

PARKING LOT 4 REHABILITATION (SWRP PROJECT 40)

Project Information:

- **Project Description:** This project involves rehabilitating the City of Chico's (City's) public Parking Lot 4, as shown on the Project Schematic (page 2). The intent of this project is to improve the parking lot so it better serves the public, reduce runoff from the project site, and promote education and outreach for storm water runoff. The rehabilitation work will remove the existing impervious pavement and replace it with pervious pavement or pavers. The small existing landscape areas around the parking lot will be lowered and planted with native California grasses to create six rain gardens; however, the existing trees will be retained. The existing sidewalks and parking meters will be retained in place. Curb cuts will be added to drain the street runoff into the rain gardens. A placard that explains how the porous pavement works and how it helps reduce and treat runoff will be developed and installed.
- **Watershed:** This project is located in the Big Chico Creek Watershed.
- **Location:** Near the intersection of West 5th Street and Salem Street.
- **Tributary Watershed Area and Impervious Percentage:** The area that drains to this project includes: Parking Lot 4, the south half of Salem street between 4th and 5th street, an adjacent building, and half of the parking lot at the intersection of Salem Street and 4th Street. The total tributary area is 0.84 acres. The current impervious percentage is 95 percent, and after implementation of this project the impervious percentage will be 60 percent.

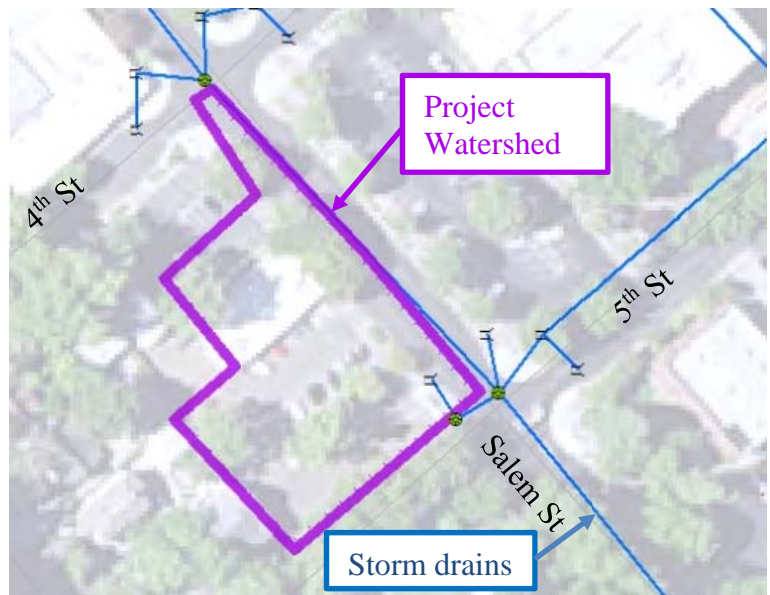


Figure 1. Project Watershed

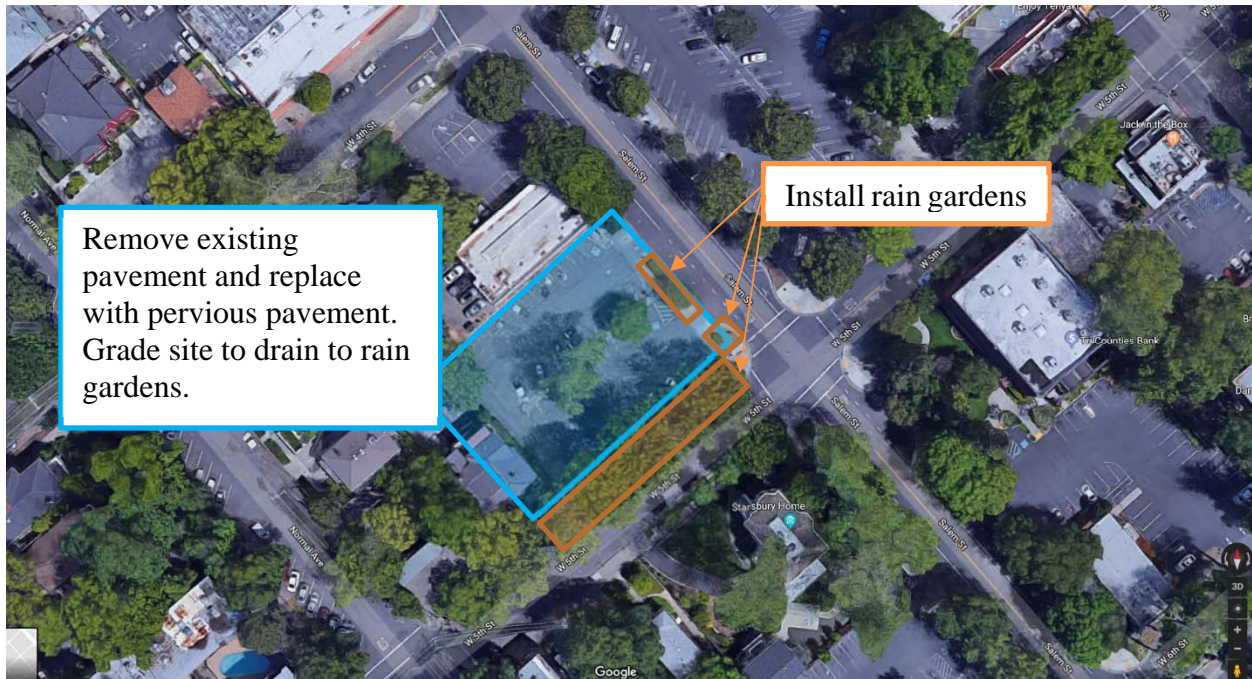
Benefits Resulting from this Project

- **Water Quality:** This project will capture To Be Determined (TBD) acre-feet of storm water and dry weather runoff per year from an urban parking lot. Parking lot runoff is typically high in oils, grease, metals, and trash.
- **Water Supply:** This project will infiltrate TBD acre-feet of runoff per year to the groundwater table, thereby increasing available groundwater supply.
- **Flood Management:** This project will reduce potential flooding in the lower Little Chico Creek watershed.
- **Environmental:** The environment is expected to be improved because reducing runoff and increasing the quality of remaining runoff will help improve habitat.
- **Community:** The community is expected to be improved because this project expands education and outreach regarding storm water and beautifies the neighborhood.

Project Costs

- **Estimated Capital cost:** TBD
- **Estimated Annual Operations and Maintenance Cost:** TBD

Project Schematic and Photographs:



Imagery: Sept 2017, Google © 2018

Other Project Elements (describe 3 to 5 other project elements)

- **Porous Pavement:** Describe the specific type of porous pavement and how it works.
- **Aggregate Base:** A layer of aggregate base (crushed rock) will be provided under the porous pavement. The open volume between rocks provides for storage of the storm water.
- **Infiltration:** This project site has soils with hydrologic group B soils, resulting in a relatively high infiltration rate. During construction of the project, the existing soil will be ripped to restore its infiltration capacity and will not be compacted.
- **Underdrains:** The necessity of underdrains will be evaluated to minimize risk of flooding during large storms.
- **Rain Gardens:** The rain gardens will be planted with the following native California vegetation: TBD.