Council Agenda # 4F
Meeting of March 28, 2006

Staff Report

RESOLUTION APPROVING PLANS AND SPECIFICATIONS, AUTHORIZING ADVERTISEMENT FOR SEALED BIDS, APPROVING AWARD OF CONTRACT TO THE LOWEST RESPONSIBLE BIDDER FOR AN AMOUNT NOT TO EXCEED $216,931, APPROVING A CONSTRUCTION CONTINGENCY NOT TO EXCEED $21,693, AND AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT FOR 27-INCH DAIRY LANE SANITARY SEWER LINE REHABILITATION, CITY CONTRACT NUMBER 474

Honorable Mayor and Council Members:

Summary
The Department of Public Works staff requests City Council approval for 27-inch Dairy Lane Sanitary Sewer Line Rehabilitation plans and specifications and also request authorization to advertise this project for bid. The engineer's estimate for this project is $216,931. Staff also requests approval of a construction contingency equal to ten percent of the contract award.

Background
The City of Belmont conducted a video inspection of the 27-inch reinforced concrete pipe (RCP) located on Dairy Lane. The video revealed severe corrosion of the concrete pipe with a significant loss of cement from the concrete pipe wall matrix. The aggregate and the reinforcing steel in the concrete are exposed in the top half of the pipe, which is indicative of hydrogen sulfide atmosphere. Hydrogen sulfide is a normal decomposition product of raw sewage. It is anticipated that enough wall thickness has been lost that the sewer may be subjected to failure and potential collapse if it is not repaired soon.

Discussion
In April 2005, City staff conducted a selection process to choose consultant services to evaluate the condition of the 27-inch collector and discharge sewer main running from Ralston Avenue to Harbor Boulevard and across Highway 101 to the South Bayside Systems Authority pumping station. The object of the evaluation was to perform capacity analysis, review the condition of the pipe, assess the extent of corrosion, develop methods of repair, and prepare plans and specifications under the direction of the City's project manager. RBF Consulting was selected to work on this project based on the firm's qualifications and experience.

It was determined that two segments of the 27-inch RCP located between the south of Ralston

Avenue and O'Neill Avenue have severe corrosion and need to be rehabilitated. The remaining sewer line from O'Neill to the Shoreway Lift Station appears to be in satisfactory condition and it is anticipated that it will provide many more years of service. However, the entire sewer needs to be cleaned of debris. Department of Public Works will establish a regular cleaning program to ensure continued service.

The consultant recommended two methods to rehabilitate the pipe:

1. Cured-In-Place (CIPP) lining using resin-impregnated fiber
2. Folded and Re-formed PVC lining

Lining original pipes with thin PVC plastic or resin-impregnated fiber is used to rehabilitate sewer lines where the existing pipe is still holding its shape, but has cracks, open joints and root intrusion. The pipe is cleaned and televised prior to lining and any laterals protruding into the interior of the sewer main are cut off to make a smooth surface for the liner. For installation, the liner material is heated to give it sufficient flexibility and pressurized while warm to form it tightly against the existing clay pipe. Once cooled, it sets to a rigid, strong, smooth lining that stabilizes further deterioration of the clay pipe and generally improves the flow characteristic and capacity of the sewer main. Lateral connections are reopened by grinding out the liner wall. The liner has an expected useful life of 50 years or more, so the lined sewers should not need further rehabilitation for many decades. Approximately 800 linear feet of sewer trunk line will be lined as part of City Contract Number 474.

The proposed bid opening date is April 26, 2006. If a contract can be awarded, construction should start in June and end in August 2006, depending on weather.

General Plan/Vision Statement

No impact.

Fiscal Impact

The engineer's estimated cost for City Contract Number 474 is $216,931. Funding will be obtained from the CIP FY 2005/06 Project Accounts 503-4326-7077-9030. Another $21,693 will be reserved as a 10 percent construction contingency to be approved for use as needed by the City Manager and Finance Director to address unforeseen conditions that would prevent contract completion.

This work is funded by the second sewer bond sale approved in 2006. The approximate expenditures that affect bond balance are the following:

Beginning Bond Balance	$7,500,000
CCN 472 Pipelining Project (approved 03/14/06)	$ 696,000
CCN 474 Dairy Lane Project	$ 238,600

Uncommitted	$6,565,400

Public Contact
Publication and posting of City Council agenda.

Recommendation
It is recommended that the City Council approve City Contract Number 474 – 27-inch Dairy Lane Sanitary Sewer Line Rehabilitation contract plans and specifications. It is further recommended that the City Council authorize advertising for sealed bids from qualified construction contractors and approve award of contract to the lowest responsible bidder for an amount not to exceed $216,931. Staff also request approval of a construction contingency equal to ten percent of the contract award. Assuming acceptable bids are received, it is recommended that Council authorize the City Manager to execute a contract with the lowest responsible bidder.

Alternatives
1. Take no action.
2. Refer back to staff for further information.

Attachments

A. Resolution

Respectfully submitted,

Bozhena Palatnik Assistant Civil Engineer Phone: (650) 595-7463 bpalatnik@belmont.gov	Raymond E. Davis III, PE, PTOE Director of Public Works	Jack R. Crist Interim City Manager

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT APPROVING PLANS AND SPECIFICATIONS, AUTHORIZING ADVERTISEMENT FOR SEALED BIDS, APPROVING AWARD OF CONTRACT TO THE LOWEST RESPONSIBLE BIDDER FOR AN AMOUNT NOT TO EXCEED $216,931, APPROVING A CONSTRUCTION CONTINGENCY NOT TO EXCEED $21,693, AND AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT FOR 27-INCH DAIRY LANE SANITARY SEWER LINE REHABILITATION, CITY CONTRACT NUMBER 474

WHEREAS, as part of the Citywide sanitary sewer rehabilitation program, the 27-inch reinforced concrete pipe (RCP) trunk line located on Dairy Lane is scheduled for rehabilitation; and,

WHEREAS, in April 2005 the City of Belmont had solicited proposals from the qualified engineering firms to perform capacity analysis, evaluate the condition of the pipe, assess the extent of corrosion, develop methods of repair and prepare plans and specifications; and,

WHEREAS, RBF Consulting was selected based on qualifications and experience to conduct the project; and,

WHEREAS, RBF Consulting determined that two segments of the 27-inch RCP located between the south of Ralston Avenue and O'Neill Avenue have severe corrosion and need to be rehabilitated; and,

WHEREAS, RBF Consulting has prepared plans and specifications and Public Works engineering has reviewed the plans and specifications for this work; and,

WHEREAS, Sewer Enterprise Funds have been budgeted in Fiscal Year 2006 for this project.

NOW, THEREFORE, BE IT RESOLVED:

1. The City Council approves City Contract Number 474 plans and specifications.
2. The City Council authorizes advertisement for sealed bids for this work.
3. The City Council approves award of contract to the lowest responsible bidder for an amount not to exceed $216,931 and approves a 10 percent construction contingency not to exceed $21,693.
4. The City Council authorizes the City Manager to execute a contract with the lowest responsible bidder.
5. Funding shall be from the FY2005/06 budget, project account 503-4326-7077-9030.

* *

I hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of Belmont at a regular meeting thereof held on March 28, 2006 by the following vote:

AYES, COUNCILMEMBERS: _____

NOES, COUNCILMEMBERS: _____

ABSTAIN, COUNCILMEMBERS: _____

ABSENT, COUNCILMEMBERS: _____

_____
CLERK of the City of Belmont

APPROVED:

_____
MAYOR of the City of Belmont