

Street Lighting

Highland Village Streetscape



Existing 3-Globe System

- Existing lighting installed 1985
- Typical 30 year life expectancy per lighting system



Retro-Fitting an Aging System

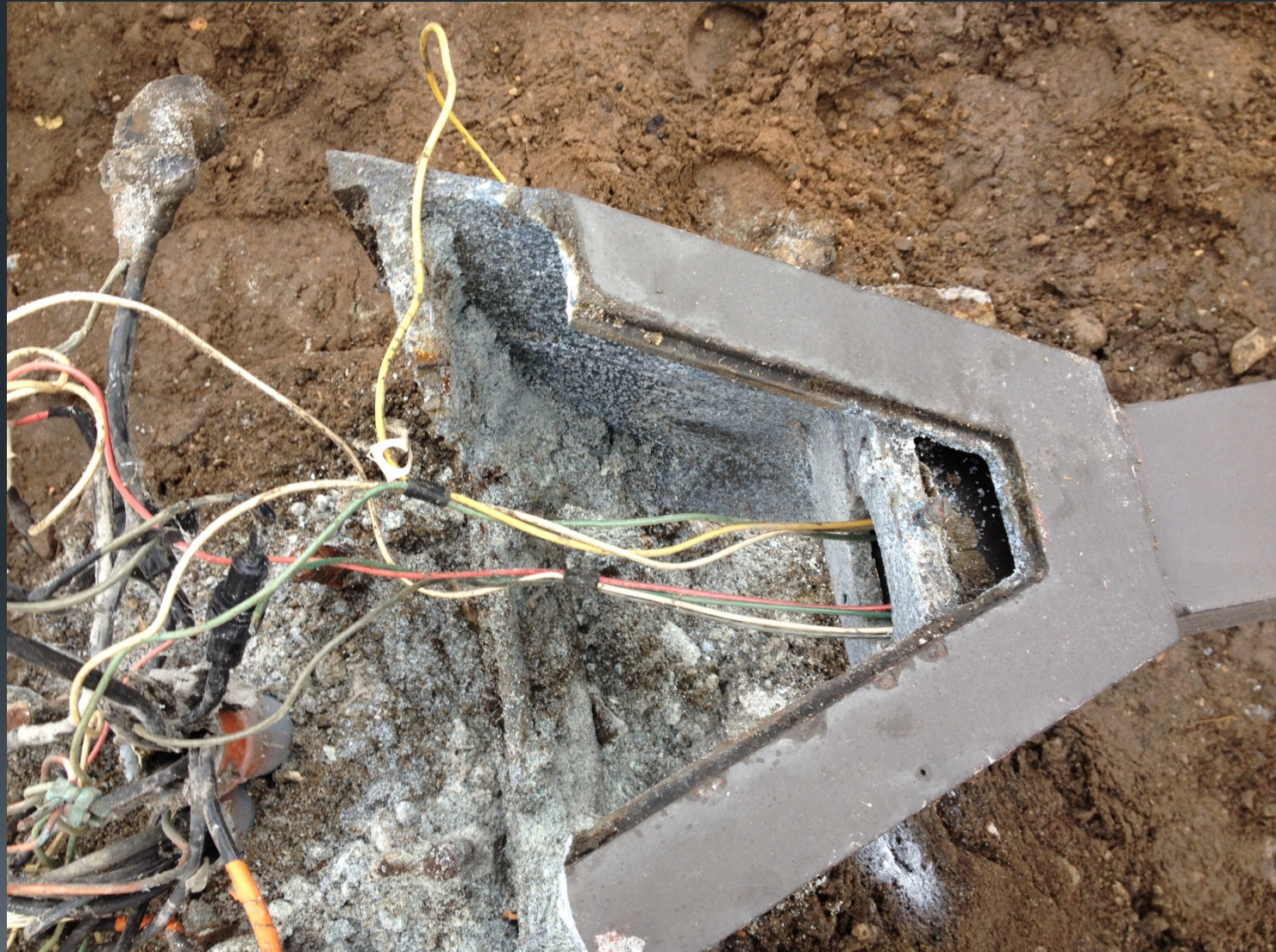


- Anchor Rod Quality
 - Approaching end of life, rusted, poor quality for re-use
- Adapter Plate
 - Necessary to accommodate different bolt circle requirements between pole types
- Existing Wiring
 - Increased splices
- Conduit
 - Typical placement behind curb which will likely be damaged during construction

Inside of Existing 3-Globe Pole



Inside of Existing 3-Globe Pole



Adapter Plate



Engineering Recommendations

- Full replacement of the existing 3-globe lighting system includes new:
 - Concrete Pole Foundations and Anchor Bolts
 - Conduit
 - Wiring
 - Twin Lantern Style Light Poles
- This will reduce increased maintenance costs compared to partial replacement of the lighting system

Twin Lantern Lighting System

- 13ft Pole
- Orientation of Lanterns
 - Perpendicular to Roadway
 - Parallel to Roadway
- Lantern Glass Directional



HPS vs. LED

- High Pressure Sodium (HPS)
 - Yellow light
 - Non-Directional Light
 - Hazardous Materials and Disposal Costs
- Consumes 91 Watts per Fixture
- Estimated Energy Cost per Year per Fixture
 - \$39.31
- Light Emitting Diode (LED)
 - White Light
 - Directional Light
 - No Hazardous Materials and Disposal Costs
- Consumes 51 Watts per Fixture
- Estimated Energy Cost per Year per Fixture
 - \$22.03

Lighting Cost Estimates

- Full Light System Replacement

- Total Project Cost
 - \$1,684,400
- Cost per Foot
 - \$178.24

- Partial Light System Replacement

- Total Project Cost
 - \$1,437,825
- Cost per Foot
 - \$152.15

- *Costs listed above are estimates only*
- *Assessments will be based on actual costs*