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**STORY COUNTY, IOWA
CERTIFICATE OF CONDITIONAL USE PERMIT
AND WRITTEN FINDINGS OF FACT**

IN THE MATTER OF THE APPLICATION OF: : **PERMIT NO. CUP03-20,**
Rob Bowers on behalf of StoryComm, 2591 : **CUP04-20, and CUP05-20**
Osborne Drive, Ames, IA, 50011, for the request :
for a Conditional Use Permit for three :
communications towers, located as follows: :
CUP03-20, Section 01, Franklin Township, :
parcel number 05-01-100-100; CUP04-20, :
Section 18, Indian Creek Township, parcel :
number 15-18-100-300; and CUP05-20, Section :
25, Warren Township, parcel number 03-25-300- :
200 :

On June 17, 2020, the Story County Board of Adjustment approved the Conditional Use Permit for the StoryComm Communication Tower as put forth in case CUP05-20, as submitted.

Motion: Brekke
Second: Neubauer
Ayes: Brekke, Neubauer, McGill
Nays: None
Not Voting: None
Absent: None
Vote: (3-0)

AND

Approved the Conditional Use Permit for the StoryComm Communication Tower as put forth in case CUP03-20, as submitted.

Motion: Neubauer
Second: Brekke
Ayes: Neubauer, Brekke, McGill
Nays: None
Not Voting: None
Absent: None
Vote: (3-0)

AND

Approved the Conditional Use Permit for the StoryComm Communications Tower as put forth in case CUP04-20, as submitted.

Motion: Brekke
Second: Neubauer
Ayes: Brekke, Neubauer, McGill
Nays: None
Not Voting: None

Absent: None
Vote: (3-0)

Written Findings of Fact

Case Summary: StoryComm is proposing to erect three communications lattice towers to provide two-way radio communications for Story County emergency services and public works agencies, including Story County, municipalities in Story County and Iowa State University. The proposed towers are as follows:

CUP03-20: A 255-foot lattice communications tower to be located in the southwestern portion of parcel 05-01-100-100 in Franklin Township. The parcel is located at the southeast corner of 550th Avenue and 160th Street. The communications tower will be 400 feet from the right-of-way of 550th Avenue and approximately 474 feet from the south property line or approximately 1,400 feet south of 160th.

The site and most surrounding parcels are in agricultural use. To the northwest is a dwelling over 2,000 feet from the tower site. To the west are two dwellings. One dwelling is located approximately 800 feet northwest of the tower site. The second dwelling is located approximately 600 feet southwest of the tower site.

The applicant indicated that they worked with southwestern's dwellings owner on the tower location and it has a substantial wind break providing screening—the applicant attempted to contact the northwest property owners but were unsuccessful. The northwest property owner provided a comment in opposition. The applicant and staff met with this property owner on their property and discussed why the location was selected (it was originally planned for property in Gilbert but encountered site distance issues with a water tower). It was suggested that StoryComm could move the tower's location on the site. However, the StoryComm working group discussed this and found it wasn't feasible as the site was selected to meet setback requirements and minimize impact to property owner's farming operation.

CUP04-20: A 285-foot lattice communications tower to be located in the southwestern portion of parcel 15-18-100-300 in Indian Creek Township. The parcel is located at the northeast corner of 620th Avenue and 305th Street. The communications tower will be 428 feet from the right-of-way of both 620th Avenue and 305th Street.

The site and most surrounding parcels are in agricultural use. There are three adjacent dwellings. One is 1,200 feet southwest from the proposed site location. One is 900 feet southeast from the tower location. To the west there is a dwelling approximately 700 feet away.

CUP05-20: A 265-foot lattice communications tower to be located in the southeastern portion of parcel 03-25-300-200 in Warren Township. The parcel is located on 150th Street. The communications tower will be 398 feet from the right-of-way of 150th Street and 133 feet from the east property line.

There are two adjacent dwellings. Other adjacent parcels are in agricultural use. To the north is a single-family dwelling is approximately 1,200 feet northwest from the proposed tower location. To the west is a parcel with a dwelling approximately 2,100 feet from the proposed tower site. The owner of the property to the north submitted a comment in opposition to the tower. StoryComm working group members and staff met the property owner on their property after receiving the comment. The tower is as far to the southeast from the dwelling as permitted by setbacks. This location was selected as it provided the required system coverage for the area and avoided interference with the microwave paths from the wind turbines located a half-mile north of the proposed site.

The Planning and Zoning Commission, at their June 16, 2020, meeting, found the proposed towers meet all standards of approval and supplemental standards required for a conditional use permit and recommended approval of the requests.

Amelia Schoeneman, Story County Planner, reviewed the Conditional Use Permit Application, site plans, written narrative and other related submittal materials in accordance to Chapter 90

Conditional Uses of the Story County Land Development Regulations. Schoeneman presented the staff report at the June 17, 2020, Story County Board of Adjustment meeting.

Analysis

1. Applicable Regulations: Chapter 90.04: Standards for Approval

- A. Compatibility. The proposed buildings or use shall be constructed, arranged and operated so as to be compatible with the character of the zoning district and immediate vicinity, and not to interfere with the development and use of adjacent property in accordance with the applicable district regulations. The proposed development shall not be unsightly, obnoxious, nor offensive in appearance to abutting or nearby properties.**

Staff Comment: Communication towers and facilities are permitted as a conditional use in the A-1, Agricultural Zoning District if a conditional use permit is granted. The properties on which the towers are proposed to be constructed are large agricultural parcels. A majority of the surrounding land is also in agricultural row crop production.

These towers will be noticed by the nearby landowners due to the heights necessary to achieve the project goals. Required setbacks from property lines will be met to minimize impacts.

The tower requested as part of CUP03-20 is on a parcel adjacent to three dwellings. One is 800 feet northwest of the tower site, one is 600 feet southwest of the tower site, and one is over 2,000 feet from the tower site.

The tower requested as part of CUP04-20 is also on a property adjacent to three dwellings. One is 930 feet southeast from the proposed site location. The other dwelling is 700 feet southwest from the tower location.

The tower requested as part of CUP05-20 is on a property adjacent to two dwellings. One is approximately 1,200 feet northwest from the proposed tower location, one is approximately 930 feet southeast from the proposed tower location, and one is 2,100 feet west of the proposed tower site.

The tower compounds also include 20-foot-by-10-foot equipment shelter, an underground 1,000 gallon liquid propane tank, and an emergency generator inside of a metal cabinet for sound attenuation. The generator would produce a sound level of 64 dB. The FAA requires all three towers to be lit as a condition of the FAA Determination of No Hazard to Air Navigation. The towers will have dual lighting controlled by a photo sensor—from dusk to dawn, a top beacon will have a red, flashing light, with steady red side markers. During the day, the top because will flash white and the side markers will also be lit. The tower will be galvanized steel, as required by the supplemental standards for towers. The equipment shelter will also have lighting to illuminate the door—two fixtures with 40 watt LED bulbs are proposed and will be shielded.

- B. Transition. The development shall provide for a suitable transition, and if necessary, buffer between the proposed buildings or use and surrounding properties.**

Staff Comment: The tower locations meet all setbacks and separation distance requirements as per the supplemental standards for a conditional use permit for communication towers and facilities.

The minimum setback requirement for the towers is 150 percent of the tower height from the road right-of-way and residential parcels and 50 percent of the tower height from other property lines.

The tower requested as part of CUP03-20 is proposed to be 255 feet in height. The 150-percent setback is 382.5 feet and the 50-percent setback is 127.5 feet. The setback from the closest property line (the west line adjacent to 550th Avenue) is 400 feet.

The tower requested as part of CUP04-20 is proposed to be 285 feet in height. The 150-percent setback is 427.5 feet and the 50-percent setback is 142.5 feet. The setback from the closest property lines (the west and south lines adjacent to 620th Avenue and 305th Street) is 428 feet.

The tower requested as part of CUP05-20 is proposed to be 265 feet in height. The 150-percent setback is 397.5 feet and the 50-percent setback is 132.5 feet. The setback from

the closest property lines (south line adjacent to 150th Street and the east line in common with a property in agricultural production) are 398 feet and 133 feet, respectively.

Also, per the supplemental standards, the applicant will be constructing a six-foot-tall chain-link fence around the tower compound with vinyl privacy slats.

C. Traffic. The development shall provide for adequate ingress and egress, with particular attention to vehicular and pedestrian safety and convenience, traffic flow and control, and emergency access.

Staff Comment: The traffic impact of the proposed towers is expected to be minimal. Once construction of the proposed structure is completed, the only traffic that will visit the site is a service technician four times a year.

All towers will have new accesses reviewed by the Story County Engineer. The access drives to the towers will be 12-feet wide and gravel. In front of the tower compound, there will be a 25-foot-50-foot gravel parking area and turnaround area.

All accesses to the towers will be located on County gravel roads.

The tower requested as part of CUP03-20 will have an access from 550th. The Iowa Department of Transportation (DOT) shows a 2015 average daily traffic count for the road of 130 vehicles.

The tower requested as part of CUP04-20 will have an access from 305th. The Iowa DOT shows a 2015 average daily traffic count for the road of 100 vehicles.

The tower requested as part of CUP05-20 will have an access from 150th. The Iowa DOT shows a 2015 average daily traffic count for the road of 10 vehicles. The adjacent dwellings to this tower site take access on 670th Avenue north of 150th Street.

D. Parking and Loading. The development shall provide all off-street parking and loading areas as required by this Ordinance, and adequate service entrances and areas. Appropriate screening shall be provided around parking and service areas to minimize visual impacts, glare from headlights, noise, fumes or other detrimental impacts.

Staff Comment: Each tower will have a 25-foot-by-50-foot gravel parking area and turnaround area adjacent to the tower compound. The subject properties are currently in row crop production.

E. Signs and Lighting. Permitted signage shall be in accordance with the applicable district regulations and shall be compatible with the immediate vicinity. Exterior lighting, if provided, shall be with consideration given to glare, traffic safety and compatibility with property in the immediate vicinity.

Staff Comment: The only signs and lighting that will be included in this development are signs and lighting required by the FAA posted on the compound fence. No advertising of any kind will be located at this development.

The FAA is requiring all three towers to be lit as a condition of the FAA Determination of No Hazard to Air Navigation. The towers will have dual lighting controlled by a photo sensor—from dusk to dawn, a top beacon will have a red, flashing light, with steady red side markers. During the day, the top because will flash white and white side markers will also be lit. The tower will be galvanized steel, as required by the supplemental standards for towers. The equipment shelter will also have lighting to illuminate the door—two fixtures with 40 watt LED bulbs are proposed and will be shielded.

F. Environmental Protection. The development shall be planned and operated in such a manner that will safeguard environmental and visual resources. The development shall not generate excessive noise, vibration, dust, smoke, fumes, odor, glare, groundwater pollution or other undesirable, hazardous or nuisance conditions, including weeds.

Staff Comment: No excessive noise, vibration, dust, smoke, fumes, odor, glare, groundwater pollution or other undesirable, hazardous or nuisance conditions, including weeds, are anticipated.

Landscaping equivalent to 20% of the impervious area is proposed around the drive and compound to provide stormwater absorption, as required by Chapter 88.05 of the Story County Land Development Regulations. SUDAS Type 2 or Type 3 seed mixes are proposed, which would include Ryegrass or Little and Big Bluestem and other grasses. These can grow between two and six feet.

An erosion control plan is required with the zoning permit submittal to minimize erosion during construction, including stabilizing any disturbed area and providing a stabilized construction entrance.

A metal cabinet for sound attenuation proposed for the generator.

If the Board concludes that all the above development criteria will be met, it must recommend approval of the application unless it concludes that, if completed as proposed, there is a strong probability the development will:

- 1. not adequately safeguard the health, safety and general welfare of persons residing or working in adjoining or surrounding property.**

Staff Comment: The towers will be built in compliance with the required setbacks from the right-of-way and adjacent property lines. The towers will be partially screened by a six foot fence. The lowest 8 feet of the towers will also have its rungs removed to discourage climbing.

- 2. impair an adequate supply (including quality) of light and air to surrounding properties.**

Staff Comment: The proposed communication towers will be a lattice type towers and will have little to no impact on the supply of light and air to surrounding properties.

- 3. unduly increase congestion in the roads, or the hazard from fire, flood, or similar dangers.**

Staff Comment: Following the construction of the proposed towers, there will be very little traffic to and from the tower. Traffic will be for maintenance only. The applicant will be required to obtain a new access permit and a 911 address for the proposed towers. The towers are not proposed to be located in the floodplain.

- 4. diminish or impair established property values on adjoining or surrounding property.**

Staff Comment: The Story County Assessor's Office raised no concerns with the request. No impacts on property values are anticipated.

- 5. not be in accord with the intent, purpose and spirit of the Land Development Regulations or County Cornerstone to Capstone (C2C) Plan.**

Staff Comment: The C2C plan is oriented toward preserving the county's rural character and high value agricultural land. The communication towers will be located on agricultural land and a small percentage of row crop will be impacted. The remainder of the parcels will continue to be farmed. Approximately 1.2 acres of land will be leased by StoryComm on the parcels—equivalent to 4.5% of the smallest parcel's land area.

D. When indicated in Table 90-1, Table of Conditional Uses, a conditional use shall be subject to the supplemental standards listed below, in addition to the standards for approval set forth in Section 90.04 and development impacts specified in Section 90.05 of this chapter.

Co-Location. Prior to applying for a conditional use permit for construction of a new tower/facility, the applicant shall exhaust all alternatives for co-location on existing towers/facilities. As such, the applicant shall submit evidence demonstrating the following:

Staff Comment: A statement regarding the feasibility of collocating the proposed equipment on an existing tower was provided and a map showing the search rings for a tower within one mile of the selected sites that would support co-location was also submitted. The applicant indicates that "towers greater than 1 mile would require a total redesign of the system and would likely result in a loss of coverage" if equipment were

co-located on them instead. There were no towers within the one mile search rings from the selected sites. Further, “the system is designed to provide specific in-building coverage within Story County, Ames and ISU campus and therefore the site locations are critical in providing the proper signal level while minimizing co-site interference, minimizing the number of sites and providing an unobstructed microwave path between site”

Height. The applicant must demonstrate the proposed height of the tower/facility is the minimum necessary to accommodate the proposal’s requirements, as documented by a qualified engineer.

Staff Comment: According to the applicant, “The Harris Corp. Private Radio Systems software program, RAPTR (Radio Analysis and Propagation Tool Repository) is a complete system design tool for the analysis and design of land mobile radio systems. The RACOM engineers use RAPTR to design the optimum location and minimum tower and antenna heights necessary to meet the coverage requirements for StoryComm’s radio system.”

Obstruction of View. The proposed tower/facility will not unreasonably interfere with the view from any publicly owned or managed areas or major view corridors.

Staff Comment: There are no adjacent publicly owned areas to the subject properties. A majority of the adjacent parcels are in agricultural use.

Submittal Requirement: A statement by the applicant as to whether construction of the tower/facility will accommodate co-location of additional antennas for future users and documentation regarding the standards for co-located established in the Ordinance.

Staff Comment: According to the applicant. “The tower is designed with 30% additional capacity and there will be additional room inside the compound. The StoryComm Board will consider applications for co-location on a case-by-case basis.”

Submittal Requirement: Copy of the signed lease agreement with the property owner.

Staff Comment: A copy of the signed leases and access easements were provided. The access easements are 30 feet in width for the 12-foot gravel drives. The leases include the 30-foot access easement areas and a 200-foot-by-200 foot area, which includes the 50-foot-by-50-foot tower compound

Comments from the General Public

Two comments were received from adjacent property owners in opposition to the towers requested as part of CUP03-20 and CUP05-20.

The owner of the property west of the tower proposed as part of CUP03-20 is concerned about the impact of the tower on their dwelling’s value and view (the tower is 800 feet southeast of the dwelling). The applicant attempted to contact the property owner but was unsuccessful prior to selecting the location. The applicant and staff met with this property owner on their property and discussed why the location was selected (it was originally planned for property in Gilbert but encountered site distance issues with a water tower). It was suggested that StoryComm could move the tower’s location on the site. However, the working group discussed this and found it wasn’t feasible as the site was selected to meet setback requirements and minimize impact to the farming operation.

The owner of the property to the north of the tower proposed as part of CUP05-20 is concerned about the impact of the tower on the value of their dwelling (1,200 feet northwest of the tower location). StoryComm working group members and staff met the property owner on their property after receiving the comment. The tower is as far to the southeast from the dwelling as permitted by setbacks. Moving the tower further east, as suggested by the property owner, would require another landowner’s permission/interest in leasing space to StoryComm. This location was selected as it provided the required system coverage for the area and avoided interference with the microwave paths from the wind turbines located a half-mile north of the proposed site.

Points considered

1. The communications towers will provide to provide two-way radio communications for Story County emergency services and public works agencies. The StoryComm system is designed to meet the Association of Public Safety Communications Officials Project 25 Phase 2 standards, which will replace proprietary radio technology that limited the interoperability of radio. Currently, the Iowa State University Police, Ames Police, and Story County Sheriff have interoperable radios but they are not interoperable with the other entities that are part of the StoryComm project.
2. The tower requested as part of CUP03-20 is on a parcel adjacent to three dwellings. One is 800 feet northwest of the tower site, one is 600 feet southwest of the tower site, and one is over 2,000 feet from the tower site. This location was selected to minimize the interference with the line of site from dwellings located to the west of the tower across 550th Avenue.
3. The tower requested as part of CUP04-20 is on a property adjacent to three dwellings. One is 1,200 feet southwest from the proposed site location. One is 700 feet west of the tower location. The other dwelling is 930 feet southeast from the tower location.
4. The tower requested as part of CUP05-20 is on a property adjacent to two dwellings. One is approximately 1,200 feet northwest from the proposed tower location and one is 2,100 feet west of the proposed tower site. This location was selected as it provided the required system coverage for the area and avoided interference with the microwave paths from the wind turbines located a half-mile north of the proposed site.
5. All supplemental standards for communications towers are met, including for setbacks and aesthetics.
6. Signs, lighting, and environmental protection measures will meet Story County Land Development Regulations and FAA requirements.
7. Traffic will be limited to maintenance and adequate parking and turnaround area are provided.
8. SUDAS Type 2 or Type 3 seed mixes are proposed around the compound and gravel drive, which would include Ryegrass or Little and Big Bluestem and other grasses. These can grow between three and six feet. A fence with vinyl slates is also proposed for screening. Climbing pegs on the lower eight feet of the tower will be removed.
9. A small percentage of row crop will be impacted. The remainder of the parcels will continue to be farmed. Approximately 1.2 acres of land will be leased by StoryComm on the parcels—equivalent to 4.5% of the smallest parcel's land area.

Public Hearing comments from June 17, 2020

Andrew Friend stated that he lives NW of the proposed 255-foot lattice communications tower location and feels disadvantaged in the process as the tower being moved for the other neighbor that it made the tower location worse for him. Friend stated that the house view will be looking directly at the tower. Friend stated that he would like to request another meeting between himself and StoryComm and Planning staff to find out if there is a better location for the proposed tower to discuss the inconvenience of the tower location to try to find balance so that both property owners can be satisfied.

Schoeneman stated regarding Friend's concern (CUP03-20), the farmer wanted the tower to be able to farm around the compound area and that there are two terraces that are being considered as well, which make it difficult to move north or south. StoryComm had concerns about moving the location east, which would impact the improvement and the timing of the project. Bowers spoke about the temporary system that is currently being used and will end at the end of June.

Tom Hackett stated that he had conversations with the land owner regarding north or south movement of the proposed tower on the property and they were reluctant. Movement to the east would pose challenges for StoryComm during construction and the long-run with a longer access drive, and more maintenance, water drainage issues. Hackett stated that all factors have

been considered and decided the current location met the long term goals for StoryComm and the land owner's preferences.

Neubauer asked for clarification on what guidelines would need to be followed in order to place a condition on CUP03-20. Schoeneman stated the Board would need to amend staff's findings and relate the condition to one or more of the standards for approval. Neubauer asked if the Assessor had any comments about impact on property value. Schoeneman stated there were no comments about impact on property values, but that the Assessor comments that the towers would be exempt as long as there are no for-profit leasing to other providers taking place. McGill stated that if the tower meets all the requirements there is really not a way to not approve the request.

Board of Adjustment Action on Written Findings of Fact

Date: July 15, 2020

VOTE: Ayes Nays

McGill

Brekke

Neubauer

Vote:

Chair: _____