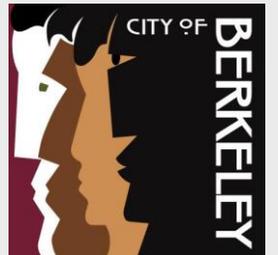


West Berkeley Aquatic Park Stormwater Improvement Project

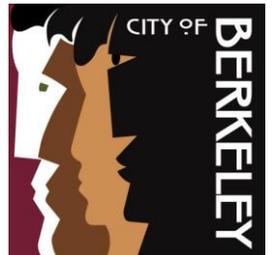
October 8, 2024

- **RICARDO SALCEDO PE, CITY OF BERKELEY – PROJECT MANAGER**
- **SRINIVAS MUKTEVI PE, CITY OF BERKELEY – SUPERVISING CIVIL ENGINEER**



General Project Info

- ▶ Grant funded water quality improvement project which includes the following:
 - ▶ Green infrastructure adjacent to Dreamland Playground
 - ▶ Trash capture infrastructure on Channing and Bancroft way east of UPRR corridor
 - ▶ Storm drainage improvements along Bancroft
- ▶ EPA SF Bay Water Quality Improvement Fund (SFBWQIF)
 - ▶ Competitive grant program focused on improving the water quality of San Francisco Bay
 - ▶ City submitted an application for funding in 2023, was selected, and Council accepted funding on June 25, 2024.
 - ▶ \$1.5M with a local match of \$1.5M



Green Infrastructure Opportunity



- ▶ Dreamland Playground adjacent to one of the City's storm drain outfalls to Aquatic park.
- ▶ Contributing sources of pollutants:
 - ▶ Illegal dumping
 - ▶ Light industrial uses
 - ▶ Commercial uses
 - ▶ Fertilizers
- ▶ Good candidate for bioretention/flow-through planter installation.
- ▶ Attempts taken to begin incorporating green infrastructure in 2020 but limited space yielded limited treatment areas

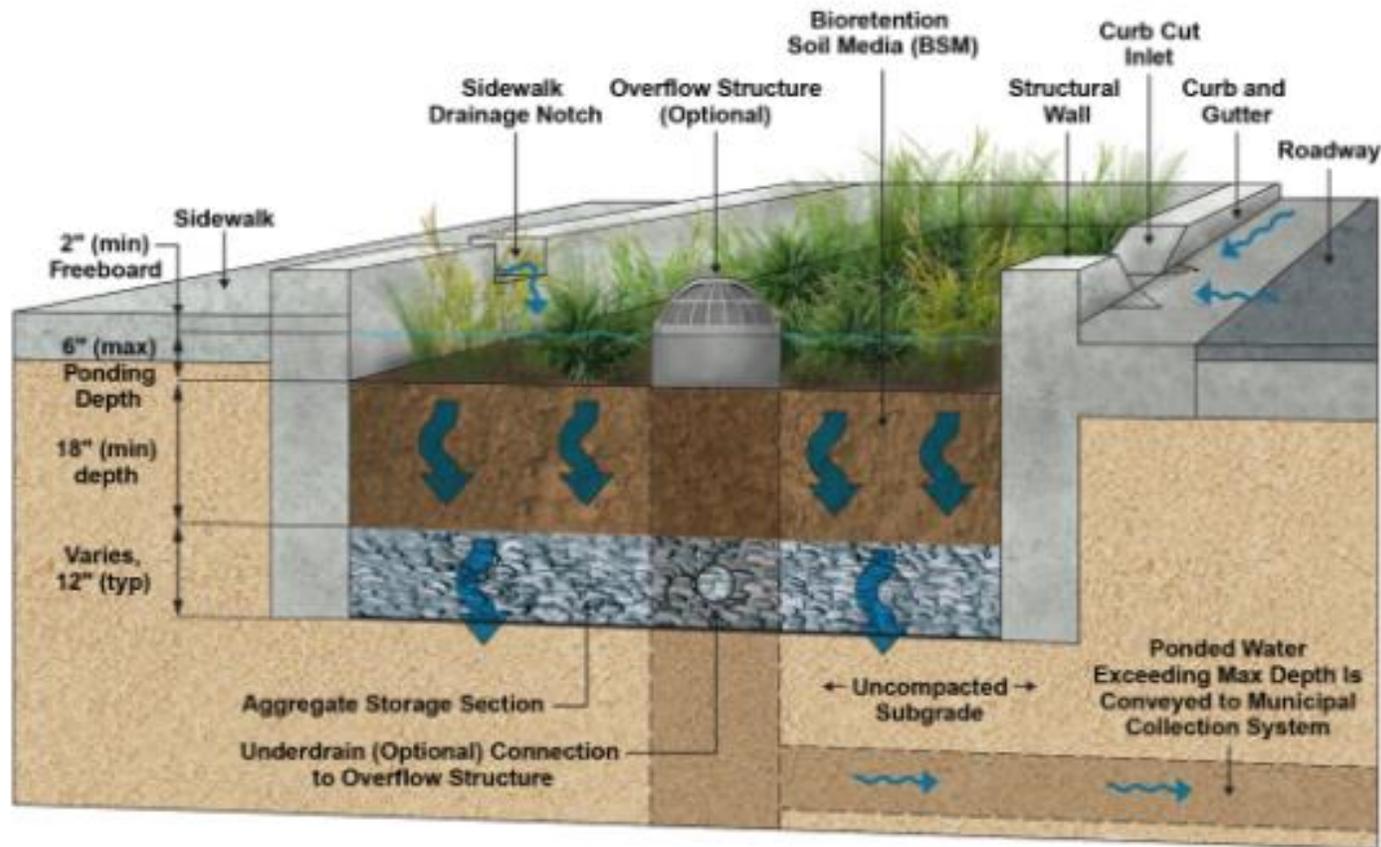


Bioretention/Flow-through planters

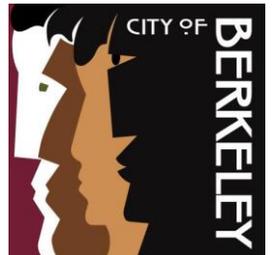


- ▶ Removes pollutants from stormwater
 - ▶ Filtration
 - ▶ Uptake by vegetation
 - ▶ Microbes
- ▶ Specially designed soil media
 - ▶ Achieves design infiltration rate of at least 5 inches/hour
 - ▶ Supports plant growth

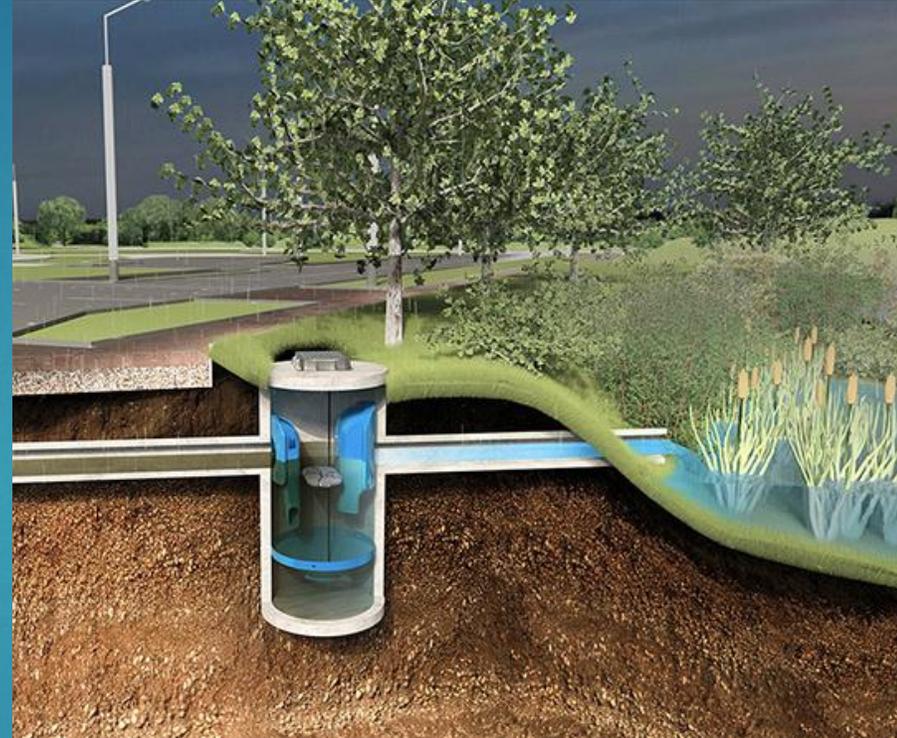
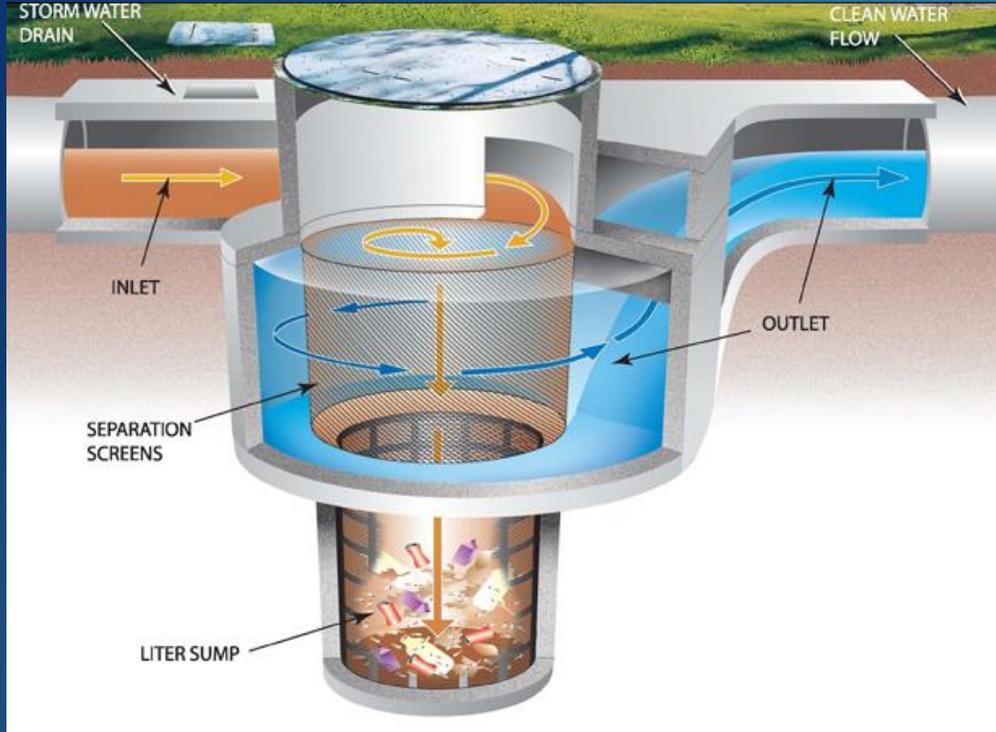
Bioretention basins



- ▶ Typically section consists of:
 - ▶ 6" ponding storage above biotreatment soil
 - ▶ 18" Biotreatment Soil Mix
 - ▶ Permeable rock layer
- ▶ Overflow drainage structure can be included to direct runoff to the public storm drain system in significant storm events



Trash Capture - HDS



- ▶ In addition to the GI, a new Hydrodynamic Separation (trash capture) device will be installed on Channing Way, upstream of the park
- ▶ This system uses swirl concentration and continuous deflective separation to screen, separate, and trap trash, debris, sediment, and hydrocarbons from stormwater runoff

Project Schedule

- ▶ Construction deadline to receive Grant Funding is 2027
- ▶ Construction tentatively expected in 2026.

