NORTH TEXAS MUNICIPAL WATER DISTRICT  
505 E. Brown Street • Wylie, Texas 75098  
(972) 442-5405 – Phone • (972) 295-6440 – Fax

TO: BOARD OF DIRECTORS
FROM: THOMAS W. KULA, EXECUTIVE DIRECTOR
DATE: AUGUST 21, 2014
SUBJECT: REGULAR MEETING – THURSDAY, AUGUST 28, 2014

I. RESIGNATION OF GARY DOWNEY

Director Gary Downey has retired from the NTMWD Board of Directors after 12 years of service. A copy of Resolution No. 14-15 is attached to this memorandum and is listed on the agenda for consideration of approval by the Board of Directors.

II. WELCOME NEW BOARD MEMBER – RICHARD PEASLEY

On August 5, 2014, the City of Frisco City Council appointed Mr. Richard Peasley to complete Mr. Gary Downey’s unexpired term as an NTMWD Board member. We wish to welcome Mr. Peasley to the NTMWD Board of Directors.

III. 2013-14 WATER SYSTEM REBATE REVIEW

District Policy No. 19 “Water Rebate Procedure,” requires the staff to submit in August of each year a list of Member Cities and Customers that would be eligible for rebates pursuant to the Policy. Attached is a copy of the Policy and list of entities that would be eligible for rebates. Since the Policy was adopted in 1993, the Board has issued rebates each year except for 1996 and 1998.

The total amount of the rebates for 2013-14 has been calculated to be $12,434,030.55. Funds to be rebated would be made available from current revenues should the Board determine this to be appropriate action. This item will be for discussion purposes only, and in accordance with the Policy, the Board may instruct staff to place this item on the September Agenda for action or it may take no action and not make any rebates for 2013-14.

IV. 2014-15 ANNUAL ALL SYSTEMS BUDGET REVIEW

Preliminary 2014-15 budget information has been reviewed with the Finance Committee. NTMWD staff will be prepared to review the budget during the discussion portion of the Board meeting.
V. ENVIRONMENTAL COMPLIANCE REPORT

A new monthly report is included this month’s Board Packet. The purpose of the report is to provide you with a snapshot of NTMWD’s regulatory and environmental compliance for the previous month. Items covered in the report include the results of any TCEQ or EPA inspections and any self-reported violations to TCEQ or EPA. A section details the occurrence of any unauthorized discharges or chemical spills, the impact of the discharge or spill and the corrective actions. NTMWD facilities are frequently inspected by city personnel for compliance with fire code inspections and stormwater regulations. The Fire Marshal and Stormwater inspections are detailed in the report. Customer service is a high priority for NTMWD. A section of the report includes a summary of the complaints received during the previous month and the resolution of the complaints. The report will also highlight performance awards such as the Peak Performance Awards listed below.

VI. NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES (NACWA) PEAK PERFORMANCE AWARDS

NTMWD’s wastewater treatment facilities have been selected to receive Silver, Gold and Platinum Peak Performance Awards. The Peak Performance Awards Program presented by NACWA annually recognizes public wastewater treatment facilities for their outstanding compliance records for the calendar year. A total of twelve (12) NTMWD wastewater treatment facilities received awards in three categories for calendar year 2013:

**SILVER AWARD**: Facilities that received no more than five (5) NPDES permit violations during calendar year 2013. Those facilities include:

- Farmersville WWTP
- Floyd Branch RWWT
- Muddy Creek WWTP
- Rowlett Creek RWWT
- South Mesquite Creek RWWT
- Squabble Creek WWTP

**GOLD AWARD**: Facilities that achieved 100% compliance with their National Pollutant Discharge Elimination System (NPDES) permit for the entire calendar year 2013. Those facilities include:

- Bear Creek WWTP
- Buffalo Creek WWTP
- Stewart Creek West WWTP
- Panther Creek WWTP

**PLATINUM AWARD**: Facilities that have received consecutive Gold Awards. Those facilities include:

- Platinum 9 Award: Seis Lagos WWTP (9 consecutive years achieving 100% compliance with the NPDES permit)
MEMORANDUM TO BOARD OF DIRECTORS
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- Platinum 12 Award: Cottonwood WWTP (12 consecutive years achieving 100% compliance with the NPDES permit)

The permits issued by the Texas Commission on Environmental Quality are done so in order to protect the quality of the water in our national streams, waterways and lakes. For their efforts and achievements in protecting this most valuable natural resource, the personnel of the Wastewater System that operate the above treatment plants are to be congratulated and will be recognized at the August Board meeting.

VII. POLICY COMMITTEE MEETING

A Policy Committee meeting is being held prior to the Board meeting on Thursday, August 28, 2014, at 1:30 p.m. Directors not on the Committee are welcome to attend.

VIII. FINANCE/AUDIT COMMITTEE MEETING

A Finance/Audit Committee meeting is being held prior to the Board meeting on Thursday, August 28, 2014, at 2:30 p.m. Directors not on the Committee are welcome to attend.

IX. ENCLOSURES

A. AGENDA – REGULAR MEETING – July 24, 2014
B. CONSENT AGENDA ITEM NO. 14-08-01 – Minutes, Regular Meeting, July 24, 2014
C. CONSENT AGENDA ITEM NO. 14-08-02 – Regional Solid Waste System, Contract Amendment No. 9 to the Interlocal Agreement By and Between Collin County, Texas, and the North Texas Municipal Water District for Participation in the County Cleanup Day Program
D. CONSENT AGENDA ITEM NO. 14-08-03 – Regional Solid Waste System, Contract Amendment No. 5 to the Interlocal Cooperation Agreement By and Between the North Texas Municipal Water District and Collin County, Texas, for Placement of Roll-Off Recycling Container
E. CONSENT AGENDA ITEM NO. 14-08-04 – Regional Wastewater System, Rowlett Creek Regional Wastewater Treatment Plant, 2011 Improvements, Project No. 222, Change Order No. 4 and Authorization to Make Final Payment
F. CONSENT AGENDA ITEM NO. 14-08-05 – Regional Water System, High Service Pump Station 1-1 Electrical Improvements, Project No. 202, Change Order No. 2
G. CONSENT AGENDA ITEM NO. 14-08-06 – Regional Water System, Environmental Services Building, Heating, Venting, and Air Conditioning System Repair, Project No. 347, Additional Engineering Services
H. CONSENT AGENDA ITEM NO. 14-08-07 – Texas Commission on Environmental Quality Air Monitoring Station at the Rockwall No. 1 Delivery Point
I. CONSENT AGENDA ITEM NO. 14-08-08 – Regional Water System, Wylie Water Treatment Plant Improvements for Lagoon Nos. 1, 2, and 3, Project No. 296, Change Order No. 1
J. ADMINISTRATIVE MEMORANDUM NO. 4232 – Regional Water System, Lower Bois d’Arc Creek Reservoir Intake and Pump Station Preliminary Engineering, Project No. 358, Engineering Services Agreement
K. ADMINISTRATIVE MEMORANDUM NO. 4233 – Regional Water System, Water Treatment Plant II, Filter Underdrain Improvements and Conversion to Biologically Active Filters, Phase I, Project No. 302, Tabulation of Bids and Award of Contract

L. ADMINISTRATIVE MEMORANDUM NO. 4234 – Regional Water System, Wylie Water Treatment Plant III, Foundation Drain Return Improvements, Project No. 364, Engineering Services Agreement

M. ADMINISTRATIVE MEMORANDUM NO. 4235 – Regional Water System, High Service Pump Station 2-2 and 2-3 Electrical Improvements, Project No. 298, Change Order No. 3

N. ADMINISTRATIVE MEMORANDUM NO. 4236 – Regional Wastewater System, South Mesquite Creek Regional Wastewater Treatment Plant Screenings Handling Improvements, Project No. 327, Tabulation of Bids and Award of Contract

O. ADMINISTRATIVE MEMORANDUM NO. 4237 – Regional Water System, Lake Tawakoni Water Treatment Plant, Project No. WCF 07-4 (099), Reduction of Retainage

P. ADMINISTRATIVE MEMORANDUM NO. 4238 – Upper East Fork Interceptor System, North McKinney Interceptor Improvements, Phase I, Project No. 345, Tabulation of Bids and Award of Contract


R. ADMINISTRATIVE MEMORANDUM NO. 4240 – Environmental Services Building, Heating, Venting, and Air Conditioning System Repair, Project No. 347, Tabulation of Bids and Award of Contract

S. ADMINISTRATIVE MEMORANDUM NO. 4241 – Regional Water System, Expand High Service Pump Station 3-1 to 350 MGD, Project No. 188, Change Order No. 2

T. ADMINISTRATIVE MEMORANDUM NO. 4242 – Regional Water System, Wylie Water Treatment Plant II, Improvements for Basin Nos. 3 and 4, Project No. 320, Change Order No. 3

U. ADMINISTRATIVE MEMORANDUM NO. 4243 – Regional Water System, Lake Tawakoni Water Treatment Plant, Sludge Lagoon Improvements, Project No. 312, Change Order No. 2

V. ADMINISTRATIVE MEMORANDUM NO. 4244 – Regional Water System, System Wide Air Valve Improvements on Wylie to Garland 42-Inch Pipeline, Project No. 365, Engineering Services Agreement

W. ADMINISTRATIVE MEMORANDUM NO. 4245 – Regional Water System, Wylie Water Treatment Plant, Finished Water Reservoir and Flow Metering Improvements, Project No. 276, Change Order No. 3

X. ADMINISTRATIVE MEMORANDUM NO. 4246 – NTMWD Administration Building, Structural Repairs, Building Renovations, and Building Additions, Task Nos. 2 and 3, Project No. 301, Tabulation of Bids and Award of Contract

Y. ADMINISTRATIVE MEMORANDUM NO. 4247 – Regional Water System, Water Transmission System Supervisory Control and Data Acquisition System Upgrade, Phase I, Project No. 329, Additional Engineering Services

AA. ADMINISTRATIVE MEMORANDUM NO. 4249 – Regional Water System, Purchase of 36.8 Acres for Lavon Lake Raw Water Pump Stations Intake Channel Improvements, Project No. 350, Resolution No. 14-14
BB. ADMINISTRATIVE MEMORANDUM NO. 4250 – Regional Water System, Water Treatment Plant III, Filter Undrain Improvements and Conversion to Biologically Active Filters, Project No. 277, Change Order No. 5
CC. ADMINISTRATIVE MEMORANDUM NO. 4251 – Regional Water System, Lake Texoma Pump Station Modifications, Project No. 128, Change Order No. 4
DD. ADMINISTRATIVE MEMORANDUM NO. 4252 – Regional Wastewater System, Rowlett Creek Regional Wastewater Treatment Plant Peak Flow Management Improvements, Phase 1, Project No. 328, Engineering Services Agreement
EE. WATER CONSUMPTION REPORT – July 2014
FF. WASTEWATER SYSTEM REPORT – July 2014
GG. SOLID WASTE SYSTEM REPORT – July 2014
HH. CONSTRUCTION PROGRESS REPORT – July 31, 2014
II. ENVIRONMENTAL COMPLIANCE REPORT – July 31, 2014
JJ. NTMWD Financial Statements for the Month Ended July 31, 2014
NORTH TEXAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 14-15

A RESOLUTION COMMENDING DIRECTOR GARY DOWNEY FOR 12 YEARS OF SERVICE AS A MEMBER OF THE NTMWD BOARD OF DIRECTORS

WHEREAS, Gary Downey was appointed to the NTMWD Board of Directors in 2002 representing the City of Frisco; and,

WHEREAS, Gary Downey has served the NTMWD for 12 years; and,

WHEREAS, during Gary Downey's tenure of service, he served on the Water, Wastewater, Solid Waste, Insurance, Finance/Audit, Personnel, and Legislative Committees; and,

WHEREAS, Gary Downey has worked for the betterment of the NTMWD region and the City of Frisco during his tenure in office.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE NORTH TEXAS MUNICIPAL WATER DISTRICT THAT:

Gary Downey has served as a distinguished Director of the North Texas Municipal Water District from 2002 to 2014 by sincere and honest efforts to always improve and enhance NTMWD programs and activities. The thanks of the NTMWD Board of Directors, staff, and cities served cannot express the true appreciation deserved.

THIS RESOLUTION PASSED BY THE NTMWD BOARD OF DIRECTORS ON THIS THE 28th DAY OF AUGUST 2014.

TERRY SAM ANDERSON, Secretary DARWIN WHITESIDE, President
WATER REBATE PROCEDURE

The Board of Directors of the NTMWD has determined it to be in the best interest of the Member Cities and Customers to adopt a policy providing for the consideration of water rebates on an annual basis. This policy is intended to provide a framework which would allow the Board of Directors on an annual basis to consider a rebate of money paid by the cities/customers, based upon the city/customer not requiring the NTMWD to meet its annual system volume requirement, in an amount equal to the estimated variable cost (power, chemicals, etc.) of treated water service not incurred by the NTMWD. Implementation of this policy is intended to reward water conservation and assist the cities/customers when reduced water sales impact the city/customer financially.

SECTION I. SCOPE

This policy shall apply to all Member Cities and Customers of the NTMWD. This policy shall not be applied to cities/customers establishing annual requirements by contract negotiation.

SECTION II. WATER CONSERVATION

This policy is intended to provide a financial reward in the form of a rebate to the cities/customers able to reduce the need for the NTMWD to treat and transport potable water.

SECTION III. PROCEDURE

The following provides a description and the criterion for the rebate concept and the administrative procedures required in the process:

A. The "rebate" equated to a cents per 1,000 gallons shall be equal to the estimated per unit reduction in expenditure for variable cost incurred by the NTMWD as determined by the Board of Directors.

B. To be eligible for the rebate, the city/customer must not meet its annual minimum volume requirement and not be excluded as set forth in Section I of this policy. The volume eligible for rebate would be the difference between the annual minimum as established in the Budget Resolution and the actual usage of the city/customer during the twelve (12) month water year.

C. The Board of Directors each year at the August Board of Directors meeting will be provided by the staff a list of cities/customers eligible for rebate, if any, the estimated rate of the rebate, and the total dollars to be considered for rebate. The
item would be a "discussion" item on the August agenda.

D. After considering the financial condition of the NTMWD and the cities/customers, the Board of Directors could instruct the staff to place rebates on the September agenda for consideration or accept the report as information only.

E. Should the Board of Directors elect to provide a rebate, the staff is directed to notify the cities/customers eligible for the rebate and provide payment within forty-five (45) days of the Board action.

F. The Board shall follow the above-referenced procedure on an annual basis.

SECTION IV. IMPLEMENTATION

This policy shall be implemented by its adoption as of October 1, 1993.

This policy passed and approved by the Board of Directors of the North Texas Municipal Water District in a regular meeting on this the 23rd day of September, 1993 and amended the 25th day of October 2007.

SIGNED:

JAMES KERR, SECRETARY

BILL HARRISON, PRESIDENT
## REGIONAL WATER SYSTEM
### 2013-14 REBATES

<table>
<thead>
<tr>
<th>MEMBERS</th>
<th>ANNUAL MINIMUM</th>
<th>ACTUAL USAGE</th>
<th>INCREASE/DECREASE</th>
<th>EXCESS BILLING (at $0.45 / 1,000)</th>
<th>REBATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>6,011,208</td>
<td>4,524,011</td>
<td>(1,487,197) -24.7%</td>
<td>$</td>
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<tr>
<td>Farmersville</td>
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<td>157,344</td>
<td>(123,123) -43.9%</td>
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<tr>
<td>Forney</td>
<td>1,625,905</td>
<td>1,440,053</td>
<td>(185,852) -11.4%</td>
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<tr>
<td>Frisco</td>
<td>9,977,663</td>
<td>8,194,170</td>
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<tr>
<td>Garland</td>
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<tr>
<td>McKinney</td>
<td>10,150,735</td>
<td>9,221,134</td>
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<td>Mesquite</td>
<td>6,297,668</td>
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<tr>
<td>Plano</td>
<td>26,719,809</td>
<td>18,020,713</td>
<td>(8,699,096) -32.6%</td>
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<tr>
<td>Princeton</td>
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<tr>
<td>Richardson</td>
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<td>(3,626,344) -32.8%</td>
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<tr>
<td>Rockwall</td>
<td>3,330,881</td>
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<td>(877,211) -26.3%</td>
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<td>Royse City</td>
<td>526,912</td>
<td>464,473</td>
<td>(62,439) -11.9%</td>
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<tr>
<td>Wylie</td>
<td>1,721,763</td>
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<td>(160,575) -9.3%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>93,870,161</strong></td>
<td><strong>69,155,408</strong></td>
<td><strong>(24,714,753)</strong></td>
<td><strong>26.3%</strong></td>
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<table>
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<th>CUSTOMERS</th>
<th>ANNUAL MINIMUM</th>
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<th>EXCESS BILLING (at $0.45 / 1,000)</th>
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<td>Abies Springs</td>
<td>75,600</td>
<td>70,587</td>
<td>(5,013) -6.6%</td>
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<td>Bonham</td>
<td>640,000</td>
<td>509,246</td>
<td>(130,754) -20.4%</td>
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<td>Caddo Basin SUD</td>
<td>320,642</td>
<td>321,512</td>
<td>870 0.3%</td>
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<td>Cash SUD</td>
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<td>245,460</td>
<td>(60,183) -19.7%</td>
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<td>College Mound SUD</td>
<td>66,769</td>
<td>30,974</td>
<td>(35,795) -53.6%</td>
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<td>Copeville SUD</td>
<td>81,827</td>
<td>88,587</td>
<td>6,760 8.3%</td>
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<td>East Fork SUD</td>
<td>379,152</td>
<td>353,118</td>
<td>(26,034) -5.9%</td>
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<tr>
<td>Fairview</td>
<td>887,811</td>
<td>707,248</td>
<td>(180,563) -20.3%</td>
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<tr>
<td>Fate</td>
<td>279,932</td>
<td>43,824</td>
<td>(236,108) -84.3%</td>
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<tr>
<td>Fate #2</td>
<td>529,453</td>
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<td>(263,342) -49.7%</td>
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<tr>
<td>Forney Lake WSC</td>
<td>329,424</td>
<td>256,431</td>
<td>(72,993) -22.2%</td>
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<tr>
<td>Gastonia-Sciurty WSC</td>
<td>110,490</td>
<td>66,997</td>
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<td>GTWA</td>
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<td>111,775</td>
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<td>Josephine</td>
<td>57,407</td>
<td>47,399</td>
<td>(10,008) -17.4%</td>
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<tr>
<td>Kaufman</td>
<td>440,188</td>
<td>459,989</td>
<td>19,801 4.5%</td>
<td>$9,900.50</td>
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<td>Kaufman Four-One</td>
<td>528,801</td>
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<td>Lavon SUD</td>
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<td>Little Elm</td>
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<td>1,176,245</td>
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<td>Lucas</td>
<td>628,590</td>
<td>513,590</td>
<td>(115,000) -18.3%</td>
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<td>Melissa</td>
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<td>244,431</td>
<td>19,126 8.5%</td>
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<td>Milligan WSC</td>
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<tr>
<td>Mt. Zion WSC</td>
<td>159,302</td>
<td>96,713</td>
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<td>Murphy</td>
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<td>1,055,182</td>
<td>(328,884) -23.8%</td>
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<tr>
<td>Nevada WSC</td>
<td>47,179</td>
<td>16,704</td>
<td>(30,475) -64.6%</td>
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<td>-</td>
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<tr>
<td>Nevada WSC #2</td>
<td>70,985</td>
<td>60,677</td>
<td>(10,308) -14.5%</td>
<td>$</td>
<td>-</td>
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<tr>
<td>North Collin WSC</td>
<td>346,058</td>
<td>313,951</td>
<td>(32,107) -9.3%</td>
<td>$</td>
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<tr>
<td>Parker</td>
<td>533,654</td>
<td>421,560</td>
<td>(112,094) -21.0%</td>
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<td>Prosper</td>
<td>923,205</td>
<td>907,719</td>
<td>(15,486) -1.7%</td>
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<tr>
<td>Rose Hill SUD</td>
<td>143,271</td>
<td>74,270</td>
<td>(69,001) -48.2%</td>
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<tr>
<td>Rowlett</td>
<td>3,192,039</td>
<td>2,309,904</td>
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<tr>
<td>Sachse</td>
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<tr>
<td>Seis Lagos MUD</td>
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<td>112,806</td>
<td>1,712 1.5%</td>
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<tr>
<td>Sunnyvale</td>
<td>595,071</td>
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<tr>
<td>Terrell</td>
<td>1,400,000</td>
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<td>-</td>
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<tr>
<td>Wylie N.E. SUD</td>
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<td>$</td>
<td>-</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>18,094,791</strong></td>
<td><strong>14,475,126</strong></td>
<td><strong>(3,619,665)</strong></td>
<td><strong>20.0%</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

| **Total**     | **111,964,952**| **83,630,534**| **(28,334,418)** | **25.3%**            | **$** | **64,590.02** |

* Establishing annual requirements by contract. Not eligible for Rebate.
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, August 28, 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 JOE JOPLIN

II. ROLL CALL

III. RECOGNITION OF GUESTS

IV. OATHS OF OFFICE

A. Director Richard Peasley

V. PUBLIC COMMENTS

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

1Persons with disabilities who plan to attend the NTMWD Board of Directors meeting and who may need auxiliary aids or services are requested to contact John Montgomery in the NTMWD Administrative Offices at (972) 442-5405 as soon as possible. All reasonable efforts will be taken to make the appropriate arrangements.
VI. 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 – July 24, 2014 (Please refer to Consent Agenda Item No. 14-08-01)

B. Consider Authorizing Execution of Contract Amendment No. 9 to the Interlocal Agreement by and Between Collin County, Texas, and the North Texas Municipal Water District for Participation in the County Cleanup Day Program (Please refer to Consent Agenda Item No. 14-08-02)

C. Consider Authorizing Execution of Contract Amendment No. 5 to the Interlocal Cooperation Agreement by and Between the North Texas Municipal Water District and Collin County, Texas, for Placement of Roll-Off Recycling Container at the 121 Regional Disposal Facility (Please refer to Consent Agenda Item No. 14-08-03)

D. Consider Authorizing Change Order No. 4 and Authorization to Make Final Payment on Project No. 222, Rowlett Creek Regional Wastewater Treatment Plant 2011 Improvements (Please refer to Consent Agenda Item No. 14-08-04)

E. Consider Authorizing Change Order No. 2 on Project No. 202, High Service Pump Station 1-1 Electrical Improvements (Please refer to Consent Agenda Item No. 14-08-05)

F. Consider Authorizing Additional Engineering Services on Project No. 347, Environmental Services Building Heating, Venting, and Air Conditioning System Repair (Please refer to Consent Agenda Item No. 14-08-06)

G. Consider Authorizing Execution of Air Monitoring Site Agreement with the Texas Commission on Environmental Quality for Air Monitoring Station at Rockwall No. 1 Delivery Point (Please refer to Consent Agenda Item No. 14-08-07)

H. Consider Authorizing Change Order No. 1 on Project No. 296, Wylie Water Treatment Plant Improvements for Lagoon Nos. 1, 2, and 3 (Please refer to Consent Agenda Item No. 14-08-08)

VII. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. Consider Adoption of Resolution No. 14-15 Commending Director Gary Downey for 12 Years of Service as a Member of the NTMWD Board of Directors (Please refer Board Memorandum)
B. Consider Authorizing Execution of Engineering Services Agreement on Project No. 358, Lower Bois d'Arc Creek Reservoir Intake and Pump Station Preliminary Engineering
(Please refer to Administrative Memorandum No. 4232)

C. Consider Authorizing Award of Construction Contract on Project No. 302, Water Treatment Plant II Filter Underdrain Improvements and Conversion to Biologically Active Filters, Phase I
(Please refer to Administrative Memorandum No. 4233)

D. Consider Authorizing Execution of Engineering Services Agreement on Project No. 364, Wylie Water Treatment Plant III Foundation Drain Return Improvements
(Please refer to Administrative Memorandum No. 4234)

E. Consider Authorizing Change Order No. 3 on Project No. 298, High Service Pump Station 2-2 and 2-3 Electrical Improvements
(Please refer to Administrative Memorandum No. 4235)

F. Consider Authorizing Award of Construction Contract on Project No. 327, South Mesquite Creek Regional Wastewater Treatment Plant Screenings Handling Improvements
(Please refer to Administrative Memorandum No. 4236)

G. Consider Authorizing Reduction of Retainage on Project No. WCF 07-4 (099), Lake Tawakoni Water Treatment Plant
(Please refer to Administrative Memorandum No. 4237)

H. Consider Authorizing Award of Construction Contract on Project No. 345, North McKinney Interceptor Improvements, Phase I
(Please refer to Administrative Memorandum No. 4238)

I. Consider Authorizing Right-of-Way Acquisition Program and Adoption of Resolution No. 14-13 Authorizing the Use of Eminent Domain to Acquire Right-of-Way for Project No. 355, 20-Inch and 60-Inch Waterline Relocations at the North Intersection of FM 2514 and FM 1378
(Please refer to Administrative Memorandum No. 4239)

J. Consider Authorizing Award of Construction Contract on Project No. 347, Environmental Services Building Heating, Venting, and Air Conditioning System Repair
(Please refer to Administrative Memorandum No. 4240)

K. Consider Authorizing Change Order No. 2 on Project No. 188, Expand High Service Pump Station 3-1 to 350 MGD
(Please refer to Administrative Memorandum No. 4241)

L. Consider Authorizing Change Order No. 3 on Project No. 320, Wylie Water Treatment Plant II Improvements for Basin Nos. 3 and 4
(Please refer to Administrative Memorandum No. 4242)
M. Consider Authorizing Change Order No. 2 on Project No. 312, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements 
(Please refer to Administrative Memorandum No. 4243)

N. Consider Authorizing Execution of Engineering Services Agreement on 
Project No. 365, System-Wide Air Valve Improvements on Wylie to Garland 
42-Inch Pipeline 
(Please refer to Administrative Memorandum No. 4244)

O. Consider Authorizing Change Order No. 3 on Project No. 276, Wylie Water 
Treatment Plant Finished Water Reservoir and Flow Metering Improvements 
(Please refer to Administrative Memorandum No. 4245)

P. Consider Authorizing Award of Construction Contract on Project No. 301, 
Structural Repairs, Building Renovations, and Building Additions, Task Nos. 2 
and 3 
(Please refer to Administrative Memorandum No. 4246)

Q. Consider Authorizing Additional Engineering Services on Project No. 329, 
Water Transmission System Supervisory Control and Data Acquisition 
System Upgrade, Phase I 
(Please refer to Administrative Memorandum No. 4247)

R. Consider Authorizing Change Order No. 28 on Project No. 153, Water 
Treatment Plants I, II, III, and IV Ozonation 
(Please refer to Administrative Memorandum No. 4248)

S. Consider Adoption of Resolution No. 14-14 Authorizing Property Purchase for 
Project No. 350, Lavon Lake Raw Water Pump Stations Intake Channel 
Improvements 
(Please refer to Administrative Memorandum No. 4249)

T. Consider Authorizing Change Order No. 5 on Project No. 277, Water 
Treatment Plant III Filter Underdrain Improvements and Conversion to 
Biologically Active Filters 
(Please refer to Administrative Memorandum No. 4250)

U. Consider Authorizing Change Order No. 4 on Project No. 128, Lake Texoma 
Pump Station Modifications 
(Please refer to Administrative Memorandum No. 4251)

V. Consider Authorizing Execution of Engineering Services Agreement on 
Project No. 328, Rowlett Creek Regional Wastewater Treatment Plant Peak 
Flow Management Improvements, Phase 1 
(Please refer to Administrative Memorandum No. 4252)
VIII. DISCUSSION

A. Water Supply Update
B. Review Status of Request for Equitable Adjustment from McCarthy on Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation
C. Review Status of Project No. 275, Chapman Lake Water Access, Task B, Dredging
D. Review 2014-2015 Annual All Systems Budget
E. Review 2014-2015 Compensation for Executive Director, Deputy Directors, and Director of Finance, Accounting, and Personnel

IX. ADJOURNMENT

NEXT REGULAR MEETING OF BOARD, THURSDAY, SEPTEMBER 25, 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, JULY 24, 2014
IN THE NTMWD ADMINISTRATIVE OFFICES, WYLIE, TEXAS

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

President Darwin Whiteside called the meeting to order. President Darwin Whiteside advised that Director Larry Parks would be abstaining from voting on Agenda Item Nos. VI. E. and VII. F.

I. INVOCATION

Director Darrell Grooms offered the invocation.

II. ROLL CALL

Secretary Terry Anderson conducted a roll call. Directors Gary Downey and Don Gordon were absent. The following Directors were present for the July 24, 2014, Board meeting:

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

The following NTMWD consultants attended the meeting:

Lewis Isaacks – Gay McCall Isaacks Gordon & Roberts
David Medanich – First Southwest Company
Alan Raynor – McCall, Parkhurst & Horton
III. **RECOGNITION OF GUESTS**

A. Registered Guests

There were no registered guests recognized.

IV. **OATHS OF OFFICE**

The following recently re-appointed Director was given his Oath of Office by Melisa Fuller prior to any action by the Board of Directors:

A. Director Shep Stahel, Plano

V. **PUBLIC COMMENTS**

Barbara Harless of Murphy, Texas, spoke to her concerns related to water rates, the Member Cities and Customers take or pay water contracts, and the recent need for cities to flush water due to reduction of usage and conservation.

VI. **CONSENT AGENDA ITEMS**

Consent Agenda Item No. VI. D. was removed from the consent agenda for individual consideration.

Upon a motion by Director Patrick Nicklen and a second by Director Bob Thurmond, the Board of Directors voted unanimously to approve all the consent agenda items except Item No. VI. D. as follows:

A. Consider Approval of Board of Directors Meeting Minutes – June 26, 2014
   (Please refer to Consent Agenda Item No. 14-07-01)

B. Consider Authorizing Execution of Drainage Easement Agreement with the City of Plano for Plano No. 1 Delivery Site
   (Please refer to Consent Agenda Item No. 14-07-02)

C. Consider Authorizing Additional Engineering Services on Project No. 315, Dublin Relift Station Improvements
   (Please refer to Consent Agenda Item No. 14-07-03)

D. Consider Authorizing Additional Engineering Services on Project No. 138, Texoma Desalination TPDES Permit Application
   (Please refer to Consent Agenda Item No. 14-07-04)

   This item was removed from the Consent Agenda for individual consideration.

On a motion by Director Shep Stahel and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to authorize additional engineering services with Alan Plummer Associates, Inc., for the Texoma Desalination
TPDES Permit Application, Project No. 138, in the not-to-exceed amount of $20,000 bringing the total authorized amount to $249,100.

E. Consider Authorizing Additional Engineering Services on Project No. 321, Expansion of Raw Water Pump Station No. 3 to 620 MGD (Please refer to Consent Agenda Item No. 14-07-05)

F. Consider Authorizing Change Order No. 1 and Authorization to Make Final Payment on Project No. 318, Wylie No. 3 Delivery Point Metering Station Upgrade (Please refer to Consent Agenda Item No. 14-07-06)

G. Consider Authorizing Change Order No. 3 and Authorization to Make Final Payment on Project No. 299, Lake Tawakoni Water Treatment Plant Chlorine Dioxide System (Please refer to Consent Agenda Item No. 14-07-07)

H. Consider Authorizing Change Order No. 2 and Authorization to Make Final Payment on Project No. 322, 121 Regional Disposal Facility Scale House Improvements (Please refer to Consent Agenda Item No. 14-07-08)

I. Consider Authorizing Change Order No. 1 on 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) (Please refer to Consent Agenda Item No. 14-07-09)

VII. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. TABLED ITEM: Consider Authorizing Amendment to District Policy No. 19 – Water Rebate Procedure (Please refer to Administrative Memorandum No. 4205-1)

Director Joe Farmer made the motion to take this item from the table. Director Jack May seconded the motion, which was unanimously approved by the Board of Directors.

Upon the recommendation of the Finance/Audit Committee, Director John Sweeden made the motion to table this item until November 2014. Director Shep Stahel seconded the motion, which was unanimously approved by the Board of Directors. In consideration of budgeting, the Member Cities and Customers would be notified that the current policy will remain in place through the end of FY 2014.
B. Consider Authorizing Execution of Potable Water Supply Contract with Town of Prosper  
(Please refer to Administrative Memorandum No. 4222)

Upon a motion by Director James Kerr and a second by Director Marvin Fuller,  
the Board of Directors voted unanimously to authorize the execution of the Town  
of Prosper Potable Water Supply Contract.

C. Consider Authorizing Execution of Potable Water Supply Contract with City of Kaufman  
(Please refer to Administrative Memorandum No. 4223)

Upon a motion by Director Lynn Shuyler and a second by Director Darrell Grooms,  
the Board of Directors voted unanimously to authorize execution of the  
City of Kaufman Potable Water Supply Contract.

D. Consider Authorizing Land Acquisition Program and Adoption of Resolution  
No. 14-10 Authorizing Property Purchase for the Leonard Water Treatment Plant Site, Project No. 154  
(Please refer to Administrative Memorandum No. 4224)

Upon the recommendation of the Water Committee, a motion by Director James  
Kerr, and a second by Director Lynn Shuyler, the Board of Directors voted  
umanimately to adopt Resolution No. 14-10 authorizing the Executive Director to  
implement a land acquisition program for purchase of 28.171 acres for the  
Leonard Water Treatment Plant Site, Project No. 154, with a budget of $400,000.

E. Consider Authorizing Right-of-Way Acquisition Program and Adoption of Resolution  
No. 14-11 Authorizing Purchase of Right-of-Way for the Cottonwood Creek Outfall Sewer Aerial Crossing Replacement, Project No. 274  
(Please refer to Administrative Memorandum No. 4225)

Upon a motion by Director Darrell Grooms and a second by Director Joe Farmer,  
the Board of Directors voted unanimously to authorize a right-of-way acquisition  
program for the Cottonwood Creek Outfall Sewer Aerial Crossing Replacement,  
Project No. 274, with a budget of $75,000, and adopt Resolution No. 14-11  
authorizing the purchase of right-of-way for the Cottonwood Creek Outfall Sewer  
Aerial Crossing Replacement, Project No. 274.

F. Consider Authorizing Execution of Engineering Services Agreement for Project  
No. 363, High Service Pump Station 1-1 Mechanical Improvements Preliminary Engineering  
(Please refer to Administrative Memorandum No. 4226)

Upon the recommendation of the Water Committee, a motion by Director Larry  
Parks, and a second by Director Lynn Shuyler, the Board of Directors voted  
umanimately to authorize the Executive Director to execute an engineering  
services agreement with Freese and Nichols, Inc., for preliminary design services
associated with the High Service Pump Station 1-1 Mechanical Improvements, Project No. 363, in the not-to-exceed amount of $265,130.

G. Consider Authorizing Award of Construction Contract and Change Order No. 1 on Project No. 295, Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements
(Please refer to Administrative Memorandum No. 4227)

Upon a motion by Director Lynn Shuyler and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to authorize award of a construction contract to Archer Western Construction, LLC, in the initial contract amount of $8,904,500 and authorize Change Order No. 1, a deduction in the amount of $345,200, resulting in a revised contract amount of $8,559,300 for the Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements, Project No. 295.

H. Consider Authorizing Change Order No. 3 on Project No. 227 (Contract A), Upper White Rock Creek Parallel Force Main
(Please refer to Administrative Memorandum No. 4228)

Upon a motion by Director Darrell Grooms and a second by Director Bob Thurmond, the Board of Directors voted unanimously to authorize Change Order No. 3 for an increase of $156,961.78, resulting in a revised contract amount of $3,357,351.91 and a 161-day contract time extension resulting in a revised final completion date of September 28, 2014, for the Upper White Rock Creek Parallel Force Main, Project No. 227 (Contract A).

I. Consider Authorizing Additional Engineering Services on Project No. 326, Casa View Control Structure Improvements and Ground Storage Tank Improvements
(Please refer to Administrative Memorandum No. 4229)

Upon a motion by Director Don Cates and a second by Director James Kerr, the Board of Directors voted unanimously to authorize an increase to the engineering services agreement with Kimley-Horn and Associates, Inc., in the not-to-exceed amount of $71,500, resulting in a revised total not-to-exceed engineering services fee of $356,000 for the Casa View Control Structure Improvements and Ground Storage Tank Improvements, Project No. 326.

J. Consider Authorizing Change Order No. 2 on Project No. 298, High Service Pump Station 2-2 and 2-3 Electrical Improvements
(Please refer to Administrative Memorandum No. 4230)

Upon a motion by Director Lynn Shuyler and a second by Director Patrick Nicklen, the Board of Directors authorized Change Order No. 2 for an increase of $36,937.46 resulting in a revised contract amount of $4,975,087.42 for Project No. 298, High Service Pump Station 2-2 and 2-3 Electrical Improvements.
K. Consider Adoption of Resolution No. 14-12 Authorizing NTMWD Board President to Act on Behalf of the Board of Directors to Negotiate Terms and Conditions of Settlement Agreements Related to the Lower Bois d'Arc Creek Reservoir Project and to Execute Settlement Agreements
(Please refer to Administrative Memorandum No. 4231)

Upon a motion by Director Larry Parks and a second by Director Shep Stahel, the Board of Directors authorized the Board President to work in concert with the District’s executive staff and legal counsel to complete such negotiations and execute on behalf of the District settlement agreements with the National Wildlife Federation, the Lone Star Chapter of the Sierra Club, the Texas Conservation Alliance, and any other protestants to any local, state, or federal permit or license that may be required to authorize the permitting, construction or operation of the Lower Bois d'Arc Creek Reservoir project, and to take all other actions necessary to facilitate same.

VIII. DISCUSSION ITEM

A. Water Supply Update

Mike Rickman provided a water supply update.

IX. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 5:06 p.m. The next regular meeting of the NTMWD Board of Directors will be held Thursday, August 28, 2014, at 4:00 p.m. in the NTMWD Administrative Offices, 505 E. Brown Street, Wylie, Texas.

APPROVED:

______________________________
DARWIN WHITESIDE, President

ATTEST:

______________________________
TERRY SAM ANDERSON, Secretary

(Seal)
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

CONSENT AGENDA ITEM NO. 14-08-02

REGIONAL SOLID WASTE SYSTEM

CONTRACT AMENDMENT NO. 9 TO THE INTERLOCAL AGREEMENT BY AND BETWEEN COLLIN COUNTY, TEXAS, AND THE NORTH TEXAS MUNICIPAL WATER DISTRICT FOR PARTICIPATION IN THE COUNTY CLEANUP DAY PROGRAM

The purpose of this consent agenda item is to request that the Board of Directors authorize the Executive Director to execute Contract Amendment No. 9 to the agreement entitled, "Interlocal Agreement By and Between Collin County, Texas, and the North Texas Municipal Water District for Participation in the County Cleanup Day Program." The term of the agreement is from October 1, 2005, through September 30, 2006, with renewals allowed for successive one-year terms unless terminated by either party. This contract amendment is to renew the agreement for the period October 1, 2014, through September 30, 2015. A copy of the original agreement can be provided upon request.

BACKGROUND

The NTMWD began a program of assisting Collin County with their annual Cleanup Day in 1989. By 1997, the program had escalated such that approximately 500 tons were being disposed at no charge. In 1998, a recommendation was presented to and approved by the Board to charge a fee equal to the budgeted landfill cost per ton versus the gate rate. This program worked successfully from 1998 through 2002.

In 2003 and 2004, the County operated the Cleanup Day Program on a monthly basis at three locations in Precinct 3 (north and east Collin County). The County utilized NCTCOG Grant Funds and a contract hauler (IESI) and paid the gate rate. This program required three crews (one at each location) and became very costly for the County. Based on this cost impact, the County proposed that NTMWD and the County consider a joint effort at the 121 Regional Disposal Facility (121 RDF). The current program began in October 2005 and has been very successful.

The program is conducted on the first Saturday of each month, with several exceptions for holidays that fall close to the first Saturday. County residents are allowed to bring cleanup items (but not household waste) to the 121 RDF for disposal. The County has a crew onsite consisting of a public works employee to verify users, a sheriff deputy for enforcement, and a crew from the SCORE Program to assist with unloading debris and tires. Based on historical usage, the County is charged 0.58 tons for each load delivered to the 121 RDF, and the County is billed for the tonnage on a monthly basis.
The fee schedule for this program was modified in 2005 to reflect dividing the landfill budget by the Member City tons plus a 10% surcharge. This method covers costs and reimburses the system for airspace consumed. Utilizing this method, the rate for fiscal year 2014-2015 is preliminarily projected to be $29.46/ton. The current gate rate is $31.00/ton, but is proposed in the FY2014-2015 budget to increase to $32.00/ton effective October 1, 2014.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute Contract Amendment No. 9 to the agreement entitled, "Interlocal Agreement By and Between Collin County, Texas, and the North Texas Municipal Water District for Participation in the County Cleanup Day Program" to continue the monthly Cleanup Day Program. This will be an item on the consent agenda of the August 2014 Board meeting.
The purpose of this consent agenda item is to request the Board of Directors authorize the Executive Director to execute Contract Amendment No. 5 to the *Interlocal Cooperation Agreement By and Between the North Texas Municipal Water District and Collin County, Texas, for Placement of Roll-Off Recycling Container* at the 121 Regional Disposal Facility (RDF). Execution of the original agreement was authorized by the Board at the July 2009 Board meeting via Consent Agenda Item No. 09-07-06.

The term of the original agreement is from the date of execution by both parties through September 30, 2010, with up to five consecutive twelve-month renewal terms allowed unless terminated by either party. Contract Amendment Nos. 1 through 4, which were approved by the Board, extended the agreement through September 30, 2014. This amendment extends the effective date of the term for the period October 1, 2014, through September 30, 2015. A copy of the original agreement can be provided upon request.

**BACKGROUND**

In 2004, Collin County received a grant issued by the North Central Texas Council of Governments through funding from the Texas Commission on Environmental Quality to purchase recycling roll-off containers to facilitate recycling throughout those areas of the county that have no service. The program currently consists of nine locations, each with an approximately 27 cubic yard capacity roll-off recycling container. One of the nine locations is the 121 RDF. Items such as newspapers, magazines, junk mail, paper bags, glass, office paper, cardboard, soft cover books, catalogs, plastic bags, aluminum/tin cans, and plastic containers are allowed to be deposited in the container. Any costs associated with hauling the container is borne by Collin County. The original agreement noted above allows Collin County to locate the container at the 121 RDF.

**RECOMMENDATION**

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute Contract Amendment No. 5 to the *Interlocal Cooperation Agreement By and Between the North Texas Municipal Water District and Collin County, Texas, for Placement of Roll-Off Recycling Container* at the 121 Regional Disposal Facility. This will be an item on the consent agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

CONSENT AGENDA ITEM NO. 14-08-04

REGIONAL WASTEWATER SYSTEM
ROWLETT CREEK REGIONAL WASTEWATER TREATMENT PLANT
2011 IMPROVEMENTS
PROJECT NO. 222

CHANGE ORDER NO. 4
AND
AUTHORIZATION TO MAKE FINAL PAYMENT

This consent agenda item is for the Board of Directors consideration of: 1) Change Order No. 4 for a decrease of $9,828 and 41 additional contract days, resulting in a revised contract amount of $4,091,389.08 and a revised final completion date of January 20, 2014; and, 2) authorization to make final payment to Archer Western Contractors, LLC, (Archer Western) for Project No. 222, Rowlett Creek Regional Wastewater Treatment Plant (RWWTP) 2011 Improvements.

REVIEW

This project includes the installation of advanced odor control and treatment systems to further reduce the potential for migration of odors from the treatment plant site. This is an additional phase to several odor control improvements that have been implemented in recent years at the Rowlett Creek RWWTP as part of expansion projects, plant rehabilitation, and odor control projects.

Previous Board actions associated with the construction phase of this project are documented in Consent Agenda Item No. 13-12-04, which was approved by the Board in December 2013. The current contract amount is $4,101,217.08.

PROPOSED CHANGE ORDER NO. 4

Proposed Change Order No. 4 consists of one item that affects the contract amount.

Item No. 1 – Adjustment to Contract Quantities ($9,828)

In January 2014, the Board of Directors authorized final payment to Archer Western contingent upon completion of a short list of minor deficiency items (punchlist) including full utilization of all unit price bypass pumping for the number of days stipulated in the bid form. Subsequent to this action by the Board, it was realized that the bypass pumping task would be completed in fewer days than expected. Although this work was completed several months ago, there was anticipation that the bypass pumping might yet be needed to support possible additional tasks related to a new connection to a basin. This additional task has been resolved without the need for the bypass pumping, and the project is now clear to be finalized. During the decision process for this additional task, the contractor was on hold for 41 days pending the final decision. As a
result, the following adjustment to contract quantities and corresponding contract amount is now proposed:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Original Qty.</th>
<th>Revised Qty.</th>
<th>Diff.</th>
<th>Total Amt.</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>Plano Lift Station Bypass Pumping</td>
<td>DY</td>
<td>$1,800</td>
<td>7</td>
<td>1.54</td>
<td>(5.46)</td>
<td>($9,828)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($9,828)</td>
</tr>
</tbody>
</table>

The proposed adjustment of quantities and related costs and contract days have been reviewed and are recommended by both NTMWD staff and Perkins Engineering as appropriate for the time and effort required.

**SUMMARY OF ADJUSTMENTS TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$3,980,590.00</td>
<td>390</td>
<td>450</td>
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<td>C.O. No. 1</td>
<td>33,099.00</td>
<td>30</td>
<td>30</td>
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<tr>
<td>C.O. No. 2</td>
<td>66,136.23</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>C.O. No. 3</td>
<td>21,391.85</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Proposed C.O. No. 4</td>
<td>(9,828.00)</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$4,091,389.08</td>
<td>541</td>
<td>601</td>
</tr>
</tbody>
</table>

**AUTHORIZATION TO FINAL**

All work on the project has been completed, and the project was considered substantially complete as of November 21, 2013. The final walkthrough was completed on December 19, 2013. The contractor has completed all work including cleanup and restoration and has submitted final O&M documentation.

**RECOMMENDATION**

It is the recommendation of the Executive Director, NTMWD staff, and Perkins Engineering that the Board of Directors authorize: 1) Change Order No. 4 for a decrease of $9,828 and 41 additional contract days, resulting in a revised contract amount of $4,091,389.08 and a revised final completion date of January 20, 2014; and, 2) authorization to make final payment to Archer Western Contractors, LLC, for Project No. 222, Rowlett Creek Regional Wastewater Treatment Plant 2011 Improvements. This will be an item on the consent agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

CONSENT AGENDA ITEM NO. 14-08-05

REGIONAL WATER SYSTEM
HIGH SERVICE PUMP STATION 1-1
ELECTRICAL IMPROVEMENTS
PROJECT NO. 202

CHANGE ORDER NO. 2

This consent agenda item is for the Board of Directors consideration of Change Order No. 2 for: 1) an increase of $24,448 resulting in a revised contract amount of $3,573,029.80; and, 2) 30 calendar days of additional contract time resulting in a final completion date of March 16, 2015, for Electrical Improvements at High Service Pump Station (HSPS) 1-1, Project No. 202.

REVIEW

In January 2010, the Board approved Administrative Memorandum No. 3436 authorizing an engineering services agreement with McCreary & Associates, Inc., (MAI) for design and construction phase services in the amount of $255,424.

In September 2013, the Board approved Administrative Memorandum No. 4048 authorizing the award of a construction contract to Crescent Constructors, Inc., for the contract amount of $3,357,000.

In June 2014, the Board approved Administrative Memorandum No. 4207 authorizing Change Order No. 1 for an increase of $11,581.80. The revised contract amount is $3,548,581.80.

PROPOSED CHANGE ORDER NO. 2

Proposed Change Order No. 2 consists of one item that impacts the scope of work for the project.

Item No. 1 – Alternate Entry into Pump Station Switchgear

$24,448
30 Calendar Days

- Issue: During installation of the electrical service to the main HSPS 1-1 transformers, NTMWD inspection staff discovered the existing conduits were installed with short radius 90-degree elbows to make the turn up into the transformer air chamber compartment. The original construction incorporated a smaller diameter cable, for which the short radius conduits conformed to the electric code at that time. Current electric code requires larger diameter power cables that will not accommodate the existing turn radius.
CONSENT AGENDA ITEM NO. 14-08-05
PAGE 2

- **Recommendation:** Direct the contractor to lift each transformer off its pad, saw-cut the pad and install conduit with long radius 90 degree elbows to accommodate the required minimum bending radius of the new power cables.

- **Proposed Cost:** The contractor has submitted a proposal to furnish and install the recommended work for the total amount of $24,448 and 30 additional calendar days.

The proposed costs have been reviewed and are recommended by both NTMWD staff and MAI as appropriate for 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>$3,537,000.00</td>
<td>420</td>
<td>465</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>11,581.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed C.O. No. 2</td>
<td>24,448.00</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$3,573,029.80</td>
<td>450</td>
<td>495</td>
</tr>
</tbody>
</table>

### FUNDING

Additional funding in the amount of $24,448 for Change Order No. 2 is available in the Regional Water System 2009D Construction Fund.

### RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and McCreary and Associates, Inc., that the Board of Directors authorize Change Order No. 2 for: 1) an increase of $24,448, resulting in a revised contract amount of $3,573,029.80; and, 2) 30 calendar days of additional contract time, resulting in a final completion date of March 16, 2015, for the High Service Pump Station 1-1 Electrical Improvements, Project No. 202. This will be an item on the consent agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

CONSENT AGENDA ITEM NO. 14-08-06

REGIONAL WATER SYSTEM
ENVIRONMENTAL SERVICES BUILDING
HEATING, VENTING, AND AIR CONDITIONING SYSTEM REPAIR
PROJECT NO. 347

ADDITIONAL ENGINEERING SERVICES

This consent agenda item is for the Board of Directors consideration of an increase in the scope and fee for additional design services by Huitt-Zollars, Inc., (Huitt-Zollars) for the Environmental Services Building Heating, Venting, and Air Conditioning (HVAC) System Repair, Project No. 347, in the additional amount of $13,907.90. This would result in a revised total not-to-exceed engineering services fee of $90,407.90.

REVIEW

In December 2013, the Board of Directors approved Administrative Memorandum No. 4098 authorizing the Executive Director to execute an engineering services agreement (ESA) with Huitt-Zollars for Project No. 347. The project includes repairs to the office and laboratory HVAC systems and is centered on three objectives: 1) maintain the building under positive pressure so that moist outside air does not intrude into the building envelope creating condensation on building walls and high indoor humidity levels; 2) condition the inside air to maintain proper temperature and advance the control of indoor humidity; and, 3) assess and remediate the exterior walls as a result of the moisture intrusion.

PROPOSED SCOPE OF ADDITIONAL SERVICES

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

Item No. 1 – Additional Design for Server Room Air Conditioning $4,000

Huitt-Zollars’ current scope includes permanent installation of a new, properly sized air conditioning (AC) unit in the computer and telephone server room. In an early review of the design, the NTMWD staff requested that a backup AC unit be provided to protect this critical space. Huitt-Zollars has requested an additional fee in the not-to-exceed amount of $4,000 to design a ductless split system with the compressor unit mounted on the roof.

Item No. 2 – Additional Design for Interior Finishes $9,907.90

Huitt-Zollars has requested an additional fee for design of restored interior finishes, including cabinet casework and modified window casing design. Both of these items have been reviewed by NTMWD staff and are recommended as necessary and representative of the efforts required.
SUMMARY OF ADDITIONAL ENGINEERING FEES

The additional not-to-exceed engineering fee for these services is summarized as follows:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Additional Design for Server Room Air Conditioning</td>
<td>$4,000.00</td>
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<tr>
<td>2</td>
<td>Additional Design for Interior Finishes</td>
<td>9,907.90</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$13,907.90</strong></td>
</tr>
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</table>

SUMMARY OF ESA

<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Additional Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original ESA (Ad. Memo. No. 4098)</td>
<td>$60,000</td>
<td>$16,500</td>
<td></td>
<td>$76,500.00</td>
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<tr>
<td>Proposed Additional Engineering Services</td>
<td></td>
<td></td>
<td>13,907.90</td>
<td>13,907.90</td>
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<tr>
<td>Revised ESA Amount</td>
<td>$60,000</td>
<td>$16,500</td>
<td>$13,907.90</td>
<td>$90,407.90</td>
</tr>
</tbody>
</table>

The additional services would be performed in accordance with the existing ESA. The NTMWD staff has reviewed the engineering fees submitted by Huitz-Zollars and recommends them as representative of the effort required.

FUNDING

Additional funding in the amount of $13,907.90 for this project is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an increase to the engineering services agreement with Huitz-Zollars, Inc., for the Environmental Services Building Heating, Venting, and Air Conditioning System Repair, Project No. 347, in the additional not-to-exceed amount of $13,907.90, resulting in a revised total not-to-exceed engineering services fee of $90,407.90. This will be an item on the consent agenda of the August 2014 Board meeting.
The NTMWD Board of Directors previously authorized an Air Monitoring Site Agreement with the Texas Natural Resource Conservation Commission (TNRCC) for an ozone monitoring station at the Rockwall No. 1 Delivery Point in April 2000 by Administrative Memorandum No. 2224. Texas Commission on Environmental Quality (TCEQ), formerly TNRCC, has requested a renewal of the Air Monitoring Site Agreement to be signed by the NTMWD. The purpose of this consent agenda is to request the Board to authorize the Executive Director to execute the new site agreement with the TCEQ.

The TCEQ operates a continuous air monitoring network to fulfill federal monitoring requirements. The TCEQ equipment located at this site is enclosed in an aluminum utility trailer with metal roof plus auxiliary equipment outside the trailer, including a 10-meter weather tower. The station requires approximately 2,000 square feet of ground space covered with a site pad (e.g., six inches of limestone). The trailer is environmentally controlled and contains instrumentation as deemed appropriate by the TCEQ, as well as peripherals required for the proper operation of the instruments. The TCEQ arranges and pays for phone and electrical service.

The TCEQ provided their standard lease agreement, which is for a period of five years and is automatically renewed for an additional five-year period unless written notice of termination is provided by one of the parties. The TCEQ is not allowed to pay for the use of land in these programs. A copy of the agreement is available upon request.

**RECOMMENDATION**

It is the recommendation of the NTMWD Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an Air Monitoring Site Agreement with the Texas Commission on Environmental Quality for an air monitoring station at the Rockwall No. 1 Delivery Point. This will be an item on the consent agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

CONSENT AGENDA ITEM NO. 14-08-08

REGIONAL WATER SYSTEM
WYLIE WATER TREATMENT PLANT
IMPROVEMENTS FOR LAGOON NOS. 1, 2, AND 3
PROJECT NO. 296

CHANGE ORDER NO. 1

This consent agenda item is for the Board of Directors consideration of Change Order No. 1 for: 1) an increase of $20,273, resulting in a revised contract amount of $339,248; and, 2) 135 additional calendar days of contract time, resulting in revised substantial and final completion dates of August 18, 2014, and September 17, 2014, respectively, for the Wylie Water Treatment Plant (WTP) Improvements for Lagoon Nos. 1, 2, and 3, Project No. 296.

REVIEW

In August 2012, the Board approved Administrative Memorandum No. 3839 authorizing an engineering services agreement with Alan Plummer Associates, Inc., (APAI) for the design of improvements to Lagoon Nos. 1, 2, and 3. The project improvements include the relocation of the decant waterline outside Lagoon No. 2 and addition of several sludge discharge points within the containment berm to distribute sludge into Lagoon Nos. 1 and 2.

In August 2013, the Board approved Administrative Memorandum No. 4030 authorizing the award of a construction contract for Project No. 296 to PCL Construction, Inc., in the amount of $318,975.

PROPOSED CHANGE ORDER NO. 1

Proposed Change Order No. 1 includes one item that affects the cost and time for the project.

Item No. 1 – Connect New 8-Inch Sludge Line to Existing 12-Inch Sludge Line

$20,273
135 calendar days

- **Issue:** An abandoned 12-inch sludge pipeline previously installed on the east side of Lagoon No. 2 was identified in the early stages of construction. This line is in a good position to be connected to the sludge distribution piping being added under this project and serve as an additional distribution leg for sludge into the lagoon.
• **Recommendation:** Re-purposing of this pipe as an additional distribution leg provides an additional option for the even distribution of sludge throughout the lagoon and is recommended as a desirable enhancement to the project. This will require installing a short interconnection of 12-inch pipe, new isolation valve at the connection point, and additional shutoff valves at each of the two new discharge points.

• **Proposed Cost and Time:** The contractor has proposed a cost of $20,273 and 135 additional days of contract time to accomplish the additional work. Much of the additional time requested is related to coordinating and performing the necessary water jetting and pre-inspection that verified the pipe is suitable for the intended service. This task has already been performed by the contractor and is part of the proposed cost presented here.

### SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$318,975</td>
<td>180</td>
<td>210</td>
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<td>Proposed C.O. No. 1</td>
<td>$20,273</td>
<td>135</td>
<td>135</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$339,248</td>
<td>315</td>
<td>345</td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td></td>
<td>August 18, 2014</td>
<td>September 17, 2014</td>
</tr>
</tbody>
</table>

### FUNDING

Additional funding in the amount of $20,273 for Change Order No. 1 is available in the Regional Water System Capital Improvement Fund.

### RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Alan Plummer Associates, Inc., that the Board of Directors authorize: 1) Change Order No. 1 for an increase of $20,273, resulting in a revised contract amount of $339,248; and, 2) 135 calendar days of additional contract time, resulting in revised substantial and final completion dates of August 18, 2014, and September 17, 2014, respectively, for Project No. 296, Wylie Water Treatment Plant Improvements for Lagoon Nos. 1, 2, and 3. This will be an item on the consent agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4232

REGIONAL WATER SYSTEM
LOWER BOIS D'ARC CREEK RESERVOIR
INTAKE AND PUMP STATION
PRELIMINARY ENGINEERING
PROJECT NO. 358

ENGINEERING SERVICES AGREEMENT

This administrative memorandum is for the Board of Directors consideration to employ Freese and Nichols, Inc., (FNI) to provide preliminary engineering services associated with Project No. 358, Lower Bois d'Arc Creek Reservoir (LBCR) Intake and Pump Station. The engineering services agreement (ESA) would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $1,293,000.

REVIEW

The Board has authorized actions for the LBCR project that involve numerous activities including feasibility studies, permit applications, legal services, environmental services, engineering services, and property acquisition. The preliminary engineering for the dam design was authorized by the Board in Administrative Memorandum No. 4091, and the pump station and intake configuration and siting engineering was authorized by the Board in Administrative Memorandum No. 4183. FNI has performed these tasks concurrently to ensure optimal coordination among the dam, intake structure and pump station, since they are so closely interrelated.

The design effort for the intake structure and pump station will be performed in three phases: 1) siting pump station location and intake structure configuration; 2) preliminary engineering; and, 3) final engineering. As noted above, Phase I is in progress and has reached the point to allow preliminary design of the facilities to proceed, including the initial 3,000 linear feet of raw water discharge pipe. This administrative memorandum requests approval for Phase II, the preliminary engineering, which will include those tasks listed under Scope of Services below.

SCOPE OF SERVICES

The project scope includes:

1) Analysis of the intake and pump station based on the siting information developed in Phase I.
2) Completion of a Preliminary Design Report and Level I (30%) Design Submittal.
Basic engineering tasks include:

- Determination of potential environmentally sensitive areas and permitting constraints
- Preliminary structural, electrical, mechanical, architectural, and civil design of the facilities
- Pump and raw water system hydraulic analysis
- Ongoing coordination with the dam design
- Construction phasing
- Development of project schedule
- Coordination with Fannin County Electrical Co-Op and Oncor
- Development of the preliminary design report
- Completion of Level I (30%) design including the design submittal, draft pump specifications, an updated opinion of probable cost, and an updated construction schedule

The special services will consist of:

1) **Invasive Species Control Concepts.** FNI will retain the services of RNT Consulting, Inc., to conduct a workshop and peer review of the new reservoir, intake and pump station preliminary design and prepare a technical memorandum on control strategies for invasive mussel species that in the future may affect the LBCR and raw water transmission facilities.

2) **Intake and Pump Station Hydraulic Model Study.** FNI will retain the services of Alden Laboratories, Inc., to analyze hydraulics, construct models and prepare reports addressing the intake tower, the pump station, and the discharge flow metering station.

3) **Transient Analysis for Pump Station and Pipeline System.** FNI will retain the services of Foster Wheeler Upstream, Inc., to analyze and prepare reports for a transient analysis of the raw water transmission system.

4) **Geotechnical Investigation for Pump Station.** Perform field exploration, laboratory testing, and engineering analysis of the pump station site, miscellaneous associated structures (vaults, pads, etc.), and the electrical substation site.

The current opinion of construction cost for the LBCR pump station, including 3,000 linear feet of discharge pipeline is $35,266,000 and for the LBCR intake tower is $17,082,000. The total combined opinion of construction cost for both structures is $52,348,000.

**ENGINEERING SERVICES FEE**

FNI has proposed to perform the preliminary engineering services in the not-to-exceed amount of $1,293,000. FNI has provided proposed pricing to perform the basic
engineering services in the not-to-exceed amount of $874,000 and special services in
the not-to-exceed amount of $419,000, for a total not-to-exceed fee of $1,293,000.
Included in the special services are the following:

a) Invasive Species Control Concepts $15,000
b) Intake and Pump Station Hydraulic Model Studies 250,000
b) Transient Analysis for Pump Station and Pipeline System 88,000
c) Geotechnical Investigation for Pump Station 66,000

Total Special Services $419,000

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

FUNDING

Funding in the amount of $1,293,000 for this project is available in the Regional Water
System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of
Directors authorize the Executive Director to execute an engineering services
agreement with Freese and Nichols, Inc., for preliminary design services associated
with Lower Bois d'Arc Creek Reservoir Intake and Pump Station, Project No. 358, in the
not-to-exceed amount of $1,293,000. This will be an item on the regular agenda of the
August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4233

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

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 Red River Construction Company (Red River) in the contract amount of $8,165,485 for Water Treatment Plant (WTP) II Filter Underdrain Improvements and Conversion to Biologically Active Filters, Phase I, Project No. 302.

REVIEW

In October 2012, the Board approved Administrative Memorandum No. 3870 authorizing an engineering services agreement (ESA) with Carollo Engineers for WTP II Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 302. The scope of this project is to provide improvements to 33 of the 40 filters at WTP II to allow conversion to biologically active filters. Structural repairs and underdrain improvements will be completed on two of the filters at WTP II on other projects.

In May 2014, the Board approved Administrative Memorandum No. 4195 authorizing additional engineering services recommending that the project be divided into two construction phases: Phase I for work in Filter Nos. 1 through 20 and Phase II for work in Filter Nos. 21 through 40.

The tabulation of bids addressed by this administrative memorandum includes work under Phase I.

SCOPE OF THE PROJECT

The scope of this project generally includes improvements to 38 filters as follows:

- concrete structural joint and crack repairs
- replacement of pipe and supports compromised by corrosion
- repair of seals at pipe wall penetrations
- replacement or repair of structural steel walkways and ladders due to corrosion
- sandblasting and coating the walls of each filter cell
- installation of a deeper bed of filter media
- raising the existing washwater troughs and gullet walls in all 40 filters
- improvement of the ventilation system for the valve gallery and pipe gallery
The attached exhibit indicates the proposed or completed work for filter improvement projects at all four Wylie WTPs during the past four to five years.

TABULATION OF CONSTRUCTION BIDS

Sealed bids were received at 2:00 p.m. on Wednesday, August 13, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Bid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red River Construction Company</td>
<td>$8,165,485</td>
</tr>
<tr>
<td>PCL Construction, Inc.</td>
<td>$8,527,649</td>
</tr>
<tr>
<td>Crescent Constructors</td>
<td>$8,549,000</td>
</tr>
<tr>
<td>Pepper Lawson Construction</td>
<td>$8,594,000</td>
</tr>
<tr>
<td>Archer-Western Construction</td>
<td>$8,643,485</td>
</tr>
<tr>
<td>Garney Companies</td>
<td>$9,598,000</td>
</tr>
<tr>
<td>Gracon Construction</td>
<td>$9,992,985</td>
</tr>
</tbody>
</table>

The engineer's opinion of probable construction cost based upon the final design was $11,900,000. The lowest responsive bid was received from Red River in the total bid amount of $8,165,485. Red River has successfully completed several previous water and wastewater plant-related projects for NTMWD, including Project No. 195, Chlorine Scrubber Facilities at WTPs I and II; Project No. 196, Floyd Branch WWTP Ultraviolet Disinfection Facilities; and, Project No. 226, WTP III Filter Underdrain Repair and Replacement, Phase II. Red River is currently constructing the Lake Tawakoni Water Treatment Plant Chlorine Dioxide System, Project No. 299. Based on their satisfactory previous experience and statement of qualifications, it is recommended that the contract be awarded to Red River.

FUNDING

Funding in the amount of $8,165,485 is available in the Regional Water System 2014 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Carollo Engineers, Inc., that the Board of Directors authorize award of a construction contract to Red River Construction Company for the Water Treatment Plant II Filter Underdrain Improvements and Conversion to Biologically Active Filters, Phase I, Project No. 302, in the amount of $8,165,485. This will be an item on the regular agenda of the August 2014 Board meeting.
Wylie WTP's – Filter Improvement Projects

- **Project No. 183** – Underdrain Replacement (Biologically Active Filtration (BAF) Conversion in Proj. No. 277)
- **Project No. 226** – Underdrain Replacement and Conversion to BAF
- **Project No. 251** – Conversion to BAF with chemical optimization
- **Project No. 259** – Underdrain Replacement, Structural Repair, Conversion to BAF
- **Project No. 277** – Conversion to BAF and Underdrain Replacement
- **Project No. 302** – Conversion to BAF and Underdrain Replacement

Not shown - Future Projects – Chemical Optimization for WTP's I - III
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4234

REGIONAL WATER SYSTEM
WYLIE WATER TREATMENT PLANT III
FOUNDATION DRAIN RETURN IMPROVEMENTS
PROJECT NO. 364

ENGINEERING SERVICES AGREEMENT

This administrative memorandum is for the Board of Directors consideration to employ Black & Veatch Corporation (B&V) to provide design and construction phase services for the Wylie Water Treatment Plant (WTP) III Foundation Drain Return Improvements, Project No. 364. The engineering services agreement (ESA) would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $100,750.

REVIEW

In WTP III, the filters and sedimentation basins include a foundation drain system that is designed to collect accumulated groundwater and water that leaks from construction joints in the structures. At this time, the water being collected is being discharged from the site as allowed by applicable regulations. However, the amount of water being discharged is significant, and through this project it is proposed to intercept and reuse most of the water that is currently discharged from the site. The attached drawing shows the structures that are designed with foundation drains and the discharge location of this collected water.

In addition to assuring compliance with the permitted discharge of this collected ground and leakage water, this project will result in a positive step regarding water conservation and in reducing "water loss" at the water treatment plant. Identification of "water loss" and reduction or elimination of these losses is a topic of discussion with the Member Cities and Customers, and this positive action demonstrates continued commitment to our mission of conserving this most valuable natural resource.

DESCRIPTION OF PROJECT

The proposed foundation drain return improvements associated with Wylie WTP III will include the following:

- A new pump station with collection well with two submersible pumps designed for a total pumping capacity of 600 GPM.

- Electrical power and instrumentation to support the pumps, including control panel at the pumps and SCADA system for status and alarms. Adjustable
frequency drives will be included to closely match the pumping rate with the rate of leakage from the filter structures and avoid excessive pump cycling.

- Pipe and flow meter from the new drain pump station to the existing WTP III filter flume overflow box. From this point the water will flow by gravity to the existing reclaim water basin to be pumped to the head of the plant for further treatment.

The proposed improvements for WTP III are similar to a project recently completed at WTP II, Project No. 198, Drain Return Improvements at WTP II. WTP IV has a foundation drain system similar to WTP III; however, at this time, the volume of water in this system is minor. If leakage from structures does increase over time, a project will be identified to correct the issue. The filter structures at WTP I utilized a different design and do not have a foundation drain system. The initial engineer's opinion of construction cost for the anticipated improvements is $650,000.

ENGINEERING SERVICES FEE

B&V submitted a cost proposal for the design work associated with this project in the not-to-exceed amount of $74,600 for basic services, with an additional not-to-exceed allowance of $26,150 for special services. The special services will be used to provide subsurface utility evaluation in the area of the proposed pump station. The total not-to-exceed amount for basic and special services being requested is $100,750. The NTMWD staff has reviewed the engineering fees submitted by B&V and recommends them as representative of the complexity of the work in a densely developed area of the plant and within the guidelines of the Consulting Engineers Council for this type of work. The services would be performed in accordance with the standard ESA.

FUNDING

Funding for this project in the amount of $100,750 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Black & Veatch Corporation for design and construction phase services for the Wylie Water Treatment Plant III Foundation Drain Return Improvements, Project No. 364, in the not-to-exceed amount of $100,750. This will be an item on the regular agenda of the August 2014 Board meeting.
Wylie WTP III Foundation Drain Return Improvements, Project No. 364
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4235

REGIONAL WATER SYSTEM
HIGH SERVICE PUMP STATION 2-2 AND 2-3
ELECTRICAL IMPROVEMENTS
PROJECT NO. 298

CHANGE ORDER NO. 3

This administrative memorandum is for the Board of Directors consideration of Change Order No. 3 for: 1) an increase of $40,481.62, resulting in a revised contract amount of $5,015,569.04; and, 2) 30 calendar days of additional contract time, resulting in a final completion date of August 19, 2015, for High Service Pump Station (HSPS) 2-2 and 2-3 Electrical Improvements, Project No. 298.

REVIEW

In September 2012, the Board approved Administrative Memorandum No. 3856 authorizing an engineering services agreement with Mbroh Engineering, Inc., (MEI) in the amount of $636,682.

The following table summarizes the construction phase actions previously authorized by the Board:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo</th>
<th>Description</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>September 2013</td>
<td>4049</td>
<td>Award of contract to WHF Electrical Contractors, Inc.</td>
<td>$4,902,970.00</td>
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<tr>
<td>March 2014</td>
<td>4162</td>
<td>C.O. No. 1 for transformer switching, larger lighting transformers and 45 additional days of contract time</td>
<td>$35,179.96</td>
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<tr>
<td>July 2014</td>
<td>4230</td>
<td>C.O. No. 2 to grout void beneath entrance and to replace grout in the construction joint between HSPS 2-2 and 2-3</td>
<td>$36,937.46</td>
</tr>
</tbody>
</table>

The revised construction contract amount is $4,975,087.42.

PROPOSED CHANGE ORDER NO. 3

Proposed Change Order No. 3 consists of one item that impacts the scope of work for the project.
Item No. 1 – Alternate Entry into Pump Station Switchgear

$40,481.62
30 Calendar Days

- **Issue:** During excavation for the new electric service into the pump station, the contractor exposed undocumented steel H-piles that supported excavation shoring from a previous project but were abandoned in place. The preparatory excavation also revealed that the existing electric duct bank serving HSPS 2-2 is larger than anticipated and is in the intended path of the new electric service. In order to construct the new electric service duct bank, the H-piles and existing duct bank would have to be removed/relocated at great expense. NTMWD staff requested that MEI develop a cost-effective approach to bring electric service to the pump station and avoid the underground conflicts.

- **Recommendation:** Install the new electric service to the edge of the electrical room wall, turn up the outside of the wall into pull boxes to enter new cable tray installed over the top of the new switchgear. The alternate entry method includes pull boxes, cable tray, and “top hat” extensions over the switchgear at the entry points to accommodate required 5 kV cable bending radii and termination kits.

- **Proposed Cost:** The contractor has submitted a proposal to furnish and install the recommended work for the total amount of $40,481.62 and 30 additional calendar days of contract time.

The proposed cost and additional contract time have been reviewed and are recommended by both NTMWD staff and MEI as appropriate for 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>
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<td>545</td>
<td>575</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>35,179.96</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>36,937.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
<td>40,481.62</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$5,015,569.04</td>
<td>620</td>
<td>650</td>
</tr>
</tbody>
</table>

**FUNDING**

Additional funding in the amount of $40,481.62 for Change Order No. 3 is available in the Regional Water System 2012 Construction Fund.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Mbroh Engineering, Inc., that the Board of Directors authorize Change Order No. 3 for: 1) an increase of $40,481.62, resulting in a revised contract amount of $5,015,569.04; and, 2) 30 calendar days of additional contract time, resulting in a final completion date of August 19, 2015 for the High Service Pump Station 2-2 and 2-3 Electrical Improvements, Project No. 298. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

REGIONAL WASTEWATER SYSTEM
SOUTH MESQUITE CREEK REGIONAL WASTEWATER TREATMENT PLANT
SCREENINGS HANDLING IMPROVEMENTS
PROJECT NO. 327

TABULATION OF BIDS
AND
AWARD OF CONTRACT

This administrative memorandum is for the Board of Directors consideration of the tabulation of bids and recommendation to award a construction contract to Crescent Constructors, Inc., (Crescent) in the contract amount of $3,270,000 for the South Mesquite Creek Regional Wastewater Treatment Plant (RWWTP) Screenings Handling Improvements, Project No. 327.

REVIEW

The recently completed expansion to 33 MGD at the South Mesquite Creek RWWTP included addition of grit removal chambers, concentrators, and separators at the headworks facility immediately downstream of the existing bar screens. The grit separators are located outdoors and discharge directly to an existing conveyor that also collects and transports screenings debris to a common waste container. The location of these facilities outdoors is not ideal due to the generation of odors and exposure of the equipment to the weather, but there was insufficient funding in the recent expansion project to enclose the screen and grit facilities.

In April 2013, the Board approved Administrative Memorandum No. 3974 authorizing an engineering services agreement with CDM Smith for Project No. 327 to provide an enclosure for these processes.

DESCRIPTION OF PROJECT

This project consists of the construction of a new masonry building to enclose a large portion of the existing headworks facility, replacement of one existing mechanical bar screen, new screenings handling equipment (sluicing troughs and screenings washer/compactors), new heating and ventilating equipment for the enclosed building, and modifications of existing odor control ductwork.

The engineer’s estimated construction cost was $3,890,000.
TABULATION OF CONSTRUCTION BIDS

Sealed bids were received at 2:00 p.m. on Wednesday, August 6, 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>$3,270,000</td>
</tr>
<tr>
<td>Pepper-Lawson Waterworks, LLC</td>
<td>$3,411,000</td>
</tr>
<tr>
<td>Rec River Construction Company</td>
<td>$3,512,600</td>
</tr>
<tr>
<td>Archer Western Construction, LLC</td>
<td>$3,555,250</td>
</tr>
<tr>
<td>Gracon Construction, Inc.</td>
<td>$3,725,800</td>
</tr>
</tbody>
</table>

The lowest responsive bid was received from Crescent in the amount of $3,270,000. Crescent has satisfactorily completed many projects of varying scopes for the NTMWD in the past, including South System Delivery Point Improvements, Priority 1; Electrical Improvements at Raw Water Pump Station No. 2; and, Floyd Branch RWWTP 2012 Odor Control Improvements. Based on their previous performance for NTMWD references, and their standing as lowest responsive bidder, it is the recommendation of the Executive Director, NTMWD staff, and CDM Smith that the Board authorize award the construction contract for South Mesquite Creek RWWTP Screenings Handling Improvements, Project No. 327, to Crescent in the contract amount of $3,270,000.

FUNDING

Funding in the amount of $3,270,000 is available in the Regional Wastewater System 2013 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and CDM Smith that the Board of Directors authorize award of a construction contract to Crescent Constructors, Inc., for the South Mesquite Creek Regional Wastewater Treatment Plant Screenings Handling Improvements, Project No. 327, in the amount of $3,270,000.

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

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4237

REGIONAL WATER SYSTEM
LAKE TAWAKONI WATER TREATMENT PLANT
PROJECT NO. WCF 07-4 (099)

REDUCTION OF RETAINAGE

This administrative memorandum is for the Board of Directors consideration of reduction of retainage to BAR Constructors, Inc., (BAR) for Project No. WCF 07-4 (099), Lake Tawakoni Water Treatment Plant (WTP), from 2.5% to approximately 2%. If approved, the retained amount will be reduced to $1,258,885.

BACKGROUND

The Board of Directors authorized the award of the Lake Tawakoni WTP construction contract to BAR through Administrative Memorandum No. 3183 in June 2008. The original contract amount was $61,316,420, which included approximately 24 months of construction time. A total of 11 change orders have been authorized by the Board since the award of contract, which increased the contract amount by $1,079,123.26 and added 929 calendar days, approximately 30 months, to the contract time. The current revised contract amount is $62,395,543.26, and revised final completion date is January 14, 2013.

The plant was considered substantially complete in November 2011 when it began treating water using chlorine as the means for disinfection. In March 2013, the entire plant including the ozone system was placed into service. The plant construction was not considered for final completion at this time due to unresolved construction issues, some of which continue today. The issues include:

- Lagoon berm leak
- Flood damaged ozone contactor valve actuators
- Liquidated damages for failure to meet ozone system performance criteria

RETAIINAGE ADJUSTMENT

In May 2014, NTMWD staff received a letter from BAR’s attorney, Canterbury Gooch, Surratt, Shapiro, Stein & Gaswirth, P.C., requesting a partial release of retainage while negotiations for the settlement of the above issues are underway. The letter was forwarded to Black & Veatch Corporation (B&V) for development of a recommendation of the appropriate retainage to be maintained and to NTMWD’s legal counsel, Saunders, Walsh & Beard, for concurrent review.
In June 2014, B&V returned a recommendation for reduction in the current retainage amount from $1,569,638.58 to $1,200,035, based on the anticipated cost to complete the construction deficiencies. NTMWD staff concurs with B&V’s recommendation but also recommends an additional retainage amount associated with the potential reimbursement of extended engineering and project management costs claimed by B&V.

B&V has requested reimbursement by NTMWD for extended engineering and project management costs incurred due to the prolonged construction period. In May 2014, the Board approved Administrative Memorandum No. 4193 authorizing additional engineering services to cover similar fees through March 31, 2013, when the ozone disinfection system came online. At this time, NTMWD staff considers any additional costs incurred by B&V after that time to be BAR’s responsibility.

It is currently estimated that the lagoon repair effort will extend until June 2015. This would result in total additional accumulated project management support fees for B&V of about $58,850. Adding this potential reimbursement amount to the retainage associated with the construction deficiencies, the total recommended retainage is $1,258,885. With the exception of the issues listed above, BAR has completed all construction work and process startup for the project. The entire plant has been in operation since March 2013.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, Black & Veatch Corporation, and Saunders, Walsh & Beard that the Board of Directors authorize a reduction in retainage from $1,569,638.58 to $1,258,885 for the Lake Tawakoni Water Treatment Plant, Project No. WCF 07-4 (099). This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4238

UPPER EAST FORK INTERCEPTOR SYSTEM
NORTH MCKINNEY INTERCEPTOR IMPROVEMENTS, PHASE I
PROJECT NO. 345

TABULATION OF BIDS
AND
AWARD OF CONTRACT

This administrative memorandum is for the Board of Directors consideration of the tabulation of bids and recommendation to award a construction contract to Layne Inliner, LLC, (Layne) in the contract amount of $2,833,770 for the North McKinney Interceptor Improvements, Phase 1, Project No. 345.

REVIEW

The existing North McKinney Interceptor was constructed in 1993 as part of the Upper East Fork Interceptor System. The interceptor originally started with a 15-inch diameter pipe at the former North McKinney Wastewater Treatment Plant (WWTP), about one mile north of State Highway 380 and running south for approximately 8.3 miles, increasing incrementally to a 36-inch diameter pipe that discharges to the McKinney Lift Station. The McKinney Lift Station pumps the flow to the adjacent Wilson Creek Regional WWTP. Reference attached exhibit.

Subsequently, the North McKinney WWTP was decommissioned and the McKinney East Side Extension was constructed near the upstream end of the North McKinney Interceptor to provide capacity for portions of northeast McKinney. In 2009, the North McKinney Lift Station and Force Main were constructed to assist in conveying the northern McKinney flows to the McKinney Lift Station. The North McKinney Force Main runs parallel to the lower 33,000 feet of the North McKinney Interceptor. Also in 2009, the McKinney East Side Parallel Interceptor was constructed, extending north from the North McKinney Lift Station and paralleling the North McKinney Interceptor for approximately 8,700 feet then continuing northward parallel to the McKinney East Side Extension.

Paralleling the North McKinney Interceptor with a new lift station and force main was demonstrated to be more economical than paralleling with another gravity interceptor. The lift station was located at a point where the North McKinney Interceptor has adequate capacity for future anticipated downstream flows.

In November 2013, the Board approved Administrative Memorandum No. 4093, authorizing an engineering services agreement with DAL-TECH Engineering, Inc., (DAL-TECH) for Project No. 345 in the not-to-exceed amount of $229,492.
DESCRIPTION OF PROJECT

The North McKinney Interceptor Improvements, Phase I, consists of improvements to approximately 10,700 linear feet (LF) of existing 36-inch concrete pipe using cured-in-place-pipe methods, improvements to existing manholes including corrosion-resistant lining and step removal, and associated bypass pumping and odor control during the construction period.

The engineer’s opinion of probable construction cost (OPCC) was $3,165,000.

TABULATION OF CONSTRUCTION BIDS

Sealed bids were received at 10:00 a.m. on August 1, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>BIDDER</th>
<th>TOTAL BID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layne Inliner, LLC</td>
<td>$2,833,770.00</td>
</tr>
<tr>
<td>Insituform Technologies, LLC</td>
<td>$3,231,945.00</td>
</tr>
<tr>
<td>IPR South Central, LLC</td>
<td>$4,021,516.25</td>
</tr>
</tbody>
</table>

The lowest responsive bid was received from Layne in the total amount of $2,833,770. The low bid is approximately $336,000 lower than the OPCC and approximately $766,000 lower than the amount included in the UEFIS Capital Improvements Program.

While NTMWD has no previous project experience with Layne, they have provided similar construction services to the City of Houston, City of Corpus Christi, and City of Sugar Land, successfully installing more than 17.6 million linear feet of liner varying from 4-inch to 90-inch diameter. Layne has installed approximately 367,400 linear feet of 36-inch CIPP. Dal-Tech contacted several of their references, including City of Houston, Gwinnett County Watershed, and Brown and Gay Engineers. These references indicated their previous experience with Layne was acceptable and completed within the contract time. Dal-Tech does not have any prior experience with Layne; however, CH2M HILL, another engineering consultant used by NTMWD, has previous work experience with Layne and reported acceptable experiences.

Based on their references, and their standing as lowest responsive bidder, it is the recommendation of the Executive Director, NTMWD staff, and DAL-TECH that the Board authorize the award of a construction contract to Layne in the amount of $2,833,770 for the North McKinney Interceptor Improvements, Phase I, Project No. 345.

FUNDING

Funding for this project in the amount of $2,833,770 is available in the Upper East Fork Interceptor 2012 Construction Fund.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and DAL-TECH Engineering, Inc., that the Board of Directors authorize award of a construction contract to Layne Inliner, LLC, for the North McKinney Interceptor Improvements, Phase I, Project No. 345, in the amount of $2,833,770. This will be an item on the regular agenda of the August 2014 Board meeting.
North McKinney Interceptor Improvements
Phase 1
Project No. 345
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

REGIONAL WATER SYSTEM
20-INCH AND 60-INCH WATERLINE RELOCATIONS AT THE NORTH
INTERSECTION OF FM 2514 AND FM 1378, PROJECT NO. 355
RIGHT-OF-WAY ACQUISITION PROGRAM
RESOLUTION NO. 14-13

This administrative memorandum requests that the Board of Directors adopt Resolution No. 14-13, "A Resolution Authorizing the Use of Eminent Domain to Acquire Right-of-Way for the 20-Inch and 60-Inch Waterline Relocations at the North Intersection of FM 2514 and FM 1378, Project No. 355, and Delegating the Authority to Initiate Condemnation Proceedings to the NTMWD Executive Director" with a budget of $120,000. Authorization to acquire right-of-way for the project is requested at this time. This administrative memorandum requests approval only for items associated with right-of-way acquisition.

DESCRIPTION OF RIGHT-OF-WAY

The City of Wylie is proposing to widen the intersection of FM 2514 (Parker Road) and FM 1378 (Country Club Road). The proposed widening will impact two NTMWD pipelines, the 20-inch Wylie to McKinney waterline and the 60-inch McKinney Parallel Pipeline, Phase I.

In order to acquire this type of an easement, the NTMWD must provide the property owners with an offer of compensation acceptable to both parties or it must condemn the easement should negotiations not produce an acceptable result. This resolution requests the Board authorize the use of eminent domain in the event negotiations are unsuccessful and requests the Board delegate the authority to initiate eminent domain proceedings to the Executive Director. In determining compensation, the NTMWD bases its offers on an approach that considers the basic fair market value of the right-of-way and the effects of the easement. It is the goal of the NTMWD to secure the easement at a value of less than 75% of the fee title.

ACQUISITION OF RIGHT-OF-WAY

Right-of-way for the project will involve four tracts owned by individuals as listed in Exhibit "A". Certain support services are necessary to successfully implement the right-of-way program. The ancillary services include title research, negotiation services, appraisal services, and legal services. If the tract cannot be secured by good faith negotiation, the NTMWD must also expend funds for expert witnesses, exhibits, and associated costs, such as payments to the special commissioners and for the proper serving of documents.
The NTMWD would propose to utilize a local title company to resolve any ownership questions that might arise concerning ownership of the tract and would plan on utilizing an appraiser, as needed. The NTMWD will require the assistance of legal counsel to condemn, if necessary. In order to expedite the project, it is requested that the Board authorize the employment of Gay, McCall, Isaacks, Gordon and Roberts, PC, as is determined necessary for acquisition of right-of-way. The NTMWD will attempt to secure the tract through good faith offers and negotiation. When, or if, that approach fails, a final offer letter will be issued and if not accepted, the property will be condemned.

The above services are utilized on an as-needed basis. It is expected the above-referenced package of expenditures, including land or easement cost, would be less than $120,000.

FUNDING

Funding in the amount of $120,000 is available in the Regional Water System Capital Improvement Fund. Should the program require expenditures in excess of the referenced amount, those expenditures would be presented to the Board of Directors for consideration.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors adopt Resolution No. 14-13, “A Resolution Authorizing the Use of Eminent Domain to Acquire Right-of-Way for the 20-Inch and 60-Inch Waterline Relocations at the North Intersection of FM 2514 and FM 1378, Project No. 355, and Delegating the Authority to Initiate Condemnation Proceedings to the NTMWD Executive Director” with a budget of $120,000. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 14-13

A RESOLUTION AUTHORIZING THE USE OF EMINENT DOMAIN TO ACQUIRE RIGHT-OF-WAY FOR 20-INCH AND 60-INCH WATERLINE RELOCATIONS AT THE NORTH INTERSECTION OF FM 2514 AND FM 1378, PROJECT NO. 355 AND DELEGATING THE AUTHORITY TO INITIATE CONDEMNATION PROCEEDINGS TO THE NTMWD EXECUTIVE DIRECTOR

WHEREAS, the City of Wylie is proposing to widen the intersection of FM 2514 (Parker Road) and FM 1378 (Country Club Road); and,

WHEREAS, due to the proposed relocation, it is necessary to relocate existing NTMWD pipelines, the Wylie to McKinney 20-inch waterline and the 60-inch McKinney Parallel Pipeline, Phase I, waterline affected by the relocation; and,

WHEREAS, the NTMWD Board of Directors has authorized the engineering design of the 20-Inch and 60-Inch Waterline Relocations at the North Intersection of FM 2514 and FM 1378, Project No. 355; and,

WHEREAS, it is necessary to proceed with the acquisition of four easements required for construction of the pipeline prior to awarding the construction contract on this project; and,

WHEREAS, it may be necessary to acquire the easement(s) required for the project through the use of eminent domain in the event negotiations are unsuccessful; and,

WHEREAS, this resolution applies to all units of property for this project; and,

WHEREAS, adequate funds in the amount of $120,000 are to be provided from the Regional Water System Capital Improvement Fund.

NOW, THEREFORE, THE BOARD OF DIRECTORS IN A REGULAR MEETING DETERMINES AND RESOLVES THAT:

1. There is a public need for and that the public welfare and convenience are to be served by the relocation of NTMWD facilities associated with the 20-inch and 60-inch Waterline Relocations at the North Intersection of FM 2514 and FM 1378.

2. The use of eminent domain is hereby authorized to acquire the easements at the intersection of FM 2514 (Parker Road) and FM 1378 (Country Club Road) across the properties described in Exhibit "A" attached hereto, and incorporated by
reference herein, for the construction, installation, and operation of the water pipelines described above.

3. The power to initiate eminent domain proceedings is hereby delegated to the Executive Director and he is hereby authorized to take all steps necessary to acquire the easements for this project including hiring appraisers, a title company, and attorneys.

4. The Executive Director is authorized to employ the firm of Gay, McCall, Isaacks, Gordon, & Roberts, PC, to represent the NTMWD in these land transactions, including filing of Petitions for Condemnation on all properties when the Executive Director determines the property cannot be secured through negotiations and after issuance of a final offer letter in accordance therewith.

5. A budget of $120,000 is authorized for right-of-way acquisition.

THIS RESOLUTION ADOPTED BY THE NTMWD BOARD OF DIRECTORS IN A REGULAR MEETING ON AUGUST 28, 2014, IN THE ADMINISTRATIVE OFFICES OF THE NTMWD, WYLIE, TEXAS.

TERRY SAM ANDERSON, Secretary          DARWIN WHITESIDE, President

(SEAL)
EXHIBIT "A"

20-INCH AND 60-INCH WATERLINE RELOCATIONS
AT THE NORTH INTERSECTION OF FM 2514 AND FM 1378
PROJECT NO. 355

<table>
<thead>
<tr>
<th>Parcel No.</th>
<th>Owner's Name</th>
<th>Permanent Esmt Area (Acres)</th>
<th>Temporary Esmt Area (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Billy R. Williams and wife, Rita C. Williams</td>
<td>0.082</td>
<td>0.185</td>
</tr>
<tr>
<td>2</td>
<td>Daniel J. Hofer, Jr., and wife, Carol A. Hofer</td>
<td>0.041</td>
<td>0.082</td>
</tr>
<tr>
<td>3</td>
<td>Parker Country Club L.P.</td>
<td>0.000</td>
<td>0.078</td>
</tr>
<tr>
<td>4</td>
<td>J.C.B.R. Holdings, L.L.C.</td>
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<td>0.103</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>0.123</td>
<td>0.448</td>
</tr>
</tbody>
</table>
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4240

ENVIRONMENTAL SERVICES BUILDING
HEATING, VENTING, AND AIR CONDITIONING SYSTEM REPAIR
PROJECT NO. 347

TABULATION OF BIDS
AND
AWARD OF CONTRACT

This administrative memorandum is for the Board of Directors consideration of the tabulation of bids for the Environmental Services Building Heating, Venting, and Air Conditioning (HVAC) System Repair, Project No. 347, and to recommend award of the construction contract to DMI Corp., Decker Mechanical, (DMI) in the amount of $850,184.72.

REVIEW

NTMWD personnel occupied the Environmental Services Building in early 2008. Thereafter, personnel began noticing issues such as uncomfortable room temperatures (too warm in the summer and too cold in the winter), high humidity levels, excessive condensation on walls and fixtures, and water dripping from some of the windowsills and electrical outlets.

After numerous attempts to have the issues corrected by the original contractor and/or architect were unsuccessful, both settled into positions in which they were unwilling to accept responsibility for or otherwise attempt to correct the reported problems.

In February 2013, the Board approved Administrative Memorandum No. 3955 authorizing the Executive Director to retain Saunders, Walsh & Beard to represent the NTMWD in pursuing legal action against all responsible parties and to collect the damages caused by these failures to properly design and construct the Environmental Services Building HVAC system.

In May 2014, the Board approved Administrative Memorandum No. 4203 authorizing agreements for settlement of all claims with the eight contractors associated with the original construction. The NTMWD's claim against the architect remains ongoing.

In December 2013, the Board approved Administrative Memorandum No. 4098 authorizing the Executive Director to execute an engineering services agreement with Huitt-Zollars, Inc., for design and construction phase services associated with the Environmental Services Building HVAC System Repair, Project No. 347. These repairs centered on positive pressurization of the building to prevent the entry of moist outside air and conditioning of the inside air to maintain proper temperature and advance the control of indoor humidity.
TABULATION OF CONSTRUCTION BIDS

Sealed bids were received at 2:00 p.m. on Friday, August 1, 2014, from three contractors at the NTMWD offices. The following is a tabulation of the bids received:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Bid</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMI Corp., Decker Mechanical</td>
<td>$850,184.72</td>
</tr>
<tr>
<td>Big Sky Construction</td>
<td>$939,083.00</td>
</tr>
<tr>
<td>Alpha Building Corp.</td>
<td>$983,196.00</td>
</tr>
</tbody>
</table>

The architect’s preliminary opinion of construction costs for the project was $725,030.

The lowest responsive bid was received from DMI for the total amount of $850,184.72. Based on highly favorable references from several successful similar projects, DMI has the experience and resources needed to complete this project.

BID AMOUNT

The bids submitted by the three contractors were higher than anticipated in the architect’s estimated construction cost. The low bid was approximately $125,000 higher than the estimate. It appears the opinion of probable cost did not fully consider the additional cost of phasing constraints that are necessary for working inside an occupied building. In addition, the local HVAC construction sector is heavily involved in the currently commercial and multi-family building boom. These types of projects are direct competitors with ours for contractors, and they tend to be much more attractive than a one-time, limited scope project.

Although the bid amount submitted by DMI exceeds the architect’s estimate, NTMWD staff and Huitt-Zollars, Inc., agree that it was a competitive bid reflective of the current bidding environment for this type of work.

FUNDING

Funding for this project in the amount of $850,184.72 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Huitt-Zollars, Inc., that the Board of Directors authorize award of the construction contract in the amount of $850,184.72 to DMI Corp., Decker Mechanical, for the Environmental Services Building Heating, Venting, and Air Conditioning System Repair, Project No. 347. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4241

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

CHANGE ORDER NO. 2

This administrative memorandum is for the Board of Directors consideration of Change Order No. 2 for an increase of $62,097.55, resulting in a revised contract amount of $7,919,396.49 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 an engineering services agreement with Freese and Nichols, Inc., (FNI) for design to add two new pumps and related equipment to increase the capacity of High Service Pump Station 3-1 from 250 MGD to 350 MGD.

In June 2010, the Board approved Administrative Memorandum No. 3501 authorizing award of a construction contract to Bar Constructors, Inc., (BAR) in the amount of $7,720,578.

In February 2014, the Board approved Administrative Memorandum No. 4149 authorizing Change Order No. 1 to extend the transformed grounding loop and replace damaged electrical duct bank, for an increase of $136,720.94. The revised contract amount is $7,857,298.94.

CHANGE ORDER NO. 2

Change Order No. 2 consists of the following two items that impact the contract amount and scope:

Item No. 1 – Repair Existing Electrical Duct Bank $10,185.55

- **Issue:** During construction of the electrical duct bank repair work associated with approved Change Order No. 1, it was discovered that this same duct bank was broken on the south end near the existing vault for the 90-inch flow meter.

- **Recommendation:** Provide a new section of electrical duct bank near the existing vault for the 90-inch flow meter using the same type materials and procedures that were approved for Change Order No. 1.

- **Proposed Cost:** The contractor has submitted a proposal to furnish and install the additional recommended work for the total amount of $10,185.55.
Item No. 2 – Flowable Fill Encasement

- **Issue:** Contract Line Item D10 for Flowable Fill Encasement includes 150 linear feet (LF) at a unit price of $206 per LF. Actual field conditions reveal that a total of 402 LF of pipe and conduit fall under the conditions where flowable fill protection is warranted.

- **Recommendation:** Provide additional flowable fill encasement for 252 LF of pipe (402 - 150) at the unit bid amount of $206 per LF.

- **Proposed Cost:** Adjust the contract quantity for Line Item D10, resulting in an increase to the extended price of $51,912 (252 LF x $206).

### SUMMARY OF CHANGE ORDER NO. 2

<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>Repair existing electrical duct bank</td>
<td>$10,185.55</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Flowable fill encasement</td>
<td>$51,912.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$62,097.55</td>
<td>0</td>
<td>0</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>$7,720,578.00</td>
<td>673</td>
<td>703</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>136,720.94</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td>Proposed C.O. No. 2</td>
<td>62,097.55</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$7,919,396.49</td>
<td>673</td>
<td>778</td>
</tr>
</tbody>
</table>

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

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, installed, and put in service. NTMWD staff is working with BAR to resolve all issues related to late delivery and the effect of approved and proposed change orders, after which a recommendation will be presented to the Board of Directors for consideration.

### FUNDING

Additional funding in the amount of $62,097.55 for Change Order No. 2 is 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 approve Change Order No. 2 for an increase of $62,097.55, resulting in a revised contract amount of $7,919,396.49 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 August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4242

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

CHANGE ORDER NO. 3

This administrative memorandum is for the Board of Directors consideration of Change Order No. 3 for an increase of $38,429.21 resulting in a revised contract amount of $5,476,922.98 for Wylie Water Treatment Plant II (WTP II) Improvements for Basin Nos. 3 and 4, Project No. 320.

REVIEW

In February 2013, the Board approved Administrative Memorandum No. 3941 authorizing an engineering services agreement (ESA) with Black & Veatch Corporation (B&V) in the not-to-exceed amount of $250,900 for design of improvements to Basin Nos. 3 and 4 at WTP II.

In February 2014, the Board approved Administrative Memorandum No. 4150 authorizing additional engineering services for a not-to-exceed amount of $26,250.

The table below summarizes the previous Board actions relating to the construction contract for this project:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2013</td>
<td>4012</td>
<td>Award of procurement contract to WesTech Engineering, Inc., to add circular clarification equipment</td>
<td>$661,536</td>
</tr>
<tr>
<td>September 2013</td>
<td>4056</td>
<td>Award of construction contract to BAR Constructors, Inc.</td>
<td>$5,447,036</td>
</tr>
<tr>
<td>November 2013</td>
<td>4082</td>
<td>C.O. No. 1 for launder support brackets</td>
<td>$21,637</td>
</tr>
<tr>
<td>March 2014</td>
<td>4157</td>
<td>C.O. No. 2 for manhole upgrade, WesTech payment deduction, and additional contract time</td>
<td>($30,179.23)</td>
</tr>
</tbody>
</table>

The revised construction contract amount is $5,438,493.77.
PROPOSED CHANGE ORDER NO. 3

Proposed Change Order No. 3 consists of two items that affect the scope of work and cost for this project.

Item No. 1 – Install Dowels and Flexible Joint Sealant  $14,347.35

- **Issue:** After removal of the floor in Basin No. 4 and filling of Basin No. 3, the wall between the basins shifted slightly toward Basin No. 4 due to foundation undermining from prolonged leakage in the basin floors.

- **Recommendation:** Drain Basin No. 3 until the new floor in Basin No. 4 is installed. Dowel the new floor in Basin No. 4 to the existing wall footings on the north and south sides of Basin No. 4. Dowel the new floor in Basin No. 3 to the existing wall footings on the north and south sides of Basin No. 3. Dowel the Basin No. 2 floor to the footing of the wall between Basin Nos. 2 and 3. Install flexible joint sealant to the joint between the south wall of Basin No. 2 and the north ozone contactor.

- **Proposed Cost:** The contractor has proposed to complete the additional recommended work for the total amount of $14,347.35.

Item No. 2 – Install Additional Handrails  $24,081.86

- **Issue:** Basin Nos. 3 and 4 at WTP II were not equipped with handrails when they were originally constructed due to the configuration of the traveling bridge clarifiers. Handrails around these basins were included in the contract documents in Addendum No. 1 but did not extend the required length. Drawing notes directed installation of these handrails from the flocculation basin baffle wall “to the east end of the walkway” but it should have directed installation “to the west end of the walkway”.

- **Recommendation:** Install an additional 454 feet of handrail from the flocculation basin baffle wall to the west end of the walkway.

- **Proposed Cost:** The contractor has proposed to complete the additional recommended work for the total amount of $24,081.86.

Both of these issues and related additional costs have been reviewed and are recommended by NTMWD staff and B&V as necessary and appropriate for the effort required.
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>Install Dowels and Flexible Joint Sealant</td>
<td>$14,347.35</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Install Additional Handrails</td>
<td>24,081.86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Proposed Total C.O. Amount</td>
<td>$38,429.21</td>
<td>0</td>
<td>0</td>
</tr>
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</table>

SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
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<td>444</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>21,637.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>(30,179.23)</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
<td>38,429.21</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$5,476,922.98</td>
<td>439</td>
<td>460</td>
</tr>
<tr>
<td>Revised Contract Dates</td>
<td>January 17, 2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $38,429.21 for Change Order No. 3 is available in the Regional Water System 2009D Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Black and Veatch Corporation that the Board of Directors approve Change Order No. 3 for an increase of $38,429.21, resulting in a revised contract amount of $5,476,922.98, for Project No. 320, Wylie Water Treatment Plant II Improvements for Basin Nos. 3 and 4. This will be an item on the regular agenda of the August 2014 Board meeting.
This administrative memorandum is for the Board of Directors consideration of Change Order No. 2 for: 1) an increase of $66,140.34, resulting in a revised contract amount of $3,573,160.63; and, 2) 30 additional calendar days of contract time resulting in revised substantial and final completion dates of November 12, 2014, and December 12, 2014, respectively, for Project No. 312, Lake Tawakoni Water Treatment Plant (WTP) Sludge Lagoon Improvements (Project No. 312).

REVIEW

In January 2013, the Board approved Administrative Memorandum No. 3921 authorizing the Executive Director to execute an engineering services agreement with Black & Veatch Corporation (B&V) for final design of Project No. 312.

In December 2013, the Board approved Administrative Memorandum No. 4106 authorizing the award of a construction contract to Crescent Constructors, Inc., (Crescent) for Project No. 312.

In June 2014, the Board approved Administrative Memorandum No. 4210 authorizing Change Order No. 1 in the amount of $44,020.34, resulting in a revised contract amount of $3,507,020.34.

PROPOSED CHANGE ORDER NO. 2

Proposed Change Order No. 2 consists of three items that impact the scope of work, cost, and contract time for this project.

Item No. 1 – Electrical Duct Bank Modifications $2,481.51
30 Calendar Days

- **Issue:** The design requires a new electrical duct bank between the new sludge pump station and the electrical building. Due to the depth of the sludge pump station, an excavation approximately 35 feet deep is required during construction. Although the specification requires compaction and testing of the backfill, some settlement of such a deep backfill is typical and often results in compromise to the duct bank entry at the structure.
**Recommendation:** Revise the duct bank installation details by implementing the following measures: 1) substitute the specified concrete encasement around the electrical conduits with sand encasement, providing only a four-inch concrete cap over the duct bank; 2) use PVC coated aluminum conduit at the wall penetrations for additional rigidity and strength at these critical locations; and, 3) span the excavated area with fiberglass conduit to provide limited flexibility between the wall penetrations.

**Proposed Cost:** The contractor has proposed an additional price of $2,481.51 and 30 additional calendar days to install the recommended work.

*Item No. 2 – Dispose of Unsuitable Material Buried under New Lagoon*  
$60,073.20

**Issue:** During design of the new lagoon, the engineer directed a geotechnical consultant to take soil samples at several locations at the future construction site. One of these samples contained charred organic material and other construction debris, which was apparently left by the contractor who originally constructed the Lake Tawakoni Water Treatment Plant. B&V used the information gathered to estimate the quantity of charred material at 2,000 cubic yards. The contract bid form included a unit price item for the disposal of this material, which Crescent priced at $15.17 per cubic yard. The total verified amount of material actually removed was 5,960 cubic yards.

**Recommendation:** Adjust the contract line item quantity for debris removal to reflect the actual work performed.

**Proposed Cost:** The resulting increase to the extended line item cost from the increase in quantity is $60,073.20 (3,960 cubic yards x $15.17 per cubic yard).

*Item No. 3 – Improve Thrust Restraint on Blow-off Valve*  
$3,585.63

**Issue:** During the bid phase of the project, B&V realized that a blow-off valve was needed on the 20-inch dewatering pipeline from the sludge pump station to the new lagoon. The blow-off valve was included in Addendum No. 2, but thrust restraint of the adjacent piping was not accounted for. B&V has since issued a field order for proper restraint of the drain line.

**Recommendation:** Direct the contractor to add the restraint per the engineer’s recommendation.

**Proposed Cost:** The contractor has proposed an additional price of $3,585.63 to install the restraint.

All of these items have been reviewed by NTMWD staff and B&V and are recommended as necessary and representative of the effort and cost required. NTMWD and B&V are discussing the possibility of B&V’s participation in the costs associated with Item No. 3.
SUMMARY OF CHANGE ORDER NO. 2

<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>Electrical Duct Bank Modifications</td>
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<td>30</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Dispose of Unsuitable Material Buried under New Lagoon</td>
<td>60,073.20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Improve Thrust Restraint on Blow-off Valve</td>
<td>3,585.63</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Proposed Total C.O. Amount</td>
<td>$66,140.34</td>
<td>30</td>
<td>30</td>
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</table>

SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
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<td>230</td>
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<tr>
<td>C.O. No. 1</td>
<td>44,020.34</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Proposed C.O. No. 2</td>
<td>66,140.34</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$3,573,160.68</td>
<td>275</td>
<td>305</td>
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<tr>
<td>Revised Contract Dates</td>
<td>November 12, 2014</td>
<td></td>
<td>December 12, 2014</td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $66,140.34 for Change Order No. 2 is available in the Regional Water System 2012 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Black and Veatch Corporation that the Board of Directors approve Change Order No. 2 for: 1) an increase of $66,140.34, resulting in a revised contract amount of $3,573,160.68; and, 2) 30 additional calendar days of contract time, resulting in revised substantial and final completion dates of November 12, 2014, and December 12, 2014, respectively, for Project No. 312, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4244

REGIONAL WATER SYSTEM
SYSTEM WIDE AIR VALVE IMPROVEMENTS ON
WYLIE TO GARLAND 42-INCH PIPELINE
PROJECT NO. 365

ENGINEERING SERVICES AGREEMENT

This administrative memorandum is for the Board of Directors consideration to employ Freese and Nichols, Inc., (FNI) to provide design and construction phase services associated with the System Wide Air Valve Improvements on Project No. 365, Wylie to Garland 42-inch Pipeline. The engineering services agreement (ESA) would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $189,218.

REVIEW

The Wylie to Garland 42-Inch Pipeline was originally constructed in 1955 and is fed from High Service Pump Station 1-1 and the Garland Mesquite 72-inch Pipeline. This pipeline remains a major component of NTMWD's treated water transmission system, serving the East Fork No. 2, Rowlett No. 1, Rowlett No. 2, Rowlett No. 3, Garland No. 1, Garland No. 2, Garland No. 4, and Mesquite No. 2 delivery points.

DESCRIPTION OF PROJECT

Current Texas Commission on Environmental Quality (TCEQ) guidelines for design of water transmission systems include the venting of air release valves above grade and maintaining a minimum system pressure at least 5 psi above the calculated minimum demand pressure for the system. These guidelines were not in effect when this pipeline and the air valves were originally installed, although NTMWD has modified system operations to maintain the 5 psi minimum system pressure. Many air valves on this system have required repair or replacement at which point they have been brought to current standards for operation at the minimum system pressure and venting above grade. It is estimated that approximately 75% of the valves on this system remain in their initial configurations.

In addition, the new McCree Road 6 Million Gallon (MG) Ground Storage Tank, Project No. 357, will change the hydraulic conditions of the pipeline, potentially requiring many of the air release valves to be upsized for the new system demands. In view of this, the purpose of this project is to:

- Evaluate and verify proper sizing and function of the system's air release valves under the new hydraulic conditions
- Determine if the changed hydraulic conditions require the addition of any new air release valves
• Evaluate and modify or replace any existing air valves and vent configurations that have not yet been brought up to current TCEQ standards.

The agreement will include construction phase services and special services for surveying and the transient analysis engineering.

The basic services will consist of:

1) Designing coordination meetings
2) 50%, 90%, final design, and construction contract documents
3) Bid phase services
4) Construction phase services

The special services will consist of:

1) Surveying to locate and set control points on thirty (30) air valve locations along the pipeline and prepare a design/topographic survey in a 50-foot by 50-foot area at each air release valve
2) A transient analysis from a model based off the system parameters and various case simulations to determine if the current air valves are adequately sized and if additional air valves are needed

The construction cost is difficult to estimate prior to the assessment of the existing air release valves and completion of the transient analysis, but the engineer has provided an upper limit opinion of probable construction cost for these improvements at $858,000. Since there are many unknown variables at this time, the estimate assumes the need to upsize all the air valves, many of which may require access beneath traffic lanes.

ENGINEERING SERVICES FEE

FNI has provided proposed pricing to perform the basic engineering services in the not-to-exceed amount of $87,202, and the special services in the not-to-exceed amount of $102,016, for a total not-to-exceed fee of $189,218. Included in the special services are the following:

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>$32,690</td>
</tr>
<tr>
<td>Transient Analysis Engineering</td>
<td>$69,326</td>
</tr>
<tr>
<td>Total Special Services</td>
<td>$102,016</td>
</tr>
</tbody>
</table>

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

Funding for this project in the amount of $189,218 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., for design and construction phase services associated with the System Wide Air Valve Improvements on the Wylie to Garland 42-Inch Pipeline, Project No. 365, in the not-to-exceed amount of $189,218. This will be an item on the regular agenda of the August 2014 Board meeting.
System Wide Air Valve Improvements on Wylie to Garland 42 Inch Pipeline
Project No. 365
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4245

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

CHANGE ORDER NO. 3

This administrative memorandum is for the Board of Directors consideration of Change Order No. 3 for: 1) an increase of $211,591.42, resulting in a revised contract amount of $14,382,335.37; and, 2) 31 calendar days of additional time, resulting in revised substantial and final completion dates of May 15, 2015, and July 14, 2015, respectively, for Wylie Water Treatment Plant (WTP) Finished Water Reservoir and Flow Metering Improvements, Project No. 276.

REVIEW

In December 2011, the Board Approved Administrative memorandum No. 3735 authorizing an engineering services agreement (ESA) with CH2M HILL for preliminary engineering in the amount of $379,925.

In August 2012, the Board approved Administrative Memorandum No. 3838 authorizing an ESA with CH2M HILL for the final design of the project in the amount of $812,000.

The table below summarizes the previous Board actions relating to the construction contract for this project:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo./ CAI No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2013</td>
<td>4021</td>
<td>Award of Contract to BAR Constructors</td>
<td>$14,720,800.00</td>
</tr>
<tr>
<td>November 2013</td>
<td>4085</td>
<td>C.O. No. 1 for deletion of large diameter piping and valves</td>
<td>($568,496.03)</td>
</tr>
<tr>
<td>May 2014</td>
<td>14-05-02</td>
<td>C.O. No. 2 to change from 45-degree bends to 90-degree bends in 96-inch diameter pipe</td>
<td>$18,439.98</td>
</tr>
</tbody>
</table>

The revised construction contract amount is $14,170,743.95.

PROPOSED CHANGE ORDER NO. 3

Proposed Change Order No. 3 consists of four items that impact the cost and scope of the project.
Item No. 1 – Replace Fallen Baffle Walls in 3-1 Finished Water Reservoir  $50,352.72

- **Issue:** Upon entering 3-1 finished water reservoir to perform work under the contract, it was discovered that four of the existing concrete masonry unit baffle walls had collapsed. Two of these four walls were to be removed and replaced under this contract while the others were to remain in service.

- **Recommendation:** Replace the additional two collapsed baffle walls with fiber reinforced plastic baffle walls to ensure proper flow patterns in the clearwell.

- **Proposed Cost:** The contractor has proposed a price of $50,352.72 for the additional work.

Item No. 2 – Install FRP Grating in Lieu of Aluminum Grating  $2,239.63

- **Issue:** The construction drawings specify the use of aluminum grating over the drainage trench in the bottom of the 4-2 finished water reservoir, which is currently under construction. Aluminum has the potential to corrode and weaken in chlorinated water and is not the preferred material in this application.

- **Recommendation:** Substitute FRP grating for aluminum in the finished water reservoir.

- **Proposed Cost:** The contractor has proposed a price of $2,239.63 to change the grating material.

Item No. 3 – Install New Wiring and Conduits to WTP I Clariflocculators  $81,006.50

- **Issue:** The existing feeder cables for the WTP I clariflocculator drives were installed in PVC conduit at a shallow depth. Over a period of many years and numerous construction projects, the conduits have been damaged. In order to protect these feeders, the NTMWD staff recommends that they be re-pulled through new conduit in the new duct banks along with other electrical work already a part of this project.

- **Recommendation:** Replace the existing conduits and feeder cables and incorporate the new conduits in the duct banks that are to be installed under the current contract.

- **Proposed Cost:** The contractor has requested an additional $81,006.50 and 16 calendar days to install the recommended work.
Item No. 4 – Relocate Existing Duct Bank at WTP III

$77,992.57
15 Calendar Days

- **Issue:** An existing duct bank that supplies power to Basin Nos. 6, 7, and 8 at WTP III was not correctly shown in record documents and is in direct conflict with the required location of a new meter vault that is to be installed under the current contract.

- **Recommendation:** Remove and re-direct the existing duct bank to avoid conflict with the new meter vault. Reuse existing cable as practical by using new splice cabinets.

- **Proposed Cost:** The contractor has requested an additional $77,992.57 and 15 calendar days to complete the additional work.

**SUMMARY OF CHANGE ORDER NO. 3**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Days</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Replace Fallen Baffle Walls in 3-1 Finished Water Reservoir</td>
<td>0</td>
<td>$50,352.72</td>
</tr>
<tr>
<td>2</td>
<td>Install FRP Grating in Lieu of Aluminum Grating</td>
<td>0</td>
<td>$2,239.63</td>
</tr>
<tr>
<td>3</td>
<td>Install New Wiring and Conduits to WTP I Clariflocculators</td>
<td>16</td>
<td>$81,006.50</td>
</tr>
<tr>
<td>4</td>
<td>Relocate Existing Duct Bank at WTP III</td>
<td>15</td>
<td>$77,992.57</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>31</td>
<td><strong>$211,591.42</strong></td>
</tr>
</tbody>
</table>

**SUMMARY OF ADJUSTMENTS TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
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<td>600</td>
<td>660</td>
</tr>
<tr>
<td>C.O. No. 1</td>
<td>($568,496.03)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>$18,439.98</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
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<td>31</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$14,382,335.37</td>
<td>631</td>
<td>691</td>
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</tbody>
</table>
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4246

NTMWD ADMINISTRATION BUILDING
STRUCTURAL REPAIRS, BUILDING RENOVATIONS,
AND BUILDING ADDITIONS, TASK NOS. 2 AND 3
PROJECT NO. 301

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 Pogue Construction in the contract amount of $8,591,366 for the NTMWD Administration Building Structural Repairs, Building Renovations, and Building Additions, Task Nos. 2 and 3, Project No. 301.

REVIEW

The following table summarizes the design phase actions previously authorized 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>October 2012</td>
<td>3869</td>
<td>Preliminary engineering services agreement with Huitz-Zollars, Inc. (Huitz-Zollars)</td>
<td>$47,200</td>
</tr>
<tr>
<td>January 2013</td>
<td>3929</td>
<td>Additional engineering services to Huitz-Zollars for structural and safety evaluation of existing Administration Building</td>
<td>$44,450</td>
</tr>
<tr>
<td>June 2013</td>
<td>4004</td>
<td>Lease agreement for temporary office space for Administration Department personnel</td>
<td></td>
</tr>
<tr>
<td>July 2013</td>
<td>4019</td>
<td>Engineering services agreement with Huitz-Zollars for design of the new Administration Building</td>
<td>$543,265</td>
</tr>
<tr>
<td>February 2014</td>
<td>4127</td>
<td>Additional engineering services to Huitz-Zollars to change scope of New Administration Building from an addition to the existing Administration Building to a standalone building</td>
<td>$45,125</td>
</tr>
<tr>
<td>June 2014</td>
<td>4217</td>
<td>Additional engineering services to Huitz-Zollars for additional renovation design and to enlarge new boardroom</td>
<td>$59,922</td>
</tr>
</tbody>
</table>
Due to the complexity of construction sequencing for the proposed work, the need to keep the executive offices and the boardroom available, and the various distinctive contractor skills required for the different tasks, this work was divided into three separate design tasks. Dividing this project allowed Huitt-Zollars to develop the design and related construction documents for the following three tasks:

Task No. 1: Stabilize subgrade for existing Administration Building south wing.

Task No. 2: Upgrade foundation and renovate interior of the south wing of the existing administration building.

Task No. 3: Design a three-story office building west of the existing Administration Building.

Task No. 1 construction effort was completed in March 2014. This administrative memorandum includes the work associated with Task Nos. 2 and 3, which have now been combined into one project.

DESCRIPTION OF PROJECT

Task Nos. 2 and No. 3 will involve the renovation of the south wing of the existing Administration Building and the construction of a new three-story Administration Building just west of the existing Administration Building performed under a single construction contract.

TABULATION OF CONSTRUCTION BIDS

Sealed bids were received at 2:00 p.m. on Friday, August 8, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Bid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pogue Construction</td>
<td>$8,591,366</td>
</tr>
<tr>
<td>Triune</td>
<td>$8,796,035</td>
</tr>
<tr>
<td>Ratcliff Constructors</td>
<td>$8,801,000</td>
</tr>
<tr>
<td>Core Construction</td>
<td>$8,808,316</td>
</tr>
<tr>
<td>Whiting - Turner</td>
<td>$9,263,902</td>
</tr>
</tbody>
</table>

The lowest responsive bid was received from Pogue Construction in the total bid amount of $8,591,366. Pogue Construction has successfully completed numerous similar building projects, including construction of the City of Melissa City Government Facility in the amount of $8,717,956; Frisco ISD Administration Facility in the amount of $23,871,277; and, Allen ISD Central Administration Facility in the amount of $8,327,858.
Based on their standing as lowest responsive bidder, the information provided and reports by the supplied references, it is the recommendation of the Executive Director, NTMWD staff, and Huitz-Zollars that the Board of Directors authorize the award of a construction contract for the NTMWD Administration Building Structural Repairs, Building Renovations, and Building Additions, Task Nos. 2 and 3, Project No. 301, to Pogue Construction in the contract amount of $8,591,366.

FUNDING

Funding in the amount of $8,591,366 is available in the Regional Water System Capital Improvement Fund. Upon final determination of the project cost, the cost will be allocated to each of the NTMWD's operating systems (Regional Water System, Regional Wastewater System, Regional Solid Waste System, Upper East Fork Interceptor System, and Sewer System) based on each system's pro rata share of annual budgeted operations and maintenance expense, and the Regional Water System Capital Improvement Fund will be reimbursed accordingly.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Huitz-Zollars, Inc., that the Board of Directors authorize award of a construction contract to Pogue Construction for the NTMWD Administration Building Structural Repairs, Building Renovations, and Building Additions, Task Nos. 2 and 3, Project No. 301, in the amount of $8,591,366. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4247

REGIONAL WATER SYSTEM
WATER TRANSMISSION SYSTEM
SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM UPGRADE, PHASE I
PROJECT NO. 329

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum is to request the Board of Directors authorize an increase in the scope and fee for Gupta and Associates, Inc., (GAI) for additional design services associated with the Water Transmission System Supervisory Control and Data Acquisition (SCADA) System Upgrade, Phase I, Project No. 329, in the not-to-exceed amount of $36,550. This will result in a revised total not-to-exceed engineering services agreement (ESA) of $327,280.

REVIEW

In April 2013, the Board approved Administrative Memorandum No. 3985 authorizing the Executive Director to execute an ESA with GAI for preliminary engineering services for the Water Transmission System SCADA System Upgrade, Project No. 329. The purpose of the preliminary engineering was to develop a technical memorandum summarizing the existing SCADA equipment at each facility in the water transmission system and present recommendations for improvement.

In November 2013, the Board approved Administrative Memorandum No. 4083 authorizing an ESA with GAI for design and construction management services associated with the Water Transmission System SCADA System Upgrade, Phase I, Project No. 329, in the not-to-exceed amount of $290,730. The anticipated scope of the Phase I design was to replace programmable logic controllers (PLCs) and radios at 50 remote pump stations and delivery sites in the water transmission system and construct a second backup radio tower at the Wylie WTP site. A separate planned project is envisioned to replace the PLCs and radios at the remaining remote pump stations and delivery sites in the water transmission system as Phase II.

In the early stages of this effort, the NTMWD staff began to understand that there are inherent limitations to the existing radio system and that a microwave radio technology might better suit the desired capabilities, considering the constraints presented by the size and geographic topography of the large service area. GAI was asked to consider microwave radio as a possible option for the project.

GAI evaluation of the service sites, relative elevations, equipment costs, and electrical needs revealed a complexity that was previously unknown. While technically feasible, the microwave radio option carried hardware and infrastructure requirements that made it considerably more expensive to install. While the wholly microwave option does not
appear to be the best solution at this time, there may be hybrid solutions that combine the features of microwave and cellular data technologies that should be investigated. The NTMWD staff will continue to discuss these possibilities with GAI.

**PROPOSED SCOPE OF ADDITIONAL SERVICES**

*Item No. 1 – Microwave System Design*  
$36,550

- **Description:** GAI was asked to develop preliminary design criteria for an alternative microwave radio system to transmit current control communications to remote sites and accommodate future growth. This additional work consisted of:
  - A radio survey to create a radio network topology from path studies (lines of communication) of the sites
  - Selection of the radio and network equipment to best accommodate SCADA and security communications
  - Coordination of the design and estimated construction cost with NTMWD staff

The construction cost estimate associated with the resulting microwave solution was much higher than envisioned due to the number of radios, PLCs, and antenna towers needed to operate the system. The microwave system required the construction of numerous tall towers to effectively relay the signals throughout the service area.

- **Recommendation:** Due to the expense of the microwave system and the potential public concerns and permitting requirements regarding the numerous tall towers, NTMWD staff does not recommend proceeding with the microwave system alternative under this project. Regardless of the decision to not move forward with the microwave system, GAI's effort to develop a preliminary design and estimated implementation cost was a necessary component of the decision process. Their proposed fee of $36,550 is recommended by the NTMWD staff as representative of the research, design, and coordination effort required.

**SUMMARY OF ESA WITH PROPOSED ADDITIONAL SERVICES FEE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Additional Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original ESA (Ad. Memo. No. 4083)</td>
<td>$265,730</td>
<td>$25,000</td>
<td></td>
<td>$290,730</td>
</tr>
<tr>
<td>Proposed Additional Engineering Services</td>
<td>0</td>
<td>0</td>
<td>36,550</td>
<td>36,550</td>
</tr>
<tr>
<td>Revised ESA Amount</td>
<td>$265,730</td>
<td>$25,000</td>
<td>$36,550</td>
<td>$327,280</td>
</tr>
</tbody>
</table>
FUNDING

Additional funding in the amount of $36,550 for Project No. 329 is available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an increase to the engineering services agreement with Gupta and Associates, Inc., for the Water Transmission System Supervisory Control and Data Acquisition System Upgrade, Phase I, Project No. 329, in the not-to-exceed amount of $36,550, resulting in a revised total not-to-exceed engineering services fee of $327,280. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4248

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

CHANGE ORDER NO. 28

This administrative memorandum is for the Board of Directors consideration of Change Order No. 28 for a decrease of $31,426.18 to the contract amount for Water Treatment Plants (WTPs) I, II, III, and IV Ozonation, Project No. 153, resulting in a revised contract amount of $111,019,386.36. 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

In May 2009, the Board approved Administrative Memorandum No. 3346 authorizing the Executive Director to enter into an engineering services agreement (ESA) with Black & Veatch Corporation (B&V) in the amount of $10,620,000. Since March 2011, the Board has authorized additional engineering services with B&V in the amount of $383,419, resulting in a revised engineering services amount of $11,003,419.

In October 2010, the Board approved Administrative Memorandum No. 3547-A awarding a construction contract to McCarthy Building Companies (McCarthy) in the amount of $112,989,000. Since August 2011, the Board has approved 27 change orders totaling $3,061,812.54 in additional costs. Due to elimination of a $5,000,000 allowance included in the original bid (approved by the Board with Change Order No. 19 in July 2013), the revised contract amount is currently $111,050,812.54. Detailed information on all change orders can be found in Administrative Memorandum No. 4180, which was approved by the Board in April 2014 and can also be provided upon request.
CHANGE ORDER NO. 28

Change Order No. 28 consists of five items that result in a net decrease in the contract amount by $31,426.18.

**Item No. 1 – WTP III Chemical Feed Modifications**

($36,999.65)

- **Issue:** The conversion to ozone disinfection requires that new chlorine feed points be installed at WTP III. One of the chlorine feed vaults was located immediately north of the electrical building, serving the WTP III plant water and backwash water pumps, in an area with several active construction efforts. Work in this area requires that several contractors work in close proximity creating safety and logistical issues for all.

A separate project, Lake Texoma Outfall to Wylie WTP Raw Water Pipeline, Project No. 268, being performed by Garney Construction, requires a filter effluent flowmeter to be installed adjacent to an area where McCarthy is required to install an ozone marking slab. If the ozone marking slab is installed in the near future as scheduled, it would likely be destroyed during the subsequent construction of the filter effluent meter.

- **Recommendation:** Remove the installation task associated with the chlorine feed vault and the ozone marker slab from McCarthy’s scope for the ozone project, take possession of the materials already received, and issue a change to Garney to include the installation of these items as part of their effluent metering work.

- **Proposed Credit:** McCarthy has proposed a credit in the amount of $36,999.65 for deleting the chemical feed vault installation labor and the ozone marking slab from the current project.

**Item No. 2 – WTP II Ammonia Feed Modifications**

($9,596.89)

- **Issue:** The ozone design provides the capability for NTMWD to feed ammonia into the raw water at all four water WTPs as needed for control of bromate formation. A recent change to Project No. 268, Texoma Outfall to Wylie WTP, resulted in the recommendation to remove one ammonia feed point from this project and install it in a different location under a separate project.

- **Recommendation:** Direct the contractor to delete the installation associated with one ammonia feeder and ammonia interconnection piping from the contract and provide a credit for work not performed. The materials will be turned over to NTMWD for incorporation by another contractor under a separate contract.

- **Proposed Cost:** McCarthy has proposed a credit in the amount of $9,596.89 for eliminating the installation labor associated with one ammonia feeder and ammonia interconnection piping in the ammonia room at WTP II.
Item No. 3 – WTP II Chlorine Feed Modifications

- **Issue:** The project design requires installation of two new chlorine solution feed points downstream of the WTP II filters. In May 2013, the Board approved an ESA with CH2M HILL for Project No. 330, Wylie WTP II Cleanwell and Disinfection Modifications, the scope of which is a review of disinfection throughout each of the four water treatment plants. Project No. 330 will change the chlorine feed points at WTP II, which negates the need for the chlorine feed points under this project. One of the chlorine feed points was in a vault, which also can be deleted from the scope of this project.

- **Recommendation:** Direct the contractor to delete the two new chlorine feed points from WTP II and provide a credit for the work not performed.

- **Proposed Cost:** McCarthy has proposed a credit in the amount of $16,459.71 to delete two chlorine feed points, one chlorine feed vault, and two chlorine diffusers.

Item No. 4 – NOPS Pavement Modifications

- **Issue:** A conceptual plan for the North Ozone Operations Building (NOPS) expansion was developed during design for the ozone project. However, during construction, NTMWD further defined the NOPS expansion and requested B&V to maximize the building footprint and develop an office layout. The footprint of the NOPS expansion was much larger than the conceptual NOPS expansion shown in the plans. NTMWD requested that McCarthy stop work on NOPS until the footprint of the expansion could be designed. Now that the footprint of the expansion is known, McCarthy is released to resume work on the NOPS parking lot. The increase in the footprint of the future building requires changes to the exterior lighting and relocation of a fire hydrant.

- **Recommendation:** Direct the contractor to resume work on the NOPS parking lot to include remobilizing McCarthy’s subcontractor to the site, installing knox boxes on the building as requested by the City of Wylie Fire Marshal, removing a concrete curb that was installed prior to the stop work directive, installing the exterior lighting, and relocating the fire hydrant to accommodate the footprint of the NOPS expansion in accordance with the revised layout.

- **Proposed Cost:** McCarthy has proposed a price of $19,688.17 for the work associated with the NOPS pavement modifications.

Item No. 5 – Relocate WTP II Basin No. 8 Plant Waterline

- **Issue:** The WTP II Sedimentation Basin No. 8 plant waterline is a four-inch ductile iron pipe located on the north side of the basin. The pipe was originally installed in 1988 in the settled water flume located on the west side of the basin. The chlorine off gas in the settled water flume caused the exterior of the water
pipe to corrode to the point that the pipe needs replacement. The condition of the pipe was not known until McCarthy had drained the south half of WTP II to make improvements associated with ozone.

- **Recommendation:** Direct the contractor to reroute the four-inch ductile iron plant water pipe above the settled water flume.

- **Proposed Cost:** McCarthy has submitted a proposed price of $11,941.90 for rerouting the four-inch plant water pipe over the settled water flume. This cost also includes insulation, heat trace, a hose valve station, and an isolation valve.

### SUMMARY OF CHANGE ORDER NO. 28

<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>WTP III Chemical Feed Modifications (decrease)</td>
<td>($36,999.65)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>WTP II Ammonia Feed Modifications (decrease)</td>
<td>($9,596.89)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>WTP II Chlorine Feed Modifications (decrease)</td>
<td>($16,459.71)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>NOPS Paving Modifications</td>
<td>$19,688.17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Relocate WTP II Sed. Basin No. 8 Plant Waterline</td>
<td>$11,941.90</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Proposed Total C.O. Amount (decrease)</td>
<td>($31,426.18)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### 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>
<tr>
<td>Original Contract</td>
<td>$112,989,000.00</td>
<td>January 15, 2014</td>
<td>January 31, 2014</td>
</tr>
<tr>
<td>Total of Previous Adjustments To-Date</td>
<td>($1,938,187.46)</td>
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<td></td>
</tr>
<tr>
<td>Proposed C.O. No. 28</td>
<td>($31,426.18)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CURRENT STATUS OF NEGOTIATIONS WITH MCCARTHY

During the November 2013 Water Committee Meeting, NTMWD Executive Director and legal counsel informed the Water Committee of a sizable claim for delay submitted by McCarthy. Since that time, two sets of meetings have been ongoing regarding the claim negotiation: 1) the Executive Director has met with McCarthy’s regional manager in an effort to maintain open lines of communication; and, 2) NTMWD staff has met with McCarthy field personnel in an attempt to discuss individual items and specifics of the submitted claim.
During these meetings, it has become apparent that the claim submitted by McCarthy is extremely involved. Although time and effort has been expended by the Executive Director and NTMWD staff in review of the information submitted by McCarthy, the complexity of the issues involved with the claim have precluded development of a recommendation for a proposed settlement. In April 2014, the Board approved Administrative Memorandum No. 4179, which ratified the actions of the Executive Director to authorize Saunders, Walsh & Beard to contract with a claims specialist to provide professional assistance for review and evaluation of information submitted by McCarthy in support of its claim. Saunders, Walsh & Beard retained a claims and scheduling specialist, and they are in the process of evaluating McCarthy's claim.

In June 2014, the Board approved Administrative Memorandum No. 4208 authorizing additional funding in support of the review of McCarthy’s claim. On August 13, 2014, a meeting was held, which included NTMWD staff, legal counsel, and claims specialist, as well as McCarthy's staff, legal counsel (by phone) and claims specialist. The meeting provided a forum for the parties to discuss the basis of the claim. Additional dialog between the parties will occur during the next several weeks. It is anticipated that McCarthy will provide additional information to justify their claim.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Black & Veatch Corporation that the Board of Directors approve Change Order No. 28 for decrease of $31,426.18 to the contract amount for Water Treatment Plants I, II, III, and IV Ozonation, Project No. 153, resulting in a revised contract amount of $111,019,386.36. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4249

REGIONAL WATER SYSTEM
PURCHASE OF 36.8 ACRES FOR LAVON LAKE RAW WATER PUMP
STATIONS INTAKE CHANNEL IMPROVEMENTS
PROJECT NO. 350
RESOLUTION NO. 14-14

The Board of Directors is requested to adopt Resolution No. 14-14, A Resolution Authorizing the NTMWD Executive Director to Implement the Purchase of 36.8 Acres for Lavon Lake Raw Water Pump Stations Intake Channel Improvements, Project No. 350, and establish a not-to-exceed amount of $850,000 for this purchase. The property is located in the City of Wylie on Skyview Drive near NTMWD’s Raw Water Intake Structure No. 2 as shown on the attached exhibit. If purchased, the property will be used for the location of dewatering the dredged material. The potential purchase and use of this property has been discussed with City of Wylie staff and they have no objection to NTMWD pursuing this property purchase.

REVIEW

In January 2014, the Board approved Administrative Memorandum No. 4120, which authorized an engineering services agreement (ESA) with Freese and Nichols, Inc., (FNI) in the amount of $388,000 for final design, bid phase, and construction phase services to remove dredged material from the intake channels in Lavon Lake. Also included in the ESA is the preparation and submittal of the environmental permitting documents to obtain a temporary construction license from the U.S. Army Corps of Engineers to dredge the intake channels to Raw Water Pump Station (RWPS) Nos. 2 and 3. Additionally, FNI would identify several acceptable areas for disposal of material dredged from the intake channels and prepare boundary surveys and easement documents.

FNI has identified a favorable area on the Wylie Water Treatment Plant (WTP) site for the material dredged from RWPS No. 3, known as Residual Disposal Area 3 (Area 3). Area 3 is one of the permanent residual disposal areas located on the Wylie WTP, which was constructed in 2010 as part of Project No. 203, and is shown on the attached exhibit.

It is recommended that disposal of dredged material from Raw Water Intake Nos. 2 and 3 would occur on property controlled by the NTMWD. This may be property currently owned by the NTMWD or new properties that may be leased or purchased for this project. This is the topic of this administrative memorandum.

Based on an evaluation by the NTMWD staff, it is the recommendation of the Executive Director that this property be purchased instead of leasing it for the storage of the material. A lease on 16 acres of this land for the needed two years would cost between $80,000 and $100,000, and the estimated 31,450 cubic yards of excavated material would ultimately have to be hauled off. Estimates to haul this material off range from
$625,000 to $800,000. If the tract of land is purchased, the material can be spread and left on this property as long as needed and then the property can be used as needed.

FUNDING

The Executive Director requests the authority to enter into a contract for purchase of 36.8 acres at a price not to exceed $850,000. It is recommended that the Board authorize a total of $850,000 for the purchase of this property to include all legal and title work associated with the purchase. Funds in the amount of $850,000 are available in the Regional Water System Contingency Fund for this property purchase.

The Executive Director requests authority to provide support services to:

1. Employ the firm of Gay, McCall, Isaack, Gordon & Roberts, P.C., to act as counsel on the acquisition of the property.

2. Employ a title company to provide professional services related to certain property ownership issues.

3. Employ a surveyor to provide a current survey of the property.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors: 1) adopt Resolution No. 14-14, A Resolution Authorizing the NTMWD Executive Director to Implement the Purchase of 36.8 Acres for Lavon Lake Raw Water Pump Stations Intake Channel Improvements, Project No. 350, which includes authorizing NTMWD's Deputy Directors and Real Estate Manager to sign closing documents and/or execute escrow agreements for such parcel; and, 2) establish a not-to-exceed budget amount of $850,000 to include property purchase, survey, legal counsel assistance, and title work. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 14-14

A RESOLUTION AUTHORIZING THE NTMWD EXECUTIVE DIRECTOR TO IMPLEMENT THE PURCHASE OF 36.8 ACRES FOR LAVON LAKE RAW WATER PUMP STATIONS INTAKE CHANNEL IMPROVEMENTS, PROJECT NO. 350

WHEREAS, the Lavon Lake Raw Water Pump Stations Intake Channel Improvements, Project No. 350, recommended the dredging of the intake channels to Raw Water Pump Station Nos. 2 and 3; and,

WHEREAS, an acceptable area for disposal of material dredged from the intake channels has been determined; and,

WHEREAS, adequate funds are available from the Regional Water System Contingency Fund to implement this acquisition.

NOW, THEREFORE, THE BOARD OF DIRECTORS IN A REGULAR MEETING RESOLVES THAT:

1. There is a public need for, and that the public welfare and convenience are to be served by, the acquisition of property for the disposal of dredged material from the intake channels for Raw Water Pump Station Nos. 2 and 3.

2. It is in the best interest of the NTMWD to acquire a 36.8 acre site.

3. The Executive Director is authorized to employ a title company, as necessary.

4. The Executive Director is authorized to employ a surveyor, as necessary.

5. The Executive Director is authorized to employ the firm of Gay, McCall, Isaacks, Gordon & Roberts, P.C., to represent the NTMWD in this land transaction.

6. The NTMWD's Deputy Directors and Real Estate Manager are authorized to execute closing documents and/or execute escrow agreements for this land transaction.

7. A total not-to-exceed amount of $850,000 is authorized for this land transaction including property purchase, survey, legal counsel assistance, and title work.

THIS RESOLUTION ADOPTED BY THE NTMWD BOARD OF DIRECTORS IN A REGULAR MEETING ON AUGUST 28, 2014, IN THE NTMWD ADMINISTRATIVE OFFICES IN WYLIE, TEXAS.

TERRY SAM ANDERSON, Secretary  DARWIN WHITESIDE, President
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4250

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

CHANGE ORDER NO. 5

This administrative memorandum is for the Board of Directors consideration of Change Order No. 5 for Project No. 277, Water Treatment Plant (WTP) III Filter Underdrain Improvements and Conversion to Biologically Active Filters, for a net increase of $132,246, resulting in a revised contract amount of $6,947,386.95.

REVIEW

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

The table below summarizes the previous construction-related actions approved by the Board for this project:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2012</td>
<td>3899</td>
<td>Construction contract awarded 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>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 wastewater valves on Filter Nos. 1 and 3</td>
<td>$69,072.15</td>
</tr>
<tr>
<td>February 2014</td>
<td>4132</td>
<td>C.O. No. 4 to provide and install four new 30-inch wastewater valves with actuators</td>
<td>$132,246.00</td>
</tr>
</tbody>
</table>
CHANGE ORDER NO. 5

Change Order No. 5 consists of one item that impacts the contract price for the project.

Item No. 1 – Sodium Hydroxide Chemical Trench at WTP II $132,246

- **Issue:** At WTP II, sodium hydroxide (caustic) was originally fed into the filter effluent pipeline as it left the southwest corner of the filter basin. This dosing point was previously relocated to nearby Clearwell 2-4 for process reasons, which resulted in the chemical pipes being directly buried along a path of approximately 200 feet. Recently, there have been multiple leaks on these lines, and the design of these lines has been reanalyzed by Operations and Engineering.

- **Recommendation:** Carollo provided evaluation and design to build a chemical trench for installation and protection of the sodium hydroxide lines from the chemical pump station to the Clearwell 2-4 injection points. The proposed chemical trench was designed to be in accordance with the new construction techniques being developed by Carollo under current Project No. 354, Wylie WTP Chemical Systems Evaluation. Due to the urgency to improve and upgrade the condition of the piping system, the design was given to several contractors currently working in the Wylie complex and cost proposals were requested.

- **Proposed Cost:** Proposals were evaluated, and the proposal from Archer-Western was selected. The contractor proposed an additional price of $132,246.

### 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>
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### FUNDING

Additional funding in the amount of $132,246 for Change Order No. 5 is 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. 5 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 $132,246, resulting in a revised contract amount of $6,947,386.95. The final completion date for this project remains January 9, 2016. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014 ADMINISTRATIVE MEMORANDUM NO. 4251

REGIONAL WATER SYSTEM
LAKE TEXOMA PUMP STATION MODIFICATIONS
PROJECT NO. 128

CHANGE ORDER NO. 4

The purpose of this administrative memorandum is for the Board of Directors consideration of Change Order No. 4 for an increase of $260,887.58, resulting in a revised contract amount of $6,910,847.36 for the Lake Texoma Pump Station Modifications, Project No. 128.

REVIEW

The following table summarizes Board actions to date for the construction activities for this project.

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<tr>
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<th>Ad. Memo. No.</th>
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<td>C.O. No. 3 for pump manufacturer to repair a galled shaft and to recoat both pumps prior to installation</td>
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The revised contract amount is $6,649,959.78.

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.
PROPOSED CHANGE ORDER NO. 4

Proposed Change Order No. 4 consists of two items that impact the work.

*Item No. 1 – Pump 1 and Pump 2 Startup Costs*  
$42,225.13

- **Issue:** The existing 4,000 hp pumps, Pump 1 and Pump 2, had not been operated for several years due to the cessation of pumping. Some modifications to the pumps were originally included in the project but they required additional work and some new materials beyond the scope of work prior to startup. The pumps are needed to provide adequate pumping capacity to the balancing reservoir for the new blending facilities.

- **Recommendation:** Install a new section of discharge pipe, flex coupling, and harness rods for Pump 1, a new flex coupling and harness rods for Pump 2, new gaskets, and new motor coupling bolts. In addition, Real Power Technologies was utilized as a subcontractor to help troubleshoot electrical issues.

- **Proposed Cost:** The contractor has submitted a proposal to furnish and install the additional recommended work for the total amount of $42,225.13.

*Item No. 2 – Pump 3 and Pump 4 Delay Costs*  
$218,662.45

- **Issue:** The two new 6,000 hp pumps, Pump 3 and Pump 4, could not be installed in the pump slots during the cessation of pumping. The new motors were temporarily installed several years ago so they could be powered up to reduce internal condensation and so they can be periodically rotated during long-term inactivity. The motors need to be disconnected and moved to allow for permanent installation of the pumps. Because the motors sat dormant for such an extended period, it is recommended they be tested prior to any work to determine if any long-term degradation has taken place that would affect their performance. If so, corrections would need to be made. This evaluation prior to permanent installation creates a virtual second startup and testing operation beyond what is provided by the contract. The delay in the pump installations also required the contractor to extend his builders risk insurance for several years.

- **Recommendation:** Direct the contractor to test the new 6,000 hp motors and electrical gear prior to disconnecting them for pump installation.

- **Proposed Cost:** The contractor has submitted a proposal for the additional recommended work and added expense for extended job overhead builders risk in the total amount of $218,662.45.
SUMMARY OF CHANGE ORDER NO. 4

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SUMMARY OF ADJUSTMENTS TO CONTRACT

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<td>Contract Dates</td>
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Additional contract time has not been addressed in this administrative memorandum. After the total effect of the zebra mussel issue and 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 GTUA and NTMWD, 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 $260,887.58 for Change Order No. 4 is available in 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. 4 to the Lake Texoma Pump Station Modifications, Project No. 128, for an increase of $260,887.58 resulting in a revised contract amount of $6,910,847.36. This will be an item on the regular agenda of the August 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

AUGUST 2014

ADMINISTRATIVE MEMORANDUM NO. 4252

REGIONAL WASTEWATER SYSTEM
ROWLETT CREEK REGIONAL WASTEWATER TREATMENT PLANT
PEAK FLOW MANAGEMENT IMPROVEMENTS, PHASE 1
PROJECT NO. 328

ENGINEERING SERVICES AGREEMENT

This administrative memorandum is for the Board of Directors consideration to employ CH2M HILL to provide design and construction phase services associated with the Rowlett Creek Regional Wastewater Treatment Plant (RWWTP) Peak Flow Management Improvements, Phase 1, Project No. 328. The engineering services agreement (ESA) would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $3,458,000.

EXECUTIVE SUMMARY

The purpose of this project is to provide additional peak flow capacity at the Rowlett Creek RWWTP. The Executive Director and NTMWD staff have previously briefed the Board regarding the need for this additional capacity and the options for providing that capacity at either Rowlett Creek or Wilson Creek RWWTP. In order to provide the capacity at the Wilson Creek RWWTP, an additional pipeline system with a capital cost exceeding $20 million is required in addition to the treatment facilities, which must be constructed at one of the two treatment plants. By constructing the facilities at the Rowlett Creek site, the capital and operating costs of the pipeline system can be eliminated.

The concept of providing this additional peak treatment capacity at the Rowlett Creek site has been discussed in a meeting with the Executive Director and Plano's City Manager. Plano has an understanding of the general approach being proposed, the need for NTMWD to submit a permit amendment to the Texas Commission on Environmental Quality (TCEQ) for these facilities, and the financial impact of constructing the facilities at the Rowlett Creek site vs. the Wilson Creek site. Plano is in concurrence with NTMWD moving forward with the next steps on this project.

The proposed improvements are very involved and will be constructed in three phases. Due to the complexity of the proposed improvements, the NTMWD staff has taken the opportunity to provide a detailed review and the approach for the project. It is recommended the Board authorize the Executive Director to execute an ESA to allow design of the improvements described in this administrative memorandum to move forward.
REVIEW

The Rowlett Creek RWWTP was initially constructed in the 1950s as a trickling filter wastewater treatment plant with a capacity of 1.85 million gallons per day (MGD). In 1981, a 14 MGD activated sludge treatment train was added (Plant I, or Train A). In 1998, the trickling filter plant was demolished to make room for a 10 MGD expansion that included an activated sludge plant with chemical phosphorus removal (Plant II, or Train B) bringing the total rated average daily flow capacity of the plant to 24 MGD. The peak two-hour flow capacity is rated 60 MGD, 2.5 times the average daily flow.

Adjacent to Rowlett Creek RWWTP is the Lower Rowlett Creek Lift Station, which pumps flow to both the Rowlett Creek RWWTP and Wilson Creek RWWTP. This allows for operational flexibility in the operation of the two treatment plants. Typically, the Rowlett Creek RWWTP is base-loaded during dry weather flow in the range of 15 to 18 MGD and the balance of flow reaching the plant is pumped to the Wilson Creek RWWTP. During wet weather conditions, the flow to Rowlett Creek RWWTP is ramped up to peak flow capacity and the balance of flow is pumped to the Wilson Creek RWWTP.

Flow transferred from the Lower Rowlett Creek Lift Station to the Wilson Creek RWWTP passes through single force mains (i.e., no parallel pipe system is in place) to the Allen Junction Structure. The current installed force mains are 48-inch and 42-inch in size, can carry over 50 MGD, and are critical to the successful transfer of flow from Rowlett Creek RWWTP to Wilson Creek RWWTP. A concern that has been expressed to the Board by the Executive Director and NTMWD staff in the past is that as these force mains age, the risk of a service interruption increases. If a force main had to be taken out of service during dry weather conditions, the entire flow could be diverted to the Rowlett Creek RWWTP while the repair occurred. However, if a service disruption occurred during certain wet weather conditions, the total flow reaching the Rowlett Creek RWWTP site could exceed the plant’s peak treatment capacity.

In June 2011, the Board approved Administrative Memorandum No. 3650 authorizing an ESA with CH2M HILL for the Rowlett Creek RWWTP Advanced Treatment and Peak Flow Management Study, Project No. 253. That study considered two general approaches to address the system reliability during a peak flow event. One approach was to parallel the force mains and ensure firm pumping capacity is available. A second approach was to make modifications to the Rowlett Creek RWWTP to handle a higher peak flow should such an event occur. The assessment calculated that the second approach has lower overall capital and operating costs and offers an additional benefit that the equipment and upgrades associated with managing the higher peak flow could also be used for advanced treatment during dry weather conditions. This approach would not increase the permitted average daily capacity of the plant but would increase the permitted peak flow capacity to assure the required treatment capacity is provided on the Rowlett Creek RWWTP site.
In April 2013, the Board approved Administrative Memorandum No. 3950-2 authorizing CH2M HILL to undertake preliminary engineering services for Rowlett Creek RWWTP Peak Flow Management Improvements, Project No. 328. The project further evaluated options for adding up to 60 MGD of peak flow treatment capacity while keeping new facilities within the existing plant fence line. Options for treating the additional peak flow were evaluated in conjunction with other planned capital improvements projects such as a consolidated headworks with all coarse screens converted to fine screens, addition of grit removal facilities, conversion of bioreactors from chemical to biological nutrient removal (BNR) systems, conversion from chlorine disinfection to ultraviolet light disinfection systems, and expansion and improvements to filtration systems.

Several options were considered including blending based high rate clarification, chemically enhanced primary treatment, membrane bioreactors (MBRs), and integrated fixed-film activated sludge. Considering the footprint requirements, operation, effluent quality, phasing options, and impact on future projects, a three-phased implementation of MBRs was selected as the recommended option. The first phase would add new MBRs for an added peak flow of 17.5 MGD. The subsequent phases would convert existing aeration basins to MBRs and a bioreactor. After the third phase, the peak flow treatment capacity would be increased from the current 60 MGD to an ultimate 120 MGD.

The MBRs replace the function of existing aeration basins, secondary clarifiers, and filters. The existing aeration basins were planned to be upgraded in future projects for BNR, and the existing filters were planned to be replaced and expanded. With the proposed MBRs, those projects will no longer be required. The existing aeration basin space will be retrofitted for MBRs and the existing secondary clarifiers will be available for use in peak flow management. Further space could be freed up within the plant footprint in the future by replacing the existing secondary clarifiers with a high rate clarifier similar to that used in the Bio Actiflo system at Wilson Creek RWWTP.

Historically, the cost of MBRs has been significantly higher than conventional activated sludge systems. Typically, MBRs were used where required to meet stringent effluent requirements and/or due to space constraints. As product development has evolved, MBR use is becoming more widespread and economies of scale are resulting in lower production costs. This has led to the current favorability of MBRs for this application; whereas, only a few years ago it may have been considered too costly.

The membranes in MBRs provide a physical barrier for solid liquid separation, which not only results in higher quality effluent but provides greater consistency of effluent quality than the conventional activated sludge system currently utilized. The effluent quality provided by the MBRs will help address the more stringent effluent requirements anticipated in future permit renewals and provide the future option to follow the MBRs with reverse osmosis treatment for producing potable water. A summary of the evaluation process and the resulting recommendation has been discussed with the City of Plano, and they have concurred with this path forward.
DESCRIPTION OF PROJECT

The project generally consists of providing design, equipment pre-selection, bidding, and construction phase services for the first of three projects proposed at the Rowlett Creek RWWTP to add peak flow capacity and implement improvements associated with screening, grit removal, biological nutrient removal, filtration, and disinfection. This initial phase generally consists of new MBR trains, new consolidated headworks, and a wet weather pump station.

These initial new MBR trains will add 17.5 MGD of peak flow treatment capacity to increase the total peak treatment capacity from 60 to 77.5 MGD. Although the average annual daily flow permitted capacity will not be increased, the redundant treatment capacity will more readily facilitate maintenance shutdowns of existing facilities during dry weather periods. The MBR facilities will be constructed within the plant boundaries without requiring any long-term shutdown of existing facilities. Two subsequent projects in this program are proposed to provide an ultimate peak capacity of 120 MGD with staging again to avoid any long-term construction shutdowns.

Currently, there are two separate headworks facilities serving Train A and Train B, respectively. Neither facility has grit removal. This initial phase will include the design for a new combined 120 MGD headworks including both screening systems and new grit. The proposed combined headworks facility will not only facilitate the additional 60 MGD of flow but will add efficiency and operating flexibility to existing plant operations. Although the design effort will be undertaken for the complete headworks layout, only equipment and structure required for the initial phase flow will be included in the construction contract.

The initial phase, to be engineered under this scope of work, includes the following facilities:

1. A new combined influent headworks structure sized to ultimately convey 120 MGD complete with odor control facilities. Fine screens (6 mm) and grit removal equipment installed in this initial phase will be for 77.5 MGD.
2. A new wet weather lift station sized to ultimately convey 60 MGD, although only pumping capacity for approximately 17.5 MGD peak flow added in this phase will be installed initially.
3. MBR trains with a total capacity of 17.5 MGD, including fine screens (2 or 3 mm), blowers, permeate pumps, ancillary building, associated equipment, and odor control.
4. New UV disinfection for the added 17.5 MGD peak flow capacity and associated distribution structure.
5. Raise concrete walls on chlorine contact basins and effluent junction structure modifications as required for system hydraulics.
6. Other miscellaneous yard piping, structural, electrical, instrumentation, and control improvements.
The design process will require equipment pre-selection. This is because of the uniqueness of several of the key systems under consideration for this project and because space limitations do not allow designing for a variety of alternatives. In the pre-selection process, it is anticipated that the bidding documents will provide for evaluated bids that consider more than just initial equipment cost but also projected operating and maintenance costs. The design will then be tailored for the pre-selected equipment, which will better facilitate laying out adjoining systems within space constraints. Equipment that might be pre-selected may include headworks and MBR screens, grit systems, MBR packages, and UV disinfection systems. The estimated construction cost for this Phase I of the project is $29 million.

ENGINEERING SERVICES FEE

CH2M HILL has proposed to perform the basic engineering services associated with this project in the not-to-exceed amount of $2,824,000. They have proposed to perform the following special services for the not-to-exceed amounts indicated:

1. Equipment pre-selection, including preparation and evaluation of multiple evaluated bids for $248,000. The MBRs are a key component to be pre-selected and include multiple subsystems to evaluate, including membrane types, aeration and scouring air systems, recycle and permeate pumping systems, chemical feed systems, automation and controls.

2. Surveying and subsurface utility engineering (SUE) for $97,000. With the original plant built in the 1950s and multiple subsequent expansions and projects within a relatively congested area, there is a significant amount of buried structures, piping, and conduit. This SUE effort will help reduce potential construction conflicts and change orders.

3. Overall plant electrical survey, evaluation, and master planning for $74,000. Again, with the original plant built in the 1950s, and multiple subsequent expansions and projects, the electrical system has evolved over time. This effort will consider the overall existing electrical system of the plant and Lower Rowlett Lift Station. Improvements will be planned for replacement of end of life electrical systems, improving serviceability based on feed configuration, and coordinating backup power with planned improvements at the Lower Rowlett Lift Station. Components of electrical work completed under this project will then be coordinated with that master plan. The complete master plan would be anticipated to be incorporated between several plant and possibly Upper East Fork Interceptor System projects.

4. Geotechnical evaluation for $37,000.

5. Stakeholders' coordination for $24,000. This would include meetings or presentations for cities and permitting agencies not included in the current scope, and only if required.

6. Operation and maintenance (O&M) manuals for $87,000. This effort is over and above the equipment manufacturer's O&M manuals and includes a detailed overview for operating and maintaining the overall system added in this project, as required by TCEQ standards.
7. Operator training for $34,000. This training is additional to that provided by equipment suppliers and relates to overall system operation.
8. Factory testing for $6,000. Factory testing may be required for certain mechanical and electrical equipment components and control systems, which may require consultant's engineers to travel to manufacturer's facilities to verify.
9. Startup support for $27,000. For systems of similar complexity, new to operations staff, startup support has been provided by consultant's staff such as the Bio Actiflo system at Wilson Creek RWTP.

The total not-to-exceed fee for special services is $634,000. Therefore, this request is for authorization of $3,458,000, which is the total of the basic engineering services and special services. The ratio of engineering fee to estimated construction cost is marginally higher than typically seen for projects in this cost range, though not significantly so. This project will be among the most logistically complex efforts undertaken by the District due to the compact work area, the density of buried piping and structures on the site, and the need to maintain full treatment capacity throughout the construction process.

The NTMWD staff has reviewed the engineering fees submitted by CH2M HILL and recommends them as representative of the design and coordination effort required at this site, particularly in consideration of the complexity of construction phasing within the footprint of a fully operating plant. While slightly elevated, these fees are within the guidelines of the Consulting Engineers Council for this type of work. The services would be performed in accordance with the standard ESA.

FUNDING

Funding for this project in the amount of $3,458,000 is available in the Regional Wastewater System 2013 Construction 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 for design and construction phase services associated with the Rowlett Creek Regional Wastewater Treatment Plant Peak Flow Management Improvements, Phase 1, Project No. 328, in the not-to-exceed amount of $3,458,000. This will be an item on the regular agenda of the August 2014 Board meeting.
ROWLETT CREEK RWWTP PEAK FLOW IMPROVEMENTS
PROJECT NO. 328

PHASE 1:
INCREASE PEAK FLOW CAPACITY TO 77.5-MGD

PHASE 2:
INCREASE PEAK FLOW CAPACITY TO 95-MGD

PHASE 3:
INCREASE PEAK FLOW CAPACITY TO 120-MGD

TO NEW HEADWORKS

MBR BUILDING

17.5-mgd MBR & FINE SCREENS

BIOBASIN

NEW 100-mgd HEADWORKS

MBR BUILDING

NEW WET WET WET PUMP STATION

25-mgd MBR & FINE SCREENS

UV DISINFECTION

EFFLUENT JUNCTION EXPANSION

CHLORINE CONTACT BASIN EXPANSION

24-mgd

35-mgd

26-mgd

60-mgd

96-mgd

7/5-mgd
# NORTH TEXAS MUNICIPAL WATER DISTRICT
## WATER CONSUMPTION REPORT
### July 2014

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<td>88.1</td>
<td>53,301</td>
<td>1,776,700</td>
<td>459,793</td>
<td>87.3</td>
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Subtotal Members: 6,221,307 207,376,906 69,155,408 73.7% 7,604,549
Subtotal Customers: 1,316,928 43,897,598 14,475,125 80.0% 1,646,029
Individual Meters: 310 10,333 3,216 229 7,633 3,066

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<tr>
<td>Lavon (Conservation Pool 492.0)</td>
<td>504,454</td>
<td>16,815,133</td>
<td>5,422,947</td>
<td>90.2</td>
<td>504,454</td>
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<td>459,793</td>
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### Precipitation

<table>
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<tr>
<th>Lake Elevations</th>
<th>Precipitation</th>
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<tr>
<td></td>
<td>Lavon</td>
</tr>
<tr>
<td></td>
<td>July 2013</td>
</tr>
<tr>
<td>Maximum</td>
<td>480.41</td>
</tr>
<tr>
<td>Minimum</td>
<td>489.08</td>
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<tr>
<td>Average</td>
<td>482.54</td>
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### Total Consumption

| Total 7,538,545 | 251,284,837 | 83,633,749 | 0.0 | 9,250,807 | 93,366,805 | 83.6 |

### Lake Elevations

95.5% (113,295 acre ft) Remaining Water Right

<table>
<thead>
<tr>
<th>July 2014</th>
<th>July 2013</th>
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</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>480.41</td>
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<tr>
<td>Minimum</td>
<td>480.08</td>
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<td>Average</td>
<td>482.54</td>
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<table>
<thead>
<tr>
<th>Total Inches</th>
<th>Year to Date</th>
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<tr>
<td>5.99</td>
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### Lake Elevations

33.4% (19,138 acre ft) Remaining Water Right

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<tr>
<td>Maximum</td>
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<tr>
<td>Minimum</td>
<td>431.50</td>
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<td>Average</td>
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<table>
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<th>Year to Date</th>
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<tr>
<td>6.64</td>
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### Lake Elevations

0% (0 acre ft) Remaining Water Right

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<th>July 2013</th>
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<tbody>
<tr>
<td>Maximum</td>
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<tr>
<td>Minimum</td>
<td>427.69</td>
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<td>Average</td>
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<table>
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### Lake Elevations

90.3% (75,903 acre ft) Remaining Water Right

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<td>Minimum</td>
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<td>Average</td>
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<table>
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## Water Consumption Report

### July 2014

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<td>Abies Springs</td>
<td>6,927</td>
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<td>7,198</td>
<td>239,933</td>
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<td>Caddo Basin SUD</td>
<td>25,606</td>
<td>853,533</td>
<td>321,512</td>
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<td>34,840</td>
<td>1,161,333</td>
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<td>Cash WSC</td>
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<td>31,989</td>
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<td><strong>43,897,598</strong></td>
<td><strong>14,475,125</strong></td>
<td><strong>80.0</strong></td>
<td><strong>1,646,029</strong></td>
<td><strong>54,867,632</strong></td>
<td><strong>14,956,602</strong></td>
<td><strong>83.1</strong></td>
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## NORTH TEXAS MUNICIPAL WATER DISTRICT
### REGIONAL WASTEWATER SYSTEM FLOW REPORT
### JULY 2014

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* Report does not include nonmember city flows.
## NORTH TEXAS MUNICIPAL WATER DISTRICT

### REGIONAL WASTEWATER SYSTEM FLOW REPORT

### JULY 2014

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# NORTH TEXAS MUNICIPAL WATER DISTRICT

## SEWER SYSTEM FLOW REPORT

### JULY 2014

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# NORTH TEXAS MUNICIPAL WATER DISTRICT
## WASTEWATER QUALITY REPORT
### JULY 2014

## CARB. BIOCHEMICAL OXYGEN DEMAND

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<th>RAW INFLUENT (mg/L)</th>
<th>FINAL EFFLUENT (mg/L)</th>
<th>TCEQ LIMIT (mg/L)</th>
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<td>167.7</td>
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## SEWER SYSTEM

| BEAR CREEK                  | 108.3               | 2.2                   | 5.0               | 98.0      | 91.9                   | 0.8                   | 5.0               | 99.1        |
| BUFFALO CREEK              | 217.0               | 2.3                   | 10.0              | 98.9      | 224.0                  | 0.8                   | 15.0              | 99.6        |
| COTTONWOOD CREEK           | 155.3               | *                     | 3.6               | 10.0      | 97.7                   | 160.0                  | 3.7               | 15.0        |
| FARMERSVILLE NO. 1         | 0.0                 | 0.0                   | 10.0              | 0.0       | 0.0                    | 0.0                   | 15.0              | 0.0         |
| FARMERSVILLE NO. 2         | 114.7               | 2.7                   | 10.0              | 97.6      | 414.6                  | 3.1                   | 15.0              | 99.3        |
| MUDDY CREEK                | 161.4               | 2.2                   | 10.0              | 98.6      | 158.0                  | 0.6                   | 15.0              | 99.6        |
| PANTHER CREEK              | 174.9               | 2.2                   | 5.0               | 98.7      | 208.4                  | 0.5                   | 12.0              | 99.8        |
| ROYSE CITY                 | 0.0                 | 0.0                   | 10.0              | 0.0       | 0.0                    | 0.0                   | 15.0              | 0.0         |
| SABINE CREEK               | 127.6               | 2.6                   | 10.0              | 98.0      | 146.6                  | 2.0                   | 15.0              | 98.6        |
| SEIS LAGOS                 | 165.3               | 2.2                   | 7.0               | 98.7      | 121.6                  | 6.0                   | 15.0              | 95.1        |
| SQUABBLE CREEK             | 200.8               | 2.3                   | 5.0               | 98.9      | 185.4                  | 0.8                   | 12.0              | 99.6        |
| STEWART CREEK WEST         | 141.5               | 2.3                   | 7.0               | 98.4      | 197.2                  | 1.1                   | 15.0              | 99.4        |
| WYLIE                      | 0.0                 | 0.0                   | 10.0              | 0.0       | 0.0                    | 0.0                   | 15.0              | 0.0         |

* Final Effluent Reported as BOD5.

## AMMONIA-NITROGEN

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<td>BUFFALO CREEK</td>
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<tr>
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<tr>
<td>FARMERSVILLE NO. 2</td>
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<tr>
<td>FLOYD BRANCH</td>
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<td>MUDDY CREEK</td>
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<td>PANTHER CREEK</td>
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<td>ROYSE CITY</td>
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<td>SABINE CREEK</td>
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<tr>
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<td>SOUTH MESQUITE</td>
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<td>WYLIE</td>
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## TOTAL PHOSPHORUS

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<td>FARMERSVILLE NO. 2</td>
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### NORTH TEXAS MUNICIPAL WATER DISTRICT
REGIONAL SOLID WASTE SYSTEM
TONNAGE REPORT

**July 2014**

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CONSTRUCTION PROGRESS REPORT
FOR PROJECTS UNDERWAY
JULY 31, 2014

WATER SYSTEM

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

CONTRACTOR: BAR CONSTRUCTORS, INC.

CONTRACT DATE: JUNE 26, 2008

NOTICE TO PROCEED DATE: JULY 17, 2008

ORIGINAL COMPLETION DATE: JUNE 30, 2010

REVISED COMPLETION DATE: JANUARY 14, 2013

TIME LAPSED: 134%

BID AMOUNT: $61,316,420.00

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

CURRENT CONTRACT AMOUNT: $62,395,543.26

AMOUNT EARNED TO DATE: $62,385,543.26

% CONTRACT AMOUNT EARNED: 99%

REMARKS: The contractor has completed all major components of construction except for the sedimentation basin sludge lagoon. A discharge from the lagoon into the adjacent creek was discovered in December 2013. NTMWD technical services has constructed containment berms and installed submersible pumps to arrest the discharge, and return the leaking water back to the lagoon. In May 2014, NTMWD staff received a letter from the contractor’s attorney, Canterbury, Gooch, Surratt, Shapiro, Stein & Gaswirth, P.C., (Canterbury, Gooch) requesting a partial release of retainage while negotiations for corrective action are underway. A response letter had been sent to Canterbury, Gooch willing to consider a partial release of retainage in the amount of approximately $300,000. In July 2014, the contractor submitted a request for the partial release of retainage in the amount of $310,753. This will leave approximately $1.2 Million being retained by NTMWD. A partial release of retainage will be presented for the Board’s consideration at the August 2014 Board meeting. NTMWD staff and B&V continue to monitor the leak while negotiations continue with the contractor.

PROJECT NO. 128
LAKE TEXOMA PUMP STATION MODIFICATIONS

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

CONTRACT DATE: JANUARY 13, 2009

NOTICE TO PROCEED DATE: JANUARY 14, 2009

COMPLETION DATE: AUGUST 1, 2010

TIME LAPSED: 358%

BID AMOUNT: $6,479,702.00

CHANGE ORDERS:
1 - $37,046.13
2 - $82,126.00
3 - $51,095.85

CURRENT CONTRACT AMOUNT: $6,649,959.78

AMOUNT EARNED TO DATE: $6,419,797.53

% CONTRACT AMOUNT EARNED: 97%
REMARKS: In July 2014, the contractor disconnected and removed the 6,000 hp motors, which had been temporarily installed in order to run the motors uncoupled from the pumps. After successfully running the motors, the contractor began installing the new pumps.

PROJECT NO. 153  
WATER TREATMENT PLANTS I, II, III AND IV OZONATION  
CONTRACTOR: MCCARTHY BUILDING COMPANIES, INC.  
CHANGE ORDERS:  1 - $87,737.15  
              2 - $30,000.00  
              3 - ($48,178.06)  
              4 - $120,288.62  
              5 - $85,531.62  
              6 - $102,863.15  
              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 - ($4,756,650.01)  
             20 - $52,692.05  
             21 - $70,404.74  
             22 - $72,815.57  
             23 - $35,120.49  
             24 - $38,373.02  
             25 - $103,555.41  
             26 - ($24,697.35)  
             27 - $25,988.91  

CURRENT CONTRACT AMOUNT: $111,050,812.54  
AMOUNT EARNED TO DATE: $107,488,046.32  
% CONTRACT AMOUNT EARNED: 97%

REMARKS: The 30-day test of South Ozone Operations Building (SOPS) and WTP I and WTP II contactors are complete. McCarthy is working on deficiencies identified at North Ozone Operations Building, WTP III north and south contactors, and WTP IV contactor. A substantial completion punchlist is being developed for SOPS WTP I and WTP II contactors.

PROJECT NO. 188  
EXPAND HIGH SERVICE PUMP STATION 3-1 TO 350 MGD  
CONTRACTOR: BAR CONSTRUCTORS, INC.  
CHANGE ORDERS:  1 - $136,720.94  
Time Ext.-75 Days  
CURRENT CONTRACT AMOUNT: $7,857,298.94  
AMOUNT EARNED TO DATE: $7,851,855.34  
% CONTRACT AMOUNT EARNED: 99%
REMARKS:  Cable for the flow meter was pulled, and new flow meter sensors were installed. A walkthrough will be scheduled during the month of August to generate a punchlist.

PROJECT NO. 202
ELECTRICAL IMPROVEMENTS AT
HIGH SERVICE PUMP STATION NO. 1-1

CONTRACTOR: CRESSENT CONSTRUCTORS, INC.

CONTRACT DATE: OCTOBER 17, 2013
NOTICE TO PROCEED DATE: NOVEMBER 6, 2013
COMPLETION DATE: FEBRUARY 14, 2015

CHANGE ORDERS: 1 - $11,581.80
CURRENT CONTRACT AMOUNT: $3,548,581.80
AMOUNT EARNED TO DATE: $2,254,750.30

BID AMOUNT: $3,537,000.00

CONTRACT AMOUNT EARNED: 64%

REMARKS: All equipment housekeeping pads, both indoors and outdoors are complete. Roof material was removed to prepare for the installation of the new overhead crane in the pump room, the existing crane was removed and the new crane installed. Underground duct bank and exposed conduit installation are both 80% complete. Cable tray is 90% complete. All switchgear has arrived and installation is 95% complete.

PROJECT NO. 205
SUPERVISORY CONTROL AND DATA ACQUISITION
SYSTEM UPGRADES AND OPERATIONS

CONTRACTOR: PRIME CONTROLS, LP

CONTRACT DATE: DECEMBER 28, 2012
NOTICE TO PROCEED DATE: JANUARY 29, 2013
ORIGINAL COMPLETION DATE: JANUARY 29, 2014
REvised COMPLETION DATE: AUGUST 27, 2014

CHANGE ORDERS: 1 - $21,083.16
Time Ext.-90 Days
2 - $94,505.21
Time Ext.-120 Days

BID AMOUNT: $2,714,732.00

CURRENT CONTRACT AMOUNT: $2,830,320.37
AMOUNT EARNED TO DATE: $2,669,689.62
CONTRACT AMOUNT EARNED: 94%

TIME LAPSED: 94%

REMARKS: This project is substantially complete. HMI programming and network switch configuration are complete. Site acceptance testing is currently underway.

PROJECT NO. 210
NORTH MCKINNEY PIPELINE PHASES I AND II

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

CONTRACT DATE: JANUARY 23, 2014
NOTICE TO PROCEED DATE: FEBRUARY 26, 2014
ORIGINAL COMPLETION DATE: JANUARY 22, 2015
REvised COMPLETION DATE: FEBRUARY 21, 2015

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

BID AMOUNT: $14,741,741.22

CURRENT CONTRACT AMOUNT: $14,996,414.22
AMOUNT EARNED TO DATE: $8,581,681.24
% CONTRACT AMOUNT EARNED: 57%

TIME LAPSED: 57%

REMARKS: The contractor is currently working on the tunnel/bore along the east side of Country Club Road just south of Stacy Road. Open trench pipelaying operations continue from the north of the project.
moving south and is currently on the Heritage Ranch Golf Club property. Approximately 19,000 LF of pipe has been installed on the project.

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

BID AMOUNT: $5,364,550.00

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

TIME LAPSED: 112%

% CONTRACT AMOUNT EARNED: 100%

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

PROJECT NO. 259
WATER TREATMENT PLANT I CONVERSION TO BAF AND IMPROVEMENTS OF EXISTING UNDERDRAINS

BID AMOUNT: $7,535,625.00

CHANGE ORDERS: 1 - $181,105.96
2 - $227,024.59
3 - $28,269.20
4 - $68,145.00
5 - $104,627.00
6 - $66,374.00
7 - $152,185.00

TIME LAPSED: 66%

% CONTRACT AMOUNT EARNED: 96%

REMARKS: This project includes work in all 12 filters and 4 clarifiers at WTP I. Work is completed on Clarifier Nos. 1, 2, 3, and 4. Most filters are complete and operational except Filters Nos. 3 and 1. Most work remaining is on Filter No. 1 due to significant structural modifications.

PROJECT NO. 260
REGIONAL WATER SYSTEM WATER TREATMENT PLANT I 2.5 AND 3.0 MG RESERVOIR ROOF IMPROVEMENTS

BID AMOUNT: $564,200.00

CHANGE ORDERS: NONE

CURRENT CONTRACT AMOUNT: $564,200.00

AMOUNT EARNED TO DATE: $405,593.16

% CONTRACT AMOUNT EARNED: 72%

TIME LAPSED: 24%

REMARKS: The base sheet has been torch applied to the 2.5 MG clearwell. The following has been completed on the 3 MG clearwell: the wall around the high-service pumps has been installed, the vent
has been raised, foam blocks have been placed, the insulating concrete has been installed, and 50% of the parabase fiberglass sheet has been secured to the top concrete layer.

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)  
BID AMOUNT: $5,798,242.00  
CHANGE ORDERS: 1 - $21,538.42  
Time Ext.-2 Days  
CURRENT CONTRACT AMOUNT: $5,819,780.42  
AMOUNT EARNED TO DATE: $1,811,404.25  
% CONTRACT AMOUNT EARNED: 31%  
CONTRACTOR: MOUNTAIN CASCADE OF TEXAS, LLC  
CONTRACT DATE: DECEMBER 19, 2013  
NOTICE TO PROCEED DATE: JANUARY 14, 2014  
ORIGINAL COMPLETION DATE: DECEMBER 12, 2014  
REVISED COMPLETION DATE: DECEMBER 14, 2014  
TIME LAPSED: 40%  
REMARKS: The contractor continues to perform tunneling and boring operations. Open trench pipe installation began on May 28 and continues on the north side of Stacy Road. Approximately 2,700 LF of pipe has been installed on the project.

PROJECT NO. 268  
LAKE TEXOMA OUTFALL TO WYLIE WATER TREATMENT PLANT RAW WATER PIPELINE  
AUTHORIZED TOTAL AMOUNT TO DATE: $282,323,495.00  
AUTHORIZED EXPENDITURE TO DATE: $279,205,155.90  
CONTRACTOR: (CMAR): GARNEY CONSTRUCTION  
CMAR NOTICE TO PROCEED DATE: JUNE 29, 2012  
AMOUNT EARNED TO DATE: $275,526,968.64  
CONTRACT DATE: JANUARY 26, 2012  
COMPLETION DATE: JUNE 30, 2014  
TIME LAPSED: 100%  
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. The board approved additional funding and set the guaranteed maximum price at $282,323,495 based on the current scope for the project.

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

CONSTRUCTION  
All pipeline sections (A, B, C, D, and E) are complete and passed hydrostatic testing. Pipeline contractors are finishing work on easement restoration. The fiber optic cable contractor completed the fiber optic cable installation, it was successfully tested, and restoration work is underway. The balancing reservoir contractor successfully completed the site acceptance test, and they continue to work on miscellaneous punchlist work items. The balancing reservoir and pipeline are in service.
On the Wylie water treatment plant site, the surge tank, all four blend tanks, and all four mixing boxes are substantially complete. All four plant raw water pipelines are tied in to the new mixing boxes and blend tanks, and all Lake Lavon water now flows through the new blending facilities. Plants I, II, III, and IV successfully continue to blend Texoma water with Lavon water. Work continued in the north and south electrical buildings at Raw Water Pump Station No. 3, the reclaim electrical buildings, and other electrical buildings. Work continued on various meter vaults, flow meter installations, and miscellaneous plant piping. The electrical contractor continued work on miscellaneous items including equipment testing, setting panels, and various duct banks throughout the plant site.
## 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>1</td>
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<td>Bonds and Insurance</td>
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<td>2</td>
<td>06/06/12</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>
<td>08/16/12</td>
<td>CMAR Selected Materials &amp; Services for Pipeline</td>
<td>$10,196,849</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 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>
<td>-$9,267,129</td>
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<td>4</td>
<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>
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<td>5</td>
<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>
<td>-$7,731,918</td>
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<td>10/03/12</td>
<td>10/31/12</td>
<td>ASI Constructors constructs Balancing Reservoir</td>
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<td>$21,549,332</td>
<td>$676,664</td>
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<td>07/11/12</td>
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<td>Construction Staking</td>
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<td>Gate Valves</td>
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<td>Flow Control Ball Valve</td>
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<td>Sleeve Valves</td>
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<td>Flow Meters</td>
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<td>12/07/12</td>
<td>MV Switchgear RWPS3</td>
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<td>MV VFD RWPS3</td>
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<td>MV Primary Unit Substation RWPS3</td>
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<td>N/A</td>
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<td>Allowance for Bonds and Insurance</td>
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<tr>
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<td>N/A</td>
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<td>Allowance for Utility Conflicts</td>
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<td>$150,000</td>
<td>$0</td>
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<tr>
<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Plant I &amp; II Furnish and Install</td>
<td>$11,413,097</td>
<td>$8,550,835</td>
<td>-$2,862,262</td>
</tr>
<tr>
<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Plant III &amp; IV Furnish and Install</td>
<td>$10,913,404</td>
<td>$9,107,940</td>
<td>-$1,786,464</td>
</tr>
<tr>
<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>60’ &amp; 78’ Yard Pipe and Connections</td>
<td>$7,524,695</td>
<td>$5,368,890</td>
<td>-$2,155,805</td>
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<tr>
<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Existing Plant Chemical Feed, meters, and vaults</td>
<td>$1,694,290</td>
<td>$3,512,000</td>
<td>$1,817,710</td>
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<tr>
<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Submittals in support of Texoma Surge Tank</td>
<td>$250,000</td>
<td>$250,000</td>
<td>$0</td>
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<tr>
<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Sherman Bypass</td>
<td>$732,273</td>
<td>$392,500</td>
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<td>12/19/12</td>
<td>02/08/13</td>
<td>Electrical &amp; Instrumentation/ SCADA</td>
<td>$11,537,350</td>
<td>$12,541,700</td>
<td>$1,004,350</td>
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<tr>
<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<td>Concrete Raw Water Storage - Lake Texoma Surge Tank</td>
<td>$3,827,500</td>
<td>$2,797,653</td>
<td>-$1,029,847</td>
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<tr>
<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<td>Credit for Submittals in support of Texoma Surge Tank</td>
<td>-$250,000</td>
<td>-$250,000</td>
<td>$0</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>
<td>$4,500,000</td>
<td>$4,381,897</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 III &amp; IV</td>
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<td>11</td>
<td>03/06/13</td>
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<td>Cathodic Protection System and Implementation</td>
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<td>-$477,050</td>
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<td>11</td>
<td>03/06/13</td>
<td>06/17/13</td>
<td>Fiber Optic Cable Install</td>
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<td>$499,852</td>
<td>$57,239</td>
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<td>11</td>
<td>04/05/13</td>
<td>06/17/13</td>
<td>Pump Vibration Monitoring and Correction</td>
<td>$250,000</td>
<td>$293,000</td>
<td>$43,000</td>
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<tr>
<td>12</td>
<td>08/21/13</td>
<td>02/24/14</td>
<td>Mobile Filtration Components</td>
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<td>$397,836</td>
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<td><strong>Current Total</strong></td>
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<td>$297,982,083</td>
<td>$278,756,368</td>
<td>-$19,225,715</td>
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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

REVISED COMPLETION DATE: JUNE 25, 2014

TIME LAPPED: 120%

REMARKS: Dredging contractor pulled off site in late July due to quantity dispute. Discussions are underway for path forward.

PROJECT NO. 276
WYLIE WATER TREATMENT PLANT FINISHED WATER RESERVOIR AND 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 LAPPED: 48%

REMARKS: Several footings, wall sections, and floor sections of the 4-2 cleawell have been poured. Installation of the Plant IV ammonia feed piping is underway. Excavation has begun for the new Plant IV chemical trench that will allow the relocation of the Plant IV caustic injection point. A great deal of conduit has been installed for meters in various places. Clariflocculator Nos. 2 and 3 at WTP I have been returned to service.

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 LAPPED: 51%

REMARKS: This project includes work in all 40 filters at WTP III and Filter No. 21 at WTP II. Filters completed to date are Nos. 1-3, 8-10, and 36-40. Filter Nos. 7, 34, and 35 are under construction. Filter No. 37 has been returned to service after minor repairs were completed on the paint in the gullet. Filter No. 40 required the same paint repair as No. 37 but remains out of service due to repeated water
intrusion through a leaking drain valve. A change order is being considered so that the contractor can weld a plug over this opening to prevent future intrusion so the filter can be completed.

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

CONTRACTOR: PCL CONSTRUCTION, INC.

**CHANGE ORDERS:**
1 - $13,902.00 Time Ext.-30 Days
2 - $18,972.00 Time Ext.-30 Days
3 - $32,235.00 Time Ext.-50 Days

**BID AMOUNT:** $525,690.00

**CURRENT CONTRACT AMOUNT:** $590,799.00

**AMOUNT EARNED TO DATE:** $551,190.00

**% CONTRACT AMOUNT EARNED:** 93%

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

**REVISED COMPLETION DATE:** APRIL 25, 2014

**TIME LAPSED:** 135%

**REMARKS:** Sludge pipeline installation is 100% complete. Pipeline is currently in operation. Request for final payment was approved at the May Board meeting. Final payment will be processed upon receipt of the project close-out documents from contractor.

**PROJECT: NO. 289**
SOUTH DELIVERY POINT IMPROVEMENTS, PRIORITY NO. 2

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

**CHANGE ORDERS:**

**BID AMOUNT:** $1,488,400.00

**CURRENT CONTRACT AMOUNT:** $1,488,400.00

**AMOUNT EARNED TO DATE:** $1,274,947.04

**% CONTRACT AMOUNT EARNED:** 86%

**NOTICE TO PROCEED DATE:** DECEMBER 9, 2013

**COMPLETION DATE:** AUGUST 6, 2014

**TIME LAPSED:** 95%

**REMARKS:** During the month of July 2014, the contractor completed the construction of the electric buildings at Rose Hill and College Mound. The electrical subcontractor continues to construct the electrical equipment for vaults and electric building for all three sites. The contractor also constructed all piping and valves inside all three vaults. Contractor also continues to process submittals.

**PROJECT NO. 291**
WYLIE WATER TREATMENT PLANT
EAST GATE IMPROVEMENTS

CONTRACTOR: NORTH TEXAS CONTRACTING

**BID AMOUNT:** $1,329,563.00

**CHANGE ORDERS:** NONE

**CURRENT CONTRACT AMOUNT:** $1,329,563.00

**AMOUNT EARNED TO DATE:** $0.00

**% CONTRACT AMOUNT EARNED:** 0%

**NOTICE TO PROCEED DATE:** JUNE 23, 2014

**COMPLETION DATE:** JULY 23, 2015

**TIME LAPSED:** 9%

**REMARKS:** Road closure shutdown for Gate IV has commenced. Temporary fence was installed and utilities work for water and sewer connections to new guard house also started. Contractor will provide
temporary vehicular access through staging area laying some flex base around trailers before commencing paving demolition.

| PROJECT NO. 293 | BID AMOUNT: $2,799,680.00 | CHANGE ORDERS: 1 - $171,098.00  
| | | 2 - $18,735.00 |
| BONHAM WATER TREATMENT PLANT |  | CURRENT CONTRACT AMOUNT: $2,989,513.00  
| SLUDGE LAGOON IMPROVEMENTS |  | AMOUNT EARNED TO DATE: $2,955,256.00  
| CONTRACTOR: HARRISON WALKER & HARPER, LP |  | % CONTRACT AMOUNT EARNED: 99%  
| CONTRACT DATE: APRIL 25, 2013 |  |  
| NOTICE TO PROCEED DATE: MAY 8, 2013 |  |  
| COMPLETION DATE: APRIL 3, 2014 |  |  
| TIME LAPSED: 134% |  |  
| REMARKS: Contractor is cleaning up the area. Substantial completion walkthrough was conducted on July 30, 2014. A list of punchlist items will be provided to the contractor. |  |  |

| PROJECT NO. 296 | BID AMOUNT: $318,975.00 | CHANGE ORDERS: NONE |
| WYLIE WATER TREATMENT PLANT IMPROVEMENTS |  | CURRENT CONTRACT AMOUNT: $318,975.00  
| FOR LAGOONS 1, 2, AND 3 |  | AMOUNT EARNED TO DATE: $316,675.00  
| CONTRACTOR: PCL CONSTRUCTION, INC. |  | % CONTRACT AMOUNT EARNED: 99%  
| CONTRACT DATE: SEPTEMBER 19, 2013 |  |  
| NOTICE TO PROCEED DATE: OCTOBER 7, 2013 |  |  
| COMPLETION DATE: MAY 5, 2014 |  |  
| TIME LAPSED: 129% |  |  
| REMARKS: Both pipelines have been installed. A proposal has been requested from the contractor to connect the existing 12-inch sludge header to the new 8-inch sludge header. A change order will be presented for the Board’s consideration at the August 2014 Board meeting. |  |  |

| PROJECT: NO. 298 | BID AMOUNT: $4,902,970.00 | CHANGE ORDERS: 1 - $35,179.96  
| | | Time Ext.-45 Days  
| | | 2 - $36,937.46  
| HIGH SERVICE PUMP STATION 2-2 AND 2-3 | CURRENT CONTRACT AMOUNT: $4,975,087.42  
| ELECTRICAL IMPROVEMENTS | AMOUNT EARNED TO DATE: $527,794.25  
| CONTRACTOR: WHF ELECTRICAL CONTRACTORS, INC. | % CONTRACT AMOUNT EARNED: 11%  
| CONTRACT DATE: OCTOBER 17, 2013 |  
| NOTICE TO PROCEED DATE: NOVEMBER 7, 2013 |  
| ORIGINAL COMPLETION DATE: JUNE 5, 2015 |  
| REVISED COMPLETION DATE: JULY 20, 2015 |  
| TIME LAPSED: 42% |  |  
| REMARKS: The contractor is currently installing duct banks, concrete pads for HVAC, and electrical manholes. The electrical grounding installation is 95% complete. House power transformers have arrived onsite. |  |  |
PROJECT NO. 299
LAKE TAWAKONI WATER TREATMENT PLANT
CHLORINE DIOXIDE SYSTEM

CONTRACTOR: RED RIVER CONSTRUCTION CO.

CONTRACT DATE: JANUARY 24, 2013

NOTICE TO PROCEED DATE: MARCH 1, 2013

ORIGINAL COMPLETION DATE: SEPTEMBER 7, 2013

REVISED COMPLETION DATE: APRIL 10, 2014

TIME LAPSED: 128%

BID AMOUNT: $2,388,146.00

CHANGE ORDERS:
1 - ($16,334.38)
2 - $34,984.00
   Time Ext.-134 Days
3 - $7,920.02
   Time Ext.-80 Days

CURRENT CONTRACT AMOUNT: $2,414,715.64

AMOUNT EARNED TO DATE: $2,390,665.62

% CONTRACT AMOUNT EARNED: 99%

REMARKS: All equipment is functioning properly and the project only lacks approved O&M manuals. Authorization for final payment was approved by the Board at the July 2014 Board meeting.

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

CONTRACTOR: CRESCENT CONSTRUCTORS, INC

CONTRACT DATE: JANUARY 23, 2014

NOTICE TO PROCEED DATE: FEBRUARY 10, 2014

COMPLETION DATE: SEPTEMBER 28, 2014

REVISED COMPLETION DATE: NOVEMBER 12, 2014

TIME LAPSED: 62%

BID AMOUNT: $3,463,000.00

CHANGE ORDERS:
1 - $44,020.34
   Time Ext.-45 Days

CURRENT CONTRACT AMOUNT: $3,507,020.34

AMOUNT EARNED TO DATE: $2,541,364.65

% CONTRACT AMOUNT EARNED: 72%

REMARKS: The concrete work for the pump station is complete. The duct bank from the Operations Building to the electrical building is under construction. Select-fill has been placed for the electrical building foundation; painting is in progress; and yard and pump station piping are under construction. The berm for the lagoon has been constructed and installation of the clay liner has begun.

PROJECT NO. 314
FARMERSVILLE PUMP STATION
PUMP NO. 2

CONTRACTOR: CRESCENT CONSTRUCTORS, INC.

CONTRACT DATE: FEBRUARY 27, 2014

NOTICE TO PROCEED DATE: APRIL 14, 2014

COMPLETION DATE: NOVEMBER 10, 2014

TIME LAPSED: 51%

BID AMOUNT: $143,700.00

CHANGE ORDERS: NONE

CURRENT CONTRACT AMOUNT: $143,700.00

AMOUNT EARNED TO DATE: $4,300.00

% CONTRACT AMOUNT EARNED: 3%

REMARKS: The contractor continues the submittal process. The pump is expected to arrive onsite in October 2014.
### 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:** 96%

**REMARKS:** This project is complete.

**BID AMOUNT:** $250,000.00

**CHANGE ORDERS:** 1 - $2,395.53

**CURRENT CONTRACT AMOUNT:** $252,395.53

**AMOUNT EARNED TO DATE:** $252,395.53

**CONTRACT AMOUNT EARNED:** 100%

---

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

**CONTRACTOR:** BAR CONSTRUCTORS, INC.

**CONTRACT DATE:** OCTOBER 17, 2013

**NOTICE TO PROCEED DATE:** NOVEMBER 4, 2013

**ORIGINAL COMPLETION DATE:** JANUARY 22, 2015

**REVISED COMPLETION DATE:** FEBRUARY 7, 2015

**TIME LAPSED:** 61%

**REMARKS:** The floor of Basin No. 4 is complete; the baffle wall is complete with the exception of a space to allow equipment through; and the troughs are being installed. The connection of the drain lines to the sludge drain vault has been completed and the sludge valves have been replaced in the sludge drain vaults for both basins. Demolition of the floor in Basin No. 3 has begun in the area south of the Basin No. 2 ozone contactor. The remainder of the Basin No. 3 floor may not be removed until Basin No. 2 can be drained to relieve pressure on the common wall to prevent deflection. Excavation and drilling of holes for all circular clarifier center piers have been completed.

**BID AMOUNT:** $5,447,036.00

**CHANGE ORDERS:** 1 - $21,637.00

2 - ($30,179.23)

Time Ext.-16 Days

**CURRENT CONTRACT AMOUNT:** $5,438,493.77

**AMOUNT EARNED TO DATE:** $3,214,767.83

**% CONTRACT AMOUNT EARNED:** 59%

---

### PROJECT NO. 323
**WYLIE WATER TREATMENT PLANT III VARIABLE FREQUENCY DRIVES FOR WASHWATER PUMPS**

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

**CONTRACT DATE:** APRIL 24, 2014

**NOTICE TO PROCEED DATE:** MAY 5, 2014

**COMPLETION DATE:** JULY 4, 2015

**TIME LAPSED:** 22%

**REMARKS:** The contractor is in the process of preparing submittals for equipment to be incorporated into the project.

**BID AMOUNT:** $634,047.00

**CHANGE ORDERS:** NONE

**CURRENT CONTRACT AMOUNT:** $634,047.00

**AMOUNT EARNED TO DATE:** $0.00

**% CONTRACT AMOUNT EARNED:** 0%
WASTEWATER SYSTEM

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

BID AMOUNT: $605,115.00
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $605,115.00
AMOUNT EARNED TO DATE: $597,060.00
% CONTRACT AMOUNT EARNED: 99%

CONTRACTOR: LEGACY CONTRACTING, LP

CONTRACT DATE: SEPTEMBER 19, 2013
NOTICE TO PROCEED DATE: NOVEMBER 12, 2013
COMPLETION DATE: JULY 10, 2014
TIME LAPSED: 109%

REMARKS: Contractor has installed all electrical and instrumentation equipment, made the physical connection in the vault, and tested the operation of the slide gate. The contractor has submitted O&M manuals for the equipment and is in process of final testing of the gate operation from the Wilson Creek RWWTP control room. Site restoration work has been completed except for establishing vegetation.

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

BID AMOUNT: $3,099,488.48
CHANGE ORDERS: 1 - $142,269.74
   - Time Ext.-25 Days
   2 - (41,368.09)
      - Time Ext.-30 Days
   3 - $156,961.76
     - Time Ext.-161 Days

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: SEPTEMBER 28, 2014
TIME LAPSED: 89%

CURRENT CONTRACT AMOUNT: $3,357,351.91
AMOUNT EARNED TO DATE: $3,319,632.15
% CONTRACT AMOUNT EARNED: 99%

REMARKS: S.J. Louis installed the 20-inch plug valve on the existing force main using two line stops. S.J. Louis also continued restoration.

PROJECT NO. 227B
UPPER WHITE ROCK CREEK LIFT STATION IMPROVEMENTS

BID AMOUNT: $2,060,950.00
CHANGE ORDERS: 1 - ($219,000.00)
   - Time Ext.-98 Days
   2 - $176,041.56

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: 93%

CURRENT CONTRACT AMOUNT: $2,017,991.56
AMOUNT EARNED TO DATE: $1,154,279.59
% CONTRACT AMOUNT EARNED: 57%

REMARKS: Archer Western continued electrical improvements and restoration.
PROJECT NO. 228
COTTONWOOD CREEK OUTFALL SEWER IMPROVEMENTS
BID AMOUNT: $2,686,876.00
CHANGE ORDERS: 1 - $24,896.50
CURRENT CONTRACT AMOUNT: $2,711,772.50
AMOUNT EARNED TO DATE: $2,543,958.75
% CONTRACT AMOUNT EARNED: 94%

CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC
CONTRACT DATE: NOVEMBER 15, 2012
NOTICE TO PROCEED DATE: DECEMBER 12, 2012
COMPLETION DATE: DECEMBER 17, 2013
TIME LAPSED: 161%

REMARKS: Insituform continued manhole testing and restoration.

PROJECT NO. 245
UPPER ROWLETT CREEK LIFT STATION
FLOW METERING IMPROVEMENTS
BID AMOUNT: $2,070,000.00
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $2,070,000.00
AMOUNT EARNED TO DATE: $2,033,334.50
% CONTRACT AMOUNT EARNED: 98%

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC
CONTRACT DATE: SEPTEMBER 19, 2013
NOTICE TO PROCEED DATE: OCTOBER 22, 2013
COMPLETION DATE: SEPTEMBER 17, 2014
TIME LAPSED: 96%

REMARKS: Contractor has completed the mechanical and electrical work. The excavation for construction of the meter vault has been completely backfilled. The magnetic flow meters have been verified and are in use. Site restoration work is in progress.

PROJECT NO. 254
SOUTH MESQUITE RWWT P
ELECTRICAL IMPROVEMENTS
BID AMOUNT: $4,664,000.00
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $4,664,000.00
AMOUNT EARNED TO DATE: $4,407,770.00
% CONTRACT AMOUNT EARNED: 92%

CONTRACTOR: ACME ELECTRIC COMPANY
CONTRACT DATE: JANUARY 24, 2013
NOTICE TO PROCEED DATE: JANUARY 29, 2013
COMPLETION DATE: FEBRUARY 28, 2014
TIME LAPSED: 131%

REMARKS: No pay application presented to the NTMWD this month. Generator load bank tested, switchgear relays set, tested. Preliminary training was held for both generator and switchgear.
PROJECT NO. 255F
FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM
FORNEY LIFT STATION IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: AUGUST 22, 2013
NOTICE TO PROCEED: SEPTEMBER 9, 2013
COMPLETION DATE: AUGUST 5, 2014
REVISED COMPLETION DATE: SEPTEMBER 27, 2014

TIME LAPSED: 85%

REMARKS: Archer Western has installed and tested new Pump No. 2. They continued installing the exhaust and supply fans, and ductwork. Their electrical subcontractor continued installing conduit and wire. Their control subcontractor tested the PLC program for controlling new Pump No. 2.

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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: 60%

REMARKS: Gracon Construction has formed and poured the electrical building slab and transformer slab. They are installing the CMU walls and fiberglass doors for the electrical building. Their electrical subcontractor finished installing the medium voltage duct banks to the electrical building and continued installing the duct banks to the aeration basins.

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PROJECT NO. 278
WILSON CREEK GRAVITY INTERCEPTOR IMPROVEMENTS PHASE 1

CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC

CONTRACT DATE: AUGUST 22, 2013
NOTICE TO PROCEED DATE: SEPTEMBER 11, 2013
COMPLETION DATE: JUNE 8, 2014
REVISED COMPLETION DATE: NOVEMBER 5, 2014

TIME LAPSED: 77%

REMARKS: Insituform completed 6,568 linear feet of cleaning and CCTV inspection of the existing interceptor. Insituform also made improvements to 10 manholes, and also continued fusing of the HDPE bypass piping.
PROJECT NO. 279
UPPER EAST FORK INTERCEPTOR SYSTEM
FUGITIVE EMISSIONS CONTROL

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: DECEMBER 19, 2013

NOTICE TO PROCEED DATE: JANUARY 13, 2014

COMPLETION DATE: DECEMBER 9, 2014

TIME LAPPED: 62%

REMARKS: Contractor has installed the underground air duct piping for the Rowlett-Cottonwood Transfer Sewer site located in Allen. Odor control vessels have been delivered to the site. Electrical duct bank has been installed for new electrical service to the site.

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

CONTRACTOR: ASSOCIATED CONSTRUCTION PARTNERS

CONTRACT DATE: MAY 23, 2013

NOTICE TO PROCEED: JUNE 19, 2012

COMPLETION DATE: JUNE 14, 2014

REVISED COMPLETION DATE: SEPTEMBER 20, 2014

TIME LAPPED: 89%

REMARKS: Associated Construction Partners (ACP) finished installing wear plates in Sludge Loading Bay Area No. 1. They are installing the wear plates in Sludge Loading Bay Area No. 2. ACP is installing the odor control equipment, and chemical piping for the bulk chemical tanks. Their electrical subcontractor continued installing above ground conduits, control panels, and wire.

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

CONTRACTOR: BIG SKY CONSTRUCTION CO.

CONTRACT DATE: DECEMBER 19, 2013

NOTICE TO PROCEED: JANUARY 22, 2014

FINAL COMPLETION DATE: DECEMBER 18, 2014

TIME LAPPED: 56%

REMARKS: Big Sky finished installing the roofing system and domestic waterlines. They continued installing the CMU wall, interior metal framing, and HVAC ductwork. Their electrical subcontractor is installing the interior conduit.
PROJECT NO. 300
ASAP GRAVITY INTERCEPTOR IMPROVEMENTS, SECTION 2 AND 3

CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC

CONTRACT DATE: OCTOBER 17, 2013

NOTICE TO PROCEED DATE: NOVEMBER 19, 2013

COMPLETION DATE: JULY 17, 2014

TIME LAPSED: 106%

REMARKS: To date, Insituform installed 4,743 linear feet of 27-inch cured-in-place pipe, 798 linear feet of 33-inch cured-in-place pipe, 3,602 linear feet of 42-inch cured-in-place pipe, completed improvements to 25 manholes, and began the exterior coating for the aerial crossings.

PROJECT NO. 311
UPPER EAST FORK INTERCEPTOR SYSTEM MANHOLE IMPROVEMENTS

CONTRACTOR: FUQUAY, INC.

CONTRACT DATE: DECEMBER 19, 2013

NOTICE TO PROCEED DATE: JANUARY 14, 2014

COMPLETION DATE: JULY 13, 2014

TIME LAPSED: 110%

REMARKS: To date, Fuquay completed coating of 61 manholes on the West Rowlett Creek Trunk Sewer Sections 1 and 2, Indian Creek interceptor, and Richardson Spring Creek Trunk Sewer.

SOLID WASTE SYSTEM

PROJECT NO. 233
121 REGIONAL DISPOSAL FACILITY
FLEET MAINTENANCE WELD SHOP

CONTRACTOR: TEGRITY CONTRACTORS, INC.

CONTRACT DATE: JULY 25, 2013

NOTICE TO PROCEED: AUGUST 28, 2013

COMPLETION DATE: MAY 25, 2014

TIME LAPSED: 123%

REMARKS: Waterline for the fire loop is installed. Pre-fab metal building is ordered. Bridge crane is ordered. Currently awaiting a proposal from the contractor to install the additional work for the fire protection system.
PROJECT NO. 331  
CUSTER ROAD TRANSFER STATION  
TIPPING FLOOR IMPROVEMENTS  

BID AMOUNT: $526,390.00  
CHANGE ORDERS: NONE  
CURRENT CONTRACT AMOUNT: $526,390.00  
AMOUNT EARNED TO DATE: $500,078.50  
CONTRACT AMOUNT EARNED: 95%  

CONTRACTOR: NORTH TEXAS CONTRACTING, INC.  

NOTICE TO PROCEED: FEBRUARY 27, 2014  

NOTICE TO PROCEED: MARCH 17, 2014  

COMPLETION DATE: OCTOBER 13, 2014  

TIME LAPSED: 62%  

REMARKS: Demolition of the west tipping floor is complete. The contractor is currently installing concrete forms and steel reinforcement in preparation to pour the west floor.

<table>
<thead>
<tr>
<th>TOTAL VALUE - ALL PROJECTS</th>
<th>$593,758,036.67</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL EARNED - ALL PROJECTS</td>
<td>$537,374,749.02</td>
</tr>
<tr>
<td></td>
<td>91%</td>
</tr>
</tbody>
</table>
### NORTH TEXAS MUNICIPAL WATER DISTRICT
ENVIRONMENTAL COMPLIANCE REPORT

July 2014

<table>
<thead>
<tr>
<th>MONTHLY SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of NACWA Platinum Awards: 2</td>
</tr>
<tr>
<td>Total Number of NACWA Gold Awards: 4</td>
</tr>
<tr>
<td>Total Number of NACWA Silver Awards: 6</td>
</tr>
<tr>
<td>Total Number of TCEQ/EPA inspections: 2</td>
</tr>
<tr>
<td>Total Number of Self-Reported Violations: 2</td>
</tr>
<tr>
<td>Total Number of Unauthorized Discharges/Spills: 4</td>
</tr>
<tr>
<td>Total Number of Complaints Received: 5</td>
</tr>
<tr>
<td>Total Number of Fire Marshal inspections: 22</td>
</tr>
<tr>
<td>Total Number of Stormwater Inspections: 0</td>
</tr>
</tbody>
</table>

**Significant Event(s):**
Caustic Spill on July 22-23, 2014, at the Wylie facility. NTMWD received notice from Texas Commission on Environmental Quality (TCEQ) of enforcement action related to this spill because the material left the facility.

**Positive Efforts:**
The permits issued by the TCEQ are done so in order to protect the quality of the water in our national streams, waterways, and lakes. For their efforts and achievements in protecting this most valuable natural resource, the personnel of the Wastewater System that operate the award winning treatment plants are to be congratulated and will be recognized at the August 2014 Board meeting.

### AWARDS / RECOGNITIONS

**National Association of Clean Water Agencies (NACWA) Peak Performance Awards for 2013**

**Silver Award:** Facilities that received not more than 5 National Pollutant Discharge Elimination System (NPDES) permit violations:
- Farmersville WWTP
- Floyd Branch RWWTP
- Muddy Creek WWTP
- Rowlett Creek RWWTP
- South Mesquite Creek RWWTP
- Squabble Creek WWTP

**Gold Award:** Facilities that achieved 100% compliance with their NPDES permit:
- Bear Creek WWTP
- Buffalo Creek WWTP
- Stewart Creek West WWTP
- Panther Creek WWTP
Platinum Award: Facilities that received consecutive Gold Awards:
- Platinum 9 Award: Seis Lagos WWTP (9 consecutive years achieving 100% compliance with the NPDES permit)
- Platinum 12 Award: Cottonwood WWTP (12 consecutive years achieving 100% compliance with the NPDES permit)

<table>
<thead>
<tr>
<th>TCEQ / EPA Inspections Conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System:</strong> Solid Waste</td>
</tr>
<tr>
<td><strong>Facility:</strong> 121 RDF</td>
</tr>
<tr>
<td><strong>Date of Inspection:</strong> July 9, 2014</td>
</tr>
<tr>
<td><strong>Type of Inspection:</strong> TCEQ Audit Methane Monitoring Inspection (Observe quarterly landfill gas monitoring for compliance with landfill gas monitoring plan)</td>
</tr>
<tr>
<td><strong>RESULTS:</strong> Exit Interview form received August 5, 2014. Form noted alleged notice of violation resolved due to not monitoring utility gas vents along a portion of the permit boundary. NTMWD agreed to monitor those vents going forward until a permit modification is approved that will remove them from the monitoring requirement. There was also another item noted where NTMWD was requested to wear a hard hat and safety glasses when performing the monitoring as noted in the gas monitoring plan.</td>
</tr>
</tbody>
</table>

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| **System:** Wastewater |
| **Facility:** Seis Lagos |
| **Date of Inspection:** July 14, 2014 |
| **Type of Inspection:** Permit Compliance Inspection |
| **RESULTS:** No non-conformances were identified during the inspection. |
Self-Reported Violations

System: Wastewater
Facility: Stewart Creek West WWTP (Reclaimed water)
Date of Violation: June 2014
Type of Violation: Frequency of Analysis

RESULTS:
Turbidity analysis is required twice per week. One week had only a single turbidity analysis performed. The violation was reported on the June 2014 Discharge Monitoring Report submitted in July 2014.

System: Wastewater
Facility: Bear Creek WWTP
Date of Violation: June 2014
Type of Violation: 7 Day Maximum Value Exceeded

RESULTS:
The 7 day maximum permit limit for Total Suspended Solids is 10 mg/L. The 7 day maximum value observed was 13.2 mg/L, which exceeds the permitted limit. The violation was reported on the June 2014 Discharge Monitoring Report submitted in July 2014.
NORTH TEXAS MUNICIPAL WATER DISTRICT
ENVIRONMENTAL COMPLIANCE REPORT

July 2014

Unauthorized Discharge / Chemical Spill

System: Water
Facility: Water Treatment Plant II
Date of Discharge / Spill: July 22-23, 2014
Type of Discharge / Spill: 1,680 gallons of sodium hydroxide

RESULTS:
TCEQ and EPA were timely notified and both agencies visited the site. The cause of the spill has been attributed to a broken pipe and operator error. Offsite consequences necessitated ongoing cleanup of the drainage ditch extending approximately 0.5 miles offsite. The spill resulted in the death of approximately 12 crawfish, 1 minnow, 2 frogs and a snake. Onsite cleanup activities are continuing and cannot be completed until the chemical pipeline is replaced. NTMWD has been notified by TCEQ of enforcement action due to the spill leaving the facility. The maximum fine is $25,000 per day and this is a two-day event.

System: Wastewater
Facility: Mustang Creek Interceptor
Date of Discharge / Spill: July 16, 2014
Type of Discharge / Spill: 110 gallons of wastewater

RESULTS:
During the process of placing a new force main pipeline in service, an air release valve did not close completely resulting in a discharge of wastewater approximately ½ mile due east of the South Mesquite RWWTP. The spill was contained before entering any waterway. TCEQ was notified.
NORTH TEXAS MUNICIPAL WATER DISTRICT
ENVIRONMENTAL COMPLIANCE REPORT

July 2014

System: Wastewater
Facility: South Mesquite RWTP

Date of Discharge / Spill: July 22, 2014
Type of Discharge / Spill: 20 gallons of polyacrylamide polymer

RESULTS:
The polymer fill line on the west side of the polymer bulk storage area was not capped off, which resulted in the spill. The area was remediated and the soil disposed at the Skyline Landfill. Volume of spilled material was less than the reportable quantity per consultation with NTMWD attorney.

System: Wastewater
Facility: Muddy Creek WWTP

Date of Discharge / Spill: July 31, 2014
Type of Discharge / Spill: 2,638 gallons of wastewater

RESULTS:
The spill was the result of a failed level controller in the bar screen that stopped the bar screen from functioning. Debris collected on the screen reduced flow-through capacity by an estimated 20%. It is believed that the level controller was damaged by lightning during an electrical storm just prior to the spill event. NTMWD utilized temporary pumps to recover an estimated 150 gallons of material that had not been absorbed into the ground and discharged the material back into the wastewater treatment process. The damaged level controller was replaced. TCEQ was notified.
## Complaints Received

<table>
<thead>
<tr>
<th>System</th>
<th>Facility</th>
<th>Date of Complaint</th>
<th>Complaint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Waste</td>
<td>Custer Road Transfer Station</td>
<td>July 2, 2014</td>
<td>Scale Operator was allegedly rude during processing and radio in background was too loud.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>RESOLUTION:</strong> Supervisor spoke with Scale Operator and requested he make sure that the radio is only loud enough for him to hear.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>Parkway Transfer Station</td>
<td>July 9, 2014</td>
<td>Odor</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><strong>RESOLUTION:</strong> Two very odorous loads arrived approximately 30 minutes prior to the complaint. Site personnel washed the facility floor and increased the frequency of the odor management system for the remainder of the day.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wastewater</td>
<td>Upper East Fork Interceptor (manholes near Vail Drive/ Circleview Ct in Plano)</td>
<td>July 8 &amp; 9, 2014</td>
<td>Sewage odor in homes and neighborhood</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>RESOLUTION:</strong> NTMWD personnel responded to the complaint and investigated the area on July 8. A cracked City of Plano manhole was determined to be the source of the odor. The cracks were temporarily sealed by NTMWD with permanent repairs performed by the City of Plano on July 9.</td>
</tr>
</tbody>
</table>
System: Wastewater

Facility: Upper East Fork Interceptor (Hwy. 5 & Chaparral Dr. in Plano)

Date of Complaint: July 15, 2014

Complaint: Sewage odor near the Upper Rowlett Creek Lift Station

RESOLUTION:
NTMWD personnel responded to the complaint and investigated the area. Four manholes west of the lift station were not sealed. The manholes were sealed and no further odors were detected.

System: Wastewater

Facility: Upper East Fork Interceptor (Heritage Ranch in Fairview)

Date of Complaint: July 30, 2014

Complaint: Sewage odor near home for approximately 1 hour

RESOLUTION:
NTMWD personnel responded to the complaint and investigated the area. No odors were detected at the time of the investigation. It is speculated that a nearby septic tank on Stacy Road was the source of the odor.

Fire Marshal Inspection

System: Administration

Facility: Administration Building

Date of Inspection: July 10, 2014

RESULTS: Passed
System: Water

Facilities: Chemical Building I, Chemical Building II, Chemical Building A, Chlorine Storage Building I, Chlorine Storage Building B, High Service Pump Station 3-1, Raw Water II, Plant IV

Date of Inspection: July 10, 2014

RESULTS: Passed

System: Water

Facility: Operations Building

Date of Inspection: July 10, 2014

RESULTS: Failed due to issue with electronic access card in k Knox box. The issue has been resolved.

System: Water

Facility: South Operations Building (Ozone)

Date of Inspection: July 10, 2014

RESULTS: Failed due to missing ceiling tiles. The building is still under construction and has not been turned over to NTMWD.

System: Water

Facility: North Operations Building (Ozone)

Date of Inspection: July 10, 2014

RESULTS: Failed due to the following: self-closure on computer needs adjustment; FM200 fire alarm system expired; fire sprinkler system needs annual inspection; requires annual fire alarm inspection; missing concealed head wrench; and FM200 tank expired.
NORTH TEXAS MUNICIPAL WATER DISTRICT
ENVIRONMENTAL COMPLIANCE REPORT

July 2014

System: Water
Facilities: Raw Water I, Raw Water III
Date of Inspection: July 10, 2014

RESULTS: Failed due to the following: master key not provided and gate access for fire department emergency personnel not provided.

System: Water
Facility: Environmental Services Building
Date of Inspection: July 10, 2014

RESULTS: Failed as the fire sprinkler system and fire alarm system needed annual inspections performed. The required annual inspections have been completed and the issues resolved.

System: Maintenance (Facility Services)
Facilities: Paint/Carpentry Building, Facility Services Building, Maintenance Storage Building
Date of Inspection: July 10, 2014

RESULTS: Passed

System: Maintenance (Technical Services)
Facility: Technical Services Building
Date of Inspection: July 10, 2014

RESULTS: Failed due to sprinkler discrepancies – need to add sprinkler heads in the shop Assistant Supervisor offices.
NORTH TEXAS MUNICIPAL WATER DISTRICT
ENVIRONMENTAL COMPLIANCE REPORT

July 2014

System: Solid Waste

Facility: Service Center

Date of Inspection: July 10, 2014

RESULTS: Passed

System: Wastewater

Facility: Muddy Creek WWTP

Date of Inspection: July 10, 2014

RESULTS: Failed due to need to provide gate access for fire department emergency personnel. The situation has been resolved.

<table>
<thead>
<tr>
<th>City Stormwater Inspection</th>
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System: NA

Facility: NA

Date of Inspection: NA

Type of Inspection: NA

RESULTS: NA