

City of Culver City, California
City Council Agenda Item Report

Meeting Date: 5/22/06		Item Number: <u>A-4</u>
AGENDA ITEM: Consideration to Approve a Budget Amendment and a Professional Services Agreement with Geo-Environmental, Inc. for the final design of slope repairs at the rear of the properties located at 10745, 10747, and 10751 Cranks Road and 5722 and 5724 Tellefson Road		
Contact Person/Dept.: Charles Herbertson/PW and Mate Gaspar/PW		Phone Number: 310.253.5635 and 310.253.5602
Fiscal Impact: Yes ☒ No ☐		General Fund: Yes ☒ No ☐
Public Hearing: ☐	Action Item: ☒	Attachments: ☒
Public Notification: Master Notification List emailed on May 17 and residents of 10745, 10747, and 10751 Cranks Road and 5722 and 5724 Tellefson Road and their respective attorneys were notified by e-mail on May 17		
Department Approval: Charles D. Herbertson 5/15/06		CAO Approval: Jerry Fulwood 5/18/06
City Controller Approval: Marlee Chang 5/16/06		

RECOMMENDATION:

Staff recommends that the City Council approve a budget amendment of \$44,904 and a professional services agreement with Geo-Environmental, Inc. for the final design of the slope repair behind the properties located at 10745, 10747, and 10751 Cranks Road and 5722 and 5724 Tellefson Road.

A four-fifths affirmative vote is required to amend the budget.

BACKGROUND:

On February 12, 2005 a landslide occurred on the slope in the rear of the properties located at 10747 and 10751 Cranks Road and 5724 Tellefson Road. After consultation with a geotechnical firm, the Public Works Department and Building and Safety Division deemed five properties (including 10745 Cranks Road and 5722 Tellefson Road) to be unsafe for human habitation and all were 'red-tagged.' Also due to the imminent threat of further sliding, Tellefson Road was closed between Cranks Road and Bernardo Road.

Portions of this slope were subjected to landslides in the 1960's, 1978, late 1980's, and in 1993. There have been several variations of repairs conducted throughout the years that were funded by the Federal Emergency Management Agency (FEMA) and the property owners. The most recent repairs to the slope occurred in 1993 when a soldier-beam pile system consisting of three walls, a series of terraces, and concrete gunite were installed.

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The failure occurred under the concrete gunite that was placed in the rear properties at 10749 and 10751 Cranks Road and 5724 Tellefson Road. The slope further east at the rear properties of 10745 Cranks Road and 5722 Tellefson Road did not fail; however, it was the opinion of the City's consulting geotechnical engineer that there was an imminent threat for a slide to occur there.

March 2005 to June 2005

There were several meetings held with FEMA representatives and the property owners regarding repairing the slope. FEMA stated that the February 12, 2005 event was included under the federal emergency declaration of the January 2005 storms. Also, they recommended that an extension be filed to ensure that the window of receiving possible federal reimbursement for the repair work did not expire after the first 6 months following the date of the disaster declaration (August 4, 2005). Staff filed a twelve month extension to complete the repair work. At the same time it was determined that a geotechnical and geologic investigation of the slope should be conducted.

On June 10, 2005, the City Council approved a budget amendment of \$35,000 and a professional services agreement with Zeiser Kling Consultants, Inc. for the geotechnical and geologic investigation of the slope behind the five properties

The work consisted of the following:

1. Research existing geotechnical reports, geologic maps and reports, aerial photographs, and meetings with staff.
2. Borings to a maximum depth of 80 feet.
3. Laboratory testing to determine pertinent engineering properties.
4. Engineering and geologic analyses to develop a geologic map and cross sections for input into slope stability analyses and develop design parameters for a soldier pile retaining system similar to existing walls.
5. Final Report and preparation of an RFP.

June 2005 to November 2005

After two months of negotiations between the City and two property owners to allow the contractor access to their private properties, exploratory drilling was performed in August 2005 and a draft report was submitted to the City by its geotechnical

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consultant on November 27, 2005. The report revealed that the main cause of the slope failure was loss of friction between soil strata as a result of percolation of large amounts of rain water during record storms in December 2004 and January 2005. The report recommended that a three soldier pile wall system be constructed, (similar to the system of walls constructed on the adjacent slope in 1993), and extended across the properties at 10745 Cranks Road and 5722 Tellefson Road.

Meanwhile, staff continued to meet with FEMA and OES representatives regarding the subject matter. FEMA's review of the draft geotechnical report resulted in questions regarding the reason for extending the repair across the slope where there was no failure. Since the initial slope failure, the slope has not failed, however, the Public Works Director/City Engineer and Building Official continue to keep these two properties red tagged due to a possibility of failure and as recommended by Zeiser-Kling. The response to FEMA was prepared by Zeiser-Kling and in summary stated that the adjacent slope experienced headward enlargement or escarpment due the adjacent slope failure, as evidenced by a growing widening cracks on the property line walls between 10743, 10745 and 10747 Cranks Road. Also, Zeiser Kling conducted a slope stability calculation and determined that the slope behind the properties at 10745 Cranks Road and 5722 Tellefson Road has a factor of safety of less than 1.5 and with an elevated groundwater level, would reduce to less than 1.0, similar to the condition of the adjacent slope prior to failure. In addition it was concluded that the slope is experiencing ongoing creep.

December 2005 to May 2005

Staff requested Zeiser Kling to submit a proposal for the final design of the soldier pile system and submit a construction cost estimate. Zeiser-Kling, along with their civil engineering sub consultant, Fuscoe Engineering of Irvine, California, submitted a \$425,000 cost proposal for the final design of slope repair. Also, they estimated that the slope repair will cost about \$1 million.

Because the proposal for design from Zeiser-Kling was much more costly than anticipated, staff decided to request multiple proposals and issued a Request for Proposal (RFP) to fifteen geotechnical design firms for the final design of the slope repair. Only two firms responded, David Lee Associates and Geo-Environmental, Inc. The other design firms were contacted and they declined to submit a proposal due to their current full workload.

Upon review, David Lee Associate's proposal was determined to be non-responsive because it did not include a final design of the repair and focused only on the geotechnical analysis. Geo-Environmental's proposal was found to be responsive and complete and they provided a total cost proposal of \$118,000. The proposal included material testing and inspection services during construction in the amount

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of \$30,080. Staff is recommending that this portion of the work be awarded at a later date to coincide with the actual construction of the repair. With this portion of the work removed from the contract, the final total cost proposal is \$88,550.

Under the current project worksheet approved by FEMA, the design is required to be completed by August 3, 2006. Therefore, it is important to move ahead and award a contract to complete the final design.

FISCAL ANALYSIS:

It is recommended that funding for this work be allocated from unreserved General Funds to Other Contractual Services 42300867. **A 4/5th vote is required to approve this budget allocation.**

FEMA has approved \$82,150 as eligible reimbursement costs for design of the repair of the slope failure. FEMA will fund \$61,613.00 or 75% of the eligible cost, and State OES will cover \$15,403.00, approximately 19%. In addition to the reimbursements just discussed, FEMA and OES have already paid to the City \$3,780.00 as an administrative allowance for the design process.

The City has already expended \$6,000 and \$32,150 for the preliminary investigations and analysis by Group Delta Consultants and Zeiser-Kling, respectively. The remaining total of FEMA/OES eligible reimbursement funds available is \$42,646. An additional \$45,904.00 is required to fund the Geo-Environmental, Inc. contract. The City potentially would need to absorb this expenditure if an alternative source of funding is not identified. Staff will be working with FEMA and OES officials in an attempt to get the approved amount of funding for design services increased through an amendment to the FEMA approved Project Worksheet. Additionally, a future agreement with the affected homeowners may include provisions for paying for some or all of the shortfalls in funding for both design and construction of the repairs.

Future Repair Costs:

The construction of the repairs has also been approved by FEMA and OES for reimbursement in the amount of \$885,413.00. FEMA/OES anticipated reimbursements, based on the percentages discussed above, are approximately \$832,280.00. FEMA/OES have also already paid to the City \$39,767.00 as an administrative allowance for the construction process. The City potentially would again need to absorb an additional expenditure if an alternative source of funding is not identified.

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Also it should be noted that the actual cost of construction has not yet been identified and it is therefore possible that the construction costs will exceed the amount currently allocated by FEMA. Additionally, FEMA's approved scope of work for the project currently differs from the scope of work that the City recommends. For both of these reasons, there exists the potential for a significant shortfall in funding for the construction phase. However, FEMA has left the door open for a future revision to the Project Worksheet for the repair work to both increase funding and to expand the scope of work. This will be discussed with FEMA following completion of the design as FEMA has indicated that they cannot make that determination without a completed design. Also, as stated earlier, in working out the agreement with the property owners, the possibility exists for the property owners to pay a portion of or the entire construction cost shortfall.

ATTACHMENT:

1. Proposal from Geo-Environmental Inc.

MOTION:

That the City Council:

1. Approve a professional services agreement with Geo-Environmental, Inc. for the final design of the slope repair behind the properties located at 10745, 10749, and 10751 Cranks Road and 5722 and 5724 Tellefson Road.
2. Approve a budget amendment to transfer \$45,904 from unreserved general funds to Other Contractual Services 10160500.619800.
3. Authorize the Public Works Director/City Engineer to approve an additional change order in the amount of \$30,080 for material testing and inspection service to Geo-Environmental, Inc., during the time of construction.

A 4/5-budget vote is required to approve the budget amendment.