

verizon DC SMALL CELL
PRESENTATION
9.25.18

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CLASS A
DESIGN

CLASS A - GENERAL DESIGN PARAMETERS

- Multiple Frequencies for densely populated high volume capacity demands, plus faster data speeds....primarily DC Core. Ratio of Class A sites will decrease moving away from core.
- Antennas
 - Target antenna height of 29' to 31' AGL for canister and 25' to 28' AGL for collar antenna.
 - Compact integrated design to reduce connections (dB loss/points of failure) and less ancillary component equals higher quality better aesthetics.
 - Maintain 2.5' vertical separation between antennas to prevent interference.
 - Fewer cables and wires.
- Telecom Equipment
 - Compact integrated design to reduce connections (dB loss/points of failure) and less ancillary component equals higher quality and better aesthetics
 - Ventilation is paramount concern to meet equipment thermal requirements.
 - Pole mounted is preferred location within a range of at least 2.2' below collar antenna. Often referred to as a "cage" as the exterior is basically a mesh material to provide for maximum ventilation while allowing the equipment to have a stealth appearance.
 - Equipment mounted in the base is an option though poses greater risks due to security, ventilation and exposure to elements. Size also increases above pole mounted application and ventilation is barely adequate.
 - Underground/Vaulted – VZW equipment specifications will not allow for underground vaulting.
- Structure
 - All light poles will be replaced with new poles that are structurally capable to handle the wireless equipment. The replacement pole will have the same appearance as the current pole, including the same height and dimensions, and will have a thicker steel gauge on the inside of the pole.
 - All wiring and cable will be enclosed within the light pole.

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CLASS B
DESIGN

CLASS B - GENERAL DESIGN PARAMETERS

- Multiple Frequencies for high data volume with increased speed to meet current and future demands of the Capital city.
- Antennas
 - Target antenna height of 25' to 28" AGL with collar mount antennas.
 - Antenna and Equipment integrated into a single component resulting in increased performance and much smaller footprint.
 - Fewer internal cables.
- Telecom Equipment
 - Integrated into the antenna.
 - Ventilation is paramount concern to meet equipment thermal requirements.
- Structure
 - All light poles will be replaced with new poles that are structurally capable to handle the wireless equipment. The replacement pole will have the same appearance as the current pole, including the same height and dimensions, and will have a thicker steel gauge on the inside of the pole.
 - All wiring and cable will be enclosed within the light pole.




**Class A Pendant Pole w/ Tear Drop,
No Base**



**Class A Pendant Pole w/ Tear Drop,
Octagonal Base**



**Class B Pendant Pole w/ Tear Drop,
No Base**

	DECORATIVE PENDENT POLE WITH TEAR DROP ARM
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Class A Pendant Pole w/ Cobra Head,
No Base



Class A Pendant Pole w/ Cobra Head,
Octagonal Base



Class B Pendant Pole w/ Cobra Head,
No Base

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**PENDENT POLE
WITH COBRA POLE**



Class A Standalone Pole with Base.



Class B Standalone Pole. No Base.



	STANDALONE POLE
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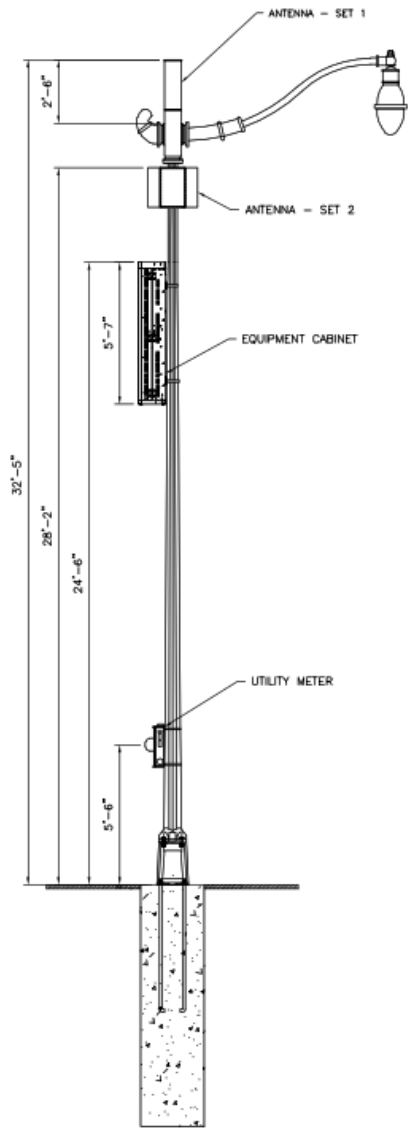
Class A Utility Pole, No Base



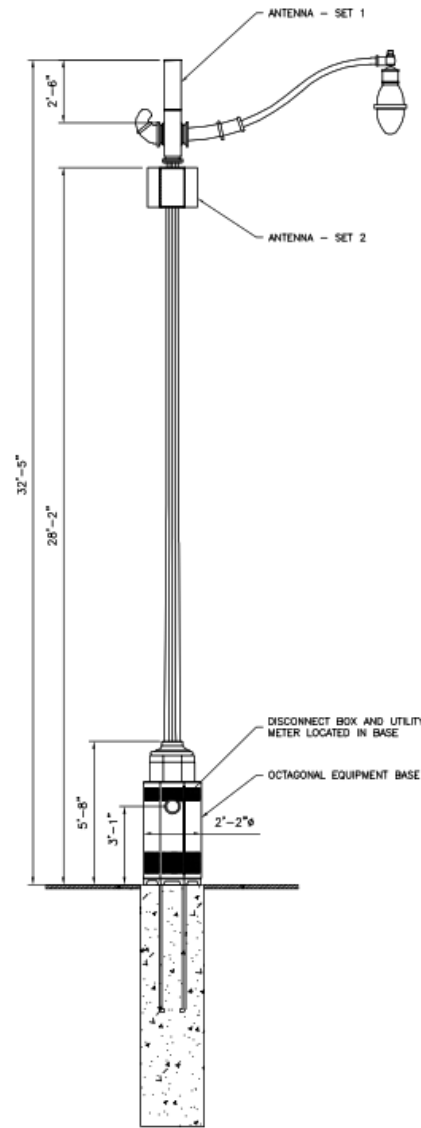
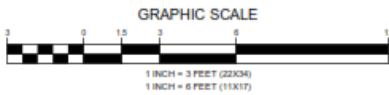
Class B Utility Pole, No Base

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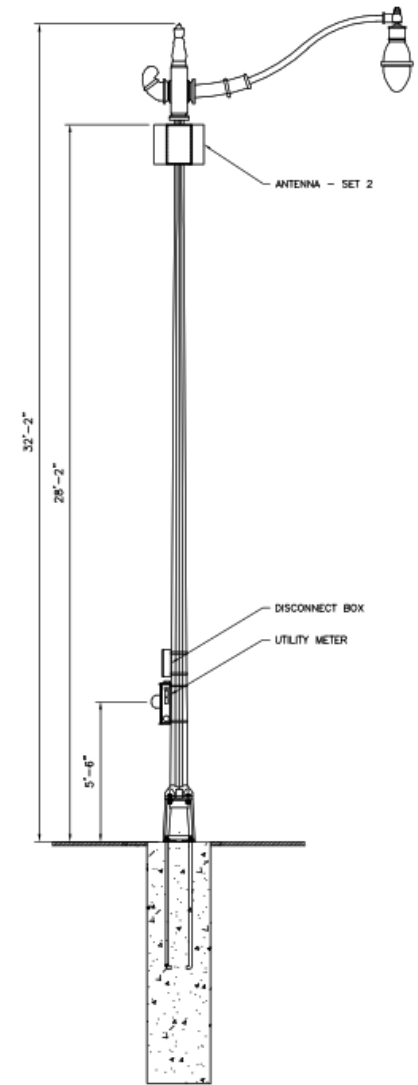
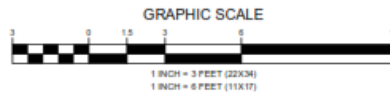
UTILITY POLE



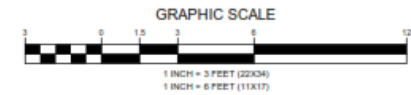
1 CLASS A PENDANT POLE w/ TEAR DROP, NO BASE
 SCALE: 1" = 3' (22X34)
 C-1 SCALE: 1" = 6' (11X17)



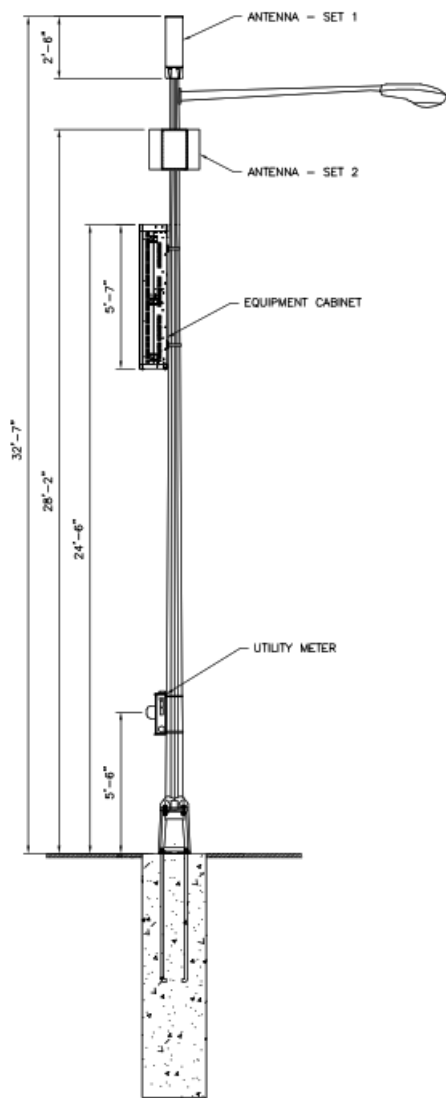
2 CLASS A PENDANT POLE w/ TEAR DROP, OCTAGONAL BASE
 SCALE: 1" = 3' (22X34)
 C-1 SCALE: 1" = 6' (11X17)



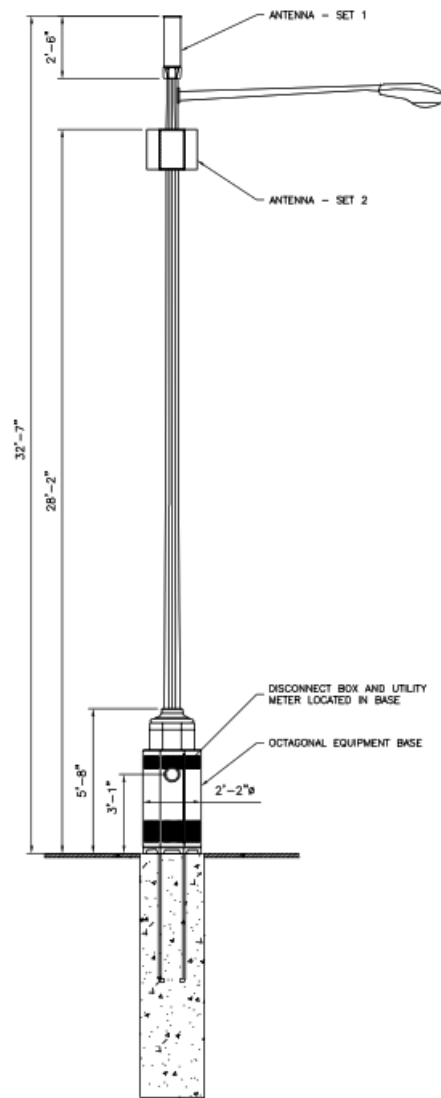
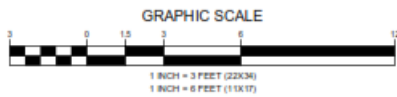
3 CLASS B PENDANT POLE w/ TEAR DROP, NO BASE
 SCALE: 1" = 3' (22X34)
 C-1 SCALE: 1" = 6' (11X17)



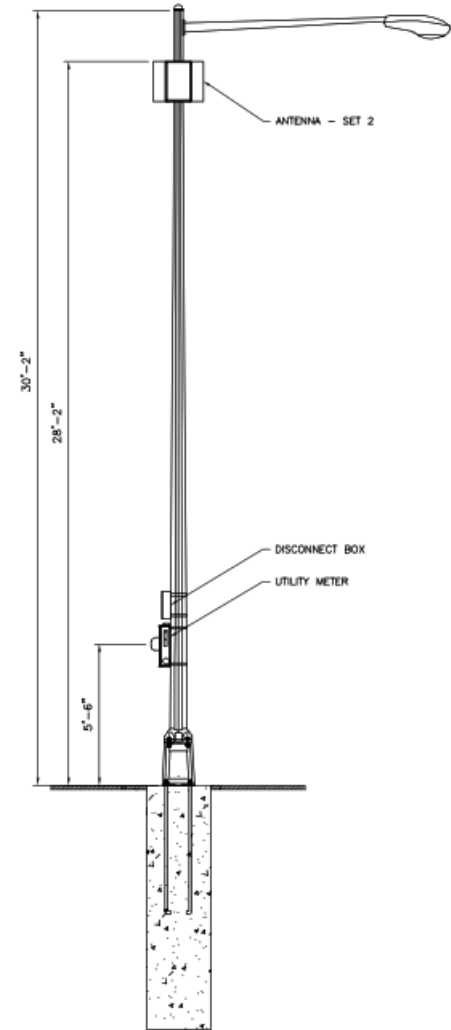
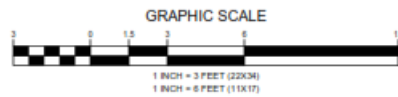
**DECORATIVE PENDENT
 POLE WITH TEAR DROP ARM**



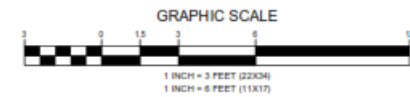
1 CLASS A PENDANT POLE w/ COBRA HEAD, NO BASE
 SCALE: 1" = 3' (22X34)
 C-2 SCALE: 1" = 6' (11X17)



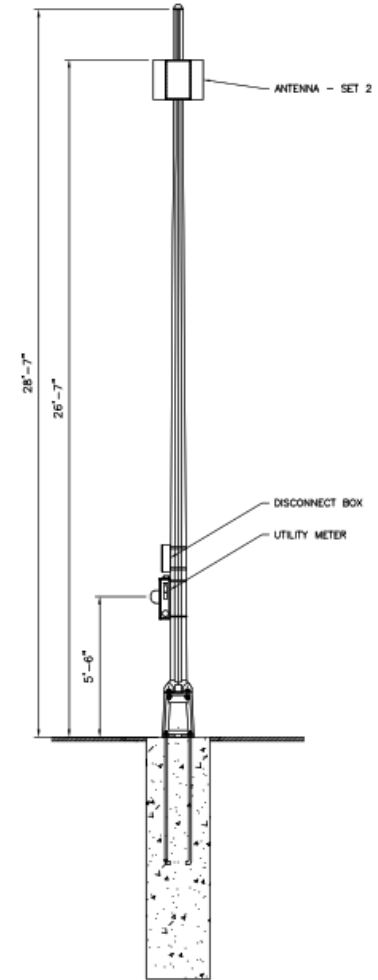
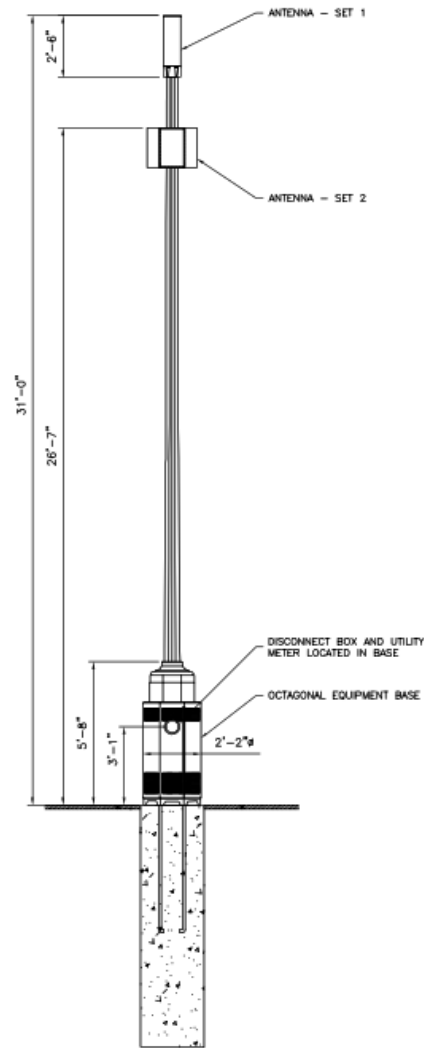
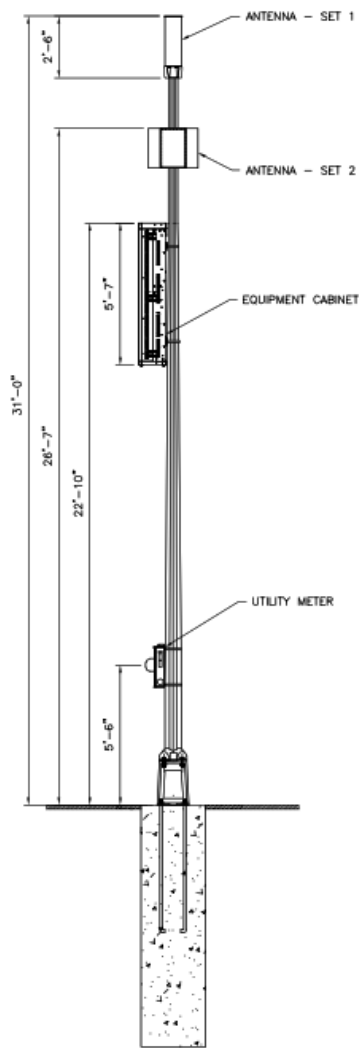
2 CLASS A PENDANT POLE w/ COBRA HEAD, OCTAGONAL BASE
 SCALE: 1" = 3' (22X34)
 C-2 SCALE: 1" = 6' (11X17)



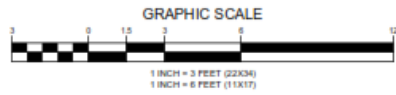
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 SCALE: 1" = 3' (22X34)
 C-2 SCALE: 1" = 6' (11X17)



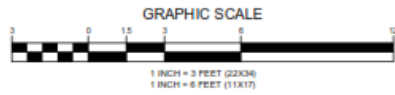
**PENDENT POLE
 WITH COBRA POLE**



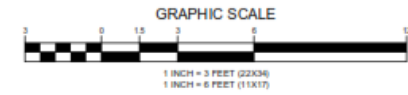
1 CLASS A STANDALONE w/ NO BASE
 C-3 SCALE: 1" = 3' (22X34)
 SCALE: 1" = 6' (11X17)



2 CLASS A STANDALONE w/ OCTAGONAL BASE
 C-3 SCALE: 1" = 3' (22X34)
 SCALE: 1" = 6' (11X17)

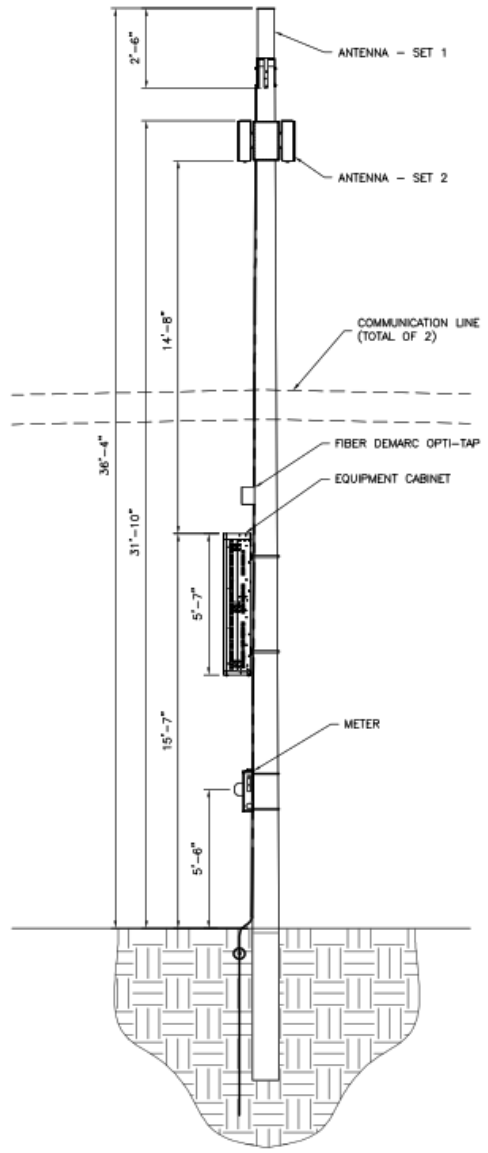


3 CLASS B STANDALONE w/ NO BASE
 C-3 SCALE: 1" = 3' (22X34)
 SCALE: 1" = 6' (11X17)

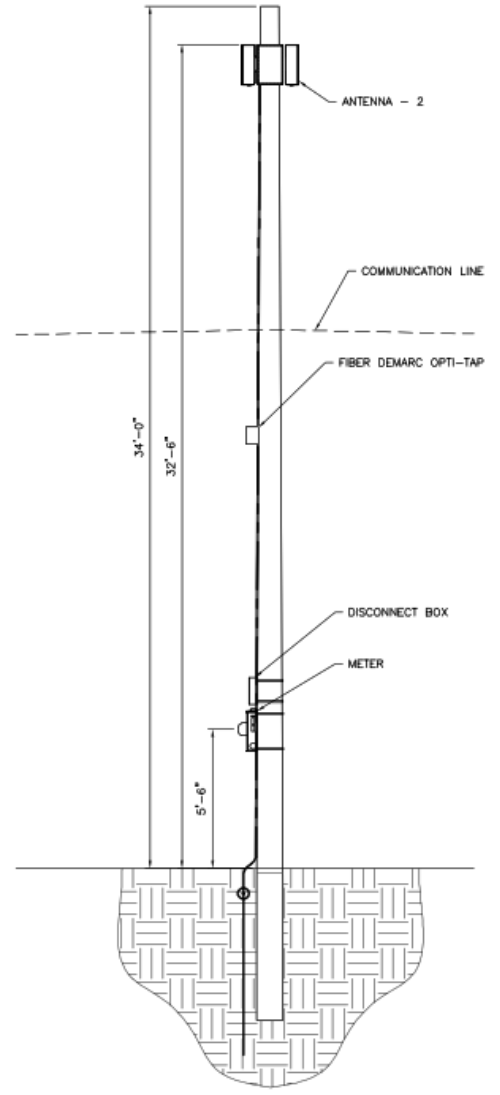
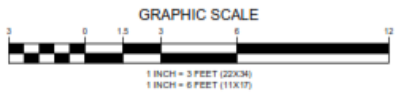


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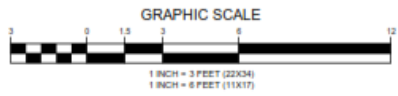
**STANDALONE
 POLE**



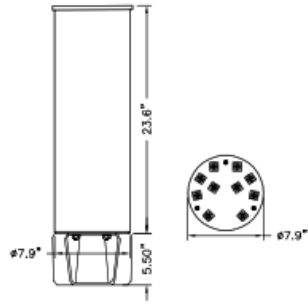
1 CLASS A UTILITY POLE
 SCALE: 1" = 3' (22X34)
 SCALE: 1" = 6' (11X17)



2 CLASS B UTILITY POLE
 SCALE: 1" = 3' (22X34)
 SCALE: 1" = 6' (11X17)

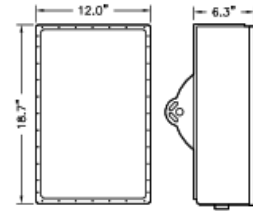


UTILITY POLE



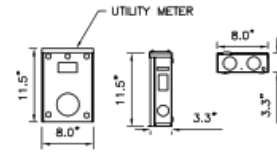
ANTENNA WEIGHT = 15.4 LBS

1 ANTENNA - SET 1 DETAIL
NOT TO SCALE
C-5

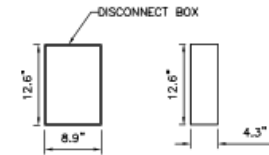


ANTENNA WEIGHT = 45.0 LBS PER UNIT

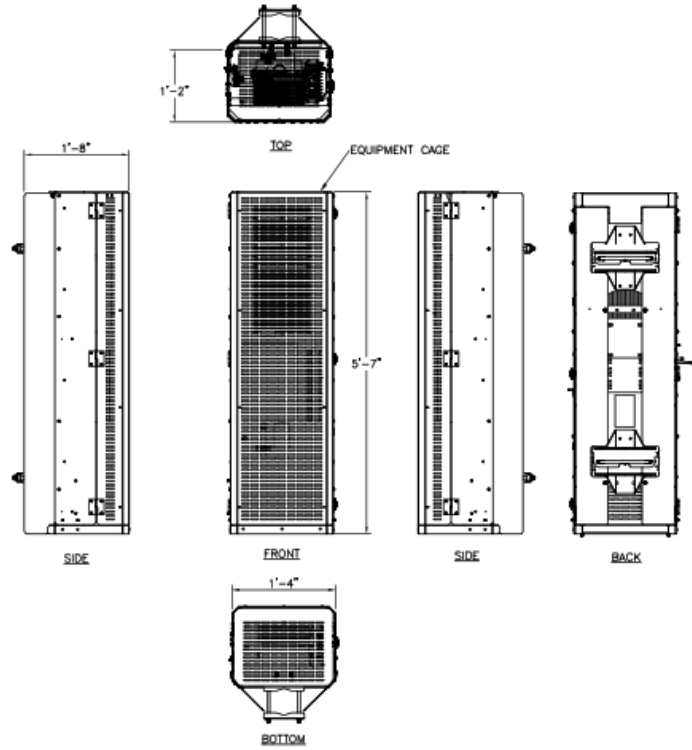
2 ANTENNA - SET 2 DETAIL
NOT TO SCALE
C-5



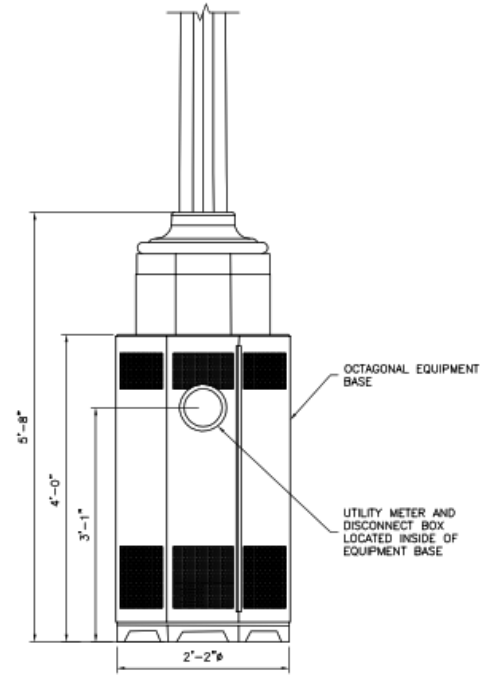
3 UTILITY METER DETAIL
NOT TO SCALE
C-5



4 DISCONNECT BOX DETAIL
NOT TO SCALE
C-5



5 EQUIPMENT CAGE DETAIL
NOT TO SCALE
C-5



6 EQUIPMENT BASE DETAIL
NOT TO SCALE
C-5



**EQUIPMENT
DETAILS**

For further information please contact:

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