address(es), and email address(es) of the Agreement’s proposed signatory(ies). The “Notes” text field, in addition to supplemental pages, may be used for the additional property and owner information required of projects involving multiple properties.
  - The following signatory business titles are acceptable. For all others, the business title must be listed, and a letter of authorization from the acceptable business title for the signatory confirming their ability to bind the owner organization in legal agreements must be submitted.
    - Corporations: President or Vice President
    - Limited Partnership (LP): General Partner
    - Limited Liability Corporation (LLC): Member or Manager

- The most recent executed deed(s) demonstrating the current ownership of the property(ies) must be submitted.
- The most recent legal description(s) of the property(ies) in an electronically editable (Word document) format must be submitted.
- For further details regarding when and how this part of the process is completed, the applicant is referred to the Submission and Review Process section below.

- SMP Maintenance Guide
  - Prepared by the project's designer and submitted to PWD as part of the PCSMP Review Phase.
  - SMP Maintenance Guides are SMP- and site-specific and should be provided to and implemented by the property owner as a guide for long-term operations and maintenance of the SMPs on-site.
  - The SMP Maintenance Guide must include a Site Map and a separate Maintenance Schedule Form for each SMP to allow the property owner to track all maintenance activities for their site.
  - The SMP Maintenance Guide must be updated and resubmitted with all field changes.
  - The applicant is referred to **Appendix G** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/g-smp-maintenance-guide-documents for an SMP Maintenance Guide sample and associated template documents.

Proof of application for applicable State and Federal permits

The applicant must prove that they have applied for all applicable permits within the initial submission for PCSMP Review to proceed. To provide proof of application, the applicant must submit copies of permit applications, application receipts, or notification letters from relevant agencies.

- Applicable permits include various State and Federal permits that may be required for development on a given site.
- If the project will involve earth disturbance of more than one acre, the applicant may need to obtain a PA DEP General (PAG-02) National Pollutant Discharge Elimination System (NPDES) Permit or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities.
- For Pennsylvania Land Recycling Program (Act 2) sites, proof of notice to PA DEP for both an intent to remediate and notification of work to an existing Act 2 site is required.
  - The applicant can submit notification correspondence through **PA DEP's OnBase form upload system** ☛ https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx.
  - The PA DEP Environmental Cleanup and Brownfields program's resource account email address is **RA-EP-SEROECB@pa.gov**.
- It is the applicant's responsibility to determine which permits are required by other regulatory agencies for a project. The applicant is referred to **Section 2.6** ☛ p. 64 for information on Zoning Code requirements and to **Section 2.7** ☛ p. 69 for information on NPDES Permit requirements.

Submission and review process

- The applicant submits a complete PCSMP Review Phase Submission Package to PWD through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. The PCSMP Review Phase Submission Package will take the place of the Concept Review Phase Submission Package within the ERSA Application for grant-funded Stormwater Retrofit projects with pre-approved Conceptual Stormwater Management Plans.
- PWD conducts an initial PCSMP administrative screening of the submitted materials to confirm that all necessary components are included. If any of the PCSMP Review Phase Submission Package components are found to be missing or incomplete, PWD will contact the applicant by email.
- Once PWD's PCSMP administrative screening is complete, and PWD has verified the inclusion of all components, PWD contacts the applicant via email. During the review, PWD examines the submittal to determine if all applicable stormwater management design criteria are met for the project. PWD verifies all plans, documents, and calculations are legible, accurate, and consistent.
- If PWD has comments on the submission, PWD issues the comments to the applicant via email. PWD issues all comments in a PCSMP Review letter, which is sent as an attachment to the email. In this email, the reviewer provides their contact information, and the applicant is encouraged to contact the reviewer directly if they have any questions about a particular comment.
- In addition to submitting to Stormwater Billing and Incentives, applicants must submit a Utility Plan to Projects Control. Applicants can wait until Stormwater Billing and Incentives issues comments first to ensure accurate plans, but they must receive Utility Plan Review approval before the PCSMP Review Phase is completed. The applicant is referred to **Section 2.5** ☛ p. 63 for more information on Utility Plan Reviews.
- The applicant resubmits to PWD a revised PCSMP Review Phase Submission Package that addresses the comments through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org.
    - Revised submittals must include all required revisions and new material, as well as a response letter addressing each review comment and indicating where the new information can be found.
    - A response letter is required that describes any changes to the design that may not be included within the comment response letter.
    - This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- Once all of the review comments have been addressed by the applicant, PWD will issue an O&M Agreement(s) for signature and notarization. There are no additional review fees for

Quick tip

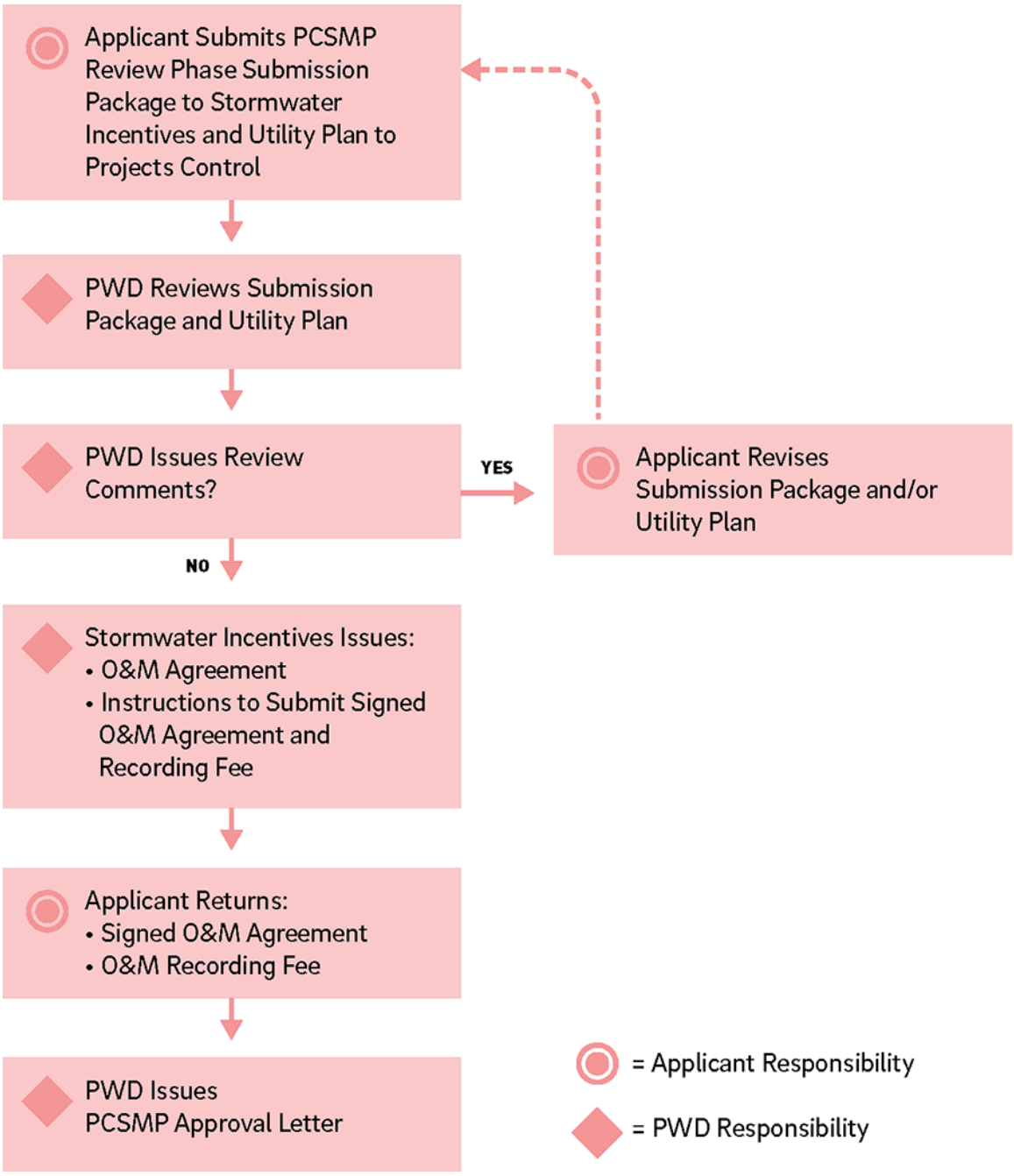
As described in the introduction of **Chapter 2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-2, Stormwater Plan Review and Stormwater Billing and Incentives are part of a larger development review process, and there may be circumstances where Stormwater Plan Review cannot issue PCSMP Approval until comments from another PWD unit, local, State, or Federal agency have been addressed. It is the applicant's responsibility to determine whether the project must comply with other PWD, local, State, or Federal requirements. The applicant is referred to **Section 2.5** ☛ p. 63, **Section 2.6** ☛ p. 64, and **Section 2.7** ☛ p. 69 for more information.

Stormwater Retrofits, but there is an O&M Recording Fee for Stormwater Retrofit projects that must be paid prior to PCSMP Approval.

- The standard O&M Agreement consists of:
  - Agreement with signature pages;
  - Signatory acknowledgement sections;
  - Exhibit A, legal description(s) of the property(ies);
  - Exhibit B, a list of SMPs to be installed on the listed parcel(s); and
  - Exhibit C, legal description of the SMP area
- PWD compiles the signatory sections, the signatory acknowledgement sections, and Exhibit A, based on the information provided by the applicant within the Online Technical Worksheet, which must be completed and submitted as part of the PCSMP Review Phase Submission Package. Incomplete and/or incorrect information within the Online Technical Worksheet will prevent the issuance of a PCSMP Approval Letter until all omissions and/or discrepancies are addressed. Signatory(ies) of the property owner(s) must be authorized to bind the property owner(s) to legal agreements. The signatory acknowledgement sections must be notarized and serve to verify the identities of all parties signing the agreement. Exhibit A contains metes-and-bounds descriptions for each parcel in its entirety, on which earth disturbance is proposed. Exhibit B lists all SMPs to be constructed on the listed parcel(s). Exhibit C can be either the property description listed in Exhibit A or a specific surveyed area of the property directly included in SMP design. Should amendments to the O&M Agreement become necessary after execution, the O&M Amendments will be sequentially numbered and will replace and supersede any and all of the project's previous O&M Agreements and Amendments.
- The O&M Agreement Fee is determined by the **fee schedule** ☛ www.phila.gov/departments/department-of-records/document-recording-and-service-fees established with the City of Philadelphia Department of Records.
- The applicant submits fee payments in the form of a cashier's check, business check, or money order, made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments. The PWD project tracking number must be listed on all checks or included in an accompanying transmittal letter.

- Upon receipt of fee check(s) and two original, signed, and notarized copies of each O&M Agreement, PWD issues a PCSMP Approval Letter via email.
- After issuance of the PCSMP Approval Letter, a representative of PWD will sign the O&M Agreement(s), and the O&M Agreement(s) are then recorded with the City of Philadelphia Department of Records on behalf of the property owner. A copy of the signed, fully executed O&M Agreement(s) will be mailed to the signatory at the conclusion of the recording process.
- The PCSMP Approval Letter can be used to obtain sign-off on the Building Permit.

Figure 2.3-13: Stormwater Retrofit Review Path PCSMP Review Phase flow chart



Field changes

PWD recognizes that design changes may be necessary after PWD issues the PCSMP Approval Letter. If construction must deviate from approved plans, the applicant must contact PWD immediately. Deviations include, but are not limited to:

- Location, size, and/or type of SMPs;
- Infiltration feasibility; and/or
- Other changes in the stormwater conveyance system.

Depending on the extent of the deviation, PWD may request that the applicant submit formally for field change approval. Field changes are given priority in the PCSMP Review queue and will be reviewed as soon as possible. The applicant must speak directly to the assigned reviewer to determine what must be included in the field change submittal.

Field changes for Stormwater Retrofit projects can be submitted to the Stormwater Billing and Incentives reviewer. All Field changes should include a short narrative describing the deviations from the originally approved PCSMP.

At the completion of construction, PWD's Inspections Coordinator must be contacted to schedule a final inspection (**Chapter 5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-5). This will initiate the Record Drawings Review Phase.

Post-construction field change

PWD periodically inspects properties to check the functionality of the SMPs and associated drainage areas (**Section 6.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-2-post-construction-stormwater-management-maintenance-inspections-and-enforcement/#6.2.1). If the site is found to be non-compliant either because the SMP is not functioning as intended or has been modified without prior PWD approval, the project may be referred to Post-Construction Enforcement (**Section 6.2.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-2-post-construction-stormwater-management-maintenance-inspections-and-enforcement/#6.2.2) and directed to submit a field change to address the non-complaint site condition. The submission process and requirements for a post-construction field change may vary slightly. Property Owners should reference the instructions received from their Enforcement Case Coordinator before proceeding with a field change submission.

Expiration Policy

For Stormwater Grant-funded Stormwater Retrofits, PCSMP Approval is valid for six months to start construction. If a grant-funded Stormwater Retrofit cannot start construction within six months of the date of PCSMP Approval, the applicant must contact Stormwater Billing and Incentives as soon as possible. Applicants for Stormwater Retrofits that are not funded by Stormwater Grants should contact **Stormwater Billing and Incentives** ☛ water.phila.gov/development/stormwater-plan-review/manual/introduction#6 for more information on expiration policies.

Record Drawing Review Phase

The Record Drawing Review Phase is the final Review Phase of the Stormwater Billing and Incentives process for the Stormwater Retrofit Review Path. A project is eligible to submit for the Record Drawing Review Phase once construction activities are substantially complete.

PWD uses a project's Record Drawings to verify compliance of the constructed site with stormwater management design criteria and to document and verify the quantity of stormwater managed on a site. It is critical that the Record Drawings reflect any changes from the Approved PCSMP design, approved field changes or otherwise, that may affect the performance of the SMPs. The Record Drawing Review Phase is complete when the applicant receives a letter confirming that the Record Drawing(s) are in general accordance with the Approved PCSMP.

Throughout construction, the contractor or engineer must document all SMP installations by measuring and taking photographs of key structure placements. The contractor must also keep the Approved PCSMP on-site at all times throughout the construction process and document all changes from the Approved PSCMP as they occur. PWD recommends marking up and tracking changes on an actual copy of the Approved PCSMP to simplify preparation of the Record Drawings. Using the Approved PCSMP as a base, the Record Drawings should highlight information confirmed to be in accordance with the Approved PCSMP in yellow and identify any deviations in red ink. The Record Drawings must be clear and legible.

Submission Package components

The Record Drawing Review Phase Submission Package consists of materials listed in **Figure 2.3-6** ☛ p. 31, which must be submitted to PWD for review after the final inspection has been completed. All submissions must be made through the Project Dashboard on the **PWD Plan Review Portal** ☛ www.pwdplanreview.org. All submissions should include the applicant's contact information if the submission is being made by a different engineering firm than that of the original ERSA Application.

Record Drawings

- The Record Drawings may be prepared by Professional Engineers, Registered Architects, Landscape Architects, Professional Land Surveyors, Professional Geologists, and Contractors licensed in the Commonwealth of Pennsylvania. The preparer of the plan must display prominently their signature and professional seal, or, in the case of Licensed Contractors, their signature and L&I Contractor License Number, on each Record Drawing plan sheet. (PA DEP may have different requirements concerning the types of professionals who may prepare Record Drawings. For projects that require a NPDES Permit, the applicant is strongly encouraged to refer to PA DEP's requirements for Record Drawings before selecting a professional to prepare Record Drawing(s) for PWD.)
- The Record Drawing(s) must meet all requirements listed in **Appendix E, Table E-8** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-8-record-drawing-requirements.
- The applicant is referred to **Appendix K** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/k-record-drawing-sample for a sample Record Drawing.
- The applicant is referred to **Section 5.3.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-3-construction-documentation#5.3.2 for more information on Record Drawing construction documentation.

Construction photographs

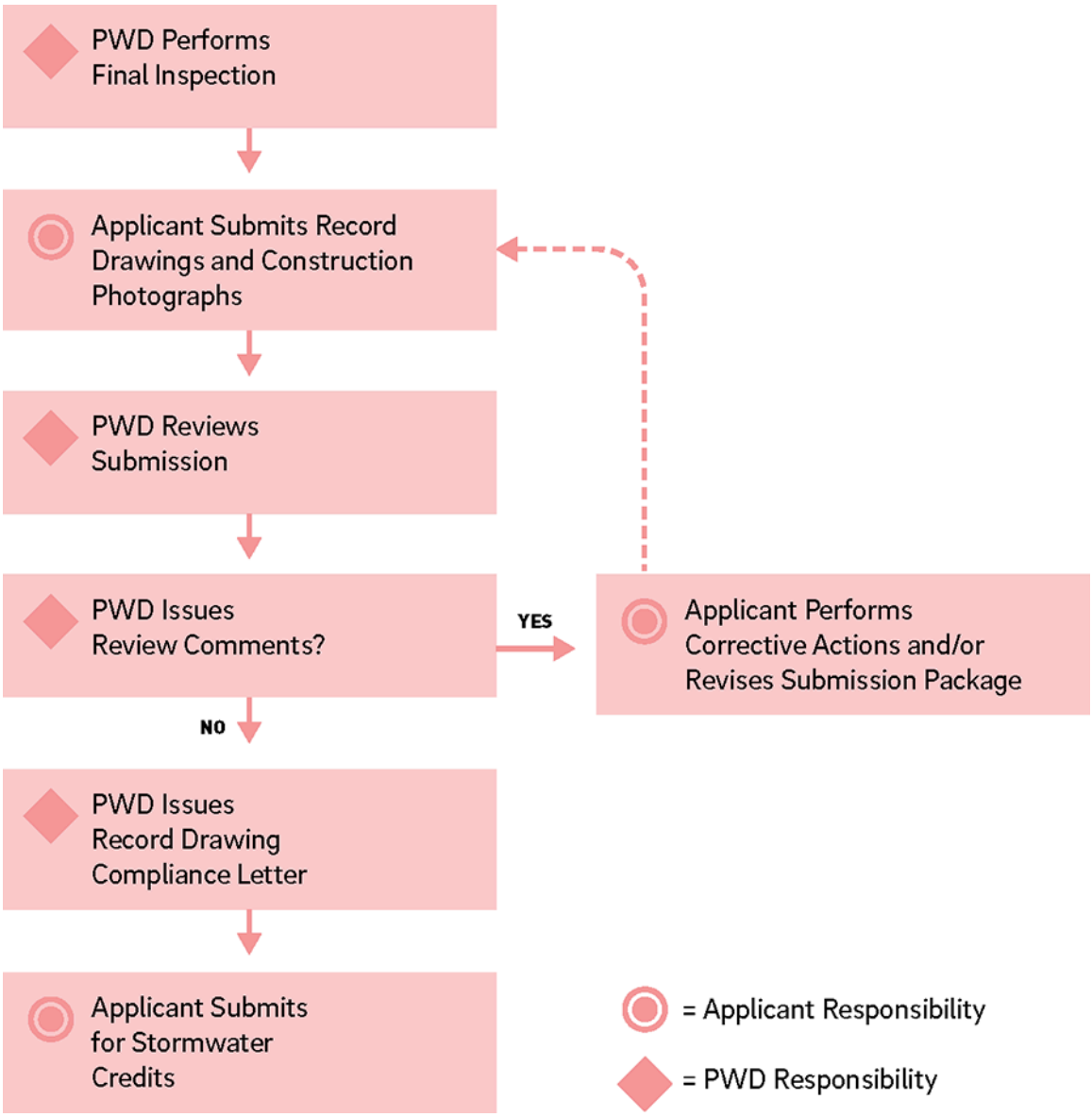
- Stormwater Retrofit projects generally require photographic documentation of key installations, but do not require material receipts.
- The applicant is referred to **Section 5.3.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-5/5-3-construction-documentation#5.3.1 for more information on documentation during construction but does not need to submit a full Construction Certification Package for Stormwater Retrofit projects.

Submission and review process

- The applicant submits the completed Record Drawings and construction photographs to PWD. If any changes occurred during construction that resulted in different drainage area delineations, new drainage area plans should be submitted, as well.
- PWD reviews the submitted Record Drawing(s) and construction photographs to ensure that the project has been constructed in accordance with the project's Approved PCSMP.
- Upon review, PWD will issue comments on the submission via email.
  - If the submitted Record Drawings are determined to be incomplete, the applicant must modify and/or add to the Record Drawings per the comments contained in the letter. Depending on the number and complexity of review comments, the applicant may choose to include a response letter addressing each review comment.
  - If the submitted Record Drawings are determined to be complete, but constructed conditions differ from the Approved PCSMP, PWD may require the applicant to submit calculations prepared by a qualified design professional demonstrating that the SMPs meet stormwater management design criteria. Specifically, PWD may check the SMP storage volume, release rate, drainage areas, and other items that affect an SMP's performance (**Chapter 3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3). If the applicant cannot demonstrate compliance with the applicable stormwater management design criteria, PWD will request that the applicant outline corrective actions to bring the project into compliance. Once corrective actions have been performed, the applicant must contact PWD to re-inspect. If necessary, the applicant must submit requested materials to the Stormwater Billing and Incentives reviewer.
  - If the Record Drawings are determined to be in general accordance with the Approved PCSMP, PWD will issue a letter via email stating as such. Once the closeout process is complete, in accordance with **Appendix M** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/m-pcsmp-project-closeout, PWD will resolve the "Hold Permit Completion" on the "PWD Stormwater Mgmt. Review" for the associated L&I building permit(s) in **eCLIPSE** ☛ www.phila.gov/departments/department-of-licenses-and-inspections/eclipse-faqs.

Most non-residential and condominium projects that comply with Stormwater Regulations per a Record Drawing review and final inspection may be eligible for stormwater credits. A **Stormwater Credits Application (Form B)** ☛ water.phila.gov/wp-content/uploads/files/form-b.pdf may be submitted to Stormwater Billing and Incentives for review once the previously outlined steps are completed. For additional information on stormwater credits, the applicant is referred to **Section 6.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-3-stormwater-credits.

Figure 2.3-14: Stormwater Retrofit Review Path Record Drawing Review Phase flow chart



2.4 Expedited Post-Construction Stormwater Management Plan Reviews

As an incentive for an applicant proposing green stormwater strategies for stormwater management, the Philadelphia Water Department (PWD) offers two Expedited Post-Construction Stormwater Management Plan (PCSMP) Reviews:

- Disconnection Green Review – **Section 2.4.1** ☛ p. 58
- Surface Green Review – **Section 2.4.2** ☛ p. 60

This section assists the applicant in determining whether a project qualifies for an Expedited PSCMP Review, elaborates on the modified submission requirements (**Section 2.4.3** ☛ p. 62), and provides a list of benefits included in the process.

Only projects in the Development Compliance Review Path can qualify for Expedited PCSMP Review. If eligible, the applicant must identify the project as a candidate for either the Disconnection Green Review or the Surface Green Review when submitting the Existing Resources and Site Analysis (ERSA) Application (**Section 2.1** ☛ p. 4).

Chapter 3 ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3 provides detailed guidance on stormwater management approaches, which the applicant can use as a guide to determine which strategies are appropriate for their site and whether the project may qualify for an Expedited PCSMP Review. Under an Expedited PCSMP Review, the PSCMP Review Phase differs from projects that take a more traditional approach to stormwater management. These differences are discussed in the following Sections.

2.4.1 Disconnection Green Review

Only Redevelopment projects that are exempt from the Channel Protection and Flood Control requirements as defined in **Section 1.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-2-stormwater-regulations#1.2.1 are eligible for a Disconnection Green Review, and they must disconnect 95% or more of the post-construction impervious area within the project's limits of disturbance (LOD). Projects eligible for a Disconnection Green Review only use disconnected impervious cover (DIC) to comply with Post-Construction Stormwater Management (PCSM) Requirements (**Section 1.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-2-stormwater-regulations#1.2.1). Examples of projects that are most likely to benefit from this approach include trail and park projects, as well as residential and industrial projects where significant green roofs, permeable pavers, and/or reinforced turf are proposed.

Disconnections eligible for use in Disconnection Green Reviews include:

- Green roofs (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-3-green-roofs);
- Permeable pavers (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-2-porous-surfaces);
- Reinforced turf (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-2-porous-surfaces);
- Porous play safety surfaces (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-2-porous-surfaces);
- DIC artificial turf athletic fields (**Section 3.5.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-5-integrated-stormwater-management-examples#3.5.5 details their important distinction from artificial turf athletic fields atop subsurface SMPs to manage directly connected impervious area (DCIA));
- Existing and proposed tree credits (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5);
- Pavement disconnections (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5); and
- Rooftop disconnections (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5).

The applicant must identify the project's intent to qualify for a Disconnection Green Review when submitting the ERSA Application (**Section 2.1** ☛ p. 4) and will be notified by PWD of the project's eligibility.

Projects qualifying for the Disconnection Green Review benefit from the following:

- Shorter (five-day) review during the PCSMP Review Phase;
- Exemption from the infiltration testing requirements (**Section 3.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-3-infiltration-testing-and-soil-assessment-for-smp-design); and
- Use of **PWD Standard Details** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/l-standard-details for green roofs and porous surfaces.

If additional stormwater management practices (SMPs) are needed to comply with National Pollutant Discharge Elimination System (NPDES) Permit requirements from the Pennsylvania Department of Environmental Protection (PA DEP), contact PWD to discuss Disconnection Green Review eligibility.

2.4.2 Surface Green Review

New Development and Redevelopment projects that can demonstrate that 100% of post-construction impervious area within the project's LOD is managed by DIC and/or bioinfiltration/bioretention basins to comply with PCSM Requirements (**Section 1.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-2-stormwater-regulations#1.2.1) are eligible for Surface Green Review.

Eligible SMPs and disconnections consist of:

- Bioinfiltration/bioretention basins (**Section 4.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-1-bioinfiltration-bioretention);
- Blue-green roofs (**Section 4.14** ☛ water.phila.gov/development/?page_id=5390&preview=true);
- Green roofs (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-3-green-roofs);
- Permeable pavers (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-2-porous-surfaces);
- Reinforced turf (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-2-porous-surfaces);
- Porous play safety surfaces (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5 and **Section 4.2** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-2-porous-surfaces);
- DIC artificial turf athletic fields (**Section 3.5.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-5-integrated-stormwater-management-examples#3.5.5 details their important distinction from artificial turf athletic fields atop subsurface SMPs to manage DCIA);
- Existing and proposed tree credits (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5);
- Pavement disconnections (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5); and
- Rooftop disconnections (**Section 3.1.5** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment-and-stormwater-management-strategies/#3.1.5).

The applicant must identify the project's intent to qualify for a Surface Green Review when submitting the ERSA Application (**Section 2.1** ☛ p. 4) and will be notified by PWD of the project's eligibility.

Projects qualifying for a Surface Green Review benefit from the following:

- Shorter (five-day) review during the PCSMP Review Phase;
- An option to delay infiltration testing until construction to provide flexibility and potential cost savings. This only applies to projects using bioinfiltration/bioretention basins meeting the minimum requirements set forth in the Bioinfiltration/Bioretention Basin Standard Detail in conjunction with the Bioinfiltration/Bioretention Basin Sizing Table (**Table 4.1.4** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-1-bioinfiltration-bioretention/#Table_4.1-4), both found in **Section 4.1.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-4/4-1-bioinfiltration-bioretention/#4.1.3; and
- Use of **PWD Standard Details** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/l-standard-details for bioinfiltration/bioretention basins, green roofs, and porous surfaces.

Projects that qualify for a Surface Green Review must still meet all applicable PCSM Requirements, which may include the Channel Protection, Flood Control, and Public Health and Safety Release Rate requirements. However, using DIC as a stormwater management strategy, an applicant may be able to qualify for exemptions from Channel Protection and Flood Control requirements by demonstrating a 20% reduction in impervious area from the predevelopment condition to the post-development condition (**Section 1.2.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-2-stormwater-regulations#1.2.1). Use of Stormwater Management Trading as a compliance strategy (**Section 3.2.4** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-2-stormwater-management-design#3.2.4) precludes a project from qualifying for a Surface Green Review. Applications that fall into this category are encouraged to contact PWD prior to ERSA Application submission to confirm Expedited PCSMP Review eligibility.

2.4.3 Expedited PCSMP Review process

An applicant who chooses to pursue either the Disconnection Green Review or Surface Green Review must declare this intent when submitting the ERSA Application (**Section 2.1.1** ☛ p. 5). By doing so, PWD can evaluate whether specific review requirements are being met in the Conceptual Review Phase (**Section 2.3** ☛ p. 16) and the applicant will know early on when, or if, infiltration testing will be required during the design process.

If the stormwater management approach changes during the plan review process and the applicant would like to consider pursuing an Expedited PCSMP Review, the applicant must contact PWD Stormwater Plan Review before resubmitting to discuss specific design and submission requirements.

The applicant is encouraged to use Stormwater Plan Review's Standard Details, including details for green roofs, porous surfaces, and bioinfiltration/bioretention basins, which are available in **Appendix L** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/l-standard-details of this Manual, when designing their project for Expedited PCSMP Review. Projects that are required to obtain a NPDES Permit from PA DEP should plan accordingly, as the shorter review times of PWD's Expedited PCSMP Reviews do not affect the NPDES Permit review process (**Section 2.7** ☛ p. 69).

2.5 PWD's Development Review Process

The Philadelphia Water Department (PWD) is organized into several different programs, each with various responsibilities and authority regarding land development. Many of the approvals needed from programs other than Stormwater Plan Review and Stormwater Billing and Incentives are related to water and sewer connections or instances in which PWD infrastructure is affected by a proposed development. Although the Development Services Unit will coordinate with other PWD programs throughout the review process, it is the applicant's responsibility to ensure obtainment of all required approvals from applicable PWD programs and other City and State agencies before beginning construction. For more information on other PWD programs involved in the development process, the applicant is encouraged to visit **PWD Development Services** ☛ water.phila.gov/development.

2.6 PWD's Role in Philadelphia's Development Process

Philadelphia Water Department (PWD) approvals are only one part of the full set of approvals required for development within Philadelphia. PWD approvals are often prerequisites for other approvals or permits. For example, the PWD Post-Construction Stormwater Management Plan (PCSMP) approval is required before the applicant may obtain a Building Permit from the City of Philadelphia **Department of Licenses and Inspections (L&I)** ☛ www.phila.gov/li. Less formally, PWD also coordinates reviews with other City agencies to promote continuity between department reviews and expedite the applicant through the City's development review process when feasible. This section provides a brief description of the City departments with which PWD interacts and overlaps as part of the City's development review process. It does not describe the full extent of each department's work, but rather a perspective of their work as it relates to PWD's review.

Licenses and Inspections

Permitting

PWD works closely with L&I to enforce the PWD Stormwater Regulations (Stormwater Regulations) and safe building practices through the issuance of various L&I permits, including Zoning, Plumbing, and Building Permits, and through active construction and maintenance inspections. PWD sign-off is a prerequisite approval for many types of permits issued by L&I.

Projects that apply for permits through the L&I Electronic Commercial Licensing, Inspection, and Permit Services Enterprise (eCLIPSE) system will require separate sign-offs from each applicable PWD unit. The applicant is referred to the **L&I eCLIPSE FAQs** ☛ www.phila.gov/departments/department-of-licenses-and-inspections/eclipse-faqs website for more guidance on eCLIPSE.

As part of the Zoning Permit review, the applicant will need to obtain PWD Conceptual Approval if the total earth disturbance associated with the project exceeds 5,000 square feet (**Section 2.3** ☛ p. 16). The primary purpose of the Conceptual Review Phase is to demonstrate compliance with the Stormwater Regulations. However, if the applicant is applying for a stormwater management-based height or density bonus, including the **Green Roof Density Bonus or Height Bonus** ☛ water.phila.gov/stormwater/incentives/development in the East Callowhill or Central Delaware Overlay Districts (Philadelphia Zoning Code § 14-702(14)), acknowledgement that the PWD requirements for the bonus have been met will be noted in the Conceptual Approval Letter. Therefore, it is important for the applicant to note in the ERSA Application (**Section 2.1.1** ☛ p. 5) if such a bonus is being sought. PWD does not review Conceptual Stormwater Management Plans for compliance with all aspects of the Zoning Code. It is the applicant's responsibility to make sure all plans submitted to PWD are code compliant.

A summary of required PWD approvals by L&I permit type is provided in Table 2.6-1.

Table 2.6-1: Summary of required PWD approval by L&I permit type

L&I Permit	Required PWD approval
Zoning Permit	• PWD Conceptual Approval is required for projects that propose more than 5,000 square feet of earth disturbance or applying for a stormwater management height or density bonus.
Building Permit – Demolition	• PWD Conceptual Approval is required for projects that propose more than 5,000 square feet of earth disturbance. • Projects that propose more than one acre also require a NPDES Permit from PA DEP (**Section 2.7** ☛ p. 69). • Discontinuance Permits are required to terminate existing water services prior to demolition.
Building Permit – Foundation Only, New Construction, and Site/Utility	• PWD Conceptual Approval is required for projects that propose more than 5,000 square feet of earth disturbance. • If more than 15,000 square feet of earth disturbance (5,000 square feet in the Darby and Cobbs Creeks Watershed) is proposed, PCSMP Approval will be required. • A NPDES Permit is required from PA DEP for projects that propose more than one acre of disturbance (**Section 2.7** ☛ p. 69). • Approvals are also required from Utility Plan Review and Sewage Facilities Planning (Act 537). • Private Cost Approval and approval from Green Stormwater Operations may be required if the project will impact PWD infrastructure.
Plumbing Permit	• Required PWD approvals for Plumbing Permits can be found at **Water and Sewer Connection Permits** ☛ water.phila.gov/development/connections/permits.

Enforcement

PWD Development Services staff coordinate with L&I staff in the enforcement of development projects that are not in compliance with Stormwater Regulations or the ***Pennsylvania Department of Environmental Protection (PA DEP) Erosion and Sediment Pollution Control Program Manual*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest). When deemed necessary, PWD will request L&I enforcement support on non-compliant properties.

The City of Philadelphia Plumbing Code

L&I administers the **City of Philadelphia Plumbing Code** ☛ www.phila.gov/departments/department-of-licenses-and-inspections/resources/applicable-codes (Plumbing Code). All requirements of the Plumbing Code must be met when designing a project to meet the Stormwater Regulations. This includes, but is not limited to, the design of all stormwater drainage piping as per the Plumbing Code. PWD will often refer the applicant to L&I for specific questions regarding sewer and water configurations as related to the Plumbing Code.

Floodplain Construction Approval

L&I requires **flood protection documents** ☛ www.phila.gov/services/permits-violations-licenses/apply-for-a-permit/building-and-repair/get-approval-for-construction-in-the-floodplain and **flood protection scoping meetings** ☛ https://form.jotform.com/83434300042139 for projects that are proposing construction, additions, renovations, and/or alterations in the floodplain over a project cost minimum. Floodplain scoping meetings should be held before zoning and/or Building Permit applications in order to receive a required Project Summary to submit with the application. PWD will refer the applicant to L&I for specific questions regarding applicability and requirements for work in the floodplain.

Streets Department

The **Streets Department** ☛ www.phila.gov/departments/department-of-streets is involved in the review of most development projects, particularly if a street opening or closing permit is required, there is bollard installation, new driveway or curb cuts are to be constructed, there are changes to ROWs or curb line widths, Americans with Disabilities Act (ADA) improvements are needed, or other ROW improvements are involved. As part of their plan review process, the Streets Department solicits comments from PWD Stormwater Plan Review and PWD Engineering Design Review to incorporate in their review letters. The comments provided by PWD will often direct the applicant to make a formal submission to the appropriate PWD unit for review.

If the applicant is proposing to make changes to PWD infrastructure located within the public ROW to accommodate a development, this work must be reviewed by the Streets Department. This includes minor improvements, such as relocation of an inlet, as well as major improvements, such as the complete striking of an existing drainage ROW. As part of their review, PWD Engineering Design Review will clarify for the applicant when and how the Streets Department should be notified.

Department of Planning and Development

The **Department of Planning and Development** ☛ www.phila.gov/departments/department-of-planning-and-development facilitates the **Division of Development Services** ☛ www.phila.gov/departments/division-of-development-services, which helps large real estate projects connect to key City departments through Developer Services Committee Meetings. The applicant can contact the Department of Planning and Development to convene a meeting of the committee. A representative from PWD Development Services will attend these meetings.

Philadelphia City Planning Commission

The **Philadelphia City Planning Commission** ☛ www.phila.gov/departments/philadelphia-city-planning-commission (PCPC) reviews development projects for various reasons, including the relocation of lot lines, location in Neighborhood Conservation Districts, Façade Control Districts, the construction of parking garages or surface parking lots, parking lot stripe modifications, and location within floodplains. As part of PCPC review, PWD's Conceptual Approval (**Section 2.3** ☛ p. 16) may be required. If the project involves relocation or striking of a public or drainage right-of-way (ROW), approval from PWD may be required. These prerequisite PWD approvals may also be requested by the **Civic Design Review Committee** ☛ www.phila.gov/services/zoning-planning-development/get-a-plan-review/philadelphia-city-planning-commission-plan-reviews/get-a-civic-design-review for projects that trigger this requirement.

While PWD and PCPC generally conduct their reviews independently, these agencies work directly with each other to administer §14-510 Wissahickon Watershed Overlay of the Philadelphia Code.

Wissahickon Watershed Overlay

To help reduce flooding, erosion, siltation, and channel enlargement resulting from development within the Wissahickon Creek Watershed, additional stormwater management requirements and impervious coverage limits may apply to projects within this watershed.

Projects located in the Wissahickon Creek Watershed are subject to the Philadelphia City Code §14-510 / Wissahickon Watershed Overlay (WWO) District. A map of the overlay is provided within the Code; however, the applicant can determine whether the project lies within the overlay by using the City's **Atlas map** ☛ https://atlas.phila.gov/ tool.

If the project is in the WWO, the applicant is advised to meet with **PCPC** ☛ www.phila.gov/departments/philadelphia-city-planning-commission prior to submitting the project's Existing Resources and Site Analysis (ERSA) Application. Depending on the project's location within the WWO, lot size, and net change in impervious area, PCPC may restrict new impervious cover, or impose additional stormwater management requirements (beyond PWD's Stormwater Regulations), which must be noted by the applicant in the project's ERSA Application (**Section 2.1.1** ☛ p. 5). Should the project be applicable to additional requirements as determined by PCPC, PWD Stormwater Plan Review will be responsible for review of the PCSMP.

PCPC does not use an earth disturbance threshold when determining whether stormwater management is required. Therefore, it is possible for development projects to trigger Post-Construction Stomwater Management Requirements under the WWO without triggering the Stormwater Regulations. Projects that fall under this category must follow the Development Compliance Review Path as defined in **Section 2.2.1** ☛ p. 11. These projects must also abide by all PWD design standards when designing systems to meet the WWO stormwater requirement.

Office of Property Assessment

For projects that trigger the Stormwater Regulations, PWD uses the **Office of Property Assessment** ☛ www.phila.gov/departments/office-of-property-assessment (OPA) address records to track projects and determine the appropriate address used in recording the Operations and Maintenance (O&M) Agreements (**Section 6.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-1-property-owner-inspections-and-maintenance). The applicant is encouraged to refer to the **OPA website** ☛ www.phila.gov/departments/office-of-property-assessment to confirm the legal address prior to submitting an ERSA Application to PWD. If an applicant disagrees with the address being used by PWD in the preparation of the O&M Agreement, the applicant should contact OPA for resolution.

PWD also uses OPA records to determine property classification (residential, non-residential, or condominium), which factor heavily into determining a monthly stormwater bill. If, over the course of a development, these features change, the applicant is advised to contact **PWD Stormwater Billing and Incentives** ☛ water.phila.gov/stormwater/billing so that the appropriate changes are reflected in subsequent stormwater bills.

Department of Records

O&M Agreements are recorded against the property for all projects that trigger the Stormwater Regulations or Stormwater Retrofit projects that receive Stormwater Grant funding. The owner is responsible for the recording of the O&M Agreement with the **Department of Records** ☛ www.phila.gov/departments/department-of-records (DOR); however, PWD may record this Agreement on the owner's behalf. The DOR charges a fee for all recordings and the DOR **fee schedule** ☛ www.phila.gov/documents/fee-schedules-department-of-records is used to determine O&M Agreement recording fees. To obtain a copy of the recorded O&M Agreement, the applicant must **contact DOR** ☛ www.phila.gov/departments/department-of-records. PWD also uses DOR deed records to determine parcel boundaries.

Historical Commission

Properties on the Philadelphia Register of Historic Places may need approval from the Philadelphia Historical Commission before starting any development or Stormwater Retrofit work. The applicant is referred to the **Philadelphia Historical Commission** ☛ www.phila.gov/departments/philadelphia-historical-commission website for more information on design reviews. **Stormwater Billing and Incentives** ☛ water.phila.gov/stormwater/billing can assist with coordination with this commission for Stormwater Retrofit projects.

2.7 PWD and Pennsylvania Department of Environmental Protection

This section outlines the circumstances in which the Philadelphia Water Department (PWD) and the Pennsylvania Department of Environmental Protection (PA DEP) jointly review projects, as well as other circumstances in which reviews are conducted entirely by PA DEP. PWD does not determine what State permits apply to a development project. This is the responsibility of the applicant, who should contact PA DEP directly with any questions.

Please note that projects that are exempt from PA DEP Permit Requirements (such as projects receiving ACOE 404 Permits for Wetlands Mitigation) are not necessarily exempt from the **PWD Stormwater Regulations** ☛ water.phila.gov/development/stormwater-plan-review/manual/appendices/c-pwd-stormwater-regulations (Stormwater Regulations). The applicant may consult **Section 1.1** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-1/1-1-applicability-factors for more information on Applicability Factors and contact PWD with any questions.

2.7.1 National Pollutant Discharge Elimination System Permits

Most projects proposing more than one acre of earth disturbance are subject to both the General (PAG-02) National Pollutant Discharge Elimination System (NPDES) Permit or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities and the Stormwater Regulations (or stormwater management design criteria for Stormwater Retrofits). NPDES Permits for land development in Philadelphia are issued by PA DEP, not PWD. The applicant must send NPDES Permit Applications to the PA DEP Southeast Regional Office in Norristown, PA. The applicant should contact PA DEP directly with questions concerning NPDES Permits. Municipal Notifications (such as those required under PA Acts 67, 68, and 127 of 2000) should be sent to the **Philadelphia City Planning Commission** ☛ www.phila.gov/departments/philadelphia-city-planning-commission (PCPC) with the PWD project tracking number listed on all notifications.

PWD recommends that NPDES Permit Applications are submitted concurrently to PA DEP with the Post-Construction Stormwater Management Plan (PCSMP) Review Phase Submission Package (**Section 2.3** ☛ p. 16) to PWD. Instructions for completing the NPDES Permit Applications should be obtained directly from PA DEP. However, the applicant may use the following general guidance when preparing and submitting a NPDES Permit Application:

- If the applicant is applying for a phased NPDES Permit, the phases listed under Section C.4 must match the order of phases submitted to PWD under individual project tracking numbers. The applicant is referred to **Section 2.1.1** ☛ p. 5 for information on PWD Stormwater Plan Review's project tracking numbers.
- The applicant must provide matching plans and reports to both PWD and PA DEP.
- If the applicant is requesting a waiver from PWD's infiltration requirement due to on-site contamination (**Section 3.3** ☛ water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-3-infiltration-testing-and-soil-assessment-for-smp-design), the applicant must also submit this waiver request to PA DEP for review as part of the NPDES Permit Application.
- Stormwater Retrofits are subject to NPDES Permits if they propose more than one acre of earth disturbance. Most Stormwater Retrofit projects may be classified as "Site Restoration" projects by PA DEP.

In addition to comments received by PWD, comments the applicant receives from PA DEP must also be incorporated into the PCSMP and Erosion and Sediment Control (E&S) Plans for PWD Stormwater Plan Review and Stormwater Billing and Incentives to issue PCSMP Approval. PCSMP Approval is a prerequisite for receiving a NPDES Permit. However, PWD Stormwater Plan Review and Stormwater Billing and Incentives will not issue PCSMP Approval until receiving confirmation from PA DEP that there are no outstanding comments with the NPDES Permit review.

More information on PA DEP's NPDES Permit Application process and requirements can be found at the following resources:

- **PA DEP website** ☛ https://www.pa.gov/agencies/dep
- **Erosion and Sediment Control requirements (25 Pa. Code §102.4)** ☛ https://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/025/chapter102/s102.4.html
- **NPDES Permit Application Notice of Intent (NOI) Instructions and *Completeness Review Checklist*** ☛ https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater/Pages/NOIApplication.aspx

2.7.2 Other PA DEP requirements

There are circumstances in addition to NPDES Permits for construction activities in which PA DEP review may be required for a project proposed in Philadelphia. These may include projects that are exempt from NPDES Permit Requirements but are still required to have an E&S Plan approved by PA DEP per 025 Pa. Code §102. This also includes projects that propose a new discharge to a water body or that propose activities within regulated waters of the Commonwealth as defined in 025 Pa. Code §105. The applicant is responsible for determining which State requirements apply to their project and is encouraged to contact PA DEP directly with any questions.

Land Recycling and Environmental Remediation Standards Act (Act 2)

Some development and Stormwater Retrofit projects may be affiliated with Act 2, which promotes voluntary remediation of contaminated sites for reuse and can preserve undeveloped land and reduce costs associated with building new infrastructure. Development and Stormwater Retrofit projects that are currently open under Act 2 will need to work with PA DEP directly regarding contamination cleanup requirements. Projects that have previously undergone remediation work under Act 2 will need to confirm that any proposed development or Stormwater Retrofit project work does not interfere with the remediation actions on the site. Contamination on site, identified during Act 2 remediation work, should be avoided when possible. The applicant is responsible for meeting any remediation requirements for work within contaminated areas.