

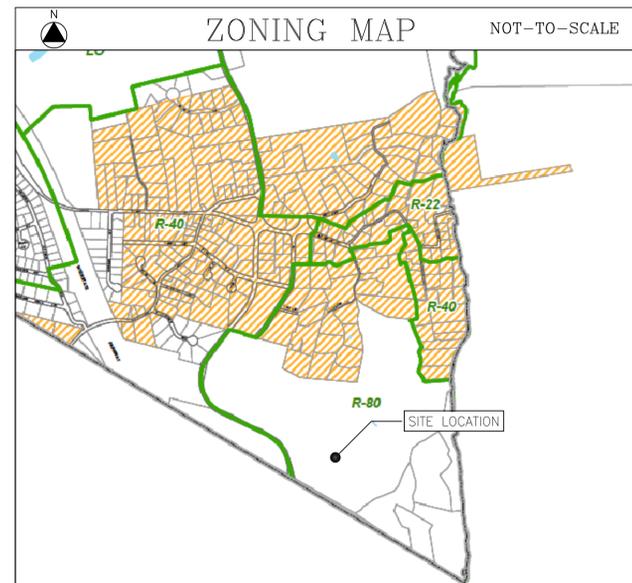
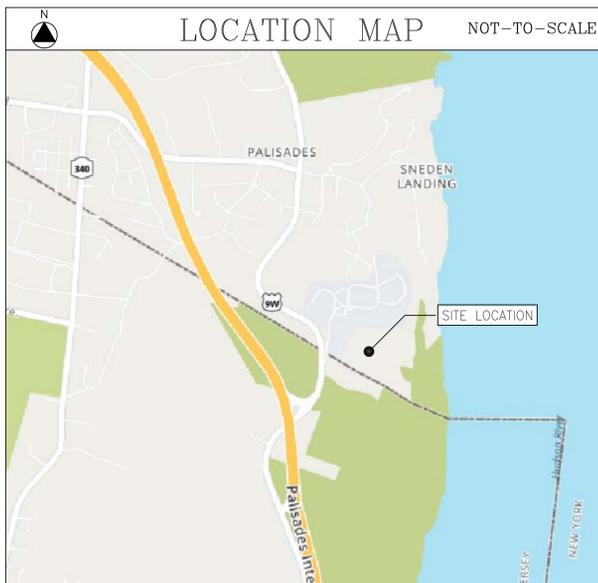


HOMELAND TOWERS SITE ID:  
NY452 - PALISADES 2

COLUMBIA UNIVERSITY  
61 RT. 9W  
PALISADES, NY 10964  
TOWN OF ORANGETOWN

PROJECT DESCRIPTION

- EXISTING 75 FT. MONOPOLE/TOWER TO BE REPLACED WITH A NEW 120 FT. MONOPOLE/TOWER (APPROX. 55 FT. AWAY)
- EXISTING FENCED TOWER COMPOUND TO BE EXPANDED TO A LARGER FENCED, GRAVEL SURFACE COMPOUND FOR CARRIER EQUIPMENT
- EXISTING SITE ACCESS AND PARKING TO BE USED
- INSTALLATION OF VERIZON OUTDOOR EQUIPMENT CABINETS AND A GAS FUELED STANDBY GENERATOR ON A CONCRETE PAD WITH ANTENNAS/APERTUNANCES AT 97 FT. ON THE STRUCTURE
- ELECTRICAL/TELEPHONE SERVICES TO BE EXTENDED FROM EXISTING UTILITY DEMARCATION POINTS ON-SITE TO EXPANDED COMPOUND AREA



PROJECT SUMMARY

SITE ID:	NY452 PALISADES 2
SITE ADDRESS:	COLUMBIA UNIVERSITY 61 RT. 9W PALISADES, NY 10964
PROPERTY OWNER:	COLUMBIA UNIVERSITY INC NY LAMONT GEOLOGICAL OBSERVATORY P.O. BOX 1000 PALISADES, NY 10964
PARCEL ID:	80.10-1-2
ZONING:	R-80
TOWER COORDINATES:	41.00203159 -73.90974041
GROUND ELEVATION:	429.6 FT. AMSL
APPLICANT:	HOMELAND TOWERS 9 HARMONY ST.; 2ND FL. DANBURY, CT 06810

DRAWING SCHEDULE

SHEET NO.	SHEET DESCRIPTION
T-1	TITLE SHEET
R-1	500 FT. RADIUS MAP
C-1	SITE LAYOUT
C-2	ENLARGED SITE PLAN
C-3	CIVIL NOTES & DETAILS
C-4	FENCE & MISC. DETAILS
A-1	COMPOUND PLAN & ELEVATION
VZ-1	VERIZON EQUIPMENT PLAN & DETAILS
VZ-2	ANTENNA PLAN & VERIZON EQUIP. SPECS



On Air Engineering, LLC  
88 Foundry Pond Road  
Cold Spring, NY 10516  
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201-456-4624

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LICENSURE



DAVID WEINPAHL, P.E.  
NY LIC NO. 078901

NO.	DATE	SUBMISSIONS
0	12.19.24	REVIEW SET
1	12.30.24	REVISED PER ATTORNEY COMMENTS
2	04.15.25	REVISED PER TOWN COMMENTS

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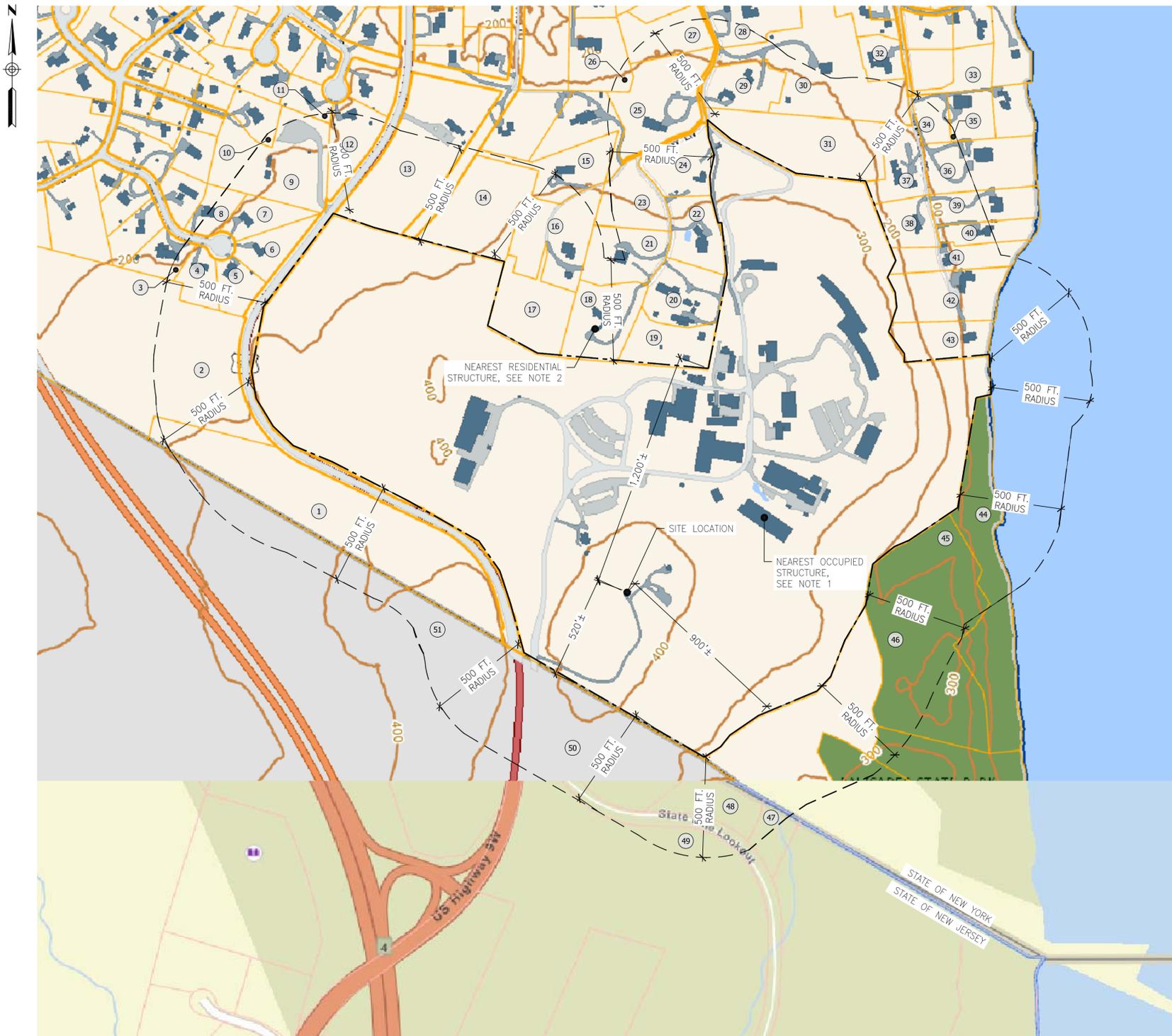
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**NY452  
PALISADES 2**

VERIZON SITE NAME:  
**PALISADES 2**

PROJECT ADDRESS:  
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61 RT. 9W  
PALISADES, NY 10964  
TOWN OF ORANGETOWN**

DRAWING TITLE:  
**TITLE SHEET**

SHEET NUMBER:  
**T-1**



**1** 500 FT. RADIUS MAP  
**R-1** Scale: 1" = 300'

NOTES:  
 1. NEAREST OCCUPIED STRUCTURE TO PROPOSED TOWER 715 FT.± (GARY C. COMER GEOCHEMISTRY BUILDING; LUDLOW LANE)  
 2. NEAREST RESIDENTIAL STRUCTURE TO PROPOSED TOWER 1,315 FT.± (80 LUDLOW LANE)

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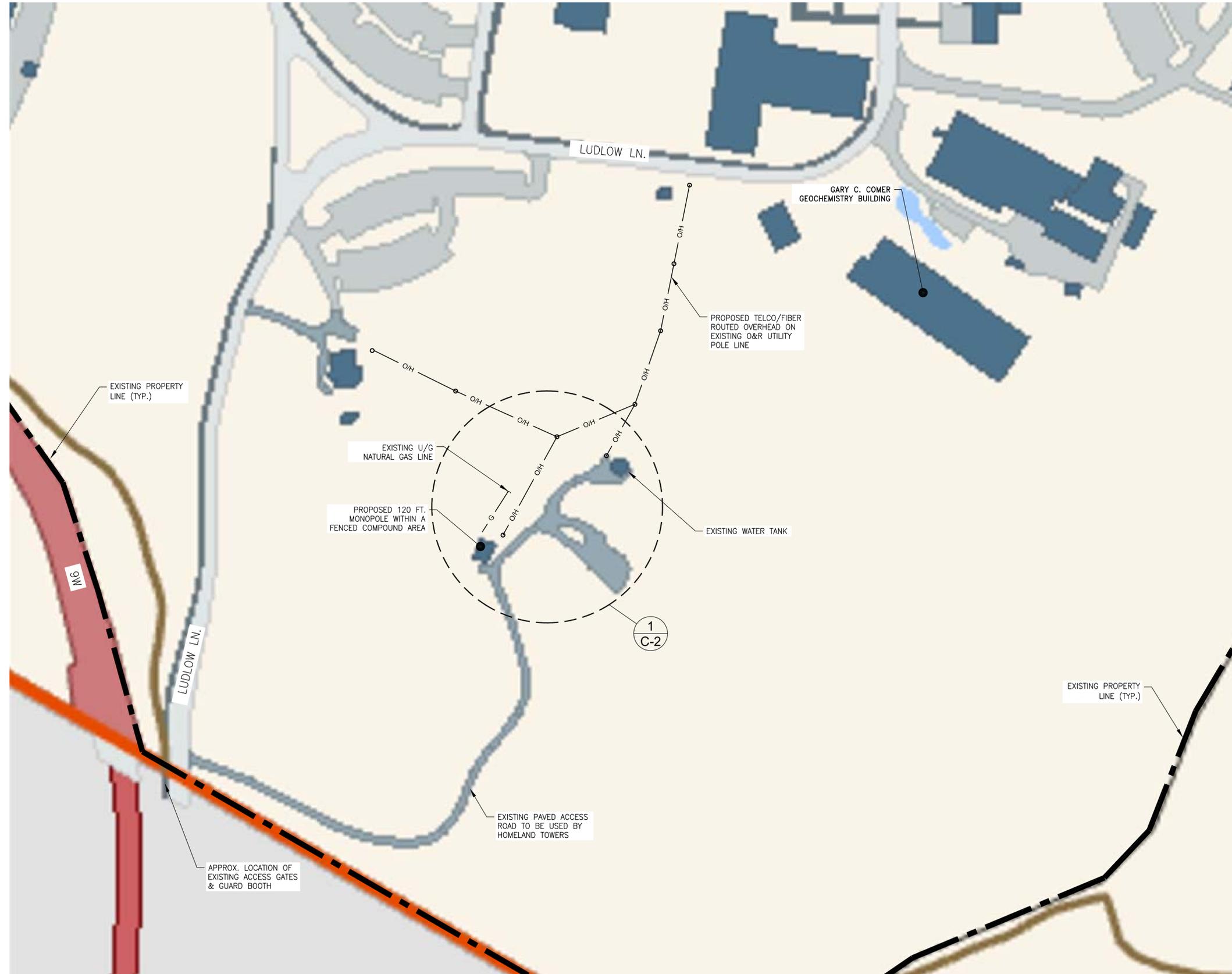
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 PALISADES 2

VERIZON SITE NAME:  
 PALISADES 2

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DRAWING TITLE:  
 500 FT. RADIUS MAP

SHEET NUMBER:  
**R-1**



**1** SITE LAYOUT  
**C-1** SCALE 1" = 75'



**HOMELAND TOWERS**  
 Homeland Towers, LLC  
 9 Harmony Street, 2nd Floor  
 Danbury, CT 06810



NEW YORK SMSA LIMITED PARTNERSHIP  
 d/b/a VERIZON WIRELESS  
 4 CENTEROCK ROAD  
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DRAWING TITLE:  
 SITE LAYOUT

SHEET NUMBER:  
**C-1**

**SCHEDULE OF BULK REQUIREMENTS**

UNDERLYING PROPERTY ZONING CLASSIFICATION: R-80 GROUP B  
 WIRELESS COMMUNICATION FACILITIES ARE SUBJECT TO CHAPTER 8.15 OF THE TOWN OF ORANGETOWN TOWN CODE

ITEM	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA: (ACRES)	5	126	N/C
MIN. LOT WIDTH: (FT.)	400	>400	N/C
MIN. STREET FRONTAGE (FT.)	50	>50	N/C
MIN. FRONT YARD: (FT)	50	>50	520±(1)
MIN. SIDE YARD: (FT)	30	>30	900±(1)
MIN. TOTAL SIDE YARD (FT)	100	>100	1,200±(1)
MIN. REAR YARD: (FT)	50	>50	1,200±(1)
MAXIMUM TOWER HEIGHT (FT)	SEE NOTE 3	75 (2)	120

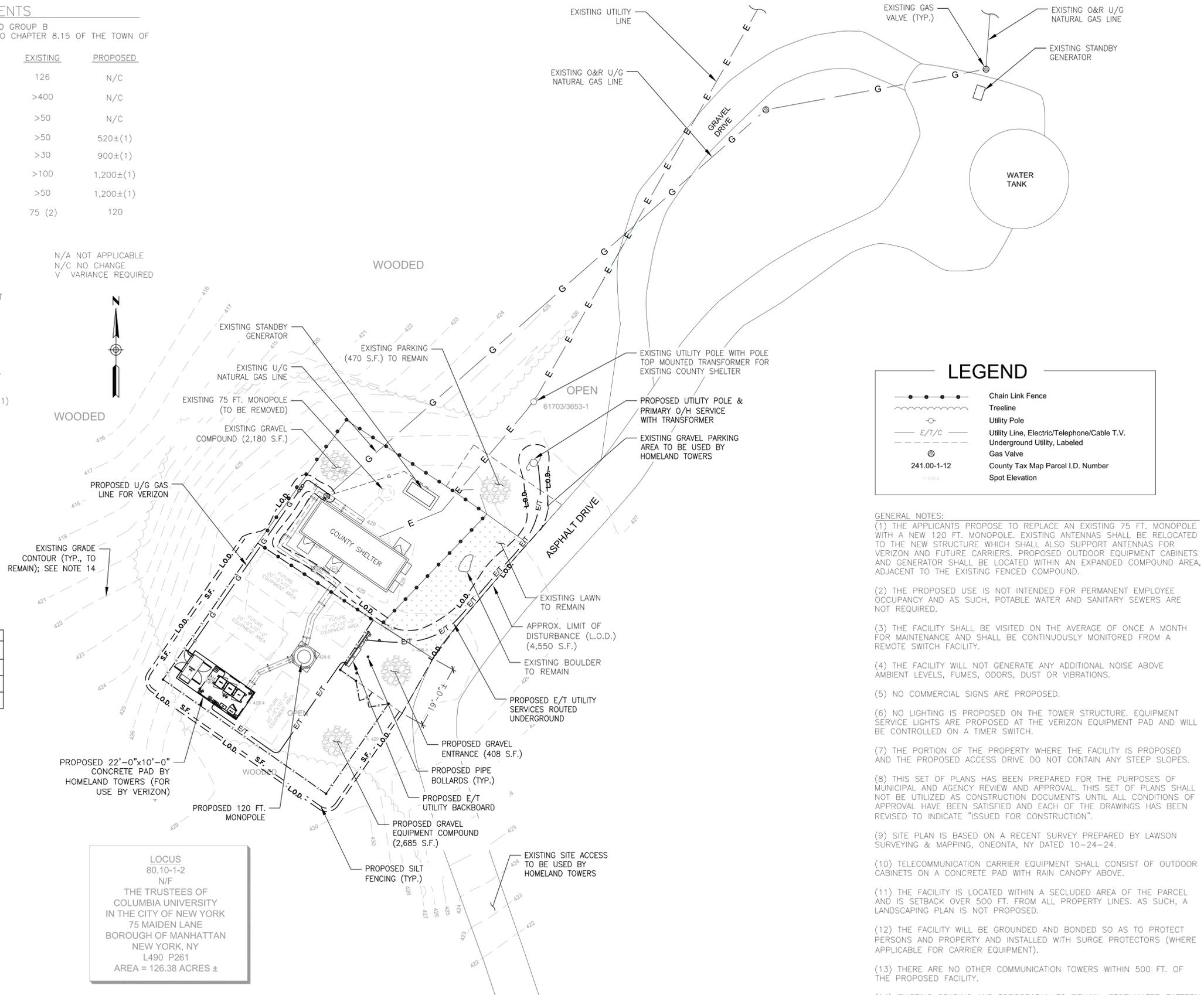
**NOTES:**

- (1) DISTANCE TO PROPERTY LINE
- (2) HEIGHT OF EXISTING TOWER (TO BE REMOVED)
- (3) REFER TO SEC. 8.15(L)(5) - THE PLANNING BOARD SHALL BE PERMITTED TO INCREASE THE HEIGHT OF ANY TOWER BEYOND ANY LIMITATIONS SET FORTH HEREIN IN ORDER TO ACCOMMODATE ADD'L USERS. IN REVIEWING A REQUEST FOR GREATER HEIGHT, THE PLANNING BOARD SHALL BALANCE THE EFFECT OF A GREATER HEIGHT AGAINST THE PROVISION OF ONE OR MORE ADDITIONAL TOWERS, CO-LOCATING OR OTHER ALTERNATIVES.
- (4) THE FACILITY IS MORE THAN 2x THE HEIGHT OF THE FACILITY FROM THE NEAREST RESIDENTIAL BLDG.
- (5) A VARIANCE MAY BE REQUIRED AS FACILITY IS LOCATED BETWEEN THE PRINCIPAL STRUCTURES ON THE PROPERTY AND THE STREET. SEE SEC. 8.15(L)(1)

N/A NOT APPLICABLE  
 N/C NO CHANGE  
 V VARIANCE REQUIRED



	EQUIPMENT COMPOUND	PARKING & ENTRANCE
EXISTING	2,180 S.F.	470 S.F.
PROPOSED	2,685 S.F.	408 S.F.
TOTAL	4,865 S.F.	878 S.F.



**LEGEND**

- Chain Link Fence
- Treeline
- Utility Pole
- Utility Line, Electric/Telephone/Cable T.V.
- Underground Utility, Labeled
- Gas Valve
- County Tax Map Parcel I.D. Number
- Spot Elevation

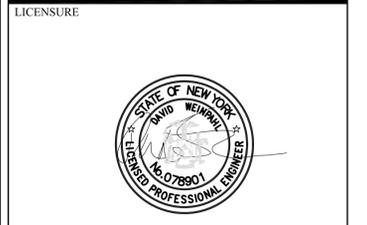
- GENERAL NOTES:**
- (1) THE APPLICANTS PROPOSE TO REPLACE AN EXISTING 75 FT. MONOPOLE WITH A NEW 120 FT. MONOPOLE. EXISTING ANTENNAS SHALL BE RELOCATED TO THE NEW STRUCTURE WHICH SHALL ALSO SUPPORT ANTENNAS FOR VERIZON AND FUTURE CARRIERS. PROPOSED OUTDOOR EQUIPMENT CABINETS AND GENERATOR SHALL BE LOCATED WITHIN AN EXPANDED COMPOUND AREA, ADJACENT TO THE EXISTING FENCED COMPOUND.
  - (2) THE PROPOSED USE IS NOT INTENDED FOR PERMANENT EMPLOYEE OCCUPANCY AND AS SUCH, POTABLE WATER AND SANITARY SEWERS ARE NOT REQUIRED.
  - (3) THE FACILITY SHALL BE VISITED ON THE AVERAGE OF ONCE A MONTH FOR MAINTENANCE AND SHALL BE CONTINUOUSLY MONITORED FROM A REMOTE SWITCH FACILITY.
  - (4) THE FACILITY WILL NOT GENERATE ANY ADDITIONAL NOISE ABOVE AMBIENT LEVELS, FUMES, ODORS, DUST OR VIBRATIONS.
  - (5) NO COMMERCIAL SIGNS ARE PROPOSED.
  - (6) NO LIGHTING IS PROPOSED ON THE TOWER STRUCTURE, EQUIPMENT SERVICE LIGHTS ARE PROPOSED AT THE VERIZON EQUIPMENT PAD AND WILL BE CONTROLLED ON A TIMER SWITCH.
  - (7) THE PORTION OF THE PROPERTY WHERE THE FACILITY IS PROPOSED AND THE PROPOSED ACCESS DRIVE DO NOT CONTAIN ANY STEEP SLOPES.
  - (8) THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND EACH OF THE DRAWINGS HAS BEEN REVISED TO INDICATE "ISSUED FOR CONSTRUCTION".
  - (9) SITE PLAN IS BASED ON A RECENT SURVEY PREPARED BY LAWSON SURVEYING & MAPPING, ONEONTA, NY DATED 10-24-24.
  - (10) TELECOMMUNICATION CARRIER EQUIPMENT SHALL CONSIST OF OUTDOOR CABINETS ON A CONCRETE PAD WITH RAIN CANOPY ABOVE.
  - (11) THE FACILITY IS LOCATED WITHIN A SECLUDED AREA OF THE PARCEL AND IS SETBACK OVER 500 FT. FROM ALL PROPERTY LINES. AS SUCH, A LANDSCAPING PLAN IS NOT PROPOSED.
  - (12) THE FACILITY WILL BE GROUNDED AND BONDED SO AS TO PROTECT PERSONS AND PROPERTY AND INSTALLED WITH SURGE PROTECTORS (WHERE APPLICABLE FOR CARRIER EQUIPMENT).
  - (13) THERE ARE NO OTHER COMMUNICATION TOWERS WITHIN 500 FT. OF THE PROPOSED FACILITY.
  - (14) EXISTING GRADING AND TOPOGRAPHY TO REMAIN. STORMWATER PATTERN SHALL MATCH EXISTING GRAVEL COMPOUND WHICH FLOWS FROM EAST TO WEST INTO A LARGE WOODED AREA. A DETAILED STORMWATER STUDY (I.E. SWPPP, PERC TESTS, ETC.) IS NOT REQUIRED.

**1 ENLARGED SITE PLAN**  
 SCALE 1" = 15'



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VERIZON SITE NAME:  
**PALISADES 2**

PROJECT ADDRESS:  
**COLUMBIA UNIVERSITY  
 61 RT. 9W  
 PALISADES, NY 10964  
 TOWN OF ORANGETOWN**

DRAWING TITLE:  
**ENLARGED SITE PLAN**

SHEET NUMBER:  
**C-2**

**SITE NOTES:**

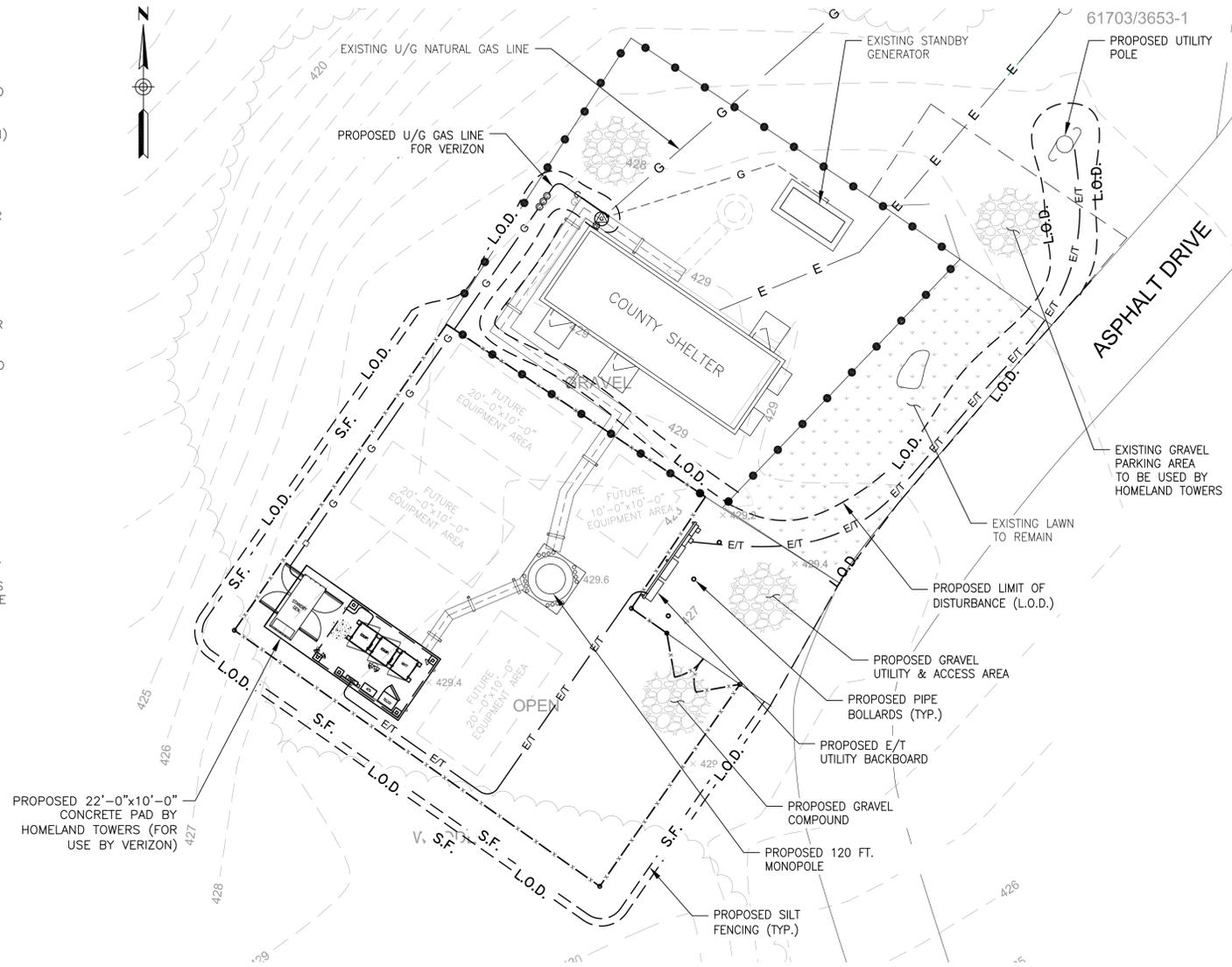
1. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS.
2. RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
3. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
4. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND, FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
5. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
6. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES.
7. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING.
8. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED, AND COVERED WITH MULCH.
9. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL.
10. ALL RESTORATION ISSUES SHALL BE COMPLETED WITHIN 72 HOURS OF THE COMPLETION OF THE WORK ACTIVITY OR WITHIN A REASONABLE AMOUNT OF TIME AS DIRECTED BY THE CONSTRUCTION MANAGER/ ENGINEER.
11. CARE SHALL BE TAKEN TO RETAIN NATURAL GROWTH AND PREVENT DAMAGE TO TREES, WITHIN AND OUTSIDE THE LIMITS OF CONSTRUCTION AND SPECIFIED WORK AREAS, CAUSED BY EQUIPMENT AND MATERIALS. ANY DAMAGE TO THIS NATURAL GROWTH SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR.
12. ALL AREAS DISTURBED BY THE CONTRACTOR WITHOUT AUTHORIZATION SHALL BE RESTORED BY THE CONTRACTOR.
13. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE CAUSING AN INTERRUPTION IN SAID SERVICE, HE SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CONTINUE HIS WORK OPERATION UNTIL SERVICE IS RESTORED.

**SEEDING SPECIFICATIONS:**

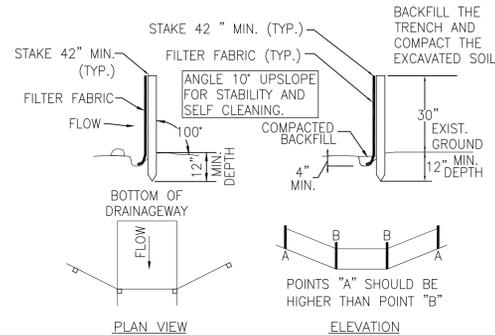
- A. IF GROUND HAS BEEN PREVIOUSLY MULCHED, MULCH MUST BE REMOVED OR ADDITIONAL NITROGEN MUST BE ADDED.
- B. REMOVE ALL SURFACE STONES 2" OR LARGER AS WELL AS ALL DEBRIS SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, CLUMPS, OR OTHER UNSUITABLE MATERIAL.
- C. APPLY FERTILIZER AT 7.5 POUNDS PER 1,000 SQUARE FEET AND LIME AT 200 POUNDS PER 1,000 SQUARE FEET UNLESS SOIL TESTING FOR REQUIREMENTS IS PERFORMED.
- D. NO MOWING IS TO BE UNDERTAKEN UNTIL THE MAJORITY OF THE VEGETATION IS AT LEAST 6" HIGH. MOWING SHOULD CUT THE TOP 1/3 OF VEGETATION. DO NOT UNDER ANY CIRCUMSTANCES CUT VEGETATION BELOW 3".
- E. DO NOT APPLY ANY FORM OF WEED CONTROL UNTIL GRASS HAS BEEN MOWED AT LEAST 4 TIMES.
- F. THESE SEEDING MEASURES ARE NOT TO BE USED ON SLOPES IN EXCESS OF 2:1 GRADING.
- G. PERMANENT SEEDING MEASURES ARE TO BE USED INSTEAD OF TEMPORARY SEEDING MEASURES WHERE WORK IS TO BE SUSPENDED FOR A PERIOD OF TIME LONGER THAN 1 YEAR.
- H. IF THERE IS NO EROSION, BUT SEED SURVIVAL IS LESS THAN 100 PLANTS PER SQUARE FOOT AFTER 4 WEEKS OF GROWTH, RE-SEED AS PLANTING SEASON ALLOWS.
- I. ALL DISTURBED AREAS OUTSIDE THE PAVEMENT AREA SHALL BE LOAMED AND SEEDED IN ACCORDANCE WITH THE SUGGESTED SEEDING MIXTURES TABLE.

**SILT FENCE SPECIFICATIONS:**

- A. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, ETHYLENE, OR SIMILAR FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING MINIMUM REQUIREMENTS:
  1. FILTERING EFFICIENCY 75 PERCENT (MIN)
  2. GRAB TENSILE STRENGTH 100 POUNDS
  3. ELONGATION AT FAILURE 15 PERCENT
  4. MULLEN BURST STRENGTH 250 POUNDS PER SQUARE INCH
  5. PUNCTURE STRENGTH 50 POUNDS
  6. APPARENT OPENING SIZE <0.90mm
  7. FLOW RATE SQUARE FOOT PER MINUTE 0.2 GALLONS PER SQUARE FOOT PER MINUTE
  8. PERMITTIVITY (MIN) 0.05 PER SECOND
  9. ULTRAVIOLET RADIATION STABILITY 70 PERCENT AFTER 500 HOURS OF EXPOSURE (MIN)
- B. STAKES ARE TO BE MADE OUT OF HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 1.5 SQUARE INCHES OR STEEL POSTS WITH A MINIMUM WEIGHT OF 0.5 POUNDS PER LINEAR FOOT.
- C. TORN OR PUNCTURED GEOTEXTILES SHALL NOT BE USED. ON SLOPES WHERE SURFACE FLOW FOLLOWS THE SILT FENCE LINE, PERPENDICULAR SILT FENCE CHECKS SHALL BE INSTALLED AT 50 FOOT INTERVALS.
- D. LINES OF SILT FENCE SHOULD FOLLOW CONTOUR LINES 5-10 FEET DOWN GRADIENT FROM THE SLOPE. WHERE CONTOUR LINES CAN NOT BE FOLLOWED PERPENDICULAR WINGS SHOULD BE PLACED AT 50 FOOT INTERVALS.

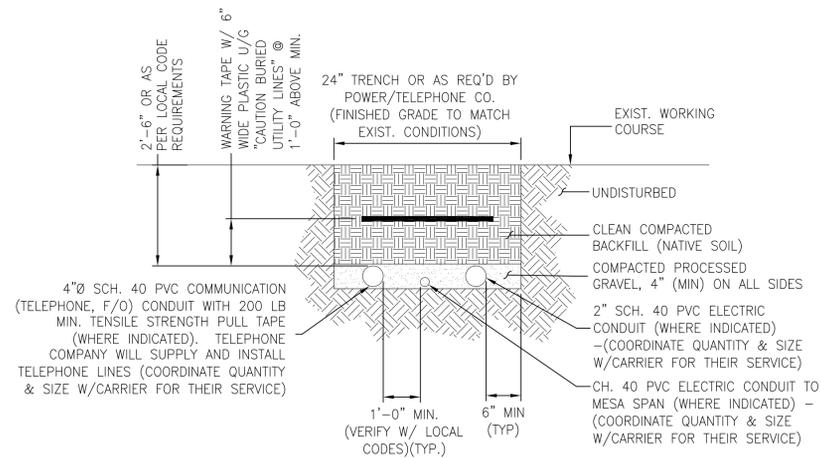


**1 SEDIMENT & EROSION CONTROL PLAN**  
Scale: 1"=10'



- NOTES:**
1. MINIMUM LENGTH OF SILT FENCE IS 15 L.F.
  2. MAXIMUM POST SPACING IS 10 L.F.
  3. JOINTS ONLY AT SUPPORT POST WITH MINIMUM 6" OVERLAP, SECURELY SEALED.
  4. SEDIMENTATION DEPOSITS SHALL BE REMOVED WHEN THEY REACH 1/2 THE HEIGHT OF THE SILT FENCE.
  5. SILT FENCE SHALL NOT BE USED IN A WATER COURSE.
  6. UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS, AND WHEN DIRECTED BY THE ENGINEER, FENCE WILL BE REMOVED AND ANY SEDIMENTATION WILL BE THINLY SPREAD UPON EXISTING GROUND COVER.

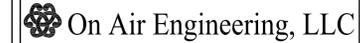
**2 SILT FENCE DETAILS AND CONSTRUCTION**  
Scale: N.T.S.



**3 SECONDARY TRENCH DETAIL**  
Scale: N.T.S.



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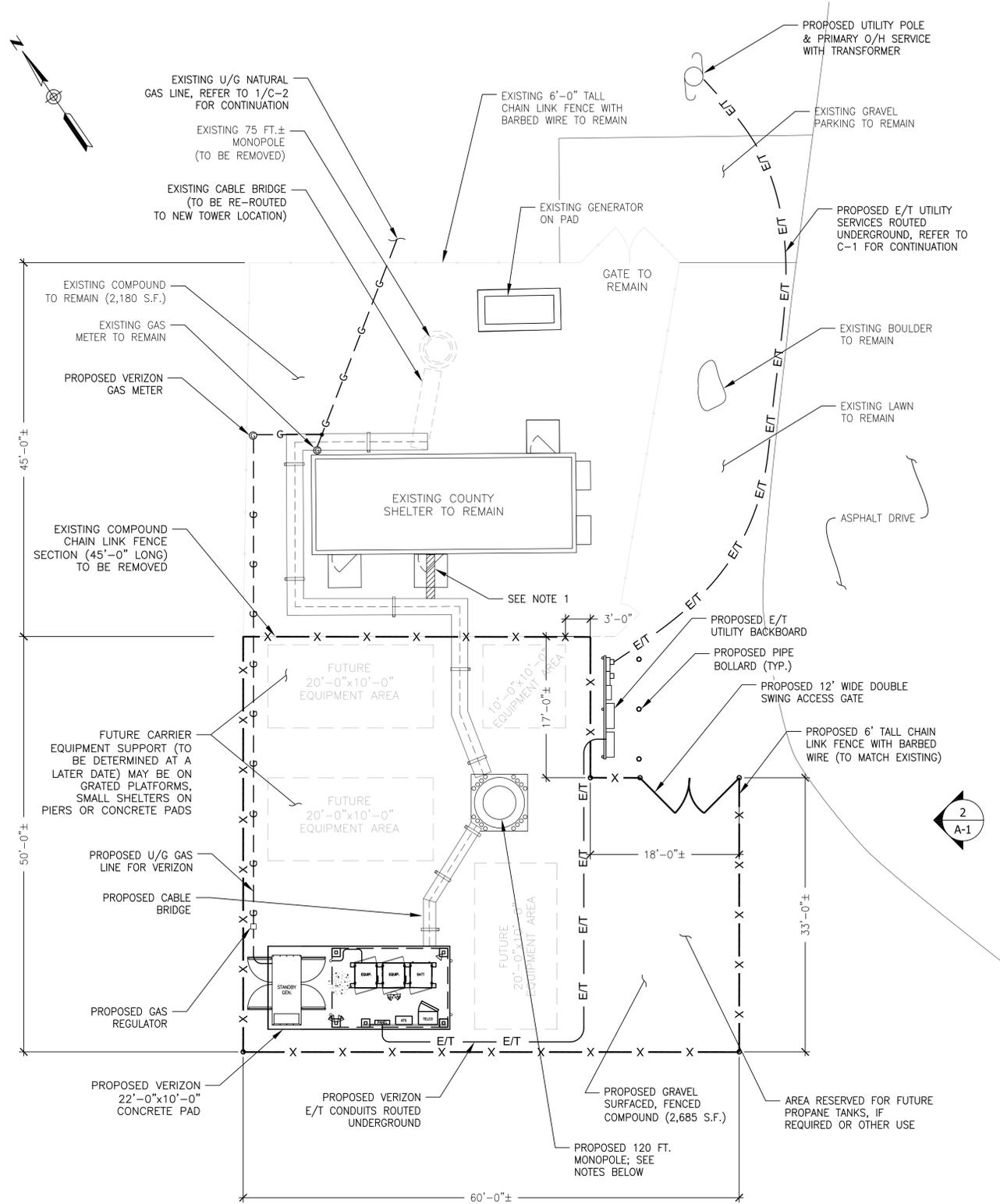
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**CIVIL NOTES & DETAILS**

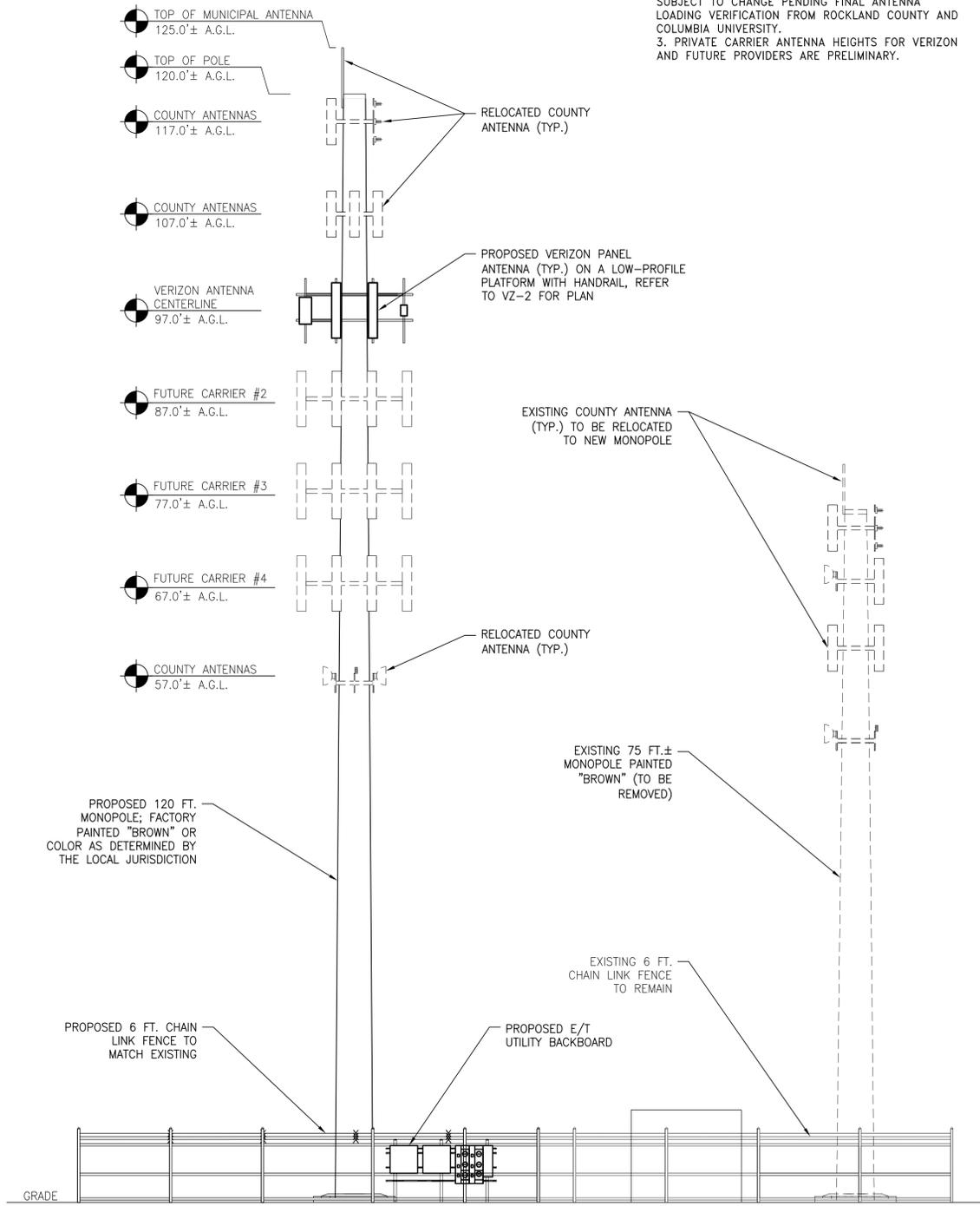
SHEET NUMBER:  
**C-3**





**1**  
A-1 **COMPOUND PLAN**  
Scale: 1/8" = 1'-0"

**MONOPOLE NOTES:**  
1. CONSTRUCTION DETAILS FOR ANCHORING THE PROPOSED MONOPOLE SHALL BE PROVIDED FOLLOWING A GEOTECHNICAL EXPLORATION AND FOUNDATION DESIGN BY A LICENSED STRUCTURAL ENGINEER. THE TOWER STEEL IS TYPICALLY ANCHORED TO THE FOUNDATION USING SEVERAL DOZEN ANCHOR RODS APPROXIMATELY 2-1/4" DIAMETER, 7 FT. LONG EACH.



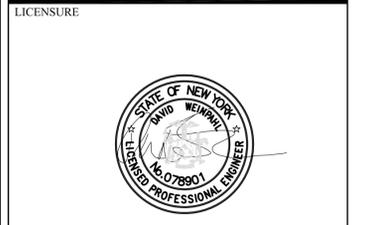
**2**  
A-1 **ELEVATION**  
Scale: 1" = 10'

**NOTES:**  
1. PLANS INDICATE THAT ALL EXISTING ANTENNAS WILL BE RELOCATED TO THE NEW TOWER STRUCTURE. THIS HAS NOT BEEN CONFIRMED BY THE COUNTY'S RF CONSULTANT OR THE OWNER.  
2. ANTENNA HEIGHTS, QUANTITY, LAYOUT, ETC. ARE SUBJECT TO CHANGE PENDING FINAL ANTENNA LOADING VERIFICATION FROM ROCKLAND COUNTY AND COLUMBIA UNIVERSITY.  
3. PRIVATE CARRIER ANTENNA HEIGHTS FOR VERIZON AND FUTURE PROVIDERS ARE PRELIMINARY.



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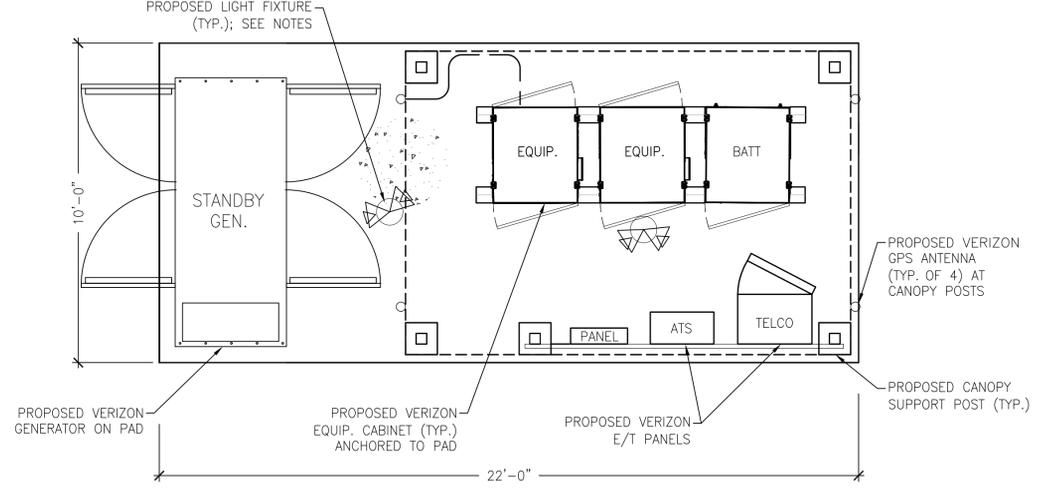
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DRAWING TITLE:  
**COMPOUND PLAN  
& ELEVATION**

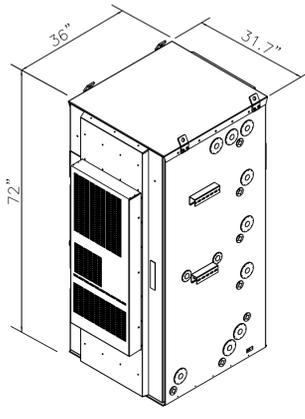
SHEET NUMBER:  
**A-1**

2  
VZ-1

**SERVICE LIGHTING NOTES**  
 1. FIXTURE TO BE MOUNTED TO UNDERSIDE OF C-CHANNEL.  
 2. FIXTURE SHALL BE FULLY SHIELDED AND DARK SKY COMPLIANT.  
 WAC LIGHTING MODEL# WP-LED430-30-ABK OR EQUAL.  
 3. CONTROL ON 4-HOUR MANUAL TIMER SWITCH BY LEVITON OR EQUAL. LOCATE SWITCH ADJACENT TO PANELBOARD.



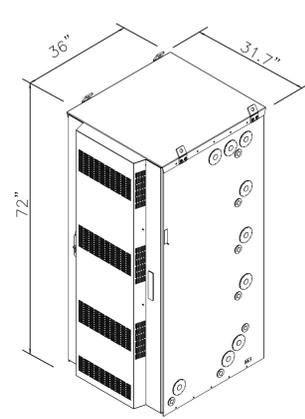
1 **EQUIPMENT PLAN**  
 Scale: 3/8" = 1'-0"



DELTA BATTERY CABINET			
HEIGHT	WIDTH	DEPTH	WEIGHT
72"	31.7"	36"	2,500 LBS

**BATTERY NOTES:**  
 1. BATTERIES ARE 12V (NOMINAL VOLTAGE), VALVE REGULATED LEAD ACID BATTERIES, 118 LBS. EACH (CABINET CAN SUPPORT UP TO 12 BATTERIES).

3 **BATTERY CABINET**  
 Scale: N.T.S.



DELTA EQUIPMENT CABINET			
HEIGHT	WIDTH	DEPTH	WEIGHT
72"	31.7"	36"	800 LBS

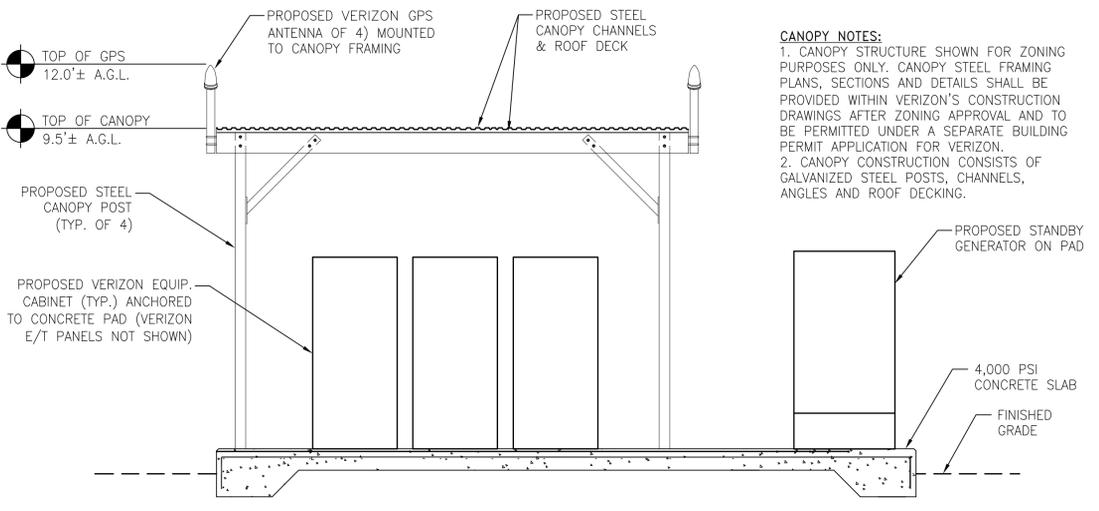
4 **EQUIPMENT CABINET**  
 Scale: N.T.S.



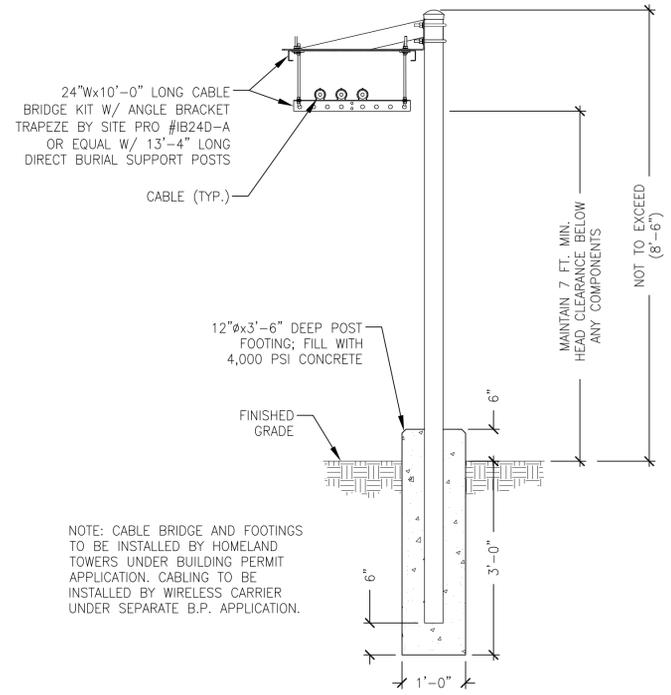
GENERAC GENERATOR SPECIFICATIONS				
MODEL #	LENGTH	WIDTH	HEIGHT	WEIGHT
SG050NA	94.8"	38.0"	57.5"	2,341 LBS

5 **50kW GENERAC GAS GENERATOR**  
 Scale: N.T.S.

**NOTES TO VERIZON GROUND EQUIPMENT:**  
 1. VERIZON EQUIPMENT/BATTERY CABINET STYLES AND GENERATOR SPECS ARE SUBJECT TO CHANGE BASED ON AVAILABILITY AT TIME OF CONSTRUCTION.



2 **EQUIPMENT ELEVATION**  
 Scale: 3/8" = 1'-0"



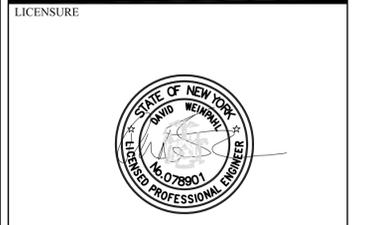
6 **CABLE BRIDGE DETAIL**  
 Scale: N.T.S.

**HOMELAND TOWERS**  
 Homeland Towers, LLC  
 9 Harmony Street, 2nd Floor  
 Danbury, CT 06810

**verizon**  
 NEW YORK SMSA LIMITED PARTNERSHIP  
 d/b/a VERIZON WIRELESS  
 4 CENTEROCK ROAD  
 WEST NYACK, NY 10994

**On Air Engineering, LLC**  
 88 Foundry Pond Road  
 Cold Spring, NY 10516  
 dweinpahl@onaireng.com  
 201-456-4624

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DAVID WEINPAHL, P.E.  
 NY LIC NO. 078901

NO.	DATE	SUBMISSIONS
0	12.19.24	REVIEW SET
1	12.30.24	REVISED PER ATTORNEY COMMENTS
2	04.15.25	REVISED PER TOWN COMMENTS

DRAWN BY:	CHECKED BY:
MF	DW

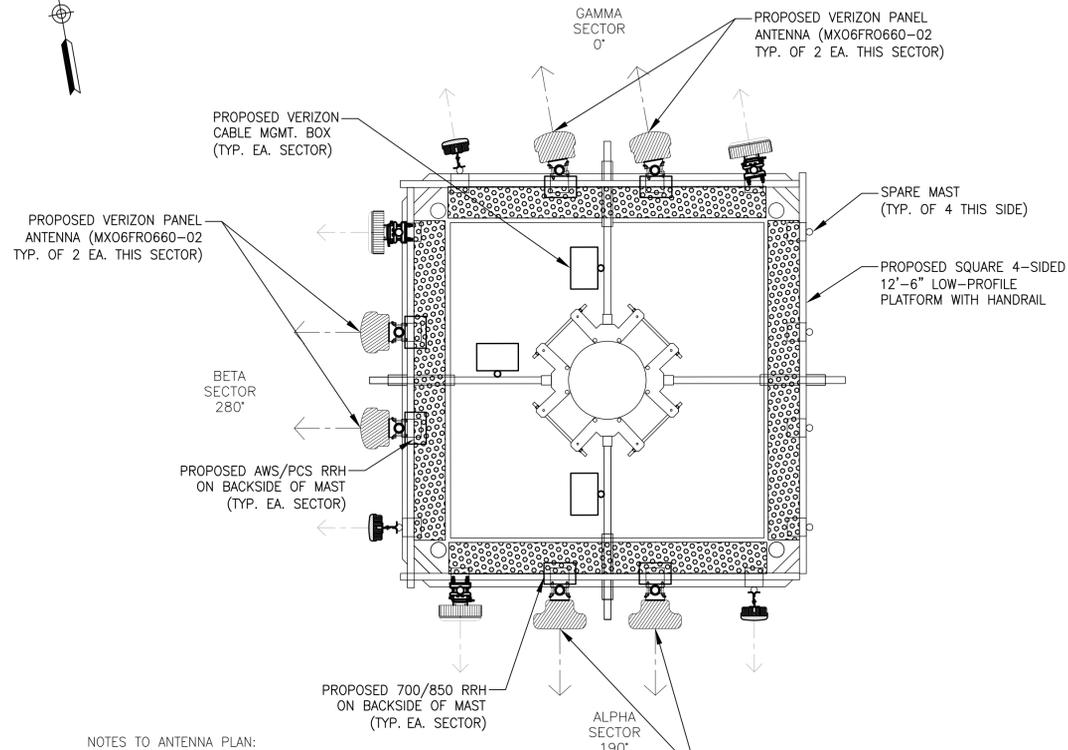
HOMELAND TOWERS SITE ID:  
 NY452  
 PALISADES 2

VERIZON SITE NAME:  
 PALISADES 2

PROJECT ADDRESS:  
 COLUMBIA UNIVERSITY  
 61 RT. 9W  
 PALISADES, NY 10964  
 TOWN OF ORANGETOWN

DRAWING TITLE:  
 VERIZON EQUIPMENT  
 PLAN & DETAILS

SHEET NUMBER:  
 VZ-1



NOTES TO ANTENNA PLAN:  
 1. ANTENNA LOW-PROFILE PLATFORM SHALL BE PERFECT VISION PVS1PP12U-16-96 INCLUDING HANDRAIL AND BELOW PLATFORM SUPPORT  
 2. CONTRACTOR SHALL SET ALPHA PLATFORM FACE AT 190° AZIMUTH.  
 3. LAYOUT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING VERIZON RFDS.

**1 ANTENNA PLAN @ 97 FT. A.G.L.**  
 Scale: 3/8"=1'-0"



MX06FR0640-02 ANTENNA SPEC.				
HEIGHT	WIDTH	DEPTH	WEIGHT	
72.0"	19.8"	10.7"	60.1 LBS	

MX06FR0660-02 ANTENNA SPEC.				
HEIGHT	WIDTH	DEPTH	WEIGHT	
71.3"	15.4"	10.7"	60.1 LBS	

**2 'MX06' ANTENNA SPEC.**  
 Scale: N.T.S.



MT6413 ANTENNA/RRH SPECIFICATIONS				
HEIGHT	WIDTH	DEPTH	WEIGHT	
28.9"	15.75"	5.5"	57.3 LBS	

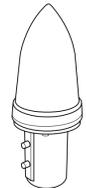
**3 MT6413 ANTENNA SPEC.**  
 Scale: N.T.S.



CBRS INTEGRATED ANTENNA SPECIFICATIONS				
COMPONENT	HEIGHT	WIDTH	DEPTH	WEIGHT
ANTENNA	12.3"	8.7"	1.4"	4.4 LBS
RRH	11.8"	8.7"	4.2"	18.7 LBS

**4 CBRS ANTENNA SPEC.**  
 Scale: N.T.S.

NOTES TO VERIZON EQUIPMENT DETAILS/SPECIFICATIONS:  
 1. ANTENNAS AND EQUIPMENT ARE SUBJECT TO CHANGE BASED ON AVAILABILITY AT TIME OF CONSTRUCTION.



KS-24119L-112A GPS ANTENNA SPEC.				
HEIGHT	WIDTH	DIAMETER	WEIGHT	
5"	16.06"	3.17"	0.6 LBS	

\*ALL MOUNTING OPTIONS FIT PIPES OF 1"-1.45" MAX. DIA.

**5 GPS ANTENNA DETAIL**  
 Scale: N.T.S.



SAMSUNG RRH AWS/PCS ORAN SPECIFICATIONS				
HEIGHT	WIDTH	DIAMETER	WEIGHT	
15"	15"	10"	74.7 LBS	

**6 RRH DETAIL - AWS/PCS**  
 Scale: N.T.S.



SAMSUNG RRH 750/800 ORAN SPECIFICATIONS				
HEIGHT	WIDTH	DIAMETER	WEIGHT	
15"	15"	9.1"	70.3 LBS	

**7 RRH DETAIL - 700/850**  
 Scale: N.T.S.



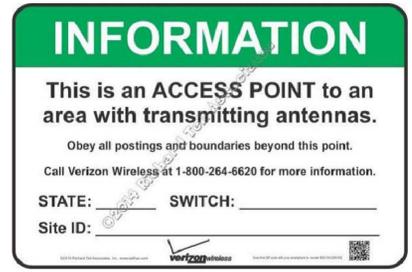
RAYCAP EQUIPMENT SPECIFICATIONS					
MODEL #	HEIGHT	WIDTH	DEPTH	WEIGHT	COLOR
RVZDC-6627-PF-48	29.5"	16.5"	12.6"	32 LBS	LIGHT GREY

**8 CABLE DIST. BOX DETAIL**  
 Scale: N.T.S.



NOTE:  
 1. "YELLOW" CAUTION SIGN SHALL BE LOCATED AT COMPOUND ENTRY LOCATION AND VERIZON EQUIPMENT.  
 2. SIGN MEASURES 12"Hx8"W

**9 CAUTION SIGN**  
 Scale: N.T.S.



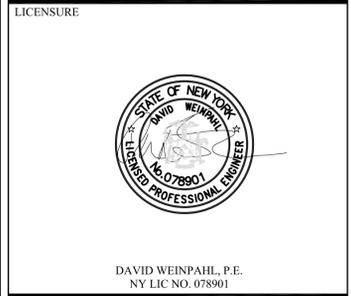
NOTE:  
 1. "GREEN" INFORMATION SIGN SHALL BE LOCATED AT COMPOUND ENTRY LOCATION AND VERIZON EQUIPMENT.  
 2. SIGN MEASURES 12"Wx8"H

**10 VERIZON INFORMATION SIGN**  
 Scale: N.T.S.



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DRAWING TITLE:  
 ANTENNA PLAN &  
 VERIZON EQUIP. SPECS

SHEET NUMBER:  
**VZ-2**