



2247 NORTH FRONT STREET
HARRISBURG, PA 17110 USA

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March 23, 2022

NARRATIVE: Potomac Edison Company's 'Sleepy Hollow Tower Site' Concept Plan

Jefferson County Zoning Ordinances: Section 4B.7 –Wireless Telecommunication Towers Subsection J. 2. a. – permits 100' Tower pursuant to the zoning ordinances.

- West Virginia Code 8A-7-3(e) states: "Essential utilities and equipment are a permitted use in any zoning district."
- Project proposes a 150' monopole.
- On December 10, 2020, the Board of Zoning Appeals approved a variance for Section 4B.7J.2a to increase the height restriction from 100' to 150' for a proposed telecommunications tower.
- At this time, co-location is not anticipated.

Benefits of a monopole at the Sleepy Hollow Substation.

Sleepy Hollow substation is a vital substation for electric supply to Jefferson County, including but not limited to the Charles Town area. The installation of the proposed monopole at that station would allow for a robust communication link that would be owned and maintained by Potomac Edison Company.

The proposed monopole and its' equipment would enhance the visibility and control of the station from the operations centers which will allow for faster responses to changes in the power grid. This monopole and its equipment will lead to shorter outages and allow for problems to be seen before they become outages.

This proposed monopole will make this site a hub for communications to other stations and devices in Jefferson County giving similar benefits to them and thereby making the power grid more stable. Another significant benefit is added security. The proposed monopole will allow Potomac Edison the ability to support a more sophisticated security system including but not limited to real time video. This security system is a very valuable tool in today's environment both as a deterrent and to permit enhanced responses and response times.

Conclusion:

This communications tower (monopole) will enhance the operation of the power grid, the safety of the power grid and allow Potomac Edison Company to have increased security systems at their substation.

Sleepy Hollow Tower Site

Parcel ID 04001000030005
Minor Site Concept Plan

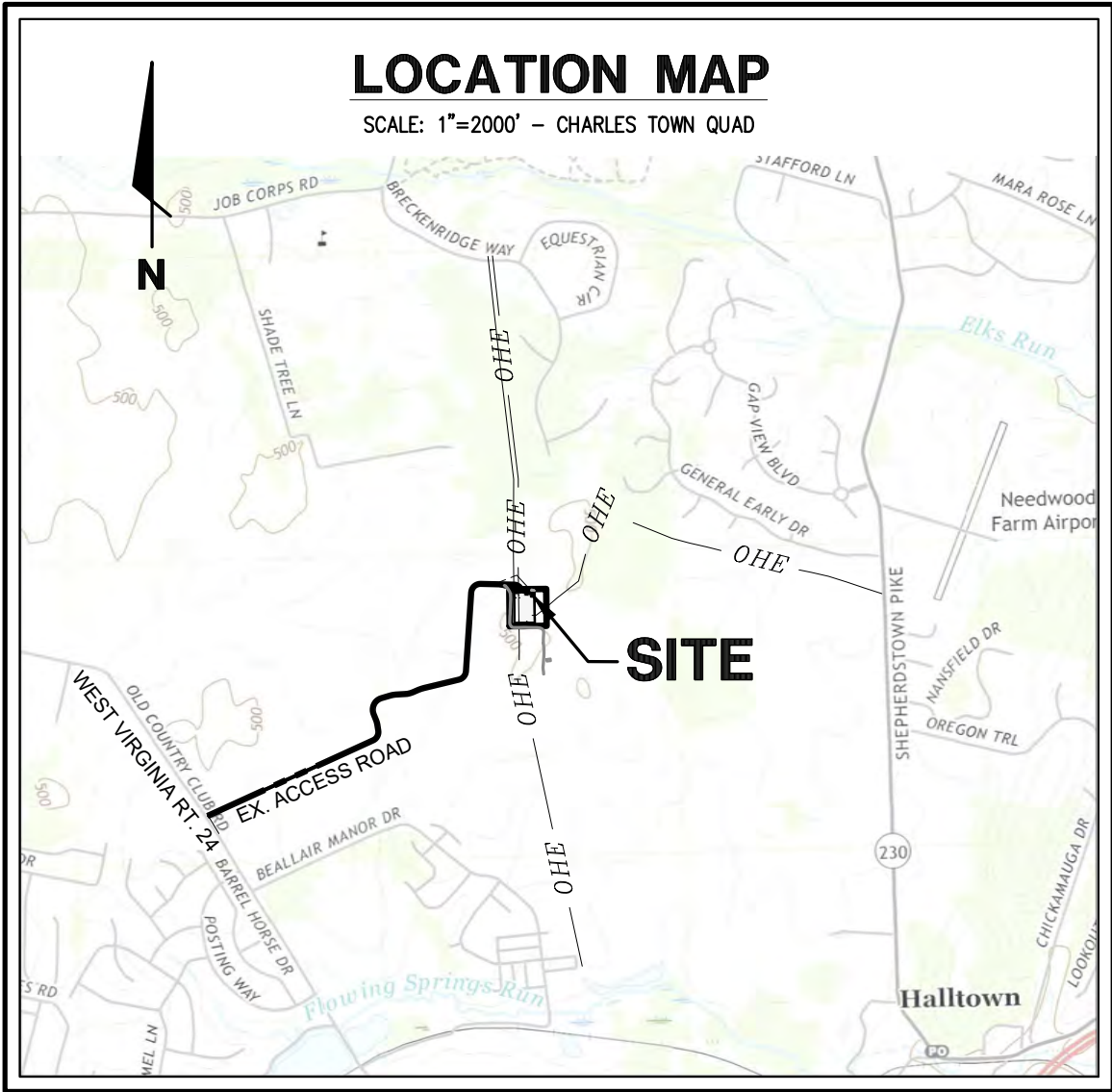
January 20, 2022
Revised February 18, 2022
Revised March 9, 2022
Revised March 23, 2022

Submitted to:
Office of Planning and Zoning
Mason Building, 2nd Floor
116 East Washington Street
Charles Town, WV 25414

Submitted by:
The Potomac Edison Company
10435 Downsview Pike
Hagerstown, MD 21740

Sheet Index

No.	Title
C-1.0	Cover Sheet
C-2.0	Aerial Photograph and Topographic Map
C-3.0	Existing Conditions Plan
C-4.0	Site Plan
C-5.0	Elevations
C-6.0	Details



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CLIENT

PotomacEdison
A FirstEnergy Company

10435 DOWNSVIEW PIKE
HAGERSTOWN, MD 21740

PROJECT

Sleepy Hollow Tower Site

1320 OLD COUNTRY CLUB ROAD
CHARLES TOWN, WV 25414

PHASE

MINOR SITE PLAN
CONCEPT PLAN
OFFICE OF PLANNING & ZONING
JEFFERSON COUNTY, WV

DRAWING

AERIAL PHOTOGRAPH,
TOPOGRAPHIC MAP, AND
CONCEPT PLAN FOR
BRECKENRIDGE EAST

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SCALE

1" = 100'

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LEGEND

---	RIGHT-OF-WAY LINE
---	PROPERTY LINE
---	ADJOINING PROPERTY LINE
---	PROPOSED PROPERTY LINE
---	EXISTING ROAD CENTER LINE
---	EXISTING EASEMENT LINE
---	PROPOSED EASEMENT LINE
---	EXISTING CONTOUR LINE
---	PROPOSED CONTOUR LINE
---	EXISTING EDGE OF PAVEMENT
---	PROPOSED EDGE OF PAVEMENT
---	TOWNSHIP/BORO/COUNTY LINE
---	SOIL BOUNDARY LINE
---	EXISTING ELECTRIC WITH UTILITY POLE
---	EXISTING UNDERGROUND ELECTRIC
○	IRON PIN (FOUND)
○	IRON PIN (SET)
---	EXISTING STRUCTURES OR FEATURES
---	PROPOSED STRUCTURE
---	12" SILT SOXX (COMPOST FILTER SOCK)
---	STABILIZED CONSTRUCTION ENTRANCE
---	LIMIT OF CONSTRUCTION
---	SOIL TEST LOCATION
---	EXISTING FENCE
---	EXISTING SUBSTATION INFRASTRUCTURE (APPROX.)

Jefferson County CONSTRUCTION NOTES

(Table 1.2-1)

- Erosion & Sediment Control Measures shall be in place and inspected prior to performing any significant earth disturbing activities and site grading.
- Earth Work shall be compacted to the percentages of maximum dry density in accordance with AASHTO T99C, as shown below:
 - Roadways..... 98%
 - Parking Lots for heavy trucks..... 98%
 - Parking Lots for passenger vehicles..... 95%
 - Utility line trenches..... 98%
 - Building Pads..... 100%The above compaction requirements shall be certified by a professional engineer or a soils technician under the direction of a professional engineer, and acceptable to the County Engineer.
- Changes and revisions to the construction plans and specifications shall not be made unless first submitted in writing and approved by the County Engineer and any other agencies, as deemed appropriate.
- Work zone temporary traffic control along a public road shall be in accordance with West Virginia Division of Highway requirements and approval.
- Seventy-two (72) hours prior to excavation in public right-of-ways or in areas served by underground utilities, call MISS UTILITY 1-800-245-4848.

Jefferson County SITE WORK MILESTONE INSPECTIONS

The developer shall request County Engineer inspections minimum of 48 hours in advance (Call 304-728-3228). Inspections shall be requested according to the Table of Milestones shown below:

- Installation of Sediment & Erosion Control Devices prior to beginning site grading.
- Roadway and/or parking lot subgrade proof roll prior to placing stone base.
- Roadway and/or parking lot stone base depth check prior to placing asphalt or concrete pavement.
- Water system and Sanitary sewer system inspection and approval by the public service district/utility prior to backfilling of trenches.
- Final inspection including but not limited to: seeding & mulching, roadway & parking lot paving, sidewalks, storm drainage and stormwater management systems, traffic control signs & pavement markings, landscaping, etc.

Note: The County Engineer may accept "third-party" inspection and certification reports in place of inspections performed by the Office of Engineering, upon prior approval. Third-party inspection reports shall be submitted in the format specified by the County Engineer.

Jefferson County – Complete List of Waivers/Variations (Table 1.2-2)

Ordinance	Section of Ordinance	Description of Waiver or Variance	Date Granted
ZONING	SECTION 4B.7J2.a VARIANCE	INCREASED THE HEIGHT RESTRICTION FROM 100' TO 150' FOR A PROPOSED COMMUNICATIONS TOWER	12/10/2020

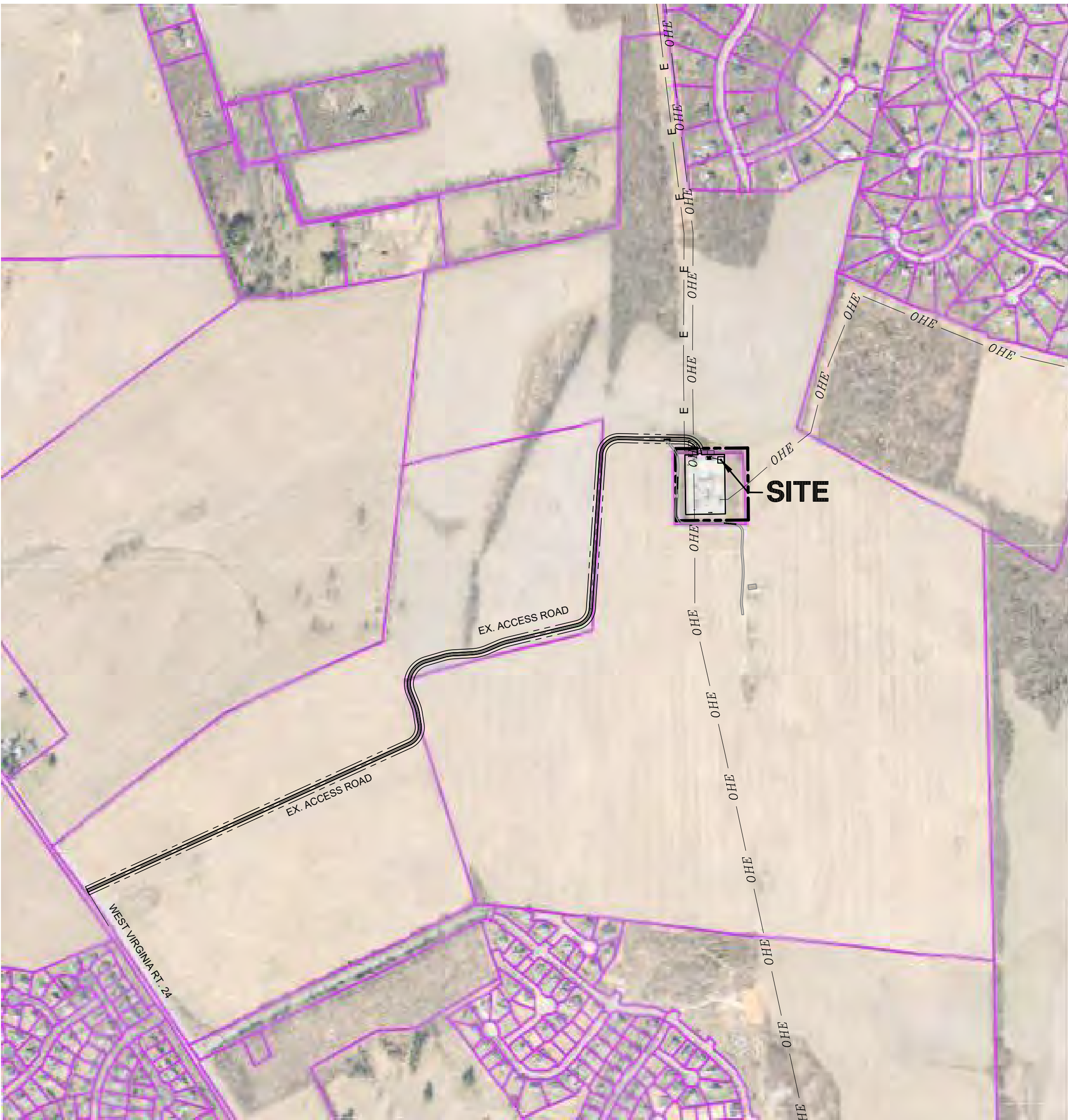
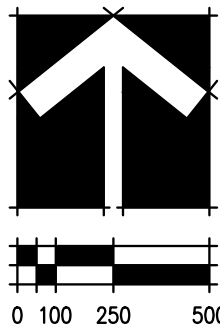
Jefferson County, West Virginia

☐ PRELIMINARY PLAT APPROVAL

☐ SITE PLAN APPROVAL

BY _____ Date _____
County Engineer

BY _____ Date _____
County Planner



TAX MAP OVERLAY
SCALE: 1" = 500'

SITE DATA

OWNER: THE POTOMAC EDISON COMPANY
10435 DOWNSVILLE PIKE
HAGERSTOWN, MD 21740

APPLICANT: RICHARD A. MARQUISS, FIRST ENERGY
10802 BOWER AVENUE
WILLIAMSPORT MD, MAILSTOP WV-WPSC
(301) 331-7026, (301) 790-6146
rmarqu@firstenergycorp.com

PHYSICAL PROPERTY ADDRESS: 1320 OLD COUNTRY CLUB ROAD
CHARLES TOWN, WV 25414

TAX DISTRICT: HARPERS FERRY (04)
MAP NO: 10
PARCEL NO: 0400100030005
DEED BOOK: 821
PAGE NO: 484

TOTAL TRACT AREA: 159,832 SF ± (3.6692 ACRES ±)
EXISTING IMPERVIOUS COVERAGE: 73,319 SF ± (1.6832 ACRES ±) = 45.9% IMPERVIOUS
PROPOSED IMPERVIOUS COVERAGE: 73,319 SF ± (1.6832 ACRES ±) = 45.9% IMPERVIOUS

EXISTING/PROPOSED WATER SERVICE: N/A
EXISTING/PROPOSED SEWER SERVICE: N/A
EXISTING USE: UTILITY (SUBSTATION)
PROPOSED USE: UTILITY (SUBSTATION & TELECOMMUNICATIONS TOWER)

ZONING DATA

ZONING DISTRICT: RESIDENTIAL GROWTH (RG)
DEVELOPMENT TYPE: COMMERCIAL
MINIMUM LOT AREA (MLA): N/A
MINIMUM LOT WIDTH: N/A
MAXIMUM BUILDING HEIGHT: 35'
IMPERVIOUS SURFACE LIMIT: 80%

BUILDING SETBACK REQUIREMENTS: FRONT 25'
SIDE 25'
REAR 25'

PARKING/DRIVE AISLE SETBACKS: FRONT 15'
SIDE 10'
REAR 10'

VARIANCE APPROVED

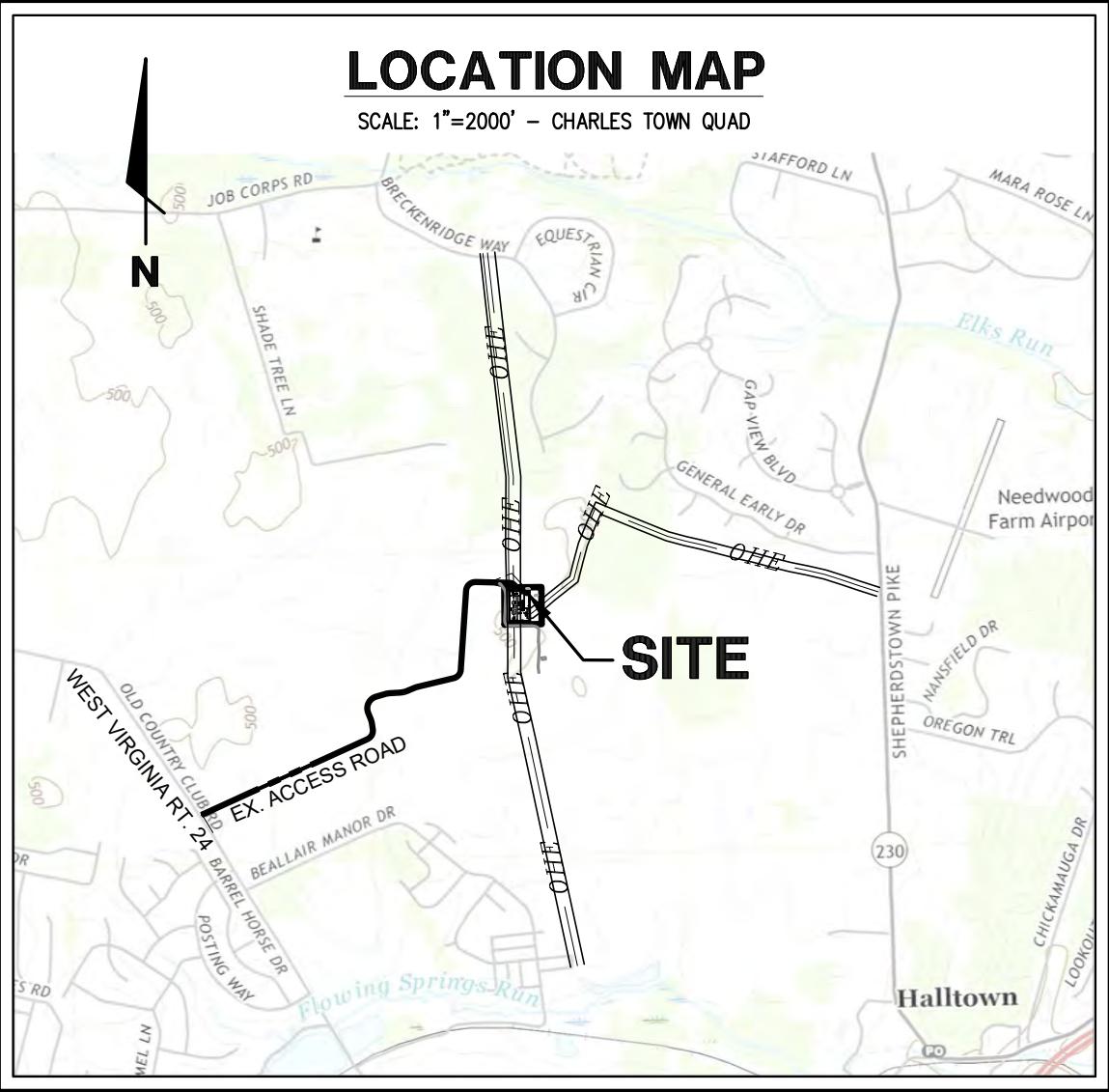
VARIANCE REQUEST FROM SECTION 4B.7.1.2.a TO INCREASE THE HEIGHT RESTRICTION FROM 100' TO 150' FOR A PROPOSED TELECOMMUNICATIONS TOWER WAS GRANTED BY BZA 12/10/20 (20-40-ZV).

CONSTRUCTION SCHEDULE

TOWER FOUNDATION POURED: JULY 2022
TOWER FOUNDATION CURE TIME: 28 DAYS
MONOPOLE AND ANTENNA INSTALLATION: AUGUST 2022

GENERAL NOTES

- THE PURPOSE OF THIS PLAN IS TO CONSTRUCT A 150' COMMUNICATIONS MONOPOLE TOWER WITHIN AN EXISTING SUBSTATION COMPOUND.
- EXISTING SUBSTATION LAYOUT AND EXISTING CONDITIONS SHOWN PER 'SLEEPY HOLLOW SUBSTATION SCREENING PLAN' BY ALLEGHENY POWER SERVICE CORP. DATED 12/7/93 SUPPLEMENTED WITH AVAILABLE DEEDS AND AERIAL PHOTOGRAPHY. NO SURVEY HAS BEEN PERFORMED AS PART OF THIS PLAN.
- EXISTING SUBSTATION CONTROL BUILDING LAYOUT TAKEN FROM 'SLEEPY HOLLOW SUBSTATION 16x36 CONTROL BUILDING CABLE TRAY LAYOUT' PLAN BY ALLEGHENY POWER SYSTEM DATED JANUARY 6, 1994.
- EXISTING SUBSTATION ELECTRICAL LAYOUT TAKEN FROM 'SLEEPY HOLLOW SUBSTATION ELECTRICAL LAYOUT ELEVATIONS A-A, B-B, C-C & H-H' PLAN BY FIRST ENERGY DATED OCTOBER 15, 2015, AND 'SLEEPY HOLLOW SUBSTATION FOUNDATION AND FENCE LAYOUT' PLAN BY FIRST ENERGY DATED JANUARY 6, 1994.
- THERE IS NO 100-YEAR FLOODPLAIN ON THE SITE PER FEMA MAP PANEL 54037C0130E DATED 12/18/2009.
- THERE ARE NO WETLANDS WITHIN THE FENCED COMPOUND AREA.
- SOURCE OF BOUNDARY DESCRIPTION TAKEN FROM ALLEGHENY POWER SYSTEM PLANS DATED DECEMBER 7, 1993, ROTATED TO SPCS WV NORTH NA083.
- BALLOON TEST PERFORMED ONSITE NOVEMBER 6, 2020. SEE ACCOMPANYING REPORT.
- NO CO-LOCATIONS ARE PLANNED FOR THIS PROPOSED TOWER.
- THE PROPOSED TOWER WILL BE GALVANIZED GRAY TO BLEND IN WITH BACKGROUND SKY.
- PER GIS.TRANSPORTATION.WV.GOV, OLD COUNTRY CLUB ROAD (WV STATE ROAD 24) IS A MINOR COLLECTOR ROAD WITH A TRAFFIC AADT OF 2394 AS RECORDED IN THE YEAR 2020.
- THE TRAFFIC COUNT/TRIP GENERATION FOR THE PROPOSED PROJECT IS ZERO.
- ACCORDING TO THE 'ENVISION JEFFERSON 2035' COMPREHENSIVE PLAN, THE NEAREST HIGHWAY PROBLEM AREA IS DANIEL ROAD, AT THE INTERSECTION WITH FLOWING SPRINGS ROAD JUST NORTH OF OLD COUNTRY CLUB ROAD.
- SIGNAGE AT ANY GROUND-BASED PORTION OF A FACILITY SITE SHALL CONFORM TO FCC AND FAA STANDARDS. NO COMMERCIAL SIGNAGE IS PERMITTED.
- TOWERS SHALL NOT BE LIGHTED OR MARKED UNLESS REQUIRED BY THE FCC OR FAA.
- GENERATORS MAY NOT BE USED AS A PRIMARY ELECTRICAL POWER SOURCE. BACKUP GENERATORS SHALL ONLY BE OPERATED DURING POWER OUTAGES OR FOR TESTING AND MAINTENANCE PURPOSES. TESTING AND MAINTENANCE OF A GENERATOR SHALL ONLY TAKE PLACE ON WEEKDAYS BETWEEN THE HOURS OF 8:00 A.M. AND 7:00 P.M.
- ALL ADJOINING PROPERTIES ARE VACANT OR AGRICULTURAL USE.
- ACCORDING TO THE 'ENVISION JEFFERSON 2035' COMPREHENSIVE PLAN, THE NEAREST KEY INTERSECTION IS THE INTERSECTION OF OLD COUNTRY CLUB ROAD (ROUTE 24) WITH FLOWING SPRINGS ROAD (ROUTE 17). FLOWING SPRINGS ROAD IS CLASSIFIED AS A MAJOR COLLECTOR / SECONDARY HIGHWAY.
- THE PROPOSED FALL RADIUS EASEMENT MUST BE RECORDED PRIOR TO THE ISSUANCE OF THE BUILDING PERMIT.



AERIAL PHOTOGRAPH AND TOPOGRAPHIC MAP
SCALE: 1" = 100'

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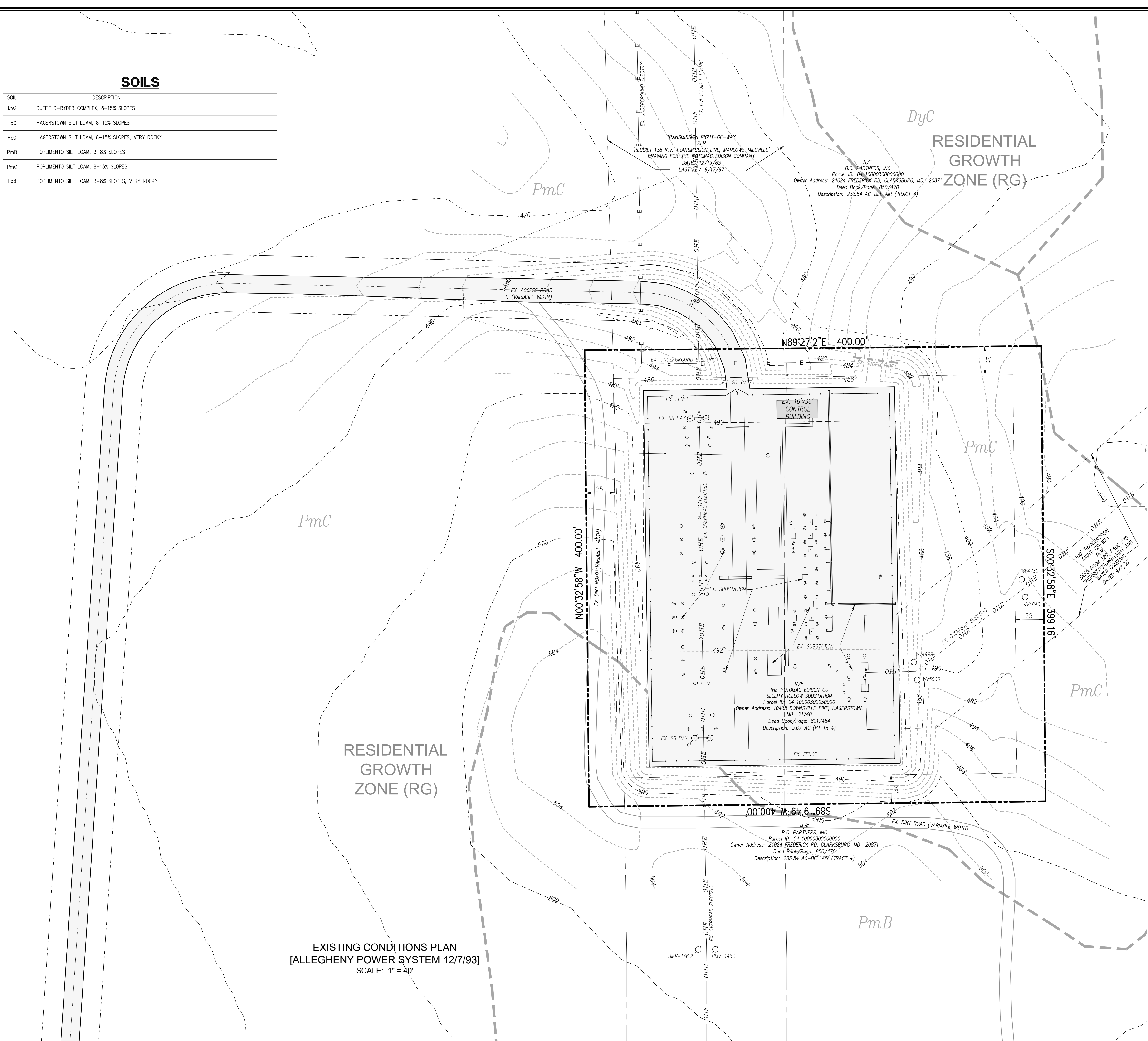
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SOIL	DESCRIPTION
DyC	DUFFIELD-RYDER COMPLEX, 8-15% SLOPES
HbC	HAGERSTOWN SILT LOAM, 8-15% SLOPES
HeC	HAGERSTOWN SILT LOAM, 8-15% SLOPES, VERY ROCKY
PmB	POPLUMTO SILT LOAM, 3-8% SLOPES
PmC	POPLUMTO SILT LOAM, 8-15% SLOPES
PpB	POPLUMTO SILT LOAM, 3-8% SLOPES, VERY ROCKY



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**EXISTING CONDITIONS
PLAN**

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SITE PLAN

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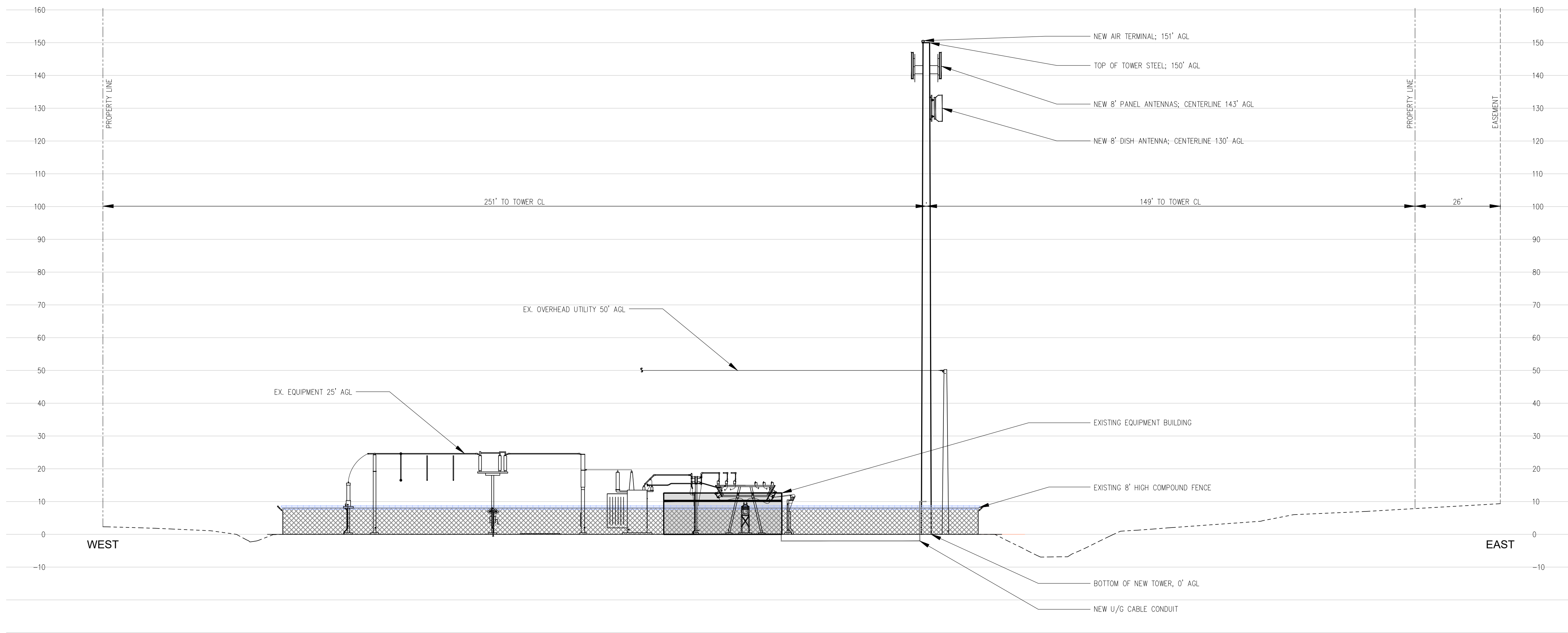
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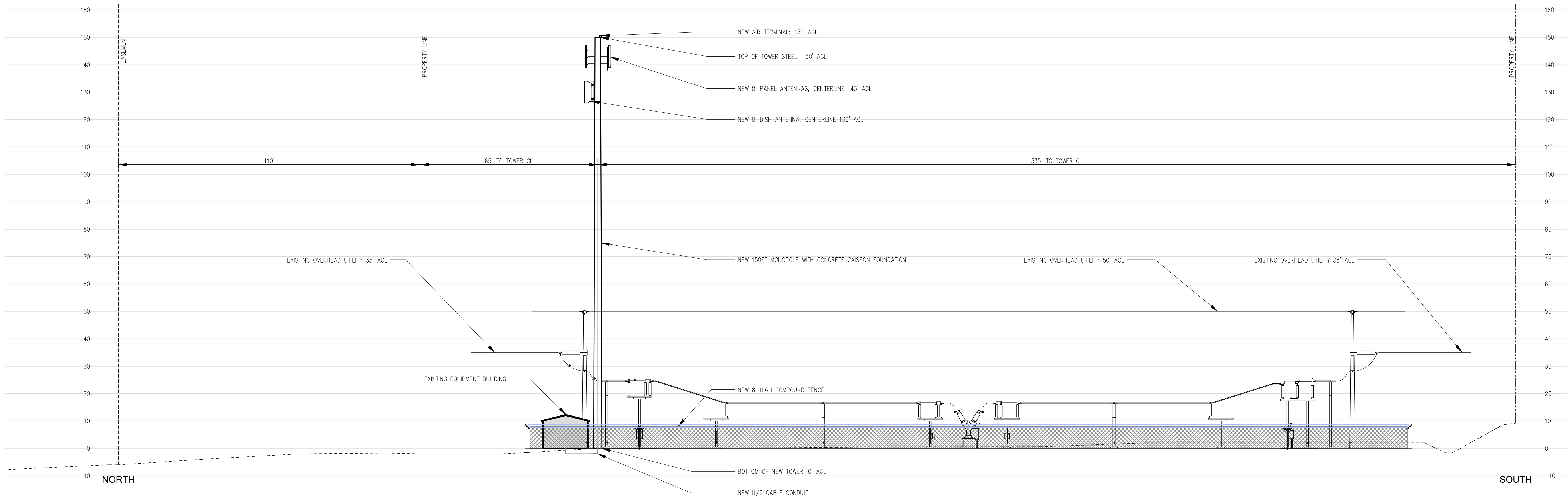
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ELEVATION WEST-EAST
SCALE: 1" = 20'



ELEVATION NORTH-SOUTH
SCALE: 1" = 20'

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ELEVATIONS

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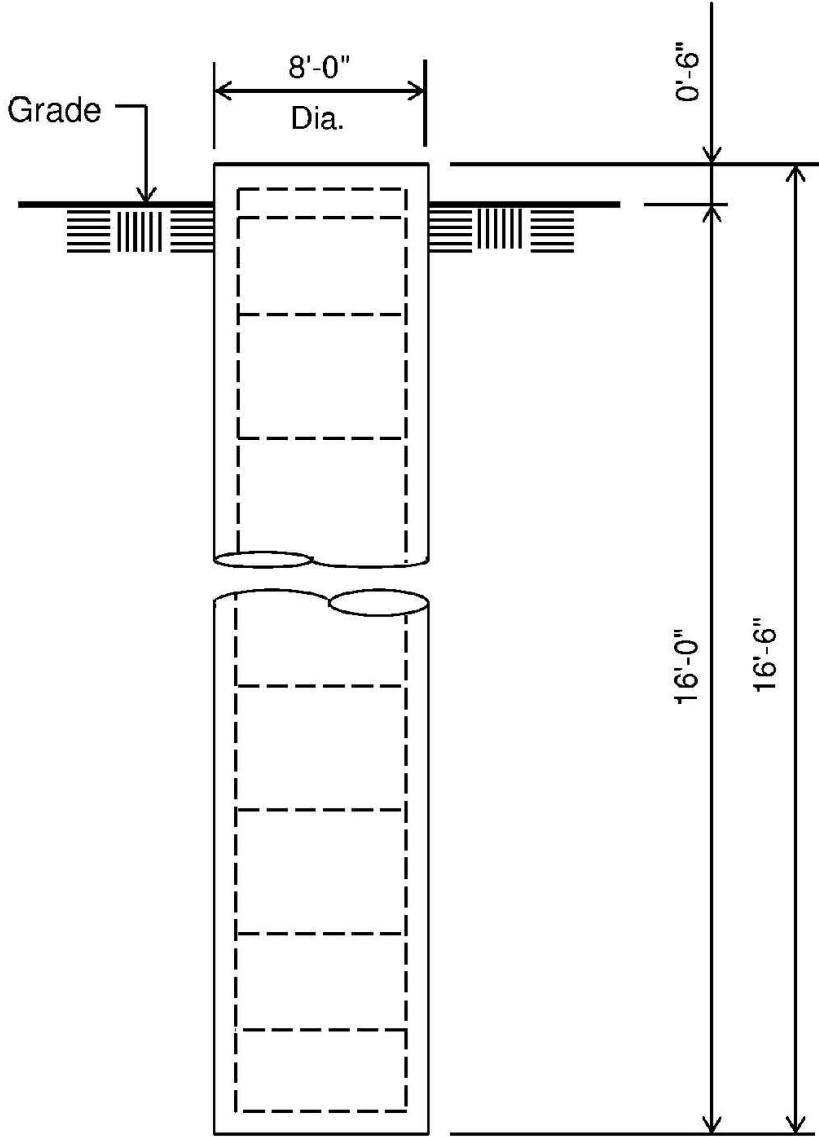
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ELEVATION VIEW
(30.72 Cu. Yds.)

Rebar Schedule for Pier	
Pier	(48) #8 vertical rebar w/ #5 ties, (2) within top 5" of pier, then 7" C/C

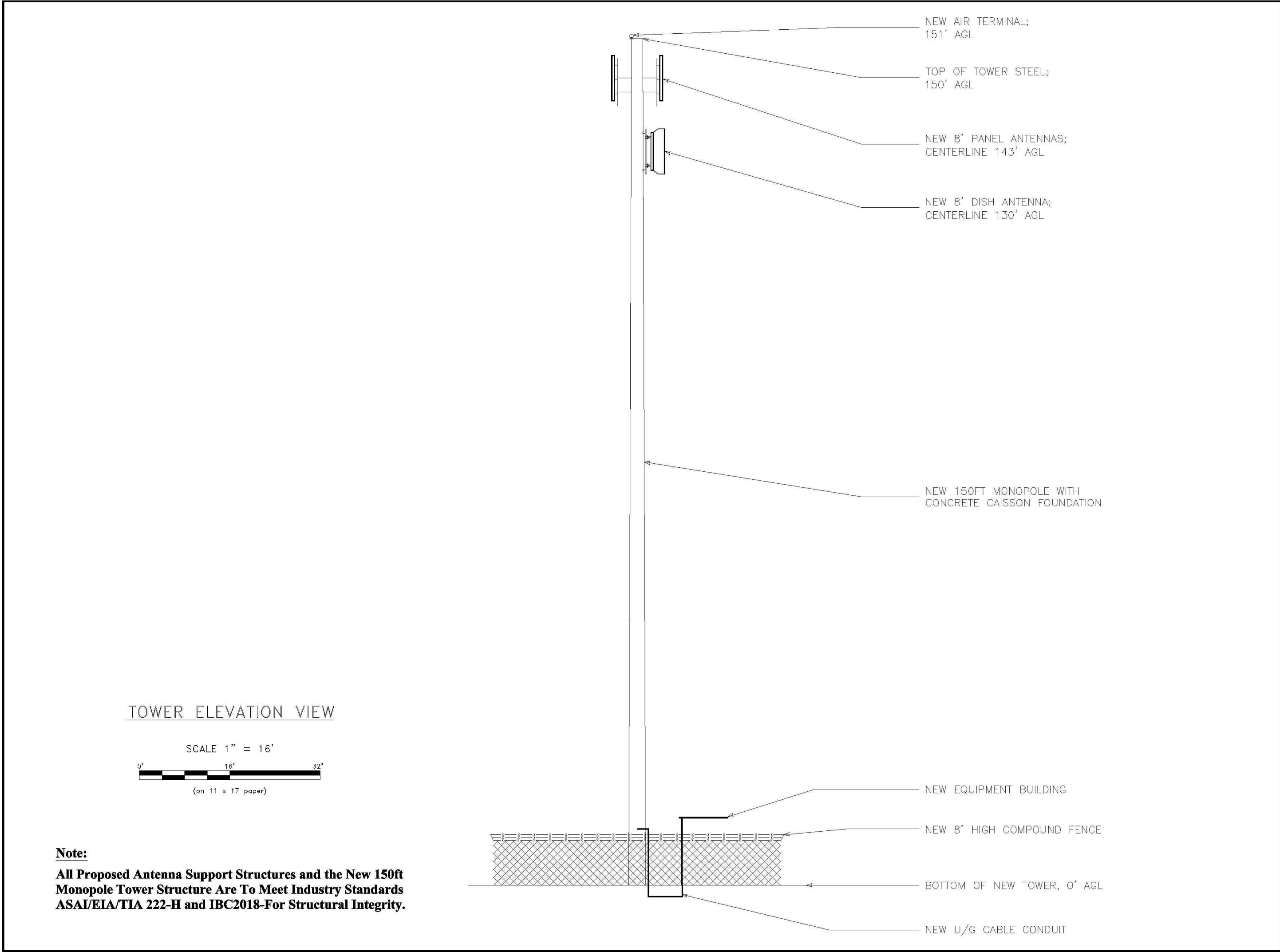
Notes:

- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on the geotechnical report by Kleinfelder, Inc., Project No. 20223415.001A, dated December 17, 2021.
- 6) See the geotechnical report for drilled pier installation requirements, if specified.
- 7) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

TOWER FOUNDATION DETAILS



TYPICAL MONOPOLE PHOTOGRAPH
NO SCALE



Note:

All Proposed Antenna Support Structures and the New 150ft Monopole Tower Structure Are To Meet Industry Standards ASAE/ETIA 222-H and IBC2018-For Structural Integrity.

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TOWER DETAILS AND SITE PLAN

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