2024 SANITARY SEWER INTERCEPTOR REHABILITATION PROJECT - CITY PROJECT NO. 24-51

CONTRACT APPROVAL: CITY OF LITTLETON AND INLINER SOLUTIONS LLC

Brent Soderlin, Interim Director of Public Works & Utilities

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BACKGROUND: WHY REHABILITATION IS NECESSARY

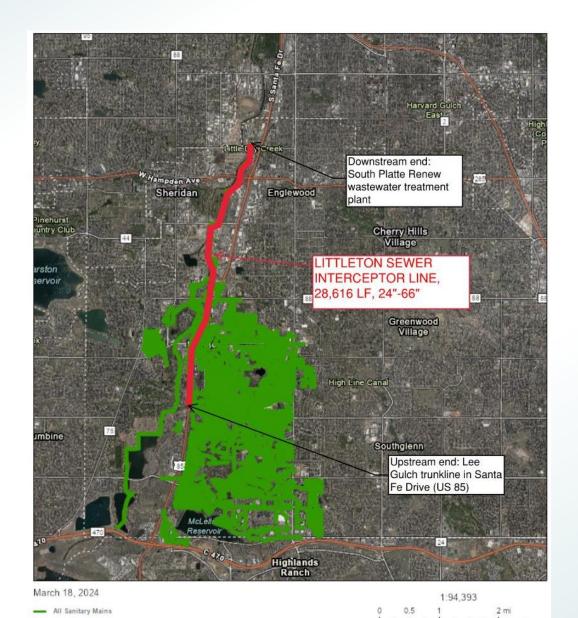
- City's sewer interceptor pipe is either concrete or clay
- Concrete pipe deteriorates over time in the corrosive environment of wastewater and associated gases.
- Clay pipe is brittle and tends to break
- Without rehabilitation, pipes collapse, causing sewage spills and possible sinkholes in roadways.
- Industry standard practice is to proactively rehabilitate pipes with a liner that can be inserted into the existing pipe, as opposed to digging and replacing the pipe, which is both more expensive and more impactful.

LITTLETON INTERCEPTOR SEWER

- Collects sewage from 8 sanitation districts, in addition to within the city limits (approx. 60 sq miles)
- City collects fees from districts to maintain this interceptor
- Interceptor size ranges from 24-inch diameter to 66-inch diameter
- Interceptor construction began (1959): Lee
 Gulch to original treatment plant
- Interceptor was extended in 1976 when wastewater plant moved to current location at SPRenew



INTERCEPTOR MAP





REHABILITATION HISTORY

- Started in 2008, at north end by the plant
- Approx \$1-2 million spent each year on phases, moving southward
- 2018 CCTV data identified critical areas
- Projects in 2019+ focused on fixing critical zones, spending \$2M + each year
- Construction costs are escalating
- Proposed 2024 project rehabilitates remaining segments as well as extending up the Lee Gulch trunkline



E Girard Ave w Hampder Ave Bear Creek Park Englewood Sheridan W. Oxford O W Quincy Ave W. Tufts Ave. E-Tuits W Esyton Ave E Layten-A Bow Mar-Centenn Bowles Lake Progress Park Goddard **Q**ittleton Columbine Valley Ketring Park Columbine Country Club

REHAB MAP





FISCAL IMPACTS

- Project was bid on Rocky Mountain E-Purchasing System.
- The low bid is \$2.9 million dollars from Inliner Solutions LLC.
- The project is fully funded from the sewer enterprise fund's line items for sewer maintenance, already budgeted and approved for 2024.



ALTERNATIVES

- Denying the project, in part or in whole, leaves segments of the sewer interceptor susceptible to additional corrosion and potential collapse.
- Denial also delays what is already-overdue maintenance, increasing chances of collapse.
- Excavation and replacing pipe is longer in duration and more expensive, with impacts to travel and noise. Traffic lanes would be closed for extended periods of time, including segments within Santa Fe Drive. Because sanitary sewer pipe is typically deep, the resulting excavation of such pipe and the surface area disturbance is large.

COUNCIL'S STRATEGIC OUTCOME GOALS

- Sustainable Community with Natural Beauty by raising overall safety and reducing environmental risk.
- The project addresses needs identified in the sewer master plan recently completed.
- High Quality Governance by utilizing the developed asset inventory, addressing identified risks, and implementing capital projects for city infrastructure.



CONCLUSION

 Staff strongly recommends approval of the construction contract for this project



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