

CITY OF HAYWARD
AGENDA REPORT

AGENDA DATE 09/17/02

AGENDA ITEM 5

WORK SESSION ITEM _____

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Conversion of Digester No. 3 to Primary Mode and Repair of Digester No. 2 Dome; Approval of Addenda No. 1, No. 2, and No. 3; Award of Construction Contract; and Authorization for Additional Appropriation from the Water Pollution Control Replacement Fund

RECOMMENDATION:

It is recommended that the City Council adopt the attached resolutions which:

1. Approve Addenda No. 1, No. 2, and No. 3 that make minor revisions to the plans and specifications;
2. Award the construction contract to Albay Construction, in the amount of \$2,473,000.
3. Authorize an additional appropriation of \$188,000 from the Water Pollution Control Replacement Fund to complete the project.

BACKGROUND:

The Water Pollution Control Facility (WPCF) has three digesters; only two provide primary treatment of sludge (produce methane gas and convert solids to simpler forms for ultimate disposal). The third digester, constructed in 1954, does not operate in primary mode. The attendant heat exchange and mixing systems deteriorated over time, becoming marginally functional, and the digester has served as a sludge storage tank (secondary digester) since 1990. Sludge generation at the WPCF has increased to the point where two digesters can no longer adequately treat the amount of sludge being generated. Three primary digesters are now needed to allow operational flexibility and backup when one digester is taken off line. Providing new heat exchange and mixing systems will convert Digester No. 3 to the primary mode, thereby providing three primary digesters at the WPCF.

Digester No. 2, constructed in 1961, has, over time, developed fine cracks in its reinforced concrete dome roof. Methane gas, produced during the digestion process, now escapes through these cracks. Roof repair will eliminate the problem, improve the functionality, and prolong the service life of the digester roof.

The conversion and dome repair are categorically exempt from environmental review under the California Environmental Quality Act (CEQA). The Public Resources Code states that CEQA

does not apply to modifications of Class I Existing Facilities, e.g., existing facilities of publicly-owned utilities used to provide public utility services.

On July 2, 2002, the City Council approved the plans and specifications for the subject project and called for bids to be received on August 13, 2002. Staff received four bids ranging from a low bid of \$2,473,000 to a high bid of \$3,052,000. The low bid, submitted by Albay Construction, was 18 percent higher than the engineer's estimate of \$2,100,000 for the project. The second low bid was 19 percent higher than the engineer's estimate. The consulting engineer who designed the project believes he underestimated the complexity of the work. Most of the differential was related to demolition within a small building and inside of and on top of the Digester No. 3 tank. The Engineer appears to also not have accounted for the congested layout of the wastewater treatment plant that restricts access for work related activities.

Due to the fact that four bids were received and that there is a very small difference between the low and the second low bid, staff believes that the low bid is reasonable and the project should be awarded.

Staff had established a combined goal of 10 percent for Disadvantaged Business Enterprise (DBE) and Women Owned Business Enterprise (WBE) participation for this project. The low bidder is proposing to use 8.1 percent combined DBE/WBE subcontract participation. This represents about 40 percent of the total proposed subcontracts. Documentation submitted by Albay Construction identifies that it made a good faith effort to secure DBE/WBE subcontractors.

PROJECT COST:

The estimated costs of the project are as follows:

| | |
|--|--------------------|
| Design and administration | \$ 640,000 |
| Construction | 2,473,000 |
| Construction administration and Inspection | 80,000 |
| Total | <u>\$3,193,000</u> |

FUNDING:

The recently approved 2002-03 Capital Improvement Program includes \$3,005,000 in the Water Pollution Control Replacement Fund for this work, funded as three separate projects. An additional \$188,000 is available for appropriation from this fund.

SCHEDULE:

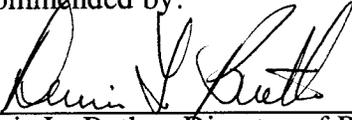
| | |
|-----------------------------|--------------------|
| Award construction contract | September 17, 2002 |
| Begin Construction | October 18, 2002 |
| Complete construction | April 30, 2003 |

Prepared by:



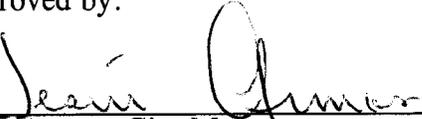
Alex Ameri, Deputy Director of Public Works

Recommended by:



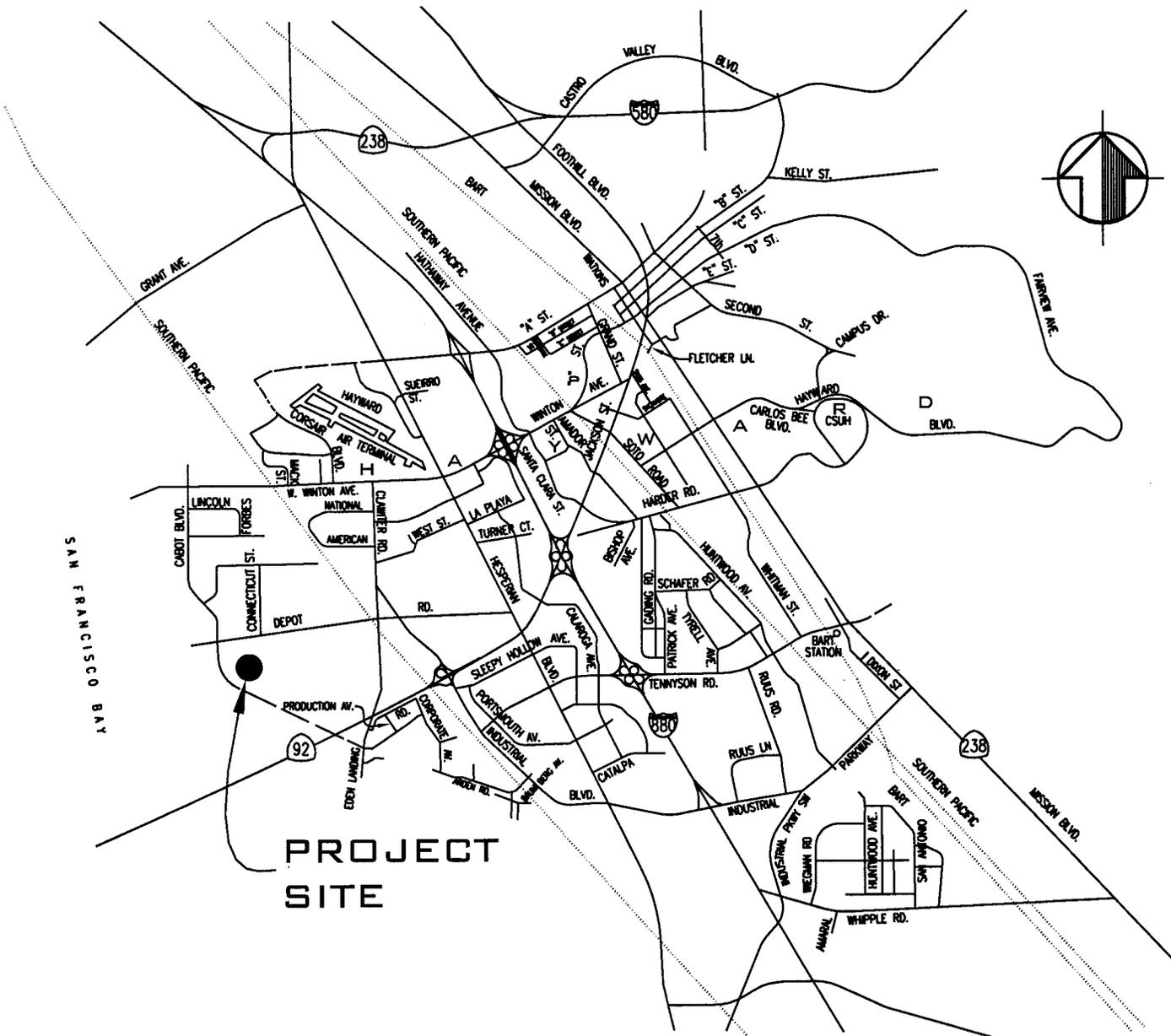
Dennis L. Butler, Director of Public Works

Approved by:



Jesús Armas, City Manager

Attachments: Exhibit A: Project Location Map
Exhibit B: Summary of Bids



**PROJECT
SITE**

**EXHIBIT A
PROJECT LOCATION**

CITY OF HAYWARD
 WPCF DIGESTER NO. 3 CONVERSION
 PROJECT NO(S). 7645
 BIDS OPENED: AUGUST 20, 2002

(NUMBER OF BIDS RECEIVED - 4)

| ITEM | QUANTITY | UNIT | DESCRIPTION | ENGINEER'S ESTIMATE | | ALBAY CONSTRUCTION COMPANY | | D.W. NICHOLSON CORPORATION | | SCOTT CO. OF CALIFORNIA | |
|------|----------|------|---|---------------------|---------------------|----------------------------|---------------------|----------------------------|---------------------|-------------------------|---------------------|
| | | | | UNIT PRICE | TOTAL | UNIT PRICE | TOTAL | UNIT PRICE | TOTAL | UNIT PRICE | TOTAL |
| | | | | | | | | | | | |
| 1 | 1 | LS | MOBILIZATION | 80,000.00 | 80,000.00 | 82,000.00 | 82,000.00 | 68,000.00 | 68,000.00 | 100,000.00 | 100,000.00 |
| 2 | 1 | LS | EARTHWORK | 67,000.00 | 67,000.00 | 48,000.00 | 48,000.00 | 75,000.00 | 75,000.00 | 19,000.00 | 19,000.00 |
| 3 | 1 | LS | PAVING AND GRADING | 10,000.00 | 10,000.00 | 33,000.00 | 33,000.00 | 60,000.00 | 60,000.00 | 25,000.00 | 25,000.00 |
| 4 | 1 | LS | BOILER BUILDING | 150,000.00 | 150,000.00 | 529,000.00 | 529,000.00 | 423,000.00 | 423,000.00 | 624,000.00 | 624,000.00 |
| 5 | 1 | LS | DIGESTER NO. 3 EQUIPMENT ROOM | 28,000.00 | 28,000.00 | 104,000.00 | 104,000.00 | 112,000.00 | 112,000.00 | 160,000.00 | 160,000.00 |
| 6 | 1 | LS | ELECTRICAL/INSTRUMENTATION | 250,000.00 | 250,000.00 | 212,000.00 | 212,000.00 | 255,000.00 | 255,000.00 | 253,000.00 | 253,000.00 |
| 7 | 1 | LS | PUMPS | 200,000.00 | 200,000.00 | 160,000.00 | 160,000.00 | 172,000.00 | 172,000.00 | 207,000.00 | 207,000.00 |
| 8 | 1 | LS | DIGESTER BOILER, SLUDGE HEAT EXCHANGER, AND ACCESSORIES | 260,000.00 | 260,000.00 | 156,000.00 | 156,000.00 | 150,000.00 | 150,000.00 | 213,000.00 | 213,000.00 |
| 9 | 1 | LS | DIGESTER NO. 3 DEMO AND MODIFICATIONS | 150,000.00 | 150,000.00 | 478,000.00 | 478,000.00 | 524,000.00 | 524,000.00 | 632,000.00 | 632,000.00 |
| 10 | 1 | LS | DIGESTER NO. 2 COATING | 180,000.00 | 180,000.00 | 141,000.00 | 141,000.00 | 186,000.00 | 186,000.00 | 102,000.00 | 102,000.00 |
| 11 | 1 | LS | YARD PIPING | 317,000.00 | 317,000.00 | 113,000.00 | 113,000.00 | 92,000.00 | 92,000.00 | 147,000.00 | 147,000.00 |
| 12 | 1 | LS | TEMPORARY PIPING INSTALLATION | 22,500.00 | 22,500.00 | 37,000.00 | 37,000.00 | 37,000.00 | 37,000.00 | 110,000.00 | 110,000.00 |
| 13A | 1,000 | LF | DIGESTER NO. 3 WALL REPAIR | 15.00 | 15,000.00 | 41.00 | 41,000.00 | 35.00 | 35,000.00 | 38.00 | 38,000.00 |
| 13B | 500 | LS | DIGESTER NO. 3 ROOF REPAIR | 15.00 | 7,500.00 | 62.00 | 31,000.00 | 39.00 | 19,500.00 | 38.00 | 19,000.00 |
| 14 | 1 | LS | MISCELLANEOUS ITEMS | 113,000.00 | 113,000.00 | 58,000.00 | 58,000.00 | 35,000.00 | 35,000.00 | 94,000.00 | 94,000.00 |
| 15 | 1 | LS | ADMINISTRATIVE CHANGE ORDERS | 250,000.00 | 250,000.00 | 250,000.00 | 250,000.00 | 250,000.00 | 250,000.00 | 250,000.00 | 250,000.00 |
| | | | TOTAL | | 2,100,000.00 | | 2,473,000.00 | | 2,493,500.00 | | 2,993,000.00 |

EXHIBIT B
 SUMMARY OF BIDS

CITY OF HAYWARD
 WPCF DIGESTER NO. 3 CONVERSION
 PROJECT NO(S). 7645
 BIDS OPENED: AUGUST 20, 2002

(NUMBER OF BIDS RECEIVED - 4)

| BID SUMMARY | | ENGINEER'S ESTIMATE | | MONTERY MECHANICAL COMPANY | | | |
|-------------|----------|---------------------|---|----------------------------|---------------------|------------|---------------------|
| ITEM | QUANTITY | UNIT | DESCRIPTION | UNIT PRICE | TOTAL | UNIT PRICE | TOTAL |
| 1 | 1 | LS | MOBILIZATION | 80,000.00 | 80,000.00 | 150,000.00 | 150,000.00 |
| 2 | 1 | LS | EARTHWORK | 67,000.00 | 67,000.00 | 180,000.00 | 180,000.00 |
| 3 | 1 | LS | PAVING AND GRADING | 10,000.00 | 10,000.00 | 30,000.00 | 30,000.00 |
| 4 | 1 | LS | BOILER BUILDING | 150,000.00 | 150,000.00 | 712,000.00 | 712,000.00 |
| 5 | 1 | LS | DIGESTER NO. 3 EQUIPMENT ROOM | 28,000.00 | 28,000.00 | 90,000.00 | 90,000.00 |
| 6 | 1 | LS | ELECTRICAL/INSTRUMENTATION | 250,000.00 | 250,000.00 | 150,000.00 | 150,000.00 |
| 7 | 1 | LS | PUMPS | 200,000.00 | 200,000.00 | 200,000.00 | 200,000.00 |
| 8 | 1 | LS | DIGESTER BOILER, SLUDGE HEAT EXCHANGER, AND ACCESSORIES | 260,000.00 | 260,000.00 | 170,000.00 | 170,000.00 |
| 9 | 1 | LS | DIGESTER NO. 3 DEMO AND MODIFICATIONS | 150,000.00 | 150,000.00 | 600,000.00 | 600,000.00 |
| 10 | 1 | LS | DIGESTER NO. 2 COATING | 180,000.00 | 180,000.00 | 150,000.00 | 150,000.00 |
| 11 | 1 | LS | YARD PIPING | 317,000.00 | 317,000.00 | 230,000.00 | 230,000.00 |
| 12 | 1 | LS | TEMPORARY PIPING INSTALLATION | 22,500.00 | 22,500.00 | 50,000.00 | 50,000.00 |
| 13A | 1,000 | LF | DIGESTER NO. 3 WALL REPAIR | 15.00 | 15,000.00 | 40.00 | 40,000.00 |
| 13B | 500 | LS | DIGESTER NO. 3 ROOF REPAIR | 15.00 | 7,500.00 | 80.00 | 40,000.00 |
| 14 | 1 | LS | MISCELLANEOUS ITEMS | 113,000.00 | 113,000.00 | 10,000.00 | 10,000.00 |
| 15 | 1 | LS | ADMINISTRATIVE CHANGE ORDERS | 250,000.00 | 250,000.00 | 250,000.00 | 250,000.00 |
| | | | TOTAL | | 2,100,000.00 | | 3,052,000.00 |

MONTERY MECHANICAL COMPANY
 8275 SAN LEANDRO STREET
 OAKLAND CA 94621
 (510) 632-3173 PHONE
 FAX

DRAFT

HAYWARD CITY COUNCIL

RESOLUTION NO. _____

Introduced by Council Member _____

*me
9/12/02*

**RESOLUTION APPROVING ADDENDA NO. 1, 2 AND 3
AND AWARDING CONTRACT TO ALBAY
CONSTRUCTION FOR THE CONVERSION OF DIGESTER
NO.3 TO PRIMARY MODE AND REPAIR OF DIGESTER
NO. 2 DOME, PROJECT NO. 7645**

WHEREAS, by resolution on July 2, 2002, the City Council approved the plans and specifications for the Conversion of Digester No. 3 to Primary Mode and Repair of Digester No. 2 Dome Project, Project No. 7645 and called for bids to be received on August 13, 2002; and

WHEREAS, on August 13, 2002, four bids were received for the Project and Albay Construction submitted the low bid in the amount of \$2,473,000, which is 15 percent above the Engineer's Estimate of \$2,100,000; and

WHEREAS, this project is categorically exempt from environmental review under the California Environmental Quality Act (CEQA)

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Hayward that Albay Construction is hereby awarded the contract for the Conversion of Digester No. 3 to Primary Mode and Repair of Digester No. 2 Dome Project, Project No. 7645, in accordance with the plans and specifications adopted therefore and on file in the office of the City Clerk of the City of Hayward at and for the price named and stated in the bid of the hereinabove specified bidder, and all other bids are hereby rejected.

BE IT FURTHER RESOLVED that the City Manager is hereby authorized and directed to negotiate and execute the contract with Albay Construction for and on behalf of the City of Hayward, in a form to be approved by the City Attorney.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2002

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:

MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward

HAYWARD CITY COUNCIL

RESOLUTION NO. _____

Introduced by Council Member _____

*mac
9/12/02*

RESOLUTION AMENDING RESOLUTION 02-087, AS AMENDED, THE BUDGET RESOLUTION FOR CAPITAL IMPROVEMENT PROJECTS FOR FISCAL YEAR 2002-03, RELATING TO AN APPROPRIATION OF FUNDS FOR THE CONVERSION OF DIGESTER NO. 3 TO PRIMARY MODE AND REPAIR OF DIGESTER NO. 2 DOME PROJECT, PROJECT NO. 7645

BE IT RESOLVED by the City Council of the City of Hayward that Resolution No. 02-087, as amended, the Budget Resolution for Capital Projects for fiscal year 2002-03, is hereby amended by approving an appropriation of \$188,000 from the Water Pollution Control Replacement Fund (Fund 616) to the Conversion of Digester No. 3 to Primary Mode and Repair of Digester No. 2 Dome Project, Project No. 7645.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2002

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:
MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward