



# City of Napoleon, Ohio

## Zoning Department

255 West Riverview Avenue, P.O. Box 151

Napoleon, OH 43545

Kevin Schultheis Code Enforcement / Zoning Administrator

Telephone: (419) 592-4010 Fax: (419) 599-8393

[www.napoleonohio.com](http://www.napoleonohio.com)

### **COMMERCIAL ZONING PERMIT**

Issued Date: March 22, 2023

Expiration Date: March 22, 2024

Permit Number: P-23-032

Job Location: 850 Vocke Street

Owner: City of Napoleon, Ohio  
255 W. Riverview Avenue  
Napoleon, OH 43545

Lessee: Verizon Wireless  
7575 Commerce  
Lewis Center, OH 43035

Contractor: Teleworld Solutions  
Phone: 440-725-9791

Zone: I-I- Enclosed Industrial

Comments: Antenna change at water tower

Permit Type: Zoning (antenna change on water tower)

Fee: \$50.00

Status: Paid

Amount Due: \$0.00

Kevin Schultheis  
Code Enforcement/Zoning Administrator



# City of Napoleon, Ohio

## Zoning Department

255 West Riverview Avenue, P.O. Box 151

Napoleon, OH 43545

Kevin Schultheis Code Enforcement / Interim Zoning Administrator

Telephone: (419) 592-4010 Fax: (419) 599-8393

www.napoleonohio.com

### Commercial Zoning Permit Application

Date 3-10-23 Job Location 850 Locke (Plot # 416095504616)  
 Owner Verizon Wireless Telephone # 412-496-6225  
 Owner Address 7575 Commerce Law Center OH 43035  
 Contractor TeleWorld Solutions Cell Phone # 440-725-9791  
 Description of Work to be Performed antenna change at  
water tower  
 Estimated Completion Date 6-1-23 Estimated Cost 10,000-

Demo Permit - \$100.00 - See Separate Form	(MDEMO 100.1700.46690)	\$
Zoning Permit - \$50.00 ✓	(MZON 100.1700.46690)	\$ 50
Fence - \$25.00	(MZON 100.1700.46690)	\$
Garage and Shed 120 SF or less (Detached) - \$25.00	(MZON 100.1700.46690)	\$
Parking lot /Driveway/Sidewalk/Curbing - \$0.00	(MZON 100.1700.46690)	\$
Drainage Permit/Outside Water/Sewer Repair - \$0.00	(MBLDG 510.0000.47300)	\$
1" Water Tap, 5/8" Meter, Copper Setter and Transmitter - \$1,200.00(Outside City - \$5,680)	(MBLDG 510.0000.47300)	\$
1" Water Tap, 3/4" Meter, Copper Setter and Transmitter - \$1,300.00(Outside City - \$5,820)	(MBLDG 510.0000.47300)	\$
1" Water Tap, 1" Meter, Copper Setter and Transmitter - \$1,400.00 (Outside City - \$5,960)	(MBLDG 510.0000.47300)	\$
1 1/2" Water Tap and Larger - See Operations Superintendent		\$
1" Meter, Copper Setter and Transmitter Without Tap - \$525.00	(MBLDG 510.0000.44730)	
3/4" Meter, Copper Setter and Transmitter Without Tap - \$440.87	(MBLDG 510.0000.44730)	
5/8" Meter, Copper Setter and Transmitter Without Tap - \$350.00	(MBLDG 510.0000.44730)	
Sewer Tap for All Commercial and Industrial Uses - \$600.00	(MBLDG 510.0000.44730)	\$
Sewer Tap Inspection Fee, M.F., Comm., Indust. 50 L.F. or Less - \$100.00	(MBLDG 510.0000.44730)	
Sewer Tap, M.F., Comm., Indust, 51 L.F. or More - \$100.00 + \$10.00 for each 50 L.F.	(MBLDG 510.0000.44730)	\$
Manufactured Home Court - \$87.00 Per Dwelling	(MBLDG 510.0000.44730)	
Sewer Main Extension in Right of Way Inspection - 2% of Construction Cost	(MBLDG 510.0000.44730)	\$
Inspection Fee Outside the Corporation Limits - Increase 50%	(MBLDG 510.0000.44730)	
<b>TOTAL FEE:</b>		<b>\$</b>

**I FULLY UNDERSTAND THAT NO EXCAVATION, CONSTRUCTION OR STRUCTURAL ALTERATION, ELECTRICAL OR MECHANICAL INSTALLATION OR ALTERATION OF ANY BUILDING STRUCTURE, SIGN, OR PART THEREOF AND NO USE OF THE ABOVE SHALL BE UNDERTAKEN OR PERFORMED UNTIL THE PERMIT APPLIED FOR HEREIN HAS BEEN APPROVED AND ISSUED BY THE CITY OF NAPOLEON ZONING DEPARTMENT.**  
 I hereby certify that I am the Owner of the named property, or that the proposed work is authorized by the Owner of record and that I have been authorized by the Owner to make this application as his/her authorized agent and I agree to conform to all applicable laws of the jurisdiction. In addition, if a permit for Work described in this application is issued, I certify that the code official or the code official's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.  
**I HEREBY ACKNOWLEDGE THAT I HAVE READ AND FULLY UNDERSTAND THE ABOVE LISTED INSTRUCTIONS.**

SIGNATURE OF APPLICANT: William Atkinson DATE: 03-10-23  
 BATCH # \_\_\_\_\_ CHECK # 2985 DATE 3/21/23



**WIRELESS. SIMPLIFIED.**

815 Superior Avenue E | Suite 1425 | Cleveland, OH 44114

**O:** 216.862.4380 **F:** 216.803.0803 **W:** [www.StrategisLLC.com](http://www.StrategisLLC.com)

March 13, 2023

**Kevin Schultheis**  
**City of Napoleon**  
**Zoning Department**  
**255 West Riverview Ave.**  
**Napoleon, OH 43545**

**Re: 850 Vocke Street**

To Whom it May Concern:

Please find enclosed the check made payable to City of Napoleon for (\$50.00), Permit Application and 2 11x17 CD's for 850 Vocke Street.

Please email or return the executed documents to Strategis, LLC, 815 Superior Avenue E, Suite 1425, Cleveland, Ohio, 44114.

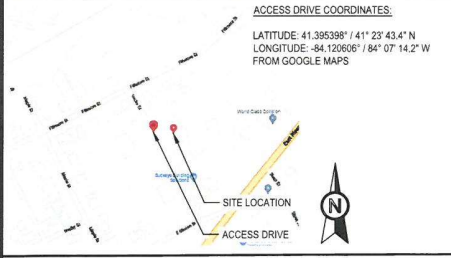
Should you have any questions, please call us at 440-725-9791 or email [casey.conrad@strategisllc.com](mailto:casey.conrad@strategisllc.com).

Sincerely,

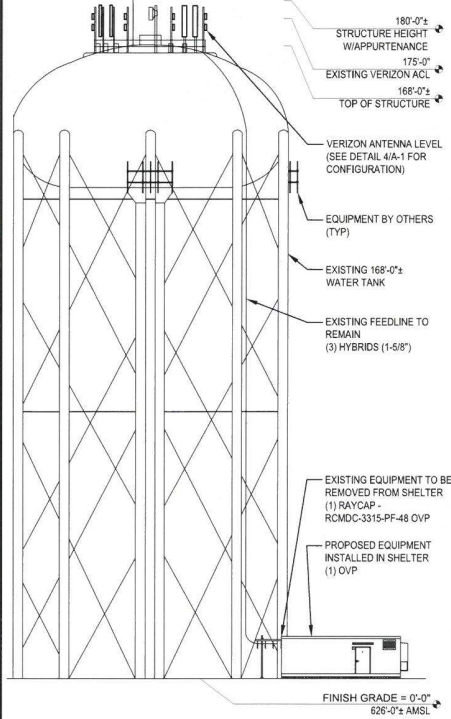
Casey Conrad  
Permitting Specialist



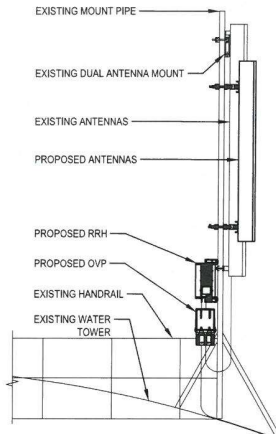
ACCESS DRIVE COORDINATES:  
 LATITUDE: 41.385389° / 41° 23' 43.4" N  
 LONGITUDE: -84.128065° / 84° 07' 14.2" W  
 FROM GOOGLE MAPS



VERIZON EQUIPMENT	
ANTENNA CL:	175'-0"
MOUNT CL:	168'-0"
FINAL COAX/HYBRID CABLES	
COUNT (SIZE) TYPE	
(6) COAX CABLES	
(3) (1-5/8") HYBRID CABLES	



**FINAL TOWER ELEVATION 1**  
 SCALE: NTS



**GENERIC OVP/RRH/ANTENNA DETAIL 2**  
 SCALE: NTS

CONTRACTOR PMI REQUIREMENTS	
PMI ACCESSED AT	HTTPS://PMI.VZWSMART.COM
SMART TOOL VENDOR PROJECT NUMBER	10180062
*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT	

MOUNT MODIFICATION REQUIRED	Y
REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS	

- SEQUENCE OF CONSTRUCTION TOWER
- REMOVE (3) COMMSCOPE - SBNHH-1D65C ANTENNAS
  - REMOVE (3) NOKIA - AHBC AIRSCALE DUAL RRH 4T4R B5B13 320W
  - REMOVE (3) NOKIA - AHFC AIRSCALE DUAL RRH 4T4R B2B66A 320W
  - REMOVE (3) NOKIA - AHFC AIRSCALE DUAL RRH 4T4R B2B66A 320W
  - REMOVE (1) RAYCAP - RCMD3-3315-PF-48 OVP
  - INSTALL MOUNT MODIFICATIONS PER MOUNT MODIFICATION DRAWINGS BY PAUL J. FORD & COMPANY DATED 1/6/23
  - INSTALL (3) COMMSCOPE - VVSSP-655-R1BV2 ANTENNAS
  - INSTALL (3) SAMSUNG - MTS407-77A ANTENNAS
  - INSTALL (3) SAMSUNG - B2B66A RRH ORAN
  - INSTALL (3) SAMSUNG - B5B13 RRH ORAN
  - INSTALL (3) SAMSUNG - CBRS RRH - RT4401-48A
  - INSTALL (1) RAYCAP - RC3DC-3315-PF-48 OVP
  - GROUND:
  - REMOVE (1) RAYCAP - RCMD3-3315-PF-48 OVP
  - INSTALL (1) OVP
- GENERAL NOTES
- THIS DRAWING IS FOR EXHIBIT PURPOSE ONLY.
  - ALL WORK SHALL COMPLY WITH TOWER OWNER'S MASTER SPECIFICATION.
  - NO NEW AC ELECTRICAL WORK IS REQUIRED FOR THIS INSTALLATION. NO NEW AC POWER IS REQUIRED.
  - REFER TO MOUNT & STRUCTURAL ANALYSIS FOR STRUCTURAL RATING.
- EQUIPMENT REPLACEMENT NOTES
- NO LINE OR ANTENNA WORK TO BEGIN PRIOR TO CONFIRMATION OF ADEQUATE TOWER AND MOUNT CAPACITY USING THE FINAL CONFIGURATION.
  - CONTRACTOR TO INSPECT THE CONDITION OF EXISTING MOUNTS. CONFIRM THE FOLLOWING:
  - CORROSION: IF MOUNTS ARE FOUND TO BE CORRODED, CONTACT VERIZON REPRESENTATIVE FOR DIRECTION.
  - LOOSE BOLTS: IF FOUND LOOSE, TIGHTEN TO ORIGINAL SPECIFICATIONS (AISC, TURN OF THE NUT METHOD).
  - MISSING BOLTS: IF MISSING, REPLACE TO SUITE.
  - ALL NEW OVPS MUST BE INSTALLED ON A MOUNT, NOT DIRECTLY ON THE TOWER LEG.
  - G.C. TO INSTALL NEW 2.5" DIA. (2.875" O.D.) MOUNT PIPE WHERE ANTENNAS, RRHs AND DIPLEXERS ARE SWAPPED OR ADDED.
  - ALL EXISTING & PROPOSED INFORMATION PROVIDED BY LANDLORD AND VERIZON WIRELESS.
  - ALL EXISTING EQUIPMENT THAT IS REMOVED SHALL BE RETURNED TO VERIZON.
  - CONFIRM MOUNTING PIPE IS ADEQUATELY SIZED TO ACCOMMODATE PROPOSED ANTENNA INSTALL.
  - ALL WORK DEPICTED ON THIS DRAWING DESIGNED IN ACCORDANCE WITH THE LATEST STANDARDS

© Copyright 2023, by Paul J. Ford and Company. All Rights Reserved. This document and the data contained herein, is proprietary to Paul J. Ford and Company, issued in strict confidence and shall not, without the prior written permission of Paul J. Ford and Company, be reproduced, copied or used for any purpose other than the intended use for this specific project.

**RJF PAUL J. FORD & COMPANY**  
 250 E. Broad St., Ste. 600 - Columbus, OH 43215  
 Phone 614.221.6679  
 www.pauljford.com

**verizon**  
 7575 COMMERCE COURT  
 LEWIS CENTER, OHIO 43065

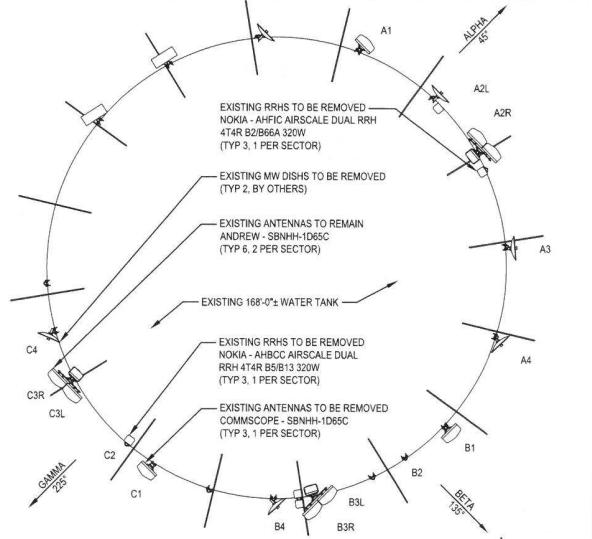
PROJECT No:	A24322-1896.004.8753
DESIGNED BY:	JTS
CHECKED BY:	JHW

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	1/6/22
1	ISSUED FOR CONSTRUCTION	2/7/23

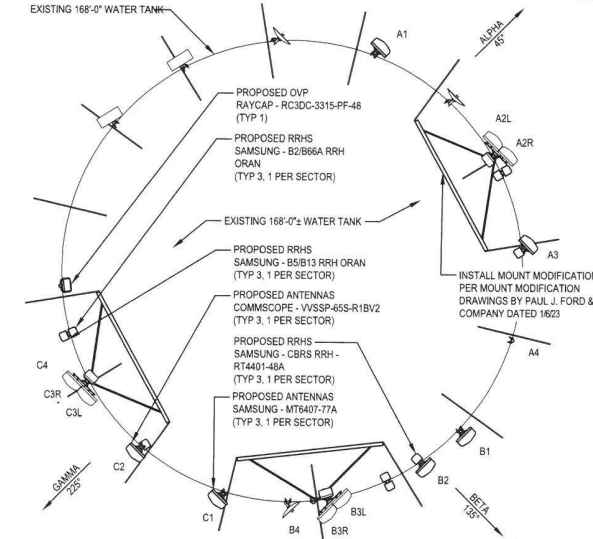
VZW LOCATION CODE (PSLC):	150134
FUZE ID:	16939079
RFDS DATE:	10/20/22
SITE NAME:	MAUMEE RIVER
SITE ADDRESS:	850 VOCKE STREET NAPOLEAN, OH 43045 HENRY COUNTY
LATITUDE:	41.395389° / 41° 23' 43.4004" N
LONGITUDE:	-84.120278° / 84° 7' 13.0008" W

Digitally signed by Richard A. Boelter  
 Date: 2023.02.07 16:52:36-05'00'

STATE OF OHIO  
 RICHARD A. BOELTER  
 E-79301  
 02/07/2023  
 REGISTERED PROFESSIONAL ENGINEER



**EXISTING ANTENNA LAYOUT 3**  
 SCALE: NTS



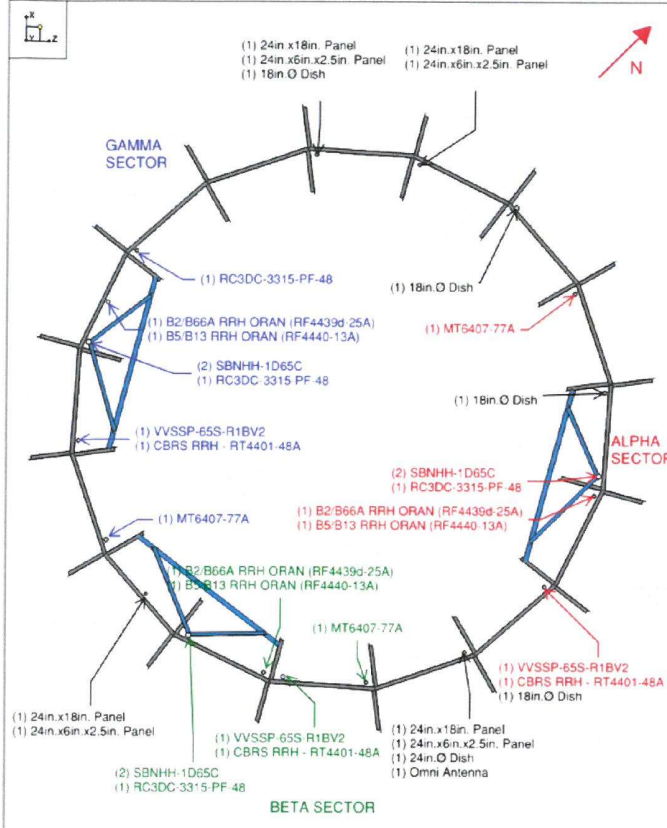
**PROPOSED ANTENNA LAYOUT 4**  
 SCALE: NTS

ELEVATION AND ANTENNA LAYOUTS

**A-1**

**POST MODIFICATION INSPECTION (PMI) REQUIREMENTS:**

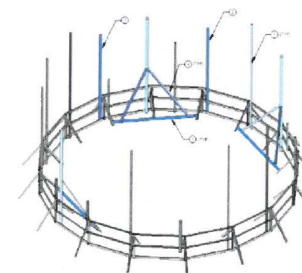
1. PMI REQUIRED FOR ALL SITES, REFER TO VERIZON NSTD-446 SECTION 1.5 AND 2.3 FOR MORE INFORMATION.
2. CONTRACTOR SHALL REFER TO THE MOUNT ANALYSIS BY PAUL J. FORD FOR ADDITIONAL DETAILS.
3. GENERAL CONTRACTOR SHALL PROVIDE THE BELOW DOCUMENTATION TO THE STRUCTURAL ENGINEER OF RECORD VIA EMAIL, DROPBOX, OR OTHER FILE SHARE METHOD. PROVIDE HIGH RESOLUTION PHOTOS (DO NOT COMPRESS).
4. STRUCTURAL ENGINEER OF RECORD WILL CONDUCT A REVIEW OF THE PROVIDED DOCUMENTS TO PREPARE A PMI REPORT. STRUCTURAL ENGINEER OF RECORD WILL NOTIFY GENERAL CONTRACTOR IF ANY ADDITIONAL DOCUMENTATION IS REQUIRED TO COMPLETE THE PMI.
5. PMI DOCUMENTATION SHALL BE SUFFICIENT TO CONFIRM THE UPGRADE WAS BUILT AS DESIGNED, INCLUDING EQUIPMENT CHANGES AND STRUCTURAL MODIFICATIONS, AND IS IN ADDITION TO ANY OTHER REQUIRED CLOSEOUT PACKAGE DOCUMENTATION.
6. REQUIRED DOCUMENTATION FOR PMI INCLUDES THE FOLLOWING AT A MINIMUM. REFER TO THE MOUNT ANALYSIS FOR POSSIBLE ADDITIONAL INFORMATION. IF STRUCTURAL MODIFICATIONS ARE REQUIRED, REFER TO THE MODIFICATION DRAWINGS FOR POSSIBLE ADDITIONAL REQUIREMENTS.
  - A. PROVIDE PRE-AND-POST CONSTRUCTION PHOTOS OF EACH SECTOR FROM THE MOUNT ELEVATION AND THE GROUND. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE PHOTOS PROVIDED. PROVIDE POSITIVE CONFIRMATION THAT THE MODIFICATION/UPGRADE WAS COMPLETED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND ANY STRUCTURAL/MOUNT MODIFICATION DRAWINGS. CONTRACTOR SHALL RELAY ANY DATA THAT CAN IMPACT THE PERFORMANCE OF THE MOUNT OR MOUNT MODIFICATION, INCLUDING SAFETY ISSUES. PHOTOS SHALL HAVE A DATETIME STAMP IN THE PHOTO. REFER TO THE MOUNT ANALYSIS FOR SCHEDULE OF REQUIRED PHOTOS. PROVIDE PHOTOS OF THE GATE SIGNS AND CARRIER SHELTER TO IDENTIFY THE TOWER OWNER, SITE NAME, SITE NUMBER, ETC.
  - B. VERIFICATION OF THE MEMBER CONNECTIONS, BRACING, AND RELEVANT DIMENSIONS.
  - C. VERIFICATION OF THE ANTENNA AND OTHER EQUIPMENT CONFIGURATION (PHOTOS OF MODEL NUMBERS/TAGS FOR ALL EQUIPMENT, AS WELL AS THE FEEDLINE CONFIGURATION). TAKE PHOTOS OF THE BACK SIDE OF EACH SECTOR AS WELL AS CLOSE-UPS OF ALL EQUIPMENT. PHOTOS SHOULD CONFIRM THE HORIZONTAL AND VERTICAL POSITIONING OF THE ANTENNAS AND EQUIPMENT AND SHALL HAVE TAPE MEASURES IN THE PHOTOS TO CONFIRM.
  - D. FOR TIEBACKS, STRUTS, MOUNT PIPES, PHOTOS TO CONFIRM THE ANGLES AND LOCATIONS OF ATTACHMENT POINT AT BOTH ENDS OF MEMBER, AS WELL AS DIMENSIONS, THICKNESS, AND LENGTHS OF THE MEMBERS. REFER TO THE CHECKLIST IN THE MOUNT ANALYSIS OR MOUNT MOD DRAWINGS FOR ADDITIONAL INFORMATION.
  - E. MATERIALS USED (TYPE, STRENGTH, DIMENSIONS, ETC.). PROVIDE BILL OF MATERIAL AND MATERIAL SPEC TO CONFIRM MATERIAL GRADES AND SIZES. PROVIDE DOCUMENTATION FOR GALVANIZATION OF MEMBERS WHETHER HOT-DIPPED OR COLD-GALVANIZED. IF MATERIALS DIFFER FROM THOSE SPECIFIED ON THESE DRAWINGS, PROVIDE DOCUMENTATION THAT THE "EQUIVALENT" MATERIAL HAS THE SAME SPECIFICATIONS.
  - F. MOUNT ORIENTATION/AZIMUTH AND ELEVATION. PROVIDE TAPE DROP OF ANTENNA CENTERLINE(S) AND MOUNT ATTACHMENT POINTS TO THE SUPPORTING STRUCTURE. IF THERE ARE MULTIPLE RAD CENTERS, PROVIDE PHOTOS OF ALL ELEVATIONS.
  - G. VERIFICATION THAT THE INSTALL HAS NOT CAUSED DAMAGE TO OR UNPLANNED OBSTRUCTION OF THE FOLLOWING:
    - CLIMBING FACILITIES
    - SAFETY CLIMB IF PRESENT, INCLUDING PHOTOS ABOVE AND BELOW THE MOUNT
    - LIGHTING SYSTEMS
    - OTHER INSTALLED SYSTEMS ON THE STRUCTURE
    - CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS SUPPORTED AND NOT ADVERSELY AFFECTED BY THE INSTALLATION OF NEW COMPONENTS. THIS MAY INVOLVE THE INSTALLATION OF WIRE ROPE GUIDES OR OTHER ITEMS TO PROTECT THE WIRE ROPE.
  - H. OTHER ITEMS DETERMINED BY THE STRUCTURAL ENGINEER TO ENSURE THE MOUNT WILL PERFORM AS DESIGNED. PHOTOS OF RELEVANT MEASUREMENTS, WITH SUFFICIENT DETAILS TO CONFIRM CONNECTION DETAILS. PLACEMENT OF EQUIPMENT, WALL ANCHOR DETAILS, BALLAST QUANTITIES, STRUCTURAL MODIFICATION ETC. DIAMETERS AND THICKNESS OF BOLTS/THREADED RODS/ANGLES/TUBES ETC. SHALL HAVE PHOTOS CONFIRMING CALIPER MEASUREMENTS.
    - CONFIRMATION THAT ALL HARDWARE WAS PROPERLY INSTALLED, AND EXISTING HARDWARE WAS INSPECTED FOR ANY ISSUES
    - FOR BALLAST SLEDS, DOCUMENTATION OF THE WEIGHT OF BALLAST IN EACH SECTOR
    - FOR WALL ANCHORS, PHOTOS, AND MEASUREMENTS OF OUTSIDE AND INSIDE OF CONNECTIONS, DOCUMENTATIONS OF ADHESIVE USED, SIZE AND LENGTH OF ANCHORS, EFFECTIVE EMBEDMENT DEPTH OF THE ANCHORS, GROUTING OF HOLLOW WALLS, SPACING AND EDGE DISTANCE MEASUREMENTS, AND ANY THROUGH-BOLTS OR BACKING PLATES.
    - FOR STUD WELD CONNECTION, DOCUMENTATION TO CONFIRM SURFACE PREPARATION, STUD WELD SIZE, GRADE, LENGTH, AND SPACING.
    - FOR FABRICATED PARTS, SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION
    - FOR WELD PARTS, CERTIFIED WELD INSPECTION
    - FOR BOLTED PARTS, BOLT INSTALLATION AND TORQUE
7. CONTRACTOR SHALL PROVIDE, IN ADDITION TO THE ABOVE, AS-BUILT CDS WITH REDLINES IDENTIFYING ANY CHANGES. THE AS-BUILTS SHALL HAVE THE CONTRACTOR'S NAME, PREPARER'S SIGNATURE, AND DATE.
8. IF THE MODIFICATION INSTALLATION WOULD FAIL THE PMI (FAILED PMI), THE CONTRACTOR SHALL WORK WITH THE ENGINEER OF RECORD TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
  - A. CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENTAL PMI.
  - B. OR, WITH EOR'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT/UPGRADE USING THE AS-BUILT CONDITION
9. NOTE: IF LOADING IS DIFFERENT THAN THAT SHOWN IN THESE CONSTRUCTION DRAWINGS OR STRUCTURAL/ MOUNT MODIFICATION DRAWINGS, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY FOR RESOLUTION.
10. THE ENGINEERING FIRM PERFORMING AN ANALYSIS SHALL PROVIDE A CONTRACTOR'S PHOTO LOG AND CHECKLIST TO BE COMPLETED BY THE INSTALLING CONTRACTOR. THE CONTRACTOR SHALL THEN PROVIDE POST-INSTALLATION INFORMATION TO THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL REVIEW THE DOCUMENTS FOR ANY DEFICIENCIES THAT CAN BE DETERMINED FROM THE DESKTOP REVIEW OF THE DATA. THE ENGINEERING FIRM SHALL THEN PROVIDE DOCUMENTATION TO VZW THAT THE SITE IS COMPLETED, AND THE PMI REPORT IS APPROVED



GAMMA SECTOR PLACEMENT DIAGRAM

ALPHA SECTOR PLACEMENT DIAGRAM

BETA SECTOR PLACEMENT DIAGRAM



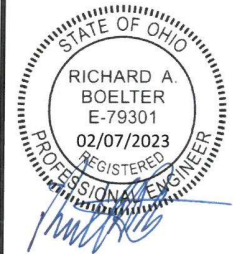
GEOMETRY VERIFICATION

© Copyright 2023, by Paul J. Ford and Company. All Rights Reserved. This document and the data contained herein, is proprietary to Paul J. Ford and Company, issued in strict confidence and shall not, without the prior written permission of Paul J. Ford and Company, be reproduced, copied or used for any purpose other than the intended use for this specific project.

**PAUL J. FORD & COMPANY**  
 2450 E Broad St, Ste 600, Columbus, OH 43215  
 Phone 614.221.8679  
 www.pauljford.com

**verizon**  
 7575 COMMERCE COURT  
 LEWIS CENTER, OHIO 43035

PROJECT No:	A24322-1896.004.8753	
DESIGNED BY:	JTS	
CHECKED BY:	JHW	
REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	1/26/22
1	ISSUED FOR CONSTRUCTION	2/7/23
VZW LOCATION CODE (PSLC): 159134		
FUZZE ID: 16939079		
RFDS DATE: 10/20/22		
SITE NAME: MAUMEE RIVER		
SITE ADDRESS: 850 VOCKE STREET NAPOLEAN, OH 43545 HENRY COUNTY		
LATITUDE: 41.395389° / 41° 23' 43.4004" N		
LONGITUDE: -84.120278° / 84° 7' 13.0008" W		

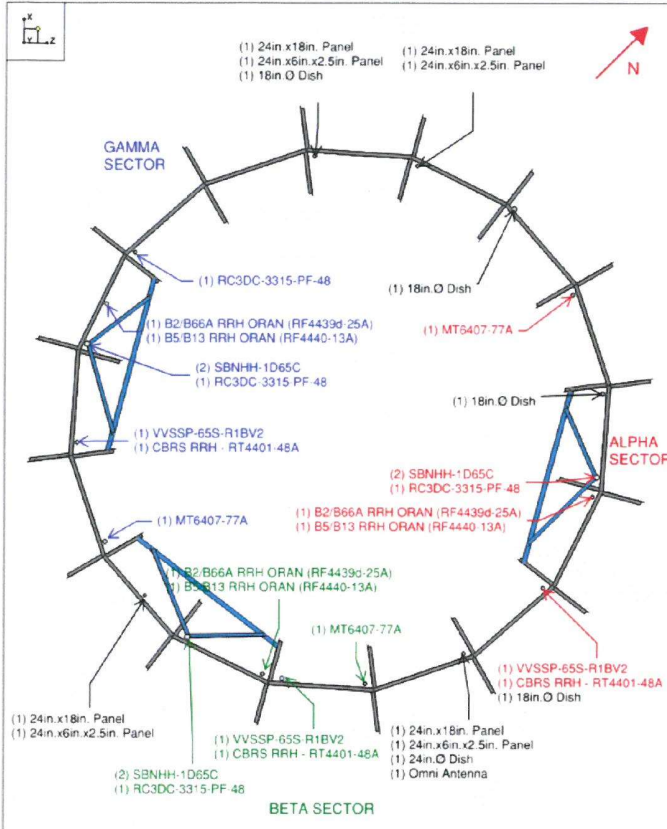


**PMI REQUIREMENTS & PLACEMENTS**

**PMI**

**POST MODIFICATION INSPECTION (PMI) REQUIREMENTS:**

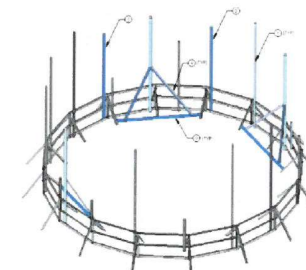
1. PMI REQUIRED FOR ALL SITES. REFER TO MOUNT ANALYSIS NSTD-446 SECTION 1.5 AND 2.3 FOR MORE INFORMATION.
2. CONTRACTOR SHALL REFER TO THE MOUNT ANALYSIS BY PAUL J. FORD FOR ADDITIONAL DETAILS.
3. GENERAL CONTRACTOR SHALL PROVIDE THE BELOW DOCUMENTATION TO THE STRUCTURAL ENGINEER OF RECORD VIA EMAIL, DROPBOX, OR OTHER FILE SHARE METHOD. PROVIDE HIGH RESOLUTION PHOTOS (DO NOT COMPRESS).
  4. STRUCTURAL ENGINEER OF RECORD WILL CONDUCT A REVIEW OF THE PROVIDED DOCUMENTS TO PREPARE A PMI REPORT. STRUCTURAL ENGINEER OF RECORD WILL NOTIFY GENERAL CONTRACTOR IF ANY ADDITIONAL DOCUMENTATION IS REQUIRED TO COMPLETE THE PMI.
  5. PMI DOCUMENTATION SHALL BE SUFFICIENT TO CONFIRM THE UPGRADE WAS BUILT AS DESIGNED, INCLUDING EQUIPMENT CHANGES AND STRUCTURAL MODIFICATIONS, AND IS IN ADDITION TO ANY OTHER REQUIRED CLOSEOUT PACKAGE DOCUMENTATION.
  6. REQUIRED DOCUMENTATION FOR PMI INCLUDES THE FOLLOWING AT A MINIMUM. REFER TO THE MOUNT ANALYSIS FOR POSSIBLE ADDITIONAL INFORMATION. IF STRUCTURAL MODIFICATIONS ARE REQUIRED, REFER TO THE MODIFICATION DRAWINGS FOR POSSIBLE ADDITIONAL REQUIREMENTS.
    - A. PROVIDE PRE-AND-POST CONSTRUCTION PHOTOS OF EACH SECTOR FROM THE MOUNT ELEVATION AND THE GROUND. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE PHOTOS PROVIDED. PROVIDE POSITIVE CONFIRMATION THAT THE MODIFICATION/UPGRADE WAS COMPLETED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND ANY STRUCTURAL/MOUNT MODIFICATION DRAWINGS. CONTRACTOR SHALL RELAY ANY DATA THAT CAN IMPACT THE PERFORMANCE OF THE MOUNT OR MOUNT MODIFICATION, INCLUDING SAFETY ISSUES. PHOTOS SHALL HAVE A DATETIME STAMP IN THE PHOTO. REFER TO THE MOUNT ANALYSIS FOR SCHEDULE OF REQUIRED PHOTOS. PROVIDE PHOTOS OF THE GATE SIGNS AND CARRIER SHELTER TO IDENTIFY THE TOWER OWNER, SITE NAME, SITE NUMBER, ETC.
    - B. VERIFICATION OF THE MEMBER CONNECTIONS, BRACING, AND RELEVANT DIMENSIONS.
    - C. VERIFICATION OF THE ANTENNA AND OTHER EQUIPMENT CONFIGURATION (PHOTOS OF MODEL NUMBERS/TAGS FOR ALL EQUIPMENT, AS WELL AS THE FEEDLINE CONFIGURATION). TAKE PHOTOS OF THE BACK SIDE OF EACH SECTOR AS WELL AS CLOSE-UPS OF ALL EQUIPMENT. PHOTOS SHOULD CONFIRM THE HORIZONTAL AND VERTICAL POSITIONING OF THE ANTENNAS AND EQUIPMENT AND SHALL HAVE TAPE MEASURES IN THE PHOTOS TO CONFIRM.
    - D. FOR TIEBACKS, STRUTS, MOUNT PIPES, PHOTOS TO CONFIRM THE ANGLES AND LOCATIONS OF ATTACHMENT POINT AT BOTH ENDS OF MEMBER, AS WELL AS DIMENSIONS, THICKNESS, AND LENGTHS OF THE MEMBERS. REFER TO THE CHECKLIST IN THE MOUNT ANALYSIS OR MOUNT MOD DRAWINGS FOR ADDITIONAL INFORMATION.
    - E. MATERIALS USED (TYPE, STRENGTH, DIMENSIONS, ETC.). PROVIDE BILL OF MATERIAL AND MATERIAL SPEC TO CONFIRM MATERIAL GRADES AND SIZES. PROVIDE DOCUMENTATION FOR GALVANIZATION OF MEMBERS WHETHER HOT-DIPPED OR COLD-GALVANIZED. IF MATERIALS DIFFER FROM THOSE SPECIFIED ON THESE DRAWINGS, PROVIDE DOCUMENTATION THAT THE "EQUIVALENT" MATERIAL HAS THE SAME SPECIFICATIONS.
    - F. MOUNT ORIENTATION/AZIMUTH AND ELEVATION. PROVIDE TAPE DROP OF ANTENNA CENTERLINE(S) AND MOUNT ATTACHMENT POINTS TO THE SUPPORTING STRUCTURE. IF THERE ARE MULTIPLE RAD CENTERS, PROVIDE PHOTOS OF ALL ELEVATIONS.
    - G. VERIFICATION THAT THE INSTALL HAS NOT CAUSED DAMAGE TO OR UNPLANNED OBSTRUCTION OF THE FOLLOWING:
      - CLIMBING FACILITIES
      - SAFETY CLIMB IF PRESENT, INCLUDING PHOTOS ABOVE AND BELOW THE MOUNT
      - LIGHTING SYSTEMS
      - OTHER INSTALLED SYSTEMS ON THE STRUCTURE
      - CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS SUPPORTED AND NOT ADVERSELY AFFECTED BY THE INSTALLATION OF NEW COMPONENTS. THIS MAY INVOLVE THE INSTALLATION OF WIRE ROPE GUIDES OR OTHER ITEMS TO PROTECT THE WIRE ROPE.
    - H. OTHER ITEMS DETERMINED BY THE STRUCTURAL ENGINEER TO ENSURE THE MOUNT WILL PERFORM AS DESIGNED. PHOTOS OF RELEVANT MEASUREMENTS, WITH SUFFICIENT DETAILS TO CONFIRM CONNECTION DETAILS, PLACEMENT OF EQUIPMENT, WALL ANCHOR DETAILS, BALLAST QUANTITIES, STRUCTURAL MODIFICATION ETC. DIAMETERS AND THICKNESS OF BOLTS/THREADED RODS/ANGLES/TUBES ETC. SHALL HAVE PHOTOS CONFIRMING CALIPER MEASUREMENTS.
      - CONFIRMATION THAT ALL HARDWARE WAS PROPERLY INSTALLED, AND EXISTING HARDWARE WAS INSPECTED FOR ANY ISSUES
      - FOR BALLAST SLEDS, DOCUMENTATION OF THE WEIGHT OF BALLAST IN EACH SECTOR
      - FOR WALL ANCHORS, PHOTOS, AND MEASUREMENTS OF OUTSIDE AND INSIDE OF CONNECTIONS, DOCUMENTATIONS OF ADHESIVE USED, SIZE AND LENGTH OF ANCHORS, EFFECTIVE EMBEDMENT DEPTH OF THE ANCHORS, GROUTING OF HOLLOW WALLS, SPACING AND EDGE DISTANCE MEASUREMENTS, AND ANY THROUGH-BOLTS OR BACKING PLATES.
      - FOR STUD WELD CONNECTION, DOCUMENTATION TO CONFIRM SURFACE PREPARATION, STUD WELD SIZE, GRADE, LENGTH, AND SPACING.
      - FOR FABRICATED PARTS, SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION
      - FOR WELD PARTS, CERTIFIED WELD INSPECTION
      - FOR BOLTED PARTS, BOLT INSTALLATION AND TORQUE
7. CONTRACTOR SHALL PROVIDE, IN ADDITION TO THE ABOVE, AS-BUILT CDS WITH REDLINES IDENTIFYING ANY CHANGES. THE AS-BUILTS SHALL HAVE THE CONTRACTOR'S NAME, PREPARER'S SIGNATURE, AND DATE.
8. IF THE MODIFICATION INSTALLATION WOULD FAIL THE PMI ("FAILED PMI"), THE CONTRACTOR SHALL WORK WITH THE ENGINEER OF RECORD TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
  - A. CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENTAL PMI.
  - B. OR, WITH EOR'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT/UPGRADE USING THE AS-BUILT CONDITION
9. NOTE: IF LOADING IS DIFFERENT THAN THAT SHOWN IN THESE CONSTRUCTION DRAWINGS OR STRUCTURAL/ MOUNT MODIFICATION DRAWINGS, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY FOR RESOLUTION.
10. THE ENGINEERING FIRM PERFORMING AN ANALYSIS SHALL PROVIDE A CONTRACTOR'S PHOTO LOG AND CHECKLIST TO BE COMPLETED BY THE INSTALLING CONTRACTOR. THE CONTRACTOR SHALL THEN PROVIDE POST-INSTALLATION INFORMATION TO THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL REVIEW THE DOCUMENTS FOR ANY DEFICIENCIES THAT CAN BE DETERMINED FROM THE DESKTOP REVIEW OF THE DATA. THE ENGINEERING FIRM SHALL THEN PROVIDE DOCUMENTATION TO VZW THAT THE SITE IS COMPLETED, AND THE PMI REPORT IS APPROVED



**GAMMA SECTOR PLACEMENT DIAGRAM**

**ALPHA SECTOR PLACEMENT DIAGRAM**

**BETA SECTOR PLACEMENT DIAGRAM**



**GEOMETRY VERIFICATION**

© Copyright 2023, by Paul J. Ford and Company. All Rights Reserved. This document and the data contained herein, is proprietary to Paul J. Ford and Company, issued in strict confidence and shall not, without the prior written permission of Paul J. Ford and Company, be reproduced, copied or used for any purpose other than the intended use for this specific project.

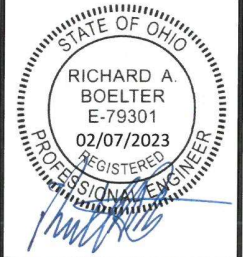
**PAUL J. FORD & COMPANY**  
 250 E Broad St, Ste 600 - Columbus, OH 43215  
 Phone 614.221.6679  
 www.pauljford.com

**verizon**  
 7575 COMMERCE COURT  
 LEWIS CENTER, OHIO 43035

PROJECT No: A24322-1896-004-8753  
 DESIGNED BY: JTS  
 CHECKED BY: JHW

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	1/26/22
1	ISSUED FOR CONSTRUCTION	2/7/23

VZW LOCATION CODE (PSLC): 150134  
 FUZE ID: 16939079  
 RFDS DATE: 10/20/22  
 SITE NAME: MAUMEE RIVER  
 850 VOCKE STREET  
 NAPOLEAN, OH 43345  
 HENRY COUNTY  
 LATITUDE: 41.395389° / 41° 23' 43.4004" N  
 LONGITUDE: -84.120278° / 84° 7' 13.0008" W



**PMI REQUIREMENTS & PLACEMENTS**

**PMI**