

### Project Objectives

- Improve safety and accessibility for all transportation modes.
- Decrease traffic delay at intersection.
- Implement a storm drain system that incorporates green infrastructure.

### Existing Conditions



Image Source: Google Maps

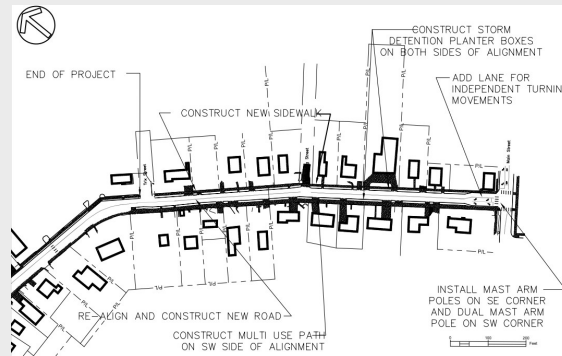
- Sidewalks on each side of roadway.
- No designated bicycle route.
- Congestion at W Main St. and McClaine.
- No stormwater management system.



# MCCLAIN STREET IMPROVEMENT SILVERTON, OREGON

An arterial road widening and improvement project for the City of Silverton.

### Site Plan



### Proposed Design

- Storm water management planter boxes on both sides of street.
- Multi-use path and standard sidewalk.
- Added turn lane and signalization for intersection.
- Traffic calming measures.

### Typical Roadway Cross Section

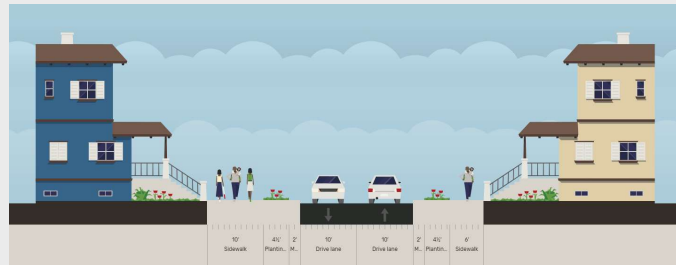


Image Source: Streetmix.net

### Shared-Use Path

- 8-10-foot-wide pathway designed to provide access for pedestrians and bicyclists.
- Pedestrians and bicyclists can use the pathway going either direction.
- Used for design because it accomplishes objective while conserving roadway section width for other aspects of design.

### Traffic Calming

- 10-foot-wide lanes designed to limit driver's comfortability in speeding.
- More speed signs added on both ends of the street.
- Speed radar added to alert motorists who are going over the designated speed limit.

### Traffic Signal

- Signalization of Intersection of West Main St and McClaine St.
- Traffic simulation conducted to design for future volumes.
- Signal phasing provides prioritization for pedestrian crossings.
- Radar detection system also installed to serve demand.
- Overall improvement for handling higher vehicular capacities.



Traffic light. (2022, April 27). [Photograph]. Who Invented the Traffic Light? <https://getjerry.com/insights/who-invented-the-traffic-light>

### Stormwater Management

- Roadside low impact development planter boxes were implemented to catch and treat runoff. A passive flow-through configuration was selected based on site conditions. Each planter has an underdrain that connects to a pipe conveyance system.

