

**NORTH TEXAS
GROUNDWATER
CONSERVATION
DISTRICT**

**PERMIT HEARING, SHOW CAUSE HEARING,
AND BOARD MEETING**

IN-PERSON MEETING LOCATION:

Pilot Point ISD Administration Office
829 S. Harrison St.
Pilot Point, TX 76258

REMOTE ACCESS ALSO AVAILABLE AT:

Join by computer, tablet or smartphone at the following link:

<https://global.gotomeeting.com/join/537537765>

or

Join by phone 571-317-3122 with access code: 537-537-765

**TUESDAY
OCTOBER 13, 2020
10:00 AM**

NOTICE OF PUBLIC MEETING

OF THE
BOARD OF DIRECTORS of the

NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT
Tuesday, October 13, 2020 at 10:00 a.m.

IN-PERSON MEETING LOCATION:
Pilot Point ISD Administration Office
829 S. Harrison St.
Pilot Point, TX 76258

REMOTE ACCESS ALSO AVAILABLE AT:

Join by computer, tablet or smartphone at the following link:
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Notice is hereby given that, in accordance with Governor Abbott's March 16, 2020, action to temporarily suspend certain provisions of the Texas Open Meetings Act, a quorum of the Board of Directors of the North Texas Groundwater Conservation District ("District") will hold public hearings and a Board meeting in-person and via telephone and video conference call beginning at 10:00 a.m. on Tuesday, October 13, 2020. Please note for in-person attendance that the Board meeting location can only accommodate a limited number of attendees in order to comply with the Governor's proclamation related to in-person gatherings, and that remote access may be required in the event the capacity limitations are reached. Public comment can be provided whether participating in-person or remotely.

Permit Hearing

The Permit Hearing will begin at 10:00 a.m.

Notice is hereby given that the Board of Directors of the North Texas Groundwater Conservation District ("District") will conduct a permit hearing on the following Production Permit and Permit Amendment Applications:

Agenda:

1. Call to Order; establish quorum; declare hearing open to the public; introduction of Board.
2. Review the Production Permit Applications of:

New Production Permits

1. Applicant: NP-OV Fort Worth Project CY, LLC; 4825 NW 41st Street, Suite 500, Riverside, MO 64150
Location of Well: 19584 FM 156, Justin, TX 76247; Latitude: 33.0128364°N, Longitude: 97.3475988°W;
About 2.6 miles south on FM 156 from the intersection of FM 156 and Hwy 114 and about one half mile northwest of FM 156.

Purpose of Use: Fire Suppression System

Requested Amount of Use: 100,000 gallons per year

Production Capacity of Well: 170 gallons per minute

Aquifer: Trinity (Antlers) Aquifer

2. Applicant: Trailwood Investments, LP; 218 W. Wall St., Grapevine, TX 76051

Location of Well: A1605A Bruce Wheeler, Tr 6; Latitude: 33.05572222°N, Longitude: 97.213472222°W;
About 0.6 miles west on FM 1171 from the intersection of FM 1171 and Hwy 377 and about one quarter of mile south of FM 1171 in Flower Mound

Purpose of Use: Landscape Irrigation

Requested Amount of Use: 10,443,900 gallons per year for 2021 and 5,633,900 gallons per year after 2021 (This permit has an additional 5,176,100 gallons per year in Historic Use)

Production Capacity of Well: 195 gallons per minute

Aquifer: Trinity (Antlers) Aquifer

Production Permit Amendments

3. Applicant: Hollyhock Residential Association, Inc.; 12700 Hillcrest Road, Suite 234, Dallas, TX 75230

Location of Well: Latitude: 33.2112677°N, Longitude: 96.8675176°W; Northeast corner of Rockhill Parkway and Teel Parkway in Frisco

Purpose of Use: Landscape Irrigation

Requested Amount of Use: 9,900,000 gallons per year

Production Capacity of Well: 210 gallons per minute

Aquifer: Woodbine Aquifer

Amendment: Increasing the production capacity of the well from 150 gallons per minute to 210 gallons per minute. This well replaced an existing well with a production capacity for 150 gallons per minute.

3. Public Comment on the Production Permit Applications (verbal comments limited to three (3) minutes each).
4. Consider and act upon the Production Permit Applications, including designation of parties and/or granting or denying the Production Permit Applications in whole or in part, as applicable.
5. Adjourn or continue permit hearing.

Show Cause Hearing

The Show Cause Hearing will begin upon adjournment of the above noticed Permit Hearing.

Notice is hereby given that the Board of Directors of the North Texas Groundwater Conservation District ("District") will hold a show cause hearing and may discuss, consider, and take all necessary action regarding the subject matter of the hearing.

Agenda:

1. Call to Order, declare hearing open to the public, and take roll.
2. Conduct Show Cause hearing under Rule 11.6 on the following for alleged violations of District Rules. Discuss, consider, receive testimony, and take appropriate action, including without limitation, authorizing the District to initiate a civil lawsuit to enforce compliance with the District Rules, including recovery of civil penalties, costs, and attorney's fees, and all other appropriate legal and equitable relief. Consider assessment of additional civil penalties based on continued non-compliance.
 - A. Shenandoah Estates Water System
3. Adjourn or continue show cause hearing.

Board Meeting

The regular Board Meeting will begin upon adjournment of the above noticed Show Cause Hearing.

Notice is hereby given that the Board of Directors of the North Texas Groundwater Conservation District ("District") may discuss, consider, and take all necessary action, including expenditure of funds, regarding each of the agenda items below:

Agenda:

1. Pledge of Allegiance and Invocation.
2. Call to order, establish quorum; declare meeting open to the public.
3. Public comment.
4. Consider and act upon approval of the minutes from the September 8, 2020, Board meeting.
5. Consider and act upon approval of invoices and reimbursements, Resolution No. 2020-10-13-01.
6. Receive reports from the following Committees*:
 - a. Budget and Finance Committee
 - 1) Receive Monthly Financial Information
 - b. Management Plan Committee
 - 1) Receive Quarterly Report
7. Update and possible action regarding the process for the development of Desired Future Conditions (DFCs).
8. Consider and act upon amendments to the District's Hydrogeological Report Requirements.

9. Consider and act upon compliance and enforcement activities for violations of District rules.
 - a. Axis Drilling
10. General Manager's Report: The General Manager will update the board on operational, educational and other activities of the District.
 - a. District's Disposal/Injection Well Program
 - b. Well Registration Summary
11. Open forum / discussion of new business for future meeting agendas.
12. Adjourn public meeting.

* Reports from District standing committees will include a briefing by each committee for the Board on the activities of the committee, if any, since the last regular Board meeting.

The above agenda schedule represents an estimate of the order for the indicated items and is subject to change at any time.

These public meetings are available to all persons regardless of disability. If you require special assistance to attend the meeting, please call (855) 426-4433 at least 24 hours in advance of the meeting to coordinate any special physical access arrangements.

For questions regarding this notice, please contact Velma Starks at (855) 426-4433, at ntgcd@northtexasgcd.org, or at 5100 Airport Drive, Denison, TX 75020.

At any time during the hearings or meeting, and in compliance with the Texas Open Meetings Act, Chapter 551, Government Code, Vernon's Texas Codes, Annotated, the North Texas Groundwater Conservation District Board may meet in executive session on any of the above agenda items or other lawful items for consultation concerning attorney-client matters (§551.071); deliberation regarding real property (§551.072); deliberation regarding prospective gifts (§551.073); deliberation regarding personnel matters (§551.074); deliberation regarding security devices (§551.076); and deliberation regarding cybersecurity (§551.089). Any subject discussed in executive session may be subject to action.

ATTACHMENT 4

**MINUTES OF THE BOARD OF DIRECTORS' BOARD MEETING AND PUBLIC HEARING
NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT**

Join by computer, tablet or smartphone at the following link:

<https://global.gotomeeting.com/join/331857229>

or

Join by phone 872-240-3212 with access code: 331-857-229

Tuesday, September 8, 2020 – 10:00 a.m.

Notice is hereby given that, in accordance with Governor Abbott's March 16, 2020, action to temporarily suspend certain provisions of the Texas Open Meetings Act, a quorum of the Board of Directors of the North Texas Groundwater Conservation District ("District") will hold a permit hearing and Board meeting via telephone and video conference call beginning at 10:00 a.m. on Tuesday, September 8, 2020. Any member of the public who wishes to participate remotely may do so through the remote access options provided above.

Members Present: Thomas Smith, Ronny Young, Allen Knight, Ryan Henderson, Lee K. Allison, Ron Sellman, Joe Helmberger, and David Flusche

Members Absent:

Staff: Drew Satterwhite, Paul Sigle, Allen Burks, Theda Anderson, Debi Atkins, Nichole Sims, Carolyn Bennett, and Velma Starks

Visitors: Kristen Fancher, Fancher Legal
James Beach, WSP
Michelle Carte
Peter Schulmeyer
James Parkman
Dale, DD Drilling

Permit Hearing

Agenda:

1. Call to Order; establish quorum; declare hearing open to the public; introduction of Board.

President Thomas Smith called the permit hearing to order at 10:00 a.m.

2. Review the Production Permit Applications of:

Applicant: North Texas Municipal Water District (Garney Construction); 361 County Road 4965, Leonard, TX 75452

Location of Well: 5571 Bomar Lane, McKinney, TX 75071; Latitude: 33.232982°N, Longitude: 96.556154°W; About one mile west of the intersection of County Road 988 and County Road 1827.

Purpose of Use: Construction, dust control, leak and pipe testing
Requested Amount of Use: 62,300,000 gallons for the duration of the construction project
Production Capacity of Well: 199 gallons per minute
Aquifer: Woodbine Aquifer

General Manager Drew Satterwhite reviewed the Permit Application with the Board.

3. Public Comment on the Production Permit Applications.

There were no public comments.

4. Consider and act upon the Production Permit Applications, including designation of parties and/or granting or denying the Production Permit Applications in whole or in part, as applicable.

Board Member Joe Helmberger made the motion to grant the Production Permit as presented. Board Member Lee Allison seconded the motion. The Board was polled individually. Motion passed unanimously. Discussion was held.

5. Adjourn or continue permit hearing.

President Thomas Smith adjourned the permit hearing at 10:19 a.m.

Board Meeting

1. Pledge of Allegiance and Invocation

Board President Thomas Smith led the Pledge of Allegiance and provided the invocation.

2. Call to order, establish quorum; declare meeting open to the public

Board President Thomas Smith called the meeting to order 10:19 a.m., established a quorum was present, and declared the meeting open to the public.

3. Public Comment

There were no public comments.

4. Consider and act upon approval of the minutes from the August 11, 2020, Board meeting.

Board President Thomas Smith asked for approval of the minutes from the August 11, 2020 meeting. Board Member Ron Sellman made the motion to approve the minutes. Board Member Lee Allison seconded the motion. Board Member Allen Knight made a correction to the minutes, Item 8, in the third sentence, remove the comma and put a space between the words "to" and "adopt". The Board was polled individually. Motion passed with one abstention. David Flusche abstained.

5. Consider and act upon approval of invoices and reimbursements, Resolution No. 2020-09-08-01.

General Manager Drew Satterwhite reviewed the liabilities with the Board. Board Member Allen Knight made the motion to approve Resolution No. 2020-09-08-01. Board Member Joe Helmberger seconded the motion. Discussion was held. The Board was polled individually. Motion passed unanimously.

6. Receive reports from the following Committees*:

- a. Budget and Finance Committee
 - 1) Receive Monthly Financial Information

General Manager Drew Satterwhite provided a review of the Financial Report for the Board.

7. Update and possible action regarding the process for the development of Desired Future Conditions (DFCs).

No update on DFCs. GMA 8 plan to meet In October.

James Beach provided a presentation on Brackish Groundwater zones. Kristen Fancher, legal counsel provided additional information. TWDB is looking to Districts for comments regarding the rules TWDB is considering implementing. Motion will give District Staff, James Beach and Kristen Fancher authority to develop comments to TWDB rules and present them to Board President Thomas Smith before sending comments to TWDB by September 21, 2020. Board Member Joe Helmberger made the motion. Board Member Ron Sellman seconded the motion. The Board was polled individually. Motion passed unanimously.

8. Consider and act upon compliance and enforcement activities for violations of District rules.

- a. CTMGT Montalcino, LLC

Drew Satterwhite provided information for the Board. CTMGT Montalcino showed one the same meter reading since 2015. Staff went out for well inspection and noticed meter had registered a significant amount of production since 2015. Staff recommends two major violations totaling \$1000.00 for (1) failure to accurately report meter readings and (2) failure to pay usage for five years. Board Member Allen Knight made the motion. Board Member Joe Helmberger seconded the motion. The Board was polled individually. Motion passed unanimously.

9. General Manager's Report: The General Manager will update the board on operational, educational and other activities of the District.

- a. District's Disposal/Injection Well Program

Drew Satterwhite updated the Board on the Disposal/Well Injection program. One application complied and we did not protest.

- b. Well Registration Summary

General Manager Drew Satterwhite reviewed the August Well Registration Summary. There were 28 registrations

Texas A&M Agrilife completed review of model of irrigation estimates. Plans are to go into Phase 2 in November. Model will be presented to the Board at a future in-person meeting.

10. Open forum/discussion of new business for future meeting agendas.

A discussion was held as to whether to continue with the virtual format or meet in person. The Board decided to move forward with in-person meetings while offering the virtual meeting as an alternative to folks who do not wish to attend.

11. Adjourn public meeting

Board President Thomas Smith declared the meeting adjourned at 11:21 a.m.

Recording Secretary

Secretary-Treasurer

ATTACHMENT 5

RESOLUTION NO. 2020-10-13-01

A RESOLUTION BY THE BOARD OF DIRECTORS OF THE NORTH TEXAS
GROUNDWATER CONSERVATION DISTRICT AUTHORIZING PAYMENT OF
ACCRUED LIABILITIES FOR THE MONTH OF SEPTEMBER

The following liabilities are hereby presented for payment:	<u>Amount</u>
<u>Administrative Services</u>	
GTUA - September	28,966.84
<u>Consultant</u>	
WSP - Hydro-Geo Services thorough August	2,200.00
<u>Dues & Subscriptions</u>	
Texas Alliance of Groundwater Districts - 2021 membership renewal	1,800.00
<u>GMA-8 Fees</u>	
WSP - Joint groundwater planning effort through August	1,925.00
<u>Injection Well Monitoring</u>	
State Wide Plat Service - July searches	50.00
State Wide Plat Service - August searches	50.00
<u>Legal</u>	
Fancher Legal - August General Legal Counsel	2,358.00
<u>Meetings & Conferences</u>	
Pilot Point ISD - BOD Room Rental	75.00
<u>Software Maintenance</u>	
Aquaveo - Well Database Maintenance for August	500.00
<u>Well Production</u>	
Creekside Water Utilities - Refund overpayment	8,338.81
GRAND TOTAL:	<u>\$ 46,263.65</u>

On motion of _____ and seconded by

the foregoing Resolution was passed and approved on this, the 13th day of October, 2020 by the

AYE:

NAY:

President

Secretary/Treasurer

ATTACHMENT 6 A-1

NORTH TEXAS GROUNDWATER

Balance Sheet

As of September 30, 2020

ASSETS

Current Assets

Checking/Savings

10001 Checking Account	1,295,544.58
10005 Cash-Index Account	6,741.18
10008 Cash - Tex Star	88,088.26
10025 Accounts Receivable	33,651.82
10033 A/R Penalties	2,000.00
10035 A/R GMA8 Members	10,014.32
10040 Pump Installer Deposit	100.00
10070 Liens	14,000.00
10010 INVESTMENT	700,000.00
10026 Allowance for Uncollectib	-27,500.00
12001 Prepaid Expenses	3,172.02

TOTAL ASSETS 2,125,812.18

LIABILITIES & EQUITY

Liabilities

Current Liabilities

Accounts Payable

23100 Accounts Payable	33,524.34
23150 Well Drillers Deposits	35,550.00

Total Liabilities 69,074.34

Equity

35100 Retained Earnings	2,046,484.57
Net Income	10,253.27

Total Equity 2,056,737.84

TOTAL LIABILITIES & EQUITY 2,125,812.18

NORTH TEXAS GROUNDWATER
Profit & Loss Budget vs. Actual
 January through September
 2020

	TOTAL				% of Budget remaining
	September 20	Budget	YTD Actual	Total Budget	
Ordinary Income/Expense					
Income					
46003 - Registration Fees	3,300.00	1,750.00	18,400.00	21,000.00	12.38%
46004 - Well Driller Fees	0.00		0.00		0.0%
46005 - PRODUCTION FEES	-8,338.81	0.00	305,489.77	700,000.00	56.36%
46006 Income GMA8	11,280.76	4,166.67	35,494.05	50,000.00	29.01%
46007 - Penalties	0.00		5,000.00		0.0%
46015 Late Fees	-50.00		18,693.42		0.0%
Uncategorized Income					0.0%
Total Income	<u>6,191.95</u>	<u>5,916.67</u>	<u>383,077.24</u>	<u>771,000.00</u>	<u>50.31%</u>
Gross Profit	6,191.95	5,916.67	383,077.24	771,000.00	50.31%
Expense					
77010 ADMINISTRATIVE					
77013 Admin-Secretarial	1,005.00	2,083.34	13,496.00	25,000.00	46.02%
77014 Admin-Project Coordinator	560.00	1,666.67	7,453.00	20,000.00	62.74%
77015 Admin-GM	5,311.00	5,166.67	53,011.00	62,000.00	14.5%
77016 Admin-Clerical	3,615.00	3,333.34	32,413.50	40,000.00	18.97%
77040 ADMIN-MILEAGE	20.82	250.00	598.87	3,000.00	80.04%
77025 ACCOUNTING	1,689.00	2,500.00	24,000.00	30,000.00	20.0%
77027 AUDITING	0.00	0.00	5,500.00	5,535.00	0.0%
77030 ADVERTISING	0.00	166.67	688.85	2,000.00	65.56%
77050 BANKING FEES	0.00	0.00	45.00	100.00	0.0%
77150 CONSULTING-HYDROGEO SVC	0.00	3,750.00	26,338.82	45,000.00	41.47%
77325 DIRECT COSTS-REIMB	254.70	583.35	2,525.94	7,000.00	63.92%
77450 DUES & SUBSCRIPTION	0.00	250.00	0.00	3,000.00	100.0%
77480 EQUIPMENT	1,061.99	833.34	2,305.01	10,000.00	76.95%
77485 Equipment Database	0.00	1,250.00	0.00	15,000.00	100.0%
77500 FEES-GMA8	1,863.50	4,583.34	33,625.65	55,000.00	38.86%
77550 FIELD TECH	9,293.50	10,416.67	92,999.50	125,000.00	25.6%
77560 Field Permitting/Geologis	5,659.50	5,833.34	49,642.00	70,000.00	29.08%
77650 FUEL/MAINTENANCE	133.30	291.67	2,156.74	3,500.00	38.38%
77800 INJECTION WELL MONITORING	100.00	58.34	414.20	700.00	40.83%
77810 INSURANCE & BONDING	371.00	329.17	3,669.98	3,950.00	7.09%
77970 LEGAL					
77975 Legal-Injection	0.00	1,416.67	3,229.40	17,000.00	81.0%
77970 LEGAL - Other	2,358.00	4,166.67	20,296.82	50,000.00	59.41%
78010 MEETINGS & CONFERENCES	0.00	666.67	1,709.83	8,000.00	78.63%
78310 Rent	200.00	200.00	1,800.00	2,400.00	25.0%
78600-SOFTWARE MAINT	500.00	416.67	6,192.95	5,000.00	-23.86%
78610 TELEPHONE	84.48	225.00	2,235.75	2,700.00	17.19%
78780 Well Monitoring/Testing	0.00	375.00	216.57	4,500.00	95.19%
Total Expense	<u>34,080.79</u>	<u>32,729.23</u>	<u>386,565.38</u>	<u>615,385.00</u>	<u>37.18%</u>
Other Income/Expense					
Other Income					
46100 INTEREST INC	0.00	1,666.67	13,741.41	20,000.00	
Total Other Income	<u>0.00</u>	<u>1,666.67</u>	<u>13,741.41</u>	<u>20,000.00</u>	
Net Other Income	0.00	1,666.67	13,741.41	20,000.00	
Net Income	<u><u>-27,888.84</u></u>	<u><u>-25,145.89</u></u>	<u><u>10,253.27</u></u>	<u><u>175,615.00</u></u>	

ATTACHMENT 6 B-1



COLLIN COUNTY - COOKE COUNTY - DENTON COUNTY

General Manager’s Quarterly Report

Date: September 30, 2020

North Texas GCD Management Plan

This quarterly briefing is being provided pursuant to the adopted Management Plan for the quarter ending September 30, 2020.

Well Registration Program:

Current number of wells registered in the District: 2,716

Aquifers in which the wells have been completed: Trinity and Woodbine

Well Inspection/Audit Program:

**2020
Well Inspections**

Month	Collin	Cooke	Denton	Total
January	9	5	15	29
February	7	26	17	50
March	17	1	3	21
April	0	38	8	46
May	1	6	8	15
June	4	6	12	22
July	3	1	15	19
August	8	1	19	28
September	2	10	7	19
October				
November				
December				
Total	51	94	104	249

ATTACHMENT 8



AGENDA COMMUNICATION

DATE: October 9, 2020

SUBJECT: AGENDA ITEM NO. 8

CONSIDER AND ACT UPON AMENDMENTS TO THE DISTRICT'S HYDROGEOLOGICAL REPORT REQUIREMENTS

ISSUE

The District staff would like the Board to consider an amendment to the Hydrogeological Report Requirements.

BACKGROUND

As the District moved into permanent rules, the District now requires a Hydrogeological Report to be submitted as part of the application process for wells capable of producing 200 gallons per minute or more.

The staff has now identified an item that we would like clarity from the Board on based upon past discussions with the Board. It is the staff's understanding that the requirement for an applicant to submit a Hydrogeological Report would be triggered when an applicant is requesting an additional 200gpm capacity. For example, if a well system had a 500 gpm capacity prior to adoption of permanent rules (1/1/19) and wanted to add a 20gpm well, the 50 gpm well alone would not require the applicant to submit a Hydrogeological Report. If the applicant followed that 50 gpm well with a well or well(s) that were >150 gpm, then a Hydrogeological Report would be required at that time.

CONSIDERATIONS

The redlined document shows a proposed change that we believe fits with the Board's previous thinking, but we wanted to formally clarify the Board's intent with when a Hydrogeological Report is required.

STAFF RECOMMENDATIONS

The staff recommends that the Board review and consider adopting the amended Hydrogeological Report Requirements.

ATTACHMENTS

Redlined Hydrogeological Report Requirements

PREPARED AND SUBMITTED BY:



Drew Satterwhite, General Manager



HYDROGEOLOGICAL REPORT REQUIREMENTS

Adopted pursuant to District Rules 3.10(a)(13), 3.10(b) and 3.15(b)

I. Introduction

- A. Hydrogeological Reports that meet the criteria in these guidelines must be included with administratively complete applications for any of the following:
1. requests to drill and operate a proposed new well or well system with a proposed aggregate production capacity of 200 gallons per minute or more;
 2. requests to modify or increase an existing well or well system ~~that would result in the existing well(s) being equipped to produce~~ with a proposed net aggregate production capacity of 200 gallons per minute more than the aggregate production capacity of the well or well system as of January 1, 2019 or the date of the last Hydrogeological Report submitted with a permit or permit amendment application approved by the Board of Directors, whichever is more recent; and/or
 3. exception to spacing requirements for wells covered by (1) or (2) above.
- B. Purpose of the Hydrogeological Report is to provide the District with hydrogeological information addressing the impacts of the proposed well on existing wells and in relation to the Desired Future Condition (DFC) for the applicable aquifer, as required by Sections 36.113(d) and 36.1132 of the Texas Water Code.
- C. Reports submitted pursuant to District Rules 3.10(a)(13), 3.10(b) and 3.15(b) and these guidelines are required to be sealed by a Professional Geoscientist or Professional Engineer licensed in the State of Texas.
- D. Hydrogeological Reports submitted to the District should follow the chronological order of the criteria set forth in Section II.

II. Required Content of Hydrogeological Reports

- A. Well construction specifics must include the following:
1. Details on all aspects of well.
 2. Schematic well construction diagram.
 3. Lithologic description of geology anticipated during well drilling.
 4. Identify specific location through maps:

- a. Maps showing location of property relative to county level, location of well relative to property boundaries, and other relevant features
- B. Discussion of hydrogeologic setting must include the following:
1. Identification of the aquifer.
 2. Discussion of surface and subsurface geology at well site.
 - a. Include whether there is any occurrence of any significant groundwater recharge features such as outcrop, surface water bodies, caves, sinkholes, faults or other geologic features.
 3. Include depth interval of proposed water bearing zone and identify target production zone.
 4. Provide anticipated thickness of water bearing zone.
 5. Identify whether the target production zone is anticipated to be confined or unconfined.
 6. Provide estimates of thickness of confining layer at well site location.
 7. Provide specific aquifer parameters at the well site, including transmissivity, hydraulic conductivity and storativity based on the Texas Water Development Board (TWDB) approved Groundwater Availability Model for the aquifer.
 - a. Provide a discussion of the variability of wells in the area, if applicable.
 8. Identify all registered wells within a 1-mile radius of the proposed well using publicly-available District well database.
 - a. In the event the 1-mile radius does not include any registered wells, the radius will be extended to a 2-mile radius in order to address impacts under Section II(D)(3) of these guidelines.
 9. Include identification of streams or springs within 1-mile radius of the proposed well.
- C. Water quality analysis must include the following:
1. Include discussion of known quality in the area based on literature and well reports.
- D. Interference analysis must include the following:
1. Provide quantitative analysis that shows the projected impacts from 1) the proposed production from the well or well system(if applicable) and 2) the well or well system (if applicable) running 100% of the simulation periods.
NOTE:Applicant is advised to work with District Staff to settle on proposed production volume prior to performing the analysis.

- a. Simulation results must be included showing drawdown at 24 hours, 30 days, and 1 year (contoured with the smallest contour equal to 1-foot water level decline).
 - i. Include discussion of the methodology used for estimating drawdown, including software that was used, the assumptions and/or solution method employed.
 - ii. Include illustration and/or maps showing the estimated cone of depression. If there is more than one well in the group, two maps should be included demonstrating:
 - (1) contours for impacts from pumping the proposed well only; and
 - (2) contours for impacts from all wells in the system.
- 2. For well systems, include a discussion of the amount or degree of interference that each of the system wells may exert on other same system wells.
- 3. Include a discussion of the estimated impacts on existing registered wells identified under Section II(B)(8) of these guidelines.
- E. Desired Future Condition (DFC) and Modeled Available Groundwater (MAG) Analysis
 - 1. Discussion of the proposed pumping amount in relation to the MAG, as well as the impact of the proposed pumping on the adopted DFC.
- F. Copies of the modeling files must be submitted with the report.

III. Post-Drilling Requirements

- A. Mandatory requirements:
 - 1. Geophysical logs required to be submitted upon completion of the well.
 - a. Geophysical logs must consist of a resistivity or induction curve and a spontaneous potential or gamma ray curve at a minimum.
 - b. Geophysical logs performed in the initial open-borehole are required and will consist of resistivity (self potential and gamma ray at a minimum).
 - c. Wells cased with PVC require induction and gamma ray logs.
 - d. All digital log files to be submitted in LAS format as well as printed.
 - 2. All public water supply sampling completed in accordance with TCEQ/EPA requirements must be submitted to the District.
- B. Must provide if available:
 - a. Digital or tabulated data of water levels measured during drawdown, specific capacity, or pumping test;

- b. Field parameters of specific conductivity, temperature and pH of measurements made during the drawdown or pumping test; and/or
- c. Any laboratory analysis completed on samples collected from the well after construction and development.

IV. Additional Construction Requirements

- A. Measuring tube at least one inch in diameter to be installed from the well head to the bottom most screen interval in all new wells with a capacity to produce 200 gpm or more.
 - 1. The measuring tube shall be a separate PVC pipe connected/adjacent to the casing.

ATTACHMENT 10 b.

North Texas Groundwater Conservation District

**Well Registration Summary
As of September-30-2020**

Well Type	Total Registered Collin County	Total Registered Cooke County	Total Registered Denton County	Total NTGCD	New Registrations since Aug-31-2020
Agriculture	8	12	41	61	1
Commercial / Small Business	7	9	34	50	1
Domestic Use (household / lawn watering at residence)	87	475	828	1391	19
Filling a pond or other surface impoundment**	50	15	107	173	3
Golf course irrigation	15	2	21	38	0
Industrial / Manufacturing	8	11	8	28	0
Irrigation	93	4	188	285	3
Leachate	0	0	0	0	0
Livestock Watering	8	73	59	140	2
Monitoring	0	0	0	0	0
Municipal / Public Water System	34	75	236	346	1
Other	12	8	38	58	1
Piezometer	0	0	0	0	0
Poultry	0	0	0	0	0
Solely to supply water for rig actively***	1	1	7	9	0
Supplying water for oil or gas production*	0	6	60	66	0
Not Specified	17	10	44	71	0
SUM	340	701	1671	2716	31

ADJOURN