

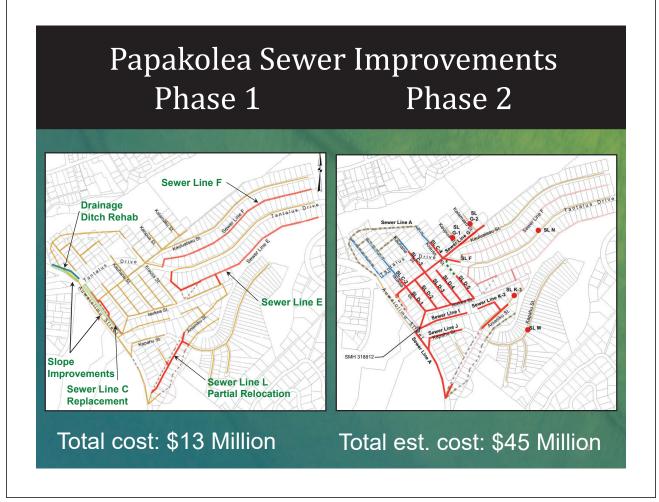
LAND DEVELOPMENT DIVISION Item E-1 Workshop Monday, July 15, 2019

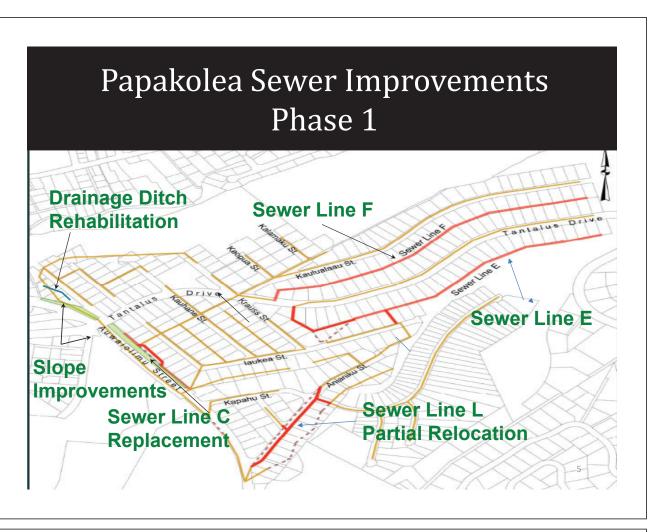


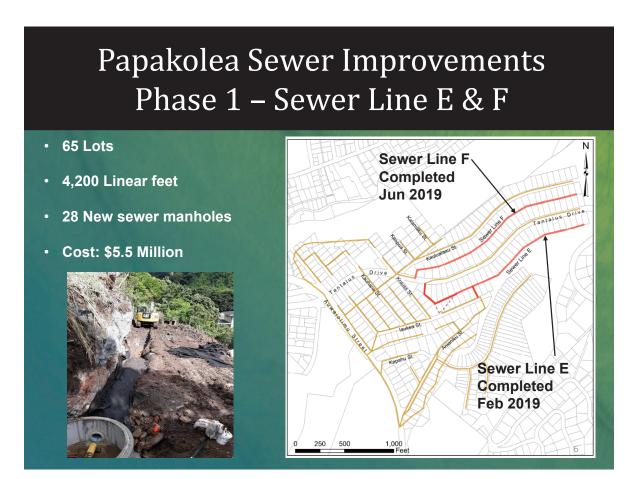
# Papakolea Sewer Improvements Purpose

- Repair and/or replace damaged and undersized pipes
- To upgrade sewer improvements and access which comply with City and County Standards









# Papakolea Sewer Improvements Sewer Line E

#### **Sewer Line E:**

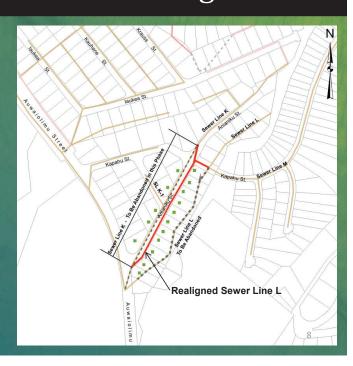
 Realigned and rerouted sewerline and manhole to avoid bisecting properties





## Papakolea Sewer Improvements Phase 1 – Sewer Line L Realignment

- 900 LF, 10-inch pipe
- 6 New sewer manholes
- 16 Lateral reconnections
- Abandon existing
   Sewerline K and L in place
- Completion: September 2019
- · Cost: \$1.3 Million



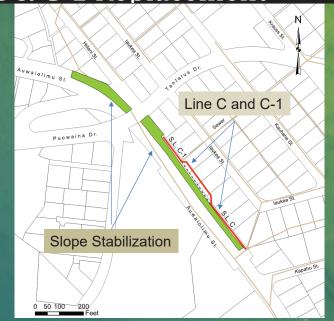
# Papakolea Sewer Improvements Slope Stabilization and Sewer Line C & C-1 Replacement

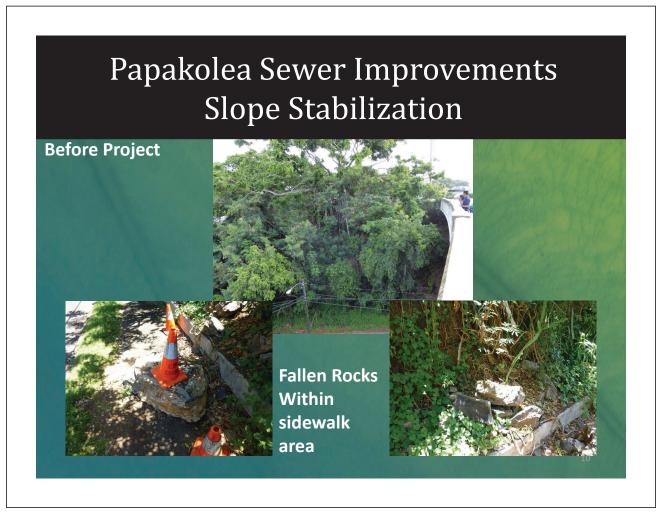
### **Slope Stabilization**

- 34,000 square feet
- Completed June 2018
- Cost: \$4 Million

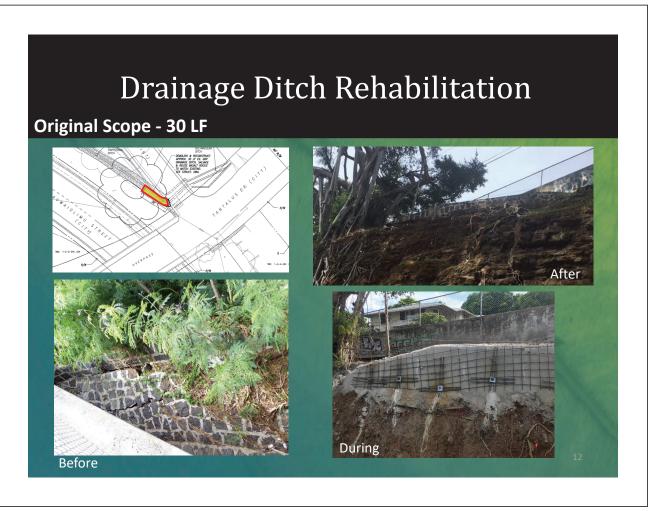
### Sewer Line C & C-1

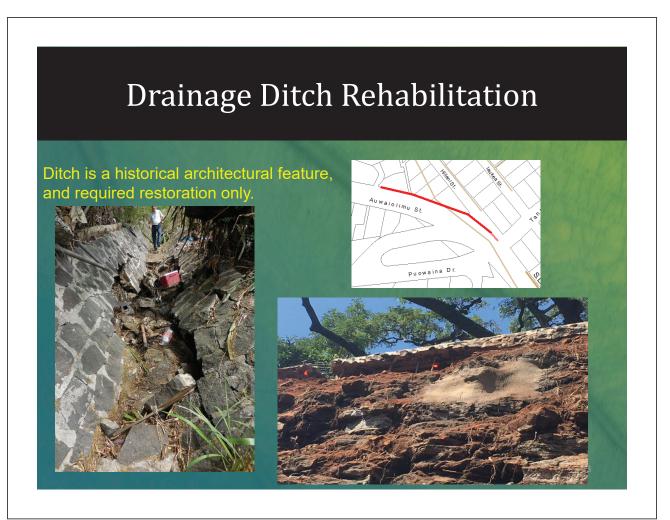
- Est. Completion August 2019
- 520 Linear feet,8" pipe
- 5 New sewer manholes
- Cost: \$0.7 Million

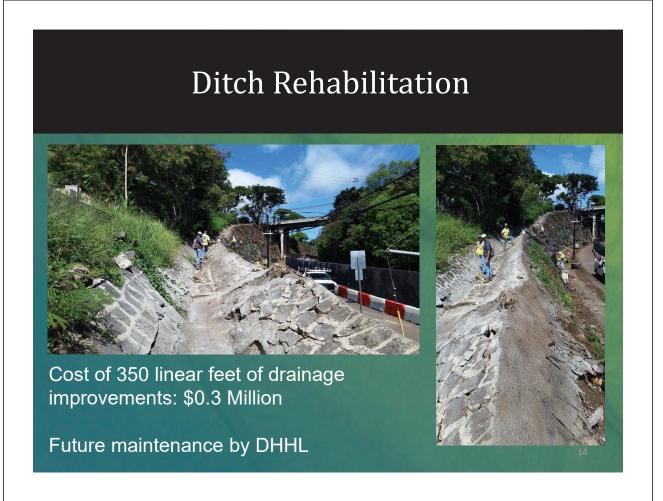












### Papakolea Sewer Improvements Sewer Easement Conditions

- Lessees shall allow contractors access to repair or replace sewerlines.
- Lessees shall not block, build nor plant trees over sewerline and other improvements.
- Any improvements over the sewerline will NOT be replaced by the City or DHHL, should repair work be required.
- Sewer lateral maintenance, including blockage remediation is the responsibility of the Lessee.
- Hawaiian Homes Commission approval required to amend approximately 46 leases with new sewer easements.

# Papakolea Sewer Improvements Phase 2

- Initiate engineering designs in 2019
- Estimated Start of Construction
   2022, subject to funding
- 12,000+ Linear feet, 8-in pipe sewer manholes & laterals
- Evaluate phasing and disposal options for Sewer Line A
- Cost: Approx \$45 million

