FINDING OF NO SIGNIFICANT IMPACT
MACRO TOWER AND CELL NODES INSTALLATION
HANSCOM AIR FORCE BASE, MASSACHUSETTS

Pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code Sections (§§) 4321 et seq.); the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations (CFR) Parts 1500–1508); and the U.S. Department of the Air Force (DAF) Environmental Impact Analysis Process (EIAP) (32 CFR Part 989), Boldyn Networks in coordination with the DAF has prepared an Environmental Assessment (EA) to identify and assess the potential impacts on the human environment associated with constructing five small cell nodes and a macro tower, to be owned and maintained by Boldyn Networks with AT&T's radio and antennas installed on the infrastructure. AT&T will lease land for the macro tower and associated equipment compound from Hanscom Air Force Base (AFB). The EA is incorporated by reference into this Finding of No Significant Impact (FONSI).

***Purpose and Need for the Proposed Action (EA §1.2, Page 6)*:** The purpose of the Proposed Action is to improve and enhance wireless coverage and capacity of AT&T FirstNet Communications within Middlesex County to include Hanscom AFB. The action is needed due to a lack of existing FirstNet Communications network coverage causing first responders to rely on numerous different radio networks for communication with each other. This presents a major problem in times of emergency. In areas with poor coverage, attempts to respond to any emergency are often met with significant delays.

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

***Proposed Action (EA §2.1 and §2.3.2, Pages 8 and 11-12)*:** The proposed action would construct a new macro telecommunications tower within a 75-foot x 75-foot equipment compound off Tinker Loop with an approximately 150-footlong access road as well as construct five small cell nodes on base at various locations. The proposed macro tower location is a grass-covered area between Grenier Street to the west, Tinker Loop to the east, a parking lot to the south, and a small, wooded area to the north. The new tower would be a 150-foot monopole and could accommodate up to three carriers. The macro tower will be lit as required by the Federal Aviation Administration Advisory Circular 70/7460-1 M, *Obstruction Marking and Lighting*, utilizing a medium-dual system. No guy wires are required since this is a monopole tower design. The macro tower compound would include a single, Environmental Protection Agency (EPA) and California Air Resources Board (CARB) emissions certified, 20-kilowatt (kW) backup generator, only to be utilized during times when backup power is required. The generator will store 54 gallons of diesel fuel within a double wall, self-contained diesel fuel tank with an overfill prevention valve. New small cell nodes would be approximately 40 feet in height and would resemble existing light poles on base. Construction activities would include ground disturbance to install footings for the macro tower, direct-bury the small cell monopoles, install underground conduit for power and fiber, and establish an access drive to the tower site. New conduit would be installed with micro-trenching, directional boring, or hand digging as needed. The location of the small cell nodes would be within previously disturbed road rights-of-way. The new infrastructure would tie into the existing internet service provider (ISP) node via the Meet-Me-Point. The Meet-Me-Point is a general term for the spot/location where the ISP from outside the fence will meet Boldyn just inside the fence. AT&T will lease land for the macro tower and associated equipment compound from Hanscom AFB. All work to install the tower, nodes, fiber and power, and any additional tasks will be completed by contractors hired by Boldyn Networks.

Alternatives Eliminated from Further Analysis (EA §2.2, Page 9): The following alternatives did not sufficiently meet the underlying purpose and need and were removed from further consideration.

Alternative 2 (Collocation on an Existing Structure on Hanscom AFB): There is existing telecommunications equipment on the smokestacks of a building on Randolph Road, owned by a different carrier. This option would improve FirstNet coverage on base; however, structural evaluations of the smokestacks determined their current condition would not support the added weight of an additional collocation. Therefore, it was eliminated from further

consideration.

Alternative 3 (Construction of a New Tower at an Off-Base Location): Boldyn Networks looked at constructing a new telecommunications tower outside of Hanscom AFB using the AT&T search ring. While this alternative would improve FirstNet network coverage in the overall area, it would limit improvements to the network capacity on base. During this review, Boldyn Networks determined there were no sites that could accommodate a new tower and removed this alternative from consideration.

***No Action Alternative (EA §2.3.1, Page 11)*:** The No Action alternative is the baseline for the rest of the analysis and helps determine the extent to which the Proposed Action would impact the environment. While the No Action alternative does not fulfill the purpose and need for the Proposed Action, the consequences of the No Action alternative are evaluated in the EA in accordance with 32 CFR §989.8.

ENVIRONMENTAL CONSEQUENCES

Based on the analyses in the EA, the Proposed Action would have no significant direct, indirect, or cumulative impacts to topography, geology, and soils; land use; water resources; biological resources; cultural resources; air quality; noise; infrastructure; transportation; solid wastes and hazardous materials and wastes; safety and occupational health; aesthetics; and socioeconomics and environmental justice.

***Topography, Geology, and Soils (EA §3.2, Pages 16-19)*:** The overall disturbance area for the macro tower would consist of approximately 6900 square feet (SF) on previously disturbed soils. Construction methods would utilize directional boring or micro trenching to minimize the amount of overall disturbance for new conduit. All disturbed areas including those area not directly disturbed as part of the proposed action would be repaired and brought back to pre-construction state by use of best management practices (BMPs). This includes areas not under gravel in and around the macro tower compound and access road as well as the new conduit runs and areas around the new small cell poles. Based on this analysis, there will be no significant short-term / long-term, direct / indirect and/or cumulative impacts to topography, geology, and soils with implementation of the Proposed Action.

***Land Use (EA §3.3, Pages 19-22)*:** The macro tower would be located in a grass lot directly north-northeast of the Hanscom Conference Center classified as administration land use. The accompanying fiber line passes through three major land use types: Administration, Industrial and Open Space Buffer. All proposed disturbance would be below ground fiber conduit located in existing rights-of-ways. In addition, all the small cell poles would resemble existing on base light poles. There is no need to re-classify land use. Overall, there are no short-term/long-term, direct, or indirect adverse impacts or significant cumulative impacts expected to land use with implementation of the Proposed Action.

***Water Resources (EA §3.4, Pages 24-26)*:** No surface waters and/or floodplains are present within or near areas of new disturbance for the Proposed Action. The closest wetland is a freshwater swamp located approximately 30 feet east and south of the proposed fiber conduit. Installation of fiber lines will utilize existing conduit and be placed in or near areas that have been previously disturbed. The proposed macro tower location would be near new stormwater management system infrastructure. Because the Proposed Action will disturb greater than 5,000 SF, the construction site operators will develop and provide a sediment and erosion control plan compliant with the *Massachusetts Stormwater Handbook* Standard 8. This plan will document the appropriate types of site erosion control measures to be used, which could include placement of protecting slopes, storm drain inlets etc. using hay bales or silt fabric to prevent sediment flow. Other measures could include on-site perimeter controls, and weekly inspections of stormwater control. Overall, there are no short-term/long-term, direct, or indirect adverse impacts or significant cumulative impacts expected to water resources with implementation of the Proposed Action.

***Biological Resources (EA §3.5, Pages 28-31)*:** According to the list generated from the United States Fish and Wildlife Service (USFWS) Planning and Consultation (IPaC) tool, the only listed species known to occur within Hanscom AFB are the federally endangered northern long-eared bat and the candidate listed monarch butterfly. To determine the presence of bats, Hanscom AFB conducted a bat acoustic survey, which resulted in the inability to confirm the presence of northern long-eared bat. On March 21, 2024, the base extended through March 31, 2029, its original determination, dated October 2, 2018, that proposed undertakings within the boundaries of the base will have "no effect" on the federally listed northern long-eared bat. There are two state-listed species known to inhabit the grasslands adjacent to the runways on Massport's Hanscom Field: the state threatened grasshopper sparrow, and the state endangered upland sandpiper. Habitats for both species are predominantly grassland fields. The Proposed Action does not contain any wooded areas and/or open fields potentially suitable habitat for these species. In addition, a majority of the work will occur on previously developed areas and manicured grass lots. Due to the small-scale of disturbance (approximately 6900 SF), there will be no significant adverse impacts to any of these species.

***Cultural Resources (EA §3.6, pages 31-35)*:** The Proposed Action falls within the Air Force Cambridge Research Laboratories and is located within the historic viewshed of the Minute Man National Historical Park (MMNHP). There are no archaeological resources found within the project area based on a 1997 Phase I Archaeological Survey conducted by Hanscom AFB. Photograph simulations were analyzed by DAF personnel, and DAF determined the proposed action will have "no adverse effect" on historic resources within MMNHP. On February 29, 2024, the MMNHP concurred with the DAF's "No Adverse Effect" determination. On March 7, 2024, HAFB submitted a letter to the Massachusetts Historical Commission (MHC) informing them implementation of the Proposed Action will have a No Adverse Effect to historic properties. On May 8, 2024, MHC concurred with the DAF's "No Adverse Effect" determination. On April 29, 2024, the DAF sent letters to the Mashpee Wampanoag Tribe, and Wampanoag Tribe of Gay Head (Aquinnah) requesting their assistance in identifying historic properties of religious and cultural significance to the tribes on the base and within the Proposed Action. On July 16, 2024, Hanscom AFB followed up with each tribe asking if they were interested in consulting on this undertaking. To date, Hanscom AFB has not received any responses. Based on the "No Adverse Effect" determination, implementation of the Proposed Action will have no significant short-term / long-term, direct / indirect, or cumulative impacts to cultural resources.

***Air Quality (EA §3.7, Pages 35-41)*:** The Proposed Action is in Middlesex County, Massachusetts, which is in attainment for nitrogen dioxide, particulate matter, carbon monoxide, sulfur dioxide, and lead. Middlesex County achieved attainment when the 1997 ozone standard was revoked; however, they are designated as a maintenance area. Volatile organic compounds and nitrogen oxides, which are precursors for the formation of ozone must be accounted for. Ground disturbing / construction activities under the Proposed Action would release short-term, temporary emissions. The backup generator is the only device that would produce long-term emissions during times when backup power is required or when maintenance occurs. The DAF Air Conformity Applicability Model (ACAM) was used to evaluate impacts to air quality. The results indicated emissions from construction and emergency generator operations would not exceed any Clean Air Act General Conformity de minimis thresholds or any DAF established insignificance indicators for criteria pollutants or greenhouse gases (EA Tables 3-1 and 3-2 on pages 38-39). A General Conformity Determination is not applicable. Based on this modeling, there are no significant short-term / long-term, direct / indirect, or cumulative impacts to air quality from the Proposed Action.

***Noise (EA §3.8, Pages 42-44)*:** The Proposed Action is located in an area averaging ambient noise levels of 55 decibels (dB). Noise related activities are associated with a 10-man construction team during the building phase as well as during operation of the backup generator. Construction work is expected to be completed within 3-4 months and the anticipated noise reading of the backup generator will be less than 66 dB and it will only to be utilized during times when backup power is required. Based on this, there will be no significant short-term / long-term, direct / indirect, or cumulative impacts to the noise environment with implementation of the Proposed Action.

***Infrastructure (EA §3.9, Pages 45-47)*:** The Proposed Action would install new electrical and fiber conduit to the existing on base infrastructure allowing FirstNet coverage to Hanscom AFB and surrounding communities. In addition, it will bolster existing wireless coverage across the local region, which is becoming increasingly important as network-based services continue to grow. Overall, there will be no short-term/long-term, direct, or indirect adverse impacts or significant cumulative impacts to infrastructure, and there will be a long-term benefit to the communications network, with implementation of the Proposed Action.

***Transportation (EA §3.10, Pages 48-49)*:** As the scale of the proposed construction is limited and will last for a short duration, some small-scale disruptions to traffic and parking are expected to be temporary and be deconflicted with the base prior to construction. There will be no long-term impacts to transportation since the project consists solely of unmanned facilities. Based on this, there will be no significant short-term, direct / indirect, or cumulative impacts to transportation.

Solid Wastes, and Hazardous Materials and Wastes (EA §3.11, Pages 49-54): No active aqueous film-forming foam, polyfluoroalkyl substances, or environmental restoration program sites are located within the Proposed Action area. Any hazardous materials will be limited to the emergency backup generator, which would store 54 gallons of diesel fuel within a double wall, self-contained diesel fuel tank with an overfill prevention valve. Construction would include the use of portable restrooms, which would be brought on site prior to the start of the project and emptied, cleaned regularly. All construction waste generated would be collected and taken off base for disposal in accordance with the Hanscom AFB's spill prevention and response plan. Due to the project consisting solely of unmanned facilities, the Proposed Action would not affect the current solid/hazardous waste conditions on or around HAFB. The diesel tank would be managed in accordance with manufacturer specifications including routine inspections and maintenance. Overall, implementation of the Proposed Action would have no significant short-term, direct / indirect, or cumulative impacts to solid wastes and hazardous materials and wastes.

***Safety and Occupational Health (EA §3.12, Pages 54-55)*:** Boldyn Networks and its contractors will follow all Occupational Safety and Health Act regulations. Boldyn Networks will also ensure the Federal Communications Commission (FCC) licensees transmitting on antenna structures will comply with the established criteria regarding radio frequency exposure limits in accordance with the Second Report and Order, as well as 47 CFR § 1.1307, § 1.1310. As the scale of the proposed construction is limited to a small team and will last for a short duration, no significant effects to safety or occupational health are expected. The proposed tower will be fenced and locked, allowing access to only approved or trained personnel, further reducing any potential environmental health or safety risks. Overall, there will be no significant short-term, direct / indirect, or cumulative impacts to safety and occupational health with implementation of the Proposed Action.

***Aesthetics (EA §3.13, Pages 55-56)*:** Implementation of the Proposed Action would maintain the functional aesthetic qualities, which are considered an integral part of the Hanscom AFB. The proposed cellular poles will resemble existing on base light poles and have minimal aesthetic impact. While the single 150-foot monopole telecommunications tower will be visible to some part of the base, the tower falls in line with the current functional aesthetic scheme already prevalent throughout Hanscom AFB. Overall, implementation of the Proposed action will have no significant short-term, direct / indirect, or cumulative impacts to aesthetics.

***Socioeconomics and Environmental Justice (EA §3.14, Pages 56-58)*:** The Proposed Action area is located within Hanscom AFB. For purposes of environmental justice (EJ), the region of influence is limited to the three towns in which the Proposed Action is to take place. The closest census tract with a meaningful minority population percentage is tract 3583 in the town of Lexington within Middlesex County (33.7 percent). As construction is limited to on base and will last for a short duration, no significant effects to socioeconomics or environmental justice are expected. Generator noise would occur only during emergency situations where backup power is required and is estimated to be less than 66 dB. These noise levels would not be heard by local businesses or minority populations.

Overall, implementation of the Proposed Action would have no disproportionate adverse impacts to minority populations, low-income populations or children and no significant cumulative impacts to socioeconomics and environmental justice.

***Intergovernmental Coordination, Public and Agency Participation (EA §1.5 and §5.1, pages 8 and 59; and Appendix A)*:** Hanscom AFB consulted with the MMNHP, the MHC, the Mashpee Wampanoag Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah). Copies of the draft EA and draft FONSI were made available for agencies and public review at the following internet link: https://www.hanscom.af.mil/About-Us/Fact-Sheets/Display/Article/379486/civil-engineering/. Agencies and the public were offered a 30-day period to comment on the EA. A public notice was published in The Bedford Citizen, The Lexington Minuteman and The Concord Journal on 14 November 2024.

FINDING OF NO SIGNIFICANT IMPACT

Based upon my review of the facts and analyses contained within the EA and as summarized above, I find implementation of the Proposed Action involving leasing DAF land to Boldyn Networks for the construction and operation of a macro tower, five small cell nodes, and associated equipment will not have a significant impact on the human environment. An environmental impact statement is not required. This fulfills the analysis requirements of NEPA, the President's Council on Environmental Quality regulations 40 CFR Parts 1500 – 1508, and the DAF EIAP regulations 32 CFR Part 989.

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