

STORMWATER POST-CONSTRUCTION PROGRAM



City of Phoenix

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Stormwater Post-Construction Program

AGENDA

- Background
- MS4 Permit
- Post-Construction Program
- Draft Key Elements
- Next Steps
- Feedback



BACKGROUND

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

WHAT IS THE MS4?

Publicly owned system that collects and conveys stormwater, which is discharged untreated to surface waters.

Includes streets, curbs, gutters, catch basins, storm drains, etc.

MS4 PERMIT

Issued by ADEQ. Authorizes the City of Phoenix to discharge stormwater to State Protected Surface Waters, including Waters of the United States.

MS4 PERMIT



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- Issued December 2020
- Effective July 1, 2021

New permit requirements, including

- Increase industrial and construction inspections
- Develop new elements of the post-construction program

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Existing Post-Construction Program

Requirements for post-construction controls have long been in place for new development and redevelopment projects one acre or greater.

Existing Post-Construction Program Elements Will Continue

- Requires post-construction controls to reduce stormwater pollution
- 2013 City of Phoenix Stormwater Policies and Standards Manual
- Owner maintains post-construction controls

New Post-Construction Program Elements

Develop and implement an inventory, inspection, and tracking program for maintenance of post-construction stormwater controls.

Post-Construction Controls examples

Used to limit surface runoff volumes and reduce pollutant loadings, including:

- Retention/detention basins
- Drywells
- Green stormwater infrastructure.

Post-Construction Control Inventory

City is required to keep an inventory of all public and private post-construction controls for new projects or major retrofit 1 acre or greater

Immediate Data Needs

Location Information for Post-construction control(s):

- Lat/long or State Plane coordinates for post-construction control(s) provided on as-builts; OR
- Spatial location of post-construction control(s) on a site provided via ArcGIS Shapefile

DRAFT PROGRAM FEATURES*



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- Applies to All NEW Projects or Major Retrofits (After July 1, 2022);
- Develop an Operations & Maintenance (O&M) Plan and submit with Plan Review
- Per current practice, post-construction control is maintained per project design by Owner;
- Annual Inspections and Five-Year Certification
- City Engagement with Owners

*Program is in development; some elements discussed are proposed, but not final

The logo for PHX Water Smart, with 'PHX' in large green letters, 'WATER' in smaller blue letters, and 'SMART' in orange letters, all on a dark blue background.

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DRAFT PROGRAM FEATURES* OPERATIONS & MAINTENANCE PLAN

Owner Responsibility

O&M Plan Details To Include:

- Documentation Requirements
- Inspection Frequency
- Stormwater Management Facilities
 - Planned Post-Construction Controls and “upstream” elements that may impact performance
- Post-Construction Controls Inspection Form(s)
- Post-Construction Control Routine and Corrective Maintenance

City-Provided O&M Plan template will:

- Identify required information
- Provide guidance on how to complete the template O&M plan
- Streamline the O&M Plan approval process during Plan Review

O&M Plan Outline



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Appendices

Appendix A: Stormwater Facility Inspection Forms

Appendix B: BMP Maintenance Follow-up Forms

Appendix C: 5-year Inspection Report

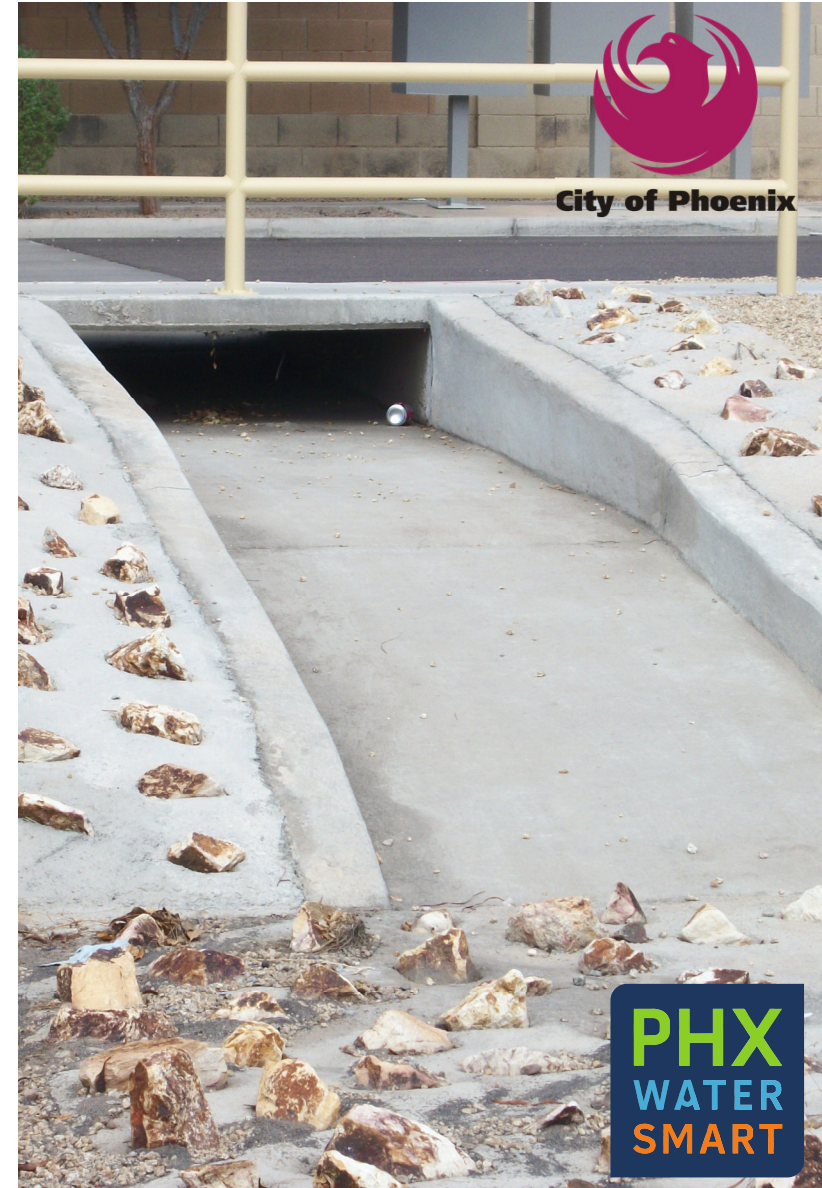
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Draft Program Features*

ANNUAL INSPECTIONS

Owner Responsibility

- No special qualifications to perform
- Use inspection checklist(s) from project O&M plan
- 1st Inspection within 1 year of completed construction
 - Submit to City
- Annual inspections thereafter
 - Owner maintain records



*Program is in development

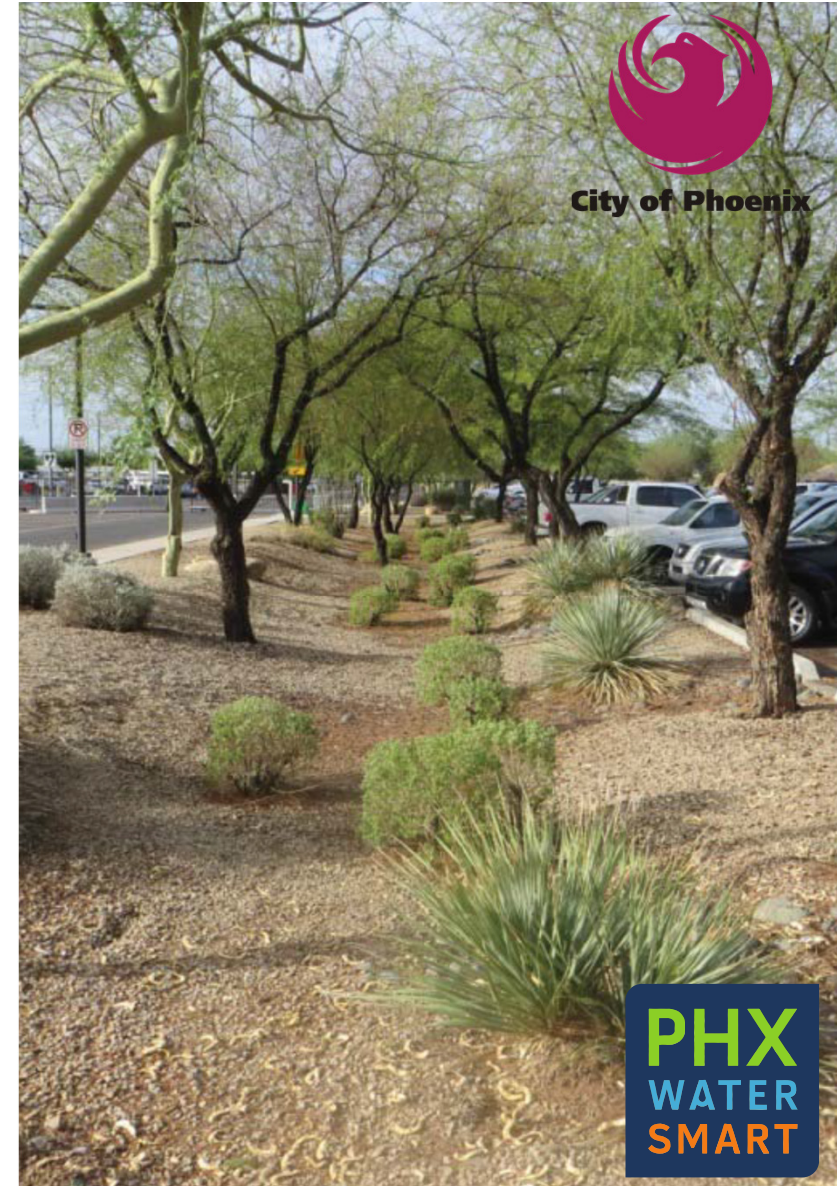
Draft Program Features*

FIVE YEAR CERTIFICATION

*Owner
Responsibility*

- Every 5 years
- Conducted by a 'qualified person'
 - Examples include PE, RG, RLA
- Submit to City
- Review and confirm annual inspections, corrective actions, maintenance, and proper functioning of post-construction control

*Program is in development



Draft Five-Year Certification



Purpose is to certify post-construction controls are functioning per design standard

A 5-year audit includes the following additional steps:

1. Review annual inspection logs for completeness and accuracy.
2. Review maintenance follow-up logs.
3. Perform an inspection following guidance outlined in the site's O&M manual.
4. Complete an inspection report.
 - 4.1. Standard format.
 - 4.2. Signed certification
5. Submit documents to City of Phoenix.

Self-Certify approach for “qualified individual”, but generally:

Qualifications:

A 5-year audit must be done by a qualified individual. Acceptable qualifications are registered engineers, landscape architect, geologist, or Certified Stormwater Manager (CSM) or equivalent certification.

CITY STAFF KEY ROLES*

*Program is in development

RESPONSIBILITIES

- Design (Plan) Review and O&M Plan Review
- Maintain Post-Construction Control Inventory & Records
 - 1st Annual Inspection
 - 5-Year Certification
- Inspections
 - Paperwork audits
 - Complaint response

FOLLOW-UP ACTIONS / ENFORCEMENT

- Failure to submit paperwork
- Failure to conduct inspections
- Failure to adequately maintain post-construction controls



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NEXT STEPS

- Fine-Tune Program Details
- Additional Stakeholder Outreach/Meetings
- Finalize Key Program Elements
- Modify City Code
- Modify Stormwater Policies and Standards Manual



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PUBLIC FEEDBACK REQUESTED

- Written comments via chat or email to keith.kesti@phoenix.gov or tricia.Balluff@phoenix.gov by **May 5, 2022**
- Meeting is being recorded to capture verbal comments



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