TO: BOARD OF DIRECTORS
FROM: THOMAS W. KULA, EXECUTIVE DIRECTOR
DATE: MAY 15, 2014
SUBJECT: REGULAR MEETING – THURSDAY, MAY 22, 2014

I. EXECUTIVE, POLICY, AND FINANCE/AUDIT COMMITTEE MEETINGS

An Executive Committee meeting will be held prior to the Board meeting on Thursday, May 22, 2014, at 1:30 p.m.

A Policy Committee meeting will be held prior to the Board meeting on Thursday, May 22, 2014, at 2:15 p.m.

A Finance/Audit Committee meeting will be held prior to the Board meeting on Thursday, May 22, 2014, at 2:45 p.m.

Directors not on these Committees are welcome to attend.

II. DIRECTORS’ APPOINTMENTS

Thirteen Directors’ terms will end on May 31, 2014. Each of the Member Cities were notified by letter of the need for consideration of the Directors’ appointments for a term to begin June 1, 2014, ending May 31, 2016. The NTMWD has received notification of reappointments from the following cities:

- Director Joe Farmer, Allen
- Director Bill Harrison, Farmersville
- Director Gary Downey, Frisco
- Director Charles McKissick, McKinney
- Director Shep Stahel, Plano
- Director Patrick Nicklen, Princeton
- Director John Murphy, Richardson
- Director Larry Parks, Rockwall
- Director Darwin Whiteside, Royse City
- Director Marvin Fuller, Wylie
MEMORANDUM TO BOARD OF DIRECTORS
MAY 15, 2014
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As of this date, the following cities have not made their appointment:

- Forney (Director Darrell Grooms)
- Garland (Director Jack May)
- Mesquite (Director Terry Anderson)

III. ENCLOSURES

A. AGENDA – REGULAR MEETING – May 22, 2014
B. CONSENT AGENDA ITEM NO. 14-05-01 – Minutes, Regular Meeting, April 24, 2014
C. CONSENT AGENDA ITEM NO. 14-05-02 – Regional Water System, Wylie Water Treatment Plant Finished Water Reservoir and Flow Metering Improvements, Project No. 276, Change Order No. 2
D. CONSENT AGENDA ITEM NO. 14-05-03 – Regional Water System, Wylie Water Treatment Plant Security Enhancements, Phase 2, Project No. 229, Engineering Services Fee Adjustment
E. CONSENT AGENDA ITEM NO. 14-05-04 – Regional Solid Waste System, 121 Regional Disposal Facility, Scale House Improvements, Project No. 322, Change Order No. 1
F. CONSENT AGENDA ITEM NO. 14-05-05 – Regional Solid Waste System, 121 Regional Disposal Facility, Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B, Change Order No. 1 and Authorization to Make Final Payment
G. CONSENT AGENDA ITEM NO. 14-05-06 – Regional Water System, Electrical Improvements at Raw Water Pump Station No. 2, Project No. 201, Additional Engineering Services
H. CONSENT AGENDA ITEM NO. 14-05-07 – Regional Water System, Bonham Water Treatment Plant, Sludge Lagoon Improvements, Project No. 293, Change Order No. 2
I. CONSENT AGENDA ITEM NO. 14-05-08 – Region C Water Planning Public Awareness Effort Contribution
K. ADMINISTRATIVE MEMORANDUM NO. 4189 – Multijurisdictional Pretreatment Agreement Between City of McClendon-Chisholm and NTMWD
L. ADMINISTRATIVE MEMORANDUM NO. 4190 – Reporting Requirements, District Policy No. 39
N. ADMINISTRATIVE MEMORANDUM NO. 4192 – Regional Wastewater System, South Mesquite Creek Regional Wastewater Treatment Plant, Solids Building Odor Control Improvements, Project No. 288, Change Order No. 1
O. ADMINISTRATIVE MEMORANDUM NO. 4193 – Regional Water System, Lake Tawakoni Water Treatment Plant, Project No. WCF 07-4 (099), Additional Engineering Services
P. ADMINISTRATIVE MEMORANDUM NO. 4194 – Regional Wastewater System, Wilson Creek Regional Wastewater Treatment Plant Filter Improvements, Project No. 309, Equipment Preselection Bid Tabulation and Recommendation

Q. ADMINISTRATIVE MEMORANDUM NO. 4195 – Regional Water System, Water Treatment Plant II, Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 302, Additional Engineering Services

R. ADMINISTRATIVE MEMORANDUM NO. 4196 – Regional Water System, Expansion of Raw Water Pump Station No. 3 to 620 MGD, Project No. 321, Engineering Services Agreement

S. ADMINISTRATIVE MEMORANDUM NO. 4197 – Regional Water System, Raw Water Pump Station No. 2 Mechanical Improvements, Project No. 360, Engineering Services Agreement

T. ADMINISTRATIVE MEMORANDUM NO. 4198 – Regional Water System, Water Treatment Plants I and II, Sludge Line Improvements, Project No. 284, Change Order No. 3 and Authorization to Make Final Payment

U. ADMINISTRATIVE MEMORANDUM NO. 4199 – Regional Water System, Water Treatment Plant I, Conversion to Biologically Active Filtration and Improvement of Existing Underdrains, Project No. 259, Change Order No. 7

V. ADMINISTRATIVE MEMORANDUM NO. 4200 – Wastewater System, Muddy Creek Wastewater Treatment Plant Evaluation, Engineering Services Agreement

W. ADMINISTRATIVE MEMORANDUM NO. 4201 – Regional Water System, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268, Construction Manager at Risk, Construction Services Agreement Extension


Z. WATER CONSUMPTION REPORT – April 2014
AA. WASTEWATER SYSTEM REPORT – April 2014
BB. SOLID WASTE SYSTEM REPORT – April 2014
CC. CONSTRUCTION PROGRESS REPORT – April 30, 2014
DD. NTMWD FINANCIAL STATEMENTS FOR THE MONTH ENDED APRIL 30, 2014
Notice is hereby given pursuant to V.T.C.A., Government Code, Chapter 551, that the Board of Directors of North Texas Municipal Water District will hold a regular meeting, open to the public, on Thursday, May 22, 2014, at 4:00 p.m., at the North Texas Municipal Water District offices, 505 E. Brown Street, Wylie, Texas.

The Board of Directors is authorized by the Texas Open Meetings Act to convene in closed or executive session for certain purposes. These purposes include receiving legal advice from its attorney (Section 551.071); discussing real property matters (Section 551.072); discussing gifts and donations (Section 551.073); discussing personnel matters (Section 551.074); or discussing security personnel or devices (Section 551.076). If the Board of Directors determines to go into executive session on any item on this agenda, the Presiding Officer will announce that an executive session will be held and will identify the item to be discussed and provision of the Open Meetings Act that authorizes the closed or executive session.

AGENDA¹

I. INVOCATION – DIRECTOR JOE FARMER

II. ROLL CALL

III. RECOGNITION OF GUESTS

   A. Registered Guests

IV. PUBLIC COMMENTS

   The Board of Directors allows individuals to speak to the Board. Prior to the meeting, speakers must complete and submit a “Public Comment Registration Form.” The time limit is five (5) minutes per speaker, not to exceed a total of thirty (30) minutes for all speakers. The Board may not discuss these items, but may respond with factual or policy information.

¹Persons with disabilities who plan to attend the NTMWD Board of Directors meeting and who may need auxiliary aids or services are requested to contact John Montgomery in the NTMWD Administrative Offices at (972) 442-5405 as soon as possible. All reasonable efforts will be taken to make the appropriate arrangements.
V. CONSENT AGENDA ITEMS

The Consent Agenda allows the Board of Directors to approve all routine, noncontroversial items with a single motion, without the need for discussion by the entire Board. Any item may be removed from consent and considered individually upon request of a Board member.

A. Consider Approval of Board of Directors Meeting Minutes – April 24, 2014
   (Please refer to Consent Agenda Item No. 14-05-01)

B. Consider Authorizing Change Order No. 2 on Project No. 276, Wylie Water Treatment Plant Finished Water Reservoir and Flow Metering Improvements
   (Please refer to Consent Agenda Item No. 14-05-02)

C. Consider Authorizing Engineering Services Fee Adjustment on Project No. 229, Wylie Water Treatment Plant Security Enhancements, Phase 2
   (Please refer to Consent Agenda Item No. 14-05-03)

D. Consider Authorizing Change Order No. 1 on Project No. 322, 121 Regional Disposal Facility Scale House Improvements
   (Please refer to Consent Agenda Item No. 14-05-04)

E. Consider Authorizing Change Order No. 1 and Authorization to Make Final Payment on Project No. ENG 13-3B, 121 Regional Disposal Facility, Sector 4A Liner Material Purchase/Install
   (Please refer to Consent Agenda Item No. 14-05-05)

F. Consider Authorizing Additional Engineering Services on Project No. 201, Electrical Improvements at Raw Water Pump Station No. 2
   (Please refer to Consent Agenda Item No. 14-05-06)

G. Consider Authorizing Change Order No. 2 on Project No. 293, Bonham Water Treatment Plant Sludge Lagoon Improvements
   (Please refer to Consent Agenda Item No. 14-05-07)

H. Consider Authorizing Funding Contribution to Region C Water Planning Group for Public Awareness Effort
   (Please refer to Consent Agenda Item No. 14-05-08)

VI. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. Consider Election of Officers for Board of Directors for 2014-2015

B. Consider Adoption of Resolution No. 14-7 Authorizing Award of 2014-2015 Treatment Chemical Supply Agreements
   (Please refer to Administrative Memorandum No. 4188)

C. Consider Authorizing Execution of Multijurisdictional Pretreatment Agreement with the City of McLendon-Chisholm
   (Please refer to Administrative Memorandum No. 4189)
D. Consider Adoption of District Policy No. 39, Reporting Requirements (Please refer to Administrative Memorandum No. 4190)

E. Consider Authorizing Execution of Engineering Services Agreement on Project No. 352, Water Treatment Plant Water System Operations Center (Please refer to Administrative Memorandum No. 4191)

F. Consider Authorizing Change Order No. 1 on Project No. 288, South Mesquite Creek Regional Wastewater Treatment Plant, Solids Building Odor Control Improvements (Please refer to Administrative Memorandum No. 4192)

G. Consider Authorizing Additional Engineering Services on Project No. WCF 07-4 (099), Lake Tawakoni Water Treatment Plant (Please refer to Administrative Memorandum No. 4193)

H. Consider Authorizing Pre-Selection and Award of Bid for Equipment for Wilson Creek Regional Wastewater Treatment Plant Filter Improvements, Project No. 309 (Please refer to Administrative Memorandum No. 4194)

I. Consider Authorizing Additional Engineering Services on Project No. 302, Water Treatment Plant II Filter Underdrain Improvements and Conversion to Biologically Active Filters (Please refer to Administrative Memorandum No. 4195)

J. Consider Authorizing Execution of Engineering Services Agreement on Project No. 321, Expansion of Raw Water Pump Station No. 3 to 620 MGD (Please refer to Administrative Memorandum No. 4196)

K. Consider Authorizing Execution of Engineering Services Agreement on Project No. 360, Raw Water Pump Station No. 2 Mechanical Improvements (Please refer to Administrative Memorandum No. 4197)

L. Consider Authorizing Change Order No. 3 and Authorization to Make Final Payment on Project No. 284, Water Treatment Plants I and II Sludge Line Improvements (Please refer to Administrative Memorandum No. 4198)

M. Consider Authorizing Change Order No. 7 on Project No. 259, Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains (Please refer to Administrative Memorandum No. 4199)

N. Consider Authorizing Execution of Engineering Services Agreement for Muddy Creek Wastewater Treatment Plant Evaluation (Please refer to Administrative Memorandum No. 4200)
O. Consider Authorizing Construction Services Agreement Extension to Construction Manager at Risk for Project No. 268, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline (Please refer to Administrative Memorandum No. 4201)

P. Consider Authorizing Extension of Seasonal Watering as Written in Stage 3 of the NTMWD’s Water Conservation and Drought Contingency/Water Emergency Response Plan (Please refer to Administrative Memorandum No. 4202)

Q. Consider Adoption of Resolution No. 14-8 Authorizing Partial Settlement of Lawsuit: North Texas Municipal Water District vs. Jennings Hacker Partners, Inc., Turkworks Engineering, Ltd., et al, Granting the Executive Director Authority to Enter Into Partial Settlement of Lawsuit Settling All Claims Against Construction Defendants Including the Authority to Execute Any Necessary Settlement Documents (Please refer to Administrative Memorandum No. 4203)

VII. DISCUSSION

A. Water Supply Update

VIII. ADJOURNMENT

NEXT REGULAR MEETING OF BOARD, THURSDAY, JUNE 26, 2014, AT 4:00 P.M. IN THE ADMINISTRATIVE OFFICES, WYLIE, TEXAS
NORTH TEXAS MUNICIPAL WATER DISTRICT
505 E. Brown Street • Wylie, Texas 75098
(972) 442-5405 – Phone • (972) 295-6440 – Fax

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS
HELD ON THURSDAY, APRIL 24, 2014
IN THE NTMWD ADMINISTRATIVE OFFICES, WYLIE, TEXAS

The North Texas Municipal Water District Board of Directors met in Regular Session on Thursday, April 24, 2014, at 4:00 p.m. in the Administrative Offices, 505 East Brown Street, Wylie, Texas. Notice of the meeting was legally posted in accordance with Government Code, Title 551, Open Meetings.

President Bill Lofland called the meeting to order. President Bill Lofland advised that Director Larry Parks will be abstaining from voting on Agenda Item Nos. VI. L., M., Q., R.

I. INOCATION

Director Don Cates offered the invocation.

II. ROLL CALL

Secretary Joe Joplin conducted a roll call. Directors Darrell Grooms and Shep Stahel were absent. The following Directors were present for the April 24, 2014, Board meeting:

Terry Anderson  Jim Mellody
Dor Cates  John Murphy
Gary Downey  Patrick Nicklen
Joe Farmer  Larry Parks
Marvin Fuller  Bobby Robinson
Dor Gordon  Richard Sheehan
Bill Harrison  Lynn Shuyler
Joe Joplin  John Sweden
James Kerr  Bob Thurmond
Bill Lofland  Darwin Whiteside
Jack May  Jerry Yancey
Charles McKissick

The following NTMWD consultants attended the meeting:

Shannon Kackley – Gay McCall Isaacks Gordon & Roberts
David Medanich – First Southwest Company
Alan Raynor – McCall Parkhurst & Horton
Brad Castleberry – Lloyd Gosselink Rochelle & Townsend
III. RECOGNITION OF GUESTS

A. Registered Guests

There were no registered guests recognized.

IV. PUBLIC COMMENTS

There were no public comments.

V. CONSENT AGENDA ITEMS

Upon a motion by Director Marvin Fuller and a second by Director Bob Thurmond, the Board of Directors voted unanimously to approve the consent agenda items as follows:

A. Consider Approval of Board of Directors Meeting Minutes – March 27, 2014 (Please refer to Consent Agenda Item No. 14-04-01)

B. Consider Authorizing Change Order No. 2 on Project No. 238, Plano No. 3 Delivery Point Metering Station Upgrade (Please refer to Consent Agenda Item No. 14-04-02)

C. Consider Authorizing Change Order No. 1 and Authorization to Make Final Payment on Project No. 255, Forney Parallel Interceptor (Line A) (Please refer to Consent Agenda Item No. 14-04-03)

D. Consider Authorization to Make Final Payment on Project No. 301, NTMWD Administration Building Structural Improvements, Task No. 1 (Please refer to Consent Agenda Item No. 14-04-04)

E. Consider Authorizing Additional Engineering Services on Project No. 331, Custer Road Transfer Station Tipping Floor Improvements (Please refer to Consent Agenda Item No. 14-04-05)

F. Consider Authorizing Inspection Services Agreement on Project No. 202, Electrical Improvements at High Service Pump Station 1-1 (Please refer to Consent Agenda Item No. 14-04-06)

G. Consider Authorizing Adjustment to Engineering Services Fee on Project No. 217, Electrical Improvements at Water Treatment Plant II Chemical Building (Please refer to Consent Agenda Item No. 14-04-07)

H. Consider Authorization to Make Final Payment on Project No. 251, Water Treatment Plant IV Conversion to Biologically Active Filtration (Please refer to Consent Agenda Item No. 14-04-08)

I. Consider Authorizing Inspection Services Agreement on Project No. 298, High Service Pump Station 2-2 and 2-3 Electrical Improvements (Please refer to Consent Agenda Item No. 14-04-09)
VI. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. Presentation by Congressman Ralph Hall to Retiring Executive Director Jim Parks
   (Please refer to Board Memorandum)

   Congressman Ralph Hall presented a United States flag to retiring Executive Director Jim Parks.

B. Consider Adoption of Resolution No. 14-3 Commending Retiring Executive Director Jim Parks
   (Please refer to Board Memorandum)

   Upon a motion by Director John Murphy and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to adopt Resolution No. 14-3 commending retiring Executive Director Jim Parks. President Bill Lofland presented the framed resolution, an engraved watch, and a plaque to Jim Parks.

C. Consider Authorizing Part-Time Executive Assistant Position
   (Please refer to Administrative Memorandum No. 4169)

   Upon a motion by Director Larry Parks and a second by Director Bobby Robinson, the Board of Directors voted unanimously to authorize the position of Executive Assistant – Part Time as outlined in Administrative Memorandum No. 4169.

D. Consider Adoption of Resolution No. 14-6 Calling the Remaining Maturities of the North Texas Municipal Water District Water Storage Facilities Revenue Bonds (City of Royse City Project), Series 2001 for Redemption Prior to Maturity; and Enacting Other Provisions Relating to the Subject
   (Please refer to Board Memorandum)

   Upon a motion by Director Jim Mellody and a second by Director Darwin Whiteside, the Board of Directors voted unanimously to adopt Resolution No. 14-6 calling the remaining maturities of the North Texas Municipal Water District Water Storage Facilities Revenue Bonds (City of Royse City Project), Series 2001 for redemption prior to maturity; and enacting other provisions relating to the subject.

E. Consider Authorizing Lower Bois d'Arc Creek Reservoir Mitigation Property Archaeological Survey, Phase I, Project No. 359
   (Please refer to Administrative Memorandum No. 4170)

   Upon a motion by Director Patrick Nicklen and a second by Director John Murphy, the Board of Directors voted unanimously to authorize funding in the not-to-exceed total amount of $118,500 for AR Consultants, Inc., to perform archaeological services for Lower Bois d'Arc Creek Reservoir Mitigation Property Archaeological Survey, Phase I, Project No. 359.
F. Consider Authorizing Execution of Engineering Services Agreement on Project No. 303, Richardson Spring Creek Lift Station Improvements Final Design (Please refer to Administrative Memorandum No. 4171)

Upon a motion by Director Lynn Shuyler and a second by Director John Sweeden, the Board of Directors voted unanimously to authorize the Executive Director to execute an engineering services agreement with Carollo Engineers, Inc., for professional services associated with Project No. 303, Richardson Spring Creek Lift Station Improvements, in the not-to-exceed amount of $351,900.

G. Consider Authorizing Execution of Engineering Services Agreement on Project No. 356, Wilson Creek Interceptor Improvements, Phase 2 (Please refer to Administrative Memorandum No. 4172)

Upon a motion by Director Joe Farmer and a second by Director Don Gordon, the Board of Directors voted unanimously to authorize the Executive Director to execute an engineering services agreement with Kimley-Horn and Associates, Inc., for professional services associated with design and construction for the Wilson Creek Interceptor Improvements, Phase 2, Project No. 356, in the not-to-exceed amount of $294,735.

H. Consider Authorizing Award of Construction Contract on Project No. 291, Wylie Water Treatment Plant East Access Gate and Road Improvements (Please refer to Administrative Memorandum No. 4173)

Upon a motion by Director Lynn Shuyler and a second by Director Bill Harrison, the Board of Directors voted unanimously to authorize a construction contract to North Texas Contracting, Inc., for the Wylie Water Treatment Plant East Access Gate and Road Improvements, Project No. 291, in the amount of $1,329,563.

I. Consider Authorizing Additional Engineering Services on Project No. 261, High Service Pump Station 2-2 and 2-3 Mechanical Improvements (Please refer to Administrative Memorandum No. 4174)

Upon a motion by Director John Sweeden and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize an increase to the engineering services agreement with MWH Americas, Inc., for High Service Pump Station 2-2 and 2-3 Mechanical Improvements, Project No. 261, in the not-to-exceed amount of $84,377, for a revised total engineering services fee of $624,514.

J. Consider Authorizing Execution of Engineering Services Agreement on Sabine Creek Wastewater Treatment Plant Evaluation (Please refer to Administrative Memorandum No. 4175)

Upon a motion by Director Jerry Yancey and a second by Director Larry Parks, the Board of Directors voted unanimously to authorize the Executive Director to execute the engineering services agreement with Perkins Engineering
Consultants, Inc., for professional services associated with the Sabine Creek Wastewater Treatment Plant Evaluation in the not-to-exceed amount of $115,122.

K. Consider Adoption of Resolution No. 14-5 Authorizing Land Acquisition Program for the McCree Road 6 MG Ground Storage Tank Site in the City of Garland, Project No. 357
(Please refer to Administrative Memorandum No. 4176)

Upon a motion by Director Lynn Shuyler and a second by Director John Murphy, the Board of Directors voted unanimously to adopt Resolution No. 14-5 authorizing the NTMWD Executive Director to implement a land acquisition program for the McCree Road 6 MG Ground Storage Tank Site in the City of Garland, Project No. 357, which includes authorizing NTMWD’s real estate manager to sign closing documents and/or execute escrow agreements for such parcel, with the total funding not to exceed $1,100,000 including property purchase, easement, legal counsel assistance, and title work.

L. Consider Authorizing Additional Engineering Services for Project No. 128, Lake Texoma Pump Station Modifications
(Please refer to Administrative Memorandum No. 4177)

Upon a motion by Director Lynn Shuyler and a second by Director Joe Farmer, the Board of Directors voted unanimously to authorize an increase to the engineering services agreement with Freese and Nichols, Inc., for additional professional services associated with the Lake Texoma Pump Station Modifications, Project No. 128, in the lump sum amount of $54,000 for a revised total not-to-exceed engineering services fee of $1,028,200.

M. Consider Authorizing Award of Construction Contract on Project No. 260, Water Treatment Plant I, 2.5 and 3.0 MG Reservoir Roof Improvements
(Please refer to Administrative Memorandum No. 4178)

Upon a motion by Director Lynn Shuyler and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to authorize a construction contract to Nations Roof Central, LLC, for the Water Treatment Plant I, 2.5 and 3.0 MG Reservoir Roof Improvements, Project No. 260, in the amount of $564,200.

N. Consider Authorizing Ratification of Execution of Agreement for Professional Services of Claims Specialist for Project No. 153, Water Treatment Plants I, II, III, and IV Ozoneation
(Please refer to Administrative Memorandum No. 4179)

Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to take the following action on Project No. 153, Water Treatment Plants I, II, III, and IV Ozoneation: (1) ratify the action of the Executive Director to authorize Saunders, Walsh & Beard, Attorneys & Counselors, to contract with a claims specialist to provide professional
assistance in the not-to-exceed amount of $25,000 for review and evaluation of information submitted by McCarthy Building Companies, Inc., in support of its claim for adjustment of the contract amount; (2) authorize the Executive Director to increase the not-to-exceed amount as appropriate, with approval of the Executive Committee of the Board of Directors; and, (3) require the Executive Director to seek ratification of any increases to the not-to-exceed amount of $25,000, by the Board of Directors.

O. Consider Authorizing Change Order No. 26 on Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation
(Please refer to Administrative Memorandum No. 4180)

Upon a motion by Director Jerry Yancey and a second by Director Don Gordon, the Board of Directors voted unanimously to authorize Change Order No. 26 for Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation, a decrease in the amount of $24,697.35, resulting in a revised contract amount of $111,024,823.63.

P. Consider Adoption of Resolution No. 14-4 Authorizing Additional Funding for Right-of-Way Acquisition Program on Project No. 268, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline
(Please refer to Administrative Memorandum No. 4181)

Upon a motion by Director Bob Thurmond and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to adopt Resolution No. 14-4 authorizing additional funding for the right-of-way acquisition program for the Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268, with an additional funding request of $400,000, resulting in a total authorization of $8,946,500 for the right-of-way program.

Q. Consider Authorizing Change Order No. 2 on Project No. 210, North McKinney Pipeline System, Phases I and II
(Please refer to Administrative Memorandum No. 4182)

Upon a motion by Director Terry Anderson and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize Change Order No. 2 for an increase of $225,788, resulting in a revised contract amount of $14,996,414.22 and a 30-day contract time extension resulting in a revised final completion date of February 21, 2015, for Project No. 210, North McKinney Pipeline System, Phases I and II.

R. Consider Authorizing Execution of Engineering Services Agreement on Project No. 358, Lower Bois d'Arc Creek Reservoir Intake and Pump Station Configuration and Siting Engineering
(Please refer to Administrative Memorandum No. 4183)

Upon a motion by Director Joe Farmer and a second by Director Don Gordon, the Board of Directors voted unanimously to authorize the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., for
professional services associated with the Lower Bois d'Arc Creek Reservoir Intake and Pump Station, Configuration and Siting Engineering, Project No. 358, in the not-to-exceed amount of $200,000.

S. Consider Authorizing Reimbursement to the City of Wylie for Road Repairs on Project No. 268, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline
(Please refer to Administrative Memorandum No. 4184)

Upon a motion by Director Marvin Fuller and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to authorize reimbursement to the City of Wylie in the amount of $80,000 for road repairs as a result of construction material delivery for the Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268.

T. Consider Authorizing Additional Engineering Services on Project No. 354, Wylie Water Treatment Plants Chemical Systems Evaluation, Preliminary Engineering
(Please refer to Administrative Memorandum No. 4185)

Upon the recommendation of the Water Committee, a motion by Director Terry Anderson and a second by Director Bob Thurmond, the Board of Directors voted unanimously to authorize Water Treatment Plants I, II, and IV to be added to the Wylie Water Treatment Plant III Chemical Systems Evaluation, Preliminary Engineering, Project No. 354, and authorize additional engineering services with Carollo Engineers in the not-to-exceed amount of $842,700, resulting in a revised not-to-exceed amount of $1,435,300.

U. Consider Authorizing Change Order No. 6 on Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains
(Please refer to Administrative Memorandum No. 4186)

Upon a motion by Director Joe Farmer and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize Change Order No. 6 for the Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains, Project No. 259, for an increase in the amount of $66,374, resulting in a revised contract amount of $8,211,170.75.

V. Consider Authorizing Extension of Seasonal Watering as Written in Stage 3 of the NTMWD's Water Conservation and Drought Contingency/Water Emergency Response Plan
(Please refer to Administrative Memorandum No. 4187)

Upon a motion by Director Marvin Fuller and a second by Director John Murphy, the Board of Directors voted unanimously to authorize extension of seasonal watering through May 31, 2014, as written in Stage 3 of the NTMWD's Water Conservation and Drought Contingency/Water Emergency Response Plan with continuation of the extension by the Member Cities and Customers no later than
May 1, 2014, or as soon as possible thereafter, with subsequent monthly extensions considered by the Board.

VII. DISCUSSION ITEM

A. Water Supply Update

Mike Rickman provided a water supply update.

B. Water Rate Projection Review

Judd Sanderson reviewed the Member City Water Rate Projections. The current water rate for FY14 is $1.87, and the preliminary water rate projections are as follows: $2.06 for FY15, $2.29 for FY16, $2.52 for FY17, and $2.76 for FY18.

C. Appointment of Nominating Committee for 2014-2015 Board of Directors Officers

President Bill Lofland appointed the following Directors to serve as the Nominating Committee to recommend the slate of officers for 2014-2015:

- Charles McKissick, Chairman
- Lynn Shuyler
- Don Cates

President Lofland requested the Nominating Committee provide a recommendation at the May 2014 Board meeting.

VIII. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 5:32 p.m. The next regular meeting of the NTMWD Board of Directors will be held Thursday, May 22, 2014, at 4:00 p.m. in the NTMWD Administrative Offices, 505 E. Brown Street, Wylie, Texas.

APPROVED:

__________________________
BILL LOFLAND, President

ATTEST:

__________________________
JOE JOPLIN, Secretary

(Seal)
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

CONSENT AGENDA ITEM NO. 14-05-02

REGIONAL WATER SYSTEM
WYLIE WATER TREATMENT PLANT FINISHED WATER RESERVOIR AND FLOW METERING IMPROVEMENTS
PROJECT NO. 276

CHANGE ORDER NO. 2

This consent agenda item is for the Board of Directors consideration of Change Order No. 2 for an increase of $18,439.98 resulting in a revised contract amount of $14,170,743.95 and no change in the contract time for Wylie Water Treatment Plant (WTP) Finished Water Reservoir and Flow Metering Improvements, Project No. 276.

REVIEW

The following table summarizes Board actions to date for the Wylie WTP Finished Water Reservoir and Flow Metering Improvements, Project No. 276.

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<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>December 2011</td>
<td>3735</td>
<td>Engineering Services Agreement (ESA) with CH2M HILL for Preliminary Engineering</td>
<td>$379,925.00</td>
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<td>August 2012</td>
<td>3838</td>
<td>ESA with CH2M HILL for Final Design</td>
<td>$812,000.00</td>
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<td>July 2013</td>
<td>4021</td>
<td>Award of Contract to BAR Constructors</td>
<td>$14,720,800.00</td>
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<td>November 2013</td>
<td>4085</td>
<td>C.O. No. 1 for Deletion of Large Diameter Piping and Valves</td>
<td>($568,496.03)</td>
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The total value of the construction contract with BAR Constructors, Inc., including Change Order No. 1 is $14,152,303.97.

PROPOSED CHANGE ORDER NO. 2

Proposed Change Order No. 2 consists of changes in materials and quantity of work for one item that will result in an overall increase of $18,439.98. The proposed cost has been reviewed and determined to be fair and reasonable by the NTMWD staff and CH2M HILL for the materials and work involved.

Item No. 1 – Change from 45 Degree to 90 Degree Bends $18,439.98

- **Issue:** Field verification of the tie-in location of the new piping to existing piping was not in the location shown on the construction drawings.
**Recommendation:** The actual location of the fitting is positioned such that 90 degree bends must be used in place of 45 degree bends and additional piping is necessary to make the connection.

**Proposed Cost:** The contractor has submitted a proposal to furnish and install the additional recommended work for the total amount of $18,439.98.

### SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$14,720,800.00</td>
<td>600</td>
<td>660</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>($568,496.03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed C.O. No. 2</td>
<td>$18,439.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$14,170,743.95</td>
<td>600</td>
<td>660</td>
</tr>
</tbody>
</table>

**FUNDING**

Additional funding in the amount of $18,439.98 for Change Order No. 2 is available in the Regional Water System 2012 Construction Fund.

**RECOMMENDATION**

It is the recommendation of the Executive Director, NTMWD staff, and CH2M HILL that the Board of Directors approve Change Order No. 2 for an increase of $18,439.98, resulting in a revised contract amount of $14,170,743.95 for Project No. 276, Wylie Water Treatment Plant Finished Water Reservoir and Flow Metering Improvements. This will be an item on the consent agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

CONSENT AGENDA ITEM NO. 14-05-03

REGIONAL WATER SYSTEM
WYLIE WATER TREATMENT PLANT SECURITY ENHANCEMENTS, PHASE 2
PROJECT NO. 229

ENGINEERING SERVICES FEE ADJUSTMENT

This consent agenda item is for the Board of Directors consideration of an adjustment to the engineering services fee with Gupta and Associates, Inc., (Gupta) for the Wylie Water Treatment Plant (WTP) Security Enhancements, Phase 2, Project No. 229, in the credit amount of $2,448.76. This would result in a revised total not-to-exceed engineering services fee of $127,867.24.

REVIEW

In January 2011, by Administrative Memorandum No. 3580, the Board authorized the Executive Director to execute an engineering services agreement (ESA) with Gupta for design of the Wylie WTP Security Enhancements, Phase 2, Project No. 229, for the total not-to-exceed amount of $55,558.

In February 2013, by Administrative Memorandum No. 3943, the Board authorized additional engineering services with Gupta in the not-to-exceed amount of $74,758, resulting in a revised total not-to-exceed engineering services fee of $130,316.

ENGINEERING SERVICES FEE ADJUSTMENT

Item No. 1 – Participation by Gupta

During construction, two change orders were recommended by the Executive Director and NTMWD staff and approved by the Board. Included in these two change orders are three change order items that can be attributed to design omission. These are items that should have reasonably been included in the original design and bid documents. In these instances, the design engineer is requested to participate in 15% of the change order cost, which reflects an anticipated cost premium for this work, as compared to the cost if it were included with the original bid.

The current omissions in which the engineer is being asked to participate are shown in the table below:

<table>
<thead>
<tr>
<th>Description of Change Order Items</th>
<th>Change Order Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Communication Enclosures</td>
<td>$6,801.94</td>
</tr>
<tr>
<td>Vibration Dampeners for CCTV Camera Poles</td>
<td>$3,285.83</td>
</tr>
<tr>
<td>Connect Substation Radios to Fiber Optic Cable</td>
<td>$6,237.27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$16,325.04</strong></td>
</tr>
</tbody>
</table>

(2,448.76)
The total cost of the three omission items included in the change orders is $16,325.04. NTMWD and Gupta have developed a tentative agreement that Gupta will participate in these changes in the total amount of $2,448.76, which is approximately 15% of the change order amount.

**SUMMARY OF ENGINEERING SERVICES FEE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original ESA</td>
<td>$47,928.00</td>
<td>$7,630.00</td>
<td>$55,558.00</td>
</tr>
<tr>
<td>Additional Engineering Services</td>
<td>74,758.00</td>
<td></td>
<td>74,758.00</td>
</tr>
<tr>
<td>Recommended Fee Adjustment (Decrease)</td>
<td>(2,448.76)</td>
<td></td>
<td>(2,448.76)</td>
</tr>
<tr>
<td>Revised Engineering Services Fee Amount</td>
<td>$120,237.24</td>
<td>$7,630.00</td>
<td>$127,867.24</td>
</tr>
</tbody>
</table>

**RECOMMENDATION**

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an adjustment to the engineering services fee with Gupta and Associates, Inc., for the Wylie Water Treatment Plant Security Enhancements, Phase 2, Project No. 229, in the credit amount of $2,448.76, resulting in a revised total not-to-exceed engineering services fee of $127,867.24. This will be an item on the consent agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

CONSENT AGENDA ITEM NO. 14-05-04

REGIONAL SOLID WASTE SYSTEM
121 REGIONAL DISPOSAL FACILITY
SCALE HOUSE IMPROVEMENTS
PROJECT NO. 322

CHANGE ORDER NO. 1

This consent agenda item is for the Board of Directors consideration of: 1) Change Order No. 1 for an increase of $11,273.52 resulting in a revised contract amount of $111,289.52; and, 2) a 117-day contract time extension resulting in a revised final completion date of June 27, 2014, for the 121 Regional Disposal Facility (121 RDF) Scale House Improvements, Project No. 322.

REVIEW

In February 2013, by Administrative Memorandum No. 3938, the Board authorized the Executive Director to execute an engineering services agreement (ESA) with Burgess and Niple, Inc., (B&N) for design of the 121 RDF Scale House Improvements, Project No. 322.

In October 2013, by Administrative Memorandum No. 4069, the Board authorized award of contract for the 121 RDF Scale House Improvements, Project No. 322, to Robin L. Brown, Inc., in the amount of $100,016.

CHANGE ORDER NO. 1

Proposed Change Order No. 1 consists of changes in materials and quantity of work for three items that will result in an overall increase of $11,273.52 and an increase of 117 calendar days of contract time. The proposed cost and request for additional time have been reviewed and determined to be fair and reasonable by the NTMWD staff and B&N for the materials and work involved.

Item No. 1 – Installation of Four Additional Windows

$11,273.52
27 Calendar Days

- **Issue:** The original building construction included mirrors attached to the building eaves to allow the scale house attendants to see in-bound and out-bound traffic. This project extended the wall and roof line at each of the two attendant’s stations. During construction, it was discovered that the mirrors could not be placed in a location visible to the attendants.
Recommendation: Construction of a 24-inch x 48-inch window on the in-bound and out-bound side of each attendant's station (four windows).

Proposed Cost: The contractor has submitted a proposal to install the additional work for the total amount of $11,273.52 and 27 additional calendar days.

Item No 2 – Additional Contract Time to Select Exterior Wall Finish

Issue: The exterior of the existing building is concrete tilt-wall with exposed aggregate finish. The contract documents specify a stucco finish for the new addition. NTMWD staff requested a series of mockup wall panels of exposed aggregate and stucco finishes to determine the best match for the existing finish. Selection of the exterior finish became a critical path item during the mockup period. The contractor has requested 30 additional calendar days to prepare the mockup wall panels.

Recommendation: NTMWD staff believes the additional time is fair and reasonable.

Item No 3 – Additional Contract Time to Secure Contract and Notice to Proceed

Issue: The Board awarded the construction contract to Robin L. Brown in October 2013. The consultant mailed the contracts to Robin L. Brown in early November 2013; however, the contracts were not delivered. The consultant personally delivered a second set of contracts to Robin L. Brown in late November, which were executed at the December 2013 Board meeting. Due to the Christmas and New Year's holidays, the preconstruction meeting and the notice to proceed letter were delayed until mid-January 2014. The contractor has requested 60 additional calendar days to secure an executed contract and notice to proceed.

Recommendation: NTMWD staff believes the additional time is fair and reasonable.

SUMMARY OF CHANGE ORDER NO. 1

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Days</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Installation of Four Additional Windows</td>
<td>27</td>
<td>$11,273.52</td>
</tr>
<tr>
<td>2</td>
<td>Additional Contract Time to Select Exterior Wall Finish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Additional Contract Time to Secure Contract and Notice to Proceed</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>117</td>
<td>$11,273.52</td>
</tr>
</tbody>
</table>
SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$100,016.00</td>
</tr>
<tr>
<td>Proposed C.O. No. 1</td>
<td>11,273.52</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$111,289.52</td>
</tr>
</tbody>
</table>

The proposed adjustments to contract include a 117-day contract time extension resulting in a revised substantial completion date of May 28, 2014, and final completion date of June 27, 2014, for the 121 Regional Disposal Facility Scale House Improvements, Project No. 322.

FUNDING

Additional funding in the amount of $11,273.52 for Change Order No. 1 is available in the Regional Solid Waste System 2009 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Burgess & Niple, Inc., that the Board of Directors authorize: 1) Change Order No. 1 for an increase of $11,273.52 resulting in a revised contract amount of $111,289.52; and, 2) a 117-day contract time extension resulting in revised final completion date of June 27, 2014 for the 121 Regional Disposal Facility Scale House Improvements, Project No. 322. This will be an item on the consent agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

CONSENT AGENDA ITEM NO. 14-05-05

REGIONAL SOLID WASTE SYSTEM
121 REGIONAL DISPOSAL FACILITY
SECTOR 4A LINER MATERIAL PURCHASE/INSTALL
PROJECT NO. ENG 13-3B

CHANGE ORDER NO. 1
AND
AUTHORIZATION TO MAKE FINAL PAYMENT

This consent agenda item is for the Board of Directors consideration of: 1) Change Order No. 1 for a decrease of $1,727.12 resulting in a revised contract amount of $297,180.66; and, 2) authorization to make final payment to Great Basin Environmental, Inc., (Great Basin) in the final contract amount of $297,180.66 for the 121 Regional Disposal Facility (121 RDF) Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B.

REVIEW

In July 2013, the Executive Director executed an engineering services agreement (ESA) with Biggs and Mathews Environmental (Biggs and Mathews) for design of the 121 RDF Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B, for the total not-to-exceed amount of $21,900.

In January 2014, by Administrative Memorandum No. 4119, the Board authorized award of a construction contract for the 121 RDF Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B, to Great Basin in the amount of $298,907.78.

CHANGE ORDER NO. 1

Proposed Change Order No. 1 consists of changes in materials and quantity of work for one item that will result in an overall decrease of $1,727.12. The proposed costs listed in the following paragraphs have been reviewed and determined to be fair and reasonable by the NTMWD staff and Biggs and Mathews for the materials and work involved.

Item No. 1 – Adjustment to Contract Quantities ($1,727.12)

As with any construction project, the original bid quantities can change due to actual field conditions encountered during construction.
CONSENT AGENDA ITEM NO. 14-05-05
PAGE 2

The following adjustment to contract quantities was made to the indicated bid item in response to the actual conditions encountered:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Original Qty</th>
<th>Revised Qty</th>
<th>Diff.</th>
<th>Total Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Hourly Labor for Tie-in Preparation</td>
<td>HR</td>
<td>$37.546</td>
<td>100</td>
<td>54</td>
<td>(46)</td>
<td>($1,727.12)</td>
</tr>
</tbody>
</table>

**SUMMARY OF ADJUSTMENT TO CONTRACT QUANTITIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract Amount</td>
<td>$298,907.78</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Proposed C.O. No. 1</td>
<td>(1,727.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$297,180.66</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>

**AUTHORIZATION TO MAKE FINAL PAYMENT**

All major work on the project is complete. This project was considered substantially complete on May 5, 2014. It is anticipated that the contractor will complete all minor punchlist items by the final completion date of May 21, 2014. Release of final payment to the contractor will be contingent upon completion of punchlist items.

**RECOMMENDATION**

It is the recommendation of the Executive Director, NTMWD staff, and Biggs and Mathews Environmental that the Board of Directors authorize: 1) Change Order No. 1 for a decrease of $1,727.12 resulting in a revised contract amount of $297,180.66; and, 2) authorization to make final payment to Great Basin Environmental, Inc., in the final contract amount of $297,180.66 for the 121 Regional Disposal Facility Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B. This will be an item on the consent agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

CONSENT AGENDA ITEM NO. 14-05-06

REGIONAL WATER SYSTEM
ELECTRICAL IMPROVEMENTS AT RAW WATER PUMP STATION NO. 2
PROJECT NO. 201

ADDITIONAL ENGINEERING SERVICES

This consent agenda item is for the Board of Directors consideration of an increase in the scope and fee for engineering services by McCreary and Associates, Inc., (MAI) for the Electrical Improvements at Raw Water Pump Station No. 2, Project No. 201, in the additional amount of $1,473.45. This would result in a revised total not-to-exceed engineering services fee of $330,823.45.

PROPOSED ADDITIONAL SERVICES

This request for an additional fee consists of the following three items:

*Item No. 1 – Startup Participation* $5,900

During the switchover from the old electrical service to the new service, the contractor encountered electrical control issues. In order to determine the source of the problem, to assure correction of each of the issues, and to reduce the amount of time the raw water pumps were out of service, NTMWD staff requested MAI to be onsite to assist the contractor during the startup of each pump. The switchover of the four raw water pumps was performed over a four-week period in which each raw water pump was shut down, restarted, and operated under the new electrical service for one week prior to the switchover of the next pump. The engineer made multiple trips to the site over the four-week startup period and in each case determined the cause and developed recommended solutions to each issue, none of which were due to design errors. The issues included:

- Failed motor resistance temperature detectors in the NTMWD-owned motors
- Motor protection relay programming/configuration adjustments
- Wiring issues in the NTMWD-owned pump control valve motor operator

MAI requested an additional engineering fee in the amount of $5,900 to cover the costs associated with the startup participation. The NTMWD staff has reviewed this proposed fee and believes it to be fair and reasonable.

*Item No. 2 – Coordination with the City of Wylie Fire Marshal* $1,255

MAI has requested an additional engineering services fee in the not-to-exceed amount of $1,255 to cover the costs associated with coordinating with the City of Wylie Fire
CONSENT AGENDA ITEM NO. 14-05-06
PAGE 2

Marshal. The coordination efforts included additional meetings and design documents regarding the following items:

- Variance to allow a 15-foot flex base access road
- Site plan and specifications for fire lane signage and fire department Knox Box and padlocks

The NTMWD staff has reviewed this proposed fee and believes it to be fair and reasonable.

Item No. 3 – Participation by MAI

($5,681.55)

During design, three authorized change orders were recommended by the Executive Director and NTMWD staff and were approved by the Board. Included in these three change orders are three change order items that can be attributed to design omission. These are items that should have reasonably been included in the original design and bid documents. In these instances, the design engineer is requested to participate in 15% of the change order cost, which reflects an anticipated cost premium for this work, as compared to the cost if it were included with the original bid.

The current omissions in which the engineer is being asked to participate are shown in the table below:

<table>
<thead>
<tr>
<th>Description of C.O. Item</th>
<th>C.O. Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove Existing Light Poles and Foundations</td>
<td>$3,878</td>
</tr>
<tr>
<td>Increase Size of 480-Volt Transformers</td>
<td>29,712</td>
</tr>
<tr>
<td>Supervisory Control and Data Acquisition Component - Install Relay Communication Module in Programmable Logic Controller</td>
<td>4,287</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$37,877</strong></td>
</tr>
</tbody>
</table>

The total cost of the three omission items included in the change orders is $37,877. NTMWD and MAI have developed a tentative agreement in which MAI will participate in these changes in the total amount of $5,681.55, which is 15% of the change order amount.

SUMMARY OF PROPOSED ADDITIONAL SERVICES

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Startup Participation</td>
<td>$5,900.00</td>
</tr>
<tr>
<td>2</td>
<td>Coordination with the City of Wylie Fire Marshal</td>
<td>$1,255.00</td>
</tr>
<tr>
<td>3</td>
<td>Participation by MAI (decrease)</td>
<td>($5,681.55)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$1,473.45</strong></td>
</tr>
</tbody>
</table>
SUMMARY OF ENGINEERING SERVICES FEE

<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Agreement</td>
<td>$146,150.00</td>
<td></td>
<td>$146,150.00</td>
</tr>
<tr>
<td>Additional Engineering Services</td>
<td>86,500.00</td>
<td>$10,000.00</td>
<td>96,500.00</td>
</tr>
<tr>
<td>Additional Engineering Services</td>
<td>61,000.00</td>
<td>25,700.00</td>
<td>86,700.00</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>1,473.45</td>
<td></td>
<td>1,473.45</td>
</tr>
<tr>
<td>Revised Total</td>
<td>$295,123.45</td>
<td>$35,700.00</td>
<td>$330,823.45</td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $1,473.45 for this project is available in the Regional Water System 2009D Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an increase to the engineering services agreement with McCreary and Associates, Inc., for the Electrical Improvements at Raw Water Pump Station No. 2, Project No. 201, in the amount of $1,473.45, resulting in a revised total not-to-exceed engineering services fee of $330,823.45. This will be an item on the consent agenda of the May 2014 Board meeting.
CHANGE ORDER NO. 2

This consent agenda item is for the Board of Directors consideration of Change Order No. 2 for a net increase of $18,735, resulting in a revised contract amount of $2,989,513 for the Bonham Water Treatment Plant (WTP) Sludge Lagoon Improvements, Project No. 293.

REVIEW

This project includes the construction of a new, or second, sludge lagoon with an earthen embankment, which will be located approximately on the same footprint as the two original City of Bonham lagoons. Also included is the cleaning of the two original City of Bonham sludge lagoons prior to construction of the new lagoon. The lagoon layout has been designed to accommodate the use of a geotube for sludge capture and dewatering. The project also includes a decant pump station with the associated electrical and instrumentation devices to pump decant water to the existing manganese contactors.

The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concluding with the latest change order approved by the Board:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo./ CAI No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2012</td>
<td>3837</td>
<td>ESA with Black &amp; Veatch Corporation (B&amp;V)</td>
<td>$164,400</td>
</tr>
<tr>
<td>December 2012</td>
<td>12-12-04</td>
<td>Additional Engineering Services with B&amp;V</td>
<td>$11,515</td>
</tr>
<tr>
<td>March 2013</td>
<td>3956</td>
<td>Award of construction contract to Harrison, Walker &amp; Harper, LP(HW&amp;H)</td>
<td>$2,799,680</td>
</tr>
<tr>
<td>July 2013</td>
<td>13-07-04</td>
<td>Additional Engineering Services with B&amp;V</td>
<td>$23,981</td>
</tr>
<tr>
<td>January 2014</td>
<td>4118</td>
<td>C.O. No. 1 for removal of additional sludge volume and drain pipe revision</td>
<td>$171,098</td>
</tr>
</tbody>
</table>
CONSENT AGENDA ITEM NO. 14-05-07
PAGE 2

The total value of the construction contract with HW&H including Change Order No. 1 is $2,970,778.

PROPOSED CHANGE ORDER NO. 2

Change Order No. 2 consists of four items on the referenced project for a net increase in contract price of $18,735. The NTMWD Engineering staff and B&V reviewed these items and recommend them as necessary and reasonable.

*Item No. 1 – Additional Drainage Improvements* $1,699

- **Issue:** As the new sludge lagoon has neared completion, storm water drainage across the flex base access road has been reevaluated. During periods of heavy rainfall, there is a concern that excessive runoff may affect the stability of the new road.

- **Recommendation:** Additional drainage improvements have been designed to avoid future erosion to the new road. A drainage ditch to divert some of the water off the road, as well as a corrugated pipe under the road, is proposed to be installed.

- **Proposed Cost:** The contractor proposed to perform this work for the total not-to-exceed amount of $1,699.

*Item No. 2 – 16-Foot Wide Fence Gate* $3,842

- **Issue:** Maintenance crews will require access between the lagoon embankment and Lake Bonham for mowing equipment and keeping the lagoon vicinity cleared of trees and brush. The existing fence does not provide access for equipment on the outside of the fence.

- **Recommendation:** Install a new 16-foot wide double fence gate at the foot of the embankment near the northwest corner of the new lagoon.

- **Proposed Cost:** The contractor proposed to perform this work for the total not-to-exceed amount of $3,842.

*Item No. 3 – Gate Valve on 10-Inch Drain Line* $1,655

- **Issue:** A connection of the new 10-inch drain pipeline to the existing 24-inch sludge line did not include an isolation valve. According to the record drawings, there was adequate elevation difference and slope such that the new 10-inch drain line did not need to be isolated. During excavation of the existing 24-inch sludge line, it was discovered that the actual pipe elevations differ from those on the record drawings.
CONSENT AGENDA ITEM NO. 14-05-07
PAGE 3

- **Recommendation:** A 10-inch gate valve shall be installed on the drain line at the connection to the existing 24-inch sludge line for isolation.

- **Proposed Cost:** The contractor proposed to perform this work for the total not-to-exceed amount of $1,655.

*Item No. 4 – Extension of Electrical Duct Bank*  
$11,539

- **Issue:** The project includes installation of a new duct bank to provide electrical power to the new decant pump station. The existing manhole into which the new duct bank was to be connected was not shown in the correct location on the record drawings.

- **Recommendation:** Extend the proposed concrete encased electrical duct bank approximately 150 feet and install additional conduit and wiring as necessary.

- **Proposed Cost:** The contractor proposed to perform this work for the total not-to-exceed amount of $11,539.

**SUMMARY OF CHANGE ORDER NO. 2**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Additional Drainage Improvements</td>
<td>$1,699</td>
</tr>
<tr>
<td>2</td>
<td>16-Foot Wide Fence Gate</td>
<td>$3,842</td>
</tr>
<tr>
<td>3</td>
<td>Gate Valve on 10-Inch Drain Line</td>
<td>$1,655</td>
</tr>
<tr>
<td>4</td>
<td>Extension of Electrical Duct Bank</td>
<td>$11,539</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$18,735</strong></td>
</tr>
</tbody>
</table>

**SUMMARY OF ADJUSTMENTS TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$2,799,680</td>
<td>300</td>
<td>330</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>$171,098</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed C.O. No. 2</td>
<td>$18,735</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$2,989,513</td>
<td>300</td>
<td>330</td>
</tr>
</tbody>
</table>

The contractor has not asked for additional contract time but has asked for consideration of additional time in the future when the authorization to final is requested.
FUNDING

Additional funding in the amount of $18,735 for Change Order No. 2 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Black & Veatch Corporation that the Board of Directors approve Change Order No. 2 for a net increase in the amount of $18,735, resulting in a revised contract amount of $2,989,513 for the Bonham Water Treatment Plant Sludge Lagoon Improvements, Project No. 293. This will be an item on the consent agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

CONSENT AGENDA ITEM NO. 14-05-08

REGION C WATER PLANNING
PUBLIC AWARENESS EFFORT CONTRIBUTION

The purpose of this consent agenda item is to request the Board of Directors approval to participate in funding the public awareness (newsletter) effort during the 4th cycle of regional water planning for the Region C Water Planning Group (RCWPG). Funding in the amount of $4,000 is requested to continue production and distribution of the RCWPG quarterly newsletter.

REVIEW

Prior to the start of the 4th cycle of regional water planning, the Texas Water Development Board funded the quarterly newsletters for the RCWPG. It is the desire of the RCWPG to continue this public awareness effort during this planning cycle by funding the costs through the RCWPG Administrative Fund, which was created by local entities in 1998. The RCWPG Administrative Fund was created by five entities to share costs that were not being funded through the TWDB grant funds. In 2005, the fund was strengthened with additional contributions being made also by these five entities to fund public awareness/media efforts. The entities providing local share funds are:

- City of Dallas
- Tarrant Regional Water District
- North Texas Municipal Water District
- TU Electric (now Luminant)
- Trinity River Authority

The four other entities have agreed to provide an additional $4,000 to the RCWPG Administrative Fund to continue the production of the RCWPG quarterly newsletter. The newsletters are prepared and distributed for RCWPG by Cooksey Communications, a subconsultant to Freese and Nichols, Inc.

Funding in the amount of $4,000 is to be included in the Regional Water System FY14 Amended Budget (Account 101-5310-53149 Raw Water Development).

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize funding in the amount of $4,000 to the Region C Water Planning Group Administrative Fund as NTMWD's contribution to the public awareness effort.

This will be an item on the consent agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

ADMINISTRATIVE MEMORANDUM NO. 4188

TREATMENT CHEMICAL SUPPLY AGREEMENTS FOR 2014-2015
TABULATION OF BIDS
RESOLUTION NO. 14-7

The purpose of this administrative memorandum is to request that the Board of Directors adopt Resolution No. 14-7, "A Resolution Approving Award of the 2014-2015 Treatment Chemical Supply Agreements." The cost to supply water and wastewater chemicals for use throughout the NTMWD treatment systems is funded each year in the annual operation and maintenance budget approved by the Board.

Sealed bids for the supply of treatment chemicals for the Water and Wastewater Systems were received on April 9, 2014, at 2:00 p.m. at the NTMWD offices in Wylie. These bids will secure the supply and fix the price of chemical commodities whose current supply agreements expire on June 30, 2014. The new agreement term will commence on July 1, 2014, and extend through June 30, 2015.

The language in the General Terms and Conditions allows the NTMWD to exercise individual one-year supply agreement extension options. The extension options may be exercised on the basis that the most favorable chemical costs can be maintained for a subsequent time period, especially during periods of escalating fuel costs and inflationary increases, at a price less than or equal to the price during the original term. Under provisions developed by NTMWD legal counsel, the vendor will always have to initiate the extension option but the NTMWD in its sole discretion will have the right to accept or reject such an offer. Presently, thirteen chemical commodities are supplied to NTMWD by contract extensions and, therefore, were not included in this round of bids.

Based on estimated quantities projected for each of the treatment chemicals utilized by NTMWD, the current bid awards represent $17,621,333 in projected annual chemical costs required to support the water and wastewater treatment processes. The thirteen chemicals currently supplied by contract extension result in a combined annual cost of $9,051,431. Therefore, the grand total of NTMWD treatment chemical costs for the period July 1, 2014, through June 30, 2015, is projected to be $26,672,764.

The present cost for treatment chemicals for the 12-month period ending June 30, 2014, is anticipated to be $25,759,969. The higher cost for 2014-2015 is primarily due to higher liquid oxygen usage with full ozonation in service at the Wylie Water Treatment Plant (WTP).

Eight different chemicals were included in the bid program. In several cases, chemicals were bid in a variety of concentrations and/or delivery options based on specific applications and plant locations. In all, 22 individual chemical commodity prices were received as a result of this competitive bid.

The chemical bids are summarized as indicated below:

* One chemical - no bid received
* Two chemicals - single bid received
* Five chemicals - multiple bids received with the lowest bid provided by a vendor meeting all terms, conditions, and bid requirements with three exceptions. One bid was nonconforming.

* No bid was received for calcium thiosulfate. There is only one known vendor nationally for calcium thiosulfate, a chemical used in the water industry to neutralize oxidants such as chlorine and ozone. Neutralization of these oxidants is occasionally required by regulations to prevent adverse environmental effects. However, such use of calcium thiosulfate is expected to be limited and the necessary supply can be obtained as needed.

In the case of liquid sodium hypochlorite for all wastewater plants, the Bonham WTP, and Tawakoni WTP; and liquid sodium hydroxide for the Wilson Creek Wastewater Treatment Plant, the District experienced reliability problems with the apparent low bidder for these chemicals several years ago at which time the vendor’s actions cost the District approximately $269,000 extra to secure the required treatment chemical. During the past several years, this vendor has been rejected when appearing as the low vendor due to its past performance and the outstanding cost the District encountered. Last year the vendor was again rejected but under new management offered to provide hydrochloric acid free for the Tawakoni WTP chlorine dioxide system to resolve their debt. The District accepted the offer for the free product for the Tawakoni WTP. However, as of yet no hydrochloric acid has been ordered from the vendor and their performance has not been demonstrated. Therefore, it is recommended that the apparent low vendor for the two referenced chemicals again be rejected until such time as they demonstrate their reliability through delivery of the hydrochloric acid or they reimburse the District for the extra costs previously encountered.

Although single bids were received for two chemicals, this is usually the result of regional “niche” markets that have evolved among suppliers. Review of the bids and past purchasing experience indicates that the single bid responses are viable and cost effective. In the case of these bids, Lhoist North America of Texas, the only bidder for lime and lime slurry, has been a reliable supplier to the NTMWD for a long period.

**RECOMMENDATION**

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors adopt Resolution No. 14-7, “A Resolution Approving Award of the 2014-2015 Treatment Chemical Supply Agreements.” Based on approval from the Board of Directors, nonconforming and/or non-responsible bids are not accepted and are rejected, and a supply agreement will be awarded for each chemical commodity as indicated in the table as “Recommended Vendor” for the term of July 1, 2014, through June 30, 2015. This will be an item on the regular agenda of the May 2014 Board Meeting.
## TABULATION OF BIDS

<table>
<thead>
<tr>
<th>CN</th>
<th>Vendor</th>
<th>Unit of Measure</th>
<th>Price Per Unit WWTP's</th>
<th>Price Per Unit Wilson Creek</th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CN-1</td>
<td><strong>Recommended Vendor</strong></td>
<td>A Lhoist North America of Texas</td>
<td>tons</td>
<td>165.50</td>
<td>190.75</td>
</tr>
<tr>
<td></td>
<td>CN-2</td>
<td>Hydrated Lime Slurry (Calcium Hydroxide)</td>
<td>Unit of Measure</td>
<td>Price Per Unit Wylie</td>
<td>Price Per Unit Bonham</td>
</tr>
<tr>
<td></td>
<td><strong>Recommended Vendor</strong></td>
<td>A Lhoist North America of Texas</td>
<td>tons</td>
<td>203.50</td>
<td>212.00</td>
</tr>
<tr>
<td>CN-8.A</td>
<td>Vendor</td>
<td>Liquid Ferric Sulfate (10 %)</td>
<td>Unit of Measure</td>
<td>Price Per Unit Wylie</td>
<td>Price Per Unit WWTP's</td>
</tr>
<tr>
<td></td>
<td><strong>Recommended Vendor</strong></td>
<td>A Penco, Inc.</td>
<td>tons</td>
<td>103.40</td>
<td>98.70</td>
</tr>
<tr>
<td></td>
<td>B Chemtrade Chemicals US LLC</td>
<td>tons</td>
<td>112.75</td>
<td>101.00</td>
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</tr>
<tr>
<td></td>
<td>C Altivia Chemicals LLC</td>
<td>tons</td>
<td>214.00</td>
<td>214.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D Kemira</td>
<td>tons</td>
<td>No bid</td>
<td>No bid</td>
<td></td>
</tr>
<tr>
<td>CN-8.B</td>
<td>Vendor</td>
<td>Liquid Ferric Sulfate (10 %)</td>
<td>Unit of Measure</td>
<td>Price Per Unit Wilson Creek</td>
<td>Est. 12 Mo. Cost</td>
</tr>
<tr>
<td></td>
<td><strong>Recommended Vendor</strong></td>
<td>A Chemtrade Chemicals US LLC</td>
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</tr>
<tr>
<td></td>
<td>B Penco, Inc.</td>
<td>tons</td>
<td>123.78</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>C Altivia Chemicals LLC</td>
<td>tons</td>
<td>305.00</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>D Kemira</td>
<td>tons</td>
<td>No bid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN-8.C</td>
<td>Vendor</td>
<td>Liquid Ferric Sulfate (Low Manganese)</td>
<td>Unit of Measure</td>
<td>Price Per Unit Wylie</td>
<td>Price Per Unit Bonham</td>
</tr>
<tr>
<td></td>
<td><strong>Recommended Vendor</strong></td>
<td>A Chemtrade Chemicals US LLC**</td>
<td>tons</td>
<td>112.75</td>
<td>101.00</td>
</tr>
<tr>
<td></td>
<td>B Penco, Inc.</td>
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<td>119.25</td>
<td>119.25</td>
<td>119.25</td>
</tr>
<tr>
<td></td>
<td>C Shannon Chemical Corporation</td>
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<td>No bid</td>
<td>No bid</td>
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**Non-conforming bid**
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<tr>
<th>CN-10</th>
<th>Vendor</th>
<th>Liquid Sodium Hypochlorite</th>
<th>Unit of Measure</th>
<th>Price Per Unit WWTP’s</th>
<th>Price Per Unit Bonham</th>
<th>Price Per Unit Tawakoni</th>
<th>Price Per Unit Wilson Creek</th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>FSTI</td>
<td>tons</td>
<td>108.00</td>
<td>108.00</td>
<td>108.00</td>
<td>108.00</td>
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</tr>
<tr>
<td></td>
<td>B</td>
<td>Petra Chemical Company</td>
<td>tons</td>
<td>108.95</td>
<td>108.95</td>
<td>134.95</td>
<td></td>
<td>$610,690</td>
</tr>
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<td></td>
<td>C</td>
<td>DPC Industries</td>
<td>tons</td>
<td>121.76</td>
<td>121.76</td>
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<tr>
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<td>D</td>
<td>Brenntag Southwest, Inc.</td>
<td>tons</td>
<td>171.00</td>
<td>171.00</td>
<td>187.00</td>
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### CN-12

<table>
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<tr>
<th>Vendor</th>
<th>Liquid Sodium Hydroxide</th>
<th>Unit of Measure</th>
<th>Price Per Unit WWTP’s</th>
<th>Price Per Unit Wylie</th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended Vendor</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>A</td>
<td>K.A. Steel Chemicals, Inc.</td>
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<td>137.14</td>
<td>137.14</td>
<td>$4,439,222</td>
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<td>B</td>
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<td>139.20</td>
<td>139.20</td>
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<tr>
<td>C</td>
<td>Pencco, Inc.</td>
<td>tons</td>
<td>141.45</td>
<td>141.45</td>
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</tr>
<tr>
<td>D</td>
<td>DPC Industries</td>
<td>tons</td>
<td>142.87</td>
<td>142.87</td>
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</tr>
<tr>
<td>E</td>
<td>Brenntag Southwest, Inc.</td>
<td>tons</td>
<td>148.30</td>
<td>148.30</td>
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</tr>
<tr>
<td>F</td>
<td>FSTI</td>
<td>tons</td>
<td>150.00</td>
<td>150.00</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>TDC, LLC</td>
<td>tons</td>
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<td>157.00</td>
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### CN-12B

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<th>Vendor</th>
<th>Liquid Sodium Hydroxide</th>
<th>Unit of Measure</th>
<th>Price Per Unit Wilson Creek</th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended Vendor</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A</td>
<td>FSTI</td>
<td>tons</td>
<td>150.00</td>
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</tr>
<tr>
<td>B</td>
<td>Pencco, Inc.</td>
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<td>C</td>
<td>Brenntag Southwest, Inc.</td>
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<tr>
<td>D</td>
<td>Petra Chemical Company</td>
<td>tons</td>
<td>166.70</td>
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<td>E</td>
<td>DPC Industries</td>
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<td>192.65</td>
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<tr>
<td>F</td>
<td>K.A. Steel Chemicals, Inc.</td>
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<tr>
<td>G</td>
<td>TDC, LLC</td>
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### CN-16

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Calcium Thiosulfate (Delivered in Tons)</th>
<th>Unit of Measure</th>
<th>Price Per Unit Wylie</th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO BID</strong></td>
<td>A</td>
<td>tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN-16.B</td>
<td>Vendor</td>
<td>Calcium Thiosulfate (Delivered In Totes)</td>
<td>Unit of Measure</td>
<td>Price Per Unit Wylie</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>----------------------------------------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>NO BID</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CN-18</th>
<th>Vendor</th>
<th>Liquid Carbon Dioxide</th>
<th>Unit of Measure</th>
<th>Price Per Unit Bonham</th>
<th></th>
<th></th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>Linde, LLC</td>
<td>tons</td>
<td>150.00</td>
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<td>$6,750</td>
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<tr>
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<td>B</td>
<td>Praxair, Inc.</td>
<td>tons</td>
<td>225.00</td>
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</table>

<table>
<thead>
<tr>
<th>CN-21</th>
<th>Vendor</th>
<th>Liquid Oxygen</th>
<th>Unit of Measure</th>
<th>Price Per Unit Wylie</th>
<th>Price Per Unit Bonham</th>
<th></th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
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<td>69.34</td>
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<td>B</td>
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<td>102.00</td>
<td>102.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>Air Liquide Industrial US LP</td>
<td>tons</td>
<td>108.68</td>
<td>118.34</td>
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<td></td>
<td>D</td>
<td>Praxair, Inc.</td>
<td>tons</td>
<td>No bid</td>
<td>No bid</td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>CN-21.B</th>
<th>Vendor</th>
<th>Liquid Oxygen</th>
<th>Unit of Measure</th>
<th>Price Per Unit Tawakoni</th>
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<th></th>
<th>Est. 12 Mo. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>Air Liquide Industrial US LP</td>
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<td>C</td>
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<td>102.00</td>
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<tr>
<td></td>
<td>D</td>
<td>Praxair, Inc.</td>
<td>tons</td>
<td>No bid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NORTH TEXAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 14-7

A RESOLUTION APPROVING
AWARD OF THE 2014-2015 TREATMENT CHEMICAL SUPPLY AGREEMENTS

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF NORTH TEXAS MUNICIPAL WATER DISTRICT:

SECTION 1

That the North Texas Municipal Water District (the “District”) awards a Treatment Chemical Supply Agreement (“Agreement”) to the conforming recommended bidder for each chemical as shown in the Tabulation of Bids included in Administrative Memorandum No. 4188.

SECTION 2

That upon its execution by the parties thereto, each Agreement shall be binding upon the District in accordance with its terms and provisions.

SECTION 3

That this Resolution shall take effect and be in full force and effect from and after the date of its adoption, and it is so resolved; and all resolutions of the Board of Directors of the District in conflict herewith are hereby amended or repealed to the extent of such conflict, and all such resolutions, and any contracts or agreements authorized thereby shall be of no further force or effect upon execution of the Agreement to the extent of any such conflict.

THIS RESOLUTION ADOPTED BY THE NORTH TEXAS MUNICIPAL WATER DISTRICT BOARD OF DIRECTORS IN A REGULAR MEETING ON MAY 22, 2014, IN THE ADMINISTRATIVE OFFICES OF NTMWD, WYLIE, TEXAS.

JOE JOPLIN, Secretary

BILL LOFLAND, President

(SEAL)
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014 ADMINISTRATIVE MEMORANDUM NO. 4189

MULTIJURISDICTIONAL PRETREATMENT AGREEMENT BETWEEN CITY OF MCLENDON-CHISHOLM AND NTMWD

The purpose of this administrative memorandum is to request the Board of Directors to approve the Multijurisdictional Pretreatment Agreement between the City of McLendon-Chisholm and NTMWD.

BACKGROUND

The City of McLendon-Chisholm is interested in sending its wastewater for treatment to the South Mesquite Creek Regional Wastewater Treatment Plant (RWWTP). The McLendon-Chisholm flow will be contracted through a Customer Service Agreement with Rockwall to flow into the Buffalo Creek Interceptor System for treatment at the South Mesquite Creek RWWTP. The other members in the Buffalo Creek Interceptor System are Forney and Heath, which have approved Rockwall's Customer Service Agreement with McLendon-Chisholm.

The NTMWD is required to operate an industrial pretreatment program in accordance with Sections 402(b)(8) and (b)(9) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved North Texas Municipal Water District-South Mesquite Creek Publicly Owned Treatment Works (POTW) Pretreatment Program. The South Mesquite Creek POTW Pretreatment Program was approved on May 3, 1985, and modified on November 30, 1994.

In order to comply with the Texas Commission on Environmental Quality-approved South Mesquite Creek POTW Pretreatment Program, each city that provides flow to the South Mesquite Creek RWWTP must have a pretreatment ordinance. In addition, NTMWD manages the pretreatment program through multijurisdictional pretreatment agreements with associated cities. On April 22, 2014, the McLendon-Chisholm City Council approved a multijurisdictional pretreatment agreement with NTMWD and approved Ordinance 2014-07 Industrial Waste. McLendon-Chisholm does not currently have any industries.

If any Director desires a copy of the agreement, a copy will be provided.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize execution of the Multijurisdictional Pretreatment Agreement with the City of McLendon-Chisholm. This will be an item on the regular agenda of the May 2014 Board meeting.
REPORTING REQUIREMENTS
DISTRICT POLICY NO. 39

This purpose of this administrative memorandum is to request the Board of Directors consideration of District Policy No. 39, Reporting Requirements (copy attached).

All NTMWD employees are required to be familiar with federal, state and local, legal and regulatory requirements pertaining to their duties; therefore, it is the recommendation of the Executive Director and NTMWD staff that a written policy be adopted and written procedures developed to ensure that the NTMWD Board of Directors and senior management are made aware of any significant issues impacting NTMWD services, liabilities, customers, and employees, and in a timely manner.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Lloyd Gosselink Rochelle & Townsend, PC, that the Board of Directors adopt District Policy No. 39, Reporting Requirements. This will be an item on the regular agenda of the May 2014 Board meeting.
REPORTING REQUIREMENTS

It is the policy of North Texas Municipal Water District to ensure that its Board of Directors and senior management are made aware of significant issues impacting District services, liabilities, customers, and employees, and in a timely manner. To this end, the District adopts the following requirements:

(1) All District employees are required to be familiar with the federal, state and local laws and regulatory requirements pertaining to their duties;

(2) District employees shall report to their supervisors within four (4) hours:
   (a) any instance of an act or omission that may expose the District to civil, criminal, or other financial liability;
   (b) loss of service impacting District Retail Customers, Member Cities, Wholesale Customers or such entities' retail customers;
   (c) reports made to regulatory agencies concerning matters that may have a significant impact on the District's legal or financial rights or obligations;
   (d) death or injury of a District official, employee or contractor; and,
   (e) any matters of significant public interest, including but not limited to, those matters likely to generate major media coverage.

(3) The Executive Director, in turn, shall report to the Board of Directors in a timely manner any of the matters listed in Paragraph (2) above.

(4) The Executive Director shall develop written procedures necessary to ensure the implementation of the provisions of this policy within 90 days of its adoption.

This policy passed and approved by the Board of Directors of the North Texas Municipal Water District in a regular meeting on the 22nd day of May 2014.

JOE JOPLIN, Secretary

BILL LOFLAND, President

(Seal)
This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement (ESA) with Huitt-Zollars, Inc., (Huitt-Zollars) to provide professional services associated with the design of the Water System Operations Center (Operations Center), Project No. 352. This project will provide for the design of a building expansion that will become the Water System Management and Operations Center and include the operations control room, supervisory control and data acquisition (SCADA) center, and office space for the system management personnel. This project coordinates activities associated with several ongoing construction projects including the ozone addition, blending facilities associated with the Texoma to Wylie Water Treatment Plant (WTP) Raw Water Pipeline, and SCADA upgrades. The ESA would be in accordance with the standard NTMWD agreement with a total not-to-exceed amount of $192,452.

REVIEW

In May 2009, the Board approved Administrative Memorandum No. 3346, which authorized an ESA with Black & Veatch Corporation, Inc., (B&V) for final design and construction document preparation for Project No. 153, Wylie WTPs I, II, II, and IV Ozonation (Ozone Project).

In October 2010, the Board approved Administrative Memorandum No. 3547 authorizing award of the construction of the Ozone Project to McCarthy Building. The Ozone Project currently is under construction with an anticipated completion date of July 2014. As part of the Ozone Project, the North Ozone Operations Building (NOPS) was constructed between WTP III and WTP IV for housing the liquid oxygen facilities, ozone generators, and cooling water chillers. An area on the west side and adjacent to NOPS was reserved and indicated on the drawings for office space. The footprint of this reserved space is 132 feet by 34 feet, or approximately 4,488 square feet. At the time of design of the ozonation facilities, the reserved area adjacent to NOPS was to be used for future design and construction of the Water System office space.

In January 2010, the NTMWD Board approved Administrative Memorandum No. 3439, which authorized the Executive Director to execute an ESA with EMA Services, Inc., (EMA) for design and construction phase services for Project No. 205, SCADA System Upgrades and Operations. Included in the SCADA project, EMA with assistance from
NTMWD staff would evaluate the existing main control room location, currently in the Operations Building constructed in the mid-1950s, and develop recommendations regarding the location of a new control room if the current location is not suitable. EMA noted that the existing control room has considerable constraints that make its upgrade or expansion difficult and costly. EMA and NTMWD staff agree that the preferred location for the new main control room would be within the area reserved for office space west of and adjacent to NOPS. It is the opinion of the Executive Director and NTMWD staff that locating the control room staff with the remaining Water System staff will provide the most efficient operation for the system. The Operations Center is envisioned to house the main control room and associated offices for key operations and plant personnel who require close access to the main control room.

PROPOSED SCOPE OF PROJECT

This project will consist of design, preparation of bidding documents, bid phase, and construction phase services for the Operations Center. The project will provide the design for centralized Water System management and operations and will include a new main control room along with ten offices, a conference room, break room, and a copy room. The engineering services includes preparation of design documents and associated construction services for constructing approximately 4,500 square feet of facility space.

A preliminary estimated construction cost at this stage is based on a typical cost per square foot plus the specialty items needed for security and data. The opinion of probable construction cost for the Operations Center is approximately $1,200,000. The cost opinion includes electrical, instrumentation, and security revisions requested by NTMWD staff.

ENGINEERING SERVICES FEE

The NTMWD staff requested a proposal from Huitt-Zollars to perform the design engineering for the Operations Center. Huitt-Zollars proposes a not-to-exceed fee of $192,452 for design services, which includes $189,392 for basic services and $3,060 for special services. Huitt-Zollars’ proposed fee appears high when compared to other projects of this size due to the increased level of electrical, instrumentation/control, mechanical, and architectural engineering efforts required for this project. There are a number of reasons for this, including:

- Implementation of a new security system for both the Operations Center and the adjacent existing NOPS building entry doors, including door access hardware, access controller panel, and programming
- Modifications to the existing building telephone and data system for both the existing NOPS building and the Operations Center
- Addition of a number of data points for uninterruptible power source backup and the addition of an engine generator to back up the uninterruptible power source
• Use of walker-duct system (in-floor communications cable routing system) in the control room floor to allow maximum flexibility and expansion in the control room

• Additional meetings with NTMWD's technical services and information technology staffs for specialty items that are required for the control room

FUNDING

Funding in the amount of $192,452 for this project is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Huitt-Zollars, Inc., for professional services associated with design of the Water System Operations Center, Project No. 352, in the not-to-exceed amount of $192,452. This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

ADMINISTRATIVE MEMORANDUM NO. 4192

REGIONAL WASTEWATER SYSTEM
SOUTH MESQUITE CREEK REGIONAL WASTEWATER TREATMENT PLANT
SOLIDS BUILDING ODOR CONTROL IMPROVEMENTS
PROJECT NO. 288

CHANGE ORDER NO. 1

This administrative memorandum is for the Board of Directors consideration of Change Order No. 1 for: 1) an increase of $11,371.12 resulting in a revised contract amount of $1,710,571.12; and, 2) ninety-eight (98) days of additional contract time resulting in revised substantial and final completion dates of July 22, 2014, and September 20, 2014, respectively, for the South Mesquite Creek Regional Wastewater Treatment Plant (RWWTP) Solids Building Odor Control Improvements, Project No. 288.

REVIEW

The purpose of this project is to construct a new packed bed chemical scrubber odor control unit and makeup air unit for the upper level sludge dewatering room, two new bulk chemical storage tanks for the chemical scrubbers, and new transport container guide plates and concrete floor repair in the lower level container room for the Solids Building at the South Mesquite Creek RWWTP.

In May 2012, by Administrative Memorandum No. 3799, the Board authorized the engineering services agreement with Perkins Engineering Consultants, Inc., (PECI) for design of the Solids Building Odor Control Improvements.

In April 2013, by Administrative Memorandum No. 3971, the Board authorized the award of the construction contract for the Solids Building Odor Control Improvements to Associated Construction Partners, Ltd., in the contract amount of $1,699,200.

CHANGE ORDER NO. 1

Proposed Change Order No. 1 consists of two items that impact the work scope for this project.

Item No. 1 – Custom Electrical Junction Box $11,371.12
30 Calendar Days

• Issue: The new electrical feeders for Side A of Motor Control Center-J (MCC-J) are to be upsized to accommodate increased electrical loads. The larger conductors cannot be routed in the same path as the existing due to space constraints inside MCC-J.
**Recommendation:** A custom electrical junction box adjacent to Side A of MCC-J is recommended to provide the needed cable routing space. This will avoid the alternate approach of rerouting numerous other feeders to create clearance for the up-sized conductors.

**Proposed Cost:** The contractor has submitted a proposed additional price of $11,371.12 for the new box and labor to install.

**Additional Contract Time:** The contractor has requested that 30 calendar days be added to the contract to account for coordination of the solution and for the delivery of materials.

**Item No. 2 – AHU Control Panel Modification**

**Issue:** The submittal for an air handling unit control panel listed an internal logic control board without a protective conformal coating. While this coating was not specifically noted in the contract specification, it is widely recognized as a required component for devices in harsh environments.

**Recommendation:** The contractor and supplier agree to provide the conformal coating at no additional contract cost, but the process adds delivery time to the component and the assembled control panel. The contractor has requested 68 additional calendar days to account for this delay.

**Proposed Cost:** No additional cost is requested for this item.

The issues associated with Change Order No. 1 result in an overall increase of $11,371.12 to the contract amount and a total of 98 days in the contract time. The proposed cost and time has been reviewed and is recommended by both NTMWD staff and PECI as appropriate for the time and effort required.

**SUMMARY OF PROPOSED CHANGE ORDER NO.1**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Days</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Custom Electrical Junction Box</td>
<td>30</td>
<td>$11,371.12</td>
</tr>
<tr>
<td>2</td>
<td>AHU Control Panel Modification</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>98</td>
<td>$11,371.12</td>
</tr>
</tbody>
</table>

**SUMMARY OF ADJUSTMENTS TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$1,699,200.00</td>
<td>300</td>
<td>360</td>
</tr>
<tr>
<td>Proposed C.O. No. 1</td>
<td>$11,371.12</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$1,710,571.12</td>
<td>398</td>
<td>458</td>
</tr>
<tr>
<td>Original Contract Dates</td>
<td>April 15, 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td>July 22, 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FUNDING

Additional funding in the amount of $11,371.12 for Change Order No. 1 is available in the Regional Wastewater 2012 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Perkins Engineering Consultants, Inc., that the Board of Directors authorize Change Order No. 1 for: 1) an increase of $11,371.12, resulting in a revised contract amount of $1,710,571.12; and, 2) ninety-eight (98) calendar days of additional contract time, resulting in revised substantial and final completion dates of July 22, 2014, and September 20, 2014, respectively, for the South Mesquite Creek Regional Wastewater Treatment Plant Solids Building Odor Control Improvements, Project No. 288. This will be an item on the regular agenda of the May 2014 Board meeting.
REGIONAL WATER SYSTEM
LAKE TAWAKONI WATER TREATMENT PLANT
PROJECT NO. WCF 07-4 (099)

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum is for the Board of Directors consideration for an increase in the scope and fee for additional engineering services by Black & Veatch Corporation (B&V) associated with the construction phase of the Lake Tawakoni Water Treatment Plant (WTP), Project No. WCF 07-4 (099), in the additional not-to-exceed amount of $109,671. This will result in a revised total not-to-exceed engineering services fee of $3,162,635.54.

EXECUTIVE SUMMARY

The Lake Tawakoni WTP construction contract included a construction time of approximately 24 months. Several factors have impacted the length of construction, and the Board has authorized a total of 929 additional calendar days, approximately 30 months, on the construction contract. The additional length of construction has had an impact on B&V’s overall costs, which were originally based on the original construction time period of 24 months. It is the recommendation of the Executive Director and NTMWD staff that NTMWD is responsible for a portion of the additional costs requested by B&V, and BAR Constructors (BAR), the construction contractor, is responsible for a portion of the costs.

It has been the intention of the NTMWD to settle all issues with BAR before presenting a full recommendation to the Board for additional fees for B&V. NTMWD staff has begun negotiations with BAR for a portion of the costs; however, these negotiations are not final and BAR has not agreed to reimburse NTMWD for the amount that NTMWD believes they are responsible for. While these negotiations are ongoing, NTMWD is withholding approximately $1,500,000 of retainage due to a leak in the sludge lagoon constructed by BAR. Because these negotiations have been lengthy and B&V has incurred costs dating back to November 2011, the NTMWD staff feels it is appropriate to request approval for a portion of the additional costs requested by B&V. Therefore, this administrative memorandum recommends an increase in the engineering fee of $109,671 for B&V based on NTMWD responsibility only. NTMWD staff continues to negotiate with BAR regarding the balance of the additional cost requested by B&V and will present those additional costs to the Board for consideration in the future.
TIMELINE

- March 2007 – Board approved Administrative Memorandum No. 3004 authorizing the Executive Director to execute an engineering services agreement (ESA) with B&V for design and construction phase services related to the Lake Tawakoni WTP in a not-to-exceed amount of $3,000,000.

- June 2008 – Board approved Administrative Memorandum No. 3183 authorizing award of contract for the Lake Tawakoni WTP to BAR in the amount of $61,316,420.

- January 2011 through February 2013 – Board approved six change orders presented by the Executive Director and NTMWD staff totaling 929 additional calendar days to the construction contract. This total additional time exceeds that which would normally be associated with a construction project; however, some unusual events occurred, which resulted in approximately 2.5 years of construction time extension. This extension has resulted in cost impacts to B&V as detailed herein.

- November 2011 – Board approved Administrative Memorandum No. 3718 authorizing additional engineering services in the amount of $52,964.54 to B&V for additional design and construction phase services over the extended construction period through October 2011.

PROPOSED SCOPE OF ADDITIONAL SERVICES

This request for the additional engineering services fee consists of the following three items:

Item No. 1 – Additional Construction Phase Services $60,494

Currently, the construction phase has not been completed and requires continued support services from B&V. B&V has requested additional engineering service fees in the amount of $126,452 based on extended time for the construction phase from November 2011 through May 2014. The additional cost is due to extended project management, extended engineering, and additional submittal review. Of this total, it is the recommendation of the Executive Director and NTMWD staff that NTMWD is responsible for $60,494 of this amount. This equates to a cost of less than $2,100 per month for B&V’s administration of the project. NTMWD staff continues to negotiate with BAR regarding the balance of the total amount requested by B&V.

Item No. 2 – Ozone System Testing $56,418

In order to qualify the ozone system for operation, a series of operational tests are performed by the contractor and ozone system supplier, which include functional testing to determine if each piece of ozone equipment is installed and operating correctly,
operational testing to determine if the entire ozone system is installed and operating correctly, and performance testing to determine if the entire ozone system meets the efficiency rating specified in the contract documents. Inspection of these tests requires a highly skilled staff with expertise in the field of ozone disinfection. NTMWD staff requested B&V witness and verify that these tests were performed and documented in accordance with the contract. As the testing plan developed, B&V was also tasked with additional engineering items including a plant operational plan that would allow the plant to meet current water demands while testing the complete production range of the ozone system.

B&V has requested an additional $56,418 for services associated with the testing of the ozone system. The proposed cost has been reviewed and determined to be fair and reasonable by NTMWD staff. The proposal is based on a total of 355 additional engineering hours at an average cost of $159 per hour. The proposed additional hours and hourly rate appear fair and reasonable to NTMWD staff.

Item No. 3 – Participation by B&V ($7,241)

There are currently eleven authorized change orders. In November 2011, Administrative Memorandum No. 3718 authorized B&V to participate in the cost of Change Order Nos. 1 through 8 in the amount of $18,135, which included 15 change order items attributed to design omission. These are items that should have reasonably been included in the original design and bid documents. In these instances, the design engineer is requested to participate in 15% of the change order cost, which reflects an anticipated cost premium for this work, as compared to the cost if it were included with the original bid. This request is for B&V’s participation in the cost for Change Order Nos. 9 through 11, which includes four additional change order items attributed to design omission.

The current omissions in which the engineer is being asked to participate are shown in the table below:

<table>
<thead>
<tr>
<th>Description of Change Order Items</th>
<th>Change Order Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone contactor drain modifications</td>
<td>$25,942.96</td>
</tr>
<tr>
<td>Ozonated water sample pump modifications</td>
<td>6,120.07</td>
</tr>
<tr>
<td>Ozone side-stream pump injector modifications</td>
<td>13,961.40</td>
</tr>
<tr>
<td>Ozone destruct unit vent pipe modifications</td>
<td>2,249.67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$48,274.10</strong></td>
</tr>
</tbody>
</table>

The cost of the four omission items included in the change orders totals $48,274.10. NTMWD and B&V have reached a tentative agreement by which B&V will participate in these changes in the total amount of $7,241, which is the cost premium portion of the change order amount.
The net additional engineering services fee of $109,671 is summarized below:

**SUMMARY OF ADDITIONAL SERVICES**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Additional Construction Phase Services</td>
<td>$60,494</td>
</tr>
<tr>
<td>2</td>
<td>Ozone System Testing</td>
<td>56,418</td>
</tr>
<tr>
<td>3</td>
<td>Participation by B&amp;V</td>
<td>(7,241)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$109,671</strong></td>
</tr>
</tbody>
</table>

**ENGINEERING SERVICES FEE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Agreement</td>
<td>$3,000,000.00</td>
</tr>
<tr>
<td>Additional Engineering Services No. 1</td>
<td>71,099.54</td>
</tr>
<tr>
<td>Participation by B&amp;V</td>
<td>(18,135.00)</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>116,912.00</td>
</tr>
<tr>
<td>Proposed Participation by B&amp;V</td>
<td>(7,241.00)</td>
</tr>
<tr>
<td><strong>Revised Total</strong></td>
<td><strong>$3,162,635.54</strong></td>
</tr>
</tbody>
</table>

It is the opinion of the NTMWD staff that the current proposal accurately reflects the level of effort to support the project through May 2014. A final adjustment to B&V’s engineering services agreement will be presented for the Board’s consideration at final completion of the project.

**FUNDING**

Additional funding in the amount of $109,671 for the additional engineering services fees is available in the Regional Water System 2006A Construction Fund.

**RECOMMENDATION**

It is the recommendation of the Executive Director and the NTMWD staff that the Board of Directors authorize an increase to the engineering services agreement with Black & Veatch Corporation for additional professional services associated with the construction phase on the Lake Tawakoni Water Treatment Plant, Project No. WCF 07-4 (099), in the amount of $109,671, resulting in a revised total not-to-exceed engineering services fee of $3,162,635.54. This will be an item on the regular agenda of the May 2014 Board meeting.
This administrative memorandum is for the Board of Directors consideration to authorize the pre-selection and award the bid of five 8 million gallons per day (MGD) "AquaDisk" cloth media filter units by Aqua-Aerobic Systems (Aqua-Aerobics), and their provision of temporary filter capacity during construction, for a guaranteed price of $1,049,445, for the Wilson Creek Regional Wastewater Treatment Plant (RWWTP) Filter Improvements, Project No. 309. This guaranteed pricing bid is to be assigned as the filter equipment and temporary filter provisions pricing used in the eventual construction contract bid for this project.

REVIEW

In November 2012, the Board approved Administrative Memorandum No. 3891 authorizing an engineering services agreement (ESA) with Alan Plummer Associates, Inc., (APAI) for preliminary engineering to develop and evaluate options for replacing the existing Plant I traveling bridge filters with cloth media filters and conversion from gas chlorine to ultraviolet (UV) disinfection.

The preliminary engineering study contained multiple options with construction estimates for various filter and UV replacement scenarios. NTMWD staff reviewed the APAI report in coordination with other plant process priorities. It was concluded that supplementing the existing Plant I filter capacity with cloth media filters provides an immediate benefit to assure continued compliance with permit limits and increased operational flexibility. The transition to UV disinfection was not an immediate need and was deferred to a separate future project.

In September 2013, the Board approved Administrative Memorandum No. 4062 authorizing an ESA with APAI for design and construction phase services for the Wilson Creek RWWTP cloth media filter improvements.

Because the physical layout, hydraulic needs, and ancillary systems can vary significantly among various filter manufacturers, the design approach included equipment pre-selection by evaluation of sealed bids at approximately the 30% design stage to identify the specific cloth media filter configuration for detailed design development.
An equipment proposal specification was prepared and sealed bids were received, including system specifics and a guaranteed price. This process provides the design engineer the information required to design the hydraulic allowances, interconnecting piping, and structural components that result in a proper fit for that particular piece of equipment. The lowest responsive proposal would then be used as the basis of detailed design with the pricing and scope guaranteed by the cloth media filter supplier to all bidders of the construction contract.

The pre-selection bid documents instructed the filter suppliers that the NTMWD would assign the equipment bid to the general contractor at the time of award of the construction contract. The bid is secured by a bid bond in the amount of 5% of the total bid amount. The bid documents for the general contractor will include the successful supplier's lump sum bid amount, and the general contractor will execute a purchase order for the filter equipment from the successfully bidding supplier for this amount.

DESCRIPTION OF PROJECT

The scope of the project is to retrofit one or two traveling bridge filters with multiple cloth media filter units. The filter selection considered disk filter equipment by Aqua-Aerobic Systems AquaDisk, Alfa Laval Ashbrook Simon-Hartley ISO-DISC, and Aqua-Aerobic Systems Aqua-Diamond Cloth Media Filters. For the first two systems, APAI determined that a single filter basin can accommodate up to five disk filter units, with a combined filtration capacity of 40 MGD. The third system, the Aqua-Diamond alternate, would convert two traveling bridge filters with their "Diamond" cloth media filters for a combined filtration capacity of 46 MGD. Additionally, the filter suppliers were required to provide temporary filtration capacity of 10 MGD to supplement the filter capacity taken offline while converting the existing traveling bridge filter to cloth media filters. Suppliers were given the option of providing a self-contained rental unit or supplying steel tanks and one or more of the permanent disk filter units in a temporary installation. The equipment will be relocated to the concrete basin after a sufficient number of disk filters are operational.

TABULATION OF PRESELECTION BIDS

Three bids were received and opened on Thursday, April 10, 2014, at 2:00 p.m., and are tabulated as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Filter Capacity</th>
<th>Bid Amount</th>
<th>Price per MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Aqua-Aerobic Systems AquaDisk</td>
<td>40 MGD</td>
<td>$1,049,445</td>
<td>$26,237</td>
</tr>
<tr>
<td>2 Alfa Laval Ashbrook Simon-Hartley ISO-DISC</td>
<td>40 MGD</td>
<td>$1,209,600</td>
<td>$30,240</td>
</tr>
<tr>
<td>3 Aqua-Aerobic Systems Aqua-Diamond</td>
<td>46 MGD</td>
<td>$1,994,000</td>
<td>$43,348</td>
</tr>
</tbody>
</table>
The engineer’s opinion of probable cost for the disk filters and the required temporary filtration provisions is $1,800,000.

Following receipt of the bids, an evaluation by APAI and NTMWD determined that the lowest responsive bid, based on total cost per gallon of treatment capacity, was received from Aqua-Aerobic Systems for the AquaDisk equipment. The lump sum bid price of $1,049,445 will be included as a line item in the bid proposal of the construction contract.

FUNDING

Funding in the amount of $1,049,445 for award of the AquaDisk units is available in the Regional Wastewater System 2013 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Alan Plummer Associates, Inc., that the Board of Directors authorize the pre-selection and award of equipment provided by Aqua-Aerobics Systems, including: 1) five 8 MGD Aqua-Disk units and 2) provision of temporary filter capacity during construction, for the guaranteed price of $1,049,445, for the Wilson Creek Regional Wastewater Treatment Plant Filter Improvements, Project No. 309. This guaranteed pricing is to be assigned as the filter equipment and temporary filter provisions pricing used in the eventual construction contract bid and contract amount for this project. This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014 ADMINISTRATIVE MEMORANDUM NO. 4195

REGIONAL WATER SYSTEM
WATER TREATMENT PLANT II
FILTER UNDERDRAIN IMPROVEMENTS AND
CONVERSION TO BIOLOGICALLY ACTIVE FILTERS
PROJECT NO. 302

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum requests an increase in the scope and fee for engineering services by Carollo Engineers (Carollo) in the not-to-exceed amount of $215,100 for additional design items to be incorporated into Project No. 302, Water Treatment Plant (WTP) II Filter Underdrain Improvements and Conversion to Biologically Active Filters. This would result in a revised total not-to-exceed engineering services fee of $956,800.

REVIEW

In October 2012, by Administrative Memorandum No. 3870, the Board authorized the Executive Director to execute an engineering services agreement (ESA) with Carollo for WTP II Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 302, in the not-to-exceed amount of $741,700. The scope of this project is to provide improvements to 38 of the 40 filters at WTP II to allow conversion to biologically active filters. Structural repairs and underdrain improvements were completed on one of the filters at WTP II (Filter No. 31) as part of Change Order No. 2 on Project No. 226, WTP III Filter Underdrain Repair and Replacement, Phase II. Structural repairs and underdrain improvements are under construction for another filter at WTP II (Filter No. 21) as part of Project No. 277, WTP III Filter Underdrain Improvements and Conversion to Biologically Active Filters. The scope of this project at WTP II includes: 1) improvements to the filter underdrains in the remaining 38 filters; 2) installation of a deeper bed of filter media; 3) raising the existing washwater troughs and gullet walls in all 40 filters; and, 4) sandblasting and coating the walls of each of the filters.

The original scope of engineering services for this project included evaluations to be performed during the design phase and, if appropriate, would be included as part of the bid package. These items apply to all 40 filters at WTP II and include: 1) leaks in the filter influent (valve) gallery and filter effluent (pipe) gallery due to structural issues; 2) pipe leaks due to corrosion issues; and, 3) replacement of valve actuators with either pneumatic or electric actuators. At many locations, water leaks from the basin or filter into the valve gallery through construction joints or cracks in the concrete walls and, in a similar manner, water leaks from the filter into the pipe gallery. Also, there are a number of locations at which the pipes leak near the pipe penetrations through the filter
walls. Carollo prepared and submitted a Structural and Mechanical Evaluation Report dated September 2013, which summarized the corrosion and mechanical investigations and recommended repairs or improvements at appropriate locations. Included in the recommended improvements are: 1) concrete structural joint and crack repairs; 2) replacement of pipe segments and supports due to corrosion; 3) repair of seals at pipe penetration locations; 4) replacement or repair of structural steel walkways and ladders due to corrosion; and, 5) improvement of the ventilation system for both the valve gallery and the pipe gallery.

The scope of engineering services also included an evaluation of the potential replacement of valve actuators with either pneumatic or electric actuators. There are six valves for each of the 40 filters resulting in a total of 240 valves with actuators. Carollo prepared and submitted an Actuators Evaluation Report dated September 2013, which summarized the investigation of pneumatic and electric valve actuators. The report recommended installation of new pneumatic valve actuators as well as a new compressed air system with appropriate air filters and dryers capable of providing “dry air”. It is recommended that new piping for the compressed air system be installed to supply all valve actuators throughout both the filter valve gallery and the filter pipe gallery.

The NTMWD has reviewed the two reports discussed above and concurs with the recommendations. The estimated construction cost, including the items identified in the two reports, has been revised to $20,000,000. Because this estimated cost is much larger than the estimated construction cost of $13,800,000 as set forth in Administrative Memorandum No. 3870, it is recommended that the project be divided into two construction phases. The first phase is proposed to include Filter Nos. 1 through 20 and the estimated construction cost is currently $10,500,000. The second phase is proposed to include Filter Nos. 21 through 40 and the estimated construction cost is currently $9,500,000.

**ADDITIONAL ENGINEERING SERVICES FEES**

NTMWD requested Carollo submit a cost proposal for the engineering services associated with design of the additional items identified in the Structural and Mechanical Evaluation Report and the Actuators Evaluation Report. A summary of these additional items includes the following:

- Structural design of leaking concrete joints and cracks
- Mechanical improvements of pipe segments and supports due to corrosion
- Mechanical improvements of seals at pipe penetration locations
- Structural improvements of steel walkways and ladders
- Mechanical improvements of the ventilation system for the valve and pipe galleries
- Mechanical improvements of the compressed air system
- Replacement of pneumatic valve actuators
NTMWD also requested a proposal for the additional engineering effort to separate this project into two phases in order to be bid separately. Additional engineering effort will be required to prepare two different sets of plans and specifications, as well as additional construction phase services for two projects.

Carollo has proposed to perform these additional services for the not-to-exceed amount of $215,100 resulting in a total not-to-exceed amount of $956,800. The NTMWD staff has reviewed the engineering fees submitted by Carollo and believes them to be fair and reasonable for the work associated with this project. These fees are within the guidelines of the Consulting Engineers Council for this type of work. The services would be performed in accordance with the standard ESA.

SUMMARY OF ENGINEERING FEES

A summary of the revised engineering services is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract Amount (Ad. Memo. No. 3870)</td>
<td>$565,600</td>
<td>$175,100</td>
<td>$741,700</td>
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<tr>
<td>Proposed Additional Services</td>
<td>$215,100</td>
<td></td>
<td>$215,100</td>
</tr>
<tr>
<td>Revised ESA Amount</td>
<td>$781,700</td>
<td>$175,100</td>
<td>$956,800</td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $215,100 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an increase to the engineering services fee with Carollo Engineers for Water Treatment Plant II Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 302, in the amount of $215,100, resulting in a revised not-to-exceed engineering services fee of $956,800. This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

ADMINISTRATIVE MEMORANDUM NO. 4196

REGIONAL WATER SYSTEM
EXPANSION OF RAW WATER PUMP STATION NO. 3 TO 620 MGD
PROJECT NO. 321

ENGINEERING SERVICES AGREEMENT

This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement (ESA) with Freese and Nichols, Inc., (FNI) to provide professional services associated with design and construction for the Expansion of Raw Water Pump Station No. 3 to 620 MGD, Project No. 321. The ESA would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $356,600.

EXECUTIVE SUMMARY

The purpose of this project is to provide increased pumping capacity at Raw Water Pump Station (RWPS) No. 3, which serves Water Treatment Plants (WTP) III and IV. This increased capacity is required due to the growth seen in the service area, and will provide firm pumping capacity (pumping capacity with the largest pump in the station out of service) required for WTPs III and IV. This project was developed as a recommendation of the 2010 Water System Capital Improvement Program Update (CIP Update), Project No. 208.

Subsequent to Project No. 208, design was completed on Project No. 268, Texoma Outfall to Wylie WTP Raw Water Pipeline. The design of Project No. 268 has impacted portions of the design concept of this raw water pump station project and is one of the reasons for an increase from the original construction cost estimated in 2010 of $1.6 million to the current estimate of $4.5 million. The NTMWD staff and FNI reviewed the overall design with the Executive Director and Director of Finance. Based on the critical nature of the raw water pumping station capacity, it is the recommendation of the Executive Director and NTMWD staff that the Board authorize the ESA presented herein. Funding for the project has been coordinated with the other capital needs in the Water System, and funding is available as indicated in the Funding subsection below.

REVIEW

In March 2010, by Administrative Memorandum No. 3464, the Board authorized an ESA with FNI to provide engineering services associated with the 2010 Water System CIP Update, Project No. 208. In this update, FNI recommended that the pumping capacity at RWPS No. 3 be expanded to provide a firm capacity of 620 MGD.

In February 2013, by Administrative Memorandum No. 3947, the Board authorized an ESA with FNI to provide professional services associated with the preliminary engineering for Project No. 321, Expansion of RWPS No. 3 to 620 MGD.
The preliminary engineering effort was performed to determine what improvements are necessary to expand the existing pump station to increase the firm capacity.

In addition to determining the improvements required to increase the station's firm capacity to 620 MGD, the preliminary engineering effort also included the development of a physical model of the pump station intakes. A physical model was developed to: 1) meet Hydraulic Institute Standards due to the overall size of the pump station; and, 2) determine the effects of changes in individual pump design since the original concept of the station was developed.

PROPOSED SCOPE OF PROJECT

The expansion of RWPS No. 3 to 620 MGD will consist of two major tasks. The first task will consist of the following four major improvements: 1) relocation of an existing 35 MGD pump, including pump control valve, discharge piping, all associated appurtenances, and electrical cable and conduit; 2) installation of one new 85 MGD pump including pump control valve, discharge piping, and appurtenances; 3) a new 1750HP, 4160V variable frequency drive (VFD) for the new 85 MGD pump; and, 4) modifications to the existing 4160V electrical switchgear.

The second task will include wetwell improvements as recommended by the results of the RWPS No. 3 hydraulic model developed as part of the preliminary engineering. The model showed that flow straightening grates to act as baffle walls were needed between each of the parallel pumps on the north and south sides and along the west wall of the wetwell.

The engineer's opinion of probable construction cost for this project is $4.5 million and has increased due to the following:

- Addition of a VFD and associated electrical improvements. It is recommended a VFD be added to the new pump due to a change in the operating conditions of the station. With the introduction of Lake Texoma water directly into the water treatment process, it is necessary to be able to adjust the flow rates to the desired blending ratios between Lake Lavon and Lake Texoma water under all demand conditions.
- Relocation of the existing 35 MGD pump. The original design concept included only installation of a new pump.
- Installation of flow straightening grates as recommended by the hydraulic modeling.

ENGINEERING SERVICES FEE

FNI has proposed to perform the following basic engineering design services for the not-to-exceed amount of $338,100, with an additional not-to-exceed allowance for special services of $18,500. The total proposed not-to-exceed amount for basic and special services being requested is $356,600.
Basic engineering tasks include:

- collection of existing data
- pump improvements
- wetwell improvements
- power coordination study
- update the cost estimate
- development of 60, 90, and 100 percent drawings including pump station drawings, wetwell drawings, and electrical and instrumentation design and drawings
- bidding and advertising assistance
- bid processing, including bid tabulation
- issue construction contract documents
- construction phase services

Special services are for the engineer to witness the factory testing of the pump, motor, and adjustable frequency drive.

NTMWD staff has reviewed the proposed scope and engineering fees submitted by FNI and believes them to be fair and reasonable for the work associated with this project. The proposed fees are within the guidelines of the Consulting Engineers Council for this type of work. The services would be performed in accordance with the standard NTMWD ESA.

FUNDING

Funding for this project in the amount of $356,600 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., for professional services associated with engineering and construction phase services for the Expansion of Raw Water Pump Station No. 3 to 620 MGD, Project No. 321, in the not-to-exceed amount of $356,600.

This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

REGIONAL WATER SYSTEM
RAW WATER PUMP STATION NO. 2
MECHANICAL IMPROVEMENTS
PROJECT NO. 360

ENGINEERING SERVICES AGREEMENT

This administrative memorandum requests the Board of Directors authorize the Executive Director to execute an engineering services agreement (ESA) with Kimley-Horn and Associates, Inc., (KHA) to provide professional services associated with design and construction phase services for Raw Water Pump Station (RWPS) No. 2 Mechanical Improvements, Project No. 360. This project will replace aging check valves, air release valves and associated appurtenances, five 60-inch buried butterfly valves, and provide new pressure transmitters and new protective coatings. The ESA would be in accordance with the standard NTMWD agreement in a not-to-exceed amount of $168,900.

REVIEW

In March 2010, the Board approved Administrative Memorandum No. 3464, which authorized an ESA with Freese and Nichols, Inc., (FNI) to provide engineering services associated with the 2010 Water System Capital Improvement Program Update (CIP Update), Project No. 208. The CIP Update examined the Water System and recommended improvements to meet projected peak-day water demands through the year 2035. The CIP Update included an extensive list of improvement projects to the Raw Water Supply System, Water Treatment System, and High Service Pumping and Transmission System required to meet the future demands of the Regional Water System. The CIP Update identified two projects needed for RWPS No. 2. The first project identified was the Electrical Improvements to RWPS No. 2, Project No. 201. The Board awarded a construction project for Project No. 201 in August 2012 through approval of Administrative Memorandum No. 3834. The second project identified for this pump station was the replacement of the mechanical equipment that had reached the end of its useful life. This pump station has a total capacity of 260 million gallons per day and pumps raw water from Lake Lavon to Water Treatment Plants (WTPs) I and II, and is critical to the operation of WTPs I and II.

During the development of the CIP Update, FNI performed a preliminary assessment of the mechanical equipment of RWPS No. 2. This assessment included the replacement of only the buried butterfly valves. KHA, along with NTMWD staff, has performed a more thorough assessment for this project and identified additional mechanical items that have reached the end of their useful life, as well as some structural improvements that are needed.
DESCRIPTION OF PROJECT

The scope of services consists of professional services for the hydraulic analysis and design of improvements associated with this project. Engineering services shall include design, bidding, and construction phase services. The engineer will prepare plans and specifications for the replacement of various valves at the RWPS No. 2 site, including five buried 60-inch butterfly valves and four check valves. Adjacent 36-inch and 48-inch piping will also be to allow for the new valve installation. This project also includes sump pump replacement, mechanical piping repainting, grout repair, grating replacement, installation of new pressure transmitters and pipe supports, and replacement of air release valves and surge valve.

The estimated cost of construction for the upgrades is $1,800,000.

ENGINEERING SERVICES FEE

The NTMWD staff requested KHA develop a proposal to provide design, construction contract documents, bid phase assistance, and certain construction phase services for the project. KHA has proposed to perform the basic engineering services in the not-to-exceed amount of $168,900. Included in the basic engineering services are the following:

a) General items and meetings $12,500
b) 50%, 90% and final design documents 95,800
c) Surge valve design 19,500
d) Bid phase services 5,000
e) Bid processing 5,500
f) Construction phase services 30,600

$168,900

There are no special services included in this project.

The total not-to-exceed fee is $168,900. The NTMWD staff has reviewed the engineering fee submitted by KHA and believes it to be fair and reasonable for the work associated with this project. The proposed fees are within the guidelines of the Consulting Engineers Council for this type of work. The services would be performed in accordance with the standard ESA.

FUNDING

Funding for this project in the amount of $168,900 for Project No. 360 is available in the Regional Water System Capital Improvement Fund.
RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Kimley-Horn and Associates, Inc., for design and construction phase services for Raw Water Pump Station No. 2 Mechanical Improvements, Project No. 360, in the not-to-exceed amount of $168,900. This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

ADMINISTRATIVE MEMORANDUM NO. 4198

REGIONAL WATER SYSTEM
WATER TREATMENT PLANTS I AND II
SLUDGE LINE IMPROVEMENTS
PROJECT NO. 284

CHANGE ORDER NO. 3
AND
AUTHORIZATION TO MAKE FINAL PAYMENT

This administrative memorandum is for the Board of Directors consideration of: 1) Change Order No. 3 for an increase of $32,235, resulting in a revised contract amount of $590,799; 2) 50 additional days of contract time, resulting in a revised final completion date of April 25, 2014; and, 3) authorization to make final payment to PCL Construction, Inc., for Water Treatment Plants (WTP) I and II Sludge Line Improvements, Project No. 284.

REVIEW

This project includes the replacement of approximately 3,900 feet of 12-inch pipeline from the sludge pump station to the sludge lagoons. As authorized by the Board, 16-inch pipe is being installed in lieu of the original 12-inch pipe.

The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concluding with the latest change order approved by the Board:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo./CAI No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2012</td>
<td>3779</td>
<td>ESA with KSA Engineers (KSA)</td>
<td>$83,000</td>
</tr>
<tr>
<td>May 2013</td>
<td>3990</td>
<td>Award to PCL Construction, Inc. (PCL)</td>
<td>$525,690</td>
</tr>
<tr>
<td>June 2013</td>
<td>13-06-03</td>
<td>Additional Engineering Services ESA with KSA</td>
<td>$8,075</td>
</tr>
<tr>
<td>November 2013</td>
<td>13-11-02</td>
<td>C.O. No. 1 for alignment changes</td>
<td>$13,902</td>
</tr>
<tr>
<td>January 2014</td>
<td>14-01-04</td>
<td>C.O. No. 2 for change of installation under 25 KV electric lines</td>
<td>$18,972</td>
</tr>
</tbody>
</table>

The total value of the construction contract with PCL including Change Order No. 2 is $558,564.
PROPOSED CHANGE ORDER NO. 3

Change Order No. 3 consists of two items on the referenced project for an increase in the contract amount of $32,235. The NTMWD engineering staff and KSA have reviewed these items and recommend these proposed changes as necessary and reasonable.

Item No. 1 – Existing Field Conditions at Pipe Station 18+00 $21,496
30 days

- **Issue:** During directional bore installation at the creek crossing at approximate pipeline station 18+00, the contractor encountered a large concrete thrust block and encasement for an existing 48-inch raw waterline and for a 20-inch treated waterline that conflicted with the designed pipeline alignment.

- **Recommendation:** The most cost-effective method to resolve the conflict was to change the elevation of the directional bore to cross above the concrete thrust block. This resulted in the contractor installing a new directional bore at a higher elevation to avoid the concrete encasement.

- **Proposed Cost:** Contractor submitted a cost proposal for the not-to-exceed amount of $21,496. This cost included the sub-contractor’s cost to demobilize (while alternate alignments and installation methods were evaluated) and remobilize to the site, as well as additional pipe fittings.

Item No. 2 – Existing Field Conditions at Pipe Station 36+50 $10,739
20 days

- **Issue:** Several days after completing the piping connections and backfilling at the tie-in of the new 16-inch sludge pipeline to existing 12-inch sludge pipeline, water was surfacing at the recently backfilled area. NTMWD staff suspected a leak in the new piping and requested the contractor excavate the area to determine the leak location. After re-excavation and further exploration in the area, it was determined the new piping and connection were intact, but water from an existing overflow pipe for Lagoon No. 3 was following the ditch line and surfacing at this location. The source of the water has now been eliminated on another project.

- **Recommendation:** It is the recommendation of the Executive Director and NTMWD staff that the contractor be compensated for the efforts expended including pumping of the water, additional bedding material, backfill and re-compaction.

- **Proposed Cost:** Contractor submitted a cost proposal for the not-to-exceed amount of $10,739.
SUMMARY OF CHANGE ORDER NO. 3

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Days</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Existing Field Conditions at Pipe Station 18+00</td>
<td>30</td>
<td>$21,496</td>
</tr>
<tr>
<td>2</td>
<td>Existing Field Conditions at Pipe Station 36+50</td>
<td>20</td>
<td>$10,739</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
<td>$32,235</td>
</tr>
</tbody>
</table>

SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
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<td>120</td>
<td>150</td>
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<td>C.O. No. 1</td>
<td>13,902</td>
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<td>30</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>18,972</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
<td>32,235</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Revised Contract</td>
<td>$590,799</td>
<td>230</td>
<td>260</td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td></td>
<td>March 26, 2014</td>
<td>April 25, 2014</td>
</tr>
</tbody>
</table>

All major work has been completed, and this project was considered substantially complete on March 26, 2014. The contractor continues to work on minor punchlist items. This request is to authorize final payment to PCL Construction, Inc., contingent upon final completion of all punchlist items.

FUNDING

Funding in the amount of $32,235 for this proposed change is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and KSA Engineers that the Board of Directors authorize: 1) Change Order No. 3 for an increase of $32,235, resulting in a revised contract amount of $590,799; 2) 50 additional days of contract time, resulting in a revised final completion date of April 25, 2014; and, 3) final payment to PCL Construction, Inc., for Water Treatment Plants I and II Sludge Line Improvements, Project No. 284. This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2014

ADMINISTRATIVE MEMORANDUM NO. 4199

REGIONAL WATER SYSTEM
WATER TREATMENT PLANT I
CONVERSION TO BIOLOGICALLY ACTIVE FILTRATION AND
IMPROVEMENT OF EXISTING UNDERDRAINS
PROJECT NO. 259

CHANGE ORDER NO. 7

This administrative memorandum is for the Board of Directors consideration of Change Order No. 7 for Project No. 259, Water Treatment Plant (WTP) I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains for an increase of $152,185, resulting in a revised contract amount of $8,363,355.75.

REVIEW

Included in this project are the following improvements in WTP I: new filter underdrains, floor slabs and air distribution piping; new precast concrete troughs at a higher elevation than the existing troughs; corrosion protectant coating on all wetted surfaces in each filter; new valves at selected locations; new electric actuators for new and existing valves; new effluent launder weir plates in the four clariflocculators; and associated electrical and instrumentation.

The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concluding with the latest change order approved by the Board:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2011</td>
<td>3666</td>
<td>ESA with Carollo Engineers (Carollo)</td>
<td>$531,400.00</td>
</tr>
<tr>
<td>October 2012</td>
<td>3872</td>
<td>Award to PCL Construction, Inc. (PCL)</td>
<td>$7,535,625.00</td>
</tr>
<tr>
<td>March 2013</td>
<td>3960</td>
<td>C.O. No. 1 for twelve (12) 30-inch wash water supply valves and bulkheads to isolate the clariflocculators</td>
<td>$181,105.96</td>
</tr>
<tr>
<td>April 2013</td>
<td>3982</td>
<td>C.O. No. 2 for additional surface preparation for epoxy coating system</td>
<td>$227,024.59</td>
</tr>
<tr>
<td>June 2013</td>
<td>4005</td>
<td>C.O. No. 3 for epoxy injection in filter construction joints</td>
<td>$28,269.20</td>
</tr>
<tr>
<td>January 2014</td>
<td>4115</td>
<td>C.O. No. 4 for bituminous coating removal at center flume of four filters</td>
<td>$68,145.00</td>
</tr>
<tr>
<td>Month/Year</td>
<td>Ad. Memo. No.</td>
<td>Description</td>
<td>Amount</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>February 2014</td>
<td>4152</td>
<td>C.O. No. 5 for change of coating systems in flumes, blower relay base modification in PLC-1, chemical trench alterations, adjustment of FRP weir installation elevation, and restoration of communications with wash water</td>
<td>$104,627</td>
</tr>
<tr>
<td>April 2014</td>
<td>4186</td>
<td>C.O. No. 6 for modifications to the loss of head instruments, addition of pipe spacers for the flange fittings, restoration of communications to the pH meter, and replacing level instruments for the filter basins.</td>
<td>$66,374</td>
</tr>
</tbody>
</table>

The total value of the construction contract with PCL including Change Order No. 6 is $8,211,170.75.

**PROPOSED CHANGE ORDER NO. 7**

Proposed Change Order No. 7 consists of five items on the referenced project for a net increase in contract price of $152,185. The NTMWD Engineering staff and Carollo have reviewed these items and recommend them as necessary and reasonable.

*Item No. 1 – Bid Item 3.2 – Delete Flowable Fill*  
($23,040)

- **Issue:** Contract Bid Item 3.2 – Flowable fill placement under the filter floor mud slab was an allowance for flowable fill to be used to stabilize the base if conditions after excavation of the existing floor were not ideal for mud slab placement. Excavation of all filters has been completed and flowable fill placement was not required.

- **Recommendation:** Accept credit for not installing Bid Item 3.2 – Flowable Fill.

- **Proposed Credit:** Contractor will credit the contract amount for Bid Item 3.2 in the extended amount of $23,040, based on the unit bid price of $256 per cubic yard for 90 cubic yards.

*Item No. 2 – Filter No. 7 Air Wash Piping Modifications*  
$4,464

- **Issue:** Wall flanged alignment for the air wash header inside the center flume at Filter No. 7 differs from all other filters on WTP I. The record drawings did not reflect this difference. Space limitations will require modifications to the stainless steel air wash piping.
• **Recommendation:** Contractor will perform air wash piping modifications to accommodate field conditions in this location.

• **Proposed Cost:** The contractor proposed to perform this work for the total amount of $4,464.

*Item No. 3 – Replace Air Wash Inlet Valves*  
$149,487

• **Issue:** The existing 18-inch butterfly valves on air wash piping at each filter were installed approximately 13 years ago and were not planned to be replaced as part of this project. After construction of the first few filter improvements and during the backwash process, it was observed that the air wash inlet valves did not seal properly. Leakage through the valve seats caused uneven distribution of filter media and wash water was “backing up” into the air header. Further testing has revealed that the air wash valve on each of the 12 filters leak to some extent.

• **Recommendation:** Replace all twelve 18-inch air wash butterfly valves. Proposed valves are resilient seated butterfly valves as recommended for air service piping.

• **Proposed Cost:** The contractor proposed to perform this work for the total amount of $149,487. This equates to approximately $12,457 per each valve.

*Item No. 4 – Settled Water Flume Joint Repair*  
$12,500

• **Issue:** Settled water flume construction joint between the original WTP I construction and the first expansion work (between Filter Nos. 6 and 8) is deteriorated and leaking substantially.

• **Recommendation:** Direct the contractor to repair the joint from inside the settled water flume and grout the joint from the outside.

• **Proposed Cost:** The contractor proposed to perform this work for the total amount of $12,500.

*Item No. 5 – 30-Inch Pipe Spool Pieces for Wash Water Valves*  
$8,774

• **Issue:** Replacement of the 30-inch wash water inlet valves for all 12 filters was part of Change Order No. 1. During replacement, it was discovered that the flange-to-flange dimension of the original valves for Filter Nos. 7, 8, 9, and 10 were larger (longer) than standard valves.

• **Recommendation:** To accommodate new valves with standard flange-to-flange body length, 30-inch spool pieces are required for Filter Nos. 7, 8, 9, and 10.
- **Proposed Cost:** Contractor submitted a cost proposal for additional cost in the not-to-exceed amount of $8,774.

A total cost of $152,185 has been proposed by the contractor for these changes. NTMWD staff and Carollo have reviewed the costs submitted by the contractor and feel they are representative of the materials and labor effort involved.

### SUMMARY OF CHANGE ORDER NO. 7

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bid Item 3.2 – Delete Flowable Fill</td>
<td>($23,340)</td>
</tr>
<tr>
<td>2</td>
<td>Filter No. 7 Air Wash Piping Modifications</td>
<td>$4,464</td>
</tr>
<tr>
<td>3</td>
<td>Replace Air Wash Inlet Valves</td>
<td>$149,487</td>
</tr>
<tr>
<td>4</td>
<td>Settled Water Flume Joint Repair</td>
<td>$12,500</td>
</tr>
<tr>
<td>5</td>
<td>30-Inch Pipe Spool Pieces for Wash Water Valves</td>
<td>$8,774</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$152,185</td>
</tr>
</tbody>
</table>

### SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
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<td>880</td>
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<td>C.O. No. 1</td>
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<tr>
<td>C.O. No. 2</td>
<td>227,024.59</td>
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<td></td>
</tr>
<tr>
<td>C.O. No. 3</td>
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<td></td>
</tr>
<tr>
<td>C.O. No. 4</td>
<td>68,145.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.O. No. 5</td>
<td>104,627.00</td>
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<td>C.O. No. 6</td>
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<td>May 5, 2015</td>
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### FUNDING

Additional funding in the amount of $152,185 for this project is available in the Regional Water System Capital Improvement Fund.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Carollo Engineers that the Board of Directors approve Change Order No. 7 for the Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains, Project No. 259, for an increase in the amount of $152,185, resulting in a revised contract amount of $8,363,355.75. This will be an item on the regular agenda of the May 2014 Board meeting.
This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement (ESA) with Perkins Engineering Consultants, Inc., (Perkins) for the preparation of a study evaluating the Muddy Creek Wastewater Treatment Plant (WWTP) and the feasibility of placing the Wylie WWTP back in service. The ESA would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $141,483. The study is to be funded through the Muddy Creek WWTP operating budget as requested in writing by the City of Wylie (Wylie) and the City of Murphy (Murphy). NTMWD would provide administrative support services for the study.

REVIEW

Wylie and Murphy transmit flow to the Muddy Creek WWTP through the Muddy Creek interceptor system and Wylie's wastewater collection system. In April 2005, the Muddy Creek WWTP was placed in service with a treatment capacity of 5 MGD. The plant's treatment capacity was expanded to 10 MGD in December of 2007. In June 2009, the Wylie WWTP was taken out of service and; henceforth, all wastewater from Wylie and Murphy has been treated at the Muddy Creek WWTP.

When the Wylie WWTP was taken out of service, NTMWD staff met with officials from Wylie to discuss the future of the plant. It was decided that the Wylie WWTP permit would remain active although no flow would be treated through the plant. This decision was made based on the possibility of placing the plant back in service sometime in the future to possibly defer the expansion of the Muddy Creek WWTP. Since the Wylie WWTP was taken out of service, the permit has been maintained and some basic operation and maintenance has been performed on the equipment in case a decision is made to place the plant back in service.

Since the Muddy Creek WWTP was placed in service, both cities have experienced growth. Peak flow experienced at the Muddy Creek WWTP indicates that planning for additional system capacity should commence. The proposed study will provide guidance for adding system capacity as well as evaluate treatment at the Muddy Creek WWTP.

THE STUDY

The proposed study by Perkins will evaluate: 1) options for adding wastewater transmittance and treatment capacity; 2) hydraulic and treatment constraints at the
Muddy Creek WWTP; and, 3) the feasibility of placing the Wylie WWTP back in service to defer expansion of the Muddy Creek WWTP.

The average daily flow at the Muddy Creek WWTP is approaching 75% of the treatment plant’s design capacity. Texas Commission on Environmental Quality (TCEQ) regulations require that planning activities for providing adequate capacity for future anticipated flows commence once the plant flow has reached 75% of the plant’s design capacity. The increasing wastewater flow is occurring during a period of historic drought. Both cities have indicated to NTMWD that growth is expected to continue. Peak flows to the treatment plant on occasion already exceed the two-hour peak capacity allowed in the permit. Therefore, part of this recommended evaluation will be to review the historical peak flows received at the treatment plant, review projected growth and related wastewater flows, and develop recommendations for adequately treating the average and peak wastewater flows. The study will also evaluate the plant’s treatment components with respect to capacity, redundancy, and meeting current TCEQ design criteria.

The project will also consist of studying the impact on the Muddy Creek Interceptor System and the Muddy Creek WWTP if the existing Wylie WWTP is placed back in service. The study will evaluate options for funding the operational costs of the Wylie WWTP that are equitable to Wylie and Murphy.

ENGINEERING SERVICES FEE AND FUNDING

Perkins has proposed to perform the basic engineering services associated with this project in the not-to-exceed amount of $141,483. The NTMWD has received written requests from Wylie and Murphy to fund a portion of the cost of the study through the FY14 Muddy Creek WWTP operating budget, and the balance through the FY15 Muddy Creek WWTP operating budget.

The NTMWD staff has reviewed the engineering fees submitted by Perkins and believes these to be fair and reasonable for the work associated with this project. The services would be performed in accordance with the standard ESA.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute the engineering services agreement with Perkins Engineering Consultants, Inc., for professional services associated with the Muddy Creek Wastewater System Evaluation in the not-to-exceed amount of $141,483. This will be an item on the regular agenda of the May 2014 Board meeting.
This administrative memorandum requests the Board of Directors approve an extension to the Construction Manager at Risk (CMAR) Construction Services Agreement for Garney Construction Companies, Inc., (Garney), which will result in an increase in the contract amount of $105,412 for construction services associated with the Lake Texoma Outfall to Wylie Water Treatment Plant (WTP) Raw Water Pipeline, Project No. 268.

SUMMARY

The Lake Texoma Outfall to Wylie WTP Raw Water Pipeline project will provide the facilities required to reestablish pumping of the NTMWD's water right from Lake Texoma. This project was authorized by the Board in September 2011. Since that time, the project team has completed the design of the entire project, completed construction of approximately 48 miles of large diameter (84-inch and 96-inch) piping, and significant progress has been made on construction of the facilities required to blend Lake Texoma water with the water pumped into the Wylie WTP from Lake Lavon (blending facilities). The entire project cost including engineering, right-of-way acquisition, construction, inspection, and testing is estimated to be approximately $312,500,000.

Achieving this amount of work in just over two years has taken a massive coordinated effort between NTMWD staff, Freese and Nichols, Inc., (FNI) and their sub-consultants, and the CMAR, Garney Construction Companies, Inc. Critical decisions were made by the project team at all points during the process based on several factors with the primary goal of achieving completion and startup of the facilities as soon as possible.

REVIEW

In September 2011, the Board approved separate actions regarding the drought. By Administrative Memorandum No. 3681, the Board approved implementation of Stage 3 of the Water Conservation and Drought Contingency/Water Emergency Response Plan effective November 1, 2011. The Board also approved Administrative Memorandum No. 3684, which approved Phase I of the project for professional services by FNI associated with pumping water directly from Lake Texoma to the Wylie WTP.
To complete the necessary construction as expeditiously as possible, a recommendation was developed regarding use of the CMAR delivery method. In this method, contracts are executed with a construction manager who then becomes part of the design team along with the design engineer and NTMWD staff.

In November 2011, the Board approved Administrative Memorandum No. 3728 and adopted Resolution No. 11-22 authorizing the use of the CMAR delivery method under Texas Government Code Chapter 2267 for the project. In January 2012, the Board approved Administrative Memorandum No. 3748 authorizing the use of Garney as CMAR for the project. The services to be provided under the January 2012 authorization were for preconstruction services. Through these services, the CMAR joined the design team along with the design engineer and NTMWD staff to review and further develop the project delivery plan to optimize the project design constructability.

In June 2012, the Board approved Administrative Memorandum No. 3817 authorizing: 1) Garney to perform CMAR procurement and construction services in the amount of $7,951,135; 2) an allowance to the CMAR for bonds, insurance, and contingency in the amount of $3,055,000; and, 3) payments to the CMAR in the not-to-exceed amount of $250,000,000 for construction associated with the project. The total funding approved in June 2012 for these services and construction was $261,006,135.

In November 2012, the Board approved Administrative Memorandum No. 3881 authorizing an additional allowance for bonds and insurance in the amount of $555,000. This adjustment increased the funding for bonds, insurance, and contingency to $3,610,000.

In January 2013, the Board approved Administrative Memorandum No. 3931 authorizing: 1) an adjustment to the allowance for the CMAR for bonds, insurance, and contingency in the amount of $2,919,300; and, 2) an adjustment to the allowance for the CMAR in the not-to-exceed amount of $17,156,309 for construction associated with the Lake Texoma Outfall to Wylie WTP Raw Water Pipeline. The total additional funding requested for these services and construction was $20,075,609.

In March 2014, the Board approved Administrative Memorandum No. 4166 authorizing a contract time extension to May 31, 2014, for WTPs III and IV, and June 30, 2014, for WTPs I and II for substantial completion of the blending facilities. The contract requirement regarding liquidated damages, which is tied to the substantial completion dates, was also adjusted to May 31, 2014, and June 30, 2014, respectively.

PROPOSED CMAR
CONSTRUCTION SERVICES AGREEMENT EXTENSION

In accordance with the terms of Administrative Memorandum No. 3817 approved by the Board in June 2012, the CMAR construction services agreement fee is $5,363,200. The original scope of services was based on 24 months and began April 2012, which
translates to expiration contract completion date of April 30, 2014. This request is for an extension from April 30, 2014, to June 30, 2014. The substantial completion dates for the blending facilities were extended at the March 2014 Board Meeting in accordance with the terms of Administrative Memorandum No. 4166. The construction services are the implementation of all bid packages and construction oversight. It is proposed to extend the CMAR construction services to coincide with the anticipated substantial completion date of June 30, 2014.

PROCUREMENT AND CONSTRUCTION FEES

In June 2012, the Board approved Administrative Memorandum No. 3817 authorizing Garney to perform CMAR procurement and construction services in the amount of $7,951,135. The service for the initial fees shown below ended on April 30, 2014. The above paragraph discussed that this proposed extension of the construction services agreement requests an extension from April 30, 2014, to June 30, 2014. In addition, a proposed additional fee is added, which is explained below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee for Project No. 268 (Ad. Memo. No. 3817)</th>
<th>Proposed Additional Fee</th>
<th>Revised Fee</th>
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<td>$105,412</td>
<td>$8,056,547</td>
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The proposed extension of the construction services shown above provides the cost for the CMAR to administer and manage the project, schedule work and coordination of the subcontractors and suppliers, and manage construction site safety and all other duties and obligations that would be customary for a general contractor to construct the project in accordance with the contract documents. In addition, the services include the requirement for the CMAR to maintain a competent, full-time staff at the project at all times that work is in preparation or in progress on the project and establish and implement onsite organization and authority so that the work on the project may be accomplished on time and within the guaranteed maximum price.

The proposed additional construction service fee includes the manpower, small tools, travel expenses, and cost to maintain the onsite field office. The CMAR construction service fees are based on the unit items from the original contract and are calculated to be $210,824. However, due to the outstanding working relationship established during the project, Garney is requesting half of that amount, which is $105,412. The NTMWD staff and FNI have reviewed the proposed extension and fees and believe it to be reasonable for the additional work. Garney has done an outstanding job as the CMAR on this project and this extension would allow them to remain as an essential part of the project team through substantial completion of the project.
FUNDING

Funding for the construction services on the project in the total amount of $105,412 is available in the Regional Water System 2012 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Freese and Nichols, Inc., that the Board of Directors approve an extension to the Construction Manager at Risk Construction Services Agreement for Garney Construction Companies, Inc., in the amount of $105,412 for construction services associated with the Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268. This will be an item on the regular agenda of the May 2014 Board meeting.
The purpose of this administrative memorandum is to provide background regarding a briefing that will occur at the May 2014 meeting of the Board of Directors for consideration of an extension of seasonal watering provisions as written in Stage 3 of the NTMWD's Water Conservation and Drought Contingency/Water Emergency Response Plan (Plan) with continuation of the extension by the Member Cities and Customers no later than June 1, 2014, or as soon as possible thereafter.

The implementation of seasonal watering, as written in Stage 3 of the Plan, limits landscape watering with sprinklers or irrigation systems at each service address between November 1 and March 31 to once every two weeks. The extension of seasonal watering effective June 1, 2014, is being considered.

Drought conditions remain for Lakes Lavon and Jim Chapman. Recent rains have not significantly improved reservoir levels, and reservoir levels continue to remain very low. As of May 15, 2014, Lavon Lake is down 11.36 feet, Lake Jim Chapman is down 6.79 feet, Lake Tawakoni is down 7.86 feet, and Lake Texoma is down 8.11 feet. The Lake Texoma water supply is scheduled to be back online in two phases:

- Phase 1 - Late May 2014 for Water Treatment Plants III and IV
- Phase 2 - June 2014 for Water Treatment Plants I and II

BACKGROUND

Implementation of Stage 3 was approved on April 25, 2013, which included Member Cities and Customers to limit landscape watering with sprinklers or irrigation systems at each service address to once every seven days effective June 1, 2013. Implementation of Stage 3 seasonal watering was approved on October 17, 2013, which included a provision Member Cities and Customers to limit landscape watering with sprinklers or irrigation systems at each service address between November 1 and March 31 to once every two weeks. On March 27, 2014, NTMWD Board approved continuation of the seasonal landscape watering of once every two weeks for the month of April 2014. On April 27, 2014, NTMWD Board approved continuation of the seasonal landscape water of once every two weeks for the month of May 2014.
ADMINISTRATIVE MEMORANDUM NO. 4202
PAGE 2

SUMMARY

Water models indicate that continuation of Stage 3 of the Plan will assist in extending water supplies. NTMWD staff will continue to monitor the raw water supply and drought conditions and will update the Board monthly.

RECOMMENDATION

NTMWD Board of Directors will be briefed on NTMWD’s current water supply during the May 2014 Board meeting. A recommendation by the Executive Director will be presented to the Board of Directors for consideration regarding the extension of seasonal watering as written in Stage 3 of the NTMWD’s Water Conservation and Drought Contingency/Water Emergency Response Plan with continuation of the extension by the Member Cities and Customers no later than June 1, 2014, or as soon as possible thereafter. This will be an item on the regular agenda of the May 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

MAY 2013

ADMINISTRATIVE MEMORANDUM NO. 4203

ENVIRONMENTAL SERVICES BUILDING LITIGATION
NORTH TEXAS MUNICIPAL WATER DISTRICT VS. JENNINGS HACKLER
PARTNERS, INC., TURKWORKS ENGINEERING, LTD., ET AL

CONSIDER PARTIAL SETTLEMENT OF LAWSUIT -
"CONSTRUCTION DEFENDANTS" ONLY
RESOLUTION NO. 14-8

Administrative Memorandum No. 4203 and Resolution No. 14-8 will be distributed during an Executive Session to be held to discuss this agenda item at the May 22, 2014, Board meeting.
## NORTH TEXAS MUNICIPAL WATER DISTRICT
### WATER CONSUMPTION REPORT
#### April 2014

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<th>Member Cities</th>
<th>Water Used Apr 14 1000 Gallons</th>
<th>Daily Avg Apr 14 30 Days</th>
<th>Total 13-14 Aug - Apr 1000 Gallons</th>
<th>Water Used Apr 13 Maximum</th>
<th>13-14 % of Annual</th>
<th>Water Used Apr 13 1000 Gallons</th>
<th>Daily Avg Apr 13 30 Days</th>
<th>Total 12-13 Aug - Apr 1000 Gallons</th>
<th>12-13 % of Annual</th>
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### Lake Elevations
- **Lavon (Conservation Pool 492.0)**
  - 100% (118,670 acre ft) Remaining Water Right
  - April 2014: 480.36
  - April 2013: 484.38

- **Chapman (Conservation Pool 440.0)**
  - 19.5% (11,032 acre ft) Remaining Water Right
  - April 2014: 429.35
  - April 2013: 432.34

- **Tawakoni (Conservation Pool 437.5)**
  - 44.9% (22,996 acre ft) Remaining Water Right
  - April 2014: 427.75
  - April 2013: 432.49

### Precipitation
- **Lavon**
  - April 2014: 1.72
  - April 2013: 2.99
  - Year to Date: 15.48
  - 19.38

- **Chapman**
  - April 2014: 4.93
  - April 2013: 3.44
  - Year to Date: 27.86
  - 25.46

- **Tawakoni**
  - April 2014: 2.92
  - April 2013: 3.08
  - Year to Date: 22.70
  - 18.44
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| Subtotal Customers      | 1,011,245                     | 33,708,158               | 10,092,851                        | 59.1                     | 1,027,551                      | 34,251,708               | 10,876,080                        | 59.3                     |
## NORTH TEXAS MUNICIPAL WATER DISTRICT
### REGIONAL WASTEWATER SYSTEM FLOW REPORT
### APRIL 2014

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<th>Total 13-14 Flow Apr-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Flow Oct-Apr (1000 GAL)</th>
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* Report does not include nonmember city flows.
## NORTH TEXAS MUNICIPAL WATER DISTRICT
### REGIONAL WASTEWATER SYSTEM FLOW REPORT
#### APRIL 2014

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# NORTH TEXAS MUNICIPAL WATER DISTRICT

## SEWER SYSTEM FLOW REPORT

**APRIL 2014**

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NORTH TEXAS MUNICIPAL WATER DISTRICT  
REGIONAL SOLID WASTE SYSTEM  
TONNAGE REPORT  

April 2014  

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<td>67,762.90</td>
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**SOURCE**

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<td>OTHERS</td>
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<tr>
<td>TOTAL</td>
<td>72,185.63</td>
<td>455,066.37</td>
</tr>
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</table>
CONSTRUCTION PROGRESS REPORT
FOR PROJECTS UNDERWAY
APRIL 30, 2014

WATER SYSTEM

PROJECT: NO. WCF 07-4
LAKE TAWAKONI WATER TREATMENT PLANT

CONTRACTOR: BAR CONSTRUCTORS, INC.

CONTRACT DATE: JUNE 26, 2008

NOTICE TO PROCEED DATE: JULY 17, 2008

ORIGINAL COMPLETION DATE: JUNE 30, 2010

REVISED COMPLETION DATE: JANUARY 14, 2013

TIME LAPSED: 128%

BID AMOUNT: $61,316,420.00

CHANGE ORDERS:
1 - ($88,876.76)
2 - $83,334.34
3 - $24,913.52
4 - $35,890.05
   Time Ext.-100 Days
5 - $532,186.58
   Time Ext.-401 Days
6 - $262,271.96
7 - $55,586.52
8 - $50,285.76
   Time Ext.-56 Days
9 - $82,627.19
   Time Ext.-98 Days
10 - $16,211.07
    Time Ext.-237 Days
11 - $24,693.03
    Time Ext.-37 Days

CURRENT CONTRACT AMOUNT: $62,395,543.26

AMOUNT EARNED TO DATE: $62,385,543.26

% CONTRACT AMOUNT EARNED: 99%

REMARKS: The contractor has completed all major components of construction except for the sedimentation basin sludge lagoon. A discharge from the lagoon into the adjacent creek was discovered in December 2013. NTMWD technical services has constructed containment berms and installed submersible pumps to arrest the discharge and return the leaking water back to the lagoon. NTMWD staff and Black & Veatch Corporation, Inc., (B&V) continue to investigate the cause of the leak. In April 2014, initial results of the investigation were sent to the contractor for comment. The results indicated improper compaction of the liner, improper liner thickness (an area of liner was too thin), and failure to perform the correct amount of soil testing during construction. NTMWD staff issued directives to the contractor in December 2013 and April 2014 to correct the lagoon construction. NTMWD staff and B&V continue to monitor the leak while negotiations are underway with the contractor.

PROJECT NO. 128
LAKE TEXOMA PUMP STATION MODIFICATIONS

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

CONTRACT DATE: JANUARY 13, 2009

NOTICE TO PROCEED DATE: JANUARY 14, 2009

COMPLETION DATE: AUGUST 1, 2010

TIME LAPSED: 342%

BID AMOUNT: $6,479,702.00

CHANGE ORDERS:
1 - $37,046.13
2 - $82,116.00
3 - $1,093.55

CURRENT CONTRACT AMOUNT: $6,649,959.78

AMOUNT EARNED TO DATE: $6,419,797.53

% CONTRACT AMOUNT EARNED: 97%
REMARKS: Since the two new vertical pumps were stored onsite for an extended period, the option to undertake a factory inspection prior to installation was recommended to the Board at the July 2013 meeting. The Board approved Change Order No. 2 in the amount of $82,116 to have the pumps returned to the pump manufacturer for inspection prior to installation. In January, the pumps were inspected by the pump manufacturer and the NTMWD was given the inspection report. In February, the Board approved Change Order No. 3 in the amount of $51,095.65 to have the pump manufacturer recoat the pumps and repair a galled shaft, both per the pump manufacturer’s recommendation following completion of the inspection report. In March, the pump manufacturer repaired the galled shaft and recoated the pumps. In April, the pumps were shipped back to the Lake Texoma pump station.

PROJECT NO. 153  
WATER TREATMENT PLANTS I, II, III AND IV OZONATION

CONTRACTOR: MCCARTHY BUILDING COMPANIES, INC.

CONTRACT DATE: DECEMBER 6, 2010

NOTICE TO PROCEED DATE: DECEMBER 13, 2010

COMPLETION DATE: JANUARY 31, 2014

TIME LAPSED: 107%

BID AMOUNT: $112,989,000.00

CHANGE ORDERS: 1 - $87,737.15
2 - $30,000.00
3 - ($48,178.06)
4 - $120,288.62
5 - $85,531.62
6 - $102,883.15
7 - $262,716.53
8 - $179,303.48
9 - $128,065.21
10 - $111,463.32
11 - $155,596.10
12 - $160,584.35
13 - $269,575.51
14 - $76,130.23
15 - $54,251.21
16 - $144,688.77
17 - $58,405.59
18 - $475,186.93
19 - ($4,756,650.01)
20 - $52,692.05
21 - $70,404.74
22 - $72,815.57
23 - $35,120.49
24 - $38,373.02
25 - $103,555.41
26 - (24,697.35)

CURRENT CONTRACT AMOUNT: $111,024,823.63

AMOUNT EARNED TO DATE: $105,993,826.76

% CONTRACT AMOUNT EARNED: 95%

REMARKS: McCarthy is correcting the deficiencies noted during the substantial completion inspection for WTP III contactors and the remaining portion of North Ozone Operations Building (NOPS). All equipment in the South Ozone Operations Building (SOPS) as well as the equipment in WTP I, WTP II north, and WTP II south contactors are installed and have been started up and are being prepared for witness testing. McCarthy also is working on deficiencies identified at NOPS, WTP III north and south contactors, and WTP IV contactor.
PROJECT NO. 188  
EXPAND HIGH SERVICE PUMP STATION 3-1 TO 350 MGD  
BID AMOUNT: $7,720,578.00  
CHANGE ORDERS: 1 - $136,720.94  
Time Ext.-75 Days  
CURRENT CONTRACT AMOUNT: $7,857,298.94  
AMOUNT EARNED TO DATE: $7,666,657.38  
% CONTRACT AMOUNT EARNED: 98%  
TIME LAPSED: 172%

REMARKS: The contractor is in the process of installing new flow meter probes and cable. The pumps are scheduled to be started up during the month of May.

PROJECT NO. 202  
ELECTRICAL IMPROVEMENTS AT  
HIGH SERVICE PUMP STATION NO. 1-1  
BID AMOUNT: $3,537,000.00  
CHANGE ORDERS: NONE  
CURRENT CONTRACT AMOUNT: $3,537,000.00  
AMOUNT EARNED TO DATE: $476,232.12  
CONTRACT AMOUNT EARNED: 13%  
TIME LAPSED: 37%

REMARKS: Submittal review continues. Above ground conduit rough-in is 50% complete, duct bank construction has started and is 6% complete. Approved materials continue to arrive and are stored onsite.

PROJECT NO. 205  
SUPERVISORY CONTROL AND DATA ACQUISITION  
SYSTEM UPGRADES AND OPERATIONS  
BID AMOUNT: $2,714,732.000  
CHANGE ORDERS: 1 - $21,083.16  
Time Ext.-90 Days  
2 - $94,505.21  
Time Ext.-120 Days  
CURRENT CONTRACT AMOUNT: $2,830,320.37  
AMOUNT EARNED TO DATE: $2,432,369.33  
CONTRACT AMOUNT EARNED: 86%  
TIME LAPSED: 79%

REMARKS: Contractor field check and startup engineering work is 75% complete. Installation and startup of Plant III PLCs is 50% complete. Existing Modicon PLC ethernet card installation is 75% complete. Electrical conduit and conductor installation is complete and punchlist is 50% complete. Approximately 78% of programming (PLC and HMI) has been completed.
PROJECT NO. 210
NORTH MCKINNEY PIPELINE PHASES I AND II
CONTRACTOR: S.J. LOUIS CONSTRUCTORS OF TEXAS, LTD.

BID AMOUNT: $14,741,741.22

CHANGE ORDERS: 1 - $28,885.00
2 - $225,788.00
Time Ext.-30 Days

CURRENT CONTRACT AMOUNT: $14,996,414.22

AMOUNT EARNED TO DATE: $1,962,835.32
% CONTRACT AMOUNT EARNED: 13%

NOTICE TO PROCEED DATE: FEBRUARY 26, 2014
ORIGINAL COMPLETION DATE: JANUARY 22, 2015
REVISED COMPLETION DATE: FEBRUARY 21, 2015
TIME LAPSED: 19%

REMARKS: The contractor continues tunneling and pipe installation operations in McKinney. The tunnel at Airport Road and Elm Street is complete, and work continues at the Airport Road and Industrial Boulevard and the Airport Road and FM 546 locations. The contractor has completed approximately 2,800 LF of 36-inch pipe and is beginning to install 60-inch pipe.

PROJECT NO. 251
WATER TREATMENT PLANT IV CONVERSION TO BIOLOGICALLY ACTIVE FILTRATION
CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

BID AMOUNT: $5,364,550.00

CHANGE ORDERS: 1 - $57,815.00
2 - $111,725.00
3 - $138,988.00
4 - $21,308.00
Time Ext.-120 Days
5 - $27,317.00
6 - $16,933.57

CURRENT CONTRACT AMOUNT: $5,738,636.57

AMOUNT EARNED TO DATE: $5,738,636.57
% CONTRACT AMOUNT EARNED: 100%

NOTICE TO PROCEED DATE: MARCH 29, 2012
COMPLETION DATE: DECEMBER 29, 2013
REVISED COMPLETION DATE: APRIL 28, 2014
TIME LAPSED: 100%

REMARKS: All major work on this project is complete. Archer Western is working on punchlist items generated during the final inspection. Final payment as authorized by the Board will be made after all punchlist items are complete.

PROJECT NO. 259
WATER TREATMENT PLANT I CONVERSION TO BAF AND IMPROVEMENTS OF EXISTING UNDERDRAINS
CONTRACTOR: PCL CONSTRUCTION, INC.

BID AMOUNT: $7,535,625.00

CHANGE ORDERS: 1 - $181,105.96
2 - $227,024.59
3 - $28,269.20
4 - $68,145.00
5 - $104,627.00
6 - $66,374.00

CURRENT CONTRACT AMOUNT: $8,211,170.75

AMOUNT EARNED TO DATE: $7,597,421.95
% CONTRACT AMOUNT EARNED: 93%

NOTICE TO PROCEED DATE: NOVEMBER 15, 2012
COMPLETION DATE: MAY 5, 2015
TIME LAPSED: 57%

REMARKS: This project includes work in all 12 filters and four clarifiers at WTP I. Work is completed on Clarifier Nos. 1 and 4 and Filter Nos. 2, 4, 8, 10, and 12. Startup of completed filters was performed the first week of March. Filter No. 6 is complete and media installation on Filter Nos. 11 and 9 is underway. Contractor plans to return these three filters to service after the WTP I shutdown in mid-May.
REMARKS: The contractor continues to perform tunneling operations and anticipates beginning open trench pipe installation beginning in early May. The contractor has received approval from the City of Allen and the Town of Fairview to perform tunneling operations on a 24-hour basis provided neither receive complaints from their residents.

REMARKS: In January 2013, through approval of Administrative Memorandum No. 3931, the Board approved an adjustment to the allowance for Garney Companies, Inc., (the CMAR) for additional funding for bonds, insurance, contingency, and construction in the amount of $20,075,609. This requested additional funding and set the guaranteed maximum price at $282,323,495 based on the current scope for the project.

BIDS RECEIVED & AWARDED
Plant Work Bid Package No. 6 was completed and approved in February; there are no planned additional bid packages required for completion of this project.

CONSTRUCTION
All pipeline sections (A, B, C, D, and E) are complete and passed hydrostatic testing. Pipeline contractors are finishing work on easement restoration. The fiber optic cable contractor is nearly complete with the fiber optic cable installation. The balancing reservoir contractor achieved substantial completion on both cells in November 2013 and continued work on miscellaneous electrical/SCADA work items.

On the Wylie water treatment plant site, the surge tank, all four blend tanks, and all four mixing boxes are substantially complete. Plant II, Plant III, and Plant IV raw water pipelines are tied in to the new mixing boxes and blend tanks, and Lake Lavon water now flows through these new blending facilities. Work continued in the north and south electrical buildings at Raw Water Pump Station No. 3, the reclaim electrical buildings, and other electrical buildings. Work continued on various meter vaults, flow meter
installations, and miscellaneous plant piping. The electrical contractor continued work on miscellaneous items including equipment testing, setting panels, and various duct banks throughout the plant site.
<table>
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<th>Date Bid</th>
<th>Date Authorized</th>
<th>Item Description</th>
<th>Budget</th>
<th>Actual Bid</th>
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<td>Plant III &amp; IV Furnish and Install</td>
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<td>$9,107,940</td>
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<td>12/12/12</td>
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<td>60&quot; &amp; 78&quot; Yard Pipe and Connections</td>
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<td>-$2,155,735</td>
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<td>12/12/12</td>
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<td>Existing Plant Chemical Feed, meters, and vaults</td>
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<td>12/12/12</td>
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<td>Sherman Bypass</td>
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<td>12/19/12</td>
<td>02/08/13</td>
<td>Electrical &amp; Instrumentation/ SCADA</td>
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<td>12/12/12</td>
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<td>Concrete Raw Water Storage - Lake Texoma Surge Tank</td>
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<td>12/12/12</td>
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<td>Credit for Submittals in support of Texoma Surge Tank</td>
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<td>Concrete Raw Water Storage - Blend Tanks I &amp; II</td>
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<td>Concrete Raw Water Storage - Blend Tanks III &amp; IV</td>
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<td>Cathodic Protection System and Implementation</td>
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<td>Fiber Optic Cable Install</td>
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<td>Pump Vibration Monitoring and Correction</td>
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PROJECT NO. 275
CHAPMAN LAKE WATER ACCESS TASK B (DREDGING)
CONTRACTOR: KALLAN INDUSTRIES, INC.

BID AMOUNT: $1,762,206.00
CHANGE ORDERS: 1 - $56,033.75
Time Ext.-20 Days
CURRENT CONTRACT AMOUNT: $1,818,239.75
AMOUNT EARNED TO DATE: $757,800.85
% CONTRACT AMOUNT EARNED: 42%

CONTRACT DATE: JANUARY 10, 2014
NOTICE TO PROCEED DATE: JANUARY 16, 2014
COMPLETION DATE: JUNE 5, 2014
REVISED COMPLETION DATE: JUNE 25, 2014

TIME LAPSED: 62%

REMARKS: The contractor has completed installation of the dewatering system and turbidity protection screens. Dredging has commenced and turbidity readings have been acceptable.

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PROJECT NO. 276
WYLIE WATER TREATMENT PLANT FINISHED WATER RESERVOIR AND FLOW METERING IMPROVEMENTS
CONTRACTOR: BAR CONSTRUCTORS, INC.

BID AMOUNT: $14,720,800.00
CHANGE ORDERS: 1 - ($568,496.03)
CURRENT CONTRACT AMOUNT: $14,152,303.97
AMOUNT EARNED TO DATE: $3,680,132.59
% CONTRACT AMOUNT EARNED: 26%

CONTRACT DATE: AUGUST 22, 2013
NOTICE TO PROCEED DATE: OCTOBER 1, 2013
COMPLETION DATE: JULY 23, 2015
TIME LAPSED: 32%

REMARKS: Excavation for the 4-2 clearwell continues. The existing pipe intended to connect the 4-1 clearwell to the new clearwell has been removed to allow construction of the new clearwell with a larger interconnection. The concrete baffle walls in the 3-1 clearwell have been poured and sluice gates are installed. NTMWD is awaiting pricing from BAR to repair and coat the underside of the deteriorated roof and replace the fallen baffle walls. At Plant I, the clarificocculator influent piping has been removed to Clarificcculator Nos. 2 and 3 and the vault for No. 2 is under construction.

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PROJECT NO. 277
WATER TREATMENT PLANT III FILTER UNDERDRAIN IMPROVEMENTS AND CONVERSION TO BAF
CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

BID AMOUNT: $6,452,461.00
CHANGE ORDERS: 1 - $104,527.71
Time Ext.-31 Days
2 - $53,132.85
3 - $69,072.15
4 - $135,947.25
CURRENT CONTRACT AMOUNT: $6,815,140.95
AMOUNT EARNED TO DATE: $3,653,497.38
% CONTRACT AMOUNT EARNED: 54%

CONTRACT DATE: JANUARY 24, 2013
NOTICE TO PROCEED DATE: FEBRUARY 7, 2013
ORIGINAL COMPLETION DATE: DECEMBER 9, 2015
REVISED COMPLETION DATE: JANUARY 9, 2016

TIME LAPSED: 42%

REMARKS: This project includes work in all 40 filters at WTP III and Filter No. 21 at WTP II. Filters completed to date are Nos. 1-3 and 36-40. A substantial completion walkthrough was performed on April 24, 2014, for the completed filters. Filter Nos. 36, 37, 38, and 40 had defective paint on the gullet floors. A recommendation from Carollo is forthcoming. Filter No. 23 is out of service pending approval of
a change order to replace the underdrain blocks. Filter No. 26, which requires extensive repairs, is out of service until next winter when a large portion of the plant can be out of service for the period of time required to complete the repairs. Filter Nos. 8, 9, and 10 are currently out of service and are scheduled to be completed in June. The work in the settled water flume at Plant II Filter No. 21 has been completed and the contractor is awaiting approval of a shutdown to remove the bulkheads. A diver has been scheduled for May 7, 2014, to inspect and video a construction joint suspected of causing substantial water leakage under Filter No. 21. Filter No. 21 at Plant II requires extensive structural repairs, which require stopping the water leakage through the floor to complete.

<table>
<thead>
<tr>
<th>PROJECT NO. 284</th>
<th>BID AMOUNT: $525,690.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>WYLIE WTPs I AND II SLUDGE LINE IMPROVEMENTS</td>
<td>CHANGE ORDERS:</td>
</tr>
<tr>
<td>CONTRACTOR: PCL CONSTRUCTION, INC.</td>
<td>1 - $13,902.00</td>
</tr>
<tr>
<td>CONTRACT DATE: JUNE 27, 2013</td>
<td>Time Ext.-30 Days</td>
</tr>
<tr>
<td>NOTICE TO PROCEED DATE: AUGUST 12, 2013</td>
<td>2 - $18,972.00</td>
</tr>
<tr>
<td>ORIGINAL COMPLETION DATE: JANUARY 9, 2014</td>
<td>Time Ext.-30 Days</td>
</tr>
<tr>
<td>REVISED COMPLETION DATE: MARCH 6, 2014</td>
<td>CURRENT CONTRACT AMOUNT: $558,564.00</td>
</tr>
<tr>
<td>TIME LAPPED: 124%</td>
<td>AMOUNT EARNED TO DATE: $551,190.00</td>
</tr>
<tr>
<td>REMARKS: Sludge Pipeline installation is 100% complete. Pipeline is currently in operation. Walkthrough and inspection punchlist was performed on April 24, 2014. Contractor to resolve listed items and closeout walkthrough will be scheduled during May 2014.</td>
<td></td>
</tr>
</tbody>
</table>

| PROJECT: NO. 289 | BID AMOUNT: $1,488,400.00 |
| SOUTH DELIVERY POINT IMPROVEMENTS, PRIORITY NO. 2 | CHANGE ORDERS: NONE |
| CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC | CURRENT CONTRACT AMOUNT: $1,488,400.00 |
| CONTRACT DATE: NOVEMBER 21, 2013 | AMOUNT EARNED TO DATE: $361,015.06 |
| NOTICE TO PROCEED DATE: DECEMBER 9, 2013 | % CONTRACT AMOUNT EARNED: 24% |
| COMPLETION DATE: AUGUST 6, 2014 | |
| TIME LAPPED: 63% | |
| REMARKS: During the month of April, the contractor constructed all tees, valves, and appurtenances on the 20-inch service line that is associated with all three vaults. The contractor completed the concrete walls and roof on the Kaufman delivery vault, and slab and walls of the College Mound delivery vault. The contractor continues to process submittals. |
**PROJECT NO. 293**  
BONHAM WATER TREATMENT PLANT
SLUDGE LAGOON IMPROVEMENTS

**BID AMOUNT:** $2,799,680.00
**CHANGE ORDERS:** 1 - $171,098.00
**CURRENT CONTRACT AMOUNT:** $2,970,778.00
**AMOUNT EARNED TO DATE:** $2,300,598.80
**% CONTRACT AMOUNT EARNED:** 77%

**CONTRACTOR:** HARRISON WALKER & HARPER, LP

**CONTRACT DATE:** APRIL 25, 2013

**NOTICE TO PROCEED DATE:** MAY 8, 2013

**COMPLETION DATE:** APRIL 3, 2014

**TIME LAPSED:** 106%

**REMARKS:** Contractor has completed most of the yard piping, including: 24-inch sludge pipeline, 6-inch drain line, and 6-inch decant line, and is currently working on piping for manganese contactor. Contractor poured concrete for the decant structure and is preparing pad for decant valve box. Contractor continues working on excavation for electrical duct bank.

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**PROJECT NO. 296**  
WYLIE WATER TREATMENT PLANT IMPROVEMENTS
FOR LAGOONS 1, 2, AND 3

**BID AMOUNT:** $318,975.00
**CHANGE ORDERS:** NONE
**CURRENT CONTRACT AMOUNT:** $318,975.00
**AMOUNT EARNED TO DATE:** $241,466.30
**% CONTRACT AMOUNT EARNED:** 76%

**CONTRACTOR:** PCL CONSTRUCTION, INC.

**CONTRACT DATE:** SEPTEMBER 19, 2013

**NOTICE TO PROCEED DATE:** OCTOBER 7, 2013

**COMPLETION DATE:** MAY 5, 2014

**TIME LAPSED:** 95%

**REMARKS:** The contractor tied in the rerouted decant line on both ends and is currently pumping water out of Lagoon No. 2 to allow rerouting under the lagoon floor. 700 feet of the eight-inch sludge header has been installed. The clay collar on the Lagoon No. 3 overflow pipe has been installed.

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**PROJECT: NO. 298**  
HIGH SERVICE PUMP STATION 2-2 AND 2-3
ELECTRICAL IMPROVEMENTS

**BID AMOUNT:** $4,902,970.00
**CHANGE ORDERS:** 1 - $35,179.96  
Time Ext.-45 Days
**CURRENT CONTRACT AMOUNT:** $4,938,149.96
**AMOUNT EARNED TO DATE:** $180,705.00
**% CONTRACT AMOUNT EARNED:** 4%

**CONTRACTOR:** WHF ELECTRICAL CONTRACTORS, INC.

**CONTRACT DATE:** OCTOBER 17, 2013

**NOTICE TO PROCEED DATE:** NOVEMBER 7, 2013

**ORIGINAL COMPLETION DATE:** NOVEMBER 30, 2013

**REVISED COMPLETION DATE:** JUNE 5, 2015

**TIME LAPSED:** 27%

**REMARKS:** The submittal process continues. Demolition of existing duct bank is 30% complete. Concrete pad demolition is 22% complete and saw cutting for new duct bank is 45% complete.
PROJECT NO. 299
LAKE TAWAKONI WATER TREATMENT PLANT
CHLORINE DIOXIDE SYSTEM

CONTRACTOR: RED RIVER CONSTRUCTION CO.

CONTRACT DATE: JANUARY 24, 2013
NOTICE TO PROCEED DATE: MARCH 1, 2013
ORIGINAL COMPLETION DATE: SEPTEMBER 7, 2013
REVISED COMPLETION DATE: JANUARY 19, 2014

TIME LAPSED: 135%

REMARKS: All equipment is functioning properly and two additional items have been requested for Change Order No. 3, which will be presented to the Board for consideration in May. The majority of the punchlist items are complete.

PROJECT NO. 301 TASK 1
ADMINISTRATION BUILDING STRUCTURAL REPAIRS,
BUILDING RENOVATIONS, AND BUILDING ADDITION

CONTRACTOR: MART, INC.

CONTRACT DATE: DECEMBER 19, 2013
NOTICE TO PROCEED DATE: FEBRUARY 5, 2014
COMPLETION DATE: APRIL 6, 2014
REVISED COMPLETION DATE: APRIL 27, 2014

TIME LAPSED: 99%

REMARKS: The contractor has completed the installation of the cut-off wall and concrete cap. Final cleanup is expected to be complete by the end of April.

PROJECT NO. 312
LAKE TAWAKONI WATER TREATMENT PLANT
SLUDGE LAGOON IMPROVEMENTS

CONTRACTOR: CRESCENT CONSTRUCTORS, INC.

CONTRACT DATE: JANUARY 23, 2014
NOTICE TO PROCEED DATE: FEBRUARY 10, 2014
COMPLETION DATE: SEPTEMBER 28, 2014

TIME LAPSED: 34%

REMARKS: The pump station foundation has been poured. Half of the subgrade walls have been poured and forms are currently being set for the upper portion. While laying out the lagoon, a conflict was discovered between the fiber optic line and the excavation adjacent to the lagoon berm, which is being made to improve drainage along the road. Black & Veatch is reviewing and will make a recommendation shortly.
PROJECT NO. 314
FARMERSVILLE PUMP STATION
PUMP NO. 2

CONTRACTOR: CRESCENT CONTRACTORS, INC.

CONTRACT DATE: FEBRUARY 27, 2014
NOTICE TO PROCEED DATE: APRIL 14, 2014
COMPLETION DATE: NOVEMBER 10, 2014

TIME LAPSED: 8%

REMARKS: A preconstruction meeting was held on April 14, 2014, and a notice to proceed was given. The contractor began the submittal process during the month of April.

PROJECT NO. 318
WYLIE NO. 3 DELIVERY POINT METERING STATION UPGRADE

CONTRACTOR: CRESCENT CONSTRUCTORS, INC.

CONTRACT DATE: NOVEMBER 21, 2013
NOTICE TO PROCEED DATE: DECEMBER 12, 2013
COMPLETION DATE: JULY 10, 2014

TIME LAPSED: 74%

REMARKS: The contractor has performed electrical work at the delivery point, including construction of an electrical manhole and duct bank. Yard valves were installed this month that allow this site to be connected to an alternate feed. The meter can now be isolated to allow installation of an upgraded meter and rate of flow control valve.

PROJECT NO. 320
WYLIE WATER TREATMENT PLANT II
IMPROVEMENTS FOR BASIN NOS. 3 AND 4

CONTRACTOR: BAR CONSTRUCTORS, INC.

CONTRACT DATE: OCTOBER 17, 2013
NOTICE TO PROCEED DATE: NOVEMBER 4, 2013
ORIGINAL COMPLETION DATE: JANUARY 22, 2015
REVISED COMPLETION DATE: FEBRUARY 7, 2015

TIME LAPSED: 39%

REMARKS: Four (4) of eighteen (18) sections of the Basin No. 4 floor and both center piers have been poured. On April 5, 2014, NTMWD personnel discovered that the wall between Basin Nos. 3 and 4 has shifted slightly. Black & Veatch recommended draining Basin No. 3 until the north sections of the Basin No. 4 floor were poured and dowelled to the wall footing to prevent further movement. The 120-inch manhole for the drain valve vault has been set.
PROJECT NO. 222
ROWLETT CREEK RWWTP
2011 IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

NOTICE TO PROCEED DATE: MAY 29, 2012

ORIGINAL COMPLETION DATE: AUGUST 22, 2013

REVISED COMPLETION DATE: DECEMBER 10, 2013

TIME LAPSED: 125%

REMARKS: All work is complete and record drawings have been submitted.

BID AMOUNT: $3,980,590.00
CHANGE ORDERS: 1 - $33,099.00
   Time Ext.-30 Days
2 - $66,136.23
   Time Ext.-26 Days
3 - $21,391.85
   Time Ext.-54 Days
CURRENT CONTRACT AMOUNT: $4,101,217.08
AMOUNT EARNED TO DATE: $4,091,389.08
% CONTRACT AMOUNT EARNED: 99%

PROJECT NO. 223
PRAIRIE CREEK RELIEF SEWER CONTROL STRUCTURE
FLOW METERING IMPROVEMENTS

CONTRACTOR: LEGACY CONTRACTING, LP

CONTRACT DATE: SEPTEMBER 19, 2013

NOTICE TO PROCEED DATE: NOVEMBER 12, 2013

COMPLETION DATE: JULY 10, 2014

TIME LAPSED: 70%

REMARKS: Contractor has completed construction of the vault and electrical building and has finished backfilling around the vault. Contractor is forming the odor control slab and electrical building roof and doing earthwork in preparation for placing the flexible base beneath the driveway paving.

BID AMOUNT: $605,115.00
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $605,115.00
AMOUNT EARNED TO DATE: $268,457.99
% CONTRACT AMOUNT EARNED: 44%

PROJECT NO. 227A
UPPER WHITE ROCK CREEK PARALLEL FORCE MAIN

CONTRACTOR: S.J. LOUIS CONSTRUCTION OF TX, LTD

CONTRACT DATE: FEBRUARY 28, 2013

NOTICE TO PROCEED DATE: MARCH 21, 2013

ORIGINAL COMPLETION DATE: FEBRUARY 24, 2014

REVISED COMPLETION DATE: APRIL 20, 2014

TIME LAPSED: 103%

REMARKS: S.J. Louis continued the construction of the valve vault and continued restoration.

BID AMOUNT: $3,099,488.48
CHANGE ORDERS: 1 - $142,269.74
   Time Ext.-25 Days
2 - (41,368.09)
   Time Ext.-30 Days
CURRENT CONTRACT AMOUNT: $3,200,390.13
AMOUNT EARNED TO DATE: $2,930,160.09
% CONTRACT AMOUNT EARNED: 92%
PROJECT NO. 227B
UPPER WHITE ROCK CREEK LIFT STATION IMPROVEMENTS
CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC
CONTRACT DATE: MARCH 28, 2013
NOTICE TO PROCEED DATE: MAY 1, 2013
ORIGINAL COMPLETION DATE: MAY 26, 2014
REVISED COMPLETION DATE: SEPTEMBER 1, 2014
TIME LAPSED: 74%
REMARKS: Archer Western installed the underground fuel tank, installed conduit, and removed and replaced a section of jogging trail.

PROJECT NO. 228
COTTONWOOD CREEK OUTFALL SEWER IMPROVEMENTS
CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC
CONTRACT DATE: NOVEMBER 15, 2012
NOTICE TO PROCEED DATE: DECEMBER 12, 2012
COMPLETION DATE: DECEMBER 17, 2013
TIME LAPSED: 136%
REMARKS: Insituform continued manhole testing and restoration. There will be a time extension due to coordination of an alignment issue.

PROJECT NO. 234
ASAP GRAVITY INTERCEPTOR IMPROVEMENTS, SECTION 1
CONTRACTOR: REPIPE CONSTRUCTION, LLC
CONTRACT DATE: JUNE 28, 2012
NOTICE TO PROCEED DATE: AUGUST 20, 2012
ORIGINAL COMPLETION DATE: FEBRUARY 16, 2013
REVISED COMPLETION DATE: MAY 31, 2013
TIME LAPSED: 218%
REMARKS: All work is complete. Bond claim issue has been resolved and final payment was submitted in April.
<table>
<thead>
<tr>
<th>PROJECT NO. 245</th>
<th>BID AMOUNT: $2,070,000.00</th>
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</thead>
<tbody>
<tr>
<td>UPPER ROWLETT CREEK LIFT STATION</td>
<td></td>
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<tr>
<td>FLOW METERING IMPROVEMENTS</td>
<td></td>
</tr>
<tr>
<td>CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC</td>
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<tr>
<td>CONTRACT DATE: SEPTEMBER 19, 2013</td>
<td></td>
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<tr>
<td>NOTICE TO PROCEED DATE: OCTOBER 22, 2013</td>
<td></td>
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<tr>
<td>COMPLETION DATE: SEPTEMBER 17, 2014</td>
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<tr>
<td>TIME LAPSED: 58%</td>
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<tr>
<td>REMARKS: Contractor has completed construction of the vault and has installed the flow meters, valves, and piping inside the vault. Pipe for the tie-in to the lift station wetwell has been installed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROJECT NO. 254</th>
<th>BID AMOUNT: $4,664,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTH MESQUITE RWWTP</td>
<td></td>
</tr>
<tr>
<td>ELECTRICAL IMPROVEMENTS</td>
<td></td>
</tr>
<tr>
<td>CONTRACTOR: ACME ELECTRIC COMPANY</td>
<td></td>
</tr>
<tr>
<td>CONTRACT DATE: JANUARY 24, 2013</td>
<td></td>
</tr>
<tr>
<td>NOTICE TO PROCEED DATE: JANUARY 29, 2013</td>
<td></td>
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<tr>
<td>COMPLETION DATE: FEBRUARY 28, 2014</td>
<td></td>
</tr>
<tr>
<td>TIME LAPSED: 114%</td>
<td></td>
</tr>
<tr>
<td>REMARKS: Pole line is complete. Work on punchlist items from initial walkthrough is in progress. Main switchgear arrived on site. Control wiring between switchgear and generator has started. Power feeders from switchgear to overhead line are 80% complete.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROJECT NO. 255E</th>
<th>BID AMOUNT: $1,063,915.55</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM</td>
<td></td>
</tr>
<tr>
<td>FORNEY PARALLEL INTERCEPTOR</td>
<td></td>
</tr>
<tr>
<td>CONTRACTOR: S.J. LOUIS CONSTRUCTION OF TEXAS, LTD.</td>
<td></td>
</tr>
<tr>
<td>CONTRACT DATE: APRIL 25, 2013</td>
<td></td>
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<tr>
<td>NOTICE TO PROCEED: MAY 6, 2013</td>
<td></td>
</tr>
<tr>
<td>COMPLETION DATE: MARCH 8, 2014</td>
<td></td>
</tr>
<tr>
<td>REVISED COMPLETION DATE: MAY 20, 2014</td>
<td></td>
</tr>
<tr>
<td>TIME LAPSED: 95%</td>
<td></td>
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<tr>
<td>REMARKS: S.J. Louis completed all punchlist items and final payment will be made in May.</td>
<td></td>
</tr>
</tbody>
</table>
**PROJECT NO. 255F**  
FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM  
FORNEY LIFT STATION IMPROVEMENTS

**CONTRACTOR:** ARCHER WESTERN CONSTRUCTION, LLC
**CONTRACT DATE:** AUGUST 22, 2013
**NOTICE TO PROCEED:** SEPTEMBER 9, 2013
**COMPLETION DATE:** AUGUST 5, 2014

**TIME LAPSED:** 71%

**REMARKS:** Archer Western has installed the site fencing and gates, 18-inch plug valve, 18-inch magnetic flow meter, and 18-inch force main piping. They have installed the joists and metal deck for the electrical building. Archer Western is working on installing standing seam metal roof. Their electrical subcontractor is working on installing the electrical equipment in the existing electrical room.

**PROJECT NO. 270**  
SOUTH MESQUITE CREEK REGIONAL WASTEWATER TREATMENT PLANT AERATION SYSTEM IMPROVEMENTS, PHASE 1

**CONTRACTOR:** GRACON CONSTRUCTION
**CONTRACT DATE:** SEPTEMBER 19, 2013
**NOTICE TO PROCEED:** OCTOBER 15, 2013
**COMPLETION DATE:** FEBRUARY 7, 2015

**TIME LAPSED:** 41%

**REMARKS:** Gracon Construction finished placing the structural fill for Blower Building No. 1 Electrical Building and the transformer pad. They have installed 110 linear feet of six-inch primary sludge line. Their electrical subcontractor is installing the medium voltage duct banks to the electrical building and the fiber optic duct bank to the Administration Building.

**PROJECT NO. 278**  
WILSON CREEK GRAVITY INTERCEPTOR IMPROVEMENTS PHASE 1

**CONTRACTOR:** INSITUFORM TECHNOLOGIES, LLC
**CONTRACT DATE:** AUGUST 22, 2013
**NOTICE TO PROCEED DATE:** SEPTEMBER 11, 2013
**COMPLETION DATE:** JUNE 8, 2014

**REVISED COMPLETION DATE:** NOVEMBER 5, 2014

**TIME LAPSED:** 55%

**REMARKS:** Insituform continued the submittal process.

**BID AMOUNT:** $1,223,150.00
**CHANGE ORDERS:** NONE
**CURRENT CONTRACT AMOUNT:** $1,223,150.00
**AMOUNT EarnED TO DATE:** $574,466.79
**% CONTRACT AMOUNT EARNED:** 47%

**BID AMOUNT:** $4,739,000.00
**CHANGE ORDERS:** 1 - ($140,095.00)  
2 - ($97,444.00)
**CURRENT CONTRACT AMOUNT:** $4,501,461.00
**AMOUNT EarnED TO DATE:** $487,854.47
**CONTRACT AMOUNT EARNED:** 11%

**BID AMOUNT:** $3,043,905.10
**CHANGE ORDERS:** 1 - $61,124.08  
Time Ext.-150 Days
**CURRENT CONTRACT AMOUNT:** $3,105,029.18
**AMOUNT EarnED TO DATE:** $0.00
**% CONTRACT AMOUNT EARNED:** 0%
PROJECT NO. 279
UPPER EAST FORK INTERCEPTOR SYSTEM
FUGITIVE EMISSIONS CONTROL

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: DECEMBER 19, 2013
NOTICE TO PROCEED DATE: JANUARY 13, 2014
COMPLETION DATE: DECEMBER 9, 2014

TIME LAPSED: 32%

REMARKS: Contractor continued to work on the equipment submittal. Contractor has secured a construction permit from the City of Allen for the Rowlett-Cottonwood transfer sewer facilities.

PROJECT NO. 288
SOUTH MESQUITE CREEK RWWTP SOLIDS BUILDING ODOR CONTROL IMPROVEMENTS

CONTRACTOR: ASSOCIATED CONSTRUCTION PARTNERS

CONTRACT DATE: MAY 23, 2013
NOTICE TO PROCEED: JUNE 19, 2012
COMPLETION DATE: JUNE 14, 2014

TIME LAPSED: 88%

REMARKS: Associated Construction Partners formed and poured the base slab for the odor control equipment and the sidewalk and equipment pad for the makeup air unit. Also, they removed the existing chemical tanks and odor control equipment. They are installing the chemical and non-potable water piping for the odor control equipment and the odor control duct for the belt filter press area. Their electrical subcontractor is installing the duct banks.

PROJECT NO. 294
SOUTH MESQUITE CREEK REGIONAL WASTEWATER TREATMENT PLANT OPERATIONS BUILDING

CONTRACTOR: BIG SKY CONSTRUCTION CO.

CONTRACT DATE: DECEMBER 19, 2013
NOTICE TO PROCEED: JANUARY 22, 2014
FINAL COMPLETION DATE: DECEMBER 18, 2014

TIME LAPSED: 30%

REMARKS: Big Sky formed and poured the base slab and the front parking lot. They finished installing the sewer lines that run underneath the slab. Big Sky is installing the metal framing. Their electrical subcontractor is installing the duct banks.
PROJECT NO. 300
ASAP GRAVITY INTERCEPTOR IMPROVEMENTS,
SECTION 2 AND 3
CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC
CONTRACT DATE: OCTOBER 17, 2013
NOTICE TO PROCEED DATE: NOVEMBER 19, 2013
COMPLETION DATE: JULY 17, 2014
TIME LAPSED: 68%
REMARKS: Insituform continued the CCTV and cleaning of the interceptor. Insituform installed 2,190 linear feet of 27-inch cured-in-place pipe.

PROJECT NO. 311
UPPER EAST FORK INTERCEPTOR SYSTEM MANHOLE IMPROVEMENTS
CONTRACTOR: FUQUAY, INC.
CONTRACT DATE: DECEMBER 19, 2013
NOTICE TO PROCEED DATE: JANUARY 14, 2014
COMPLETION DATE: JULY 13, 2014
TIME LAPSED: 59%
REMARKS: Fuquay completed coating of 14 manholes on the West Rowlett Creek Trunk Sewer Sections 1 and 2.

SOLID WASTE SYSTEM

PROJECT NO. 233
121 REGIONAL DISPOSAL FACILITY
FLEET MAINTENANCE WELD SHOP
CONTRACTOR: TEGRITY CONTRACTORS, INC.
CONTRACT DATE: JULY 25, 2013
NOTICE TO PROCEED: AUGUST 28, 2013
COMPLETION DATE: MARCH 26, 2014
TIME LAPSED: 117%
REMARKS: All submittals, except the pre-engineered building submittal, have been approved. The engineer has revised the design to accommodate the fire suppression system. Work has begun on the drive ramps.
PROJECT NO. 322
121 REGIONAL DISPOSAL FACILITY
SCALE HOUSE MODIFICATIONS

CONTRACTOR: ROBIN L. BROWN, INC.

CONTACT DATE: DECEMBER 19, 2013
NOTICE TO PROCEED: JANUARY 20, 2014
COMPLETION DATE: MARCH 2, 2014
TIME LAPSED: 232%

REMARKS: Demolition of the scale house wall and new construction has begun on the north side of the building.

PROJECT NO. 331
CUSTER ROAD TRANSFER STATION
TIPPING FLOOR IMPROVEMENTS

CONTRACTOR: NORTH TEXAS CONTRACTING, INC.

CONTACT DATE: FEBRUARY 27, 2014
NOTICE TO PROCEED: MARCH 17, 2014
COMPLETION DATE: OCTOBER 13, 2014
TIME LAPSED: 21%

REMARKS: Construction of the tipping floor is complete on the east side of the building. The east side push walls and cantilevered floor area have steel reinforcement in place.

TOTAL VALUE - ALL PROJECTS $597,596,676.51
TOTAL EARNED - ALL PROJECTS $512,393,877.10

86%