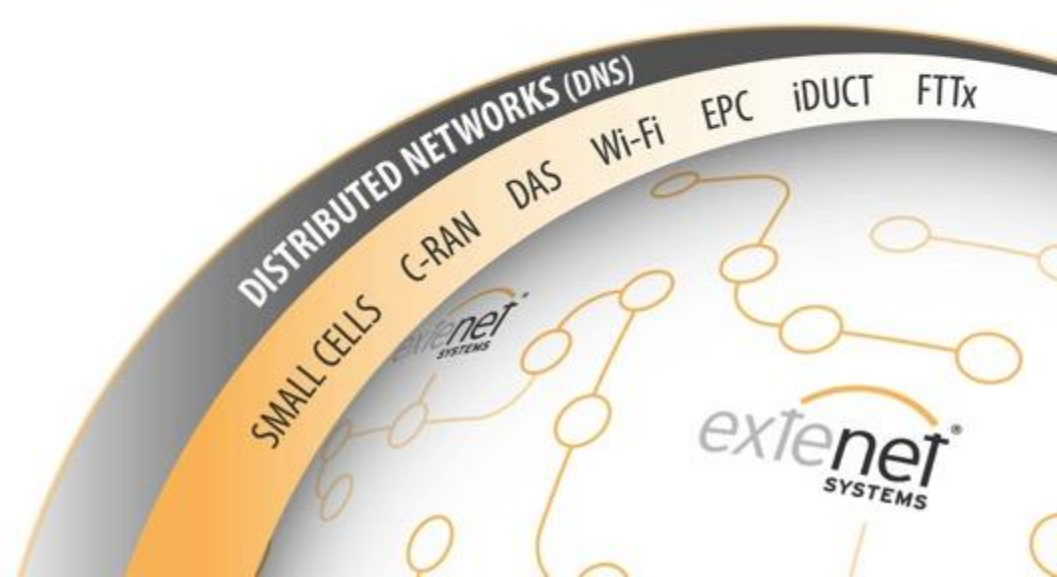


APPLICATION FOR SITE PLAN DISTRIBUTED ANTENNA SYSTEM/SMALL CELL NODE VILLAGE OF FLOWER HILL, NY

MAY 6, 2019



STATEMENT OF INTENT

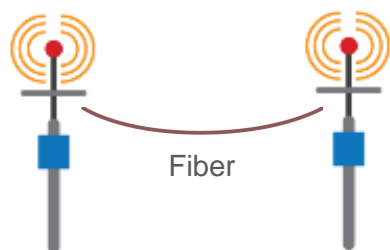
ExteNet Systems, Inc is requesting a Site Plan Review be conducted for the construction of a wireless telecommunications facility within the Village of Flower Hill.

PURPOSE

Install small cell wireless infrastructure to patch discrete holes in Verizon Wireless 4G coverage and provide greater capacity to 4G wireless network.

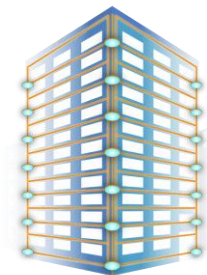
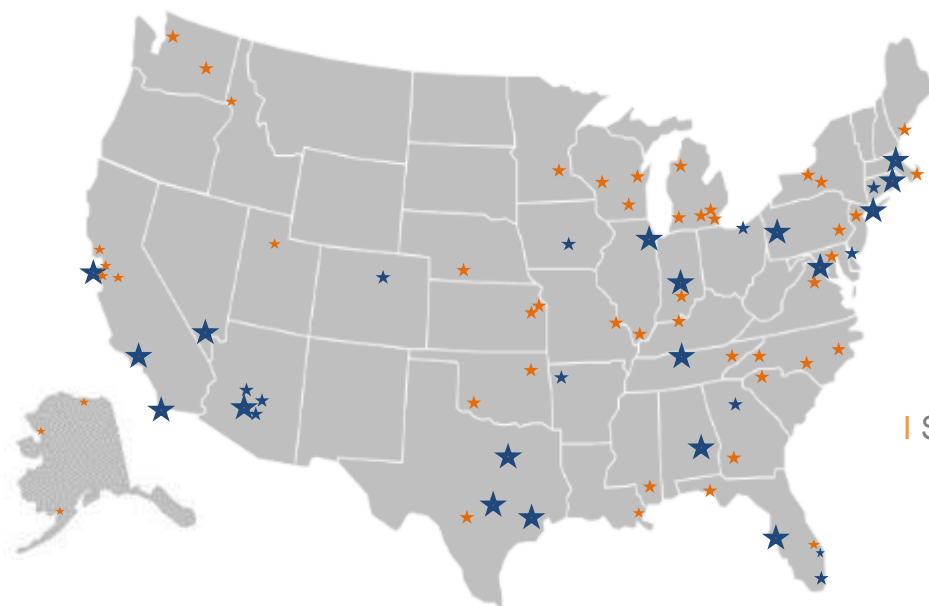
ABOUT EXTENET SYSTEMS

EXTENET IS A LEADING PROVIDER OF
CONVERGED COMMUNICATION INFRASTRUCTURE AND SERVICES
FOR ADVANCED NETWORK CONNECTIVITY



OUTDOOR NETWORKS

- | Suburban | Urban
- | Rural



INDOOR NETWORKS

- | Sports & Entertainment | Class A
- | Hospitality | Healthcare

24 x 7

CARRIER CLASS NOC

KEY EXTENET COMPANY FACTS

- | FOUNDED IN 2002 | LARGEST INDEPENDENT OWNER & OPERATOR OF DISTRIBUTED NETWORKS (DNS)
- | RE-CAPITALIZED FOR \$1.4 BILLION IN 2015 | PRIMARY CUSTOMERS INCLUDE CARRIERS & BUILDING OWNERS

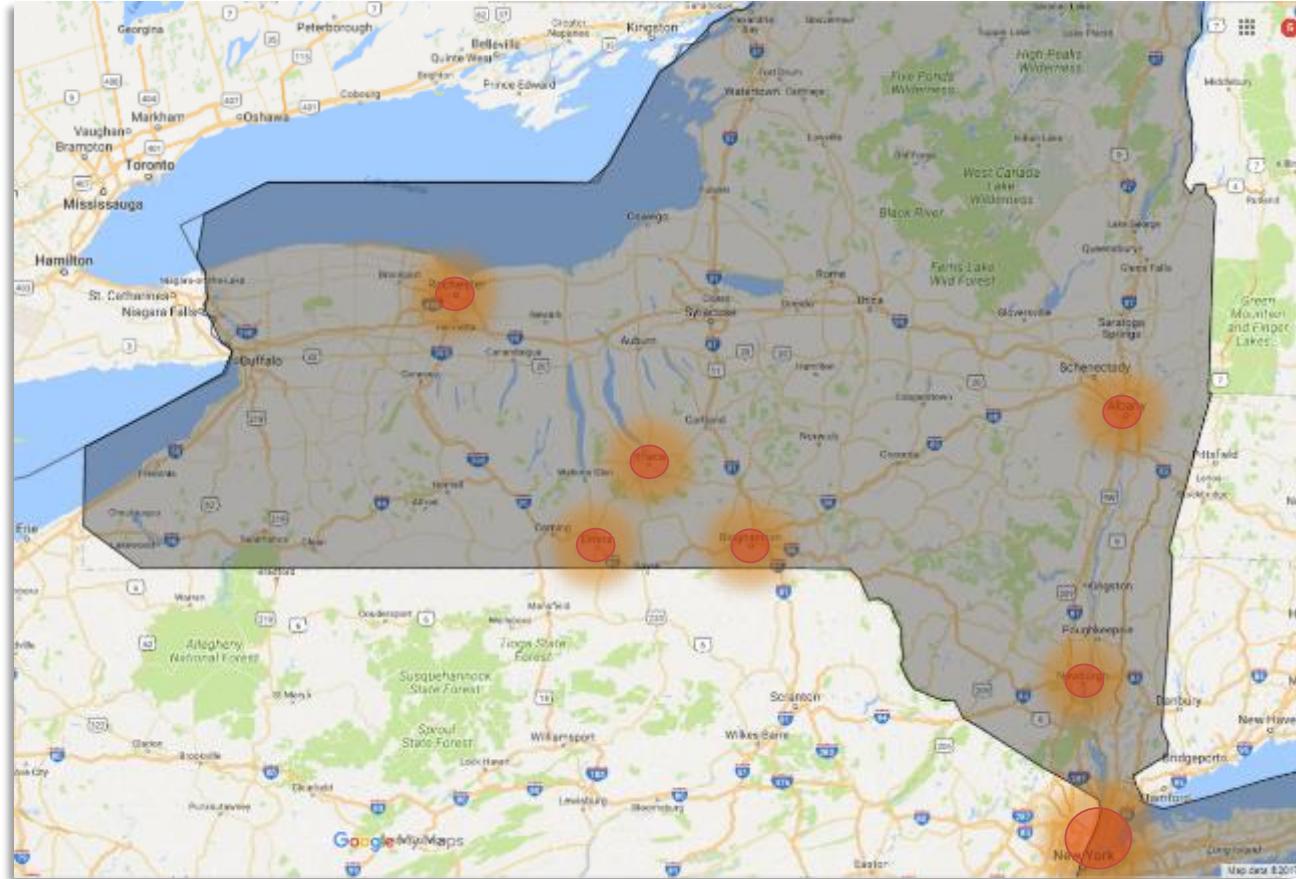
EXTENET OUTDOOR DEPLOYMENTS IN NEW YORK

ACTIVE DEPLOYMENTS

1. City of Newburgh
2. City of Rochester
3. City of Mount Vernon
4. City of Yonkers
5. City of Ithaca
6. Village of Pelham Manor
7. Village of Pelham
8. New York City
9. Village of Jackson City
10. City of Binghamton
11. Town of Elmira
12. City of Elmira
13. City of Albany

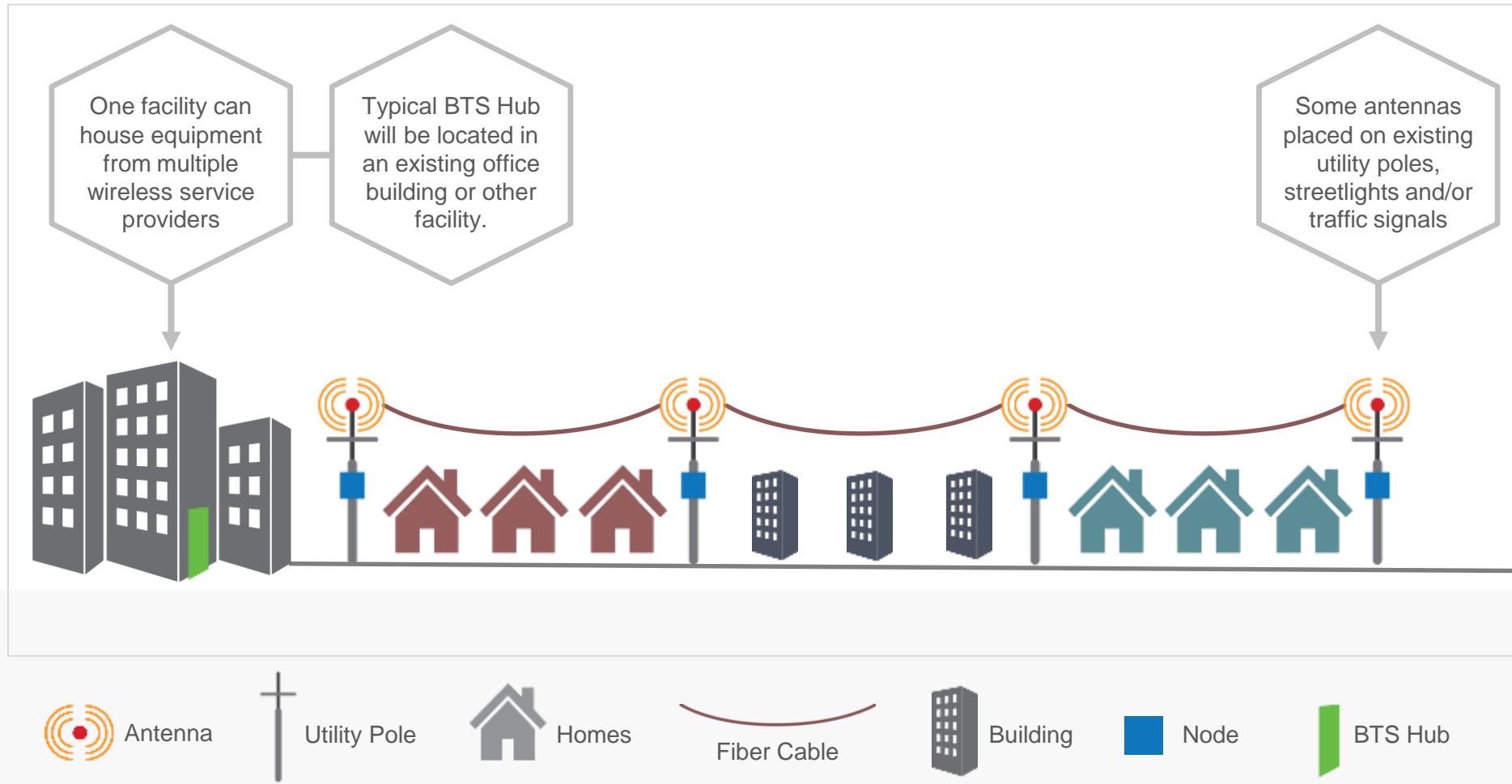
SCHEDULED FOR 2019

1. Village of Kings Point
2. Village of Munsey Park
3. Village of Flower Hill
4. Village of Lake Success

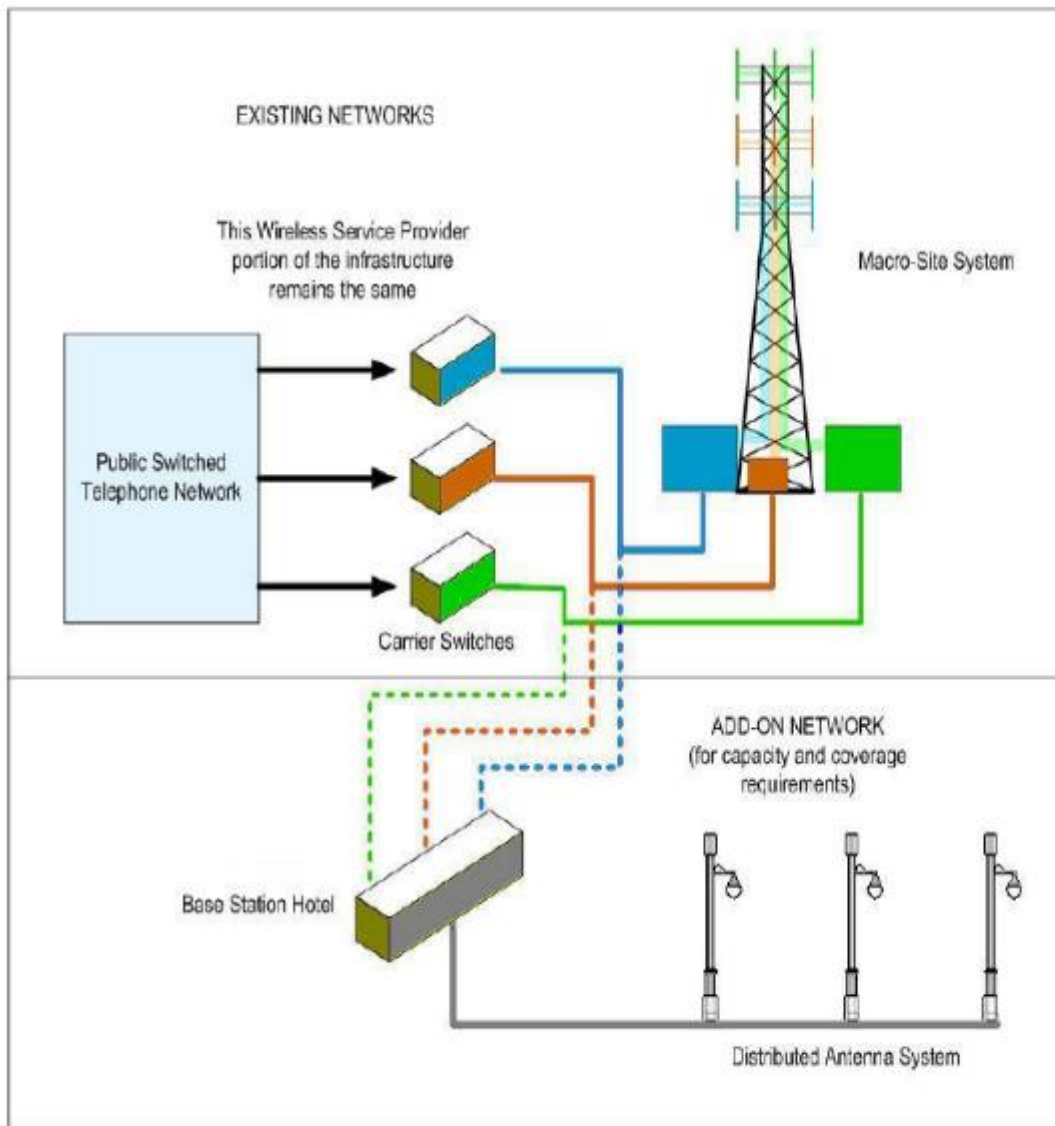


WHAT ARE DISTRIBUTED NETWORKS AND SMALL CELLS AND WHY ARE THEY NEEDED?

OUR DISTRIBUTED NETWORKS (DNS) BRING NETWORKS CLOSER TO USER TO AUGMENT CONNECTIVITY



COMPARING DNS TO “MACRO” SITES



Macro Site

200-foot tower with multiple equipment sheds (one per carrier)

DNS

40-foot light poles (existing) with one “hotel” housing multiple carriers’ equipment

COMMUNITY BENEFITS

- Improved wireless services - capacity and coverage
- Increased wireless broadband speeds
- Smaller form-factor and less obtrusive than towers
- Public safety
- Carrier neutral host approach reduces proliferation of equipment

EXTENET'S PROPOSED DAS NODE DETAILS

APPLICATION SUMMARY

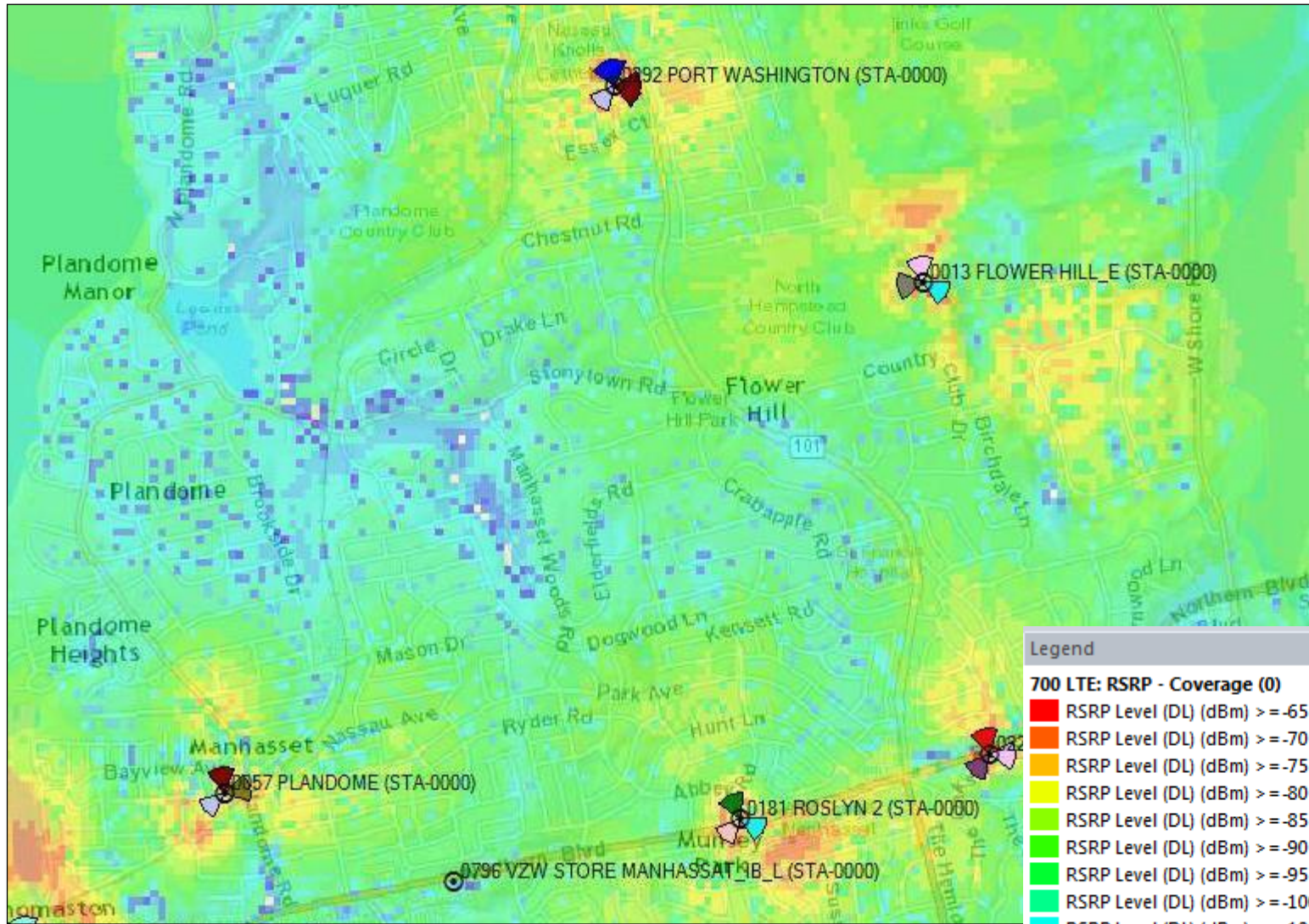
- Distributed Antenna System (DAS) Nodes Constructed on wood utility poles. Fiber is not part of the application.
- 18 Sites
 - 2 or 3 Existing poles
 - 5 or 6 Replacement poles
 - 9 to 12 Decorative street lights
- Form Factor
 - Wood Utility Poles
 - Heights range from 34ft to 40ft
 - Antenna – 14.6in diameter by 24in height (pole top or within communications zone)
 - Radio Shroud – 35.2in x 15.6in x 9in (9.5 ft above ground)
 - Decorative Street Lights – 30ft height

APPLICATION SUMMARY

- System Power
 - The maximum deployed transmit power specified for these radio units is 20 Watts each at 700MHz & 1900 MHz and 40 Watts at 2100 MHz.

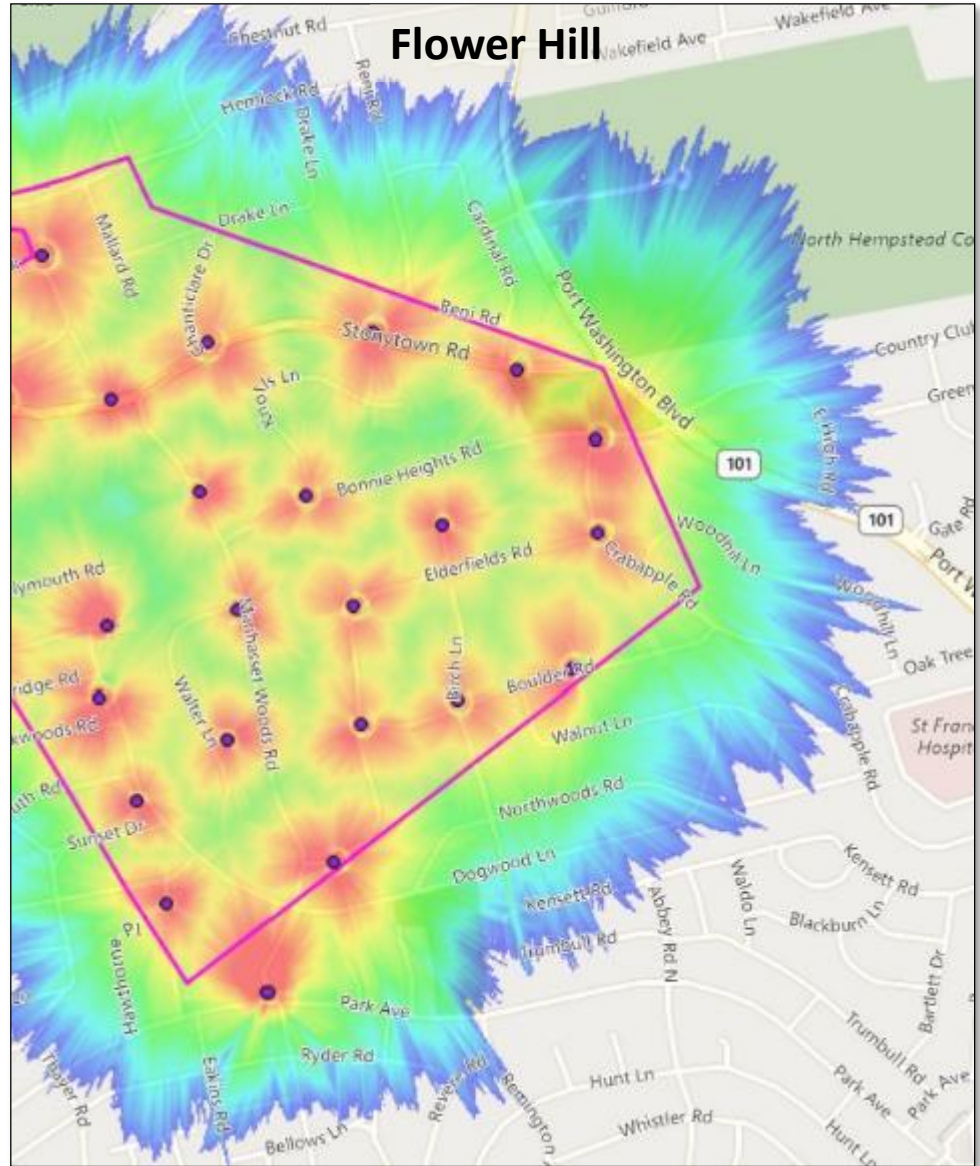
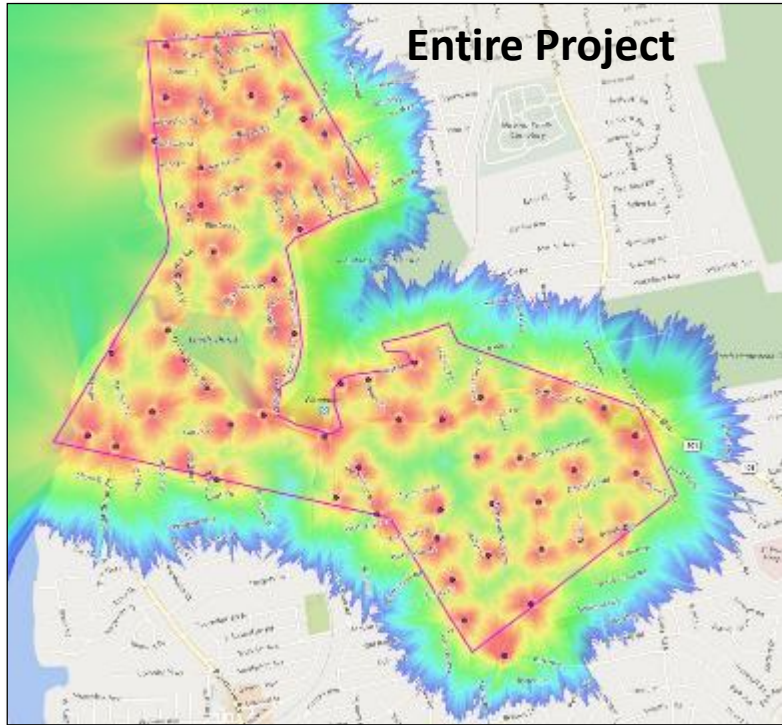
EXISTING COVERAGE MAP

Red is good. Yellow is just OK. Anything below yellow is substandard.



AWS Coverage from Verizon Wireless

PROPOSED RF COVERAGE IN FLOWER HILL

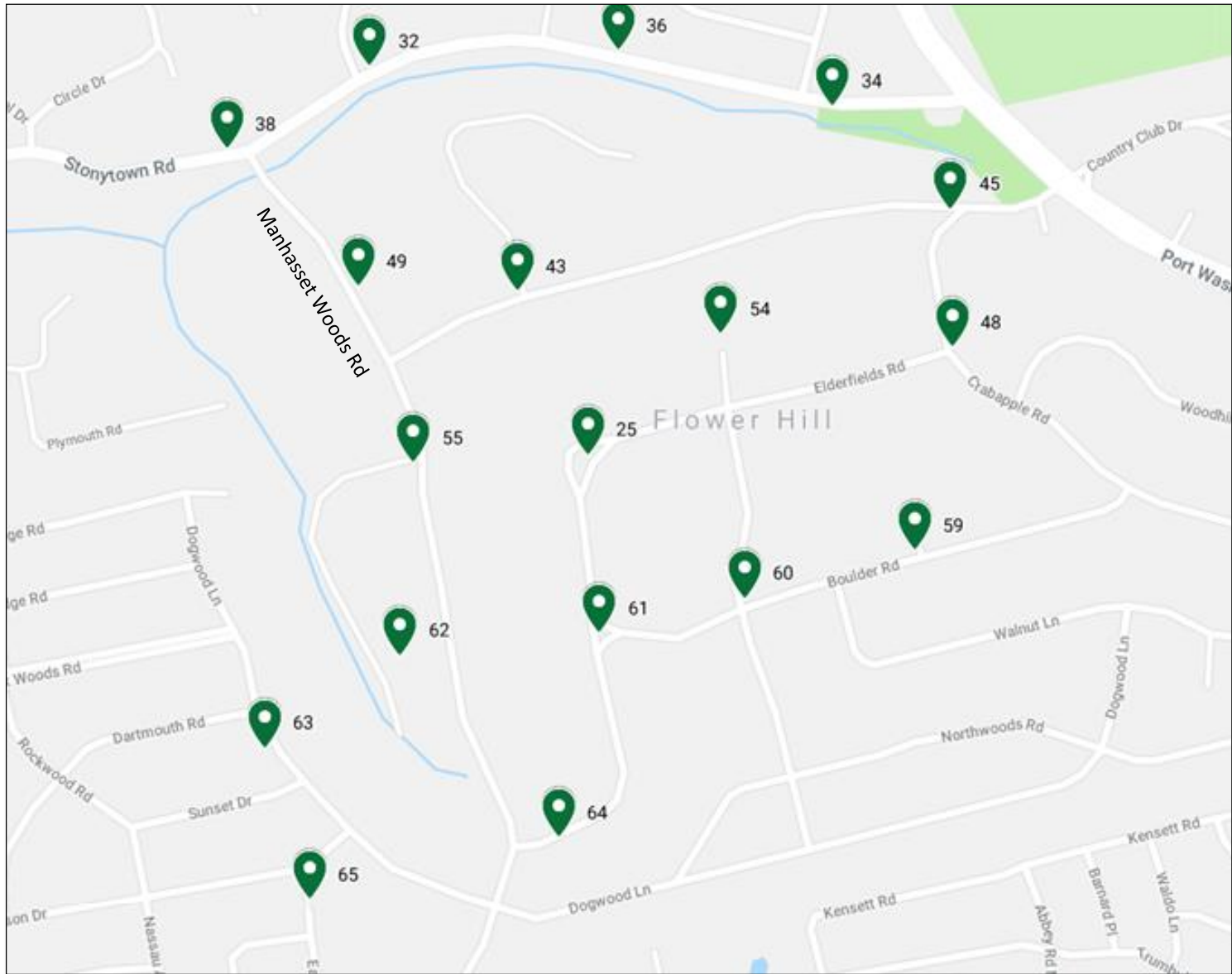


Legend

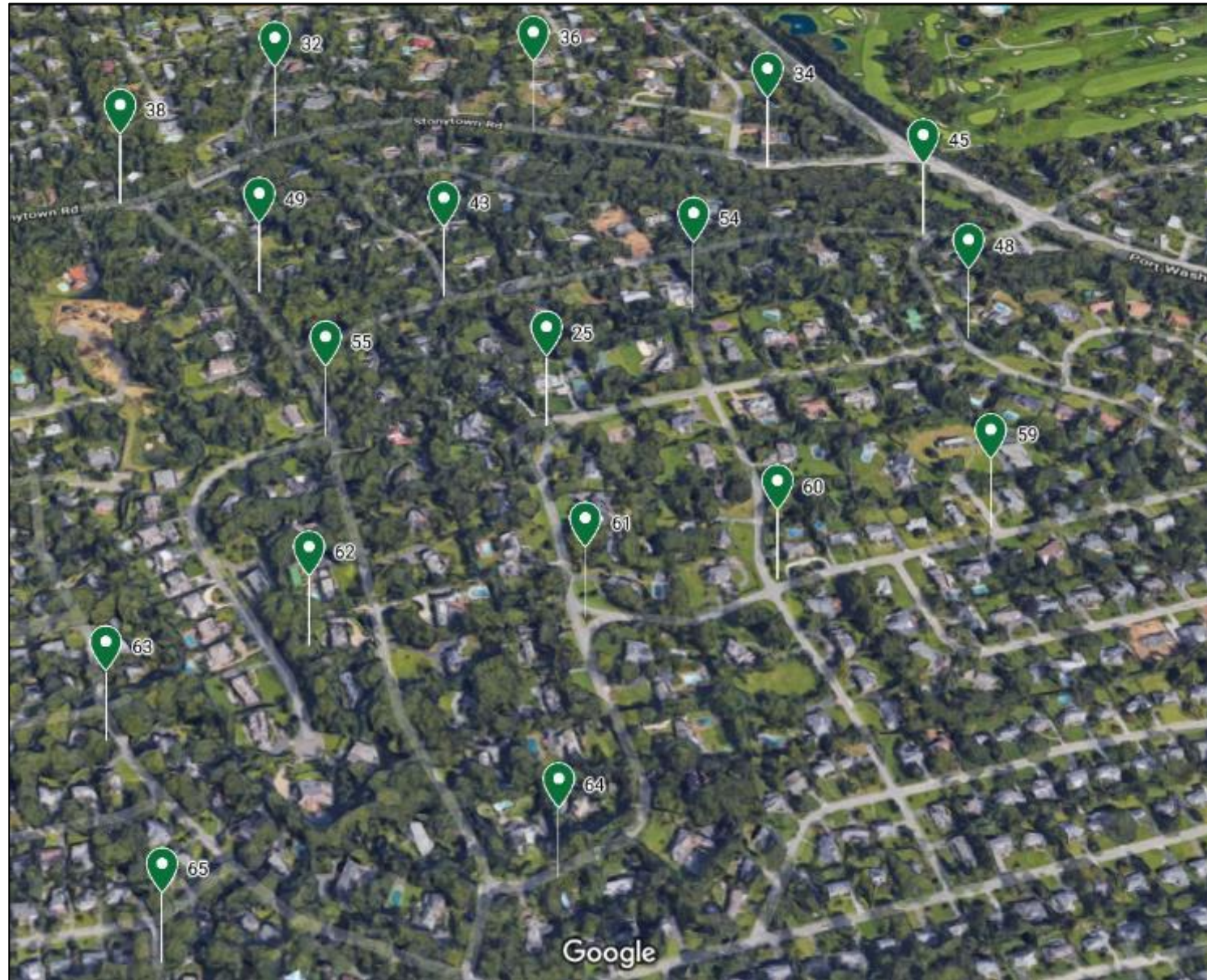
700 LTE: RSRP - Coverage (0)

- RSRP Level (DL) (dBm) > = -65
- RSRP Level (DL) (dBm) > = -70
- RSRP Level (DL) (dBm) > = -75
- RSRP Level (DL) (dBm) > = -80
- RSRP Level (DL) (dBm) > = -85
- RSRP Level (DL) (dBm) > = -90
- RSRP Level (DL) (dBm) > = -95
- RSRP Level (DL) (dBm) > = -100
- RSRP Level (DL) (dBm) > = -105
- RSRP Level (DL) (dBm) > = -110
- RSRP Level (DL) (dBm) > = -115

PROPOSED DAS NODES IN FLOWER HILL



PROPOSED DAS NODES IN FLOWER HILL



EXAMPLE INSTALLATIONS

TYPICAL PHOTOSIM (COMMUNICATIONS ZONE)



Site Name: Village of Flower Hill
Wireless Communication Facility

Photograph Information:
Typical Comm Zone Antenna
Showing the Proposed Site

NB-C
TOTALLY COMMITTED.

TYPICAL PHOTOSIM (POLE TOP)



Site Name: Village of Flower Hill
Wireless Communication Facility

Photograph Information:
Typical Pole Top Antenna
Showing the Proposed Site



PROPOSED EQUIPMENT

AMPHENOL ANTENNA

Mounting Options

This antenna can be mounted using any of the following mounting kits. Mounting kits can be ordered as a separate line item with model number CWWT070X06Fxy-0 or can be included with the antenna as a single line item. See Ordering Options (page 1) for details.

Side Mounting, Pipe Mounting Kit

Part Number: CW1 MKS SIDL



Top Mounting, Pipe Mounting Kit

Part Number: CW1 MKS TOP

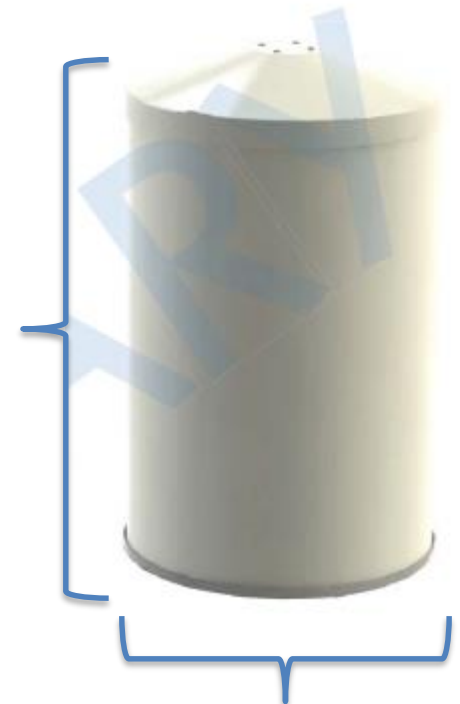


Utility Pole Mounting Kit

Part Number: WB3X-MKS-01



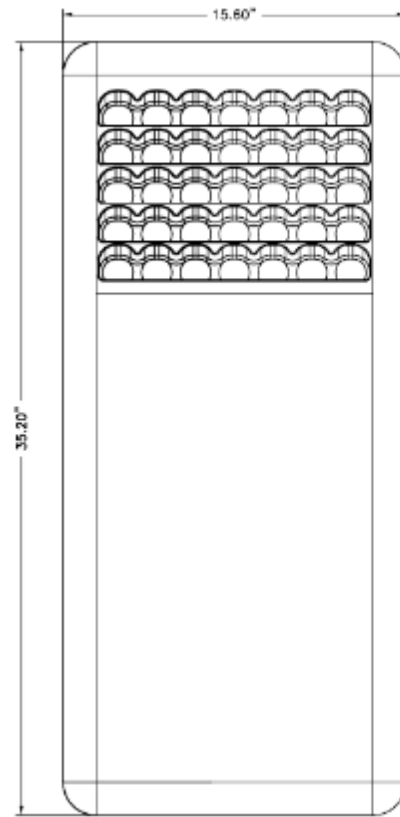
24"



14.6"

PROPOSED EQUIPMENT

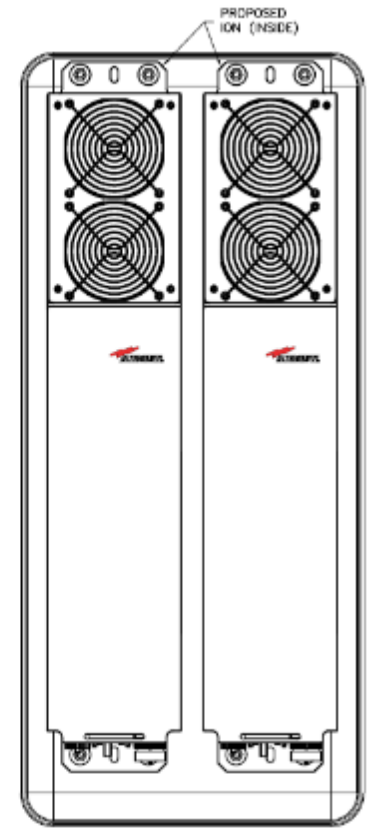
COMMSCOPE SHROUD WITH RADIOS



FRONT_VIEW



SIDE_VIEW



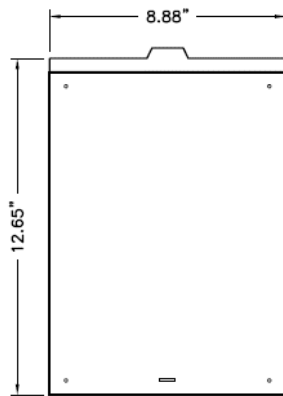
INSIDE_VIEW

PROPOSED EQUIPMENT

OTHER EQUIPMENT



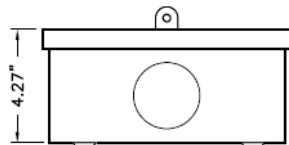
AC Load Center



FRONT



SIDE



TOP

SQUARE D LOAD CENTER:
PART NO. Q0612L100RB



100A Electrical Meter

Depth 3.5in
Length 8in
Height 10.9in

ACTUAL STREETLIGHTS AS SMALL CELL SITES



ACTUAL STREETLIGHTS AS SMALL CELL SITES



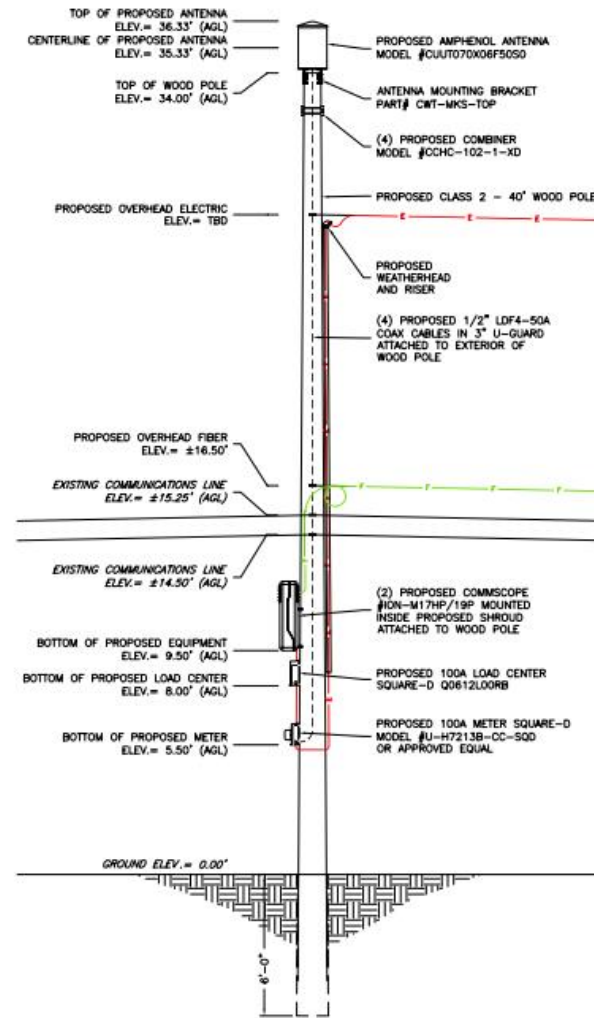
ACTUAL STREETLIGHTS AS SMALL CELL SITES



PHOTOSIMULATIONS OF STREETLIGHTS AS SMALL CELLS

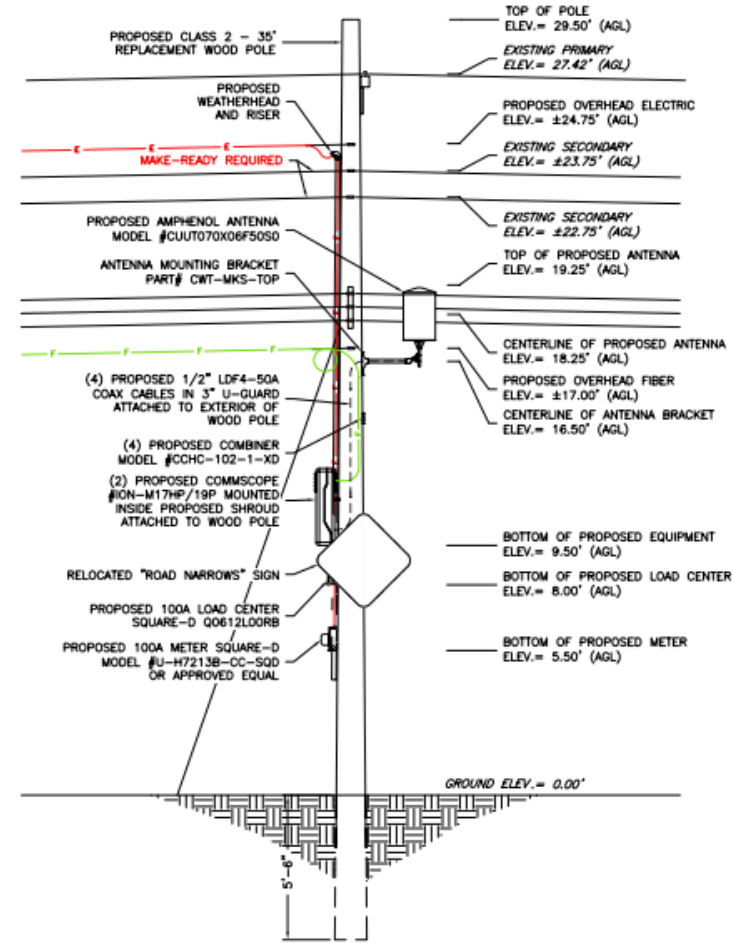
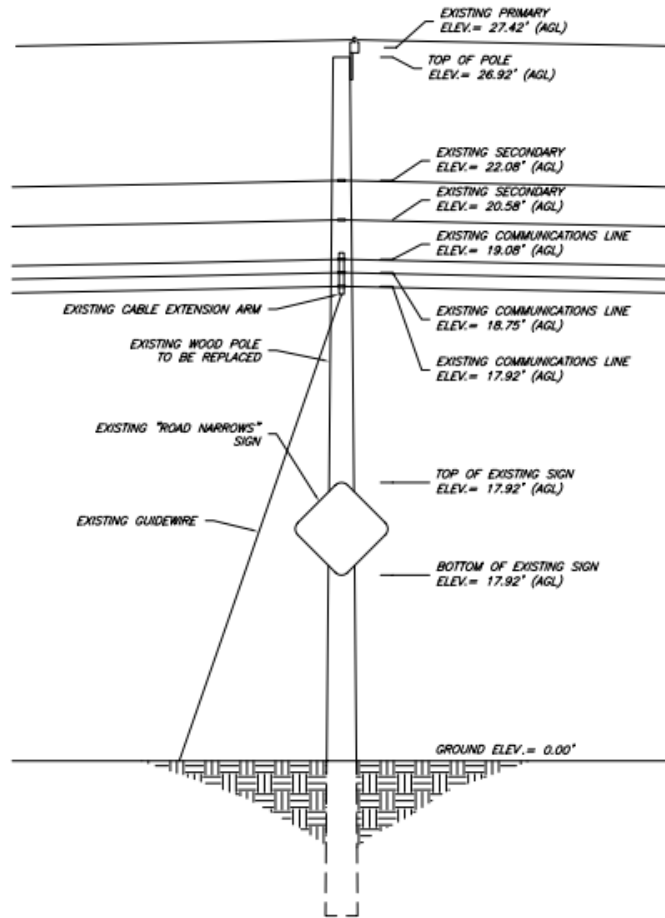


EXAMPLE CONCEPTUAL DRAWING (POLE TOP ANTENNA)



PROPOSED ELEVATION (LOOKING NORTHEAST)

EXAMPLE CONCEPTUAL DRAWING (COM ZONE ANTENNA)



Node 38
Near 335 Stonytown Rd

EXISTING ELEVATION (LOOKING EAST)

PROPOSED ELEVATION (LOOKING EAST)

STREETLIGHT LOCATION DETAILS

NODE 25

DECORATIVE METAL STREET LIGHT



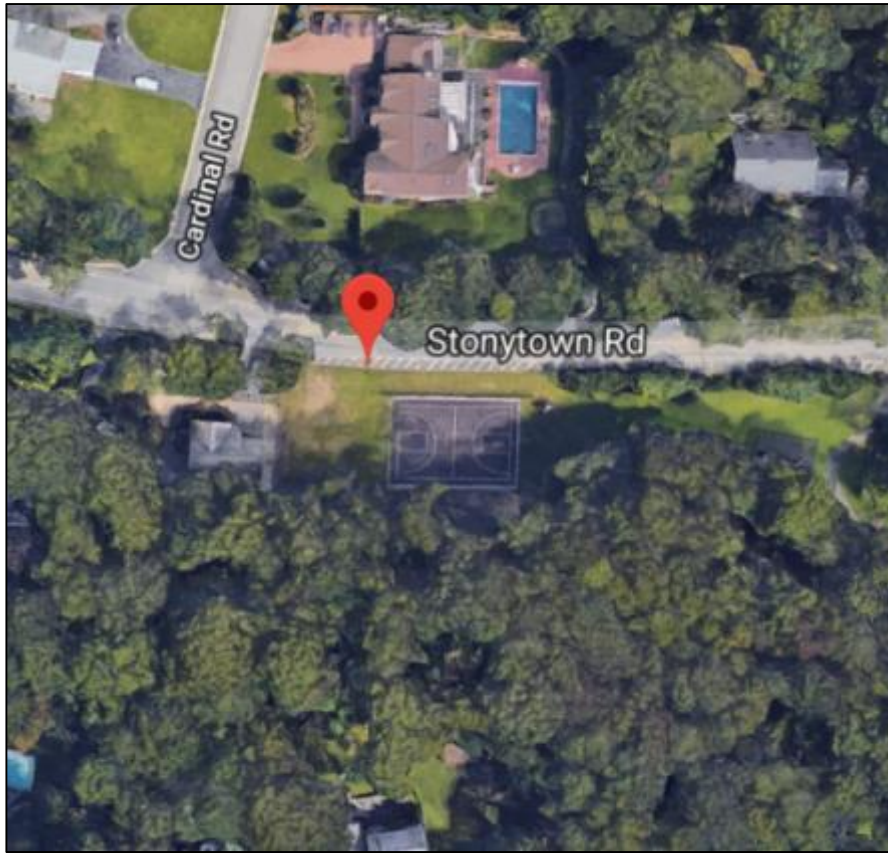
NODE 32

REPLACEMENT WOOD POLE



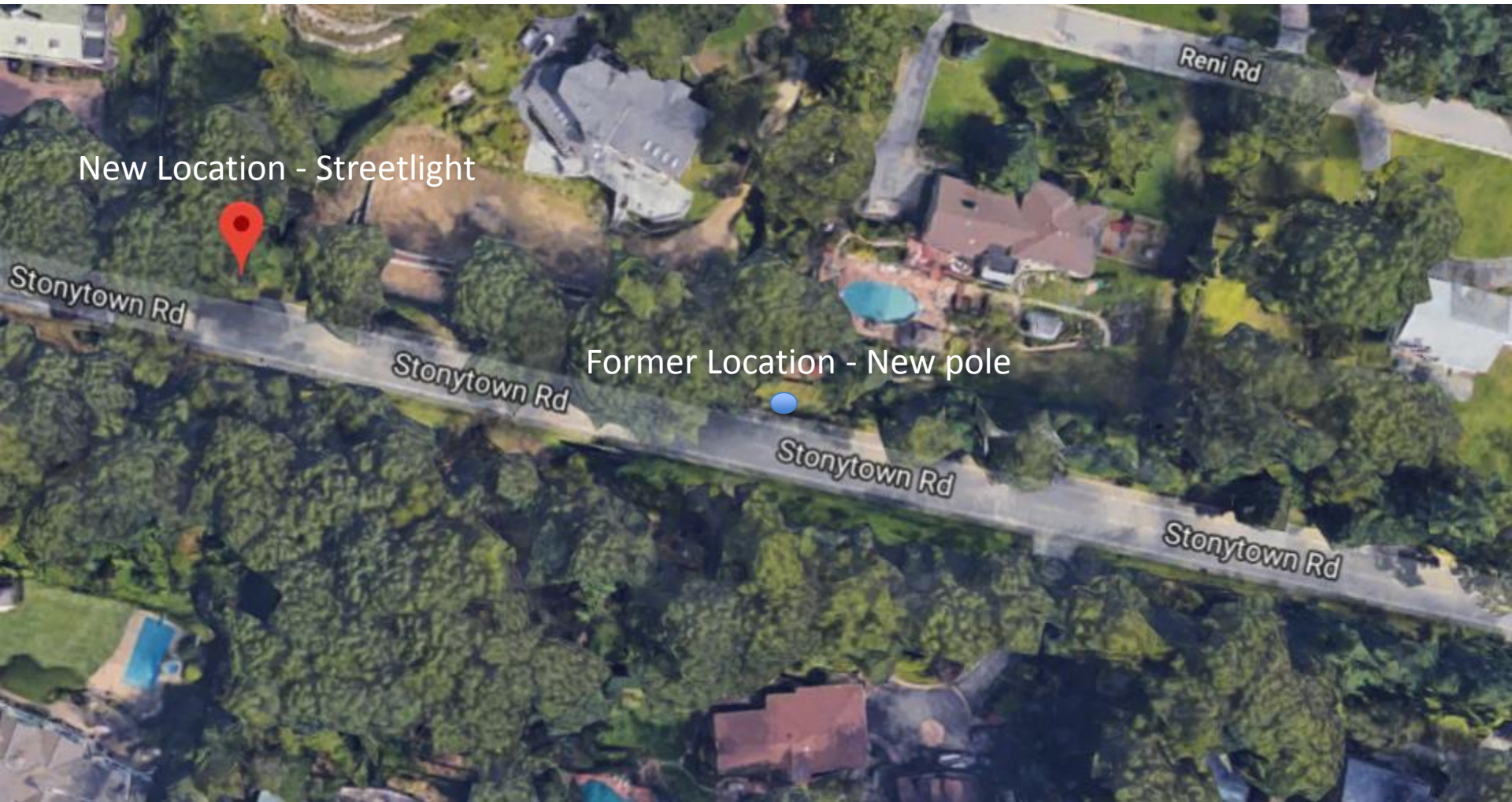
NODE 34

EXISTING WOOD POLE



NODE 36

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 36

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 38

REPLACEMENT WOOD POLE



NODE 43

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



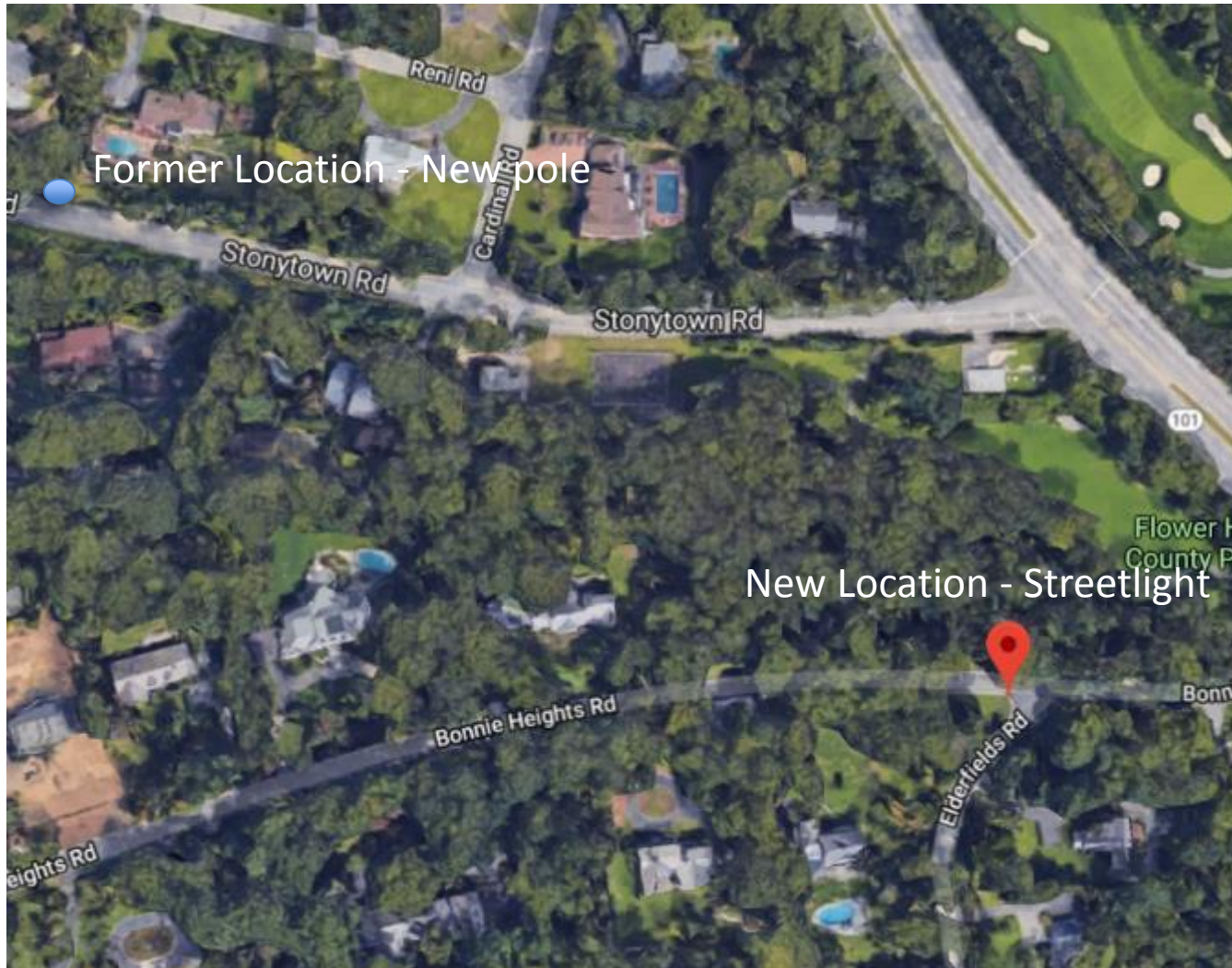
NODE 43

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 45

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



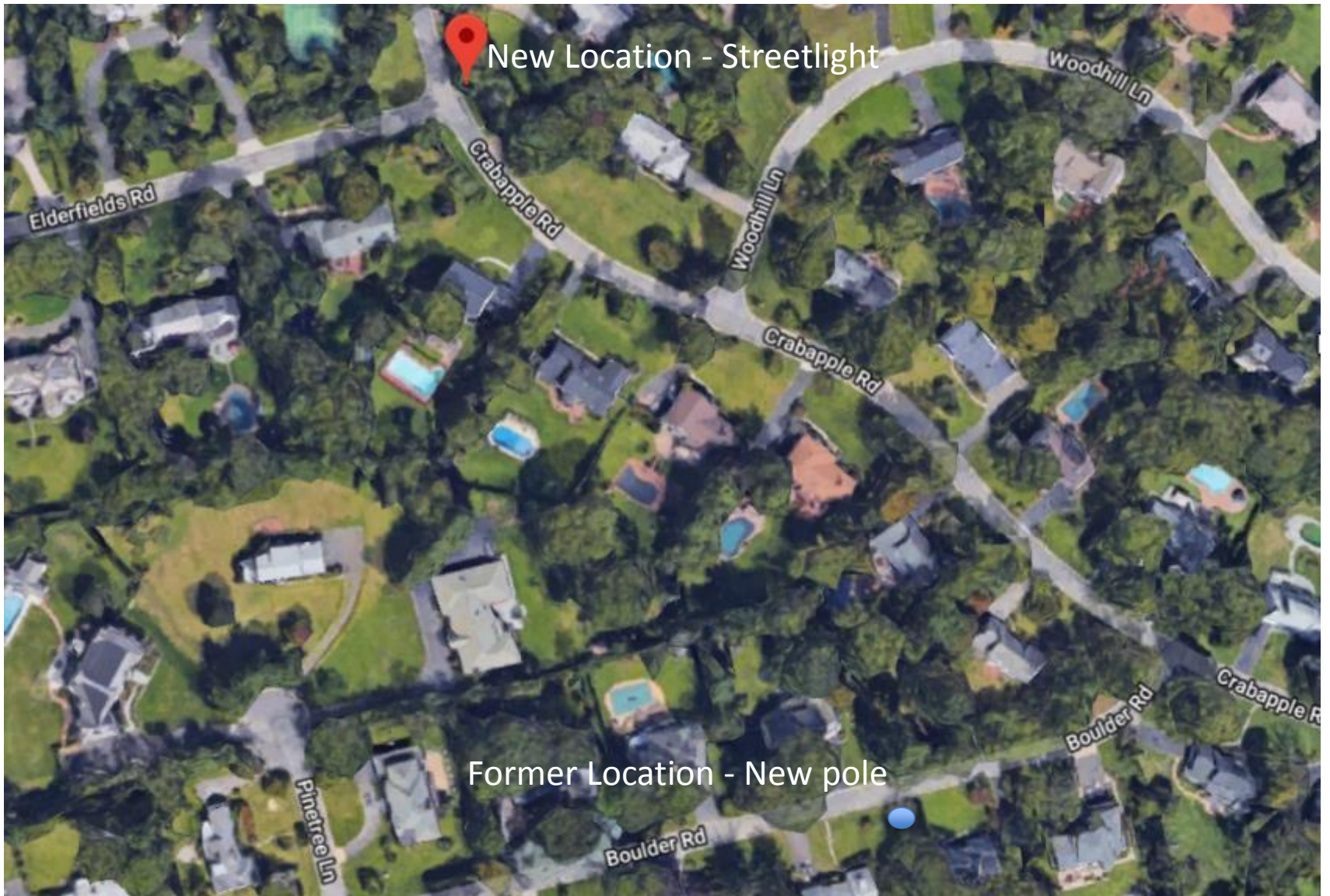
NODE 45

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 48

DECORATIVE METAL STREET LIGHT OR EXISTING POLE (RELOCATED SINCE APPLICATION FILING)



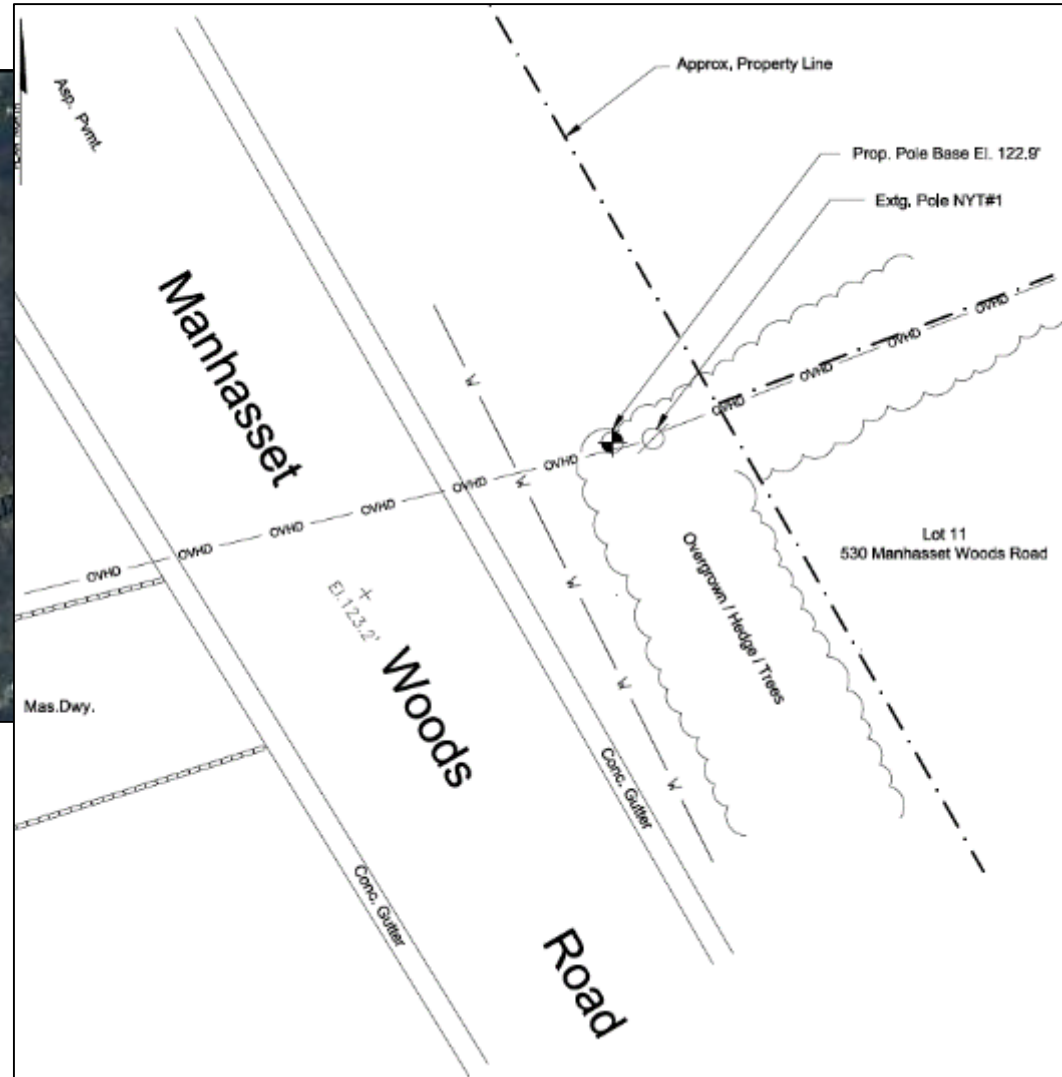
NODE 48

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 49

DECORATIVE METAL STREET LIGHT OR REPLACEMENT WOOD POLE
NEAR 530 MANHASSET WOODS RD



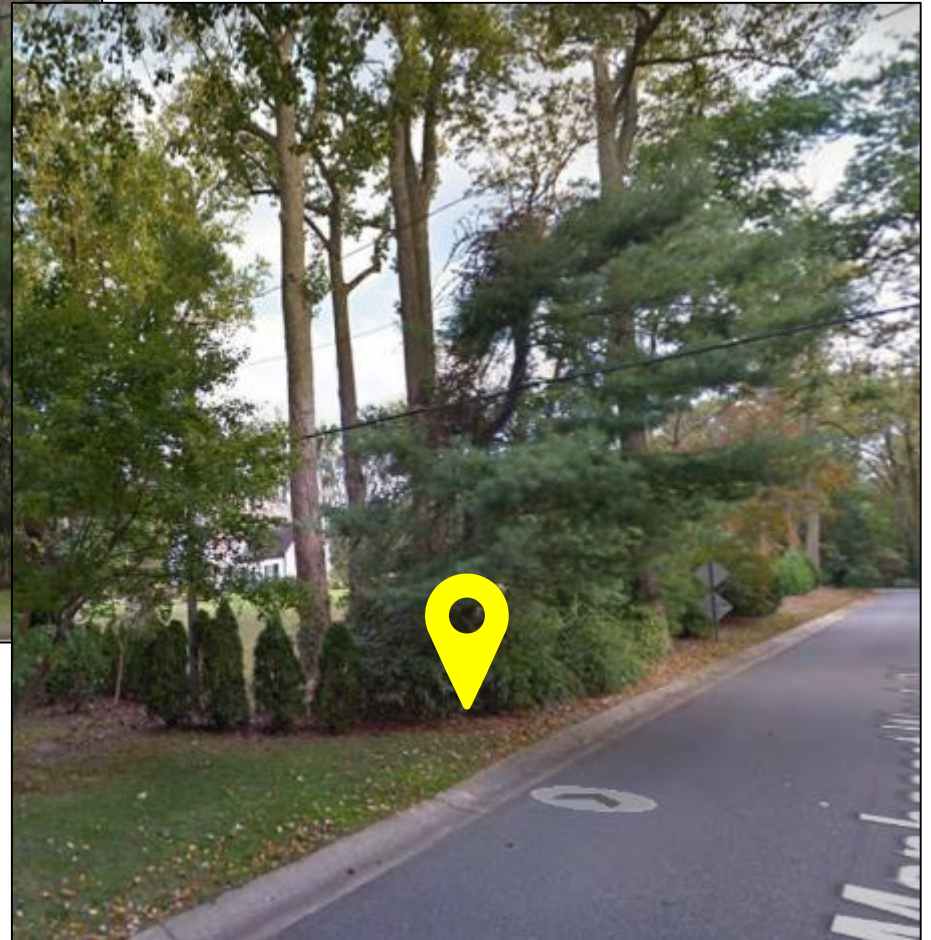
NODE 49

DECORATIVE METAL STREET LIGHT OR REPLACEMENT WOOD POLE



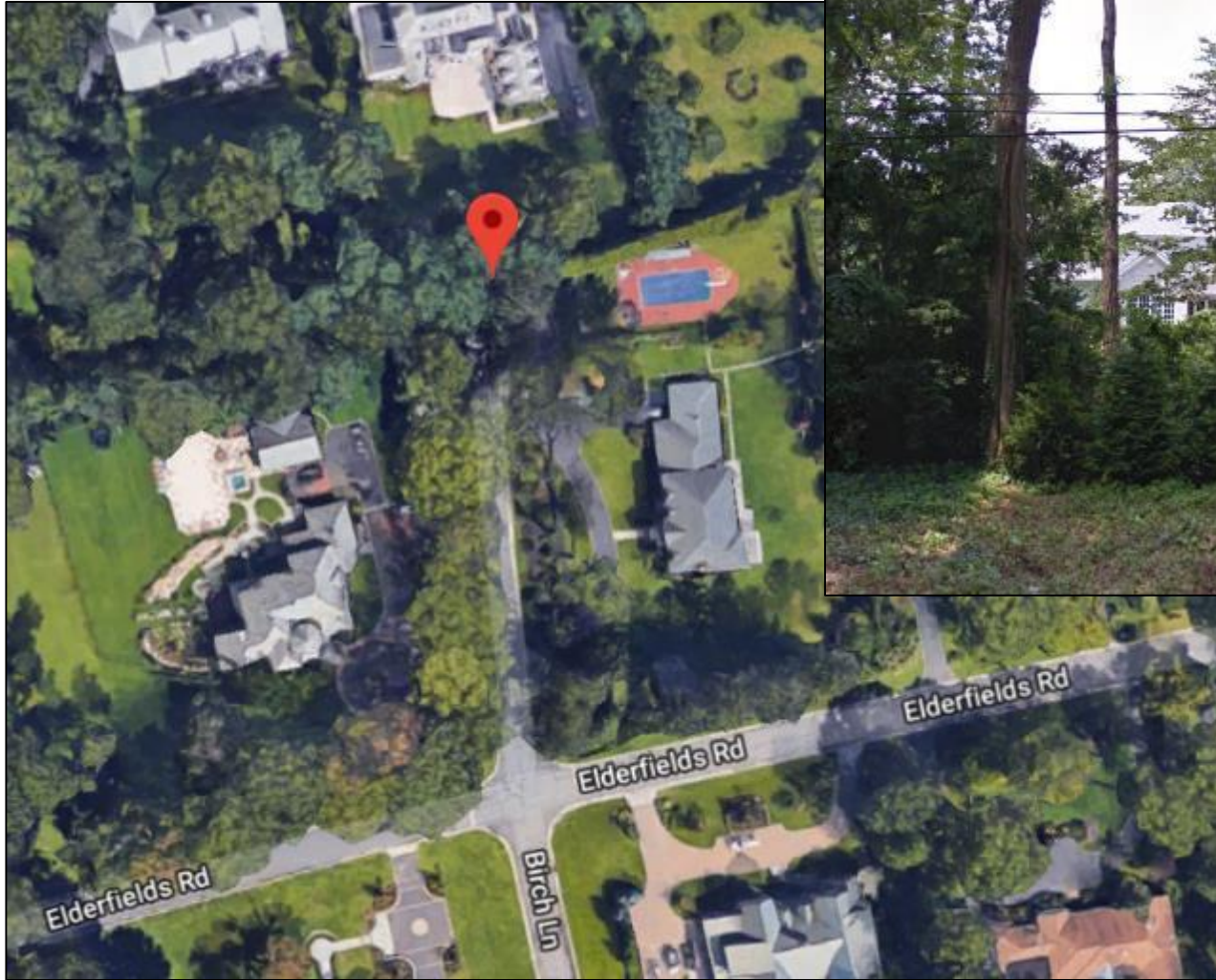
Existing Wood Pole

New Street light at Curb



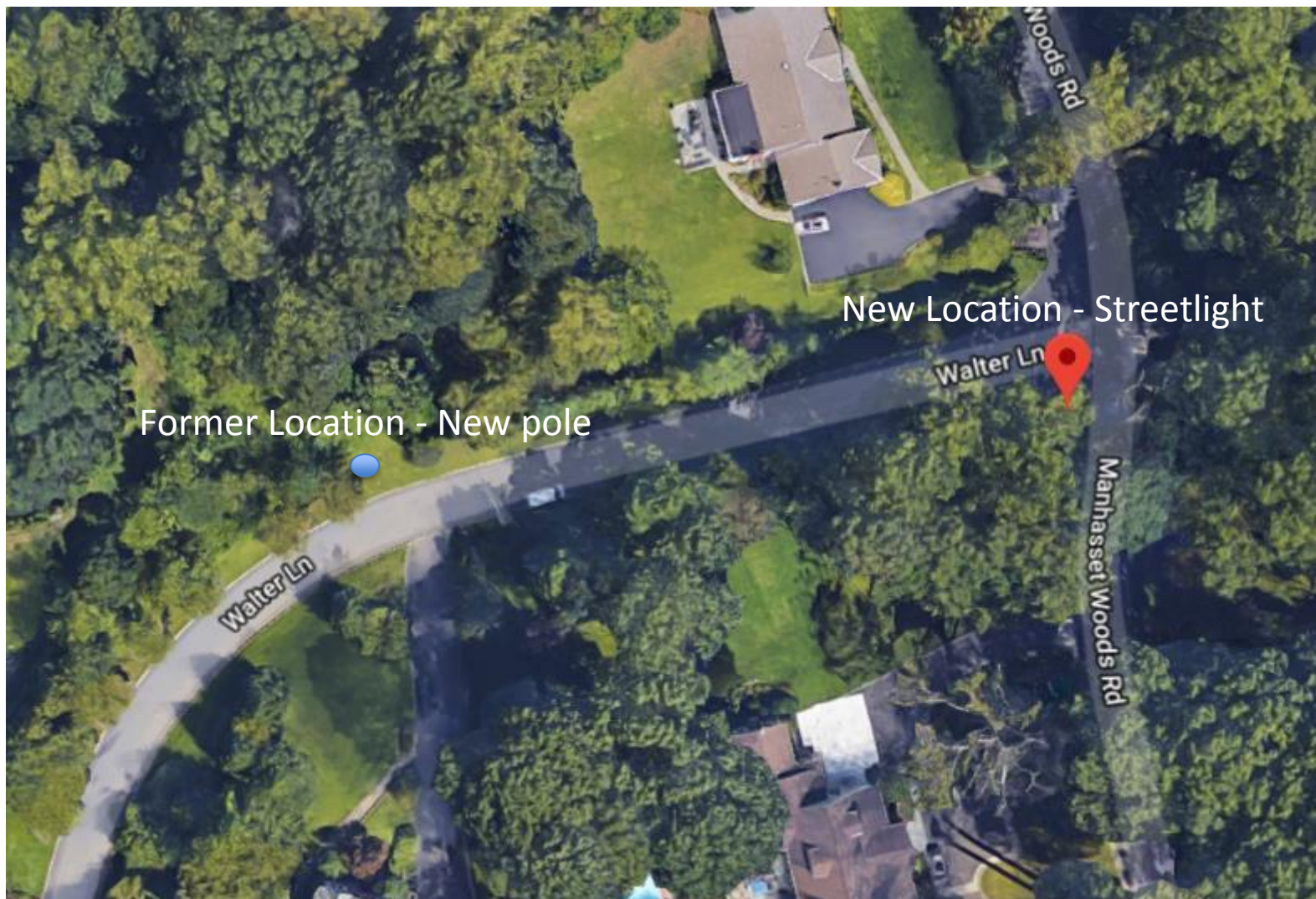
NODE 54

REPLACEMENT WOOD POLE



NODE 55

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 55

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 59

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 59

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



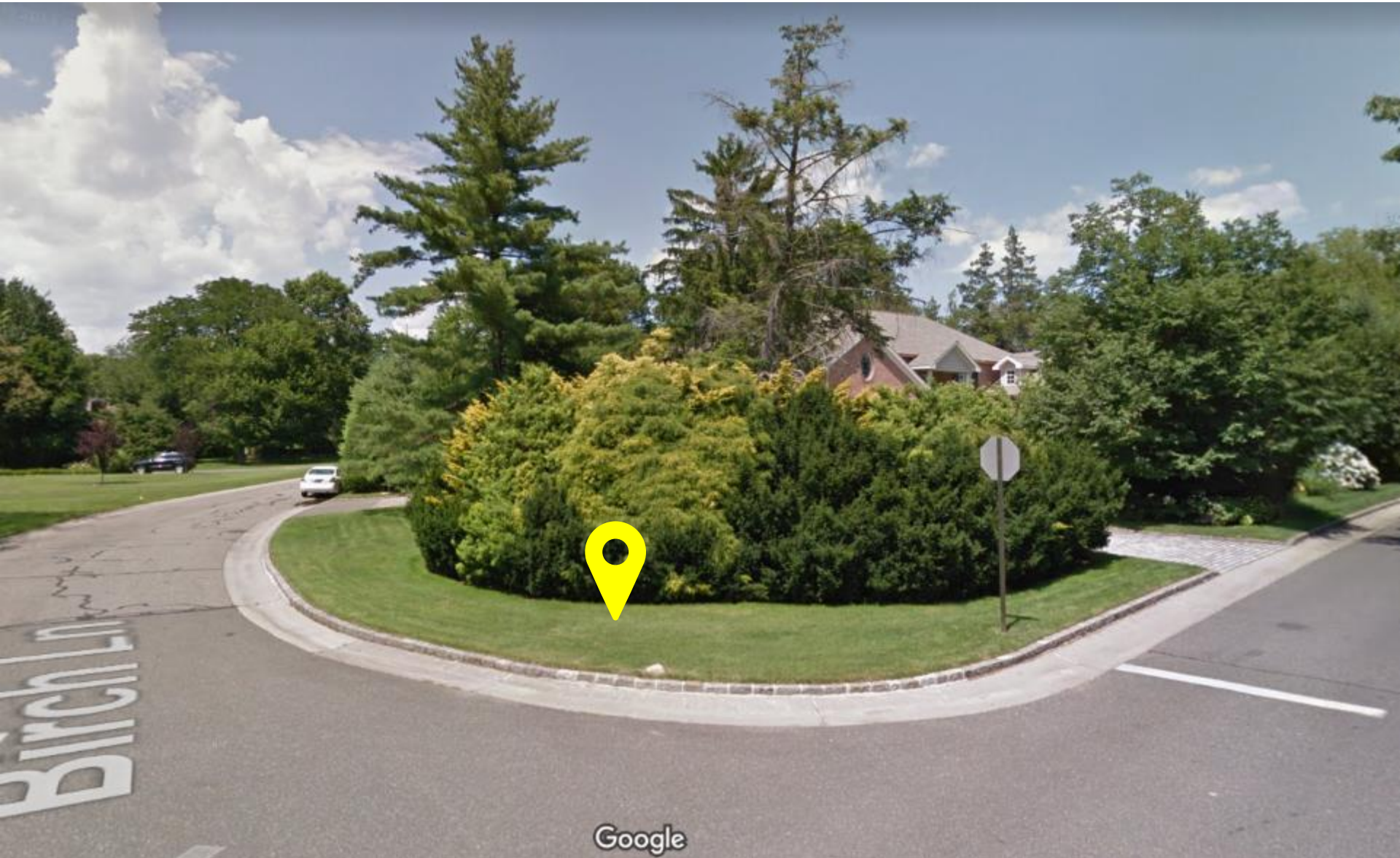
NODE 60

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 60

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



Google

NODE 61

DECORATIVE METAL STREET LIGHT OR FLAG POLE (RELOCATED SINCE APPLICATION FILING)



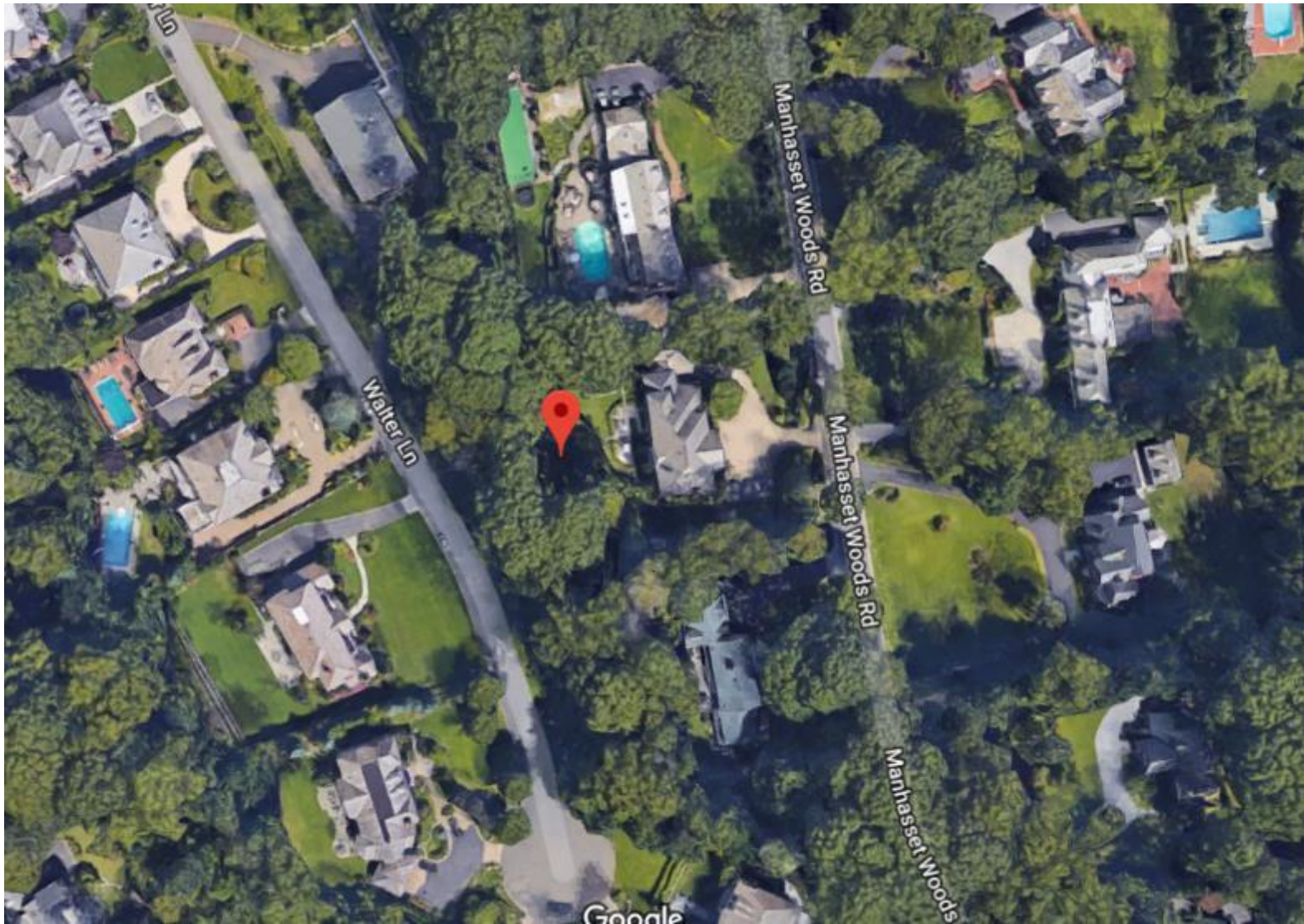
NODE 61

DECORATIVE METAL STREET LIGHT OR FLAG POLE (RELOCATED SINCE APPLICATION FILING)



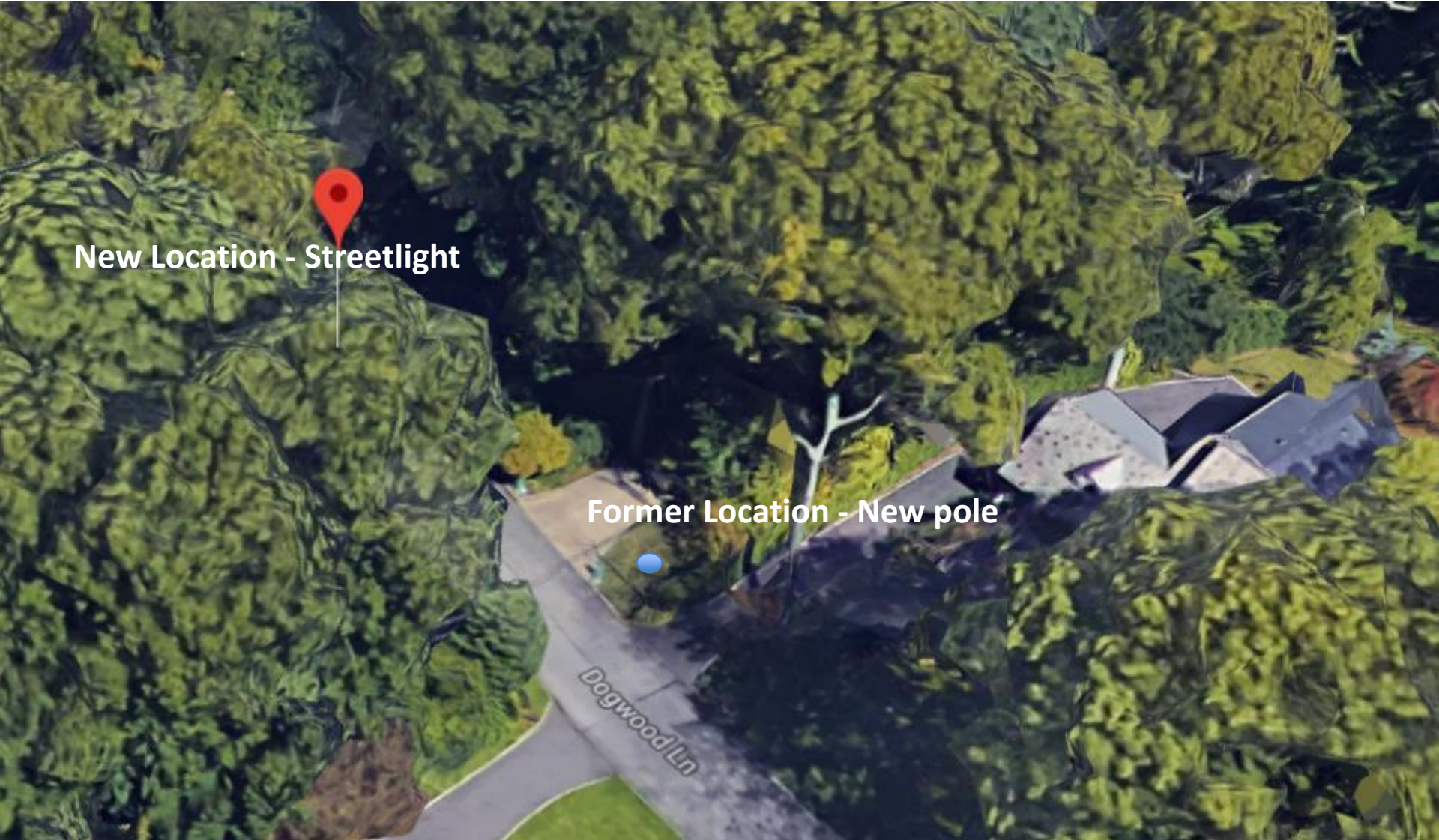
NODE 62

USE EXISTING WOOD UTILITY POLE



NODE 63

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 63

DECORATIVE METAL STREET LIGHT (RELOCATED SINCE APPLICATION FILING)



NODE 64

DECORATIVE METAL STREET LIGHT (SAME LOCATION – WAS FORMERLY A NEW POLE)



NODE 64

DECORATIVE METAL STREET LIGHT (SAME LOCATION – WAS FORMERLY A NEW POLE)



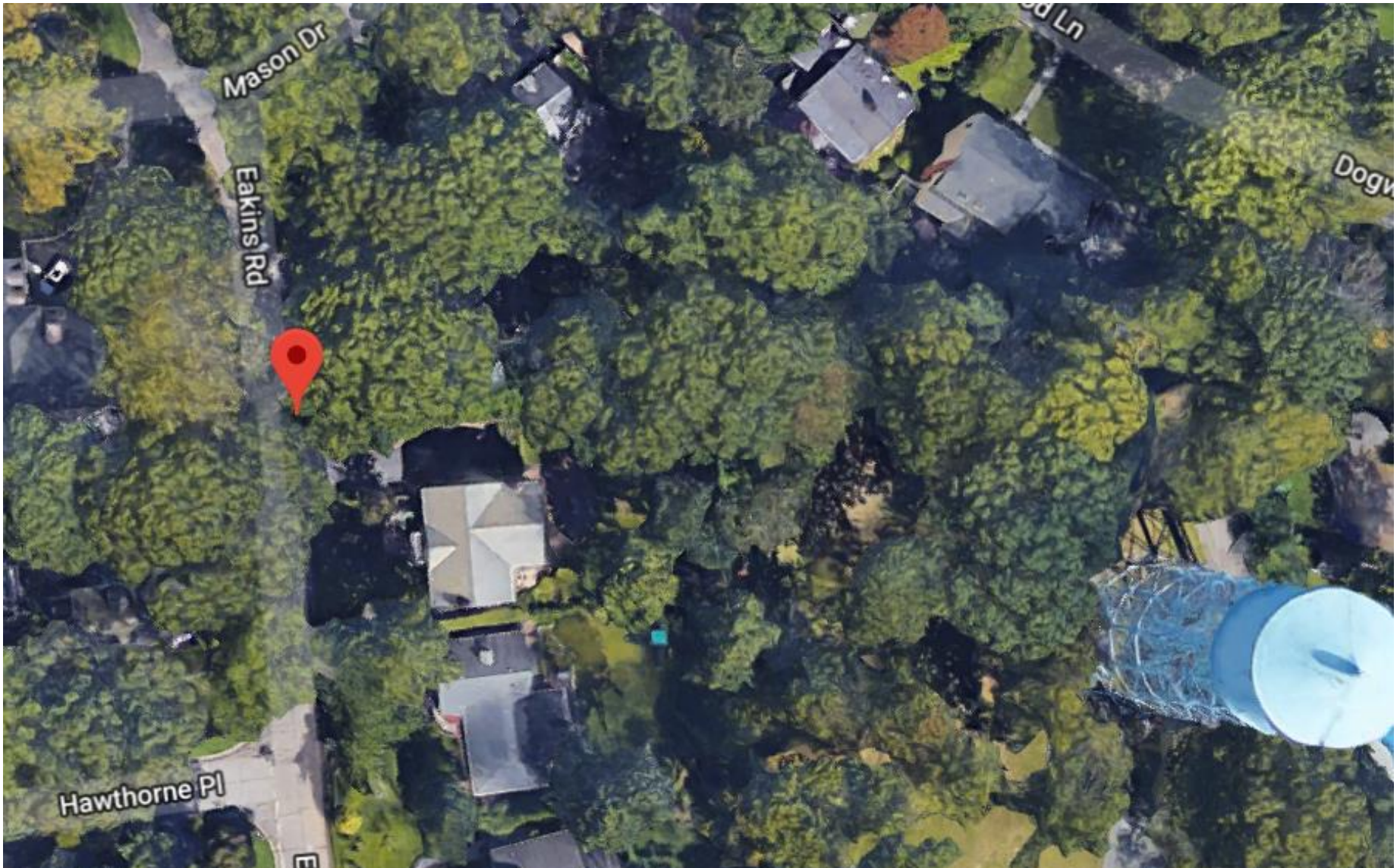
NODE 64

DECORATIVE METAL STREET LIGHT (SAME LOCATION – WAS FORMERLY A NEW POLE)



NODE 65

REPLACEMENT WOOD POLE



NODE 65

REPLACEMENT WOOD POLE



FCC COMPLIANCE

The Telecommunications Act of 1996

The Telecommunications Act of 1996 includes five limitations on local regulation of wireless telecommunication facilities.

One limitation involves the RF energy associated with wireless telecommunications facilities:

“Local regulations may not regulate the placement, construction or modification of personal wireless service facilities on the basis of the “environmental effects of radio frequency emissions” as long as the facilities meet standards set by the FCC.”

The Telecommunications Act, 47 USC § 332(c)(7)(B)

This site will be in compliance with FCC Regulations

FCC Office of Engineering and Technology Bulletin 65 (OET Bulletin 65) provides guidelines for mathematical models to calculate potential RF exposure levels at various points around transmitting antennas.

Conservative methodology and worst case assumptions are incorporated into the calculations. This significantly overstates the calculated RF levels relative to the levels that are actually likely to occur. The purpose of this approach is to assure the safest conclusions for compliance with MPE limit.

The analysis in this report find that the “worst case” emissions are less than 1% of the FCC limits at the base of the installation.

These values will decrease even more the further one moves away from the cell site.

These values are within the rules adopted by FCC which specify that RF emissions should not be in excess of 5% of the exposure limit.

FCC Small Cell Order

Local aesthetic requirements for small cell wireless facilities must be (1) reasonable; (2) no more burdensome than those applied to other infrastructure deployments in the right-of-way; and (3) objective and published in advance.

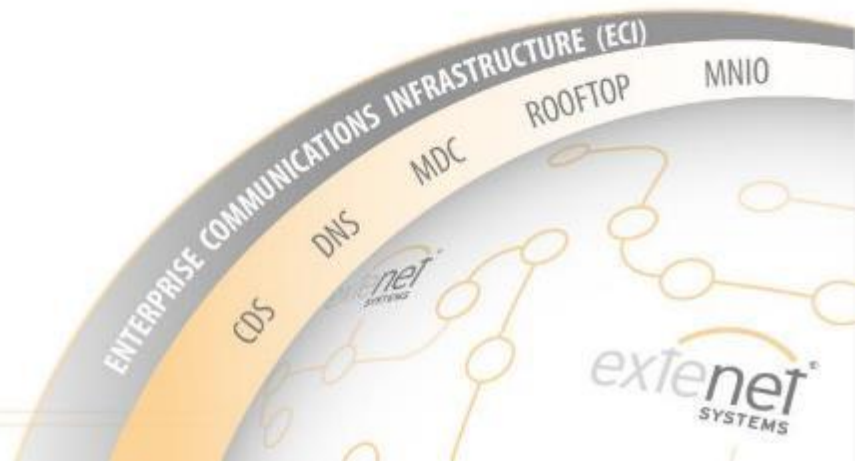
DAS/Small Cell Applications are subject to the Shot Clock; which proscribes a 60 day decision timeline for a local municipality. Non-compliance with the Shot Clock is a violation of The Telecommunications Act.

Recent FCC Small Cell Order sets forth specific right-of-way access fees.

THANK YOU

ANY QUESTIONS?

Richard Lambert
ER Manager, East
rlambert@extenetsystems.com
202.553.7010





Mobile Connectivity Everywhere



Connecting America

with **Distributed Networks**



- Outdoor
- Indoor
- Sports & Entertainment
- Healthcare
- Hospitality
- Commercial Real Estate

