



APPROVED
JUL 18 2000
OFFICE OF THE
CITY CLERK

1.14

Department of Utilities
Engineering Services Division

CITY OF SACRAMENTO
CALIFORNIA

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AG 2000-103

June 30, 2000

City Council
Sacramento, California

Honorable Members in Session:

**SUBJECT: COMBINED SYSTEM REAL TIME CONTROL PILOT PROJECT (PN:XD41):
APPROVE CONSULTANT SERVICES AGREEMENT WITH BROWN AND
CALDWELL FOR AN AMOUNT NOT TO EXCEED \$153,360**

LOCATION AND COUNCIL DISTRICT:

The Combined System Real Time Control Pilot Project is in the Combined Sewer System, (Council Districts 1,3,4,5,6). See attached location map.

RECOMMENDATION:

Staff recommends that the City Council approve a Consultant Services Agreement with Brown and Caldwell for an amount not to exceed \$153,360.

CONTACT PERSON: Gary A. Reents, Engineering Services Manager, 264-1433
Rick Batha, Supervising Engineer, 264-1448

FOR COUNCIL MEETING OF: July 18, 2000

SUMMARY

A Consultant Services Agreement with Brown and Caldwell for an amount not to exceed \$153,360 has been negotiated to provide engineering services to develop a real time control pilot in order to optimize operation of storage facilities within the Combined Sewer System.



CITY OF SACRAMENTO
DEPARTMENT
OF UTILITIES

Making a Difference in Your Neighborhood

City Council
June 30, 2000

COMBINED SEWER SYSTEM REAL TIME CONTROL PILOT PROJECT (XD41)

COMMITTEE/COMMISSION ACTION

None.

BACKGROUND

The City has constructed two storage facilities in the Combined Sewer System (CSS) to receive a portion of combined sewage in low areas to relieve flooding of property and streets. These facilities are 42nd Street Storage and Med Center Regional Storage. Another facility is planned at the Union Pacific Railyard site near Sacramento City College and more are anticipated. These facilities receive sewage when pipe flows are high and threaten to outflow onto streets and then fill by flowing over a weir at a pre-set elevation. This pre-set elevation may or may not be the optimum level for a given storm, but rather is determined to accommodate a wide range of storm events.

The storage facilities can be made more effective by adjusting the weir levels, depending upon characteristics of each storm and the levels within nearby pipelines. Such adjustments in "real time" could allow the facilities to fill faster or slower depending upon actual levels and flows in the CSS and characteristics of the storm.

This project consists of developing a "Real Time Control" prototype system to design these refinements in the operation of storage facilities within the CSS. By optimizing the timing of filling the storage facilities depending upon the storm characteristics, the effectiveness of the facilities can be improved.

ENVIRONMENTAL DETERMINATION

Environmental considerations will be addressed in conjunction with any construction project which could result from this engineering effort.

FINANCIAL CONSIDERATIONS

Funding for this Consultant Services Agreement is available in the Sewer Fund Capital Improvement Program, Combined Sewer Replacement Project (414/425-500-XD41-4802). Sufficient funding is available to award this contract.

City Council
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COMBINED SEWER SYSTEM REAL TIME CONTROL PILOT PROJECT (XD41)

POLICY CONSIDERATIONS

This action is consistent with Chapter 58, Article III, Section 58.03.304 of the City Code concerning award of contracts.

ESBD

ESBD goals have been waived for this project. The work is highly specialized and no emerging or small engineering companies exist with such experience and skills. In addition, no subconsulting opportunities exist for this project, as all related work will be performed by City staff to reduce overall costs.

Respectfully submitted,



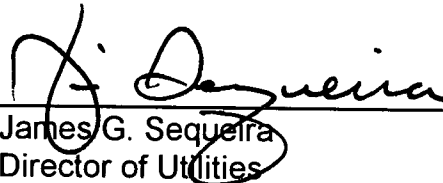
Gary A. Reents
Engineering Services Manager

RECOMMENDATION APPROVED:



Robert P. Thomas
City Manager




APPROVED:



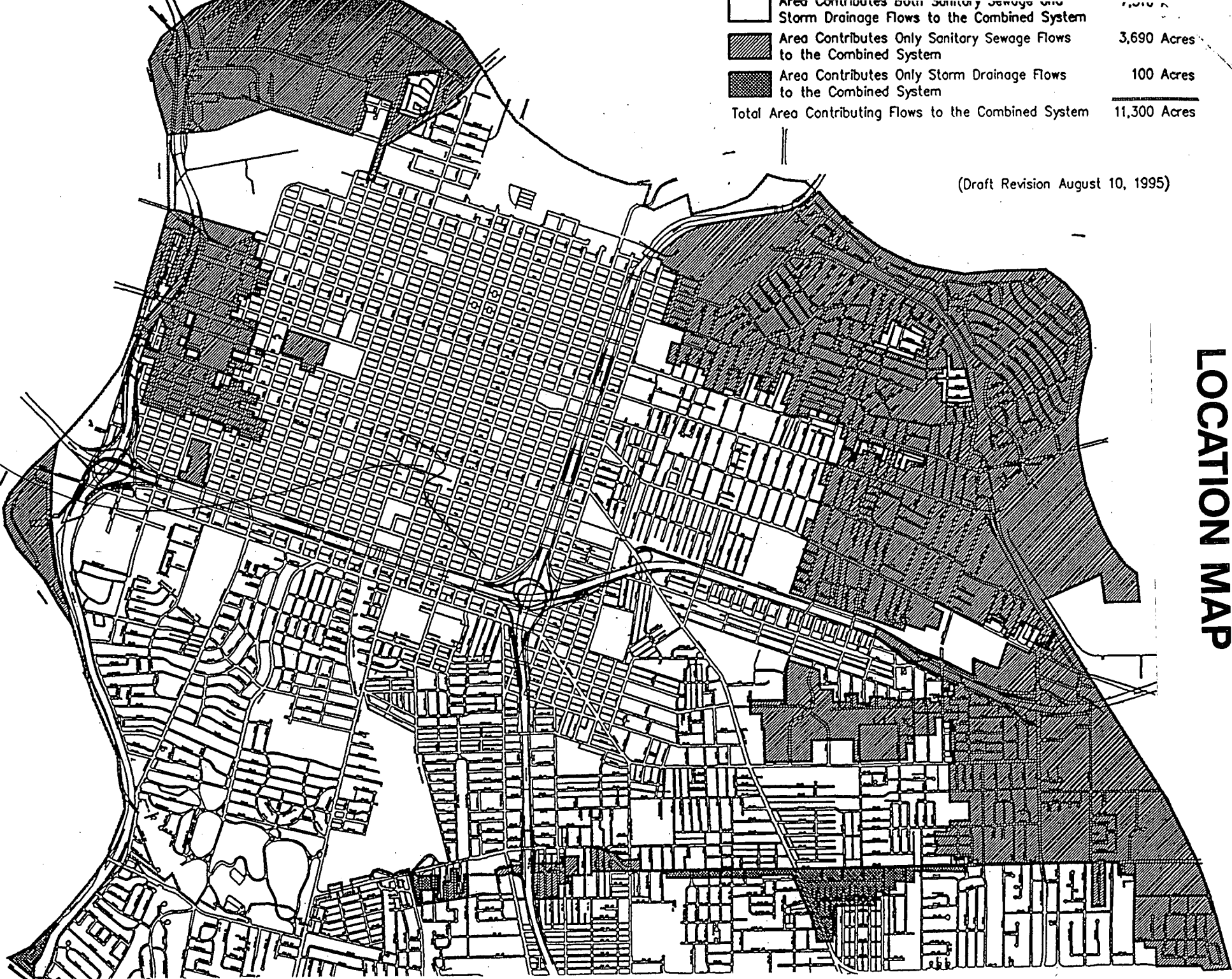
James G. Sequeira
Director of Utilities

Combined System

LOCATION MAP

	Area Contributes Both Sanitary Sewage and Storm Drainage Flows to the Combined System	7,070 Acres
	Area Contributes Only Sanitary Sewage Flows to the Combined System	3,690 Acres
	Area Contributes Only Storm Drainage Flows to the Combined System	100 Acres
Total Area Contributing Flows to the Combined System		11,300 Acres

(Draft Revision August 10, 1995)



APPROVED

JUL 18 2000

OFFICE OF THE
CITY CLERK

RESOLUTION NO. 2000-431

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF _____

RESOLUTION AUTHORIZING THE CITY MANAGER AND CITY CLERK TO EXECUTE A CONTRACT WITH BROWN AND CALDWELL FOR THE COMBINED SYSTEM REAL TIME CONTROL PILOT PROJECT (PN:XD41) FOR AN AMOUNT NOT TO EXCEED \$153,360

BE IT RESOLVED BY THE SACRAMENTO CITY COUNCIL THAT:

The City Manager and City Clerk are authorized to execute a contract with Brown and Caldwell for the Combined System Real Time Control Pilot Project (XD41) for an amount not to exceed \$153,360.

MAYOR

ATTEST:

CITY CLERK

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____