

APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS – STAFF REPORT

073-17-CA250 E LANE STREET RIGHT-OF-WAYApplicant:FIBER TECHNOLOGIES NETWORKS, LLCReceived:4/17/2017Meeting Date(s):Submission date + 90 days:7/16/20171) 5/25/20173)

INTRODUCTION TO THE APPLICATION

<u>Historic District</u>: BLOUNT STREET HISTORIC DISTRICT <u>Zoning</u>: HOD-G <u>Nature of Project</u>: Installation of 37' wood utility pole with cell antenna and equipment; establish performance standards for future small cell COA applications

APPLICABLE SECTIONS OF GUIDELINES and DESCRIPTION OF PROJECT

| Sections | <u>Topic</u> | Description of Work |
|----------|--------------------------|---|
| 2.1 | Public Rights-of-Way and | Installation of 37' wood utility pole with cell antenna |
| | Alleys | and equipment |

STAFF REPORT

Based on the information contained in the application and staff's evaluation:

- A. Installation of 37' wood utility pole with cell antenna and equipment is not incongruous in concept according to *Guidelines* 2.1.10; however installation of equipment associated with the antenna **may be** incongruous according to *Guidelines* 2.1.10 and the following suggested facts:
- 1* The proposal is for a 34 feet tall wood utility pole with a cylindrical antenna on top that increases the height to 37 feet. The lower portion of the pole contains equipment, wires, and an electric meter.
- 2* The proposed pole is located in the grass right-of-way near the western boundary of the district and adjacent to the side façade of the Andrews London House at 301 N Blount Street. A photographic simulation of the proposal is included in the application.
- 3* The closest utility pole on the same side of the street is about 94 feet to the east.
- 4* According to City of Raleigh 2015 Pictometry data, the other poles in the vicinity range from approximately 20 to 33 feet in height.

- 5* The color of the antenna is the approximately the same as the pole; a sample was not provided.
- 6* The equipment associated with the antenna is placed on the pole between about 3 feet 5 inches and 13 feet 5 inches off the ground.
- 7* Five examples of other wood pole configurations were provided. They range in maximum height from 30 feet 6 inches and 50 feet 1 inches and vary in color, amount of external equipment, antenna shape, base size, presence of light fixtures, and equipment shrouds.
- 8* Photographs, locations, and directions to installations in Raleigh were provided: approximately 205 W Lenoir Street, 1500 Varsity Drive, 2109 Avent Ferry Road, 2621 Hillsborough Street, Pullen Road. Examples in Holly Springs, Wake Forest, and High Point were also provided.
- 9* On the planning page (p. 8) of Public Rights-of-Way and Alleys section of the *Guidelines* it states that "Public right-of-way features such as trees, streetlights, benches, ground cover, sidewalk paving patterns, curbs, and gutters contribute to a district's character, as do necessary transportation and communication features, such as utility lines and poles, transformers, traffic signs, vending machines, transit stops, and parking booths. Consequently, maintaining the distinctive visual ambiance of a district requires attention to its streets and alleys and their features. Right-of-way characteristics vary from district to district; some vary within districts."

Pending the committee's decision regarding the pole mounted equipment; staff suggests that the committee approve the application.

Additionally, staff suggests that the performance standards for consideration when reviewing future similar applications be deferred and brought back to the June meeting. The following are offered for discussion.

- That the pole be constructed of the same material and be the same color as the nearby utility poles or streetlight poles.
- That the diameter of the pole similar to nearby utility poles or streetlight poles.
- That there not be another cell antenna pole on the same block.

- That the new pole be placed at least 45 feet from an existing utility pole on the same side of the street.
- That the height of the new pole plus antenna be no more than 3 feet taller than the existing poles.
- That the antenna be similar in color to the pole.
- That exposed equipment be covered with a shroud the same color as the pole?
- That on metal poles, the size of the equipment base be no large than ##?

Raleigh Historic Development Commission – Certificate of Appropriateness (COA) Application



DEVELOPMENT SERVICES DEPARTMENT Development Services Customer Service Center One Exchange Plaza 1 Exchange Plaza, Suite 400 Raleigh, North Carolina 27601 Phone 919-996-2495 eFax 919-996-1831



| Minor Work (staff rev | iew) – <mark>1 copy</mark> | For Office Use Only | | | | | | |
|---|---|---------------------|--|--|--|--|--|--|
| Major Work (COA Co Additions Greate New Buildings Demo of Contrib All Other Post Approval Re-rev | mmittee review) – 10 copies er than 25% of Building Squar outing Historic Resource view of Conditions of Approva | re Footage | Transaction # 502424 File # $073-17-CA$ Fee 29 Amount Paid 29 Received Date 2217 Received By $7177-CA$ Received By $7177-CA$ | | | | | |
| Property Street Address E Lane St 250 (CAA) 301 N Blown RC | | | | | | | | |
| Historic Property/Landmark nam | e (if applicable) | | | | | | | |
| Owner's NameRaleigh, City | / of | | | | | | | |
| Lot size | (width in feet) | (| depth in feet) | | | | | |
| For applications that require review by the COA Committee (Major Work), provide addressed, stamped envelopes to owners of all properties within 100 feet (i.e. both sides, in front (across the street), and behind the property) not including the width of public streets or alleys (<u>Label Creator</u>). | | | | | | | | |
| Property Ad | dress | Property Address | | | | | | |
| | | | | | | | | |

I understand that all applications that require review by the commission's Certificate of Appropriateness Committee must be submitted by 4:00 p.m. on the application deadline; otherwise, consideration will be delayed until the following committee meeting. An incomplete application will not be accepted.

| Type or print the following: | | | | | | | |
|---|--------------------|----------------|--|--|--|--|--|
| Applicant Fiber Technologies Networks, L.L.C. | | | | | | | |
| Mailing Address 300 Meridian Centre | | | | | | | |
| ^{city} Rochester | State New York | Zip Code 14618 | | | | | |
| Date 1/27/2017 Daytime Phone 585-445-5896 | | | | | | | |
| Email Address rzajac@lightower.com | 1 | | | | | | |
| Applicant Signature Million Richard Zajac, Permits Admin. | | | | | | | |
| | | | | | | | |
| Will you be applying for rehabilitation tax credits | Office Use Only | | | | | | |
| Did you consult with staff prior to filing the appli | cation? 🗌 Yes 🔳 No | | | | | | |

| E | Design Guidelines - Please cite the a | applicable sections of the design guidelines (<u>www.rhdc.org</u>). | | | | |
|--------------|---------------------------------------|---|--|--|--|--|
| Section/Page | Торіс | Brief Description of Work (attach additional sheets as needed) | | | | |
| 2.1/8-9 | Public Right of way and Alleys | Proposing to install one (1) new 40' wood utility pole within the ROW along E Lane St. See attached drawings for additional detail. | | | | |
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WWW.RALEIGHNC.GOV

Minor Work Approval (office use only)

Upon being signed and dated below by the Planning Director or designee, this application becomes the Minor Work Certificate of Appropriateness. It is valid until _______. Please post the enclosed placard form of the certificate as indicated at the bottom of the card. Issuance of a Minor Work Certificate shall not relieve the applicant, contractor, tenant, or property owner from obtaining any other permit required by City Code or any law. Minor Works are subject to an appeals period of 30 days from the date of approval.

Signature (City of Raleigh) _____

Date ____

| | TO BE COMPLETED BY CITY STAFF | | | | | | | |
|---------------------------------|---|-----|-----|--|--|-----|--|--|
| | YES | NO | N/A | | | | | |
| Attach and oth below to Minor V | 8-1/2" x 11" or 11" x 17" sheets with written descriptions and drawings, photographs, er graphic information necessary to completely describe the project. Use the checklist o be sure your application is complete. <u>Nork</u> (staff review) – 1 copy | | | | | | | |
| 1 | Written description Describe clearly and in detail the nature of your project | | | | | | | |
| 1. | Include exact dimensions for materials to be used (e.g. width of siding, window trim, etc.) | | | | | | | |
| 2. | Description of materials (Provide samples, if appropriate) | | | | | | | |
| 3. | Photographs of existing conditions are required. Minimum image size 4" x 6" as printed. Maximum 2 images per page. | | | | | | | |
| 4. | Paint Schedule (if applicable) | | | | | | | |
| 5. | Plot plan (if applicable). A plot plan showing relationship of buildings, additions, sidewalks, drives, trees, property lines, etc., must be provided if your project includes any addition, demolition, fences/walls, or other landscape work. Show accurate measurements. You may also use a copy of the survey you received when you bought your property. Revise the copy as needed to show existing conditions and your proposed work. | , s | | | | | | |
| 6. | Drawings showing existing and proposed work | | | | | 100 | | |
| | Plan drawings | | | | | | | |
| | Elevation drawings showing the façade(s) | | | | | | | |
| | Dimensions shown on drawings and/or graphic scale (required) | | | | | | | |
| | □ 11" x 17" or 8-1/2" x 11" reductions of full-size drawings. If reduced size is so small as to be illegible, make 11" x 17" or 8-1/2" x 11" snap shots of individual drawings from the big sheet. | | | | | | | |
| 7. | Stamped envelopes addressed to all property owners within 100 feet of property not counting the width of public streets and alleys (required for Major Work). Use the <u>Label Creator</u> to determine the addresses. | | | | | | | |
| 8. | Fee (<u>See Development Fee Schedule</u>) | | | | | | | |



phone 585-697-5100 fax 585-442-8845 300 Meridian Centre Rochester, NY 14618

April 14th, 2017

Raleigh Historic Development Commission Development Services Customer Service Center Attn: Tania Tully / Melissa Robb One Exchange Plaza, Suite 400 Raleigh, North Carolina 27601

RE: Certificate of Appropriateness Applications (Major Work COA) – Transaction #'s 502424 and 501827 (Fibertech reference #'s Node 0314, Node 0315).

Dear Ms. Tully,

Enclosed you will find the following items:

- 10 copies of site plans for the proposed pole installation along E Martin St (transaction #501827, our file #Node0314).
- 10 copies of site plans for the proposed pole installation along E Lane St (transaction #502424, our file #Node0315).
- 10 copies of "Small Cell Solutions" a guide to the many options/flexibility we have in constructing small cells
- Empty #10 envelopes, pre-stamped + addressed for each location
- Check #30009674 in the amount of \$118 (processing fee for Node0314)
- Check #30009675 in the amount of \$118 (processing fee for Node0315)

Should you have any questions or require additional information in order for this to be added to the May 25th meeting agenda, please do not hesitate to contact me.

Sincerely,

Richard Zajac Permits Admin. Fiber Technologies Networks, L.L.C. 300 Meridian Centre, Suite 200 Rochester, NY 14618 585-445-5896 rzajac@lightower.com



SMALL CELL PROPOSED NODE SC-NC 0315 LOCATION RALEIGH, NC



LAT: 35.78391° LONG: -78.63678° 1" = 500' NODE PLACEMENT





NOTE 1: **40" MIN. WORKER SAFETY ZONE** BETWEEN LOWEST ENERGIZED POWER & HIGHEST COMMUNICATIONS CABLE

MUST MEET OR EXCEED 10% OF **OVERALL HEIGHT ABOVE GROUND** (INCLUDING ATTACHMENTS), PLUS 2 FEET, ROUNDED UP TO THE NEXT FULL FOOT.





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION (PROPOSED CABLES NOT SHOWN)

| LOCATION: RALEIGH, NC | |
|---------------------------|--------------------|
| 35.78391°,-78.63678 | 0 |
| POLE OWNER: FIBERTECH | |
| NOTES: | |
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| PREPARED RV | |
| I C SVNEDG | стк |
| Innovative Thinking. Engr | ineered Solutions. |
| MANSFIELD, MA 0204 | 8 |
| www.ucseng.com 1- | 508-337-7600 |
| FIBERTECH SMALL | CELL |
| РНОТОЅІМ | |
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| SCALE: NTS | л |
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| NODE NAME: SC-NC 0315 | • |
| SHEET #: 4 OF 11 | |





In accordance with FCC rules 47 CFR 1.1307(b)

POLE SIGNAGE NOT TO SCALE

| | Host (B | 1) | | (D1) | | |
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| Color | ТΧ | RX | Technologies | Color | ТХ | RX |
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| Purple | 1471 | 1491 | 1900 PCS LTE | Gray | 1491 | 1471 |
| Green | 1511 | 1531 | 850 CDMA | Blue | 1531 | 1511 |
| Orange | 1551 | 1571 | 700 LTE | Yellow | 1571 | 1551 |
| Brown | 1591 | 1611 | 2100 AWS LTE | Red | 1611 | 1591 |

SFP/CWDM COLOR CODING REFERENCE



NOT TO SCALE

9

ERICSSON mRRUS 12 B2 (PCS)

2-#14 THHN AWG

ERICSSON RRUS 12 REMOTE RADIO

REMOTE RADIO

ERICSSON PSU AC 02









ERICSSON mRRUS 12 REMOTE RA WITH ADA SOLUTIONS, LLC 102-2270 EQUIPMENT CONCEPTUAL VIEW

ERICSSON mRRUS 12 REMOTE RADIO

| <section-header></section-header> | LOCATION: RALEIGH, NC |
|-----------------------------------|---|
| | PREPARED FOR: CEDESTIC CONStruction PREPARED BY: CEDESTIC CONSTRUCTION Innovative Thinking: Engineered Solutions. 21 OXFORD RD MANSFIELD, MA 02048 WWW.ucseng.com 1-508-337-7600 |
| | FIBERTECH SMALL CELL ERICSSON mRRUS12 |
| ADIO FMOUNTING BRACKET | DRAFTER: MI SCALE: NTS ISSUE DATE: 02/13/17 NODE NAME: SC-NC 0315 SHEET #: 7 OF 11 |







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| Pole ID:SC-NC 0315.pplx | | | 0-C | alc® Pro A | nalysis Re | port | | Thursd | ay, February 16 | 6, 2017 12:59 PM | Pole ID:SC-N | IC 0315.pplx | | | | 0 | -Calc® Pro | Analysis | Report | | Thu | sday, February 1 | 6, 2017 12:59 PM |
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| Aux Data 2 | Unset | Setting Depth | (ff) [.] | 6.00 C | construction G | irade [.] | C Pc | le Strength F | actor: | 0.85 | | | Load | | _oad | Moment | Moment | Capacity | Stress | Load | Stress | Stress | Capacity |
| Aux Data 3 | Unset | G/L Circumfer | rence (in): | 36.00 Lo | oading Distric | t: | Medium Tra | ansverse Wir | nd LF: | 1.75 | | | (lbs) | ¢ | (%) | (ft-lb) | (%) | (%) | (+/- psi) | (lbs) | (psi) | (psi) | (%) |
| Aux Data 4 | Unset | G/L Fiber Stre | ess (psi): | 8,000 lo | e Thickness (| (in): | 0.25 Wi | re Tension L | F: | 1.30 | Elco | | | 47 | 6.8 | 1,206 | 8.3 | 1. | 4 98 | B 39 | 0 | 98 | 1.4 |
| Aux Data 5 | Unset | Allowable Stre | ess (psi): | 6,800 W | /ind Speed (m | nph): | 39.53 Ve | rtical LF: | | 1.90 | Fibertech | | | 460 | 66.3 26.0 | 10,485 | /1./ | 12. | 5 85 | 2 283 | 18 | 854 | 12.6 |
| Aux Data 6 | Unset | Fiber Stress H | It. Reduc: | No W | /ind Pressure | (psf): | 4.00 | | | | Totals: | | | 693 | 100.0 | 14 624 | 100.0 | 17 | 5 1 18 | 8 2 2 17 | 21 | 1 209 | 17.8 |
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| | | | | | // Pole Ca | apacity Utiliz | ation (%) | ŀ | leight | Wind Angle | Detailed L | oad Comp | onents: | Owner | Height | Horiz Ca | able Sag at | Cable I.e | ad/Span Span | Wire Te | nsion Tension | Offset W | ind Moment |
| | | | | d | | | | | (ft) | (deg) | Power | | | Owner | (ft) | Offset Diar | neter Max | Weight L | ength Angle | Length (| bs) Moment* | Moment* Mor | nent* at GL* |
| | | | | | Maximu | um | 18.5 | | 0.0 | 0.0 | | | | | | (,,,) (, | (ft) | | | | (11-15) | (11-10) (11 | -10) (11-10) |
| | | | A INTE | | Vertical | line | 3.3 | | 0.0 15.5 | 0.0 | Secondary | Cat | posed Secondary ple | EICO | 28.00 | 0.20 0 | 1.5370 1.22 | 0.071 | 60.0 0. | 0 60.1 | 32 1,105 | 9 | 0 1,174 |
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| | | 1. | - Fester | Third and | Pole M | oments (ft-lb |) | Load | Angle | Wind Angle | Comm | | | Owner | Height | Horiz. Ca | able Sag at | Cable Le | ad/Span Span | Wire Te | nsion Tension | Offset W | ind Moment |
| • | DAGE | Short 3 | | | | | · | _ | (deg) | (deg) | | | | | (14) | (in) (i | in) Temp | (lbs/ft) | (ft) (deg) | (ft) | (ft-lb) | (ft-lb) (ft | -lb) (ft-lb) |
| | - | The second second | | | Max Ca | ap Util | 15,242 | | 0.1 | 0.0 | Overlashed B | undle 10M | I STRAND | Fibertech | 24.00 | 6.77 0 | .3060 0.79 | 0.165 | 60.0 0. | 0 60.0 | 300 9,360 | 11 | 0 9,371 |
| Bicho | | 11/1 | 1 | WRE | Ground | lline wable | 15,242 | | 0.1 | 0.0 | Fiber Overlas | hed Fib | er Cable | Fibertech | 23.96 | 6.77 0 | .6100 | 0.147 | 60.0 0. | 0 60.0 | otals: 9.360 | 11 22 | 0 11 |
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| | | | | | ST. | | | | | | GenericEq | quipment | | Owner | Height | Horiz. Offset | Offset Ro Angle A | ngle Weigh | Unit It Height | Unit Unit Depth Diame | ter Length | Offset Win Noment* Mom | nd Moment ent* at GL* |
| Groundline Load Sun | nmary - Reporting A | nale Mode: La | oad - Reporting | Angle: 0.1° | | | | | | | Cylinder | C | SS ANTENNA CYL- | Fibertec | 1 36. | (in) 00 0.92 | (deg) (c 90.0 | leg) (lbs) 0.0 22 | (in) .00 24.20 | (in) (in) | (in) | (ft-lb) (ft- | b) (ft-lb) 639 639 |
| | Shear | Applied | Bending | Applied | Pole | Bending | Vertical | Vertical | Total | Pole | Box | X | 7CAP-2-C ADIO CAGE | Fibertec | n 13. | 25 13.92 | 180.0 | 0.0 90 | 00 30.00 | 18.00 | 20.00 | -198 | 618 420 |
| | Load* | Load | Moment (ff-lb) | Moment (%) | Capacity (%) | Stress (+/- psi) | Load (lbs) | Stress (nsi) | Stress (psi) | Capacity (%) | Box | Q | 01DM10030TRBR | Fibertec | n 7. | 17 7.79 | 90.0 | 0.0 12 | .00 14.00 | 5.00 | 10.00 | 0 | 39 39 |
| Powers | 42 | 6.0 | 1,174 | 8.0 | 1.4 | 95 | 18 | (poi) 0 | 96 | 1.4 | Box | EI | ectric Meter | Elco | 5. | 50 8.39 | 90.0 | 0.0 10 | .00 12.00 | 6.00 | 10.00 | 0 | 31 31 |
| Comms | 390 | 56.3 | 9,382 | 64.2 | 11.2 | 762 | 38 | 0 | 762 | 11.2 | | | | | | | | | | | Totals: | -198 | ,327 1,128 |
| GenericEquipments | 76 | 10.9 | 1,128 | 7.7 | 1.4 | 92 | 255 | 2 | 94 | 1.4 | Insulator | | | | Owner | Height | Horiz. Of | ffset Rota | te Unit | Unit | Unit Of | set Wind | Moment at |
| Pole | 186 | 26.9 | 2,934 | 20.1 | 3.5 | 238 | 1,894 | 18 | 257 | 3.8 | | | | | | (π) | (in) (c | leg) (de | g) (lbs) | (in) | (in) (ft | lb) (ft-lb) | (ft-lb) |
| Pole Load | 693 | 100.0 | 14 624 | 100.0 | 17.5 | 1 188 | 2 217 | 21 | 1 209 | 0.0 | Spool | | Attachment | ary E | co | 28.00 | 0.00 | 0.0 | 0.0 1.0 | 0 2.50 | 0.00 | 1 | 0 1 |
| Pole Reserve Capacity | у | 100.0 | 69,087 | 100.0 | 82.5 | 5,612 | 2,211 | 21 | 5,591 | 82.2 | Bolt | | Fibertech | F | bertech | 24.00 | 0.00 | 0.0 | 0.0 5.0 | 0 3.00 | 0.00 Totals: | 6 | 0 5 0 6 |
| User:bj589q PIKE OCP:5.02 | 2 [•] In | icludes Load Facto | tor(s) | Page 1 o | of 3 | ² Wors | t Wind Per Guy Wire | | | ³ Wind At 0° | User:bj589q F | PIKE OCP:5.0 | 2 | * Include | es Load Facto | or(s) | Page | e 2 of 3 | ² Wo | orst Wind Per Guy | Wire | | ³ Wind At 0° |
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| | | | | | Pole ID:SC-N | C 0315.pplx | | | | O-Calc® P | ro Analysis Re | eport | | | Thursday, | February 16, 20 | 17 12:59 PM | | | | | | |
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| | | | | | Buckling Constant | Buckling Column | Buckling Buc Section Sec | kling Mini | mum Diame kling Ti | eter at Diameter | at Modulus of Elasticity | Pole I Density | ce Density Pol | e Tip I eight | Buckling Load | Buckling Load | Buckling Load Factor | | | | | | |
| | | | | | | Height* (ft) | Height Diar (% Buckling (| meter Diamo in) G | eterat (in iL | n) (in) | (psi) | (pcf) | | (ft) C | apacity at Height | Applied at Height | of Safety | | | | | | |
| | | | | | 2.00 | 15.46 | Col. Hgt.) | (i | n) 9.86 | 7 32 11 | 46 1.60e+6 | 60.00 | 57.00 | 34.00 | (lbs) | (lbs) | 20.01 | | | | | | |
| | | | | | 2.00 | 10.40 | 02.40 | 10.00 | 0.00 | 1.02 | 1.00010 | 00.00 | 01.00 | 04.00 | 00,001 | 2,217 | 23.51 | | | | | | |
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| Thursday, | February | 16, | 2017 | 12:59 | PN |
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Small Cell Solutions

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Nick Rusin





Wood Solutions



Standard Wood Pole









Wood Communications Pole







Wood Pole With Rectifier













Primary Power Wood Pole With Slim Cabinet













Composite Solutions







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Steel Solutions



Standard Steel Pole







Steel Pole With Slim Cabinet









Steel Pole With Slim Cabinet





Steel Pole With Slim Cabinet







Steel Pole With Rectifier







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Joint-Use Steel Pole With Lightower Equipment Shroud











Steel Pole With Equipment Base

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32

Decorative Steel Pole With Equipment Base





lightower

Decorative Steel Pole With Acorn Light and Equipment Base



| 4 | PART# | DESCRIPTION | QTY. | GALV. |
|---|------------|---|------|--------|
| 1 | - | POLE PARTS | 6 | 1 |
| | 16033-34 | 7GA. x 8.097" TD x 9" BD x 10'-11 3/4" A36, 12 FLAT FLUTE TAPERED POLE | 1 | 271 |
| | 16033-32 | 7GA. x 7" TD x 10" BD x 5'-7 1/4" A36, 12 FLAT FLUTE TAPERED POLE WLDMNT | 1 | 102 |
| | 15423-12 | 11GA.x6*x12* A569, PORT COVER | 2 | 2.6 |
| | 95220-H | 24*Ø x 2*4 3/4* DECORATIVE BASE SHROUD | 2 | 171 |
| | | LIGHT ARM PARTS | 15- | 11.0 |
| | ARWSO-2S | DBL ACORN W/O LUMINAIRES | 1 | 870 |
| | 10,000,000 | ANTENNA MOUNTS PARTS | | 012000 |
| | PL-1649 | 16" TD x 10 56" 8D x 2-0 7/8" TALL TAPERED SHROUD | 2 | 5.3 |
| | WA-968 | 3/8*x11 5/8* O.D. A36, TOP CAP WLDMNT | 1 | 7 |
| 1 | 15412-12 | 11GA.x1*x5 5/8* A589, FORMED BRACKET | 2 | 0.2 |
| 1 | PL-1879 | 1/4*x4 3/8*x5* A36, ANTENNA ADAPTER | 1 | 0.6 |
| | | CONDUIT PARTS / FACTORY INSTALLED PARTS | | |
| 1 | 15423-3 | 11GA.x7*x1'-6 3/8" A569, FORMED PLATE | 1 | 4.1 |
| 1 | 1.25C93 | 1.66" O.D. x .140"w x 7'-9 15/16" PVC, CONDUIT | 1 | 3.1 |
| 1 | | HARDWARE | 0.1 | 1. |
| | PL-718 | 1/4*x2*x6* COPPER, BUS BAR | 3 | 0.8 |
| 1 | 10900 | 110 x 3 1/2" A325 BOLT/NUT/LW, GALV. | 4 | 1.7 |
| 1 | 40061 | 110 F436 HARDENED FLAT WASHER, GALV. | 8 | 0.1 |
| 1 | 70013F | 1/2"Ø x 2" FULLY THO'D BOLT/NUT/LW, S.S. | 3 | 0.2 |
| 1 | 70282 | 1/2*Ø x 1 1/2* BUTTON-HD SCKT CAP SCREW, S.S. | 3 | 0.01 |
| 1 | 44005 | 1/2*Ø FLAT WASHER, NYLON | 6 | 0.01 |
| 1 | 40024 | 1/2*Ø FLAT WASHER, S.S. | 6 | 0.04 |
| 1 | 52001 | 1/2*Ø A563-DH JAM NUT, GALV. | 3 | 0.04 |
| 1 | 70120 | 3/8*/0 x 1 1/2* BOLT/NUT/LW, S.S. | 2 | 0.1 |
| 1 | 70428 | 3/8"Ø x 1 1/4" COUNTERSUNK SCKT HD SCREW, S.S. | 3 | 0.01 |
| 1 | 71110 | 3/8*Ø x 1* BOLT, S.S. | 3 | 0.05 |
| 1 | 91137 | 3/8*8 x 1* ROUND HEAD SLOTTED NYLON SCREW | 6 | 0.01 |
| 1 | 70222 | 3/810 x 3/4" SS FLGD BUTTON-HD SCKT CAP SCRW | 2 | 0.01 |
| | 71017 | 3/81/0 x 5/8" BOLT, S.S. | 6 | 0.04 |
| J | 71102 | 3/8*/2 x 1/2* BOLT, S.S. | 4 | 0.03 |
| 1 | 90060 | 3/8" STANDOFF INSULATOR (559640) | 6 | 0.1 |
| | 43010 | 3/8"Ø LOCK WASHER, S.S. | 16 | 0.01 |
| 1 | 51995 | 3'8'Ø JAM NUT, S.S. | 3 | 0.02 |
| 1 | 56000 | 3/8*Ø HEAVY HEX NUT, S.S. | 3 | 0.03 |
| 1 | 70217 | 1/4*Ø x 1* SS FLGD BUTTON-HD SCKT CAP SCRW | 14 | 0.02 |
| | 55500 | 1/4-20 U-STYLE SPEED NUT | 14 | 0.02 |
| | | TOTAL GAL | VWT | 2102 |

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Steel Pole With Lightower Equipment Shroud







Standard Steel Pole With Lightower Equipment Shroud







Steel Flag Pole





Date: 05/05/2017
To: City of Raleigh
From: George Sipek, Fibertech
Subject: List of Fibertech wireless sites in Raleigh and other cities in NC

Raleigh, NC Sites

1. Node 0019

Go to intersection of S McDowell Street and W Lenoir Street Head W on W Lenoir Street for 56 feet Pole is on S side of W Lenoir Street This is a new metal Fibertech pole with a recently added equipment shroud design for aesthetics Site completed: April 2016



Go to intersection of Avent Ferry Road and Varsity Drive Head NW on Varsity Drive for 102 feet Pole is on NE side of Varsity Drive This was one of the very first Duke (Joint-Use) metal street light replacement poles installed in NC Equipment shroud design Site completed: April 2017



Go to intersection of Western Blvd and Avent Ferry Road Head SW on Avent Ferry Road for 125 feet Pole is on NW side of Avent Ferry Road Fibertech equipment was placed on a newly placed (replacement) Duke wood street light pole Note: The original pole (now shorter in height) will be removed by Duke Minimal radio design (no shroud) Site completed: September 2016



Southwest corner of Hillsborough Street and Gardner Street intersection Used City of Raleigh LED street light and placed LED light on new Fibertech metal pole Minimal radio design (no shroud) Site completed: April 2016



Go to intersection of Western Blvd and Pullen Road Head N on Pullen Road for 342 feet Pole is on W side of Pullen Road (across from Pullen Park) Fibertech equipment placed on new wood pole Radio design (no shroud) Site completed: September 2016



Holly Springs, NC Site

6. Node 0237

Go to intersection of Holly Springs Road and Sunset Lake Road Head SE on Sunset Lake Road for 441 feet (in front of PNC Bank) Pole is on SW side of Sunset Lake Road Fibertech equipment placed on new wood pole Minimal radio design (no shroud) Site completed: April 2017



Wake Forest, NC Site

7. Node 0265 – Wake Forest

Go to intersection of S Main Street and Alberbury Commons Court Head NW on S Main Street for 30 feet Pole is on SE side of S Main Street Fibertech equipment placed on very first Composite/FRP pole placed in NC as requested by city Equipment shroud design Site completed: April 2017



High Point, NC Site

8. Node 0031

Go to intersection of N Elm Street and W Broad Avenue Head N on N Elm Street for 60 feet Pole is on E side of N Elm Street Fibertech equipment placed on very first Stealth pole placed in NC as requested by city Equipment shroud design Site completed: March 2017

