



The City of Phoenix (City) recognizes the benefits associated with green stormwater infrastructure (GSI) and is committed to increasing the use of these design techniques on public and private property. This document serves to outline the general permitting and approval processes in the Planning & Development and Street Transportation Departments. Depending on the location and scale of the feature(s), additional requirements and/or conditions may be placed on the project.

Green Stormwater Infrastructure, or GSI, means infrastructure constructed with a range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to the public storm drain system or to surface waters. Examples include bioswales, bioretention systems, curb openings and extensions, and permeable pavement.

Benefits of Green Stormwater Infrastructure

GSI provides multiple co-benefits including:

- Localized flood mitigation
- Reducing the heat-island effect
- Local air quality improvement
- Improving localized water quality
- Reducing reliance on public water for irrigation
- Promoting biodiversity with native vegetation

Features Approved for Installation

The Planning & Development Department (PDD) adopted the technical standard details and specifications in the 2019 Greater Phoenix Metro Green Infrastructure Handbook:

<https://sustainability-innovation.asu.edu/sustainable-cities/resources/lid-handbook/>

This document presents details for permeable pavement, two types of curb openings, sediment traps, stormwater harvesting basins, vegetated or rock bioswales, bioretention systems, curb extensions (chicanes), bioretention planters, and domed overflow structures.

The Street Transportation Department (STR) issued a 2021 City of Phoenix Supplement to the 2019 Maricopa Association of Governments Uniform Specifications and Details for Public Works Construction. It includes details for eight (8) features including permeable pavement, curb openings, sediment traps, stormwater harvesting basins, vegetated or rock bioswales, bioretention systems, and domed overflow structures. These features are not permitted along arterial classified roadways. Curb extensions (chicanes) and bioretention planters are not included. Additionally, permeable pavement is not approved for use in the public right of way.

<https://www.phoenix.gov/streetssite/Pages/2021maguniformstd.aspx>

Applications and Permits

Flow charts 1 and 2 outline the basic application and permitting processes for most projects. Site specific and project construction details may result in different requirements.

Depending on the size of your development, redevelopment, retrofit, or construction project, you may need to acquire a grading and drainage, paving, and/or concrete permit. Contact the PDD at 602-262-7811 (voice), 7-1-1 (TTY), or complete a contact request at [Contact Planning and Development - City of Phoenix](#) to determine the course of action for your specific project.

Additionally, if the feature will be constructed within the City right of way, the STR may require a maintenance agreement. Non-standard features may also require a revokable permit. For questions about this process, contact STR at 602-262-6284 (voice), 7-1-1 (TTY), or complete a contact form at [Contact the Phoenix Street Transportation Department - City of Phoenix](#).

Fees

- PDD plan review and permit fees are assessed per the fee schedule in Phoenix City Code, Chapter 9, Appendix A-2. <https://phoenix.municipal.codes/CC/A.2>
- Maintenance Agreements do not have application or annual use fees.
- Revokable Permits have an application fee of \$100 (single-family residence, non-profit organization, etc.) or \$1,000 (all other uses) and an annual use fee which is calculated by the City depending on the use of the right of way.
- Liability insurance is required when a Maintenance Agreement and Revokable Permit is issued. Details are included in the application instructions.

Resources

City of Phoenix Green Stormwater Infrastructure Website: www.phoenix.gov/pdd/gsi

Structures in the Right of Way Determination Guidance (TRT 00856)

Study: Effectiveness of Existing Green Infrastructure in Phoenix (2018)

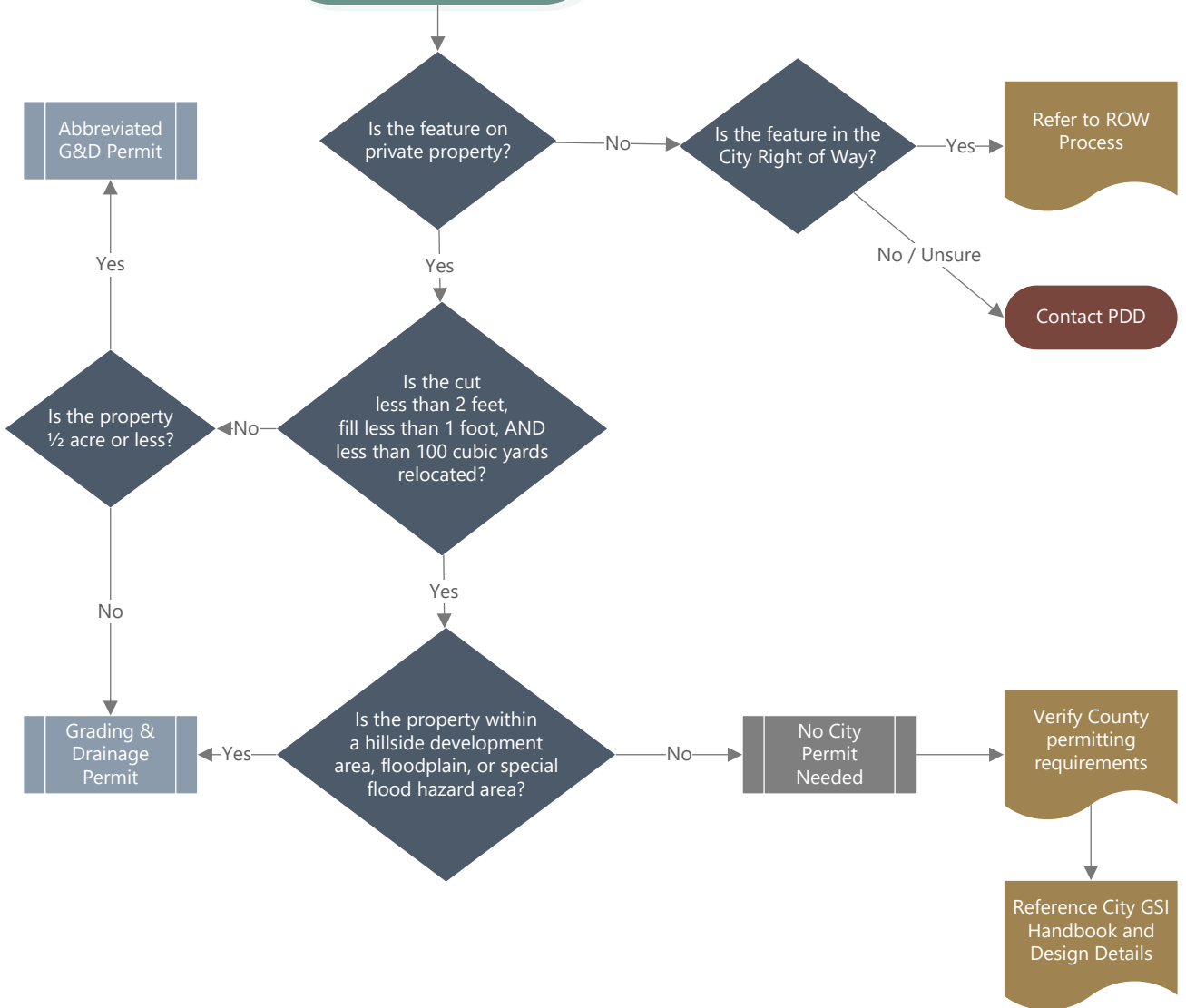
https://www.phoenix.gov/oepsite/Documents/FINAL_Green%20Infrastructure%20Assessment%20report.pdf

Identifying Key Areas in the City of Phoenix for Infiltration and Retention Using Low Impact Development (2022)

<https://www.phoenix.gov/oepsite/Documents/LID%20Floodplain%20Final%20Report%20January%202022%20-%200508%20complete.pdf>

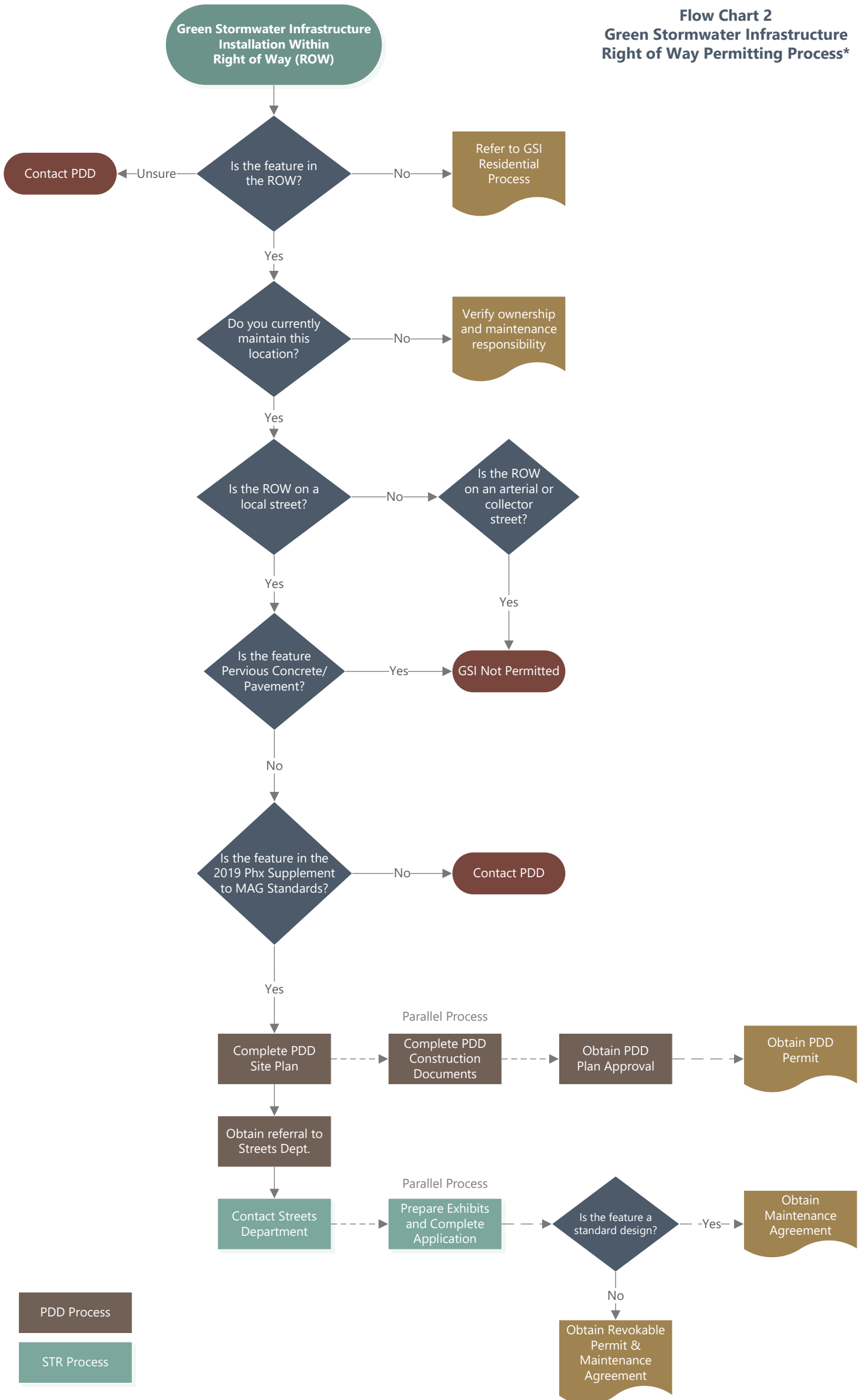
**Green Stormwater Infrastructure
Installation Within
Residential Property**

**Flow Chart 1
Green Stormwater Infrastructure
Residential Permitting Process***



*Projects are reviewed on a case by case basis and specific project requirements may vary.

**Flow Chart 2
Green Stormwater Infrastructure
Right of Way Permitting Process***



PDD Process
STR Process

*Projects are reviewed on a case by case basis and requirements may vary.