



Building/Planning Department
City of Glen Rose, Texas 76043
PH: (254) 897-9373
Fax: (254) 897-7989

Staff Use Only
Date Received: _____
Fee: _____ Paid On: _____

PRELIMINARY PLAT APPLICATION

Address of property: TBD. (Bo Gibbs Blvd., N. of First Baptist)

Applicant's Name: Horizon Capital Solutions, LLC Date: 5/17/2021

Property Owner Information

Full Name: Horizon Capital Solutions, LLC

Address: 1028 CR 409 Nemo, TX 76070

Telephone No: 817-412-0561 Email: barnesplumbing09@yahoo.com

Applicant/Owner's Representative (if not the owner)

Full Name: Chuck Stark PE, RPLS

Address: 6221 Southwest Blvd. Ste. 100 Fort Worth, TX 76132

Telephone No: 817-231-8100 Email: chucks@barronstark.com
willc@barronstark.com

Property Information

Present zoning at site: R-1

Form of Ownership of the property: Individual Partnership Corporation

Legal Description of Current Property:

Acres: Exhibit A 20.82 ac. Lot# _____ Block: 56

Subdivision: Milam County School Land Survey Abst. No. 136

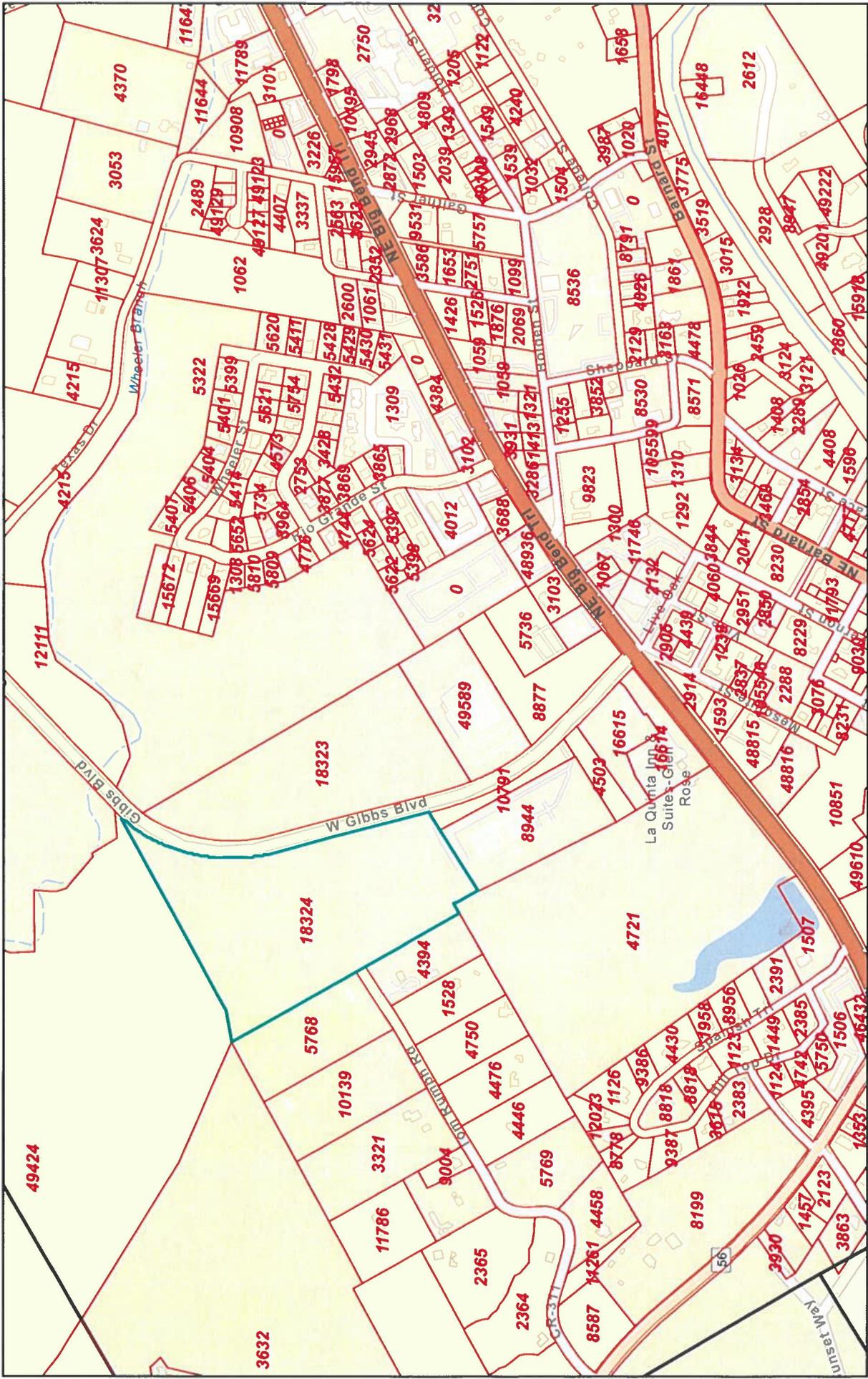
Additional Comments/Information

I/We, am/are the owner(s) of the property. I/We hereby certify that all the information provided is true and correct.

[Signature]
Owner(s) Signature AUTHORIZED AGENT

5/17/21
Date

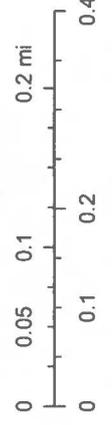
Somervell CAD Web Map



5/14/2021, 3:25:43 PM

- Abstracts
- Parcels

1:9,028



Esri Community Maps Contributors, Texas Parks & Wildlife, Esri, HERE, Somervell County Appraisal District, BIS Consulting - www.bisconsulting.com
 Disclaimer: This product is for informational purposes only and has not been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of boundaries.



6221 Southwest Boulevard, Suite 100
Fort Worth, Texas 76132
Texas Registered Engineering Firm F-10998

MEMORANDUM



USE OF THIS ELECTRONIC SEAL/SIGNATURE
AUTHORIZED BY CHARLES F. STARK, P.E.
TEXAS REGISTRATION NO. 57357

TO: City of Glen Rose
FROM: Chuck Stark, PE RPLS
DATE: April 8, 2021

RE: **Drainage Report for Rock Ridge Estates Single Family Development**

Introduction:

Rock Ridge Estates is a proposed, single-family residential subdivision located on the west side of Bo Gibbs Boulevard. The site is adjacent to and northwest of the First Baptist Church, and located to the south/southwest of an existing creek, Wheeler Branch. The development will include approximately 65 single family lots sized at 70'x120', with pad modules of 50'x70'. This subdivision will be constructed in phases, and this report includes drainage requirements necessary for developing all phases within this site.

Existing Conditions:

The site in question forms two distinct drainage basins, divided by an existing ridge that runs east/west across the property. The southern basin drains south via open channel roadside ditches and CMP culverts along/under Bo Gibbs Boulevard, flowing through various properties before ultimately terminating into the Paluxy River. Upon entering the existing ditch along Bo Gibbs at the southeastern most point of the property in question, a portion of the discharge is conveyed through an existing 36" CMP under Bo Gibbs. The remaining discharge continues south in the existing ditch, through an existing 12" CMP at the northern-most First Baptist Church driveway and eventually crosses Bo Gibbs via an existing 30" CMP located approximately 200' south of the southern property line of the site in question. This 30" CMP was installed as part of the church construction.

After crossing under Bo Gibbs through the existing CMPs, the stormwater travels southeasterly, utilizing various existing minor drainage paths through undeveloped land, until converging at an existing headwall and concrete drop intake structure near the northwest property line of the Tractor Supply site located at 200 Bo Gibbs Blvd. At this point, the stormwater enters a single 48" HDPE pipe, which is part of the Tractor Supply stormwater conveyance system that was designed and constructed in late 2017. Per as-built drawings created by BEFCO Engineering, Inc. (17-6921) and provided by the City, the system includes two runs of 48" pipe with slopes of 0.50% and 0.38%. Capacities at the 100-year frequency are noted as 119.84 cfs and 105.30 cfs respectively. Using Manning's Equation with a roughness coefficient of 0.0110, capacities of 120.02 cfs and 104.63 cfs are obtained and validate the capacities listed in the as-built drawings.

The conveyance system runs across the Tractor Supply site, collecting discharge from the existing onsite detention pond through a 30" HDPE lateral line and junction box, and outfalls at the eastern property line. Per the engineered civil drawings and hydraulic calculations, the capacity of the downstream-most pipe run is exceeded. After discussions with the engineer of record, it is understood that although the capacity is exceeded in the downstream run at the 100-year frequency, the surcharge is contained in the pipe. It was communicated that when performing the HY-8 culvert analysis for the Tractor Supply storm system, the tailwater elevation was input to match the downstream HGL elevation, thus accounting for the surcharge in the analysis. At this frequency, this portion of the system acts as a pressurized system. The engineer also noted that the system has functioned without issue since early 2018. Therefore, it can be concluded that the Tractor Supply conveyance system will perform adequately if the post-development discharge to the south from the site in question does not exceed the existing conditions discharge rate. On the attached pre-development drainage area map, the following area drains to the south:

DA 1	16.48 acres	Southern portion of site to be developed, eastern portion of adjacent property to the west
------	-------------	--

The second basin drains to the existing creek just north of the northern property line (Wheeler Branch). The stormwater is conveyed to the creek through a combination of flow paths including earthen roadside ditches along Bo Gibbs. A large portion of the drainage from the northern basin enters an existing draw located in the northeastern quadrant of the site in question, and is conveyed north to the creek in this manner. The remaining portion enters the existing roadside ditches and flows to the north, paralleling Bo Gibbs, until outfalling into Wheeler Branch.

On the attached pre-development drainage area map, the following area drains to the north:

DA 2	9.15 acres	Northern portion of site to be developed and small piece of adjacent property to the west
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Pre-development discharge calculations have been performed using the Modified Rational Method and in accordance with NCTCOG Integrated Stormwater Management (iSWM). The 100-year storm event was analyzed for both existing basins, and calculations are shown below. For DA 1, an existing conditions discharge of 39.40 cfs is obtained. For DA 2, an existing condition discharge of 21.88 cfs is obtained.

DA 1, EXISTING 100-YEAR

Drainage Area:	16.48	Ac
Existing Condition 'C':	0.3	
T _C Existing:	15	min
I ₁₀₀	7.97	in/hr
Existing Condition Discharge:	39.40	cfs

DA 2, EXISTING 100-YEAR

Drainage Area:	9.15	Ac
Existing Condition 'C':	0.3	
T _C Existing:	15	min
I ₁₀₀	7.97	in/hr
Existing Condition Discharge:	21.88	cfs

Proposed Conditions:

As the southerly basin discharges through developed properties and existing storm drain systems, DA 1 will be the primary focus of this report. As shown in the attached post-development drainage area map, the design intent is to reconfigure the two existing basins such that the post-development discharge to the south (Design Point #1) does not exceed the pre-development discharge rate, which is currently accommodated in the downstream facilities. Based on the proposed site grading, lot grading and roadway profiles, the high point dividing the existing areas shall be shifted to the south. This produces a reduced area of 8.93 acres for DA 1 and a revised post-development area of 16.73 acres for DA 2. Post-development discharge calculations, evaluated for the 100-year storm event, are shown below and confirm that the developed conditions discharge for DA 1 (38.43 cfs) does not exceed the existing conditions discharge for DA 1 (39.40 cfs).

DA 1, PROPOSED 100-YEAR

Drainage Area:	8.93	Ac
Proposed Condition 'C':	0.54	composite
T _C Proposed:	15	min
I ₁₀₀	7.97	in/hr
Developed Condition Discharge:	38.43	cfs

DA 2, PROPOSED 100-YEAR

Drainage Area:	16.73	Ac
Proposed Condition 'C':	0.59	composite
T _C Proposed:	15	min
I ₁₀₀	7.97	in/hr
Developed Condition Discharge:	78.67	cfs

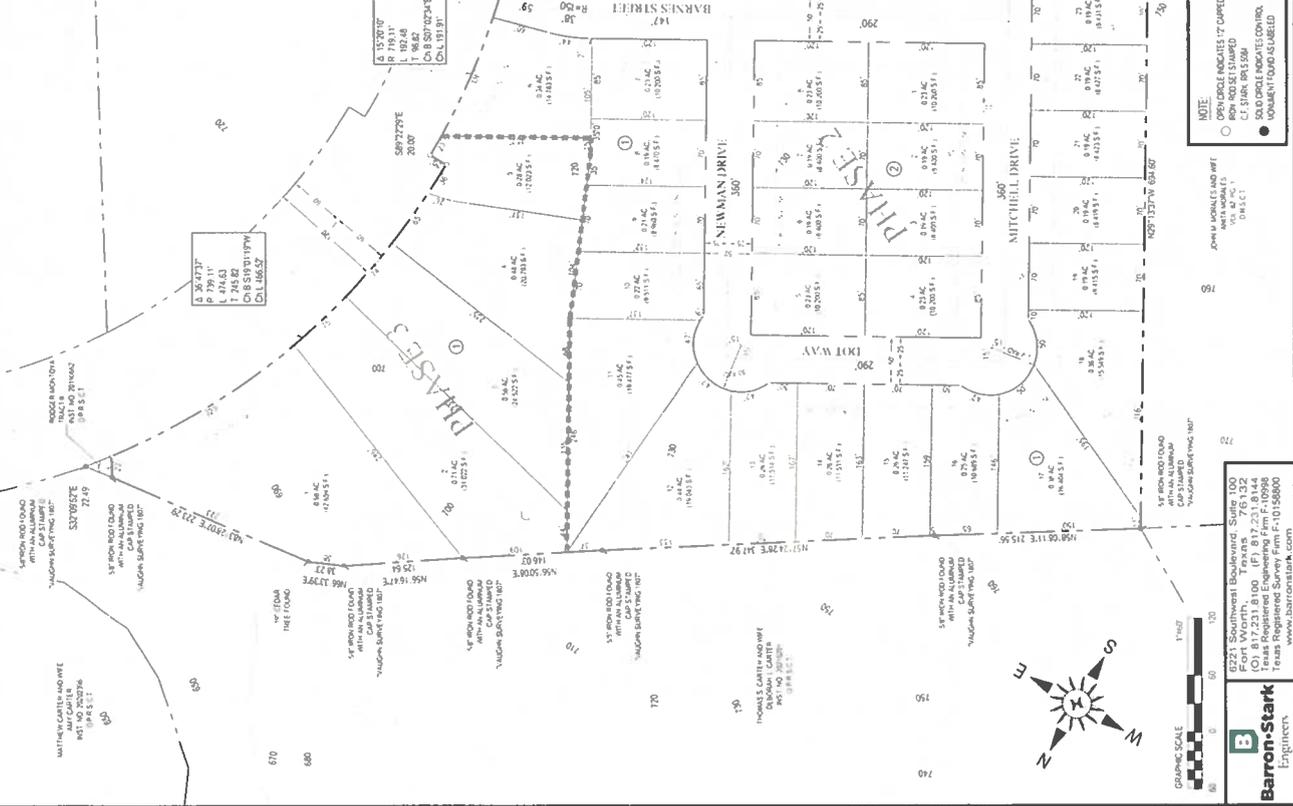
Conclusion:

Adequate capacity exists in the existing downstream system to accommodate post-development stormwater discharge of the southern basin without the need for on-site detention. A post-development discharge of 38.43 cfs to the south will not have adverse impacts nor require downstream mitigation.

1. All areas shown on this map are shown as they exist on the date of recording.
2. The survey was conducted on or about 10/15/2024.
3. The survey was conducted by the City of Glen Rose, Texas.
4. The survey was conducted by the City of Glen Rose, Texas.
5. The survey was conducted by the City of Glen Rose, Texas.
6. The survey was conducted by the City of Glen Rose, Texas.
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8. The survey was conducted by the City of Glen Rose, Texas.
9. The survey was conducted by the City of Glen Rose, Texas.
10. The survey was conducted by the City of Glen Rose, Texas.



MILAM COUNTY SCHOOL LAND SURVEY
DISTRICT NO. 135



Preliminary Plat
 Lots 1 thru 36, Block 1, Lots 1 thru 8, Block 2
 Lots 1 thru 12, Block 3 and Lot 1 thru 10, Block 4
ROCK RIDGE ESTATES
 an Addition to the City of Glen Rose
 Somervell County, Texas

Being 20.82 Acres Situated in the
 MILAM COUNTY SCHOOL LAND SURVEY
 ABSTRACT NO. 135
 City of Glen Rose, Somervell County, Texas

Baron-Stark
 Engineers

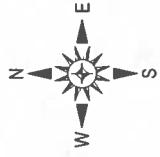
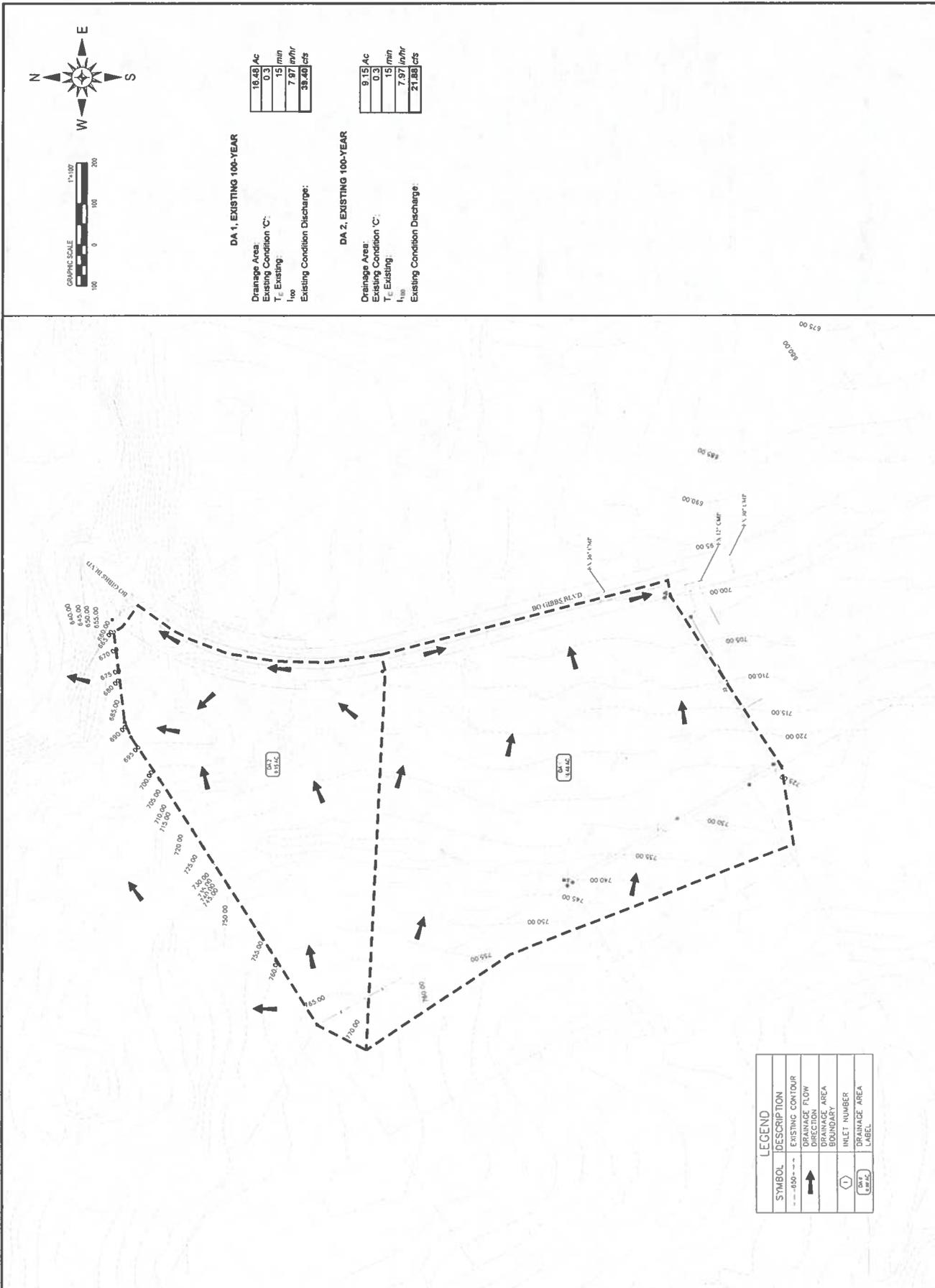
0221 Southwest Boulevard, Suite 100
 Fort Worth, Texas 76132
 P.O. Box 25763
 Texas Registered Engineering Firm F-10998
 Texas Registered Survey Firm F-10158800
 www.baronstark.com

EXISTING DRAINAGE AREA MAP
ROCK RIDGE ESTATES
 CITY OF GLEN ROSE
 SOMERVELL COUNTY, TEXAS

PROJECT No.	9116
DESIGN	MS
DATE	APRIL 2021
SHEET	1 of 2



REVISIONS	DATE	BY	DESCRIPTION



DA 1, EXISTING 100-YEAR	
Drainage Area:	18.48 Ac
Existing Condition 'C':	0.3
T ₁₀₀ Existing:	15 min
I ₁₀₀ :	7.97 in/hr
Existing Condition Discharge:	35,460 cfs

DA 2, EXISTING 100-YEAR	
Drainage Area:	9.15 Ac
Existing Condition 'C':	0.3
T ₁₀₀ Existing:	15 min
I ₁₀₀ :	7.97 in/hr
Existing Condition Discharge:	21,280 cfs

LEGEND	
SYMBOL	DESCRIPTION
---00---	EXISTING CONTOUR
↑	DRAINAGE FLOW
---	DRAINAGE AREA BOUNDARY
①	INLET NUMBER
(DA 1, DA 2)	DRAINAGE AREA LABEL

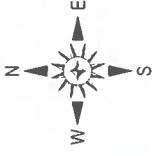
DATE: 04/15/2021 10:54 AM
 PROJECT: 9116
 SHEET: 1 OF 2

PROPOSED DRAINAGE AREA MAP
 ROCK RIDGE ESTATES
 CITY OF GLEN ROS
 SOMERVELL COUNTY, TEXAS

Barron-Stark
 Engineers



DATE: 04/11/2011	2011
PROJECT No. 1111A	
DESIGNER: BSE	
DRAWN: BSE	
CHECKED: BSE	
DATE: 04/11/2011	



DA 1, PROPOSED 100-YEAR

Drainage Area	8.93 Ac
Proposed Condition 'C'	0.54 composite
T _p Proposed	15 min
I ₁₀₀	7.97 in/hr
Developed Condition Discharge	38.43 cfs

DA 2, PROPOSED 100-YEAR

Drainage Area	16.73 Ac
Proposed Condition 'C'	0.59 composite
T _p Proposed	15 min
I ₁₀₀	7.97 in/hr
Developed Condition Discharge	78.67 cfs



LEGEND	
SYMBOL	DESCRIPTION
- - - - -	EXISTING CONDEMP
↑	DRAINAGE FLOW DIRECTION
○	DRAINAGE AREA BOUNDARY
①	INLET NUMBER
②	DRAINAGE AREA LABEL

REVISIONS	DATE	BY

Barron-Stark
Engineers

10000 West Loop West, Suite 1000
Houston, Texas 77042
Tel: 281.416.8800
Fax: 281.416.8801
www.barron-stark.com

FOR INTERIM REVIEW ONLY

NOT FOR CONSTRUCTION OR
OTHER OFFICIAL PURPOSES
WITHOUT THE SIGNATURE
& SEAL OF A LICENSED ENGINEER

65082277

PROPOSED DRAINAGE AREA MAP
PHASE I
ROCK RIDGE ESTATES
CITY OF GILBERT
GILBERT COUNTY, TEXAS

DATE	NO.	BY

C2.1



NOTE: TO PROVIDER
ROCK RIDGE ESTATES DRAINAGE REPORT DOCUMENT
FOR ADDITIONAL INFORMATION REGARDING EXISTING AND
PROPOSED DRAINAGE CONDITIONS

LEGEND	
SYMBOL	DESCRIPTION
- - -	EXISTING CONTOUR
↑	DRAINAGE FLOW DIRECTION
- - -	DRAINAGE AREA BOUNDARY
○	INLET NUMBER
○	DRAINAGE AREA LABEL

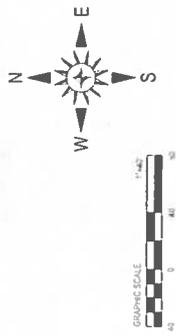
NO.	DATE	REVISIONS

B
Barron-Stark
 Engineers

FOR INTERIM REVIEW ONLY
 NO USE FOR RECORD, CONSTRUCTION OR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF BARRON-STARK ENGINEERS
 02/08/2023

PHASE I SANITARY SEWER PLAN
ROCK RIDGE ESTATES
 CITY OF GLEN ROS
 SOMERVELL COUNTY, TEXAS

CLIENT NO.	413
PROJECT NO.	2176
DESIGNER	
CHECKED	
DATE	02/08/2023
C4.0	



DATE PLOTTED: 02/08/2023 10:00 AM
 PLOT BY: J. BARRON-STARK



Planning and Zoning Commission
City of Glen Rose, Texas
P.O. Box 1949, Glen Rose, Texas 76043

**COMMISSION'S DETERMINATION
AND
RECOMMENDATION TO THE GLEN ROSE CITY COUNCIL**

Date and time of public hearing: May 20, 2021, 5:30 pm

Purpose of hearing: Preliminary Plat for the Rock Ridge Estates subdivision for the property identified as Acres 20.820, Tract D4-1-6, Abst A136, A136 Milam Co Sch Ld, located on W Gibbs Blvd.

Request submitted by: Owners, Horizon Capital Solutions, LLC and owner's representative, Chuck Stark, PE, RPLS.

After considering all information submitted, the Planning and Zoning Commission has made the determination to:

- Approve the request and further recommends approval to the City Council.
 Deny the request.

Reason for decision: _____

Signature: *Lucy Wilson*

Date: *20 May 2021*

Position: *Chairman*

The City Council of the City of Glen Rose, Texas, has voted to:

- Approve Disapprove this recommendation.

Staff Representative Signature

Approval Date: _____

Comments: _____