

**MINUTES OF THE REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
ENGINEERING COMMITTEE**

May 13, 2010

A Regular Meeting of the South Orange County Wastewater Authority Engineering Committee was held on Thursday, May 13, 2010, at 8:30 a.m. at the Administrative Office located at 34156 Del Obispo Street, Dana Point, California.

The following Engineering Committee Members were present:

DAN FERONS, Santa Margarita Water District
DENNIS CAFFERTY, El Toro Water District
DR. ROBERT GUMERMAN, Moulton Niguel Water District
DAVE REBENS DORF, City of San Clemente (left 9:27 a.m.)
ERIC BAUMAN, City of San Juan Capistrano
MIKE DUNBAR, South Coast Water District (arrived 8:37 a.m.)

Also Present:

BRIAN PECK, SOCWA Director of Engineering
CHRISTINE HUTTON, Administrative Assistant
MIKE WILSON, Assistant G.M. /Dir. of Operations (arrived 9:25 a.m.)
GUILLERMO GARCIA, HDR Engineering

Mr. Peck, SOCWA, Director of Engineering, called the meeting to order at 8:31 a.m. and welcomed all those in attendance.

Review/Approval of Meeting Minutes (February '10 and March '10)

DISCUSSION:

Mr. Peck requested comments and corrections for the provided meeting minutes. Dr. Gumerman noted that he could not comment as he was not at either of the two referenced Engineering Committee meetings.

ACTION:

Motion was made by Mr. Ferons and seconded by Mr. Shissler to approve the provided Engineering Committee minutes. Motion carried with all present Engineering Committee members voting aye (with the exception of Dr. Gumerman who abstained.)

Review of Proposals for the Coastal Treatment Plant Primary Upgrade Phase II Design (PC 15)

DISCUSSION:

Mr. Garcia left the room to allow open discussion for the selection of the design team for the Coastal Treatment Plant Primary Upgrade Phase II design project. Mr. Peck stated that five proposals were received for the Phase II project. Phase I of the Primary Treatment Upgrade Project is nearing the end of construction.

The upgrade to the primary sedimentation basins was designed by Brown and Caldwell. The problems with the Brown and Caldwell design for the primary sedimentation upgrade at the Regional Treatment Plant were discussed at the April Engineering Committee meeting. Mr. Peck noted that there is no expectation that a design be perfect; however, the results of the recent project merit consideration. Mr. Peck believes that having made the material selection mistake once it is very unlikely that Brown and Caldwell would repeat that mistake.

Mr. Peck reported that all five firms have excellent qualifications in wastewater treatment plant design. Phone calls were placed to many of the project specific references. The response of all of the contacted individuals was very positive. Mr. Rebensdorf noted that the number of hours for Brown and Caldwell were significantly less while the number of drawings were similar for the other consultants. Mr. Peck responded that this reflected Brown and Caldwell's experience with the Phase I project. The actual CAD work needed for the project is relatively light. Mr. Peck discussed proposed fees. Brown and Caldwell have the lowest fee while Lee & Ro is a relatively close second. The fees for the remaining three firms were over \$25,000 more than the proposed Brown and Caldwell fee.

Mr. Peck asked if anyone had any direct working experience with Lee & Ro's proposed project manager (David Bachtel). Mr. Rebensdorf indicated the he had led projects for the City of San Clemente; City staff felt that Mr. Bachtel had done an excellent job.

Discussion ensued during which the Engineering Committee narrowed the selection down to two firms: Brown and Caldwell and Lee & Ro. Mr. Peck stated that strengths of Brown and Caldwell were their experience and their comparatively low fee. Lee & Ro offered the advantage of local structural support. Mr. Peck indicated that he believed that the structural engineering was the most difficult component of the project. Mr. Rebensdorf asked if it would be possible to get Lee & Ro to lower their fee. Mr. Ferons suggested walking though the scope with Lee & Ro. This might allow Lee & Ro to lower their fee. The budget would then have sufficient contingency to address the situation where the fee is negotiated to too low a level. Mr. Peck indicated that SOCWA had previously negotiated successfully with Lee & Ro under similar terms.

Dr. Gumerman inquired when was the last time SOCWA had awarded work to Lee & Ro. Mr. Peck indicated that it had been four years. The three representatives from Project Committee 15 member agencies indicated that the recommendation would be for Lee & Ro pending the outcome of Mr. Peck's discussion with them

ACTION:

The SOCWA Engineering Committee recommended that the contract be awarded to Lee & Ro if the project fee could be negotiated to a level more comparable to the proposed Brown and Caldwell fee.

Coastal Treatment Plant Headworks Upgrade Construction Progress Report (PC 15)

DISCUSSION:

The Coastal Treatment Plant (CTP) Headworks Upgrade construction project is very early in the shop drawing phase. However, Mr. Peck reported that there was a potential large change order associated with the plant's three rotary screens which are being replaced as part of the project. Each rotary screen is a tall structure. Each day the operator's rounds include climbing up a ladder to a platform behind the screen. The operator then uses a tool to scrape accumulated material off the screen. The CTP staff did not indicate this as a concern during design. However, Regional Treatment Plant staff that performs shift duty at the CTP on the weekends has now come forward with a concern about access to the platforms. Mr. Peck then worked with Carollo Engineers to develop an alternative involving an elevated walkway that would connect all of the stairs with a standard stairway at one end. This walkway would also allow for better access to the knife gate valves on the influent header. Carollo's cost estimate for the elevated walkway is \$23,000. There is a contingency of \$275,000 for the overall project so the proposed change would be well within budget. The change has been forwarded to S.S. Mechanical for a formal proposal.

Discussion ensued. The present representatives for the Project Committee 15 member agencies (Mr. Dunbar, Dr. Gumerman and Mr. Shissler) agreed that there was value in the elevated walkway. It was also pointed out that the walkway would allow two employees to work on the screen if an upstream event resulted in a heavy load of debris reaching the screens.

ACTION:

Mr. Peck is to bring the change order proposal back from S.S. Mechanical to the Engineering Committee.

Review Status of San Juan Creek Ocean Outfall Junction Structure Upgrade (PC 5)

DISCUSSION:

Mr. Peck reported that the development of the project continues. Mr. Peck has toured the project site with two contractors from SOCWA's select list of general contractors. Both contractors, Pascal & Ludwig and Schuler Engineering, expressed an interest in pursuing the project.

Engineering staff has also met with Ninyo and Moore and Layne Geotechnical. Layne is the company that does grout stabilization. They initially expressed concern about the project site. Their first concern was the movement of the grout stabilization equipment on to the beach. Layne indicated that the campers would need to be kept some distance from the work. The beach itself is not conducive for the movement of equipment. Layne representatives believed it would be tricky but doable. There was also discussion about how the grout stabilization would be contracted. Layne representatives agreed that it would be more reasonable for them to

subcontract to a standard general civil contractor. SOCWA will pursue separate purchase orders with Layne Geo and Ninyo and Moore for the development of the work. Both companies expressed concern proceeding with the project while taking on the liabilities associated with all of the unknowns for the project. Mr. Peck will pursue this item with Ms. Giannone.

The potential impact of the grout stabilization on the adjacent San Juan Creek was discussed. The concern is whether or not the grout would actually reach the Creek. Layne Geo does not think so; but can not guarantee that that will not happen. Mr. Peck indicated that he believed that the Regional Water Quality Control Board should be contacted on this topic. Dr. Gumerman and Mr. Dunbar both thought that it would be possible to berm within the Creek to maximize the distance between the grout injection and the flowing creek. It was suggested that the SOCWA contact Orange County Watersheds about the project.

Mr. Rebensdorf suggested that it would be better to construct the work during the winter months to minimize access problems. Mr. Peck indicated that spring or fall construction periods might be necessary to avoid winter storm events.

ACTION:

No action is necessary at this time.

J.B. Latham Treatment Plant East Plant Improvements Construction Progress Report (PC 2)

DISCUSSION:

Mr. Peck reported that the F. T. Ziebarth Company (Ziebarth) is making good progress with the construction work for the East Plant Improvements project. Ziebarth will be substantially complete this week with the work in the primary sedimentation basins. The new switchgear is completely installed at this point. It is anticipated that San Diego Gas & Electric (SDG&E) will be energizing that switchgear in approximately three to four weeks. Southern Contracting is moving along with the pulling of the new 480 volt cable. The electric work still has three solid months of work left. Then as soon as the existing switchgear is removed the pump station work will begin.

Two new change orders are being brought before the Engineering Committee. The first change (Change Order No.9) is for the repair of a break in an existing non-potable water pipeline for a total of \$976.27. This pipeline was not shown on the drawings. The second change (Change Order No.10) was related to damage caused to the non-potable water system irrigation system around the perimeter of the plant. The problem has been that staff has been unable to locate any drawings of the irrigation system. SOCWA has been unable to determine where the irrigation system connects to the non-potable water system. Change Order No.10 created a new underground piping network to isolate portions of the irrigation system to allow

further work to take place. The total cost for this change order is \$6,402. This brings the total change order cost for the project to \$51,690.52.

ACTION:

The representatives for Project Committee No.2 recommended the two change orders to the Board of Directors for approval.

Review of Proposed Scope of Services for the J. B. Latham Treatment Plant Strategic Plan (PC 2)

DISCUSSION:

Mr. Peck reviewed the draft request for proposals (RFP) for the J. B. Latham Treatment Plant Strategic Plan. The comment was made at the April Engineering Committee meeting that it would be good to have a workshop at the start of the project to make sure that the right items were being analyzed for the Strategic Plan. Mr. Peck has set the project scope so that the consultant will do three things before Workshop No.1: (1) evaluate data on the plant loadings with regard to the original basis of design; (2) review regulatory impacts; and (3) investigate structural conditions and vulnerability to seismic events. This will give the consultant more relevant information with which to conduct the first workshop. The request for proposals now states that SOCWA will award the contract for the full amount but only authorize tasks leading up to and including the first workshop. After that first workshop, the Engineering Committee can determine whether or not a modification of the scope is needed.

Mr. Ferons noted that under the Assessment of Concrete Conditions task it was stated that SOCWA would loan the selected consultant a set of half size plans. Mr. Peck indicated that scanned versions of the plans already exist. Mr. Ferons indicated that that information should be included in the RFP so that the consultant would not identify extra cost for copying. Mr. Peck stated that an ftp site would be set up during the selection process so that each proposing firm would be able to see the type of data that would be provided to the selected firm.

Mr. Ferons asked if the pre-proposal meeting is mandatory. Mr. Peck stated he had been led to believe that the mandatory requirement was not allowed under California state law. Mr. Ferons, Dr. Gumerman and Mr. Dunbar all disagreed with that perspective. Discussion ensued. The general consensus was that a firm not represented at the pre-proposal meeting would be deemed not responsive.

Mr. Ferons also commented that the draft RFP states that SOCWA will provide eight – 48 hour diurnal flow charts for dates specified by firm. Mr. Ferons stated that SOCWA should identify the dates based on operational experience. Mr. Ferons and Dr. Gumerman further identified several typographic errors in the draft RFP.

Mr. Peck indicated that the original intent has been to distribute the RFP to four companies: Black & Veatch, Carollo, CH2MHill and HDR. Brown and Caldwell have also

expressed interest. Dr. Gumerman indicated that it was Mr. Peck's decision if he wished to add a fifth firm to the list. Mr. Peck stated that he would go ahead and distribute the RFP to all five firms.

ACTION:

The Engineering Committee directed SOCWA to distribute the RFP with the suggested changes to the five identified firms (including Brown and Caldwell).

Review of Request for Proposals for Plant 3A Infrastructure Repair Design Services (PC 3A)

DISCUSSION:

Mr. Peck indicated that problems with subsidence around the dissolved air flotation (DAF) thickeners had been discussed at previous Engineering Committee meetings. The draft request for proposals (RFP) describes the preliminary design effort. The consultant is asked to evaluate data that has been developed over the last few years and to identify concepts for remediation of the problem. The consultant is asked to develop three different alternatives and to rank those alternatives in term of technical feasibility and cost. The goal is to get to a good budgetary cost estimate, in which the Engineering Committee can then determine how to proceed with the project.

Dr. Gumerman indicated that he was still troubled as to why the geotechnical fabric was not installed during the initial construction. How was this described in the original bid documents? Mr. Peck responded that he had never seen the original requirement. However, Converse reported in their 2003 analysis that the requirement was in the geotechnical report that was part of the bidding documents.

Mr. Peck discussed the firms that would receive the RFP. Mr. Peck recommended TetraTech, Malcolm Pirnie, Carollo and HDR based on their past experience working at Plant 3A. Dr. Gumerman agreed with the list. Mr. Ferons proposed adding AECOM to the RFP list. Mr. Peck noted that AECOM was already doing a small project at Latham; he had no problem adding them to the list.

ACTION:

The Engineering Committee directed SOCWA to distribute the RFP to the five identified firms (including AECOM).

Regional Treatment Plant Headworks Upgrade Construction Progress Report (PC 17)

DISCUSSION:

Mr. Peck indicated that the Regional Treatment Plant Headworks project was approximately 75% complete. The new roof decking has been completed. The tile should be added in the next two weeks. Four change orders are being presented for Engineering Committee review and action. Three of the change orders have actually been part of the project

for over six months. However, the total cost of those three change orders was \$22,500 which is below the \$25,000 cumulative limit (at which point the change orders are to be presented to the Engineering Committee). The fourth change order involves the addition of a sun shield awning above a series of new instrumentation panels on the south side of the Headworks Building. The existing exposure to sunlight has two impacts: (1) the digital displays can not be read at certain times of the day and (2) the interior of the panels become overheated. We have gone through several iterations of awning design to match the appearance of the existing building. The negotiated cost for the awning is \$21,500. The total cost of Change Orders No.2 through No.5 (Change Order No.1 was rejected by SOCWA) is \$44,336.84.

Mr. Peck reminded the Engineering Committee that the Headworks Upgrade was a Project Committee 17 Liquids project; Moulton Niguel Water District is the sole participating agency.

ACTION:

Dr. Gumerman recommended the four change orders to the Board of Directors for approval.

Regional Treatment Plant Clarifier Upgrade Phase I Construction Progress Report (PC 17)

DISCUSSION:

SOCWA has the proposal for the primary sludge collector stainless steel shafts. However, SOCWA maintenance staff is now questioning whether the higher grade metal merits the high cost of the change order. Ralph Dean, SOCWA Maintenance Supervisor, will advise SOCWA engineering staff early next week of the maintenance staff preference.

ACTION:

No action is necessary at this time.

Public Comments on Items 1, 2, 3, 4, 5, 6, 7, 8 and 9

DISCUSSION:

Mr. Peck asked if there were any public comments on items 1, 2, 3, 4, 5, 6, 7, 8, and 9. There was none.

ACTION:

No action needed.

There being no further business, the meeting adjourned at 9:51 a.m.

/Christine Hutton /

Christine Hutton, Administrative Assistant/Recorder