

## WESTERN WAKE PARTNERS

### Minutes

Anyone who needs official, certified copies of minutes or has questions about minutes should contact Nancy Held at (919) 319-4543 or [nancy.held@townofcary.org](mailto:nancy.held@townofcary.org). Minutes are considered draft until officially approved by the Policy Advisory Committee.

### Policy Advisory Committee Recommendations

Thursday, October 13, 2005  
Cary Town Hall Bldg C, 2<sup>nd</sup> Floor Conference Room  
120 Wilkinson Avenue, Cary, North Carolina  
[www.westernwakepartners.org](http://www.westernwakepartners.org)

Cary Mayor Ernie McAlister called the meeting to order at 4:00 p.m. Committee members attending were Apex Mayor Keith Weatherly, Holly Springs Mayor Dick Sears, Morrisville Mayor Pro Tem Jan Faulkner, Cary Town Manager Bill Coleman, Apex Town Manager Bruce Radford, Holly Springs Town Manager Carl Dean and Morrisville Town Manager John Whitson were in attendance. The meeting adjourned at 4:26 p.m.

#### 1. Introductions

Committee members and Technical Advisory Committee members stated their name and town.

#### 2. Administration

- a. Mayor Weatherly moved to appoint Mayor McAlister as the Policy Advisory Committee chairperson; Mayor Sears provided the second, and the committee unanimously approved the motion
- b. Mayor Sears moved to adopt the Operating Procedures, Mayor Weatherly provided the second, and the committee unanimously approved the motion. (Attachment A)
- c. Committee approved two meeting dates: Tuesday, December 13 at 4:00 p.m., and Tuesday, March 14, 4:00 p.m. for the annual meeting. No motion/second, this was approved by unanimous consensus. Also, they agreed by consensus that future meetings would be on 2<sup>nd</sup> Tues. at 4 p.m.

#### 3. Items for Discussion:

##### a. Design Consultant Selection (PAC06-01)

Mayor Weatherly moved to award the design contract of the Western Wake Regional Water Reclamation Facility to the team of Arcadis/CH2M Hill, Mayor Pro Tem Faulkner provided the second, and the committee unanimously approved the motion. (Attachment B)

##### b. Jurisdiction of WRF site (PAC06-02)

By unanimous consensus the Committee tabled this item until an unspecified future date. (Attachment C)

##### c. Establishment of an annual operation budget (PAC06-03)

Mayor Weatherly moved to approve the FY06 operating budget of \$50,000 for the Western Wake Regional Wastewater Management Facility, Mayor Pro Tem Faulkner provided the second, and the committee unanimously approved the motion. (Attachment D)

##### d. Energy Service to WRF Site (PAC06-04)

Mayor Pro Tem Faulkner moved to approve the solicitation of proposals by the Lead Agency from the Town of Apex and from Progress Energy regarding the provision of electrical power to the WRF site, Mayor Sears provided the second, and the committee unanimously approved the motion. (Attachment E)

**4. Other Business**

- a. FYI: Handout of potential issues for future committee meetings. (Attachment F)
- b. The Project Partner Mayors selected and approved the following designated alternates in the event they cannot attend a meeting.
  - Cary – Town Manager
  - Apex – Town Manager or Mayor Pro Tem
  - Holly Springs – Town Manager
  - Morrisville – Town Manager
- c. Mayor Sears moved to approve the Technical Advisory Committee representatives for each partner, Mayor Pro Tem Faulkner provided the second, and the committee unanimously approved the motion.
  - Apex – Public Works Director
  - Cary – Director of Public Works and Utilities
  - Holly Springs – Engineering Director
  - Morrisville – Engineering Director

**5. Next Meeting**

December 13, 2005, 4:00 p.m. at Cary Town Hall

## WESTERN WAKE PARTNERS

### Policy Advisory Committee Operating Procedures

#### **Definition (from Interlocal Agreement dated August 22, 2005)**

Section 5.1. The Policy Advisory Committee. (a) A Policy Advisory Committee, consisting of the Mayors and Town Managers of Apex, Cary and Morrisville, or their designees, shall be created to advise the Lead Agency on all policy matters for the Wastewater Management Facilities and in the selection of outside consultants for major capital projects. With respect to matters that relate solely to the Treated Effluent Pumping and Conveyance Facilities, the Mayor and the Town Manager of Holly Springs will also be a member of the Policy Advisory Committee. The Mayor of any Town may designate the Town Manager as the Mayor's designee. The Policy Advisory Committee shall meet at least annually and may determine to meet more often as deemed necessary by the Policy Advisory Committee. The Policy Advisory Committee shall also meet upon the request of any Project Partner.

(b) Any recommendations made by the Policy Advisory Committee requiring a vote of the members will be made on the basis of one vote per Town. Apex, Cary and Morrisville shall be entitled to vote with respect to any matters regarding the Wastewater Management Facilities. Holly Springs shall be entitled to vote with respect to matters that relate solely to the Treated Effluent Pumping and Conveyance Facilities. A majority vote of the Policy Advisory Committee will be binding on the Lead Agency.

#### **Meeting Dates**

Annual meetings of the Policy Advisory Committee (PAC) will be held at 4:00 p.m. on the 2<sup>nd</sup> Tuesday in March, at Cary Town Hall, 120 Wilkinson Ave., 2<sup>nd</sup> floor conference room, unless noted otherwise. Any Partner may request a meeting of the PAC by notifying the Cary Town Manager in writing. Meetings of the Policy Advisory Committee occur on the 2<sup>nd</sup> Tuesday of the month at 4:00 p.m., unless the timing of other events dictates otherwise.

#### **Public Notice for Meetings**

In accordance with G.S.143-318.12, each Partner will post a public notice at least 48 hours in advance of each meeting of the Policy Advisory Committee (PAC), stating the date, time, and that the purpose of meeting is to consider matters related to the Western Wake Regional Wastewater Management Facilities. Each Partner will also cause a current copy of the schedule of regular meetings to be kept on file with the town clerk.

#### **Meeting Agenda and Materials**

The Lead Agency (Cary) will post the agenda and supporting materials for consideration at the meetings on the Project Partners' website ([www.westernwakepartners.org](http://www.westernwakepartners.org)) at least 5 business days before the meeting. As supporting information, the Lead Agency will prepare reports to the PAC for each agenda item giving background information and specifying the action requested by the PAC.

Committee business will be discussed by the committee. Public comments are to be directed through the Project Partner local governments at their regularly scheduled meeting of their respective elected governing bodies.

#### **Meeting Minutes**

The Lead Agency will take action minutes as required by the open meetings law. Draft minutes will be distributed via email to all members of the PAC, and will be considered for approval by the PAC at the next meeting. Final minutes will be posted on the website, and the Cary Department of Public Works and Utilities will be the custodian of the final minutes.

#### **Inability to Attend Meeting**

In the event that a Project Partner will not be represented by the Mayor or Town Manager or designee, that Project Partner may notify the chairperson of their comments and concerns on any matter about which a vote is likely to be taken in advance of that meeting. The chairperson shall share those comments and concerns with the Project Partner at the meeting.

**WESTERN WAKE PARTNERS**

**Report to the Policy Advisory Committee (PAC06-01)**

Date: October 13, 2005  
To: Policy Advisory Committee  
From: Tim Bailey, P.E. – Town of Cary, Engineering Director  
Subject: Contract Award – Engineering Services for the Western Wake Regional Water Reclamation Facility

**Background:**

The Town of Cary, as Lead Agency, received proposals on September 23, 2005 for engineering services related to the design and construction of the Western Wake Regional Water Reclamation Facility, a new 18 MGD wastewater treatment facility on a new location. Proposals were received from two teams of engineering consultants interested in providing these services, the team of Hazen and Sawyer/CDM, and the team of Arcadis/CH2M HILL.

An eight-member selection committee composed of members of the Technical Advisory Committee from Apex, Morrisville and Cary, as well as additional Town of Cary staff members who will be involved in managing the project, was assembled to review these proposals. The selection committee reviewed each proposal for relevant experience of the firm and its personnel and sub-consultants, project approach and proposed schedule and cost. The committee unanimously recommends that an engineering services contract be awarded to the team of Arcadis/CH2M HILL. The selection committee found overall that their proposal most satisfied the needs of this project.

Major issues that were considered during the selection process are:

**Workload**

The team of Hazen and Sawyer/CDM is currently engaged in procuring all necessary regulatory approvals, as well as site and route selection activities, for this project. There is still a tremendous amount of work to be done to identify and obtain all necessary permits, regulatory approvals and sites that will be required to construct and operate the Western Wake Regional wastewater management facilities. Key Hazen and Sawyer/CDM staff proposed for the design are still actively engaged in the regulatory and site selection processes where there is still a lot of work left to do.

Selecting Arcadis/CH2M HILL for the design phase will ensure that the Project Partners are making maximum use of available resources to simultaneously complete all of the various components required to return treated wastewater to the Cape Fear River on the required schedule. The Arcadis/CH2M HILL team, especially the senior team members, has an outstanding record of dealing with permitting agencies, providing efficient and effective coordination of the permitting and design efforts. This is important since design activities will need to mesh seamlessly with permitting activities.

**Technical Approach**

The treatment process selected for the Western Wake Regional WRF will be the most fundamental element of this design. This will impact operations costs and future capital costs for decades to come. New technologies are becoming more cost effective and are rapidly gaining acceptance in large scale operations. It is therefore important to fully consider them in this design.

As part of their permitting activities H&S/CDM has prepared a preliminary engineering report (PER) that describes their proposed treatment process. The Partners' design team, however, did not have the opportunity to make a fully informed process selection through H&S/CDM's PER process. The H&S/CDM team has shown a strong bias toward a certain treatment process and plant arrangement that may not be the best fit for the Partners at this facility. This is evidenced by their work on the PER as well as the discussion of treatment technologies in their proposal. The Partners' design team believes their recommendations may be premature. H&S/CDM's process selection proposal seems geared mostly toward affirming the work they have

done to date. H&S/CDM's proposal states that aspects of their PER were "not intended to serve as the basis of the final design". The Partners' design team has difficulty reconciling this statement with a desire to provide the best, most efficient and cost effective facility possible.

Arcadis/CH2M HILL's proposed evaluation of alternate processes is unbiased especially since they have not been involved in this decision to date. They will bring a sophisticated fresh perspective to this important task. They have presented a thoughtful and timely approach to helping the Partners make a well-informed decision. Arcadis/CH2M HILL's proposal even provides references to other facilities they have designed and built with the capability to change process type during future expansions with minimum wasted effort and maximum utilization of facilities built in early phases. This concept will be an important design consideration at the Western Wake Regional WRF, especially if treatment requirements increase for future phases of this facility.

The H&S/CDM proposal also shows a presupposition that the Western Wake Regional WRF will accept untreated high-strength raw wastewater flows from Research Triangle Park. This is the subject of another study being performed by CDM that has not been completed or approved by the Town of Cary. The cost impacts of accepting this flow may be considerable and are not fully understood at this time.

### **Previous Experience With Project Partners**

The team of Arcadis/CH2M HILL has a proven ability to design and implement enhanced wastewater treatment processes. Arcadis has an excellent track record of supporting clients during operations after the project is complete as evidenced by their performance on several Town of Cary projects. Arcadis' design at the South Cary WRF has a proven record of outstanding and efficient performance that meets and exceeds discharge requirements and has been featured in numerous trade presentations.

The H&S/CDM team places a lot of faith in construction cost estimates they have prepared as part of the Preliminary Engineering Report. These estimates have proven to be problematic and have been revised upward several times. Questions remain about this team's ability to estimate and control construction costs.

Of the firms that submitted proposals, Arcadis has provided the Town of Cary in particular with the best 'support after the sale'. They have a proven track record of being responsive to the Owner during design. Overall their designs have been thorough with few problems. When problems have occurred they have assumed the highest level of responsibility to correct things. An example of this is that Arcadis is the only one of the proposing firms that has actually paid for capital work to correct design problems. Senior members of the proposed Arcadis/CH2M HILL team have proven themselves to be extremely capable and trustworthy of defending the best interest of our projects.

### **Project Cost**

The Town of Cary has exempted this project from the provisions of North Carolina General Statute 143-64.31 as it is in the best interests of its citizens to procure these services through a process of open competition. Therefore, cost proposals were considered in making the final selection.

The work consists of two main components: design phase services, and construction phase services. Arcadis/CH2M HILL proposes to perform all design phase work for a price of \$4,417,000. H&S/CDM proposes a price of \$4,800,000. Arcadis/CH2M HILL's cost proposal is about 8% less for the engineering design services.

Construction phase services are further broken down into office construction administration services and field inspection services. Arcadis/CH2M HILL proposes to perform all construction phase work for a price of \$4,390,000. H&S/CDM proposes a price of \$3,150,000. The difference in the proposed prices is found entirely in the field inspection portion of the work. Arcadis/CH2M HILL's construction phase service proposal is about 40% higher in cost and is directly attributable to their projected man-hours for field inspection being over 60% higher.

It is important to point out that the contract will be structured in such a manner that pre-determined lump sum amounts will be paid for design phase and office construction administration services while payment for field inspection services will be made based on actual cost with a not-to-exceed ceiling. This is because the amount of effort associated with observing and inspecting construction in the field can vary a great deal depending on contractors, weather, site conditions, material availability, quality of workmanship, and other variables that are difficult to fully quantify at this time. Office services are easier to quantify. Therefore, it is

typically in the best interest of both parties to structure compensation in this manner. We believe that the difference in the teams' approach to field services indicates a relative difference of opinion between the two teams in the importance of field QA/QC during construction.

It is the opinion of the selection committee that the Arcadis/CH2M HILL proposal represents a better value to the Partners.

**Recommendation**

The selection committee unanimously recommends that an engineering services contract be awarded to the team of Arcadis/CH2M HILL. The selection committee also recommends awarding this contract for the design services only at this time, reserving the right to defer a decision on whether to award construction phase services (office and field) until the design firm has proven itself. The contract will require a separate authorization for construction phase services. All costs related to the Water Reclamation Facility will be allocated to the Project Partners according to the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* dated August 22, 2005.

**Requested Action:** The selection committee recommends that the Policy Advisory Committee approve the engagement of the Arcadis/CH2M HILL team by the Town of Cary, as Lead Agency, for the design of the Western Wake Regional Water Reclamation Facility.

**WESTERN WAKE PARTNERS**

**Report to the Policy Advisory Committee (PAC06-02)**

Date: October 13, 2005  
To: Policy Advisory Committee  
From: Kim Fisher, P.E. – Town of Cary, Director of Public Works and Utilities  
Subject: Consideration of Jurisdiction of WRF Site

**Background:**

The proposed Western Wake WRF site is currently located in Wake County's planning and zoning jurisdiction. The County's review and approval process for projects located in the County's jurisdiction is defined in the Wake County Zoning Ordinance (Section 1-1-23 Permits). However, Municipal Wastewater Treatment Plants are exempt from the zoning ordinance, and therefore the Western Wake WRF would not be subject to the review and approval of Wake County Planning Staff, the Wake County Planning Board, or the Wake County Board of Commissioners. However, it would be necessary for the Project Partners to work with County staff during design and construction for plan review, building permits and building inspections if the site remains under County jurisdiction. This would add some uncertainty to the process since Wake County is not a Project Partner and therefore would not necessarily be aligned with expediting these processes to assist in meeting the January 1, 2011 deadline for a having the WRF operational.

The proposed WRF site is also located in the Town of Apex Long-Range Urban Service Area. The Town of Apex has proposed to annex the WRF site in accordance with General Statutes 160A – Cities and Towns, Article 4 – Corporate Limits. In this case, the Project Partners would work with Town of Apex staff for plan review, building permits and building inspections.

Based on the current corporate limits of the Town of Apex and the Town of Holly Springs, the proposed WRF site is located closer to the Town of Holly Springs than to the Town of Apex.

In cases such as this, for the Town of Apex to annex the WRF site, North Carolina General Statutes (NCGS) require that the Town of Apex and the Town of Holly Springs enter into an annexation agreement. At a minimum, the annexation agreement would have to clearly state that the Town of Holly Springs will not annex the WRF site (*NCGS § 160A-58.1 – Petition for annexation; standards*). The duration of the agreement would not exceed 20 years, and would need to be approved by ordinance by the governing boards of Apex and Holly Springs, respectively, executed by the mayor of each town and recorded in the minutes of the meetings (*NC GS § 160A-58.23 – Annexation agreements authorized*).

With an annexation agreement addressing the WRF site in place between Apex and Holly Springs, the Town of Apex Board of Commissioners could initiate annexation of WRF site by adopting a resolution stating its intent to annex the property, in lieu of filing a petition. The resolution would need to contain an adequate description of the property and fix a date for a public hearing on the question of annexation. Notice of the public hearing would need to be published once at least 10 days before the date of the hearing. At the hearing, any resident of the Town of Apex could appear and be heard on the question of the desirability of the annexation. If the Board of Commissioners finds that annexation is in the public interest, it could adopt an ordinance annexing the property. The ordinance could be made effective immediately upon adoption or on any specified date within six months from the date of passage (*NCGS § 160A-58.7 – Annexation of municipal property*).

**Requested Action:** It is requested that the Policy Advisory Committee provide the Technical Advisory Committee with guidance regarding the desired jurisdiction of the WRF site.

**WESTERN WAKE PARTNERS**

**Report to the Policy Advisory Committee (PAC06-03)**

Date: October 13, 2005  
To: Policy Advisory Committee  
From: Leila Goodwin - Town of Cary, Water Resources Manager  
Subject: Consideration of FY06 Operating Budget for the Western Wake Regional Wastewater Management Facilities.

**Background:**

This fall, the Town of Cary, as the lead agency, will begin managing the design of capital projects associated with the Western Wake Regional Wastewater Management Facilities. Design and construction will continue through 2010. Startup and warranty work will continue through 2011. During this time, Town of Cary staff will manage at least four major design efforts and approximately 12 construction contracts. To begin accomplishing this, Cary proposes to hire one new engineer in the Engineering Department for the second half of fiscal year 2006. We anticipate the cost of this position for FY06 to be approximately \$50,000. In the interest of time, the Cary Town Council has already approved the hiring of the engineer. The position will only be advertised after approval of the budget by the Policy Advisory Committee.

In the future, staffing and other costs to the Project Partners will be presented to the Policy Advisory Council for approval during the spring, as part of the annual operating budget for the upcoming fiscal year. We anticipate future staff needs to include real estate staff to obtain property and easements, operations and maintenance staff to participate in design and construction review, and field staff for overseeing construction inspection and administration. Past experience on similarly complex projects has shown the involvement of operations and maintenance staff in the project during design and construction is essential to successful startup by familiarizing them with new facilities prior to assuming responsibility for their operation.

The FY06 operating costs will be allocated to each Project Partner according to the percentage of each Partner's total estimated capital costs (excluding land) as presented in Table A-5 of Exhibit A of the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* dated August 22, 2005.

**Requested Action:** Approval of an FY06 operating budget of \$50,000 for the Western Wake Regional Wastewater Management Facilities, and approval of allocating this cost according to each Partners' pro-rata share of total estimated capital costs (excluding land) as presented in Table A-5 of Exhibit A of the *Agreement For Design, Construction, Ownership, Management And Operation Of Western Wake Regional Wastewater Management Facilities* dated August 22, 2005.

**WESTERN WAKE PARTNERS**

**Report to the Policy Advisory Committee (PAC06-04)**

Date: October 13, 2005  
To: Policy Advisory Committee  
From: Kim Fisher, P.E. – Town of Cary, Director of Public Works and Utilities  
Subject: Consideration of Soliciting Proposals from Electrical Power Providers for WRF Site

**Background:**

There are two power supply options for the WRF site:

- 1) Town of Apex
- 2) Progress Energy

While a preliminary cost analysis for electric service has been done based on costs provided by the Town of Apex, no discussions have been held with Progress Energy regarding power costs. Progress Energy has requested that they be invited to discuss the provision of electric service to the WRF site with the Project Partners. The Technical Advisory Committee recommends that the Policy Advisory Committee approve the solicitation of formal proposals from each entity for provision of electrical service to the WRF site.

**Requested Action:** It is requested that the Policy Advisory Committee approve the solicitation of proposals by the Lead Agency from the Town of Apex and from Progress Energy regarding the provision of electrical power to the WRF site.

**WESTERN WAKE PARTNERS**

**Policy Advisory Committee**

**Potential Issues For Future Consideration**

1) Near-Term Issues (1- to 12-months)

- a) Selection of Power provider for WRF site – Town of Apex versus Progress Energy
- b) Notification of public hearings for EIS/PER
- c) Consideration of major changes to project component design/locations/cost as a result of discussions with federal and state agencies during finalization of EIS/PER
- d) Consideration of major facility design features that will impact cost and/or future operations (pumping stations and WRF facilities)
- e) Approval of terms and conditions of low-interest loan from Constructions, Grants & Loan Division of NCDENR
- f) Approval of NPDES Permit Application for discharge to Cape Fear River
- g) FY07 Operating Budget

2) Long-Term Issues (12-months and beyond)

- a) Land acquisition transactions – negotiated sales and condemnation
- b) Change orders that result in an increase in the overall Project Costs – during final design and during construction
- c) Construction contractor pre-qualification process – evaluation criteria and final results
- d) Construction bid tabulations and recommendation of award
- e) Staffing Plan for WRF facility
- f) Operations and maintenance budget for WRF facility, pumping stations and pipelines