

Via Real Stormwater Project

CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
JUNE 08, 2022

Agenda

1. Project Introduction
2. Location
3. Design
4. Benefits
5. Historic Flooding
6. Plans & Studies
7. Project Schedule

Via Real Stormwater Project

Project includes implementation of the following components:

- Bioretention basin in the right-of-way at the north end of Poplar Street
- New storm drain on Poplar St
- Increase the existing storm drain pipe size crossing Via Real from a 21-inch pipe to a 36-inch pipe to accommodate peak flowrates
- New bioswales within the right-of-way along the north side of Via Real
- Upgrade existing storm drain connections from Via Real to Caltrans drainage

Via Real Stormwater Project

City selected proposed design based following:

- Location - within City right-of-way
- Cost & Feasibility - most feasible alternative
- Flood event – project designed to mitigate 25-year storm event and significantly reduce impacts of larger storm events
- Low Impact Development elements
- Long-term maintenance cost

Hydrology 101 – Return Period

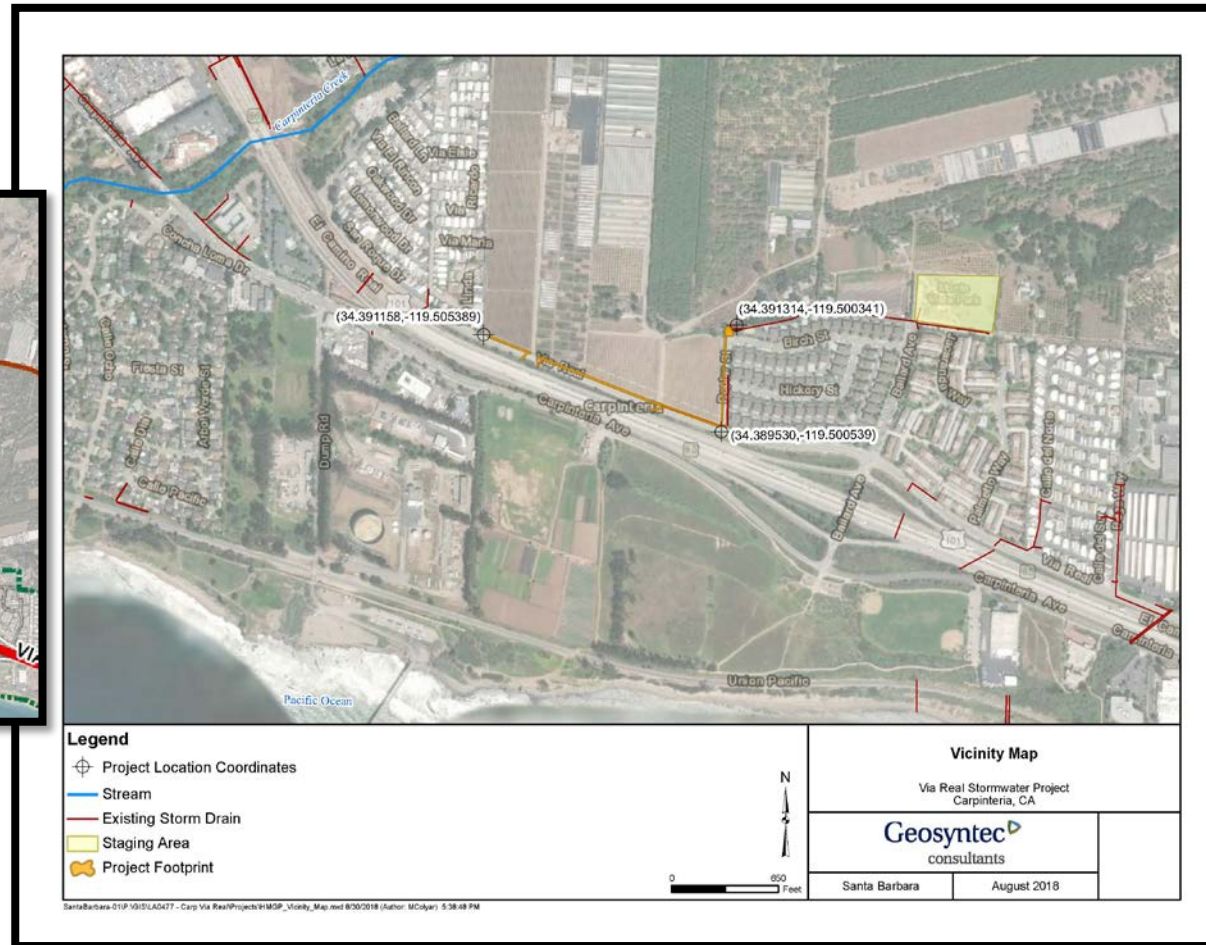


- In hydrology storms events are typically classified based on their return period.
- A return period, also known as a reoccurrence interval, is an estimate of how long it will be between events of a given magnitude.
- A 10-year storm for example refers to a maximum 24 hour rain event with a probable rain occurrence of once every 10 years, or ten percent (i.e $1/10$) probability of occurring in any given year.

Project Location



0 = Project location





Via Real Stormwater Project Design

Project Benefits

- Reduce flood hazard risks on arterial roadway
- Provide protective measures for adjacent and downstream properties
- Reduce erosion on adjacent properties
- Bioretention basin and bioswales will improve water quality of runoff that discharges into Carpinteria Creek and provide some groundwater recharge.



Existing Infrastructure – Poplar Street & Via Real



January 2021



January 2021

Historical Flooding – Via Real (West & East Views)



Winter 2010



Winter 2010

Historical Flooding – Via Real



Winter 2018



Winter 2018

Historical Flooding – Mobile Home Park Entrances



January 2021



January 2021

Project Plans & Studies

Plan: Santa Barbara County-wide Integrated Stormwater Resource Plan ([Link here](#))

Santa Barbara County Integrated Regional Water Management Plan ([Link here](#))

Study: Preliminary Design Report for the Via Real Drainage Improvement Project, February 2018 (available upon request)

Engineering Design

Questions?

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