# Approved

REQUEST FOR AGENDA PLACEMENT FORM			
Submission Deadline - Tuesday, 12:00 PM before Court Dates			
SUBMITTED BY: Jennifer VanderLaan	TODAY'S DATE: November 17, 2022		
<b>DEPARTMENT</b> :	Public Works		
SIGNATURE OF DEPARTMENT HEAD:	1) window from		
REQUESTED AGENDA DATE:	November 28, 2022		
SPECIFIC AGENDA WORDING:			
Consideration of Order 2022-94, Order approving Lots 1 thru 16, Block 1 of Trinity Acres in Precinct #4 - Public Works Department			
PERSON(S) TO PRESENT ITEM: Jennifer VanderLaan			
SUPPORT MATERIAL: (Must enclose supporting documentation)			
TIME: 10 minutes  (Anticipated number of minutes needed to discuss item)	ACTION ITEM: X WORKSHOP CONSENT: EXECUTIVE:		
STAFF NOTICE:			
COUNTY ATTORNEY: IT DEF AUDITOR: PURCE PERSONNEL: PUBLI	PARTMENT: HASING DEPARTMENT: C WORKS: X R:		
********This Section to be Completed by County Judge's Office********  ASSIGNED AGENDA DATE:			
REQUEST RECEIVED BY COUNTY JUDGE'S OFFICE			
COLIDT MEMBED ADDROVAL	Date		

NOV 28 2022

# JOHNSON COUNTY COMMISSIONERS COURT



Becky Ivey, County Clerk
Johnson County Texas

By \_\_\_\_\_\_Deputy

RICK BAILEY Commissioner Pct. #1

KENNY HOWELL Commissioner Pct. #2 ROGER HARMON County Judge

PAULA REID
Assistant to Commissioners Court

MIKE WHITE Commissioner Pct. #3

LARRY WOOLLEY Commissioner Pct. #4

STATE OF TEXAS

**COUNTY OF JOHNSON** 

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**ORDER 2022-94** 

## ORDER APPROVING PLAT

WHEREAS, Chapter 232 of the Texas Local Government Code requires the owner of a tract of land located outside the limits of a municipality to have a plat of the subdivision prepared if the owner divides the tract of land into two or more parts to lay out: (1) a subdivision of the tract, including an addition; (2) lots; or (3) streets, alleys, squares, parks, or other parts of the tract intended to be dedicated to public use or for the use of purchasers or owners of lots fronting on or adjacent to the streets, alleys, squares, parks or other parts; and

WHEREAS, an application for a plat of a subdivision has been presented to the Public Works Department of Johnson County; and

WHEREAS, the application for the plat of the subdivision meets the requirements of Chapter 232 of the Texas Local Government Code and the requirements of the Subdivision Rules and Regulations of Johnson County, Texas as currently amended; and

WHEREAS, a motion was made by Commissioner Woolley, Pct. #4 and seconded by Commissioner White, Pct. #3 that stated: "I make the motion to approve for filing purposes only, a Plat of Trinity Acres, Lots 1 thru 16, Block 1, in Precinct 4 and clarify that the filing of the plat which dedicates roads and streets to the public does not make those roads and streets county roads subject to county maintenance."

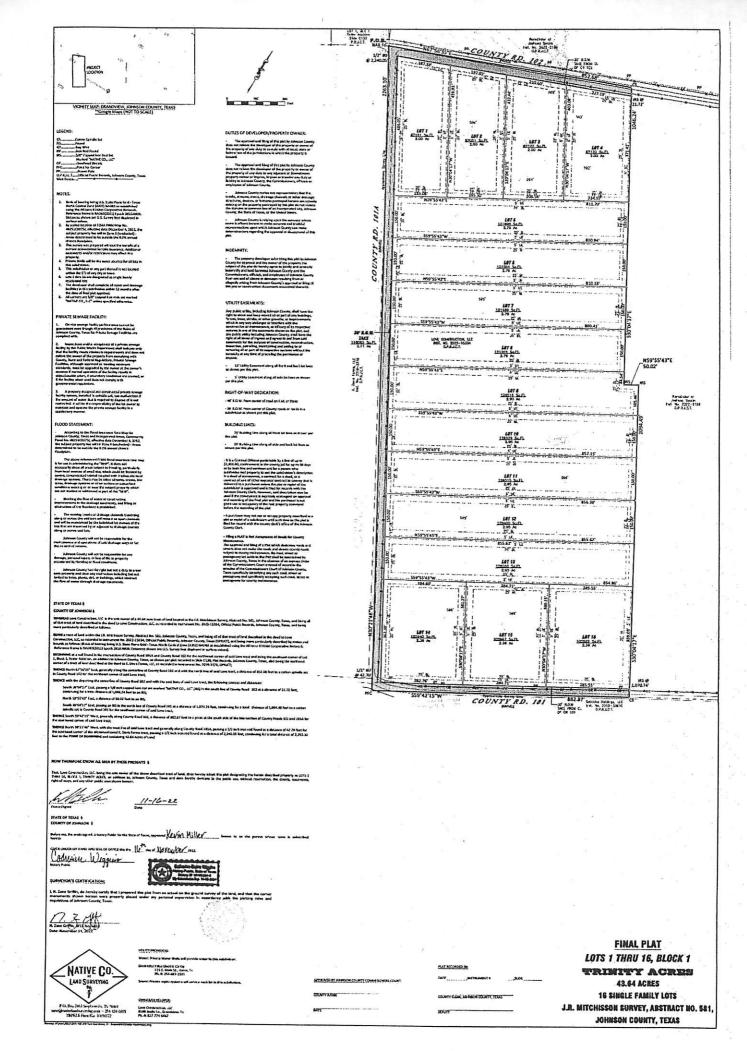
Said motion was approved by a vote of the Commissioners Court on the 28<sup>th</sup> day of November 2022.

# NOW THEREFORE BE IT RESOLVED AND ORDERED:

The Commissioners Court of Johnson County, Texas does hereby enter this Order approving the Plat of **Trinity Acres**, Lots 1 thru 16, Block 1, in Precinct 4 for filing purposes only and clarifying that the filing of the plat which dedicates roads and streets to the public **does not** make those roads and streets county roads subject to county maintenance.

WITNESS OUR HAND THIS, THE  $28^{TH}$  DAY OF NOVEMBER 2022.

Roger Harmon, Johns Voted: yes,	
	Las Louise
Rick Bailey, Comm. Pct. #1  Voted:yes,no, abstained	Voted: no, abstained
Mehr White	Trans a Toller
Mike White, Comm. Pct. #3  Voted: yes, no, abstained	Larry Woolley, Comm. Pct. #4  Voted: ves. no abstained
TTEST: Becky Ivey County Clerk	Jos, dostamed





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#### TECHNICAL MEMORANDUM

To:

Kathy Turner Jones, General Manager, Prairielands GCD

From:

Wade Oliver, PG, INTERA Inc. Andrew Osborne, INTERA Inc.

Date:

September 7, 2022

Re:

Review of Trinity Acres Groundwater Availability Certification

INTERA was tasked by Prairielands GCD with reviewing the Groundwater Availability Certification (GAC) and attached Groundwater Availability Study submitted by Bullock, Bennett & Associates.

#### Review of Data Presentation and Methods

The report includes a thorough site location description, with descriptions of elevation data and surface water flow direction. It mentions the nearby wells and include site maps with existing and test well locations, surface geology, and property boundaries. It thoroughly describes the field methods for drilling and constructing the two test wells, and includes water quality samples, diagrams of the well columns with attached cuttings logs and complete geophysical logs, as well as the State Well Reports. It also includes a thorough description of the local geology and a set of water quality samples along with the field methods for conducting the sampling and the Change of Custody forms.

Two test wells were completed in the Woodbine formation with screened depths of 280-300 feet. Well 1 was pumped at a constant 18 gallons per minute for just over 24 hours and water level data was observed and recorded in both wells. The raw data for both wells is included in the report. The consultant (BB&A) used AQTESOLV  $Pro^{TM}$  to analyze the drawdown data. Below are the estimated aquifer properties compared with the groundwater availability model (GAM) in the same location. Note, there is a small disparity between the estimated hydraulic conductivity reported in the conclusion section (4.02 gpd/ft² or 0.54 ft/d) and that reported in the data and results section (5.4 gpd/ft² or 0.73 ft/d). We have included both values in Table 1 below. Based on our assessment of the report, we believe the estimated properties are realistic.





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Table 1. Comparison of GAM properties to properties obtained from pumping test analysis

	Reported Woodbine Properties	Groundwater Availability Model (GAM)
Hydraulic Conductivity (ft/day)	0.53 — 0.73	0.81
Specific Storage (ft <sup>-1</sup> )	3.0e-7	2.5e-6
Saturated Thickness (ft)	180	197

The report includes estimates of drawdown at the proposed well sites assuming 5 pumping wells each producing at 1 GPM for 30 years. This scenario was chosen because it approximates the demand of the subdivision assuming 16 households each with four people consuming 112.5 gallons per day (a total of 450 gallons per day). The maximum drawdown is predicted to be 8.5 feet over 30 years. INTERA evaluated the same scenario using an analytic element modeling tool (TTIM) and achieved similar results as those presented in the report using the same hydraulic properties.

The report concludes that there is sufficient groundwater available for the development, though includes recommendations to have each house equipped with rainwater harvesting systems, ground water storage tanks, and have the water tested for total coliforms and disinfected if before consumption.

## Conclusion

This groundwater availability certification and the accompanying report appear to be professionally completed and present the methods, analyses and conclusions in a clear, fair and thorough manner. This report could be used as an example or template for other groundwater availability certification studies in the future.

