

COMMUNITY DESIGN REVIEW BOARD STAFF REPORT

Meeting Date March 18, 2025

REPORT TO: Michael Sable, City Manager

REPORT FROM: Michael Martin, AICP, Assistant Community Development Director

PRESENTER: Michael Martin, AICP, Assistant Community Development Director

AGENDA ITEM: Design Review Resolution Verizon Wireless Communications Monopole, 1210 Sterling Street South

Action Requested: ☒ Motion ☐ Discussion ☐ Public Hearing

Form of Action: ☒ Resolution ☐ Ordinance ☐ Contract/Agreement ☐ Proclamation

Policy Issue:

Verizon Wireless proposes installing a 125-foot communications tower to house equipment currently residing on a ski jump owned and operated by the Saint Paul Educational Foundation. The proposal includes moving the equipment off the ski jump and onto a new tower on the ski jump property at 1210 Sterling Street South. The applicant needs city council approval for a conditional use permit and design review to move forward.

Recommended Action:

Motion to approve a design review resolution for a 125-foot communications tower to be constructed at 1210 Sterling Street South.

Fiscal Impact:

Is There a Fiscal Impact? ☒ No ☐ Yes, the true or estimated cost is \$0

Financing source(s): ☐ Adopted Budget ☐ Budget Modification ☐ New Revenue Source
☐ Use of Reserves ☒ Other: N/A

Strategic Plan Relevance:

☐ Community Inclusiveness ☐ Financial & Asset Mgmt ☐ Environmental Stewardship
☐ Integrated Communication ☒ Operational Effectiveness ☐ Targeted Redevelopment

The city deemed the applicant's application complete on February 14, 2025. The initial 60-day review deadline for a decision was April 15, 2025. Due to the applicant's availability, the applicant has requested a 30-day extension to the review deadline. The revised deadline is now May 15, 2025. As stated in Minnesota State Statute 15.99, the city can take an additional 60 days, if necessary, to complete the review.

Background:

The Saint Paul Educational Foundation is the nonprofit foundation that owns and manages the ski jump. The existing ski jump is 100 feet in height. The property owner conducted a design and structural analysis, and it was determined that the ski jump tower could not hold the equipment

needed for additional upgrades without structural modifications. This has led to the Saint Paul Educational Foundation working with Verizon Wireless to propose the installation of a new 125-foot communications tower.

Conditional Use Permit

Section 44-1327 of the city's zoning code requires a conditional use permit (CUP) for a communication tower in a residential zoning district. The site at 1210 Sterling Street South is zoned Farm Residential. The code also states that communication towers can only be located in the following residentially zoned locations or properties:

- a. Churches or places of worship.
- b. Parks, when the city determines the facility would be compatible with the nature of the park.
- c. City-owned property, government, school, utility, and institutional sites or facilities.

This site would be considered an institutional use site and currently has wireless communication equipment on-site. A CUP was not required previously for this site as the equipment is located on the ski jump, which is permitted by the code.

In reviewing an application for a conditional use permit for the construction of commercial antennas, towers, and accessory structures, the city council shall consider the following:

- 1. Standards in this Code.
- 2. Recommendations of the planning commission and community design review board.
- 3. Effect of the proposed use upon the health, safety, convenience and general welfare of residents of surrounding areas.
- 4. Effect on property values.
- 5. Effect of the proposed use on the comprehensive plan.

As the site already contains equipment for three wireless carriers who previously submitted coverage/ interference analysis and capacity analysis to the city, the applicant was not required to supply this information with this application. Towers in residential zoning districts designed and built for collocation are allowed to be 125 feet in height. The applicant is requesting approval for a 125-foot communications tower, meeting the requirement.

Towers located next to a residential property line or next to a property that the city is planning for residential use must be located at least the height of the tower plus 25 feet from the nearest residential structure. The proposed tower would be located more than 150 feet from the nearest residential structure, thus meeting this requirement.

The code states that all ground equipment and accessory structures must be at least ten feet from the side and rear property lines. The ground equipment for the wireless carriers already exists on-site and meets the setback requirements. No changes to the location of the ground equipment are proposed.

Design Review

Site Plan

The proposed communications tower would be located just south of the ski jump. The proposed tower and existing ground equipment meet all setback requirements.

Monopole Elevation and Landscaping/Screening

Sec. 44-1327(13) requires the community design review board to recommend the plans for towers, utility, equipment or accessory buildings, site plans, and proposed screening and landscaping. Sec. 44-1328(3)9 requires that towers be light blue, gray, or another color shown to reduce visibility. The applicant would need to meet this requirement. The code also requires that all equipment be removed from the ski jump and prohibits the new tower from being lit.

The existing ground equipment does have a chain link fence, but staff feels there is an opportunity to add additional landscaping screening around this equipment area. Environmental staff reviewed the plans and found that the proposed tower is close to two 18" oak trees. The applicant should submit a tree plan showing the significant trees' size, species, and location within the disturbed area. The applicant should also be required to submit a landscape plan to show tree replacement, if necessary, and additional screening for the tower and ground equipment.

Department Comments

Engineering

No comments.

Commission Review

Community Design Review Board

March 18, 2025: The community design review board will review this project.

Planning Commission

March 18, 2025: The planning commission will review this project and hold a public hearing.

Citizen Comments

Staff sent public hearing notices to the 50 surrounding property owners within 500 feet of the proposed site. Staff did not receive any comments.

Reference Information

Site Description

Campus Size: 17.99 acres
Existing Land Use: Ski jump

Surrounding Land Uses

North: Single-family homes
East: I-494

South: Single-family homes
West: Single-family homes

Planning

Existing Land Use: Open Space
Existing Zoning: Farm Residential

Attachments:

1. Conditional Use Permit Resolution
2. Design Review Resolution
3. Overview Map
4. 2040 Future Land Use Map
5. Zoning Map
6. Applicant's Narrative
7. Property Owner Narrative
8. Site Plans
9. Tower Elevation
10. Photo Simulations
11. Applicant's Educational Handout

CONDITIONAL USE PERMIT RESOLUTION

BE IT RESOLVED by the City Council of the City of Maplewood, Minnesota, as follows:

Section 1. Background.

1.01 Verizon Wireless has requested approval of a conditional use permit to permit a 125-foot communications tower.

1.02 The property is located at 1210 Sterling Street South and is legally described as:

PIN: 132822430022. The South seventy- four feet (S. 74') of the West Half of the Southeast Quarter (W 1/2 of SE 1/4) of Section 13, Township 28, Range 22, lying North of the South twenty-five (S. 25) acres, East of Sterling Street, and West of State Trunk Highway 494, it being the intention of the granters to convey a seventy-four foot (74') strip immediately to the North of the South twenty-five (S. 25) acres of the West Half of the Southeast Quarter (W 1/2 of SE 1/4) of Section 13, Township 28, Range 22.

AND

Outlot A, HIGHWOOD ESTATES NO. 2, according to the recorded plat thereof.

AND

That portion of the SW 1/4 of the SE1/4 of Sec. 13, T. 28, R.22, according to the Government Survey thereof, described as follows: Commencing at the SE corner of the SW 1/4 of the SE 1/4 of said Sec. 13, thence N. 50 rods, thence W. 80 rods to the Quarter Sec. line, thence S. 50 rods to the Sec. line, thence E. along the sec. line 80 rods to the place of beginning, being 25 acres, more or less.

Less and Except that portion of the property conveyed by the following: As referred to in Warranty Deed recorded as Instrument No. 2717756: The east one-half of Sterling Street right-of-way that is located in the south half of Section 13, Township 28, Range 22 which is south of the south line of the following- described property and south of the (easterly) extension of said south line: the north 487.99 feet of the SW 1/4 of the SE 1/4 of Section 13, Township 28, Range 22.

AND

Outlet A, Maplewood Highlands, Ramsey County, Minnesota according to the recorded plat thereof.

As referred to in Warranty Deed recorded as instrument No. 2718516:
That part of the South 180.00 feet of the West 233.00 feet of the Southwest Quarter of the Southeast Quarter of Section 13, Township 28, Range 22, Ramsey County, Minnesota lying East of the West 33.00 thereof.

Ramsey County
Abstract Property

Section 2. Standards.

2.01 City Ordinance Section 44-512(4) requires a Conditional Use Permit for the exterior storage of goods or materials.

2.02 Communication Towers Conditional Use Permit Standards. City Ordinance Section 44-1326.

1. Standards in this Code.
2. Recommendations of the planning commission and community design review board.
3. Effect of the proposed use upon the health, safety, convenience and general welfare of residents of surrounding areas.
4. Effect on property values.
5. Effect of the proposed use on the comprehensive plan.

2.03 General Conditional Use Permit Standards. City Ordinance Section 44-1097(a) states that the City Council must base approval of a Conditional Use Permit on the following nine standards for approval.

1. The use would be located, designed, maintained, constructed and operated to be in conformity with the City's Comprehensive Plan and Code of Ordinances.
2. The use would not change the existing or planned character of the surrounding area.
3. The use would not depreciate property values.
4. The use would not involve any activity, process, materials, equipment or methods of operation that would be dangerous, hazardous, detrimental, disturbing or cause a nuisance to any person or property, because of excessive noise, glare, smoke, dust, odor, fumes, water or air pollution, drainage, water run-off, vibration, general unsightliness, electrical interference or other nuisances.
5. The use would not exceed the design standards of any affected street.
6. The use would be served by adequate public facilities and services, including streets, police and fire protection, drainage structures, water and sewer systems, schools and parks.
7. The use would not create excessive additional costs for public facilities or services.
8. The use would maximize the preservation of and incorporate the site's natural and scenic features into the development design.
9. The use would cause minimal adverse environmental effects.

Section 3. Findings.

3.01 The proposal meets the specific conditional use permit standards.

Section 4. City Review Process

4.01 The City conducted the following review when considering this conditional use permit request.

1. On March 18, 2025, the planning commission held a public hearing. The city staff published a hearing notice in the Pioneer Press and sent notices to the surrounding property owners. The planning commission gave everyone at the hearing a chance to speak and present written statements. The planning commission recommended that the city council _____ this resolution.
2. On April 28, 2025, the city council discussed this resolution. They considered reports and recommendations from the planning commission and city staff.

Section 5. City Council

5.01 The city council hereby _____ the resolution. Approval is based on the findings outlined in section 3 of this resolution. Approval is subject to the following conditions: (additions are underlined and deletions are crossed out):

1. All construction shall follow the plans approved by the city. The director of community development may approve minor changes.
2. The proposed construction must be substantially started within one year of council approval, or the permit shall become null and void.
3. The city council shall review this conditional use permit in one year.
4. This conditional use permit is conditioned upon the applicant allowing the collocation of other providers' telecommunications equipment on the proposed tower. The applicant shall submit a letter to staff allowing collocation before a building permit can be issued.
5. The tower may not have any lighting on or illuminating the structure.
6. All wireless communication equipment on the ski jump must be removed when the new monopole tower is operational.

DESIGN REVIEW RESOLUTION

BE IT RESOLVED by the City Council of the City of Maplewood, Minnesota, as follows:

Section 1. Background.

1.01 Verizon Wireless has requested approval of design review to permit a 125-foot communications tower.

1.02 The property is located at 1210 Sterling Street South and is legally described as:

PIN: 132822430022. The South seventy- four feet (S. 74') of the West Half of the Southeast Quarter (W 1/2 of SE 1/4) of Section 13, Township 28, Range 22, lying North of the South twenty-five (S. 25) acres, East of Sterling Street, and West of State Trunk Highway 494, it being the intention of the granters to convey a seventy-four foot (74') strip immediately to the North of the South twenty-five (S. 25) acres of the West Half of the Southeast Quarter (W 1/2 of SE 1/4) of Section 13, Township 28, Range 22.

AND

Outlot A, HIGHWOOD ESTATES NO. 2, according to the recorded plat thereof.

AND

That portion of the SW 1/4 of the SE1/4 of Sec. 13, T. 28, R.22, according to the Government Survey thereof, described as follows: Commencing at the SE corner of the SW 1/4 of the SE 1/4 of said Sec. 13, thence N. 50 rods, thence W. 80 rods to the Quarter Sec. line, thence S. 50 rods to the Sec. line, thence E. along the sec. line 80 rods to the place of beginning, being 25 acres, more or less.

Less and Except that portion of the property conveyed by the following: As referred to in Warranty Deed recorded as Instrument No. 2717756: The east one-half of Sterling Street right-of-way that is located in the south half of Section 13, Township 28, Range 22 which is south of the south line of the following- described property and south of the (easterly) extension of said south line: the north 487.99 feet of the SW 1/4 of the SE 1/4 of Section 13, Township 28, Range 22.

AND

Outlet A, Maplewood Highlands, Ramsey County, Minnesota according to the recorded plat thereof.

As referred to in Warranty Deed recorded as instrument No. 2718516:
That part of the South 180.00 feet of the West 233.00 feet of the Southwest Quarter of the Southeast Quarter of Section 13, Township 28, Range 22, Ramsey County, Minnesota lying East of the West 33.00 thereof.

Ramsey County
Abstract Property

Section 2. Site and Building Plan Standards and Findings.

2.01 City ordinance Section 2-290(b) and 44-1327(13) requires that the community design review board make the following findings to approve plans:

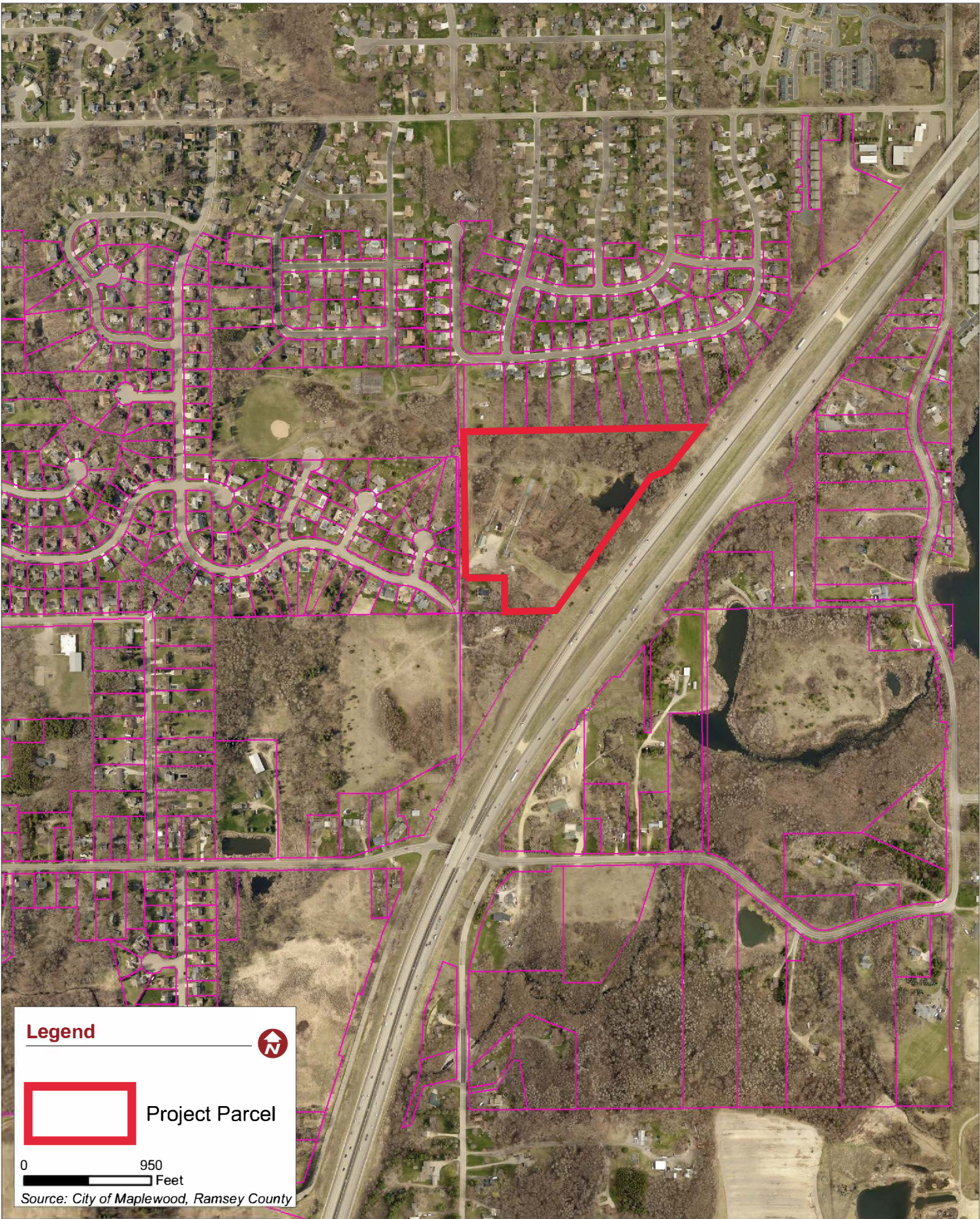
1. That the design and location of the proposed development and its relationship to neighboring, existing or proposed developments and traffic is such that it will not impair the desirability of investment or occupation in the neighborhood; that it will not unreasonably interfere with the use and enjoyment of neighboring, existing or proposed developments; and that it will not create traffic hazards or congestion.
2. That the design and location of the proposed development are in keeping with the character of the surrounding neighborhood and are not detrimental to the harmonious, orderly and attractive development contemplated by this article and the city's comprehensive municipal plan.
3. That the design and location of the proposed development would provide a desirable environment for its occupants, as well as for its neighbors, and that it is aesthetically of good composition, materials, textures and colors.

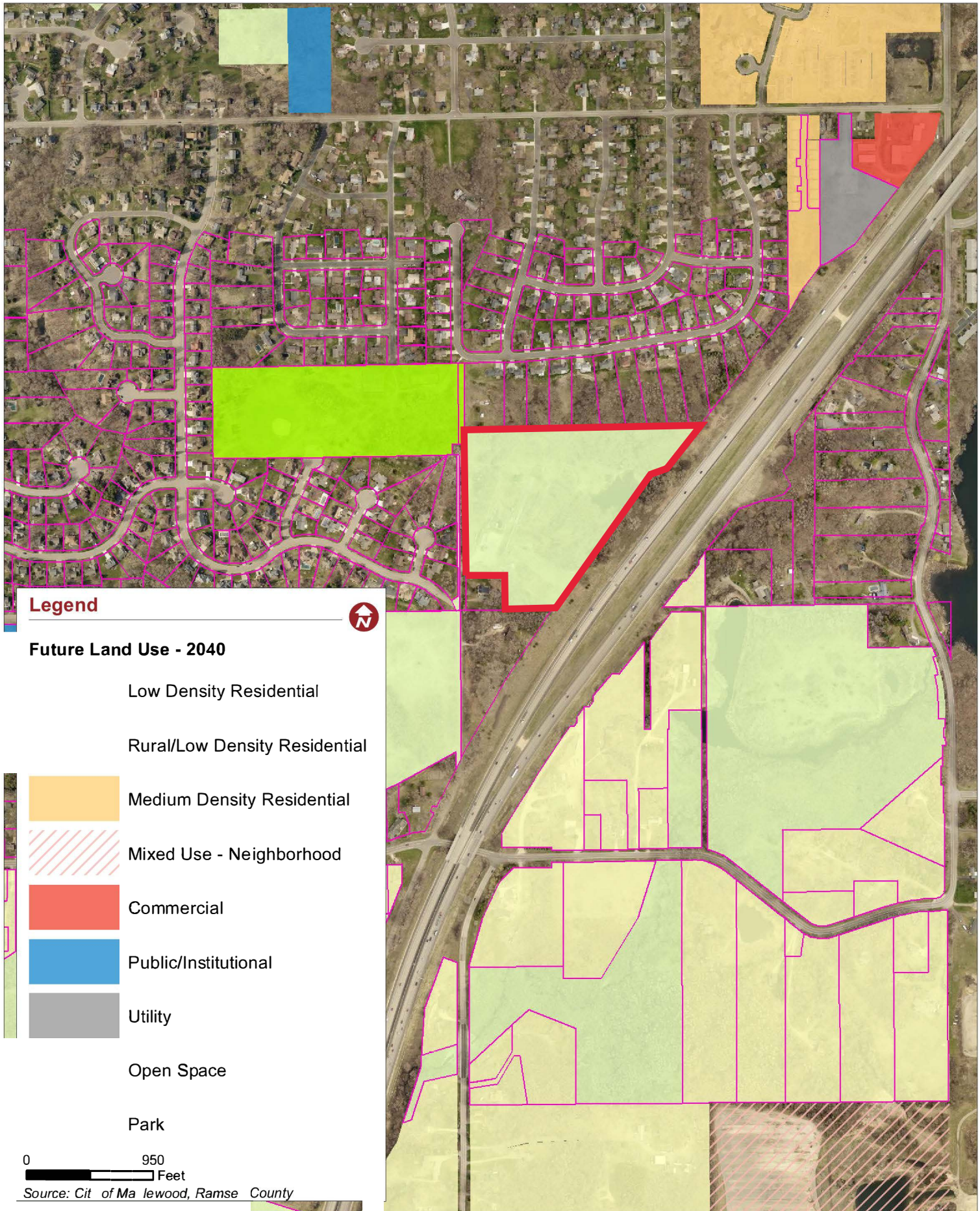
Section 3. City Council Action.

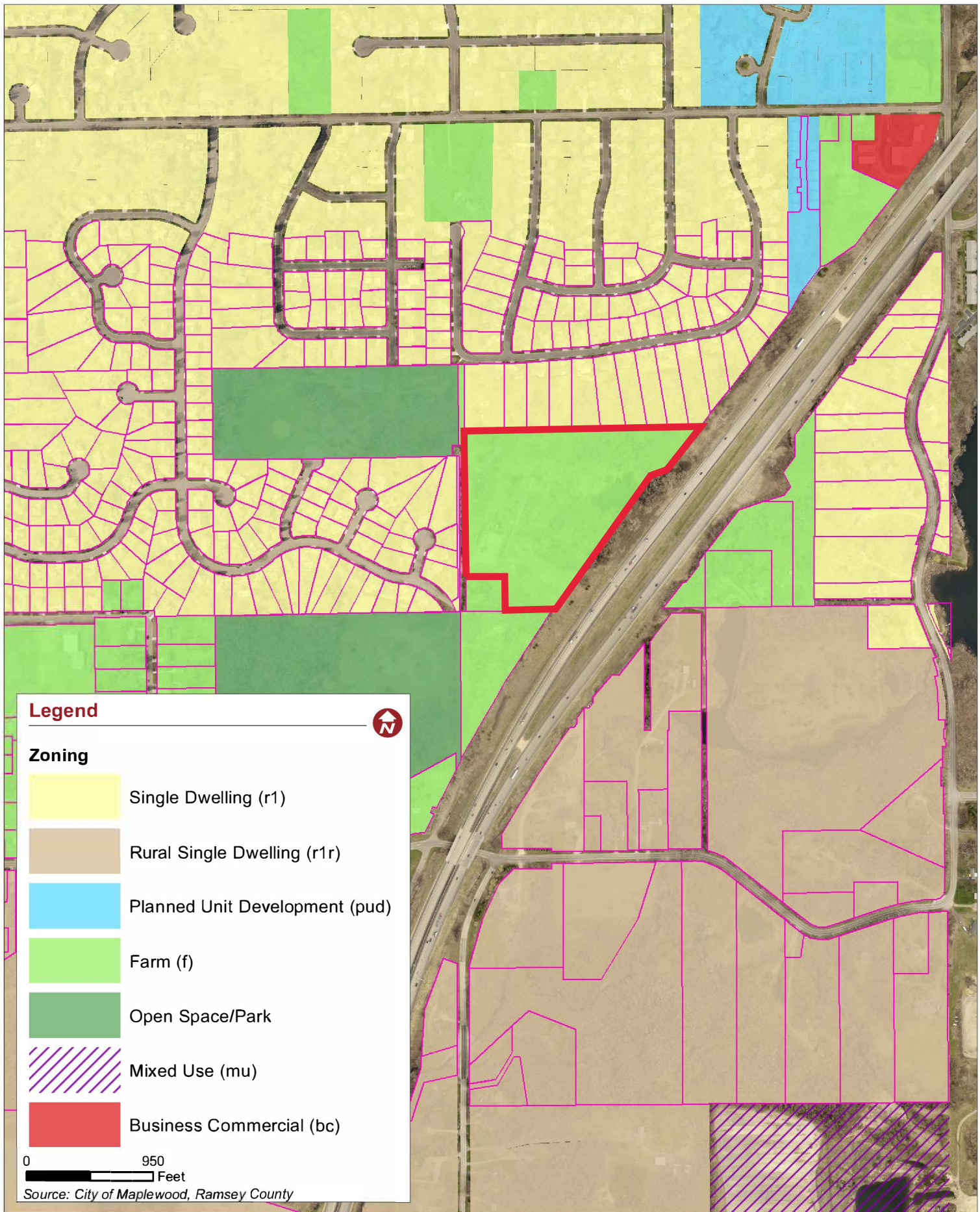
3.01 The above-described site and design plans are hereby approved based on the findings outlined in Section 3 of this resolution. Subject to staff approval, the site must be developed and maintained in substantial conformance with the design plans. Approval is subject to the applicant doing the following:

1. Obtain a conditional use permit approval from the city council for this project.
2. Repeat this review in two years if the city has not issued a building permit for this project.
3. All requirements of the city engineer, fire marshal and building official must be met.
4. Prior to the issuance of a building permit, the applicant shall submit for staff approval the following items:
 - a. Submit a tree plan showing the size, species, and location of all significant trees within the disturbed area. A significant tree is any hardwood tree six diameter inches or larger, conifer tree eight diameter inches or larger, and softwood tree 12 diameter inches or larger. The plan must show which trees will be removed with the development of the monopole or how the trees near the project will be preserved. If significant tree removal is proposed, the plan must show tree replacement per the City's tree ordinance.
 - b. Submit a landscape plan to show tree replacement if necessary and how the tower and ground equipment will be screened per the City's antenna and tower ordinance.

- c. The applicant shall provide the city with a cash escrow or an irrevocable letter of credit for all required exterior improvements. The amount shall be 150 percent of the cost of the work.
- 5. If any required work is not done, the city may allow temporary occupancy if:
 - a. The city determines that the work is not essential to public health, safety or welfare.
 - b. The above-required letter of credit or cash escrow is held by the City of Maplewood for all required exterior improvements. The owner or contractor shall complete any unfinished exterior improvements by June 1 of the following year if use of the building is in the fall or winter or within six weeks of occupancy of the building if use is in the spring or summer.
- 6. All work shall follow the approved plans. The director of community development may approve minor changes.







VIII. Proposal Summary Information

Site Name: MIN Nazgul (VZW Project No. 16233577/2839081)

Applicant: Cellco Partnership d/b/a Verizon Wireless
10801 Bush Lake Road
Bloomington, MN 55438
Attn: Tamora Hartman

Phone: [612.360.3288]

Preparer for Applicant: Tamora Hartman
Verizon Wireless
10801 Bush Lake Road
Bloomington, MN 55438

Phone: 612.360.3288

Property Owner: St. Paul Educational Foundation, Inc.
6568 Falstaff Terrace
Woodbury, MN 55125

Phone: 651.329.4112

Request: Conditional Use Permit application review and Community Design Review Board application review for a new 125-foot freestanding communication tower.

Location: 1210 Sterling Street South, Maplewood, MN 55119

Zoning: F – Farm Residence District

IX. Introduction:

Verizon Wireless is expanding and upgrading its wireless communication network in Maplewood, Minnesota, and is committed to providing the latest generation in wireless telecommunication technology designed for the most advanced technologies of wireless devices, such as smart phones with high speed data transfer, email, GPS, turn-by-turn navigation, mobile apps (e.g. telemedicine and remote learning apps), video messaging, web browsing, and streaming videos and music, which are essential capabilities in the information age.

Since the COVID-19 pandemic, the growth curve for wireless services is even more significant. The COVID-19 pandemic is the textbook example of why the deployment of wireless services is critical and necessary, especially near residential areas:

- Emergency Services: Emergency service responders use wireless services to respond to 911 calls, to locate residences through GPS systems, to utilize medical equipment, and to provide other critical emergency responses. In addition, wireless services are critical to allow citizens to place e-911 calls because of the rising number of wireless households. The availability of reliable and robust wireless services is essential to emergency service providers, and will only become more so in the future.
- Telemedicine: Telemedicine is already supplementing and/or replacing in-office patient visits. Wireless services, in conjunction with virtual meeting and telemedicine apps, allow patients greater access to medical professionals and improved medical care.
- Online Schooling and Remote Work Environments: Wireless broadband is the new essential school supply. Schools and higher education facilities will continue to increasingly utilize remote learning, requiring students to use wireless services to engage and participate in their virtual classrooms. Employers have also allowed employees to continue to work remotely, often on hybrid schedules, from home or elsewhere. Online schooling and remote work environments require apps such as Zoom, Microsoft Teams, WebEx, GoogleMeets, and Classroom, all of which rely on wireless services with increasing capacity. Connectivity for both individuals and at home businesses is critical as the global COVID-19 crisis has resulted in long-lasting, if not permanent, changes in the way we live, work, and play.

The improved service provided by the facility to Verizon Wireless' network will provide beneficial impacts to the residents, businesses, and future users in the area.

Verizon Wireless' network operates by splitting a region into smaller geographic areas called cells; each cell is served by a transmitter and receiver, or "base station". As a caller moves across the landscape, the call is passed, or "handed-off", from one base station to another. Each

base station is connected to a mobile telephone switching facility, which is linked to the land-based phone network serving your home or office.

Individual site locations, such as the proposed site, are selected based on several considerations related to topography, distance from other base stations, proximity to traffic corridors, and other technical criteria. Verizon Wireless' engineers utilize computer modeling, radio testing, and consumer information to determine where potential sites are needed.

The proposed wireless facility is located at 1210 Sterling Street South, Maplewood, MN 55119. It will replace an existing facility that has reached its maximum capacity and cannot support the addition of new equipment and technology to meet the ever-increasing demand for wireless service in this area. The proposed new facility will enable Verizon Wireless to install new technology to ensure that Verizon Wireless' network in the area will continue to have sufficient capacity to provide critical services to its customers. If the new proposed facility is not built, Verizon Wireless will be unable to make critical upgrades to its network, including more coverage and capacity, and Verizon Wireless' existing sites will exhaust their capacity and will no longer be able to provide service to the customers in the area. This new freestanding communication tower will provide the following:

- Densification of Verizon's wireless network in Maplewood and the surrounding area to provide robust capacity and allow the best service;
- Capacity offload from surrounding sites currently serving Maplewood that are nearing full capacity;
- Improved data throughput for indoor users in Maplewood;
- Additional bandwidth for residents, businesses, and first responders in Maplewood;
- The availability of new wireless services in Maplewood.

With data usage increasing rapidly, this existing site and other nearby wireless facilities are critical to the Maplewood area, but they are at or near full capacity. **Exhibit A**, Verizon Wireless' Education Handout. With the installation of this new freestanding communication tower, Verizon Wireless will be able to continue to provide quality wireless services to Maplewood for years to come.

X. Proposal Description.

Verizon Wireless seeks to obtain a Conditional Use Permit for a 125-foot freestanding communication tower. As illustrated in the attached Site Plan (**Exhibit B**), the freestanding communication tower will support antennas, radios, and all associated equipment. There is space reserved for one future carrier. The proposed freestanding communication tower will be constructed at 125 feet, which is the lowest possible height that can address the gap in coverage/capacity, and will provide additional space to accommodate collocation of at least one additional wireless carrier in the future. The new freestanding communication tower will add to Verizon Wireless' existing network and improve wireless services, including voice, text, and data for customers, thereby improving overall system performance.

The location of this development is in the F(Farm) zoning district. In accordance with the City of Maplewood Code of Ordinances Table 44-46-1, placing a freestanding communication tower in this zoning district requires a Conditional Use Permit approved by the Planning Commission and City Council ("**CUP**").

The property owner agreed to lease space to Verizon Wireless for the facility and the new freestanding communication tower. The proposed facility will be compatible with the property's owner's use of the property as an outdoor recreational facility.

The surrounding area is characterized by farm uses as well as residential structures which include one and two-story single-family homes, approximately 150' – 650' away. The freestanding communication tower design is in harmony with the surrounding mix of farm and residential land use. The proposed freestanding communication tower is located the greatest distance from adjacent habitable structures as possible for Verizon Wireless to fill its coverage/capacity gap. This location is the best option because it is the least visible and will most easily blend into the surrounding area.

Access to the site is provided through an access easement over the leased property pursuant to the lease agreement with the property owner. Because maintenance visits occur approximately once per month, there will be virtually no transportation impact to the surrounding area.

XI. Requested Land Use Review:

Verizon Wireless requests a Conditional Use Permit for a new freestanding communication tower in the Farm zoning district.

XII. Response to City of Maplewood Code of Ordinances Requirements for CUP Application Approved by Planning Commission and City Council (SEC. 44-1327).

Sec. 44-1327 (2) There shall be no more than one freestanding tower at one time on a property that the city has planned for a residential use or that the city has zoned residentially, unless one of the following applies:

a. The additional towers or antennas are incorporated into existing structures such as a church steeple, light pole, power line support device or similar structure.

b. The residential property is at least five acres in size.

c. If the proposed tower is to replace an existing tower and if the owner/user of the existing tower agrees to remove the existing tower within 30 days of the completion of the new or replacement tower.

Response: In 1997 two wireless cellular carriers approached the land owner about installing cellular antennae on its ski jump. The land owner viewed this offer as a win-win proposition for everyone. The land owner could provide an elevated space necessary for the antennas on an existing structure while the wireless carriers could provide critical wireless services to residents, visitors, and first responders to the area... Over the years carriers have made upgrades to their equipment on the ski jump in order to improve coverage and increase capacity as the demand for wireless services grew exponentially. In 2020, several events took place that caused the landowner to restrict site upgrades and reevaluate the use of the ski jump as a communications tower. Further, it was determined that from a structural standpoint, no further upgrades were possible. A comprehensive design and structural analysis confirmed that the ski jump tower could not hold any additional equipment. The proposed freestanding tower would be built near the existing ski jump and would contain the same type of equipment that has already been approved by the City of Maplewood previously. The tower compound would also include a 6-foot chain link fence attached to the ski jump, gravel compound, and a secured climbing system. Antennas and other equipment on the existing ski jump structure will be moved over to the new freestanding communication tower.

Sec. 44-1327 (3) The applicant shall demonstrate, by providing a coverage/interference analysis and capacity analysis, that location of the tower as proposed is necessary to meet the frequency reuse and spacing needs of the cellular or personal wireless communication services systems,

and to provide adequate personal wireless communication or portable cellular telephone coverage and capacity to areas which cannot be adequately served by locating the antennas in a less restrictive district or on an existing structure.

Response: The existing communication tower design was approved by the City of Maplewood Community Design Review Board on August 31, 2015. Zoning was approved as a permitted use as the equipment was attached to an existing structure and has been operating since that time. The need for coverage and capacity has only increased, which has created an urgent need for additional upgrades to the facility. Because the ski jump structure cannot physically support these upgrades, the proposed new freestanding communication tower is the best and least intrusive solution.

Sec. 44-1327 (4) If no existing structure that meets the height requirements for the antennas is available for mounting the antennas, such antennas may be mounted on a tower not to exceed 75 feet in height. The tower shall be located a distance of at least the height of the tower plus 25 feet from the nearest residential structure.

Sec. 44-1327 (5) The height of a tower may be increased to a maximum of 125 feet if the tower and base area are designed and built for the collocation of at least one other personal wireless communication service provider's antennas and equipment.

Response: Verizon Wireless seeks to obtain a Conditional Use Permit for a 125-foot freestanding communication tower. As illustrated in the attached Site Plan **Exhibit B**, the freestanding communication tower will support antennas, radios, and all associated equipment. There is space reserved for future carriers.

Sec. 44-1327 (6) Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary for transmitting, receiving and switching, the owner or operator shall locate it at least ten feet from the side or rear lot line and shall landscape and screen it. The community design review board shall review such a building and the landscaping and screening. The owners and operators of all new equipment or utility buildings and accessory structures for towers shall design and construct such structures to blend in with the surrounding environment.

Response: The existing equipment structure will be used for this facility.

Sec. 44-1327 (7) Towers shall not be located between a principal structure and a public street, unless the city determines that such a location would lessen the visibility of the tower or would lessen the negative impacts of such a facility on nearby properties.

Response: Compliant.

Sec. 44-1327 (9) Towers shall be built at least ten feet from side and rear property lines, unless the site is next to a residential property line or next to a property that the city is planning for a residential use. If the tower would be next to a residential property line or next to a property that the city is planning for a residential use, the tower must be located at least the height of the tower plus 25 feet from the nearest residential structure. The owner or operator shall locate ground equipment and accessory structures at least ten feet from side and rear property lines.

Response: Compliant. The freestanding communication tower is over 150' from the nearest residential property as illustrated in the attached Site Setback **Exhibit D**.

Sec. 44-1327 (10) The owner or operator of any tower shall screen ground-mounted equipment from view by suitable vegetation, except where a design of nonvegetative screening better reflects and complements the character of the surrounding neighborhood.

Response: The existing equipment shelter will be used for this facility.

Sec. 44-1327 (11) Tower locations should provide the maximum amount of screening possible for off-site views of the facility and to lessen the visibility of the tower.

Response: The 125' freestanding communication tower will be screened by the adjacent 98.4' existing ski jump structure which will remain on the site.

Sec. 44-1327 (12) The existing on-site vegetation shall be preserved to the maximum practicable extent.

Response: None of the existing on-site vegetation will be disturbed.

Sec. 44-1327 (13) The community design review board (CDRB) shall make recommendations on the plans for towers, utility, equipment or accessory buildings, site plans and proposed screening and landscaping.

Response: Application for CDRB review has been made concurrent with this application.

Sec. 44-1327 (14) Towers with antennas shall be designed and constructed to withstand a uniform wind loading as prescribed by the UBC (Uniform Building Code).

Response: Compliant.

Conclusion: Verizon Wireless has demonstrated that it complies with the conditions of Sec 44-1327 and therefore the Planning Commission should approve its application for a CUP.

VI. Response to City of Maplewood Code of Ordinances Requirements for Collocation of personal wireless communication service equipment Sec. 44.1331:

(a) The city shall not approve a request for a new personal wireless service tower unless it can be documented by the applicant to the satisfaction of the city council that the telecommunications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or commercial building within one-half mile radius, transcending municipal borders, of the proposed tower due to one or more of the following:

- (1) The planned equipment would exceed the structural capacity of the existing or approved tower or commercial building.

Response: The existing ski jump support structure is no longer capable of supporting the wireless equipment modifications and upgrades necessary to provide adequate service to customers in the area.

(b) Additional submittal requirements.

- (1) A letter of intent committing the tower owner and his successors to allow the shared use of the tower if an additional user agrees to meet reasonable terms and conditions for shared use.

Response: Tower ownership will be transferred to the St. Paul Education Foundation upon completion. See attached letter **Exhibit E** from the Foundation of its intent to allow shared use of the tower.

- (2) The applicant shall demonstrate that the proposed facility is necessary to fill a significant existing gap in users' coverage or to accommodate system capacity needs;

- (3) The proposal is the least intrusive method of achieving the necessary coverage or additional system capacity in the area and other alternatives will not work;

- (4) The equipment planned for the proposed tower cannot be accommodated at any existing tower or antenna facility;

Response: The existing communication facility design was approved by the City of Maplewood Community Design Review Board on August 31, 2015. Zoning was approved as a permitted use as the equipment was attached to an existing structure and has been operating since that time. The need for coverage and capacity has only increased, which has created an urgent need for additional upgrades to the facility. Because the ski jump structure cannot physically support these upgrades, the proposed new freestanding communication tower is the best and least intrusive solution. There are no other existing towers or antenna facilities in the immediate area from which Verizon can serve its customers.

(5) Materials or documentation demonstrating to the city that the applicant has made a good-faith effort to collocate on existing towers, but he could not reach an agreement to collocate on an existing tower.

Response: There are no existing towers in the immediate area on which to collocate. The proposed new freestanding tower will replace the existing ski jump facility since the ski jump can no longer structurally support critical upgrades and modifications.

(6) Design information and documentation showing how the applicant, owner or operator of the tower has designed structurally, electrically and in all respects the tower to accommodate both the applicant's antennas and the antennas for at least two additional users if the tower is equal to or more than 100 feet in height in all locations or for at least one additional user if the tower is equal to or more than 75 feet in height. The applicant and owner must design and install a new tower to allow for the maximum future arrangement of antennas on the tower, to accept antennas mounted at varying heights and to accommodate the equipment and other needs of future users.

Response: Verizon Wireless seeks to obtain a Conditional Use Permit for a 125-foot freestanding communication tower. As illustrated in the attached Site Plan **Exhibit B**, the freestanding communication tower will support antennas, radios, and all associated equipment. There is space reserved for future carriers.

(7) Photo-illustrations or similar-styled artist's renderings of the proposed tower and base site that show the appearance of the proposed tower and the proposed ground equipment or buildings after the contractor completes them.

Response: See attached Photo Sim **Exhibit C**

Conclusion: Verizon Wireless has demonstrated that it complies with the conditions of Sec 44-1330 and therefore Verizon Wireless respectfully requests that the City Council approve its request.



St. Paul Educational Foundation, Inc.

PO Box 25434

Woodbury MN 55125

To Whom it May Concern:

The St. Paul Educational Foundation is planning on moving all existing carriers from the ski jump over to the new monopole and we are planning on adding at least one more that is not already on the ski jump.

If you have any questions, please feel free to contact me.

Kathleen Wallace, President
Saint Paul Educational Foundation, Inc.
PO Box 25434
Woodbury MN 55125
Phone: 651-329-4112

Officers:

President – Kathy Wallace spefpres@gmail.com * Vice President – Bryan Maki spefvp@stpaulskiclub.com
Secretary – Kris Edlund spefsec@gmail.com * Treasurer – Kelly Larson speftreas@gmail.com

SS-1

DRAWN BY: TRD

V.1 11-21-24

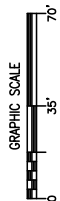
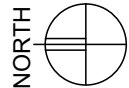
V.2 11-22-24

V.3 12-10-24

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET SOUTH
MAPLEWOOD, MN 55119

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1.COM



1 SITE PLAN
SCALE: 1" = 70'-0"

EXHIBIT D

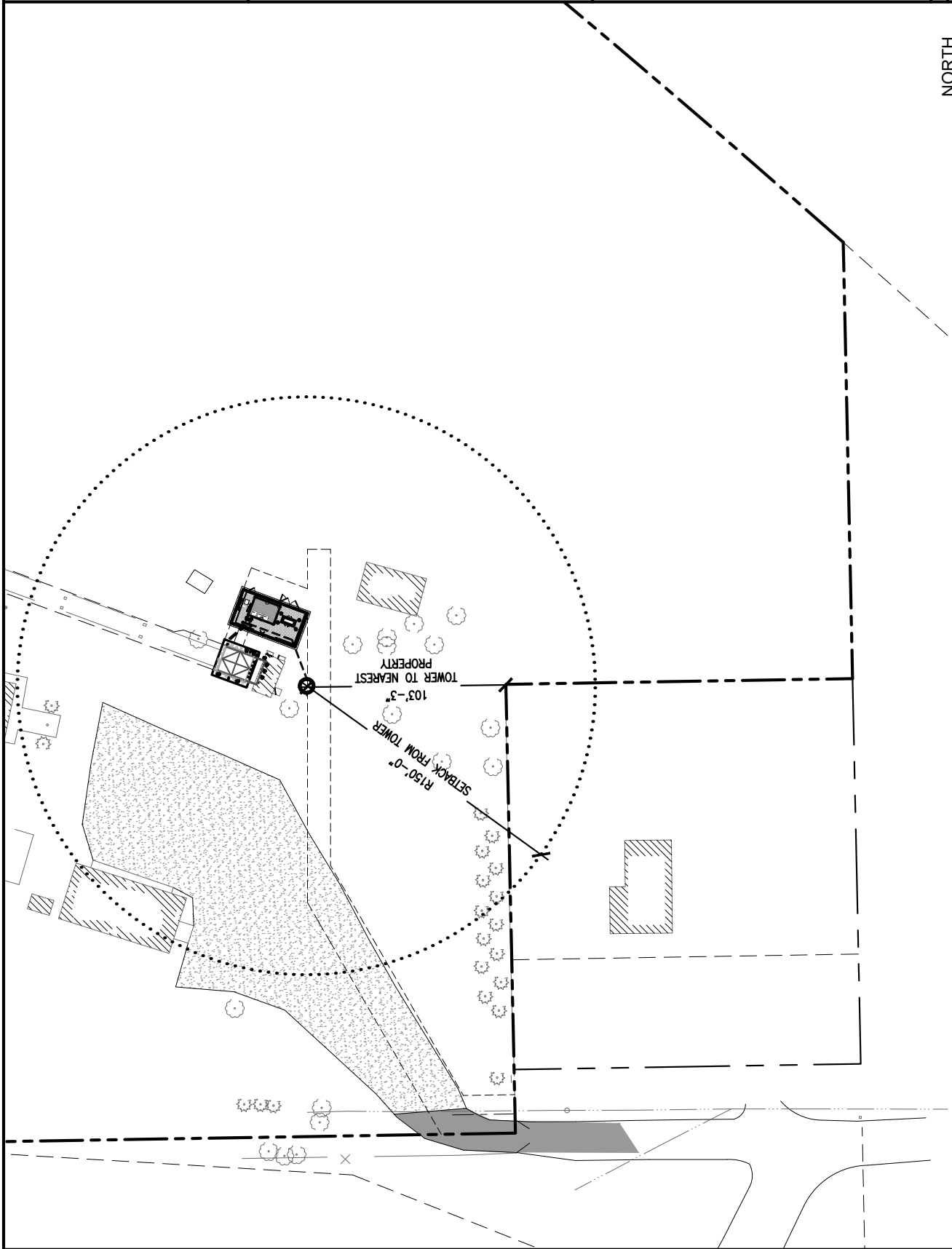
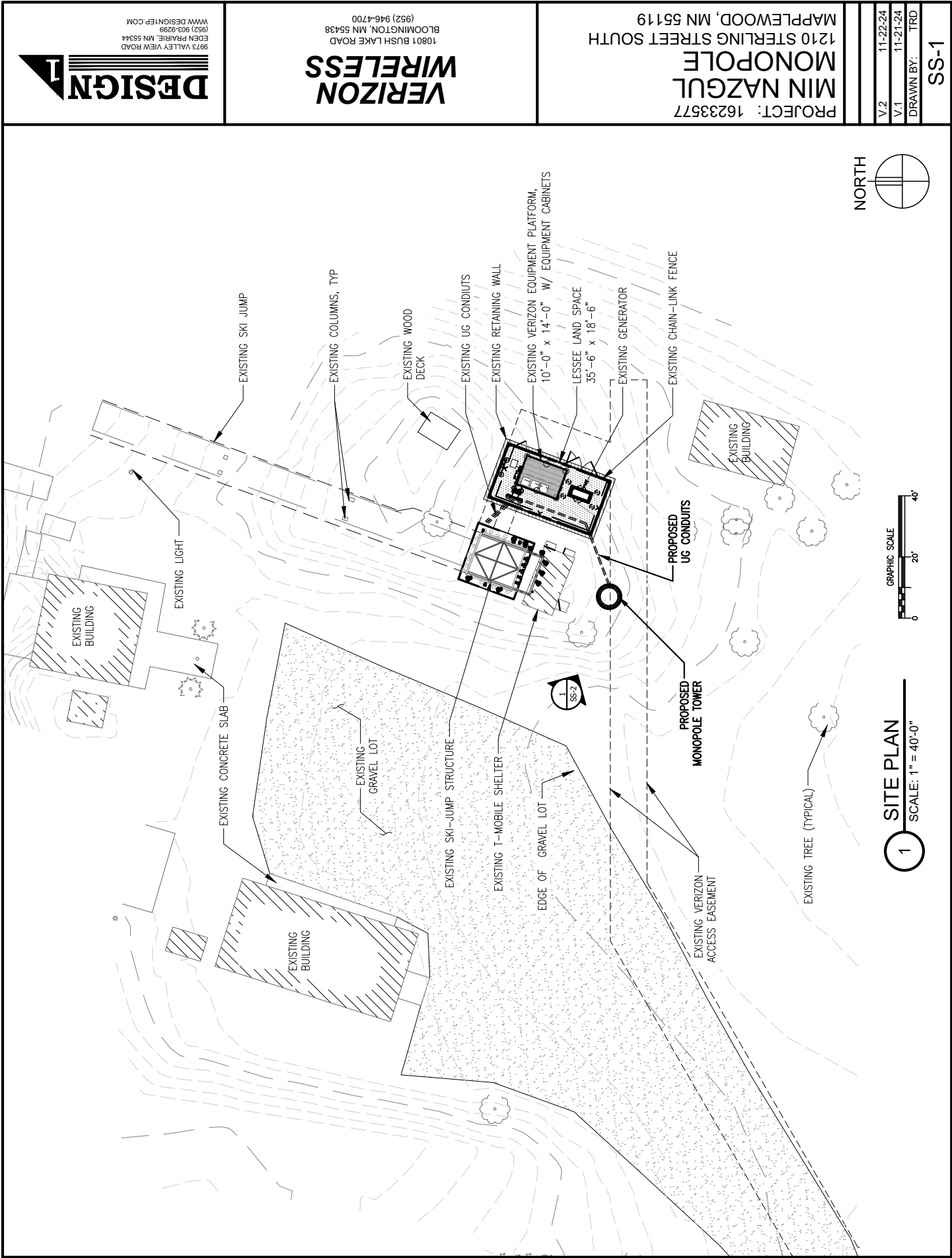


EXHIBIT B

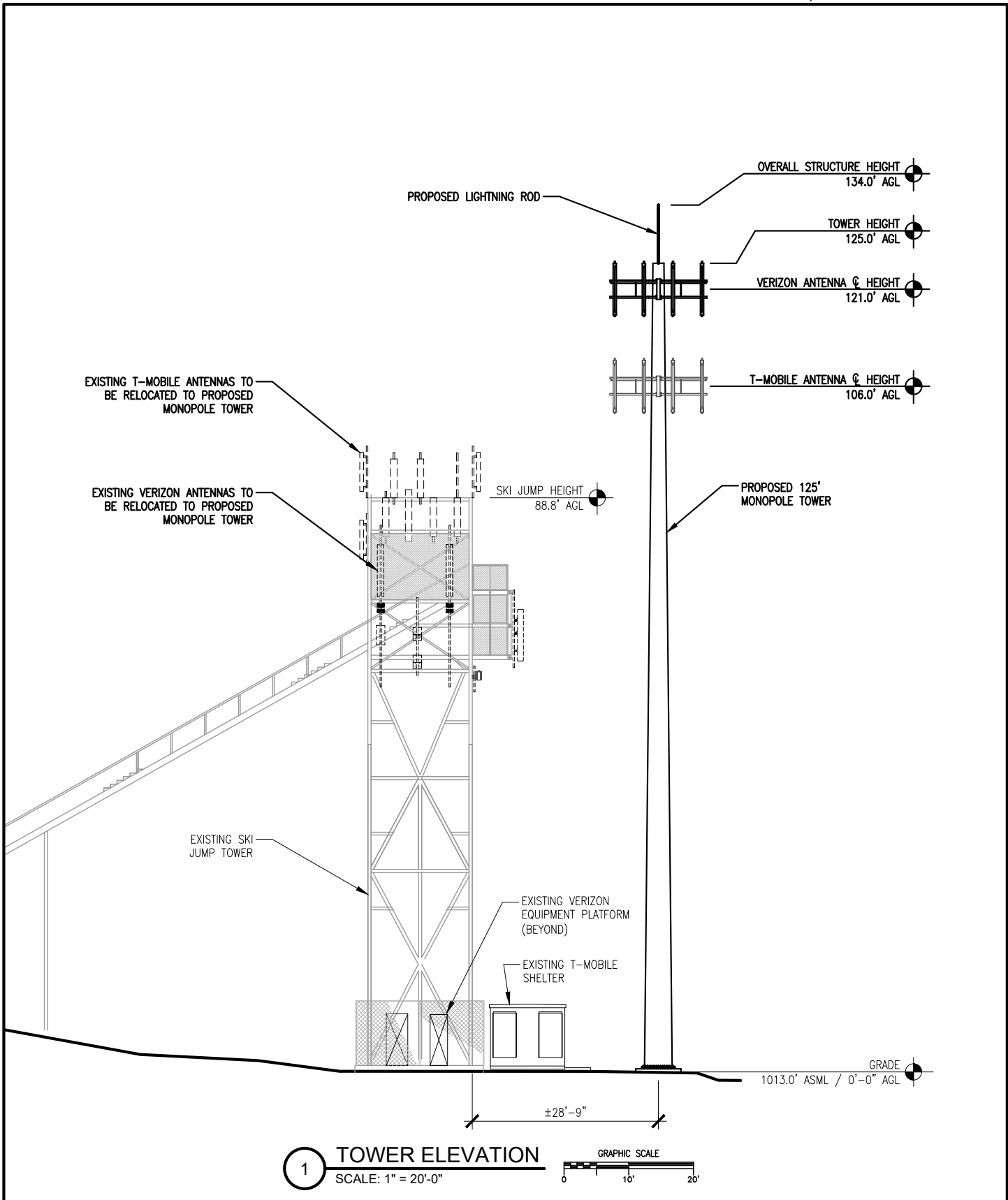


DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM

VERIZON WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT: 16233577
MIN NAZGUL MONOPOLE
1210 STERLING STREET SOUTH
MAPPLEWOOD, MN 55119

SS-1
DRAWN BY: TRD
V.1 11-21-24
V.2 11-22-24



SS-2 DRAWN BY: TRD V.1 11-21-24 V.2 11-22-24	PROJECT: 16233577 MIN NAZGUL MONOPOLE 1210 STERLING STREET SOUTH MAPPLEWOOD, MN 55119	VERIZON WIRELESS 10801 BUSH LAKE ROAD BLOOMINGTON, MN 55438 (952) 946-4700	DESIGN 1 9973 VALLEY VIEW ROAD EDEN PRAIRIE, MN 55344 (952) 903-9299 WWW.DESIGN1EP.COM
--	--	---	--

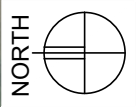
PS-1

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD
V.1 11-27-24

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55444
(952) 903-9299
WWW.DESIGNTEP.COM



MAP DATA ©2024 BING



SITE LOCATION,
ST. PAUL SKI JUMP



STERLING ST S



SHADT DR

PLEASANTVIEW PARK



SOUTHCOREST AVE E



DESCRIPTION: A PHOTOSIMULATION
PORTRAYING A MONOPOLE TOWER WITH
VERIZON AND T-MOBILE ANTENNAS.

EXHIBIT C

PS-2

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD
11-27-24
V.1

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN
1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM

VIEW 1 - EXISTING CONDITIONS.
ON SITE LOOKING NE.



PS-3

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM

DRAWN BY: TRD
11-27-24
V.1



VIEW 1 – PROPOSED CONDITIONS.
ON SITE LOOKING NE.

DISCLAIMER: THIS PICTURE IS AN ARTIST'S RENDERING
OF THE COMPLETED SITE PRIOR TO CONSTRUCTION.
THE COMPLETE CONSTRUCTION MAY VARY IN LAYOUT,
COLOR, AND DIMENSION FROM THE ABOVE PICTURE.

PS-4

VIEW 2 - EXISTING CONDITIONS.
FROM 494 LOOKING NW.

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD
11-27-24
V.1

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-8299
WWW.DESIGN1EP.COM



PS-5

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN
1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-8299
WWW.DESIGN1EP.COM

DRAWN BY: TRD
V.1 11-27-24

DISCLAIMER: THIS PICTURE IS AN ARTIST'S RENDERING
OF THE COMPLETED SITE PRIOR TO CONSTRUCTION.
THE COMPLETE CONSTRUCTION MAY VARY IN LAYOUT,
COLOR, AND DIMENSION FROM THE ABOVE PICTURE.

VIEW 2 - PROPOSED CONDITIONS.
FROM 494 LOOKING NW.



PS-6

PROJECT: 16233577

MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD

V.1 11-27-24

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-8299
WWW.DESIGN1EP.COM

VIEW 3 - EXISTING CONDITIONS.
FROM SOUTHCREST AVE E LOOKING SW.



PS-7

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD
11-27-24
V.1

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-8299
WWW.DESIGN1EP.COM



DISCLAIMER: THIS PICTURE IS AN ARTIST'S RENDERING OF THE COMPLETED SITE PRIOR TO CONSTRUCTION. THE COMPLETE CONSTRUCTION MAY VARY IN LAYOUT, COLOR, AND DIMENSION FROM THE ABOVE PICTURE.

VIEW 3 - PROPOSED CONDITIONS.
FROM SOUTHCREST AVE E LOOKING SW.

PS-8

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD
11-27-24
V.1

**VERIZON
WIRELESS**
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGN1EP.COM



VIEW 4 - EXISTING CONDITIONS.
FROM PLEASANTVIEW PARK ENTRANCE LOOKING SE.

PS-9

PROJECT: 16233577

MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

DRAWN BY: TRD

V.1 11-27-24

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN 1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-8299
WWW.DESIGN1EP.COM



DISCLAIMER: THIS PICTURE IS AN ARTIST'S RENDERING OF THE COMPLETED SITE PRIOR TO CONSTRUCTION. THE COMPLETE CONSTRUCTION MAY VARY IN LAYOUT, COLOR, AND DIMENSION FROM THE ABOVE PICTURE.

VIEW 4 - PROPOSED CONDITIONS.
FROM PLEASANTVIEW PARK ENTRANCE LOOKING SE.

PS-10

DRAWN BY: TRD
11-27-24
V.1

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN
1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-2929
WWW.DESIGN1P.COM



VIEW 5 - EXISTING CONDITIONS.
FROM SHADT DR LOOKING NE.

PS-11

DRAWN BY: TRD
V.1 11-27-24

PROJECT: 16233577
MIN NAZGUL
MONOPOLE
1210 STERLING STREET S
MAPLEWOOD, MN 55119

VERIZON
WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

DESIGN
1
9973 VALLEY VIEW ROAD
EDEN PRAIRIE, MN 55344
(952) 903-8299
WWW.DESIGN1P.COM



DISCLAIMER: THIS PICTURE IS AN ARTIST'S RENDERING OF THE COMPLETED SITE PRIOR TO CONSTRUCTION. THE COMPLETE CONSTRUCTION MAY VARY IN LAYOUT, COLOR, AND DIMENSION FROM THE ABOVE PICTURE.

VIEW 5 - PROPOSED CONDITIONS.
FROM SHADT DR LOOKING NE.

**Connecting
our homes,
businesses &
communities**

verizon

Why are we expanding the wireless network?

More people than ever before rely on wireless connections to manage their lives and businesses.

Verizon is expanding its wireless network to meet the growing demands of today and tomorrow.

But it takes time.

73.7

Trillion MB of data traffic was processed on the nation's wireless networks in 2022. This a 20 trillion MB (38%) increase from 2021.¹

73%

Of households are wireless only.²

74%

Of Americans say government should make it easier to build wireless networks.³

1. 2023 CTIA Annual Survey Highlights (September 2023)

2. The Washington Post, June 23, 2023

3. CTIA Industry Data (9/7/23)

What it takes to keep families and businesses connected.

How does wireless service work?

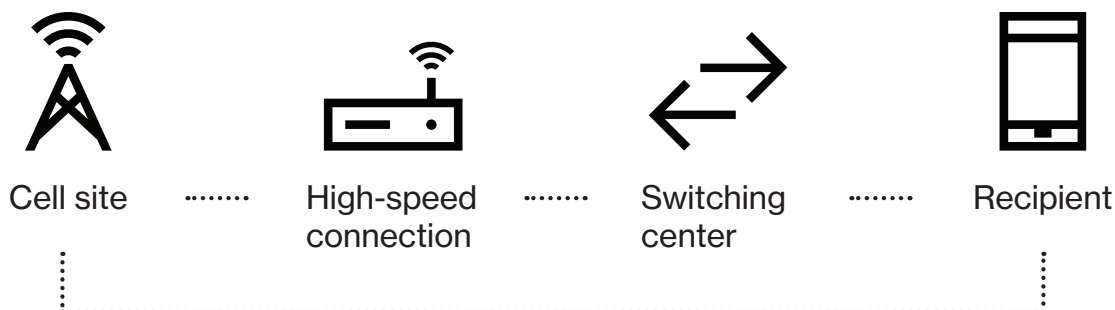
Radio frequencies can carry signals from radios and televisions, to baby monitors, garage door openers, home Wi-Fi service and cordless phones.

Cell service uses these radio frequencies to wirelessly connect a mobile device with the nearest antenna. That antenna may be hidden in a church steeple, sitting on a rooftop, attached to a building façade or mounted on a freestanding tower structure. All are known generically as cell sites.

From the cell site, the call or data session then travels through a high-speed connection to a network switching center where it is then directed to the recipient.

This all happens in fractions of a second.

The many types of wireless technologies include cellular and fixed wireless, or Wi-Fi.



Different locations require different solutions.

Verizon uses a balanced approach to engineering the best possible network given the local community's needs.

Traditional, or macro cell sites, are most often the best choice for meeting coverage and capacity needs. Macro sites are traditional cell sites or towers that provide coverage to a broad area, up to several miles.

Small cells are just like the name implies – short range cell sites used to complement macro cell towers in a smaller geographic area ranging from a few hundred feet to upwards of 1,000 feet. These lower power antennas enhance capacity in high traffic areas, dense urban areas, suburban neighborhoods, and more. Small cells use small radios and a single antenna or small antennas placed on existing structures including utility poles and street lights.

Distributed Antenna Systems (DAS) are a group of antennas in outdoor or indoor locations that connect to a base station. DAS systems are typically used in large venues including stadiums and shopping centers.

Staying ahead of demand.

A wireless network is like a highway system...

More wireless traffic needs more wireless facilities just like more vehicle traffic needs more lanes.

- Many wireless users share each cell site and congestion may result when too many try to use it at the same time.
- Wireless coverage may already exist in an area, but with data usage growth increasing exponentially each year, more capacity is needed.
- To meet capacity demands, we need to add more wireless antennas closer to users and closer to other cell sites to provide the reliable service customers have come to expect from Verizon.

The monthly data traffic in North America is projected to amount to 19.53 exabytes (the equivalent of over four billion DVD's) by 2027. In 2021, the average data traffic amounted to almost 5 EB per month.*

*Statista, Monthly data traffic in North America 2011-2027, Feb 22, 2022.

Finding the right location.

To meet customer needs and expectations, wireless providers need the ability to expand and enhance their networks where users live, work, travel and play.

Verizon gathers information from many sources including customer feedback, results of our own exhaustive network testing, and data from third parties.

When an area for improvement is identified, utilizing our existing network is always our first effort. If that is not possible, we then look at adding a new site.

Steps to finding a new site

Our engineers analyze the areas that need improvement to figure out the ideal location based on customer needs, coverage objectives, and terrain.

Using existing structures is considered first.

Network teams perform exhaustive searches in the area needing improvement to find a location that will meet our technical needs. We also look at interest from property owners.

We pick a location that has the highest likelihood of meeting technical needs and works for the community.

Guidelines for new sites

We comply fully with all requirements for community notification and review, zoning and permitting.

Potential antenna locations must meet all local, state and federal regulations.

Verizon holds Federal Communications Commission (FCC) licenses for the frequencies utilized and we strictly follow their regulations.

Wireless facilities and property values.

**Cell service in and around the home
has emerged as a critical factor in
home-buying decisions.**

National studies demonstrate that most homebuyers value good cell service over many other factors including the proximity of schools when purchasing a home.

90%

Of single family homebuyers consider an area of good cellular service somewhat important or very important when buying a home.¹

87%

Of prospective homebuyers identified faster mobile phone connections as somewhat or very important when looking at 5G and a potential home.¹

57%

...during the past year, 57% of respondents said they had take classes on line.²

1. Morning Consult, 5G Home buyers' 5G & Connectivity Needs, May 2021
2. 2022 Connectivity and Mobile Trends Survey – Press Release – Deloitte US.

Health and safety background.

Health and safety organizations worldwide have studied potential health effects of RF emissions for decades, and studies continue.

The Federal Communications Commission (FCC) guidelines for operating wireless networks are based on the recommendations of federal health and safety agencies including:

- The Environmental Protection Agency (EPA)
- The Food and Drug Administration (FDA)
- The National Institute for Occupational Safety and Health (NIOSH)
- The Occupational Safety and Health Administration (OSHA)
- The Institute of Electrical and Electronics Engineers (IEEE)
- The National Council on Radiation Protection and Measurements (NCRP)

Wireless technology, equipment and network operations are highly regulated.

For more information go to:
Federal Communications Commission: fcc.gov
Food and Drug Administration: fda.gov
World Health Organization: who.int
American Cancer Society: cancer.org

Verizon's telecommunications equipment and networks comply with FCC safety standards governing RF emissions.

Connectivity at home.

The demand for access to wireless broadband continues.

People continue to rely more and more on their wireless broadband for work and personal uses.

85%

Smartphone penetration in the U.S.¹

190×

Increase in wireless data use from 2010 to 2022.¹

82%

Of voters say wireless is important driving innovation in the U.S.¹

1. CTIA Infographics (9/7/23)



Building a wireless network you can rely on in a crisis.

The reliability of your cell phone is never more important than when crisis strikes. That's when a simple call or text message can make the difference between life and death.

We build reliability into every aspect of our wireless network to keep customers connected when you need it most. Reliability starts when we choose the safest, most secure locations for our wireless equipment. The likelihood of earthquakes, and risk from wildfires, mudslides, floods, hurricanes and more are all considered. When disaster strikes, we coordinate with first responders and can mobilize charging stations, special equipment, emergency vehicles and more to support local, state and federal agencies in all 50 states.

80%

Of 911 calls originate from a cell phone.¹

240

Million 911 calls are made annually. In many areas, 80% or more are from wireless devices.¹

1. <https://www.nena.org/page/911Statistics>

Wireless is a critical component in today's medical fields.

Smart pill bottles and cases can help patients and their caregivers track medication usage, ensuring medications are taken on time and correctly. This supports increased medical compliance, provides more consistent care, and enables preventative care, keeping patients in their homes longer and reducing the number of emergency visits to the doctor's office or hospital.

Wireless connected glucose monitors, blood-pressure cuffs, and EKGs can track a patient's vital signs and catch an issue before it turns into an emergency.

Pacemakers and sleep apnea monitors can be tracked remotely.

Routine eye exams can be conducted with a wireless device connected to a smartphone, bringing solutions and services to low-income and remote areas that would otherwise go unsupported.

Wireless is a critical component in today's communities.

Wireless smart city solutions are being used to track available parking and minimize pollution and wasted time.

These same solutions are being used to track pedestrian and bike traffic to help planning and minimize accidents.

Smart, wireless connected lighting enables cities to control lighting remotely, saving energy and reducing energy costs by 20%.

4G technology is utilized to track and plan vehicle deliveries to minimize travel, maximize efficiency, and minimize carbon footprint.

4G technology is also used to monitor building power usage down to the circuit level remotely, preventing energy waste and supporting predictive maintenance on machines and equipment.

Wireless sensors placed in shipments are being used to track temperature-sensitive medications, equipment, and food. This is important for preventing the spread of foodborne diseases that kill 3,000 Americans each year.



Verizon is part of your community.

Because we live and work there too.

We believe technology can help solve our biggest social problems. We're working with innovators, community leaders, non-profits, universities and our peers to address some of the unmet challenges in education, healthcare and energy management.

Learn more about our corporate social responsibility at [verizon.com](https://www.verizon.com/csr).

verizon✓