TO: BOARD OF DIRECTORS

FROM: JAMES (JIM) M. PARKS, EXECUTIVE DIRECTOR

DATE: FEBRUARY 20, 2014

SUBJECT: REGULAR MEETING – THURSDAY, FEBRUARY 27, 2014

I. WATER COMMITTEE MEETING

A Water Committee meeting will be held prior to the Board meeting on Thursday, February 27, 2014, at 12:30 p.m. Lunch will be served at 12:00 p.m. Directors not on the Water Committee are welcome to attend.

II. FINANCE/AUDIT COMMITTEE MEETING

A Finance/Audit Committee meeting will be held prior to the Board meeting on Thursday, February 27, 2014, at 2:30 p.m. Directors not on the Finance/Audit Committee are welcome to attend.

III. ENCLOSURES

A. AGENDA – REGULAR MEETING – February 27, 2014
B. CONSENT AGENDA ITEM NO. 14-02-01 – Minutes, Regular Meeting, January 23, 2014
C. CONSENT AGENDA ITEM NO. 14-02-02 – Minutes, Special Meeting, February 1, 2014
D. CONSENT AGENDA ITEM NO. 14-02-03 – Minutes, Planning Retreat, February 1, 2014
E. CONSENT AGENDA ITEM NO. 14-02-04 – Regional Wastewater System, Floyd Branch Regional Wastewater Treatment Plant, 2012 Odor Control Improvements, Project No. 280, Authorization to Make Final Payment
F. CONSENT AGENDA ITEM NO. 14-02-05 – Regional Water System, Union Pacific Railroad Crossing Protection of the Existing 72-Inch Texoma Pipeline, Project No. 313, Authorization to Make Final Payment
G. CONSENT AGENDA ITEM NO. 14-02-06 – Regional Water System, Wylie Water Treatment Plant Security Enhancements, Phase 2, Project No. 229, Change Order No. 2 and Authorization to Make Final Payment
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H. CONSENT AGENDA ITEM NO. 14-02-07 – Regional Solid Waste System, 121 Regional Disposal Facility, Fleet Maintenance Weld Services Building, Project No. 233, Additional Engineering Services

I. CONSENT AGENDA ITEM NO. 14-02-08 – Recognition Ceremony for Retiring Executive Director

J. ADMINISTRATIVE MEMORANDUM NO. 4126 – Funding for the Texas Water Smart Coalition Awareness Campaign

K. ADMINISTRATIVE MEMORANDUM NO. 4127 – NTMWD Administration Building, Structural Repairs, Building Renovations, and Building Additions, Project No. 301, Additional Engineering Services

L. ADMINISTRATIVE MEMORANDUM NO. 4128 – NTMWD Administration Building Structural Improvements, Task No. 1, Project No. 301, Change Order No. 1


N. ADMINISTRATIVE MEMORANDUM NO. 4130 – Regional Water System, Lower Bois d’Arc Creek Reservoir, Phase IIIB, Engineering and Legal Assistance, Project No. 351

O. ADMINISTRATIVE MEMORANDUM NO. 4131 – Regional Water System, 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335, Tabulation of Bids and Award of Contract

P. ADMINISTRATIVE MEMORANDUM NO. 4132 – Regional Water System, Water Treatment Plant III, Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 277, Change Order No. 4

Q. ADMINISTRATIVE MEMORANDUM NO. 4133 – Upper East Fork Interceptor System, Upper Rowlett and Cottonwood Creek Parallel Force Main Design, Project No. 308, Additional Engineering Services

R. ADMINISTRATIVE MEMORANDUM NO. 4134 – Upper East Fork Interceptor System, Wilson Creek Gravity Interceptor Improvements, Phase 1, Project No. 278, Change Order No. 1

S. ADMINISTRATIVE MEMORANDUM NO 4135 – Regional Water System, FY 2014 Water Supply Planning Assistance, Additional Engineering Services

T. ADMINISTRATIVE MEMORANDUM NO. 4136 – Regional Water System, Wylie-McKinney 20-Inch Waterline Relocation at Stinson Road, Project No. 310, Change Order No. 1 and Authorization to Make Final Payment

U. ADMINISTRATIVE MEMORANDUM NO. 4137 – Regional Water System, Farmersville Pump Station Pump No. 2, Project No. 314, Tabulation of Bids and Award of Contract

V. ADMINISTRATIVE MEMORANDUM NO. 4138 – Regional Water System, Cooper Pipeline Embankment Improvement Near FM 3218 in Commerce, Texas, Project No. 285, Additional Engineering Services

W. ADMINISTRATIVE MEMORANDUM NO. 4139 – Regional Water System, Expand Frisco/McKinney Pump Station to 130 MGD, Project No. 207, Change Order No. 3 and Authorization to Make Final Payment

X. ADMINISTRATIVE MEMORANDUM NO. 4140 – Upper East Fork Interceptor System, Upper White Rock Creek Parallel Force Main, Project No. 227 (Contract A), Change Order No. 2
Y. ADMINISTRATIVE MEMORANDUM NO. 4141 – Regional Water System Water Treatment Plant, Water System Operations Center, Project No. 352, Engineering Services Agreement


AA. ADMINISTRATIVE MEMORANDUM NO. 4143 – Regional Water System, Lake Texoma Pump Station Modifications, Project No. 128, Change Order No. 3

BB. ADMINISTRATIVE MEMORANDUM NO. 4144 – Regional Water System, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312, Additional Engineering Services

CC. ADMINISTRATIVE MEMORANDUM NO. 4145 – Regional Water System, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312, Inspection Services Agreement

DD. ADMINISTRATION MEMORANDUM NO. 4146 – Regional Water System, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268, Authorization to Reimburse Grayson County for Road Damage

EE. ADMINISTRATIVE MEMORANDUM NO. 4147 – Regional Water System, Wylie Water Treatment Plant II Clearwell and Disinfection Modifications, Project No. 330, Engineering Services Agreement

FF. ADMINISTRATIVE MEMORANDUM NO. 4148 – Regional Water System, Rockwall No. 2 Flow Meter Improvements, Project No. 286, Additional Engineering Services

GG. ADMINISTRATIVE MEMORANDUM NO. 4149 – Regional Water System, Expand High Service Pump Station 3-1 to 350 MGD, Project No. 188, Change Order No. 1

HH. ADMINISTRATIVE MEMORANDUM NO. 4150 – Regional Water System, Wylie Water Treatment Plant II, Improvements for Basin Nos. 3 and 4, Project No. 320, Additional Engineering Services

II. ADMINISTRATIVE MEMORANDUM NO. 4151 – Regional Water System, Chapman Lake Water Access, Task B, (Dredging), Project No. 275, Change Order No. 1

JJ. ADMINISTRATIVE MEMORANDUM NO. 4152 – Regional Water System, Water Treatment Plant I, Conversion to Biologically Active Filtration and Improvement of Existing Underdrains, Project No. 259, Change Order No. 5

KK. WATER CONSUMPTION REPORT – January 2014

LL. WASTEWATER SYSTEM REPORT – January 2014

MM. SOLID WASTE SYSTEM REPORT – January 2014

NN. CONSTRUCTION PROGRESS REPORT – January 31, 2014

OO. NTMWD FINANCIAL STATEMENTS FOR THE MONTH ENDED JANUARY 31, 2014

PP. EXECUTIVE COMMITTEE MEETING MINUTES – January 23, 2013

QQ. JOINT MEETING OF EXECUTIVE AND POLICY COMMITTEES MEETING MINUTES – January 23, 2013

RR. FINANCE/AUDIT COMMITTEE MEETING MINUTES – February 1, 2014
NORTH TEXAS MUNICIPAL WATER DISTRICT
505 E. Brown Street • Wylie, Texas 75098
(972) 442-5405 – Phone • (972) 295-6440 – Fax

BOARD OF DIRECTORS
REGULAR MEETING
THURSDAY, FEBRUARY 27, 2014
4:00 P.M.

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, February 27, 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.

AGENDA

I. INVOCATION – DIRECTOR JERRY YANCEY

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.

Persons 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 – January 23, 2014
   (Please refer to Consent Agenda Item No. 14-02-01)

B. Consider Approval of Board of Directors Special Meeting Minutes – February 1, 2014
   (Please refer to Consent Agenda Item No. 14-02-02)

C. Consider Approval of Board of Directors Planning Retreat Minutes – February 1, 2014
   (Please refer to Consent Agenda Item No. 14-02-03)

D. Consider Authorization to Make Final Payment on Project No. 280, Floyd Branch Regional Wastewater Treatment Plant, 2012 Odor Control Improvements
   (Please refer to Consent Agenda Item No. 14-02-04)

E. Consider Authorization to Make Final Payment on Project No. 313, Union Pacific Railroad Crossing Protection of the Existing 72-Inch Texoma Pipeline
   (Please refer to Consent Agenda Item No. 14-02-05)

F. Consider Authorization to Make Final Payment on Project No. 229, Wylie Water Treatment Plant Security Enhancements, Phase 2
   (Please refer to Consent Agenda Item No. 14-02-06)

G. Consider Authorizing Additional Engineering Services on Project No. 233, 121 Regional Disposal Facility Fleet Maintenance Weld Services Building
   (Please refer to Consent Agenda Item No. 14-02-07)

H. Consider Authorizing Funding for Retirement Dinner in Honor of NTMWD’s Executive Director
   (Please refer to Consent Agenda Item No. 14-02-08)

VI. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. Consider Authorizing Funding for the Texas Water Smart Coalition Awareness Campaign
   (Please refer to Administrative Memorandum No. 4126)
B. Consider Authorizing Additional Engineering Services for Project No. 301, NTMWD Administration Building Structural Repairs, Building Renovations, and Building Additions
   (Please refer to Administrative Memorandum No. 4127)

C. Consider Authorizing Change Order No. 1 on Project No. 301, NTMWD Administration Building Structural Improvements, Task No. 1
   (Please refer to Administrative Memorandum No. 4128)

   (Please refer to Administrative Memorandum No. 4129)

E. Consider Authorizing Engineering and Legal Assistance for Project No. 351, Lower Bois d’Arc Creek Reservoir, Phase IIIB
   (Please refer to Administrative Memorandum No. 4130)

F. Consider Authorizing Award of Construction Contract on Project No. 335, 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121
   (Please refer to Administrative Memorandum No. 4131)

G. Consider Authorizing Change Order No. 4 on Project No. 277, Water Treatment Plant III, Filter Underdrain Improvements and Conversion to Biologically Active Filters
   (Please refer to Administrative Memorandum No. 4132)

H. Consider Authorizing Additional Engineering Services on Project No. 308, Upper Rowlett and Cottonwood Creek Parallel Force Main Design
   (Please refer to Administrative Memorandum No. 4133)

I. Consider Authorizing Change Order No. 1 on Project No. 278, Wilson Creek Gravity Interceptor Improvements, Phase 1
   (Please refer to Administrative Memorandum No. 4134)

J. Consider Authorizing Additional Engineering Services for Fiscal Year 2014 Water Supply Planning Assistance
   (Please refer to Administrative Memorandum No. 4135)

K. Consider Authorizing Change Order No. 1 and Authorization to Make Final Payment on Project No. 310, Wylie-Mckinney 20-Inch Waterline Relocation at Stinson Road
   (Please refer to Administrative Memorandum No. 4136)

L. Consider Authorizing Award of Construction Contract on Project No. 314, Farmersville Pump Station Pump No. 2
   (Please refer to Administrative Memorandum No. 4137)
M. Consider Authorizing Additional Engineering Services for Project No. 285, Cooper Pipeline Embankment Improvement Near FM 3218 in Commerce, Texas
(Please refer to Administrative Memorandum No. 4138)

N. Consider Authorizing Change Order No. 3 and Authorization to Make Final Payment on Project No. 207, Expand Frisco/McKinney Pump Station to 130 MGD
(Please refer to Administrative Memorandum No. 4139)

O. Consider Authorizing Change Order No. 2 on Project No. 227, Contract A, Upper White Rock Creek Parallel Force Main
(Please refer to Administrative Memorandum No. 4140)

P. Consider Authorizing Execution of Engineering Services Agreement on Project No. 352, Water System Operations Center
(Please refer to Administrative Memorandum No. 4141)

Q. Consider Authorizing Change Order No. 24 on Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation
(Please refer to Administrative Memorandum No. 4142)

R. Consider Authorizing Change Order No. 3 on Project No. 128, Lake Texoma Pump Station Modifications
(Please refer to Administrative Memorandum No. 4143)

S. Consider Authorizing Additional Engineering Services on Project No. 312, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements
(Please refer to Administrative Memorandum No. 4144)

T. Consider Authorizing Execution of Inspection Services Agreement on Project No. 312, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements
(Please refer to Administrative Memorandum No. 4145)

U. Consider Authorizing Reimbursement to Grayson County for Road Damage, Project No. 268, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline
(Please refer to Administrative Memorandum No. 4146)

V. Consider Authorizing Execution of Engineering Services Agreement on Project No. 330, Wylie Water Treatment Plant II Clearwell and Disinfection Modifications
(Please refer to Administrative Memorandum No. 4147)

W. Consider Authorizing Additional Engineering Services for Project No. 286, Rockwall No. 2 Flow Meter Improvements
(Please refer to Administrative Memorandum No. 4148)
X. Consider Authorizing Change Order No. 1 on Project No. 188, Expand High Service Pump Station 3-1 to 350 MGD (Please refer to Administrative Memorandum No. 4149)

Y. Consider Authorizing Additional Engineering Services for Project No. 320, Wylie Water Treatment Plant II, Improvements for Basin Nos. 3 and 4 (Please refer to Administrative Memorandum No. 4150)

Z. Consider Authorizing Change Order No. 1 on Project No. 275, Chapman Lake Water Access, Task B (Dredging) (Please refer to Administrative Memorandum No. 4151)

AA. Consider Authorizing Change Order No. 5 on Project No. 259, Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains (Please refer to Administrative Memorandum No. 4152)

VII. ADJOURNMENT

NEXT REGULAR MEETING OF BOARD, Thursday, March 27, 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, JANUARY 23, 2014
IN THE NTMWD ADMINISTRATIVE OFFICES, WYLIE, TEXAS

The North Texas Municipal Water District Board of Directors met in Regular Session on Thursday, January 23, 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 Lofland advised that Director Don Gordon would be abstaining from Agenda Item Nos. VI. G., H., and R.; Director Joe Joplin would be abstaining from Agenda Item Nos. VI. G. and S.; Director Charles McKissick would be abstaining from Agenda Item Nos. VI. H.; and Director Larry Parks would be abstaining from Agenda Item Nos. VI. P., and Q.

I. INVOCATION

Director Patrick Nicklen offered the invocation.

II. ROLL CALL

Secretary Joe Joplin conducted a roll call. Director Darrell Grooms and Bob Thurmond were absent from the meeting. The following Directors were present for the January 23, 2014, Board meeting:

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

The following NTMWD consultants attended the meeting:

John Gay – Gay McCall Isaacks Gordon & Roberts
David Medanich – First Southwest Company
Mark Walsh – Saunders, Walsh & Beard
III.  RECOGNITION OF GUESTS

    A. Registered Guests

        Jim Parks introduced the 2013 Employee of the Year, Jerry Rice of the Solid Waste System; and the 2013 Employee of the Year Finalists, Cynthia Ruder, Support Services; Raymond Sirmans, Wastewater System; and Roy Cooke, Water System.

IV.  PUBLIC COMMENTS

    There were no public comments.

V.  CONSENT AGENDA ITEMS

    Upon a motion by Director Larry Parks and a second by Director Joe Farmer, the Board of Directors voted unanimously to approve the consent agenda items as follows:

    A. Consider Approval of Board of Directors Meeting Minutes – December 19, 2013
       (Please refer to Consent Agenda Item No. 14-01-01)

    B. Consider Authorizing Ratification of Execution of Instrument of Assignment on Project No. 275, Chapman Lake Water Access, Task B (Dredging)
       (Please refer to Consent Agenda Item No. 14-01-02)

    C. Consider Authorization to Make Final Payment on Project No. 222, Rowlett Creek Regional Wastewater Treatment Plant 2011 Improvements
       (Please refer to Consent Agenda Item No. 14-01-03)

    D. Consider Authorizing Change Order No. 2 on Project No. 284, Water Treatment Plants I and II Sludge Line Improvements
       (Please refer to Consent Agenda Item No. 14-01-04)

    E. Consider Authorizing Additional Engineering Services on Project No. 279, Fugitive Emissions Control Improvements
       (Please refer to Consent Agenda Item No. 14-01-05)

VI. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

    A. Consider Acceptance of 2012-2013 Annual Audit
       (Please refer to Board Memorandum)

        Upon the recommendation of the Finance/Audit Committee, a motion by Director John Sweeden, and a second by Director Shep Stahel, the Board of Directors voted unanimously to table this item until February 1, 2014. The Finance/Audit Committee reviewed the 2012-2013 Annual Audit and recommended tabling this item to allow time to add a disclosure regarding a wastewater matter.

    B. Consider Appointment of Auditors for Fiscal Year 2013-2014
       (Please refer to Board Memorandum)
Upon the recommendation of the Finance/Audit Committee, a motion by Director John Sweeden, and a second by Director Don Gordon, the Board of Directors voted unanimously to appointment Weaver and Tidwell, L.L.P., as auditors for fiscal year 2013-2014 at a cost of $113,000. The Finance/Audit Committee recommended the NTMWD staff consider changing auditing firms after this fiscal year.

C. Consider Authorizing Execution of Engineering Services Agreement on Project No. 348, Supervisory Control and Data Acquisition Improvements Preliminary Engineering
(Please refer to Administrative Memorandum No. 4107)

Upon a motion by Director Patrick Nicklen and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to authorize the Executive Director to execute an engineering services agreement with Gupta and Associates, Inc., to provide professional services associated with the preliminary engineering for the Upper East Fork Interceptor System Supervisory Control and Data Acquisition System Improvements, Project No. 348, in the not-to-exceed amount of $61,081.

D. Consider Authorizing Additional Engineering Services on Project No. ENG 12-7, Beck Branch Gravity Sewer, Rowlett Creek Crossing Improvements, Condition Assessment and Preliminary Design
(Please refer to Administrative Memorandum No. 4108)

Upon a motion by Director Jerry Yancey and a second by Director James Kerr, the Board of Directors voted unanimously to authorize an increase in the engineering services fee with Michael Baker, Jr., Inc. for the Beck Branch Gravity Sewer Rowlett Creek Crossing Improvements Condition Assessment and Preliminary Design, Project No. ENG 12-7, in the amount of $32,848.77, resulting in a revised total not-to-exceed amount of $223,692.27.

E. Consider Authorizing Additional Engineering Services on Project No. 295, Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements Design
(Please refer to Administrative Memorandum No. 4109)

Upon a motion by Director Terry Anderson and a second by Director Jim Mellody, the Board of Directors voted unanimously to authorize additional engineering services for CH2M HILL Engineers, Inc., in the not-to-exceed amount of $62,783, resulting in a revised engineering services fee amount of $680,593, for Project No. 295, Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements.

F. Consider Authorizing Execution of Engineering Services Agreement on Project No. 349, Wilson Creek Regional Wastewater Treatment Plant, Plant II Odor Control Improvements Final Design
(Please refer to Administrative Memorandum No. 4110)

Upon a motion by Director Marvin Fuller and a second by Director Bobby Robinson, the Board of Directors voted unanimously to authorize the Executive
Director to execute an engineering services agreement with Perkins Engineering Consultants, Inc., for professional services associated with engineering and construction phase services for the Wilson Creek Regional Wastewater Treatment Plant, Plant II Odor Control Improvements Final Design, Project No. 349, in the not-to-exceed amount of $88,500.

G. Consider Authorizing Adoption of Resolution No. 14-1 Authorizing the Use of Eminent Domain to Acquire Right-of-Way for the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335 (Please refer to Administrative Memorandum No. 4111)

Upon a motion by Director Lynn Shuyler and a second by Director John Murphy, the Board of Directors voted unanimously to authorize a right-of-way acquisition program for the 121 Site Facility Water Transmission Pipeline Relocation of State Highway 121, Project No. 335, with a budget of $75,000 and adopt Resolution No. 14-1 authorizing the use of eminent domain to acquire property described in Exhibit A and shown in Exhibit B (attached to Resolution No. 14-1) for the construction, maintenance, and operation of the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121.

H. Consider Authorizing Adoption of Resolution No. 14-2 Authorizing Additional Funding for Right-of-Way Acquisition Program on North McKinney Pipeline, Phase I and II, Project No. 210 (Please refer to Administrative Memorandum No. 4112)

Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to adopt Resolution No. 14-2 authorizing additional funding for right-of-way for the North McKinney Pipeline, Phase I and II, Project No. 210, Right-of-Way Acquisition Program with additional funding of $800,000 resulting in a total authorization of $4,285,000, and reduce the currently authorized funding for right-of-way for Project No. 266, 42-Inch and 24-Inch Waterline Relocation along Stacy Road from $2,290,000 to $1,170,000.

I. Consider Authorizing Award of Construction Contract on Project No. 331, Custer Road Transfer Station Tipping Floor Improvements (Please refer to Administrative Memorandum No. 4113)

Upon a motion by Director James Kerr and a second by Director Joe Farmer, the Board of Directors voted unanimously to authorize award of a construction contract to North Texas Contracting, Inc., for the Custer Road Transfer Station Tipping Floor Improvements, Project No. 331, in the amount of $526,390.

J. Consider Authorizing Change Order No. 23 on Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation (Please refer to Administrative Memorandum No. 4114)

Upon a motion by Director Jerry Yancey and a second by Director Jim Mellody, the Board of Directors voted unanimously to approve Change Order No. 23 for Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation, an increase
in the amount of $35,120.49 resulting in a revised contract amount of $110,907,592.55.

K. Consider Authorizing Change Order No. 4 on Project No. 259, Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains
   (Please refer to Administrative Memorandum No. 4115)

   Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize Change Order No. 4 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 $68,145, resulting in a revised contract amount of $8,040,139.75.

L. Consider Authorizing Change Order No. 5 on Project No. 251, Water Treatment Plant IV Conversion to Biologically Active Filtration
   (Please refer to Administrative Memorandum No. 4116)

   Upon a motion by Director John Murphy and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to authorize Change Order No. 5 for an increase of $27,317, resulting in a revised contract amount of $5,721,703 for Project No. 251, Water Treatment Plant IV Conversion to Biologically Active Filtration.

M. Consider Authorizing Change Order No. 3 on Project No. 277, Water Treatment Plant III, Filter Underdrain Improvements and Conversion to Biologically Active Filters
   (Please refer to Administrative Memorandum No. 4117)

   Upon a motion by Director Patrick Nicklen and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize Change Order No. 3 for Water Treatment Plant III Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 277, for an increase in the amount of $69,072.15, resulting in a revised contract amount of $6,679,193.71.

N. Consider Authorizing Change Order No. 1 on Project No. 293, Borham Water Treatment Plant Sludge Lagoon Improvements
   (Please refer to Administrative Memorandum No. 4118)

   Upon a motion by Director Jerry Yancey and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to authorize Change Order No. 1 for a net increase in the amount of $171,098, resulting in a revised contract amount of $2,970,778 for the Bonham Water Treatment Plant Sludge Lagoon Improvements, Project No. 293.

O. Consider Authorizing Award of Construction Contract and Execution of Construction Agreement for Project No. ENG 13-3B, 121 Regional Disposal Facility, Sector 4A Liner Material Purchase/Install
   (Please refer to Administrative Memorandum No. 4119)
Upon a motion by Director Lynn Shuyler and a second by Director James Kerr, the Board of Directors voted unanimously to authorize award of a construction contract to Great Basin Environmental, Inc., in the amount of $298,907.78 for the 121 Regional Disposal Facility Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B, and authorize the Executive Director to execute the construction agreement with Great Basin Environmental, Inc., once the contractor provides all necessary documents to facilitate the execution of the agreement.

P. Consider Authorizing Execution of Engineering Services Agreement on Project No. 350, Lavon Lake Raw Water Pump Stations Intake Channel Improvements Final Engineering
(Please refer to Administrative Memorandum No. 4120)

Upon a motion by Director Joe Farmer and a second by Director Marvin Fuller, 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 design and construction management for the Lavon Lake Raw Water Pump Stations Intake Channel Improvements Final Engineering, Project No. 350, in the not-to-exceed amount of $388,000.

Q. Consider Authorizing Execution of Compromise, Settlement Agreement and Release between the North Texas Municipal Water District, Freese and Nichols, Inc., Eagle Contracting, LP, and Smith Pump Company for Repair of Vertical Turbine Pumps at East Fork Raw Water Supply Project Diversion Pump Station
(Please refer to Administrative Memorandum No. 4121)

Upon a motion by Director Jerry Yancey and a second by Director John Murphy, the Board of Directors voted unanimously to authorize the Executive Director to execute the Compromise, Settlement Agreement and Release between the North Texas Municipal Water District, Freese and Nichols, Inc., Eagle Contracting, L.P., and Smith Pump Company for repair of the four vertical turbine pumps at the East Fork Raw Water Supply Project Diversion Pump Station. The agreement provides funding from Smith Pump Company and Freese and Nichols, Inc., in the amount of $522,075 for repairs to the four vertical turbine pumps at the Diversion Pump Station.

R. Consider Authorizing Execution of Interlocal Cooperation Agreement between the City of Allen and North Texas Municipal Water District Concerning Reimbursement for Incremental Cost of Upgraded Screening Walls for the Upper East Fork Interceptor System Fugitive Emissions Control Improvements, Project No. 279
(Please refer to Administrative Memorandum No. 4122)

Upon a motion by Director Lynn Shuyler and a second by Director Bobby Robinson, the Board of Directors voted unanimously to authorize the Executive Director to execute an Interlocal Cooperation Agreement between the City of Allen and North Texas Municipal Water District Concerning Reimbursement for Incremental Cost of Upgraded Screening Walls for the UEFIS Fugitive Emissions Control Improvements, Project No. 279, contingent upon approval by the Allen City Council.
S. Consider Authorizing Execution of Cooperative Service Agreement between the City of McKinney, North Collin Water Supply Corporation, and North Texas Municipal Water District for Interim Water Service to the Trinity Falls Development
   (Please refer to Administrative Memorandum No. 4123)

Upon a motion by Director Jerry Yancey and a second by Director John Murphy, the Board of Directors voted unanimously to authorize the execution of a Cooperative Service Agreement between the City of McKinney, North Collin Water Supply Corporation, and North Texas Municipal Water District for interim water services to the Trinity Falls Development.

T. Consider Authorizing Award of Construction Contract and Execution of Construction Agreement on Project No. ENG 13-3A, 121 Regional Disposal Facility Sector 4A Liner and Leachate Collection System Construction
   (Please refer to Administrative Memorandum No. 4124)

Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize award of a construction contract to Hammett Excavation, Inc., in the amount of $349,981.15 for the 121 Regional Disposal Facility Sector 4A Liner and Leachate Collection System Construction, Project No. ENG 13-3A, and authorize the Executive Director to execute the construction agreement with Hammett Excavation, Inc., once the contractor provides all necessary documents to facilitate the execution of the agreement.

VII. DISCUSSION ITEMS

A. Receive Legal Advice from the District’s Attorney Regarding Environmental Compliance Issues Related to the Wastewater System

The regular session recessed at 4:39 p.m.

President Bill Lofland declared a need for an Executive Session of the Board of Directors to consult with attorney pursuant to Section 551.071 of the Texas Government Code. The Executive Session was called to order by President Bill Lofland at 4:40 p.m.

The Executive Session adjourned at 5:20 p.m.

The Board of Directors reconvened into regular session at 5:21 p.m.

VIII. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 5:22 p.m. The next regular meeting of the NTMWD Board of Directors will be held Thursday, February 27, 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

MINUTES OF A SPECIAL MEETING OF THE BOARD OF DIRECTORS
HELD ON SATURDAY, FEBRUARY 1, 2014
IN THE HILTON DALLAS/ROCKWALL LAKEFRONT HOTEL IN ROCKWALL, TEXAS

The North Texas Municipal Water District Board of Directors met in Regular Session on Saturday, February 1, 2014, at 8:15 a.m. in the Hilton Dallas/Rockwall Lakefront Hotel located in Rockwall, 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.

ROLL CALL

Secretary Joe Joplin conducted a roll call. Director Terry Anderson was absent from the meeting. The following Directors were present for the February 1, 2014, Board meeting:

Don Cates                              Jim Mellody
Gary Downey                           John Murphy
Joe Farmer                            Patrick Nicklen
Marvin Fuller                         Larry Parks
Don Gordon                            Bobby Robinson
Darrell Grooms                        Richard Sheehan
Bill Harrison                         Lynn Shuyler
Joe Joplin                            Shep Stahel
James Kerr                            John Sweeden
Bill Lofland                          Bob Thurmond
Jack May                               Darwin Whiteside
Charles McKissick                     Jerry Yancey

The following NTMWD consultants attended the meeting:

Lewis Isaacks – Gay McCall Isaacks Gordon & Roberts
John Gay – Gay McCall Isaacks Gordon & Roberts
Martin Rochelle – Lloyd Gosselink Townsend & Rochelle
Brad Castleberry – Lloyd Gosselink Townsend Rochelle
Mark Walsh – Saunders, Walsh & Beard
David Medanich – First Southwest Company
Alan Raynor – McCall Parkhurst & Horton
David Timmerman – Black & Veatch Corporation
Alan Plummer – Alan Plummer Associates, Inc.
John Minahan – Alan Plummer Associates, Inc.
Brian Coltharp – Freese and Nichols, Inc.
Tom Gooch – Freese and Nichols, Inc.
Jeff Payne – Freese and Nichols, Inc.
Gordon Wells – Freese and Nichols, Inc.

Incoming NTMWD Executive Director Thomas Kula was a special guest in attendance.
PUBLIC COMMENTS

There were no public comments.

I. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. **TABLED ITEM:** Consider Acceptance of 2012-2013 Annual Audit

Upon a motion by Director John Murphy and a second by Director Shep Stahel, the Board of Directors voted unanimously to take this item from the table.

Upon the recommendation of the Finance/Audit Committee, a motion by Director Joe Farmer, and a second by Director Shep Stahel, the Board of Directors voted unanimously to accept the 2012-2013 Annual Audit as presented.

B. Consider Authorizing Amendment of District Policy No. 2, Executive Director
(Please refer to Administrative Memorandum No. 4125)

Upon the recommendation of the Finance/Audit Committee, a motion by Director John Sweeden and a second by Director Shep Stahel, the Board of Directors voted unanimously to authorize amendment of District Policy No. 2, Executive Director, to allow minor changes to reflect the present day practices of different types of compensation for the Executive Director.

II. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 8:19 a.m. The next regular meeting of the NTMWD Board of Directors will be held Thursday, February 27, 2014, at 4:00 p.m. in the NTMWD Administrative Offices, 505 E. Brown Street, Wylie, Texas.

APPROVED:

BILL LOFLAND, Presidnet

ATTEST:

JOE JOPLIN, Secretary

(Seal)
NORTH TEXAS MUNICIPAL WATER DISTRICT

MINUTES OF A PLANNING RETREAT OF THE BOARD OF DIRECTORS
HELD ON SATURDAY, FEBRUARY 1, 2014
IN THE HILTON DALLAS/ROCKWALL LAKEFRONT HOTEL, ROCKWALL, TEXAS

The North Texas Municipal Water District Board of Directors met in Regular Session for a Planning Retreat on Saturday, February 1, 2014, at 8:30 a.m. in the Hilton Dallas/Rockwall Lakefront Hotel, 2055 Summer Lee Drive, Rockwall, Texas 75032. Notice of the meeting was legally posted in accordance with Government Code, Title 551. Open Meetings.

I. ROLL CALL

The following Directors were present for the February 1, 2014, Board Planning Retreat meeting:

- Don Cates
- Gary Downey
- Joe Farmer
- Marvin Fuller
- Don Gordon
- Darrell Grooms
- Bill Harrison
- Joe Joplin
- James Kerr
- Bill Lofland
- Jack May
- Charles McKissick
- Jim Mellody
- John Murphy
- Patrick Nicklen
- Larry Parks
- Bobby Robinson
- Richard Sheehan
- Lynn Shuyler
- Shep Stahel
- John Sweeden
- Bob Thurmond
- Darwin Whiteside
- Jerry Yancey

Director Terry Anderson was absent.

The following NTMWD consultants attended the meeting:

- Lewis Isaacks – Gay McCall Isaacks Gordon & Roberts
- John Gay – Gay McCall Isaacks Gordon & Roberts
- Martin Rochelle – Lloyd Gosselin Townsend & Rochelle
- Brad Castleberry – Lloyd Gosselin Townsend Rochelle
- Mark Walsh – Saunders, Walsh & Beard
- David Medanich – First Southwest Company
- Alan Raynor – McCall Parkhurst & Horton
- David Timmerman – Black & Veatch Corporation
- Alan Plummer – Alan Plummer Associates, Inc.
- John Minahan – Alan Plummer Associates, Inc.
- Brian Coltharp – Freese and Nichols, Inc.
- Tom Gooch – Freese and Nichols, Inc.
- Jeff Payne – Freese and Nichols, Inc.
- Gordon Wells – Freese and Nichols, Inc.

Incoming NTMWD Executive Director Thomas Kula was a special guest in attendance.
The following NTMWD staff attended the Retreat:

Erik Felthous  Bently Powell
Denise Hickey  Gerry Reagan
Ted Kilpatrick  Mike Rickman
Jeff Mayfield  Judd Sanderson
Robert McCarthy  Jim Shirley
John Montgomery  Joe Stankiewicz
David Morgan  Elizabeth Turner
Kelly O'Brian  Ken Wesson
Jim Parks  Teresa Wigington

II. WELCOME AND INTRODUCTION TO PLANNING RETREAT

Jim Parks and President Bill Lofland welcomed attendees to the 2014 Planning Retreat.

III. DISCUSSION ITEMS

A. Revised Water Demand Projections

Tom Gooch and Brian Coltharp reviewed the revised water demand projections. Gordon Wells and Jeff Payne reviewed the dredging projects.

B. Texoma Pipeline and Blending Project Update

Ted Kilpatrick presented a Texoma Pipeline and Blending Project Update. Martin Rochelle presented an update on Oklahoma/Texas boundary issue related to the Lake Texoma pump station.

C. Water Conservation and Water Resources Management Plan Update

Denise Hickey provided a Water Conservation and Water Resources Management Plan Update.

D. Ozone Project Update

Ted Kilpatrick provided an Ozone Project Update.

E. Lower Bois d'Arc Creek Reservoir Project Update

Robert McCarthy provided a Lower Bois d'Arc Creek Reservoir Project Update.

F. Solid Waste System Update

Jeff Mayfield provided a Solid Waste System Update.
G. Consultants with Attorneys

Brief updates were provided from the following attorneys on the following matters:

1. Lewis Isaacks
   a) Ball/Tissing Wall Issue
   b) Update on Condemnation Matters

2. Mark Walsh
   a) Ozone Construction Project
   b) Chapman Pipeline Erosion Issue
   c) Environmental Services Building HVAC Issue
   d) Tawakoni Water Treatment Plant Residual Lagoon Issue

3. Martin Rochelle
   a) Lookout Drive Transfer Station Contested Case Hearing
   b) Lower Bois d'Arc Creek Reservoir
   c) Environmental Compliance Related to Wastewater System
   d) Upper East Fork Regional Interceptor System EPA Audit
   e) Risk Management Plan EPA Audit

H. Discussion of District’s Mission and Strategic Planning

There was no discussion on this item.

IV. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 4:10 p.m.

APPROVED:

__________________________________________
BILL LOFLAND, President

ATTEST:

__________________________________________
JOE JOPLIN, Secretary

(SEAL)
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

CONSENT AGENDA ITEM NO. 14-02-04

REGIONAL WASTEWATER SYSTEM
FLOYD BRANCH REGIONAL WASTEWATER TREATMENT PLANT
2012 ODOR CONTROL IMPROVEMENTS
PROJECT NO. 280

AUTHORIZATION TO MAKE FINAL PAYMENT

This consent agenda item is for the Board of Directors consideration of authorization to make final payment to Crescent Constructors, Inc., in the final contract amount of $835,223 for the Floyd Branch Regional Wastewater Treatment Plant 2012 Odor Control Improvements, Project No. 280.

REVIEW

Odor control for the primary clarifier, prior to this project, consisted of covered effluent weirs and troughs from which foul air was actively drawn through a carbon filter for treatment. The bar screen and plant influent channel area were covered to contain odors but the air under those covers was not treated. The proximity of these processes to neighboring property and the potential for offsite effects were factors in initiating this project to improve odor control at those areas.

In December 2012, the Board approved Administrative Memorandum No. 3904 authorizing the award of a construction contract for the project to Crescent Constructors, Inc., in the amount of $817,000.

In December 2013, the Board approved Consent Agenda Item No. 13-12-03 authorizing Change Order No. 1 for an increase of $18,223 and 20 additional calendar days, resulting in a revised contract amount of $835,223 and a revised final completion date of April 2, 2014.

AUTHORIZATION TO MAKE FINAL PAYMENT

All major work on the project has been completed, and the project was considered substantially complete as of November 12, 2013. The final walkthrough was completed on January 29, 2014. It is anticipated the contractor will complete the minor punchlist items noted and submit the final O&M documentation within the next month. Release of the final payment to the contractor will be contingent upon completion of these items.
CONSENT AGENDA ITEM NO. 14-02-04
PAGE 2

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Perkins Engineering Consultants, Inc., that the Board of Directors authorize final payment to Crescent Constructors, Inc., in the final contract amount of $835,223 for the Floyd Branch Regional Wastewater Treatment Plant 2012 Odor Control Improvements, Project No. 280. This will be an item on the consent agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

CONSENT AGENDA ITEM NO. 14-02-05

REGIONAL WATER SYSTEM
UNION PACIFIC RAILROAD CROSSING PROTECTION OF THE
EXISTING 72-INCH TEXOMA PIPELINE
PROJECT NO. 313

AUTHORIZATION TO MAKE FINAL PAYMENT

This consent agenda item is for the Board of Directors consideration of authorization to make final payment to Lewis Contractors, Inc., (Lewis Contractors) in the final contract amount of $165,000 for the Union Pacific Railroad Crossing Protection of the Existing 72-Inch Texoma Pipeline (Texoma Pipeline), Project No. 313.

REVIEW

The NTMWD operates a raw water transmission system from Lake Texoma to Lavon Lake. The system includes a pump station at Lake Texoma and a 72-inch pipeline from Lake Texoma to Sister Grove Creek east of Howe, Texas. Prior to the cessation of pumping due to the presence of zebra mussels in Lake Texoma, pumped water from the Lake Texoma Pump Station would flow down Sister Grove Creek to Lavon Lake. NTMWD shares the pump station and pipeline with Greater Texoma Utility Authority (GTUA), which diverts water from the pipeline to its water treatment plant in Sherman. At the pump station, NTMWD currently has two large (47 MGD each) pumps, and a contract is underway to install two additional large pumps. GTUA currently has three small (6 MGD each) pumps and space for one additional small pump.

NTMWD staff has been informed that Union Pacific will be installing an additional track between Denison and Pottsboro. This additional track, which will be placed adjacent to an existing rail line, will cross the existing 72-inch Texoma pipeline. In addition, there will be drainage improvements within the existing Union Pacific right-of-way that will be installed over the existing pipeline. These proposed improvements required the construction of systems to protect the existing pipeline.

In December 2012, by Administrative Memorandum No. 3912, the Board approved engineering services in the not-to-exceed amount of $55,290 to Freese and Nichols, Inc., for the Union Pacific Railroad Crossing Protection of the Existing 72-Inch Texoma Pipeline, Project No. 313.

In October 2013, the Board approved Administrative Memorandum No. 4075 authorizing the award of the construction contract for the project to Lewis Contractors in the contract amount of $165,000 for construction of Project No. 313.
AUTHORIZATION TO MAKE FINAL PAYMENT

All major work on the project was completed, and the project was considered substantially complete by February 5, 2014, five days before the required substantial completion date. It is anticipated that the contractor will complete all punchlist items by February 25, 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 Freese and Nichols, Inc., that the Board of Directors authorize final payment to Lewis Contractors, Inc., in the final contract amount of $165,000, for the Union Pacific Railroad Crossing Protection of the Existing 72-Inch Texoma Pipeline, Project No. 313. This will be an item on the consent agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

CONSENT AGENDA ITEM NO. 14-02-06

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

CHANGE ORDER NO. 2
AND
AUTHORIZATION TO MAKE FINAL PAYMENT

This consent agenda item is for the Board of Directors consideration of: 1) Change Order No. 2 for an increase of $10,423.78 resulting in a revised contract amount of $2,119,549.72; and, 2) a time extension of 65 calendar days of contract time, resulting in a revised final completion date of January 19, 2014; and, 3) authorization to make final payment to Facility Solutions Group, Inc., (FSG) in the final contract amount of $2,119,549.72, for the Wylie Water Treatment Plant (WTP) Security Enhancements, Phase 2, Project No. 229 (Security Project).

REVIEW

In January 2011, by Administrative Memorandum No. 3580, the Board authorized the Executive Director to execute an engineering services agreement with Gupta and Associates, Inc., (GAI) for design of the Security Project. GAI completed the design, and the project was advertised in May 2012.

In June 2012, by Administrative Memorandum No. 3821, the Board authorized the award of a construction contract with FSG in the amount of $2,102,324 for the Security Project.

In February 2013, by Consent Agenda Item 13-02-02, the Board authorized Change Order No. 1 for: 1) an increase of $6,801.94, resulting in a revised contract amount of $2,109,125.94; and, 2) an additional 90 calendar days of contract time, resulting in a revised final completion date of November 15, 2013, for the Security Project.

PROPOSED CHANGE ORDER NO. 2

Change Order No. 2 consists of five items for an increase in the amount of $10,423.78 resulting in a revised contract amount of $2,119,549.72 and a 65-day contract time extension, resulting in a revised final completion date of January 19, 2014, for the Security Project. The proposed costs and contract extension have been reviewed by the NTMWD staff and GAI and determined to be fair and reasonable.
CONSENT AGENDA ITEM NO. 14-02-06
PAGE 2

Item No. 1 – Electrical Raceway Modifications ($3,841.58)

The contract documents required the use of rigid aluminum conduit to route all types of conductors in all indoor and outdoor locations. The contractor requested the use of thin wall steel conduit, commonly used in dry office space environments, in the office area of the Administration and Operations Buildings. The contractor has also proposed to install plenum rated (fire resistant) security computer cable in lieu of routing the security computer cable in the conduit in the air return area above the office area ceiling of the Administration and Operations Buildings. The contractor has submitted a proposal to install the electrical raceway modifications for a total credit amount of $3,841.58. NTMWD staff and GAI have reviewed this contract modification request and have agreed the cost is reasonable.

Item No. 2 – Wall Furr-down for Entry Door at Plant 1 Operations Building $1,071

The contract plans require the addition of badge reading equipment at the entry to the Plant 1 Operations Building. The existing construction does not allow for concealed conduit to route signal and power conductors to the badge reading equipment. The contractor has proposed to provide a dry wall furr-down to cover the conduit between the existing columns north and south of the main entry door. The area to be covered is about 20 feet long and 10 feet high and includes framing, sheetrock, and painting. The contractor has submitted a proposal to install the furr-down for the total amount of $1,071 and seven additional calendar days. NTMWD staff and GAI have reviewed this contract modification request and have agreed the cost is reasonable.

Item No. 3 – Vibration Dampeners for CCTV Camera Poles $3,285.83

The contract requires the use of six-inch tapered one-piece aluminum poles with 1/4-inch wall thickness, 16 feet tall, to support the closed-circuit television (CCTV) cameras. During design, GAI omitted vibration dampeners to stabilize the camera poles during high winds. Excessive vibration has the potential to distort the camera’s video signal, resulting in a video display too poor for the control room operators to utilize. The contractor has submitted a proposal to install vibration dampeners on the five camera poles for the total amount of $3,285.83 and 21 additional calendar days. NTMWD staff and GAI reviewed this contract modification request and have agreed the cost is reasonable. This was an omission by the consultant, and NTMWD staff is negotiating with GAI to participate in the cost of this change order item.

Item No. 4 – Relocation of East Stairwell Door $3,671.26

The contract documents require the installation of a new security door located at the entrance to the east stairwell from the electrical room of High Service Pump Station 1-1. Access to the electrical room is secured by the Operations Building perimeter doors.
CONSENT AGENDA ITEM NO. 14-02-06
PAGE 3

The stairwell leads to the break room and office areas upstairs, which are also secured areas. Since both sides of this door are in secure areas, NTMWD staff recommended relocating the access control equipment to an interior door located at the southeast corner of the electrical room. The interior door provides access between the electrical room and the pump room. A roll-up door located on the back side of the south loading dock also provides access to the pump room. In the event the roll-up door is left open, the interior door will allow unsecured access to the electrical room and upstairs office area. The contractor has submitted a proposal to relocate the security door for the total amount of $3,671.26 and seven additional calendar days. NTMWD staff and GAI reviewed this contract modification request and have agreed the cost is reasonable.

Item No. 5 – Connect Substation Radios to Fiber Optic Cable $6,237.27
30 Calendar Days

The contract documents required the use of radio communication for the new security system CCTV cameras from electrical substations 1 and 2 to an existing master radio in the control room at Plant I. Due to the age of the existing radio system, the new radios will not communicate with the master radio without significant modifications to the entire system. The new security cameras also have the ability to communicate over fiber optic lines. NTMWD staff requested the contractor to submit a proposal to connect the new cameras to an existing fiber optic cable installed between the substations and the Plant I control room. The contractor has submitted a proposal to install and configure the necessary network switches, fiber optics patch panels, conduit, and conductors to connect the cameras for the total amount of $6,237.27 and 30 additional calendar days. The radios already purchased will be turned over to the NTMWD for use at other locations. NTMWD staff and GAI reviewed this contract modification request and have agreed the cost and additional contract time is reasonable. In addition, NTMWD staff is negotiating with GAI to participate in the cost of this change order item.

SUMMARY OF CHANGE ORDER NO. 2

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Days</th>
<th>Amount</th>
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<tr>
<td>1</td>
<td>Electrical Raceway Modifications</td>
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<td>($3,841.58)</td>
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<td>2</td>
<td>Wall Furr-down for Entry Door at Plant I Operations Building</td>
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<td>$1,071</td>
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<td>3</td>
<td>Vibration Dampeners for CCTV Camera Poles</td>
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<td>$3,285.83</td>
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<td>4</td>
<td>Relocation of East Stairwell Door</td>
<td>7</td>
<td>$3,671.26</td>
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<td>5</td>
<td>Connect Substation Radios to Fiber Optic Cable</td>
<td>30</td>
<td>$6,237.27</td>
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<td>$10,423.78</td>
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SUMMARY OF ADJUSTMENTS TO CONTRACT

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<th>Days to Final Completion</th>
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<td>360</td>
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<td>C.O. No. 1</td>
<td>$ 6,801.94</td>
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<td>90</td>
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<td>C.O. No. 2</td>
<td>$10,423.78</td>
<td>65</td>
<td>65</td>
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<tr>
<td>Revised Contract Amount</td>
<td>$2,119,549.72</td>
<td>425</td>
<td>515</td>
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<td>Revised Contract Dates</td>
<td>October 21, 2013</td>
<td></td>
<td>January 19, 2014</td>
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All major work has been completed, and this project was considered substantially complete on July 24, 2013. All punchlist items were completed by October 30, 2013, with the exception of painting the Administration Building lower level entrance door. That work has now been completed, and NTMWD staff recommends authorization to make final payment to Facility Solutions Group, Inc., in the final contract amount of $2,119,549.72 for Wylie WTP Security Enhancements, Phase 2, Project No. 229.

FUNDING

Additional funding in the amount of $10,423.78 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 Gupta and Associates, Inc., that the Board of Directors authorize: 1) Change Order No. 2 for an increase of $10,423.78, resulting in a revised contract amount of $2,119,549.72; and 2) a time extension of 65 calendar days in contract time, resulting in a revised final completion date of January 19, 2014; and, 3) authorization to make final payment to Facilities Solution Group, Inc., in the final contract amount of $2,119,549.72 for the Wylie Water Treatment Plant Security Enhancements, Phase 2, Project No. 229. This will be an item on the consent agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

CONSENT AGENDA ITEM NO. 14-02-07

REGIONAL SOLID WASTE SYSTEM
121 REGIONAL DISPOSAL FACILITY
FLEET MAINTENANCE WELD SERVICES BUILDING
PROJECT NO. 233

ADDITIONAL ENGINEERING SERVICES

This consent agenda item is for the Board of Directors consideration of additional engineering services for CP&Y, Inc., (CP&Y) in the not-to-exceed amount of $14,386 for the 121 Regional Disposal Facility (121 RDF) Fleet Maintenance Weld Services Building, Project No. 233. This would result in a revised total not-to-exceed engineering services fee of $90,111.

REVIEW

In March 2011, by Administrative Memorandum No. 3599, the Board authorized the Executive Director to execute an engineering services agreement with CP&Y for design of the 121 RDF Fleet Maintenance Weld Services Building, Project No. 233, in the not-to-exceed amount of $75,725.

In June 2013, by Administrative Memorandum No. 4011, the Board authorized the Executive Director to execute an inspection services agreement with CP&Y for construction inspection of the 121 RDF Fleet Maintenance Weld Services Building, Project No. 233, in the not-to-exceed amount of $66,954.

In July 2013, by Administrative Memorandum No. 4016, the Board authorized the award of a construction contract to Tegrity Contractors, Inc., (Tegrity) for construction of the 121 RDF Fleet Maintenance Weld Services Building, Project No. 233, in the total contract amount of $830,214.81.

PROPOSED ADDITIONAL SERVICES

This request for additional fee consists of the following two items:

Item No. 1 – Additional Bid Phase Services

$4,152

In April 2013, the project was advertised, and the bid opening was scheduled for May 31, 2013. The bid opening was postponed due to the insufficient number of bids received. NTMWD staff and CP&Y contacted prospective bidders to confirm interest in the project and rescheduled the bid opening for June 27, 2013.
CP&Y has requested additional services in the total not-to-exceed amount of $4,152 for additional costs associated with the bidding process. The proposed costs have been reviewed and determined to be fair and reasonable by NTMWD staff. The additional costs incurred by CP&Y include:

- Preparation of additional bid documents
- Additional coordination with the City of Melissa
- Additional pre-bid meeting and site tour
- Additional project management to coordinate and attend second bid opening

**Item No. 2 – Additional Design Phase Services**

$10,234

CP&Y has requested additional design services in the total not-to-exceed amount of $10,234 associated with extended coordination and design efforts with the City of Melissa Board of Adjustments. In September 2012, the City of Melissa Board of Adjustments and Planning and Zoning Commission approved the engineering site plan and development permit, which included the following items:

- Rezone the construction site from agricultural to light industrial
- Variance to waive the 10-foot building separation requirement to allow new weld services building construction to be five feet from the existing fleet maintenance building without the need to install a fire suppression system
- Variance to waive permanent markings to identify parking spaces
- Variance to waive the 80 percent masonry requirement for new construction
- Variance to waive landscaping

In April 2013, final comments from the City of Melissa and the Melissa Fire Department were incorporated into the plans and specifications and the project was advertised. The construction contract was awarded to Tegrity in July 2013. In November 2013, Tegrity applied for a construction permit, which to date has not been approved by the City of Melissa for the following concerns:

- Existing fleet maintenance building and new weld services building shall include a fire suppression system
- Install permanent fire lane signs
- Install Fire Department padlock on site gate
- Install master electrical switch for all direct current loads
- Install ground fault interrupt equipment on 110-volt electrical outlets
- Modify location of fire hydrants

Since November 2013, CP&Y and NTMWD staff met with the City of Melissa to resolve these concerns. CP&Y has incurred additional costs including additional correspondence, plan review meetings and modifications to the plans and specifications. All of the City’s concerns have been resolved, which will allow the contractor to provide the final submittal to the City for the construction permit. CP&Y
CONSENT AGENDA ITEM NO. 14-02-07
PAGE 3

has requested additional services in the total amount of $10,234 for costs incurred since November 2013 to resolve these issues.

The proposed costs have been reviewed and determined to be fair and reasonable by NTMWD staff. CP&Y estimates the above additional scope items will require 86 hours of project management and design at an average rate of $119 per hour. The proposed additional scope and associated costs appear fair and reasonable to NTMWD staff.

SUMMARY OF ADDITIONAL SERVICES

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>Additional Bid Phase Services</td>
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<td>2</td>
<td>Additional Design Phase Services</td>
<td>10,234</td>
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<td>Total</td>
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<td>$14,386</td>
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The NTMWD staff has reviewed the additional bid and design phase services submitted by CP&Y and recommends them as reasonable for the work associated with this project. These additional services are within the guidelines of the Consulting Engineers Council for this type of work.

SUMMARY OF ENGINEERING SERVICES AGREEMENT (ESA)

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<td>14,386</td>
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<td>Revised ESA Amount</td>
<td>$73,836</td>
<td>$16,275</td>
<td>$90,111</td>
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The NTMWD staff has reviewed the proposed fees submitted by CP&Y and recommends them as reasonable and representative of the additional effort and expense required. Once additional construction costs are developed, the NTMWD staff and CP&Y will review those costs to develop a recommendation for Board action.

FUNDING

Additional funding in the amount of $14,386 for the additional engineering services is available in the Regional Solid Waste 2009 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 CP&Y, Inc., for the 121 Regional Disposal Facility Fleet Maintenance Weld Services Building, Project No. 233, in the not-to-exceed amount of $14,386, resulting in a revised total not-to-exceed engineering services fee of $90,111. This will be an item on the consent agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

CONSENT AGENDA ITEM NO. 14-02-08

RECOGNITION CEREMONY
FOR RETIRING EXECUTIVE DIRECTOR

This consent agenda item is for the Board of Directors consideration to authorize funding for a retirement dinner in honor of NTMWD's retiring Executive Director. The Finance/Audit Committee met in January 2014 to discuss the retirement compensation package of retiring Executive Director James M. Parks. It is anticipated Mr. Parks will retire from his position as Executive Director April 30, 2014. In honor of his dedicated service as Executive Director of the NTMWD for 16 years, the Finance/Audit Committee recommended funding a retirement dinner in Mr. Parks honor to be held in May 2014.

FUNDING

The estimated cost of the dinner is $15,000 and is based on 100 attendees at a cost of $150 per person. Funding in an amount not to exceed $15,000 for the cost of the dinner is to be made available from the 2014 Operating Budget Employee Programs Account (101-5320-53152).

RECOMMENDATION

It is the recommendation of the NTMWD Finance/Audit Committee that the Board of Directors consider authorizing funding in an amount not to exceed $15,000 for a retirement dinner in honor of NTMWD's retiring Executive Director. This will be an item on the consent agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4126

FUNDING FOR THE TEXAS WATER SMART COALITION AWARENESS CAMPAIGN

This administrative memorandum requests that the Executive Director with the concurrence of the Board of Directors continue to provide support and authorize funding for the Texas Water Smart Coalition (TWSC) Awareness Campaign (Campaign).

Previously, in January 2013, the Board approved Administrative No. 3915; and in May of 2012, the Board approved Administrative Memorandum No. 3796 to fund the Campaign effort.

BACKGROUND

TWSC is a diverse public-private coalition of businesses, trade associations, cities, water suppliers, and elected officials who are committed to promoting water conservation. Many of the valuable coalition partners of TWSC are Texas Nursery and Landscape Association, Texas Retailers Association, Texas A&M AgriLife Extension Service, Scott's Miracle-Gro Company, and Texas Department of Agriculture. In response to the extreme drought experienced since 2011, the TWSC developed the Campaign to assist in educating and raising awareness of water efficient practices. The purpose of the Campaign is to educate families and businesses about easy and efficient ways to conserve water and learn how simple tweaks can make a big difference and help extend water supplies.

The TWSC is seeking partnerships and funding for continuation and expansion of the Campaign. NTMWD is requesting approval to fund the Campaign in a not-to-exceed amount of $100,000 on behalf of the NTMWD, Member Cities, and Customers. TWSC has again agreed to co-brand with Water IQ on Campaign components.

The Campaign components include:

- Media: radio reads, print ads
- Public Relations: press events, press releases
- Social Media: Web site, Twitter, and Facebook
- Outreach: collaterals displayed at point of sale locations

It is anticipated that funding of the Campaign will continue over a multi-year partnership.
SUMMARY

TWSC is implementing the Campaign for another year and is seeking support of businesses, trade associations, cities, water suppliers, and elected officials to promote water conservation. TWSC has requested that NTMWD and other water suppliers partner and provide funding of the Campaign.

FUNDING

Funding in the not-to-exceed amount of $100,000 on behalf of NTMWD, Member Cities, and Customers is available in the FY14 Public Relations Budget (Account No. 101-5311-53200 - Memberships and Subscriptions).

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that NTMWD continue to partner with the Texas Water Smart Coalition by funding the Texas Water Smart Coalition Awareness Campaign in a not-to-exceed amount of $100,000 on behalf of the NTMWD, Member Cities, and Customers. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4127

NTMWD ADMINISTRATION BUILDING
STRUCTURAL REPAIRS, BUILDING RENOVATIONS, AND BUILDING ADDITIONS
PROJECT NO. 301

ADDITIONAL ENGINEERING SERVICES

The purpose of this administrative memorandum is to request the Board of Directors authorize: 1) a change in the scope of services for the NTMWD administration building additions to include design and construction of a standalone building west of the existing administration building; and, 2) an increase in the scope and fee for Huitt-Zollars, Inc., (Huitt-Zollars) for the design of the standalone building in addition to the work required for renovation of the existing administration building. The additional engineering will be in the not-to-exceed amount of $45,125 for Project No. 301, NTMWD Administration Building Structural Repairs, Building Renovations, and Building Additions, and would result in a revised total not-to-exceed engineering services fee of $588,390.

REVIEW

The Board previously authorized an engineering services agreement with Huitt-Zollars for the administration building additions. The approach that was recommended to the Board included construction of a three-story building attached to the existing administration building, renovation of the south wing of the existing administration building, and installation of a cut-off wall on the perimeter of the existing building that would result in stabilization of the subgrade below the existing building. In December 2013, the Policy Committee met to discuss the design concept, including an alternate approach to construct a standalone building in lieu of the expansion being attached to the existing building. The NTMWD staff has reviewed the two concepts, and based on the comments during the December 2013 Policy Committee meeting and Board meeting, recommends design and construction of a new three-story standalone building west of the existing administration building in addition to the renovation of the south wing of the existing administration building.

PROPOSED ADDITIONAL SERVICES

Based on the change to the design concept, NTMWD staff requested Huitt-Zollars review the change in scope and submit a revised fee. Huitt-Zollars has submitted an increase in fee of $45,125, basically consisting of three items. The additional fee is based on construction of a new three-story standalone building addition separate from the existing building, in the available area west of the existing building as shown in the attached drawing. The additional cost for design of the three-story standalone building is reviewed in Item No. 1 below.

The recommendation will also result in a change in the design concept of the rehabilitation of the south wing of the existing building. These additional building renovations are discussed in Item No. 2 below.
By construction of a standalone building, the root barrier required around the perimeter of the existing building will need to be extended in the area that would have been occupied by the building expansion in the previous recommendation presented to the Board. This extension is described in Item No. 3 below.

**Item No. 1 – Additional New Administration Building Design**

$27,610

The original engineering scope of services included the design of the new administration building as an attached addition to the existing administration building south wing. NTMWD staff requested Huitz-Zollars revise the original scope of services to include design of the new administration building as a detached three-story free-standing structure.

The boardroom will be constructed with the new building addition. Based on previous authorization, NTMWD staff had directed Huitz-Zollars to proceed with design details in the existing administration building renovation and site work associated with the concept that included the building expansion attached to the existing building.

Based on the recommended design approach, Huitz-Zollars has requested additional design services in the total amount of $27,610 for the standalone building and revised site work associated with the new building addition. The proposed cost has been reviewed and determined to be fair and reasonable by NTMWD staff.

**Item No. 2 – Additional Building Renovations**

$17,110

NTMWD staff requested Huitz-Zollars revise the original scope of services to include interior renovation of the existing executive office area and boardroom. The additional scope items include:

- Relocation of the existing executive offices and boardroom to the new administration building.

- Renovation of the current boardroom as a new training room.

- Renovation of the current executive offices area as a new break room and restroom facilities. The break room would be available for NTMWD personnel, as well as those attending training sessions, and in conjunction with the restrooms would allow this area of the building to be isolated from the office area and ongoing NTMWD operations.

Huitz-Zollars has requested additional design services in the total amount of $17,110 for the additional scope items. The proposed cost has been reviewed and determined to be fair and reasonable by NTMWD staff.
Item No. 3 – Additional Root Barrier Wall and Cap

The construction contract approved by the Board at the December 2013 Board meeting includes the installation of two sections of concrete root barrier below grade along the north and south perimeter of the existing administration building south wing. Based on the current recommendation to construct a standalone building addition west of the existing administration building, additional root barrier must be constructed in the area outside the current executive offices.

A total additional 160 linear feet of root barrier is required. NTMWD staff requested Huitz-Zollars design the additional root barrier layout and request an additional cost from the contractor for the additional work. Huitz-Zollars has requested additional services in the amount of $405 for the additional root barrier design. The proposed additional engineering cost has been reviewed and determined to be fair and reasonable by NTMWD staff. The additional cost for the additional 160 linear feet of root barrier is described in Administrative Memorandum No. 4128 in this month’s Board packet.

The additional not-to-exceed engineering fee for these additional engineering services is $45,125. There are no changes to special services.

SUMMARY OF ADDITIONAL ENGINEERING COSTS

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Additional New Administration Building Design</td>
<td>$27,610</td>
</tr>
<tr>
<td>2</td>
<td>Additional Building Renovations</td>
<td>17,110</td>
</tr>
<tr>
<td>3</td>
<td>Additional Root Barrier Wall and Cap</td>
<td>405</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$45,125</td>
</tr>
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</table>

SUMMARY OF ENGINEERING SERVICES AGREEMENT (ESA)

<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original ESA (Ad. Memo. No. 4019)</td>
<td>511,765</td>
<td>31,500</td>
<td>$543,265</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>45,125</td>
<td>0</td>
<td>45,125</td>
</tr>
<tr>
<td>Revised Total</td>
<td></td>
<td></td>
<td>$588,390</td>
</tr>
</tbody>
</table>

NTMWD staff has reviewed the fee proposed by Huitz-Zollars for the additional services and believes it to be fair and reasonable.

FUNDING

Additional funding in the amount of $45,125 for this project is to be made 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: 1) a change in the scope of services for the NTMWD administration building additions to include design and construction of a standalone building west of the existing administration building; and, 2) an increase to the engineering services agreement with Huitt-Zollars, Inc., for Project No. 301, NTMWD Administration Building Structural Repairs, Building Renovations, and Building Additions in the not-to-exceed amount of $45,125, for a revised total engineering services fee of $588,390. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4128

NTMWD ADMINISTRATION BUILDING
STRUCTURAL IMPROVEMENTS, TASK NO. 1
PROJECT NO. 301

CHANGE ORDER NO. 1

This administrative memorandum is for the Board of Directors consideration of:
1) Change Order No. 1 for an increase of $20,634, resulting in a revised contract amount of $67,634; and, 2) a 21-day contract time extension, resulting in a revised final completion date of April 27, 2014, for the NTMWD Administration Building Structural Improvements, Task No. 1, Project No. 301.

REVIEW

The following table summarizes Board actions to date for the NTMWD Administration Building Structural Improvements, Task No. 1, Project No. 301.

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>January 2013</td>
<td>3929</td>
<td>Additional Engineering Services with Huitt-Zollars.</td>
<td>$44,450</td>
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<tr>
<td>July 2013</td>
<td>4019</td>
<td>Engineering Services Agreement with Huitt-Zollars.</td>
<td>$543,265</td>
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<tr>
<td>December 2013</td>
<td>4090-1</td>
<td>Award of Contract to Mart, Inc., for Task No. 1 to stabilize subgrade around administration building south wing.</td>
<td>$47,000</td>
</tr>
</tbody>
</table>

PROPOSED CHANGE ORDER NO. 1

Change Order No. 1 consists of one item for an increase in the amount of $20,634 resulting in a revised contract amount of $67,634 and a 21-day contract time extension, resulting in a revised final completion date of April 27, 2014, for the NTMWD Administration Building Structural Improvements, Task No. 1, Project No. 301. The proposed cost and contract extension have been reviewed by the NTMWD staff and Huitt-Zollars, Inc., and determined to be fair and reasonable.

*Item No. 1 – Additional Concrete Root Barrier Wall and Cap*  
21 Calendar Days  
$20,634

The contract documents include the installation of two sections of concrete root barrier below grade along the north and south perimeter of the existing administration building south wing. Provided the Board approves the overall approach for design of a standalone building as described in Administrative Memorandum No. 4127 in this Board
packet, additional root barrier must be installed outside the existing executive offices. A total of 160 linear feet is required. NTMWD staff requested Huitz-Zollars to design the additional root barrier layout and request a cost from the contractor for the additional work. The contractor has submitted a proposal to install the additional root barrier for the total amount of $20,634 and 21 additional calendar days.

**SUMMARY OF CHANGE ORDER NO. 1**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Cost</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Additional Concrete Root Barrier Wall and Cap</td>
<td>$20,634</td>
<td>21</td>
<td>21</td>
</tr>
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</table>

**SUMMARY OF CHANGES TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Substantial Completion Date</th>
<th>Final Completion Date</th>
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<tbody>
<tr>
<td>Original Contract</td>
<td>$47,000</td>
<td>March 7, 2014</td>
<td>April 6, 2014</td>
</tr>
<tr>
<td>Proposed C.O. No. 1</td>
<td>20,634</td>
<td>21 Calendar days</td>
<td>21 Calendar days</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$67,634</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FUNDING**

Additional funding in the amount of $20,634 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 Huitz-Zollars, Inc., that the Board of Directors approve: 1) Change Order No. 1 for an increase of $20,634 resulting in a revised contract amount of $67,634; and, 2) a 21-day contract time extension, resulting in a revised final completion date of April 27, 2014, for the NTMWD Administration Building Structural Improvements, Task No. 1, Project No. 301. This will be an item on the regular agenda of the February 2014 Board meeting.
This administrative memorandum requests the Board of Directors amend the NTMWD’s Water Conservation and Drought Contingency/Water Emergency Response Plans, March 2008, and amend District Policy No. 24, Water Conservation and Drought Contingency/Water Emergency Response Plans. These Plans were developed to ensure that NTMWD was protecting our limited water resources.

Since the 1950s, the increasing population and economic development of North Central Texas have led to growing demands for water supplies. Local and less expensive sources of water supply are largely developed. Additional supplies to meet higher demands will be expensive and difficult to secure. Therefore, it is important that efficient use of our existing water supplies is implemented to extend the use for as long as possible. Extending our current supplies will delay the need for new supplies, minimize any environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

The Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of water conservation and drought contingency plans for wholesale water suppliers. The North Texas Municipal Water District (NTMWD) has developed a Water Conservation Plan, February 2014, and a Water Resource and Emergency Management Plan, February 2014, (the Plans) pursuant to TCEQ guidelines and requirements. TCEQ requires that these plans be updated every five years. The updated plans are required to be submitted to TCEQ by May 2014.

The titles of the plans have been renamed to NTMWD’s Water Conservation Plan, February 2014, and NTMWD’s Water Resource and Emergency Management Plan, February 2014. The wording, “Drought Contingency/Water Emergency Response” has been removed as implementation of the Water Resource and Emergency Management Plan, February 2014, can be initiated for reasons other than drought conditions; for example, the loss of a water supply source due to an invasive species, a zebra mussel infestation.
The objectives of the Water Conservation Plan, February 2014, are to:

- Reduce water consumption from the levels that would prevail without conservation efforts
- Reduce the loss and waste of water
- Improve efficiency in the use of water
- Encourage efficient outdoor water use
- Document the level of recycling and reuse in the water supply
- Extend the life of current water supplies by reducing the rate of growth in demand

The objectives of the Water Resource and Emergency Management Plan, February 2014, are to:

- Conserve the available water supply in times of drought, water supply shortage, and emergency
- Maintain supplies for domestic water use, sanitation, and fire protection
- Protect and preserve public health, welfare, and safety
- Minimize the adverse impacts of water supply shortages
- Minimize the adverse impacts of emergency water supply conditions

REVIEW

The NTMWD’s Water Conservation and Drought Contingency/Water Emergency Response Plans were amended through Administrative Memorandum No. 3143 with Board concurrence in March 2008. On April 19, 2011, NTMWD initiated Stage I of the Plan; on August 19, 2011, initiated Stage 2 of the Plan; and, on June 1, 2013, initiated Stage 3 of the Plan. NTMWD has continued ongoing communication efforts with representatives from the NTMWD Member Cities and has received requests and agrees that minor amendments are needed to the Plans to enhance the strategies available to reduce water consumption during periods of non-drought, drought, and water emergencies.

Through the implementation of the drought contingency plans, it was recognized that many of the drought contingency plan strategies could actually strengthen and prove more effective if implemented in the conservation plans on an ongoing daily basis. It was also recognized that water conservation awareness, education, information, and guidance is paramount to the consumer utilizing their water supply wisely and efficiently. Model Water Conservation and Water Resource and Emergency Management Plans for Member Cities and Customers were developed at the request of the Member Cities to assist in a regional approach to obtain consistency for water conservation and drought contingency/water emergency response measures.

While it is the goal of the NTMWD to achieve consistent strategies within the region served, NTMWD collaborated with Dallas Water Utilities, Tarrant Regional Water District, Upper Trinity Regional Water District, the Trinity River Authority and the cities of
Arlington, Fort Worth, and Mansfield to implement common drought response measures throughout the North Texas metroplex. The regional area water providers worked in partnership to achieve similar water management strategies to ease confusion for consumers.

The key Water Resource and Emergency Management Plan, February 2014, amendments include:

- Removal of voluntary Stage 1
- Reduce from 4 to 3 stages
- Amend percentage of water use reduction goals for each stage and amend the restriction to landscape watering for each stage
  - Stage 1: If needed, no more than twice per week landscape watering and a 5% water use reduction goal
  - Stage 2: If needed, no more than once per week landscape watering and a 10% water use reduction goal
  - Stage 3: No outdoor watering permitted and a 33% of water use reduction goal, or to be determined as required
  - Water use reduction goals for each stage are calculated by multiplying the prior fiscal year consumption (as adjusted by population increases based on the 2010 Census data and NCTCOG population data) by the appropriate reduction percentage amount for each stage. This calculation was adopted by the Board in December 2012 pursuant to Consent Agenda Item No. 12-12-02.
  - The business sector most likely will not be affected until the initiation of Stage 3. Stage 3 prohibits the use of potable water for the irrigation of new landscaping, prohibits permitting of new pools, landscape watering of parks, golf courses, and athletic fields with potable water. Also, only commercial car wash facilities utilizing a recycle system are permitted to operate.

The key NTMWD Water Conservation Plan, February 2014, amendments include:

- If needed, no more than twice per week watering April 1 – October 31
- If needed, no more than once per week watering November 1 – March 31
- Prohibit overseeding, sodding, sprigging, broadcasting, or plugging with cool season grasses or watering cool season grasses, except for golf courses and athletic fields

NTMWD is currently implementing the NTMWD Drought Contingency/Water Emergency Response Plans, March 2008. Therefore, the following text will be included in the NTMWD Water Resource and Emergency Management Plan, February 2014, for transition to the amended Plans when appropriate.
“This plan will replace the NTMWD Drought Contingency and Water Emergency Response Plan, March 2008. The March 2008 plan shall continue to apply until such time that the drought contingency or water emergency response stage currently in effect under the March 2008 plan terminates and a less restrictive stage is applicable. At such time, the February 2014 plan shall take effect, replacing the March 2008 plan, and the appropriate water resource management stage as provided in February 2014 plan shall be initiated.”

In conformance with the TCEQ rules, NTMWD scheduled a public comment meeting to receive public input on the proposed amendments to the Plans. The public comment meeting notice was posted on the NTMWD website, in the McKinney Courier-Gazette, and in accordance with open public meetings (Secretary of State, Collin County, and NTMWD offices) and was held February 19, 2014. Comments received from the public meeting have been reviewed and included in the amended Plans if warranted.

SUMMARY

As required by the TCEQ, NTMWD is required to update plans every five years, and as the NTMWD Member Cities and Customers update their plans, NTMWD suggests that the Model Water Conservation and Water Resource and Emergency Management Plans for NTMWD Member Cities and Customers be utilized to achieve consistency throughout the NTMWD service area. In coordination with amending the NTMWD Water Conservation and Drought Contingency/Water Emergency Response Plan, March 2008, amendments to District Policy No. 24 are required.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors: 1) amend and rename the NTMWD’s Water Conservation and Drought Contingency/Water Emergency Response Plans, March 2008; and, 2) amend District Policy No. 24, Water Conservation and Drought Contingency/Water Emergency Response Plans. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 1997

DISTRICT POLICY NO. 24
AMENDED AUGUST 1999
AMENDED MARCH 2000
AMENDED AUGUST 2004
AMENDED APRIL 2006
AMENDED MARCH 2008
AMENDED FEBRUARY 2014

WATER CONSERVATION AND WATER RESOURCE
AND EMERGENCY MANAGEMENT PLANS

SECTION I. INTRODUCTION

Substantial amendments have been made to the March 2008 version of District Policy No. 24. The amendments result in an essentially rewritten District Policy No. 24.

Since the 1950s, the increasing population and economic development of North Central Texas have led to growing demands for water supplies. Local and less expensive sources of water supply are largely developed. Additional supplies to meet higher demands will be expensive and difficult to secure. Therefore, it is important that efficient use of our existing water supplies is implemented to extend their use for as long as possible. Extending our current supplies will delay the need for new supplies, minimize any environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of water conservation and drought contingency plans for wholesale water suppliers. The North Texas Municipal Water District (NTMWD) has developed a Water Conservation and a Water Resource and Emergency Management Plan, February 2014, (the Plans) pursuant to TCEQ guidelines and requirements.

NTMWD recognizes that in order to achieve its goals of maximizing water conservation and efficiency, it is necessary to develop and implement a water conservation plan that goes beyond basic compliance with TCEQ guidelines and requirements. These Plans reflect NTMWD’s commitment to enhanced water conservation and efficiency strategies, particularly those best management practices established by the Water Conservation Implementation Task Force, which were incorporated, where practicable, in the development of the water conservation measures. The Water Conservation Implementation Task Force developed the Texas Water Development Board Report 362 Water Conservation Best Management Practices Guide in partial fulfillment of the Texas Legislature’s charge to the TCEQ and Texas Water Development Board to develop recommendations for optimum levels of water use efficiency and conservation in the State.
NTMWD has, where practicable, implemented those best management practices that are appropriate for a wholesale water supplier of its type, reflecting the intent of the best management practices to provide flexibility to wholesalers in implementing those practices that are appropriate for their individual circumstances.

As a wholesale supplier of water to customers, NTMWD does not have any direct control over the end user of water, nor does it have the authority to create ordinances or enforce the measures laid out in these Plans for end users. In order to work within the confines of its role as a wholesaler, NTMWD has developed Model Water Conservation Plans to be adopted by Member Cities and Customers, who then have the ability to enforce those measures through ordinances or regulations on end users.

NTMWD understands that achieving the highest practicable levels of water conservation and efficiency requires that it look beyond the TCEQ requirement to update its plan every five years. To that end, the NTMWD will continually reassess ways in which to improve upon its water conservation and efficiency, and is committed to updating these Plans whenever new opportunities to improve upon water conservation and efficiency necessitate edits and revisions hereto.

SECTION II. OBJECTIVE

The objectives of the Water Conservation Plan, February 2014, are to:

- Reduce water consumption from the levels that would prevail without conservation efforts
- Reduce the loss and waste of water
- Improve efficiency in the use of water
- Encourage efficient outdoor water use
- Document the level of recycling and reuse in the water supply
- Extend the life of current water supplies by reducing the rate of growth in demand

The objectives of the Water Resource and Emergency Management Plan, February 2014, are to:

- Conserve the available water supply in times of drought, water supply shortage, and emergency
- Maintain supplies for domestic water use, sanitation, and fire protection
- Protect and preserve public health, welfare, and safety
- Minimize the adverse impacts of water supply shortages
- Minimize the adverse impacts of emergency water supply conditions
SECTION III. REVIEW AND AMENDMENT

Any reviews, updates, and amendments to the Plans will be made in accordance with the TCEQ requirements or whenever new opportunities to improve upon water conservation and efficiency necessitate edits and revisions hereto. The NTMWD will review the Plans no less than every five years or as required by the TCEQ.

SECTION IV. PUBLIC INVOLVEMENT

A. Any amendments to the Plans will be communicated to all NTMWD Member Cities and Customers. As a wholesale provider, NTMWD will continue to assist its Member Cities and Customers in the development of water conservation and water resource and emergency management programs. NTMWD has developed a Model Water Conservation Plan for NTMWD Member Cities and Customers and a Model Water Resource and Emergency Management Plan for NTMWD Member Cities and Customers that its Member Cities and Customers can use to develop their own water conservation and water resource and emergency management plans.

B. As part of the review and amendment process, the NTMWD will provide opportunity for the public to comment on the proposed amended Plans by providing a draft copy for review at the NTMWD administrative offices. A public comment meeting and notice of such meeting will be held according to TCEQ requirements. Newspaper notices will be published regarding the time and location of such public comment meeting.

C. Upon adoption, a copy of the Plans will be made available for NTMWD Member Cities and Customers. The Plans will also be made available on the NTMWD website.

D. The NTMWD water service area is located within the Region C and Region D Water Planning Groups, which upon adoption, will be provided a copy of the Plans.

SECTION V. IMPLEMENTATION

The NTMWD Water Conservation Plan, February 2014, is the day-to-day, ongoing plan that will remain in effect until the NTMWD Water Resource and Emergency Management Plan, February 2014, is implemented. The Executive Director/General Manager of the NTMWD is authorized to implement and enforce the Plans. Notification of implementation of the Plans will be made to the Member Cities and Customers. The key NTMWD Water Conservation Plan, February 2014, amendments include:

- If needed, no more than twice per week watering April 1 – October 31
- If needed, no more than once per week watering November 1 – March 31
• Prohibit overseeding, sodding, sprigging, broadcasting or plugging with cool season grasses or watering cool season grasses, except for golf courses and athletic fields.

As part of the Model Conservation Plan, NTMWD requires its Member Cities and Customers to provide annual water conservation reports. NTMWD will review these reports and compile the information as part of its own annual conservation report, which will be used to manage the effectiveness of NTMWD's water conservation program. The results will be reported to the NTMWD Water Committee of the NTMWD Board and the Board of Directors.

NTMWD wholesale water supply contracts entered into, renewed, or extended after adoption of the NTMWD Water Conservation and Water Resource and Emergency Management Plans, February 2014, will include a provision that in case of a shortage of water resulting from drought, loss of supply, or water emergency, NTMWD's water supplies shall be distributed in accordance with the provisions of Texas Water Code Section 11.039. Included in the NTMWD Customer contracts is also a water conservation clause that states:

Customer agrees to adopt, implement, and enforce any and all ordinances and policies related to water conservation and drought management as required by the Texas Water Code, rules of the TCEQ and/or as may be adopted by the Board of Directors of NTMWD. NTMWD's obligations pursuant to this Contract shall be subject to Customer preparing and implementing a water conservation plan or water conservation measures, as well as implementing any water conservation plans and drought contingency plans adopted by NTMWD and required or approved by the TCEQ, the Board, or any other federal, state, or local regulatory authority with power to require or approve water conservation and drought contingency plans.

SECTION IV. ADOPTION

THIS POLICY PASSED AND APPROVED, AS AMENDED, BY THE NORTH TEXAS MUNICIPAL WATER DISTRICT BOARD OF DIRECTORS IN A REGULAR MEETING ON THE 27TH DAY OF FEBRUARY 2014.

JOE JOPLIN, Secretary

BILL LOFLAND, President

(Seal)
The purpose of this administrative memorandum is to request that the Board of Directors authorize funding in the not-to-exceed amount of $1,000,000 (funding of $500,000 for Freese and Nichols, Inc., (FNI) and funding of $500,000 for Lloyd, Gosselink, Rochelle & Townsend, PC, (LGRT)) for Lower Bois d'Arc Creek Reservoir Phase IIIB Engineering and Legal Assistance (LBCR Phase IIIB). This assistance will include preparation and participation in negotiations with protestants, preparations for discovery and contested case hearing for the TCEQ Water Rights Permit, and providing assistance in reviewing the draft United States Army Corps of Engineers (USACE) Clean Water Act Section 404 Environmental Impact Statement (EIS) and any assistance that might be required by the EIS contractor during preparation of the Final EIS. To the extent that any funding remains and a contested hearing is necessary, the assistance will also include actual participation in the contested case hearing for Lower Bois d'Arc Creek Reservoir (LBCR); however, it is expected that additional funding will be required at a later date should a contested case hearing prove necessary.

BACKGROUND

PHASE I - A fatal flaw analysis of constructing the LBCR was completed as part of Phase I. The Phase I fatal flaw analysis concluded there were no major flaws that would obstruct building the LBCR. The Phase I study identified a site that would yield 123,000 AF/YR (111 MGD) of water supply to NTMWD. Additional engineering services were added to Phase I to perform a tandem reservoir assessment whereby an upper reservoir site would be developed in addition to the lower site to provide flood protection to the City of Bonham and increased water supply. The study concluded it was not cost-effective to build a tandem reservoir system for either flood reduction or for additional water supply. Additionally, a study titled, "The Economic, Fiscal, and Developmental Impacts of the Proposed Lower Bois d'Arc Creek Reservoir Project" was completed by the Institute of Applied Economics, University of North Texas.

PHASE II - Under this Phase, the water rights application to TCEQ and the Clean Water Act Section 404 (Section 404) application to the USACE were completed and submitted to the respective agencies. The TCEQ Water Rights application was filed in December 2006, and the Section 404 application was filed in June 2008. Additionally, an environmental report supporting the Section 404 application was submitted to the USACE on July 1, 2008.
Administrative Memorandum No. 3347 listed above stated, “Phase IIIIIB will include engineering assistance for preparation and participation in contested case hearings, and engineering assistance to address additional Requests For Information from the USACE and TCEQ. Some fees for these activities are included in Phase IIIIA, but additional fees may be needed due to the uncertainty of these activities.” Administrative Memorandum No. 3540, also listed above, stated, “It is recognized that the amount of engineering work and studies necessary to receive the Section 404 and water right permits will not be known for certain until the permits are actually issued.” Additional
fees to prepare and participate in contested case hearings and to perform additional engineering studies to address additional Requests For Information from the USACE and TCEQ over and above the amount requested in this administrative memorandum may be requested in the future as Phase IIIB.” Funding authorized for LBCR Phase IIIA will soon be exhausted and additional funding is now needed for LBCR Phase IIIB.

Based on a current assessment of the permitting process and recognizing all RFIs that have been received to date as well as any verbal comments received from USACE and TCEQ, FNI and LGRT are each requesting $500,000. This funding is to provide engineering and legal services to assist NTMWD in negotiating with protestors and to begin preparations for discovery and contested case hearing for the Water Rights Permit, and to provide assistance in reviewing the draft Section 404 EIS and any assistance that may be required by the USACE’s EIS contractor in preparation of the Final EIS. Once again, the amount of work necessary to complete the required tasks to obtain both the TCEQ Water Rights Permit and the Section 404 Permit are unknown, and additional funding will be requested in the future if the current funding request is exhausted.

### SUMMARY OF PHASE IIIB ENGINEERING AND LEGAL ASSISTANCE

| Authorization for Engineering Assistance, FNI | $ 500,000 |
| Authorization for Legal Assistance, LGRT      | $ 500,000 |
| Total Authorization for Phase IIIB            | $1,000,000 |

### FUNDING

The NTMWD staff believes the requests for funding for engineering and legal services are fair and reasonable for the amount of work to be performed. Funding in the amount of $1,000,000 ($500,000 for Engineering and $500,000 for Legal) is available in the Regional Water System Capital Improvement Fund for the requested authorization.

### RECOMMENDATION

It is the recommendation of the Executive Director and the NTMWD staff that the Board of Directors approve funding for Freese and Nichols, Inc., and Lloyd, Gosselink, Rochelle & Townsend, PC, to perform engineering and legal services for Lower Bois d’Arc Creek Reservoir Phase IIIB, Project No. 351, in the not-to-exceed total amount of $1,000,000 (funding of $500,000 for Freese and Nichols, Inc., and funding of $500,000 for Lloyd, Gosselink, Rochelle & Townsend, PC). This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4131

REGIONAL WATER SYSTEM
121 SITE FACILITY WATER TRANSMISSION PIPELINE
RELOCATION AT STATE HIGHWAY 121
PROJECT NO. 335

TABULATION OF BIDS
AND AWARD OF CONTRACT

This administrative memorandum is for the Board of Directors consideration of a tabulation of bids and recommendation to award a construction contract to Vessels Construction, A Division of Vescor, Inc., (Vessels) in the contract amount of $90,878 for the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335.

REVIEW

The Texas Department of Transportation (TxDOT) is proposing to widen State Highway (SH) 121 from SH 5 to 1.65 miles west of Farm-to-Market (FM) 455 in Melissa, Texas. NTMWD owns and operates a 12-inch water transmission pipeline in this area, which was installed in 2003. There is a section of the pipeline that lies in the proposed TxDOT expansion right-of-way (R-O-W).

The TxDOT design for the roadway improvement indicates that the existing NTMWD 12-inch waterline will be within TxDOT’s proposed R-O-W for approximately 600 linear feet at SH 121 and the Dallas Area Rapid Transit (DART) facility railroad easement. This will require NTMWD to relocate this section of 12-inch waterline, which includes extending a steel casing within TxDOT R-O-W and relocating the line into a new easement parallel to SH 121.

In July 2013, the Board approved Administrative Memorandum No. 4022 authorizing an engineering services agreement with CP&Y, Inc., for design and construction services associated with Project No. 335. Since NTMWD is currently within a private easement, TxDOT will reimburse NTMWD for relocation of the pipeline including engineering, property, construction, and inspection services costs.
TABULATION OF CONSTRUCTION BIDS

Sealed bids were received at 10:00 a.m. on January 23, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Bid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessels Construction</td>
<td>$90,878</td>
</tr>
<tr>
<td>Barbosa A. Construction, Inc.</td>
<td>$112,105</td>
</tr>
<tr>
<td>Dowager Utility Construction, Ltd.</td>
<td>$122,000</td>
</tr>
<tr>
<td>Canary Construction, Inc.</td>
<td>$127,850</td>
</tr>
<tr>
<td>Interstate Pipeline Utility Const., LLC</td>
<td>$135,317</td>
</tr>
<tr>
<td>Atkins Bros. Equipment Co., Inc.</td>
<td>$171,500</td>
</tr>
</tbody>
</table>

The engineer's opinion of probable construction cost was $112,000.

The lowest responsive bid was received from Vessels Construction in the total amount of $90,878. Vessels' references were contacted by CP&Y. Vessels has constructed water pipeline and paving projects for Greater Texoma Utility Authority, TxDOT, and Fannin County as well as the cities of Sherman, Pottsboro, and Sanger. It is the opinion of the NTMWD staff and CP&Y that Vessels has the ability to complete the project according to the construction documents.

FUNDING

Funding in the amount of $90,878 for this project is to be made available in the Regional Water System Capital Improvement Fund. There will be reimbursement from TxDOT for engineering, property, construction, and inspection services costs as provided by TxDOT reimbursement policy in a total estimated amount of $194,578.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and CP&Y Inc., that the Board of Directors authorize award of a construction contract to Vessels Construction, A Division of Vescor, Inc., for 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335, in the amount of $90,878. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEbruary 2014

ADMINISTRATIVE MEMORANDUM NO. 4132

REGIONAL WATER SYSTEM
WATER TREATMENT PLANT III
FILTER UNDERDRAIN IMPROVEMENTS AND
CONVERSION TO BIOLOGICALLY ACTIVE FILTERS
PROJECT NO. 277

CHANGE ORDER NO. 4

This administrative memorandum is for the Board of Directors consideration of Change Order No. 4 for Project No. 277, Water Treatment Plant (WTP) III Filter Underdrain Improvements and Conversion to Biologically Active Filters, for a net increase of $135,947.24, resulting in a revised contract amount of $6,815,140.95.

REVIEW

In January 2012, the Board approved Administrative Memorandum No. 3752, which authorized Carollo Engineers (Carollo) to prepare plans and specifications for this project. This project is the third phase of a three-phased program to repair and replace underdrain blocks in all 40 filters at WTP III. The original scope of this project included improvements to the remaining 20 filters at WTP III.

NTMWD staff later added WTP III Filter No. 26 and WTP II Filter No. 21 improvements to the project scope. WTP III Filter No. 26 and WTP II Filter No. 21 both have structural issues that were evaluated and approved for repair through previous change orders in Project No. 226. However, due to shutdown conflicts with ongoing WTP construction projects, the repairs were unable to be completed in these two filters. Therefore, the revised Project No. 277 scope will repair and replace the underdrain blocks in Filter Nos. 1-10, 26, and 31-40 at WTP III, and Filter No. 21 at WTP II.

The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concludes 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>January 2012</td>
<td>3752</td>
<td>ESA with Carollo</td>
<td>$279,100.00</td>
</tr>
<tr>
<td>December 2012</td>
<td>3899</td>
<td>Construction contract award to Archer Western Construction, LLC</td>
<td>$6,452,461.00</td>
</tr>
<tr>
<td>May 2013</td>
<td>3995</td>
<td>C.O. No. 1 for additional concrete surfacing of filter flumes in 21 filters</td>
<td>$104,527.71</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>December 2013</td>
<td>4103</td>
<td>C.O. No. 2 for repair of contraction joints in nine filters and repair deteriorated concrete around the troughs in the gullet walls</td>
<td>$53,132.85</td>
</tr>
<tr>
<td>January 2014</td>
<td>4117</td>
<td>C.O. No. 3 for excess filter media disposal, repair of undermined area under Filter No. 21, and removal and replacement of two wash water valves on Filter Nos. 1 and 3</td>
<td>$69,072.15</td>
</tr>
</tbody>
</table>

**CHANGE ORDER NO. 4**

Change Order No. 4 consists of one item on the referenced project for a net increase in contract price of $135,947.24. The NTMWD Engineering staff and Carollo reviewed this item and recommend it as necessary and reasonable.

*Item No. 1 – Provide and Install Four Wash Water Valves with Actuators  $135,947.24*

During removal of the filter media in Filter Nos. 1 and 3, the contractor found that the filter would fill with water unexpectedly due to the backwashing of other filters. It was determined that the source of the water was due to a leaking valve in each of these filters. NTMWD Technical Services personnel adjusted the wash water valves; however, this did not stop the water from entering the filter. The contractor removed the valves and installed blind flanges at the request of NTMWD in order to stop the leakage and allow work to continue inside the filters until the valves were repaired and ready for installation. NTMWD’s Technical Services personnel inspected both valves and determined that the valves were not worth repairing. Two 30-inch valves previously reconditioned by NTMWD Technical Services personnel were provided to the contractor for use at these two filters. The contractor installed these repaired valves in place of the leaking valves for a total cost of $28,298.61, which was approved by Change Order No. 3.

Testing has been performed on additional filters to determine whether or not the wash water valves leak. Filter Nos. 4, 5, and 7 showed significant leakage through their wash water valves. After adjustments were made to the actuators by an NTMWD mechanic, the wash water valves on Filter Nos. 5 and 7 continue to have excessive leakage and these two valves must be replaced in order to make the planned repairs to the filter underdrains. Two additional valves are proposed to be purchased and will be available in the event additional wash water valves are found to be leaking on other filters. The cost for each 30-inch valve including the labor to remove the existing valve and install the new valve is $33,986.81. The total cost for four valves is $135,947.24.
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>$6,452,461.00</td>
<td>975</td>
<td>1035</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>104,527.71</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>53,132.85</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 3</td>
<td>69,072.15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed C.O. No. 4</td>
<td>135,947.24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$6,815,140.95</td>
<td>1006</td>
<td>1066</td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $135,947.24 for Change Order No. 4 is to be made available in the Regional Water System 2009D Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Carollo Engineers that the Board of Directors approve Change Order No. 4 for the Water Treatment Plant III Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 277, for an increase in the amount of $135,947.24, resulting in a revised contract amount of $6,815,140.95. The final completion date for this project remains January 9, 2016. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4133

UPPER EAST FORK INTERCEPTOR SYSTEM
UPPER ROWLETT AND COTTONWOOD CREEK
PARALLEL FORCE MAIN DESIGN
PROJECT NO. 308

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum is for the Board of Directors consideration of additional engineering services in the amount of $97,785 for Cobb, Fendley & Associates, Inc., (Cobb Fendley) on the Upper Rowlett and Cottonwood Creek Parallel Force Main Design, Project No. 308. This would result in a revised total not-to-exceed engineering services fee of $619,517.

REVIEW

The Upper Rowlett Creek Lift Station, the Upper Cottonwood Creek Lift Station, and the original Upper Rowlett and Cottonwood Creek Force Main were all constructed under the same project in 1986. When both lift stations were constructed, they intercepted pipelines that previously flowed to the Rowlett Creek Regional Wastewater Treatment Plant (RWWTP). Due to the growth in the cities served and the long-term planning for wastewater treatment in the Upper East Fork Basin, the Upper East Fork Interceptor System (UEFIS) was developed in conjunction with the Wilson Creek RWWTP. The original Upper Rowlett and Cottonwood Creek Force Main was installed as a part of the UEFIS to transport flow from the west Plano, Allen, Frisco, and McKinney area to the Wilson Creek RWWTP for treatment.

The Upper East Fork Interceptor System Evaluation Report (UEFIS Report), completed by CH2M HILL in 2010, evaluated capacity and condition issues of the lift stations and pipelines in the UEFIS and recommended priorities for their improvements. In order to provide redundancy in the system and meet future capacity, a parallel force main (to the Upper Rowlett and Cottonwood Creek Force Main, extending from the Upper Rowlett Creek Lift Station to the Allen Junction Structure), is required.

In 2010, as a part of the Chaparral Road widening project, the portion of the original force main from Upper Rowlett Lift Station to Upper Cottonwood Lift Station was paralleled. This project will extend the parallel 48-inch force main from Upper Cottonwood Lift Station to the Allen Junction Structure.

In November 2012, the Board of Directors approved Administrative Memorandum No. 3890 authorizing an engineering services agreement (ESA) with Cobb Fendley in the not-to-exceed amount of $521,732 for the Upper Rowlett and Cottonwood Creek Parallel Force Main, Project No. 308.
SCOPE OF ADDITIONAL SERVICES

Since the start of design, there have been two significant changes in pipeline routing, and a proposed change of approach for surge analysis, resulting in additional funding requests for the following four items:

*Item No. 1 – Additional Engineering Design* $49,500

The original scope of work was based on paralleling the existing force main. Early in the design process it became apparent this route would be problematic at certain properties due to limited easement availability and alignment of the existing force main. After considerable investigation to confirm this condition, NTMWD staff and Cobb Fendley agreed to explore alternate routes and avoid these conflicts.

Several alignments were considered, including one that follows a proposed future route of Chaparral Road. During a meeting with the City of Parker (City) it was determined that the future road alignment was too uncertain to proceed with that option, so a route was recommended that follows the perimeter of a large undeveloped tract. This route impacted the least property owners, and the owner of the large undeveloped tract was favorable to working with NTMWD.

By the time easement documents were developed, and negotiations for easement acquisition initiated, the property owner had entered into negotiations to sell a portion of the large tract to a developer. The proposed pipe routing, although on the perimeter of the property, would be within fenced residential backyards of the planned development. This routing results in potential difficulties associated with future maintenance of the pipeline.

The developer completed the overall development plans for a multi-phase development, including the final road alignment for Chaparral. These plans have been submitted to the City, and the City has agreed to the final road alignment. In a follow-up meeting, the City indicated their preference for NTMWD to locate the force main in the median of the Chaparral Road alignment. Having fewer 90 degree bends on this route and providing greater maintenance accessibility are deemed preferable for NTMWD. It was agreed by NTMWD staff and Cobb Fendley to redeploy efforts to this third pipe route.

Additional engineering design effort was incurred by Cobb Fendley in efforts spent on the evaluation, coordination, and design development efforts for three pipeline routes versus the originally scoped route. The second route had about 90 percent alignment change versus the original, and the third route has over 60 percent alignment change versus the second route. The cost for the additional design services is $49,500.
Additional topographic surveying services were required for the investigation of difficulties with the original route and development of new routes associated with the alternates described in Item No. 1 above. This additional surveying cost $15,000.

**Item No. 3 – Additional Easements $12,000**

The original funding allocated to provide easement surveys, exhibits, and metes and bounds descriptions was spent in developing the second route described in Item No. 1 above. Additional funding allocation of $12,000 is requested for development of easements on the current route.

**Item No. 4 – Surge Analysis $21,285**

An advanced surge analysis was recently conducted on Project No. 334, Indian Creek/Preston Road Force Main. The results indicated the need to further mitigate potential vacuum conditions in that force main that was not recognized using previously established design methodology. Although this Upper Rowlett and Cottonwood Creek Parallel Force Main project is not as long, and does not have the same extent of elevation modulations as the Indian Creek/Preston Road Force Main, it is proposed to also conduct an advanced surge analysis to ensure adequate measures are implemented on the pipeline to control transient events. Such an analysis will consider the impacts of the larger pumps currently being designed for both the Upper Rowlett and Upper Cottonwood Creek Lift Stations and the impact of parallel force mains. The proposal for $21,285 is for a surge analysis to be completed by Flow Science, Inc., as a sub-consultant to Cobb Fendley.

**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 Engineering Design</td>
<td>$49,500</td>
</tr>
<tr>
<td>2</td>
<td>Additional Surveying</td>
<td>15,000</td>
</tr>
<tr>
<td>3</td>
<td>Additional Easements</td>
<td>12,000</td>
</tr>
<tr>
<td>4</td>
<td>Surge Analysis</td>
<td>21,285</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$97,785</strong></td>
</tr>
</tbody>
</table>

**SUMMARY OF ESA**

A summary of the revised engineering services is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Services (Original Contract Amount – Ad. Memo. No. 3890)</td>
<td>$445,392</td>
</tr>
<tr>
<td>Special Services</td>
<td>$76,340</td>
</tr>
<tr>
<td>Proposed Additional Services</td>
<td>$97,785</td>
</tr>
<tr>
<td>Revised Not-to-Exceed ESA</td>
<td>$619,517</td>
</tr>
</tbody>
</table>
NTMWD staff has reviewed the change in scope and the associated fees and recommends them as representative of the effort required. The services would be performed in accordance with the standard ESA.

FUNDING

Additional funding in the amount of $97,785 is available in the Upper East Fork Interceptor System 2009 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize additional engineering services to Cobb, Fendley & Associates, Inc., for professional services associated with design of the Upper Rowlett and Cottonwood Creek Parallel Force Main, Project No. 308, in the not-to-exceed amount of $97,785, resulting in a revised not-to-exceed engineering services fee of $619,517. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4134

UPPER EAST FORK INTERCEPTOR SYSTEM
WILSON CREEK GRAVITY INTERCEPTOR IMPROVEMENTS, PHASE 1
PROJECT NO. 278

CHANGE ORDER NO. 1

This administrative memorandum is for the Board of Directors consideration of: 1) Change Order No. 1 for an increase of $61,124.08 resulting in a revised contract amount of $3,105,029.18; and, 2) an additional 150 calendar days of contract time, resulting in a revised final completion date of November 5, 2014, for the Wilson Creek Gravity Interceptor Improvements, Phase 1, Project No. 278.

REVIEW

The Wilson Creek Gravity Interceptor, completed in 1989, and the Wilson Creek Parallel Force Main, completed in 2011, combine to provide for the projected capacity of the Wilson Creek drainage basin and other areas served by this pipeline system through 2030.

In January 2012, the Board approved Administrative Memorandum No. 3756 authorizing an engineering services agreement (ESA) with DAL-TECH Engineering, Inc., (DAL-TECH) in an amount not to exceed $221,804 for design of the Wilson Creek Gravity Interceptor Improvements, Phase 1. These improvements are intended to provide upgraded linings to the interceptor and the associated manholes in order to improve hydraulic performance and extend the useful life. The improvements are being addressed in two phases; Phase 1 includes the downstream section closest to the interceptor termination at the McKinney Lift Station, and a future Phase 2 will address the upstream section of the interceptor.

In August 2013, the Board approved Administrative Memorandum No. 4033 authorizing award of a construction contract for Phase 1 to Insituform Technologies, LLC, in the contract amount of $3,043,905.10.

CHANGE ORDER NO. 1

Change Order No. 1 consists of one item as follows:

Item No. 1 – Manhole Modifications

$61,124.08
150 Calendar Days

DAL-TECH’s original design scope included inspection of the existing pipe and manholes during the pre-design phase to determine the proper approach for repair and relining. During this inspection, the existing manholes were incorrectly identified as
being of precast riser construction, and repair details provided were specific to this configuration. In preparation for construction activities, the manholes were thoroughly cleaned making it clearer that the manholes are of cast-in-place concrete construction. The cutting and restoration process required to gain working access to these manholes requires a different level of effort than depicted in the contract design. DAL-TECH provided additional details for cutting and restoration of cast in place manholes, but recognizes that the construction type and required effort should have been detected and considered in their design.

During construction cleaning, two of the 14 manholes involved in the project were found to need only coating, and five others were identified as needing new top rings and covers in addition to the specified coating. The seven remaining manholes will require saw cutting of the existing cone and replacement with a flat top cover as part of the work access. These clarifications of work conditions result in the reduction of work related to original Bid Line Item No. 8, and addition of three new line items of work related to the cast-in-place manhole work, as summarized below.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description of Work</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Original Qty</th>
<th>Revised Qty</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Bid Item No. 8</td>
<td>Precast Manhole Improvements (Including stopper, cover, frame, and manhole rehabilitation)</td>
<td>EA</td>
<td>$10,600.00</td>
<td>14</td>
<td>-14</td>
<td>($148,400.00)</td>
</tr>
<tr>
<td>C.O. No. 1 Item No. 1</td>
<td>CIP Manhole Modifications non-insertion manholes 1593, 1597, 1601,1605, and 1611</td>
<td>EA</td>
<td>$13,518.51</td>
<td>-</td>
<td>5</td>
<td>$67,592.55</td>
</tr>
<tr>
<td>C.O. No. 1 Item No. 2</td>
<td>CIP Manhole Modifications CIPP insertion manholes 1595, 1599, 1603, 1607, 1613, 1615, and 1617</td>
<td>EA</td>
<td>$19,018.79</td>
<td>-</td>
<td>7</td>
<td>$133,131.53</td>
</tr>
<tr>
<td>C.O. No. 1 Item No. 3</td>
<td>CIP Manhole Modifications Rehab only (1597A and 1619)</td>
<td>EA</td>
<td>$4,400.00</td>
<td>-</td>
<td>2</td>
<td>$8,800.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$61,124.08</strong></td>
</tr>
</tbody>
</table>

The contractor also requests an additional 150 calendar days of contract time in recognition of the delays to project scheduling incurred during resolution of this issue.

The proposed cost in the amount of $61,124.08 and the additional 150 calendar days of contract time has been reviewed and determined to be fair and reasonable by the NTMWD staff and DAL-TECH for the materials and work involved.
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>$3,043,905.10</td>
<td>210</td>
<td>270</td>
</tr>
<tr>
<td>Proposed C.O. No. 1</td>
<td>61,124.08</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Revised Contract Amounts</td>
<td>3,105,029.18</td>
<td>360</td>
<td>420</td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td>September 6, 2014</td>
<td></td>
<td>November 5, 2014</td>
</tr>
</tbody>
</table>

This change order request is attributed to a design omission by DAL-TECH, as the type of manhole construction and the proper approach to modifications should have reasonably been included in the original design and bid documents. Recognizing the generally accepted cost premium for change work versus similar work in the original bid, DAL-TECH has agreed to participate by providing a $12,224.82 reduction to their engineering services fee, which represents 20% of the net cost increase. The adjustment to the ESA will be presented to the Board in a separate future action.

FUNDING

Additional funding in the amount of $61,124.08 for Change Order No. 1 is to be made available from the Upper East Fork Interceptor System 2012 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and DAL-TECH Engineering, Inc., that the Board of Directors approve: 1) Change Order No. 1 for an increase of $61,124.08, resulting in a revised contract amount of $3,105,029.18; and, 2) an additional 150 calendar days of contract time, resulting in a revised final completion date of November 5, 2014, for the Wilson Creek Gravity Interceptor Improvements, Phase 1, Project No. 278. This will be an item on the regular agenda of the February 2014 Board meeting.
REGIONAL WATER SYSTEM
FY 2014 WATER SUPPLY PLANNING ASSISTANCE

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum is for the Board of Directors consideration for additional engineering services by Freese and Nichols, Inc., (FNI) for Fiscal Year (FY) 2014 Water Supply Planning Assistance in the additional not-to-exceed amount of $150,000. This would result in a revised total not-to-exceed engineering services fee of $350,000.

REVIEW

Long-range water supply planning to determine the most feasible and economical option(s) is a continuing effort, especially when the current water supplies are reduced, the needs of NTMWD evolve and new issues and opportunities arise. The persistent drought conditions and the loss of Lake Texoma water due to the zebra mussel infestation continue to warrant efforts on closely monitoring the lake elevations, climate outlooks, and adjusting the needs and schedules of water supply projects to ensure that NTMWD’s water supply is reliable. FNI has been NTMWD’s consultant on providing the water supply planning assistance, and the continued planning assistance has been playing an important role on providing technical support in the decision-making process.

On September 19, 2013, the Board of Directors approved the FY 2013-14 Annual All System Budget. As part of the budget, $200,000 was allocated for Water Supply Planning Assistance. FNI was authorized $150,000 on October 1, 2013, and an additional $50,000 on January 9, 2014, for a total not-to-exceed amount of $200,000 to continuously assist NTMWD on the water supply planning effort.

The work efforts that have been completed by FNI include:

1. Worked with NTMWD staff to meet with all 13 member cities and five large customers to review the latest Region C water demand projections and updated demand projections for NTMWD water supply planning.

2. Updated projections of raw water supply from the NTMWD water supply system and adjusted the required timing of new raw water supplies.

3. Developed desalination alternatives for using additional Lake Texoma water and conducted a preliminary cost comparison.

4. Assisted NTMWD with updating conservation and water management plans and model conservation and water management plans.

5. Conducted monthly model analysis on Lavon Lake elevation projections. This
work included updating the model with lake level changes and projecting lake elevations assuming different demand and water supply scenarios.

6. Provided weekly updates on water use and conservation graphs, and tracked water use goals for NTMWD Member Cities and Customers.

7. Made presentations at various NTMWD Board meetings and Member City and Customer meetings.

8. Developed plans and prepared technical memoranda on delivery of Dallas water to NTMWD.

9. Provided other as-needed planning assistance on miscellaneous water supply planning issues.

After the water demand and supply projections were updated, the water supply needs and options for the next twenty years were evaluated. Due to the uncertainty of some supply options to meet the projected demands between 2017 and 2020, substantial efforts were spent on evaluating desalination alternatives. The goal of this effort was to determine where NTMWD could use additional water right in Lake Texoma of approximately 100 MGD that previously was planned to be used after 2025 for blending with other sources, due to the high salinity in the water. The preliminary results of the desalination alternatives were presented at the Board of Directors Annual Planning Retreat held on February 1, 2014. Because of the additional efforts, which included the desalination evaluation, the $200,000 authorized budget has been spent faster, and additional funding is required for the anticipated efforts through the end of this fiscal year. The authorized budget amount has been spent as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Demand and Supplies</td>
<td>$37,000</td>
</tr>
<tr>
<td>Water Conservation and Drought Plan Update</td>
<td>24,000</td>
</tr>
<tr>
<td>Lake Level Modeling</td>
<td>21,000</td>
</tr>
<tr>
<td>As-needed Planning Assistance</td>
<td>54,000</td>
</tr>
<tr>
<td>Desalination Analysis</td>
<td>64,000</td>
</tr>
<tr>
<td>Total</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

PROPOSED SCOPE OF ADDITIONAL SERVICES

FNI has provided a proposal for additional funding for Water Supply Planning Assistance during the 2014 Fiscal Year. The scope includes:

1. Continuing to develop the desalination alternatives for using additional Lake Texoma water and update the Water System Capital Improvement Program.

2. Conducting monthly model analysis on Lavon Lake elevation projections.
3. Assisting NTMWD to complete the conservation and water management plan updates.

4. Providing other as-needed planning assistance on miscellaneous water supply planning issues.

The proposed cost to perform these services is a not-to-exceed amount of $150,000. NTMWD staff believes that this proposal is fair and reasonable for the work associated with the above-listed tasks.

FUNDING

Additional funding in the amount of $150,000 for FY14 Water Supply Planning Assistance is to be made available in the FY14 Operating Budget Regional Water System Raw Water Development Account (101-5310-53149).

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 Freese and Nichols, Inc., for Fiscal Year 2014 Water Supply Planning Assistance in the not-to-exceed amount of $150,000 for a revised total engineering services fee of $350,000. This will be an item on the regular agenda of the February 2014 Board meeting.
This administrative memorandum is for the Board of Directors consideration of: 1) Change Order No. 1 for an increase of $26,566 resulting in a revised contract amount of $153,828; and, 2) authorization to make final payment to Dowager Utility Construction, Ltd., (Dowager) in the final contract amount of $153,828 for the Wylie-McKinney 20-Inch Waterline Relocation at Stinson Road, Project No. 310.

REVIEW

Installed in 1956, the Wylie-McKinney 20-inch waterline is a bar-wrapped concrete pipe, which conveys water from High Service Pump Station 1-1. There are delivery points directly from this line for the communities of Parker, Seis Lagos, and Lucas as it runs along FM 1378. The line ties into a 42-inch section of the McKinney Parallel 42-Inch, Phase II, waterline at Estates Parkway (FM 2170) and into a 24-inch section of this same line at Stacy Road (FM 2786).

A portion of this line was exposed at a drainage crossing located on the south side of West Lucas Road, (FM 1378) approximately 800 linear feet (LF) east of Stinson Road. The purpose of this project is to protect the pipe by lowering and encasing it at the drainage crossing.

In December 2012, the Board approved Administrative Memorandum No. 3898, authorizing an engineering services agreement with Winkelmann & Associates, Inc., (Winkelmann) to perform the design of Project No. 310.

In June 2013, the Board approved Administrative Memorandum No. 4006 for the award of construction contract to Dowager in the contract amount of $127,262 for construction of Project No. 310.

CHANGE ORDER NO. 1

Proposed Change Order No. 1 consists of the adjustment to contract quantities. The proposed quantities and subsequent costs have been reviewed and determined to be fair and reasonable by the NTMWD staff and Winkelmann.
Item No. 1 – Adjustment to Contract Quantities

As with any pipeline project, the original bid quantities can change due to changes in actual lengths or other field conditions that are discovered during construction. There was additional linear feet (LF) of pipe to be removed and replaced, and less square yards (SY) of seeding to plant.

The following adjustments to contract quantities were made to the indicated bid items 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 Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Hydraulic Mulch Seeding</td>
<td>SY</td>
<td>$2</td>
<td>1,115</td>
<td>1,088</td>
<td>(27)</td>
<td>($54)</td>
</tr>
<tr>
<td>7</td>
<td>20-inch Bar-Wrapped Concrete Cylinder Pipe</td>
<td>LF</td>
<td>810</td>
<td>96</td>
<td>128</td>
<td>32</td>
<td>25,920</td>
</tr>
<tr>
<td>11</td>
<td>Trench Safety</td>
<td>LF</td>
<td>10</td>
<td>96</td>
<td>128</td>
<td>32</td>
<td>320</td>
</tr>
<tr>
<td>12</td>
<td>Remove Existing 20-inch Reinforced Concrete Pipe</td>
<td>LF</td>
<td>$10</td>
<td>90</td>
<td>128</td>
<td>38</td>
<td>380</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$26,566</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>$127,262</td>
<td>180 days</td>
<td>210 days</td>
</tr>
<tr>
<td>Proposed C.O. 1</td>
<td>26,566</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$153,828</td>
<td>180 days</td>
<td>210 days</td>
</tr>
<tr>
<td>Contract Dates (no changes)</td>
<td></td>
<td>January 28, 2014</td>
<td>February 27, 2014</td>
</tr>
</tbody>
</table>

All major work on the project was completed, and the project was considered substantially complete by January 28, 2014. Additionally, all punchlist items are now complete.

FUNDING

Additional funding in the amount of $26,566 for Change Order No. 1 is to be made available in the Regional Water System Capital Improvement Fund.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Winkelmann & Associates, Inc., that the Board of Directors authorize: 1) Change Order No. 1 for an increase of $26,566, resulting in a revised contract amount of $153,828; and, 2) final payment to Dowager Utility Construction, Ltd., in the final contract amount of $153,828 for the Wylie-McKinney 20-Inch Waterline Relocation at Stinson Road, Project No. 310. This will be an item on the regular agenda of the February 2014 Board meeting.
REGIONAL WATER SYSTEM
FARMERSVILLE PUMP STATION PUMP NO. 2
PROJECT NO. 314

TABULATION OF BIDS AND AWARD OF CONTRACT

This administrative memorandum is for the Board of Directors consideration of a tabulation of bids and recommendation to award a construction contract to Crescent Constructors, Inc., (Crescent) in the contract amount of $143,700 for Farmersville Pump Station Pump No. 2, Project No. 314.

REVIEW

As growth occurs in any part of NTMWD’s water transmission system, pipelines and pump stations are constructed, and pumping arrangements are modified to meet projected demands. In the McKinney/Princeton/Farmersville system, the pumping arrangements have been modified over time. When the system was originally constructed, Princeton and Farmersville were fed from the west through a pump station at the McKinney No. 1 Delivery Point. Through several additions to this subsystem and increased demands in the North System, the method of meeting the demands has been achieved through modification of pumping arrangements. Currently, the delivery points in Princeton can be fed from either the west (McKinney No. 1) or the east (Farmersville). The system pressures, in particular at the high points along the 14-inch line between McKinney No. 1 and Farmersville, are directly tied to the pumping arrangement selected by the Water System Control Room Operator at the McKinney No. 1 Pump Station and the Farmersville Pump Station. There are many times when these pump stations are cycled on and off and when delivery valves are cycled open and closed to meet the demands along this line. The inconsistent nature of the demands at each end of this line leads to varying pressures along the piping system.

In 2010, the Board approved an engineering services agreement (ESA) with Freese and Nichols, Inc., (FNI) to perform the 2008 Water System Study and Capital Improvement Program. During the course of that study, FNI installed pressure recorders at various locations throughout NTMWD’s Water Transmission System. One pressure gauge was installed on the piping system between Farmersville and McKinney. Based on the pressures seen during the course of this study and the recommended pumping regimes for current and future demands, FNI recommended system changes to assure that minimum pressure is maintained in the transmission system between McKinney and Farmersville.

In January 2013, the Board approved Administrative Memorandum No. 3919, authorizing an ESA with The Wallace Group, Inc., (TWG) to perform the design work required to install an additional pump at the Farmersville Pump Station that will assure minimum pressures are maintained in the transmission system piping between
Farmersville and McKinney. The original scope proposed that a 4th pump of the appropriate size at the Farmersville Pump Station will allow continuous pumping from Farmersville to the west that will maintain a minimum pressure along the 14-inch line. During design, it was determined that instead of installing a pump in the No. 4 slot, the pump would be placed in the No. 2 slot. Design was completed, and the project was advertised for bid as Farmersville Pump Station Pump No. 2.

The engineer's opinion of probable construction cost was $155,000. Additional changes upstream and downstream of Farmersville to assure minimum system pressures will also be made as part of other projects that will be presented to the Board for consideration in the future.

**TABULATION OF CONSTRUCTION BIDS**

Sealed bids were received at 10:00 a.m. on January 24, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Bid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crescent Constructors, Inc.</td>
<td>$143,700</td>
</tr>
<tr>
<td>Fryer Construction Co., Inc.</td>
<td>$153,400</td>
</tr>
<tr>
<td>Dake Construction</td>
<td>$163,800</td>
</tr>
<tr>
<td>Archer Western Construction, LLC</td>
<td>$164,900</td>
</tr>
<tr>
<td>Red River Construction Co.</td>
<td>$167,000</td>
</tr>
<tr>
<td>Rama Enterprises, LLC</td>
<td>$171,700</td>
</tr>
<tr>
<td>Gracon Construction, Inc.</td>
<td>$179,500</td>
</tr>
<tr>
<td>Dal-Ee Construction, LTD.</td>
<td>$181,390</td>
</tr>
</tbody>
</table>

The lowest responsive bid was received from Crescent Constructors, Inc., in the total amount of $143,700. Crescent has successfully completed the South System Delivery Point Improvements, Priority No. 1, Project No. 236 and Electrical Improvements at Raw Water Pump Station No. 2, Project No. 201, for the NTMWD. They are also currently undertaking the following projects for NTMWD:

- Floyd Branch Regional Wastewater Treatment Plant 2012 Odor Control Improvements, Project No. 280
- Electrical Improvements at High Service Pump Station 1-1, Project No. 202
- Wylie No. 3 Delivery Point Metering Station Upgrade, Project No. 318

Additionally, Crescent has successfully performed projects for the Member Cities of Mesquite, Richardson, Wylie, and Plano. Based on Crescent's performance, references, and standing as lowest responsive bidder, it is the recommendation of the Executive Director, NTMWD staff, and TWG that the Board of Directors authorize the award of a construction contract for the Farmersville Pump Station Pump No. 2, Project No. 314, in the amount of $143,700 to Crescent Constructors, Inc.
FUNDING

Funding in the amount of $143,700 for this project is to be made available in the Regional Water System 2008 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and The Wallace Group, Inc., that the Board of Directors authorize award of a construction contract to Crescent Constructors, Inc., for the Farmersville Pump Station Pump No. 2, Project No. 314, in the amount of $143,700. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4138

REGIONAL WATER SYSTEM
COOPER PIPELINE EMBANKMENT IMPROVEMENT
NEAR FM 3218 IN COMMERCE, TEXAS
PROJECT NO. 285

ADDITIONAL ENGINEERING SERVICES

The purpose of this administrative memorandum is to request the Board of Directors to authorize an increase in scope and fee for engineering services by Lockwood, Andrews & Newnam, Inc., (LAN) for the Cooper Pipeline Embankment Improvement near FM 3218 in Commerce, Texas, Project No. 285, for the temporary solution design and coordination with the U.S. Army Corps of Engineers (USACE) and associated work for the additional not-to-exceed amount of $22,733, resulting in a new total engineering services not-to-exceed fee of $141,733.

REVIEW

NTMWD jointly owns and operates the 84-inch Cooper Pipeline, which was installed in 1994, with the City of Irving. This pipeline conveys pumped raw water from Lake Chapman to the Cooper Outfall Balancing Reservoir (approximately three miles northeast of Farmersville) then into Lavon Lake via gravity. Recently, a section of approximately 65 linear feet of this pipeline was discovered to be exposed due to erosion from an adjacent drainage channel. It appears the drainage channel was constructed after the pipeline and was a City of Commerce project. The location of the exposed pipe is approximately two miles south of the City of Commerce center and approximately 400 feet west of FM 3218 within the city limits of Commerce.

In March 2012, Administrative Memorandum No. 3778 authorized Project No. 285 in the not-to-exceed amount of $119,000 for the Cooper Pipeline Embankment Improvement Near FM 3218 in Commerce, Texas. The administrative memorandum authorized employment of LAN to provide professional services for the design of a retaining wall to protect a portion of exposed 84-inch pipe on the Cooper Pipeline System.

The original design approach to mitigate the pipe exposure was to construct a stabilizing retaining wall in order to protect the pipe. However, the nature of the soils resulted in the design requiring eleven 36-inch steel H-column reinforced concrete piers, approximately 40 feet deep, with steel members extending from the concrete piers to be used to support prefabricated concrete panels. The engineer’s opinion of probable construction cost for the retaining wall option is $688,000 including a 10% contingency.

NTMWD staff discussed an alternative to the retaining wall to allow for a more permanent solution – a reroute of the drainage channel. The NTMWD staff was also
concerned about the potential impact to the exposed pipe particularly during the installation of the concrete piers. NTMWD requested LAN to estimate the construction cost of regrading the drainage channel in order to reroute the channel away from the pipe, thus negating the need of the construction of the retaining wall. Additionally, NTMWD staff weighed the advantages and disadvantages of constructing a retaining wall versus regrading the channel and purchasing property in the area of the rerouted channel. While the total cost of additional engineering services, purchasing the property and regrading the channel are estimated to be slightly higher, NTMWD staff believes the permanently rerouted channel and reestablishment of proper backfill around the pipeline outweighs the long-term maintenance of a retaining wall. NTMWD staff has met with the City of Irving to discuss this alternative. The City of Irving also believes the reroute of the channel is the best alternative.

It is suspected that a City of Commerce sponsored project that originally rerouted the drainage channel was the cause of the erosion of the cover of the pipeline. NTMWD has met on multiple occasions to discuss the issues with the City of Commerce. However, Commerce has made no commitment to address the issue nor offered any relief to NTMWD and Irving for any proposed remediation of the problem.

The exposed pipeline required immediate temporary stabilization measures. LAN and their subconsultants worked with the USACE by designing a temporary solution and obtaining USACE approval to perform the measures. The measures included installation of select fill material above and to the exposed side of the pipeline, compacting the fill, and placing articulating block matting on the channel embankment. It is the opinion of NTMWD that the work performed in April 2013 will provide adequate protection of the pipeline until a permanent solution can be enacted. However, before a recommendation is presented to the Board for the permanent repair, it is the opinion of the Executive Director and NTMWD staff that the next action should be discussed with the Board. An item for this discussion will be placed on the Water Committee agenda before the February Board meeting.

ENGINEERING SERVICES FEE

LAN has submitted a cost proposal to perform the additional basic services for the design of the temporary stabilization measures and coordination efforts for the not-to-exceed amount of $6,421. They have proposed to provide additional special services for the not-to-exceed amount of $16,312. Therefore, this request is for authorization to increase the engineering services agreement by $22,733 to a revised not-to-exceed total amount of $141,733.

PROPOSED ADDITIONAL SERVICES

This request for additional fee consists of the following item:

*Item No. 1 – Coordination with the USACE and Temporary Solution Design $22,733*
The consultant and subconsultants provided research and investigation into measures that could be taken while remaining in compliance with the USACE Nationwide Permits. They met and corresponded with USACE staff as well as provided environmental and archeological surveys of the site. The consultant also provided a temporary solution design to be used by the contractor hired by NTMWD and the City of Irving to construct the temporary solution.

**SUMMARY OF ENGINEERING 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 (Ad. Memo. No. 3778)</td>
<td>$98,000</td>
<td>$21,000</td>
<td>$119,000</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>6,421</td>
<td>16,312</td>
<td>22,733</td>
</tr>
<tr>
<td>Revised Total</td>
<td></td>
<td></td>
<td>$141,733</td>
</tr>
</tbody>
</table>

NTMWD staff has reviewed the fee proposed by LAN for the additional services performed and believes it to be fair and reasonable.

**FUNDING**

The design and construction cost of the repair will be shared in accordance with the operating agreement between NTMWD and the City of Irving. NTMWD will initially fund the repairs then request reimbursement from the City of Irving once the final cost is established. Additional funding in the amount of $22,733 for the increase in scope and fee for engineering services is available from 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 additional engineering services to Lockwood, Andrews & Newnam, Inc., for the Cooper Pipeline Embankment Improvement Near FM 3218 in Commerce, Texas, Project No. 285, in the not-to-exceed amount of $22,733 for a not-to-exceed total of $141,733. This will be an item on the agenda of the February 2014 Water Committee meeting and on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4139

REGIONAL WATER SYSTEM
EXPAND FRISCO/MCKINNEY PUMP STATION TO 130 MGD
PROJECT NO. 207

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 a decrease of $72,624.12 resulting in a revised contract amount of $6,520,067.52; 2) additional 131 days for final completion resulting in a final completion date of January 15, 2014; and, 3) authorization to make final payment to Archer Western Contractors, Ltd., (Archer Western) in the final contract amount of $6,520,067.52 for Project No. 207, Expand Frisco/McKinney Pump Station to 130 MGD.

REVIEW

The demands developed in the 2010 CIP Update confirmed the need to move forward with an expansion of the Frisco/McKinney Pump Station from 90 MGD to 130 MGD to provide additional capacity in the north system. In February 2010, Administrative Memorandum No. 3444 was approved by the Board authorizing the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., (FNI) for professional services associated with the design and construction to expand the Frisco/McKinney Pump Station to 130 MGD.

In December 2010, the Board approved Administrative Memorandum No. 3562-R, which authorized the construction to expand Frisco/McKinney Pump Station to 130 MGD to Archer Western in the amount of $6,441,225.

In October 2011, the Board approved Change Order No. 1, Administrative Memorandum No. 3711, in the amount of $75,540, resulting in a revised contract amount of $6,516,765.

In December 2012, the Board approved Change Order No. 2, Administrative Memorandum No. 3901, in the amount of $75,926.64 and additional 40 calendar days, resulting in a revised contract amount of $6,592,691.64.
CHANGE ORDER NO. 3

Proposed Change Order No. 3 consists of the following item:

*Item No. 1 – Adjustment to Contract Quantities* ($72,624.12)

As with any construction project, the original bid quantities can change due to actual field conditions during construction. The following adjustments to contract quantities were made to the indicated bid items in response to the actual conditions encountered:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description of Work</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Original Qty.</th>
<th>Revised Qty.</th>
<th>Diff.</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-5</td>
<td>Witness Test-Pump</td>
<td>EA</td>
<td>$3,000</td>
<td>2</td>
<td>0</td>
<td>(2)</td>
<td>($6,000.00)</td>
</tr>
<tr>
<td>A-6</td>
<td>Witness Test-Motor</td>
<td>EA</td>
<td>$12,500</td>
<td>2</td>
<td>0</td>
<td>(2)</td>
<td>($25,000.00)</td>
</tr>
<tr>
<td>A-7</td>
<td>Witness Test-VFD</td>
<td>EA</td>
<td>$15,000</td>
<td>1</td>
<td>0</td>
<td>(1)</td>
<td>($15,000.00)</td>
</tr>
<tr>
<td>D-5</td>
<td>Allowance to Repair Existing Pumps</td>
<td>LS</td>
<td>$50,000</td>
<td>1</td>
<td>0.8875176 (0.1124824)</td>
<td>(3)</td>
<td>($5,624.12)</td>
</tr>
<tr>
<td>D-6</td>
<td>Witness Test-Repaired Pumps</td>
<td>EA</td>
<td>$7,000</td>
<td>3</td>
<td>0</td>
<td>(3)</td>
<td>($21,000.00)</td>
</tr>
</tbody>
</table>

Bid Items A-5, A-6, and A-7 were included in the bid form for an NTMWD representative to attend the factory witness test for the pumps, motors, or VFDs, respectively. The NTMWD staff and FNI elected to accept the standard factory performance test data without a representative from NTMWD in attendance. Bid Item D-5 included an allowance of $50,000 for the inspection and repairs to three of the existing pumps. Each of these pumps was inspected and repairs were completed. The total cost of the pump repairs was $5,624.12 less than the $50,000 allowance. Bid Item D-6 included in the bid form was for an NTMWD representative to attend the factory witness test for the three repaired pumps. Once again, the NTMWD staff and FNI elected to accept the standard factory performance test data for the repaired pumps without a representative from NTMWD in attendance.

All major work on the project was completed, and the project was considered substantially complete on June 13, 2012, for the new sections of the pump station including two new pumps. Final completion included the inspection and repair of three existing pumps, and this work was completed by September 6, 2013. The additional time from final completion to authorization to final (September 2013 to February 2014) was due to the coordination effort required to re-test the electrical system. The electrical testing had been completed but the test documentation was misplaced by the electrical testing subcontractor. The contractor agreed to re-test the electrical system and provide
the documentation as required by the specification. The documentation was provided on January 15, 2014, and the contractor achieved final completion on this date. The pump station was fully available for use during the additional time required to re-test the electrical system. It is recommended that 131 days be added to the final completion date.

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>$6,441,225.00</td>
<td>450 days</td>
<td>900 days</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>75,540.00</td>
<td>0 days</td>
<td>0 days</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>75,926.64</td>
<td>40 days</td>
<td>40 days</td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
<td>(72,624.12)</td>
<td>0 days</td>
<td>131 days</td>
</tr>
<tr>
<td>(Decrease)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$6,520,067.52</td>
<td>490 days</td>
<td>1,071 days</td>
</tr>
</tbody>
</table>

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Freese and Nichols, Inc., that the Board of Directors authorize: 1) Change Order No. 3 for a decrease of $72,624.12, resulting in a revised contract amount of $6,520,067.52; 2) additional 131 days for final completion resulting in a final completion date of January 15, 2014; and, 3) authorization to make final payment to Archer Western Contractors, Ltd., in the final contract amount of $6,520,067.52, for Project No. 207, Expand Frisco/McKinney Pump Station to 130 MGD. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4140

UPPER EAST FORK INTERCEPTOR SYSTEM
UPPER WHITE ROCK CREEK PARALLEL FORCE MAIN
PROJECT NO. 227 (CONTRACT A)

CHANGE ORDER NO. 2

This administrative memorandum is for the Board of Directors consideration of:
1) Change Order No. 2 for a net decrease of $41,368.09, resulting in a revised contract
amount of $3,200,390.13; and, 2) an additional 30 days of contract time, resulting in a
revised final completion date of April 20, 2014, for the Upper White Rock Creek Parallel
Force Main, Project No. 227 (Contract A).

REVIEW

In December 2010, the Board approved Administrative Memorandum No. 3567
authorizing an engineering services agreement with Birkhoff, Hendricks, and
Carter, LLP, (BH&C) for design of the Upper White Rock Creek Lift Station and Parallel
Force Main. The design for the lift station improvements and the design for the
associated parallel force main are closely interdependent and were developed in a
single design effort but the two projects were bid separately. Both projects are currently
in construction under two separate construction contracts, Project No. 227, Contract A,
is the force main; and, Project No. 227, Contract B, includes the lift station
improvements. This administrative memorandum deals only with Project No. 227,
Contract A, the Upper White Rock Creek Parallel Force Main.

In January 2013, the Board approved Administrative Memorandum No. 3917
authorizing the award of a construction contract to S.J. Louis Construction of Texas in
the amount of $3,099,488.48.

In December 2013, the Board approved Administrative Memorandum No. 4100
authorizing Change Order No. 1 for an increase of $142,269.74 for work associated with
pipe realignment and revised tie-in configuration due to unknown field obstructions.

CHANGE ORDER NO. 2

Change Order No. 2 consists of one item as follows:

Item No. 1 – Removal of Supervisory Control and
Data Acquisition (SCADA) Work

($41,368.09)

30 Calendar days
The design includes isolation valves with motorized actuators on the two force mains (existing and new) near their discharge points at the Preston Road Lift Station. These valves were intended to be integrated into the Upper East Fork Interceptor System SCADA system through the Preston Road Lift Station to allow for operational flexibility. The instrumentation design was completed before the current NTMWD SCADA standards were implemented and will now require revision in equipment and communication protocol to ensure overall system integration. The required elements are much more involved than the original concepts, so the decision was made to remove the remote monitoring and control integration from the current contractor's scope and have them implemented at a later time (planned for March 2015) by a more specialized contractor. The electrical work to provide power to the valve actuators will remain in the current project.

Since the SCADA work and electrical power work are combined in the current bid item structure, a proposal was requested to delete Bid Line Item No. 28, Remove and Replace Existing SCADA System and Electrical Work at the Preston Road Lift Station, and add a new Line Item No. C.O. 2-1, Revised Electrical Work at the Preston Road Lift Station.

The revised electrical work includes installing the valve actuators and the power circuit conduit and wiring from a motor control center to the valve actuators outside the station. The control conduit and wire for the motor operated valves will be installed from the actuators to a new junction box inside the lift station for future integration. The motorized valves will be controlled at valve actuator pedestals located adjacent to the valves.

The contractor has also requested 30 additional days of contract time in recognition of the delay to his progress during the development and review of the contract change.

**SUMMARY OF CHANGE ORDER NO. 2**

<table>
<thead>
<tr>
<th>Line Item No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Unit Price</th>
<th>Extended Total</th>
</tr>
</thead>
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<tr>
<td>28</td>
<td>Remove and Replace Existing SCADA System and Electrical Work at the Preston Road Lift Station</td>
<td>-1</td>
<td>$74,000.00</td>
<td>($74,000.00)</td>
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<td>C.O. 2-1</td>
<td>Revised Electrical Work at the Preston Road Lift Station</td>
<td>1</td>
<td>$32,631.91</td>
<td>$32,631.91</td>
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<tr>
<td><strong>Total Proposed C.O. No. 2 Amount</strong></td>
<td></td>
<td></td>
<td></td>
<td>($41,638.09)</td>
</tr>
</tbody>
</table>

NTMWD staff and BH&C have reviewed and discussed the extra efforts and pricing in detail and recommend the proposal as representative of the time and effort required.
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>$3,099,488.48</td>
<td>280</td>
<td>340</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>142,269.74</td>
<td>25</td>
<td>25</td>
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<tr>
<td>Proposed C.O. No. 2</td>
<td>($41,368.09)</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$3,200,390.13</td>
<td>335</td>
<td>395</td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td></td>
<td>February 19, 2014</td>
<td>April 20, 2014</td>
</tr>
</tbody>
</table>

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Birkhoff, Hendricks, and Carter, LLP, that the Board of Directors approve: 1) Change Order No. 2 for a net decrease of $41,368.09, resulting in a revised contract amount of $3,200,390.13; and, 2) an additional 30 calendar days resulting in a revised final completion date of April 20, 2014, for the Upper White Rock Creek Parallel Force Main, Project No. 227 (Contract A). This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4141

REGIONAL WATER SYSTEM
WATER TREATMENT PLANT
WATER SYSTEM OPERATIONS CENTER
PROJECT NO. 352

ENGINEERING SERVICES AGREEMENT

This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement (ESA) with Black & Veatch Corporation (B&V) 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, the blending facilities associated with the Texoma to Wylie 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 $274,600.

REVIEW

In May 2009, the Board approved Administrative Memorandum No. 3346, which authorized an ESA with B&V in the amount of $10,620,000 for final design and construction document preparation for Project No. 153, Wylie Water Treatment Plants I, II, II, and IV Ozonation (Ozone Project).

In October 2010, the Board approved Administrative Memorandum No. 3547 authorizing award of the construction contract to McCarthy Building Companies, Inc., (McCarthy) in the contract amount of $112,989,000. The Ozone Project currently is under construction with a proposed completion date of July 2014. As part of the Ozone Project, the North Ozone Operations Building (NOPS) was constructed between WTP III and IV for housing the liquid oxygen facilities, the ozone generators, and the 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 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.

In February 2012, the Board approved Administrative Memorandum No. 3764 authorizing additional engineering services for B&V to design a new main plant control room along with office space and then negotiate a change order with McCarthy for construction. Plans were prepared to the 95% level and McCarthy was provided with a set of 95% plans for preliminary pricing. McCarthy's preliminary price based on the set of plans provided was 60% higher than the engineer's opinion of construction cost. Due to the significant discrepancy between the engineer's opinion of cost and that submitted by McCarthy and the overall size of the project (approximately 4,500 square feet), it is the recommendation of the Executive Director and NTMWD staff that plans and specifications be developed and the project be competitively bid in lieu of proceeding with this work as a change order. Since receipt of the preliminary price submitted by McCarthy, the Board will recall that McCarthy has submitted a Request for Equitable Adjustment (REA) along with additional change order requests that total approximately $10 million. The REA and change order items are currently under review by the NTMWD staff and Saunders, Walsh & Beard. Therefore, NTMWD staff requests that the Board authorize a separate project for the Water System Operations Center. In order to perform this work as a separate project, B&V will have to prepare a complete set of documents, as well as include the time for bid phase and construction phase services.

B&V completed the scope of services as approved by the Board in February 2012. After reviewing the preliminary proposal from McCarthy, NTMWD and B&V developed a number of value engineering items to reduce cost. The value engineering resulted in several major changes to the 95% level plans. A partial list of the major changes is included below:

- Reduce office sizes and increase the number of offices from 8 to 10
- Shorten the height of pre-cast panels from 20 feet to 14 feet
• Use rough aggregate finish for exterior of concrete precast panels instead of brick veneer to increase competition

• Use package air conditioning units and a damper controlled duct system

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 10 offices, a conference room, break room, and a copy room. The engineering services include 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. B&V’s 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

B&V proposes a not-to-exceed basic services fee of $274,600 for these design services. B&V’s 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 (UPS) backup and the addition of an engine generator to back up the UPS

• 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 $274,600 for this project is to be made 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 Black & Veatch Corporation for professional services associated with design of the Water System Operations Center, Project No. 352, in the not-to-exceed amount of $274,600. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTHERN TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4142

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

CHANGE ORDER NO. 24

This administrative memorandum is for the Board of Directors consideration of Change Order No. 24 for Project No. 153, Water Treatment Plants (WTPs) I, II, III, and IV Ozonation. The recommended changes will result in an increase of $38,373.02, resulting in a revised contract amount of $110,945,965.57. The interim milestone substantial completion dates and final completion date for this project will remain unchanged.

REVIEW

The use of ozone to supplement the treatment process has been discussed with the Board on several occasions. Ozone is an oxidation process that has several potential advantages including:

- Disinfection
- Disinfection byproduct control (THMs, HAA5, etc.)
- Micro-constituent oxidation
- Micro-flocculation to reduce chemical usage
- Taste and odor control

The preliminary engineering study for this project indicated that NTMWD will gain benefit from ozone disinfection. The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concludes 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>May 2009</td>
<td>3346</td>
<td>ESA with Black &amp; Veatch Corporation (B&amp;V)</td>
<td>$10,620,000.00</td>
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<tr>
<td>October 2010</td>
<td>3547-A</td>
<td>Award to McCarthy Building Companies (McCarthy)</td>
<td>112,989,000.00</td>
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<tr>
<td>August 2011</td>
<td>3668</td>
<td>C.O. No. 1 for modifications to WTP III sedimentation basins and wiring modifications</td>
<td>87,737.15</td>
</tr>
<tr>
<td>September 2011</td>
<td>3699</td>
<td>C.O. No. 2 for improvements to WTP I Clarifier No. 2</td>
<td>30,000.00</td>
</tr>
<tr>
<td>October 2011</td>
<td>3713</td>
<td>C.O. No. 3 for deletion of electric handholes and davit crane modifications</td>
<td>(48,178.06)</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>December 2011</td>
<td>3740</td>
<td>C.O. No. 4 for changing to two-hour firewalls, demolition for 72-inch pipe, and ozone contactor influent pipes</td>
<td>120,288.62</td>
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<tr>
<td>January 2012</td>
<td>3753</td>
<td>C.O. No. 5 for mechanical insulation credit, 20-inch valve addition, and WTP II Basin No. 4 undermining</td>
<td>85,531.62</td>
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<tr>
<td>March 2012</td>
<td>3776</td>
<td>C.O. No. 6 for existing construction debris, additional control system programming, and 25kV cables</td>
<td>102,863.15</td>
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<tr>
<td>April 2012</td>
<td>3791</td>
<td>C.O. No. 7 for trap primers, WTP IV concrete pipe encasement, waterline leak, additional undermining at WTP II</td>
<td>252,716.53</td>
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<tr>
<td>May 2012</td>
<td>3807</td>
<td>C.O. No. 8 for electrical relays, increase MCC breaker size, relocation of backflow preventers, and additional chlorine feeders</td>
<td>179,303.48</td>
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<tr>
<td>September 2012</td>
<td>3859</td>
<td>C.O. No. 9 for chlorine diffuser orifice drilling, WTP II sludge valve station piping, WTP III sedimentation basin effluent box repair, and additional thrust restraint</td>
<td>128,065.21</td>
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<tr>
<td>October 2012</td>
<td>3873</td>
<td>C.O. No. 10 for WTP I and II chlorine feed system modifications, chlorine injector panel modifications, large diameter butterfly valve encasement, and WTP IV 84-inch pipe encasement demolition</td>
<td>111,463.32</td>
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<tr>
<td>November 2012</td>
<td>3887</td>
<td>C.O. No. 11 for replacement of a 16-inch tapping valve at North Ozone Operations (NOPS) Building, HVAC wiring modifications, pipe penetrations at precast walls, WTP II Basin No. 3 limit switch relocation, and relocated eight-inch ozone gas pipe</td>
<td>155,596.10</td>
</tr>
<tr>
<td>December 2012</td>
<td>3906</td>
<td>C.O. No. 12 for rerouting electrical circuits at WTP II, pour back concrete walls in the WTP III and IV settled water flumes, repair and coat settled water boxes at WTPs III and IV, remove an electrical duct bank in conflict at South Ozone Operations (SOPS) Building, relocate WTP I sample lines, and additional contract time</td>
<td>160,584.35</td>
</tr>
<tr>
<td>January 2013</td>
<td>3930</td>
<td>C.O. No. 13 for additional fiber optic cables and fire alarm panel connectivity, WTP III fiber optic cable conflict, revised WTP IV chemical feed, and cable tray extension at NOPS</td>
<td>269,575.51</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>
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</tr>
<tr>
<td>February 2013</td>
<td>3949</td>
<td>C.O. No. 14 for work changes at NOPs required for NOPs expansion, add'l ozone generator cable testing, and fireman's switches at NOPs and SOPS</td>
<td>76,130.23</td>
</tr>
<tr>
<td>March 2013</td>
<td>3966</td>
<td>C.O. No. 15 for a concrete fillet in WTP II Sedimentation Basin No. 7, changes to the ozone gas manifolds, quenching chemical light base changes, WTP IV plant water leak repair, chilled water minimum bypass at NOPs and SOPS, and WTP III and IV sedimentation basin underdrain reroute, and adjustment to interim completion dates</td>
<td>54,251.21</td>
</tr>
<tr>
<td>April 2013</td>
<td>3986</td>
<td>C.O. No. 16 for WTP III temporary bypass pipe conflict, demister pipe changes at 11 contactors, NOPs and WTP IV contactor fiber optic cabinets, WTP II fire department connection relocation, NOPs and SOPS fence alignment changes, and NOPs and SOPS signal splitters</td>
<td>144,688.77</td>
</tr>
<tr>
<td>May 2013</td>
<td>4003</td>
<td>C.O. No. 17 for electrical duct bank replacement, plug valve spool pieces, WTP II north and south contactor sanitary sewer reroute, eight-inch isolation valve at WTP IV, lightning protection credit, and electric valve actuator credit</td>
<td>58,405.59</td>
</tr>
<tr>
<td>June 2013</td>
<td>4013</td>
<td>C.O. No. 18 for fiber optic cabinets and switches, settled water turbidity sample pumps, destruct canisters, and fire sprinkler installation delay</td>
<td>475,186.93</td>
</tr>
<tr>
<td>July 2013</td>
<td>4017</td>
<td>C.O. No. 19 for relocation of an air release valve at NOPs, re-feed WTP II Basin Nos. 5, 6, 7, and 8 power panels, WTP II Basin No. 7 overflow pipes, ozone destruct piping, plant waterline encasement, and a credit for the WTP II Basin Nos. 3 and 4 sludge collection equipment</td>
<td>(4,756,650.01)</td>
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<tr>
<td>August 2013</td>
<td>4039</td>
<td>C.O. No. 20 for replacing the plant water pipe on the north side of WTP II Sedimentation Basin No. 7, bolt material credit, chiller flow switches, compressed air drip legs, and quenching chemical credit</td>
<td>52,692.05</td>
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<tr>
<td>October 2013</td>
<td>4076</td>
<td>C.O. No. 21 for modification of WTP II steps and add'l guardrail gates, WTP II Sed. Basin No. 3 rectangular butterfly valve conflict, add'l LOX tank pressure relief valve, add'l pipeline dewatering, and add'l electrical for quenching chemical metering pumps</td>
<td>$70,404.74</td>
</tr>
</tbody>
</table>
## Change Order No. 24

The total value of the construction contract with McCarthy including Change Order No. 23 is $110,907,592.55.

### Item No. 1 – Room Integrity Test at NOPS and SOPS

$8,675.86

The City of Wylie building code requires the NOPS and SOPS to have a fire sprinkler system, including the control room and server room for both buildings. A fire sprinkler system is not suitable for the computer and server equipment in these two rooms. In response to Wylie’s code requirements, B&V designed a non-water type fire suppression system for this area that uses a gas instead of water to extinguish the fire. Factory Mutual (FM) has a specification for this equipment, which is known as FM 200. McCarthy installed an FM 200 in accordance with the contract documents. The FM 200 system requires that the room hold a positive air pressure for a short time period, and this test is known as the FM 200 room integrity test. Several items in the rooms in both buildings need to be changed to make them capable of passing the FM 200 room integrity test. The ceiling tile/wall interface is caulked, gaskets are added to wall outlets and switches, the doors are modified by adding smoke gaskets, closers and automatic door bottoms, and the HVAC system is reprogrammed to accommodate the FM 200 system. McCarthy has submitted a cost proposal in the amount of $8,675.86 to make the modifications necessary to pass the FM 200 room integrity test. NTMWD is in discussions with B&V regarding their participation in this item.

### Item No. 2 – WTP II Sedimentation Basin No. 7 Flocculator Grease Lines

$4,102.66

The grease lines for the third stage flocculator drive equipment for WTP II Sedimentation Basin No. 7 are located on the west baffle wall of the flocculator area of the sedimentation basin. The contract documents showed that McCarthy is to remove this wall and install a stainless steel baffle wall that will create a proper flow path for the
plate settlers. The grease lines need to be relocated to allow McCarthy to install the new baffle wall. The required relocation of these grease lines was not shown on the contract drawings. The purpose for the grease lines is to allow NTMWD to add grease to the flocculator bearings while the bearings are submerged and in service. McCarthy has submitted a change request in the amount of $4,102.66 to remove the existing grease lines and install approximately 140 linear feet of new stainless steel grease line and fittings. NTMWD is in discussions with B&V regarding their participation in this item.

Item No. 3 – Rain Caps and Door Thresholds $4,226.26

McCarthy has requested compensation for extra work involved in adding rain caps and thresholds for exterior doors at SOPS and NOPS. Eight doors were equipped with automatic door bottom sweeps on the exit door hardware. Due to a conflict between the exit rod hardware and the continuous automatic door bottom, McCarthy was not able to install the automatic door bottom sweeps. McCarthy requested information from B&V on how to remedy the conflict. B&V responded to McCarthy’s request by instructing McCarthy to replace the door bottom with an ADA compliant threshold. This correction was performed on four doors at NOPS and four at SOPS.

After a rain in June 2013, NTMWD inspectors noticed rain coming inside the interior of NOPS. Installing rain caps over the top of the affected doors is the proposed fix for the rain problem. There are six doors affected by this change, three at NOPS and three at SOPS. McCarthy has installed all six rain caps.

McCarthy has submitted cost proposal in the amount of $4,226.26 for the modifications to a total of 14 doors at NOPS and SOPS. B&V has reviewed the additional cost submitted by McCarthy and determined that cost of additional work was appropriate for the work performed.

Item No. 4 – WTP III Contactor Road Grade Conflict $18,234.99

During the initial grading of the road north of the WTP III North Ozone Contactor, McCarthy noticed that there was inadequate clearance between the top of the ozone contactor influent pipe and the bottom of pavement for subgrade material. A PVC chlorine gas pipe in this area also was very shallow and susceptible to loads from the pavement. The slope of the road was redesigned to allow more clearance between the bottom of pavement and the ozone influent pipe. In addition to the additional clearance, NTMWD requested that McCarthy install a steel plate over the PVC gas line, as well as a capped sleeve parallel to the newly installed chlorine gas line. This capped sleeve is for the purpose of installing a second gas line if the original gas line is damaged in the future beneath the concrete pavement.

NTMWD has used steel plates to protect water lines beneath pavement in other locations, and this would be a proper application for a steel plate. The NTMWD took a “belt and suspenders” approach with this particular gas line by requesting that McCarthy install the PVC sleeve beneath the pavement in case the chlorine gas line developed a leak somewhere beneath the pavement. McCarthy has submitted a cost proposal in the
amount of $18,234.99 for the paving modifications, installation of the steel plate and pipe sleeve.

*Item No. 5 – Additional Gravel in Liquid Oxygen Area at SOPS $3,133.25*

Gravel is placed in the liquid oxygen area of SOPS and NOPS to eliminate the chance that liquid oxygen could contact organic matter such as grass. There are two areas at SOPS that are adjacent to paving, and NTMWD prefers gravel in these two areas rather than topsoil and grass. Gravel will provide plant operations and technical services with an all-weather area around the liquid oxygen unloading station pad. The total amount of additional gravel is approximately 1,600 square feet. A similar area was constructed with gravel at NOPS, and the gravel in lieu of grass has worked well in that location. McCarthy has submitted a change request in the amount of $3,133.25 to install six inches of gravel similar to the gravel at NOPS. The additional cost is mostly the material difference between the gravel versus the topsoil and grass. McCarthy’s labor cost is only the additional labor required for placing the gravel. A credit for the labor and equipment for placing topsoil was taken into account in McCarthy’s price.

**SUMMARY OF CHANGE ORDER NO. 24**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Room Integrity Test at NOPS and SOPS</td>
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<td>2</td>
<td>WTP II Sedimentation Basin No. 7 Flocculator Grease Lines</td>
<td>4,102.66</td>
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<tr>
<td>3</td>
<td>Rain Caps and Door Thresholds</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>4</td>
<td>WTP III Contactor Road Grade Conflict</td>
<td>18,234.99</td>
<td>0</td>
<td>0</td>
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<tr>
<td>5</td>
<td>Additional Gravel in Liquid Oxygen area at SOPS</td>
<td>3,133.25</td>
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<td>0</td>
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<tr>
<td></td>
<td>Proposed Total C.O. Amount</td>
<td>$38,373.02</td>
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**SUMMARY OF ADJUSTMENTS TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Substantial Completion</th>
<th>Final Completion</th>
</tr>
</thead>
<tbody>
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<td>C.O. No. 2</td>
<td>30,000.00</td>
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<tr>
<td>C.O. No. 3</td>
<td>(48,178.06)</td>
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<td>C.O. No. 4</td>
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<td>C.O. No. 5</td>
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<td></td>
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<tr>
<td>Description</td>
<td>Contract Amount</td>
<td>Substantial Completion</td>
<td>Final Completion</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>------------------------</td>
<td>------------------</td>
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<tr>
<td>C.O. No. 6</td>
<td>102,863.15</td>
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<td>C.O. No. 7</td>
<td>252,716.53</td>
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<td>C.O. No. 8</td>
<td>179,303.48</td>
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<td>C.O. No. 9</td>
<td>128,065.21</td>
<td></td>
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<td>C.O. No. 10</td>
<td>111,463.32</td>
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<td>C.O. No. 11</td>
<td>155,596.10</td>
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<td>C.O. No. 12</td>
<td>160,584.35</td>
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<td>C.O. No. 13</td>
<td>269,575.51</td>
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<td>C.O. No. 14</td>
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<td>C.O. No. 15</td>
<td>54,251.21</td>
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<td>C.O. No. 16</td>
<td>144,688.77</td>
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<td>C.O. No. 17</td>
<td>58,405.59</td>
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</tr>
<tr>
<td>C.O. No. 18</td>
<td>475,186.93</td>
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<tr>
<td>C.O. No. 19</td>
<td>(4,756,650.01)</td>
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<td></td>
</tr>
<tr>
<td>C.O. No. 20</td>
<td>52,692.05</td>
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<tr>
<td>C.O. No. 21</td>
<td>70,404.74</td>
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<td></td>
</tr>
<tr>
<td>C.O. No. 22</td>
<td>72,815.57</td>
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<td></td>
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<tr>
<td>C.O. No. 23</td>
<td>35,120.49</td>
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</tr>
<tr>
<td>Proposed C.O. No. 24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the last 29 months, the NTMWD staff has presented 23 change order requests to the Board for this project totaling $2,761,793.64 excluding the $4,756,650.01 credit for scope reduction contained in Administrative Memorandum No. 4017 from July 2013 and the $48,178.06 credit for deletion of handholes and davit crane modifications contained in Administrative Memorandum No. 3713 from October 2011. This may appear to be a significant extra cost but relative to the size of the project, it is approximately a 2.4 percent change. The amount of work completed by McCarthy since the start of the project is approximately $103,700,000.

In October 2013, NTMWD Executive Director informed the Board, by Administrative Memorandum No. 4076, that McCarthy did not achieve Milestone No. 2 by the August 24, 2013, date as extended in Administrative Memorandum No. 4039. Milestone No. 2 consists of one-half of the NOPS Building and WTP IV contactors. McCarthy did achieve Milestone No. 2 on November 18, 2013, approximately 86 days late. During the November 2013 Water Committee Meeting, NTMWD Executive Director and legal counsel informed the Water Committee of McCarthy’s current schedule, as
well as a sizable claim for delay submitted by McCarthy. The liquidated damages from McCarthy's late completion of this project will be part of the claim negotiation. McCarthy is submitting letters to NTMWD purportedly in support of its claim, and NTMWD staff continues to answer each letter from McCarthy in a timely manner responding to McCarthy's claim for delay. NTMWD staff will keep the Board informed regarding the status of McCarthy's claim. At this time, NTMWD's position is that the contract precludes McCarthy from waiting so long to make a claim for delays that occurred in the past, some over two years ago. NTMWD staff is negotiating with McCarthy regarding the portion of McCarthy's claim for delays that occurred within the last few months.

FUNDING

Additional funding in the amount of $38,373.02 for this change order is to be made available in the Regional Water System 2010A Construction 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. 24 for Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation, an increase in the amount of $38,373.02, resulting in a revised contract amount of $110,945,965.57. This will be an item on the regular agenda of the February 2014 Board meeting.
The purpose of this administrative memorandum is for the Board of Directors consideration of Change Order No. 3 for an increase of $51,095.65, resulting in a revised contract amount of $6,649,959.78 for the Lake Texoma Pump Station Modifications, Project No. 128.

REVIEW

The NTMWD operates a raw water transmission system from Lake Texoma. The system includes a pump station at Lake Texoma and a 72-inch pipeline from Lake Texoma to Sister Grove Creek, east of Howe, Texas, and to balancing reservoirs currently in construction. NTMWD shares the pump station and a portion of the pipeline with Greater Texoma Utility Authority (GTUA), which diverts water from the pipeline to its water treatment plant in Sherman, Texas. At the pump station, the NTMWD currently has two large pumps (47 MGD each) and space for two additional large pumps. GTUA currently has three small pumps (6 MGD each) and space for one additional small pump.

In February 2008, by Administrative Memorandum No. 3141, the Board authorized the execution of an engineering services agreement with Freese and Nichols, Inc., (FNI) for the design of the Lake Texoma Pump Station Modifications. At that time, the capacity of the Lake Texoma transmission system was 94 MGD with both large pumps operating. Under normal conditions, 4 MGD was diverted to GTUA and the remaining 90 MGD delivered to NTMWD. The pumping rate of 90 MGD did not allow NTMWD to capture the available water right nor enough downtime for maintenance or repairs on the pumps and other equipment.

In December 2008, Administrative Memorandum No. 3277-A authorized award of contract for the Lake Texoma Pump Station Modifications, Project No. 128, to Archer Western Contractors, Ltd., (Archer Western) in the amount of $6,479,702.

The modifications to the Lake Texoma Pump Station includes installation of:

- Two 58.5 MGD pumps in the spare spaces
- Associated discharge piping and valves for the two new pumps
- Associated electrical starters, wiring, and controls
- Improvements to the electrical power supply to the pump station
By installing these larger pumps at the Lake Texoma Pump Station, the intent was that NTMWD would increase the peak transmission capacity, allow for routine maintenance downtime on the system, and maximize the capacity of the existing 72-inch pipeline.

In March 2010, Administrative Memorandum No. 3466 approved Change Order No. 1 in the amount of $37,046.13 for addition of test stations for corrosion monitoring, exterior pipeline evaluation, bypass piping modifications, a new door, and modifications to the soft starters.

In July 2013, Administrative Memorandum No. 4025 approved Change Order No. 2 in the amount of $82,116 for the two new pumps to be returned to the manufacturer for inspection and to refurbish the shafts and bearings if required to meet original tolerances prior to installation.

Prior to installation of the pumps for this project, zebra mussels were discovered in Lake Texoma, which resulted in the cessation of pumping from the station. While procedures to deal with maintenance associated with zebra mussels were under review, the pump installation was placed on hold.

CHANGE ORDER NO. 3

Change Order No. 3 consists of two changes in work scope for this project that will result in an overall increase in the contract amount by $51,095.65. These proposed costs are a result of an inspection conducted by the pump manufacturer. The pumps provided in this project had been stored in a fixed position for a period extending well beyond what was recommended by the manufacturer. The pump manufacturer recommended, and NTMWD staff and FNI concurred, that the pumps be returned to the manufacturer for inspection and to refurbish the shafts and bearings if required to meet original tolerances. This inspection was previously approved by the Board in Change Order No. 2. The proposed costs detailed below have been reviewed and determined to be fair and reasonable by the NTMWD staff and FNI.

Item No. 1 – Reapplication of Top Coat Paint on Pumps

$39,428.90

Upon completion of the inspection, the pump manufacturer provided an inspection report. Recoating the pumps is recommended due to the number of times they have been handled, as well as the prolonged exposure to the elements while stored outside. The pump manufacturer will recoat each pump for a cost not to exceed $19,714.45. Additional time associated with this item will be addressed in a future change order.

Item No. 2 – Repair of 3rd Stage Impeller and Pump Shaft

$11,666.75

During the pump manufacturer's disassembly of one pump, the 3rd stage impeller galled to the shaft. The clearance between the shaft and the impeller is 0.006” and any small debris can cause the galling, particularly with stainless steel impellers and shafts. There is no indication of the impeller galling to the shaft when it was originally installed; therefore, the debris likely got between the shaft and impeller after assembly of the bowl
assembly. Galling is not uncommon when removing an impeller of this size from the shaft. The pump manufacturer will repair the impeller and pump shaft for a cost not to exceed $11,666.75. Additional time associated with this item will be addressed in a future change order.

**SUMMARY OF CHANGE ORDER NO. 3**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reapplication of Top Coat Paint on Pumps</td>
<td>$39,428.90</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>2</td>
<td>Repair of 3rd Stage Impeller and Pump Shaft</td>
<td>11,666.75</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$51,095.65</td>
<td>0*</td>
<td>0*</td>
</tr>
</tbody>
</table>

*To be addressed in future change order.

**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>533</td>
<td>564</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>37,046.13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>82,116.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
<td>51,095.65</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$6,649,959.78</td>
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<td></td>
</tr>
<tr>
<td>Contract Dates</td>
<td></td>
<td>July 1, 2010</td>
<td>August 1, 2010</td>
</tr>
</tbody>
</table>

*Additional contract time has not been addressed in this administrative memorandum.

After the total effect of the zebra mussel issue and the cessation of pumping from the station have been evaluated, a recommendation will be presented to the Board for consideration of additional contract time.

Pursuant to the September 22, 2011 Cost Share Agreement between NTMWD and GTUA, GTUA is responsible for paying 20% of the total project cost associated with this project. NTMWD will provide the initial funding and will request reimbursement from GTUA upon completion of the project.

**FUNDING**

Additional funding in the amount of $51,095.65 for Change Order No. 3 is to be made available from the Regional Water System 2008 Construction Fund.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Freese and Nichols, Inc., that the Board of Directors approve Change Order No. 3 to the Lake Texoma Pump Station Modifications, Project No. 128, for an increase of $51,095.65 resulting in a revised contract amount of $6,649,959.78. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4144

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

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum requests authorization for additional engineering services for Black & Veatch Corporation (B&V) on the Lake Tawakoni Water Treatment Plant (WTP) Sludge Lagoon Improvements, Project No. 312, in the additional amount of $23,958. This would result in a revised total not-to-exceed engineering services fee of $451,168.

REVIEW

In January 2013, the Board of Directors approved Administrative Memorandum No. 3921 authorizing an engineering services agreement (ESA) with B&V in the not-to-exceed amount of $427,210 for the Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312.

In December 2013, the Board of Directors approved both Administrative Memorandum No. 4106 awarding the construction contract to Crescent Constructors, Inc., (Crescent) in the contract amount of $3,463,000 and Consent Agenda Item No. 13-12-09 requesting authorization to pay the Kaufman County Building Permit Fee of $3,794 for the referenced project.

*Item No. 1 - Additional Soil Testing*

$5,058

During the design phase, soil samples were collected at the construction site for the proposed lagoon and sludge pumping station at the Lake Tawakoni WTP. One of the samples collected contained approximately ten feet of partially burned organic material. This material must be removed before construction of the sludge pumping station. Two test pits were excavated for sample collection. These samples assisted in determining the extent of the buried organic material for cost estimation purposes for the construction of the new facilities. This design effort is considered special services and includes the work by B&V as well as the geotechnical sub-consultant.

*Item No. 2 - Electrical Room Relocation*

$13,500

The scope of services included a precast, concrete tilt-up panel electrical building located on top of the sludge pump station dry well substructure and the design was, therefore, initiated based on this understanding. At the basis of design memo review
meeting, the NTMWD staff requested that B&V relocate the electrical building from the top of the drywell to be an independent structure separated from the sludge pump station in order to allow openings with hatches to be constructed on the deck of the pumping station for direct pump removal with a boom truck. While engineering of the sludge pump station structure had not been carried through completion at that point, a number of design activities had already been completed. Relocation of the electrical building required additional architectural, building mechanical, and electrical engineering work versus what had been included in the original scope of services for one single building. These efforts are estimated to total about 100 hours of engineering time, which at an average burdened salary rate of $60 per hour and a multiplier of 2.25, as stipulated in the ESA, would result in an additional fee of $13,500.

*Item No. 3 - Specification of Injectable Pump Packing*  
$2,700

At the 50% design level in July 2013, the NTMWD staff requested that B&V provide injectable packing for the pumps in lieu of standard packing with external seal water. External seal water stations were requested to be provided, but to be left disconnected from each pump to allow a future switch back to external water for lubricating the pump packing seals if needed in the future. Although the NTMWD has experience with injectable packing in sewer lift station pumps, the NTMWD has no experience with injectable packing in this application of pumping sludge. Evaluation and specification of the injectable packing resulted in additional engineering efforts estimated at approximately 16 hours, which at an average burdened salary rate of $75 per hour and a multiplier of 2.25, as stipulated in the ESA, would result in an additional fee of $2,700.

*Item No. 4 - Retagging Equipment for New Standards*  
$2,700

At the 50% design level review meeting, the NTMWD staff requested that B&V retag the equipment and valves per the NTMWD’s newly adopted supervisory control and data acquisition (SCADA) tagging standards. The retagging involved equipment and valves shown on drawings plus the specification instrumentation lists that had already been developed at that point. B&V estimates that the engineering efforts to retag equipment and valves and to check the new tag numbers at approximately 16 hours, which at an average burdened salary rate of $75 per hour and a multiplier of 2.25, as stipulated in the ESA, would result in an additional fee of $2,700.

**SUMMARY OF ADDITIONAL SERVICES**

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<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
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<td>1</td>
<td>Additional Soil Testing</td>
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<tr>
<td>2</td>
<td>Electrical Room Relocation</td>
<td>13,500</td>
</tr>
<tr>
<td>3</td>
<td>Specification of Injectable Pump Packing</td>
<td>2,700</td>
</tr>
<tr>
<td>4</td>
<td>Retagging Equipment for New Standards</td>
<td>2,700</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$23,958</strong></td>
</tr>
</tbody>
</table>
SUMMARY OF ESA

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>ESA with B&amp;V (Ad Memo No. 3921)</td>
<td>$393,000</td>
<td>$34,210</td>
<td>$427,210</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>18,900</td>
<td>5,058</td>
<td>23,958</td>
</tr>
<tr>
<td>Total Revised Amount</td>
<td></td>
<td></td>
<td>$451,168</td>
</tr>
</tbody>
</table>

NTMWD staff has reviewed the change in scope and the associated fees and recommends them as representative of the effort required. The services would be performed in accordance with the standard ESA.

FUNDING

Additional funding in the amount of $23,958 for the additional engineering services 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 additional engineering services for Black & Veatch Corporation for professional services associated with design for the Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312, in the not-to-exceed amount of $23,958, resulting in a revised engineering services fee amount of $451,168. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4145

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

INSPECTION SERVICES AGREEMENT

This administrative memorandum requests the Board of Directors authorize execution of an inspection services agreement with Dietz Engineering (Dietz) to provide resident project inspection services during the construction of the Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312. The resident inspection services agreement would be in a not-to-exceed amount of $105,000.

REVIEW

In January 2013, the Board approved Administrative Memorandum No. 3921 authorizing an engineering services agreement with Black & Veatch Corporation (B&V) in the not-to-exceed amount of $427,210 for the Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312.

In December 2013, the Board approved both Administrative Memorandum No. 4106 awarding the construction contract to Crescent Constructors, Inc., in the contract amount of $3,463,000 and Consent Agenda Item No. 13-12-09 requesting authorization to pay the Kaufman County Building Permit Fee of $3,794 for the referenced project.

Concurrent with this administrative memorandum in February 2014, the Board will consider authorization of additional engineering services to B&V in the amount of $23,957.80.

INSPECTION SERVICES FEE

Normally, the inspection requirements are provided by NTMWD Engineering; however, due to the number of existing projects under construction, a full time NTMWD inspector is not available. Dietz is an Allen-based firm specializing in construction inspection with extensive municipal construction experience. Dietz was requested to submit a cost proposal for providing resident project inspection services associated with the project. Dietz has proposed to provide inspection services at a maximum fee not to exceed $105,000. This fee will cover salary, fringe benefits, transportation costs, supplies, communication equipment, overhead, and profit for a minimum of 1,153 hours of inspection services. During the course of construction, the contractor’s progress, as well as the inspection by Dietz, will be monitored by the Engineering staff. Should additional inspection effort beyond 1,153 hours be required due to the complexities of
the project and the future workload of NTMWD's Inspection staff, a separate request for additional inspection will be made at that time.

The NTMWD staff has reviewed the inspection fees submitted by Dietz 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.

FUNDING

Funding in the amount of $105,000 for this project is to be made 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 inspection services agreement with Dietz Engineering in the not-to-exceed amount of $105,000 for the Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4146

REGIONAL WATER SYSTEM
LAKE TEXOMA OUTFALL TO WYLIE WATER TREATMENT PLANT
RAW WATER PIPELINE
PROJECT NO. 268

AUTHORIZATION TO REIMBURSE GRAYSON COUNTY FOR ROAD DAMAGE

This administrative memorandum is for the Board of Directors consideration to authorize reimbursement to Grayson County (County) for damage to county roads as a result of construction material delivery for the Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268, per the “Interlocal Agreement between Grayson County and the NTMWD for Road Repairs” dated October 16, 2012. The requested amount of reimbursement is $793,700. Even with the proposed reimbursement, it is still projected that the total project cost including engineering, right-of-way acquisition, construction, inspection, and testing will be within the total amount previously authorized by the Board.

SUMMARY

The Lake Texoma Outfall to Wylie Water Treatment Plant (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 $312,459,025.

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 Construction Manager at Risk (CMAR), Garney Construction Company. Critical decisions were made by the project team at all points during the process based on several factors with the primary goal of achieving timely completion and startup of the facilities as soon as possible.

REVIEW

In May 2012, the Board approved Administrative Memorandum No. 3798 authorizing the use of eminent domain to acquire right-of-way. This administrative memorandum
also authorized the Executive Director to acquire road crossing permits and execute the “Interlocal Agreement between Grayson County and the North Texas Municipal Water District for Road Repairs”. This agreement has an effective date of October 16, 2012, and allowed the NTMWD to open-cut 16 county roads and not bore or tunnel under the county roads, which is a substantial cost savings to NTMWD. The Interlocal Agreement includes NTMWD’s agreement to reimburse the County for all damages caused by construction activities and delivery of construction materials including: 1) pipe, 2) gravel for pipe trench embedment; and, 3) disposal of excess materials excavated from the pipe trench.

On December 30, 2013, representatives from FNI, Garney, and NTMWD staff met with Grayson County Commissioner Jeff Whitmire to discuss the condition of the county roads and to visually verify by driving and inspecting the roads used during the construction activities. The heavy construction traffic has impacted 17 county roads with a total length of approximately 23.3 miles. All of these roads are constructed of either gravel or asphalt materials. Commissioner Whitmire has requested reimbursement in the amount of $793,700. If approved, this reimbursement amount will be used by the County to purchase gravel and asphalt materials as appropriate for each road. The materials will be placed by County personnel utilizing equipment owned by the County.

**FUNDING**

Funding in the amount of $793,700 is currently available from unspent funds that have previously been authorized by the Board for right-of-way expenditures for this project.

**RECOMMENDATION**

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize reimbursement to Grayson County in the amount of $793,700 for damage to county roads as a result of construction material delivery for the Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline, Project No. 268, per the “Interlocal Agreement between Grayson County and the NTMWD for Road Repairs” dated October 16, 2012. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

REGIONAL WATER SYSTEM
WYLIE WATER TREATMENT PLANT II CLEARWELL AND
DISINFECTION MODIFICATIONS
PROJECT NO. 330

ENGINEERING SERVICES AGREEMENT

This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement with CH2M HILL Engineers, Inc., (CH2M HILL) to provide professional engineering services associated with design and construction for the Wylie Water Treatment Plant (WTP) II Clearwell and Disinfection Modifications, Project No. 330. The engineering services agreement would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $1,350,000.

REVIEW

In May 2013, the Board approved Administrative Memorandum No. 4002 authorizing CH2M HILL to perform preliminary engineering for Wylie WTP Disinfection Evaluation at the Wylie WTP complex on the following items:

- Chlorine Evaluation
- Chlorine Dioxide Evaluation
- Ammonia Evaluation
- Caustic Evaluation
- Contact Time (CT) Evaluation
- Sampling
- Baffling Evaluation
- Operational Protocol for Disinfection
- WTP II Clearwell Evaluation

SCOPE OF PROJECT SERVICES

CH2M HILL submitted a final report to NTMWD upon completion of preliminary engineering. This final report contained the following recommendations to address the additional clearwell capacity at WTP II and modifications to the disinfection process at WTPs I, II, III, and IV. Each of these items has been evaluated by the NTMWD staff and these items are recommended to be included in the final project design scope for the Wylie WTP II Clearwell and Disinfection Modifications:
- **WTP I**  
  - Install chlorine and pH monitoring points on the outlets of Clearwells 1-1, 1-2, and 1-3.
- **WTP II**  
  - Construct new Clearwells 2-5 and 2-6. Each clearwell will have a capacity of 5.0 million gallons (MG). See attached exhibit.
  - Install magnetic flow meters in the 60-inch and 90-inch pipelines that transfer water from WTP's III and IV to WTP's I and II.
  - Relocate and add as necessary chlorine and ammonia feed points.
  - Convert Clearwell 2-4 into a chlorine contact basin.
  - Install chlorine and pH monitoring points.
- **WTP III**  
  - Install chlorine and pH monitoring points.
- **WTP IV**  
  - Install chlorine and pH monitoring points.

The engineer's estimate of probable construction cost of these improvements is $19,705,000. While the majority of the construction cost pertains to improvements at Wylie WTP II, the scope of design also includes the addition of chlorine and pH monitoring points at Wylie WTPs I, III, and IV.

**ENGINEERING SERVICES FEE**

NTMWD requested CH2M HILL submit a cost proposal for the engineering associated with the design of the Wylie WTP II Clearwell and Disinfection Modifications. CH2M HILL has proposed to perform the basic engineering services in the not-to-exceed amount of $1,157,600. CH2M HILL also requested the not-to-exceed amount of $192,400 for special services. Included in the special services are the costs for subsurface utility investigation, surveying, geotechnical investigation, revision of operations and maintenance (O&M) manuals, and conducting a tracer study on eight existing and two proposed clearwells at the Wylie WTP site.

NTMWD staff has reviewed the engineering fees submitted by CH2M HILL 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 engineering services agreement.

**FUNDING**

Funding in the amount of $1,350,000 for this project is to be made 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 CH2M HILL Engineers, Inc., for professional services associated with design and construction for the Wylie Water Treatment Plant II Clearwell and Disinfection Modifications, Project No. 330, in the not-to-exceed amount of $1,350,000. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4148

REGIONAL WATER SYSTEM
ROCKWALL NO. 2 FLOW METER IMPROVEMENTS
PROJECT NO. 286

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum requests authorization to increase the scope and fee for additional engineering services by KSA Engineers, Inc., (KSA) in the not-to-exceed amount of $37,000, for the Rockwall No. 2 Flow Meter Improvements, Project No. 286. This would result in a revised total not-to-exceed engineering services fee of $64,336.

REVIEW

The City of Rockwall currently has two delivery points. As growth continues, it is anticipated a third delivery point will be added within the next 10 years. Rockwall No. 1, the original delivery point for the City of Rockwall, is located at 100 E. Heath Street. Rockwall No. 2, located at 1303 Interstate Highway 30, was constructed in 1992. Currently, the existing Rockwall Delivery Point No. 2 metering is rated to 20 MGD and has begun to operate at its maximum rate during peak demand periods.

At the April 2012 Board meeting, the Board of Directors approved Administrative Memorandum No. 3789 authorizing an engineering services agreement with KSA for the design of Rockwall No. 2 Flow Meter Improvements, Project No. 286, in the not-to-exceed amount of $27,336. The scope of the design of the Rockwall No. 2 Flow Meter Improvements is to upgrade existing flow metering for a higher flow range, add an automated control valve to maintain back pressure to the upstream system, reconfigure piping for the new meter and control valve, and to eliminate current hydraulic limitations.

PROPOSED ADDITIONAL SERVICES

As the delivery point upgrade design has progressed, one issue has arisen that requires additional engineering evaluation and design effort beyond the original contract scope. At the time the engineering services agreement was initiated, it was intended to replace the existing flow control valve in-kind with a new butterfly valve. Further evaluation of the hydraulic constraints at the Rockwall No. 2 delivery point, as well as discussion among NTMWD staff and consultants on other similar projects have resulted in a recommendation to utilize control valves with better flow proportional control and designed specifically for continuous throttling such as sleeve, piston, or plunger valves. This type of flow control valve is often referred to as an “energy dissipating” valve with the ability to “break head” (absorb relatively large pressure drop across the valve). Such valves have longer laying lengths and would reduce the straight length of pipe upstream of the flow meter. This arrangement would not fit in the existing vault. The energy dissipating valves are more robust and will provide longer service life than a butterfly valve in the same hydraulic conditions. Improved service life (and thus reduced maintenance) is an important consideration for operation of the water system.
Additional engineering services are proposed to design a new vault upstream of the existing vault adequately sized for the new control valve and flow meter. The pipe will run through the existing vault and allow bypass of the obsolete equipment. This approach also offers the benefit of minimizing shutdown time. The new vault will also have stairs rather than a ladder to accommodate the need for frequent access to this confined space. Safely entering a confined space with a ladder requires substantially more time, equipment, and personnel than with stairs, which can amount to significant labor cost and impact on productivity. NTMWD determined the need to change the design standard to require stairs for frequently accessed confined spaces after design work started on this project.

The addition of a new valve vault is beyond the original scope. KSA has requested an additional fee of $37,000, which includes $34,000 for additional engineering services, and $3,000 for special services. The special services include surveying and geotechnical investigation. The revised not-to-exceed total for the project engineering services is $64,336. The revised estimated construction cost of the project is $838,300.

**SUMMARY OF ENGINEERING FEE**

<table>
<thead>
<tr>
<th></th>
<th>Basic and Additional Services</th>
<th>Special Services</th>
<th>Total</th>
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<tr>
<td>Original Agreement</td>
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<td>$0</td>
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<tr>
<td>Proposed Additional Engineering Services</td>
<td>34,000</td>
<td>3,000</td>
<td>37,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$64,336</strong></td>
</tr>
</tbody>
</table>

NTMWD staff has reviewed the proposed fees submitted by KSA and believes them to be fair and reasonable for the work associated with this project. These services will be performed in accordance with the standard engineering services agreement.

**FUNDING**

Additional funding in the amount of $37,000 for additional engineering services is to be made 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 agreement with KSA Engineers, Inc., for Rockwall No. 2 Flow Meter Improvements, Project No. 286, in the not-to-exceed amount of $37,000, for a revised total engineering services fee of $64,336. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4149

REGIONAL WATER SYSTEM
EXPAND HIGH SERVICE PUMP STATION 3-1 TO 350 MGD
PROJECT NO. 188

CHANGE ORDER NO. 1

This administrative memorandum is for the Board of Directors consideration of: 1) Change Order No. 1 for an increase of $136,720.94, resulting in a revised contract amount of $7,857,298.94; and, 2) an increase of 75 calendar days of contract time for Project No. 188, Expand High Service Pump Station 3-1 to 350 MGD.

REVIEW

In July 2009, the Board approved Administrative Memorandum No. 3371 authorizing the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., (FNI) for professional services associated with preparation of the plans and specifications for adding two new pumps and related equipment at High Service Pump Station 3-1 to increase pumping capacity from 250 MGD to 350 MGD.

In June 2010, the Board approved Administrative Memorandum No. 3501 authorizing award of a construction contract for Project No. 188, Expand High Service Pump Station 3-1 to 350 MGD to Bar Constructors, Inc., (BAR) in the amount of $7,720,578.

CHANGE ORDER NO. 1

Change Order No. 1 consists of two items of extra work on the above-referenced project for an increase of $136,720.94 and an additional 75 calendar days of contract time. The proposed costs and contract time extension have been reviewed by the NTMWD staff and FNI and are recommended as representative of the extra costs and time required for the work.

Item No. 1 – Grounding Loop for Existing Transformers $6,049

While the electrical subcontractor was in the process of installing the specified grounding loop around the two new 10 MVA transformers that will feed Pump Nos. 6-10, they discovered that there is no existing ground loop around the two existing 10 MVA transformers feeding Pump Nos. 1-5. Having the same grounding system around all four transformers is important for the safety of both personnel and equipment. NTMWD staff asked FNI to prepare a work change directive for the contractor to install a grounding system around the two original transformers. The contractor has proposed to furnish the materials and labor to install the ground system in the amount of $6,049. NTMWD staff and FNI reviewed the proposed cost and recommend approval.
Item No. 2 – Electrical Duct Bank

During the process of pulling new cable for the new flow meter vault, the contractor discovered that the existing low-voltage duct banks that come out of the building and provide service to the Wylie to Lavon meter vault have settled and collapsed under the slab. This existing duct bank not only carries wires from the existing meter vault but also carries wire from the new meter vault. New duct banks and cables need to be provided into the building. The existing cables to the meter vault need to be removed in order to demolish the existing duct bank and construct the new duct bank. These cables and attached sensors will need to be replaced as the cabling cannot be spliced and will likely incur some damage while being pulled out. The new conduit will run up the outside of the wall and will penetrate the wall approximately three feet above ground surface. The new concrete duct bank will be anchored to the pump station concrete foundation to prevent further settling. The amount of wire to be replaced is approximately 5,300 linear feet total and the two duct banks to be replaced are approximately 100 linear feet each. NTMWD staff and FNI reviewed the proposed cost and recommend approval.

Due to the time required to demolish the existing duct bank, construct the new duct bank, and pull new cable, BAR is requesting an additional 75 calendar days be added to the contract time. This time will only be added to the final completion date since this extra work does not affect the date for placing the two new pumps into service.

### SUMMARY OF CHANGE ORDER NO. 1

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
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<th>Days to Final Completion</th>
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<td>Grounding Loop for Existing Transformers</td>
<td>$6,049.00</td>
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<td>0</td>
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<tr>
<td>2</td>
<td>Electrical Duct Bank</td>
<td>$130,671.94</td>
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<td>75</td>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>$136,720.94</strong></td>
<td>0</td>
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### SUMMARY OF ADJUSTMENTS TO CONTRACT

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<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>$7,720,578.00</td>
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<tr>
<td>Proposed C.O. No. 1</td>
<td>136,720.94</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$7,857,298.94</td>
<td>673</td>
<td>778</td>
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</table>
The actual delivery of the pumping units from the manufacturer, ITT Goulds, was delayed by approximately 22 months from the originally scheduled delivery date. The pumps have been delivered and installed. Startup of the new pumps is anticipated to occur within the next 30-45 days. NTMWD staff is working with BAR to resolve all issues related to the late delivery, after which a recommendation will be presented to the Board of Directors for consideration.

FUNDING

Additional funding in the amount of $136,720.94 for Change Order No. 1 is to be made available in the Regional Water System 2009D Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff and Freese and Nichols, Inc., that the Board of Directors: 1) approve Change Order No. 1 for an increase of $136,720.94, resulting in a revised contract amount of $7,857,298.94; and, 2) approve an additional 75 calendar days of contract time, for Project No. 188, Expand High Service Pump Station 3-1 to 350 MGD. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4150

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

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum requests authorization for additional engineering services for Black & Veatch Corporation (B&V) on the Wylie Water Treatment Plant (WTP) II Improvements for Basin Nos. 3 and 4, Project No. 320, in the additional amount of $26,250. This would result in a revised total not-to-exceed engineering services fee of $277,150.

REVIEW

In February 2013, the Board approved Administrative Memorandum No. 3941, which authorized an engineering services agreement (ESA) with B&V in the not-to-exceed amount of $350,900. This agreement included basic engineering services in the not-to-exceed amount of $207,000 if the option of using conventional sedimentation with circular clarification was chosen, or basic engineering services in the not-to-exceed amount of $307,000 if the option of using plate settlers with a track-mounted sludge collection system was chosen. Administrative Memorandum No. 3941 also approved a not-to-exceed allowance of $43,900 for special services, which included subsurface utility evaluation (pitholing to determine locations of underground utilities) and the engineering evaluation of sludge collection technologies.

An evaluation by NTMWD staff and B&V revealed that the most cost-effective approach to the design of the basin improvements utilized conventional circular clarifiers. By Administrative Memorandum No. 3941, this evaluation reduced the basic services to the not-to-exceed amount of $207,000, which set the total not-to-exceed amount, including special services, at $250,900.

SCOPE OF ADDITIONAL SERVICES

Since the start of design, there have been two significant scope changes for which additional funding is being requested.

Item No. 1 – Drainage Trenches in Basin Nos. 2 and 7  $19,500

NTMWD staff requested that B&V design drainage trenches adjacent to the plate settler areas and within Basin Nos. 2 and 7 to aid in cleaning of the basins. These improvements are expected to reduce the time necessary to clean the basins by two
days for each basin by improving the drainage of sludge from the basin floor to the collection sump. These basins are normally cleaned several times per year. B&V proceeded with the design of these drainage trenches prior to opening of bids for this project. B&V has requested $19,500 for additional engineering services for this design effort.

Item No. 2 - Replacement of Existing Control Panels $6,750

The original scope of services for this project included developing procurement and construction contract bid documents, including drawings and specifications, for the improvements in Basin Nos. 3 and 4. In addition to the new clarification equipment and necessary flume modifications, the scope of the retrofit included replacing the existing plug valves in the sludge blow-off lines at Basin Nos. 3 and 4 sludge valve stations, the design at these sludge valve stations assumed that the existing instrument and control would remain unchanged. Toward the end of the design phase, NTMWD staff requested that B&V replace the existing sludge blow-off control panels at the previously indicated valve stations and that B&V also include the necessary instrumentation and control improvements to provide sludge blow-off control through an existing programmable logic controller located east of Basin No. 1. B&V estimated the engineering and design efforts to implement the above additional improvements at 40 hours, which at an average burdened rate of $75 per hour and a multiplier of 2.25, as stipulated in the ESA, results in an additional fee of $6,750.

SUMMARY OF ADDITIONAL SERVICES

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<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
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<td>Drainage Trenches in Basin Nos. 2 and 7</td>
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<td>2</td>
<td>Replacement of Existing Control Panels</td>
<td>6,750</td>
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<tr>
<td>Total</td>
<td></td>
<td>$26,250</td>
</tr>
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</table>

The additional not-to-exceed fee for these additional engineering services is $26,250. There are no changes to special services. The services would be performed in accordance with the standard ESA.

SUMMARY OF ESA

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>ESA with B&amp;V (Ad. Memo. No. 3941)</td>
<td>$207,000</td>
<td>$43,900</td>
<td>$250,900</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>26,250</td>
<td></td>
<td>26,250</td>
</tr>
<tr>
<td>Total Revised Amount</td>
<td></td>
<td></td>
<td>$277,150</td>
</tr>
</tbody>
</table>
NTMWD staff has reviewed the change in scope and the associated fees and recommends them as representative of the effort required.

FUNDING

Additional funding in the amount of $26,250 for additional engineering services 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 additional engineering services for Black & Veatch Corporation for professional services associated with design for the Wylie Water Treatment Plant II Improvements for Basin Nos. 3 and 4, Project No. 320, in the not-to-exceed amount of $26,250, resulting in a revised engineering services fee of $277,150. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4151

REGIONAL WATER SYSTEM
CHAPMAN LAKE WATER ACCESS, TASK B (DREDGING)
PROJECT NO. 275

CHANGE ORDER NO. 1

This administrative memorandum is for the Board of Directors consideration of:
1) Change Order No. 1 for an increase of $56,033.75, resulting in a revised contract
amount of $1,818,239.75; and, 2) a 10-day contract time extension, resulting in a
revised final completion date of June 15, 2014, for the Chapman Lake Water Access
Task B (Dredging), Project No. 275.

REVIEW

Due to the current drought, the lake level at Chapman Lake has been dropping, raising
concern among Chapman Lake water right holders (NTMWD, Irving, Upper Trinity
Regional Water District (UTRWD), City of Sulphur Springs, and City of Cooper)
regarding access to the conservation pool storage, which can potentially become
isolated from the pump station intake.

In September 2011, the Board approved Administrative Memorandum No. 3687
authorizing funding to UTRWD as a participant in the Chapman Lake Water Access
Feasibility Study undertaken by Freese and Nichols, Inc., (FNI) on behalf of the
Chapman Lake water right holders. The feasibility study, completed in December 2011,
included modeling various demand and inflow conditions and evaluating alternatives for
accessing the conservation pool water. The feasibility study concluded that a floating
pump station on the old Sulphur River channel be further pursued as an option for
accessing the conservation pool water and potential sediment pool water. The cost to
purchase and install the floating pump station was estimated in the range of
$5 to $6.5 million.

The path forward at that time included attaining additional lake survey data, requesting
an easement amendment from the U.S. Army Corps of Engineers (USACE) for a
floating pump station and starting the design process. The Chapman Lake water right
holders agreed that NTMWD would be the lead agency to oversee the design contract.
In December 2011, the NTMWD Board authorized Administrative Memorandum
No. 3736, which was an engineering services agreement with FNI in the amount of
$222,100 for the Chapman Lake Water Access Study, Task A, and Lake Bottom Survey
services. The lake bottom survey was completed in December 2012, and it concluded
that there was significant silt accumulation but no major obstructions, such as tree
stumps, in the channel leading to the pump station. Without the need to remove tree
stumps, the cost of maintenance dredging is considerably lower since accumulated silt can be removed hydraulically.

FNI and NTMWD staff met with the USACE in March 2013 during which USACE noted that it preferred maintenance dredging versus a temporary pump station. The maintenance dredging option requires less permitting effort. Several meetings were held between NTMWD, Irving, and UTRWD during which the following were discussed:

- Maintenance dredging is a lower cost option
- Maintenance dredging will ultimately be required to remove silt from the intake channel
- This option has minimal permitting requirements as compared to other alternatives

NTMWD, Irving, and UTRWD recommended that the design for a maintenance dredging project proceed immediately before the water level is too low for barge access.

In June 2013, the Board authorized Administrative Memorandum No. 4041 in the amount of $159,552.51 for the design of a maintenance dredging project for the intake channel of Lake Chapman. This project is known as Chapman Lake Water Access Task B, Project No. 275.

In October 2013, the Board awarded a construction contract for the Chapman Lake Water Access Task B (Dredging), Project No. 275, to Kallan Industries, Inc., for the amount of $1,762,206 in Administrative Memorandum No. 4068.

CHANGE ORDER NO. 1

Change Order No. 1 consists of one item as follows:

*Item No. 1 – Clearing and Road Construction on Permanent Easement*  
$56,033.75

20 Calendar Days

NTMWD owns approximately 50 acres of land generally three miles south of Chapman Lake. This property was purchased by NTMWD for the use in dewatering dredged material from the lake. The property is landlocked, lying approximately 670 feet to the east of Hopkins County Road (CR) 4810. At the time the property was purchased, a 60-foot wide road access easement was obtained across an adjacent property with frontage on CR 4810 for the purpose of accessing NTMWD's property. The contract documents contain a bid item for the construction of an eight-inch flex base road across NTMWD's easement; however, the location of the road and NTMWD's access easement were shown incorrectly on the plans. The plans indicated clear, dry ground in the easement from CR 4810 to NTMWD's property to be utilized by the contractor in the dewatering process. In reality, the easement is congested with many trees, including approximately 60 trees six inches and greater in diameter. The contractor has
requested additional compensation for the removal and disposal of the necessary trees to provide the required access. Additionally, a portion of the easement contains standing water from nearby stock ponds. The contractor also is requesting additional compensation for moving fill dirt from the dewatering area to the easement area in order to stabilize the easement subgrade for the proposed eight-inch flexbase road.

The easement clearing and road construction is included in this project because this is the first time the access easement has been used. NTMWD and the City of Irving will need to use this road in the future to access the dewatering property. NTMWD is discussing FNI's participation in this additional cost.

### SUMMARY OF ADJUSTMENTS TO CONTRACT FOR CHANGE ORDER NO. 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
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<th>Days to Final Completion</th>
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<td>20</td>
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<tr>
<td>Revised Contract Amount</td>
<td>$1,818,239.75</td>
<td>140</td>
<td>160</td>
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</table>

### FUNDING

This Change Order No. 1 is proposed to be funded by the NTMWD, Irving, and UTRWD pursuant to the *Amended Agreement for Jim Chapman Lake Operating Plan*. The breakdown is as follows:

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<thead>
<tr>
<th>Entity</th>
<th>Cost Sharing Distribution</th>
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<tr>
<td>NTMWD</td>
<td>$25,181.57</td>
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<tr>
<td>City of Irving</td>
<td>$23,763.91</td>
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<tr>
<td>UTRWD</td>
<td>$7,088.27</td>
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<tr>
<td>Total</td>
<td>$56,033.75</td>
</tr>
</tbody>
</table>

### FUNDING

NTMWD's share of the funding in the amount of $25,181.57 for this project is to be made available from the Regional Water System Contingency Fund. This fund currently has a balance of $23.2 million. This change order has been discussed with Irving and UTRWD and both are in concurrence to proceed. Notifying the contractor to move forward as expeditiously as possible will preclude potential additional charges from the contractor. Upon approval by the Board, it is recommended that NTMWD staff direct the contractor immediately to move forward with this work. Concurrent with this work, Irving and UTRWD will take the necessary council action for approval of the additional required funding.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff and Freese and Nichols, Inc., that the Board of Directors approve: 1) Change Order No. 1 for an increase of $56,033.75, resulting in a revised contract amount of $1,818,239.75; and, 2) an additional 20 calendar days of contract time, resulting in a revised final completion date of June 25, 2014, for the Chapman Lake Water Access, Task B (Dredging), Project No. 275. This will be an item on the regular agenda of the February 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

FEBRUARY 2014

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

CHANGE ORDER NO. 5

This administrative memorandum is for the Board of Directors consideration of Change Order No. 5 for Project No. 259, Water Treatment Plant (WTP) I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains for an increase of $104,627 resulting in a revised contract amount of $8,144,796.75.

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 washwater 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>
</tbody>
</table>
The total value of the construction contract with PCL including Change Order No. 4 is $8,040,169.75.

CHANGE ORDER NO. 5

Change Order No. 5 consists of six items on the referenced project for a net increase in contract price of $104,627. The NTMWD Engineering staff and Carollo have reviewed these items and recommend them as necessary and reasonable.

Item No. 1 – Change of Coating System on all Filter Flumes $24,257

Due to the unfinished and rough surfaces and very high humidity conditions inside the center flumes, the specified coating system has been extremely difficult to apply and achieve acceptable results. The contractor applied additional coating layers without acceptable results. After inspection and evaluation of the flumes already coated, Carollo with input from the NTMWD staff, proposed changing the current coating material from the specified Carboline high solids coating system to a Xypex system. The benefit from the Xypex system is that it does require humidity in the concrete for application, which makes the product ideal for this location. The specified high solids epoxy Carboline coating system will continue to be used on the remainder of the exposed surfaces of all filters.

The Xypex system is currently used on the WTP IV filters project on the same location (center flumes only) with excellent results. The same paint specification was used at WTPs I and IV, and in both projects it has been recommended to install the Xypex product in place of the originally specified product. The contractor will remove the previously applied Carboline material and replace it with Xypex on five filters (Filter Nos. 2, 4, 8, 10, and 12). The contractor will also install Xypex coating on the remaining seven filters (Filter Nos. 1, 3, 5, 6, 7, 9, and 11). Cost for the removal of the material on flumes already coated with Carboline will be covered by the contractor. NTMWD staff and Carollo have reviewed the proposed costs and recommend approval.

Item No. 2 – FRP Weir for Clariflocculator No. 3 $4,230

The top surface of the wall on Clariflocculator No. 3 where the fiberglass reinforced plastic (FRP) weir is to be mounted has lost a significant amount of concrete due to erosion and the age of this structure. On several segments of the circumference of the wall there is not enough spacing for the new FRP weirs to be bolted into place. Carollo and NTMWD staff evaluated the most efficient and cost effective manner to resolve this issue and recommended installing wider segments of FRP weir only on the segments where the concrete deterioration is excessive. NTMWD staff and Carollo have reviewed the proposed costs and recommend approval. The proposed installation will be sufficient until further improvements are performed. The current Water Treatment Capital Improvement Program includes a project to perform improvements at the WTP I rapid mix structure and all four clariflocculators. It is planned to present an ESA for
design of these improvements for the Board’s consideration in the spring of 2015, with construction of these improvements commencing in late 2015.

*Item No. 3 – Blower Relay Base Modification in PLC-1*  
$2,696

After the new programmable logic controller (PLC-1) was installed and termination of wires was complete, it was discovered that induced voltage was causing the PLC to function incorrectly. Approximately 28 volts was being induced due to the proximity of previously installed electrical cables. It has been determined that induced voltage has been present at this location for many years. Because the older equipment utilized 120-volt relay technology, the induced voltage had not caused signal interference. The most cost-effective solution is to change the relay base for PLC-1 to an electrical isolation type device, which will eliminate the induced voltage. The contractor proposed to purchase and install the new PLC relay base for a total cost of $2,696.

*Item No. 4 – Chemical Trench Alterations*  
$16,436

As a coordination effort on several projects working in this area, a decision was made to abandon the chemical trench on the east side of the WTP I Operations Building. Chlorine solution and chemical feed pipes in this trench were relocated along the east wall of the filter structure with proper insulation and heat-tracing by the ozone contractor as a no cost change. To complete the installation, a cost proposal was requested from the contractor to refurbish a segment of the chemical trench along the north side of the filter structure and install a sump manhole. This northernmost section of chemical trench will remain in service.

Work proposed to be performed by the contractor will include:

- Relocation of chlorine solution and sample lines to be mounted on the outside face of the north wall of the filters
- Insulation and heat tracing of all lines including a new heat trace control panel
- Installation of a sump manhole for dewatering of the chemical trench

*Item No. 5 – Adjustment of FRP Weir Installation Elevation*  
$11,478

The contractor installed the new fiber FRP weirs on WTP I Clariflocculator No. 1 at the elevation required by the contract drawings. After installation of the weirs in Clariflocculator No. 1, and after discussions with the consulting engineer, Carollo, it was determined that the top elevation of the weirs as shown in the plans was not correct. The contractor was required to remove the FRP weirs and reinstall them at the correct elevation. The contractor has requested an increase in the amount of $11,478 for this additional work. Carollo will be participating in the cost and it appears at this time that the consultant is responsible for the full cost of this item.
During construction of this project, several items have been discovered that impact the communications for the system, which controls the washwater pumps and the washwater elevated storage tank. These system controls are critical to the proper operation of the backwash system, and the improvements described herein are recommended by the Executive Director and NTMWD staff to provide the proper control and safety for the system.

Significant construction has occurred in this area since WTP I was originally placed into service. In some cases, the new facilities were not accurately shown on the record drawings. As a result, the design of the new control system did not provide complete communications, and additional improvements are needed for proper control of the washwater pumps and tank levels. There are several proposed changes, which will result in system improvements described as follows:

- Relocate the washwater pump controls and tank level wiring and programming to the new PLC-1 so that all filter system controls will be on the same PLC
- Change the level transmitter to improve accuracy and dependability
- Modify the PLC program to add level control
- Modify the HMI (human machine interface) to display the correct level and scaling
- Install additional equipment in the pump control panel and revise the control logic for proper operation and sequencing of the washwater pumps
- Modify the HMI to add user interface/control for operation of the pumps

These items and recommended improvements were discussed and reviewed by Carollo and NTMWD Engineering and Operations staff. It is the consensus of the group that all of the recommendations should be implemented. The following equipment, materials, labor, and services will be required to accomplish the recommended improvements:

**Electrical**

- 75 LF concrete encased duct bank with four two-inch PVC conduit
- 100 LF 120-Volt wire replacement to boathouse
- Three stainless steel junction boxes
- 180 LF one-inch PVC-coated conduit with wiring
- 300 LF aluminum rigid conduit with wiring
- Terminations and labels
Instrumentation

- Modify PLC-1 program to add level control and change from a discrete to an analog value
- Move the input/output to PLC-1 for display
- Add relays in the pump control panels
- Add logic in PLC-1 to alternate pumps
- Add pump status for each pump
- Testing and shop drawings to reflect modifications to pump control panels, level panel, and PLC-1

A total cost of $45,530 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. 5**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Change of coating system on all filter flumes</td>
<td>$24,257</td>
</tr>
<tr>
<td>2</td>
<td>FRP Weir for Clarifloculator No.3</td>
<td>4,230</td>
</tr>
<tr>
<td>3</td>
<td>Blower relay base modification in PLC-1</td>
<td>2,696</td>
</tr>
<tr>
<td>4</td>
<td>Chemical trench alterations</td>
<td>16,436</td>
</tr>
<tr>
<td>5</td>
<td>Adjustment of FRP weir installation elevation</td>
<td>11,478</td>
</tr>
<tr>
<td>6</td>
<td>Restore communications with washwater pumps and tank level</td>
<td>45,530</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$104,627</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>$7,535,625.00</td>
<td>820</td>
<td>880</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>181,105.96</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>227,024.59</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 3</td>
<td>28,269.20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 4</td>
<td>68,145.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed C.O. No. 5</td>
<td>104,627.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$8,144,796.75</td>
<td>820</td>
<td>880</td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td>March 6, 2015</td>
<td></td>
<td>May 5, 2015</td>
</tr>
</tbody>
</table>
FUNDING

Additional funding in the amount of $104,627 for this project is to be made 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. 5 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 $104,627, resulting in a revised contract amount of $8,144,796.75. This will be an item on the regular agenda of the February 2014 Board meeting.
CONSTRUCTION PROGRESS REPORT
FOR PROJECTS UNDERWAY
JANUARY 31, 2014

WATER SYSTEM

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

BID AMOUNT: $61,316,420.00

CHANGE ORDERS:
1 - ($88,876.76)
2 - $83,334.34
3 - $24,913.52
4 - $35,890.06
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%

PROJECT NO. 128
LAKE TEXOMA PUMP STATION MODIFICATIONS

BID AMOUNT: $6,479,702.00

CHANGE ORDERS:
1 - $37,046.13
2 - $92,116.00

CURRENT CONTRACT AMOUNT: $6,598,864.13

AMOUNT EARNED TO DATE: $6,215,995.88

% CONTRACT AMOUNT EARNED: 95%

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 are currently investigating the cause of the leak.

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

CONTRACTOR: MCCARTHY BUILDING COMPANIES, INC.

BID AMOUNT: $112,989,000.00

CHANGE ORDERS: 1 - $87,737.15
2 - $30,000.00
3 - ($46,178.06)
4 - $120,288.62
5 - $85,531.62
6 - $102,963.15
7 - $252,716.53
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 - ($4,756,690.01)
20 - $52,692.05
21 - $70,404.74
22 - $72,815.57
23 - $35,120.49

CURRENT CONTRACT AMOUNT: $110,907,592.55

AMOUNT EARNED TO DATE: $104,197,660.35

% CONTRACT AMOUNT EARNED: 94% 

REMARKS: The plate settlers in WTP II Basin No. 7 have been started up and are ready for operation. The south contactor is ready for water even though there is still equipment being electrically connected in the WTP II south contactor ozone gallery. Installation of conduit and wire from the WTP II south contactor electrical room to various pieces of equipment in the contactor gallery is still in progress. Witness testing of the ozone safety equipment at NOPS and WTP III north and south contactors is underway. The performance testing of the ozone equipment for WTP III north and south contactors is also underway. The electrical installation in the WTP I ozone contactor gallery is complete; the termination of the electrical instruments in WTP I gallery is underway. Paving around the South Ozone Operations Building is 75% complete.

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PROJECT NO. 188
EXPAND HIGH SERVICE PUMP STATION 3-1 TO 350 MGD

CONTRACTOR: BAR CONSTRUCTORS, INC.

BID AMOUNT: $7,720,578.00

CHANGE ORDERS: NONE

CURRENT CONTRACT AMOUNT: $7,720,578.00

AMOUNT EARNED TO DATE: $7,487,191.20

% CONTRACT AMOUNT EARNED: 97%

REMARKS: The contractor installed conduit and seal tight to limit switch junction boxes on Actuator Nos. 6 and 7, finished wire pulls from electrical chase to motors for RTD's, vibration switches, and motor space heaters. The contractor also pulled 5KV cable for power to Motor Nos. 6 and 7, routed control wiring to junction boxes and meger tested. Terminated control cables in Soft Starter Nos. 6 and 7 from RTD's, motor space heaters, and vibration switches. Applied intermediate and final project coatings to
motors, pumps, and associated valves and pipes. Applied intermediate and final paint coating to flow meter and piping in the meter vault.

<table>
<thead>
<tr>
<th>PROJECT NO. 200</th>
<th>BID AMOUNT: $4,572,759.47</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALL SECOND 50 MGD PUMP AND IMPROVEMENTS AT APOLLO PUMP STATION</td>
<td>CHANGE ORDERS: 1 - $26,243.17</td>
</tr>
<tr>
<td>CONTRACTOR: LEGACY CONTRACTING, LP</td>
<td>Time Ext.-60 Days</td>
</tr>
<tr>
<td>CONTRACT DATE: NOVEMBER 21, 2011</td>
<td>2 - $30,608.17</td>
</tr>
<tr>
<td>NOTICE TO PROCEED DATE: DECEMBER 21, 2011</td>
<td>Time Ext.-222 Days</td>
</tr>
<tr>
<td>ORIGINAL COMPLETION DATE: APRIL 14, 2013</td>
<td>CURRENT CONTRACT AMOUNT: $4,629,610.81</td>
</tr>
<tr>
<td>REVISED COMPLETION DATE: JANUARY 21, 2014</td>
<td>AMOUNT EARNED TO DATE: $4,583,619.13</td>
</tr>
<tr>
<td>TIME LAPSED: 102%</td>
<td>% CONTRACT AMOUNT EARNED: 99%</td>
</tr>
</tbody>
</table>

REMARKS: During the month of January, the contractor continued working on the outstanding items required for final completion.

<table>
<thead>
<tr>
<th>PROJECT NO. 201</th>
<th>BID AMOUNT: $5,157,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTRICAL IMPROVEMENTS AT RAW WATER PUMP STATION NO. 2</td>
<td>CHANGE ORDERS: 1 - $34,388.00</td>
</tr>
<tr>
<td>CONTRACTOR: CRESCENT Constructors INC.</td>
<td>2 - $10,337.00</td>
</tr>
<tr>
<td>CONTRACT DATE: SEPTEMBER 27, 2012</td>
<td>Time Ext.-14 Days</td>
</tr>
<tr>
<td>NOTICE TO PROCEED DATE: OCTOBER 11, 2012</td>
<td>CURRENT CONTRACT AMOUNT: $5,201,725.00</td>
</tr>
<tr>
<td>ORIGINAL COMPLETION DATE: OCTOBER 11, 2013</td>
<td>AMOUNT EARNED TO DATE: $5,166,981.58</td>
</tr>
<tr>
<td>REVISED COMPLETION DATE: OCTOBER 25, 2013</td>
<td>CONTRACT AMOUNT EARNED: 99%</td>
</tr>
<tr>
<td>TIME LAPSED: 125%</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS: The project construction is complete. Equipment and SCADA training has been completed, and the construction record drawings have been submitted to the Engineer. Final approved O&M manuals are pending.

<table>
<thead>
<tr>
<th>PROJECT NO. 202</th>
<th>BID AMOUNT: $3,537,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTRICAL IMPROVEMENTS AT HIGH SERVICE PUMP STATION NO. 1-1</td>
<td>CHANGE ORDERS: NONE</td>
</tr>
<tr>
<td>CONTRACTOR: CRESCENT Constructors, Inc.</td>
<td>CURRENT CONTRACT AMOUNT: $3,537,000.00</td>
</tr>
<tr>
<td>CONTRACT DATE: OCTOBER 17, 2013</td>
<td>AMOUNT EARNED TO DATE: $185,237.36</td>
</tr>
<tr>
<td>NOTICE TO PROCEED DATE: NOVEMBER 6, 2013</td>
<td>CONTRACT AMOUNT EARNED: 5%</td>
</tr>
<tr>
<td>COMPLETION DATE: FEBRUARY 14, 2015</td>
<td></td>
</tr>
<tr>
<td>TIME LAPSED: 17%</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS: The contractor has mobilized and continues the submittal process.
PROJECT NO. 205
SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM UPGRADES AND OPERATIONS

CONTRACTOR: PRIME CONTROLS, LP

CHANGE ORDERS: 1 - $21,083.16
Time Ext.-90 Days

CURRENT CONTRACT AMOUNT: $2,735,815.16

AMOUNT EARNED TO DATE: $2,242,989.91

CONTRACT AMOUNT Earned: 82%

TIME Lapsed: 80%

REMARKS: Plant III Basin Nos. 6, 7, and 8 communication cards have been installed in the programmable logic controllers and testing is 15% complete. Installation of layer three network switches and rack-mounted patch panels in the administration and operations buildings are complete. Installation and documentation of the fiber optics system for the SCADA network is 95% complete. Electrical work is complete and punchlist cleanup is 70% complete. Programming is now 61% complete.

PROJECT NO. 206
INSTALL PIPING MODIFICATIONS AT HAILEY PUMP STATION

CONTRACTOR: LEGACY CONTRACTING, LP

CURRENT CONTRACT AMOUNT: $410,584.44

AMOUNT EARNED TO DATE: $410,584.44

CONTRACT AMOUNT Earned: 100%

TIME Lapsed: 125%

REMARKS: As of May 2013, the contractor has completed all work associated with this project. Closeout is planned to be concurrent with Project No. 200.

PROJECT NO. 207
EXPAND FRISCO/MCKINNEY PUMP STATION TO 130 MGD

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

CURRENT CONTRACT AMOUNT: $6,592,691.64

AMOUNT EARNED TO DATE: $6,520,067.52

% CONTRACT AMOUNT Earned: 99%

TIME Lapsed: 120%

REMARKS: Construction of this project is complete. During the month of January, the contractor completed the required testing for the electrical study. Permission to final the project will be requested at the February 2014 Board meeting.
PROJECT NO. 217
ELECTRICAL IMPROVEMENTS AT WATER TREATMENT PLANT II CHEMICAL BUILDING

CONTRACTOR: FACILITY SOLUTIONS GROUP

CONTRACT DATE: AUGUST 25, 2011

NOTICE TO PROCEED DATE: SEPTEMBER 7, 2011

ORIGINAL COMPLETION DATE: NOVEMBER 5, 2012

REVISED COMPLETION DATE: NOVEMBER 11, 2013

TIME LAPSED: 145%

REMARKS: This project is complete. Final payment was authorized at the December 2013 Board meeting.

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

CONTRACTOR: FACILITIES SOLUTION GROUP

CONTRACT DATE: JULY 26, 2012

NOTICE TO PROCEED DATE: AUGUST 22, 2012

COMPLETION DATE: AUGUST 30, 2013

REVISED COMPLETION DATE: NOVEMBER 15, 2013

TIME LAPSED: 116%

REMARKS: The project construction is complete. The 30-day acceptance test is in progress. Final approved O&M manuals are pending.

PROJECT NO. 251
WATER TREATMENT PLANT IV CONVERSION TO BIOLOGICALLY ACTIVE FILTRATION

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

CONTRACT DATE: MARCH 22, 2012

NOTICE TO PROCEED DATE: MARCH 29, 2012

COMPLETION DATE: DECEMBER 29, 2013

REVISED COMPLETION DATE: APRIL 28, 2014

TIME LAPSED: 88%

REMARKS: This project includes work in all 20 filters at WTP IV. Filter Nos. 1-17 are complete with the exception of automatic operation of the leveling gates. These filters have been placed back into service. Filter Nos. 19 and 20 have been removed from service. Coatings in Filter Nos. 19 and 20 are complete, and filter media installation is in progress. Work in Filter No. 18 consists of a concrete walk and leveling gate installation, and this work is complete. Wire and conduit installation to the metering pumps and leveling gate operators is still in progress. Chemical feed piping installation is still in progress.
PROJECT NO. 259
WATER TREATMENT PLANT I CONVERSION TO BAF AND IMPROVEMENTS OF EXISTING UNDERDRAINS

CONTRACTOR: PCL CONSTRUCTION, INC.

CHANGE ORDERS: 1 - $181,105.96
2 - $227,024.59
3 - $28,269.20
4 - $68,145.00

CURRENT CONTRACT AMOUNT: $8,040,169.75

AMOUNT EARNED TO DATE: $6,668,116.60

% CONTRACT AMOUNT EARNED: 83%

TIME LAPSED: 48%

REMARKS: This project includes work in all 12 filters and 4 clarifiers at WTP I. WTP I is currently completely shut down and is scheduled to be placed back into operation in February 2014. Contractor completed installing media in Filters Nos. 2, 4, 8, 10 and 12. Backwash cycles and media testing is complete. Slab on Filter No. 6 was poured and new underdrain installation is underway. All new valves/actuators and one new mag meter has been installed. Media removal of odd-numbered filters was completed and demolition work is in progress.

PROJECT NO. 266
42-INCH AND 24-INCH WATERLINE RELOCATION ALONG STACY ROAD (FM 2786) FROM SH 5 (GREENVILLE DRIVE) TO FM 1378 (COUNTRY CLUB ROAD)

CONTRACTOR: MOUNTAIN CASCADE OF TEXAS, LLC

AMOUNT EARNED TO DATE: $0.00

% CONTRACT AMOUNT EARNED: 0%

TIME LAPSED: 5%

REMARKS: The contractor is in the process of surveying the permanent and temporary easements, as well as providing preconstruction video. Contractor is also providing the design engineer (Kimley-Horn and Associates, Inc.) and the NTMWD staff with project submittals.

PROJECT NO. 268
LAKE TEXOMA OUTFALL TO WYLIE WATER TREATMENT PLANT RAW WATER PIPELINE

CONTRACTOR: (CMAR): GARNEY CONSTRUCTION

AUTHORIZED TOTAL AMOUNT TO DATE: $282,323,495.00

AUTHORIZED EXPENDITURE TO DATE: $278,701,907.80

AMOUNT EARNED TO DATE: $265,006,320.62

TIME LAPSED: 92%

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 also set the guaranteed maximum price at $282,323,495 based on the current scope for the project.

**BIDS RECEIVED & AWARDED**
During January, Plant Work Bid Package No. 6 follow up evaluation meeting was held after Garney received clarification on specific bid item questions. This bid package is for the mobile filtration components.

**CONSTRUCTION**
All pipeline sections (A, B, C, D, and E) are complete and passed hydrostatic testing. Pipeline contractors continued work on easement restoration and fiber optic conduit 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, and all four blend tanks are substantially complete. Work continued in the north and south electrical buildings at Raw Water Pump Station No. 3 as well as the reclaim electrical buildings. Work continued on the mixing boxes, various meter vaults, flow meter installations, and plant piping. The electrical contractor continued work on miscellaneous items including setting equipment, panels, and various duct banks throughout the plant site.
# Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline
## Cost Summary to Date

<table>
<thead>
<tr>
<th>Amendment</th>
<th>Date Bid</th>
<th>Date Authorized</th>
<th>Item Description</th>
<th>Budget</th>
<th>Actual Bid</th>
<th>Difference</th>
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<tbody>
<tr>
<td>1</td>
<td>N/A</td>
<td>06/29/12</td>
<td>Procurement Service</td>
<td>$350,540</td>
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<td>Construction Service</td>
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<td>2</td>
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<td>Pipe Material</td>
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<td>3</td>
<td>07/11/12</td>
<td>08/16/12</td>
<td>CMAR Provided Materials &amp; Services for Pipeline</td>
<td>$10,142,738</td>
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<td>3</td>
<td>07/11/12</td>
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<td>CMAR Selected Materials &amp; Services for Pipeline</td>
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<td>CMAR Provided Materials &amp; Services for Connections &amp; Blending</td>
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<td>3a</td>
<td>N/A</td>
<td>10/31/12</td>
<td>Credit for CMAR Selected Materials that were incorporated into Amendment No. 5</td>
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<td>08/01/12</td>
<td>08/16/12</td>
<td>CMAR Provided Services for Sludge Removal at WTP Site</td>
<td>$2,049,507</td>
<td>$1,867,888</td>
<td>-$181,619</td>
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<td>10/03/12</td>
<td>10/31/12</td>
<td>Pipeline Installation (John D. Stevens Sections A&amp;B, BAR Constructors Section C, Garney Construction Section D, and Oscar Renda Contracting Section E)</td>
<td>$63,185,094</td>
<td>$55,453,176</td>
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<td>10/03/12</td>
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<td>ASI Contractors constructs Balancing Reservoir</td>
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<td>Construction Staking</td>
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<td>Flow Meters</td>
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<td>MV Switchgear RWPS3</td>
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<td>12/12/12</td>
<td>01/21/13</td>
<td>Plant I &amp; II Furnish and Install</td>
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<td>12/12/12</td>
<td>01/21/13</td>
<td>Plant III &amp; IV Furnish and Install</td>
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<td>12/12/12</td>
<td>01/21/13</td>
<td>60&quot; &amp; 78&quot; Yard Pipe and Connections</td>
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<td>Existing Plant Chemical Feed, meters, and vaults</td>
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<td>Submittals in support of Texoma Surge Tank</td>
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<td>Sherman Bypass</td>
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<td>Electrical &amp; Instrumentation/ SCADA</td>
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<td>Credit for Submittals in support of Texoma Surge Tank</td>
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<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<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>04/05/13</td>
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<td><strong>-$19,373,551</strong></td>
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</table>
### PROJECT NO. 275
**CHAPMAN LAKE WATER ACCESS TASK B (DREDGING)**

**CONTRACTOR:** KALLAN INDUSTRIES, INC.

**CONTRACT DATE:** JANUARY 10, 2014

**NOTICE TO PROCEED DATE:** JANUARY 16, 2014

**COMPLETION DATE:** JUNE 5, 2014

**TIME LAPSED:** 8%

**REMARKS:** The contractor is in the process of mobilizing and preparing the dewatering system. No dredging has occurred to date.

**BID AMOUNT:** $1,762,206.00

**CHANGE ORDERS:** NONE

**CURRENT CONTRACT AMOUNT:** $1,762,206.00

**AMOUNT EARNED TO DATE:** $402,897.75

**% CONTRACT AMOUNT EARNED:** 23%

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### PROJECT NO. 276
**WYLIE WATER TREATMENT PLANT FINISHED WATER RESERVOIR & FLOW METERING IMPROVEMENTS**

**CONTRACTOR:** BAR CONSTRUCTORS, INC.

**CONTRACT DATE:** AUGUST 22, 2013

**NOTICE TO PROCEED DATE:** OCTOBER 1, 2013

**COMPLETION DATE:** JULY 23, 2015

**TIME LAPSED:** 18%

**REMARKS:** Pipelines have been located in areas where meter vaults are to be constructed. Excavation for clearwell is expected to commence in February 2014.

**BID AMOUNT:** $14,720,800.00

**CHANGE ORDERS:** 1 - ($568,496.03)

**CURRENT CONTRACT AMOUNT:** $14,152,303.97

**AMOUNT EARNED TO DATE:** $710,171.72

**% CONTRACT AMOUNT EARNED:** 5%

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### PROJECT NO. 277
**WATER TREATMENT PLANT III FILTER UNDERDRAIN IMPROVEMENTS AND CONVERSION TO BAF**

**CONTRACTOR:** ARCHER WESTERN CONTRACTORS, LLC

**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:** 33%

**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. 36-40. 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. 1, 2, and 3 are currently out of service and being sandblasted. The washwater valves for Filter Nos. 1 and 3 were rebuilt by NTMWD Technical Services and reinstalled by the contractor this month.

**BID AMOUNT:** $6,452,461.00

**CHANGE ORDERS:**
1. $104,527.71
   - Time Ext.-31 Days
2. $53,132.85
3. $69,072.15

**CURRENT CONTRACT AMOUNT:** $6,679,193.71

**AMOUNT EARNED TO DATE:** $2,720,222.77

**% CONTRACT AMOUNT EARNED:** 41%
PROJECT NO. 282
24-INCH REPLACEMENT LINE FOR THE PRINCETON NO. 1 AND MCKINNEY-PRINCETON-FARMERSVILLE PIPELINES CROSSING US HIGHWAY 380

CONTRACTOR: WRIGHT CONSTRUCTION CO., INC.

CONTRACT DATE: JUNE 27, 2013

NOTICE TO PROCEED DATE: JULY 3, 2013

COMPLETION DATE: JANUARY 9, 2014

TIME LAPSED: 110%

REMARKS: The contractor has completed the tie-in of the new waterline and is performing final grading and clean-up. The abandoned lines under US 380 are in the process of being filled with grout.

PROJECT NO. 283
FM 1378 20-INCH AND 60 INCH WATERLINE RELOCATIONS

CONTRACTOR: MOUNTAIN CASCADE OF TEXAS, LLC

CONTRACT DATE: DECEMBER 20, 2012

NOTICE TO PROCEED DATE: JANUARY 4, 2013

ORIGINAL COMPLETION DATE: JUNE 3, 2013

REVISED COMPLETION DATE: DECEMBER 30, 2013

TIME LAPSED: 107%

REMARKS: This project is complete. Awaiting record drawings from the engineer in order to submit invoice for reimbursement by the City of Wylie.

PROJECT NO. 284
WYLIE WTPs I AND II SLUDGE LINE IMPROVEMENTS

CONTRACTOR: PCL CONSTRUCTION, INC.

CONTRACT DATE: JUNE 27, 2013

NOTICE TO PROCEED DATE: AUGUST 12, 2013

ORIGINAL COMPLETION DATE: JANUARY 9, 2014

REVISED COMPLETION DATE: MARCH 6, 2014

TIME LAPSED: 81%

REMARKS: Approximately 96% of the pipeline is installed. Contractor encountered direct buried 25KV electrical cables not shown on record drawings parallel and along the pipeline alignment. The Board approved a change order on installation method by jack and bore of the final 100 LF. Contractor is waiting on material to arrive on-site to complete this segment. Shutdown to connect new pipeline to existing sludge system will be requested and scheduled after installation.
PROJECT: NO. 289
SOUTH DELIVERY POINT IMPROVEMENTS, PRIORITY NO. 2

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $1,488,400.00

CONTRACT DATE: NOVEMBER 21, 2013
AMOUNT EARNED TO DATE: $0.00

NOTICE TO PROCEED DATE: DECEMBER 9, 2013
% CONTRACT AMOUNT EARNED: 0%

COMPLETION DATE: AUGUST 6, 2014
TIME LAPSED: 20%

REMARKS: During the month of January, the contractor continues to work on submittals.

PROJECT NO. 293
BONHAM WATER TREATMENT PLANT SLUDGE LAGOON IMPROVEMENTS

CONTRACTOR: HARRISON WALKER & HARPER, LP
CHANGE ORDERS: 1 - $171,098.00
CURRENT CONTRACT AMOUNT: $2,970,778.00

CONTRACT DATE: APRIL 25, 2013
AMOUNT EARNED TO DATE: $1,821,148.05

NOTICE TO PROCEED DATE: MAY 8, 2013
% CONTRACT AMOUNT EARNED: 61%

COMPLETION DATE: APRIL 3, 2014
TIME LAPSED: 80%

REMARKS: Sludge removal from original Lagoons 1 and 2 has been completed. Lagoons were cleaned to original elevation. Contractor continues working on embankments. The two 24-inch plug valves to be relocated have been removed, and installation at the revised location will be scheduled in February 2014. Contractor continues work on decant and manganese pipelines.

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

CONTRACTOR: PCL CONSTRUCTION, INC.
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $318,975.00

CONTRACT DATE: SEPTEMBER 19, 2013
AMOUNT EARNED TO DATE: $84,495.68

NOTICE TO PROCEED DATE: OCTOBER 7, 2013
% CONTRACT AMOUNT EARNED: 26%

COMPLETION DATE: MAY 5, 2014
TIME LAPSED: 52%

REMARKS: Pipe-laying began on January 16, 2014, and the contractor has installed over 300 feet to date. An RFI requesting approval of a re-alignment of the decant line was accepted by the Engineer to avoid crossing the direct-buried 25KV lines in the area.
### PROJECT NO. 298
HIGH SERVICE PUMP STATION 2-2 AND 2-3 ELECTRICAL IMPROVEMENTS

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

**BID AMOUNT:** $4,902,970.00
**CHANGE ORDERS:** NONE

**CURRENT CONTRACT AMOUNT:** $4,902,970.00
**AMOUNT EARNED TO DATE:** $0.00
**% CONTRACT AMOUNT EARNED:** 0%

**CONTRACT DATE:** OCTOBER 17, 2013
**NOTICE TO PROCEED DATE:** NOVEMBER 7, 2013
**COMPLETION DATE:** JUNE 5, 2015

**TIME LAPSED:** 14%

**REMARKS:** The contract documents were executed at the October 17, 2013 Board meeting and the preconstruction conference was held on November 7, 2013. The notice to proceed was issued on November 7, 2013. Contractor is currently working on submittals.

### PROJECT NO. 299
LAKE TAWAKONI WATER TREATMENT PLANT CHLORINE DIOXIDE SYSTEM

**CONTRACTOR:** RED RIVER CONSTRUCTION

**BID AMOUNT:** $2,388,146.00
**CHANGE ORDERS:** 1 - ($16,334.38)
2 - $34,984.00
**Time Ext.-134 Days**

**CURRENT CONTRACT AMOUNT:** $2,406,795.62
**AMOUNT EARNED TO DATE:** $2,390,665.62
**% CONTRACT AMOUNT EARNED:** 99%

**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:** 106%

**REMARKS:** Startup is expected during the first week of February. The contractor is expecting delivery of repair components for the scales on which the day tanks are mounted and a level transmitter.

### PROJECT NO. 310
WYLIE-MCKINNEY 20-INCH WATERLINE RELOCATION AT STINSON ROAD

**CONTRACTOR:** DOWAGER UTILITY CONSTRUCTION, LTD.

**BID AMOUNT:** $127,262.00
**CHANGE ORDERS:** NONE

**CURRENT CONTRACT AMOUNT:** $127,262.00
**AMOUNT EARNED TO DATE:** $125,032.00
**CONTRACT AMOUNT-EARNED:** 98%

**CONTRACT DATE:** JULY 25, 2013
**NOTICE TO PROCEED DATE:** AUGUST 1, 2013
**COMPLETION DATE:** FEBRUARY 27, 2014

**TIME LAPSED:** 86%

**REMARKS:** The contractor has completed the tie-in of the new pipe and is finalizing items on the air release valve and blow off valve. Final completion is expected in February.
PROJECT NO. 313
UNION PACIFIC RAILROAD CROSSING PROTECTION OF EXISTING 72-INCH TEXOMA PIPELINE

CONTRACTOR: LEWIS CONTRACTORS, INC.

CONTRACT DATE: NOVEMBER 21, 2013

NOTICE TO PROCEED DATE: DECEMBER 12, 2013

COMPLETION DATE: MARCH 12, 2014

TIME LAPSED: 51%

REMARKS: The tunnel liner work was successfully completed during the scheduled Texoma Pipeline shutdown in January. Restoration work remains.

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: 22%

REMARKS: The contractor is in the process of submitting technical data on items to be installed on this project and has performed exploratory excavations to locate the existing waterlines.

PROJECT NO. 320
WYLIE WATER TREATMENT PLANT II
IMPROVEMENTS FOR BASINS 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

TIME LAPSED: 19%

REMARKS: The contractor has set up their crane which will be on-site for the duration of the project. The wall separating the north and south halves of Basin No. 4 has been removed. The concrete floor has been demolished using a track-mounted hydraulic jackhammer. A drainage trench has been excavated to intercept water under the slab. The 60-day window for completing the bores under Basin No. 5 began on January 8, 2014. The bore pit has been excavated and excavation of the 30-foot deep receiving pit has been started in preparation for the boring contractor who is expected to begin work on February 10, 2014.
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: 103%

BID AMOUNT: $3,980,590.00
CHANGE ORDERS: 1 - $33,098.00
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%

REMARKS: Work is complete with the exception of minor punchlist items.

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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: 33%

BID AMOUNT: $605,115.00
CHANGE ORDERS: NONE

CURRENT CONTRACT AMOUNT: $605,115.00
AMOUNT EARNED TO DATE: $36,461.00
% CONTRACT AMOUNT EARNED: 6%

REMARKS: The contractor continues to work on submittals. Contractor has also mobilized on site and begun laying out the vault structure and preliminary excavation for the vault and temporary driveway.

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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: MARCH 21, 2014

TIME Lapsed: 87%

BID AMOUNT: $3,099,488.48
CHANGE ORDERS: 1 - $142,269.74
Time Ext.-25 Days

CURRENT CONTRACT AMOUNT: $3,241,758.22
AMOUNT EARNED TO DATE: $2,889,794.30
% CONTRACT AMOUNT EARNED: 89%

REMARKS: During the month of January, S.J. Louis continues the construction of the valve vault. S.J. Louis also replaced a section of jogging path and continued restoration.
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: 56%
REMARKS: Archer Western continues the submittal process.

BID AMOUNT: $2,060,950.00
CHANGE ORDERS: 1 - ($219,000.00)
2 - $176,041.56
Time Ext.-98 Days
CURRENT CONTRACT AMOUNT: $2,017,981.56
AMOUNT EARNED TO DATE: $46,550.00
% CONTRACT AMOUNT EARNED: 2%

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: 112%
REMARKS: Insituform performed improvements to eleven manholes and completed the five bank stabilizations at the aerial crossings. Insituform also continues restoration.

BID AMOUNT: $2,686,876.00
CHANGE ORDERS: 1 - $24,896.50
CURRENT CONTRACT AMOUNT: $2,711,772.50
AMOUNT EARNED TO DATE: $2,282,248.75
% CONTRACT AMOUNT EARNED: 84%

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: 188%
REMARKS: All major work is complete. Final payment is being withheld pending resolution of bond claim by supplier.

BID AMOUNT: $1,633,117.20
CHANGE ORDERS: 1 - $48,680.00
Time Ext.-40 Days
2 - (87,681.20)
Time Ext.-64 Days
CURRENT CONTRACT AMOUNT: $1,594,116.00
AMOUNT EARNED TO DATE: $1,594,116.00
% CONTRACT AMOUNT EARNED: 100%
PROJECT NO. 245
UPPER ROWLETT CREEK LIFT STATION
FLOW METERING IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: SEPTEMBER 19, 2013

NOTICE TO PROCEED DATE: OCTOBER 22, 2013

COMPLETION DATE: SEPTEMBER 17, 2014

TIME LAPSED: 31%

REMARKS: Contractor has completed excavation for the vault. Base slab is complete. Forms, steel reinforcing, and concrete placement for the walls are approximately 60% complete.

PROJECT NO. 254
SOUTH MESQUITE RWWTP
ELECTRICAL IMPROVEMENTS

CONTRACTOR: ACME ELECTRIC COMPANY

CONTRACT DATE: JANUARY 24, 2013

NOTICE TO PROCEED DATE: JANUARY 29, 2013

COMPLETION DATE: FEBRUARY 28, 2014

TIME LAPSED: 92%

REMARKS: Pole potholing has been completed and pole assembly has started. Pole placement is scheduled to begin in February.

PROJECT NO. 255E
FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM
FORNEY PARALLEL INTERCEPTOR

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

CONTRACT DATE: APRIL 25, 2013

NOTICE TO PROCEED: MAY 6, 2013

COMPLETION DATE: MARCH 8, 2014

TIME LAPSED: 88%

REMARKS: The engineer has provided S.J. Louis the design for eliminating an aerial creek crossing on a connecting lateral.
PROJECT NO. 255F
FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM
FORNEY LIFT STATION IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION

CONTRACT DATE: AUGUST 22, 2013

NOTICE TO PROCEED: SEPTEMBER 9, 2013

COMPLETION DATE: AUGUST 5, 2014

TIME LAPSED: 44%

REMARKS: Archer Western is working on getting submittals approved and has received some material on site.

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: 23%

REMARKS: Gracon Construction's electrical subcontractor set up power for the contractor's and inspector's construction trailers. They are working on getting submittals approved and have received some material on site.

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

TIME LAPSED: 53%

REMARKS: Insituform continues the submittal process.
PROJECT NO. 279  
UPPER EAST FORK INTERCEPTOR SYSTEM  
FLGITIVE EMISSIONS CONTROL  

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC  

BID AMOUNT: $1,684,000.00  
CHANGE ORDERS: NONE  
CURRENT CONTRACT AMOUNT: $1,684,000.00  
AMOUNT EARNED TO DATE: $0.00  
% CONTRACT AMOUNT EARNED: 0%  

CONTRACT DATE: DECEMBER 19, 2013  
NOTICE TO PROCEED DATE: JANUARY 13, 2014  
COMPLETION DATE: DECEMBER 9, 2014  
TIME LAPSED: 6%  

REMARKS: Preconstruction meeting and notice to proceed occurred on January 13, 2014. Contractor is preparing submittals.

PROJECT NO. 280  
FLOYD BRANCH RWWTP  
ODOR CONTROL IMPROVEMENTS  

CONTRACTOR: CRESCENT CONSTRUCTORS, INC.  

BID AMOUNT: $817,000.00  
CHANGE ORDERS: 1 - $18,223.00  
Time Ext.-20 Days  
CURRENT CONTRACT AMOUNT: $835,223.00  
AMOUNT EARNED TO DATE: $835,223.00  
% CONTRACT AMOUNT EARNED: 100%  

CONTRACT DATE: JANUARY 24, 2013  
NOTICE TO PROCEED DATE: FEBRUARY 6, 2013  
ORIGINAL COMPLETION DATE: MARCH 13, 2014  
REVISED COMPLETION DATE: APRIL 2, 2014  
TIME LAPSED: 84%  

REMARKS: During the month of January, Crescent completed installation of the modified hand rails for the primary clarifier. A final walkthrough is scheduled, and it is anticipated the project will be completed in February.

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

CONTRACTOR: ASSOCIATED CONSTRUCTION PARTNERS  

BID AMOUNT: $1,699,200.00  
CHANGE ORDERS: NONE  
CURRENT CONTRACT AMOUNT: $1,699,200.00  
AMOUNT EARNED TO DATE: $199,698.50  
% CONTRACT AMOUNT EARNED: 12%  

CONTRACT DATE: MAY 23, 2013  
NOTICE TO PROCEED: JUNE 19, 2012  
COMPLETION DATE: JUNE 14, 2014  
TIME LAPSED: 63%  

REMARKS: Associated Construction Partners (ACP) has received some material on site. ACP's electrical subcontractor is getting ready to remove and replace one set of feeders for the solids building motor control center.
PROJECT NO. 294
SOUTH MESQUITE CREEK REGIONAL WASTEWATER TREATMENT PLANT OPERATIONS BUILDING

BID AMOUNT: $1,439,000.34
CHANGE ORDERS: NONE

CONTRACTOR: BIG SKY CONSTRUCTION CO.
CURRENT CONTRACT AMOUNT: $1,439,000.34

CONTRACT DATE: DECEMBER 19, 2013
AMOUNT EARNED TO DATE: $27,871.00

NOTICE TO PROCEED: JANUARY 22, 2014
CONTRACT AMOUNT EARNED: 2%

FINAL COMPLETION DATE: DECEMBER 18, 2014
TIME LAPSED: 3%

REMARKS: The contract documents were executed on December 19, 2013, and the preconstruction conference was held on January 22, 2014. The notice to proceed was issued on January 22, 2014. Big Sky provided a preconstruction video and is working on getting submittals approved.

---

PROJECT NO. 300
ASAP GRAVITY INTERCEPTOR IMPROVEMENTS, SECTION 2 and 3

BID AMOUNT: $3,272,042.25
CHANGE ORDERS: NONE

CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC
CURRENT CONTRACT AMOUNT: $3,272,042.25

CONTRACT DATE: OCTOBER 17, 2013
AMOUNT EARNED TO DATE: $0.00

NOTICE TO PROCEED DATE: NOVEMBER 19, 2013
% CONTRACT AMOUNT EARNED: 0%

COMPLETION DATE: JULY 17, 2014
TIME LAPSED: 30%

REMARKS: Insituform continues the submittal process.

---

PROJECT: NO. 311
UPPER EAST FORK INTERCEPTOR SYSTEM MANHOLE IMPROVEMENTS

BID AMOUNT: $995,830.00
CHANGE ORDERS: NONE

CONTRACTOR: FUQUAY, INC.
CURRENT CONTRACT AMOUNT: $995,830.00

CONTRACT DATE: DECEMBER 19, 2013
AMOUNT EARNED TO DATE: $0.00

NOTICE TO PROCEED DATE: JANUARY 14, 2014
% CONTRACT AMOUNT EARNED: 0%

COMPLETION DATE: JULY 13, 2014
TIME LAPSED: 9%

REMARKS: During the month of January the preconstruction conference was held. Fuquay also started the submittal process.
PROJECT NO. 233
121 REGIONAL DISPOSAL FACILITY
FLEET MAINTENANCE WELD SHOP

CONTRACTOR: TEGRITY CONTRACTORS, INC.

BID AMOUNT: $830,214.81
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $830,214.81
AMOUNT EARNED TO DATE: $20,694.00
CONTRACT AMOUNT EARNED: 3%

CONTRACT DATE: JULY 25, 2013
NOTICE TO PROCEED: AUGUST 28, 2013
COMPLETION DATE: MARCH 26, 2014
TIME LAPSED: 58%

REMARKS: The contractor has applied for a building permit with the City of Melissa (City). All submittals, except the pre-engineered building submittal, have been approved. The City Fire Marshall has requested modifications to the current fire suppression design. The engineer is currently revising the design to accommodate the Fire Marshall's requests. Once the design is approved by the City, the contractor will reapply for the building permit.

| TOTAL VALUE - ALL PROJECTS | $599,860,486.50 |
| TOTAL EARNED - ALL PROJECTS | $505,287,796.16 |
| 84% |
### NORTH TEXAS MUNICIPAL WATER DISTRICT
### WATER CONSUMPTION REPORT
### January 2014

<table>
<thead>
<tr>
<th>Member Cities</th>
<th>Water Used Jan 14</th>
<th>Daily Avg Jan 14</th>
<th>Total 13-14 Aug - Jan 1000 Gallons</th>
<th>13-14 % of Annual Maximum</th>
<th>Water Used Jan 13</th>
<th>Daily Avg Jan 13</th>
<th>Total 12-13 Aug - Jan 1000 Gallons</th>
<th>12-13 % of Annual Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>284,947</td>
<td>8,904,594</td>
<td>2,439,115</td>
<td>40.6</td>
<td>311,304</td>
<td>10,376,800</td>
<td>2,980,250</td>
<td>49.6</td>
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<tr>
<td>Farmersville</td>
<td>12,013</td>
<td>375,406</td>
<td>85,620</td>
<td>30.5</td>
<td>13,679</td>
<td>455,967</td>
<td>111,302</td>
<td>39.7</td>
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<tr>
<td>Forney</td>
<td>101,449</td>
<td>3,170,281</td>
<td>767,423</td>
<td>47.2</td>
<td>76,127</td>
<td>2,537,567</td>
<td>695,371</td>
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<tr>
<td>Frisco</td>
<td>486,500</td>
<td>15,203,125</td>
<td>4,402,900</td>
<td>44.1</td>
<td>509,402</td>
<td>16,980,067</td>
<td>5,530,607</td>
<td>56.8</td>
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<tr>
<td>Garland</td>
<td>731,343</td>
<td>22,854,469</td>
<td>5,502,110</td>
<td>40.1</td>
<td>678,523</td>
<td>22,617,425</td>
<td>6,002,587</td>
<td>43.7</td>
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<tr>
<td>McKinney</td>
<td>624,809</td>
<td>19,525,281</td>
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<td>549,126</td>
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<td>5,273,316</td>
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<tr>
<td>Mesquite</td>
<td>311,590</td>
<td>9,737,188</td>
<td>2,559,933</td>
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<td>296,211</td>
<td>9,873,700</td>
<td>3,073,504</td>
<td>37.0</td>
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<tr>
<td>Plano</td>
<td>1,071,859</td>
<td>33,495,594</td>
<td>9,787,111</td>
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<td>1,055,651</td>
<td>35,188,367</td>
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<td>Princeton</td>
<td>27,792</td>
<td>868,500</td>
<td>211,827</td>
<td>43.6</td>
<td>29,955</td>
<td>998,500</td>
<td>231,174</td>
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<tr>
<td>Richardson</td>
<td>478,867</td>
<td>14,964,594</td>
<td>4,018,701</td>
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<td>479,460</td>
<td>15,982,000</td>
<td>4,606,441</td>
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<tr>
<td>Rockwall</td>
<td>145,635</td>
<td>4,551,094</td>
<td>1,367,976</td>
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<td>138,656</td>
<td>4,621,867</td>
<td>1,543,851</td>
<td>46.3</td>
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<td>Royse City</td>
<td>30,770</td>
<td>961,563</td>
<td>241,312</td>
<td>45.8</td>
<td>30,028</td>
<td>1,000,933</td>
<td>239,649</td>
<td>45.5</td>
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<tr>
<td>Wylie</td>
<td>112,736</td>
<td>3,523,009</td>
<td>871,856</td>
<td>50.6</td>
<td>97,780</td>
<td>3,259,333</td>
<td>869,278</td>
<td>50.5</td>
</tr>
</tbody>
</table>

|                   | 4,420,310         | 138,134,698      | 37,164,185                         | 39.6                      | 4,265,902         | 142,198,726       | 42,718,408                         | 45.6                      |

|                   | 961,902           | 30,059,440       | 7,924,302                          | 43.8                      | 838,387           | 27,946,239       | 7,909,250                          | 43.9                      |

|                   | 216               | 6,750            | 1,613                              | -----                     | 308               | 10,267           | 1,914                              | -----                     |

|                   | 5,382,428         | 168,200,888      | 45,090,100                         | 40.3                      | 5,104,597         | 170,153,232       | 50,629,572                         | 45.4                      |

### Lake Elevations

**Lavon (Conservation Pool 492.0)** 
100% (118,670 acre ft) Remaining Water Right

<table>
<thead>
<tr>
<th>January 2014</th>
<th>January 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>479.80</td>
</tr>
<tr>
<td>Minimum</td>
<td>479.61</td>
</tr>
<tr>
<td>Average</td>
<td>479.70</td>
</tr>
</tbody>
</table>

**Chapman (Conservation Pool 440.0)** 
8.97% (5,134 acre ft) Remaining Water Right

<table>
<thead>
<tr>
<th>January 2014</th>
<th>January 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>427.97</td>
</tr>
<tr>
<td>Minimum</td>
<td>427.44</td>
</tr>
<tr>
<td>Average</td>
<td>427.79</td>
</tr>
</tbody>
</table>

**Tawakoni (Conservation Pool 437.5)** 
88.1% (44,220 acre ft) Remaining Water Right

<table>
<thead>
<tr>
<th>January 2014</th>
<th>January 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>428.94</td>
</tr>
<tr>
<td>Minimum</td>
<td>428.29</td>
</tr>
<tr>
<td>Average</td>
<td>428.60</td>
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### Precipitation

<table>
<thead>
<tr>
<th>January 2014</th>
<th>January 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Inches</td>
<td>0.10</td>
</tr>
<tr>
<td>Year to Date</td>
<td>12.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>January 2014</th>
<th>January 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Inches</td>
<td>1.28</td>
</tr>
<tr>
<td>Year to Date</td>
<td>17.78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>January 2014</th>
<th>January 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Inches</td>
<td>0.82</td>
</tr>
<tr>
<td>Year to Date</td>
<td>16.76</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Ables Springs</td>
<td>5,874</td>
</tr>
<tr>
<td>Caddo Basin SUD</td>
<td>28,519</td>
</tr>
<tr>
<td>Cash WSC</td>
<td>19,524</td>
</tr>
<tr>
<td>College Mound WSC</td>
<td>3,192</td>
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<tr>
<td>Copeville WSC</td>
<td>7,392</td>
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<tr>
<td>East Fork SUD</td>
<td>24,134</td>
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<tr>
<td>Fairview</td>
<td>40,436</td>
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<tr>
<td>Fate</td>
<td>18,895</td>
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<tr>
<td>Forney Lake WSC</td>
<td>15,509</td>
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<tr>
<td>Gastonia-Scurry WSC</td>
<td>3,840</td>
</tr>
<tr>
<td>GTUA</td>
<td>0</td>
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<tr>
<td>Josephine</td>
<td>3,335</td>
</tr>
<tr>
<td>Kaufman</td>
<td>38,587</td>
</tr>
<tr>
<td>Kaufman Four One</td>
<td>40,887</td>
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<tr>
<td>Lavon WSC</td>
<td>11,325</td>
</tr>
<tr>
<td>Little Elm</td>
<td>85,314</td>
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<tr>
<td>Lucas</td>
<td>28,863</td>
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<td>Melissa</td>
<td>21,287</td>
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<td>Milligan WSC</td>
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<td>Mt. Zion WSC</td>
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<td>Murphy</td>
<td>64,409</td>
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<tr>
<td>Nevada WSC</td>
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<td>North Collin WSC</td>
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<td>Parker</td>
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<td>Prosper</td>
<td>52,778</td>
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<tr>
<td>Rose Hill SUD</td>
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<td>Rowlett</td>
<td>138,773</td>
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<tr>
<td>Sachse</td>
<td>59,001</td>
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<td>Seis Lagos MUD</td>
<td>3,869</td>
</tr>
<tr>
<td>Sunnyvale</td>
<td>25,081</td>
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<tr>
<td>Terrell</td>
<td>110,476</td>
</tr>
<tr>
<td>Wylie NE WSC</td>
<td>9,102</td>
</tr>
<tr>
<td>Bonham WTP</td>
<td>38,661</td>
</tr>
<tr>
<td><strong>Subtotal Customers</strong></td>
<td><strong>961,902</strong></td>
</tr>
</tbody>
</table>
## NORTH TEXAS MUNICIPAL WATER DISTRICT

### REGIONAL WASTEWATER SYSTEM FLOW REPORT

#### JANUARY 2014

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Floyd Branch</td>
<td>4.75</td>
<td>56,803</td>
<td>1.832</td>
<td>250,775</td>
<td>73,149</td>
<td>2.360</td>
<td>227,584</td>
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<tr>
<td>Rowlett Creek</td>
<td>24</td>
<td>349,523</td>
<td>11.275</td>
<td>1,483,685</td>
<td>379,881</td>
<td>12.254</td>
<td>1,494,168</td>
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<tr>
<td>South Mesquite Creek</td>
<td>33</td>
<td>481,137</td>
<td>14.875</td>
<td>1,975,482</td>
<td>505,011</td>
<td>16.291</td>
<td>1,812,227</td>
</tr>
<tr>
<td>Wilson Creek</td>
<td>56</td>
<td>1,294,748</td>
<td>41.766</td>
<td>5,400,492</td>
<td>1,521,977</td>
<td>49.096</td>
<td>5,137,759</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FLOW BY CITY</th>
<th>Total Flow Jan-14 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 13-14 Oct-Jan (1000 GAL)</th>
<th>Flow %</th>
<th>Total Flow Jan-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Oct-Jan (1000 GAL)</th>
<th>Flow %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>175,253</td>
<td>8.40</td>
<td>738,046</td>
<td>8.39</td>
<td>224,016</td>
<td>9.33</td>
<td>696,187</td>
<td>8.25</td>
</tr>
<tr>
<td>Forney</td>
<td>47,359</td>
<td>2.27</td>
<td>212,203</td>
<td>2.41</td>
<td>51,370</td>
<td>2.14</td>
<td>166,344</td>
<td>1.97</td>
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<tr>
<td>Frisco</td>
<td>86,924</td>
<td>4.16</td>
<td>355,583</td>
<td>4.04</td>
<td>86,897</td>
<td>3.62</td>
<td>319,562</td>
<td>3.79</td>
</tr>
<tr>
<td>Heath</td>
<td>22,160</td>
<td>1.06</td>
<td>91,748</td>
<td>1.04</td>
<td>25,540</td>
<td>1.06</td>
<td>87,051</td>
<td>1.03</td>
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<tr>
<td>McKinney</td>
<td>386,802</td>
<td>18.53</td>
<td>1,626,813</td>
<td>18.49</td>
<td>433,665</td>
<td>18.05</td>
<td>1,578,284</td>
<td>18.71</td>
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<th>UPPER EAST FORK INTERCEPTOR SYSTEM</th>
<th>Total Flow Jan-14 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 13-14 Oct-Jan (1000 GAL)</th>
<th>Flow %</th>
<th>Total Flow Jan-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Oct-Jan (1000 GAL)</th>
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<td>4.76</td>
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<td>McKinney</td>
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<td>433,665</td>
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<td>6,397,007</td>
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* Report does not include nonmember city flows.
### LOWER EAST FORK INTERCEPTOR SYSTEM

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Flow Jan-14 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 13-14 Oct-Jan (1000 GAL)</th>
<th>Flow %</th>
<th>Total Flow Jan-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Oct-Jan (1000 GAL)</th>
<th>Flow %</th>
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</thead>
<tbody>
<tr>
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<td>78.47</td>
<td>119,835</td>
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### SABINE CREEK REGIONAL WWTP

<table>
<thead>
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<th>Total Flow Jan-14 (1000 GAL)</th>
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<th>Flow %</th>
<th>Total Flow Jan-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Oct-Jan (1000 GAL)</th>
<th>Flow %</th>
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<tbody>
<tr>
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<tr>
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<td>109,833</td>
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## NORTH TEXAS MUNICIPAL WATER DISTRICT

### SEWER SYSTEM FLOW REPORT

#### JANUARY 2014

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<td>Bear Creek</td>
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<td>46.710</td>
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<td>185.614</td>
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<td>Cottonwood Creek</td>
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## NORTH TEXAS MUNICIPAL WATER DISTRICT
### WASTEWATER QUALITY REPORT
#### JANUARY 2014

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<td>FINAL (mg/L)</td>
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<td>WILSON CREEK</td>
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<th>TOTAL PHOSPHORUS</th>
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<td>FINAL (mg/L)</td>
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<td>BUFFALO CREEK</td>
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<td>COTTONWOOD CREEK</td>
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<td>PANTHER CREEK</td>
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<td>SABINE CREEK</td>
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<td>SEIS LAGOS</td>
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<td>3.3</td>
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<td>WYLIE</td>
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* Final Effluent Reported as BOD5.
## NORTH TEXAS MUNICIPAL WATER DISTRICT
### REGIONAL SOLID WASTE SYSTEM
### TONNAGE REPORT

**January 2014**

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<td><strong>68,162.15</strong></td>
<td><strong>259,473.96</strong></td>
<td><strong>69,346.86</strong></td>
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### SOURCE

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<td>88,658.31</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>68,162.15</strong></td>
<td><strong>259,473.96</strong></td>
<td><strong>69,346.86</strong></td>
<td><strong>274,038.85</strong></td>
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</tbody>
</table>
NORTH TEXAS MUNICIPAL WATER DISTRICT

MINUTES – JOINT MEETING OF THE EXECUTIVE AND POLICY COMMITTEES
HELD JANUARY 23, 2014
IN THE ADMINISTRATIVE OFFICES, WYLIE, TEXAS

Chairman Bill Lofland called the joint meeting of the NTMWD Executive and Policy Committees to order at approximately 1:00 p.m. on Thursday, January 23, 2014, at the Administrative Offices in Wylie, Texas.

Members of the Executive Committee present included Chairman Bill Lofland, Vice President Darwin Whiteside, Secretary Joe Joplin and past President Charles McKissick. Members of the Policy Committee present included Chairman Bill Lofland, Directors Terry Anderson, Marvin Fuller, James Kerr, Larry Parks, John Sweeden, Patrick Nicklen, and Joe Farmer. Director Sweeden was late and arrived during the discussion portion of the meeting. Directors Jack May and Shep Stahel also attended and Directors Don Cates and Don Gordon attended a portion of the meeting. NTMWD staff members present included Jim Parks, Joe Stankiewicz, Mike Rickman, Judd Sanderson, Ken Wesson, and Melissa Fuller. John Gay of Gay McCall Isaacks Gordon & Roberts, PC; Brad Castleberry of Lloyd Gosselink Rochelle & Townsend, PC; and Greg Waldron of Holmes & Moore, PLLC, were also in attendance.

I. ACTION ITEMS

A. Consider Approval of Minutes of Executive Committee Meeting – August 22, 2013

The Committees passed on this item to allow approval at a future Executive Committee meeting.

B. Consider Approval of Minutes of Policy Committee Meeting – December 19, 2013

The Committees passed on this item to allow approval at a future Policy Committee meeting.

II. DISCUSSION ITEMS

A. Receive Legal Advice from the District’s Attorney Regarding Environmental Compliance Issues Related to the Wastewater System

The regular session recessed at 1:10 p.m.

Chairman Bill Lofland declared a need for an Executive Session of the Executive and Policy Committees to consult with attorneys in accordance with Texas Government Code, Title 5, Subchapter D, Section 551.071. The Executive Session was called to order by Chairman Bill Lofland at 1:11 p.m.

The Executive Session adjourned at 2:39 p.m.
The Executive and Policy Committees reconvened into regular session at 2:40 p.m.

III. ADJOURNMENT

There being no further business, the meeting adjourned at 2:41 p.m. The next meeting of the Executive and Policy Committees will be called by the Chairman with proper notification to all members.

BILL LOFLAND
Chairman
NORTH TEXAS MUNICIPAL WATER DISTRICT

MINUTES - EXECUTIVE COMMITTEE MEETING
HELD JANUARY 23, 2014
IN THE NTMWD ADMINISTRATIVE OFFICES, WYLIE, TEXAS

A meeting of the NTMWD Executive Committee was called to order by President Bill Lofland at approximately 5:30 P.M. on Thursday, January 23, 2014, in the NTMWD Administrative Offices in Wylie, Texas.

Members present included President Bill Lofland, Vice President Darwin Whiteside, Secretary Joe Joplin, and past President Charles McKissick. NTMWD staff present included Jim Parks and Melisa Fuller.

I. REVIEW AND AUTHORIZE ATTENDANCE AT CONFERENCES IN ACCORDANCE WITH DISTRICT POLICY NO. 11-A-2

The Executive Committee reviewed the attached list of conferences being held in 2014 and designated each conference as general, special, or technical and designated as to whether or not spouses were eligible to attend. On a motion by Director Darwin Whiteside and a second by Director Charles McKissick, the Executive Committee approved the attached list of conferences for 2014 and the designations as listed.

II. ADJOURNMENT

There being no further business, the meeting was adjourned at approximately 5:38 P.M. The next meeting of the Executive Committee will be called by the Chairman with proper notification to all members.

BILL LOFLAND
Chairman
# NORTH TEXAS MUNICIPAL WATER DISTRICT

## 2014 RETREAT/CONFERENCE DATES

<table>
<thead>
<tr>
<th>Activity</th>
<th>Dates</th>
<th>Location</th>
<th>General/Technical</th>
<th>Spouses Eligible to Attend</th>
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</thead>
<tbody>
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<td>Jan. 31 – Feb. 2, 2014</td>
<td>Hiltor Rockwall</td>
<td>General</td>
<td>Yes</td>
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<tr>
<td>Texas Water Day</td>
<td>Feb. 4 - 6, 2014</td>
<td>Washington, DC</td>
<td>Special</td>
<td>Yes</td>
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<tr>
<td>TWCA Annual Conference</td>
<td>March 5 – 7, 2014</td>
<td>The Woodlands, TX</td>
<td>General</td>
<td>Yes</td>
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<tr>
<td>Texas Water (AWWA)</td>
<td>April 14 - 17, 2014</td>
<td>Dallas, TX</td>
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<td>June 8 - 12, 2014</td>
<td>Boston, MA</td>
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<td>TWCA Mid-Year Conference</td>
<td>June 11 – 13, 2014</td>
<td>Horseshoe Bay, TX</td>
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<td>WaterReuse Symposium</td>
<td>Sept. 7 – 10, 2014</td>
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<tr>
<td>TWCA Fall Conference</td>
<td>Oct. 15 – 17, 2014</td>
<td>San Antonio, TX</td>
<td>Technical</td>
<td>No</td>
</tr>
<tr>
<td>NWRA Annual Conference</td>
<td>Nov. 12 – 14, 2014</td>
<td>Coronado, CA</td>
<td>Technical</td>
<td>No</td>
</tr>
</tbody>
</table>

In accordance with District Policy No. 11 "Travel and Expense" the Board of Directors Executive Committee has authorized and designated the activities listed above for calendar year 2014.

Bill Lofland, President

Date
Chairman John Sweeden called the meeting of the Finance/Audit Committee to order at approximately 8:00 a.m. on Saturday, February 1, 2014, in the Hilton Dallas/Rockwall Lakefront Hotel located in Rockwall, Texas. Notice of the meeting was legally posted in accordance with Government Code, Title 551, Open Meetings.

Finance/Audit Committee members in attendance included Chairman John Sweeden, Directors Joe Farmer, Don Cates, Shep Stahel, Don Gordon, and Marvin Fuller. Director Terry Anderson was absent. NTMWD Board President Bill Lofland, Vice President Darwin Whiteside, Secretary Joe Joplin, and all other NTMWD Directors were in attendance. NTMWD staff in attendance included Jim Parks, Joe Stankiewicz, Mike Rickman, Judd Sanderson, Teresa Wigington, Erik Felthous, Melisa Fuller, Denise Hickey, Ted Kilpatrick, Jeff Mayfield, Robert McCarthy, John Montgomery, David Morgan, Kelly O'Brien, Bently Powell, Gerry Reagan, Jim Shirley, Elizabeth Turner, and Ken Wesson. John Gay and Lewis Isaacks of Gay, McCall, Isaacks, Gordon & Roberts; and Shawn Parker of Weaver and Tidwell, L.L.P., were also in attendance along with various other consultants (who were in attendance for the 2014 Planning Retreat).

I. ACTION ITEMS

A. Consider Approval of Minutes – January 23, 2014

Upon a motion by Director Shep Stahel and a second by Director Joe Farmer, the Finance/Audit Committee voted unanimously to approve the minutes of the meeting held on January 23, 2014.

B. TABLED ITEM - Review and Possible Action on 2012-2013 Financial Operations by Weaver and Tidwell, L.L.P.

Director Shep Stahel made the motion to take this item from the table. Director Don Gordon seconded the motion, which was unanimously approved by the Finance/Audit Committee.

Judd Sanderson reviewed the changes in the 2012-2013 Financial Audit, which included additional disclosure on Page 38 related to a wastewater matter.

Upon a motion by Director Shep Stahel and a second by Director Joe Farmer, the Finance/Audit Committee voted unanimously to recommend acceptance of the 2012-2013 Financial Audit to the Board of Directors.

II. ADJOURNMENT

There being no further business, the meeting adjourned at 8:03 a.m. The next meeting of the Finance/Audit Committee will be called by the Chairman with proper notification to all members.

JOHN SWEEDEN
Chairman