

Agenda Item Summary

**1. ACTION REQUESTED/PURPOSE:** Concur with the ranking of Proposers by the Qualification Selection Committee for RFP-06-01 GATEWAY WWTP EXPANSION PROJECT, in the following order of ranking, and authorize contract negotiations to commence with the number one ranked firm: (1) MWH; (2) Wharton-Smith Inc.; (3) Encore Construction Company; and (4) Earth Tech Consulting Inc., for an amount not-to-exceed (for design services, Phase II) of \$1,700,000.00. Additionally, request Board approve waiving of any formal process (if needed) and authorize the use of the Direct Material Purchase Orders as provided for in the CM agreement with Lee County, which allows the County to purchase directly from the suppliers of equipment and/or materials as a cost/time saving measure.

**2. WHAT ACTION ACCOMPLISHES:** Provides Lee County with a Design/Build team for the Gateway Wastewater Treatment Plant Expansion Project. The purpose of the proposed project is to expand the treatment capacity of the Gateway WWTP in two phases to at least 5.0 MGD with the ability to expand to 6.0 MGD in the future. Phase-One includes the Construction Management of the plant expansion to 3.00 MGD in accordance to the plans and specifications prepared by TKW Consulting Engineers, INC. Phase-Two includes the Design/Build of an additional 2.0 MGD capacity to the plant. The conceptual design is already incorporated in the original design included in Phase-One.

**3. MANAGEMENT RECOMMENDATION:** Staff recommends approval.

<b>4. Departmental Category:</b> 10		<b>CIOI</b>	<b>5. Meeting Date:</b> 08-01-2006
<b>6. Agenda:</b>	<b>7. Requirement/Purpose: (specify)</b>		<b>8. Request Initiated:</b>
<input checked="" type="checkbox"/> Consent	Statute		Commissioner
<input type="checkbox"/> Administrative	Ordinance		Department Public Works
<input type="checkbox"/> Appeals	<input checked="" type="checkbox"/> Admin. Code	AC-4-4	Division Utilities
<input type="checkbox"/> Public	Other		By: Ivan Velez, Acting Director
<input type="checkbox"/> Walk-On			<i>[Signature]</i> 6/14/06

**9. Background:** The Utilities Division submitted a request to Contracts Management to obtain design/build proposals for RFP-06-01 GATEWAY WWTP EXPANSION PROJECT. Florida statutes required the use of a formal proposal process due to the expected cost of this service.

Step One of the Design/Build Process:

- Statements of Qualification (SOQ) were due on April 6, 2006. A total of five SOQs were submitted by the established deadline date.
- The Qualification Selection Committee met on April 24, 2006 to short-list the qualified firms. The Qualification Selection Committee consisted of the following members: Jim Lavender, Director of Public Works, Chairman, Ivan Velez, Utilities Acting Director and Luis Soto, Project Manager.
- The short-listed firms were: Earth Tech Consulting; Encore Construction Company; MWH and Wharton Smith, Inc.

Continued on Page Two

**10. Review for Scheduling:**

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services				County Manager/P.W. Director
<i>[Signature]</i> 6-14-06	<i>[Signature]</i> 6/14/06	N/A		<i>[Signature]</i> 6/14/06	Analyst	Risk	Grants	MGR.	<i>[Signature]</i> 6-14-06

**11. Commission Action:**

- Approved  
 Deferred *6-27-06 TO Aug 1-3-1-*  
 Denied *Judith - nay*  
 Other *So - County Admin*

RECEIVED BY  
 COUNTY ADMIN:  
 6-14-06 - *[Signature]*  
 11:40  
 COUNTY ADMIN  
 FORWARDED TO:

Rec. by CoAtty  
 Date: 6/14/06  
 Time: 10:40am  
 Forwarded To:

Step Two of the Design/Build Process:

- Technical/Price Proposals were due and submitted to the Qualification Selection Committee on Thursday, June 1, 2006.
- Oral Presentations were conducted on Monday, June 12, 2006 by all four (4) short-listed firms.
- The Qualification Selection Committee met On Tuesday, June 13, 2006 to discuss all written materials along with the oral presentations made on June 12, 2006; and to make the selection of the most qualified proposer.
- The Qualification Selection committee unanimously selected the proposer whose proposal was in the best interest for Lee County, MWH.

Funds **are** available in account string: **20700048713.506540**

Attachments: Price Proposal Tab  
Proposer Ranking Sheet  
MWH Technical/Price Proposal

QUALIFICATION SELECTION COMMITTEE  
OVERALL RANKING SHEET  
FOR  
RFP-06-01 DESIGN BUILD SERVICES  
FOR  
GATEWAY WWTP EXPANSION PROJECT  
MONDAY, JUNE 12, 2006  
9:00 A.M. & 2:30 P.M.

COMPANY NAME

NUMBER RANKED

EARTH TECH CONSULTING, INC.

4

ENCORE CONSTRUCTION COMPANY

3

MWH

1

WHARTON-SMITH, INC.

2



COMMITTEE MEMBER  
(PROJECT MGR) SIGNATURE

6/13/06

Date:

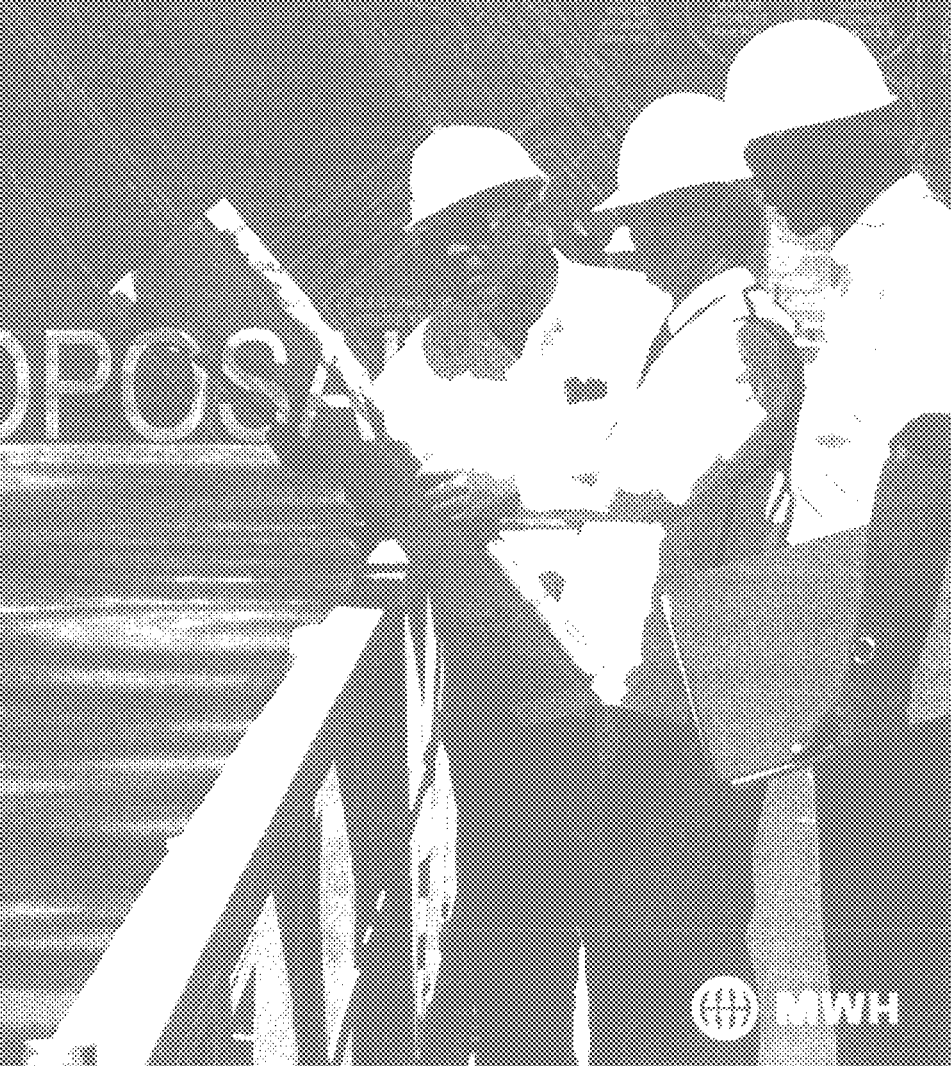


Design/Build Services for  
Gateway Wastewater  
Treatment Plant  
Expansion

RFP No.: RFP-06-01

June 1, 2006

PRICE PROPOSAL



ISSUED: May 16, 2006

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**RFP NO. RFP-06-01, STEP TWO  
OFFICIAL PRICE PROPOSAL FORM  
FOR DESIGN/BUILD SERVICES FOR  
GATEWAY WASTEWATER TREATMENT PLANT EXPANSION**

\*\*\*\*\*

Mail or Hand Deliver

**ORIGINAL PRICE PROPOSAL FORM AND SEVEN (7) COMPLETE COPIES**

**By 11:30 AM – THURSDAY, JUNE 1, 2006**

To:

**BOARD OF COUNTY COMMISSIONERS  
LEE COUNTY, FLORIDA  
CONTRACTS MANAGEMENT  
1500 MONROE STREET, 4<sup>TH</sup> FL  
FORT MYERS, FLORIDA 33901**

Anticipated Price Proposal Opening:

**EVALUATION COMMITTEE MEETING  
TO BE DETERMINED – BE PREPARED FOR PRESENTATIONS  
TO THE COMMITTEE JUNE 12, 13 OR 14, 2006  
THE MEETING COMMENCES AT TBA .**

**LEE COUNTY CONTRACTS MANAGEMENT  
1500 Monroe Street, 4<sup>th</sup> Floor  
Fort Myers, Florida 33901**

**COMPANY NAME:** MWH Constructors, Inc.  
**COMPLETE MAILING ADDRESS:** 370 Interlocken Boulevard, Suite 200  
**CITY:** Broomfield, **COUNTY:** Broomfield, **STATE:** CO, **ZIP CODE:** 80021  
**TELEPHONE NUMBER:** (303) 439.2800 & **FAX NUMBER:** (303) 439.2851  
**CONTACT PERSON NAME:** Blair Lavoie  
**CONTACT E-MAIL ADDRESS:** blair.m.lavoie@mwhglobal.com

\*\*\*\*\*

**FORM B**

\*\*\*\*\*

**Board of County Commissioners  
Lee County, Florida**

The Undersigned, hereinafter called "Proposer", having visited the site of the proposed project and familiarized himself/herself with the local conditions, nature and extent of the work, and having examined carefully the Contract Form, Scope of Work, General Conditions, Supplementary Conditions, Design Criteria Package and other Contract Documents, and with the Bond requirements herein, proposes to furnish all design, management, labor, materials, equipment and other items, facilities and services for the proper execution and completion of **DESIGN/BUILD SERVICES FOR GATEWAY WASTEWATER TREATMENT PLANT EXPANSION**, in full accordance with the Design Criteria, Scope of Services, drawings and specifications prepared in accordance with Contract Documents and, if awarded the contract, to complete the said work within the proposed project schedule for the following:

**Design Services (Phase II) Price \$** 1,700,000 **DOLLARS**

**Written in Words:** One million, seven hundred thousand dollars and no cents.

**The Proposer hereby agrees that there is attached:**

1. Non-Collusion Affidavit, Attachment A Yes X
2. Required Disclosure, Attachment B Yes X
3. Schedule D, Attachment C-1 (**only if Sub-consultants are being used for Design**) Yes X
4. ~~Subcontractor/Supplier Page, Attachment C-2a~~ Yes
5. Team Composition, Attachment C-3 Yes X
6. ~~Trench Safety Act Form, Attachment D~~ Yes      N/A
7. ~~Proposal Bond or Cashiers Check, Exhibit 1~~ Yes       
~~(10% of Base Price Proposal)~~
8. ~~Public Payment & Performance Bond (Exhibit 2)~~ Yes
9. ~~Irrevocable Letter of Credit (Exhibit 3)~~ Yes
10. Seven (7) Complete copies of this Price Proposal Form with all attachments Yes X
11. Licenses Attached Yes X

**ADDENDUM ACKNOWLEDGEMENT:**

The Proposer shall acknowledge receipt of any addenda issued to the solicitation by completing the blocks below or by completion of the applicable information on the addendum and returning it not later than the date and time for receipt of the Proposal. Failure to acknowledge an addendum that has a material impact on the solicitation may negatively impact the responsiveness of the Proposal. Material impacts include but are not limited to changes to scope of work, delivery time, performance period, quantities, bonds, letters of credit, insurance and qualifications, etc:

If awarded this Design/Build Contract, the Proposer agrees to complete the Work covered by this Contract as follows:


Work shall start at the Project site within fourteen (14) days of the effective date of the Notice to Proceed.

Substantial and Final Completion shall be accomplished in accordance submitted Project schedule.

Should the Successful Proposer fail to complete work as specified, the liquidated damage clause will apply (**Step One RFQ, Part E, Contract**).

The Proposer hereby agrees that the County reserves the right to waive informalities in any price proposal and to reject any or all Price Proposals, or to accept any Price Proposal that in its judgment will be in the best interest of the County.

**FLORIDA CONSTRUCTION INDUSTRIES LICENSING BOARD  
CERTIFICATION:**

Blair Lavoie, MWH Constructors, Inc.	1455659
<b>(NAME OF HOLDER)</b>	<b>(CERTIFICATE NO.)</b>
	
<b>(SIGNATURE OF PROPOSER)</b>	
<b>(CERTIFICATE EXPIRATION DATE)</b>	August 31, 2006
Blair Lavoie	
<b>(NAME TYPED)</b>	

**AUTHORIZED SIGNATORIES/NEGOTIATORS**

The Proposer represents that the following persons are authorized to sign and/or negotiate contracts and related documents to which the Proposer will be duly bound:

Name Blair Lavoie Title Vice President, MWH Constructors, Inc.

Telephone Number with area code : (303) 439.2800

Name \_\_\_\_\_ Title \_\_\_\_\_

Telephone Number with area code : \_\_\_\_\_

In witness whereof, the Proposer has hereunto set his signature and affixed his seal this day of May 30, A.D. 20 06.

BY:

  
\_\_\_\_\_  
(Signature)

TITLE: Assistant Secretary

PRINT NAME: Michael Cavanaugh

FEDERAL I.D. #: 841242056



**Lee County, Florida**  
**Gateway Wastewater Treatment Plant Expansion**  
**Phase II Design Estimate**  
**Pricing Assumptions**

**General Assumptions**

1. This Phase II Design Price Proposal is based on the design of the Gateway Wastewater (WWTP) Phase II Expansion as defined in the Lee County RFP-06-01 Step One Section D Scope of Work – Page D-2.
2. This Price Proposal is based on the assumption that MWH would undertake Phase II Design in conjunction with Phase I and II Construction Management-at-Risk. This price is not valid as a stand-alone price for Phase II Design only without Construction Management-at-Risk.
3. Based on MWH design reviews and value engineering proposals (as discussed in the accompanying Technical Proposal), it is understood that it will not be necessary to construct additional aerobic digesters during the Phase II design. This Price Proposal is based on the assumption that design of new digesters is not required.
4. It is assumed that this design will be based on modular expansion of the Phase I Gateway WWTP as shown in the drawings provided as part of this RFP.
5. Project duration is estimated at fifty (50) weeks. This provides twenty (20) weeks for process design, development, and review and approval by Lee County (Owner), and assumes a maximum Owner review time of 2-3 weeks. Following approval of the process design by the Owner, MWH will commence the development of construction documents. This phase has a planned duration of thirty (30) weeks. Survey and geotechnical work shall be completed at the same time as process design development.
6. Lead Discipline Engineers and the Lead Architect will participate in weekly design team conference calls spanning the 50-week duration of the project design schedule.
7. Five (5) project review meetings will be conducted corresponding to the five major design phases. Attendance at the project review meetings will include the Lead Discipline Engineers and Architect. Each meeting is scheduled to last one (1) working day.
8. Project QA/QC meetings will be conducted at the conclusion of the Conceptual, Preliminary, and Final Design Milestones. Attendance at the QA/QC review meetings will include the Chief Discipline Engineers and Architect and the project Lead Discipline Engineers and Architect. Each meeting is scheduled to last two (2) working days.
9. The project Lead Engineers and Architect will provide review and evaluation of scoping documents used to contract with outside subconsultants as well as review submitted proposals for conformance with scope requirements.
10. One Value Engineering Workshop will be conducted at the conclusion of the Preliminary Engineering Phase. Discipline Chief Engineers and the Chief Architect (or their designee) will participate in the 40-hour workshop to be conducted in Lee County. This design estimate includes man-hours to cover the pre-work and follow-up exercises.
11. MWH assumes that Lee County will provide all CAD files prepared for the previous project for use by MWH on this project. This includes original pen table definition and associated CAD standards that will be integrated into MWH's CAD standard.
12. This estimate does not include GMP preparation services (including cost estimates). These services are assumed to be covered under the Construction Management-at-Risk tasks of this contract.
13. This estimate does not include site topographical or geotechnical survey. It is assumed that required survey data will be provided by Lee County.
14. This estimate does not include bidding or construction phase services.

**Design Discipline Specific Assumptions**

**Civil Engineering**

1. The Storm Water Plan and Program performed during Phase I accommodates Phase II and there is no civil engineering support required for plans and/or permits.
2. There are no new or modified roads required for the Phase II expansion. All necessary access roads are included in the Phase I design.
3. Existing utility information is available in electronic format and included in the site survey base map prepared for the Phase I project.

**Lee County, Florida  
Gateway Wastewater Treatment Plant Expansion  
Phase II Design Estimate  
Pricing Assumptions**

4. Site survey and base map are complete. Data is appropriately separated between point files, break files, structures, utilities, etc.
5. The Phase II Geotech report shall include appropriate recommendations for pipeline design.
6. Phase I design includes all storm water piping and catch basins required for all subsequent plant expansions. Site grading can be accomplished by matching existing grade constructed in Phase I or prior to Phase I.
7. Potable water system has been designed in Phase I and accounts for all subsequent plant expansions.
8. Design of water supply and pressure to buildings and hydrants for fire suppression has been performed in Phase I to accommodate subsequent plant expansions. Calculations are assumed to be available for review to confirm fire supply adequacy and will not require recalculation by MWH.

**Architecture**

1. Architectural programming and concept development will be performed simultaneously with development of the Basis of Design Report.
2. The design estimate is based on preparing no more than three (3) design alternatives for the Admin/Ops facility. Basis of the design assumes that the Admin/Ops facility will be constructed of reinforced concrete block walls with a stucco finish on the exterior. Interior walls will be drywall on metal studs. The roof structure will be standing seam metal roofing on metal deck on metal trusses.
3. Color boards and renderings are not included in this design estimate.
4. For the purposes of this design estimate, the Admin/Ops building will be programmed to accommodate 1,500 square feet and include the following areas:

Office	Control Room
Laboratory	Break Room
Parts Storage and Maintenance Area	Electrical Room
Men's Restroom/Locker	Women's Restroom/Locker
Mechanical room	Janitor Closet

**Process-Mechanical**

1. The basis of this estimate assumes that the existing processes, mechanical equipment, and piping will be basically identical to that of Phase I and the design being priced is a "copy" of the current design.
2. MWH's pricing does not reflect ANY changes, review, or QC of the Phase I design.

**NON-COLLUSION AFFIDAVIT**

The undersigned being first duly sworn as provided by law, deposes and says:

- 1. This Affidavit is made with the knowledge and intent that it is to be filed with the Board of County Commissioners, Lee County, Florida and that it will be relied upon by said County, in any consideration which may give to and any action which it may take with respect to this Proposal.
- 2. The undersigned is authorized to make this Affidavit on behalf of, MWH Constructors, Inc. (Name of Corporation, Partnership, Individual, etc.), a Corporation formed under the laws of Delaware for which he is Vice President (Sole Owner, partner, president, etc.)
- 3. Neither the undersigned nor any other person, firm or corporation named in above Paragraph 2, nor anyone else to the knowledge of the undersigned, have themselves solicited or employed anyone else to solicit favorable action for this Proposal by the County, also that no head of any department or employee therein, or any officer of Lee County, Florida is directly interested therein.
- 4. This Proposal is genuine and not collusive or a sham; the person, firm or corporation named above in Paragraph 2 has not colluded, conspired, connived or agreed directly indirectly with any Proposer or person, firm or corporation, to put in a sham Proposal, or that such other person, firm or corporation, shall refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person, firm or corporation, to fix the prices of said proposal or proposals of any other Proposer; and all statements contained in the proposal or proposals described above are true; and further, neither the undersigned, nor the person, firm or corporation named above in Paragraph 3, has directly or indirectly submitted said proposal or the contents thereof, or divulged information or data relative thereto, to any association or to any member or agent thereof.

[Signature]  
(AFFIANT)

TAKEN, SWORN AND SUBSCRIBED TO BEFORE ME this 30th day of May, 20 06.

Notary Public

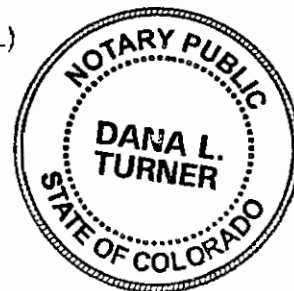
Dana Turner

(SEAL)

(Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known X or Produced Identification \_\_\_\_\_

Type of Identification: \_\_\_\_\_



My Commission Expires  
2/20/2010

**REQUIRED DISCLOSURE**

The following Disclosure is of all material facts pertaining to any felony or civil conviction or any pending felony or civil charges in the last three (3) years in this State or any other State of the United States against 1) Proposer, 2) any business entity related to or affiliated with Proposer, or 3) any present or former executive employee, officer, director, stockholder, partner or owner of Proposer or of any such related or affiliated entity. This Disclosure shall not apply to any person or entity that is only a stockholder, which person or entity owns twenty percent (20) or less of the outstanding shares of a Proposer whose stock is publicly owned and traded.

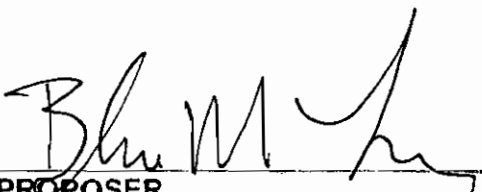
On behalf of the Proposer, the undersigned represents that to my knowledge and for the purpose of this disclosure, there are no known material facts to identify for this proposal.

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\_\_\_\_\_  
**PROPOSER**

**SCHEDULE D  
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

NOTE: This form must be signed by the person who will sign, or has signed the Proposal Form. This form will become a part of the contract documents.

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION):

DESCRIPTION OF WORK: Surveying during design phase

SUBCONTRACTOR'S NAME: E.F. Gaines Surveying Services, Inc.

EST. DOLLAR VALUE OF PROPOSED WORK: TBD

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION):

DESCRIPTION OF WORK: Mechanical and Electrical Engineering Design

SUBCONTRACTOR'S NAME: J.E. Gonzalez & Associates, Inc.

EST. DOLLAR VALUE OF PROPOSED WORK: TBD

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION):

DESCRIPTION OF WORK: \_\_\_\_\_

SUBCONTRACTOR'S NAME: \_\_\_\_\_

EST. DOLLAR VALUE OF PROPOSED WORK: \_\_\_\_\_

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION):

DESCRIPTION OF WORK: \_\_\_\_\_

SUBCONTRACTOR'S NAME: \_\_\_\_\_

EST. DOLLAR VALUE OF PROPOSED WORK: \_\_\_\_\_

TOTAL VALUE OF ALL DBE/MINORITY/WOMEN SUBCONTRACT WORK: \$ TBD

ESTIMATED TOTAL PERCENT (%) TO BE UTILIZED: \_\_\_\_\_ 3.0 %\*

\*Based on Price Proposal for design of Phase II (Price Form B-2). Does not include potential construction subcontractors for Phase I or Phase II.

MWH Constructors, Inc.  
CONTRACTOR NAME

  
SIGNATURE

May 30, 2006  
DATE

**PROJECT TEAM**

RFP Project Number RFP-0p-01  
NAME: MWH Constructors, Inc.

Federal I.D. Number 841242056		Is Prime Consultant a certified MWBE Firm		Yes	No	X
<u>PRIME</u> MWH Constructors, Inc. Role	Name and City of Residence of Individual Assigned to the Project	Number of Years Experience	Education, Degree(s)	Florida Registration Numbers	Active	Registration Numbers
Principle-in-Charge	Richard Lewis, Fort Myers, FL	32	BS, Education, Northwestern University			
Project Manager	Tom Machinski, Naples, FL	20	BS, Construction Science, University of Oklahoma			
Project Engineer	Dave Baar, Cape Coral, FL	23	MS, Engineering; BS, Civil Engineering, Univ. of Central Florida	Professional Engineer (FL) License #38531		
Project Construction Manager	Brian Smith, Fort Myers, FL	20	Coursework, University of Missouri & Southern Illinois University			
Other Key Member ( )						
Other Key Member ( )						
<u>SUB-CONSULTANT</u> Role	Company Name and Address of Office Handling this Project	If Certified MWBE specify which	Projected % of Overall work on the entire project *	Name of Individual Assigned to the Project		
Architecture						
Mechanical Engineering	J.E. Gonzalez & Associates, 12995 S Cleveland Ave., Ft. Myers	MBE	*1.5%	Julio Gonzalez		
Electrical Engineering						
Structural Engineering						
Civil Engineering						
Landscape Architecture						
Other Key Member ( surveying )	E.F. Gaines Surveying Services, 1342 Colonial Blvd., Ft. Myers	WBE	*1.5%	Elizabeth Gaines		

Note: Percentages indicated must conform to percentages indicated on Form C

Attachment C-3

\*Based on Price Proposal for design of Phase II (Price Form B-2). Does not include potential construction subcontractors for Phase I or Phase II.

# LICENSES

STATE OF FLORIDA	AC# 2192691
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION	
QB0009231	09/13/05 050226345
QUALIFIED BUSINESS ORGANIZATION MWH CONSTRUCTORS INC	
(NOT A LICENSE TO PERFORM WORK. ALLOWS COMPANY TO DO BUSINESS IF IT HAS A LICENSED QUALIFIER.)	
IS QUALIFIED under the provisions of Ch.489 FS. Expiration date: AUG 31, 2007 L05091301147	

DETACH HERE

AC# 2192691

## STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
CONSTRUCTION INDUSTRY LICENSING BOARD SEQ# L05091301147

DATE	BATCH NUMBER	LICENSE NBR
09/13/2005	050226345	QB0009231

The BUSINESS ORGANIZATION  
Named below IS QUALIFIED  
Under the provisions of Chapter 489 FS.  
Expiration date: AUG 31, 2007  
(THIS IS NOT A LICENSE TO PERFORM WORK. THIS ALLOWS  
COMPANY TO DO BUSINESS ONLY IF IT HAS A QUALIFIER.)

MWH CONSTRUCTORS INC  
370 INTERLOCKEN BLVD STE 300  
BROOMFIELD CO 80021

JEB BUSH  
GOVERNOR

DISPLAY AS REQUIRED BY LAW

SIMONE MARSTILLER  
SECRETARY

AC# 1455659

## STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
CONSTRUCTION INDUSTRY LICENSING BOARD SEQ# L04061800979

DATE	BATCH NUMBER	LICENSE NBR
06/18/2004	030734708	CGC058999

The GENERAL CONTRACTOR  
Named below IS CERTIFIED  
Under the provisions of Chapter 489 FS.  
Expiration date: AUG 31, 2006



LAVOIE, BLAIR MICHAEL  
MWH CONSTRUCTORS INC  
370 INTERLOCKEN BLVD  
SUITE 300  
BROOMFIELD CO 80021

JEB BUSH  
GOVERNOR

DIANE CARR  
SECRETARY

# LICENSES

Professional Engineering License, State of Florida  
Dave Baar, Project Engineer



Log On DBPR Home Online Services Home Help Site Map

5:36:02 PM 3/3/2006

**Public Services**

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- Apply to Retake Exam
- Find Exam Information
- File a Complaint
- AB&T Delinquent Invoice & Activity List Search

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- Change License Status
- Maintain Account
- Change My Address
- View Messages
- Change My PIN
- View Continuing Ed

Term Glossary

Online Help

**Licensee Details**

**Licensee Information**

Name: **BAAR, DAVID A (Primary Name)**  
(DBA Name)

Main Address: **C/O MWH**  
**490 SAWGRASS CORP. PARKWAY SUITE 300**  
**SUNRISE Florida 33325**

County: **BROWARD**

License Mailing:

License Location:

**License Information**

License Type: **Professional Engineer**

Rank: **Prof Engineer**

License Number: **38531**

Status: **Current, Active**

Licensure Date: **08/10/1987**

Expires: **02/28/2007**

**Special Qualifications**    **Qualification Effective**

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# ACORD™ CERTIFICATE OF LIABILITY INSURANCE

08/31/2006

DATE (MM/DD/YY)  
09/27/2005

**PRODUCER**  
Lockton Companies  
8110 E Union Avenue  
Suite 700  
Denver CO 80237  
(303) 414-6000

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.**

**INSURERS AFFORDING COVERAGE**

**INSURED**  
1052589 MWH Americas, Inc.  
and MWH Constructors, Inc.  
370 Interlocken Blvd., Suite 300  
Broomfield, CO 80021

INSURER A: Zurich American Insurance Company  
INSURER B: National Union Fire Ins. Co. of PA  
INSURER C: Lexington Insurance Company  
INSURER D:  
INSURER E:

**COVERAGES VW**

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR	GLO4277220-00	08/31/2005	08/31/2006	EACH OCCURRENCE \$ 1,000,000
	FIRE DAMAGE (Any one fire) \$ 500,000 MED EXP (Any one person) \$ Excluded PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000				
A	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	BAP4277221-00 (AOS) TAP4277222-00 (TX)	08/31/2005	08/31/2006	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<b>GARAGE LIABILITY</b> <input type="checkbox"/> ANY AUTO	NOT APPLICABLE			BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX AUTO ONLY - EA ACCIDENT \$ XXXXXXXX OTHER THAN EA ACC \$ XXXXXXXX AUTO ONLY: AGG \$ XXXXXXXX
B	<b>EXCESS LIABILITY</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> UMBRELLA FORM RETENTION \$	BE4484886	08/31/2005	08/31/2006	EACH OCCURRENCE \$ 20,000,000
	AGGREGATE \$ 20,000,000 \$ XXXXXXXX \$ XXXXXXXX \$ XXXXXXXX				
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>	WC4277218-00 (AOS) WC4277219-00 (MA&WI)	08/31/2005	08/31/2006	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
	<b>OTHER</b> Professional Liability	4649099	10/01/2005	10/01/2006	\$70,000,000 each claim \$10,000,000 aggregate

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

**CERTIFICATE HOLDER**

2398510  
For Information Only

ADDITIONAL INSURED; INSURER LETTER:

**CANCELLATION** [M36060]

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 60 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

*William M. O'Connell Jr.*



**D.O.O**

Cancellation clause also reads: Ten (10) days for non-payment. Certificate Holder and any other entity are Additional Insureds as respects General Liability, Auto Liability & Umbrella Liability if required by written contract. Coverage is primary/non-contributory if required by written contract. Waiver of Subrogation applies in favor of Certificate Holder and any other entity as respects General Liability, Auto Liability, Umbrella Liability & Workers' Compensation if required by written contract.



June 1, 2006

Board of County Commissioners  
Lee County, Florida  
Contracts Management  
1500 Monroe Street, 4th Floor  
Fort Myers, FL 33901

**Subject:** Request for Technical and Price Proposal Number: RFP-06-01  
Design-Build Services for Gateway Wastewater Treatment Plant Expansion

Dear Board,

MWH Constructors, Inc. (MWH) appreciates the opportunity to submit the following proposal to Lee County (County) for the Gateway Wastewater Treatment Plant (WWTP) Expansion project. Having completed numerous wastewater treatment and collection projects throughout Southwest Florida, we will approach this project with our demonstrated due diligence, tenacity, and professionalism in bringing innovative and cost-effective solutions.

MWH understands that Lee County Utilities (LCU) faces the following major challenges in the Gateway WWTP Phase I and II Expansions:

- **Schedule** – Achieving commissioning of the Gateway WWTP Phase I expansion to enable permitted capacity to exceed influent wastewater flows
- **Cost** – Constructing the Gateway WWTP Phase I and II expansions in accordance with Lee County's budget
- **Quality** – Achieving the effluent requirements of the Florida Department of Environmental Protection (FDEP) while allowing simple and straightforward operation by LCU staff

MWH proposes to address these challenges as follows:

- **Schedule** – MWH has assembled a comprehensive plan for completing the Phase I expansion by June 2008 and the Phase II expansion by June 2009. One key component to achieving these milestones is maximizing the construction resources available to LCU to complete this project. MWH's position as a leader in the Southwest Florida water and wastewater construction market will be vital to delivering these resources.
- **Cost** – As a true CM-at-Risk firm, MWH will strive to complete these expansions at a cost lower than LCU's budgets through:
  - ✓ **Competitive Bidding.** Subcontracts will be competitively bid to a field of pre-qualified subcontractors. Bid packages will be structured to minimize second tier contractors and reduce mark-ups included in the Guaranteed Maximum Price (GMP).
  - ✓ **Value Engineering.** MWH has already carried out a Design Review of the Phase I plant design, and has formulated numerous recommendations for reducing the Phase I cost.



✓ **Change Management.** Our disciplined procedures for managing subcontractor claims and change orders have a proven track record of reducing or eliminating claims and change orders to maintain costs within the GMP.

- **Quality** – As a truly integrated engineering and construction firm, MWH will bring to bear its resources both as designer and constructor. We will perform the majority of engineering in-house, combining our world-class wastewater treatment plant design resources with our Florida-based design expertise. Our engineers will work seamlessly with our veteran construction management team. This integrated team will leverage the benefits of early contractor involvement in design to optimize constructability and maximize quality control. MWH will provide LCU with a true single point of responsibility for a high-quality design-build project.

We have carefully read Lee County's Request for Technical and Price Proposal Number RFP-06-01, and the requirements therein. We have also received Addenda Numbers One and Two to this RFP dated May 24, 2006, and May 26, 2006, respectively. Following our initial review, we believe the County's general terms and conditions to be acceptable. We realize the County or LCU may wish to adjust final contract language in its best interest based on the successful respondent's proposal.

Furthermore, we certify this proposal to be substantive and affirm that the signatory is an authorized representative of MWH and has the authority to bind the company to performing the work described in our proposal.

We look forward to partnering with you to improve the services you provide to your customers and, in doing so, enhancing their quality of life.

Sincerely,

A handwritten signature in black ink, appearing to read "Blair M. Lavoie".

Blair M. Lavoie  
Vice President  
MWH Constructors, Inc.

Request for Technical and Price Proposal Number: RFP-06-01  
Design-Build Services for Gateway Wastewater Treatment Plant Expansion

370 Interlocken Blvd  
Suite 300  
Broomfield, Colorado  
80021

Tel 303 410 4000  
Fax 303 410 4100

*Delivering Innovative Projects and Solutions Worldwide*

**REQUIRED FORMS AND TECHNICAL PROPOSAL**  
**RFP-0P-01 STEP TWO**  
**DESIGN-BUILD SERVICES FOR**  
**GATEWAY WASTEWATER TREATMENT PLAN EXPANSION**  
**DUE 11:30 A.M. – THURSDAY, JUNE 1, 2006**

**PROPOSER INFORMATION:**

NAME OF FIRM: MWH Constructors, Inc.

ADDRESS: 370 Interlocken Boulevard, Suite 200 (Street Address)

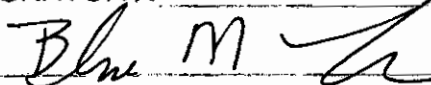
(PO Box)

Broomfield, Colorado 80021 (City, County, State, Zip)

PHONE: (303) 439.2800

FAX: (303) 439.2851

AUTHORIZED SIGNATORY: Blair Lavoie (Print Name) TITLE: Vice President  
MWH Constructors, Inc.

SIGNATURE: 

CONTACT'S E-MAIL ADDRESS: blair.m.lavoie@mwhglobal.com

**IDENTIFICATION OF BUSINESS ORGANIZATION:**

**Check the appropriate box that describes the organization of the firm proposing:**

Sole Proprietorship  Partnership  Joint Venture  Corporation

State of Incorporation: Delaware

The Proposer represents that the following persons are authorized to sign and/or negotiate contracts and related documents to which the Proposer will be duly bound:

Name	Title	Phone Number
Blair Lavoie	Vice President, MWH Constructors, Inc.	(303) 439.2800

**ADDENDUM ACKNOWLEDGEMENT:**

The Proposer shall acknowledge receipt of any addenda issued to the solicitation by completing the blocks below or by completion of the applicable information on the addendum and returning it not later than the date and time for receipt of the Proposal. Failure to acknowledge an addendum that has a material impact on the solicitation may negatively impact the responsiveness of your Proposal. Material impacts include but are not limited to changes to scope of work, delivery time, performance period, quantities, bonds, letters of credit, insurance and qualifications, etc.

Addendum	No.	Date	Addendum	No.	Date
One - Step 2		May 24, 2006	Two - Step 2		May 26, 2006

**CERTIFICATE OF AUTHORITY**

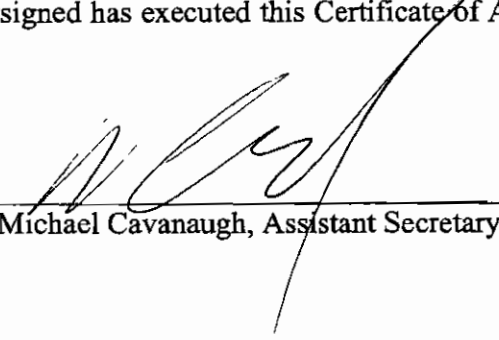
At the City of Broomfield, State of Colorado, Michael Cavanaugh does hereby state:

That he comes at this time on behalf and in the name of MWH Constructors, Inc., a Delaware corporation (the Company), as its Assistant Secretary, to certify that:

**FIRST:** Blair M. Lavoie is employed with the Company in the capacity of Vice President, and

**SECOND:** Blair M. Lavoie, has signatory authority sufficient to execute on behalf of the Company for a Request for Proposals for Design Build Services for Gateway Wastewater Treatment Plant Expansion Project for Lee County, Florida.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Authority on this 30<sup>th</sup> day of May 2006.

  
\_\_\_\_\_  
Michael Cavanaugh, Assistant Secretary

CORPORATE SEAL

# Project Understanding, Approach and Preliminary Design

## Project Understanding

MWH understands that Lee County Utilities' (LCU) expansion of the Gateway Wastewater Treatment Plant (WWTP) will occur in three phases as outlined below.

	Expansion Phase		
	Phase I	Phase II	Phase III
AADF Capacity Before Expansion	1.0 mgd	3.0 mgd	5.0 mgd
Additional AADF Capacity	+ 2.0 mgd	+ 2.0 mgd	+ 2.0 mgd
Decommission Capacity*			- 1.0 mgd
Expanded AADF Capacity	= 3.0 mgd	= 5.0 mgd	= 6.0 mgd

AADF = Annual Average Dry Weather Flow

\* In Phase III, LCU plans to convert the existing package plant into a reject water storage tank

The scope of work for the present proposal includes:

- **Phase I Expansion** – Construction Management-at-Risk (CM-at-Risk)
- **Phase II Expansion** – Design and Construction Management-at-Risk (CM-at-Risk)

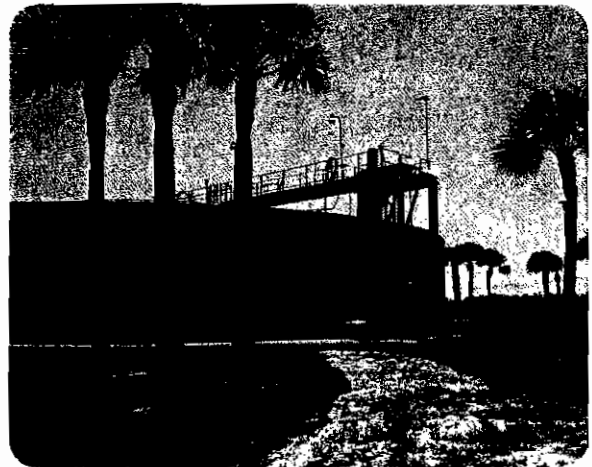
The Phase I scope of services would also include a review of the Phase I design prepared by others to assess viability, constructability, and potential value engineering improvements to that design.

## Existing Field Conditions

MWH has carried out numerous site visits to the Gateway WWTP to evaluate existing site conditions. Some of our observations from these visits include:

- The site is currently accessed through the Gateway Community. Identifying alternative site access could significantly reduce disruption to the community during construction.

- The existing DAVCO package treatment plant units are in moderately acceptable condition, but will require extensive ongoing maintenance.
- The existing package plant was designed with a 1.0-mgd capacity but is only permitted for 0.5-mgd treatment. MWH understands that LCU intends to re-rate this package plant to 1.0-mgd capacity during the Phase I permitting process.
- Current biosolids operation involves manual lime stabilization and landfill hauling.
- The Gateway Community currently owns and operates reclaimed water distribution.
- Current site operations buildings are in temporary facilities. MWH understands a new operations building is scheduled for construction as part of the Phase II expansion.



## Potential Design and Construction/Build Issues

On May 24, in preparation for this proposal, MWH conducted an intensive design review. Senior wastewater process engineers, wastewater treatment plant designers, treatment plant operations specialists, construction managers, and construction cost estimation specialists gathered under the leadership of our proposed Project Manager, Tom Machinski.

The objectives of the Design Review and Value Engineering Meeting were to evaluate the Gateway WWTP Phase I Design's suitability for:

- Wastewater treatment process design
- Hydraulic design
- Operability
- Constructability
- Plant phasing and expandability
- Site space utilization
- Accessibility
- Cost-effectiveness
- Potential value engineering modifications

This Design Review and Value Engineering Meeting resulted in a list of potential design improvements that would significantly enhance the plant's performance and operability while reducing the time and cost necessary to achieve plant upgrade to 6-mgd capacity. The following discussion of a potential alternative approach to biosolids processing provides one example of MWH's value engineering approach. We look forward to sharing other key value engineering proposals during our presentation to LCU.

### Value Engineering Example - Biosolids Processing

LCU's current undertaking of a comprehensive countywide residuals management plan will help determine the long-term usage of biosolids generated at its wastewater treatment plants. Most communities in southwest Florida are investing in processing facilities to achieve Class A type biosolids for marketing and distribution, including a combination of thermal processing and drying treatments. The following presents MWH's proposed alternative approach to that outlined in the Preliminary Design Report:

1. Construct the aerobic digesters planned under Phase I with minor value engineering changes. For example, MWH recommends using positive displacement (PD) blowers for the aerobic digesters instead of the multi-stage centrifugal blowers included in the current Phase I design. Controlling airflow with centrifugal blowers can be difficult, especially with varying digester levels. PD blowers are more suited for varying digester levels and can

be designed at lower speeds to reduce noise (or provided with acoustical enclosures).

2. In Phase II, utilize the aerobic digesters constructed during Phase I for storage and partial stabilization of sludge generated from the plant, allowing the postponement of constructing additional digesters or thickeners until the regional plan is finalized. The existing digesters will provide over 20 days of storage/stabilization at Phase II flows.
3. Continue to haul unthickened biosolids to the landfill through the existing sludge hauling contract. If necessary, allow the private hauler to transport a mobile dewatering unit to the site to reduce transportation costs.
4. Conduct testing to determine the current system's volatile solids destruction and its operating cost per pound of volatile solids destroyed. Evaluate if this system meets Class B requirements – sludge from extended aeration oxidation ditch processes are typically very stable and require little additional treatment to meet Class B requirements.
5. Evaluate the cost-effectiveness of pumping liquid sludge off-site for further processing and/or drying (i.e., at the landfill site or another wastewater treatment plant). Consolidating biosolids processing in a single facility can save significant capital and labor costs.
6. Provide other necessary facilities at appropriate locations once the Countywide Biosolids Management Plan is completed.

This alternative approach would benefit LCU by minimizing the investment for Gateway WWTP biosolids processing facilities, the construction of which may not be consistent with the long-term plan.

### Minimizing Disruptions to the Existing Wastewater Treatment System Operations

The Gateway WWTP expansion will involve construction at an operating facility during both Phase I and Phase II.

- **Phase I expansion** involves the re-routing of influent force mains to the new headworks structure and connection of the new headworks to the existing package plant.



- **Phase II expansion** may involve the beginning of Phase II construction during the completion of construction, startup, testing, commissioning, and operation of the Phase I plant.

Tie-ins and shutdowns are absolutely critical to the success of the Gateway WWTP project – existing plant operations must not be interrupted. MWH has identified two key aspects to the project involving tie-ins and shutdowns:

- Scheduling these items in the overall project schedule to support construction work while minimizing impacts to the plant
- Coordinating the actual work to ensure smooth operation after construction activity is completed

MWH employs the following tools for coordinating tie-in and shutdown activities:

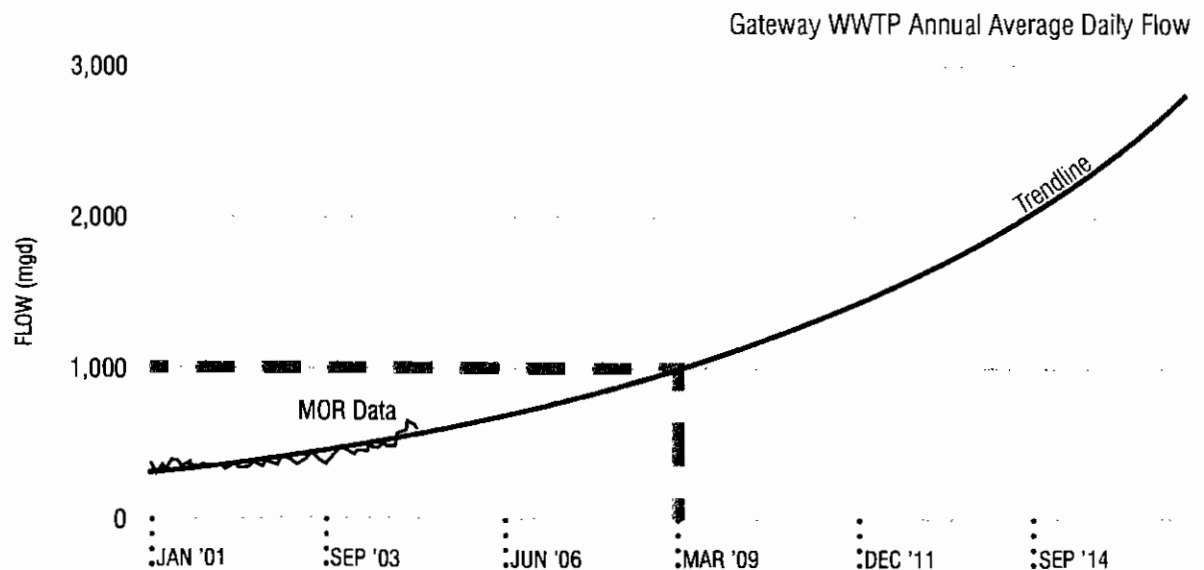
- **Potential Disruptions and Mitigation Plan** – We will prepare a preliminary analysis of potential disruptions and create mitigation plans for the plant's construction, focusing particularly on critical tie-ins.
- **Operations Analysis** – This tool will help schedule and coordinate major tie-ins and shutdowns while minimizing their impact on existing plant operations. This collaborative analysis of future tie-in, shutdown, or other critical construction activity includes a seven-element analysis for each

work activity completed by members of the CM-at-Risk team, engineer, and LCU's operations staff. This will be performed concurrent with our detailed scheduling activities.

- **Pre-Work Planning** – Essential for operationally critical work, Pre-Work Planning Sessions are completed for each area of work that could potentially impact plant operations. These Planning Sessions will gather involved subcontractors, operations staff, the program manager, design engineers, and other LCU staff to identify the tools, equipment, and materials required for the installation of the work. Pre-planning the installation allows for sequence timing, identifying missing items or site issues, and making subsequent plan revisions to enable an easier and safer installation.

## Comprehensive Plan for Completing the Specified Work

MWH understands that LCU requires expansion of the Gateway WWTP to be completed and commissioned efficiently to meet rapidly increasing wastewater flows. MWH carefully reviewed the Preliminary Design Report for the Gateway WWTP Expansion and has noted the report's indication that flows to the plant will exceed the plant's designed 1.0-mgd capacity by March 2009.



MWH understands it may be necessary to expedite the plant's Phase I expansion to achieve an earlier commissioning date. We further understand the City of Fort Myers requires 2.0-mgd treatment capacity for the Arborwood development area (between Colonial Blvd. and Daniels Parkway to the East of Interstate 75) and has provided funds to enable LCU to provide this capacity through the plant's Phase II expansion. As consistent with interlocal agreements in place between Lee County and Fort Myers, completion of the Phase II expansion will be required as soon as possible after completion of Phase I construction. MWH has responded with an aggressive project schedule (detailed in the following section) for the completion of these phases as follows:

- Phase I Expansion – June 2008 Commissioning
- Phase II Expansion – June 2009 Commissioning

MWH's Comprehensive Plan for the completion of the Gateway WWTP project will focus on achieving these milestones.

## Techniques for Efficient Project Delivery

### Construction Management-at-Risk

While MWH is capable of self-performing construction work, we understand the role of a CM-at-Risk to be exactly what the term implies – a construction manager who accepts the project's delivery risk. MWH will maximize competition for each element of work through open-book subcontracting. Bid packages will be formulated to:

- Maximize the subcontractor opportunities by unbundling work

- Maximize the involvement of construction resources
- Minimize the number of second tier subcontractors

Minimizing second tier contractors will reduce the amount of mark-ups included in the Guaranteed Maximum Price (GMP) while maximizing the accessibility (and therefore responsiveness) of subcontractors.

Hard-bid contractors who propose to self-perform major portions of the work will not allow market forces to achieve the best prices. A hard-bid contractor who proposes to price competitively against its own subcontractors is unlikely to draw the same level of competition, as subcontractors will likely consider the competition to be slanted.

As a major player in the water and wastewater construction market in southwest Florida, MWH will be able to draw significant bid participation to this project, providing LCU with the most competitive costing. Through our work in Lee County, Cape Coral, and throughout southwest Florida, MWH understands which of the region's contractors have the experience and resources to perform the work (along with the reputation and ability to deliver).

As a national leader in design and construction of water and wastewater plants, we are also able to draw on a larger statewide and national subcontractor resource base when necessary to supplement the southwest Florida market (both in terms of resources and of specialized supplier/contractor requirements).

One opportunity for the CM-at-Risk to reduce risk to LCU is through experienced change and claims management. As an integrated engineer-contractor, we provide experienced construction managers to minimize change orders during construction. For example, during the construction of the South

### **MWH is a True CM-at-Risk Firm**

As a true practitioner of CM-at-Risk, MWH is committed to the value this delivery method brings to owners such as LCU. In its intended form, CM-at-Risk provides owners the benefits of constructability input during design; competitive open-book bidding; maximizing construction resource "draw" to the project; GMP pricing; single point of responsibility for construction; reduced risk of claims, litigation, and delays; improved construction quality control; and experienced startup and commissioning input through all project phases. We are committed to applying CM-at-Risk in its true form to deliver the Gateway WWTP Expansion Project to meet and exceed LCU's budget, schedule, and quality expectations.

## Our standard process for subcontractor management includes:

- Responding immediately to all change correspondence from the contractor
- Rigorously tracking schedules and documenting responses for time and change impacts
- Enforcing all contract and scope of work conditions at our disposal
- Discovering and eliminating frivolous claims
- Negotiating item by item from a position of superior knowledge and data to reduce total change order exposure

County Water Reclamation Facility (WRF) Expansion in Collier County, MWH's standard contractor management process enabled us to reduce a change order on the project from \$700,000 to \$151,000.

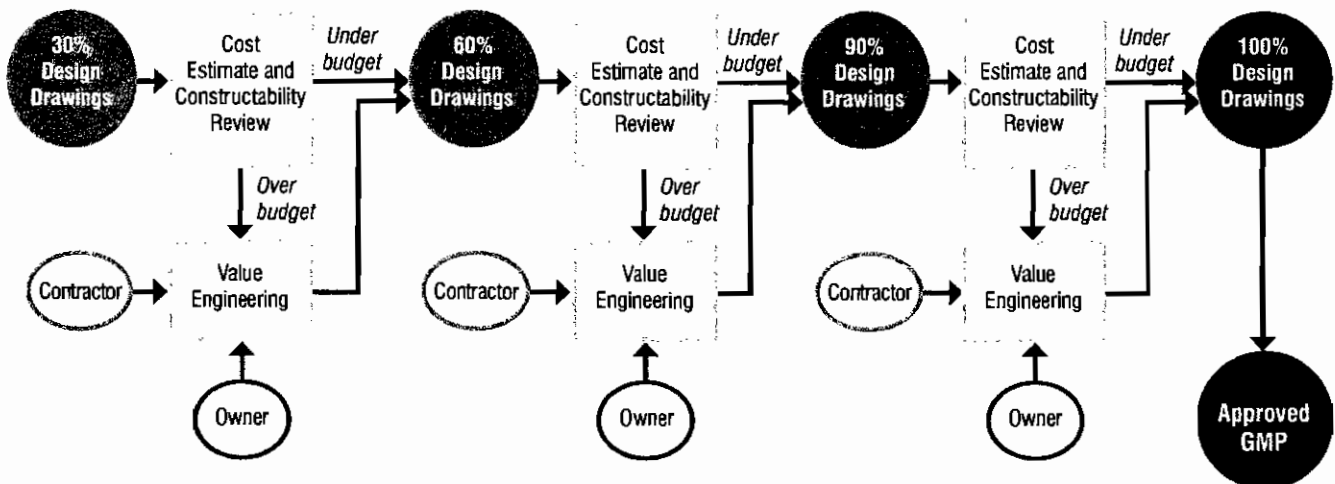
### Design Methodology

For the Phase II expansion, MWH will leverage our integrated design and construction resources. We will perform the majority of engineering in-house, combining our world-class wastewater treatment plant design resources with our Florida-based expertise and providing LCU the benefit of a true single point of responsibility.

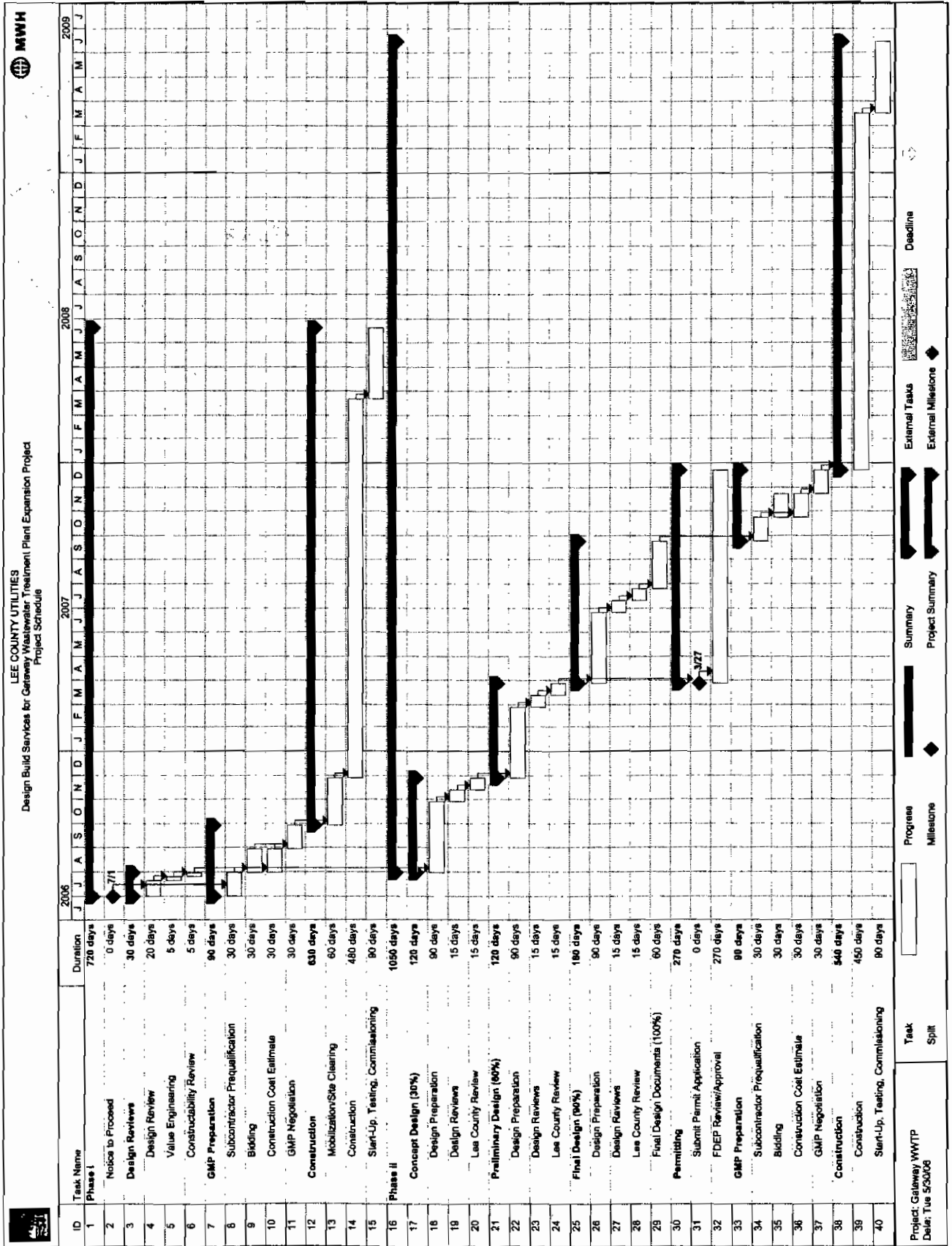
MWH's approach to the Phase II design will focus on working closely with LCU to allow maximum input

from its engineering and operations staff in designing a plant that meets LCU's needs and expectations as owner and end-user. Our approach calls for working with LCU through all stages of design to 100% design completion. Formal Design Reviews will be held at the 30%, 60%, and 90% completion stages, and will include constructability and value engineering reviews as described in the following sections of this proposal. Most importantly, informal contact will proceed on a day-to-day basis with our Lee County-based design team.

### Integrated Constructability and Value Engineering Process Yields Total Budget Management



# Project Schedule



# Value Engineering

As a truly integrated engineering-construction firm, MWH has the proven capability to conduct value engineering and constructability reviews that can produce substantial cost and schedule savings for Lee County Utilities (LCU). The recent and relevant experience of our proposed core project team is supplemented by our global staff of more than 6,000 professionals, providing the breadth and depth of personnel, knowledge, experience, and innovative thinking needed to deliver solutions for complex design-build projects such as the Gateway WWTP Expansion.

MWH will bring together team members from every stage of the Phase I and Phase II expansions—design, permitting, estimating, procurement, construction, and startup—to discuss and recommend innovative solutions to reduce the project schedule and budget while maintaining plant quality, performance, reliability, and operability. Inclusion of LCU engineers, operations staff, and subcontractors during these design reviews will enable broad exploration and understanding of alternative solutions. This early involvement can reduce the overall project schedule by jump-starting construction planning and scheduling while helping to integrate the entire project team from design through startup and commissioning.

The Gateway WWTP Expansion presents the particular challenge of maintaining operability of the existing plant throughout the project's duration, making MWH's experience and success in constructing improvements in operating treatment plants a strong point of our project team and our company. Maintaining LCU's ability to serve its customers without disruption is a critical aspect of our role as designer and builder. MWH is well-versed

in managing such complicated interface issues and will work to enable the Gateway WWTP to continue treating wastewater while we plan and execute critical tie-ins and interconnections with the full cooperation of LCU operations staff.

## Two-Phased Approach to Value Engineering and Constructability Reviews

Following LCU's issuance of a notice to proceed, MWH will begin Phase II design concurrent with Phase I construction to encourage continuity of construction between phases. After an in-depth review of LCU's design criteria, we will develop a Phase II design based on the design and development of the Phase I expansion, MWH's technological knowledge base, and essential input from LCU's engineering and operations staff.

## Introducing Opportunities for Innovation Early and Often

Early in the design process, MWH will hold initial design innovation sessions, bringing together some of our leading wastewater treatment process engineers with LCU staff to develop alternatives for Phase II. These alternatives will be aimed at optimizing the Phase I expansion. We will balance the capital and the operation and maintenance costs to minimize the whole lifecycle cost of new facilities required to achieve the Phase II outputs.

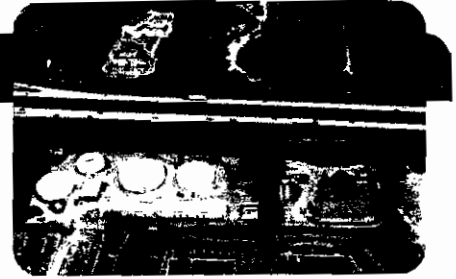
### Value Engineering Case Study 1

**The South County WRF Expansion Project** included numerous scheduled shutdowns of the existing plant to allow tie-ins. Each shutdown was budgeted to cost Collier County \$33,000. To save the County money and facilitate future operations, MWH constructed a headworks bypass. This innovative solution saved the County \$150,000 in construction costs and helped MWH complete construction five months ahead of schedule. It also provided a permanent headworks bypass, which increased the flexibility of plant operations and created the potential to save time and money during future plant operations shut-downs.



## Value Engineering Case Study 2

Working with Jacksonville Electrical Authority (JEA), MWH provided value engineering (VE) at the Highland Avenue Water Treatment Plant in Jacksonville, Florida. Several innovative concepts were developed with JEA engineering and operations staff, and approved VE items incorporated into the project resulted in a savings of approximately \$400,000 on this \$8M project.



Following the development of a Phase II conceptual design, MWH will conduct additional value engineering and constructability reviews at the 30%, 60%, and 90% design levels centered around a design review workshop process as shown in the flowchart below. The workshop model includes all stakeholders (LCU, designers, and construction staff) and involves a six-step process for identifying constructability recommendations. This model has been successfully applied on MWH's City of Cape Coral Water and Wastewater Expansion Program, where it has taken the form of a two-stage workshop review process.

The first stage involves an internal constructability and value engineering review workshop, where MWH engineers and constructors review the design and generate and rank ideas, then develop them for further recommendation to LCU (Information, Critique, Creative, Evaluation, and Development Phases).

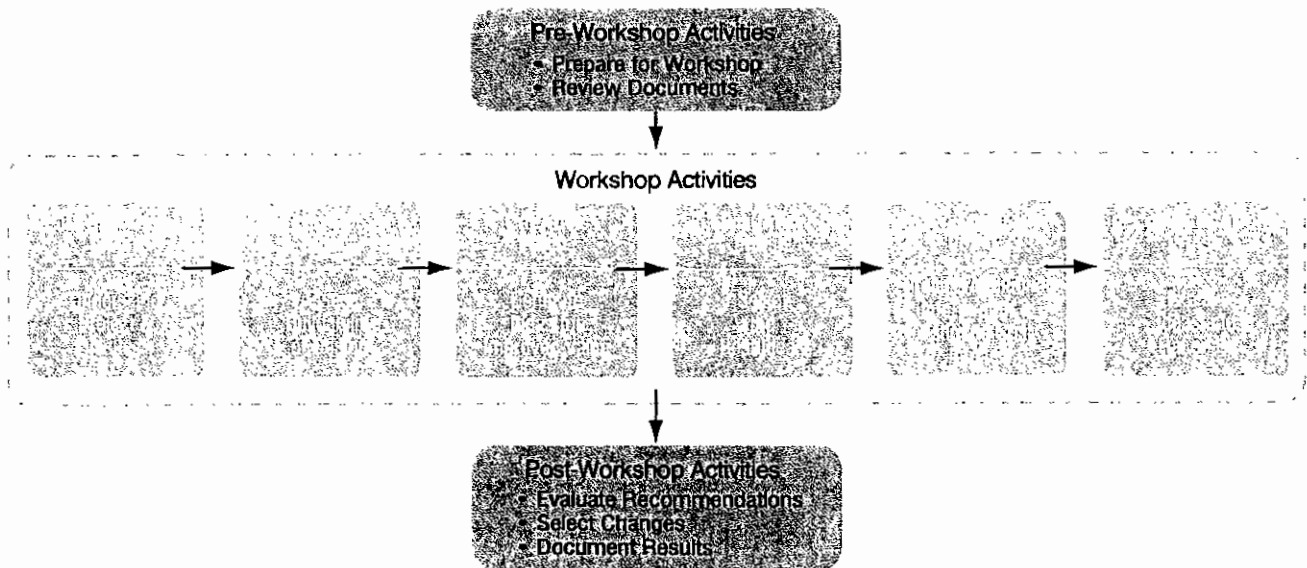
The second stage is a Technical Review Committee (TRC), a workshop that involves direct LCU participation and input into the constructability and

value engineering process. The TRC will consist of LCU personnel, including engineering and operations staff, and MWH's constructability review team, including engineers, contractors, operators, safety officers, estimators, and scheduling staff.

## Design Review Issues and Opportunities for the Gateway WWTP Expansion

As part of our preliminary design review of the Phase I design documents for this project, we gathered some of our construction and wastewater process specialists from across the country for a full-day workshop. This workshop identified potential elements of the design that could hamper the successful construction and operation of the Phase I expansion. The group also identified potential cost savings that could be realized through optimization of the existing design.

The results of the workshop confirmed there are areas for improvement in the design, with resulting



## Value Engineering and Constructability Review Workshop Stages

MWH performs value engineering (VE) and constructability review (CR) services in a highly organized workshop environment following a structured CR Work Plan encompassing the following six phases:

1. **Information Phase** – used by the team to understand the background and decisions that have influenced the development of the design and to become familiar with design plans, specifications, and cost estimates.
2. **Critique Phase** – involves critical assessment of the buildability of proposed designs by seasoned self-performing contractors on the constructability review team. This phase involves “story-boarding” the construction process to step through its various stages and assess what impediments there may be to constructing the facilities as designed.
3. **Creative Phase** – generates alternative cost saving ideas that could be considered to satisfy required functions.
4. **Evaluation Phase** – compares, refines, and analyzes the identified alternatives to produce a list of alternatives ranked according to potential cost savings and constructability.
5. **Development Phase** – ensures that high-ranking alternatives are further developed and the most viable alternatives are selected.
6. **Recommendations Phase** – formulates and finalizes the best alternatives and presents them to LCU and the project team with justifications.

CR workshops are usually preceded by an orientation period that includes a presentation by the project team and establishment of a scope of work and limitations of the client. The workshops are followed by report preparation and a result assessment session attended by LCU, the project team, and the CR team leader.

cost-saving opportunities that could offset the costs of undertaking the optimization. A further benefit to this process is that it would provide a more financially viable and technically robust product while maintaining the overall intent of the original design. MWH looks forward to sharing more of these ideas with LCU during our presentation this month.

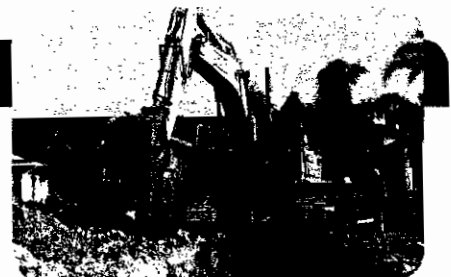
The preliminary design report also discusses the need for a raw wastewater pumping and transmission main to collect flows from the Airport Commerce Park, the industrial area, and the Daniels Parkway Corridor. The report's proposed route lies predominately outside the Daniels Parkway right-of-way within Lee County-owned land and maximizes the use of existing casings for road crossings. Using the existing Florida Power and Light easement to gain access to the Gateway

WWTP will also minimize impacts on roadways and public right-of-ways in the Gateway Community. Although our preliminary review of the proposed route indicates it currently offers the least impact on right-of-ways, MWH is prepared to address additional value engineering and constructability concerns related to this issue.

MWH's well-timed and planned reviews throughout construction of the Phase I expansion and design of the Phase II expansion will enable design and construction issues to be addressed simultaneously, minimizing the need for additional meetings and placing fewer time constraints on LCU staff and design and construction team members.

## Value Engineering Case Study 3

As part of the ongoing Cape Coral Utility Extension Program, MWH planned a collection and transmission network for a portion of the City of Cape Coral known as Southwest-4 (SW-4). During our regular value engineering sessions, the City identified its plans to independently install fiber optic cables in the SW-4 area in the near future. Working together, MWH and the City team planning the cable identified a common route to accommodate both the utility infrastructure and cable ducts and modified the schedules to allow a single contractor to install both services in a single pass. This will minimize disruption to the general public, limit road reconstruction, and save the City approximately \$200,000 in budgeted capital costs for the planned fiber optic cable.



# Quality Control (Design and Construction)

## MWH Quality Program Overview

MWH maintains a comprehensive Quality Management Program that enables delivery of high-quality services and products for the design, preconstruction, construction, and facility startup phases of a project. The specific quality assurance and control processes that will be used for the Gateway WWTP Expansion tailors MWH's standard at-risk design, construction, and startup quality control plan to meet the particular challenges and quality objectives of the project. While our ultimate goal for QA/QC is to attain the highest achievable quality levels as measured by recognized industry standards, our proven processes and systems will also facilitate achieving Lee County Utilities' (LCU) budget and schedule objectives.

## An Integrated Approach to Quality

In a single-point-responsibility project delivery, quality control is a continuous process extending from the project's pre-design phase through completion of construction and into facility startup and handover. As an integrated engineering and construction firm, MWH's design, construction, and QA/QC management staff will provide a level of continuous involvement and teamwork that will:

- Maintain budget and schedule through design process control
- Provide consistency of design intent through construction
- Enable early and continuous QA/QC involvement of construction, startup, and LCU operations staff in key design decisions
- Reduce communications issues between the designer and builder (i.e., Requests for Information, clarifications)

## Available Labor Resources

Meeting LCU's quality requirements on the Gateway WWTP Expansion project requires the dedication of a team of experienced design, construction, and facility

Quality Control is Our Priority



operations professionals. We recognize the unique challenges of this project and have assembled a proven team with extensive experience constructing major capital improvements at operating water treatment facilities.

The proposed MWH QA/QC team offers the necessary skill set to meet quality assurance and control requirements for this project. This team will monitor quality during design, preconstruction, construction, and facility startup and provide direct communication and reporting between MWH project staff and LCU. They are fully empowered to enforce the objectives of the Quality Management Program.



Table 1 lists the primary responsibilities of each QA/QC Team member. MWH's Director of Quality, John Awezec, will have overall responsibility for the implementation of MWH's Quality Management Program for the Gateway WWTP Expansion project. Project construction QA/QC will fall under the direction of the Onsite Quality Control Engineer, Dave Baar, who will be responsible for QA/QC activities during construction of the project while providing continuity between the design and construction stages.

Table 1. Primary Responsibilities of QA/QC Team

Role	Duties/Responsibilities
Director of Quality John Awezec	<ul style="list-style-type: none"> <li>Review and approve QA/QC Program</li> <li>Monitor onsite QA/QC Team</li> <li>Evaluate effectiveness of QA/QC Plan</li> <li>Ensure corrective and preventive actions are followed</li> </ul>
Onsite Quality Control Engineer Dave Baar	<ul style="list-style-type: none"> <li>Prepare QA/QC Plan</li> <li>Lead field QC activities</li> <li>Training</li> <li>Screen submittals</li> <li>Prepare QA/QC reports</li> <li>Perform audits</li> <li>Prepare quality trending</li> <li>Perform document control</li> <li>Implement corrective actions</li> </ul>
Construction QC Team MWH Inspectors Independent Labs Inspection Services Subcontractors Suppliers and Vendors	<ul style="list-style-type: none"> <li>Conduct inspections</li> <li>Conduct testing</li> <li>Resolve deficiencies</li> </ul>

## MWH Quality Management Program Objectives

Prior to executing this project, the MWH QA/QC Team will establish project-specific QA/QC objectives that combine our corporate Quality Management Program with other relevant project objectives identified by LCU. These jointly established objectives include measurable quality criteria that allow the comparison of planned quality with that actually achieved during project execution. In our evaluation of the project requirements, MWH has established the general QA/QC objectives for this project listed in Table 2.

To accomplish these objectives, we will structure our Quality Management Program to address quality assurance and quality control during both the design and construction periods as described in the following sections.

Table 2. MWH Will Strive to Provide the Highest Achievable Quality Levels to LCU

Gateway WWTP General Quality Management Objectives
<ul style="list-style-type: none"> <li>Provide LCU with complete confidence that our work fully conforms with LCU and permitting agency requirements.</li> </ul>
<ul style="list-style-type: none"> <li>Provide LCU with documented, objective evidence that quality requirements have been met.</li> </ul>
<ul style="list-style-type: none"> <li>Provide adequate resources to enable effective maintenance, promotion, and implementation of the project Quality Management Program.</li> </ul>
<ul style="list-style-type: none"> <li>Continually monitor and improve the program as necessary.</li> </ul>
<ul style="list-style-type: none"> <li>Ensure QA/QC objectives and specific quality standards are conveyed to and met by our subcontractors and material and equipment suppliers and vendors.</li> </ul>
<ul style="list-style-type: none"> <li>Maintain positive supplier and subcontractor relationships by treating them as partners in the delivery of LCU requirements.</li> </ul>
<ul style="list-style-type: none"> <li>Maintain continuous, safe operability of the Gateway WWTP throughout the construction process.</li> </ul>
<ul style="list-style-type: none"> <li>Provide appropriate subcontractor training in the application of the QA/QC process and procedures to meet the identified QA/QC objectives.</li> </ul>

## Quality Assurance – MWH Quality Management Program Processes

After project initiation, MWH will submit a project-specific Quality Management Program (developed with LCU's input) to LCU for review. As necessary, subsequent modifications to the Program will be made for further review and approval. MWH Quality Management Programs are developed so that every member of the project team will be able to readily follow the QA/QC processes in the execution of the work.

### Assuring Quality through Detailed Design Reviews

MWH's two-pronged approach to QA/QC begins during the design and preconstruction phases, before construction teams mobilize. Specifically, MWH's engineering team will focus our early value engineering and constructability review efforts on the plant's quality, reliability, and performance by evaluating the plant's entire design in the context of its ultimate planned expansion and capacity.

As discussed in the Value Engineering section, our team of construction and wastewater process specialists already completed an initial process review workshop of the preliminary design for Phase I. This workshop resulted in a compilation of potential innovations and alternatives that can further optimize the plant's long-term quality, constructability, and operability – reducing the potential for design and constructability issues that may cause delays during construction.

MWH utilizes the Three Phases of Control for both on-site and off-site work to ensure quality.

A second full design review prior to Phase I construction will focus on a detailed quality assurance/quality control review of the final design, including any value engineering options or innovations LCU decides to incorporate into Phase I.

MWH will continue to hold well-timed design and constructability reviews throughout Phase I construction and the completion of the Phase II expansion design, allowing the QA/QC team to address design and construction issues simultaneously throughout the entire project. The format for these design reviews is detailed in the preceding Value Engineering section of this proposal.

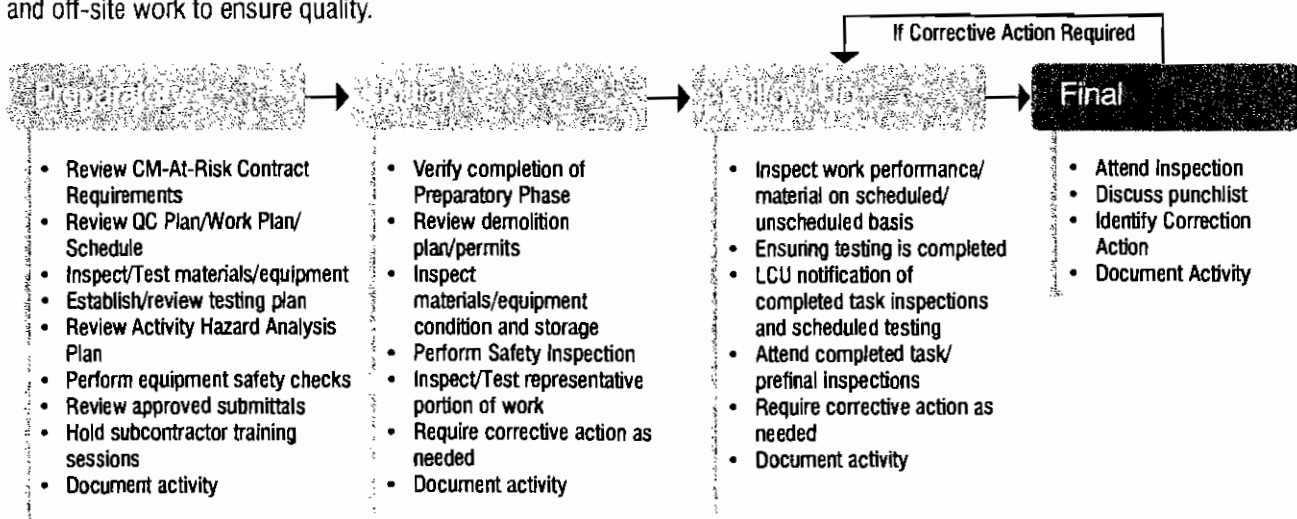
## Quality Control – Three-Phase Quality Control System

During the construction of Phases I and II, the onsite QA/QC team will use MWH's Three-Phase Quality Control System as illustrated and described below.

### Preparatory Phase

The onsite QA/QC team will hold training sessions with our subcontractors during the prequalification, bidding, and construction phases of this project. Topics of these sessions will include but not be limited to:

- Review drawings, specifications, references, and contract requirements
- Back-check materials and equipment to confirm that testing is completed, documented, and approved



- Develop project-specific checklists and review forms to document QC activities during construction
- Back-check inspection and testing controls
- Inspect work area to ensure that completed work is compliant so subsequent work can proceed
- Physically examine materials, equipment, and sample work to assess conformance with specifications, drawings, and other requirements
- Review Health and Safety Plan and appropriate hazard analysis to ensure compliance with safety requirements
- Identify any repetitive deficiencies and implement corrective action

#### Initial Phase

The onsite QA/QC team and our subcontractors will meet during the construction phase, at the start of each definable work item, to verify that the controls agreed to during the Preparatory Phase have been implemented. We will notify LCU before conducting an Initial Phase training session or field inspection. This phase is repeated for each new work crew or when our construction personnel suspect that specified quality standards are not being met.

#### Follow-Up Phase

The onsite QA/QC team will perform continuous inspections (scheduled and unscheduled) to confirm daily onsite clean-up control tests are completed and that all work complies with established standards and contract and task requirements. This phase includes final follow-up checks and correction of any deficiencies before starting subsequent work items. These inspections will be recorded on a Daily QC Report form.

The onsite QA/QC team may elect to issue a stop-work order unless the Corrective Action Report resolution establishes an alternative acceptance criteria that is acceptable to the design team and LCU. Corrective Action Reports will be formulated to preclude recurrence of the non-compliance item and may result in the need to modify the Quality Management Program to prevent reoccurrence of the deficient work. QA/QC reports will be logged and maintained by the onsite QA/QC team, which also has the authority and responsibility to direct the removal and replacement of any defective work.

As part of our QA/QC program, we will provide formal classroom-style QA/QC training to our subcontractors during the critical stages of prequalification, award, and throughout the construction period.

# Coordination (Utilities and Agencies)

The Gateway WWTP Expansion will require scrupulous coordination with numerous people, agencies, communities, and companies. In addition to the plant's central location in the Gateway Community, the project team must address circumstances such as:

- The plant shares its only access with an adjacent ballpark and the Gateway storage company compound.
- The reject and reclaimed water ponds are located within a Florida Power and Light easement.
- The northern part of the area is shared with the Gateway Community lands maintenance.
- Lee County Utilities (LCU) owns and operates the treatment plant, but not the wastewater collection system nor the reclaimed water storage and distribution.

Efficient and effective communication and coordination with all parties will be one of the central pillars of this project's success.

## Regulatory Agencies

Expanding the Gateway WWTP will require significant regulatory permitting through agencies already overloaded with permit requests arising from the region's explosive growth – growth this project will help support. Completing the plant's expansion within LCU's targeted timeframe will require significant coordination and cooperation with agencies such as the Florida Department of Environmental Protection (FDEP) and the South Florida Water Management District (SFWMD).

MWH's unique permitting experience in Lee County and our involvement with these agencies in southwest Florida provides a strong foundation for the efficient permitting of the Gateway WWTP. In particular, our experience and success during the Cape Coral Utility Extension Program has strengthened our close working relationships with the individuals responsible for this type of permitting. MWH's dedicated permitting staff, based in Cape Coral, uses systems and techniques developed jointly by MWH and these agencies to expedite project permitting. Our communication and coordination plans include:

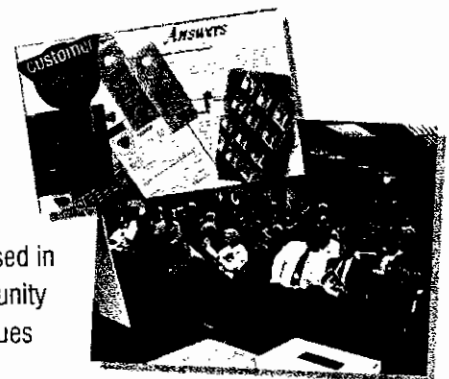
- **Pre-submittal Design Discussions:** Early communication of our plans to the individuals who will be reviewing our permits encourages their awareness and endorsement of the proposals we are developing.
- **Agency Involvement in Project Design Reviews:** While workloads often preclude agency staff's involvement, MWH embraces the regulatory reviewer as part of our design development team and keeps them informed of project developments and the relevant results of our frequent design reviews.
- **Pre- and Post-submittal Meetings:** MWH takes time to meet with reviewers early to make them aware of our submittal plans, reducing the possibility for unexpected issues. We also take the time to review submittals with permitting staff for completeness and accuracy.

These activities benefit the team by encouraging the reviewer to contact MWH directly with questions by phone rather than relying on cumbersome requests for information (RFIs) or rejections pending further information. MWH can fax reviewers additional information on an "as needed" basis, thereby minimizing the time necessary to process permit applications. Furthermore, our permit applications are based on 30% design information, another benefit of our ongoing agency relationships.

## The Community

MWH has been an active part of the Lee County community for a number of years – the majority of our local staff lives in Lee County, and some of our most senior officers live in Gateway itself. Our team is

MWH is well versed in advanced community outreach techniques



committed to maintaining Lee County's quality of life and continuing to position LCU as a premier utility service provider and good neighbor.

Our good neighbor commitment is also exemplified by our work for the City of Cape Coral. Our public involvement systems and procedures focus on effectively informing and engaging those people affected by our work. Their ideas and concerns are addressed early in the project, allowing MWH to accommodate changes that will minimize public impacts to an acceptable level. We extend this approach beyond the general public to all adjacent property owners, including the Gateway Community Development District or utility owners like Florida Power and Light.

MWH will apply many of the public outreach principles of the Cape Coral Water and Wastewater Expansion Program and the South Collier Water Reclamation Facility (WRF), including:

- Neighborhood Meetings
- Project Telephone Hotline
- Project Web Site

Identifying the most effective methods for communicating with neighbors can help avoid common utility project pitfalls. In Cape Coral, MWH received an unprecedented 83% satisfaction rating from the ultimate customer – the general public.

### Other Parties Involved with the Project

The successful expansion of the Gateway WWTP will require all involved parties—including LCU staff, MWH, suppliers, and subcontractors—to have timely access to accurate project information and open lines of communication. MWH will create a secure project Web site allowing these individuals and firms straightforward, streamlined access to project files and

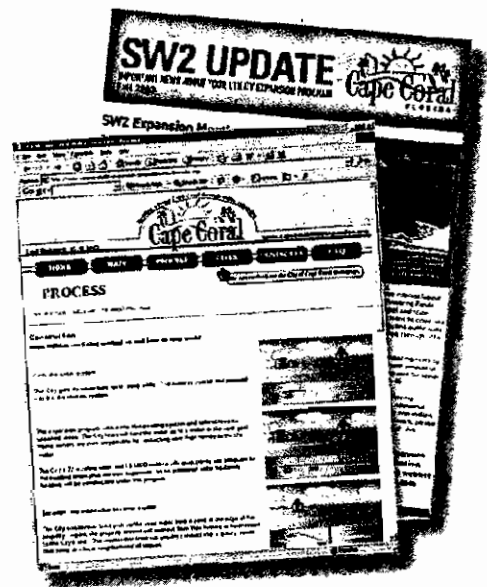
### Survey Question:

Were you satisfied with the construction of your water and sewer utilities?



Cape Coral's "Customer First" program resulted in 83% satisfaction from City residents.

information through a password-controlled system. This system will allow LCU staff and MWH team members to efficiently monitor project development and design production through a hierarchical site structure that allows appropriate levels of access to the right person or party.



### South Collier WRF Public Outreach

Surrounded by residences, the South Collier WRF site is accessed via narrow, low-speed residential streets. MWH adopted a diligent, proactive approach to planning, communication, and traffic routing. On at least two occasions, MWH delivered more than 50 concrete trucks to the site during a 24-hour period. Neighbors were consulted, advised in advance of the concrete deliveries, and told exactly during what periods they would occur. As a result, the County did not receive a single complaint.



# DBE/M/WBE Participation

## Local Subconsultants Add Strength and Diversity

MWH enthusiastically supports LCU's Disadvantaged Business Enterprise (DBE) Program and has an excellent record of meeting or exceeding DBE goals on projects throughout the U.S. We have identified the following two firms to assist MWH in the design phase of our scope of services for the Gateway WWTP Expansion. MWH will continue to strive to meet or exceed LCU's DBE goals during the construction of Phase I and Phase II.

**E.F. Gaines Surveying Services, Inc.** is a licensed surveying and mapping firm providing design-related services to public and private sector clients in southwest Florida since 1999. Based in Fort Myers, the locally-owned firm uses the latest field technologies such as total stations, data collectors, robotics, digital levels, and GPS to meet the specialized needs of its clients. The company produces clear and accurate maps using AutoCad Land Development desktop software and ESRI's ArcView 8.2 GIS software.

E.F. Gaines specializes in providing personalized surveying services to engineering and architectural firms and public agencies. They understand that

the initial electronic base mapping, which becomes the foundation of the design, must be planned with the design team's needs in mind. The firm holds Disadvantaged Business Enterprise and Women-owned Business Enterprise certifications with the Florida Department of Transportation, State of Florida, Florida Department of Management Services, Office of Supplier Diversity, and the South Florida Water Management District.

**J.E. Gonzalez & Associates, Inc.** is a Fort Myers firm that specializes in mechanical and electrical engineering design for commercial, institutional, residential, and health care facilities. The firm was founded in 1990 by Julio Gonzalez, who brings over 20 years of design and field experience, and a history of quality and functional design plans and continued service through construction and operation. J.E. Gonzalez & Associates offers a complete range of mechanical and electrical engineering design and construction administration services, including building system design, power generation, building analysis and energy management, and specialized systems design. J.E. Gonzalez & Associates is a registered Minority Business Enterprise.

## We Invest Heavily in Small and Disadvantaged Businesses

MWH has made a substantial investment in promoting the interests and values of local firms and small, woman-owned and minority-owned businesses. This commitment is reflected in our Small Business Development Program as highlighted by the following results.

- For the Miami-Dade Pump Station Improvement Program, we created enhanced minority programs, registering 85 new Black Business Enterprise firms and assisting them with bonding and working capital, leading to more than 100 construction contracts.
- For the past 7 years, MWH has awarded more than 89% of all federal subcontracts to small firms and businesses owned by minorities, women, disabled veterans, the handicapped, and other disadvantaged groups. We have steadily increased the total dollars subcontracted to these firms from \$17.5M in 1998 to more than \$50M. MWH received the Defense Logistics Agency's Certificate of Achievement for surpassing small/disadvantaged business goals for nine consecutive years. Most recently, we were rated Highly Successful on the agency's overall review of MWH's small/disadvantaged business contracting program.
- For the USACE Louisville District Total Environmental Restoration Contract, MWH achieved 60% small-business subcontracting, 10.5% small disadvantaged business, and 12.3% woman-owned small business, exceeding all customer subcontracting goals. We received an Outstanding rating in 2001 in a small-business compliance audit conducted by the USACE advisor.

**SCHEDULE D  
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

NOTE: This form must be signed by the person who will sign, or has signed the Proposal Form. This form will become a part of the contract documents.

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION)

DESCRIPTION OF WORK: Surveying during design phase

SUBCONTRACTOR'S NAME: E.F. Gaines Surveying Services, Inc.

EST. DOLLAR VALUE OF PROPOSED WORK: TBD

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION)

DESCRIPTION OF WORK: Mechanical and Electrical Engineering Design

SUBCONTRACTOR'S NAME: J.E. Gonzalez & Associates, Inc.

EST. DOLLAR VALUE OF PROPOSED WORK: TBD

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION)

DESCRIPTION OF WORK: \_\_\_\_\_

SUBCONTRACTOR'S NAME: \_\_\_\_\_

EST. DOLLAR VALUE OF PROPOSED WORK: \_\_\_\_\_

DIVISION OF EQUAL OPPORTUNITY CERTIFIED DBE /MINORITY /WOMEN  (CHECK APPROPRIATE DESIGNATION)

DESCRIPTION OF WORK: \_\_\_\_\_

SUBCONTRACTOR'S NAME: \_\_\_\_\_

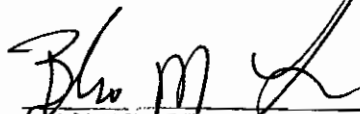
EST. DOLLAR VALUE OF PROPOSED WORK: \_\_\_\_\_

TOTAL VALUE OF ALL DBE/MINORITY/WOMEN SUBCONTRACT WORK: \$ TBD

ESTIMATED TOTAL PERCENT (%) TO BE UTILIZED: 3.0 %\*

\*Based on Price Proposal for design of Phase II (Price Form B-2). Does not include potential construction subcontractors for Phase I or Phase II.

MWH Constructors, Inc.  
CONTRACTOR NAME

  
SIGNATURE

May 30, 2006  
DATE

# Questionnaire

**Q1.** What would be the standard procedure documents do you use for this type of project?

- Project Management and Administration Plan (MAP)
- Primavera Project Schedule
- Timberline Project Cost Estimate
- Project QA/QC Plan
- Daily QC Inspection Report
- QC Corrective Action Report
- Site-specific Health and Safety Plan
- Emergency Management Plan
- Safety Orientation Checklist and Acknowledgement
- Weekly Schedule and Coordination Meeting Minutes
- Biweekly Subcontractor Progress Meeting Minutes
- Monthly Owner Progress Meeting Minutes
- Subcontract and Procurement Plan
- Subcontractor Bid Packages, including general and special conditions, special requirements
- GMP Bid Book
- Daily Construction Report
- Submittal Document
- Record Drawings
- Design Change Log
- Trend Log
- Request for Information (RFI)
- Change Order
- Construction Manager Payment Request
- Commissioning and Startup Plan
- O&M Manuals

**Q2.** What tools will be used to monitor schedule and budget?

MWH schedules and construction sequencing are realistic, detailed, and developed by experienced treatment plant construction professionals. Our construction personnel are proficient in using Primavera Project Planner (P3) as our primary tool for preparing and monitoring project schedules and integrating cost tracking with our construction scheduling process.

Our project schedules are managed through continuous schedule reviews at each weekly construction meeting where the progress of each task is reviewed, verified, and action plans developed to correct deviations from the schedule. At these weekly meetings, look-ahead schedules are reviewed in conjunction with sequencing plans to ensure that there are no surprises in the field, such that construction progresses as planned in an orderly manner.

Budget and cost control is a part of our mission from the very start of planing through final testing and commissioning. Critical to cost control are the constructability and value analysis workshops with our engineering, construction, and operations experts and Lee County Utilities (LCU) to find opportunities to reduce lifecycle costs of the entire project while providing a forum to brainstorm construction-related cost savings associated with design.

With over 300 years of combined experience in treatment plant estimating, MWH is well equipped to provide LCU with an accurate cost estimate, allowing LCU to make informed decisions about design and equipment choices. This baseline estimate will provide the foundation for our cost control, and will be updated in real-time, incorporating all design modifications such that the team always knows the budget.

We will use the Web-based Prolog construction management and tracking system to provide LCU and project management personnel with access to all project documents, including drawings, specifications, quality control, risk management, trend management, schedule and budget, meeting notes, and requests



for information and clarification. This integrated, centralized management tool increases productivity, improves risk management, and reduces management costs to LCU by providing a one-stop shop.

### **Q3.** How would you develop the schedule for this project?

An overall project schedule has been developed and included in this proposal. Upon receipt of the notice to proceed, MWH will develop a more detailed project schedule including a complete Work Breakdown Structure (WBS) using Primavera software. This schedule would be agreed upon with LCU as part of GMP negotiations.

### **Q4.** Describe your approach for developing the work packages for this proposed project.

MWH will maximize competition for each element of work through open-book subcontracting. Bid packages will be formulated to:

- Maximize the subcontractor opportunities by unbundling work
- Maximize the involvement of construction resources
- Minimize the number of second tier subcontractors

Minimizing second tier contractors will reduce the amount of mark-ups included in the Guaranteed Maximum Price (GMP) while maximizing the accessibility (and therefore responsiveness) of subcontractors.

Work packages would be broken down by specialty and, as required for fast-tracking the project, would generally include:

- Site Clearing and Preparation
- Civil/Mechanical Work
- Electrical and Instrumentation Work
- Operations Building Construction

### **Q5.** What is your current work load? And can you devote all resources necessary to expedite this project in a very timely manner?

With five Florida offices, MWH employs more than 120 water and wastewater professionals in the state alone and more than 6,000 professionals worldwide. Each MWH team member is linked through an industry-leading technical knowledge sharing system, providing real-time access to the world's foremost water and wastewater information. Nearly half of our Florida staff are headquartered in MWH's Cape Coral office in Lee County – only 10 minutes from the LCU offices in Fort Myers. MWH's remaining Florida staff is split mostly between our Tampa and Fort Lauderdale offices.

MWH manages its Florida workload on a regional basis, and the amount of work in one office never dictates MWH's ability to serve its clients in that area. Upon the issuance of a notice to proceed, our Florida clients can be assured they will benefit from a dedicated, local team of professional engineers focusing on their project. We employ a large pool of specialist engineers and technicians in three regional design centers, keeping specialist resources available when required at the local level. MWH is never left waiting for resources in order to move forward on a project.

MWH's proposed Gateway WWTP Expansion team comprises highly experienced and capable professionals specifically suited to this project who are ready and able to commit upon issuance of a notice to proceed. This staff will stay committed throughout the project's duration, and MWH will bolster its resources as required by the work schedule.

Securing a permit from the FDEP and effectively mobilizing construction professionals to build the project are the most critical elements to achieving the project schedule. MWH's current permitting activity keeps our staff in close, frequent communication with the FDEP and SFWMD, helping to maintain high-level relationships and ensuring we fully understand the specific requirements and preferences of permitting individuals in each agency.

As the largest utility constructor in southwest Florida, MWH maintains strong ongoing relationships and contracts with the industry's major players – from concrete and steel suppliers to pipeline installers and pump manufactures. These relationships help position

MWH work at the front of the queue and command attractive prices for our bids. This factor will further improve MWH's ability to complete the Gateway WWTP Expansion in a timely manner.

## Q6: How do you process changes to the work?

MWH's change management process is timely and transparent, providing complete information at all stages of the process from issue identification through cost and scope resolution. Our team will review detailed change logs with LCU and the project manager frequently to ensure transparency and understanding by all parties in this process. Requests for Information (RFI's) and their timely response will become more important in the change management process. Our process, supplemented by our CM-at-Risk experience and the Prolog reporting system, will deliver a straightforward and transparent process for dealing with change during project implementation. MWH's change management process is further detailed on pages 4-5 of this proposal.

## Q7: How are pay requests developed and checked?

Payment requests are developed through a standardized process in MWH's Prolog project controls tool in accordance with the approved LCU format and process with which we are familiar from past and current work. These payment requests will be based on our transparent, open-book accounting system.

## Q8: How will deliveries be coordinated?

Based on careful review of the standard form of CM-at-Risk contract provided with the RFQ for this project, MWH notes that LCU may desire to direct purchase some equipment and materials to benefit from tax savings. MWH has extensive experience carrying out owner direct purchase order (DPO) procurement, particularly in our recent work for the City of Cape Coral.

Owner-procured equipment presents many advantages, including improved owner control, accelerated schedule due to procurement before GMP contract, and the advantages of the owner's tax exempt purchase power. There is, however, potential owner risk for delivery delay, system compliance, and performance.

We have developed an eight-step procurement process to deal specifically with these issues, as shown in the figure below. We will work closely with LCU and the project manager to prepare purchase orders for all owner-procured items. We will then accept "control, care, and custody" responsibility for the equipment once it is delivered. This process integrates the benefits of owner-procured equipment while maintaining the risk transfer typically associated with contractor-procured items. Following procurement, our approach is based on three major elements:

1. Equipment receiving
2. Equipment care program
3. Installation

### DPO Equipment Procurement Management Procedure

- 1 MWH prepares LCU Purchase Order
- 2 LCU directs purchases
- 3 MWH accepts equipment
- 4 MWH procurement specialist coordinates and expedites process
- 5 MWH procurement group provides QC, tracking of inspection, documentation, and inspections
- 6 Field staff inspects equipment upon delivery
- 7 Proper procedures established for handling and storage
- 8 Regular maintenance and servicing is performed

Our standard equipment receiving process for either owner-provided or MWH-purchased equipment ensures equipment is ordered correctly and supports the project schedule. Scheduling is the key factor in the process. Long lead-time items are identified early in the GMP development process so that orders can be placed in a timely manner. Our approach is based on having our equipment onsite as soon as possible to prevent delivery delays. Care of the stored equipment will include a receiving and maintenance log, protection from weather, connection of unit heaters in motors, and regular maintenance such as oil changes as recommended by the manufacturers.

All activities leading up to deliveries are scheduled and coordinated between the procurement professionals and site personnel through the Primavera Project Schedule and the Prolog integrated document and submittal management system described above in Question 2.

## Q9. How will you ensure that existing operations of the Gateway WWTP will be maintained during construction?

The Gateway WWTP expansion will involve construction at an operating facility during both Phase I and Phase II.

- **Phase I expansion** involves the re-routing of influent force mains to the new headworks structure and connection of the new headworks to the existing package plant.
- **Phase II expansion** may involve the beginning of Phase II construction during the completion of construction, startup, testing, commissioning, and operation of the Phase I plant.

Tie-ins and shutdowns are absolutely critical to the success of the Gateway WWTP project – existing plant operations must not be interrupted. MWH has identified two key aspects to the project involving tie-ins and shutdowns:

- Scheduling these items in the overall project schedule to support construction work while minimizing impacts to the plant
- Coordinating the actual work to ensure smooth operation after construction activity is completed

MWH employs the following tools for coordinating tie-in and shutdown activities:

- **Potential Disruptions and Mitigation Plan** - We will prepare a preliminary analysis of potential disruptions and create mitigation plans for the plant's construction, focusing particularly on critical tie-ins.
- **Operations Analysis** – This tool will help schedule and coordinate major tie-ins and shutdowns while minimizing their impact on existing plant operations. This collaborative analysis of future tie-in, shutdown, or other critical construction activity includes a seven-element analysis for each work activity completed by members of the CM-at-Risk team, engineer, and LCU's operations staff. This will be performed concurrent with our detailed scheduling activities.
- **Pre-Work Planning** - Essential for operationally critical work, Pre-Work Planning Sessions are completed for each area of work that could potentially impact plant operations. These Planning Sessions will gather involved subcontractors, operations staff, the program manager, design

engineers, and other LCU staff to identify the tools, equipment, and materials required for the installation of the work. Pre-planning the installation allows for sequence timing, identifying missing items or site issues, and making subsequent plan revisions to enable an easier and safer installation.

## Q10. What are the major challenges you anticipate in this project and how do you plan to resolve them?

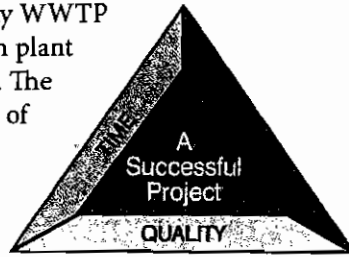
- **Schedule** – achieving commissioning of the Gateway WWTP Phase I expansion to enable permitted capacity to exceed influent wastewater flows. MWH has assembled an aggressive, comprehensive schedule for completing the Phase I expansion by June 2008 and the Phase II expansion by June 2009. The keys to achieving these milestones are:

- Overlapping Phase II Design and Permitting with Phase I Construction
- Maximizing construction resources available to LCU to complete this project. MWH's position as a major player in the southwest Florida water and wastewater construction market will be a key to delivering these resources.

- **Cost** - Construction of the Gateway WWTP Phase I and II expansions in accordance with LCU's budget for these expansions. MWH will strive to bring these expansions in below budgeted cost through:

- Competitive Bidding of all subcontracts to a field of pre-qualified subcontractors. Bid packages will be structured to minimize second tier contractors, reducing the amount of mark-ups included in the Guaranteed Maximum Price (GMP).
- Value Engineering and Constructability Review of the Phase I and II designs to eliminate costs that do not provide value to the Gateway WWTP. MWH has already carried out a Design and Value Engineering Review of the Phase I plant design, and has formulated numerous recommendations for reducing the Phase I cost. MWH would be pleased to share these ideas with LCU during our presentation.
- Change Management – MWH's disciplined procedures for managing subcontractor claims and change orders is described in this proposal. This system has a proven track record of reducing or eliminating claims and change orders to maintain costs within the GMP cap.

- **Quality** - The Gateway WWTP must be designed with plant performance in mind. The plant must be capable of achieving the effluent requirements of the Florida Department of Environmental Protection (FDEP) and be easy for LCU staff to operate. MWH will achieve this quality through:



- Design Reviews – As mentioned above, MWH has already carried out a Design and Value Engineering Review of the Phase I plant design, identifying numerous potential improvements. Further Design Reviews are proposed after the project begins and prior to GMP development.
- BioWin™ Process Model - Biological process models have become valuable tools in meeting owners' and engineers' needs. The process models available today allow detailed analysis of proposed and existing treatment facilities for capacity and effluent quality issues. A BioWin™ Model has already been developed for the Gateway WWTP and has been used to evaluate: (a) the ability of the Phase I design to achieve effluent criteria; and (b) potential means of optimizing capacity to allow for future re-rating of the plant. MWH would be pleased to share these ideas with LCU during our presentation.

**Q11** . Which major plant components designed in Phase I would you change to make this project more cost effective? How would you approach the permitting agencies to resolve any permitting issues that may arise with the changes?

On May 24, in preparation for this proposal, MWH conducted an intensive design review. Senior wastewater process engineers, wastewater treatment plant designers, treatment plant operations specialists, construction managers, and construction cost estimation specialists gathered under the leadership of our proposed Project Manager, Tom Machinski. The objectives of the Design Review and Value Engineering Meeting were to evaluate the Gateway WWTP Phase I Design's suitability for:

- Wastewater treatment process design
- Hydraulic design
- Operability

- Constructability
- Plant phasing and expandability
- Site space utilization
- Accessibility
- Cost-effectiveness
- Potential value engineering modifications

This Design Review and Value Engineering Meeting resulted in a list of potential design improvements that would significantly enhance the plant's performance and operability while reducing the time and cost necessary to achieve plant upgrade to 6-mgd capacity. The following discussion of a potential alternative approach to biosolids processing provides one example of MWH's value engineering approach. We look forward to sharing other key value engineering proposals during our presentation to LCU.

#### Value Engineering Example - Biosolids Processing

LCU's current undertaking of a comprehensive countywide residuals management plan will help determine the long-term usage of biosolids generated at its wastewater treatment plants. Most communities in southwest Florida are investing in processing facilities to achieve Class A type biosolids for marketing and distribution, including a combination of thermal processing and drying treatments. The following presents MWH's proposed alternative approach to that outlined in the Preliminary Design Report:

1. Construct the aerobic digesters planned under Phase I with minor value engineering changes. For example, MWH recommends using positive displacement (PD) blowers for the aerobic digesters instead of the multi-stage centrifugal blowers included in the current Phase I design. Controlling airflow with centrifugal blowers can be difficult, especially with varying digester levels. PD blowers are more suited for varying digester levels and can be designed at lower speeds to reduce noise (or provided with acoustical enclosures).
2. In Phase II, utilize the aerobic digesters constructed during Phase I for storage and partial stabilization of sludge generated from the plant, allowing the postponement of constructing additional digesters or thickeners until the regional plan is finalized. The existing digesters will provide over 20 days of storage/stabilization at Phase II flows.

3. Continue to haul unthickened biosolids to the landfill through the existing sludge hauling contract. If necessary, allow the private hauler to transport a mobile dewatering unit to the site to reduce transportation costs.
4. Conduct testing to determine the current system's volatile solids destruction and its operating cost per pound of volatile solids destroyed. Evaluate if this system meets Class B requirements – sludge from extended aeration oxidation ditch processes are typically very stable and require little additional treatment to meet Class B requirements.
5. Evaluate the cost-effectiveness of pumping liquid sludge off-site for further processing and/or drying (i.e., at the landfill site or another wastewater treatment plant). Consolidating biosolids processing in a single facility can save significant capital and labor costs.
6. Provide other necessary facilities at appropriate locations once the Countywide Biosolids Management Plan is completed.

This alternative approach would benefit LCU by minimizing the investment for Gateway WWTP biosolids processing facilities, the construction of which may not be consistent with the long-term plan.

MWH understands that the permit application for Phase I of the Gateway WWTP Expansion is already in process. If any design changes identified by MWH could be considered as value-added improvements to the Phase I design, MWH will consult with LCU as soon as possible regarding their potential incorporation. If LCU approves these changes, MWH will approach the necessary permit changes as follows:

- Minor modifications to the detailed design of the plant (e.g., changing the type of blowers used for digesters) do not require FDEP approval.
- Modifications to the design of process units may require approval by FDEP. MWH will contact FDEP as early as possible to confirm these changes will not impact the permitting schedule.