

**STATE OF CONNECTICUT**  
**CONNECTICUT SITING COUNCIL**

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**APPLICATION OF ARX WIRELESS INFRASTRUCTURE, LLC**



**LOT N-4, SEQUIN DRIVE**  
**GLASTONBURY, CT 06033**

**Docket No. \_\_\_\_\_**

**June 4, 2021**

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## **EXECUTIVE SUMMARY**

Applicant Arx Wireless Infrastructure, LLC (“ARX”) submits an application and supporting documentation (collectively “Application”) for a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance, and operation of a wireless telecommunications facility (“Facility”) at Lot N-4, Sequin Drive, Glastonbury, Connecticut (the “Property” or the “Site”). The Facility would provide New Cingular Wireless PCS, LLC (“AT&T”) with enhanced wireless communications and the opportunity for improved 911 service in this area of Glastonbury.

The Facility would consist of a 115-foot monopole structure (not to exceed 115’ with antennas) within a 50’ x 50’ fenced equipment compound (within a 50’ x 50’ leased area) surrounded by a chain-link fence, located behind an existing commercial warehouse building. The tower would accommodate the antenna arrays of AT&T and three future wireless carriers. The antennas affixed to the top of the monopole, initially, will consist of AT&T panel antennas, mounted in three sectors, at a centerline height of 111’. Access to and from the Site will be from Sequin Drive.

The Property is an approximately 11.24-acre parcel zoned as Planned Commerce (PC) in the Town’s zoning records. The Property is presently developed as a storage facility for industrial/commercial equipment. The Site is situated on the north side of Sequin Drive and Oakwood Drive to the south. There are no trees that will need to be removed to construct the Facility.

ARX is a wireless infrastructure provider that uses its knowledge of the wireless carriers’ networks and/or specific information from the individual carriers to develop new wireless facilities where a need has been demonstrated. ARX only pursues a site

search for a new tower when it is clear that a new tower facility will be required, and all other options have been evaluated and/or exhausted. When conducting a site search, ARX's radio frequency engineers, in consultation with the appropriate wireless carrier radio frequency engineers, identify search areas central to the necessary geographical coverage area. In this case, AT&T identified a need for wireless coverage in this area of Glastonbury and has agreed to support an application by ARX to construct a new facility in this location to provide the coverage required.

ARX filed a Technical Report with the Town of Glastonbury on January 27, 2021. On March 2, 2021, ARX held a virtual Microsoft Teams meeting with Richard Johnson, the Town Manager of Glastonbury to discuss the Site. On April 27, 2021, the Glastonbury Town Council held a public informational hearing for the Site, at which ARX presented information about the Site to the Town Council, and the Town Council received any comments from residents.

This Application includes reports, site plans, a visibility analysis, and other information detailing the proposed Facility. These reports and supporting documentation contain the relevant site-specific information required by statute and the Council's regulations. This Application also includes a copy of the Council's Community Antenna Television and Telecommunication Facilities Application Guide with references to this Application, attached as Exhibit A.

## List of Attachments

- A. Council's Community Antenna Television and Telecommunication Facilities Application Guide
- B. Certificate of Service of Application on Government Officials; and List of Officials Served
- C. Legal Notice published in *The Glastonbury Citizen*
- D. Notice to Landowners; List of Abutting Landowners; Certificate of Service
- E. Radio Frequency Engineering Report with Propagation Plots Attached
- F. Site Search Summary, Map of Rejected Sites, and 4-Mile Tower Map with Table
- G. Project Plans
- H. Visibility Assessment
- I. National Environmental Policy Act (NEPA) Report
- J. Power Density Report
- K. Avian Resources Evaluation
- L. Wetlands Report
- M. Correspondence with the Town of Glastonbury
- N. Federal Aviation Administration Report
- O. Redacted Lease
- P. Aerial Photograph
- Q. Schools and Daycares Map

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

RE: APPLICATION BY ARX WIRELESS  
INFRASTRUCTURE LLC FOR A  
CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED  
FOR A TELECOMMUNICATIONS FACILITY  
AT LOT 4-N, SEQUIN DRIVE IN THE  
TOWN OF GLASTONBURY, CONNECTICUT

DOCKET NO. \_\_\_\_\_

Date: JUNE 4, 2021

**APPLICATION FOR A CERTIFICATE OF  
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED**

**I. INTRODUCTION**

**A. Authority and Purpose**

Pursuant to Connecticut General Statutes §§ 16-50g, *et seq.* and §§ 16-50j-1, *et seq.* of the Regulations of Connecticut State Agencies, Applicant ARX Wireless Infrastructure LLC (“ARX”) submits an application and supporting documentation (collectively “Application”) for a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance and operation of a wireless telecommunications facility (“Facility”) at Lot 4-N, Sequin Drive in the Town of Glastonbury (the “Property” or the “Site”). New Cingular Wireless PCS, LLC (“AT&T”) will be the anchor tenant and will intervene in this proceeding.

**B. The Applicant**

ARX is a Delaware limited liability company with an office at 110 Washington Avenue, North Haven, Connecticut 06473. ARX will be the Certificate Holder and construct and maintain the Facility accordingly.

Communications regarding the Application should be to ARX's attorneys as follows:

Cohen and Wolf, P.C.  
1115 Broad Street  
Bridgeport, CT 06604  
Telephone: (203) 368-0211  
Attention: David A. Ball, Esq.  
[dball@cohenandwolf.com](mailto:dball@cohenandwolf.com)  
Philip C. Pires, Esq.  
[ppires@cohenandwolf.com](mailto:ppires@cohenandwolf.com)

**C. Application Fee**

The estimated construction cost for the Facility is \$275,000.00. Therefore, pursuant to § 16-50v-1a(b) of the Regulations of Connecticut State Agencies, a check made payable to the Council in the amount of \$1,250.00 accompanies this Application.

**D. Compliance with Connecticut General Statutes § 16-50/ (c)**

ARX is not engaged in generating electric power in the State of Connecticut; thus, the proposed Facility is not subject to Connecticut General Statutes § 16-50r. The proposed Facility has not been identified in any annual forecast reports and, therefore, is not subject to Connecticut General Statutes § 16-50/ (c).

**II. SERVICE AND NOTICE REQUIRED BY CONNECTICUT GENERAL STATUTES § 16-50/ (b)**

Pursuant to Connecticut General Statutes § 16-50/ (b), copies of this Application have been sent to municipal, regional, state, and federal officials. A certificate of service, along with a list of the parties served with a copy of the Application, is attached



hereto as Exhibit B. Pursuant to §16-50/ (b), notice of the Applicant's intent to file this Application was published on two occasions in *The Glastonbury Citizen* (on May 27, 2021 and June 3, 2021) which is the newspaper in which Town of Glastonbury Planning and Zoning Commission notices are published. A copy of the legal notice is attached hereto as Exhibit C. Finally, pursuant to § 16-50/ (b), notices were sent to each person appearing of record as the owner of real property abutting the Property. Certification of such notice, a sample notice letter, and the list of property owners to whom the notice was mailed are included in Exhibit D.

### **III. PROPOSED FACILITY**

#### **A. Facility Design**

This section will provide an overview and general description of the proposed Facility.

The Property is an approximately 11.24-acre parcel of property located at Lot 4-N, Sequin Drive in Glastonbury with a zoning designation of Planned Commerce ("PC"). The Property is presently developed as a storage facility for industrial/commercial equipment. The Site is situated on the north side of Sequin Drive and Oakwood Drive to the south. There are no trees that will need to be removed to construct the Facility.

ARX is proposing to construct a telecommunications facility consisting of a 115'-tall monopole with AT&T equipment and antennas, situated within a 50' x 50' fenced equipment compound within a 50' x 50' leased area, located behind an existing commercial warehouse building. A 25'-wide access and utility easement originating off Sequin Drive would provide the Site with underground utilities and vehicular access.

The vehicular access will be on a 12' access driveway within the 25'-wide access and utility easement. The antennas affixed to the top of the monopole will consist of AT&T panel antennas, mounted in three sectors, at a centerline height of 111'.

**B. Coverage to be Achieved**

AT&T has identified significant coverage deficiency in the existing AT&T wireless communications network along East Main Street and the neighboring residential and business/retail areas of Glastonbury. The proposed Facility will bring the needed fill-in coverage to significant portions of East Main Street and the residential neighborhoods and business/retail areas in the vicinity of the proposed location.

Exhibit E of this Application includes propagation plots that depict coverage from AT&T's existing sites in the area, and the anticipated coverage from the proposed Facility together with the existing and approved sites in the area. Table 1 on page 4 of Exhibit E is a table showing the incremental coverage achieved by the proposed Facility:

	Incremental Coverage from Proposed Site (700 MHz)	
<b>Population:</b> <sup>2</sup>	(≥ -83 dBm)	1,517
	(≥ -93 dBm)	1,578
<b>Business Pops:</b> <sup>3</sup>	(≥ -83 dBm)	2,721
	(≥ -93 dBm)	1,040
<b>Area (mi<sup>2</sup>):</b>	(≥ -83 dBm)	1.16
	(≥ -93 dBm)	0.89
<b>Roadway (mi):</b>	Main (-93 dBm):	0.9
	Secondary (-93 dBm):	7.0
	Total (-93 dBm):	7.9

Table 1: Coverage Statistics

#### IV. STATEMENT OF NEED AND BENEFIT

##### A. Statement of Need

##### 1. United States Policy & Law

The laws and policies of the United States aim to maximize nationwide wireless access and foster wireless network growth. The United States Congress first set forth a regulatory structure for wireless telecommunications in the Telecommunications Act of 1996 (the “Telecommunications Act”). Aimed at increasing market competition amongst service providers, the Telecommunications Act encouraged “the rapid deployment of new telecommunications technologies.”<sup>1</sup> The Telecommunications Act substantially increased public access to wireless services by removing barriers to provider-

<sup>1</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

competition, promoting universal service at affordable rates and in all areas of the United States, and enhancing the interconnectivity of users and vendors in light of the Telecommunications Act's proposed changes. Thus, the Telecommunications Act accelerated the process of making wireless services available nationwide for nearly all individuals.

Following the regulatory changes under the Telecommunications Act, Congress passed the Wireless Communications and Public Safety Act of 1999 (the "Public Safety Act"), designating 9-1-1 as the universal emergency assistance number for both landline and wireless telephone service.<sup>2</sup> The express findings of Congress as stated in the Public Safety Act emphasize the nexus between access to wireless communication and public safety:

Emerging technologies can be a critical component of the end-to-end communications infrastructure connecting the public with emergency medical service providers and emergency dispatch providers, public safety, fire service and law enforcement officials, and hospital emergency and trauma care facilities, to reduce emergency response times and provide appropriate care.<sup>3</sup>

The emphasis on accessibility found in the Telecommunications Act coupled with the promotion of wireless use to enhance public safety reflects the United States government's ongoing commitment to maximizing the vast potential of wireless services.

Continuing its efforts to utilize wireless services as a means of enhancing public safety, Congress subsequently passed the New and Emerging Technologies 911 Improvement Act of 2008 (the "NET 911 Act"). The NET 911 Act sought to accelerate a

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<sup>2</sup> Wireless Communications and Public Safety Act, Pub. L. No. 106-81, §2(a)(3), 113 Stat. 1286-87 (1999).

<sup>3</sup> Id. at 1287.

country-wide transition to a national IP-enabled emergency network and improve existing emergency services for individuals with disabilities.<sup>4</sup> Thus, Congressional implementation of the Public Safety Act and the NET 911 Act represent the federal government's growing awareness of how wireless telecommunications not only support economic growth but also create safer municipalities.

The United States has continued to acknowledge the importance of maximizing access to wireless services. The American Recovery and Reinvestment Act of 2009 (the "Recovery Act") provided \$7.2 billion to increase broadband access throughout the United States.<sup>5</sup> The Recovery Act also established the Broadband Technology Opportunities Program, awarding grants to enhance community broadband infrastructure, upgrade or construct public computer centers, and increase broadband access in areas that traditionally underutilized broadband services.<sup>6</sup> In 2010, the Federal Communications Commission developed a National Broadband Plan (the "NBP," or the "Plan") under the direction of Congress, setting forth strategic initiatives for maximizing broadband access for every American. The Executive Summary of the NBP states the express goal of the Plan:

[M]aximizing use of broadband to advance consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes. [Internal quotation marks omitted].<sup>7</sup>

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<sup>4</sup> New and Emerging Technologies 911 Improvement Act of 2008, 47 U.S.C. §615(a)-1.

<sup>5</sup> National Telecommunications and Information Administration, United States Dept. of Commerce. *Broadband Technology Opportunities Program (BTOP): About*, <http://www2.ntia.doc.gov/about> (last visited July 30, 2013).

<sup>6</sup> *Id.*

<sup>7</sup> Federal Communications Commission, *National Broadband Plan*, ix (July 20, 2013), <http://download.broadband.gov/plan/national-broadband-plan-executive-summary.pdf>

The NBP establishes policies for innovation, investment, and the utilization of broadband in specific areas such as health care, education, energy, and public safety. By addressing these various needs, the comprehensive framework of the NBP recognizes that as “the development of electricity, telephone, radio and television transformed the United States and, in turn, helped us transform the world [...] [b]roadband will be just as transformative.”<sup>8</sup> In order to implement the proposals set forth in the NBP, the FCC established the Broadband Acceleration Initiative (the “Initiative”), in order to “work inside the FCC, with its partners in state and local governments, and in the private sector to reduce barriers to broadband deployment.”<sup>9</sup> Through the Initiative, the FCC committed to voting on a Notice of Inquiry to collect information on existing barriers to broadband access.<sup>10</sup> Following through on the agenda set forth in the Initiative, the FCC published a Notice of Inquiry in April 2011 in order to better understand how the FCC and local municipalities should work together to achieve uniform, nationwide, broadband access for all:

This Notice is intended to update our understanding of current rights of way and wireless facilities siting policies, assess the extent and impact of challenges related to these matters, and develop a record on potential solutions to these challenges.<sup>11</sup>

Echoing the charge of the FCC found in the Telecommunications Act, FCC Chairman Julius Genachowski’s concluding statements in the Notice of Inquiry stressed the ongoing duty of the FCC under the Telecommunications Act to make available

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<sup>8</sup> Id. at 21.

<sup>9</sup> Federal Communications Commission: *The FCC’s Broadband Acceleration Initiative*, (Feb. 9, 2011), [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-304571A2.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-304571A2.doc)

<sup>10</sup> Id.

<sup>11</sup> Federal Communications Commission: Notice of Inquiry 11-51, WC Docket No. 11-59 (Apr. 7, 2011), 5.

broadband services for all individuals, and that “[t]he Broadband Acceleration Initiative, and our actions today, are central to carrying out that duty.”<sup>12</sup>

In June 2012, President Obama signed an executive order aimed at accelerating the deployment of broadband on federal lands and reiterating the importance of uniform access to broadband and other wireless services, recognizing the need for improved broadband access across the United States:

Broadband access is essential to the Nation’s global competitiveness in the 21st century, driving job creation, promoting innovation, and expanding markets for American businesses. Broadband access also affords public safety agencies the opportunity for greater levels of effectiveness and interoperability.<sup>13</sup>

Despite these efforts from the White House and Congress, the FCC’s 14th Broadband Progress Report (the “Report”) confirms that the FCC must continue its efforts to close the “digital divide” and extend the reach of broadband deployment to all Americans. The Report states that “Section 706(a) mandates that we continue to promote deployment of advanced telecommunications capacity to all Americans, and even though ‘current data continue to demonstrate significant ongoing progress, it remains the case that rural and Tribal areas continue to lag behind in broadband deployment.’”<sup>14</sup>

The FCC’s Declaratory Ruling interpreting §332(c)(7)(b) of the Telecommunications Act established specific time limits for decisions on land use and zoning permit applications, which supports the public need for timely deployment of wireless development.<sup>15</sup> The Middle Class Tax Relief and Job Creation Act of 2012

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<sup>12</sup> *Id.* at 21.

<sup>13</sup> Exec. Order 13616, 77 Fed. Reg 36,903 (Jun. 20, 2012).

<sup>14</sup> Federal Communications Commission, FCC 21-18A1, Fourteenth Broadband Progress Report, at 4. (2012).

<sup>15</sup> WT Docket No. 08-165-Declaratory Ruling on Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring at Variance (“Declaratory Ruling”).

(Section 6409(a)) emphasized the critical nature of the timely deployment of wireless infrastructure to public safety and the economy by preempting a discretionary review process for eligible modifications of existing wireless towers of existing base stations.<sup>16</sup> More recently, in 2018, the FCC adopted two separate orders incorporating several declaratory rulings and a set of new regulations to specifically address various areas of state and municipal oversight of wireless facility siting including towers and small cells.<sup>17</sup> The first order prohibits any actual or de facto moratoria on the siting of wireless facilities. The second, intended to streamline the siting of 4G LTE and future 5G wireless infrastructure, addressed numerous provisions of the Telecommunications Act and focused on any state or local siting requirements that might materially inhibit the deployment of wireless facilities including small cells. The Trump administration further developed a national strategy for the United States to win the 5G global race and continue American leadership in wireless technology.<sup>18</sup>

## 2. United States Wireless Usage Statistics

Over the past thirty years, wireless communications have revolutionized the way Americans live, work and play. The ability to connect with each other in a mobile environment has proven essential to the public's health, safety, and welfare. According to the CTIA's Annual Survey, Americans used a record 15.7 trillion megabytes of mobile data in 2017, nearly quadrupling since 2014 and representing 40 times the volume used

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<sup>16</sup> Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §6409 (2012), available at <http://gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf>; see also H.R. Rep. No. 112-399 at 132-33 (2012)(Conf. Rep.), available at <http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt399/pdf/CRPT-112hrt399.pdf>.

<sup>17</sup> WT Docket No. 17-79 – Declaratory Ruling and Third Report and Order, Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment.

<sup>18</sup> See <https://www.whitehouse.gov/presidential-actions/presidential-memorandum-developing-sustainable-spectrum-strategy-americas-future/> and <https://www.whitehouse.gov/articles/america-will-win-global-race-5g/>



in 2010<sup>19</sup>. An estimated 400.2 million individuals in the United States subscribed to a wireless provider, up from 128.3 million subscribers as of December 2011<sup>20</sup>. The reported increase in annual wireless data traffic grew forty (40) times from 2010 to 2017,<sup>21</sup> and data-only only devices increased by 147% from 2013 to 2017.<sup>22</sup> Emphasizing the need to meet the heightened demand for wireless services, in 2017 the number of cell sites in operation in the United States exceeded 320,000, representing a 52% increase over the last decade.<sup>23</sup> In addition to the vast number of individual wireless subscribers, United States households are increasingly dependent on wireless service, with 52.5% of households exclusively wireless.

The number of wireless users is exponentially increasing among the country's teenager and elderly populations as well. In a February 5, 2018 report, Pew Research Center found that 95% of all Americans own a cellphone, with 77% of Americans owning smartphones, compared to just 35% owning smartphones in 2011<sup>24</sup>. The percentage of adults ages 65 and older who reported owning a cellphone of any kind as of November 2016 was 80%, with smartphone ownership increasing by 24% since 2013.<sup>25</sup> By comparison, nearly 95% of American teenagers own a smartphone.<sup>26</sup> Clearly, statistics suggest that the number of mobile phone users is growing across demographic lines.

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<sup>19</sup> CTIA Annual "The State of Wireless 2018" available at <https://www.ctia.org/news/the-state-of-wireless-2018>; see also [https://api.ctia.org/wp-content/uploads/2018/07/CTIA\\_ToplineWirelessIndustrySurvey.pdf](https://api.ctia.org/wp-content/uploads/2018/07/CTIA_ToplineWirelessIndustrySurvey.pdf).

<sup>20</sup> Id.

<sup>21</sup> Id.

<sup>22</sup> Id.

<sup>23</sup> Id.

<sup>24</sup> See <https://www.pewinternet.org/fact-sheet/mobile/>

<sup>25</sup> Monica Anderson and Andrew Perrin, *Report: Tech Adoption Climbs among Older Adults* (May 17, 2017), See <https://www.pewinternet.org/2017/05/17/technology-use-among-seniors/>

<sup>26</sup> Monica Anderson and JingJing Jiang, *Teens, Social Media and Technology*, May 31, 2018 (Pew Research Center Internet & Technology) (2018); See <https://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/>

Wireless services not only enhance the efficiency of personal and business communications but also play a key role in enhancing public safety. Up to 80% of all 9-1-1 calls made each year come from a wireless device.<sup>27</sup> Beginning May 15, 2015, wireless carriers in the United States voluntarily supported Text-to-911, a program that allows users to send text messages to emergency services as an alternative to placing a phone call.<sup>28</sup> A June 2013 study of mobile phone activity by the Pew Research Center indicates that over 30 days, 19% of individuals used their mobile device to get help in an emergency.<sup>29</sup> Therefore, maximizing broadband and wireless access not only promotes convenient and efficient personal communication but enhances public safety as well.

Further, wireless services serve an important function in assisting local police, fire, and first responders. The Federal Communications Commission (FCC) and the Federal Emergency Management Agency (FEMA) established the Wireless Emergency Alerts (WEA) system, a national emergency system used for disseminating location-aware emergency text message alerts.<sup>30</sup> The messages distributed through the WEA system include Imminent Threat Alerts, such as notification of man-made or natural disasters, and Amber Alerts, which assist law enforcement in the search and identification of missing children.<sup>31</sup> Reaching nearly 97% of wireless subscribers, the

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<sup>27</sup> 911 Wireless Service Guide, available at <https://transition.fcc.gov/cgb/consumerfacts/wireless911srv.pdf>

<sup>28</sup> See *Text-to-911: What you need to know*, available at <https://www.fcc.gov/consumers/guides/what-you-need-to-know-about-text-911>. See also, *Text-to-911 is now available in Connecticut*, available at <https://www.text911ct.org>

<sup>29</sup> Joanna Brenner, *Pew Internet: Mobile*, Pew Internet & American Life Project (June 6, 2013). <http://pewinternet.org/Commentary/2012/February/Pew-Internet-Mobile.aspx> (last visited July 30, 2013).

<sup>30</sup> For more on the WEA program, see CTIA: *Wireless Emergency Alerts on Your Mobile Device* <https://www.ctia.org/consumer-resources/wireless-emergency-alerts> (last visited June 26, 2019).

<sup>31</sup> *Id.*

WEA program reflects how wireless technology can be utilized to save lives and promote municipal safety.

### 3. Site Specific Public Need

The Facility proposed in this Application would be an integral component of AT&T's network in its FCC-licensed areas throughout the state. AT&T is expanding and enhancing its 4G LTE high-speed wireless broadband services throughout New England by filling in existing coverage gaps and addressing capacity, interference, and high-speed broadband issues. In addition to improving 4G LTE coverage for AT&T customers, AT&T is also building, managing, and operating the National Public Safety Broadband Network using FirstNet's 700 MHz Band 14 spectrum, to provide prioritized, preemptive wireless services for first responders across Connecticut, New England and nationwide. In this specific location, there is a significant coverage deficiency in the existing AT&T wireless communications network along East Main Street and the nearby residential and business/retail areas. This deficiency in coverage is evidenced by the inability to adequately and reliably transmit or receive quality calls and utilize data services offered by the network. Exhibit E of this Application is a Radio Frequency ("RF") Engineering Report with propagation plots and other information which identify and demonstrate the specific need for a new wireless facility in this area.

#### **B. Technological Alternatives**

The FCC licenses granted to AT&T authorize it to provide wireless services in this area of the state through the deployment of a network of wireless transmitting sites. Repeaters, microcell transmitters, distributed antenna systems (DAS), and other types of transmitting technologies are not a practicable or feasible means to providing service

within the service area for this site. These technologies are better suited for specifically defined areas where new coverage is necessary, such as commercial buildings, shopping malls, and tunnels, or to address capacity. Ensuring reliable wireless services in this area of Glastonbury requires a tower site that can provide reliable service in this critical location. There are no equally effective technological alternatives to the construction of the proposed Facility for AT&T to provide reliable personal wireless services in this area of Connecticut.

## **V. SITE SELECTION AND TOWER SHARING**

### **A. Site Selection**

ARX is a wireless infrastructure provider that uses its knowledge of the wireless carriers' networks and/or specific information from the individual carriers to develop new wireless facilities where a need has been demonstrated. It is only when it is clear that a new tower facility will be required to provide coverage and reliable service does ARX pursue a site search for a new tower. In performing its site search, ARX consults with wireless carrier radio frequency engineers to identify geographic areas where a new tower facility will be required for the provision of coverage and/or capacity in the carriers' networks. In this case, AT&T identified a need for wireless coverage in this area of Glastonbury and agreed to support an application by ARX to construct a new facility in this location to provide the coverage required. Due to terrain characteristics and the distance between the targeted coverage area and the existing sites, AT&T's options to provide services in this area are quite limited (maps of the terrain in this area

and the distance to neighboring AT&T sites from the proposed site are included as Attachments 1 & 2, respectively, to the RF Report, Exhibit E).

AT&T conducted its own site search in the area and identified no existing structures or reasonable location sites for a new tower facility. In conducting its site search, AT&T seeks to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental impacts of a new facility. In this area of Glastonbury, there are no known existing structures suitable for co-location and the provision of reliable service to the public.

Only after determining that no existing suitable facilities or structures could be used to provide reliable coverage in this area, a search for tower sites was conducted. The search included independent reviews by ARX and AT&T and fieldwork conducted by consultants for both entities.

The map of existing facilities within a four-mile radius with table dated January 15, 2021, along with the site selection narrative and map of rejected sites contained in Exhibit F, provide a thorough explanation of the Applicant's methodology for conducting site searches, the actual search for potential sites in the area, and the locations reviewed during the Applicant's search and the reasons for elimination from consideration of all but the Property.

#### **B. Tower Sharing**

To promote the sharing of wireless facilities in the Town, ARX proposes to construct a facility that can accommodate AT&T and three future wireless carriers. The Facility would also be willing to accommodate municipal emergency communications equipment at no cost to the Town. Details of the design are contained in Exhibit G.

## **VI. ENVIRONMENTAL COMPATIBILITY**

Pursuant to Connecticut General Statutes § 16-50p, the Council is required to find and to determine as part of the Application process any probable environmental impact of the Facility on the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forest and parks, air and water purity and fish and wildlife. As demonstrated in this Application and the accompanying attachments and documentation, the Facility would not have a significant adverse environmental impact, and/or any such effects are unavoidable in this part of the State to provide reliable service to the public.

### **A. Visual Assessment**

The visual impact of the Facility would vary from different locations around the Facility depending upon factors such as vegetation, topography, distance from the Facility, and the location of structures around the Facility.

ARX retained visibility experts, Virtual Site Simulations, LLC (“VSS”), to prepare the Visibility Analysis for the site. The Visibility Analysis includes a computer-based, predictive viewshed model, which has proven to depict accurately the potential impact of the Facility from within a 1-mile radius (the “Study Area”).

VSS used a combination of a predictive computer model, in-field analysis, and a review of various data sources to evaluate the visibility associated with the Facility on both a quantitative and qualitative basis. The predictive model provides a measurable assessment of visibility throughout the entire area, including private properties and other areas inaccessible for direct observations.

The in-field analyses consisted of a balloon test completed on February 11, 2021 and field reconnaissance of the area to record existing conditions, verify results of the predictive model, inventory seasonal and year-round view locations, and provide photographic documentation from publicly accessible areas. The balloon test consisted of raising a brightly-colored, approximately four-foot diameter, helium-filled balloon tethered to a string at a height of  $\pm 115$  feet AGL at the location of the proposed Facility. VSS conducted a study area reconnaissance by driving along local and State roads and traveling along other publicly accessible locations to document and inventory where the red balloon could be seen above and through the tree canopy and other visual obstructions. Visual observations from the reconnaissance were also used to evaluate the results of the preliminary visibility mapping and to identify any discrepancies in the initial modeling.

As presented in the viewshed maps attached to the Visibility Analysis, the predicted estimate of year-round views (summer, leaf-on condition) of the proposed Facility are from approximately 22.6 acres or approximately 1.13% of the 1-mile, 2,010.6 acre study area. The majority of those specific views (10.3 acres) are of the uppermost portion (upper 25%) of the proposed tower.

The predicted estimate of seasonable views (winter, leaf-off condition) of the proposed Facility are from an additional 4.2 acres (0.2%). Thus, the total predicted season views are approximately 26.8 acres, or approximately 1.33% of the study area.

No schools or commercial daycare centers are located within 250 feet of the Facility. The Links Transition School/Links Academy is located about 0.46 miles to the west of the Site at 628 Hebron Avenue, Building 4, in Glastonbury. The nearest

commercial childcare center is YMCA Child Care Program/Preschool, which is located about 0.27 miles to the southwest of the Site at 95 Oakwood Drive in Glastonbury. Visibility is possible from or in the vicinity of the childcare center, but not the school.

Weather permitting, and if allowed under COVID-19 protocols, the Applicant may be asked to raise a balloon with a diameter of at least three (3) feet at the Facility on the day of the Council's hearing on this Application, or at a time otherwise specified by the Council. In lieu of the balloon float, the Applicant will hold a virtual site visit on the day of the hearing.

#### **B. Solicitation of State and Federal Agency Comments**

On behalf of ARX, EBI Consulting ("EBI") submitted a request for review and comment for the Facility to the State Historic Preservation Office (the "SHPO"). Included in that submission to the SHPO were project details, copies of consultant correspondence to date, and the results of EBI's evaluation of the potential effects of the project on historic and archaeological resources. EBI also obtained the maps from the database of the Connecticut Department of Energy & Environmental Protection ("CT DEEP").

The SHPO noted that 10 previously identified archaeological sites are located within 1 mile of the project area, however, none of those sites will be impacted by the project. See Letter from SHPO dated February 1, 2021 contained in NEPA Report attached hereto as Exhibit I. SHPO agreed that "the project area possesses a low potential to contain intact archaeological deposits." See Letter from SHPO dated February 1, 2021 contained in NEPA Report attached hereto as Exhibit I.



The SHPO also concurred “with the findings of the cultural resources survey [prepared by EBI] that additional archaeological investigations are not warranted, and the proposed undertaking will have no adverse effects to sites listed on or eligible for listing on the National Register of Historic Places, with the following conditions: 1) The antennae, wires, mounts, and associated equipment will be designed, painted to match adjacent materials, and installed to be as non-visible as possible; and 2) if not in use for six consecutive months, the antennae, mounts, and equipment shall be removed by the telecommunications facility owner. This removal shall occur within 90 days of the end of such six months. See Letter from SHPO dated February 1, 2021 contained in NEPA Report attached hereto as Exhibit I. ARX is prepared to fully comply with these conditions.

Section 2.4 of EBI’s NEPA Report, Exhibit I, concludes: “[T]he SHPO determined that as proposed, the Wireless Facility will have ‘No Adverse Impact’ on districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture, that is listed or is eligible for listing in the National Register of Historic Places. See Exhibit I at § 2.4.

On behalf of ARX, EBI also consulted with the United States Fish and Wildlife Service (“USFW”) and reviewed the CT DEEP Wildlife Division Natural Diversity Data Base (“NDDB”) to determine if rare, threatened, or endangered species or designated critical habitat may be present in the project area. Based on EBI’s review, EBI determined that suitable habitats capable of supporting the Northern long-eared bat (*Myotis septentrionalis*) are potentially present at or near the Site. However, information obtained from the USFWS did not identify any known hibernaculum within 0.25 miles of

the Site or known maternity roosting trees within 150 feet of the proposed Site. As such, EBI is unaware of known hibernaculum within 0.25 miles or known maternity roosting trees within 150 feet of the proposed Site. As such, EBI submitted these findings to the USFWS with the online 4D Rule Key determination. In a response dated December 17, 2020, the USFWS determined that any resulting incidental take of the Northern long-eared bat (*Myotis septentrionalis*) as a result of the project is not prohibited by the final 4(d) Rule. Further, unless the USFWS determines within 30 days of December 17, 2020 that the IPaC determination was incorrect, this response satisfies and concludes EBI's investigation. To date, EBI has not received a further response from the USFWS, and accordingly, no further action is necessary. See Appendix B to the NEPA Report, Exhibit I.

### **C. MPE Limits/Power Density Analysis**

In August 1996, the FCC adopted a standard for exposure to Radio Frequency ("RF") emissions from telecommunications facilities like the Facility proposed in this Application. To ensure compliance with applicable standards, AT&T retained C Squared Systems, LLC to perform maximum power density calculations for the Facility assuming that the antennas are operating at 100% capacity and power and that all antenna channels are transmitting simultaneously. Obstructions, such as trees and buildings, that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not consider actual terrain elevations which also could attenuate the signal. As a result, the predicted signal levels reported by C Squared Systems, LLC are much higher than the actual signal levels of the Facility will be.

The resulting power density for AT&T's operations would be approximately 13.66% percent of the applicable Maximum Permissible Exposure (MPE) standards. A copy of the power density calculation report for the Facility is attached hereto as Exhibit J.

#### **D. Other Environmental Factors**

The Facility would be unmanned, requiring infrequent monthly maintenance visits by AT&T that would last approximately one hour. The equipment located at the Facility would be monitored 24 hours a day, 7 days a week from a remote location. The Facility would not require a water supply or wastewater utilities. No outdoor storage or solid waste receptacles would be needed, and the Facility would not create or emit any smoke, gas, dust, or other air contaminants, noise, odors, or vibrations other than the installed heating and ventilation equipment. Temporary power outages could require the limited use of emergency generators on site and provisions have been made for a permanent, self-contained, on-site diesel generator. The construction and operation of the proposed Facility would have no significant impact on air, water, or noise quality.

ARX retained EBI to evaluate the Facility in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969 ("NEPA"). A copy of the NEPA Report dated April 16, 2021, is attached hereto as Exhibit I. In the NEPA Report, EBI concludes:

- The proposed Facility will not be located in an area designated as a wilderness area or a wildlife preserve.
- The Facility will not affect federally-listed threatened or endangered species or designated critical habitats.

- The Facility will not affect districts, sites, buildings, structures, or objects of significant American history, architecture, archaeology, engineering or culture, that are listed, or eligible for listing, in the National Register of Historic Places.
- The Facility will not affect an Indian religious site. EBI consulted with eight Native American Indian tribes – the Bad River Band of Lake Superior Tribe of Chippewa Indians, the Lac Vieux Desert Band of Lake Superior Chippewa Indians, the Mohegan Indian Tribe, the Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin, Narragansett Indian Tribe, Mashantucket Pequot Tribe, the Lac du Flambeau Band of Lake Superior Chippewa Indians, and the Sac and Fox Nation – because they might have interests impacted by the construction, operation, and maintenance of the Facility. EBI received no reply from the Bad River Band of Lake Superior Tribe of Chippewa Indians, the Lac Vieux Desert Band of Lake Superior Chippewa Indians, the Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin, Narragansett Indian Tribe, Mashantucket Pequot Tribe, the Lac du Flambeau Band of Lake Superior Chippewa Indians, and the Sac and Fox Nation. The Mohegan Indian Tribe replied and indicated that they did not believe that they have any interests that would be impacted by the Facility. They further indicated that they concurred with the conclusion in the Phase 1A Archaeological Report that no further archaeological investigation was warranted. See Tribal Correspondence Summary Letter dated April 15, 2021 and attached correspondence contained in the NEPA Report attached hereto as Exhibit I.
- The Facility will not be located in 100-year floodplains and not elevated at least one foot above the BFE.

- The construction of the Facility will not involve a significant change in surface features (e.g., wetlands fill, water diversion, or deforestation). Specifically, the proposed development will not result in either temporary or permanent direct impacts to any wetland resource area. ARX retained Davison Environmental to conduct a wetlands inspection and delineation on the Property. Wetlands (WF 1D – 10) were delineated along the western property boundary between the Property and an adjacent commercial building. Davison Environmental concludes that, based on the most recent Project Plans, the wetlands will not be directly impacted by the proposed Facility. At its closest, the proposed access drive would be located approximately 10' from the wetlands. Potential temporary wetland impacts will be minimized by the implementation of an erosion and sedimentation control plan. If this Application is approved, ARX will design, install, and maintain sedimentation and soil erosion controls during construction activities in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.
- The Facility will not utilize high-intensity white lights in a residential neighborhood.
- The Facility is not likely to adversely affect any potential threatened or endangered species or any designated critical habitats

Additionally, the proposed Facility is not anticipated to adversely affect any migratory bird species because the height would be below 200 feet, would not include guy wires, and would not require lighting. The Site is not located within any Important Bird Area or Waterfowl Priority Habitat. In its Avian Resources/Migratory Bird Impact

Analysis, EBI concluded that the proposed Facility will not significantly impact migratory birds. See Avian Resources/Migratory Bird Impact Analysis dated March 11, 2021 attached hereto as Exhibit K.

As a result, the Facility is categorically excluded from any requirement for further environmental review by the FCC in accordance with the NEPA, and no permit is required by the FCC prior to construction of the proposed Facility. See 47 C.F.R. §§ 1.1306(b) and 1.1307(a).

## **VII. CONSISTENCY WITH THE GLASTONBURY LAND USE REGULATIONS**

The Council Application Guide for Community Antenna Television and Telecommunications Facilities, as amended in July 2012, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Conservation and Development (the "Plan"), Zoning Regulations, and Wetlands Regulations as well as a description of planned and existing uses of the site location and surrounding properties.

### **A. Planned and Existing Land Uses**

The Property is approximately 11.24 acres and is zoned Planned Commerce (PC). The Property is presently developed as a storage facility for industrial/commercial equipment. ARX is not aware of any confirmed future development plans regarding the Property. The properties immediately surrounding the property are zoned PC, except for the parcel to the east (Dutton Place) which is zoned Village Residential according to the Town's zoning map.

## **B. Glastonbury Plan of Development**

The Glastonbury Plan of Conservation and Development (“Plan”), a copy of which is included in the bulk filing, was effective as of November 30, 2018. The Plan identifies a policy that the Town shall “advocate for multiple use communications antenna towers and multi-users on single towers clustered in designated areas, such as Birch Mountain, to avoid extensive dispersal of such towers throughout the town.” See Bulk Filing, Plan at p. 38. The Plan further states that a policy is to “[l]imit new communication towers permitted by the State Siting Council to a single location when feasible. Strongly encourage the use of existing buildings for communications antennas, if aesthetically appropriate.” See Bulk Filing, Plan at p. 47. The Plan also states that a policy is to “[p]romote use of existing structures/buildings for new communication transmitting towers with new tower facilities supported only after all other alternatives are exhausted.” See Bulk Filing, Plan at p. 23. Because the Facility is designed to accommodate antennas for four wireless carriers, the Facility furthers this policy in the Plan to encourage multi-users on single towers and to maximize singular locations for towers. Given the need for coverage in the vicinity of the Site, locating a tower in the Birch Mountain area located in the northeast corner of Glastonbury would not meet the coverage needs of the carriers. Additionally, because ARX has exhausted all existing structures/buildings, the construction of a new tower is consistent with the Plan.

## **C. Glastonbury Zoning Regulations**

The Glastonbury Zoning Regulations (“Zoning Regulations”) do not have a section addressing telecommunications facilities. See Bulk Filing, Zoning Regulations.

The Property is zoned Planned Commerce (PC). The Telecommunications facilities are not listed as a permitted use or special use in the PC zone, and therefore, there is no regulation governing this use in the PC zone. See Bulk Filing, Zoning Regulations at p. 93.

#### **D. Glastonbury Inland Wetlands and Watercourses Regulations**

The Glastonbury Inland Wetlands and Watercourses Regulations (“Wetlands Regulations”) regulate certain activities conducted in or adjacent to wetlands or watercourses as defined therein. See Bulk Filing, Wetlands Regulations, adopted February 11, 2010.

The construction of the Facility will not involve a significant change in surface features (e.g., wetlands fill, water diversion, or deforestation). Specifically, the proposed development will not result in either temporary or permanent direct impacts to any wetland resource area. ARX retained Davison Environmental to conduct a wetlands inspection and delineation on the Property. Wetlands (WF 1D – 10) were delineated along the western property boundary between the Property and an adjacent commercial building. Davison Environmental concludes that, based on the most recent Project Plans, the wetlands will not be directly impacted by the proposed Facility. At its closest, the proposed access drive would be located approximately 10’ from the wetlands. Potential temporary wetland impacts will be minimized by the implementation of an erosion and sedimentation control plan. If this Application is approved, ARX will design, install, and maintain sedimentation and soil erosion controls during construction activities in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. Further, stormwater generated by the proposed development will be



properly handled and treated in accordance with the 2004 Connecticut Stormwater Quality Manual.

## **VIII. CONSULTATIONS WITH LOCAL, STATE, AND FEDERAL OFFICIALS**

### **A. Local Consultations**

Connecticut General Statutes § 16-50/ (e) requires an applicant to consult with the local municipality in which a proposed facility may be located and with any adjoining municipality having a boundary of 2,500 feet from the proposed facility concerning the proposed and alternate sites of the facility. On January 27, 2021, ARX submitted a technical report to the Town Manager, Richard Johnson, regarding the Facility. The technical report, a copy of which is being bulk filed with this Application, included specifics about the Property, the Facility, the site selection process, and the environmental effects, if any, of the proposed Facility. A copy of the cover letter to Richard Johnson submitted with the technical report is included in Exhibit M.

On March 2, 2021, ARX held a virtual Microsoft Teams meeting with Richard Johnson, the Town Manager of Glastonbury to discuss the Site. On April 27, 2021, the Glastonbury Town Council held a public informational hearing for the Site, at which ARX presented information about the Site to the Town Council, and the Town Council received any comments from residents.

Following ARX's submission of the Technical Report, the Town of Glastonbury issued a Request for Proposal ("RFP") for a potential telecommunications tower on Town property at 311 Oakwood Drive. Initially, ARX filed an application in response to the RFP as a potential developer. However, subsequent to its response, ARX was

advised by AT&T that the Town's proposed site at 311 Oakwood Drive was not acceptable from an RF standpoint. Further, Verizon notified ARX that it had no interest in locating at the Town's site. Accordingly, because the carriers rejected the Town's proposed site at 311 Oakwood Drive, ARX withdrew its application in response to the RFP. For these reasons, ARX's proposed Site in this Application at Lot N-4, Sequin Drive is the preferable site to meet the carriers' coverage needs.

**B. Consultations with State Officials**

As noted in Section VII.B of this Application, ARX consulted with the SHPO and obtained CTDEEP mapping from the CTDEEP's database in the course of its NEPA survey. As indicated in Section VII.B, the SHPO found no adverse impact. Copies of the correspondence with SHPO are included in the NEPA Report attached hereto as Exhibit I.

**C. Consultation with Federal Agencies**

ARX received a report from Federal Aviation Administration ("FAA") for the Facility, which is attached hereto as Exhibit N. The results indicate that the Facility does not exceed obstruction standards and would not be a hazard to air navigation. Therefore, no FAA lighting or marking would be required for the Facility proposed in this Application.

ARX evaluated the project to determine whether it fell within any of the "listed" categories requiring review under NEPA. The "listed" categories, included in 47 C.F.R § 1.1307, are activities that may affect wilderness areas; wilderness preserves; endangered or threatened species; critical habitats; National Register historic districts, sites, buildings, structures or objects; Indian religious sites; flood plains; and wetlands.

The resulting report, included in the NEPA Report attached hereto as Exhibit I, confirms that the Property does not fall under any of the NEPA “listed” categories of 47 C.F.R. §1.1307. Therefore, the proposed Facility does not require review by the FCC pursuant to NEPA.

## **IX. ESTIMATED COST AND SCHEDULE**

### **A. Overall Estimated Cost**

The total estimated cost of construction for the Facility is \$275,000.00. This estimate includes:

- (1) Tower (cost of tower) and foundation costs (including installation) of approximately \$85,000.00;
- (2) Site development costs of approximately \$160,000.00; and
- (3) Utility installation costs of approximately \$30,000.00.

### **B. Overall Scheduling**

Site preparation and engineering would commence immediately following Council approval of ARX’s Development and Management (“D&M”) Plan and is expected to be completed within four (4) to five (5) weeks. Installation of the monopole structure, antennas, and associated equipment is expected to take an additional eight (8) weeks. The duration of the total construction schedule is approximately fifteen (15) weeks. Facility integration and system testing is expected to require an additional two (2) weeks after the construction is completed.

**X. CONCLUSION**

This Application and the accompanying materials and documentation demonstrate that a significant public need exists in the Town for improved wireless services and that the Facility would not have any substantial adverse environmental effects. ARX, therefore, respectfully submits that the public need for the Facility far outweighs any potential environmental effects resulting from the construction of the Facility.

The Applicant therefore respectfully requests the Council grant a Certificate of Environmental Compatibility and Public Need for the Facility.

RESPECTFULLY SUBMITTED,

**ARX WIRELESS INFRASTRUCTURE, LLC,**

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