IOWN SIGNATURES:		
CHAIRMAN	DATE	
SECRETARY	DATE	
TOWN ENGINEER		

ALL NORTH HACKETTSTOWN

TOWN OF HACKETTSTOWN

BLOCK 45, LOT 2.01

632.25'± (NAVD 88)

SMDB REALTY LLC

VERIZON WIRELESS

215 STIGER STREET

215 STIGER STREET

101 MILLER STREET

MUNICIPAL DATA: ■

908-852-3130

908-852-3300

908-852-6304

FOR EMERGENCIES CALL 911

ABBREVIATIONS:

MGB

RF

■■ NEW JERSEY CODE COMPLIANCE: ■

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN

ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS

ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS

TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS

OF THE FOLLOWING CODES:

TYP

AUTOMATIC TRANSFER SWITCH MAX

ELECTRICAL METALLIC TUBING POT

INTERNATIONAL BUILDING CODE RGS

AMERICAN WIRE GAUGE

BASE TRANSMISSION SYSTEM

INTERNATIONAL FIRE CODE

LIMIT OF DISTURBANCE

ATTENTION

CONTINUED COPPER

GENERATOR

DRAWING

GROUND

BUILDING CODE:

ELECTRICAL CODE:

FIRE SAFETY CODE:

CONSTRUCTION TYPE:

USE GROUP:

2 VALLEY SQUARE / SUITE 300 512 EAST TOWNSHIP LINE ROAD

TOWN OF HACKETTSTOWN

BLUE BELL, PENNSYLVANIA 19422

HACKETTSTOWN, NEW JERSEY 07840

HACKETTSTOWN POLICE DEPARTMENT

HACKETTSTOWN, NEW JERSEY 07840

HACKETTSTOWN FIRE DEPARTMENT

HACKETTSTOWN, NEW JERSEY 07840

MINIMUM

TYPICAL

INTERNATIONAL BUILDING CODE 2018 (NEW JERSEY EDITION)

INTERNATIONAL FIRE CODE 2018 (NEW JERSEY EDITION)

MASTER GROUND BAR

POINT OF BEGINNING

POINT OF CONNECTION

POINT OF TERMINATION

POLYVINYL CHLORIDE

RADIO FREQUENCY

RIGID GALVANIZED STEEL

MANUAL TRANSFER SWITCH

NATIONAL ELECTRICAL CODE

POWER PROTECTION CABINET

NATIONAL ELECTRICAL CODE 2017

U (UTILITY)

100 BILBY ROAD

3.00 ACRES

MONOPOLE

WARREN COUNTY, NEW JERSEY

LM - LIMITED MANUFACTURING

N 40°51'58.55" (40.8663°) (NAD83)

W 74°48'46.08" (-74.8128°) (NAD83)

155'-0"± AGL (TOP OF LIGHTNING ROD)

HACKETTSTOWN, NEW JERSEY 07840

ALLENTOWN SMSA, LIMITED PARTNERSHIP

A DELAWARE LIMITED PARTNERSHIP D/B/A

HACKETTSTOWN, NEW JERSEY 07840

SITE NAME:

SITE ADDRESS:

JURISDICTION

ZONING:

PARCEL ID:

PARCEL SIZE:

SITE COORDINATES

GROUND ELEVATION

STRUCTURE TYPE

STRUCTURE HEIGHT

LANDLORD ADDRESS

LANDLORD NAME:

APPLICANT:

MUNICIPALITY:

POLICE:

FIRE:

BTS

CU

DWG

EMT

GEN

IFC

CONT

ALLENTOWN SMSA, LIMITED PARTNERSHIP A DELAWARE LIMITED PARTNERSHIP d/b/a

SITE NAME: ALL NORTH HACKETTSTOWN

VERIZON WIRELESS

NEW BUILD

SITE ADDRESS: 100 BILBY ROAD HACKETTSTOWN, NEW JERSEY 07840

SCALE: 1" = 1000' Old Bilby ny's II Pizza & Pasta Stephens State Park Computer Wholesalers Inc Center

■ DRIVING DIRECTIONS: ■ HEADING FROM VERIZON OFFICE AT 512 EAST TOWNSHIP LINE ROAD: TURN LEFT ONTO TOWNSHIP LINE ROAD. TURN RIGHT ONTO US-202 / DEKALB PIKE. TAKE RAMP FOR PA-611 NORTH TOWARD EASTON. TURN RIGHT ONTO DELAWARE ROAD. TURN RIGHT ONTO RIVER ROAD. BEAR RIGHT ONTO WARREN GLEN-BLOOMSBURY ROAD / WARREN GLEN ROAD / CR-639. BEAR RIGHT ONTO RT-173. BEAR LEFT ONTO BLOOMSBURY ROAD / CR-632. TURN

Riverfront Park

CERTIFICATION OF OWNERSHIP: I

HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY WHICH IS SUBJECT OF THIS PLAN AND THAT THE LAND USE ACTION PROPOSED BY THIS PLAN IS MADE AT MY DIRECTION AND THAT I AUTHORIZE THIS PLAN TO BE RECORDED IN ACCORDANCE WITH THE REGULATIONS OF THE TOWN OF HACKETTSTOWN LAND DEVELOPMENT ORDINANCE.

LEFT ONTO ASBURY BROADWAY ROAD / CR-643. TURN RIGHT ONTO ASBURY-ANDERSON ROAD / CR-632. BEAR RIGHT ONTO RT-57. BEAR LEFT ONTO US-46 / MAIN STREET. TURN RIGHT ONTO WILLOW GROVE STREET / CR-604. TURN

SIGNATURE DATE

LEFT ONTO BILBY ROAD. SITE IS ON THE LEFT.

DRAWING SHEET:

Z-2

Z-4

Z-5

Z-6

Z-7

Z-8

Z-10

Z-11

THE PROPOSED EQUIPMENT ASSOCIATED WITH THIS PROJECT PLEASE REFER TO THE STRUCTURAL ANALYSIS COMPLETED BY OTHERS FOR AL

> Know what's **below.** Call before you dig.

> > DRAWING TITLE:

TITLE SHEET

COMPOUND PLAN

ELEVATION

SCREENING PLAN

LIGHTING PLAN

EQUIPMENT PAD DETAILS & NOTES

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS (CONTINUED)

GENERATOR DETAILS

LP TANK DETAILS

ANTENNA PLAN & DETAILS

■ DRAWING SCALE NOTES: ■

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24"x36". CONTRACTOR SHALI

VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHAL

IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE

PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

THIS DRAWING DOES NOT INCLUDE NECESSAF ONSTRUCTION MUST BE DONE IN COMPLIAN ACT OF 1970 AND ALL RULES AND REGULATION:

ALLENTOWN SMSA, LIMITED PARTNERSHIP A DELAWARE LIMITED PARTNERSHIP d/b/a

VERIZON WIRELESS 2 VALLEY SQUARE / SUITE 300 **512 EAST TOWNSHIP LINE ROAD**

BLUE BELL. PENNSYLVANIA 19422

ISSUED FOR ZONIN ISSUED FOR ZONIN 07-30-20 ISSUED FOR ZONING DATE

> 19E0092.001 ■ DRAWING TITLE: ■

TITLE SHEET

■ DRAWING SHEET:■

AE JOB No:

SITE INFORMATION: SITE NAME: ALL NORTH

> **HACKETTSTOWN** SITE ADDRESS: 100 BILBY ROAD HACKETTSTOWN. **NEW JERSEY 07840**

JURISDICTION: TOWN OF HACKETTSTOWN WARREN COUNTY, NEW JERSEY

SHEET NUMBER:

ENGINEER SEAL: AE CERTIFICATION OF AUTHORIZATION # 24GA28073100

ANDREW M. MILLER, PE NEW JERSEY PROFESSIONAL ENGINEER LICENSE # GE50514

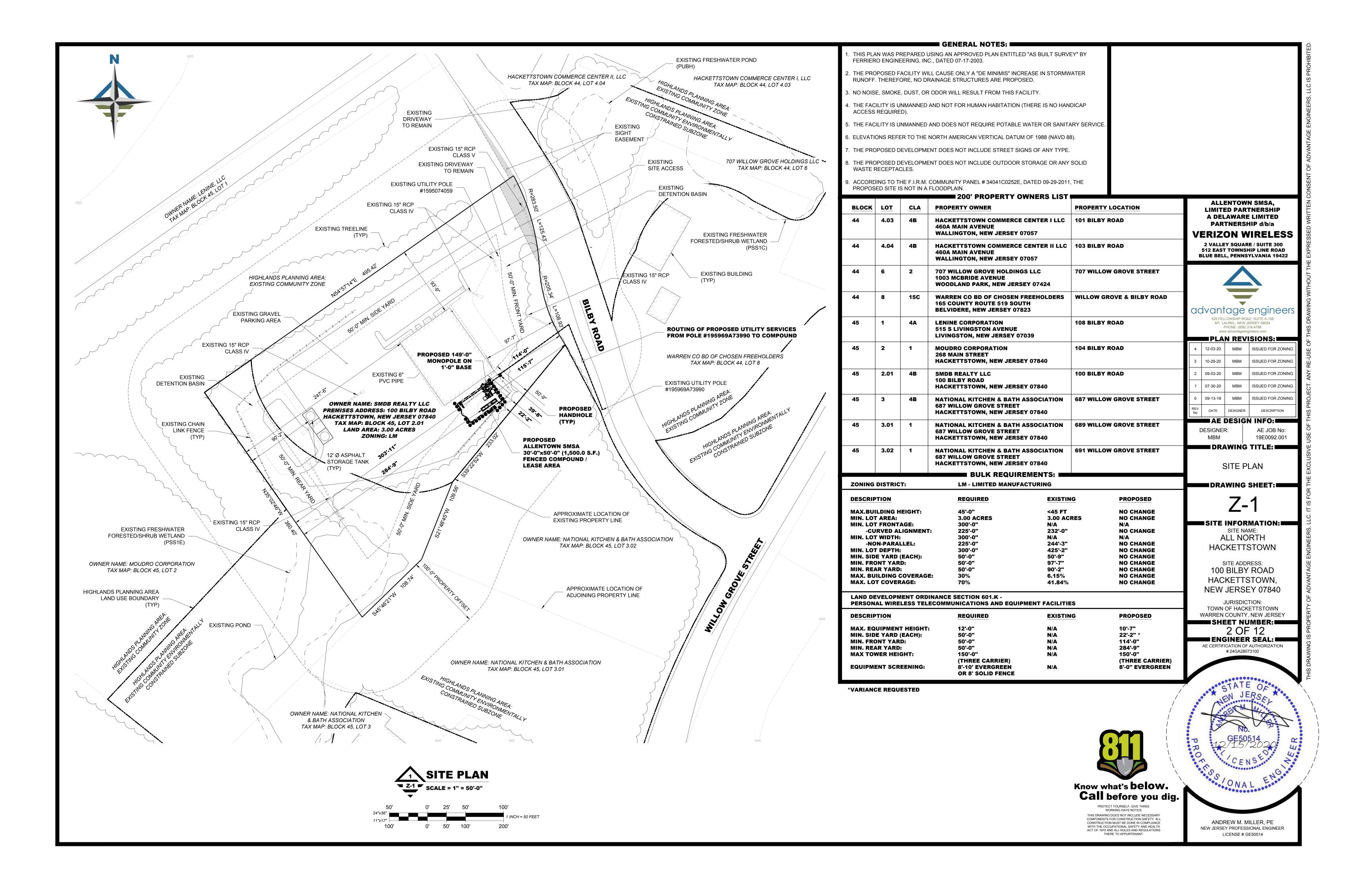
SCALE: 1" = 200'

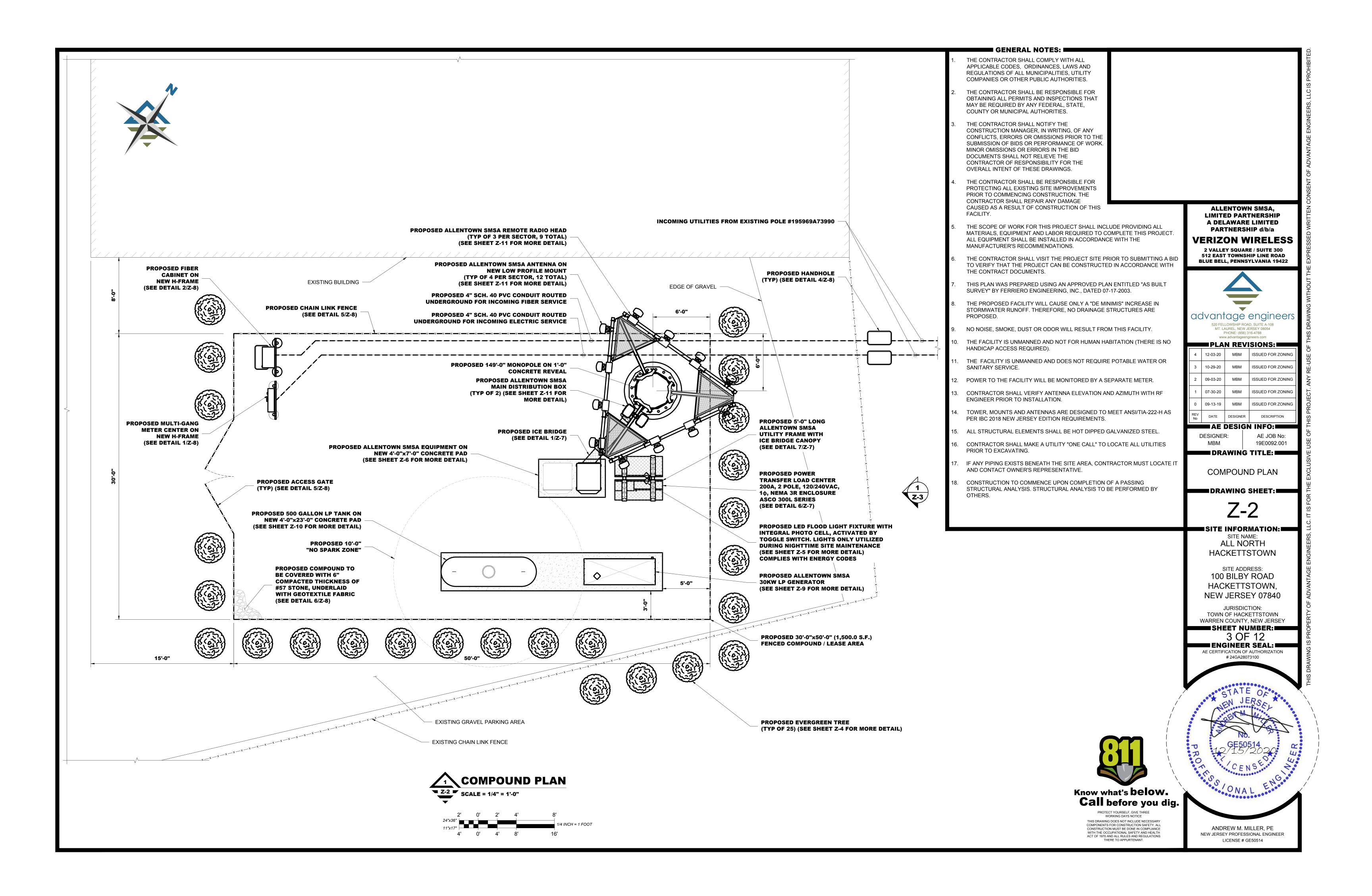
- PROPOSED MONOPOLE AND EQUIPMENT PAD TO BE INSTALLED WITHIN A NEW 30'-0"x50'-0" FENCED COMPOUND / LEASE AREA.
- THE COMPOUND.
- ALONG A NEW ICE BRIDGE.
- 5. NEW ELECTRICAL SERVICE TO BE INSTALLED TO COMMUNICATIONS COMPOUND.

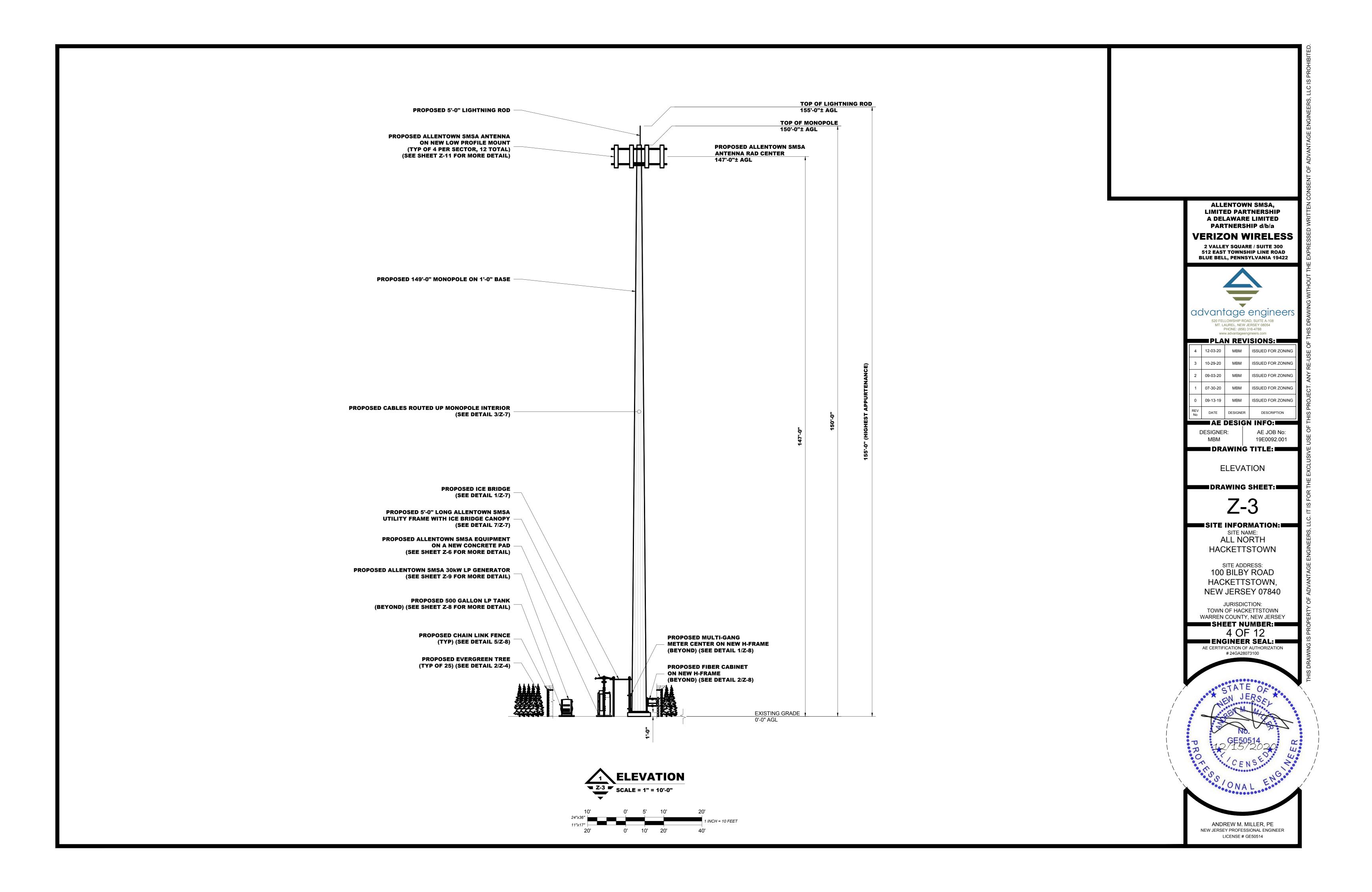
PROJECT DESCRIPTION:

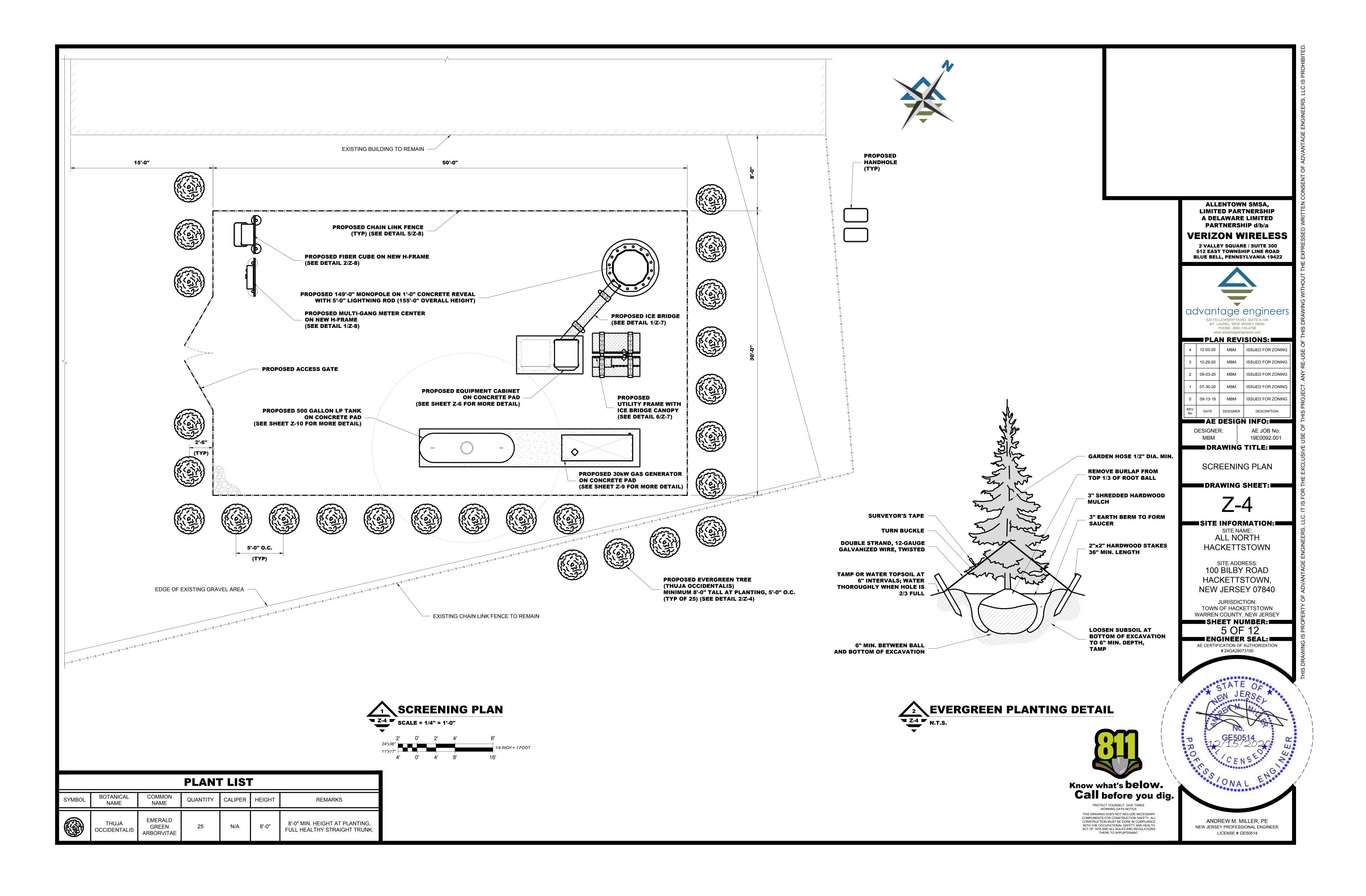
- 2. PROPOSED LP GENERATOR AND 500 GALLON LP TANK TO BE INSTALLED ON A NEW CONCRETE PAD WITHIN
- ARE TO BE INSTALLED ON A NEW LOW PROFILE PLATFORM ON THE NEW MONOPOLE.

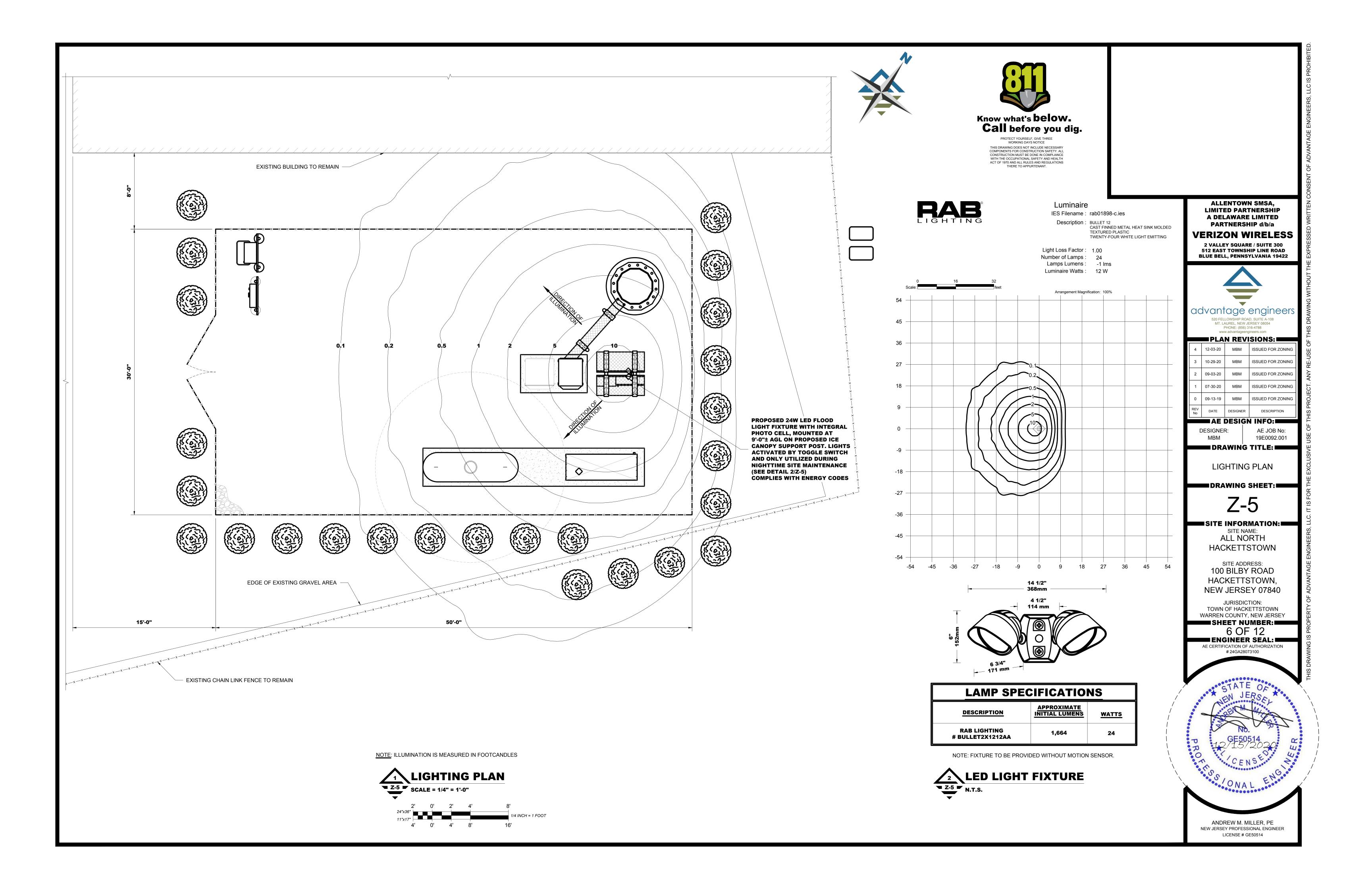
- 3. TWELVE (12) PROPOSED ANTENNAS, NINE (9) REMOTE RADIO HEADS AND TWO (2) MAIN DISTRIBUTION BOXES
- 4. TWO (2) NEW HYBRID CABLES TO BE INSTALLED ALONG THE INSIDE OF THE PROPOSED MONOPOLE AND
- 6. NEW FIBER SERVICE TO BE INSTALLED TO COMMUNICATIONS COMPOUND.

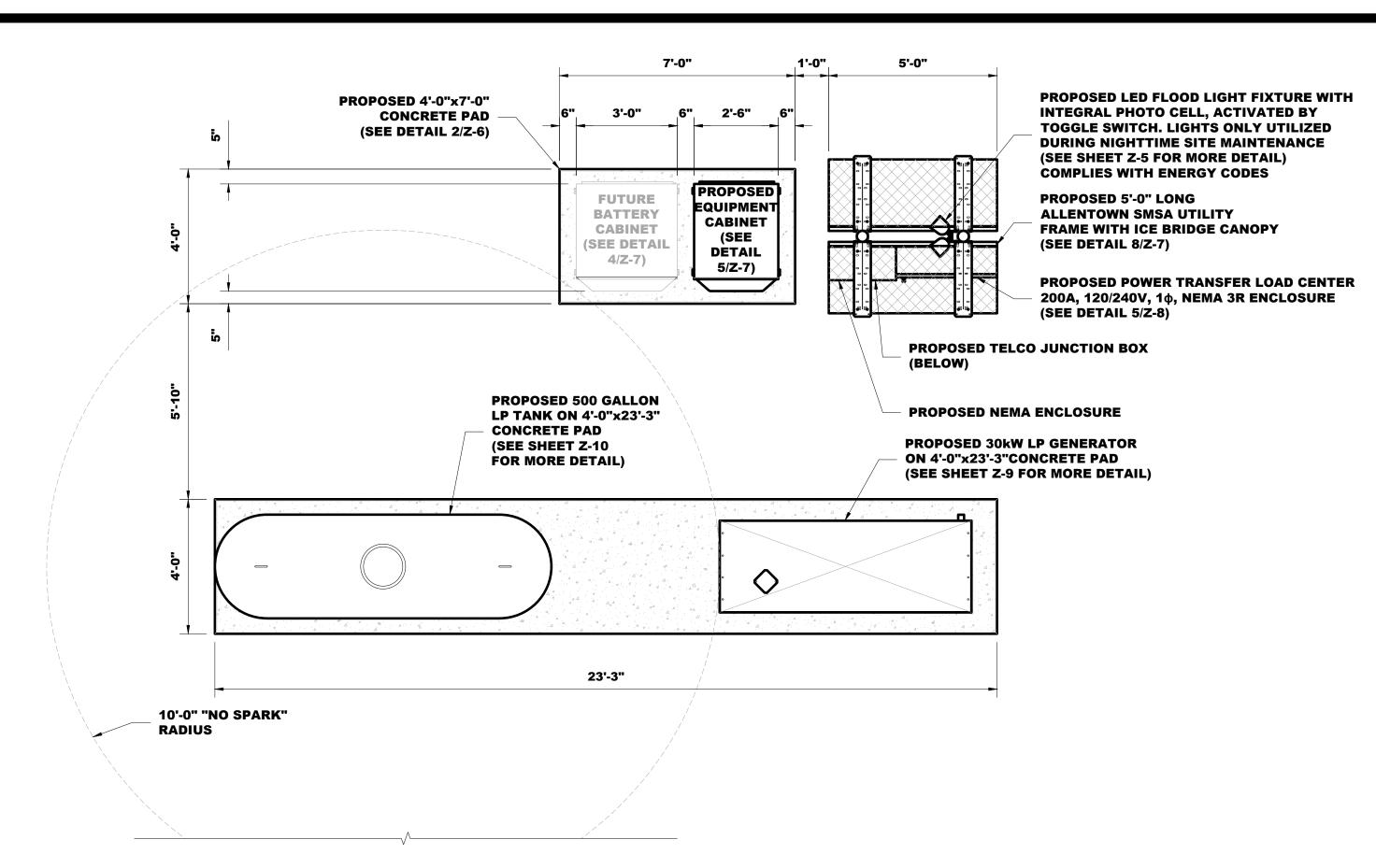




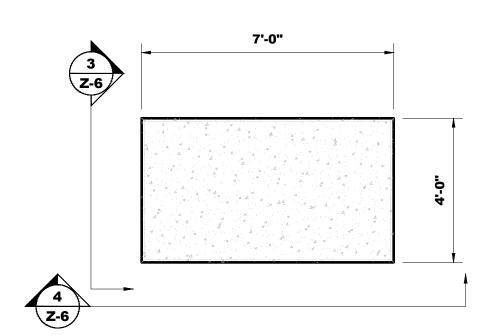




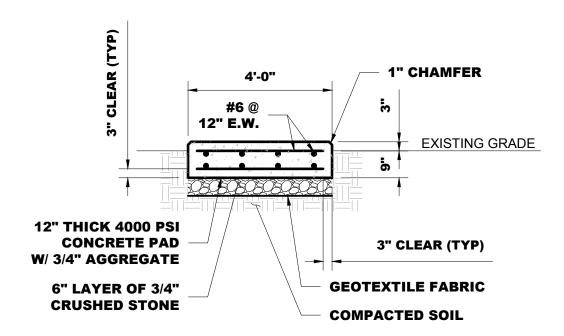




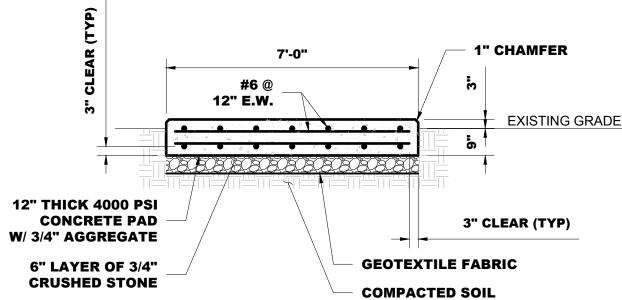
EQUIPMENT LAYOUT PLAN 2-6 P N.T.S.















PROTECT YOURSELF, GIVE THREE
WORKING DAYS NOTICE
THIS DRAWING DOES NOT INCLUDE NECESSARY
COMPONENTS FOR CONSTRUCTION SAFETY. ALL
CONSTRUCTION MUST BE DONE IN COMPLIANCE
WITH THE OCCUPATIONAL SAFETY AND HEALTH
ACT OF 1970 AND ALL RULES AND REGULATIONS
THERE TO APPLIFTENANT

■ STRUCTURAL NOTES: ■

1. DESIGN INFORMATION AND GENERAL REQUIREMENTS

1.1 CODES

- a. DESIGN CONFORMS TO INTERNATIONAL BUILDING CODE (IBC) 2018 NEW JERSEY EDITION.
- b. AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318-14.

2. EARTHWORK

2.1 FOUNDATIONS

- a. FOUNDATIONS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED RESIDUAL SOILS, CAPABLE OF SAFELY SUPPORTING A NET ALLOWABLE BEARING PRESSURE OF 2000 PSF. IF FOUNDATION CONDITIONS PROVE UNACCEPTABLE AT ELEVATIONS SHOWN, EXCAVATION SHALL BE CARRIED DEEPER AND SHALL BE BACKFILLED WITH LEAN CONCRETE TO PLAN FOOTING BOTTOM, OR REDESIGN OF FOUNDATIONS WILL BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
- b. DESIGN, FURNISH AND INSTALL ALL TEMPORARY SHEETING, SHORING AND DRAINAGE NECESSARY TO MAINTAIN THE EXCAVATION AND PROTECT SURROUNDING STRUCTURES AND UTILITIES.
- c. THOROUGHLY COMPACT ALL BOTTOM OF FOOTINGS PRIOR TO PLACING ANY CONCRETE.

3. CONCRETE

.1 FORMWORK

- a. CONCRETE CONSTRUCTION SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," (ACI 301-16).
- b. FORMWORK SHALL CONFORM TO ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."

3.2 REINFORCEMENT

a. REINFORCING STEEL ASTM A615, GRADE 60. WELDED WIRE ASTM A185 (FLAT SHEET). LAPS 40 BAR DIAMETERS UNLESS NOTED. BARS SHALL BE SECURELY HELD IN ACCURATE POSITION BY SUITABLE ACCESSORIES, TIE BARS, SUPPORT BARS, ETC. HOOK LENGTHS SHALL BE 12 BAR DIAMETERS.
b. CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED: FOOTINGS & SLABS CAST AGAINST GROUND 3"
CONCRETE TO BE IN CONTACT WITH GROUND OR WEATHER
AT BARS GREATER THAN #5

AT BARS GREATER THAN #5	2"
AT BARS #5 OR LESS	1 1/2"
CONCRETE NOT TO BE EXPOSED TO GROUND OR WEATHER	
BEAMS, GIRDERS & COLUMNS	1 1/2"
SLABS & WALLS	3/4"

CAST-IN-PLACE-CONCRETE a. MINIMUM 28 DAY CYLINDER STRENGTH AND MAXIMUM SLUMP. PRIOR TO ADDITION OF SUPER

 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		• • · · ·
PLASTICIZERS, AS FOLLOWS:	F'c (PSI)	SLUMP
CLASS I FOOTINGS	3000	3"
CLASS III INTERIOR ELEVATED SLABS & WALLS	4000	4"
CLASS V OTHER WORK	4000	4"
CLASS VI LEAN CONCRETE FOR		
OVER-EXCAVATION OF FOUNDATIONS	2000	N/A

- c. COARSE AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33 SIZE #57.

 COARSE AGGREGATE FOR LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM C330 GRADED 3/4"

 TO 1/4"
- d. COLD WEATHER PLACEMENT SHALL COMPLY WITH ACI 306.1
- e. HOT WEATHER PLACEMENT SHALL COMPLY WITH ACI 305 R.
- f. CHAMFER ALL EXPOSED EDGES 3/4".
- g. THE MAXIMUM TEMPERATURE OF ALL CONCRETE AT DELIVERY TO THE SITE SHALL BE 85°F. TOTAL DELIVERY TIME SHALL BE LESS THAN 75 MIN.

4. <u>STRUCTURAL STEEL</u>

4.1 MATERIALS

ΑI	ERIALS	
۱.	STRUCTURAL STEEL	ASTM A992
	MISC & PLATE	ASTM A36, U.N.O.
	HSS	ASTM A500, GRADE B, Fy=46 ksi
	PIPES	ASTM A53, GRADE B
).	BOLTS	ASTM A325 U.N.O.
: .	WELDING ELECTRODES	AWS A5.1 (E70XX)
l.	STEEL CONSTRUCTION SHALL CONFORM TO "SPECIFICATION FOR ST	TRUCTURAL STEEL FOR
	BUILDINGS".	
) .	WELDING SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CO	DDE".
	THE FABRICATOR SHALL FURNISH CHECKED SHOP AND ERECTION D	RAWINGS TO THE ENGINEER,
	AND OBTAIN APPROVAL PRIOR TO FABRICATING ANY STRUCTURAL S	STEEL. SHOP DRAWINGS SHALL

4.2 CONNECTIONS

- a. SHOP CONNECTIONS MAY BE BOLTED OR WELDED.
- b. FIELD CONNECTIONS BOLTED WITH A325-N BOLTS, (INSTALLED SNUG TIGHT) UNLESS OTHERWISE SPECIFIED OR IF WELDED CONNECTIONS ARE NOTED ON DRAWINGS.
- c. FIELD CONNECTIONS SHALL BE MADE WITH HIGH TENSILE BOLTS AND HARDENED
- WASHERS EXCEPT AS INDICATED ON THE DESIGN DRAWINGS.

CONFORM TO AISC "DETAILING FOR STEEL CONSTRUCTION".

- d. CONNECTIONS NOT SHOWN ON DRAWINGS SHALL BE DESIGNED BY THE STEEL FABRICATOR. CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH AISC "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" AND AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- e. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER.

4.3 FINISHES

- a. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A123.
- b. ALL STEEL SHALL BE CLEANED OF RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS AND BE HOT DIPPED GALVANIZED OR STAINLESS STEEL IF OTHERWISE INDICATED ON PLAN.
- c. FIELD FABRICATIONS SHALL BE TREATED WITH ZRC COLD GALVANIZING COMPOUND OR EQUAL PRIOR TO ASSEMBLY.
- d. BOLTS AND NUTS SHALL BE HOT DIP GALVANIZED PER ASTM A153.

ALLENTOWN SMSA, LIMITED PARTNERSHIP A DELAWARE LIMITED PARTNERSHIP d/b/a

VERIZON WIRELESS 2 VALLEY SQUARE / SUITE 300 512 EAST TOWNSHIP LINE ROAD



advantage engineers

520 FELLOWSHIP ROAD, SUITE A-108
MT. LAUREL, NEW JERSEY 08054
PHONE: (856) 316-4788

PLAN REVISIONS:			
4	12-03-20	MBM	ISSUED FOR ZONING
3	10-29-20	MBM	ISSUED FOR ZONING
2	09-03-20	MBM	ISSUED FOR ZONING
1	07-30-20	MBM	ISSUED FOR ZONING
0	09-13-19	MBM	ISSUED FOR ZONING
REV	DATE	DESIGNER	DESCRIPTION

AE DESIGN INFO:

DRAWING TITLE:				
MBM	19E0092.001			
DESIGNER:	AE JOB No:			

EQUIPMENT PAD

DETAILS & NOTES

DRAWING SHEET:

Z-6

SITE INFORMATION: SITE NAME: ALL NORTH

HACKETTSTOWN

SITE ADDRESS: 100 BILBY ROAD HACKETTSTOWN,

JURISDICTION: TOWN OF HACKETTSTOWN WARREN COUNTY, NEW JERSEY

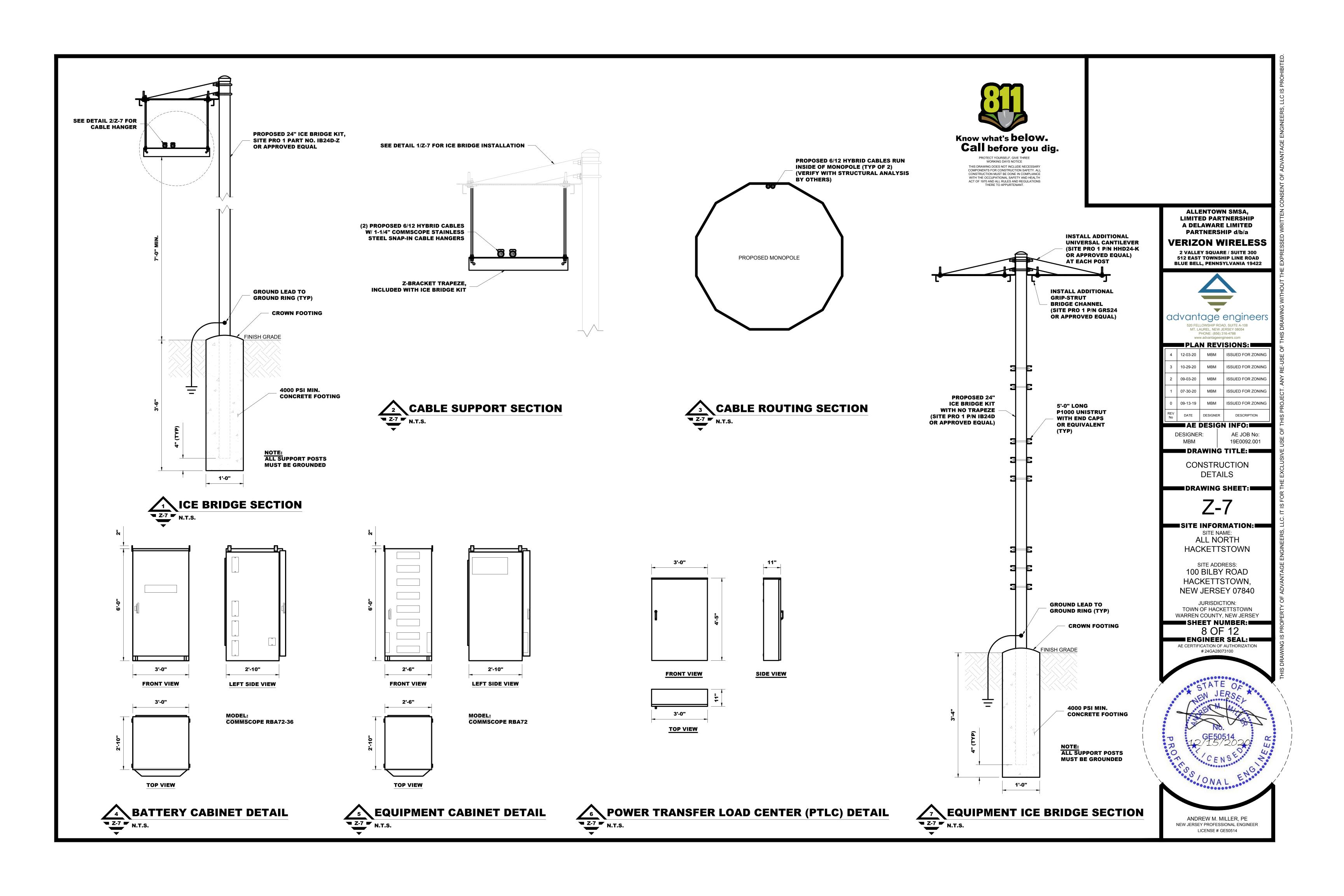
NEW JERSEY 07840

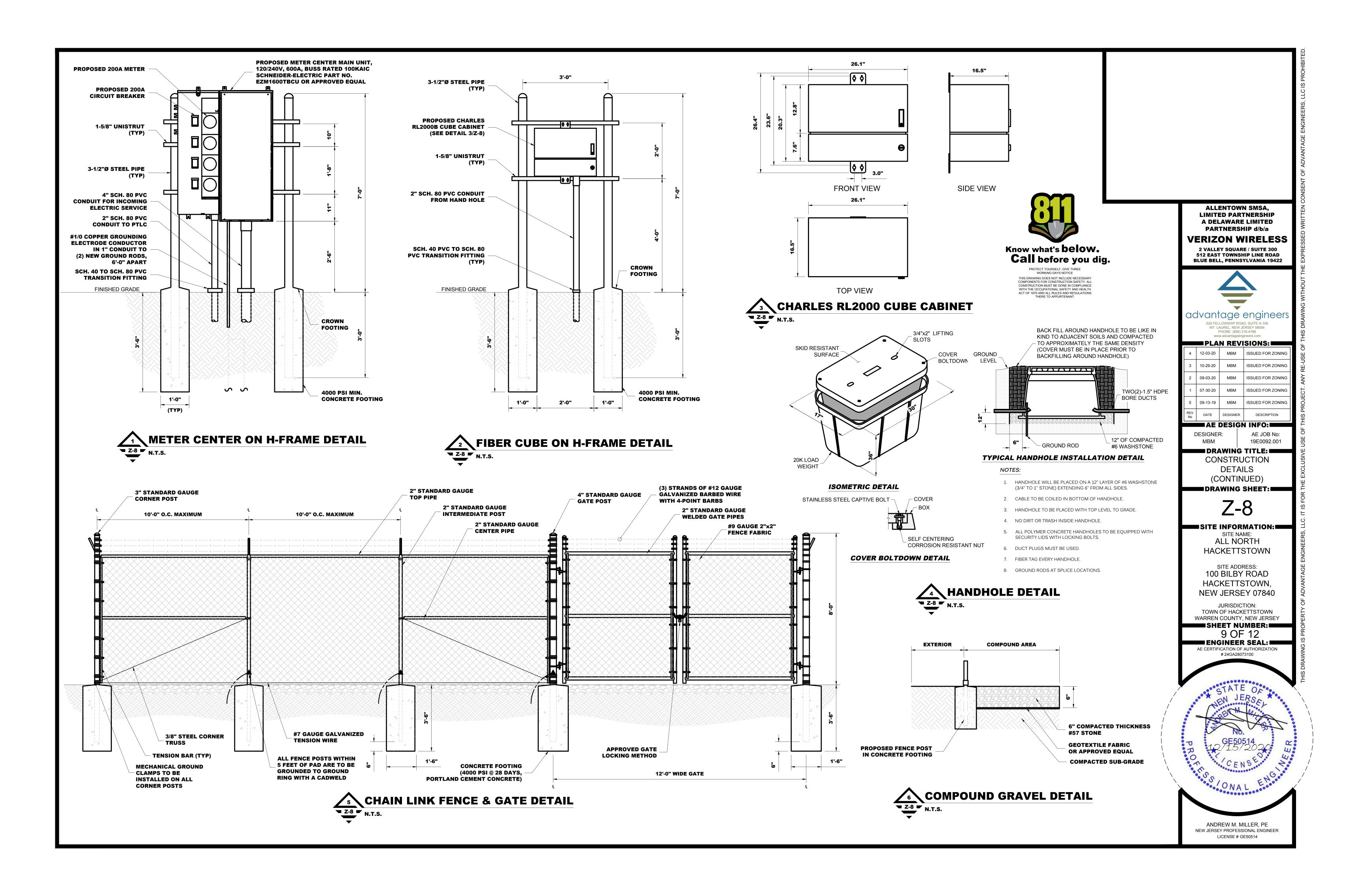
SHEET NUMBER: 7 OF 12

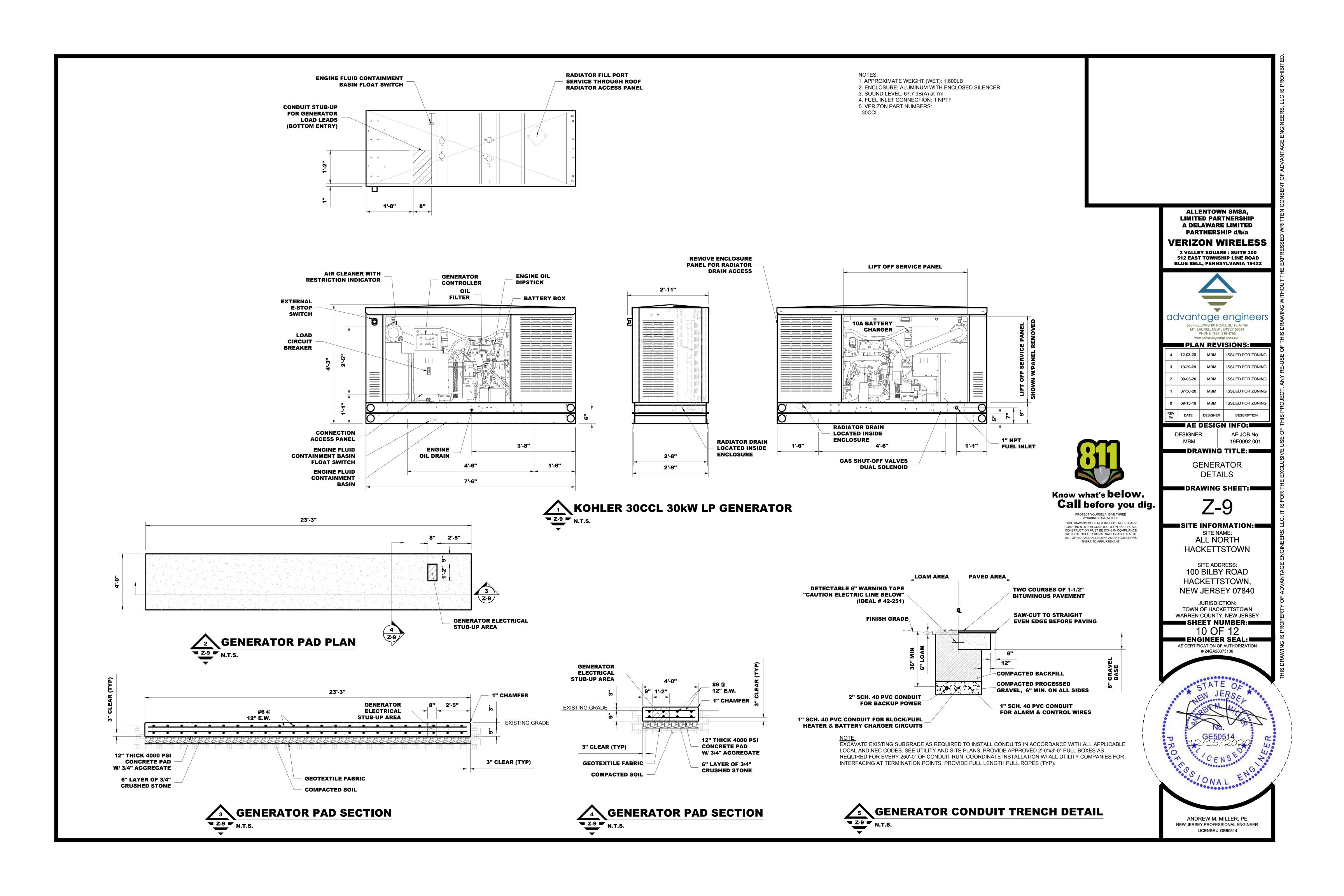
ENGINEER SEAL: AE CERTIFICATION OF AUTHORIZATION # 24GA28073100

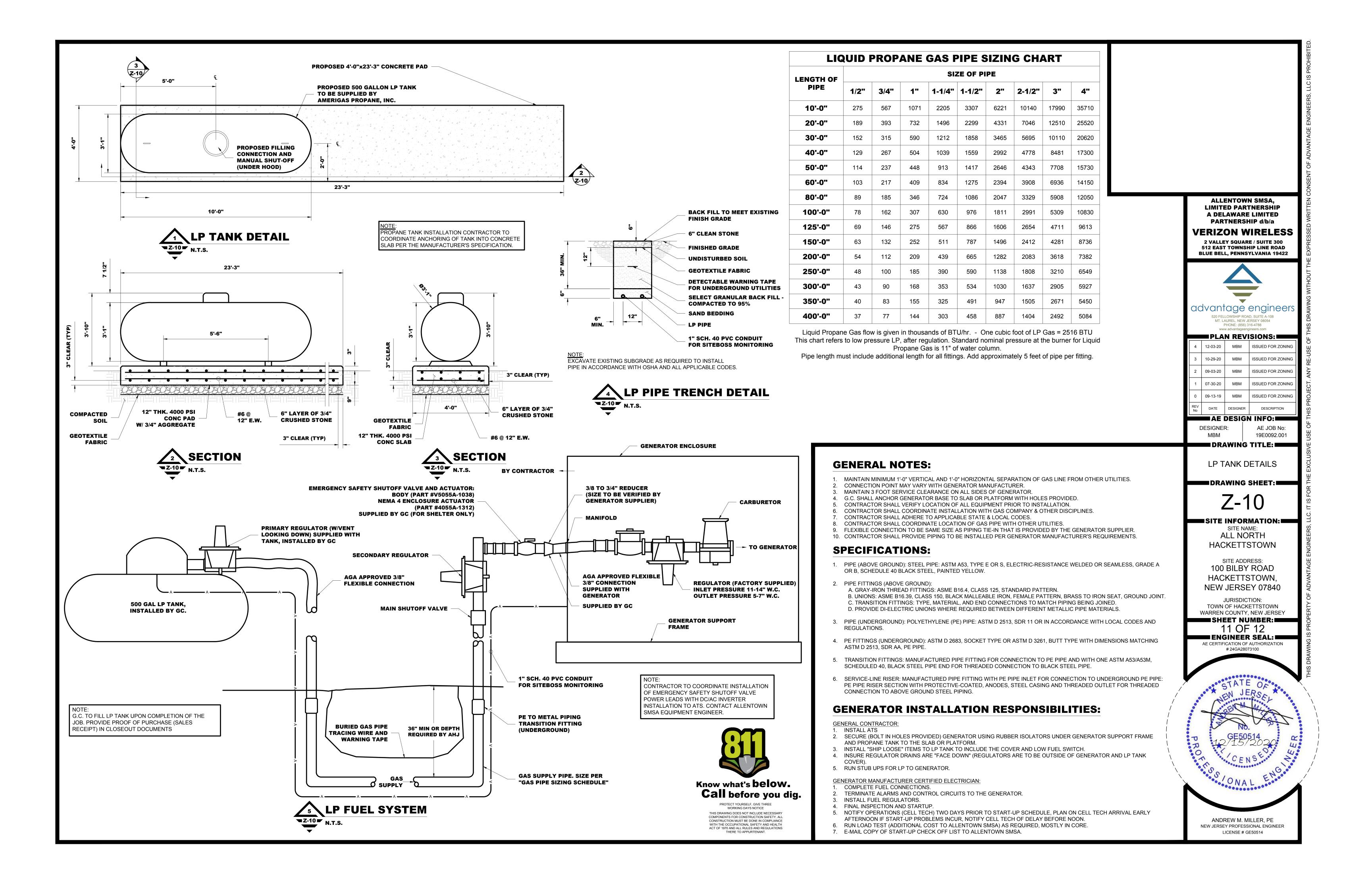


ANDREW M. MILLER, PE NEW JERSEY PROFESSIONAL ENGINEER LICENSE # GE50514

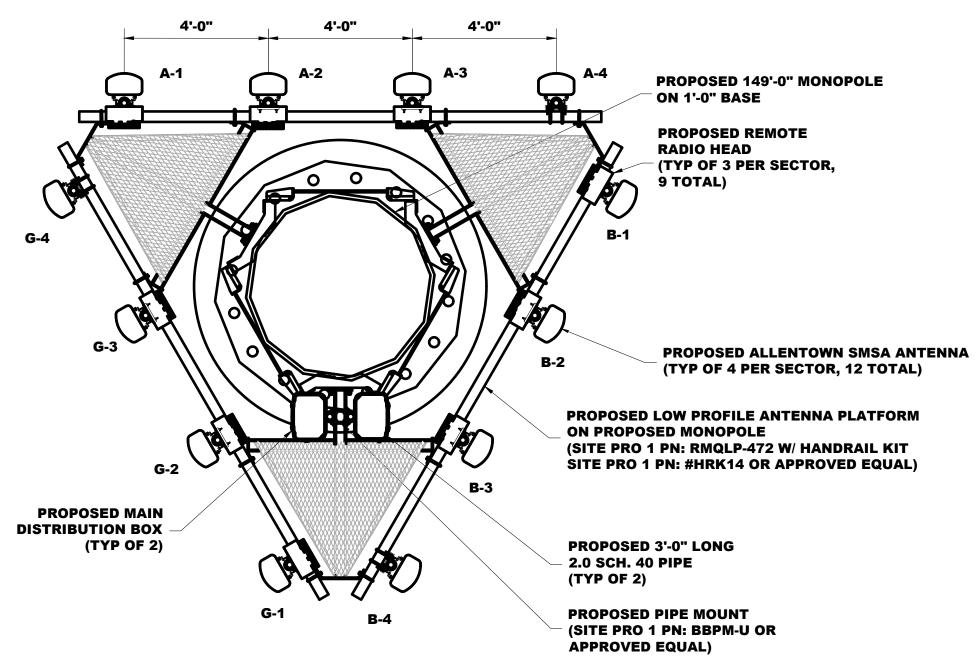






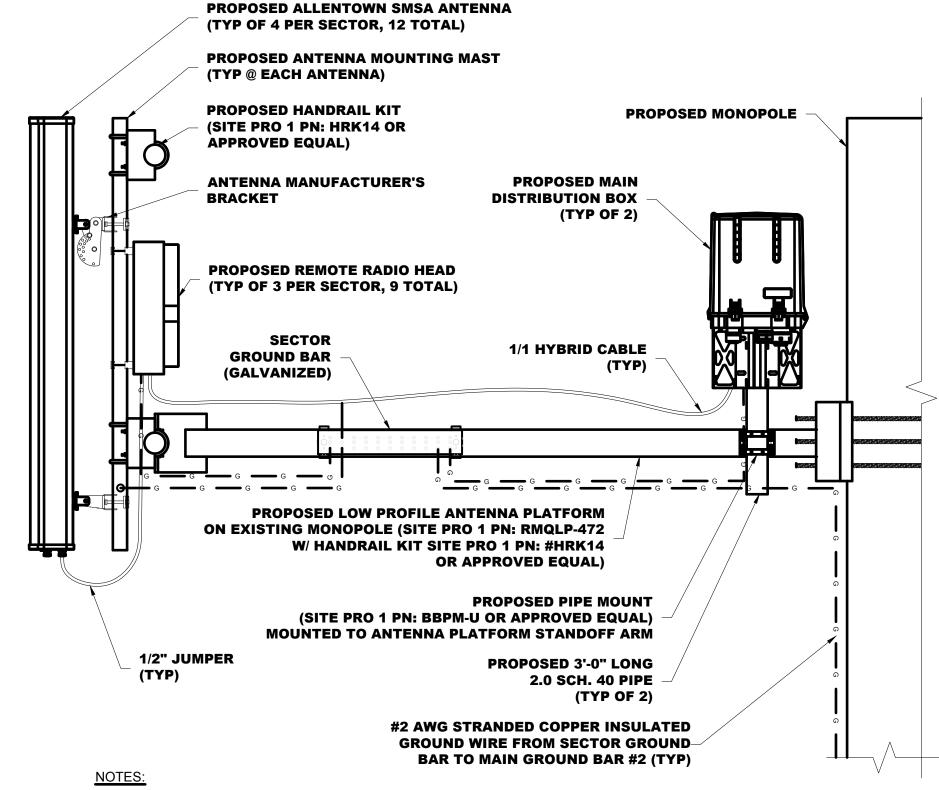






- 1. TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS, PRIOR TO ORDERING CABLE, CONTRACTOR TO VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
- 2. CONTRACTOR SHALL VERIFY THE DOWNTILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
- 3. CONTRACTOR TO CONFIRM CABLE COLOR CODING PRIOR TO CONSTRUCTION.
- 4. COLOR BANDING SHALL BE 2" WIDE ON THE MAIN LINE (5 WRAP MIN.). SPACING TO BE 1" BETWEEN COLORS. COLOR BAND ON JUMPERS 1" WIDE WITH 1" SPACE. START COLOR BANDS 2" BEYOND WEATHERPROOFING. START SECTOR COLOR NEXT TO END





- 1. ALL ANTENNAS TO BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH RF ENGINEER.
- 2. ANTENNA CENTERLINE HEIGHT IS IN REFERENCE TO ELEVATION 0'-0" AGL.
- 3. CHECK WITH RF ENGINEER FOR LATEST ANTENNA TYPE & AZIMUTH.
- 4. CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH CONSTRUCTION.



ALLENTOWN SMSA, LIMITED PARTNERSHIP A DELAWARE LIMITED PARTNERSHIP d/b/a

VERIZON WIRELESS

2 VALLEY SQUARE / SUITE 300 **512 EAST TOWNSHIP LINE ROAD** BLUE BELL, PENNSYLVANIA 19422



advantage engineers MT. LAUREL, NEW JERSEY 08054 PHONE: (856) 316-4788

	PLA	N REVI	SIONS:
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0	09-13-19	MBM	ISSUED FOR ZONING
REV No	DATE	DESIGNER	DESCRIPTION

AE DESIGN INFO:

DESIGNER: AE JOB No: 19E0092.001 DRAWING TITLE:

ANTENNA PLAN

& DETAILS

DRAWING SHEET:

Z-11

SITE INFORMATION:

SITE NAME: ALL NORTH **HACKETTSTOWN**

SITE ADDRESS: 100 BILBY ROAD HACKETTSTOWN, NEW JERSEY 07840

JURISDICTION: TOWN OF HACKETTSTOWN

WARREN COUNTY, NEW JERSEY SHEET NUMBER:

12 OF 12 ENGINEER SEAL: AE CERTIFICATION OF AUTHORIZATION # 24GA28073100

ANDREW M. MILLER, PE NEW JERSEY PROFESSIONAL ENGINEER LICENSE # GE50514