

TOWN OF DAVIE TOWN COUNCIL AGENDA REPORT

TO: Mayor and Councilmembers

FROM/PHONE: Daniel Colabella - 954-433-4024

SUBJECT: Resolution

TITLE OF AGENDA ITEM: A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, AUTHORIZING AND DIRECTING THE UTILITIES DEPARTMENT TO NEGOTIATE AN AGREEMENT WITH THE TOWN'S CURRENT UTILITY ENGINEERING FIRM, CALVIN, GIORDANO & ASSOCIATES, INC., FOR THE CONTINUATION OF PROJECTS CURRENTLY UNDERWAY; AND PROVIDING AN EFFECTIVE DATE.

REPORT IN BRIEF: It is in the best interest of the Town for the Utilities Department to continue utilizing the services of Calvin, Giordano & Associates, Inc. for professional engineering services in the continuation of projects previously started.

PREVIOUS ACTIONS: Not applicable

CONCURRENCES: Not applicable

FISCAL IMPACT: Not applicable

RECOMMENDATION(S): Motion to approve the resolution

Attachment(s): Resolution and Project Summary Sheet

RESOLUTION _____

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, AUTHORIZING AND DIRECTING THE UTILITIES DEPARTMENT TO NEGOTIATE AN AGREEMENT WITH THE TOWN'S CURRENT UTILITY ENGINEERING FIRM, CALVIN, GIORDANO & ASSOCIATES, INC., FOR THE CONTINUATION OF PROJECTS CURRENTLY UNDERWAY.

WHEREAS, Calvin, Giordano and Associates, Inc. has been the Town of Davie Utilities Department's provider for professional engineering and surveying services; and

WHEREAS, the Town's Utilities Department ranked Calvin, Giordano & Associates, Inc. first in the recent engineering firms selection committee; and

WHEREAS, the Town's Utilities Director has begun design of projects with Calvin, Giordano and Associates, Inc.; and

WHEREAS, the Town's Utilities Director has reviewed and approved the fee schedule to continue design of said projects with Calvin, Giordano and Associates, Inc.; and

WHEREAS, the Town Council deems it to be in the best interest of the Town to continue these projects previously started by Calvin, Giordano and Associates, Inc.; and

WHEREAS, the Town Council finds that the most practical and cost effective method for completing these projects is to continue using Calvin, Giordano and Associates, Inc. for design, contract administration and inspection of the previously started projects; and

WHEREAS, the Utilities Department has determined that selection of another engineering firm to complete these projects already started would require a significant expenditure of the Town's resources in gathering large amounts of information to supply to the new engineering firm.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA.

SECTION 1. The Utilities Director shall continue to use Calvin, Giordano and Associates, Inc. to complete the projects upon which they have already started work or have provided a design proposal for (see attached Exhibit "A"). These projects are hereby

approved in substantially the form attached as Exhibit "A" together with such non-substantial changes as may be acceptable to the Utilities Director and the Town Administrator.

SECTION 2. The appropriate Town officials are authorized to execute all necessary documents to effectuate the intent of this resolution.

SECTION 3. This resolution shall take effect immediately upon its passage and adoption.

PASSED AND ADOPTED THIS _____ DAY OF _____, 2001.

MAYOR/COUNCILMEMBER

ATTEST:

TOWN CLERK

APPROVED THIS _____ DAY OF _____, 2001.

EXHIBIT "A"

Town of Davie
Project Summary Sheet
Calvin, Giordano and Associates, Inc. - Engineering Requirements

WWTP NPDES Operating Permit

Calvin, Giordano and Associates, Inc. (CGA) has obtained all recent Department of Environmental Protection (DEP) and Broward County Department of Planning and Environmental Protection (DPEP) permits for the construction and operation of the Wastewater Treatment Plant WWTP. The Town currently has a permit with a Notice to Issue outstanding. CGA has an excellent working relationship with the permit writers for the agencies as well as with the Utility Directors for Cooper City and Hollywood. These two municipalities share the effluent disposal system with the Town. Of the engineering firms considered during the selection process, CGA is the only one with the experience with Environmental Protection Agency (EPA) regulations concerning the Ocean outfall. They were instrumental in obtaining the National Pollution Discharge Elimination System (NPDES) permit with the EPA and DEP for the Town's WWTP.

HOURLY NOT TO EXCEED FEE OF \$6,800

WWTP DPEP Building Moratorium

CGA has guided the Town through the DPEP building moratorium. The DEP currently only issues Dry Line permits for new development. This means that Certificates of Occupancies (C/O's) cannot be issued for these properties until this issue is resolved. They are intimately familiar with the issues and County personnel involved with this moratorium. CGA has provided all monthly updates and attended meetings at DPEP concerning this issue. It is critical that this issue be resolved as quickly as possible and allowing another engineering firm to handle this issue could delay resolution.

HOURLY NOT TO EXCEED FEE OF \$2,600

Update Water and Sewer Atlas Maps

The Town's water and sewer atlas maps are currently maintained by CGA in electronic format. CGA has performed work for over 20 years for the Town; they have the most extensive database of projects completed within the Town of any engineering consultant. Many of the utility projects in the Town were designed by CGA and their knowledge of these projects as well as their understanding of the collection and distribution system make them the most capable and qualified to continue in the role of maintaining these Atlas maps.

HOURLY NOT TO EXCEED FEE OF \$8,200

WWTP Industrial Pretreatment Program

The Town discharges its treated wastewater through the Hollywood Ocean Outfall. Due to this discharge to surface waters the Town is required to have an NPDES operating permit. One requirement of an NPDES permit is that the Town creates and maintains an Industrial Pretreatment Program. This program is required to prohibit introduction into the sewer system waste that might inhibit treatment at the WWTP or pass through to the ocean outfall. CGA prepared the required Industrial Pretreatment Ordinance, prepared permits for all industrial users of the Town's sewer system, performed semi-annual site visits to each of the permitted industrial users and prepared the yearly reports for

submission to DEP. The EPA through the Code of Federal Regulations (CFR) Title 40 Subchapter N (Parts 401-471) regulates this program. Of the engineering firms interviewed, CGA is the only one who has demonstrated experience with these EPA regulations. Also, they are familiar with the DEP personnel in Tallahassee who are in charge of this important program and they have a very good working relationship with them. CGA is the only firm with the experience to successfully continue this program.
HOURLY NOT TO EXCEED FEE OF \$16,700

Consumer Confidence Report

The Town is required to prepare Consumer Confidence Reports (CCR's) for the areas of the Town served by Davie Utilities Water Treatment Plants (WTP's) and the Hacienda Village area served by the Town with water purchased from the City of Fort Lauderdale. CGA has prepared all CCR's for the Town since the EPA mandated this program. CGA has summaries of the data required for preparation of the CCR's and the experience necessary to provide these reports for the Town.
HOURLY NOT TO EXCEED FEE OF \$5,000

Biosolids Disposal Agricultural Use Permit

The Town's WWTP generates biosolids, also know as sludge, as a product of the sewage treatment process. The sludge is hauled and applied to farms and ranches in the central part of the State. Testing of the sludge is done on a regular basis. The Town is required to prepare yearly Agricultural (AG) Use Reports for submission to the DEP as well as the EPA as a requirement of the Towns WWTP Operating permit, i.e. the NPDES permit. CGA designed the sludge treatment processes at the Town's WWTP and is very familiar with the operation of these processes at the plant. CGA has summaries of the data required for preparation of the report and they prepare the annual AG Use Report for the Town. Of the firms interviewed, CGA is the only firm familiar with the EPA regulation, 40 CFR Part 500, as it applies to the Town's sewage sludge.

CGA has begun an investigation of a new sludge treatment process for the Town. This process would create Class A sludge, which would allow the Town to use disposal sites much closer to the WWTP. The DEP and certain Florida counties have recently closed many sludge disposal sites in central Florida. Many of the closed sites were permitted for disposal for the Town thereby reducing the sites available for the Town. CGA should continue this investigation, as it is familiar with the DEP personnel and the sludge hauler contracted with by the Town to provide disposal services for the Town.
HOURLY NOT TO EXCEED FEE OF \$4,240

WTP Storage Tank, New Well, Finished Water Transmission Line - Construction Services
CGA is currently performing design of a new 2 million gallon (MG) water storage tank on the WTP site. The design also includes a new finished water transmission line to connect the plant to the eastern section of the water transmission line system, one new raw water well, deepening of two existing wells to reduce the color of the raw water, new high service pump and various onsite pipe lines. CGA should be contracted with to complete bidding, onsite engineering inspection, hydrogeological inspection for wells, electrical inspection for wells and high service pumps and instrumentation and structural engineering for the storage tank. They are intimately familiar with the plans and specifications for the project and they designed and supervised construction of the existing WTP. Their familiarity with the new plans, the existing plant and equipment is required for a successful completion of this project.
HOURLY NOT TO EXCEED FEE OF \$125,000

Agricultural Pump Station #19 Rehabilitation

CGA has done investigative work at this station and has prepared a proposal to design the rehabilitation of this major sewage pumping station.

HOURLY NOT TO EXCEED FEE OF \$30,000

Refurbish Water Storage Tank at System III WTP

CGA has investigated the condition of this tank and will make recommendations on the repair methodology when the tank is drained for inspection. The tank cannot be drained until the new 2 MG water storage tank project is completed.

HOURLY NOT TO EXCEED FEE OF \$25,000

Main Lift Station #1 Rehabilitation

CGA has done investigative work at this station and has prepared a proposal to design the rehabilitation of this main sewage pumping station.

HOURLY NOT TO EXCEED FEE OF \$45,000

Replacement of Gaseous Chlorine Disinfection System at the WWTP and South WTP

The Town currently uses gaseous chlorine for disinfection at the WWTP and South WTP. Storage of 2500 pounds or greater requires the Town to maintain a Risk Management Program to reduce the possibility of a chlorine leak which could injure workers at the plants or the residents near the facilities. CGA has investigated onsite chlorine generation systems and prepared reports on these systems.

HOURLY NOT TO EXCEED FEE OF \$32,000

Expansion of the South Water Treatment Plant and Closure of the North WTP

The Town desires to close the North WTP. CGA has performed engineering studies describing the various alternatives available to the Town if the North WTP is closed. The South WTP cannot supply the entire eastern service area's needs. The South WTP can be expanded to meet the average daily water needs as well as the peak daily needs of the eastern water service area. Several options are available to affect this expansion. These options must be designed to meet the future EPA regulations. The three most promising processes follow:

1. Construction of a 4 MGD expansion to the WTP using current lime softening treatment and Ion Exchange technology. This Ion Exchange technology uses the existing treatment system of lime softening and treats a side stream with an Ion Exchange Process. Contaminants are removed from the water onto an Ion Exchange resin filter unit. The treated water is blended with the water from the existing lime softening unit. These resin filters are back washed and regenerated with a small amount of salt solution, which would likely be discarded in the sanitary sewer. Water from this system should meet all future EPA drinking water regulations. The estimated installed cost of this system is \$5.4 million.
2. Construction of a 3 mgd Membrane Softening (MS) treatment process that uses cartridge filter units to remove contaminants from the raw water stream. The treated water is blended with the water from the existing lime softening unit. This system operates under medium pressure and discards 10 to 20 percent of the raw water stream as waste. Deep wells will likely need to be drilled to dispose of this waste stream. Water from this system should meet all future EPA drinking water regulations. The estimated installed cost of this system is \$9.75 million with the capability to add 1 MGD of additional membrane capacity.

3. Construct a 3 MGD Reverse Osmosis (RO) treatment process that uses cartridge filter units to remove contaminants from the raw water stream. The treated water is blended with the water from the existing lime softening unit. This system operates under high pressure and discards 15 to 25 percent of the raw water stream as waste. Deep wells will likely need to be drilled to dispose of this waste stream. Water from this system should meet all future EPA drinking water regulations. The estimated installed cost of this system is \$13.5 million with the capability to add 1 MGD of additional membrane capacity.

Of the three systems described above, the system that removes the most contaminants is the RO system and the system that removes the least is the Lime Softening/Ion Exchange system. However, all three systems should allow the Town to meet the future EPA drinking water regulations.

HOURLY NOT TO EXCEED FEE OF \$615,000 for a Lime Softening/Ion Exchange system