

**TOWN OF WINDSOR
AGENDA REPORT**

Town Council Meeting Date: November 1, 2006

To: Mayor and Town Council
From: Richard W. Burt, Public Works Director/Town Engineer
Subject: Professional Services Agreement
Engineering and Related Services for Ponds S and T

Recommendation to Council:

Adopt a resolution authorizing the Town Manager to execute a professional services agreement with CH2M HILL Inc ("Consultant") to provide Phase 1A and Phase 1B engineering and related services for the Ponds S and T Project, with the following provisions as described in the attached resolution:

1. Consultant shall be authorized to proceed with only Phase 1A services at this time, with authorization to proceed with Phase 1B services to occur only after further Council direction based upon review of the results of Phase 1A services, and
2. Compensation to Consultant for Phase 1A services shall not exceed \$586,000.00, with the not to exceed amount for Phase 1B services to be established at the time of Council authorization to proceed with Phase 1B services, if and when so authorized.

Background:

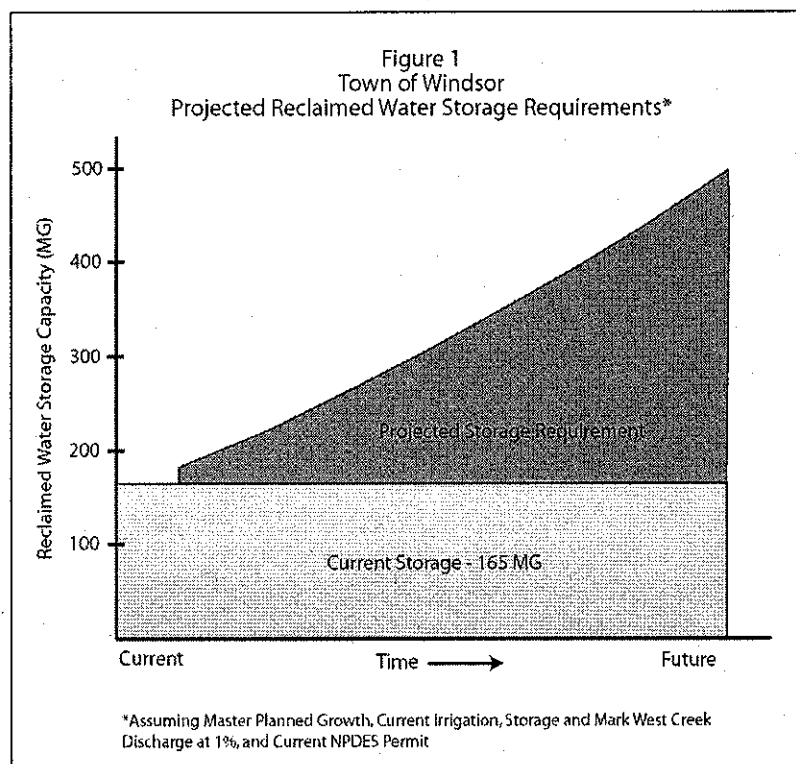
The Town is presently operating near the overall rated capacity of its water reclamation system, currently 1.6 million gallons per day (MGD) Average Dry Weather Flow (ADWF). This rated capacity is determined using a complex water balance model that accounts for all inflows to the system, the capacity of the treatment processes, the volume of storage available, the area of irrigation lands available, and the volume of water that may be discharged to Mark West Creek. The current limiting factor on rated system capacity is water reclamation storage. In order to maintain sufficient storage capacity as the Town continues to grow, additional storage must be added.

Effluent discharge capability has and will continue to have an important influence on the Town's water reclamation system capacity. The Town currently discharges up to one percent of the natural flow in Mark West Creek during the permitted discharge period. The Town monitors the water quality of the discharge of reclaimed water into the Russian River and its tributaries as required under the California Toxics Rule (CTR). The final determination of the CTR could lead to required changes to the schedule, volume, or location of the Town's effluent discharge in the future. This may mean that in order to comply with the CTR regulations, the discharge of effluent may need to be routed to a larger body of water, such as, the Russian River, or additional storage and irrigation of reclaimed water may need to be added to the system, beyond that contemplated to date.

The Town's most recently constructed reclaimed water storage pond was constructed in 1990 and is located at the corporation yard. The pond is commonly referred to as Pond 7 and is the Town's primary reclamation effluent pond. Pond 7 holds approximately 80 MG of highly treated effluent before it is distributed for irrigation and discharge. The Town's population has steadily increased

since Pond 7 was constructed, and the need for additional storage capacity has become critical. In order to maintain sufficient reclamation storage capacity for the Town's current and planned growth, additional storage must be added now.

The overall rated capacity of the Town's water reclamation system is included within the terms of the Town's NPDES Permit issued by the Regional Water Quality Control Board ("Regional Board"). This permit is up for renewal in January 2007. The Town's application for renewal of this permit for an additional five-year term has been submitted to and initially been reviewed by the Regional Board. Because storage limitations could impact overall system permit compliance within the upcoming five-year term, the Regional Board has indicated that the Town's revised permit will contain a compliance schedule for increasing reclaimed water storage and disposal capacity. Depending on the actual rate of growth of the Town and the resultant rate of growth in wastewater production, it is estimated that approximately 75 MG of new reclaimed water storage will be required over the next five years, with approximately 115 MG of new storage beyond current levels by the year 2015, and additional storage beyond that being required in the long term. Figure 1 shows the Town's projected reclaimed water storage requirement.



To assess the future reclamation needs of the Town, a master plan for reclamation management was undertaken in the late 1990's. The Water Reclamation Master Plan for Treatment, Storage and Disposal was adopted in 2001. The Town Council approved Resolution 995-01 in February 2001, which certified the Environmental Impact Report for the Water Reclamation Master Plan for Treatment, Storage and Disposal as complete and in compliance with CEQA. The Council subsequently adopted Resolution 1005-01 in March 2001, which approved a preferred program alternative, known as Alternative 4X in the Master Plan, and adopted priorities for the use of reclaimed water, related mitigation findings, a Statement of Overriding Considerations, and a Mitigation Monitoring Program.

The Master Plan's primary recommendations were to increase plant capacity to 3 million gallons per day, increase additional storage capacity by 182 million gallons (MG), increase irrigation by 495 equivalent acres, discharge up to 750,000 gallons per day into the Geysers Pipeline, and continue to discharge to Mark West Creek at up to 1% of natural stream flow.

The implementation of these recommendations was in accordance with the Council's priorities at that time. The Council also adopted priorities as a part of the Master Plan approved in 2001 for the use of the Town's reclaimed water as follows:

- Priority 1: Reuse within the Town limits or sphere of influence
- Priority 2: Agricultural reuse outside of Windsor
- Priority 3: Reuse at the Geysers
- Priority 4: Discharge to Mark West Creek

Since adoption of the Master Plan in 2001, improvements completed at the Town's Water Reclamation Treatment Plant have increased average dry weather flow treatment capacity from 1.50 million gallons per day to 2.25 million gallons per day. The Town's disposal efforts have followed Priorities 1 and 2, by continuing to expand the recycled water system within the Town and by increasing agricultural lands irrigated. These efforts are important but do not meet the total storage and disposal needs for the Town's reclamation system. Therefore, Priorities 3 and 4 were also explored, and have not yielded additional storage and discharge capacity.

Since the Water Reclamation Master Plan was adopted, staff has also pursued several options to meet the Town's storage and disposal needs. An update of the two most promising of these projects will be provided at the November 1, 2006 Town Council Meeting, and include the following:

1. Shone Farm Pond with Santa Rosa Junior College
2. Joint Use Project with Sonoma County Water Agency and City of Santa Rosa

Companion agenda reports providing more detail for these two projects have been prepared for the November 1 Council meeting. These two projects, although promising for developing reclamation storage, are multi-agency projects that will require time to negotiate and implement and are considered longer-term regional endeavors. As such, they are less directly within the control of the Town than the Ponds S and T project. Although significant recent progress has been made, the Shone Farm Pond project will not provide sufficient new storage to fully address the Town's immediate storage needs.

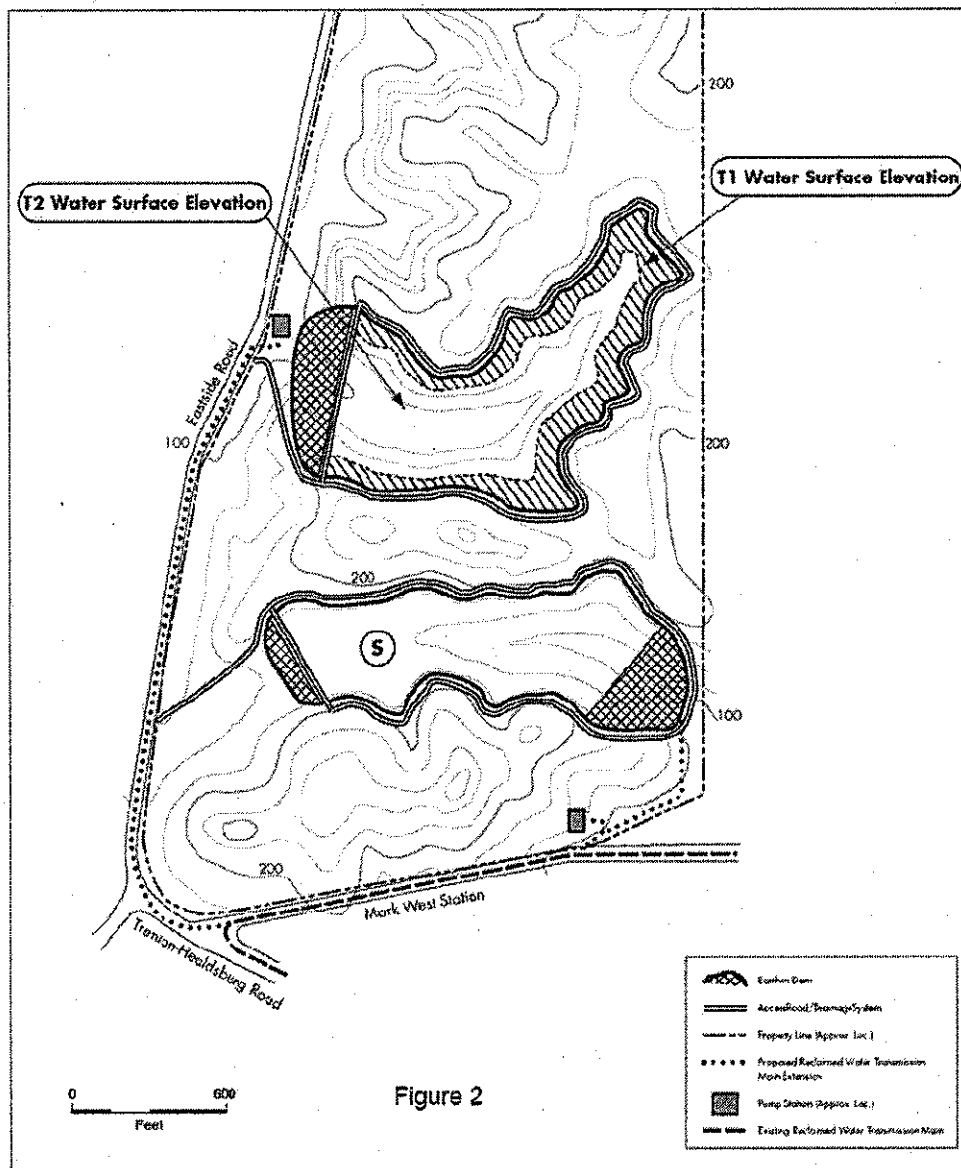
As you will learn from another companion staff report and presentation at the November 1, 2006, Town Council meeting, the City of Santa Rosa is currently implementing their Incremental Recycled Water Program. Under this program, Santa Rosa is expanding urban reuse, considering relocation of its discharge to the Russian River, adding seasonal storage, and other master planning projects. Santa Rosa may increase its use of the Geysers Project in order to meet its own increased demands and regulatory constraints. Due to these circumstances, there is no certainty at this time that Windsor can procure a dedicated share in the capacity of the Geysers Project. Discussions have continued with Santa Rosa over the past four years but to date no commitment to use the Geysers has been made. Since this particular project is still uncertain, the Town must

proceed with other water reclamation storage and disposal alternatives now, while keeping these partnering opportunities available.

One additional long-term option under consideration is relocation of the Town's Mark West Creek surface water discharge location to the Russian River, allowing a more reliable, less weather-dependent discharge capability. This too is viewed as a long-term option, not available to address immediate needs, due to the length of time to address the regulatory, environmental, and public review requirements of such a change.

Discussion:

Of the options available to the Town to fully address its immediate storage and disposal needs, the Ponds S and T Project is viewed as the most fully developed option and the option most within the control of the Town. With the adoption of the 2001 Water Reclamation Master Plan, the Council approved Ponds S and T1 and T2 (see Figure 2 below).



The sites for Ponds S and T are located on a single large, Town-owned parcel to the northeast of the intersection of Eastside Road and Trenton-Healdsburg Road. As conceptually developed, Pond S has a maximum storage capacity of 125 MG, while Pond T has two alternate configurations with storage capacities of either 146 MG (T1) or 249 MG (T2). The Windsor Water District acquired the subject property in 1990 for future use as a water reclamation storage pond site. The property is well situated relative to the location of many of the Town's irrigation customers as well as the location of the Town's existing discharge facilities at Mark West Creek.

During the Master Plan CEQA analysis, the Town Council determined that the construction of Ponds S and/or T would cause significant, unavoidable impacts through the removal of protected, native trees and cumulative long-term impacts to biological resources. In adopting the Water Reclamation EIR, the Town made and adopted a Statement of Overriding Considerations, which addressed these unavoidable significant adverse impacts. In March 2006, Town Council authorized staff to pursue preliminary engineering to better scope the Pond S and T project, to develop a construction estimate, and update the environmental documentation for the project. This preliminary work would be followed directly by the final design and construction of the Pond S and T project. The proposed project is to construct one of the pond alternatives from among alternatives S and T. Time is of the essence in securing the needed storage for the Town.

Pursuant to the Council's direction of March 2006, staff developed a Request for Proposals to select a firm to undertake preliminary engineering work at the site, including assessing the impacts to trees and other related biotic resources as part of the preliminary project evaluation, and if appropriate, to support the project through design, construction and startup. Due to the substantial magnitude and nature of the Ponds S and T project, only a limited number of firms nation-wide are qualified to undertake such a project. Proposals were solicited from nine (9) consulting firms, from whom two (2) responsive proposals were received—one from CH2M HILL Inc. of Santa Rosa, CA and the other from HDR Engineering of Folsom, CA. Both proposals were evaluated and both firms were interviewed by the Town's technical and management team. Based upon the proposals received and the interviews conducted, the CH2M HILL team was determined most qualified for this project. In addition to CH2M HILL, key team members include Geomatrix for geotechnical analysis and engineering, Carlile Macy for surveying and mapping, Data Instincts for public outreach, and John Meserve of Horticultural Associates for arboreal services.

Staff has proceeded with scope and cost negotiations with CH2M HILL. Negotiations have concluded and staff is recommending that Town Council authorize the Town Manager to execute a professional services agreement with CH2M HILL for Phase 1A and 1B engineering services for Ponds S and T, as described below and in the attached resolution.

The overall project is envisioned to unfold in several phases within the following estimated schedule and cost parameters:

Table 1. Current Program Schedule and Preliminary Cost Estimates for Ponds S&T

Ponds S&T Phase	Estimated Completion Date	Estimated Contract Cost Parameters
Town Council Awards Contract	November 2006	-
Phase 1A - Preliminary Analysis, including Geotech Feasibility	May 2007	\$586,000
Phase 1B - Preliminary Design and Environmental Documentation	March 2008	\$1,100,000
Phase 2 - Final Design and Permitting	January 2009	-
Phase 3 - Construction	Fall 2010	-
Phase 4 - Initial Filling and Startup	Summer 2011	-

Upon adoption of the attached resolution and execution of the resulting professional services agreement, the consultant will be authorized to proceed only with Phase 1A (Preliminary Analysis) services, which will include screening of different project configurations based on various criteria including environmental impact, cost, and technical feasibility. Compensation for Phase 1A services shall not exceed \$586,000.00.

The project team will report back to the Town Council in May 2007 with the results of the Phase 1A (Preliminary Analysis) services, including the following:

- recommended project configuration
- technical feasibility
- financial feasibility
- preliminary biotic data and a recommended approach for updating the project environmental documentation, including reporting on the resumption of the CEQA process.

Based upon further Town Council direction, Phase 1B (Preliminary Design) services for the selected option will be authorized at that time, including which project configuration is to be pursued and authorization of the not to exceed amount for Phase 1B services. The Town Council may also elect not to proceed further with the development of Ponds S and T at that time.

Phase 1A and Phase 1B services will be funded from previously authorized appropriations for Reclaimed Water Disposal Expansion in the adopted FY 2005/2007 Town budget.

While preliminary analysis of Ponds S and T is undertaken over the next 6 months, communication with other agencies will remain open, especially as it relates to the potential for additional storage, irrigation, or related disposal capacity. Should any one or more of these options become viable as a short-term or long-term strategy, they can be assessed in the context of progress on current priorities and benefit to the Town. Investigation of the possibility of relocating the Town's surface water discharge point to the Russian River will also continue. Staff anticipates that a professional services agreement for a feasibility analysis of this alternative will be brought forward for Council approval at the December 6, 2006, Council meeting.

Attachment: Resolution

Prepared By:



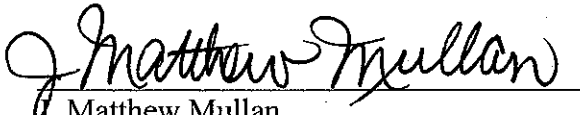
Wilhelm Daida
Assistant Town Engineer

Reviewed By:



Richard W. Burt
Public Works Director/Town Engineer

Recommended By:



J. Matthew Mullan
Town Manager

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RESOLUTION NO. _____

**A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF WINDSOR
AUTHORIZING THE TOWN MANAGER TO EXECUTE A PROFESSIONAL SERVICES
AGREEMENT WITH CH2M HILL INC TO PROVIDE ENGINEERING AND RELATED
SERVICES FOR THE PONDS S AND T PROJECT**

WHEREAS, additional reclaimed water storage or alternative disposal means are necessary to accommodate anticipated development within the Town in accordance with the Town's adopted General Plan; and

WHEREAS, the Ponds S and T project is an identified element of the Town of Windsor's adopted Water Reclamation Master Plan to provide such additional storage and such additional storage is required at this time; and

WHEREAS, proposals have been solicited and received from qualified engineering firms to provide engineering and related services for the Ponds S and T project; and

WHEREAS, two proposals were received from qualified consultant teams headed by the firms of CH2M HILL and HDR, respectively; and

WHEREAS, both consultant teams from whom proposals were received have been interviewed, and on the basis of the proposals received and the interviews conducted CH2M HILL has been determined to be the most qualified consultant to provide engineering and related services for the Ponds S and T project; and

WHEREAS, negotiations regarding scope and compensation for Phase 1A (Preliminary Analysis) and Phase 1B (Preliminary Design) services for the Ponds S and T project have been successfully concluded with the consultant team determined most qualified;

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Windsor hereby authorizes the Town Manager to execute an agreement for professional services with CH2M HILL Inc ("Consultant") for Phase 1A (Preliminary Analysis) and Phase 1B (Preliminary Design) services for the Ponds S and T project; and

BE IT FURTHER RESOLVED that Consultant shall be authorized to proceed with only Phase 1A services at this time, with authorization to proceed with Phase 1B services to occur only after further Council direction based upon review of the results of Phase 1A services, provided that the Town Council may also elect not to proceed further with the development of Pond S or T at that time; and

BE IT FURTHER RESOLVED that compensation to Consultant for Phase 1A services shall not exceed \$586,000.00, with the not to exceed amount for Phase 1B services to be established at the time of Town Council authorization to proceed with Phase 1B services, if and when so authorized; and

BE IT FURTHER RESOLVED that the Town Council authorizes the Administrative Services

Director to pay all proper claims for the performance of services provided in accordance with said agreement.

PASSED, APPROVED AND ADOPTED this _____ day of _____ 2006.

AYES:

NOES:

ABSTAIN:

ABSENT:

Mayor

ATTEST:

Town Clerk