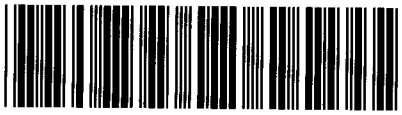

Control Number: 43001

Item Number: 6

Addendum StartPage: 0

House Bill (HB) 1600 and Senate Bill (SB) 567 83rd Legislature, Regular Session, transferred the functions relating to the economic regulation of water and sewer utilities from the TCEQ to the PUC effective September 1, 2014.

TCEQ Interoffice Memorandum

43001

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2014 SEP 18 AM 9:45

PUBLIC UTILITY COMMISSION
FILING CLERK

To: Debbie Reyes Tamayo
Utilities Financial Review

From: Fred Bednarski III
Utilities Financial Review

Thru: Lisa Fuentes
Utilities Financial Review

Date: May 30, 2014

Subject: Application from Curtis D. Logan dba L and T Waterworks, LLC, A2017, to Acquire Facilities and Transfer Certificate of Convenience and Necessity (CCN) No. 12993 held by W.R. Coffey dba Athens Land Company in Henderson County; Application No. 37826-S

CN: 600708051; RN: 101243624 (WR Coffey dba Athens Land Comapny)
CN: 604520673; RN: 107111874 (Curtis D. Logan dba L and T Waterworks, LLC)

In my opinion, Curtis D. Logan dba L and T Waterworks, LLC has demonstrated adequate financial and managerial capability to provide service to the area subject to this application. These conclusions are based on information provided by the applicant prior to this date and may not reflect any changes in the applicant's status subsequent to this date.

Curtis D. Logan dba L and T Waterworks, LLC submitted an application with the Texas Commission on Environmental Quality to acquire facilities and transfer certificate of convenience and necessity (CCN) No. 12993 held by W.R. Coffey dba Athens Land Company in Henderson County. This transactions proposed service area is located approximately 5.8 miles northwest of downtown Athens, Texas and is generally bounded on the north by CR 3913; on the east by Highway 19; on the south by US 175; and on the west by the City of Eustace. The total area being requested includes approximately 516 acres and serves 83 current customers and will not effect the current customers' rates and services.

The operator of and owner of L and T Waterworks, LLC, Curtis D. Logan has 20 years of working in the water field. He has a class A license and was the operator of WR Coffey dba Athens Land and Company. He is receiving this system at no cost from the estate of William R Coffey. Mr. Logan has been working in the surface, waste, and ground water field for 20 years. He worked for the City of Athens for 17 years, Poynor Water Supply for 16 years, and currently works for the City of Palestine going on 4 years. Mr. Logan is obtaining the system for $0.00. L and T Waterworks' projected assets total $320,000 and liabilities total $0.00. Annually net income is projected to be approximately $18,000 for the next 5 years. Additionally, for initial cash flow purposes, Mr. Logan will fund the system, if necessary, from his monthly income of $2,324.60 for services provided to the City of Palestine as well as from his livestock business which generates approximately $32,000 a year.

House Bill (HB) 1600 and Senate Bill (SB) 567 83rd Legislature, Regular Session, transferred the functions and records relating to the economic regulation of water and sewer utilities from the TCEQ to the PUC effective September 1, 2014.

Central Records Personally Identifiable Information Audit

NOTICE OF REDACTION

Documents containing Personally Identifiable Information* have been redacted from electronic posting, in accordance with Texas privacy statutes.

*"Personally Identifiable Information" (PII) is defined to include information that alone or in conjunction with other information identifies an individual, including an individual's: Social security or employer taxpayer identification number, driver's license number, government-issued identification card number, or passport numbers, checking and savings account numbers, credit card numbers, debit card numbers, unique electronic identification number, address, or routing code, electronic mail names or addresses, internet account numbers, or internet identification names, digital signatures, unique biometric data, and mother's maiden name, marriage and any other numbers or information used to access an individual's financial account.

☞ PLEASE ANSWER QUESTIONS 17 THROUGH 22 ON A DIFFERENT SHEET FOR EACH PHYSICALLY DISTINCT SYSTEM BEING TRANSFERRED OR ACQUIRED

17. A. For Water Systems. TCEQ Public Water System Identification Number: 1 0 7 0 2 3 5

Date of last inspection: 03/11/2013

B. For Wastewater Systems:

-TCEQ Discharge Permit Number: W Q -
-Name of Permitee: N/A
-Date of application to transfer Discharge Permit submitted:
-Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ standards? ☐ Yes ☑ No. If yes, please explain:

B. Is there a moratorium on new connections? ☐ Yes ☑ No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ standards (attach additional sheets if necessary):

Description of the Required Improvement	Schedule to Complete	Estimated Cost
N/A		

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? ☐ Yes ☑ No

If yes, indicate the number of customers within the city limits or district boundaries:
☐ Water ☐ Sewer

☞ **Attach copy of franchise agreement or consent letter from the city or district.**

20. Do you currently purchase water or sewer treatment capacity from another source? ☐ Yes ☑ No

Water Sewer Purchased on a Regular Seasonal Emergency Basis

- Source: % of total supply:

21. List the number of existing connections to be effected by this transaction.

Water				Sewer	
	-Non Metered		-2"meter	-Residential Connection	
	-5/8" or 3/4" meter		-3" meter	-Commercial Connection	
	-1" meter		-4" meter	-Industrial Connection	
	-1 1/2" meter		-Other	-Other	
	Total Water Connections:			Total Sewer Connections	

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? [ ] Yes [✓] No
If yes, please explain what steps are being taken to address the capacity issues:

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

Name	Class	License#

24. Attach the following maps with each copy of the application:
   a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
   b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
      1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
      2. A map showing only the proposed area by:
         i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
         ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
         iii. following verifiable natural and man-made landmarks, or
         iv. a copy of recorded plat map with metes and bounds.
      3. A written description of the proposed service area

OATH FOR SELLER OR FORMER SERVICE PROVIDER

STATE OF Texas

COUNTY OF Henderson

I, Timothy W Coffey ,being duly sworn, file this application for sale, lease, rental or merger or consolidation as Independent Exector of the will for William R (WR) Coffey (***indicate relationship to applicant***) that is, owner, member of partnership, title as officer of corporation, or other authorized representative of applicant); that, in such capacity, I am qualified and authorized to file and verify such application, am personally familiar with the documents filed with this application, and have complied with all the requirements contained in the application; and, that all such statements made and matters set forth therein with respect to applicant are true and correct. Statements about other parties are made on information and belief. I further state that the application is made in good faith and that this application does not duplicate any filing presently before the Commission.

I further state that I have provided to the purchaser or transferee a written disclosure statement about any contributed property as required under Section 13.301(j) and copies of any outstanding Orders of the Commission or Attorney General and have also complied with the notice requirements in Section 13.301(k) of the Water Code.

Timothy W. Coffey

AFFIANT
(Utility's Authorized Representative)

If the Affiant to this form is any person other than the sole owner, partner, officer of the Applicant, or its attorney, a properly verified Power of Attorney must be enclosed.

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the State of Texas, day [redacted] of [redacted] 20[redacted].

SEAL

GINGER FRANKLIN
Notary Public, State of Texas
My Commission Expires
July 12, 2016

Ginger Franklin

NOTARY PUBLIC IN AND FOR THE
STATE OF TEXAS

Ginger Franklin

PRINT OR TYPE NAME OF NOTARY

MY COMMISSION EXPIRES 7-12-16

One copy of this page must be submitted for each utility involved in this transaction.

RECEIVED
DEC 23 2013
UTILITIES & DISTRICTS
SECTION

OATH FOR PURCHASER OR ACQUIRING ENTITY

STATE OF Texas

COUNTY OF Henderson

I, L and T Waterworks, LLC - Curtis Logan ,being duly sworn, file this application for

sale, lease, rental or merger or consolidation as Athens Water System - Owner
(indicate relationship to applicant) that is, owner, member of partnership, title as officer of corporation, or other authorized representative of applicant); that, in such capacity, I am qualified and authorized to file and verify such application, am personally familiar with the documents filed with this application, and have complied with all the requirements contained in the application; and, that all such statements made and matters set forth therein with respect to applicant are true and correct. Statements about other parties are made on information and belief. I further state that the application is made in good faith and that this application does not duplicate any filing presently before the Commission.

I am also authorized and do agree to be bound by and comply with any outstanding orders of the Commission or the Attorney General which have been issued to the system or facilities being acquired and recognize that I will be subject to administrative penalties or other enforcement actions if I do not comply.

Curtis Logan
AFFIANT
(Utility's Authorized Representative)

If the Affiant to this form is any person other than the sole owner, partner, officer of the Applicant, or its attorney, a properly verified Power of Attorney must be enclosed.

Applicant represents that all other parties to this transaction have been furnished copies of this completed application.

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the State of Texas, day 6th of November, 20 [redacted] .

SEAL

TERESA D. HERRERA
MY COMMISSION EXPIRES
March 9, 2015

Teresa D. Herrera
NOTARY PUBLIC IN AND FOR THE
STATE OF TEXAS

TERESA D. HERRERA
PRINT OR TYPE NAME OF NOTARY

MY COMMISSION EXPIRES March 9, 2013

One copy of this page must be submitted for each utility involved in this transaction.

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DEC 23 2013
UTILITIES & DISTRICTS
SECTION

SECTION 1.0 -- RATE SCHEDULE

Section 1.01 - Rates

Meter Size	Monthly Minimum Charge	Gallonage Charge
5/8" or 3/4"	$26.00 (Includes 1,000 gallons)	$4.00 per 1000 gallons, over the minimum

FORM OF PAYMENT: The utility will accept the following forms of payment:
Cash X, Check X, Money Order X, Credit Card_____, Other (specify)_____
THE UTILITY MAY REQUIRE EXACT CHANGE FOR PAYMENTS AND MAY REFUSE TO ACCEPT PAYMENTS MADE USING MORE THAN $1.00 IN SMALL COINS. A WRITTEN RECEIPT WILL BE GIVEN FOR CASH PAYMENTS.

REGULATORY ASSESSMENT 1.0%
TCEQ RULES REQUIRE THE UTILITY TO COLLECT A FEE OF ONE PERCENT OF THE RETAIL MONTHLY BILL.

Section 1.02 - Miscellaneous Fees

TAP FEE $600.00
TAP FEE COVERS THE UTILITY'S COSTS FOR MATERIALS AND LABOR TO INSTALL A STANDARD RESIDENTIAL 5/8" or 3/4" METER. AN ADDITIONAL FEE TO COVER UNIQUE COSTS IS PERMITTED IF LISTED ON THIS TARIFF.

TAP FEE (Unique costs) ..... Actual Cost
FOR EXAMPLE, A ROAD BORE FOR CUSTOMERS OUTSIDE OF SUBDIVISIONS OR RESIDENTIAL AREAS.

TAP FEE (Large meter) ..... Actual Cost
TAP FEE IS THE UTILITY'S ACTUAL COST FOR MATERIALS AND LABOR FOR METER SIZE INSTALLED.

METER RELOCATION FEE ..... Actual Relocation Cost, Not to Exceed Tap Fee
THIS FEE MAY BE CHARGED IF A CUSTOMER REQUESTS THAT AN EXISTING METER BE RELOCATED.

RATES LISTED ARE EFFECTIVE ONLY
IF THIS PAGE HAS TCEQ APPROVAL STAMP

TEXAS COMM. ON ENVIRONMENTAL QUALITY
35338-G, CCN 12993, MARCH 30, 2007
APPROVED TARIFF BY SP/KA

SECTION 1.0 – RATE SCHEDULE (Continued)

METER TEST FEE .. .. $ 25.00
THIS FEE WHICH SHOULD REFLECT THE UTILITY'S COST MAY BE CHARGED IF A CUSTOMER REQUESTS A SECOND METER TEST WITHIN A TWO-YEAR PERIOD AND THE TEST INDICATES THAT THE METER IS RECORDING ACCURATELY. THE FEE MAY NOT EXCEED $25.

RECONNECTION FEE
THE RECONNECT FEE MUST BE PAID BEFORE SERVICE CAN BE RESTORED TO A CUSTOMER WHO HAS BEEN DISCONNECTED FOR THE FOLLOWING REASONS (OR OTHER REASONS LISTED UNDER SECTION 2.0 OF THIS TARIFF):

a) Non payment of bill (Maximum $25.00) $25.00
b) Customer's request that service be disconnected $25.00

TRANSFER FEE $25.00
THE TRANSFER FEE WILL BE CHARGED FOR CHANGING AN ACCOUNT NAME AT THE SAME SERVICE LOCATION WHEN THE SERVICE IS NOT DISCONNECTED

LATE CHARGE (EITHER $5.00 OR 10% OF THE BILL) $5.00
TCEQ RULES ALLOW A ONE-TIME PENALTY TO BE CHARGED ON DELINQUENT BILLS. A LATE CHARGE MAY NOT BE APPLIED TO ANY BALANCE TO WHICH THE PENALTY WAS APPLIED IN A PREVIOUS BILLING.

RETURNED CHECK CHARGE $20.00
RETURNED CHECK CHARGES MUST BE BASED ON THE UTILITY'S DOCUMENTABLE COST.

CUSTOMER DEPOSIT RESIDENTIAL (Maximum $50) $50.00

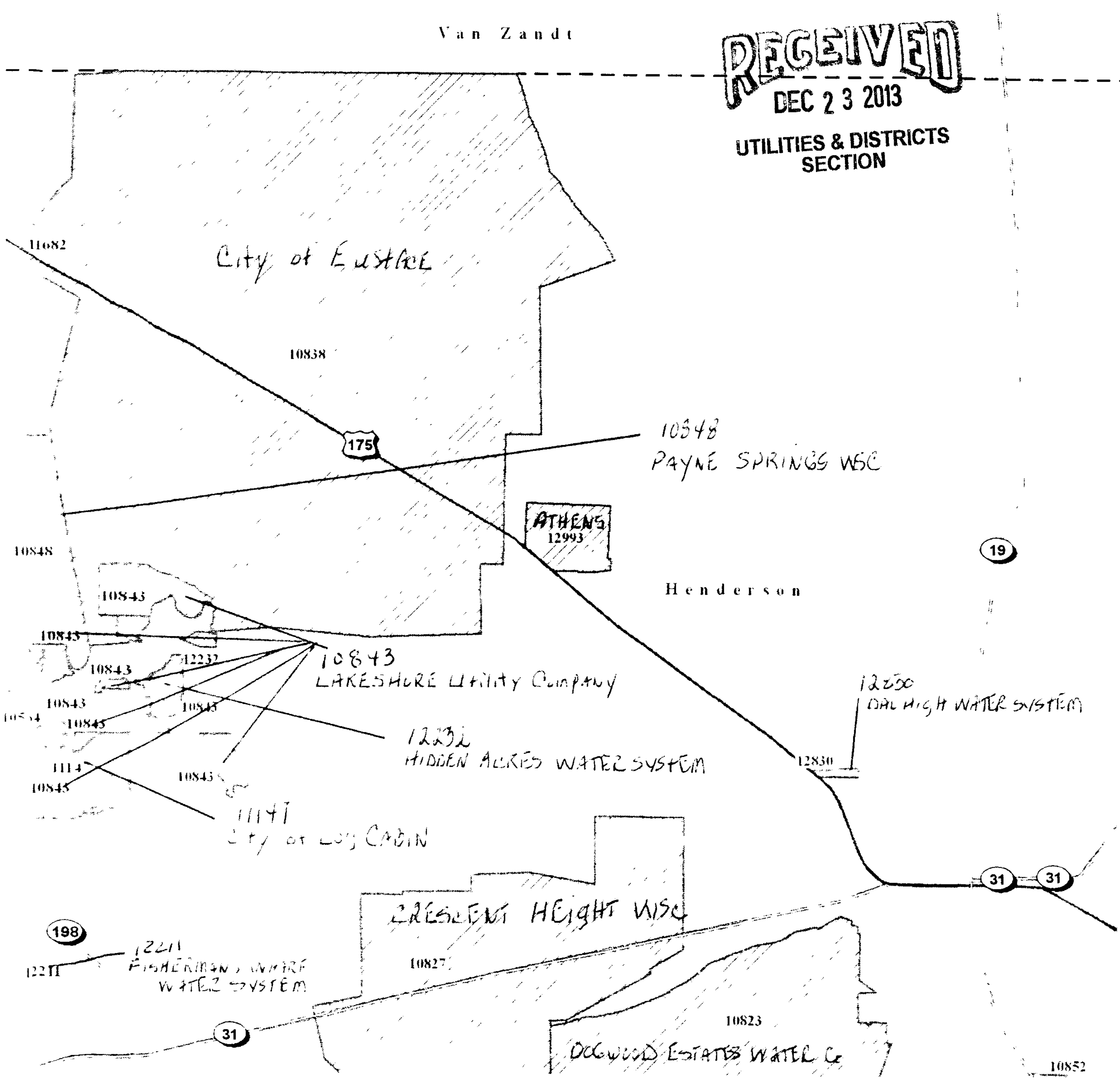
COMMERCIAL & NON-RESIDENTIAL DEPOSIT ..... 1/6TH OF ESTIMATED ANNUAL BILL

GOVERNMENTAL TESTING, INSPECTION AND COSTS SURCHARGE ..... N/A
WHEN AUTHORIZED IN WRITING BY TCEQ AND AFTER NOTICE TO CUSTOMERS, THE UTILITY MAY INCREASE RATES TO RECOVER INCREASED COSTS FOR INSPECTION FEES AND WATER TESTING. [30 TAC 291.21(K)(2)]

LINE EXTENSION AND CONSTRUCTION CHARGES:
REFER TO SECTION 3.0--EXTENSION POLICY FOR TERMS, CONDITIONS, AND CHARGES WHEN NEW CONSTRUCTION IS NECESSARY TO PROVIDE SERVICE

RATES LISTED ARE EFFECTIVE ONLY
IF THIS PAGE HAS TCEQ APPROVAL STAMP

TEXAS COMM. ON ENVIRONMENTAL QUALITY
35338-G, CCN 12993, MARCH 30, 2007
APPROVED TARIFF BY SP/KA



Protecting Texas by Reducing and Preventing Pollution

TCEQ

Texas Commission on Environmental Quality
P O Box 13087
Austin, Texas 78711-3087
For more information
concerning this map, please contact the
Water Supply Division at (512) 239-4691
10/05 2011

The Selected Area of Interest

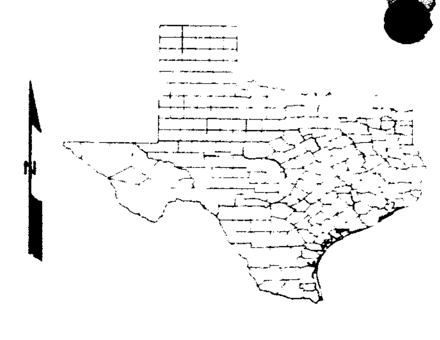
0 05 1 15 2 Miles

Legend

- Water CCN Facility Line
- Sewer CCN Facility Line
- Senate - Districts
- House - Districts
- TCEQ Service Region Boundary
- County Boundary
- Sewer CCN Service Area
- Water CCN Service Area
- City Boundary

CCN Overlap Key

- Sewer-Water CCN Service Area



Disclaimer
This map was generated by the Integrated Water Utilities Database (iWUD) from the Texas Commission on Environmental Quality No claims are made to the accuracy or completeness of the data or to its suitability

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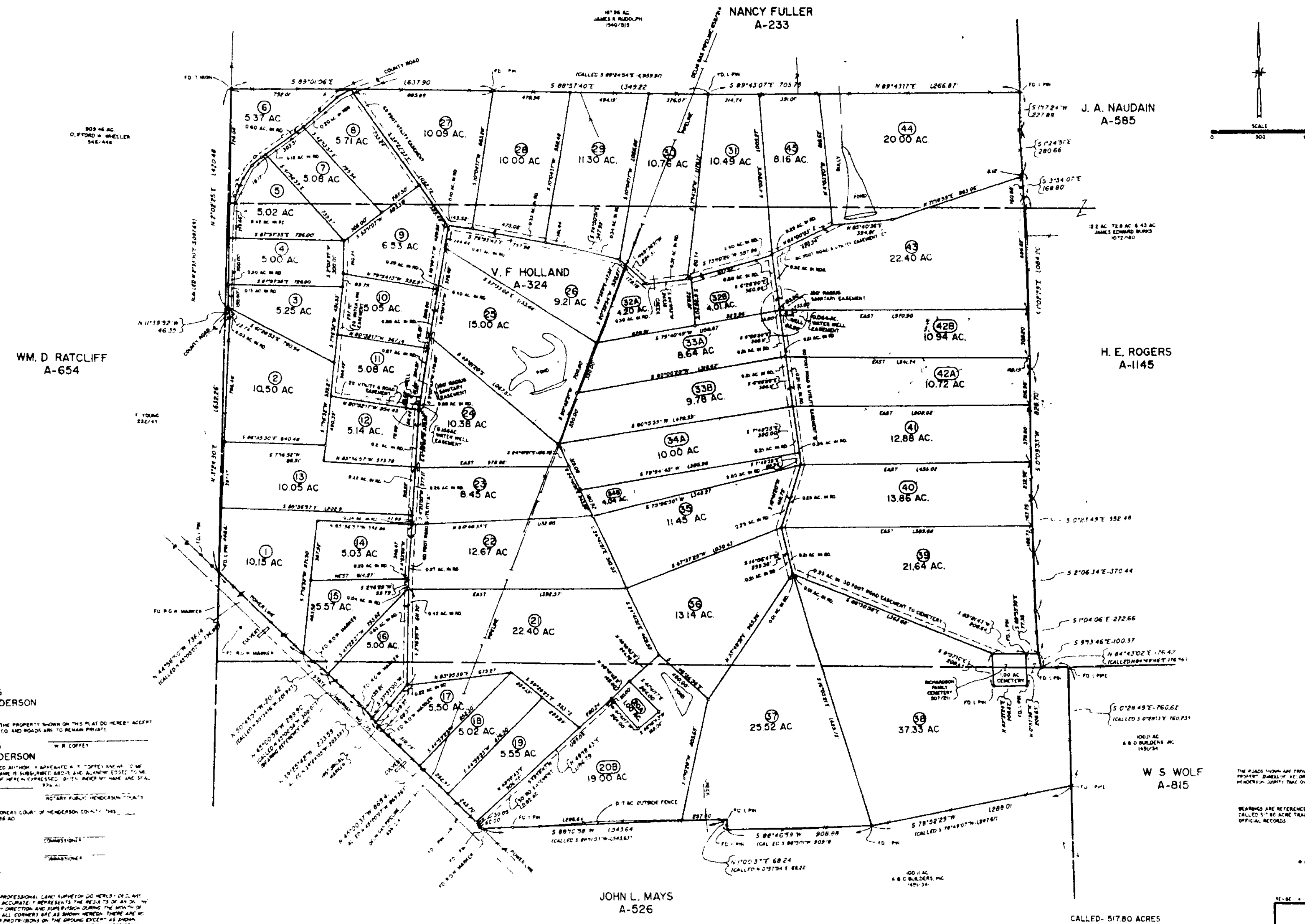
DEC 2 3 2013
UTILITIES & DISTRICTS
SECTION



STATE OF TEXAS
COUNTY OF HENDERSON

STATE OF TEXAS
COUNTY OF HENDERSON

CALLED- 517.80 ACRES
FIRST NATIONAL BANK OF ATHENS
TO
WILLIAM R COFFEY TRUSTEE
FEB 16 199?
VOL 1583 PAGE 288 H. C. O. R

PLAT OF SURVEY
ATHENS LAND CO.
W. R. COFFEY - OWNER
TOTAL - 516.06 ACRES

ASSUMED NAME CERTIFICATE

NOTICE: "CERTIFICATE OF OWNERSHIP" ARE VALID FOR A PERIOD NOT TO EXCEED 10 YEARS FROM THE DATE FILED IN THE COUNTY CLERK'S OFFICE.
(Chapter 36, Section. 1, Title 4-Business and Commerce Code)

NAME IN WHICH BUSINESS IS OR WILL BE CONDUCTED:

L and T Waterworks, LLC
(Print or Type)

Business Address: _____

City: Palestine State: Texas Zip Code: 75801

Business is to be conducted as (check one):

_____ Proprietorship _____ General Partnership _____ Limited Partnership

_____ Other(name type) _____

CERTIFICATE OF OWNERSHIP

I/we, the undersigned, are the owner(s) of the above business and my/our owner(s) and the address(es) are true and correct. There is/are no ownership(s) in said business other than listed below.

Name of Owners

Name: Curtis Logan Title: Owner
Address: 1560 ACR 485 Palestine TX 75803
Phone No. (903) 477-0501
Signature:

Name: Rayleana Logan Title: Co-owner
Address: 1560 ACR 485 Palestine TX 75803
Phone No. (903) 681-9499
Signature:

Name: _____ Title: _____
Address: _____
Phone No. ( )
Signature:

STATE OF TEXAS §
COUNTY OF_____ §

Before me, the undersigned authority, this instrument was acknowledged on the _____day of_____, 20____by _____

_____
Notary Public, State of Texas

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DEC 23 2013
UTILITIES & DISTRICTS SECTION

Debbie Reyes Tamayo

From: Angela Hicks
Sent: Monday, June 30, 2014 4:26 PM
To: Debbie Reyes Tamayo
Subject: RE: Comprehensive Compliance Investigation with Athens Water System

Hi Debbie –
I conducted a File review on 6/18/14 and resolved all of the alleged violations. The report was just approved, the Final Letter is going out July 2, 2014.
I think it's a good thing that Mr. Logan is taking over, he will do a great job

Thank you,
Angela Hicks

From: Debbie Reyes Tamayo
Sent: Monday, June 30, 2014 3:28 PM
To: Angela Hicks
Subject: Comprehensive Compliance Investigation with Athens Water System
Importance: High

Hi Angela I am currently working on an STM Application from Curtis D. Logan dba L and T Waterworks, LLC, A2017, to Acquire Facilities and Transfer Certificate of Convenience and Necessity (CCN) No. 12993 held by W.R. Coffey dba Athens Land Company in Henderson County; Application No. 37826-S

CN: 600708051; RN: 101243624 (WR Coffey dba Athens Land Company)
CN: 604520673; RN: 107111874 (Curtis D. Logan dba L and T Waterworks, LLC)

I need to know if you have any response after receiving information from Athens by the attached letter. Can you please provide a copy of TCEQ's response if any for the attached?

Debbie Reyes Tamayo
Texas Commission on Environmental Quality
Utilities Financial Review Team
Water Supply Division, Bldg.F, Mail Code 153
Phone: (512) 239-4683, Fax: (512) 239-6972
Email: Debbie.Reyes-Tamayo@tceq.texas.gov

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 10, 2013

CERTIFIED MAIL 91 7199 9991 7031 8543 7400
RETURN RECEIPT REQUESTED

Mr. W.R. Coffey, Owner
Athens Water System COOP
PO Box 423
Centerville, TX 75833

Re: Comprehensive Compliance Investigation at:
Athens Water System COOP, V.F. Holland Survey, A324, Lots 42B and 43, (Henderson County), Texas, RN101281855, TCEQ Additional ID 1070235, Investigation No. 1087152

Dear Mr. Coffey:

On March 11, 2013, Ms. Angela Hicks of the Texas Commission on Environmental Quality (TCEQ) Tyler Region Office conducted an investigation of the above-referenced system to evaluate compliance with applicable requirements for public water systems. Enclosed is a summary which lists the investigation findings. During the investigation, certain outstanding alleged violations were identified for which compliance documentation is required.

Please submit a compliance plan by **June 10, 2013**, for the following outstanding alleged violations; **465935, 499942, 499949, and 499950**. The plan should include the proposed actions to be taken to correct the alleged violation and a schedule for the completion of the corrections. If the violations have already been corrected, please submit compliance documentation, such as a photograph, purchase order, etc., demonstrating what actions were taken. In addition, please submit compliance documentation by August 26, 2013 for the following violation tracking number: 489659. The documentation should demonstrate what actions have been taken and may include photographs, purchase orders, results of analyses, etc.

In the listing of the alleged violations, we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled Obtaining TCEQ Rules (GI 032) are located on our agency website at http://www.tceq.state.tx.us for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Tyler Region Office at (903) 535-5100 or the Central Office Publications Ordering Team at 512-239-0028.

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violation(s) documented in this notice. Should you choose to do so, you must notify the Tyler Region Office within 10 days from the date of this letter. At that time, Mr. Ross B. Morgan, Water Section Manager, will schedule a violation review meeting to be conducted within 21 days from the date of this letter. However, please be advised that if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the attached Summary of Investigation Findings until an official decision is made regarding the status of any or all of the contested violations.

If you or members of your staff have any questions, please feel free to contact Ms. Angela Hicks in the Region 5-Tyler Office at (903) 535-5122.

Sincerely,

William Gibson
PWS Work Leader
Tyler Region Office

WDG/ALH

Enclosures: Summary of Investigation Findings

Summary of Investigation Findings

ATHENS WATER SYSTEM COOP — **Investigation # 1087152**

Investigation Date: 03/11/2013

, HENDERSON COUNTY,

Additional ID(s): 1070235

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF VIOLATION

Track No: 465935 **Compliance Due Date: To Be Determined**

30 TAC Chapter 290.46(m)

Alleged Violation:

Investigation: 1002708 Comment Date: 05/04/2012

Failure to initiate maintenance and housekeeping practices to ensure the good working condition and general appearance of the system's facilities and equipment. These practices should include maintaining a protective paint coating on the 10,500 gallon storage tank.

The investigator observed during the investigation conducted on 03/30/2012 that the exterior and interior of the 10,500 gallon storage tank is in need of a new protective coating.

Investigation: 1020455 Comment Date: 07/16/2012

Failure to initiate maintenance and housekeeping practices to ensure the good working condition and general appearance of the system's facilities and equipment. These practices should include maintaining a protective paint coating on the 10,500 gallon storage tank.

Investigation: 1087152 Comment Date: 05/07/2013

Failure to initiate maintenance and housekeeping practices to ensure the good working condition and general appearance of the system's facilities and equipment. These practices should include maintaining a protective paint coating on the 10,500 gallon storage tank.

During the investigation on March 11, 2013, the investigator observed that the exterior and interior of the 10,500 gallon storage tank is in need of a new protective coating.

Recommended Corrective Action: Please submit a compliance plan by June 10, 2013. The plan should include the proposed actions to be taken to correct the alleged violation and a schedule for the completion of the corrections. If this violation has already been corrected, please submit compliance documentation, photographs, purchase orders, results of analyses, etc., demonstrating what actions were taken.

Track No: 499942 **Compliance Due Date: To Be Determined**

30 TAC Chapter 290.46(t)

Alleged Violation:

Investigation: 1087152 Comment Date: 05/03/2013

Failure to post a legible sign at each of its production, treatment, and storage facilities by each community system. The sign must be located in plain view of the public and must provide the name of the regulated entity and an emergency telephone number where a responsible official can be contacted.

During the investigation, the investigator documented that the there was no ownership sign at the plant.

Recommended Corrective Action: Please submit a compliance plan by June 10, 2013. The plan should include the proposed actions to be taken to correct the alleged violation and a schedule for the completion of the corrections. If this violation has already been corrected, please submit compliance documentation, photographs, purchase orders, results of analyses, etc., demonstrating what actions were taken.

Track No: 499949 **Compliance Due Date: To Be Determined**
30 TAC Chapter 290.46(m)

Alleged Violation:
Investigation: 1087152 Comment Date: 04/29/2013

Failure to maintain the grounds and facilities in a manner so as to minimize the possibility of the harboring of rodents, insects, and other disease vectors, and in such a way as to prevent other conditions that might cause the contamination of the water.

During the investigation, the investigator observed that the weeds and vegetation were grown-up around the water plant.

Recommended Corrective Action: Please submit a compliance plan by June 10, 2013. The plan should include the proposed actions to be taken to correct the alleged violation and a schedule for the completion of the corrections. If this violation has already been corrected, please submit compliance documentation, photographs, purchase orders, results of analyses, etc., demonstrating what actions were taken.

Track No: 499950 **Compliance Due Date: To Be Determined**
30 TAC Chapter 290.46(m)(1)

Alleged Violation:
Investigation: 1087152 Comment Date: 04/29/2013

Failure to inspect each of the system's ground, elevated, and pressure tanks shall be annually by water system personnel or a contracted inspection service.

During the investigation, the investigator documented that the operator did not conduct the annual tank inspection or provide records of previous annual tank inspections.

Recommended Corrective Action: Please submit a compliance plan by June 10, 2013. The plan should include the proposed actions to be taken to correct the alleged violation and a schedule for the completion of the corrections. If this violation has already been corrected, please submit compliance documentation, photographs, purchase orders, results of analyses, etc., demonstrating what actions were taken.

ATHENS LAND COMPANY

P. O. BOX 423
CENTERVILLE, TX 75833
(903) 536-7200
FAX: (903) 536-3421

May 23, 2013

Certified Mail 7002-3150-0004-4333-2111
Return Receipt Requested

Texas Commission on Environmental Quality
Region 5, Attn: William Gibson
PWS Work Leader
2916 Teague Dr.
Tyler, Texas 75701-3734

Re: Notice of Violation for the Comprehensive Compliance Investigation at:
Athens Water System COOP, V F Holland Survey, A324, Lots 42B and 43, (Henderson County), Texas, RN101281855, TCEQ Additional ID 1070235, Investigation NO. 1087152Located on Richardson Rd, off of US-175, N of Athens (Henderson Co.), TX.

Attn: William Gibson

The enclosed information is in reference to the notice of alleged violations for Athens Water System COOP, located in Henderson County, Texas.

Alleged Violations:

 # 465935 Failure to initiate maintenance and housekeeping practices to ensure the good working condition and general appearance of the system's facilities and equipment. These practices should include maintaining a protective paint coating on the 10,500 gallon storage tank.

Copies of the information from Velvin & Weeks Consulting Engineers, Inc. is enclosed showing the proposal and projected completion.

#499942 Failure to post a legible sign at each of its production, treatment and storage facilities by each community system. The sign must be located in plain view of the public and must provide the name of the regulated entity and an emergency number where a responsible official can be contacted.

Pictures are enclosed showing the sign, placement on fence at entrance to Water System facility, with name of the regulated entity and emergency number where a responsible official can be contacted.

#499949 Failure to maintain the grounds and facilities in a manner so as to minimize the possibility of the harboring of rodents, insects, and other disease vectors, and in such a way as to prevent other conditions that might cause the contamination of the water.

Pictures enclosed show the Water System grounds are cleaned and grass is mowed.

#499950 Failure to inspect each of the system's ground, elevated, and pressure tanks shall be annually by water system personnel or a contracted inspection service.

Inspection document enclosed.

I am enclosing a copy of the proposal regarding the upgrades to the Athens Water Company Pump Station near Athens, Texas, including as proof that the tank maintenance and housekeeping issues are being addressed. The enclosed copy of the letter to Velvin & Weeks Consulting Engineers, Inc, with the selection of Option No. 3, which is the proposed preliminary design for the upgrade and installation of a 7,500 gallon capacity fiberglass reinforced plastic ground storage tank (includes ladder, vent, hatches, isolation valves, etc.) Once the new tank is installed and brought online, the existing ground storage tank will be taken offline and then processed for coating rehabilitation on both interior and exterior tank surfaces. When all coating rehabilitation work is completed, the old tank will be brought back online to serve in parallel with the new ground storage tank.

If you should have any additional concerns or questions please advise.

Sincerely,

Tim Coffey

Enclosure: Documents

C & L INVESTMENT CO., INC.

P.O. BOX 423
CENTERVILLE, TX. 75833
(903) 536-7200
FAX: (903) 536-3421

June 4, 2013

Velvin & Weeks
Consulting Engineers, Inc.
930 E Corsicana Street
Athens, TX 75751

RE: Upgrades at the Athens Water Company Pump Station near Athens, Texas

Attn: Christopher Weeks, P.E.

This is in reference to the letter dated February 19, 2013 regarding the Proposed Drinking Water System Upgrades at the Athens Water Company Pump Station near Athens, Texas.

The information provided within the letter report was very helpful, after reviewing the different proposals I am selecting Option No.3.

I am forwarding this information to Texas Commission on Environmental Quality in order to update them with the latest available information concerning the upgrade.

If you should have any questions regarding this information please contact me at 903-536.7200.

Sincerely,

Tim Coffey
CEO

cc: TCEQ

NEAL E. VELVIN, P.E.
WAYNE WEEKS, P.E.
TYLER N. HENDRICKSON, P.E.
CHRISTOPHER WEEKS, P.E.

VELVIN & WEEKS
CONSULTING ENGINEERS, INC.

930 E. CORSICANA ST.
PO BOX 1007
ATHENS, TX 75751
PH: 903.675.3903
FAX: 903 675.8345
vwce@velvin-weeks.com

October 5th, 2012

Mr. Tim Coffey – Chief Executive Officer
C&L Investment Company
P.O. Box 423
Centerville, TX 75833

RE: Proposal for Professional Engineering Services Associated with Drinking Water System Upgrades at the Athens Water Company Pump Station near Athens, Texas

Dear Mr. Coffey:

Thank you for giving Velvin & Weeks Consulting Engineers, Inc. (VWCE) an opportunity to submit this proposal to provide professional engineering services related to anticipated drinking water system upgrades at the Athens Water Company (AWC) Pump Station located on Richardson Road, a few miles to the northwest of the City of Athens, Texas.

As I understand the situation, AWC plans to install a new ground storage tank at the pump station to operate in parallel with the existing ground storage tank. Once the new tank is installed and brought online, the existing ground storage tank will be taken offline and then processed for coating rehabilitation on both interior and exterior tank surfaces. When all coating rehabilitation work is completed, the old tank will be brought back online to serve again in parallel with the new ground storage tank. Currently, the pump station provides potable drinking water to 31 domestic meter connections within the Richardson Road service area.

As we discussed during our initial meeting at the pump station on September 25th, the existing open ground areas available for placement of the new tank and foundation will provide engineering challenges on several levels within the facility. To determine and implement the most feasible options available to you in this matter, our proposed scope of services generally will consist of completing the following tasks:

Preliminary Phase

1. Meet and / or speak with yourself, and others (as required) to establish an overall scope of the project.
2. Conduct preliminary investigations and review maps, drawings, records and other data associated with previous construction and/or installation of the existing groundwater well and drinking water distribution system within the service area along Richardson Road.

3. Develop a preliminary estimate of total engineering man-hours required to assemble a set of construction plans and specifications to address the proposed drinking water pump station upgrades.
4. Confer with agencies and governmental entities for proper planning and review of the project.
5. Develop a Preliminary Engineering Letter Report (PELR) on the scope of costs associated with proposed drinking water pump station upgrades for review, discussion and interim approval by yourself and others (if required).
6. As part of the PELR, develop an Engineer's Opinion of Probable Construction Costs for your use in making a "Go – No Go" decision on implementation of the project plan to upgrade the drinking water pump station.

Planning and Design Phase

7. Upon approval of the PELR by yourself and others (if required) with a decision to construct, VWCE will proceed with final design of the drinking water pump station upgrade project.
8. VWCE will arrange for and/or coordinate any required topographical surveying of the project area for planning and design purposes.
9. VWCE will arrange for and/or coordinate any required geotechnical sampling and/or testing of the project area for planning and design purposes.
10. Develop and prepare contract documents, construction plans and technical specifications for the proposed drinking water pump station upgrade project.
11. Submit design documents to appropriate local and state regulatory agencies (e.g., the Texas Commission on Environmental Quality, or TCEQ) for review, comment and approval (if required).

Construction Phase

12. Assist yourself and others in obtaining bids for the drinking water pump station upgrade project and in the selection and hiring of a reputable General Contractor (if desired).
13. Administer project during construction (e.g., prepare and process contract change orders, verify and recommend contractor pay requests, review and interpret geotechnical test results, conduct periodic and final inspections, etc.).
14. Provide Contractor (with copies to yourself, TCEQ, etc.) a Certificate of Substantial Completion when project can be used beneficially, and a Certificate of Final Completion when project is completely finished to begin the one–year warranty service period.
15. Provide Resident Inspection services on an "as–needed" or "as–requested" basis to determine if the project is being constructed in accordance with the approved plans and specifications.

Our company will charge compensation for the services described above as follows:

1. Preliminary Phase work will be charged at the hourly rates shown on Attachment I and will be billed concurrent with submittal of the PELR to you. We anticipate a total cost at or less than $1,400 to complete work on the Preliminary Engineering Letter Report.
2. If your own contractor is hired to upgrade the drinking water pump station within the Richardson Road service area, then the Planning and Design Phase work and Construction Phase work on that portion of the overall project will be charged at the hourly rates shown on Attachment I and will be billed monthly.
3. If a General Contractor is selected through a competitive bidding process to upgrade the drinking water pump station within the Richardson Road service area, then the Planning and Design Phase work and

Construction Phase work will be charged at the percent of construction cost rates shown on Attachment II. Payment for these services will be due as follows:

a. 85% of the basic fees for the construction contract will be due upon completion and submittal to review agencies for approval of the construction plans and specifications.
b. The remaining 15% of the basic fees are to be paid periodically (usually monthly) during construction.

4. The Resident Inspection time that is requested by AWC will be charged at the applicable hourly rates shown on Attachment I and will be billed monthly.

Costs for any additional engineering work not included in the scope of services described above will be charged at the hourly rates shown in Attachment I and will be billed monthly. Typically, those services would include (but not necessarily be limited to) work on obtaining executed and recorded utility easements, attending regulatory hearings, environmental assessment work, equipment startup, preparation and distribution of Equipment Operation & Maintenance manuals, etc. Those services could also include (at your request) work associated with an analysis of historical water consumption within the service area as part of a petition to TCEQ for a variance from the requirement to provide a groundwater well capacity of at least 0.6 gpm per meter connection.

Payment for other professional services such as topographical surveying and geotechnical engineering work will be made by AWC directly to the providers of those services.

If the terms outlined above are acceptable, your signature below will indicate that AWC agrees to the task order and fee structure listed herein and it shall serve as our notice to begin work. After signing, please keep a copy for your records and return the original letter to our office at your earliest opportunity.

Please call me at (903) 676–6546 if you should have any questions or comments on this proposal.

Cordially yours,

VELVIN & WEEKS CONSULTING ENGINEERS, INC.

Christopher Weeks, P.E.

Attachments (2)

Cc: File

Accepted By: _____ Date: _____
Tim Coffey – Chief Executive Officer

ATTACHMENT I

VELVIN & WEEKS
CONSULTING ENGINEERS, INC.

930 East Corsicana Street
Athens, Texas 75751
(903) 675–3903

HOURLY RATE SCHEDULE
2012

Principal of Firm	$ 130.00/Hr.
Professional Engineer	$ 105.00/Hr.
Engineering Graduate (EIT)	$ 75.00/Hr.
Inspector	$ 50.00/Hr.
Civil Technician/Project Coordinator	$ 95.00/Hr.
Drafter	$ 55.00/Hr.
Clerical	$ 40.00/Hr.
Survey Party (Per Person)	$ 50.00/Hr.

ATTACHMENT II

MEDIAN FEES FOR PROFESSIONAL ENGINEERING SERVICES AS A PERCENTAGE OF NET CONSTRUCTION COST

Total Actual Construction Cost	Column 1 % Fee
$ 50,000	15.0
100,000	12.7
200,000	11.3
300,000	10.6
400,000	10.1
500,000	9.5
600,000	9.2
700,000	9.0
800,000	8.8
900,000	8.6
1,000,000	8.5
2,000,000	7.9
3,000,000	7.7
10,000,000	7.1

The fee for project costs falling between the figures shown in Column 1 shall be interpolated to the nearest one–tenth of one percent.

Total actual construction cost includes total of all construction contracts and value of material furnished by Owner and incorporated into the construction.

C-Tex Surveying & Mapping
713 County Road 200
Centerville, TX 75833

Invoice

Date	Invoice #
10 11 2012	12015

Bill To
C&L Investments, Inc PO Box 423 Centerville, TX 75833

P O. No.	Terms	Project
		12015

Quantity	Description	Rate	Amount
	Topographic Survey of the Athens Land Co. Water Well Facility	870 00	870 00

RECEIVED
DEC 2 3 2013
UTILITIES & DISTRICTS SECTION

Thank you for your business.

Total $870 00

ETTL Engineers & Consultants Inc.

GEOTECHNICAL * MATERIALS * ENVIRONMENTAL * DRILLING * LANDFILLS

November 1, 2012

Christopher Weeks P. E.
Velvin & Weeks Consulting Engineers, Inc.
930 East Corsicana St.
Athens, TX 75751

Proposal
Geotechnical Investigation
Athens Water Co. GST 10' Diameter x 18' Tall
Athens, Texas

Dear Mr. Weeks,

We appreciate the opportunity to provide the subsurface data and foundation design recommendations you require for the above referenced project. With over 46 years of experience in providing recommendations for foundation designs of all types and sizes we are confident that we can provide counsel which is both reliable and suitable for the specific requirements of your project. Our *Statement of Qualifications* is available upon request, or you can visit our web site at www.ettlinc.com for more information regarding our capabilities.

Project Description

The project will consist of a new ground storage water tank 10' diameter x 18' tall located near Athens, Texas.

Boring Layout and Depth

One boring will be drilled to a depth of 30. Representatives of ETTL Engineers and Consultants Inc. will locate the borings with assistance from the client. We will also require client assistance in locating underground utilities, if any.

Field Operations

Sampling of the substrata will be continuous for the upper 10 feet and at major strata changes or a maximum of 5-foot intervals thereafter. In conjunction with Standard Penetration Tests, split-spoon samples will be taken in granular soils. Shelby tube samples will be taken in cohesive soils. Groundwater observations will be made for the duration of our field operations.

210 Beech Street
Texarkana, Arkansas 71854
870-772-0013 Phone
870-216-2413 Fax

1717 East Erwin
Tyler, Texas 75702
903-595-4421 Phone
903-595-6113 Fax

w w w . e t t l i n c . c o m

707 West Cotton Street
Longview, Texas 75604-5505
903-758-0915 Phone
903-758-2446 Fax

Laboratory Testing

Evaluation of the physical properties of the substrata will be conducted by the performance of certain laboratory tests. For this project the following tests are anticipated.

- Atterberg liquid and plastic limits
- Percentage of fines passing the No. 200 sieve
- Natural moisture content
- Unconsolidated Undrained Tri-Axial
- One-dimensional swell

These tests are conducted to: (1) classify the soil strata according to a widely-used engineering classification system; (2) identify, and provide quantitative data for active (expansive) soils; (3) define strength characteristics relating to allowable bearing values; (4) predict immediate settlement; and (5) assess construction workability of the soils.

Engineering Evaluation and Report

The results of field and laboratory tests will be analyzed and used as a basis for formulating foundation recommendations for the design and construction of the proposed project. Issues addressed in the report will include foundation design bearing pressures, a prediction of immediate settlement, groundwater, recommended site preparation, placement of select fill and other related items. A preliminary estimate of long-term settlement can be made based on approximate correlations of consolidation coefficients with soil properties (included in standard cost, below). However, consolidation test(s) to predict long-term settlement more accurately should be considered (option at extra cost), especially where differential settlement is critical to the function of tank (as may be the case for a concrete tank). Test results, soil parameters, and recommendations for the design of foundations for the structure will be documented and presented in an engineering report.

Cost Estimate

If this exploration and evaluation program proceeds as planned, i.e., no unforeseen circumstances develop; the estimated cost of this study is $2,600.00. Consolidation tests and evaluation will be conducted (provided that suitable samples are obtained) at an additional cost of $700 each if warranted and requested. This estimate does not include the cost to drill and obtain rock cores for testing. If rock is encountered during drilling, additional charges will be applied at a rate of $40 per foot plus the cost for testing the core samples, if required for the evaluation of the site and structure foundation. When required for securing access to any drilling site costs incurred by ETTL Engineers & Consultants Inc. (e.g., dozer work or mud buggy haul charges) will be billed to you at our cost plus 15% and are not included in the above estimate. If drilling operations are postponed or delayed due to inaccessible boring locations, or if rock is encountered, or questions regarding these locations or utility conflicts, additional mobilization and/or crew standby costs may also be charged. If the scope of the project changes, such as, but not limited to, increased building footprint, increased number of structures, relocation of structure(s), addition of retaining wall, evaluation of slope stability, addition of parking and drives, and changes to finished floor elevation, then additional services may be necessary. Please contact this office to determine if additional work will be needed. If the work for this project extends longer than one month an invoice for the work will be submitted at the end of each month. It will be based upon a percent of completion of the estimated cost of the study.

Schedule

Based on current workload we can begin work on this study within 3-10 business days after receiving authorization to precede. It is estimated that field operations will require 1 business day. The engineering evaluation and report preparation will take no more than 15 business days from completion of laboratory testing. Verbal recommendations and/or an Executive Summary may be issued at an earlier date (usually within 7-10 business days of drilling) if necessary to expedite finalization of design studies or construction plans by your consultants.

Insurance Coverage

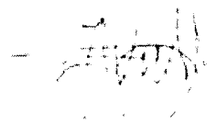
ETTL Engineers & Consultants Inc. at the present time maintains professional liability insurance (errors and omissions insurance) in the amount of $1,000,000.00. This coverage, in addition to providing protection to ETTL Engineers & Consultants Inc. also provides insulation to the prime professional and owner should any unforeseen claim arise. Also, ETTL Engineers & Consultants Inc. is insured for general liability. Proof of this coverage is available upon request.

Acceptance

We appreciate the opportunity to be of service to you and trust that you will find this proposal acceptable. If this is the case please sign and return one copy of the attached *Agreement for Consulting Services*.

We are looking forward to working with you on this project. If you have any questions, please do not hesitate to contact us.

Sincerely,
ETTL Engineers & Consultants Inc.



T.J. Vickery

AGREEMENT FOR CONSULTING SERVICES

This agreement is made as of November 1, 2012, ETTL Engineers & Consultants Inc., a Texas Corporation, (hereinafter referred to as "ETTL") whose mailing address is 1717 East Erwin, Tyler, Texas 75702, and CLIENT, Chris Weeks, Velvin & Weeks Consulting Engineers, whose mailing address is Post Office Box 1007, Athens, Texas 75751 and is subject to the following terms and conditions to which the parties mutually agree:

ARTICLE 1 - SCOPE OF SERVICES

1.1 In consideration of the mutual covenants contained herein, ETTL shall perform the services identified in the proposal attached hereto (hereinafter "the Services"), which is made a part hereof, in accordance with the terms of this Agreement.

1.2 The services covered by this Agreement will be undertaken by ETTL only upon receipt of an executed copy, signed by an authorized representative of ETTL.

1.3 ETTL will commence the services upon verbal notification of an authorized representative of the CLIENT and after receipt of an executed copy of this Agreement.

ARTICLE 2 - AMENDMENTS

2.1 CLIENT, without invalidating this Agreement, may request changes within the general scope of the Services required by this Agreement by altering or adding to the Services to be performed, and any such changes in the Services shall be performed subject to this Agreement. Upon receiving the CLIENT's request, ETTL shall return to CLIENT a change proposal setting forth an adjustment to the Services and Project Cost estimated by ETTL to represent the value of the requested changes Following CLIENT's review of ETTL's change proposal, CLIENT shall execute a written change order or contract amendment directing ETTL to perform the changes in the Services.

ARTICLE 3 - PROJECT COSTS and PAYMENT

3.1 ETTL shall be paid in accordance with the proposal, attached hereto.

3.2 ETTL will submit an Invoice to the CLIENT at the end of each month or upon completion of the Services unless otherwise specified by the CLIENT in writing.

3.3 Payment shall be made by the CLIENT within 30 days after receipt of the Invoice.

3.4 CLIENT shall provide written notification to ETTL within 15 days of receipt of the Invoice should the CLIENT object to all or part of charges appearing on the Invoice. The portion of the Invoice which is not in dispute shall be paid by the CLIENT within 30 days of receipt of the Invoice.

3.5 A finance charge of 1 5% per month will be paid by the CLIENT for all non-disputed invoices after 30 days.

ARTICLE 4 - CONFIDENTIALITY

4.1 ETTL shall maintain as confidential and not disclose to others without CLIENT's prior written consent, all information obtained from the CLIENT, not otherwise previously known to ETTL in the public domain. The provisions of this paragraph shall not apply to information in whatever form which (I) is published or comes into the public domain through no fault of ETTL, (ii) is furnished by or obtained from a third party who is under no obligation to keep the information confidential, or (iii) is required to be disclosed by law on order of a court, administrative agency or other authority with proper jurisdiction. Notwithstanding the above, ETTL will notify CLIENT in writing at least 24 hours before disclosure if information is requested under item (iii) above and client may but shall not be obligated to interpose all objections they may have to the disclosure of such information but not limited to the right to seek an appropriate protective order. If client chooses to interpose any objection(s) to disclosure, ETTL should cooperate with CLIENT to maintain the confidential nature of the requested information until all such objections are resolved.

ARTICLE 5 - CONSULTANT'S REPRESENTATIONS, WARRANTIES, and COVENANTS

5.1 ETTL, its employees, agents and subcontractors will hold necessary licenses and certificates required by federal, state, or local rules and regulations.

5.2 The Services will be performed in accordance with standards customarily provided by an experienced professional organization providing similar services in the area during the same time period.

5.3 ETTL shall take reasonable precautions to prevent injury or loss to persons or property at the site.

5.4 Other than those specifically set forth under this Agreement, ETTL makes no warranties either expressed or implied, as to the Services performed hereunder.

ARTICLE 6 - CLIENT'S REPRESENTATIONS, WARRANTIES, and COVENANTS

6.1 The CLIENT agrees to provide ETTL with all existing data, plans, and other information in the CLIENT's possession, which are necessary for the performance of the Services. The CLIENT further agrees to provide any additional data, plans, or other information, which may be specified in authorized work orders. This information will include such

information as location of utilities, known site hazards, nature and/or characteristics of any hazardous or toxic materials on or near the site. ETTL may rely upon this information but is not responsible for its accuracy.

6.2 The CLIENT shall ensure that ETTL has authorized access to the site during performance of the Services and if the time of that access is limited, CLIENT will notify ETTL prior to commencement of the Services so adjustments in Project Costs and planning can be made if necessary.

ARTICLE 7 - INDEMNITY

7.1 ETTL shall indemnify, defend and hold harmless CLIENT from and against any and all lawsuits, claims, liabilities, causes of action, losses, damages, forfeitures, penalties, fines, costs and expenses, including, but not limited to, reasonable attorney's fees and expenses, by whomever asserted, including, but not limited to, any government agency or branch, or any third party, to the extent the same arise from (I) a breach by ETTL of any term or provision of this Agreement, (ii) violation by ETTL of federal, state or local statute, rule, regulation or ordinance, or (iii) negligent acts or omissions of ETTL or its employees, agents, or subcontractors in the performance of the Services, or (iv) the negligence or willful misconduct of ETTL or agent of ETTL.

7.2 CLIENT shall indemnify, defend and hold harmless ETTL from and against any and all lawsuits, claims, liabilities, actions, causes of action, demands, losses, damages, forfeitures, penalties, fines, costs and expenses, including, but not limited to, reasonable attorney's fees and expenses, by whomever asserted, including, but not limited to, any government entity, agency or branch, any third party, an employee, contractor employed or retained by ETTL, to the extent that such claim, property damage, injury or death resulted from (I) the negligence, gross negligence, or willful misconduct of CLIENT or any employee, agent or independent contractor of CLIENT, (ii) violation of federal, state or local statute, rule, regulation or ordinance by CLIENT or any employee, agent, or independent contractor of CLIENT, (iii) CLIENT's alleged involvement or status as an owner, operator, arranger, generator or transporter of hazardous substances or constituents at the site, or (iv) inaccurate information provided by CLIENT to ETTL.

ARTICLE 8 - LIMITATION OF LIABILITY

8.1 WITH RESPECT TO THE SERVICES PERFORMED BY ETTL, ITS EMPLOYEES, AGENTS, AFFILIATES AND SUBCONTRACTORS, DAMAGE, COSTS, EXPENSES, OR OTHER LIABILITY, DIRECT OR INDIRECT, SHALL BE LIMITED TO ETTL'S FEE FOR THIS PROJECT AS SPECIFIED IN THE ATTACHED PROPOSAL. IN NO CASE SHALL ETTL BE LIABLE FOR PUNITIVE, SPECIAL, INCIDENTAL, OR EXEMPLARY DAMAGES.

ARTICLE 9 - INSURANCE

9.1 ETTL represents that it now carries and will continue during the terms of this Agreement to carry Workmen's Compensation, Comprehensive General Liability and Comprehensive Automobile Liability insurance in the following amounts and with deductibles acceptable to the CLIENT:

- Commercial General Liability Insurance - $1,000,000 per occurrence and $1,000,000 annual aggregate for bodily injury or death and property damage, including loss of use thereof, written on an occurrence (as opposed to a "claims made") basis.
- Comprehensive Automobile Liability Insurance covering all owned, non-owned and hired vehicles - $1,000,000 combined single limit of liability per occurrence for bodily injury or death and property damage, including loss of use thereof, written on an occurrence (as opposed to a "claims made") basis.
- Statutory Workers Compensation Insurance and Employers Liability Insurance-$500,000 per accident.
- Errors and Omissions Insurance, including Pollution Liability, Applicable to Services-$1,000,000 with respect to claims made against ETTL for negligent errors or omissions in the performance of the Services hereunder.

ARTICLE 10 - DELAYS AND TERMINATION

10.1 The CLIENT or ETTL may terminate this Agreement upon forty-eight (48) hours written notice should the other party fail substantially to perform in accordance with the terms and conditions of this Agreement through no fault of the terminating party. A complete settlement of all claims upon such termination of this Agreement shall be made as follows: CLIENT shall compensate ETTL for the Services performed up to the date of receipt of termination plus reasonable costs incurred in terminating the Services in accordance with ETTL's current fee schedule. In the event Services cannot be performed on or before the projected due date because of circumstances beyond the control of ETTL, including, but not limited to strike, fire, riot, excessive precipitation, act of God, governmental action, third party action or action of omission by CLIENT, the Services shall be amended by CLIENT and ETTL in accordance with Article 2 of this Agreement.

ARTICLE 11-ENTIRE AGREEMENT

11.1 This Agreement (including attached schedules) constitutes the sole and entire agreement between ETTL and the CLIENT. This agreement replaces and supersedes all prior discussions and agreement between the CLIENT and ETTL with respect to the matters contained herein.

ARTICLE 12 - WASTE AND SAMPLE DISPOSITION

12.1 Unless otherwise specified in the attached proposal, the proper disposition of any contaminated materials generated on-site as a result of the Services, including but not limited to, waste materials, samples, produced soils or fluids, or

protective equipment (hereinafter "Affected Materials"), shall be considered out-of-scope and shall require a written change order request by CLIENT in accordance with Article 2 of this Agreement wherein CLIENT provides a generator number, specifies its choice of transporter and treatment, storage or disposal facility and completes documentation necessitated by these services. CLIENT understands that ETTL is in no way responsible for the proper disposition of the Affected Materials except as provided under this Agreement and CLIENT is responsible for directing the disposition of the Affected Materials In the event that test samples obtained during the Services contain substances hazardous to health, safety or the environment or equipment used during the Services cannot be reasonably decontaminated, CLIENT shall, if necessary, sign documentation required to ensure that this equipment and/or samples are transported and disposed of properly.

12.2 In the event CLIENT wishes for ETTL to retain test samples beyond the final report date for the Services, CLIENT shall provide ETTL with a written request stating the same. ETTL shall invoice CLIENT only for those storage charges incurred for storage beyond thirty (30) days after the report date for the Services.

ARTICLE 13 - DISPUTE RESOLUTION

13.1 If a dispute arises out of, or relates to, the breach thereof, and if the dispute cannot be settled through negotiation, then ETTL and the Client agree to submit the dispute to mediation. However, any dispute to collect on the payment of an invoice(s) may be submitted by filing an action at law or in equity. In the event ETTL or the Client desires to mediate any dispute, that party shall notify the other party in writing of the dispute desired to be mediated. If the parties are unable to resolve their differences within 10 days of the receipt of such notice, such dispute shall be submitted for mediation in accordance with the procedures and rules of the American Arbitration Association (or any successor organization) then in effect. The deadline for submitting the dispute to mediation can be changed if the parties mutually agree in writing to extend the time between receipt of notice and submission to mediation. The expenses of the mediator shall be shared 50 percent by ETTL and 50 percent by the Client. This requirement to seek mediation shall be a condition required before filing an action at law or in equity. This Agreement is performable in Smith County, Texas. The law applicable to this Agreement shall be laws of the State of Texas or, where appropriate, applicable federal law.

13.2 The Client shall be responsible for the settlement of all contractual and administrative issues arising out of any procurement made by the Client in support of this Agreement's work. Any disputes concerning the Work hereunder or additional costs, or any non-procurement issues shall be settled in accordance with Title 43, Texas Administrative Code, §9.2.

13.3 Governing Law and Venue. This Agreement shall be interpreted, construed and governed by the laws of the State of Texas, excluding any choice of law rules which may direct the application of the laws of any other jurisdiction. This Agreement is made in and performable in Smith County, Texas, and any action arising out of this Agreement or the Parties rights and duties hereunder shall be brought only in federal or state court sitting in Smith County, Texas, and each Party submits itself to the jurisdiction of that court.

By executing this agreement, ETTL and CLIENT indicate their acceptance and agreement with its terms.

Client: Velvin & Weeks Consulting Engineers
Athens Water Co. GST 10' x 18'
By: _____

Name: _____

Title: _____

Date: _____

ETTL Engineers & Consultants Inc.
By: C. Brandon Quinn

Name: C. Brandon Quinn, P.E., P.G., CPG

Title: Vice President

Date: November 1, 2012

NEAL E. VELVIN, P.E
WAYNE WEEKS, P.E
TYLER N. HENDRICKSON, P.E
CHRISTOPHER WEEKS, P.E

VELVIN & WEEKS
CONSULTING ENGINEERS, INC.

930 E. CORSICANA ST
PO BOX 1007
ATHENS, TX 75751
PH 903 675.3903
FAX 903.675.8345
vwce@velvin-weeks.com

December 20th, 2012

Mr. Tim Coffey Chief Executive Officer
C&L Investment Company
P.O. Box 423
Centerville, TX 75833

RE: Report on Geotechnical Engineering Services Associated with Drinking Water System Upgrades at the Athens Water Company Pump Station near Athens, Texas
ETTL Job No. G3873-12

Dear Mr. Coffey:

Please find enclosed one original copy of the above-referenced geotechnical engineering report that was completed recently by ETTL Engineers & Consultants, Inc. in Tyler, Texas. This single report is for your files; however, additional copies can be printed and delivered to you at any time upon your request to this office.

Please call me at (903) 676–6546 if you have any questions about, or comments on, this report.

Cordially yours,

VELVIN & WEEKS CONSULTING ENGINEERS, INC.

Christopher Weeks, P.E.

Enclosures (1)

Cc: File

ETTL Engineers & Consultants Inc.

GEOTECHNICAL * MATERIALS * ENVIRONMENTAL * DRILLING * LANDFILLS

December 18, 2012

Athens Water Supply Corp.
C/o Christopher Weeks, P.E.
Velvin & Weeks Consulting Engineers, Inc.
P. O. Box 1007
Athens, Texas 75751

SUBJECT: Athens Water Supply Standpipe
Richardson Rd, Athens, Texas
Geotechnical Investigation
ETTL Job No. G3873-12

Dear Mr. Weeks:

Submitted herein is the report summarizing the results of a geotechnical investigation conducted at the site of the above referenced project.

If you have any questions concerning this report, or if we can be of further assistance during construction, please contact us. We are available to perform any construction materials testing and inspection services that you may require.

Thank you for the opportunity to be of service.

Sincerely,
ETTL Engineers & Consultants Inc.

Arthur M. Campos
Senior Project Manager

C. Brandon Quinn, P.E., P.G.
Vice President
Manager of Engineering Services

STATE OF TEXAS
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December 18, 2012

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Geotechnical Investigation
Athens Water Supply Standpipe
Richardson Rd
Athens, Texas

Submitted to

Athens Water Supply Corp.
c/o Velvin & Weeks Consulting Engineers, Inc.
Athens, Texas

Prepared by

ETTL Engineers & Consultants Inc.
Tyler, Texas

December 2012

EXECUTIVE SUMMARY

This Executive Summary is provided as a brief synopsis of the specific recommendations and design criteria provided in the attached report. It is not intended as a substitute for a thorough reading of the report in its entirety.

Project Description
The project consists of a steel tank 10' in diameter and 18' high. The tank will be supported on an approximately 14' x 14' x 15" thick concrete mat. Finished grade will be close to existing grade.

Site Description
Site is an open area northwest of the existing pump house as shown on Plate I.

Depth & Number of Borings
1 – 30' deep

Soils Encountered
Soils consist of 3' loose silty sand (SM), overlying 5' hard fat clay with sand (CH), 5' medium dense silty sand (SM) and terminate in very stiff to hard lean clay (CL). Atterberg Plasticity Indices of the tested soils range from 21 to 39.

Groundwater Depth
Not encountered. Predicted to be below a depth of 30 feet.

Recommended Foundation Type
Mat footing

Allowable Gross Bearing Pressure
2,000 psf, (concentric bearing pressure only) for a minimum founding depth of 1.5 feet below surrounding finished grade in properly compacted select fill. Total settlement is predicted to be less than 1.0 inch for a sustained pressure of 1,500 psf.

Structure Subgrade Preparation

- Remove surficial vegetation and topsoil. Overexcavation of the loose sand and expansive clay to a depth of 4 feet below existing grade is recommended to reduce Potential Vertical Rise (PVR) to less than 1".
- Scarify the exposed subgrade, adjust the moisture content and recompact.
- Backfill with properly compacted select fill to finished subgrade.

Site Preparation
Good drainage away from the foundation is essential for proper function of the foundation. Surface drainage that collects around the footing and infiltrates the subgrade could reduce the bearing capacity and result in upward swelling pressure. Resultant localized softening of the soil could lead to tipping of the structure. The ground around the structure should be sloped away from it on all sides so that water will drain rapidly away. A concrete apron (optional) at least 5' wide surrounding the foundation will limit moisture change beneath the mat and thus reduce the risk of significant differential movement. Any joints in the apron as

well as the joint between the apron and the foundation should be sealed and maintained.

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APPENDIX

1.0 INTRODUCTION

This study was performed at the request and authorization to proceed granted by Christopher Weeks, P. E. with Velvin & Weeks Consulting Engineers, Inc., Athens, Texas in accordance with our proposal dated November 1, 2012. Field operations were conducted on December 3, 2012.

The purpose of this investigation was to define and evaluate the general subsurface conditions at the site of the proposed ground storage tank northwest of the existing pump house on Richardson Road, just northwest of Athens, Texas. Specifically, the study was planned to determine the following:

- Subsurface stratigraphy within the limits of exploratory borings,
- Classification, strength, expansive properties, and compressibility characteristics of the foundation soils;
- Suitable foundation types and allowable loading; and
- Construction related problems that may be anticipated by the investigation.

To determine this information a variety of tests were preformed on the soil samples. The scope of testing for this report comprised Standard Penetration, Atterberg liquid and plastic limits, Percentage of Fines Passing the No. 200 sieve and Natural Moisture Content. These tests were conducted to classify the soil strata according to a widely used engineering classification system; identify, and provide quantitative data for active (expansive) soils; define strength characteristics relating to allowable bearing values; predict total settlement; and assess construction workability of the soils.

The conclusions and recommendations that follow are based on limited information regarding site grading and proposed finished floor elevations provided to ETTL by others. The boring was drilled at a location as directed by the client's representative on site (ETTL did not confirm by survey that the locations indicated on the attached Plan of Borings accurately reflect the location on the ground). This information should be verified prior to design. *Should any portion of it prove incorrect, this firm should be notified in order to assess the need for revisions to this report.*

2.0 PROJECT DESCRIPTION

The project consists of a steel tank 10' in diameter and 18' high. The tank will be supported on an approximately l4' x 14' x 15" thick concrete mat. Finished grade will be close to existing grade.

3.0 SITE DESCRIPTIONS

Site is an open area northwest of the existing pump house as shown on Plate I.

4.0 SITE GEOLOGY

Subsurface conditions revealed by this investigation indicate the project site is directly underlain by strata of the Wilcox group of Eocene geologic age. The Wilcox in East Texas is predominantly a continental deposit laid down by shifting and meandering, sediment-laden streams.

The constant shifting of river courses during deposition of the Wilcox has produced a heterogeneous mixture of sand, silt, and clay, like that encountered at the project site. In outcrop the weathered silt and sandy clay displays various shades of gray, brown, yellow, and red. In addition, calcareous siltstone and ironstone concretions may appear as continuous ledges within the formation. Thickness of the Wilcox Group ranges from 500 to 1000 feet.

5.0 FOUNDATION SOIL STRATIGRAPHY & PROPERTIES

Soils consist of 3' loose silty sand (SM), overlying 5' hard fat clay with sand (CH), 5' medium dense silty sand (SM) and terminate in very stiff to hard lean clay (CL). Atterberg Plasticity Indices of the tested soils range from 21 to 39.

5.1 Behavior of Expansive Soils

Moderately expansive soils such as were found below the proposed foundation, swell when they absorb moisture and shrink as they dry. Structures placed on these soils move up and down with such volume changes of the soil. When expansive soils are covered by an impermeable surface such as a large foundation, building slab or pavement, seasonal moisture fluctuation at the interior of the covered area tends to be reduced or eliminated due to the lack of exposure to natural wetting and drying conditions (i.e., wind, rain, sun, vegetative, etc.). At the edges of the structure, however, the near surface soils are still subject to seasonal drying and wetting. Where continuously irrigated areas abut a building, the risk of severe shrinkage due to seasonal evaporative drying effects is low, but excess moisture could lead to significant swelling (especially if native clays are dry at the start of construction). Where areas immediately adjacent to the structure are paved both the risk of swelling due to excess moisture and shrinkage due to moisture loss are reduced significantly.

The soils we tested were moderately dry. Potential for swelling is considered to be moderate under conditions at the time of drilling. Potential for shrinkage is moderate. As the moisture content of the soil changes from what it was in our samples, the potential for swelling and shrinkage will change accordingly.

One method for quantifying the potential for subgrade movement at any given location is to calculate the Potential Vertical Rise (PVR) (Tex 124 E Modified). This calculation takes into account the inter-relationship between depth, PI, and fluctuations in soil moisture. The maximum potential movement of the existing subgrade, PVR, due to normal climatological fluctuations in soil moisture content is predicted to be 1.3 inches at the *existing grade* (based on assumed dry conditions and an estimated annual seasonal moisture fluctuation zone of approximately 10 feet).

5.2 Seismic Design Parameters

Based on the 2012 International Building Code section 1615 *Earthquake Loads – Site Ground Motion,* the seismic site class definition may conservatively be taken as **Class C.** A full report with recommended design parameters for this site is included in the Appendix.

6.0 GROUNDWATER OBSERVATIONS

Groundwater levels and seepage depths were monitored during and upon completion of drilling as well as at some point following completion. Groundwater was not encountered. The phreatic surface is predicted to be below a depth of 30 feet.

It should be noted, however, that seasonal groundwater conditions might vary throughout the year depending upon prevailing climatic conditions. This magnitude of variance will be largely dependent upon the duration and intensity of precipitation, surface drainage characteristics of the surrounding area, and significant changes in site topography.

7.0 FOUNDATION DESIGN RECOMMENDATIONS

The water storage tank will be supported on a large concrete mat. Pertinent design parameters for a mat foundation are outlined below.

7.1 Mat Footing

The bearing surface of the mat foundation should be placed on properly compacted select fill. A gross allowable soil bearing pressure of 2,000 psf (concentric bearing pressure only) is recommended for a minimum founding depth of 1.5 feet below finished surrounding grade. This allowable bearing pressure incorporates a safety factor relative to shear failure of the soil of at least 3 and may be increased up to 33% for intermittent loads such as wind. Total settlement due to load is predicted to be less than 1 inch for a sustained pressure of 1,500 psf.

The foundation will also be subject to shrink/swell movements due to volume changes of the native expansive clays that remain beneath the foundation. These movements (heave or shrinkage) can occur in isolated areas and, thus, should be considered potential differential movement. Movement potential of these soils depends upon the moisture condition of the soil at the time of construction. Drying of the soils prior to placement of the footing could result in even higher movement potential than what is predicted in section **4.1**, above. Subgrade moisture fluctuation and thus the potential movement to which the foundation is subject can be reduced by providing a 5' wide (minimum) concrete apron around the foundation. The joint between the apron and the foundation as well as any joints in the apron should be sealed and maintained.

7.2 Eccentrically Loaded Footings

Allowable loading for eccentrically loaded footings is proportional to the degree of eccentricity and is lower than for a concentrically loaded footing. Equivalent allowable vertical uniform pressure (i.e. ignoring the effects of overturning moments) on an eccentrically loaded footing may be computed in accordance with the following:

$$q_{ae} = q_a * R_{ex} * R_{ey}$$

Where:

q_a	=	allowable uniform pressure for a concentrically loaded footing as determined above.
R_{ex}	=	reduction coefficient for eccentricity about the x axis
	=	$1 - 2 * e_x/B_x$ for cohesive soils (CL & CH)
	=	$1 - (e_x/B_x)^{0.5}$ for cohesionless soils (SM, SC, ML)
R_{ey}	=	reduction coefficient for eccentricity about the y axis
	=	$1 - 2 * e_y/B_y$ for cohesive soils (CL & CH)
	=	$1 - (e_y/B_y)^{0.5}$ for cohesionless soils (SM, SC, ML)
e_x, e_y	=	eccentricity in the x and y direction, respectively
B_x, B_y	=	footing dimension in the x and y direction, respectively

Total allowable vertical load with eccentricities e_x and e_y may be found by multiplying the gross area of the eccentrically loaded footing by q_{ae} as determined above.

8.0 STRUCTURE SUBGRADE PREPARATION

In order to validate the design assumptions given above regarding allowable foundation loads, it is imperative that the subgrade of the structure be properly prepared. The following procedures are recommended as a minimum:

- Remove surficial vegetation and organic topsoil.
- Overexcavate the existing loose sand and expansive clay to a depth of 4 feet below existing grade in order to reduce Potential Vertical Rise (PVR) to less than 1".
- Scarify the exposed subgrade to a depth of 8 inches, adjust the moisture content to, and maintain it within a range of optimum to optimum plus 3 percent and recompact to a minimum density of 95 percent of the maximum density defined by ASTM D 698 (Standard Proctor).
- Backfill with properly compacted select fill to finished subgrade. Specifications for the placement of select fill are covered in section **10.2 Select Fill**.

9.0 STRUCTURE SITE PREPARATION

Good drainage is essential for proper function of the foundation. Surface drainage that collects around the footing and infiltrates the subgrade could reduce the bearing capacity and/or result in upward swelling pressure and differential movement. Resultant localized softening of the soil could lead to tipping of the structure. As noted above, a concrete apron surrounding the foundation will also help reduce the risk of differential movement.

10.0 GENERAL CONSTRUCTION CONSIDERATIONS

10.1 Mat Footing

All footing excavations should be inspected by qualified personnel to insure that subgrade is composed of firm, undisturbed native soil as recommended in this report. Water and/or

loose material in footing excavations should be removed prior to final shaping of the footing excavation and placement of concrete.

10.2 Select Fill

Select fill shall consist of homogeneous soils (i.e. not sand with clay lumps) free of organic matter and rocks larger than 6 inches in diameter and possessing an Atterberg PI of 8 to 18, with a liquid limit of 40 or less and with material finer than the #200 sieve greater than 40%. Atterberg limits testing of the fill at a rate of 1 test per every 250 cubic yards of fill placed is recommended to verify that fill specifications are met. The material should be placed in the following manner:

- Prepare the subgrade in accordance with the recommendations discussed in a previous section of this report entitled **STRUCTURE SUBGRADE PREPARATION**. Sites that slope more than about 15% should be benched with 5' wide benches.

- Place subsequent lifts of select fill in thin, loose layers not exceeding nine inches in thickness to the desired rough grade and compact to a minimum of 95% of the maximum density defined by ASTM D 698. Maintain moisture within a range of optimum to optimum +3%.

- Conduct in-place field density tests at a rate of one test per 3,000 square feet for every lift with a minimum of 2 tests per lift recommended. Density testing is essential to help assure that the soil, which supports the structure, is properly placed.

- Prevent excessive loss of moisture during construction.

- For select fill placed above the existing groundline, extend the lateral limits of the fill at least 5 feet beyond the perimeter of the structure area, transitioning back to the existing groundline on a 3:1(horizontal/vertical) slope.

10.3 Excavations

The Federal Register, Volume 54, No. 209 (Revised July 1992), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) contain the "Construction Standards for Excavations, 29 CFR, part 1926, Subpart P". The contractor is solely responsible for designing and constructing stable, temporary excavations in accord with these standards and should shore, slope or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in CFR Part 1926, should evaluate the soil exposed in the excavation as part of the contractor's safety procedure. In no case should the height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. Testing to determine the slope stability for the soils at this site was beyond the scope of this study. Based on conditions at the time of drilling, soils at this site may be classed as Type A

11.0 LIMITATIONS

Geotechnical design work is characterized by the presence of a calculated risk that soil and groundwater conditions may not have been fully revealed by the exploratory borings. This

risk derives from the practical necessity of basing interpretations and design conclusions on a limited sampling of the subsoil stratigraphy at the project site. The number of borings and spacing is chosen in such a manner as to decrease the possibility of undiscovered anomalies, while considering the nature of loading, size and cost of the project. The recommendations given in this report are based upon the conditions that existed at the boring locations at the time they were drilled. The term "existing groundline" or "existing subgrade" refers to the ground elevations and soil conditions at the time of our field operations.

It is conceivable that soil conditions throughout the site may vary from those observed in the exploratory borings. If such discontinuities do exist, they may not become evident until construction begins or possibly much later. Consequently, careful observations by the geotechnical engineer must be made of the construction as it progresses to help detect significant and obvious deviations of actual conditions throughout the project area from those inferred from the exploratory borings. Should any conditions at variance with those noted in this report be encountered during construction, this office should be notified immediately so that further investigations and supplemental recommendations can be made.

Construction plans and specifications should be submitted to ETTL for review prior to issuance for construction to help verify that the recommendations of this report have been correctly understood and implemented.

This company is not responsible for the conclusions, opinions, or recommendations made by others based on the contents of this report. The recommendations made in this report are applicable only to the proposed structure(s) as defined in **SECTION 2.0 PROJECT DESCRIPTION**. The purpose of this study is only as stated elsewhere herein and is not intended to comply with the requirements of 30 TAC 330 Subchapter T regarding testing to determine the presence of a landfill. Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. No warranties are either expressed or implied.

APPENDIX

I.0 FIELD OPERATIONS

Subsurface conditions were defined by one sample core boring drilled to depths of 30 feet. ETTL personnel staked and drilled the boring based on a site plan provided by the client. The field boring log was prepared as drilling and sampling progressed. The final boring log is also included in the Appendix. Descriptive terms and symbols used on the log are in accordance with the Unified Soil Classification System (ASTM D 2487). A reference key is provided on the final page of this report.

A truck-mounted drill rig utilizing dry auger drilling procedures was used to advance the borings. Soils were sampled by means of a 1 3/8-inch I.D. by 24-inch long split-spoon sampler driven into the bottom of the borehole in accordance with ASTM D 1586 procedures. In conjunction with this sampling technique, the Standard Penetration Test was conducted by recording the N-value, which is the number of blows required by a 140-pound weight falling 30 inches to drive a split-spoon sampler 1 foot into the ground. For very dense strata, the number of blows is limited to a maximum of 50 blows within a 6-inch increment. Where possible, the sampler is "seated" six inches before the N-value is determined. The N-value obtained from the Standard Penetration Test provides an approximate measure of the relative density that correlates with the shear strength of soil. The disturbed samples were removed from the sampler, logged, packaged, and transported to the laboratory for further identification and classification.

Soils were also sampled by means of a 3-inch O.D. by 24-inch long thick-walled Shelby Tube sampler. Using the drilling rig's hydraulic pressure, the sampler was pushed smoothly into the bottom of the borehole. The consistency of these samples was measured in the field by a calibrated pocket penetrometer. These values, recorded in tons per square foot, are shown on the boring logs. Such samples were extruded in the field, logged, sealed to maintain *in situ* conditions, and packaged for transport to the laboratory.

Samples obtained during our field studies and not consumed by laboratory testing procedures will be retained in our Tyler office free of charge for a period of 60 days. To arrange storage beyond this point in time, please contact the Tyler office.

II.0 LABORATORY TESTING

Upon return to the laboratory, a geotechnical engineer visually examined all samples and several specimens were selected for representative identification of the substrata. By determining the Atterberg liquid and plastic limits (ASTM D 4318) and percentage of fines passing the No. 200 sieve (ASTM D 1140), field classification of the various strata was verified. Also conducted were natural moisture content tests (ASTM D 2216).

Strength characteristics of the cohesive substrata were evaluated by conducting unconsolidated, undrained triaxial compression tests (ASTM D 2850) on selected undisturbed field samples obtained with the Shelby tube sampler. In this type of compression test, confining pressures were chosen that approximate in situ pressures at the sample depth below existing ground. The specimens were axially loaded until failure

occurred. The shear strength (or cohesion) is equal to one-half the peak compressive stress. Moisture content (ASTM D 2216) and dry density (ASTM D 2437) are determined as part of this test. The results of these tests are also presented in the individual log of boring provided in this Appendix.

USGS Design Maps Summary Report

User-Specified Input

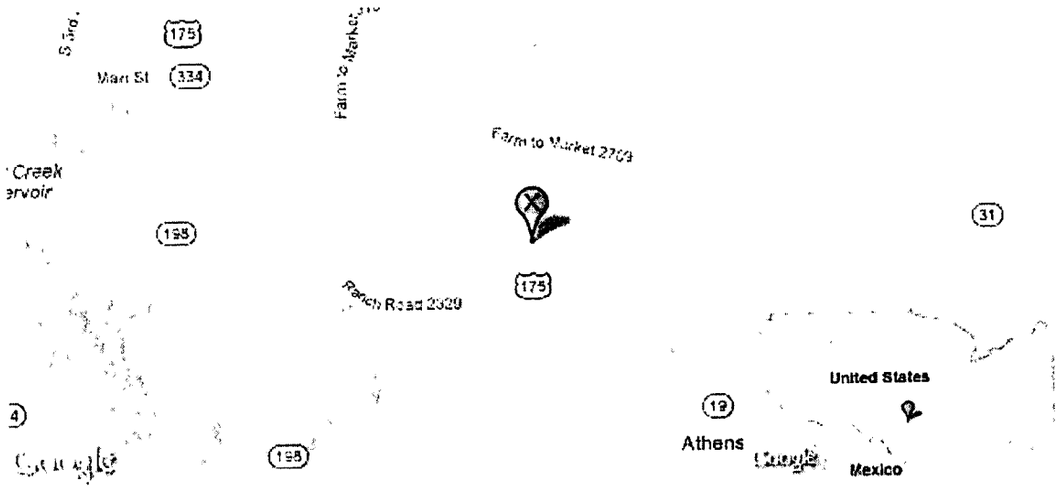
Report Title Athens Water Supply Standpipe, Athens, Texas
Tue December 18, 2012 17:18:04 UTC

Building Code Reference Document 2012 International Building Code
(which makes use of 2008 USGS hazard data)

Site Coordinates 32.27263°N, 95.92735°W

Site Soil Classification Site Class C – "Very Dense Soil and Soft Rock"

Risk Category I/II/III

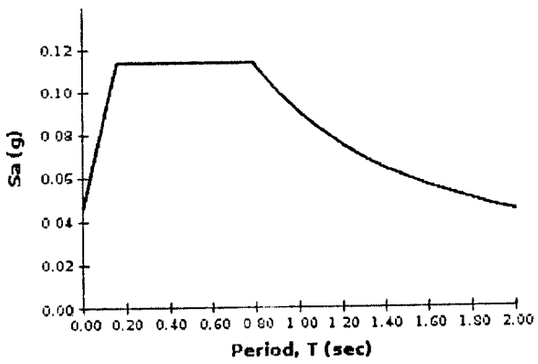


USGS-Provided Output

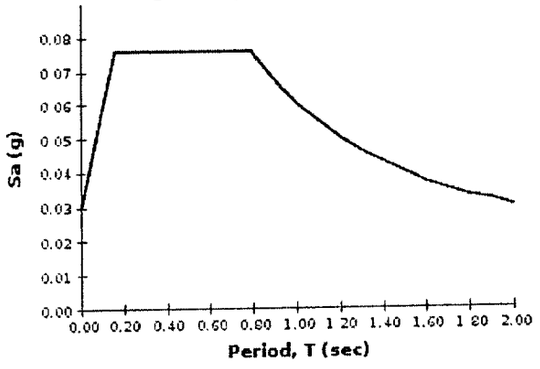
S_S =	0.095 g	S_{MS} =	0.114 g	S_{DS} =	0.076 g
S_1 =	0.053 g	S_{M1} =	0.090 g	S_{D1} =	0.060 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.

MCE_R Response Spectrum



Design Response Spectrum



USGS Design Maps Detailed Report

2012 International Building Code (32.27263°N, 95.92735°W)

Section 1613.3.1 — Mapped acceleration parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_s) and 1.3 (to obtain S_1). Maps in the 2012 International Building Code are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 1613.3.3.

From Figure 1613.3.1(1) [1]	S_s = 0.095 g
From Figure 1613.3.1(2) [2]	S_1 = 0.053 g

Section 1613.3.2 — Site class definitions

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class C, based on the site soil properties in accordance with Section 1613.

2010 ASCE-7 Standard – Table 20.3-1
SITE CLASS DEFINITIONS

Site Class	$\bar{v}_s$	$\bar{N}$ or $\bar{N}_{ch}$	$\bar{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
	Any profile with more than 10 ft of soil having the characteristics: • Plasticity index PI > 20, • Moisture content w ≥ 40%, and • Undrained shear strength $\bar{s}_u$ < 500 psf		
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 1613.3.3 — Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters

TABLE 1613.3.3(1)
VALUES OF SITE COEFFICIENT F_a

Site Class	Mapped Spectral Response Acceleration at Short Period				
	$S_s \le 0.25$	$S_s = 0.5$	$S_s = 0.75$	$S_s = 1$	$S_s \ge 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_s

For Site Class = C and S_s = 0.095 g, F_a = 1.200

TABLE 1613.3.3(2)
VALUES OF SITE COEFFICIENT F_v

Site Class	Mapped Spectral Response Acceleration at 1-s Period				
	$S_1 \le 0.1$	$S_1 = 0.2$	$S_1 = 0.3$	$S_1 = 0.4$	$S_1 \ge 0.5$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_1

For Site Class = C and S_1 = 0.053 g, F_v = 1.700

Equation (16-37): $S_{MS} = F_a S_S = 1.200 \times 0.095 = 0.114$ g

Equation (16-38): $S_{M1} = F_v S_1 = 1.700 \times 0.053 = 0.090$ g

Section 1613.3.4 — Design spectral response acceleration parameters

Equation (16-39): $S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 0.114 = 0.076$ g

Equation (16-40): $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.090 = 0.060$ g