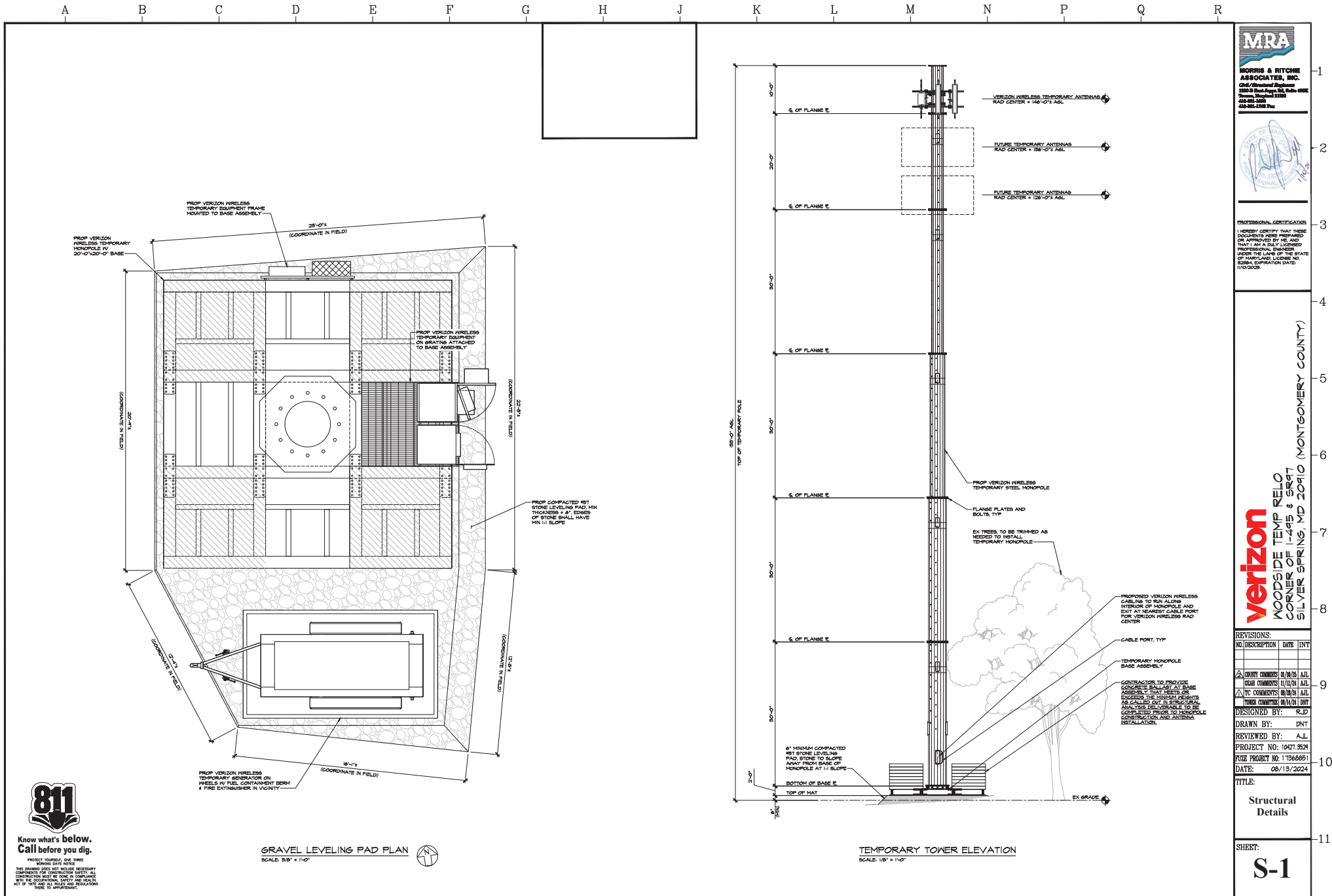
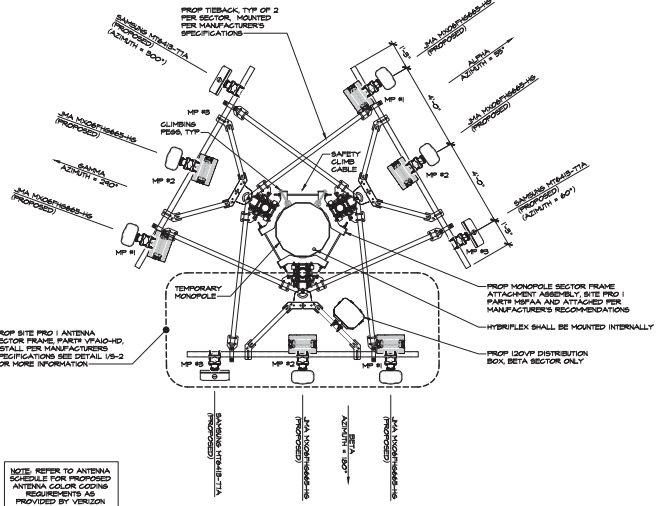




A B C D E F G H J K L M N P Q R

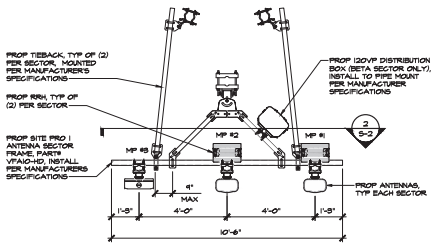


RRH CHART

MPH1 SAMSUNG BS/ BS RRH (RP4464-28A)

MPH2 SAMSUNG BS/ BSAA RRH (RP4464-28A)

ANTENNA SECTOR PLAN
SCALE: 3/8" = 1'-0"

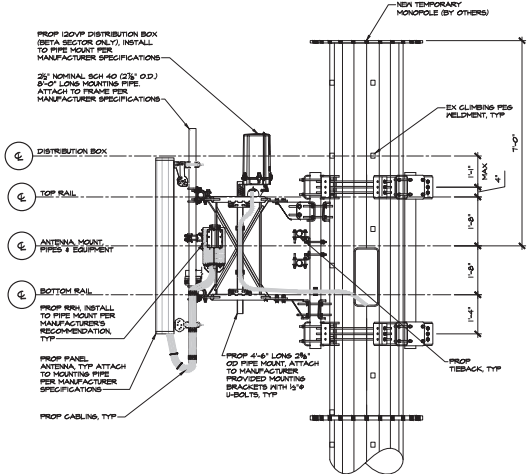


1
S-2
TYPICAL 10'-6" ANTENNA SECTOR DETAIL
SCALE: 3/8" = 1'-0"

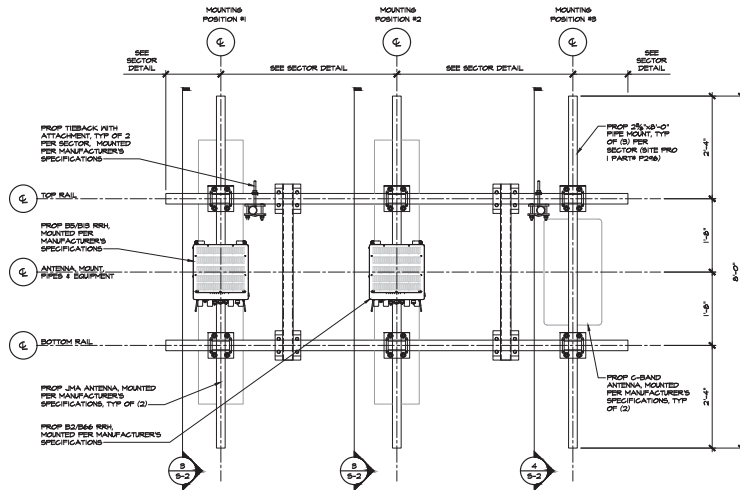
- NOTES
1. ALL PROPOSED ANTENNAS & ANCILLARY EQUIPMENT (RRHS, DISTRIBUTION BOXES, ETC.) MUST BE INSTALLED AS SHOWN.
 2. ALL APPURTENANCES MUST BE MOUNTED TO A DESIGNATED MOUNTING POSITION (MOUNTING PIPE, APPURTENANCES SHALL NOT BE DIRECTLY MOUNTED TO RAILS, STANDOFFS OR OTHER PORTIONS OF THE MOUNT UNLESS IT IS A DESIGNATED MOUNTING POSITION).
 3. ALL APPURTENANCES SHALL BE ATTACHED TO PIPE MOUNT PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
 4. ALL NEW STRUCTURAL STEEL, FASTENERS, AND EQUIPMENT MOUNTING HARDWARE TO RECEIVE A HOT-DIPPED GALVANIZED FINISH PRIOR TO INSTALLATION.

PIM-FRIENDLY MATERIALS NOTE:

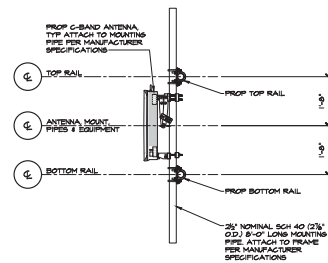
ALL CABLE SUPPORT HARDWARE WITHIN A 10-FT RADIUS OF ALL ANTENNAS MUST BE CONSTRUCTED WITH PIM-FRIENDLY MATERIALS. PIM-FRIENDLY MATERIALS ARE TO BE CERTIFIED THROUGH VERIZON WIRELESS LOGISTICS OR SHALL COORDINATE ALL PIM-FRIENDLY AND INSTALLATION OF PIM-FRIENDLY MATERIALS WITH VERIZON WIRELESS LOGISTICS. MATERIALS TO BE USED:



3
S-2
TYPICAL JMA ANTENNA & EQUIPMENT MOUNT DETAILS
SCALE: 1/2" = 1'-0"



2
S-2
TYPICAL ANTENNA MOUNT REAR ELEVATION
SCALE: 3/4" = 1'-0"



4
S-2
TYPICAL C-BAND ANTENNA MOUNT DETAILS
SCALE: 1/2" = 1'-0"

MRA
MORRIS & RITCHIE
ASSOCIATES, INC.
Civil/Structural Engineers
2500 S. East Avenue, Suite 400
Towson, Maryland 21204
410.281.1400
410.281.1300 Fax



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 33364. EXPIRATION DATE: 1/30/2025

verizon
WOODSIDE TEMP RELO
CORNER OF I-495 & SR97
SILVER SPRING, MD 20910 (MONTGOMERY COUNTY)

NO.	DESCRIPTION	DATE	INT
1	COUNTY COMMENTS	01/04/25	A.L.
2	COAH COMMENTS	11/12/24	A.L.
3	TC COMMENTS	08/14/24	A.L.
4	TOWER COMMENTS	08/14/24	DNT

DESIGNED BY: R.D.
DRAWN BY: DNT
REVIEWED BY: A.L.
PROJECT NO: 10421.924
PUBS PROJECT NO: 17366051
DATE: 08/13/2024

TITLE:
Structural
Details

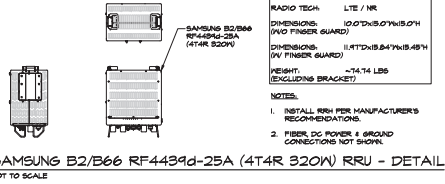
SHEET:
S-2



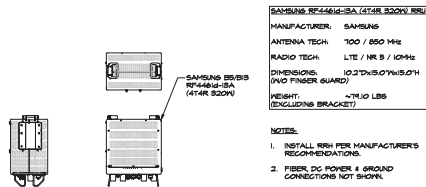
Know what's below.
Call before you dig.

PROTECT YOURSELF, ONE THREE
EIGHT ONE ONE
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 OTHER REGULATIONS
PERTINENT TO APPURTENANCE.

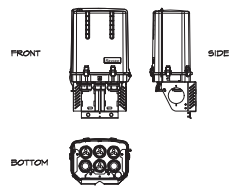
A B C D E F G H J K L M N P Q R



SAMSUNG B2/B66 RF4494d-25A (4T4R 320W) RRU - DETAIL
NOT TO SCALE



SAMSUNG B5/B13 RF4461d-13A (4T4R 320W) RRU - DETAIL
NOT TO SCALE



RAYCAP RCMDC-6627-PF-48 DISTRIBUTION BOX DETAIL
NOT TO SCALE



Know what's below.
Call before you dig.

PROTECT YOURSELF, ONE TRICE
WARNING DAYS WITH
THIS DRAWING DOES NOT INCLUDE NECESSARY
COMPONENTS FOR CONSTRUCTION SAFETY. ALL
CONSTRUCTION MUST BE DONE IN ACCORDANCE
WITH THE REGULATIONS, SAFETY AND HEALTH
ACT OF 1970 AND ALL OTHER REGULATIONS
HEREIN TO APPLICABLE.

STRUCTURAL NOTES:

BUILDING CODES

- ALL CONSTRUCTION SHALL CONFORM WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC 2018) AND ALL SUBSEQUENT SUPPLEMENTS.
- ANSI/TIA-222-H-2017 "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES, 2ND PRINTING"
- IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH THE GOVERNING LOCAL BUILDING CODE.

DESIGN LOADS

- WIND LOAD DESIGN CRITERIA**
BASIC WIND SPEED (NO ICE): V_W = 115 MPH
BASIC WIND SPEED WITH ICE: V_W = 40 MPH
DESIGN RADIAL ICE THICKNESS: 1.0\"/>

- SEISMIC LOADING:** DOES NOT CONTROL.

MISCELLANEOUS

- SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER SHALL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.
 - THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
 - THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.
 - SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- EXISTING STRUCTURE**
- ALL EXISTING PLANS, DETAILS, DIMENSIONS, AND ELEVATIONS INDICATE EXISTING CONDITIONS AS KNOWN. THE EXISTING INFORMATION SHOWN IS NOT INTENDED TO BE "AS BUILT" AND THE ACTUAL CONSTRUCTION MAY DIFFER FROM THAT SHOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING DIMENSIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION. MINOR VARIATIONS CAN BE EXPECTED AND ANY REQUIRED DEVIATION FROM THE CONTRACT DOCUMENTS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
 - THE CONTRACTOR SHALL LOCATE ALL OVERHEAD AND UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION AND PREVENT DAMAGE TO THEM. SHOULD DAMAGE OCCUR TO ANY UTILITIES, THE CONTRACTOR IS REQUIRED TO REPAIR THE DAMAGE TO THE SATISFACTION OF THE OWNER. IF THE OWNER ENGINEER CONTRACTOR SHALL ALSO ENSURE SAFETY CONDITIONS TO AVOID AROUND ANY AND ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES, CONTRACTOR SHALL COORDINATE WITH THE NATIONAL POWER AND UTILITY COMPANY PRIOR TO CONSTRUCTION TO DETERMINE AN APPROPRIATE SAFETY PLAN TO ENSURE WORKPLACE SAFETY OF ALL MEMBERS ON SITE.
 - THE CONTRACTOR SHALL MONITOR THE EXISTING STRUCTURE DURING CONSTRUCTION. IMMEDIATELY NOTIFY THE ENGINEER OF AREAS EXHIBITING DISTRESS OR FAILURE.
 - THE CONTRACTOR SHALL FIELD VERIFY THE SIZE AND CONDITION OF ALL EXISTING FRAMING. SHOULD THE SIZE OR CONDITION OF THE EXISTING FRAMING DIFFER FROM THAT SHOWN ON THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

STRUCTURAL AND MISCELLANEOUS STEEL

- ALL STEEL CONSTRUCTION SHALL CONFORM TO THE NINTH EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- ALL MISCELLANEOUS STEEL (ANGLES, PLATES, ETC.) SHALL CONFORM TO ASTM A 36 HAVING A MINIMUM YIELD STRENGTH OF F_y = 36,000 PSI.
- ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A 53 GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF F_y = 35,000 PSI.
- ALL CONNECTIONS TO EXISTING STEEL FRAMING SHALL BE FIELD BOLTED UNLESS OTHERWISE INDICATED. THE CONTRACTOR MAY SUBSTITUTE FIELD JOINTS PROVIDED THE EXISTING STEEL IS TESTED TO DETERMINE STRENGTH AND CHEMICAL PROPERTIES. TEST METHODS AND RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO ANY FIELD WELDING TO EXISTING STEEL.
- THE CONTRACTOR SHALL NOT SPlice OR CUT OPENINGS IN STEEL MEMBERS NOT SHOWN ON CONTRACT DRAWINGS WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.
- AN INDEPENDENT INSPECTION AGENCY SHALL INSPECT ALL STRUCTURAL STEEL AND VERIFY THAT IT CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 5 DAYS OF THE INSPECTION. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY OF ALL PHASES OF STEEL CONSTRUCTION AND WELDING.
- STEEL MEMBERS, FABRICATIONS AND ASSEMBLIES INDICATED TO BE GALVANIZED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A 123 AFTER FABRICATION. ALL EXPOSED STEEL MEMBERS SHALL BE HOT DIPPED GALVANIZED.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING THE SIZE, EXTENT, AND LOCATION OF ALL STRUCTURAL AND MISCELLANEOUS STEEL FRAMING INCLUDING ALL CONNECTIONS, PARTS, AND BEARINGS.

POST-INSTALLATION INSPECTION

- A POST-INSTALLATION INSPECTION REPORT IS REQUIRED AND SHALL BE INCLUDED IN THE CONTRACTORS BID. A POST-INSTALLATION INSPECTION IS A VISUAL INSPECTION OF TOWER INSTALLATION AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE INSTALLATION DRAWINGS.
- THE POST-INSTALLATION INSPECTION REPORT SHALL BE COMPLETED BY A PROFESSIONAL ENGINEER LICENSED IN THE JURISDICTION IN WHICH THE PROJECT IS LOCATED.
- THE INTENT OF THE POST-INSTALLATION INSPECTION REPORT IS TO CONFIRM INSTALLATION AND CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE INSTALLATION DESIGN ITSELF.
- TO ENSURE THAT THE REQUIREMENTS OF THE POST-INSTALLATION INSPECTION REPORT ARE MET, IT IS VITAL THAT THE CONTRACTOR AND POST-INSTALLATION INSPECTOR BEGIN COMMUNICATION AND COORDINATION AS SOON AS A POI IS RECEIVED.



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1405, EXPIRATION DATE: 1/01/2025.

WOODSIDE TEMP RELO
CORNER OF I-495 & SR97
SILVER SPRING, MD 20910 (MONTGOMERY COUNTY)

verizon

REVISIONS:

NO. DESCRIPTION DATE INT

1. COUNTY COMMENTS 08/14/24 AIL

2. COAH COMMENTS 11/12/24 AIL

3. TOWER COMMENTS 08/14/24 AIL

DESIGNED BY: RLP

DRAWN BY: DNT

REVIEWED BY: A.L.

PROJECT NO: 10421.924

DATE: 08/13/2024

Structural
Details & Notes

SHEET:
S-3