

**City of Culver City, California  
Agenda Item Report**

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| Meeting Date: 05/02/11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Item Number: <u>C-5</u>                                                                |  |
| <b>CITY COUNCIL AGENDA ITEM: Approval of Final Plans and Specifications and Authorization to Publish a Notice Inviting Bids for Sewer Main Lining Rehabilitation Project (Phase II), P-906.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                        |  |
| Contact Person/Dept.: Hong Wang/PW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Phone Number: 310-253-5604                                                             |  |
| Fiscal Impact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | General Fund: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>      |  |
| Public Hearing: <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Action Item: <input type="checkbox"/> Attachments: <input checked="" type="checkbox"/> |  |
| Commission Action Required: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Date: _____                                                                            |  |
| Public Notification: (E-Mail) Agenda and Meetings – City Council (04/27/11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                        |  |
| Department Approval:<br>Charles D. Herbertson (04/20/11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | City Attorney Approval:<br>Carol Schwab (by H. Baker) (04/27/11)                       |  |
| Chief Financial Officer Review:<br>Jeff Muir (by K. Marsden) (04/27/11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | City Manager Approval:<br>John M. Nachbar (04/27/11)                                   |  |
| <p><b><u>RECOMMENDATION:</u></b></p> <p>Staff recommends the City Council approve the final plans and specifications and authorize the publication of a notice inviting bids for construction of the Sewer Main Lining Rehabilitation Project (Phase II), P-906.</p> <p><b><u>BACKGROUND:</u></b></p> <p>Since 2009, Public Works has been utilizing trenchless technology to rehabilitate sewer mains with minimum impacts on private properties. Most of the sewer mains contained in this project are located along the rear property line easements where they are difficult to access and maintain. Constructed between the 1920's and the 1940's, these aging sewer mains exhibit root damage, cracked pipes, protruding laterals, and offset joints. Approximately 7.5 miles (out of the total 90 miles of city sewer mains) will be rehabilitated with this phase of the sewer lining project.</p> <p><b><u>DISCUSSION:</u></b></p> <p>Engineering staff has completed the design and preparation of the plans and specifications for the sewer rehabilitation projects. The City's Information Technology GIS Division staff assisted with the preparation of the plan sheets. A peer review was conducted by Dudek, on-call engineering consultant.</p> <p>After the study of the latest Closed Circuit Television (CCTV) inspection of the existing sewer mains, it was determined that the sewer pipes to be rehabilitated with</p> |  |                                                                                        |  |
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this project have structural integrity, though, there are signs of root damage and joint problems. Instead of excavation and replacement of the existing sewer main, the cured-in-place lining process provides for the insertion of a special lining material inside the existing pipe at a much lower cost and much less disruption to the public than sewer line replacement. The new liner creates a watertight, smooth surface that is structurally sound and long lasting within the existing sewer main pipe.

In addition, based on review of the sewer videos, approximately 30% of the sewer laterals have various degrees of root intrusion with some of the roots extending into to City's sewer main lines. As part of this project, the private sewer laterals with root intrusion at the sewer main connection will receive a 6 to 8 inches deep "top hat" trenchless liner. The liner will then prevent roots from entering the connection point between the laterals and the City's sewer line and thereby reduce the incidence of root intrusion from laterals into the City's sewer main. However, the homeowner is still responsible for roots and breaks within their private sewer lateral as per the City Code.

Final construction plans and specifications are available at the City Clerk's office for public review.

**FISCAL ANALYSIS:**

This project has sufficient funds in the Sewer Enterprise Fund capital project budget 20400906.

**ATTACHMENTS:**

1. Location maps

**MOTIONS:**

That the City Council:

Approve the final plans and specifications and authorize publication of a notice inviting bids for construction of the Sewer Main Lining Rehabilitation Project (Phase II), P-906.