Permit Hearing
Item #11

NOTICE OF PERMIT HEARING OF THE CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT POSTPONEMENT

Notice is hereby given that the Board of Directors for the Clearwater Underground Water Conservation District have postponed the original hearing set for "March 18, 2020 at 1:30 pm" to "March 24, 2020 at 1:30 p.m.". Applications for Permit as described below will be heard in the Clearwater UWCD Board Room located at 700 Kennedy Court, Belton, Texas, in compliance with the Texas Open Meetings Act.

The hearing will be conducted on the following applications:

Applicant's File Number	Permit Applicant/Holder and Landowner	Location of Well	Proposed Annual Groundwater Withdrawal Amount & Purpose of Use
Combination Drilling & Operating Permit N2-20-001G	Richard Castle 8398 S. I-35 Belton, TX 76513	2.06 acre tract of land located at 8398 S. I-35, Belton, Texas Latitude 30.983801° Longitude -97.507313°	0.67 acre-feet per year or 219,000 gallons per year from the Edwards BFZ Aquifer to produce water for office use.
Combination Drilling & Operating Permit N1-20-001P	Richard & Joyce Dillman Revocable Living Trust c/o Michelle Vernon 535 Van Bibber Salado, TX 76571	1.338 acre tract of land located at 5095 Elm Grove Rd, Belton, Texas Latitude 31.00115° Longitude -97.45884°	0.59 acre-feet per year or 192,720 gallons per year from the Edwards BFZ Aquifer to produce water for domestic use.

The Application for Permit, if granted, would authorize the permit holders to drill and/or operate a well within the Clearwater Underground Water Conservation District according to the terms and conditions set forth in the permit.

If you would like to support, protest, or provide comments on this application, you must comply with District Rule 6.10 and either appear at the hearing or submit a written Contested Case Hearing Request that complies with District Rule 6.10 and that must be received by the District prior to the date of the hearing. A person wishing to submit a Contested Case Hearing Request who is unable to appear at the hearing on the date and time set forth above must also file a motion for continuance with CUWCD demonstrating good cause for the inability to appear. For additional information about this application or the permitting process, or to request information on the legal requirements on what MUST be included in a Contested Case Hearing Request to be valid, please contact the CUWCD at 700 Kennedy Court (PO Box 1989) Belton, Texas, 76513, 254-933-0120.

ISSUED this **6th** day of **March 2020** in Belton, Texas, on the recommendation of the General Manager.
RE-ISSUED this **18th** day of **March 2020** in Belton, Texas, on the recommendation of the General Manager.

I, the undersigned authority, do hereby certify that the above NOTICE OF PERMIT HEARING of the Board of Directors of the Clearwater Underground Water Conservation District is a true and correct copy of said Notice. I have posted a true and correct copy of said Notice at the District office located in Belton, Texas, and said Notice was posted on **March 6, 2020,** and again on **March 17, 2020** and remained posted continuously for at least 10 (ten) days immediately preceding the day of said hearing; a true and correct copy of said Notice was furnished to the Bell County Clerk, in which the above named political subdivision is located. This amended posting is to postpone said announcement thus will add an additional 7 days to the day preceding announcement posted on **March 6, 2020**. The purpose of said postponement is to ensure the health and safety of the permittees, potential protestants, interested citizens, staff and directors.

Dated **3/17/2020**

Clearwater Underground Water Conservation District

By _____
Dirk Aaron, General Manager, Asst. Secretary

FILED FOR RECORD
2020 MAR 17 P 2:55
SHELLEY COSTON
CO. CLK. BELL CO. TX

NOTICE OF PERMIT HEARING OF THE CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Notice is hereby given that the Board of Directors for the Clearwater Underground Water Conservation District will conduct a hearing on the Applications for Permit as described below at 1:30 p.m. on Wednesday, March 18, 2020 in the Clearwater UWCD Board Room located at 700 Kennedy Court, Belton, Texas, in compliance with the Texas Open Meetings Act.

The hearing will be conducted on the following applications:

Applicant's File Number	Permit Applicant/Holder and Landowner	Location of Well	Proposed Annual Groundwater Withdrawal Amount & Purpose of Use
Combination Drilling & Operating Permit N2-20-001G	Richard Castle 8398 S. I-35 Belton, TX 76513	2.06 acre tract of land located at 8398 S. I-35, Belton, Texas Latitude 30.983801° Longitude -97.507313°	0.67 acre-feet per year or 219,000 gallons per year from the Edwards BFZ Aquifer to produce water for office use.
Combination Drilling & Operating Permit N1-20-001P	Richard & Joyce Dillman Revocable Living Trust c/o Michelle Vernon 535 Van Bibber Salado, TX 76571	1.338 acre tract of land located at 5095 Elm Grove Rd, Belton, Texas Latitude 31.00115° Longitude -97.45884°	0.59 acre-feet per year or 192,720 gallons per year from the Edwards BFZ Aquifer to produce water for domestic use.

The Application for Permit, if granted, would authorize the permit holder to drill and operate a well within the Clearwater Underground Water Conservation District according to the terms and conditions set forth in the permit.

If you would like to support, protest, or provide comments on this application, you must comply with District Rule 6.10 and either appear at the hearing or submit a written Contested Case Hearing Request that complies with District Rule 6.10 and that must be received by the District prior to the date of the hearing. A person wishing to submit a Contested Case Hearing Request who is unable to appear at the hearing on the date and time set forth above must also file a motion for continuance with CUWCD demonstrating good cause for the inability to appear. For additional information about this application or the permitting process, or to request information on the legal requirements on what MUST be included in a Contested Case Hearing Request to be valid, please contact the CUWCD at 700 Kennedy Court (PO Box 1989) Belton, Texas, 76513, 254-933-0120.

ISSUED this **6th** day of **March 2020** in Belton, Texas, on the recommendation of the General Manager.

I, the undersigned authority, do hereby certify that the above NOTICE OF PERMIT HEARING of the Board of Directors of the Clearwater Underground Water Conservation District is a true and correct copy of said Notice. I have posted a true and correct copy of said Notice at the District office located in Belton, Texas, and said Notice was posted on **March 6, 2020**, and remained posted continuously for at least 10 (ten) days immediately preceding the day of said hearing; a true and correct copy of said Notice was furnished to the Bell County Clerk, in which the above named political subdivision is located.

Dated **3/6/2020**

Clearwater Underground Water Conservation District

By: _____
Dirk Aaron, General Manager

Permit Hearing
Item #11a
N2-20-001G (Richard Castle)

Staff Report

Application for Operating Permit
N2-20-001G

Clearwater
Every drop counts!

Applicant/Owner:	Richard Castle 1507 Hilltop Circle Salado, tX 76571
Location of Well:	2.06 acre tract Located at 8398 S. I-35, Belton, Texas Latitude 30.983801°/Longitude -97.507313°

Proposed Annual Withdrawal; **Rate of Withdrawal:** @ 17 gpm Total: **0.67 ac-ft/yr** or 219,000 gallons/year/well	**Aquifer:** Edwards BFZ	**Proposed Use:** Office Use	**Nearest Existing Well:** 6 wells within ¼ mile; 17 wells within ½ mile.

General Information

Richard Castle has submitted an application to the Clearwater Underground Water Conservation District (CUWCD) on February 13, 2020 for an operating permit to authorize withdrawal from an existing well for general office use at his facility in located on2.06 acre tract located at 8398 S. I-35, Belton, Texas. He is in the process of selling this facility and per the disclosure process the buyer requires that the well be in good standing with the district. The current owner, when purchasing the property in 5-3-2002 failed to make sure the well was properly registered and did not pursue an operating permit according to district rules. The well appears to have been drilled prior to 2002 thus would be grandfather per setback from adjacent properties.

This permit will authorize the withdrawal from the existing well completed in the Edwards BFZ Aquifer with a 1 1/4 inch column pipe on a 2.06 acre tract located at 8398 S. I-35, Belton, Texas, Latitude 30.983801°/Longitude -97.507313° (well# N2-20-001G), to produce water for office use in a proposed annual quantity not to exceed 0.67 acre-feet or 219,000 gallons per year total.

Special Provisions will be discussed with the board should the permit be approved, to ensure compliance in per set-back requirements, well construction and conservation. The permit will be renewed annually by CUWCD staff, unless the permittee fails to meet all required reporting, and/or other special provisions are not complied with, and/or conditions of the Edwards BFZ Aquifer merit curtailment of all permit holders in accordance with District Rules and Chapter 36 necessary to meet the DFC under statutory requirements.

CUWCD consulting hydrogeologist, Mike Keester LRE Water LLC, has reviewed the application, and has conducted the required drawdown analysis per district rules.

The applicant's permit request is for 0.67 ac-ft/year per well. The well will be producing from the Edwards BFZ Aquifer at a maximum rate of 17 gallons per minute (gpm). Estimated annual production was calculated based on the applicates submitted beneficial needs (see attached) of approximately 60 gallons/person/day average (10 staff members) for general office needs, thus 290,000 gallons per year. In comparison to the exempt wells privileges of 17 gpm or maximum 25,000 gallons per day is approximately 28 acre feet, the well is requesting substantially less groundwater.

This property lies within City of Belton CCN # 11133 (certificate of convenience and necessity); and the applicant has investigated with City of Belton for the possibility of public water supply delivery and will testify that public water is currently not available thus the need to pursue groundwater rather than public water supply. Verification and approval of on-site septic system has been conducted by Bell County Public Health District – Environmental Health Division and has confirmed with CUWCD that the well location meets the minimum 100 foot set-back from the on-site septic system distance . The well must be more than 100 feet from the existing on-site septic system and is approximately 25 feet from the property line (grandfathered privileges on property line setback). The location of the wells requires 50 feet from all adjacent properties, but grandfather privileges prevaile for wells constructed prior to creation of the district.

Per Rules 6.9 and 6.10

In deciding whether or not to issue a permit, the Board must consider the following:

1) **The application contains all the information requested.**
The application is complete—all requested information has been provided.

2) **The proposed use of water is dedicated to a beneficial use.**
The water produced from this well will be used for commercial office needs which is a beneficial use.

3) **The applicant agrees to avoid waste and achieve water conservation.**
The applicant has agreed to avoid waste and achieve water conservation by signing the application form stating compliance with the District's Management Plan. Applicant understands the importance of water conservation measures in the business thus options for outside water conservation are vital to the sustainability of the aquifer. The District acknowledges that the applicant has stated they do not intend to utilize the groundwater for landscape purposes.

4) **The applicant has agreed that reasonable diligence will be used to protect groundwater quality and that the applicant will follow well plugging guidelines at the time of well closure.**
The applicant has agreed (by signing the application form) should a well deteriorate over time that state law and district rules require such wells to be plugged, before a replacement well can be drilled.

5) **The proposed water wells comply with spacing and production limitations identified in these rules.**
The proposed well will have a column pipe with an inside diameter of 1 1/4 inch. Based on this column pipe size, a minimum size tract of 2 acres is required, with a 100 foot spacing requirement from other wells, but the 50 foot setback requirement from adjacent property lines is unmet from the property to the south. District Rule 9.5.2 all

property line setbacks would prevail should the applicant need to replace the existing grandfathered well.

The District rules do not impose production limitations other than those determined applicable in the review of the today's permit request or to prevent unacceptable level of decline in water quality of the aquifer, or as may be necessary to prevent waste and achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, lessen interference between wells, or control and prevent subsidence. These issues are considered in Items 6 & 7 below and with staff recommendations to address potential concerns of adjacent property owners.

6) **The proposed use of water does or does not unreasonably affect existing groundwater and surface water resources or existing permit holders.**
Based upon available information, there are 6 wells within ¼ mile of the well site, and all of the wells are reported as active and completed in the Edwards BFZ aquifer, ; with the nearest well is approximately 457 feet away. There are 17 additional well within ½ mile, of which one is listed as never drilled, all the others are active wells and one of those active wells has an unknown depth. All but one of these of these wells are listed as exempt in our database. This well N2-05-004P Salado Business Park and is completed to the Middle Trinity for industrial use.

Mike Keester, Hydrogeologist, LRE Water, has reviewed this application and has determined anticipated drawdown and has provided the attached report, with his conclusions and recommendations stating that the proposed well and permitted amount of 0.67 acre feet/year will not diminish the ability of other aquifer users to produce water for a beneficial use from the Edwards BFZ Aquifer. He will also offer testimony as needed.

7) **The proposed use of water is consistent with the District's water management plan.**
The District's Management Plan reflects a groundwater availability figure in the Edward B aquifer of **6,469 ac-ft/year Modeled Available Groundwater** (then reserve 825 ac-ft/year for exempt well use) thus **5,644 ac-ft/year is the Managed Available Groundwater for permitting.**

The board, per the district management plan, has evaluated groundwater available for permitting the Edwards BFZ Aquifer and most recently evaluated the available groundwater for permitting (*consistent with the management plan as stated on pages 9-10*).

The requested permit amount relative to the modeled available groundwater MAG determined by the Texas Water Development Board (TWDB) based on the desired future conditions (DFCs) established by the District for the Edwards BFZ Aquifer was set by CUWCD based on spring flow of 200 ac-ft/month in January 2019. To achieve this DFC, the TWDB used a model that indicated the MAG was equal to 6,469 acre-feet per year from the Edwards BFZ Aquifer.

A summary of YTD 2020 permit production, HEUP & OP Permit Analysis, pending applications and *Exempt Well Reservations are for the Trinity Aquifer which is provided per District Report *(see attached Edwards BFZ Aquifer Status Report).*

8) **The Modeled Available Groundwater calculations determined by the Executive Administrator of the Texas Water Development Board.**
Refer to #7 above. The modeled available groundwater will not be exceeded by granting this permit.
(see attached District Trinity Aquifer Status Report).

9) **The Executive Administrator of the Texas Water Development Board's estimate of the current and projected amount of groundwater produced under the exemptions in District Rule 8.3.**
Refer to #7 above. Reservation of Modeled available groundwater for exempt well use will not be exceeded by granting this permit. 825 ac-ft is reserved vs 361 ac-ft estimated being used. *(see district exempt use report December 2019)*

10) **The amount of groundwater authorized under permits previously issued by the District.**
Refer to #7 above. Existing permits do not exceed the managed available groundwater *(modeled available groundwater – exempt well use = Managed available groundwater)* for the Edwards BFZ aquifer 5,644 ac-ft per year.

11) **A reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District.**
The actual production from all permitted wells in in the Edwards BFZ Aquifer in 2019 was **1,994.27 acre-feet (79.44%)** and ytd in 2020 is **236.16 acre-feet (9.40%)** of permitted amount. *(Figures are based upon monthly production reports submitted to Clearwater by the permit holders in 2019 and 2020).*

12) **Yearly precipitation and production patterns.**
Clearwater is currently in no drought management stage based on the PDI system (average running total annual rainfall) over the Aquifer in the District, is currently at **33.368** inches rain received in the last 365 days (3/12/120) thus 101.11% of annual expected rainfall of 33 inches. Currently the permit holders in the first 2 months of 2020 have used only 9.40% of total permitted amounts. Permit holders did not exceed their total permitted amounts in 2019. The gravity of the drought of 2011-2015 necessitated the need for all permit applications to be evaluated based on conservative needs and usage that is not contradicted by the current drought contingency plan stage.

Conclusions:

- CUWCD well records indicate that 6 wells (all in the Edwards BFZ) are located within a ¼-mile radius and 14 additional Edwards BFZ wells, 1 unknown, 1 in the Middle Trinity and one never drilled are located within a ½-mile radius of the proposed well site. The wells listed as grandfathered exempt often times have declared depths by the original registrant at incorrect depths based on limited information at the time.

- The producing interval of the Edwards BFZ aquifer based on adjacent property well driller's reports and our virtual bore (see attached) is estimated that the water bearing strata of the Edwards BFZ is within 50'-298' feet bls. The well has no legacy drilling report but the District has reviewed well E-03-393P (Wolfe) 637 feet away and see the wells depth would be approximately 160 feet bls. CUWCD has conducted a water quality screening (see attached) and feel that the geochemistry indicates Edwards BFZ water quality.

- MK, LRE Water LLC, (see attached) review of the well has indicated that the model data sets indicate the local aquifer has a transmissivity value of about 6,000 gpd/ft.

- MK, LRE Water LLC, also stated that at the proposed pumping rate, the projected water level decline is negligible in nearby wells being less than one foot after a year of pumping.

- Proposed annual permit amount of 0.67 acre-feet (219,000 gallons/year) is substantially less than the allowed production of an exempt well under Chapter 36 and District rules to produce at a rate of 17 gallons per minute (or 25,000 gallons per day) for 365 days equaling 28 acre feet/year. The long-term pumping effects from the proposed well at the requested pumping amount are negligible and the combined effects from many wells with relatively small pumping rates can have a noticeable long-term effect on aquifer water levels per Keester's review, thus the drawdown will not diminish the ability of other aquifer users to produce water for a beneficial use. (see Keester's Report)

Recommendations:

1) Approve the application for the Richard Castle well with the following special permit conditions:
   a) To assess actual changes in water levels due to pumping from the proposed well, the well owner will need to have a pump installer make sure removable plug in the sanitary seal is in place to allow clear access into the well for water level measurement by District personnel.
   b) In addition, if space allows, the pump installer should install a measuring tube alongside the column pipe to allow for measurement of the water level using an e-line or other direct measurement method.
   c) As an N2 operating permit the well owner is required to have a meter installed for monthly reporting of all production

Clearwater Underground Water Conservation District

Every drop counts!

Water Quality Assessment Results

The Clearwater Underground Water Conservation District (CUWCD or District) provides in-house screening for some of the most common parameters for drinking water. **Please note that the CUWCD LAB IS NOT A CERTIFIED LABORATORY.** This screening is offered as a convenience to registered well owners in Bell County and is provided for informative purposes only. The District disclaims any liability for this screening and the accuracy of any analysis. The water quality analytical results from different faucets, taken at different times or analyzed by a certified laboratory may be different from CUWCD analysis of water from the same well. Please contact our office if you would like information regarding laboratories that are certified for chemical/microbiological testing of drinking water.

Name: Richard Castle
Mailing Address: 1507 Hilltop Circle Salado TX, 76571
CUWCD Well Number: N2-20-001G

Phone Number:
Email:
Aquifer:

PARAMETER RESULTS **Test Date: 2/13/2020**

Coliform Bacteria **Not Tested**

Ecoli **Not Tested**

	Results	Drinking Water Standard*
Conductivity (µS/cm)	420	none
****Total Dissolved Solids (mg/L)**	202	1,000 mg/L (secondary)
Salinity (mg/L)		500 mg/L (secondary)
pH	8.67	6.5 - 8.5 (secondary)
Alkalinity (as CaCO3)	180	none
Hardness (as CaCO3)	200	none
Nitrite (as N)(mg/L)	0.002	1 mg/L (primary)
Nitrate (as N)(mg/L)	0.080	10 mg/L (primary)
Phosphate (mg/L)	0.08	none
Sulfate (mg/L)	53	300 mg/L (secondary)
Fluoride (mg/L)	1.68	4.0 mg/L (primary)

Comments

** The concentrations of analytical parameters in milligrams per liter (mg/L) refer to the Drinking Water Standards for public water supply systems established by the United States Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ). Primary standards are the enforceable maximum allowable concentration for each parameter to maintain health. Secondary standards are non-enforceable guidelines for the cosmetic or esthetic quality of drinking water. These standards do not apply to private water wells but are useful in assessing water quality. Details on EPA and TCEQ drinking water standards are available at:* http://www.epa.gov/safewater/mcl.html#mcls & http://www.tnrcc.state.tx.us/oprd/rules/pdflib/290_ind.pdf

** The Total Dissolved Solids value reported is calculated from the Conductivity measured in the analysis. This TDS value should be considered as an "apparent" value and may have limited accuracy when compared to values reported by certified laboratories, accuracy range may be + or - 25 percent.

Edwards (BFZ) Aquifer Status Report – March 2020

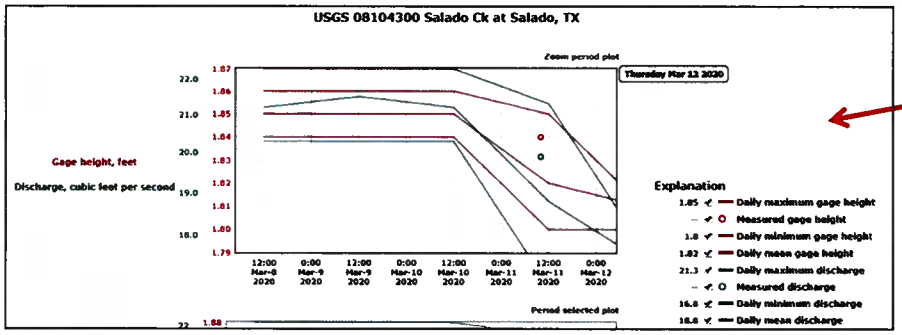
	DFC Analysis Over Time (2000-Present) Modeled Available Groundwater			HEUP and OP Permit Analysis Relative to the Modeled Available Groundwater			2020 YTD Prod. Jan - Feb 236.16 Ac-ft 9.40%	Pending Applications		Exempt Well Reservations		
	DFC Adopted * Minimum Spring Flow	**Status of DFC **** Current / Low	**MAG ***** Ac-ft	HEUP Ac-ft	OP Ac-ft	Total Permitted Ac-ft	2019 Actual Production	Available for Permitting Ac-ft	Pending Applications Ac-ft	Exempt Well Reservation Ac-ft	Exempt Well Use Estimation Ac-ft	Available Exempt Use Ac-ft
Edwards (BFZ) Aquifer	**100 Ac-ft** per month or **1.68 cfs**	**1259.11 Ac-ft** 3/13/2020 vs **220 Ac-ft** 08/20/2014	6469	2209.7	301.44	**2511.14**	1,994.27 Ac-ft 79.44%	3131.54	**1.26**	825	361	464

**Desired Future Conditions (DFC) established by Clearwater UWCD and approved by GMA8 and TWBD, is the description of how the aquifer should look in the future (50 years based on maintaining the Salado Spring Complex discharge during a repeat of drought conditions similar to the drought of record in the 1950's, under drought of record, a five-day average of discharge amounting to 200 ac-ft-month is preferred and 100 ac-ft-/month is the minimum acceptable spring flow. Spring flow is measured and estimated by the USGS Gage in Salado Creek located below the Salado Creek Spring Complex.*

***Status of the DFC is the estimated spring flow over a five-day average from the springs releasing artesian pressure from the Edwards BFZ Aquifer expressed as acre feet per month of spring flow into Salado Creek.*

****The Modeled Available Groundwater (MAG) is the estimated amount of water available for permitting assigned to Clearwater UWCD by the Executive Administrator of TWDB, based on the desired future conditions.*

Richard & Joyce Dillman Revocable Living Trust N1-20-001P (0.59 ac-ft/yr)
Richard Castle N2-20-001G (0.67 ac-ft/yr)



CFS is measured continuously at the downstream gage with USGS developing the rating curve according to industry standards and maintaining the information for public access on the USGS website.

5 - day average for March 8th – March 12th was 21.16 CFS = 1259.11 ac-ft/month

5 - day average for February 5th – February 10th was 16.1 CFS = 958.02 ac-ft/month

CUWCD Exempt Well Use Summary

As of: 3/13/2020

Aquifer	Total Active Registered Exempt Wells[3]	Registered Domestic Wells	Estimated Domestic Use Gallons/Day[1,2]	Estimated Domestic Use Ac-ft/Year[1,2]	Registered Stock Wells	Estimated Stock Use Gallons/Day[4]	Estimated Stock Use Ac-ft/Year[4]	Total Estimated Use Gallons/Day[7]	Total Estimated Exempt Well Use Ac-ft/Year[7]
Glen Rose (Upper Trinity)	498	405	118,487	133	93	80,352	90	198,839	223
Hensell (Middle Trinity)	869	812	388,483	435	57	49,248	55	437,731	490
Hosston (Lower Trinity)	138	127	37,155	42	11	9,504	11	46,659	52
Trinity (Total)[6]	1,505	1,344	544,125	609	161	139,104	156	683,229	765
Edwards BFZ	841	707	206,840	232	134	115,776	130	322,616	361
Edwards Equivalent	395	306	89,523	100	89	76,896	86	166,419	186
Buda	28	15	4,388	5	13	11,232	13	15,620	17
Lake Waco	8	3	878	1	5	4,320	5	5,198	6
Austin Chalk	226	141	41,251	46	85	73,440	82	114,691	128
Ozan	166	118	34,522	39	48	41,472	46	75,994	85
Pecan Gap	67	44	12,873	14	23	19,872	22	32,745	37
Kemp	15	11	3,218	4	4	3,456	4	6,674	7
Alluvium	573	363	106,199	119	210	181,440	203	287,639	322
Other[5]	1,478	1,001	292,853	328	477	412,128	462	704,981	790
CUWCD Total Active	3,824	3,052	1,043,817	1,169	772	667,008	747	1,710,825	1,916

1. Domestic use estimate assumes 106 gallons/person per day (USGS estimate of domestic use outside of a municipal water system) and 2.76 persons/household (U.S. Census Bureau, Population Estimates Program (PEP) July 1, 2019)

2. Benjamin G. Wherley, Ph.D. Associate Professor- Turfgrass Science & Ecology Dept. of Soil and Crop Sciences Texas A&M University estimate of 2,000ft^2 warm season turfgrass requires 38,855gal/yr/lawn or 106gal/day/lawn; "Ranchette" Avg. lawn size is 13,042ft^2 , 6.5X larger; 6.5 X 106gal/day/lawn= 689gal/day/lawn; ~217 "Ranchette" Middle Trinity Wells; 689 X 217=an additional 150,924gal/day/lawn; ***490ac-ft/yr or an 89% increase in Middle Trinity exempt well use from the 2018 estimate of 258ac-ft/yr.***

3. Exempt well use estimate factors out all plugged, capped, monitor and inactive wells in the database.

4. Source of stock water estimates is Texas Agrilife Extension @ 18 gallons water per day per cow. Livestock water use estimates are based on the 2017 Census of Agriculture, USDA National Agricultural Statistics Service. 36,868 cows / 771 stock wells= 48 cows/stock well; 48* 18gpd= 846 gal/day/stock well, ***747ac-ft/yr or a 34% increase in annual stock use from the 2018 estimate of 556ac-ft/yr.***

5. The "Other" designation is the total of minor aquifer and alluvium source designation of the exempt wells.

6. Trinity Aquifer wells registered with unknown depth are assigned to the Middle Trinity per Board decision.

7. All estimates of groundwater use by exempt well owners is based on assumptions and scientific data, but by no means are they to be interpreted as recommended practices by CUWCD.

Clearwater Underground Water Conservation District

Every drop counts!

Water Quality Assessment Results

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Name: Richard Castle
Mailing Address: 1507 Hilltop Circle Salado TX, 76571
CUWCD Well Number: N2-20-001G

Phone Number:
Email:
Aquifer:

PARAMETER RESULTS **Test Date: 2/13/2020**

Coliform Bacteria **Not Tested**

Ecoli **Not Tested**

	Results	Drinking Water Standard*
Conductivity (µS/cm)	420	none
****Total Dissolved Solids (mg/L)**	202	1,000 mg/L (secondary)
Salinity (mg/L)		500 mg/L (secondary)
pH	8.67	6.5 - 8.5 (secondary)
Alkalinity (as CaCO3)	180	none
Hardness (as CaCO3)	200	none
Nitrite (as N)(mg/L)	0.002	1 mg/L (primary)
Nitrate (as N)(mg/L)	0.080	10 mg/L (primary)
Phosphate (mg/L)	0.08	none
Sulfate (mg/L)	53	300 mg/L (secondary)
Fluoride (mg/L)	1.68	4.0 mg/L (primary)

Comments

** The concentrations of analytical parameters in milligrams per liter (mg/L) refer to the Drinking Water Standards for public water supply systems established by the United States Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ). Primary standards are the enforceable maximum allowable concentration for each parameter to maintain health. Secondary standards are non-enforceable guidelines for the cosmetic or esthetic quality of drinking water. These standards do not apply to private water wells but are useful in assessing water quality. Details on EPA and TCEQ drinking water standards are available at:* http://www.epa.gov/safewater/mcl.html#mcls & http://www.tnrcc.state.tx.us/oprd/rules/pdflib/290_ind.pdf

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Drawdown Analysis

Clearwater Underground Water Conservation District

Every drop counts!

Proposed Well ID: N2-20-001G

Well Name: *Castle Well*

Tract Size: 2.06 acres

Column Pipe Size: *2* Inches

Aquifer: Edwards BFZ

Proposed Annual Production: .67 Acre-Feet per Year

Proposed Instantaneous Pumping Rate: *17 gpm* Gallons per Minute

The potential effects of the proposed production on local water levels in the aquifer are calculated using the Theis equation[1] which relates water level decline (that is, drawdown) to the pumping rate of a well and properties of the aquifer. While the equation does not account for aquifer conditions which may affect the calculation of long-term water level declines (for example: aquifer recharge, faulting, or changes in aquifer structure), it does provide a very good, reliable, and straightforward method for estimating relatively short-term drawdown in and near a well due to pumping. As the duration of pumping and distance from the well increase, the uncertainty in the calculated drawdown also increases. To assess the potential effects from the proposed production, the equation uses values from the groundwater availability model datasets[2].

The following table presents the calculated drawdown at the proposed well and at other nearby wells completed in the same aquifer. For *1-Day Drawdown*, we applied the proposed instantaneous pumping rate for a period of 24 hours. For *30-Day Drawdown*, we assumed peak pumping during the summer of about 15 percent more than the average monthly amount (that is, the proposed annual production rate divided by 12 then multiplied by 1.15). For *1-Year Drawdown*, we used the proposed annual production amount.

Table 1. Predicted water-level drawdown due to the proposed pumping.

Well Name	Distance from Proposed Well (feet)	1-Day Drawdown (feet)	30-Day Drawdown (feet)	1-Year Drawdown (feet)
Castle Well	Not Applicable	5 feet	Negligible	Negligible
E-02-284G	217	Negligible	Negligible	Negligible
E-02-515G	438	Negligible	Negligible	Negligible
E-02-1932G	455	Negligible	Negligible	Negligible
E-03-393P	633	Negligible	Negligible	Negligible
E-02-1841G	1245	Negligible	Negligible	Negligible
E-02-2118G	1261	Negligible	Negligible	Negligible
E-02-1840G	1369	Negligible	Negligible	Negligible
E-02-1887G	1509	Negligible	Negligible	Negligible
E-02-1886G	1578	Negligible	Negligible	Negligible
E-02-1888G	1806	Negligible	Negligible	Negligible
E-02-3222G	1892	Negligible	Negligible	Negligible
E-02-390G	1979	Negligible	Negligible	Negligible

[1] Theis, C.V., 1935, The Relation Between the Lowering of the Piezometric Surface and the Rate and Duration of Discharge of a Well Using Ground-Water Storage: American Geophysical Union Transactions, v. 16, p. 519-524.

[2] Groundwater availability model (GAM) datasets include the Northern Edwards GAM, the Northern Trinty/Woodbine GAM (for the Upper and Middle Trinity aquifers), and the modified Northern Trinty/Woodbine GAM (for the Lower Trinity Aquifer).

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Underground Water Conservation District
Every drop counts!

Well Name	Distance from Proposed Well (feet)	1-Day Drawdown (feet)	30-Day Drawdown (feet)	1-Year Drawdown (feet)
E-02-2134G	2077	Negligible	Negligible	Negligible
E-02-577G	2256	Negligible	Negligible	Negligible
E-02-3145G	2335	Negligible	Negligible	Negligible
E-02-1127G	2390	Negligible	Negligible	Negligible
E-03-260P	2425	Negligible	Negligible	Negligible
E-03-427P	2472	Negligible	Negligible	Negligible
E-02-2180G	2498	Negligible	Negligible	Negligible
E-04-078P	2508	Negligible	Negligible	Negligible
E-02-576G	2635	Negligible	Negligible	Negligible
E-02-3489G	2701	Negligible	Negligible	Negligible
E-02-2084G	2829	Negligible	Negligible	Negligible
E-18-069GU	2859	Negligible	Negligible	Negligible
N2-10-002P	2883	Negligible	Negligible	Negligible
E-02-2665G	2893	Negligible	Negligible	Negligible
E-02-2636G	2988	Negligible	Negligible	Negligible
E-02-2635G	2992	Negligible	Negligible	Negligible
E-02-590G	3076	Negligible	Negligible	Negligible
E-02-2707G	3130	Negligible	Negligible	Negligible
E-02-2213G	3428	Negligible	Negligible	Negligible
E-02-2591G	3482	Negligible	Negligible	Negligible
E-15-030P	3548	Negligible	Negligible	Negligible
E-04-100P	3554	Negligible	Negligible	Negligible
N1-09-004P	3713	Negligible	Negligible	Negligible
E-02-921G	3757	Negligible	Negligible	Negligible
E-17-005G	3825	Negligible	Negligible	Negligible
E-02-1575G	3853	Negligible	Negligible	Negligible
E-02-922G	3970	Negligible	Negligible	Negligible
E-04-026P	3980	Negligible	Negligible	Negligible
E-04-038P	4024	Negligible	Negligible	Negligible
E-04-037P	4050	Negligible	Negligible	Negligible
N2-15-003P	4079	Negligible	Negligible	Negligible
E-14-062G	4098	Negligible	Negligible	Negligible
E-02-481P	4136	Negligible	Negligible	Negligible
E-02-391G	4177	Negligible	Negligible	Negligible
E-12-042P	4202	Negligible	Negligible	Negligible
E-02-1158P	4319	Negligible	Negligible	Negligible
E-04-027G	4347	Negligible	Negligible	Negligible
E-18-021P	4390	Negligible	Negligible	Negligible
E-03-428G	4446	Negligible	Negligible	Negligible
E-03-411P	4459	Negligible	Negligible	Negligible
E-03-455P	4463	Negligible	Negligible	Negligible
E-03-429G	4581	Negligible	Negligible	Negligible

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Underground Water Conservation District
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Well Name	Distance from Proposed Well (feet)	1-Day Drawdown (feet)	30-Day Drawdown (feet)	1-Year Drawdown (feet)
E-03-237G	4626	Negligible	Negligible	Negligible
E-18-067GU	4629	Negligible	Negligible	Negligible
E-03-236G	4697	Negligible	Negligible	Negligible
E-02-504G	4704	Negligible	Negligible	Negligible
E-02-166G	4782	Negligible	Negligible	Negligible
E-02-2952G	4793	Negligible	Negligible	Negligible
E-18-007P	4795	Negligible	Negligible	Negligible
E-02-1023G	4801	Negligible	Negligible	Negligible
E-16-012P	4815	Negligible	Negligible	Negligible
E-02-3310G	4834	Negligible	Negligible	Negligible
E-02-3030G	4850	Negligible	Negligible	Negligible
E-02-278G	4857	Negligible	Negligible	Negligible
E-13-013P	4885	Negligible	Negligible	Negligible
E-02-1639P	4919	Negligible	Negligible	Negligible
E-14-051P	5005	Negligible	Negligible	Negligible
E-15-017P	5048	Negligible	Negligible	Negligible
E-02-1567G	5061	Negligible	Negligible	Negligible
E-02-2159G	5075	Negligible	Negligible	Negligible
E-14-023P	5077	Negligible	Negligible	Negligible
E-17-061P	5163	Negligible	Negligible	Negligible
E-18-061GU	5190	Negligible	Negligible	Negligible
E-02-203G	5223	Negligible	Negligible	Negligible
E-02-274G	5227	Negligible	Negligible	Negligible
E-02-923G	5237	Negligible	Negligible	Negligible

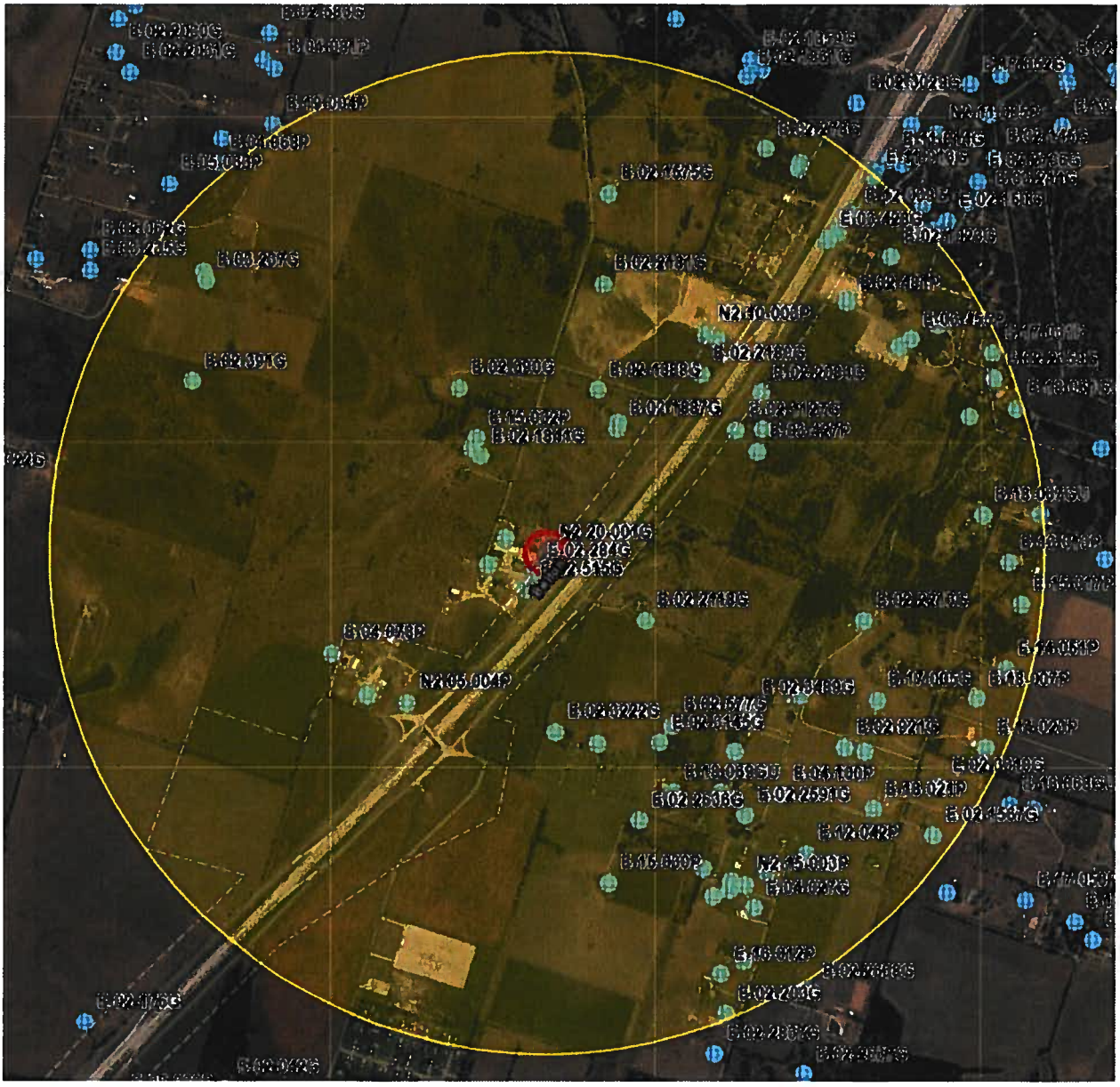


Figure 1. Wells within one mile of the proposed well.

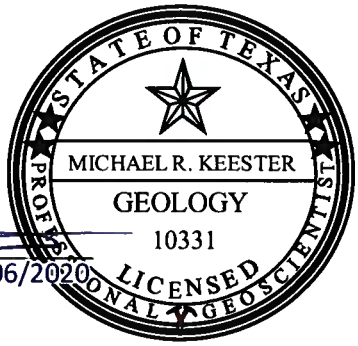
The predicted drawdown presented above is based on our current understanding of the aquifer hydraulic properties and the estimated production from the proposed well. The predicted drawdown values presented do not include the effects from other wells pumping near the proposed well. As Table 1 and Figure 1 illustrate, there are many existing wells within one mile of the proposed well and the combined production will affect the aquifer water levels in the area. Predicted drawdown of less than one (1) foot is considered negligible for analysis purposes due to inherent uncertainty in the aquifer hydraulic characteristics and a difference in the estimated retail electricity costs for a typical domestic well being less than $0.10.

Recommendations

1) To assess actual changes in water levels due to pumping from the proposed well, the well owner will need to have a pump installer make sure removable plug in the sanitary seal is in place to allow clear access into the well for water level measurement by District personnel.
2) In addition, if space allows, the pump installer should install a measuring tube alongside the column pipe to allow for measurement of the water level using an e-line or other direct measurement method.
3) As a N2 operating permit the well owner is required to have a meter installed for monthly reporting of all production

Geoscientist Seal

The following licensed professional geoscientist(s) have reviewed the results and recommendations presented in this report of the potential effects due to production from a proposed well.



Michael Keester, PG 03/06/2020

Clearwater UWCD Virtual Bore

Latitude	30.983796
Longitude	-97.507311

Approximate Ground Surface Elevation

596.84

Top Elev. (ft)	Bottom Elev. (ft)		Depth to Formation (ft)*	Formation Thickness (ft)*	Formation (Geologic Unit)
596.84	546.668		0	50.172	Del Rio, Georgetown, Main Street and Paw Paw Limestone
546.668	501.115		50.172	45.553	Edwards and Comanche Peak Limestone
501.115	202.979		95.725	298.136	Walnut
202.979	-328.089		393.861	531.068	Glen Rose
-328.089	-358.413		924.929	30.324	Hensell
-358.413	-663.907		955.253	305.494	Pearsall, Cow Creek Limestone and Hammett Shale
-663.907	-741.094		1260.747	77.187	Hosston
-741.094			1337.934		Undifferentiated

*Depths / Thicknesses are not to scale

Disclaimer: This product is for informational purposes only and has not been prepared for or suitable for legal, engineering, or other purposes. All representations in this virtual bore represent only the approximate relative depths and thicknesses based on geological interpretation and extrapolation of available well data. Additional data may modify one or more of these formation surfaces. The Clearwater Underground Water Conservation District expressly disclaims any and all liability in connection herewith.

N2-20-001G
Application & Notification

Clearwater Underground Water Conservation District
P.O. Box 1989, Belton, TX 76513
Phone: 254/933-0120 Fax: 254/933-8396

APPLICATION FOR PERMIT
NON-EXEMPT WELLS
Classification 2

A **NON-EXEMPT WELL, CLASSIFICATION 2** is a well that satisfies the following conditions:
1) A water well used for purposes other than domestic, livestock or poultry; or
2) A water well that is drilled, equipped or completed so that it is capable of producing more than 25,000 gallons/day.

Check one of the following:

DRILLING PERMIT
(Complete Sections 1, 2, 3, 4 & 7)
___ New Well
___ Replacement Well
Existing Well

OPERATING PERMIT
(Complete Sections 1, 5 & 7; update Sections 2, 3, & 4 if different from Drilling Permit)
✓ Water to Remain in District
___ Water to be Exported Outside District*

N2-20-001G

PERMIT AMENDMENT
___ Modify Drilling Permit (Complete Sections 1, 2, 3, 4 & 7)
___ Modify Operating Permit (Complete Sections 1, 5 & 7)
___ Change in Well Ownership (Complete Sections 1 & 7)

An application for an **Operating Permit** must be filed within 30 days of completing a new well, or reworking/re-equipping an existing well.
A **Hydrogeological Report** is required for 1) Operating Permit applications requesting an annual maximum permitted use of more than 37 acre-feet; or 2) amendments to increase production or production capacity of a public water supply, municipal, commercial, industrial, agricultural or irrigation well with an outside casing diameter greater than 6 5/8 inches as discussed in District Rule 6.9.2.

*Requests to export water outside the District must also complete Section 7.

Per Rule District Rule 9.3 and State Law TDLR all *State of Texas Well Reports* are due to the District within 60 days of well completion.
NEW Per District Rule 9.3.3 at completion of all wells Water Quality Assessment is required by the Pump Installer and/or Well Driller. District Staff will provide screen test, sample bottles, and coordinate with Pump Installer or Driller to retrieve the sample within 45 days of the well completion. Temporary pump to purge the well is required should the well not have pump permanently installed in first 45 days. This requirement is for operating permits 37 ac. ft. or less.

1. **Owner Information**
Note: If well owner is different from property owner, provide documentation from property owner authorizing well construction and operation.

Well Owner: Richard Castle Telephone No.: 254-718-6370

Address: 1507 Hilltop Circle (Street or P.O. Box) Salado (City) TX (State) 76571 (Zip Code)

Contact Person (if other than owner): Scott Motsinger Telephone No.: 254-931-5636

If ownership of well has changed, name of previous owner _____ State Well No. _____

smotsingeracentalrgre.com

2. **Property Location & Proposed Well Location**
Owner of property (if different from well owner): _____

Property is located 4.8 (Number) miles S (N, S, E, W) of Belton (Nearest City or Town) on I 35 (Name of Road)

Acreage: 2.06 Bell CAD Property ID # 233439 Latitude: 30.983801 Longitude: -97.507313

3. **Well Description** (Submit if State of Texas Well Report is available)
a. Proposed use of well and estimated amount of water to be used for each purpose:
___ *Domestic; ___ Livestock/Poultry; ___ Agricultural/Irrigation;
X Industrial; ___ **Public Supply; ___ Other.
*Total number of houses to be serviced by the well 0.
**Notice is required of any application to the TCEQ to obtain or modify a Certificate of Convenience and Necessity to provide water or wastewater service with water obtained pursuant to the requested permit.

b. Estimated distance from nearest:
175' N / S Property Line; 25' E / W Property Line; ___ Existing Septic Leach Field;
___ River, Stream or Lake; ___ Existing Water Well; ___ Livestock Enclosure;
___ Other Source of Contamination (cemetery, pesticide mixing/loading, petroleum storage tank, etc.)

c. Estimated rate of withdrawal (GPM): <17gpm d. Is property subject to flooding: Yes / (No)

e. Is there another well on the property? Yes / (No) If yes, how many wells? _____

f. Is the well part of a multi-well aggregate system? Yes / (No) List State Well Numbers: _____

g. Attach the following:
- tax plat map indicating the location of the proposed well or the existing well to be modified, the subject property, and adjacent owners' physical addresses and mailing addresses. (Bell CAD maps if current will be accepted)
- Indicate the location of the proposed well or the existing well to be modified with a circle and dot, and the distance to the well from property lines.
- CUWCD will provide the location of all existing wells within ½ mile radius of the proposed well or the existing well to be modified.

NOTE: If this is a replacement well, indicate location of well that is being replaced and distance from the proposed well. **Abandoned well must be properly capped or filled in accordance with state law and the rules of the District.**

Required: Pump Installer / Well Driller Information (Required by Law)

Name: _____ TDLR Pump Installer License Number: _____

Address: _____ TDLR Well Drillers License Number: _____
(Street or P.O. Box)

_____ Comments/notes _____

_____ _____
(City) (State) (Zip Code)

_____ _____ _____
(Phone #) (Fax #) (E-mail address)

4. **Completion Information**
Provide the following information to the extent known and available at the time of application.
NOTE: Provide the complete driller's log and any mechanical log, or chemical analysis, within 30 days of completion of well and prior to obtaining an operating permit. Well must be drilled within 30 feet of the location specified and not closer to any existing well or authorized well site than the District's minimum spacing rule requires.

If amending existing permit, explain requested amendment and reason for amendment: _____

_____

Latitude: 30.983801 N; **Longitude:** -97.507313 W; **Elevation:** 596.84 feet (ft) above msl.

Completion Date: _____; **Driller:** _____; **License No.:** _____.

Total Depth of Well: 150 ft; Borehole Diameter (Dia) 6 inches (in) from ____ to ____; Dia. (2) __ in. from ____ to ____.

Casing: Material _____; Inside Diameter (ID) _____inches (in); Welded / Threaded / Bell Joint; Depth _____ft.

Screen: Yes/No; Screen Type_____; Screen Dia.____ in from ____ to ____ ft; Packing Yes/No; Type _____.

Pump: Turbine___; Power: **Electric**____; **Natural Gas**____; **Diesel** ____; **Horsepower**____; **Pump Bowls Dia.**____ in;

No. of Stages____; **Column Pipe ID:** 1¼ in; **Depth**____ ft. est

Submersible ___; **Power:** Electric____; **Other**_____; **Horsepower**____; **Column Pipe ID:** 1¼ in; **Depth** 150

Windmill___; **Column Pipe ID:** _____in; **Foot Valve Depth**_____.

Pump Discharge: _____ gpm; **Water Level:** _____ ft; Measured from _____ ft above ground level (GL); Date _____.

Pumping Level _____ ft; Measured from _____ ft above GL; after pumping _____hours/minutes; Date _____.

Water Bearing Formation: Edwards BFZ; **Water Quality Analysis?** (Yes) / No Date: 2/13/20

5. **Operating Permit**
NOTE: If requesting operating permits or permit renewals for multiple wells, please attach a separate sheet with the information requested below for each well.
Current operating permit annual production: 0 Requested increase/decrease: 0
Include statement/documentation explaining requested production: _____

_____

Number of contiguous acres owned or leased on which water is to be produced: _____acres

Total annual production requested with this operating permit: .67 acre-feet or 29,000 gallons

Requested annual volume to be exported out of the District: NA Gallons (NA % of total pumpage)

NOTE: (1 acre-foot = 325,851 gallons) Withdrawals from all non-exempt wells Classification 2 must be reported to the District monthly—by the 10th of the following month

6. **Export Requirements**
If water is to be exported outside the District, describe the following issues and provide documents relevant to these issues:
- The availability of water in the District and in the proposed receiving area during the period requested.
- The projected effect of the proposed export on aquifer conditions, depletion, subsidence or effects on existing permit holders or other groundwater users within the District.
- How the proposed export is consistent with the approved regional water plan and certified District Management Plan.

7. **Certification**
I hereby certify that the information contained herein is true and correct to the best of my knowledge and belief. I certify to abide by the terms of the District Rules, the District Management Plan, and orders of the Board of Directors. I agree to comply with all District well plugging and capping guidelines as stated in the District Rules.

_____ Received from Field by CO & SM
Owner Signature Date

PERMIT TERMS: ***Drilling Permits***—effective for 365 days from the date the permit application is approved by the Board. ***Combination Drilling / Operating Permits***—effective until the end of the calendar year in which it is issued. Permits may be renewed by the General Manager, subject to any changes necessary under proportional adjustment regulations, District Rules, or the District Management Plan.
SPACING/ACREAGE REQUIREMENTS: Refer to District Rules, Section 9.5. For a well with a column pipe size of 2" or less, a minimum tract size of 2 acres is required, with a 100' setback from other well sites, and a 50' setback from property lines. Acreage and setbacks increase with larger column pipe size.
NOTICE REQUIREMENTS: Permit applicants must provide notice of filing as follows: 1) publication in a newspaper of general circulation in the District; and 2) certified mail, return receipt requested, to all adjacent property owners and owners of wells located within ¼ mile radius of the existing well or proposed well that is the subject of the application. The District will provide the appropriate forms for notification. Applicant must provide 1) proof of publication of public notice; and 2) proof of receipt by certified mail of the public notice to property owners as described above 12 days prior to the proposed public hearing date.

Estimate of Water Use/Needs:

Applicant name: Proposed CUWCD Well #: **N2-20-001G**

Declare Usage Needs: Determined for each proposed non-exempt well

1) *Domestic: 10 # of people per office x 60 g/day/person = 600 x 365 days/325851 = 0.67 ac-ft/yr

2) **Landscape Use (suggest that landscape watering be limited to 1500 square feet)

_____gpm/zone x _____ minutes each zone runs = _____ gallons/zone

_____gallons/zone X _____ number of zones = _____ gallons/day

_____gallons/day x _____days/wk system runs = _____ gallons/wk

_____gallons/wk x _____ number of wks/year = _____ gallons/year

_____gallons per year / 325851 = _____ acre feet per year requested.

Total needs: Office: 219,000 gallons per year
Landscape: none gallons per year

Proposed Annual Production Amount: 219,000 gallons and/or 0.67 ac-ft/year

The above estimate is for groundwater needs for a well on a tract of land less than 10 acres and greater than 2 acres subdivided after March 1st 2004.

**includes average household use for indoors and lawn irrigation.*

*** is estimate of groundwater needs (annually) for just outside landscape use for an N1 well when the home is provided public water supply.*

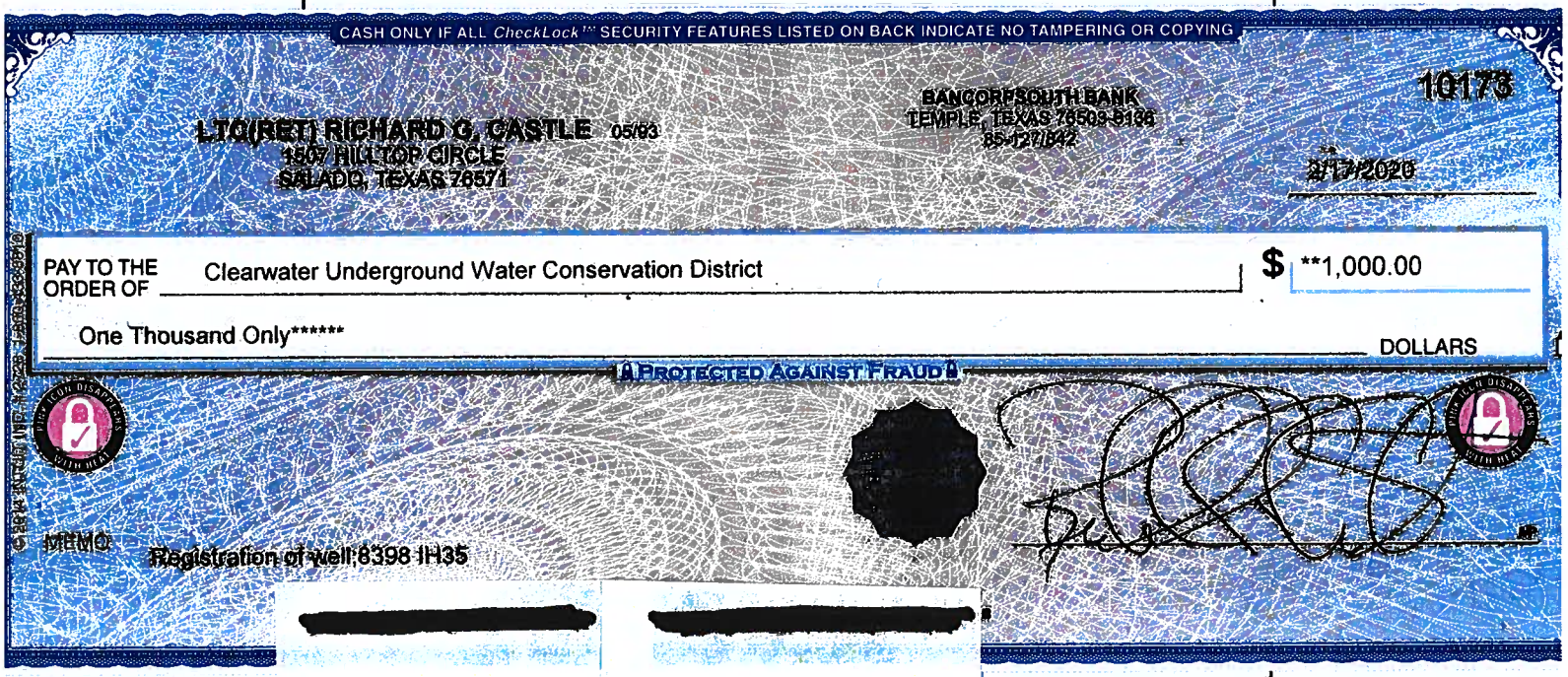
Clearwater Underground Water Conservation
PO Box 1989
Belton, TX 76513

Invoice

Invoice #: 124
Invoice Date: 2/11/2020
Due Date: 2/11/2020
Project:
P.O. Number:

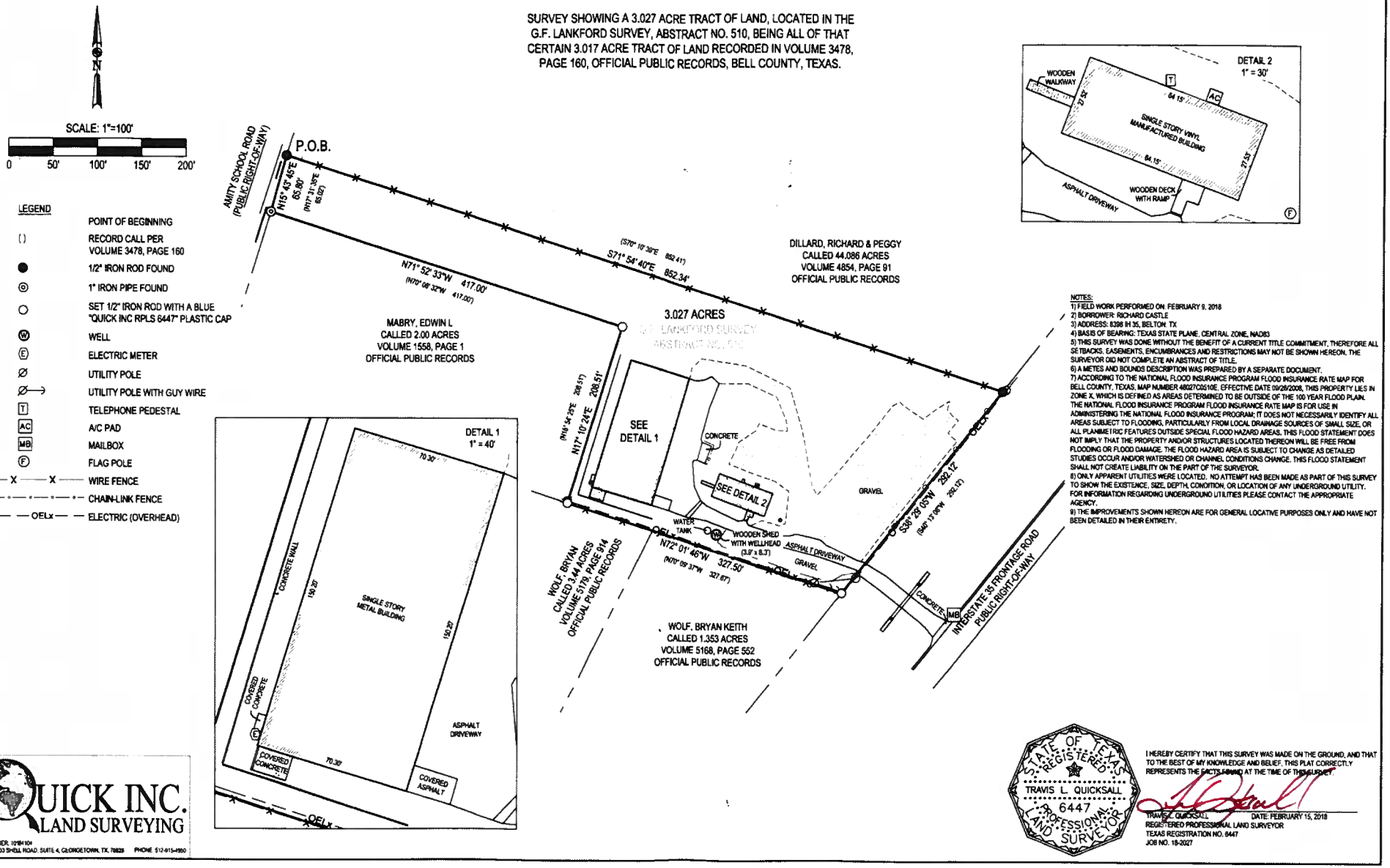
Bill To:
Richard Castle
1507 Hilltop Circle
Salado, TX 76571

Date	Description	Amount
2/14/2020	Permit Application Fee	1,000.00



Total	$1,000.00
Payments/Credits	-$1,000.00
Balance Due	$0.00

SURVEY SHOWING A 3.027 ACRE TRACT OF LAND, LOCATED IN THE G.F. LANKFORD SURVEY, ABSTRACT NO. 510, BEING ALL OF THAT CERTAIN 3.017 ACRE TRACT OF LAND RECORDED IN VOLUME 3478, PAGE 160, OFFICIAL PUBLIC RECORDS, BELL COUNTY, TEXAS.



NOTES:
1) FIELD WORK PERFORMED ON FEBRUARY 9, 2018
2) BORROWER: RICHARD CASTLE
3) ADDRESS: 8398 IH 35, BELTON, TX
4) BASIS OF BEARING: TEXAS STATE PLANE, CENTRAL ZONE, NAD83
5) THIS SURVEY WAS DONE WITHOUT THE BENEFIT OF A CURRENT TITLE COMMITMENT, THEREFORE ALL SETBACKS, EASEMENTS, ENCUMBRANCES AND RESTRICTIONS MAY NOT BE SHOWN HEREON. THE SURVEYOR DID NOT COMPLETE AN ABSTRACT OF TITLE.
6) A METES AND BOUNDS DESCRIPTION WAS PREPARED BY A SEPARATE DOCUMENT.
7) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR BELL COUNTY, TEXAS, MAP NUMBER 48027C0510E, EFFECTIVE DATE 09/26/2008, THIS PROPERTY LIES IN ZONE X, WHICH IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 100 YEAR FLOOD PLAIN. THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY AND/OR STRUCTURES LOCATED THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. THE FLOOD HAZARD AREA IS SUBJECT TO CHANGE AS DETAILED STUDIES OCCUR AND/OR WATERSHED OR CHANNEL CONDITIONS CHANGE. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.
8) ONLY APPARENT UTILITIES WERE LOCATED. NO ATTEMPT HAS BEEN MADE AS PART OF THIS SURVEY TO SHOW THE EXISTENCE, SIZE, DEPTH, CONDITION, OR LOCATION OF ANY UNDERGROUND UTILITY. FOR INFORMATION REGARDING UNDERGROUND UTILITIES PLEASE CONTACT THE APPROPRIATE AGENCY.
9) THE IMPROVEMENTS SHOWN HEREON ARE FOR GENERAL LOCATIVE PURPOSES ONLY AND HAVE NOT BEEN DETAILED IN THEIR ENTIRETY.

QUICK INC. LAND SURVEYING
FIRM NUMBER: 10194104
OFFICE: 3303 SHELL ROAD, SUITE 4, GEORGETOWN, TX. 78628 PHONE: 512-915-1550

STATE OF TEXAS REGISTERED TRAVIS L. QUICKSALL 6447 PROFESSIONAL LAND SURVEYOR

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND, AND THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS PLAT CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THIS SURVEY.

TRAVIS L. QUICKSALL DATE: FEBRUARY 15, 2018
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NO. 6447
JOB NO. 18-2027


Clearwater Web Map
N
W
E
S
N2-20-001G
Clearwater
Every drop counts!
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Dirk Aaron

From: Cheryl Maxwell <CMaxwell@BeltonTexas.Gov>
Sent: Friday, March 13, 2020 12:49 PM
To: 'Scott Motsinger'
Cc: Dirk Aaron
Subject: RE: Richard Castle Application for an Operating Permit

Dirk,

Per request below, there is no public water supply available to this site (8398 S. IH 35 Service Road). We are allowing the existing water well to be used for the existing building provided it is approved by CUWCD.

Thanks,

Please take a moment to complete the City of Belton Customer Satisfaction Survey.

Cheryl Maxwell, AICP
Director of Planning

333 Water St.
Belton, TX 76513
T 254.933.5816
cmaxwell@beltontexas.gov
www.BeltonTexas.Gov

Connect with City of Belton

From: Scott Motsinger <smotsinger@centralrpre.com>
Sent: Friday, March 13, 2020 12:17 PM
To: Cheryl Maxwell <CMaxwell@BeltonTexas.Gov>
Cc: Dirk Aaron (daaron@cuwcd.org) <daaron@cuwcd.org>
Subject: FW: Richard Castle Application for an Operating Permit

Cheryl,
Can you respond in this email for Dirk. He needs something from you saying that city water is not available at this site.
Thanks

Scott T. Motsinger, CCIM
Principal/Broker

Commercial Real Estate Development
5412 Hwy 317, Ste A
Belton, TX 76513
Office Ph. (254) 791 8700

BELL COUNTY PUBLIC HEALTH DISTRICT

Temple, Belton, Killeen

PERMIT TO INSTALL A SEPTIC TANK SYSTEM

Permit No. T 2182
Receipt No. 5431
Flood Plain No. 4071

U-30

Location I-35 (W) St. Address _____ Blk. ___ Lot ___ Sec. ___ B ___

Legal Description: Survey G.F. Sanford 301 Abstract No. 510 Vol. 3007 Page 476

Issued By Becky Date Issued: 6.13.96 This Permit Expires: 6.13.97

Owner Rick Castle Address 802 Hilltop Cir. Salado Phone _____

Installer R+D Backhoe Address PO Box 191 Salado Phone 760.0017

Signature X Kevin Stuart Amount Paid $75 CK# 2280

No. of Bedrooms N/A Size of Septic Tank Required: 500 gal.; Size Installed: _____ gal. Tank Manufacturer/Serial #: _____

Soil Type _____ Disposal Fields: Total Area Req. 300 Sq. Ft.; Total Area Installed _____ Sq. Ft.

*If soil type varies from that stated reflecting an increased percolation rate, size of disposal fields must be increased accordingly.

Width of Trench _____ ft. Length of Trench _____ ft. Depth of Trench _____ ft. Sandy/Sandy Loam Backfill? _____ Yes _____ No

I. Tank Size: 1 or 2 BR. — 750 gal.; 3 BR. — 1000 gal.; 4 BR. — 1250 gal.; 5 BR. — 1500 gal.

II. Tank from House — 5 ft.; property line — 10 ft.

III. Disposal Field from house — 15 ft.; property line — 10 ft.; water lines — 10 ft.; Distance between lines — 5 ft.

IV. Bottom of absorption ditches and drainfield should be essentially level, drop not to exceed one inch per 100 ft.

V. I certify that this system is installed in accordance with Sanitary Regulation I., Bell County, Texas.

License No. 3373 X Kevin Stuart
Installer

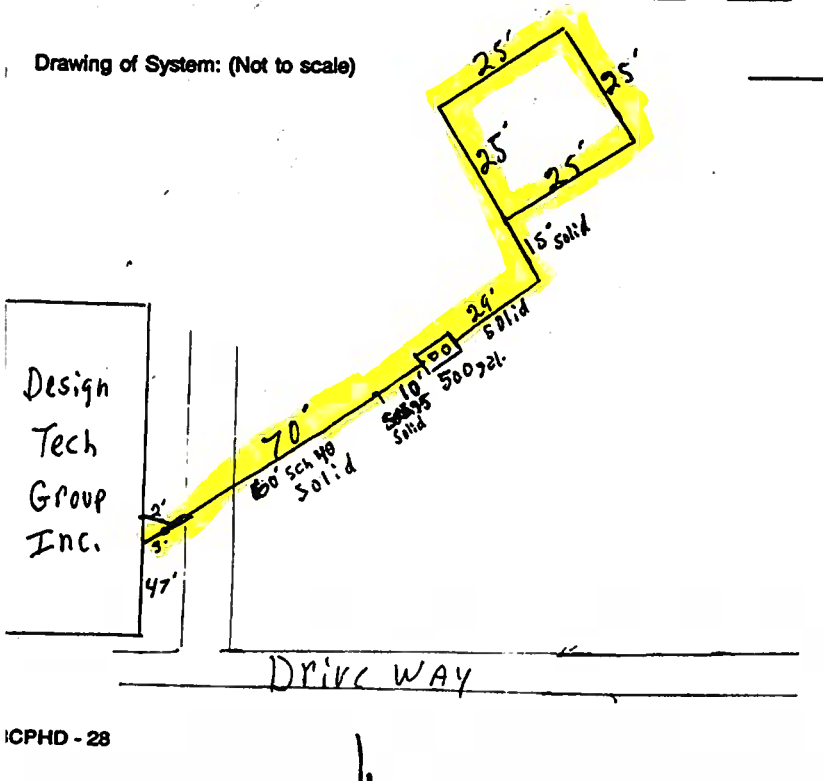
Remarks: Office/Storage building

Date 6-14-96 Does System meet minimum Department Standards Yes ✓ No ___

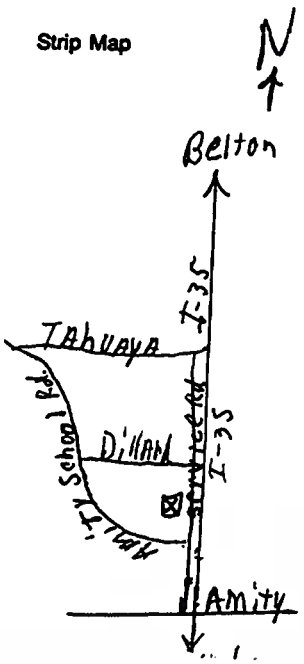
Thomas Mayse, R.S.
Inspector

Wayne Farrell
Director

Drawing of System: (Not to scale)



Strip Map



CPHD - 28

N2-20-001G Contact List

Wells 1/4 Mile

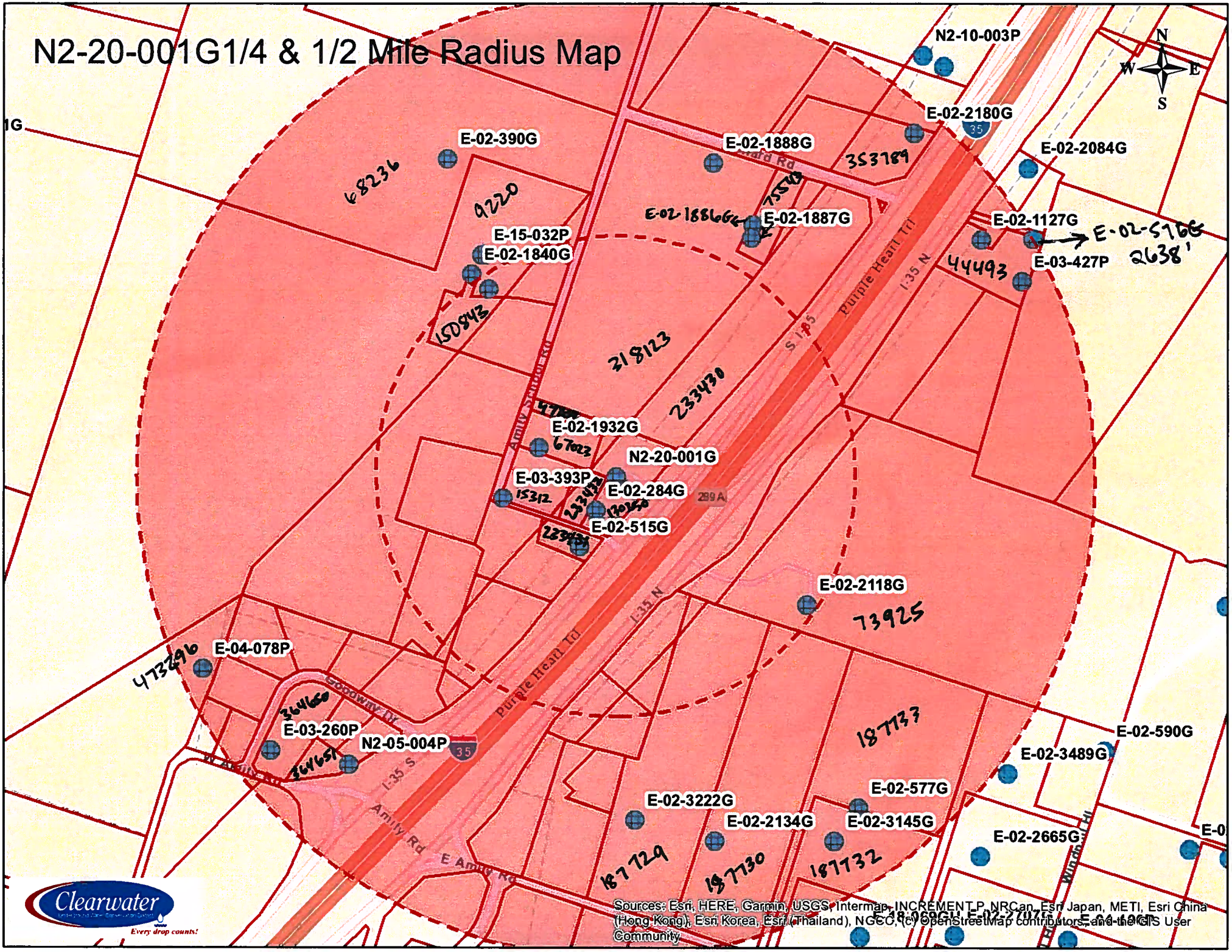
Prop ID	Name	Address	City	State	Zip	Well #	Status	Depth	Aquifer	Use	Distance
67023	Edwin Mabry	8401 Amity School Rd	Belton	TX	76513	E-02-1932G	Active	170	Edwards BFZ	Domestic	457 ft
125312	Wolff Construction	PO Box 1002	Salado	TX	76571	E-03-393P	Active	160	Edwards BFZ	Domestic	637 ft
130250	Bryan Wolff	14055 Crows Ranch Rd	Salado	TX	76571	E-02-284G	Active	126	Edwards BFZ	Domestic	215 ft
233431	Bryan Wolff	14055 Crows Ranch Rd	Salado	TX	76571	E-02-515G	Active	135	Edwards BFZ	Domestic	436 ft
73925	Ronald & Emily Mikeska	711 Lavon Lane	Temple	TX	76502	E-02-2118G	Active	160	Edwards BFZ	Domestic	1,270 ft
9220	Willard Bennett & Janet Rand	PO Box 884	Belton	TX	76513	E-02-1841G	Active	98	Edwards BFZ	Livestock/Poultry	1,242 ft

Wells 1/2 Mile

150843	Willard Bennett & Janet Rand	PO Box 884	Belton	TX	76513	E-02-1840G	Active	98	Edwards BFZ	Domestic	1,371 ft
9220	Willard Bennett & Janet Rand	PO Box 884	Belton	TX	76513	E-15-032P	Never Drilled				1,423 ft
68236	Max & Mary Lou Marks	200 Lake Rd Apt 701	Belton	TX	76513	E-02-390G	Active	80	Edwards BFZ	Livestock/Poultry	1,976 ft
318123	Richard & Peggy Dillard	231 Dillard Rd	Belton	TX	76513	E-02-1888G	Active	unknown	unknown	Domestic	1,794 ft
75543	Richard & Peggy Dillard	231 Dillard Rd	Belton	TX	76513	E-02-1886G	Active	200	Edwards BFZ	Domestic	1,574 ft
75543	Richard & Peggy Dillard	231 Dillard Rd	Belton	TX	76513	E-02-1887G	Active	150	Edwards BFZ	Domestic	1,495 ft
353789	Michael & Gennifer Brister	PO Box 178	Bend	TX	76824	E-02-2180G	Active	170	Edwards BFZ	Domestic	2,498 ft
44493	Brubaker Family Revocable Trust	5051 Elm Grove Rd	Belton	TX	76513	E-02-1127G	Active	130	Edwards BFZ	Livestock/Poultry	2,391 ft
44493	Brubaker Family Revocable Trust	5051 Elm Grove Rd	Belton	TX	76513	E-02-576G	Active	152	Edwards BFZ	Domestic	2,642 ft
44493	Brubaker Family Revocable Trust	5051 Elm Grove Rd	Belton	TX	76513	E-03-427G	Active	150	Edwards BFZ	Livestock/Poultry	2,471 ft
187733	Timothy & Gwen Petter	520 E Amity Rd	Salado	TX	76571	E-02-577G	Active	160	Edwards BFZ	Domestic	2,259 ft
187732	Scott & Mayra Ellithorp	540 E Amity Rd	Salado	TX	76571	E-02-3145G	Active	163	Edwards BFZ	Domestic	2,327 ft
187730	Helga Venus	506 E Amity Rd	Salado	TX	76571	E-02-2134G	Active	165	Edwards BFZ	Domestic	2,073 ft
187729	James & Melinda Davis	386 E Amity Rd	Salado	TX	76571	E-02-3222G	Active	170	Edwards BFZ	Domestic	1,896 ft
364651	FW Richardson Enterprises LLC	PO Box 144	Belton	TX	76513	N2-05-004P	Active	980	Middle Trinity	Industrial	2,169 ft
364650	FW Richardson Enterprises LLC	PO Box 144	Belton	TX	76513	E-03-260P	Active	165	Edwards BFZ	Domestic	2,426 ft
473296	Willard Bennett & Janet Rand	PO Box 884	Belton	TX	76513	E-04-078P	Active	160	Edwards BFZ	Livestock/Poultry	2,516 ft

Adjacent Property

233440	Richard & Peggy Dillard	231 Dillard Rd	Belton	TX	76513
318123	Richard & Peggy Dillard	231 Dillard Rd	Belton	TX	76513
47309	Richard Castle	1507 Hilltop Circle	Salado	TX	76571
233432	Bryan Wolff	14055 Crows Ranch Rd	Salado	TX	76571
130245	Bryan Wolff	14055 Crows Ranch Rd	Salado	TX	76571
130250	Bryan Wolff	14055 Crows Ranch Rd	Salado	TX	76571
67023	Edwin Mabry	8401 Amity School Rd	Belton	TX	76513


N2-20-001G1/4 & 1/2 Mile Radius Map
N2-10-003P
E-02-2180G
E-02-2084G
E-02-390G
E-02-1888G
E-02-1887G
E-02-1127G
E-02-576G
E-03-427P
E-15-032P
E-02-1840G
E-02-1932G
N2-20-001G
E-03-393P
E-02-284G
E-02-515G
E-02-2118G
E-04-078P
E-03-260P
N2-05-004P
E-02-590G
E-02-3489G
E-02-577G
E-02-3222G
E-02-2134G
E-02-3145G
E-02-2665G
Purple Heart Trl
I-35 N
I-35 S
Amity Rd
E Amity Rd
Broadway Dr
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Clearwater
Every drop counts!

Publisher's Affidavit

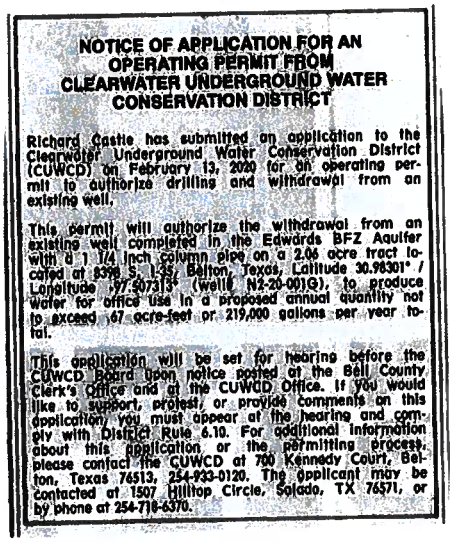
State of Texas
County of Bell

Before Me, The Undersigned Authority, this day personally appeared Jane Moon after being by me duly sworn, says that she is the Classified Inside Sales Manager of the Temple Daily Telegram, a newspaper published in Bell County, Texas and that the stated advertisement was published in said newspaper on the following date(s):

February 20, 2020

For: Richard Castle
Ad #: 16655636
Cost: $125.80
Times Published: 1

Jane Moon
Classified Manager Inside Sales



NOTICE OF APPLICATION FOR AN OPERATING PERMIT FROM CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Richard Castle has submitted an application to the Clearwater Underground Water Conservation District (CUWCD) on February 13, 2020 for an operating permit to authorize drilling and withdrawal from an existing well.

This permit will authorize the withdrawal from an existing well completed in the Edwards BFZ Aquifer with a 1 1/4 inch column pipe on a 2.06 acre tract located at 8398 S. I-35, Belton, Texas, Latitude 30.98301° / Longitude -97.507315° (Well# N2-20-001Q), to produce water for office use in a proposed annual quantity not to exceed .67 acre-feet or 219,000 gallons per year total.

This application will be set for hearing before the CUWCD Board upon notice posted at the Bell County Clerk's Office and at the CUWCD Office. If you would like to support, protest, or provide comments on this application, you must appear at the hearing and comply with District Rule 6.10. For additional information about this application or the permitting process, please contact the CUWCD at 700 Kennedy Court, Belton, Texas 76513, 254-933-0120. The applicant may be contacted at 1507 Hilltop Circle, Salado, TX 76571, or by phone at 254-718-6370.

Subscribed and sworn to before me,
this day: February 20, 2020

Notary Public in and for
Bell County, Texas

(Seal)

TERI ZAMORA
Notary Public, State of Texas
Comm. Expires 11-05-2023
Notary ID 10837339

7017 2400 0000 3022 6639

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☐ Adult Signature Restricted Delivery	$
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Sent To: Richard & Peggy Dillard
Street and Apt. No., or PO Box No.: 231 Dillard Rd
City, State, ZIP+4®: Belton, TX 76513

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Sent To: Edwin Mabry
Street and Apt. No., or PO Box No.: 8401 Amity School Rd
City, State, ZIP+4®: Belton, TX 76571

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Sent To: Willard Bennett & Janet Rand
Street and Apt. No., or PO Box No.: P.O. Box 884
City, State, ZIP+4®: Belton, TX 76513

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Postage	$0.55
Total Postage and Fees	$6.95

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Sent To: Ronald & Emily Mikeska
Street and Apt. No., or PO Box No.: 711 Lavon Lane
City, State, ZIP+4®: Temple, TX 76502

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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Sent To: Wolff Construction
Street and Apt. No., or PO Box No.: P.O. Box 1002
City, State, ZIP+4®: Salado, TX 76571

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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Sent To: Bryan Wolff
Street and Apt. No., or PO Box No.: 14055 Crows Ranch Rd
City, State, ZIP+4®: Salado, TX 76571

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

NOTICE OF APPLICATION FOR AN OPERATING PERMIT FROM CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Richard Castle has submitted an application to the Clearwater Underground Water Conservation District (CUWCD) on February 13, 2020 for an operating permit to authorize drilling and withdrawal from an existing well.

This permit will authorize the withdrawal from an existing well completed in the Edwards BFZ Aquifer with a 1 1/4 inch column pipe on a 2.06 acre tract located at 8398 S. I-35, Belton, Texas, Latitude 30.983801°/Longitude -97.507313° (well# N2-20-001G), to produce water for office use in a proposed annual quantity not to exceed 0.67 acre-feet or 219,000 gallons per year total.

This application will be set for hearing before the CUWCD Board upon notice posted at the Bell County Clerk's Office and at the CUWCD Office. If you would like to support, protest, or provide comments on this application, you must appear at the hearing and comply with District Rule 6.10. For additional information about this application or the permitting process, please contact the CUWCD at 700 Kennedy Court, Belton, Texas 76513, 254-933-0120. The applicant may be contacted at 1507 Hilltop Circle, Salado, TX 76571, or by phone at 254-718-6370.

February 17, 2020

NOTICE OF APPLICATION FOR DRILLING AND OPERATING PERMIT

Name
Address
City, TX Zip

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: Application for an Operating Permit

To Whom It May Concern:

I, Richard Castle, have submitted an application to the Clearwater Underground Water Conservation District (CUWCD) on February 13, 2020 for an operating permit on an existing well (N2-20-001G) for 0.67 acre-feet or 219,00 gallons per year.

This permit will authorize the withdrawal from a well completed in the Edwards BFZ Aquifer with a 1 ¼ inch column pipe on a 2.06 acre tract located at 8398 S. I-35, Salado, Texas, Latitude 30.983801°/Longitude -97.507313° (well# N2-20-001G), to produce water for office use in a proposed annual quantity not to exceed 0.67 acre-feet or 219,000 gallons per year total.

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Sincerely,

Richard Castle