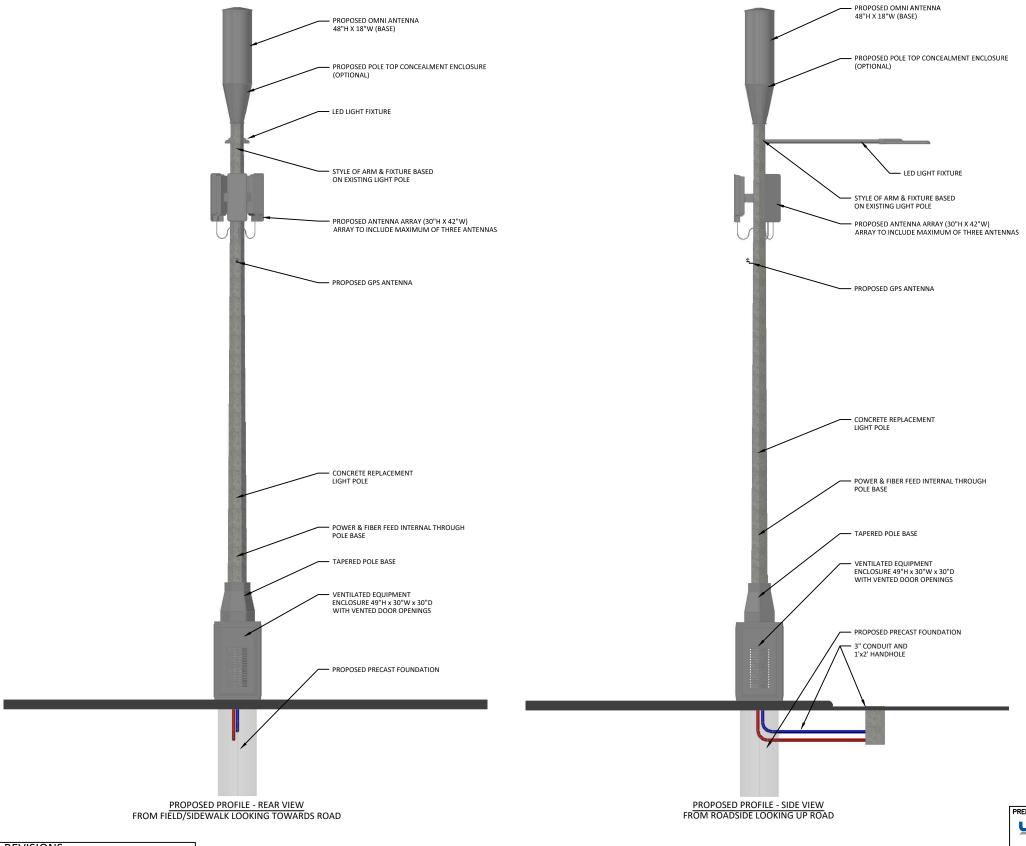
### EXHIBIT X-1A

### SCHEDULE OF APPROVED WIRELESS FACILITIES

| Facility<br>Number  | X-1A - Standard Concrete Light Pole with RRH Concealment /<br>Aeriata, Cobra, Shoebox, Double Cobra, Curved, Double Curved, Straight, Double<br>Straight  |
|---|---|
| Attachment Types  (check all that apply and provide detail below) | _X_ Replacement City Pole (streetlight)  _X_ Replacement City Property Pole (streetlight)  _X_ Attach to existing City Pole (streetlight)  _X_ Attach to existing City Property Pole (streetlight)  Attach to existing City Pole (traffic signal)  Attach to existing City Property Pole (traffic signal)  Attach to existing City Pole (street furniture)  Attach to existing City Property Pole (street furniture)  |
| Attachment<br>Type Detail   | Attach to Non-City Pole  Standard Concrete Replacement Light Pole with RRH  |
| Physical<br>Description   | Antenna array (no more than 42" diameter and no more than 30" height) of up to three antennas mounted to exterior of pole above and below the light fixture with a previously approved X-1 antenna or as a stand-alone system. Remote radio head(s), power, and fiber equipment will be concealed and ventilated within a stealth, expanded, base (not to exceed 49"H x 30"W x 30"D) The base will be painted to match the steel replacement pole and antenna equipment. GPS Antenna to be installed on the pole (not to exceed 4"H x 3"W). |
| Concealment   | The pole top antenna and related cabling will be contained within a concealed structure as detailed above. Cabling will be routed within the replacement pole structure and will connect to the equipment housed within the pole mounted enclosure. The antenna, pole, and equipment enclosure will be painted to match. The replacement luminaire  |

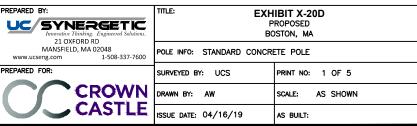
|                                 | will be installed at the same height as the existing pole to conform to the local streetscape.  |
|---------------------------------|---|
| Included<br>Documents           | The following documents:  A. Replacement Pole Profile including fixture type, equipment specifications, and foundation and ground connection details.  B. Photo mock-up showing existing and proposed pole views. |
| RF<br>Compliance<br>Information | $\underline{X}$ Facility conforms to information already on file $\underline{X}$ RF information attached Crown Castle will attach FCC signage appropriate to the installed equipment.                             |
| Comments                        |   |

### STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA

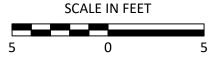


### NOTES:

- 1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
- ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
- 3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
- 4. THE PURPOSE OF THE DESIGN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
- POLE REPLACEMENT SPECIFICATIONS AND DIMENSIONS, INCLUDING STRUCTURAL FOUNDATIONS, WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY CROWN CASTLE.
- 6. EQUIPMENT ENCLOSURE TO BE NO LARGER THAN (49"Hx30"Wx30"D).
- 7. GPS ANTENNA TO BE NO LARGER THAN 4"Hx3"W.
- 8. OMNI ANTENNA TO BE NO LARGER THAN 18"Øx48"H.
- 9. EACH ANTENNA ARRAY TO BE NO LARGER THAN 30"Hx42"W.
- 10. POLE REPLACEMENT INFORMATION FOR ALL STANDARD LIGHT POLES:
- 14' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 20'
- 19' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 25'
- 24' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 28.8'
- 29' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 34.8'
- 11. CROWN CASTLE WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
- 12. LED LIGHT & LUMINAIRE ARM STYLE WILL MATCH EXISTING & WILL BE AT SAME HEIGHT AS SHOWN IN PHOTOSIMS.
- 13. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
- 14. PROPOSED INSTALLATION WILL BE PERFORMED IN ACCORDANCE WITH APPLICABLE SAFETY CODES, MAINTAINING APPROPRIATE CLEARANCES FROM EXISTING UTILITIES.
- 15. PROPOSED INSTALLATION WILL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE STRUCTURAL ENGINEERING DESIGN STANDARDS. ANY ADDITIONS OR MODIFICATIONS TO THE EXISTING INSTALLATION WILL INCLUDE MODIFICATIONS TO ENSURE THE STRUCTURE IS SOUND AND COMPLIANT WITH CURRENT APPLICABLE STANDARDS
- 16. ORNAMENTAL & DECORATIVE FEATURES & LUMINAIRES WILL MATCH THE EXISTING FIXTURE UNLESS THE EXISTING FIXTURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO A CITY OF BOSTON APPROVED LED FIXTURE.



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### STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (COBRA)



EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

| PREPARED BY:  SYNERGET C  Innovative Thinking. Eugenered Solutions. 21 OXFORD RD | F                         | IBIT X-20D<br>PROPOSED<br>OSTON, MA |
|--|---------------------------|-------------------------------------|
| MANSFIELD, MA 02048<br>www.ucseng.com 1-508-337-7600                             | POLE INFO: STANDARD CONCR | ETE POLE                            |
| PREPARED FOR:  | SURVEYED BY: UCS          | PRINT NO: 2 OF 5                    |
| CROWN  | DRAWN BY: AW              | SCALE: AS SHOWN                     |
| CASTLE   | ISSUE DATE: 04/16/19      | AS BUILT:                           |

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# STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (SHOE BOX)



EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

| PREPARED BY:  UC SYNERGETIC  Innovative Thinking. Engineered Solutions. 21 OXFORD RD | F                         | IIBIT X-20D<br>ROPOSED<br>DSTON, MA |
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| MANSFIELD, MA 02048<br>www.ucseng.com 1-508-337-7600                                 | POLE INFO: STANDARD CONCR | ETE POLE                            |
| PREPARED FOR:  | SURVEYED BY: UCS          | PRINT NO: 3 OF 5                    |
|  | DRAWN BY: AW              | SCALE: AS SHOWN                     |
| CASTLE   | ISSUE DATE: 04/16/19      | AS BUILT:                           |

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### STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (DOUBLE COBRA)



**EXISTING PHOTOGRAPHIC VIEW** 



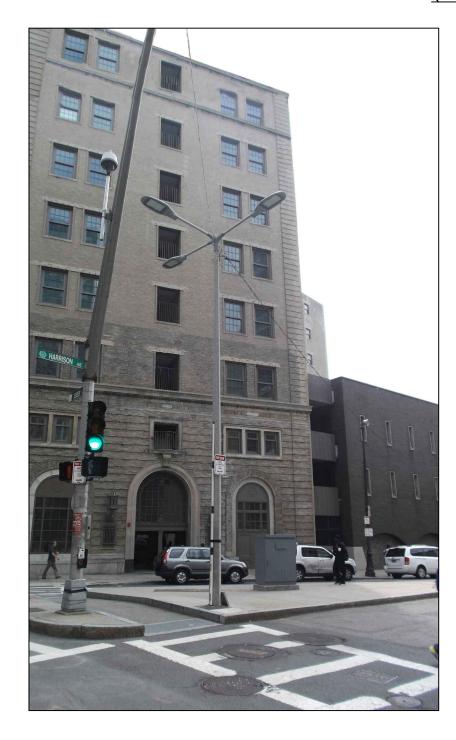
PROPOSED PHOTOGRAPHIC SIMULATION

EXHIBIT X-20D PROPOSED BOSTON, MA

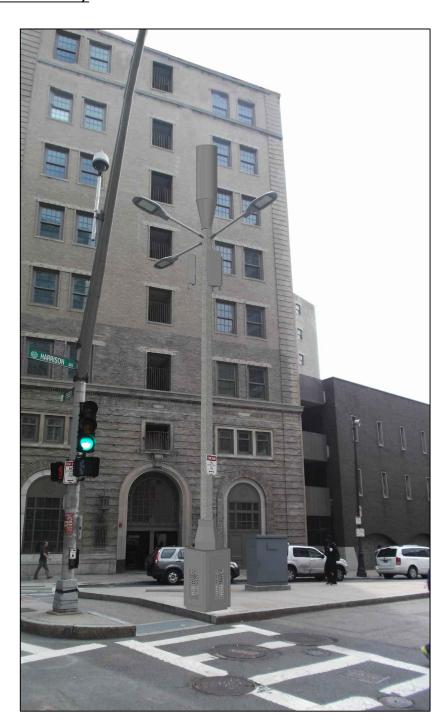
SSUE DATE: 04/16/19

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## STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (TRIPLE COBRA)



EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

| PREPARED BY:  |                           | IIBIT X-20D      |
|---|---------------------------|------------------|
| UC SYNERGETIC Innovative Thinking. Engineered Solutions. 21 OXFORD RD | · ·                       | OSTON, MA        |
| 21 OXFORD RD<br>MANSFIELD, MA 02048<br>www.ucseng.com 1-508-337-7600  | POLE INFO: STANDARD CONCR | ETE POLE         |
| PREPARED FOR:   | SURVEYED BY: UCS          | PRINT NO: 5 OF 5 |
| CROWN   |                           | SCALE: AS SHOWN  |
| CASTLE  | ISSUE DATE: 04/16/19      | AS BUILT:        |

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### STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA PROPOSED OMNI ANTENNA 48"H X 18"W (BASE) NOTES: PROPOSED POLE TOP CONCEALMENT ENCLOSURE PROPOSED POLE TOP CONCEALMENT ENCLOSURE (OPTIONAL) PROPOSED ANTENNA ARRAY (30"H X 42"W) PROPOSED ANTENNA ARRAY (30"H X 42"W) ARRAY TO INCLUDE MAXIMUM OF THREE ANTENNAS ARRAY TO INCLUDE MAXIMUM OF THREE ANTENNAS - LED LIGHT FIXTURE LED LIGHT FIXTURE STYLE OF ARM & FIXTURE BASED STYLE OF ARM & FIXTURE BASED ON EXISTING LIGHT POLE PROPOSED GPS ANTENNA — PROPOSED GPS ANTENNA CONCRETE REPLACEMENT LIGHT POLE CONCRETE REPLACEMENT POWER & FIBER FEED INTERNAL THROUGH POWER & FIBER FEED INTERNAL THROUGH TAPERED POLE BASE TAPERED POLE BASE VENTILATED FOUIPMENT ENCLOSURE 49"H x 30"W x 30"D VENTILATED EQUIPMENT ENCLOSURE 49"H x 30"W x 30"D PROPOSED PRECAST FOUNDATION WITH VENTED DOOR OPENINGS PROPOSED CITY OF BOSTON STANDARD 1'x2' HANDHOLE PRECAST FOUNDATION

SCALE IN FEET

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PROPOSED PROFILE - REAR VIEW

FROM FIELD/SIDEWALK LOOKING TOWARDS ROAD

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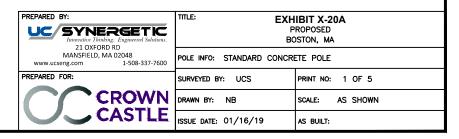
**REVISIONS** 

DESCRIPTION

PROPOSED PROFILE - SIDE VIEW

FROM ROADSIDE LOOKING UP ROAD

- 1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
- 2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
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- POLE REPLACEMENT SPECIFICATIONS AND DIMENSIONS, INCLUDING STRUCTURAL FOUNDATIONS, WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY
- EQUIPMENT ENCLOSURE TO BE NO LARGER THAN (49"Hx30"Wx30"D).
- 7. GPS ANTENNA TO BE NO LARGER THAN 4"Hx3"W.
- 8. OMNI ANTENNA TO BE NO LARGER THAN 18"Øx48"H.
- 9. EACH ANTENNA ARRAY TO BE NO LARGER THAN 30"Hx42"W.
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  - 19' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 25' - 24' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 28.8'
  - 29' EXISTING POLE TO BE REPLACED WITH NEW POLE AND A MAX HEIGHT OF 34.8'
- 11. CROWN CASTLE WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
- 12. LED LIGHT & LUMINAIRE ARM STYLE WILL MATCH EXISTING & WILL BE AT SAME HEIGHT AS SHOWN IN PHOTOSIMS.
- 13. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
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- 15. PROPOSED INSTALLATION WILL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE STRUCTURAL ENGINEERING DESIGN STANDARDS. ANY ADDITIONS OR MODIFICATIONS TO THE EXISTING INSTALLATION WILL INCLUDE MODIFICATIONS TO ENSURE THE STRUCTURE IS SOUND AND COMPLIANT WITH CURRENT APPLICABLE
- 16. ORNAMENTAL & DECORATIVE FEATURES & LUMINAIRES WILL MATCH THE EXISTING FIXTURE UNLESS THE EXISTING FIXTURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO A CITY OF BOSTON APPROVED LED FIXTURE.



## STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (COBRA)



EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

| PREPARED BY: UC/SYNERGETIC   |                           | HIBIT X-20A<br>PROPOSED |
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| Innovative Thinking. Engineered Solutions.                           | · ·                       | OSTON, MA               |
| 21 OXFORD RD<br>MANSFIELD, MA 02048<br>www.ucseng.com 1-508-337-7600 | POLE INFO: STANDARD CONCE | RETE POLE               |
| PREPARED FOR:  | SURVEYED BY: UCS          | PRINT NO: 2 OF 5        |
| CROWN  |                           | SCALE: AS SHOWN         |
| CASTLE   | ISSUE DATE: 01/16/19      | AS BUILT:               |

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# STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (SHOE BOX)



EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

| PREPARED BY:  SYNERGET C  Innovative Thinking. Engineered Solutions. 21 OXFORD RD  MANSFIELD, MA 02048  www.ucseng.com 1-508-337-7600 | TITLE: EXHIBIT X-20A PROPOSED BOSTON, MA |                  |
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|   | POLE INFO: STANDARD CONCRETE POLE        |                  |
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## STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (DOUBLE COBRA)



EXISTING PHOTOGRAPHIC VIEW



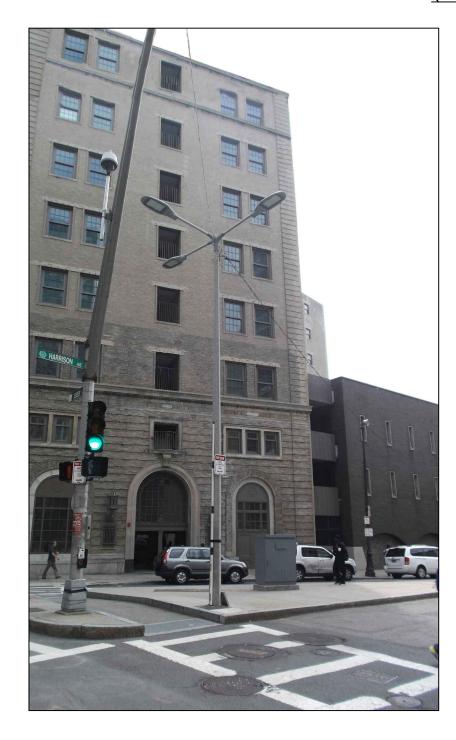
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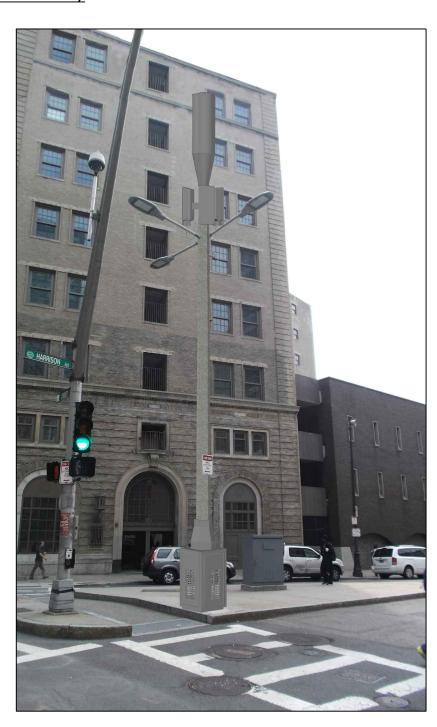
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## STANDARD CONCRETE REPLACEMENT LIGHT POLE WITH BASE CABINET, ANTENNA ARRAY AND POLE TOP ANTENNA (TRIPLE COBRA)



**EXISTING PHOTOGRAPHIC VIEW** 



### PROPOSED PHOTOGRAPHIC SIMULATION

| PREPARED BY:  SYNERGETC  Immunitive Thinking: Engineered Solutions. 21 OKFORD RD  MANSFIELD, MA 02048  www.ucseng.com 1-508-337-7600 | TITLE: EXHIBIT X-20A PROPOSED     |                  |
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|  | BOSTON, MA                        |                  |
|  | POLE INFO: STANDARD CONCRETE POLE |                  |
| PREPARED FOR:  | SURVEYED BY: UCS                  | PRINT NO: 5 OF 5 |
| CROWN  |                                   | SCALE: AS SHOWN  |
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