

CITY OF WEST DES MOINES STAFF REPORT COMMUNICATION

Meeting Date: February 15, 2023

ITEM: 7502 Raccoon River Drive, US Cellular – Variance of the Side Yard Setback to accommodate a 130 foot tall monopole tower – GSS Inc. – VAR-005896-2023

REQUESTED ACTION: Variance to Reduce Side Yard Setback

Applicant's Request: The applicant, Humberto (Albert) Aguirre, GSS Inc., with permission from the property owner, RRK Land, LLC (Raccoon River Kennel), is requesting a Variance to Title 9 (*Zoning*), Chapter 7 (*Setback and Bulk Density Regulations*), Section 4 (*Setback and Density Regulations*), Subsection D, Table 7.7 for the side yard setback required in the Open Space district to accommodate a 130-foot monopole communications tower. The applicant is seeking to reduce the required setback from 110 feet to 59 feet, a difference of 51 feet. The applicant has indicated the purpose of the new tower is to enhance coverage, accommodate future needs, and offload capacity on area towers.

History: This property was developed in the Dallas County area outside of the City of West Des Moines corporate limit. When annexed into the City of West Des Moines in 2010, the Raccoon River Kennel operated as a business on the property. There are two development records the City has on file – a Minor Modification Level 2 for a building addition in 2013 and a Minor Modification Level 2 for an accessory structure in 2018.

Staff Review and Comment: Staff notes the following information:

City Code Requirement as Relates to Request: The code provision that is the subject of the variance request is the side yard setback, according to Title 9 (*Zoning*), Chapter 7 (*Setback and Bulk Density Regulations*), Section 4 (*Setback and Density Regulations*), Subsection D, Table 7.7. Within that table for the Open Space district the minimum setback from the side yard property line is 50 feet with an allowed height of a structure of 60 feet. This section of City Code provides for additional height with a corresponding addition in setback at a ratio of each additional 12 feet in height for each additional 10 feet of setback provided. For the 130' tall tower, an additional 60 feet of setback would be necessary, or a setback of 110 feet. The proposed setback for the structure is 58.86 feet or rounded up to be 59 feet. Therefore, the variance from the code requirement of 110 feet is 51 feet.

- **Variance vs Zoning Exception:** In the fall of 2020, city code was amended to provide an alternative to the variance process (AO-004860-2020). This amendment created the Zoning Exception process specifically for existing residential properties wanting to make improvements. A variance is similar to a zoning exception in that it is a relaxation of the applicable zoning requirement; however, a variance requires the applicant show there is an “unnecessary hardship,” while an applicant must only show there is a “practical difficulty” for a zoning exception request. Specifically defined allowable Zoning Exceptions only apply to existing single-family zoned and developed properties. Relief from zoning regulations for undeveloped single-family lots, as well as requests associated with non-single-family zoned parcels must be considered as a variance. Neither a variance nor a zoning exception is permission to circumvent zoning regulations just because a resident wants an improvement: the necessary findings applicable to each request (variance or zoning exception) must be made in granting the request.

City Council Subcommittee: This item was presented to the Development and Planning City Council Subcommittee as an upcoming project only. There was no discussion on the request as the City Council does not have authority over variance or zoning exception requests.

Variance Findings: To grant the variance, all of the following findings must be made, or conditions and limitations, as the Board deems necessary, imposed to allow it to make said findings.

1. That the granting of the variance shall not be contrary to the public interest.
2. That without the granting of the variance, and due to special conditions, a strict application of the zoning regulations as they apply to the subject property will result in an unnecessary hardship. An “unnecessary hardship” exists when:
 - a. The subject property cannot yield a reasonable return from any use or improvement permitted by the subject zoning regulations. Failure to yield a reasonable return may only be shown by proof that the owner has been deprived of all beneficial or productive use of the subject property. It is not sufficient to merely show that the value of the land has been depreciated by the regulations or that a zoning variance would permit the owner to increase the value in the subject property;
 - b. The plight of the owner is due to unique circumstances not of the owner's making and not due to the general conditions in the neighborhood; and
 - c. The use or construction to be authorized by the variance will not alter the essential character of the neighborhood.
3. That the spirit of the ordinance shall be observed when the variance is granted; and
4. Substantial justice shall be done as a result of granting the variance.

It is the responsibility of the applicant to prove to the satisfaction of the Board that the above findings can be made. The applicant's findings to grant the variance and staff's findings, are included herein for the Board's consideration in making their decision.

Lead Staff Member: Kara Tragesser

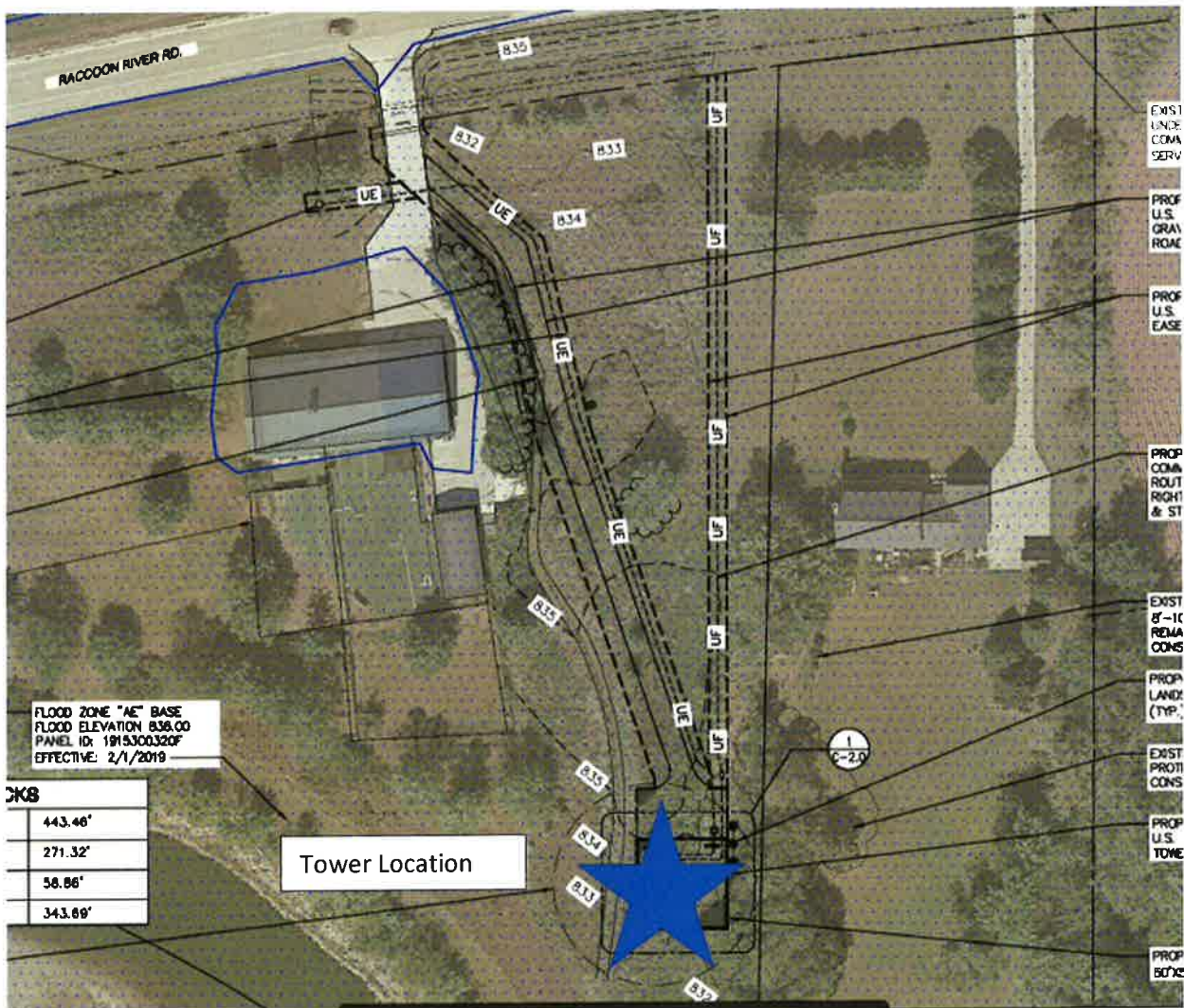
Staff Report Reviews:

<input checked="" type="checkbox"/> Development Coordinator or Director	<input checked="" type="checkbox"/> Legal Department
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Publications (if applicable)

Published In:	Des Moines Register Community Section
Date(s) Published	February 3, 2023
Date(s) of Mailed Notices	February 7, 2023

Subject Property



Applicant's Findings

A variance shall only be granted if all of the following findings are made; or if conditions and limitations, as the Board deems necessary, are imposed to allow it to make said findings. **It shall be the responsibility of the applicant to prove to the satisfaction of the Board that the following findings can be made:**

1. That the granting of the variance shall not be contrary to the public interest:

APPLICANT RESPONSE: *This proposed project does not conflict with the existing characteristics of the neighborhood. GSS has worked in conjunction with the development department to ensure that public health, safety and welfare are being protected. This project is intended to improve a lack of communication capabilities/safety by the customers of US Cellular and potential other commercial communication service providers.*

2. That without the granting of the variance, and due to special conditions, a strict application of the zoning regulations as they apply to the subject property will result in an unnecessary hardship. An "unnecessary hardship" exists when:

- a. The subject property cannot yield a reasonable return from any use or improvement permitted by the subject zoning regulations. Failure to yield a reasonable return may only be shown by proof that the owner has been deprived of all beneficial or productive use of the subject property. It is not sufficient to merely show that the value of the land has been depreciated by the regulations or that a zoning variance would permit the owner to increase the value in the subject property; and
- b. The plight of the owner is due to unique circumstances not of the owner's making and not due to the general conditions in the neighborhood; and
- c. The use or construction to be authorized by the variance will not alter the essential character of the neighborhood.

APPLICANT RESPONSE: *The variance request by GSS Inc. on behalf of US Cellular is for relief of a side yard setback. US Cellular has a critical need for additional coverage and capacity in this area. Multiple locations have been researched and eliminated due to current Zoning Standards. All co-location opportunities have been vetted with no success as they would not meet the coverage objectives. The location selected on the subject property was chosen taking into consideration many obstacles which include regulatory flood ways (flood plain), neighbors, city easements and planned expansion by the Raccoon River Kennels. The proposed location does meet side yard setback for the underlying zoning regulations. But due to the required height to meet the minimal US Cellular Coverage objectives the additional setback requirements are not met. Currently the tower is setback is 60.07 feet our submitted fall zone letter states that the tower will be designed to fall at 40% tower height (56 feet) meaning that if there were a tower failure the tower would fall within the boundaries of the subject parcel.*

City owned easement, floodway and planned development by the existing business is preventing us from moving the tower any further to the west to try and meet new setbacks incurred by the height of the tower.

The building of a tower on the selected parcel will not interfere with the characteristics of the existing neighborhood. Surrounding parcels are all zoned open space. With Businesses located on the parcels with the exception of 1 parcel with a residence located on it.

3. That the spirit of the ordinance shall be observed when the variance is granted;
APPLICANT RESPONSE: *GSS Inc. on behalf of US Cellular has worked closely with the development department to make sure that the spirit of this ordinance was observed. Due to the needed height of the proposed tower to meet coverage objectives. We fail the additionally required distance of a side yard setback. The proposed tower meets all underlying setbacks for standard structures in this zoning jurisdiction. To offset the concerns about the additional tower height a fall zone letter has been provided by the tower company stating that the tower will collapse at 40% of tower height. Which would keep the collapsed tower within the underlying side yard setback of 50 feet. It is due to all these steps taken that GSS Inc on behalf of US Cellular believes that we captured the spirit of the ordinance was still observed.*

4. Substantial justice shall be done as a result of the granting of the variance.
APPLICANT RESPONSE: *Substantial justice will result in the passing of this variance request. Members of the community who are US Cellular customers will see an increase in their cellphone coverage. The proposed tower will also provide opportunities to other carriers to co-locates and provide coverage to their customers. Steps have been taken to mask this tower so it will not cause any changes to the characteristics of this neighborhood. A justice will also be seen by the property owner here as US Cellular is providing a use to previously unused portion of a parcel. The proposed tower will also provide the property owner with freedom to expand their existing business.*

Staff's Findings

A variance shall only be granted if all of the following findings are made; or if conditions and limitations, as the Board deems necessary, are imposed to allow it to make said findings. **It shall be the responsibility of the applicant to prove to the satisfaction of the Board that the following findings can be made:**

1. That the granting of the variance shall not be contrary to the public interest:
STAFF'S RESPONSE: *Staff understands the need for wireless communication facilities and new technology is always on the horizon. However, today's technology still requires the use of the tower as a base station for deployment of smaller wireless communication antenna, such as small cell antenna you see on some of the street light poles in the City. From the information provided, the statements made by the applicant, and staff's experience with inquiries for placing tower facilities in this area and complaints of inadequate service, this project is in the public interest.*

2. That without the granting of the variance, and due to special conditions, a strict application of the zoning regulations as they apply to the subject property will result in an unnecessary hardship. An "unnecessary hardship" exists when:
 - a. The subject property cannot yield a reasonable return from any use or improvement permitted by the subject zoning regulations. Failure to yield a reasonable return may only be shown by proof that the owner has been deprived of all beneficial or productive use of the subject property. It is not sufficient to merely show that the value of the land has been depreciated by the regulations or that a zoning variance would permit the owner to increase the value in the subject property; and
 - b. The plight of the owner is due to unique circumstances not of the owner's making and not due to the general conditions in the neighborhood; and
 - c. The use or construction to be authorized by the variance will not alter the essential character of the neighborhood.

STAFF'S RESPONSE: *The following information provided by Staff is provided under the premise that the subject property is the leased area of the greater parcel, and that the owner is the leaseholder.*

- a. *The applicant has been offered this property within the proposed lease area by the property owner of the greater parcel for the placement of a wireless communication tower purportedly for the purpose of keeping land free of structures on the west side of the kennel facility for future expansion. If the leased area is held by the applicant or by the applicant's client, the sole purpose is to construct a communications tower, the strict application of the ordinance would render the lease area useless for the applicant.*

- b. *The general conditions of the neighborhood do not have an effect of creating a hardship. There is a communication tower located to the east at 5400 Grand, that was zoned Open Space at the time of consideration. That application also needed a variance to avoid placing the antenna in the middle of the parcel. As far as unique circumstances, The placement of the tower off to the side of a parcel is intended to provide the landowner with more clear space to conduct the primary business. The floodway along the river also determines how far south a structure could be built as no structures are allowed within the floodway. Structures may be allowed in the floodplain if they meet conditions of a floodplain development permit.*

- c. *As noted previously, there is another tower in the area to the east. To avoid a field of towers in the open space district in this area, the construction of one tower holding*

three carriers is better for the neighborhood characteristics. The variance for a setback for a communication tower has been used for most towers that have been approved in West Des Moines for the past 10-15 years.

3. That the spirit of the ordinance shall be observed when the variance is granted; and
STAFF'S RESPONSE: *The ordinance is observed with the granting of a variance. The variance would be in keeping with the spirit of providing separation of structures and according to City Code, Title 9, Chapter 3, A-1-5 to prevent conflicts of land use and structures.*

4. Substantial justice shall be done as a result of the granting of the variance.

STAFF'S RESPONSE:

Staff is of the opinion that substantial justice can be found in that the construction of the tower will enhance service in the area, fulfill a gap in coverage, and is compatible with the common public good. These are intents of the Federal Communication Commission in writing the legislation in the Telecommunication Act of 1996.

The City has several development applications for various projects in the area ranging from recreation services to single family residential which will benefit from better service.

The proposed communication tower has been proposed to have the ability to hold up to three wireless carriers which decreases the need for more towers for each carrier in the area.

October 6, 2022

Vince Abben
Project Manager
3311 109th Street
Urbandale, IA 50322

RE: 140' Sabre Slimline Pole for Grand Ave., IA

Dear Mr. Abben,

Upon receipt of order, we propose to design and supply the above referenced Sabre slimline for a Basic Wind Speed of 110 mph and 40 + 1.5" ice, Structure Class II, Exposure Category C and Topographic Category 1, in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G.

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%. Therefore, it is highly unlikely that the slimline will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the upper portion of the monopole shaft. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the upper portion of the monopole shaft. This is likely to result in the portion of the monopole above "folding over" onto the portion below, essentially collapsing on itself. Please note that this letter only applies to the above referenced monopole designed and manufactured by Sabre Towers & Poles. In the unlikely event of total separation, this would result in the portion above collapsing within a radius equal to 40% of the tower height.

Sincerely,

Robert E. Beacom, P.E., S.E.
Engineering Manager



ENGINEERING STATEMENT

I, Jeff Banaszek, am a Radio Frequency Engineer for US Cellular. US Cellular is the wireline operator of the domestic public cellular radio telecommunications system that serves Dallas County, Iowa.

US Cellular desires to build a 135-foot cellular tower at 7502 Raccoon River Dr, West Des Moines, Iowa, in Dallas County. The proposed tower is needed to meet current and future wireless data and voice service needs in the area. The proposed tower will offload existing site's data traffic which will improve customer's quality of service in this area. A secondary benefit will be an improvement with deep in-building signal for the community in the area.

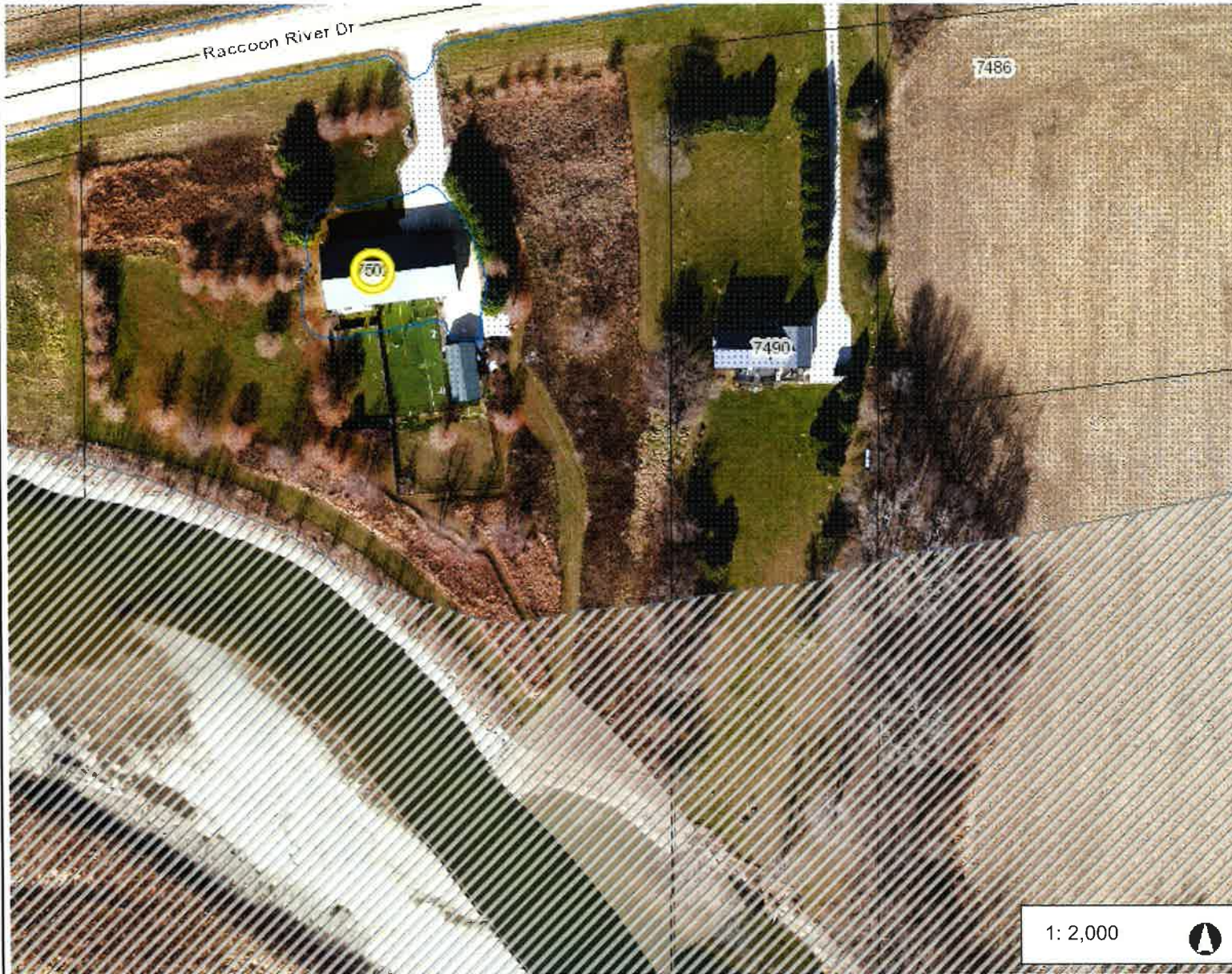
The location and height of the proposed tower meets US Cellular's current and future capacity objectives for the area. The proposed site location is in an area of town currently being served by one site which is over 1.5 miles away and is not able to effectively keep up with the increasing demand of wireless services. The included image shows the coverage that this new site will provide the community in green and coverage of existing sites in yellow. This new site will strengthen the coverage for residences and businesses in this area of Des Moines, so customers will continue to have quality service in buildings and outdoors.

Sincerely,

Jeff Banaszek - RF Engineer - US Cellular



7502 Raccoon River Drive Flood Plain, Flood Way, and City Easement



Legend

Addresses

DFIRM

- 0.2 PCT ANNUAL CHANCE FLOOD
- A,
- AE,
- AE, FLOODWAY
- X PROTECTED BY LEVEE,
- X,

Corporate Limits

Parcels

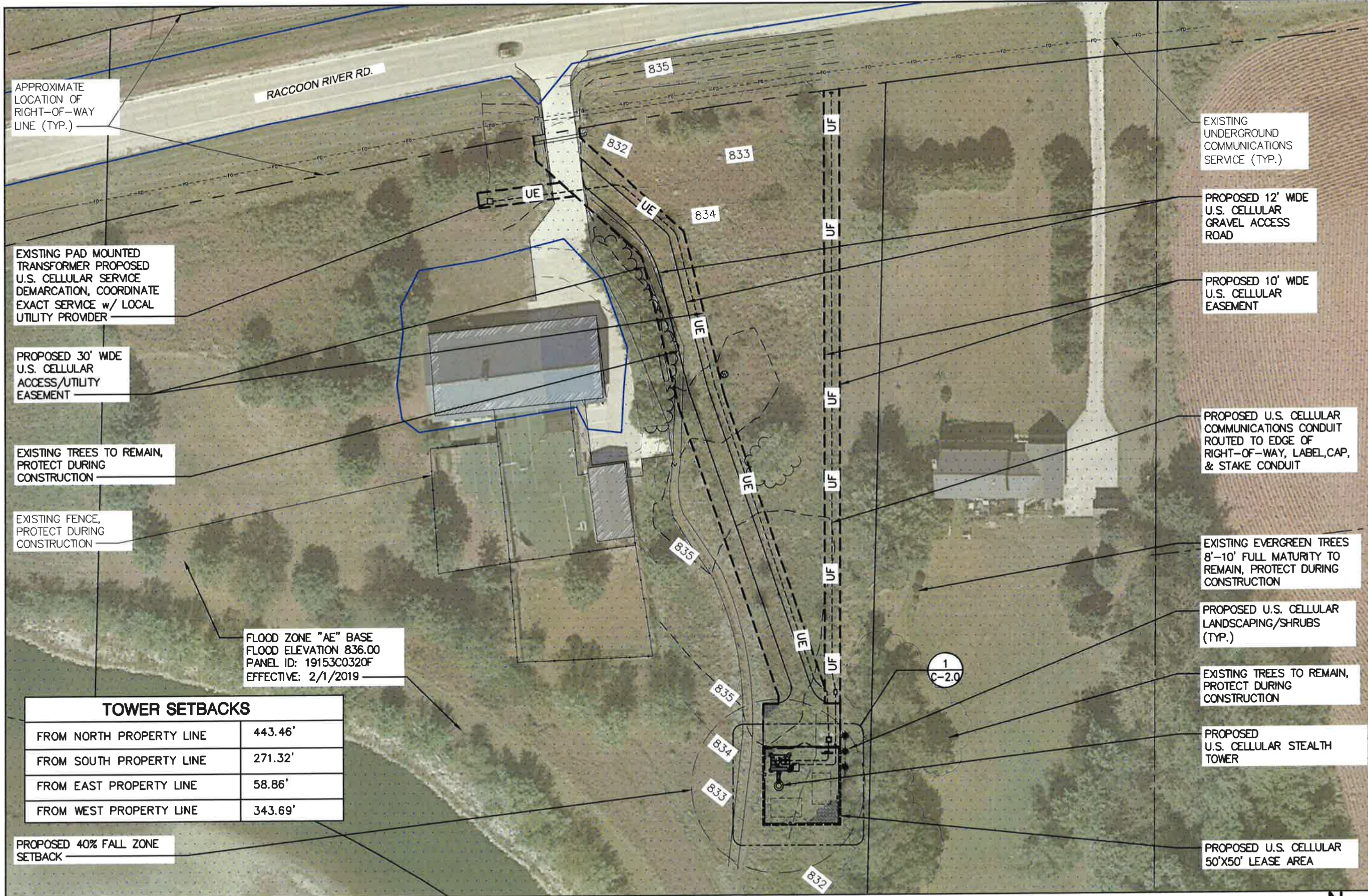
Easement Research

333.3 0 166.67 333.3 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
© City of West Des Moines, Iowa

Disclaimer: The City of West Des Moines makes no warranties regarding the accuracy or completeness of the data provided herein.

THIS MAP IS NOT TO BE USED FOR NAVIGATION



APPROXIMATE LOCATION OF RIGHT-OF-WAY LINE (TYP.)

EXISTING PAD MOUNTED TRANSFORMER PROPOSED U.S. CELLULAR SERVICE DEMARCATION, COORDINATE EXACT SERVICE w/ LOCAL UTILITY PROVIDER

PROPOSED 30' WIDE U.S. CELLULAR ACCESS/UTILITY EASEMENT

EXISTING TREES TO REMAIN, PROTECT DURING CONSTRUCTION

EXISTING FENCE, PROTECT DURING CONSTRUCTION

FLOOD ZONE "AE" BASE FLOOD ELEVATION 836.00
 PANEL ID: 19153C0320F
 EFFECTIVE: 2/1/2019

TOWER SETBACKS	
FROM NORTH PROPERTY LINE	443.46'
FROM SOUTH PROPERTY LINE	271.32'
FROM EAST PROPERTY LINE	58.86'
FROM WEST PROPERTY LINE	343.69'

PROPOSED 40% FALL ZONE SETBACK

EXISTING UNDERGROUND COMMUNICATIONS SERVICE (TYP.)

PROPOSED 12' WIDE U.S. CELLULAR GRAVEL ACCESS ROAD

PROPOSED 10' WIDE U.S. CELLULAR EASEMENT

PROPOSED U.S. CELLULAR COMMUNICATIONS CONDUIT ROUTED TO EDGE OF RIGHT-OF-WAY, LABEL, CAP, & STAKE CONDUIT

EXISTING EVERGREEN TREES 8'-10' FULL MATURITY TO REMAIN, PROTECT DURING CONSTRUCTION

PROPOSED U.S. CELLULAR LANDSCAPING/SHRUBS (TYP.)

EXISTING TREES TO REMAIN, PROTECT DURING CONSTRUCTION

PROPOSED U.S. CELLULAR STEALTH TOWER

PROPOSED U.S. CELLULAR 50'X50' LEASE AREA



A 08/16/22	INTERNAL REVIEW	JAP
0 08/31/22	CLIENT REVIEW	JAP
1 09/23/22	CLIENT REVIEW	JAP
2 09/30/22	CLIENT REVIEW	JAP
3 10/03/22	CLIENT REVIEW	JAP
4 12/30/22	CLIENT UPDATE	JAP

7601334 - GRAND AVE.
 7502 RACCOON RIVER DR.
 WEST DES MOINES, IA 50625 - DALLAS COUNTY
 NEW SITE BUILD - STEALTH TOWER
 PROJ # 22-06-03
 DWG BY: JAP
 CHKD BY: AJK

1 PARTIAL SITE PLAN
 SCALE: 1"=60'



SHEET TITLE
PARTIAL SITE PLAN
 SHEET NUMBER
C-10

Prepared by: Kara Tragesser, City of West Des Moines Development Services Dept., PO Box 65320,
West Des Moines, Iowa 50265-0320 515-222-3620
When Recorded, Return to: City Clerk, City of West Des Moines, PO Box 65320, West Des Moines, IA 50265-0320

RESOLUTION BOA-2023-04

**A RESOLUTION OF THE BOARD OF ADJUSTMENT OF THE CITY OF WEST DES MOINES,
(APPROVING / DENYING) THE VARIANCE REQUEST FOR REDUCING THE EAST SIDE
YARD SETBACK FROM 110 FEET TO 59 FEET FOR THAT PROPERTY
LOCATED AT 7502 RACCOON RIVER DRIVE**

WHEREAS, pursuant to the provisions of Title 9, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, GSS, Inc., an Iowa Corporation, with permission from the property owner, RRK Land, LLC, an Iowa limited liability company, has requested approval of a Variance from Title 9, (*Zoning*), Chapter 7 (*Setback and Bulk Density Regulations*), Section 4 (*Setback and Density Regulations*), Subsection D, Table 7.7 of the required 110 feet side yard setback on the east side of the parcel required to construct a 130' tall structure. The variance will reduce the setback required by 51' resulting in a 59 feet side yard setback and allowing for the installation of a 130 ft. tall communication tower on the property located at 7502 Raccoon River Drive and legally described as:

**(PER WARRANTY DEED RECORDED IN THE DALLAS COUNTY RECORDER'S
OFFICE IN BOOK 2022, PAGE 6034)**

**PARCEL 'B' OF THE SURVEY OF THE NORTHEAST 1/4 OF SECTION 26,
TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE 5TH P.M. CITY OF WEST DES
MOINES, AS SHOWN IN BOOK 2002 PAGE 13185 IN THE OFFICE OF THE
RECORDER OF DALLAS COUNTY, IOWA**

WHEREAS, studies and investigations were made, and staff reports, and recommendations were submitted which is made a part of this record and herein incorporated by reference; and

WHEREAS, on February 15, 2023, the Board of Adjustment held a duly noticed public hearing to consider the application for a Variance (VAR-005896-2023).

WHEREAS, based upon a review of the submitted variance request, the Board of Adjustment finds (**In Favor of Applicant's Findings, In Favor of Staff Findings, or in Favor of the Board's Findings**) _____ as attached at Exhibit B;

NOW, THEREFORE, the Board of Adjustment of the City of West Des Moines does resolve that a Variance Request to allow a reduction of 51 feet of the required 110 feet east side setback resulting in a 59 foot setback is (**approved / denied**).

PASSED AND ADOPTED on February 15, 2023.

Michele Stevens, Chair

ATTEST:

Recording Secretary

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Board of Adjustment for the City of West Des Moines, Iowa, at a regular meeting held on February 15, 2023, by the following vote:

AYES:

NAYS:

ABSTAIN:

ABSENT:

ATTEST:

Recording Secretary

Exhibit A
Conditions of Approval

None.