

**From:** Scala, Mary Joy  
**Sent:** Thursday, June 18, 2015 3:43 PM  
**To:** 'Wilmer, Jessica'  
**Cc:** 'Tony Rocklein'; Doug Brooks (doug@realpropertyinc.com)  
**Subject:** BAR Actions - 500 Court Square - June 16, 2015

June 18, 2015

Thomas Michie – TR – 1<sup>st</sup> Mont LD TR  
500 Court Square  
Charlottesville, VA 22902

Jessie Wilmer  
Ntelos Wireless  
1150 Shenandoah Village Dr.  
Waynesboro, VA 22980

**Certificate of Appropriateness Application**

BAR 15-06-02  
500 Court Square  
Tax Parcel 530096000  
Thomas Michie, TR -1<sup>st</sup> Mont LD TR, Owner/ Neteleos Wireless, Applicant  
Replace 3 existing with 9 screened antennas and relocate ground cabinets.

Dear Applicant,

The above referenced project was discussed before a meeting of the City of Charlottesville Board of Architectural Review (BAR) on June 16, 2015. The following action was taken:

**The BAR accepted (5-0-1 with DeLoach recused) the applicant's request for deferral. The BAR recommends that the property board propose a master plan or approach rather than a disjointed solution. BAR members are willing to meet with the owners to discuss possible solutions. Some possible options to consider are: locating the antennas behind the baluster; locating the antennas to the sides of the penthouse, and painting the antennas to match the penthouse; or adding screening to the penthouse area resulting in a wider penthouse.**

*Please resubmit when you are ready, by the submittal deadline three weeks prior to the meeting at which you wish to be heard.*

If you have any questions, please contact me at 434-970-3130 or [scala@charlottesville.org](mailto:scala@charlottesville.org).

Sincerely yours,

Mary Joy Scala, AICP  
Preservation and Design Planner

**Mary Joy Scala, AICP**  
Preservation and Design Planner  
City of Charlottesville  
Department of Neighborhood Development Services  
City Hall – 610 East Market Street  
P.O. Box 911  
Charlottesville, VA 22902  
Ph 434.970.3130 FAX 434.970.3359  
[scala@charlottesville.org](mailto:scala@charlottesville.org)

**CITY OF CHARLOTTESVILLE  
BOARD OF ARCHITECTURAL REVIEW  
STAFF REPORT  
June 16, 2015**



**Certificate of Appropriateness Application**

BAR 15-06-02

500 Court Square

Tax Parcel 530096000

Thomas Michie, TR -1<sup>st</sup> Mont LD TR, Owner/ Ntelos Wireless, Applicant

Replace 3 existing with 9 screened antennas and relocate ground cabinets

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**Background**

This property is a contributing structure in the North Downtown ADC district and the Charlottesville Albemarle County Courthouse National Register District. The 1980 National Register nomination describes the building as a 9 story brick (Flemish bond) building with a flat roof designed in the Colonial Revival by architect Stanhope Johnson of Lynchburg. The building was constructed between 1924-26 and originally called the Monticello Hotel. It is currently a condominium building.

February 28, 1989 - New windows in south wall façade and 2-3 outdoor mechanical units on fire stair

June 27, 1989 - Install new railings on towers and two sets of stairs on roof

January 23, 1990 - Install six new rear windows; close two fire door entrances; install vent; add two heat pump units on fire stairs

April 24, 1990 - Screening for rear heat pumps

June 21, 1994 - Replace new sliding doors

February 2001 - Administrative approval: Co-locate antenna on roof (Nextel/Crown)

April 2001 - Administrative approval: (Ntelos) Replace 2 cabinets and upgrade equipment.

July 2001 - Administrative approval: Locate up to 6 to 9 antennas (General Dynamics) with accessory telecommunication cabinets

October 2001 - Administrative approval: Remove 3 antennas and replace 6 (US Cellular)

June 17, 2003 - Add two new rectangular windows in south elevation.

September 21, 2004 - Install revolving door

June 21, 2011 - The BAR approved on the consent agenda to replace the balustrade with a painted terne-coated stainless steel replica.

July 19, 2011 - The BAR approved the replacement of nine existing wood windows in a 6<sup>th</sup> floor unit facing Market Street with aluminum clad wood window sash kits with exterior applied 7/8" putty profile muntins. This is the only approved window replacement at this time for the entire structure.

March 19, 2013 - Approved (9-0) as submitted re-roofing and replacement of painted galvanized steel balustrade with painted copper balustrade.

March 18, 2014 - The BAR approved (5-0) the change in baluster material from painted copper to fiberglass as submitted.

August 19, 2014 - Administrative approval to AT&T to replace three antennas with three similar sized antennas.

April 21, 2015 - The BAR approved (8-0) the U.S. Cellular application as submitted to replace 6 antennas and add one new cabinet on roof.

## **Application**

Ntelos plans to remove three panel antennas from the penthouse and install nine new antennas in three locations on existing steel frames. Three stealth screening walls are proposed to enclose the new antennas and ancillary equipment. Alpha faces Court Square, on the northeast side; Beta faces Market Street on the south west side; Gamma faces 5<sup>th</sup> Street on the southwest side.

In addition to the Ntelos stealth screening walls, the applicant notes that the building owner will soon replace the "white ballast parapet wall" recently removed. A photo is included in this report of the baluster that is being replaced by the owner. The stealth material panels are proposed to be located between the antennas and the existing wall and/or proposed parapet walls. 1' away

The applicant notes: All the proposed stealth walls are 14'4" high, shown on sheets S1 (Alpha), S3 (Beta) and S5 (Gamma). There are 3 different types of antennas proposed 63.3", 51.5" and 60.6" all shown on sheet D-4. There is an existing 7'6" parapet wall that our antennas must project overtop. See attached photo labeled "CV101 (AT&T) Antenna Height" that shows how the antennas are mounted to the steel frame. The new parapet wall by the owner's will go in front of the antenna skid (but below the antennas). Photos 3 and 7 show the Beta and Gamma skids, while photo 6 shows the Alpha skid. The Alpha skid is much narrower because it is between the edge of roof and penthouse.

Ntelos is also proposing to relocate its ground equipment cabinets from a frame just east of the penthouse to a larger existing steel frame on the west side of the penthouse, recently vacated by Nextel. No stealth wall is proposed in this location.

The applicant notes: Photo 7 shows the vacated (by Nextel) equipment skid. The skid is 20" off the rooftop and the NTELOS equipment cabinets are only 63" tall for a total height of ~7'. Nextel recently removed a shelter that was 11' tall atop this platform. We feel that the equipment cabinets will not be visible from ground level because it will be screened on the east side by the penthouse, from the south by the new 14'4" stealth screening on the south and the proposed parapet on the north. The equipment must be elevated on platforms so the building's roof can be maintained/ replaced without removing the equipment.

## **Criteria, Standards and Guidelines**

### **Review Criteria Generally**

*Sec. 34-284(b) of the City Code states that,*

*In considering a particular application the BAR shall approve the application unless it finds:*

- (1) That the proposal does not meet specific standards set forth within this division or applicable provisions of the Design Guidelines established by the board pursuant to Sec.34-288(6); and*
- (2) The proposal is incompatible with the historic, cultural or architectural character of the district in which the property is located or the protected property that is the subject of the application.*

### **Pertinent Standards for Review of Construction and Alterations include:**

- (1) Whether the material, texture, color, height, scale, mass and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable design control district;*
- (2) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs;*

- (3) *The Secretary of the Interior Standards for Rehabilitation set forth within the Code of Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;*
- (4) *The effect of the proposed change on the historic district neighborhood;*
- (5) *The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls and walks;*
- (6) *Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;*
- (7) *When reviewing any proposed sign as part of an application under consideration, the standards set forth within Article IX, Sections 34-1020, et seq. shall be applied; and*
- (8) *Any applicable provisions of the city's Design Guidelines (see Sec. 34-288(6)).*

**Pertinent Design Review Guidelines for Site Design and Elements**

**H. UTILITIES & OTHER SITE APPURTENANCES**

*Site appurtenances, such as overhead utilities, fuel tanks, utility poles and meters, antennae, exterior mechanical units, and trash containers, are a necessary part of contemporary life. However, their placement may detract from the character of the site and building.*

- 1. *Plan the location of overhead wires, utility poles and meters, electrical panels, antennae, trash containers, and exterior mechanical units where they are least likely to detract from the character of the site.*
- 2. *Screen utilities and other site elements with fences, walls, or plantings.*
- 3. *Encourage the installation of utility services underground.*
- 4. *Antennae and communication dishes should be placed in inconspicuous rooftop locations, not in a front yard.*
- 5. *Screen all rooftop mechanical equipment with a wall of material harmonious with the building or structure.*

**Discussion and Recommendations**

The pertinent Telecommunication Facilities section of the zoning ordinance that was adopted in 2003 states:

Sec. 34-1073. Facilities by district.

(a) *Within the city's historic and entrance corridor overlay districts:*

- (1) *The following shall be permitted uses: antennae or microcells mounted on existing communications towers established prior to February 20, 2001; attached communications facilities utilizing utility poles or other electric transmission facilities as the attachment structure; and other attached communications facilities if such other attached communications facilities are not visible from any adjacent street or property.*
- (2) *The following shall be prohibited uses: attached communications facilities where such facilities are visible from any adjacent street or property, and communications facilities utilizing alternative tower, monopole tower, guyed tower, lattice tower and self-supporting tower support structures.*

Staff commends the property owner and the utility for working together to improve the City's most important historic district. Ideally, over time, all the antennas can be removed from the penthouse

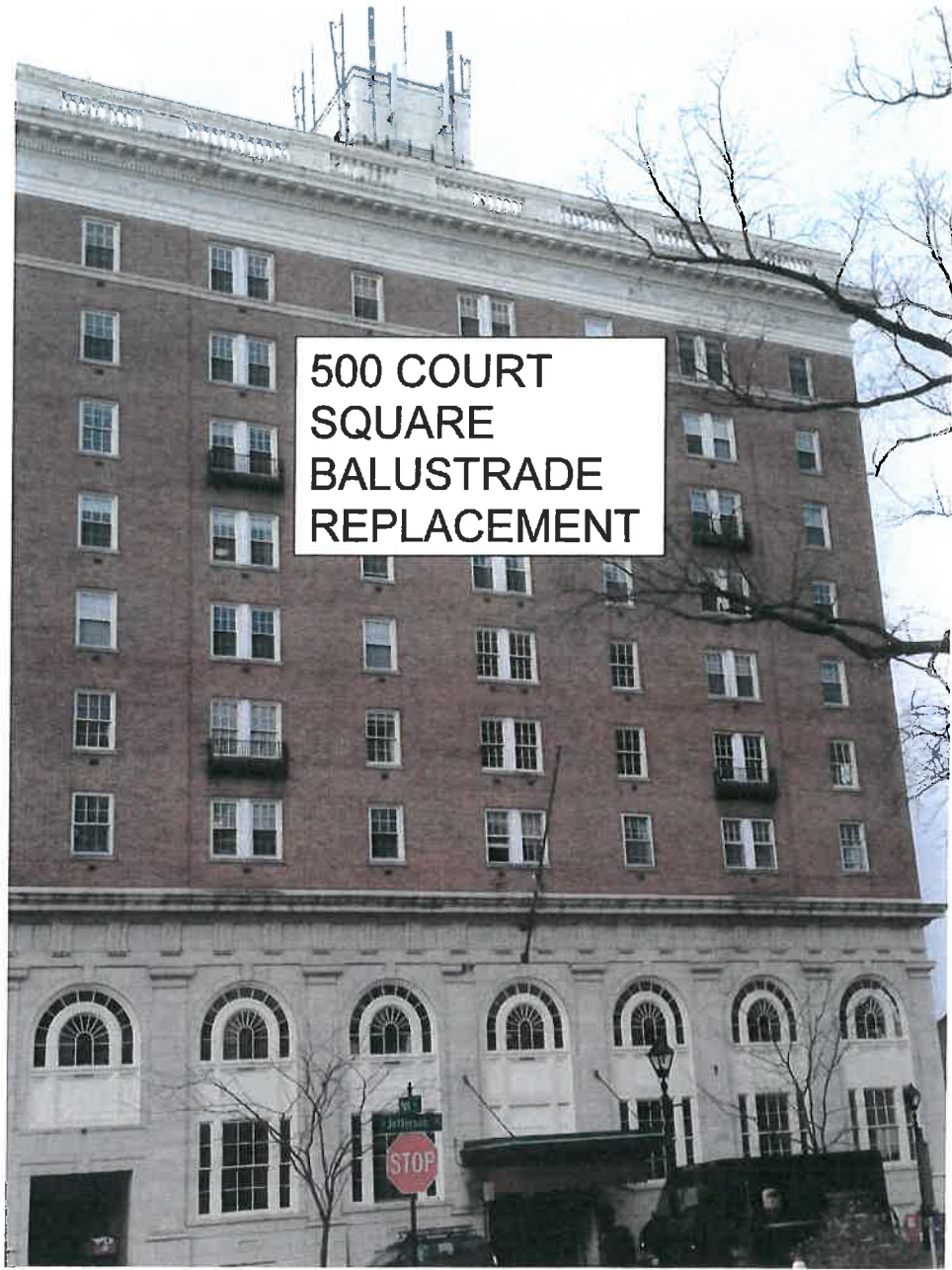
and located on the lower roof behind a screening wall that could be built in phases as the several users upgrade their antennas and equipment. However, staff has several concerns:

1. The proposed stealth wall does not extend down to the roof. The applicant is assuming the balustrade, which is not solid, will screen the lower portion of the assembly. If the lower portion of the assembly will be visible through the balustrade, then the screen wall should be extended downward. ✓
2. The applicant says that all three proposed stealth walls are the same height. However, on photo sim angle 2D, it appears that the stealth walls for the Gamma and Beta locations have two different top-of-wall heights. It should be confirmed that all the screen walls will have a consistent top height.
3. The Gamma skid is located very close to the south parapet wall. (The existing steel frames are located on building joists to meet structural code.) Ideally the screen walls could be located at a consistent distance from the parapet so that they could potentially be extended to form a continuous screen. If the BAR agrees, the location of the proposed Gamma screen should be discussed.

*see rear of Gamma  
from West St.*

### **Suggested Motion**

Having considered the standards set forth within the City Code, including City Design Guidelines for Site Design & Elements, I move to find that the plan to replace 3 antennas with 9 antennas, add three screen walls, and to relocate cabinets satisfies the BAR's criteria and is compatible with this property and other properties in the North Downtown ADC district, and that the BAR approves the application as submitted (or with the following modifications...).



**500 COURT  
SQUARE  
BALUSTRADE  
REPLACEMENT**







CV (101) (24)

Ntelos antennas on penthouse  
To be removed



Gamma Skid



equipment platform  
←

Beta Skid ↗

EV 101 (7)

SW Corner

AT&T Antenna (nTelos Site : CV101)



CV 101 (AT&T Antenna Height)  
NWcorner



**Board of Architectural Review (BAR)  
Certificate of Appropriateness**

**RECEIVED**  
MAY 1 2015  
NEIGHBORHOOD DEVELOPMENT SERVICES

Please Return To: City of Charlottesville  
Department of Neighborhood Development Services  
P.O. Box 911, City Hall  
Charlottesville, Virginia 22902  
Telephone (434) 970-3130 Fax (434) 970-3359

Please submit ten (10) copies of application form and all attachments.

For a new construction project, please include \$375 application fee. For all other projects requiring BAR approval, please include \$125 application fee. For projects that require only administrative approval, please include \$100 administrative fee. Make checks payable to the City of Charlottesville.

The BAR meets the third Tuesday of the month.

Deadline for submittals is Tuesday 3 weeks prior to next BAR meeting by 3:30 p.m.

Owner Name 500 Court Square Association Applicant Name Ntelos Wireless  
Project Name/Description Ntelos CV101 Court Square Parcel Number 530096000  
Property Address 500 Court Square, Charlottesville

**Applicant Information**

Address: 1150 Shenandoah Village Dr  
Waynesboro, VA 22980  
Email: wilmerj@ntelos.com  
Phone: (W) (540) 241-5060 (H) \_\_\_\_\_  
FAX: (540) 941-4106

**Property Owner Information (if not applicant)**

Address: 500 Court Square Association  
40 Real Property Inc. 1500 Amherst St #3  
Email: Charlottesville, VA 22903-5158  
Phone: (W) \_\_\_\_\_ (H) \_\_\_\_\_  
FAX: \_\_\_\_\_

**Signature of Applicant**

I hereby attest that the information I have provided is, to the best of my knowledge, correct. (Signature also denotes commitment to pay invoice for required mail notices.)

Jim RWL 4/28/15  
Signature Date

Jessie Wilmer  
Print Name Date

**Property Owner Permission (if not applicant)**

I have read this application and hereby give my consent to its submission.

see attached Owner Consent  
Signature Date

Print Name Date

Do you intend to apply for Federal or State Tax Credits for this project? N/A

Description of Proposed Work (attach separate narrative if necessary): see attached narrative

List All Attachments (see reverse side for submittal requirements): 1) Site Plan, 2) photo simulations 2) sample material

**For Office Use Only**  
Received by: O. Ebanks  
Fee paid: 12500 Cash/Ck. # 6080661  
Date Received: 5/11/15  
Approved/Disapproved by: \_\_\_\_\_  
Date: \_\_\_\_\_  
Conditions of approval: \_\_\_\_\_



**500 COURT SQUARE ASSOCIATION  
OWNER'S CONSENT LETTER**

500 Court Square Association hereby grants permission to Virginia PCS Alliance, L.C., d/b/a NTELOS and its authorized contractors/agents to act as "Applicant" in the processing of all applications and permits associated with the modification and placement of NTELOS' antennas and base station equipment on the rooftop of the building located at 500 Court Square, Charlottesville, VA (Parcel ID 530096000).

This consent includes the permission to file all applications for any required governmental approvals necessary to modify the existing facilities installed by NTELOS on the property to make all presentations necessary during any zoning, site plan and building permitting processes with regards to such approvals.

The consent granted in this letter shall expire on June 30, 2015.

By Owner:

500 Court Square Association

Signature:



Title:

Board member / building committee chair

Date:

March 17, 2015



May 18, 2015

City of Charlottesville  
Department of Neighborhood Development Services  
P.O. Box 911, City Hall  
Charlottesville, VA 22902

**RE: NTELOS Wireless Board of Architectural Review (BAR) Application  
CV101 500 Court Square (Rooftop)**

Dear Ms. Scala;

Virginia PCS Alliance, L.C. ('NTELOS') is in the process of enhancing its existing 3G voice and data network by replacing old network equipment with 4G/LTE (Long Term Evolution) equipment at most of its wireless telecommunications facilities in the City and Albemarle County, which will provide improved call performance, expanded coverage, faster downloads and stronger indoor signals for its customers. The current 3G voice and data network utilizes the 1900 MHz spectrum only. Because of a unique partnership that NTELOS has with Sprint, NTELOS is able to have diverse spectrum available for its use. The proposed NTELOS 4G/LTE equipment upgrades will use a tri-band system that will: 1) repurpose old Nextel spectrum (800 MHz spectrum) for increased coverage and better in-building coverage, 2) use Clearwire spectrum (2.5 GHz spectrum) for increased data capacity and 3) continue to use the existing Sprint/NTELOS spectrum (1900 MHz spectrum). By using this tri-band system, NTELOS and Sprint customers will have LTE enhancement, improved call quality and diverse data capacity.

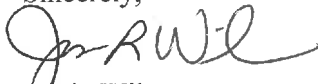
This specific application is a proposal to replace the existing antennas and base station equipment on the rooftop of the 500 Court Square building in downtown Charlottesville. The subject parcel is owned by 500 Court Square Association, described as tax parcel 530096000. The building is located on the south side of Court Square, east of 5<sup>th</sup> Street, NE.

Attached is a site plan of the rooftop of the building. Currently NTELOS has three (3) panel antennas located on the existing penthouse and a base station equipment frame location on the rooftop, east of the penthouse. With this proposal, NTELOS is proposing remove the existing (3) panel antennas from the penthouse and install (9) tri-band antennas that will support multiple spectrum capabilities for 4G/LTE services on the existing steel frame (labeled as Alpha, Beta and Gamma) recently vacated by Nextel. The proposed new antennas will be screened from public view at ground elevation by stealth screening walls. The remote radio head ancillary equipment will be located behind the antennas and behind the stealth screen walls as shown on the site plan drawings. Photo simulations are attached as part of the BAR application showing the location of the stealth screening walls. A sample of the stealth screening wall material is submitted along with this application. In addition to the stealth screening walls, the building owner has proposed to replace the white ballast parapet wall recently removed. This will further shield the NTELOS installation from public visibility. NTELOS is also proposing to relocate its ground equipment cabinets to a larger existing steel frame on the rooftop located on the west side of the penthouse, also recently vacated by Nextel.

While not all the telecommunications equipment on the building's rooftop by other carriers will be concealed from public view, the proposed equipment upgrades by NTELOS and stealth screening walls are compatible with the area's urban setting and will have minimal visual impact on the surrounding area as compared to its current scenario. This proposal will deliver a much improved customer communications experience and will serve the public health and safety needs to the community by providing increased wireless voice capabilities and improved high speed data services to this heavily populated area of Charlottesville. I look forward to receiving your comments regarding this proposal.

Please feel free to contact me if you need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Jessie Wilmer". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Jessie Wilmer

NTELOS

Sr. Site Acquisition Specialist

(540) 241-5060

[wilmerj@ntelos.com](mailto:wilmerj@ntelos.com)



**GAMMA**  
**BETA**

PARAPET WALL SHOWN  
IS A SIMULATION ONLY.  
THE EXACT DESIGN AND  
CONSTRUCTION WILL NOT  
BE DETERMINED  
BY STEALTH®.



**STEALTH**  
FIRST IN CONCEALMENT™

800.755.0689

[stealthconcealment.com](http://stealthconcealment.com)

500 Court Square - Angle 2D  
NT14-01621W-17

Simulation is an approximate representation  
of our proposed concealment solution.  
Actual concealment(s) may vary.

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**ALPHA**



PARAPET WALL SHOWN  
IS A SIMULATION ONLY.  
THE EXACT DESIGN AND  
CONSTRUCTION WILL NOT  
BE DETERMINED  
BY STEALTH®.



**STEALTH**  
FIRST IN CONCEALMENT™

800.755.0689

[stealthconcealment.com](http://stealthconcealment.com)

500 Court Square - Angle 3D  
NT14-01621W-17

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GAMMA



**STEALTH**  
FIRST IN CONCEALMENT™

800.755.0689

[stealthconcealment.com](http://stealthconcealment.com)

500 Court Square - Angle 1D  
NT14-01621W-17

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1150 SHENANDOAH VILLAGE DRIVE  
WAYNESBORO, VA 22980

# ZONING DRAWINGS

## COURT SQUARE CV101

PROPOSED EQUIPMENT UPGRADE  
OF EXISTING ROOFTOP INSTALLATION



1150 SHENANDOAH VILLAGE DRIVE  
WAYNESBORO, VA 22980

SITE NAME: COURT SQUARE

SITE NUMBER: CV101

SITE ADDRESS:  
500 COURT SQUARE  
CHARLOTTESVILLE, VA 22902

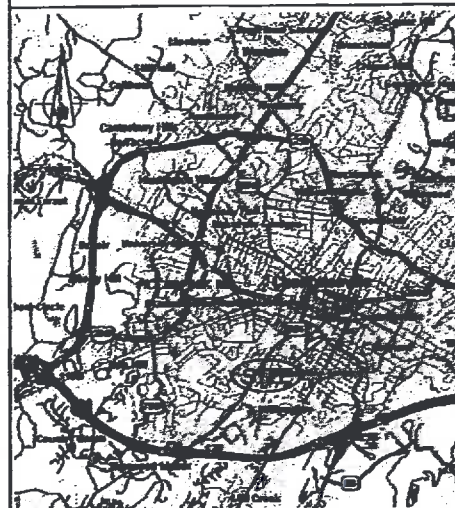
AREA:  
LEASE AREA = 208 SQ. FT.

BUILDING OWNER:  
500 COURT SQUARE ASSOCIATION

LATITUDE: N38° 01' 54.98"

LONGITUDE: W78° 28' 41.02"

NO.	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/11/14
2	REISSUE FOR COMMENT	09/24/14
3	REISSUE FOR COMMENT	02/18/15
4	ISSUE FOR CONSTRUCTION	03/31/15
5	ISSUE FOR ZONING	05/01/15



AREA MAP



VICINITY MAP

**SITE DIRECTIONS**  
FROM WAYNESBORO, VA: I-64 EAST TO EXIT 120 (SR631-5TH STREET). TURN LEFT (NORTH) ONTO SR631 AND FOLLOW FOR ABOUT 2.1 MILES TO US250 BUSINESS. CONTINUE STRAIGHT ONTO US250 BUSINESS AND FOLLOW FOR 0.2 MILES. BEAR RIGHT ONTO HIGH STREET (US 250 BUSINESS). FOLLOW HIGH STREET FOR 0.3 MILES. TURN RIGHT ONTO 4TH ST. NE. TAKE NEXT LEFT ONTO COURT SQUARE AND FOLLOW FOR 300 FEET. BUILDING IS ON THE RIGHT.

DESIGN ENGINEER  
**Mead & Hunt**  
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

CONSULTANT TEAM

DIRECTIONS TO SITE

**SITE NAME**  
COURT SQUARE

**SITE NUMBER**  
CV101

**SITE ADDRESS**  
500 COURT SQUARE  
CHARLOTTESVILLE, VA 22902

**BUILDING OWNER**  
500 COURT SQUARE ASSOCIATION

**SITE DATA**  
NAD 83 LATITUDE - N38° 01' 52.01"  
NAD 83 LONGITUDE - W78° 28' 39.05"

**LEASE AREA**  
208 SQUARE FEET

**PROJECT DESCRIPTION**  
INSTALLATION OF EQUIPMENT CABINETS ON EXISTING STEEL FRAME. INSTALLATION OF NEW ANTENNAS ON EXISTING STEEL FRAMES. UTILITY RUN TO NEW EQUIPMENT.

**JURISDICTION**  
CITY OF CHARLOTTESVILLE

**CONTACTS**  
nTELOS (CONSTRUCTION)  
BEN PIERCE  
(804) 218-5474 - PHONE  
7501 BOULDERS VIEW DR., SUITE 600  
RICHMOND, VA 23225  
nTELOS (LEASING)  
DEBBIE BALSER  
(540) 941-4220 x3071 - PHONE  
(540) 941-4106 - FAX  
MEAD & HUNT  
CURTIS PAXTON  
(304) 553-8103 - PHONE  
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311

PROJECT INFORMATION

**SHEET T-1** TITLE SHEET  
**SHEET C-1** EXISTING CONDITIONS  
**SHEET C-2** PROPOSED SITE PLAN  
**SHEET C-3** EQUIPMENT PLATFORM PLAN  
**SHEET C-4** ANTENNA AND CABLE LAYOUT  
**SHEET C-5** UTILITY SERVICE PLAN  
**SHEET C-6** GROUNDING PLAN  
**SHEET D-1** MISCELLANEOUS DETAILS  
**SHEET D-2** MISCELLANEOUS DETAILS  
**SHEET D-3** MISCELLANEOUS DETAILS  
**SHEET D-4** MISCELLANEOUS DETAILS  
**SHEET D-5** PPC CABINET DETAILS  
**SHEET D-6** ELECTRICAL NOTES  
**SHEET D-7** GENERAL NOTES

**STEALTH DRAWINGS**  
**SHEET T1** TITLE SHEET  
**SHEET N1-N2** NOTES & SPECIFICATIONS  
**SHEET S1-S2** ASSEMBLY - ELEVATIONS ALPHA SCREENWALL  
**SHEET S3-S4** ASSEMBLY - ELEVATIONS BETA SCREENWALL  
**SHEET S3-S4** ASSEMBLY - ELEVATIONS GAMMA SCREENWALL

**SHEET INDEX**

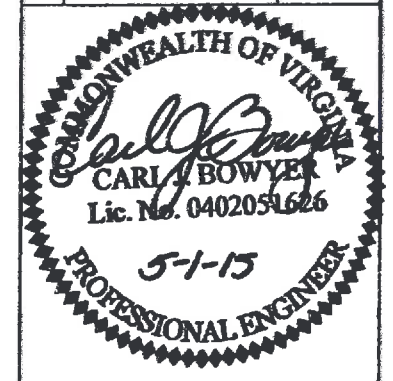
**POLICE/FIRE/RESCUE**  
911

**ELECTRIC POWER**  
DOMINION POWER  
CONTACT: CUSTOMER SERVICE  
PHONE#: 888-667-3000

**TELEPHONE**  
CENTURY LINK  
CONTACT: CUSTOMER SERVICE  
PHONE#: 866-768-1847

**nTELOS NOC**  
(800) 566-9568 - PHONE

EMERGENCY AND UTILITY CONTACTS



**Mead & Hunt**  
400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

TITLE SHEET	SHEET
	T-1



1150 SHENANDOAH VILLAGE DRIVE  
WAYNESBORO, VA 22980

SITE NAME: COURT SQUARE

SITE NUMBER: CV101

SITE ADDRESS:  
500 COURT SQUARE  
CHARLOTTESVILLE, VA 22902

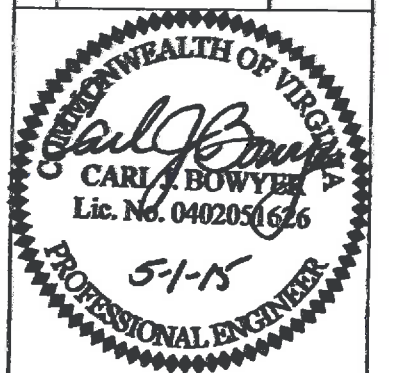
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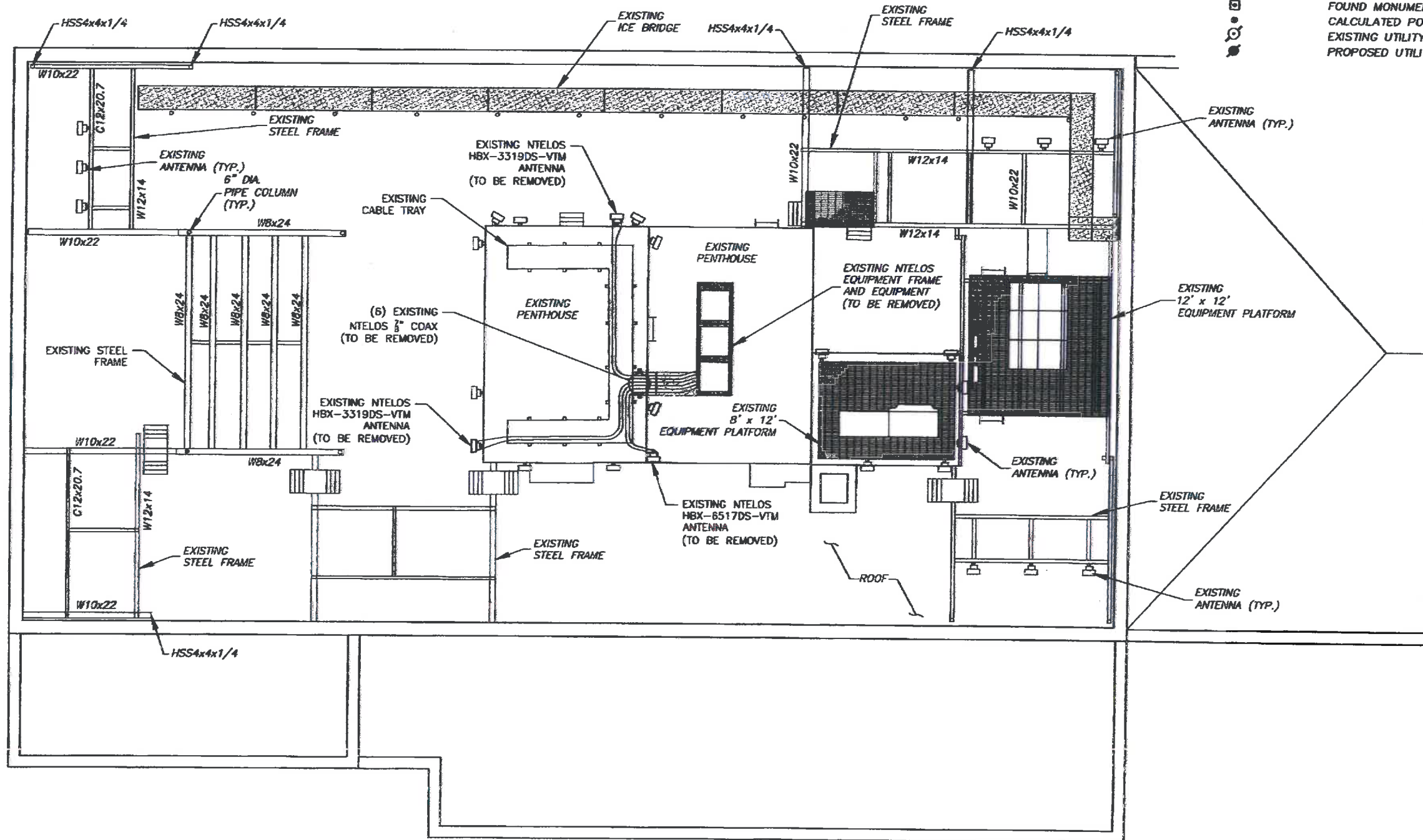
400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

EXISTING CONDITIONS SHEET  
C-1

**LEGEND**

---	PROPERTY LINE
---	TRACT LINE
---	LEASE LINE
---	ROW LINE
-x-x-	EXISTING FENCE LINE
-xx-xx-	PROPOSED FENCE LINE
-G-G-	GAS LINE
-E-E-	OVERHEAD POWER
-T-T-	OVERHEAD TELEPHONE
-UE-UE-	UNDERGROUND POWER
-UT-UT-	UNDERGROUND TELCO.
-E&T-E&T-	OVERHEAD POWER/TELEPHONE
⊙	5/8" REBAR W/CAP SET
⊙	FOUND MONUMENTATION
⊙	CALCULATED POINT
⊙	EXISTING UTILITY POLE
⊙	PROPOSED UTILITY POLE



**EXISTING CONDITIONS**  
SCALE: 1" = 10'





1150 SHENANDOAH VILLAGE DRIVE  
WAYNESBORO, VA 22980

SITE NAME: COURT SQUARE

SITE NUMBER: CV101

SITE ADDRESS:  
500 COURT SQUARE  
CHARLOTTESVILLE, VA 22902

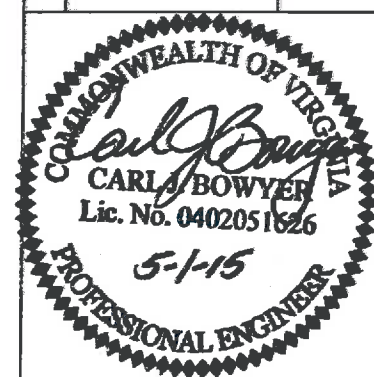
AREA:  
LEASE AREA = 208 SQ. FT.

BUILDING OWNER:  
500 COURT SQUARE ASSOCIATION

LATITUDE: N38° 01' 54.98"

LONGITUDE: W78° 28' 41.02"

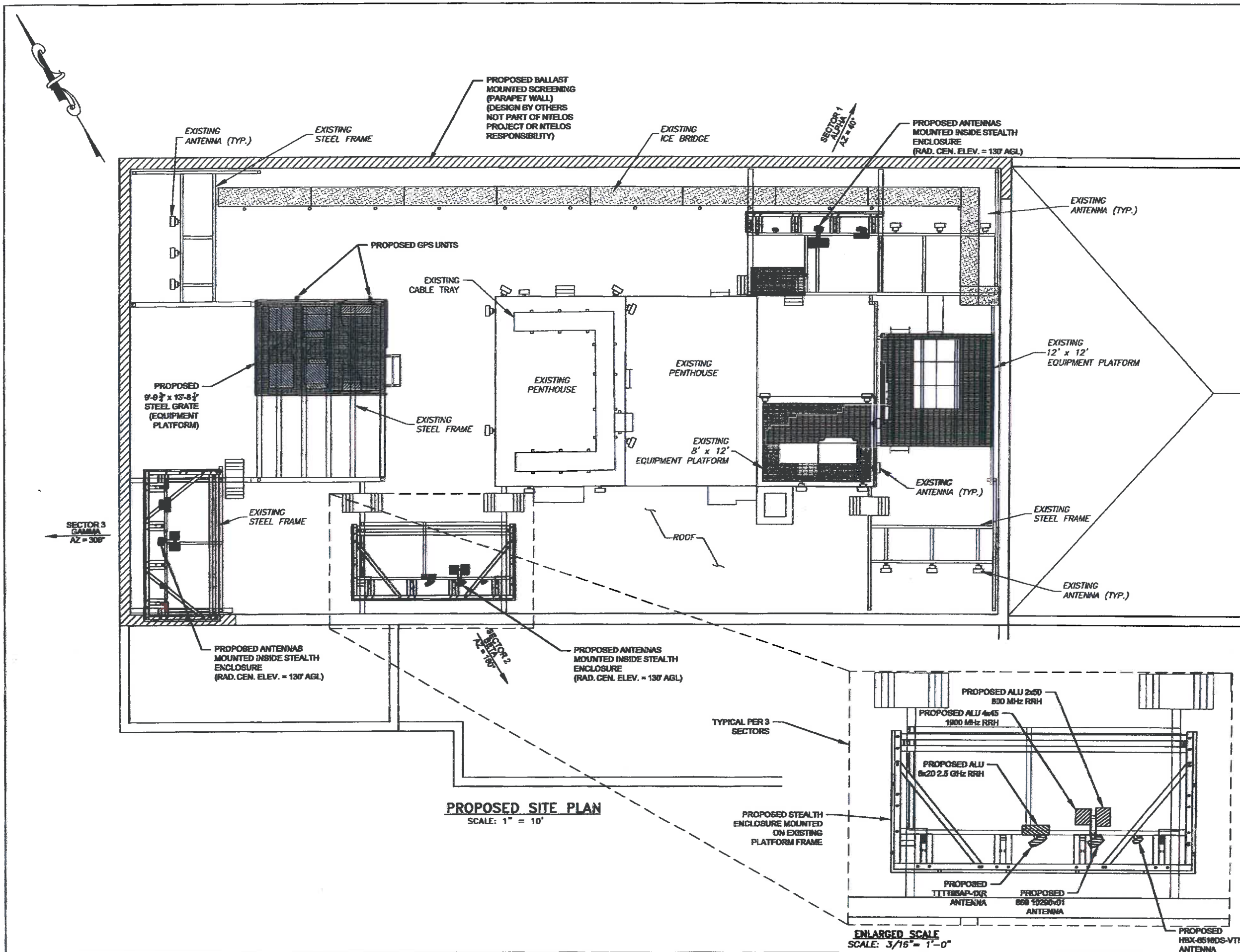
NO.	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/11/14
2	REISSUE FOR COMMENT	08/24/14
3	REISSUE FOR COMMENT	02/18/15
4	ISSUE FOR CONSTRUCTION	03/31/15
5	ISSUE FOR ZONING	05/01/15

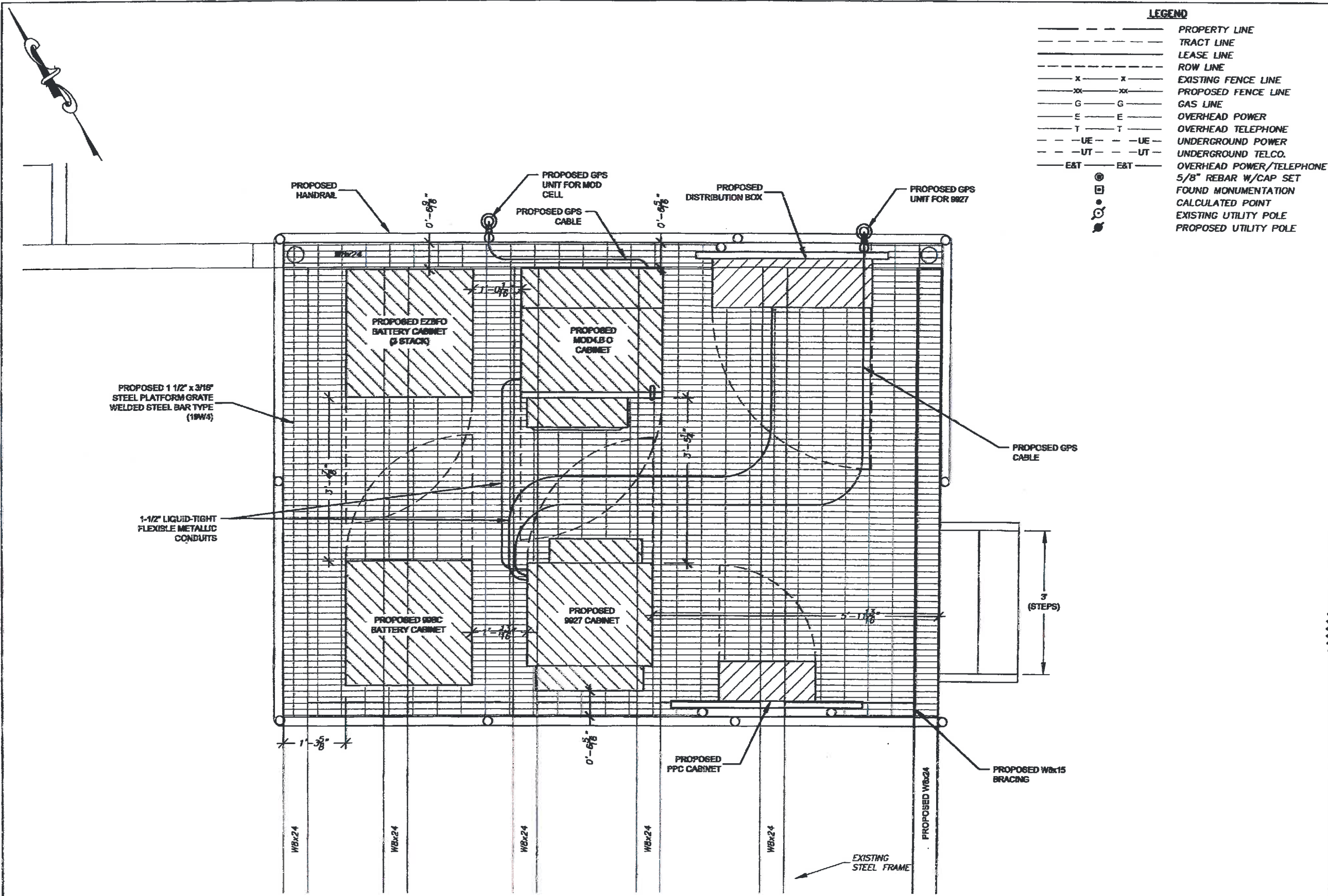


400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

PROPOSED SITE PLAN	SHEET
	C-2





**LEGEND**

---	PROPERTY LINE
- - -	TRACT LINE
---	LEASE LINE
---	ROW LINE
x - x	EXISTING FENCE LINE
xx - xx	PROPOSED FENCE LINE
G - G	GAS LINE
E - E	OVERHEAD POWER
T - T	OVERHEAD TELEPHONE
-UE - -UE	UNDERGROUND POWER
-UT - -UT	UNDERGROUND TELCO.
E&T - E&T	OVERHEAD POWER/TELEPHONE
⊙	5/8" REBAR W/CAP SET
⊠	FOUND MONUMENTATION
⊙	CALCULATED POINT
⊙	EXISTING UTILITY POLE
⊙	PROPOSED UTILITY POLE



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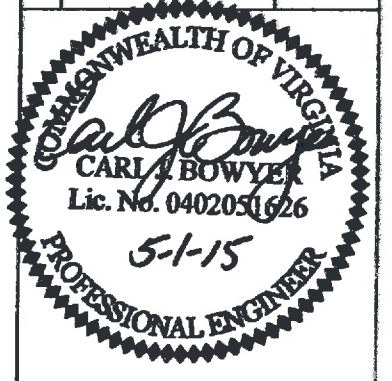
AREA: LEASE AREA = 208 SQ. FT.

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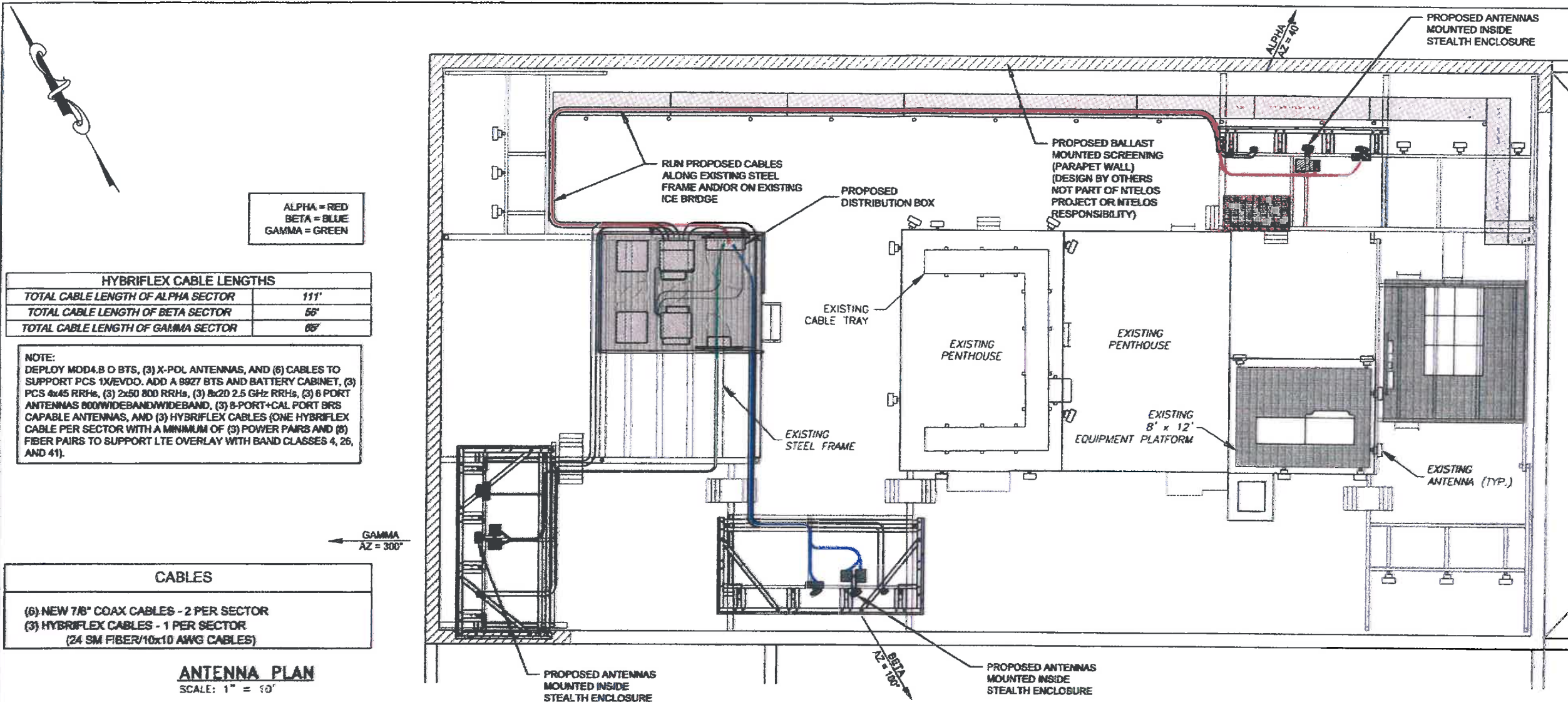
400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

EQUIPMENT PLATFORM PLAN	SHEET
	C-3

**EQUIPMENT PLATFORM PLAN**  
SCALE: 1/2" = 1'-0"





**HYBRIFLEX CABLE LENGTHS**

TOTAL CABLE LENGTH OF ALPHA SECTOR	111'
TOTAL CABLE LENGTH OF BETA SECTOR	56'
TOTAL CABLE LENGTH OF GAMMA SECTOR	65'

**NOTE:**  
 DEPLOY MOD4.B O BTS, (3) X-POL ANTENNAS, AND (6) CABLES TO SUPPORT PCS 1X/EVDO. ADD A 9927 BTS AND BATTERY CABINET, (3) PCS 4x45 RRHs, (3) 2x50 800 RRHs, (3) 8x20 2.5 GHz RRHs, (3) 6 PORT ANTENNAS 800W/BAND/WIDE BAND, (3) 8-PORT+CAL PORT 8RS CAPABLE ANTENNAS, AND (3) HYBRIFLEX CABLES (ONE HYBRIFLEX CABLE PER SECTOR WITH A MINIMUM OF (3) POWER PAIRS AND (6) FIBER PAIRS TO SUPPORT LTE OVERLAY WITH BAND CLASSES 4, 26, AND 41).

**CABLES**

(6) NEW 7/8" COAX CABLES - 2 PER SECTOR
(3) HYBRIFLEX CABLES - 1 PER SECTOR (24 SM FIBER/10x10 AWG CABLES)

**ANTENNA PLAN**  
 SCALE: 1" = 10'

1150 SHENANDOAH VILLAGE DRIVE  
 WAYNESBORO, VA 22980

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SITE NUMBER: CV101

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 CHARLOTTESVILLE, VA 22902

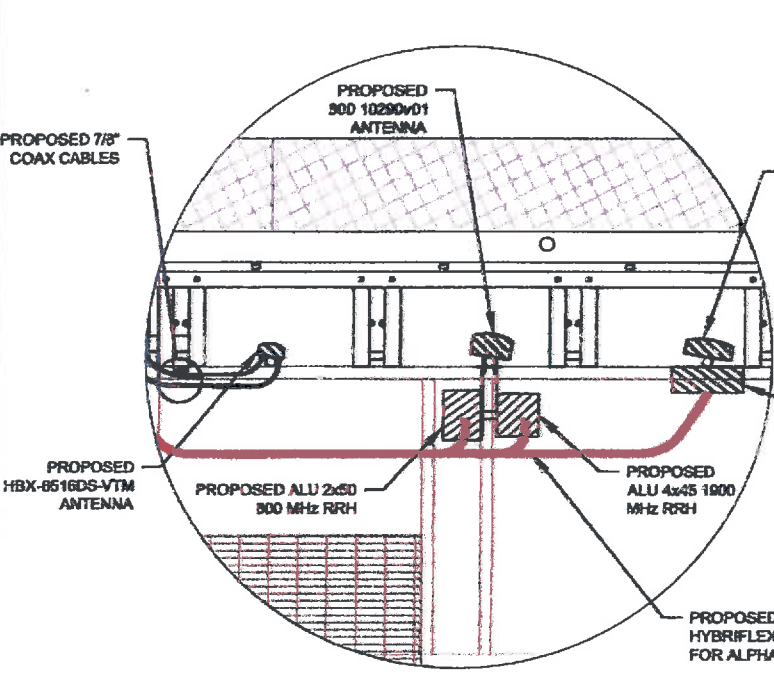
AREA: LEASE AREA = 208 SQ. FT.

BUILDING OWNER: 500 COURT SQUARE ASSOCIATION

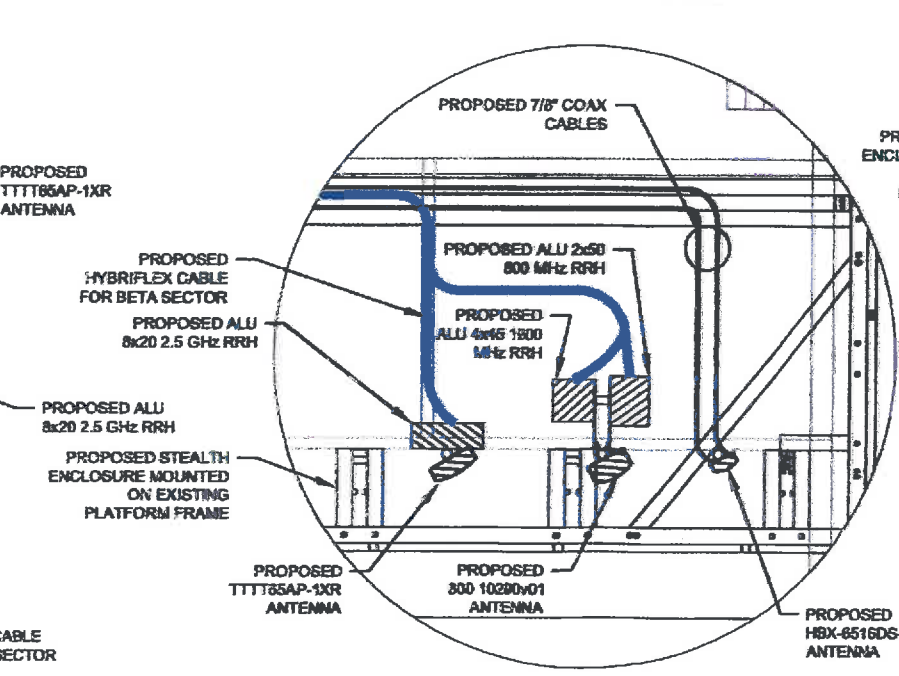
LATITUDE: N38° 01' 54.98"

LONGITUDE: W78° 28' 41.02"

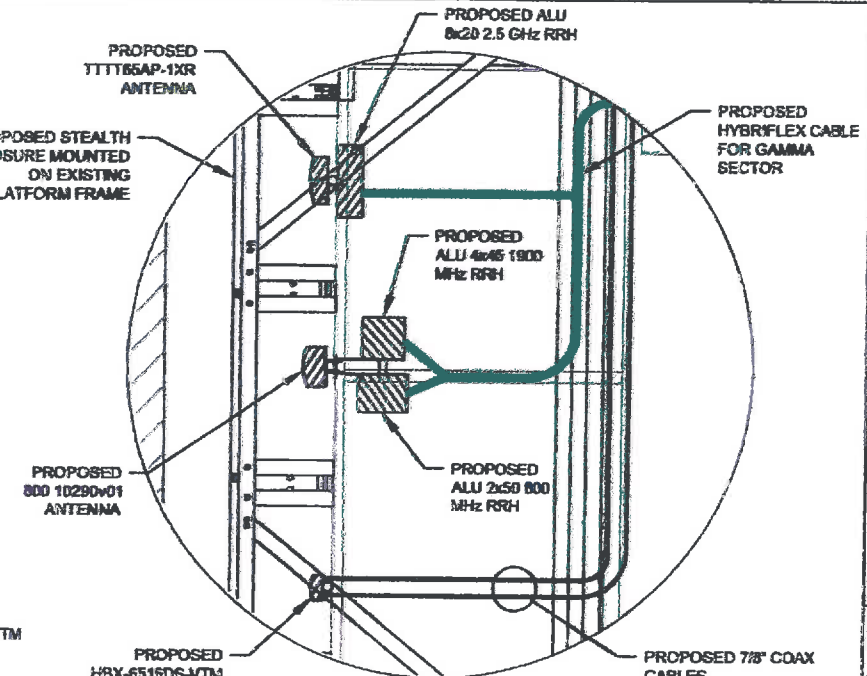
NO.	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	08/11/14
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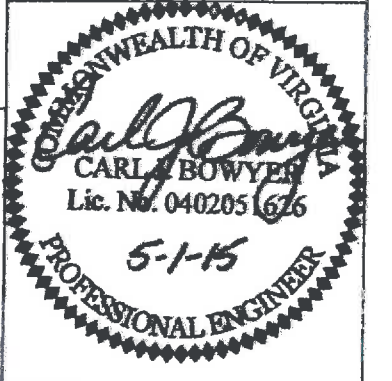
**ALPHA SECTOR**  
 SCALE: 1/4" = 1'-0"



**BETA SECTOR**  
 SCALE: 1/4" = 1'-0"



**GAMMA SECTOR**  
 SCALE: 1/4" = 1'-0"



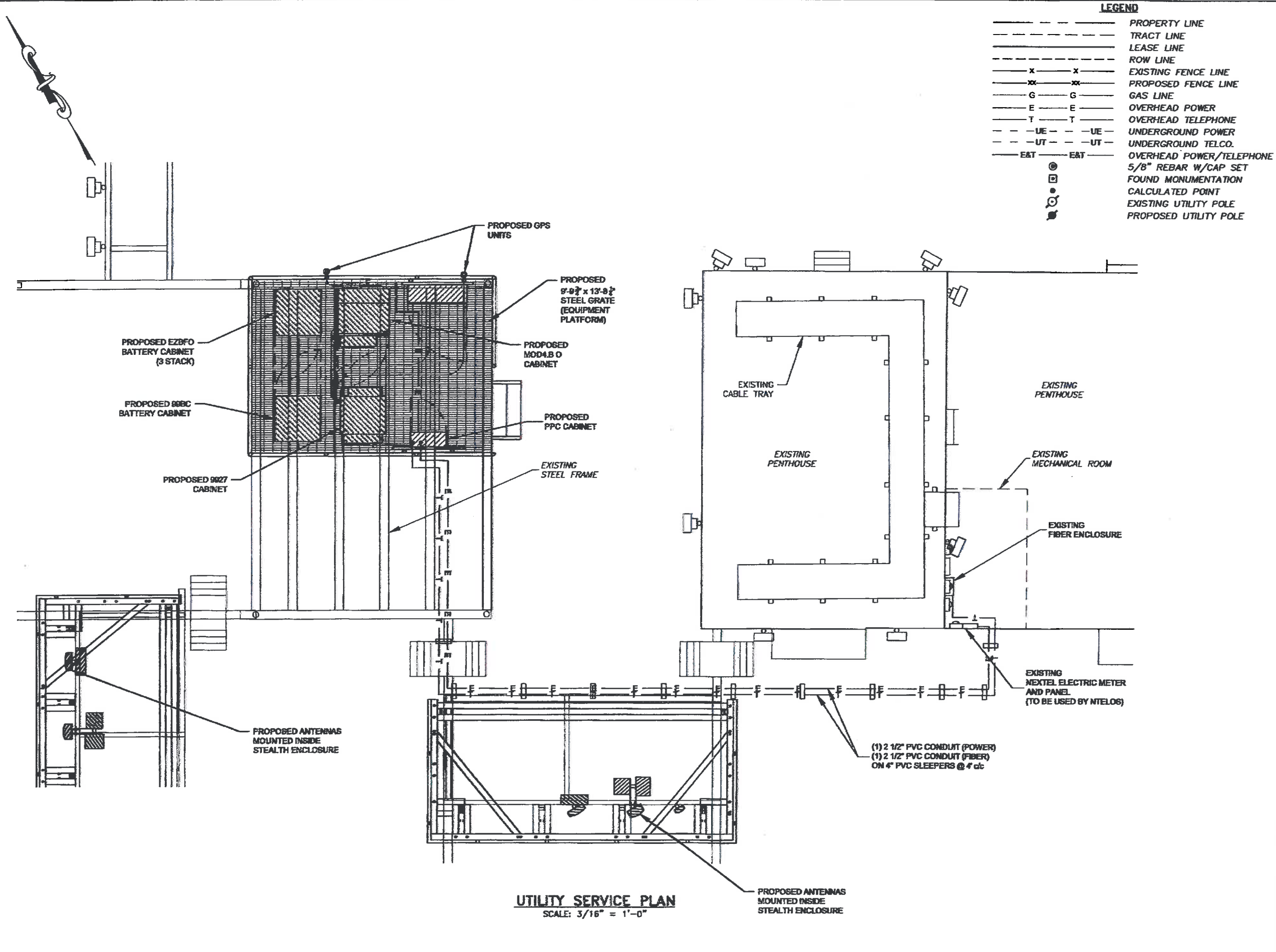
**Mead & Hunt**

400 TRACY WAY  
 SUITE 200  
 CHARLESTON, WV 25311  
 (304) 345-6712 PHONE

PROJECT # R4022100-141667.01

ANTENNA AND CABLE LAYOUT	SHEET C-4
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WAYNESBORO, VA 22980

SITE NAME: COURT SQUARE

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CHARLOTTESVILLE, VA 22902

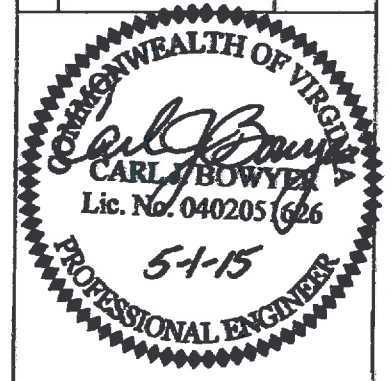
AREA: LEASE AREA = 208 SQ. FT.

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LATITUDE: N38° 01' 54.98"

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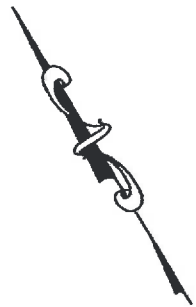


400 TRACY WAY  
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CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

UTILITY SERVICE PLAN	SHEET
	C-5

**UTILITY SERVICE PLAN**  
SCALE: 3/16" = 1'-0"



**NOTE:**  
CONTRACTOR TO GROUND ALL  
NEW ADDED EQUIPMENT PER  
MANUFACTURERS  
SPECIFICATIONS AND NEC REQUIREMENTS.

**GROUNDING LEGEND**

- 5/8" x 8' COPPER-CLAD STEEL GROUND ROD
- ⊙ GROUND ROD WITH PLASTIC INSPECTION SLEEVE
- COMPRESSION LUG CONNECTION
- ▶ EXOTHERMIC WELD GROUNDING CONNECTION
- P — POWER RATING
- T — TELCO WIRING
- G — GROUND WIRING

**ABBREVIATIONS**

A	AMPERE	PVC	POLYVINYL CHLORIDE
C	CONDUIT	V	VOLT
(E)	EXISTING	W	WIRE
G	GROUND	Ø	PHASE
P	POLE		



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CHARLOTTESVILLE, VA 22902

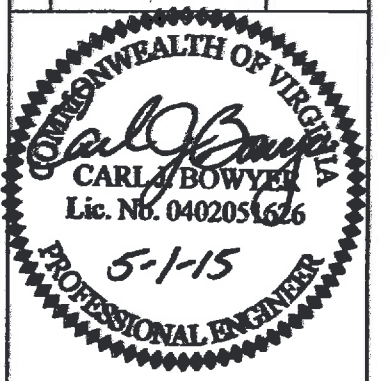
AREA:  
LEASE AREA = 208 SQ. FT.

BUILDING OWNER:  
500 COURT SQUARE ASSOCIATION

LATITUDE: N38° 01' 54.98"

LONGITUDE: W78° 28' 41.02"

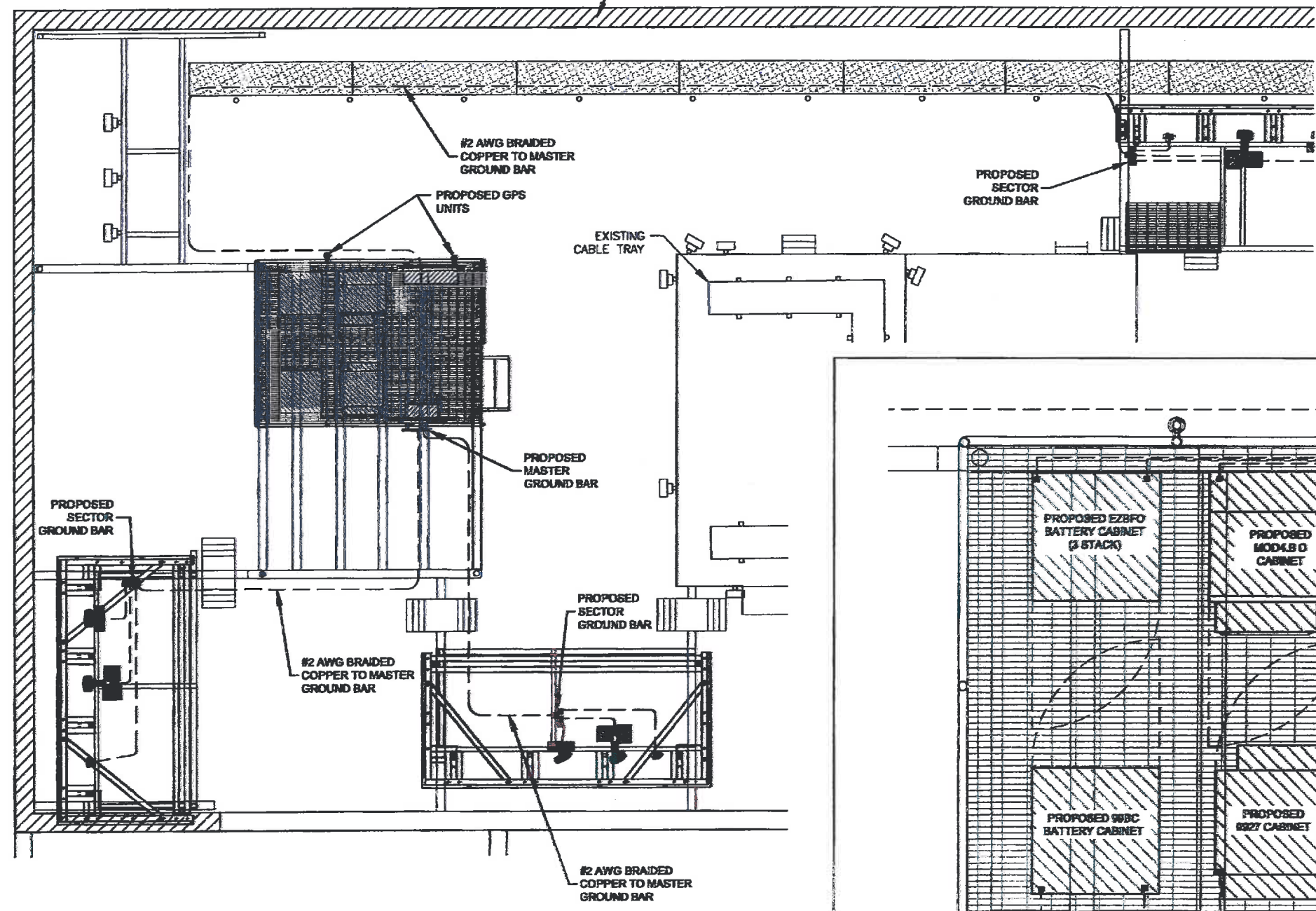
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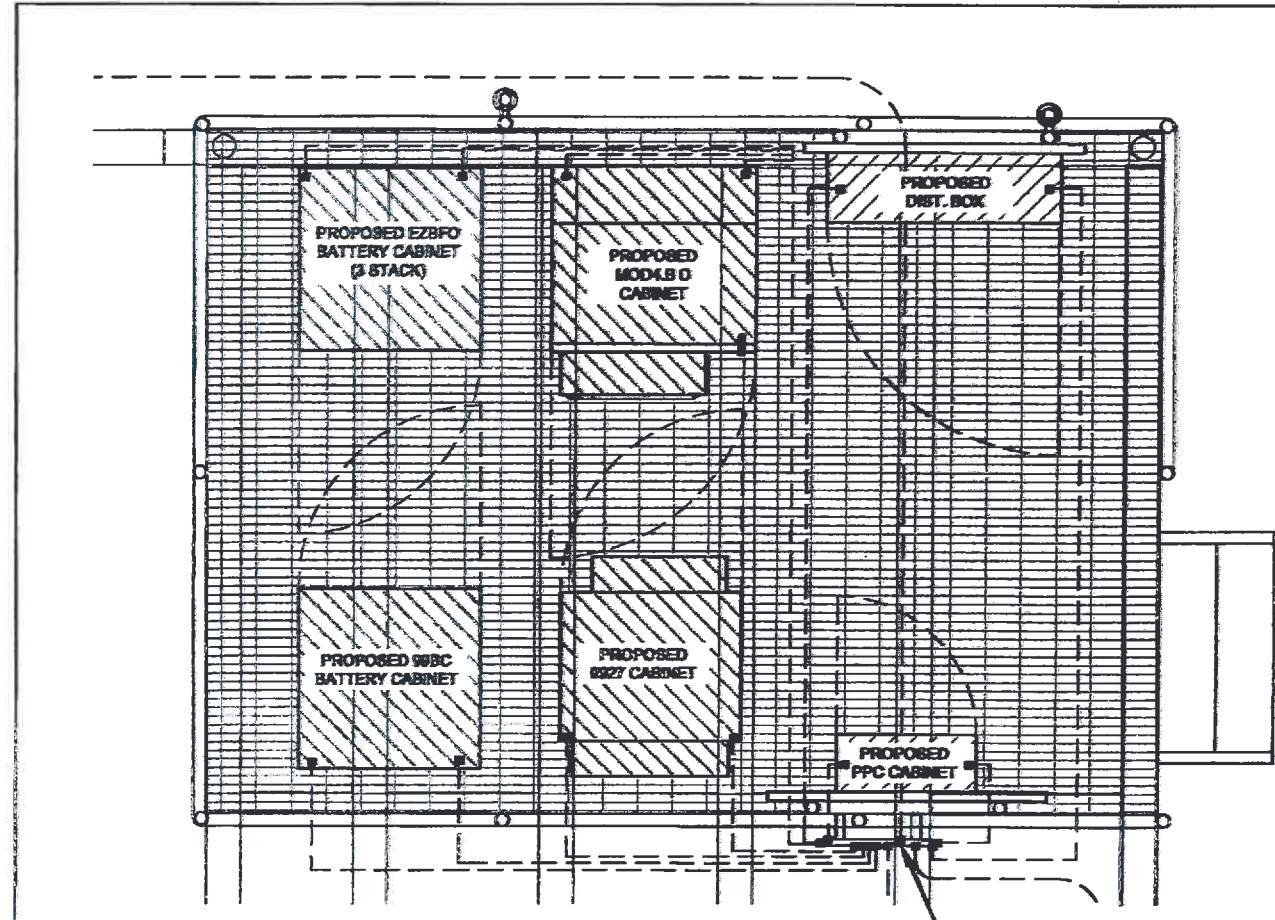
400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

GROUNDING PLAN	SHEET
	C-6



**ANTENNA GROUNDING PLAN**  
SCALE: 1/8" = 1'-0"



**PLATFORM GROUNDING PLAN**  
SCALE: 3/8" = 1'-0"





1150 SHENANDOAH VILLAGE DRIVE  
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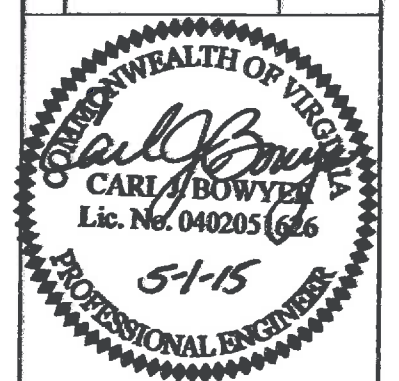
AREA:  
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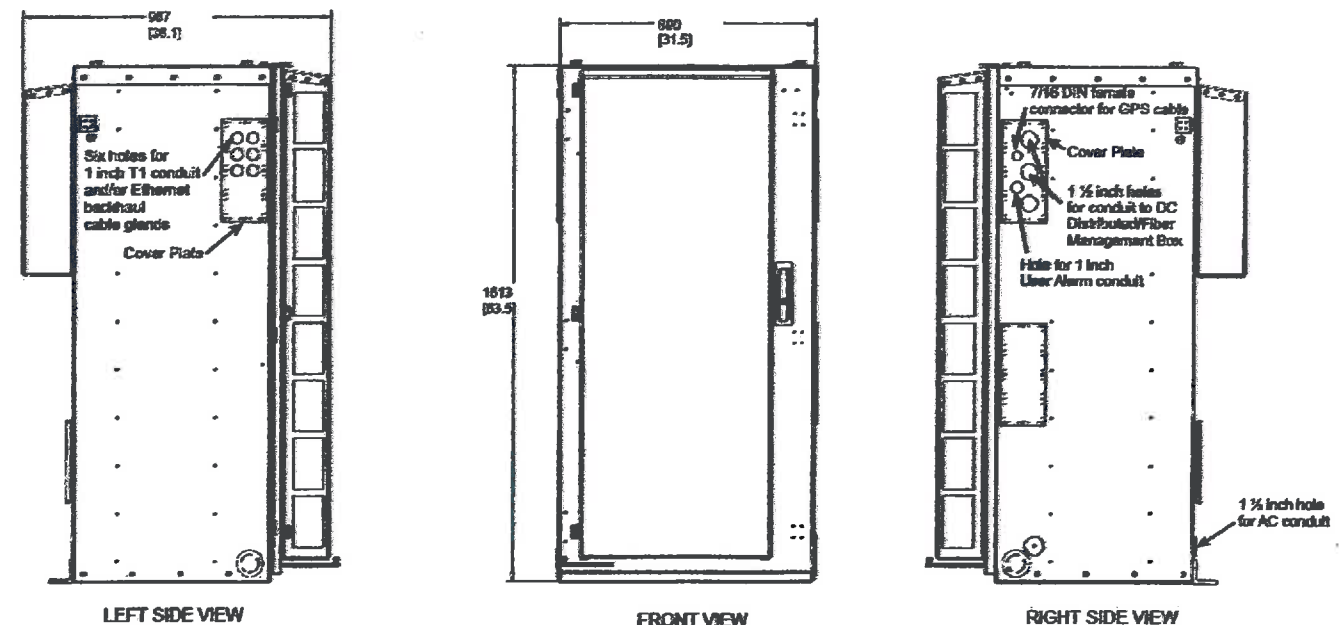


400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

MISCELLANEOUS DETAILS SHEET D-1

PROPOSED EQUIPMENT DATA								
COMPONENT	MANUFACTURER	MODEL	WIDTH (INCH)	DEPTH (INCH)	HEIGHT (INCH)	QTY	WT. EACH (LBS)	TOTAL WT. (LBS)
BTS CABINET	ALCATEL LUCENT	MDD4.8 0	35.4	40	72	1	1200	1200
BATTERY CABINET	ALCATEL LUCENT	EZBF0	31.5	31.5	23.6	3	832	2496
BTS CABINET	ALCATEL LUCENT	9827	32	38	83.6	1	834	834
BATTERY CABINET	ALCATEL LUCENT	988C	31.5	31.2	83.6	1	2640	2640
RADIO HEADS	COMMSCOPE	ALU 4x45	11.1	10.7	25.1	3	62.7	188.1
RADIO HEADS	COMMSCOPE	ALU 8x20	18.6	6.7	26.2	3	70.55	211.65
RADIO HEADS	COMMSCOPE	ALU 2x50	1.3	10	15.8	3	50.7	152.1
ANTENNA	COMMSCOPE	HBX-6516DS-VTM	6.6	3.3	51.5	3	10.4	31.2
ANTENNA	KATHREIN SCALA	800 10290V01	10.3	5.9	80.6	3	46.3	138.9
ANTENNA	COMMSCOPE	TTTT85AP-1NR	12.0	4.6	63.3	3	33.0	99.0



9827 LTE CABINET DETAIL  
NOT TO SCALE



1150 SHENANDOAH VILLAGE DRIVE  
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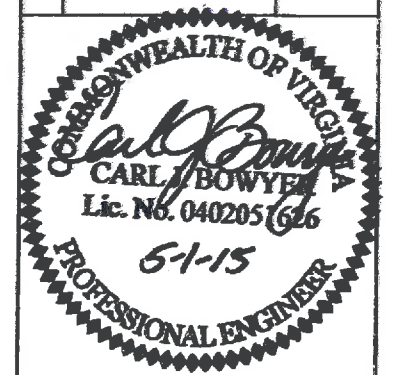
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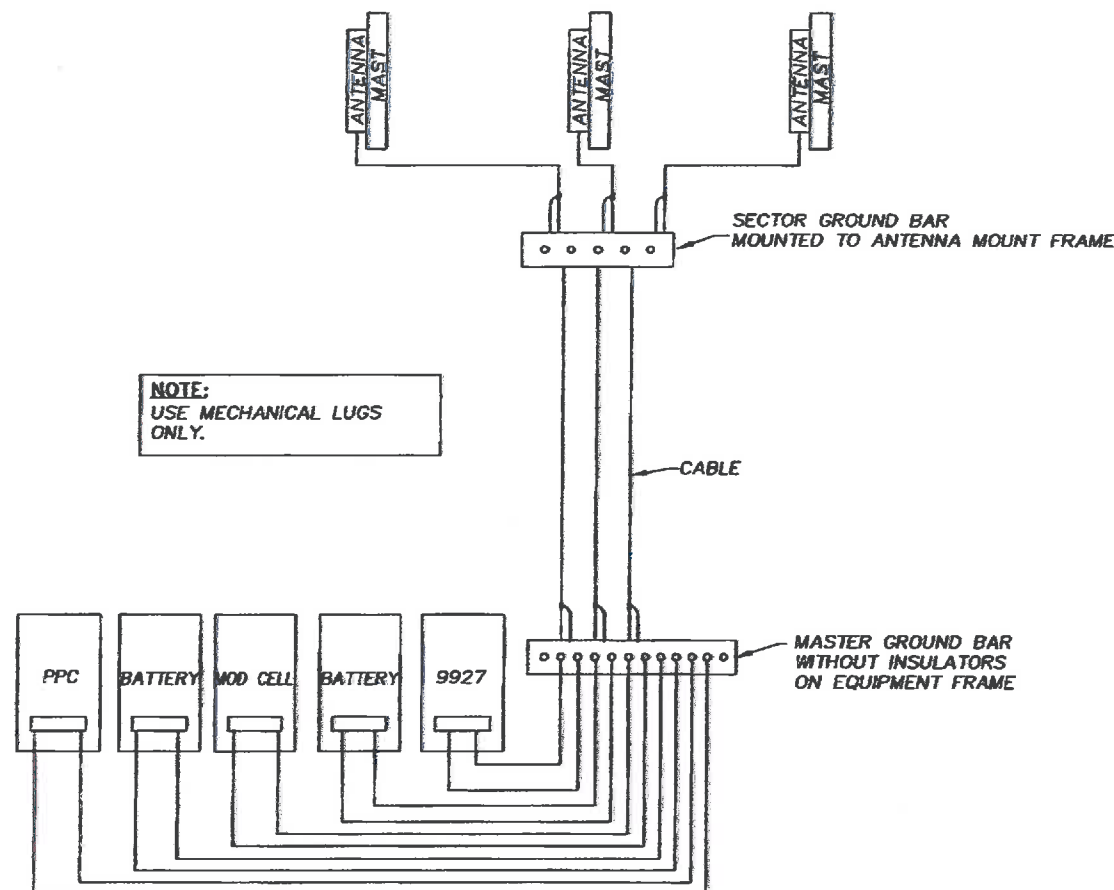


**Mead & Hunt**

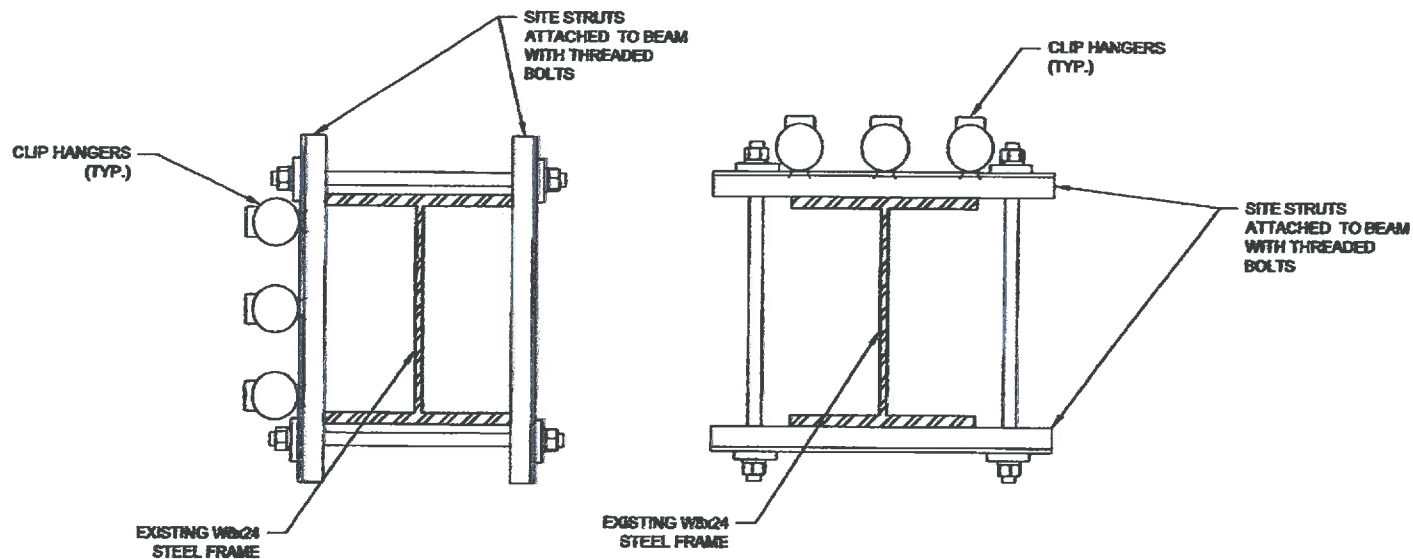
400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

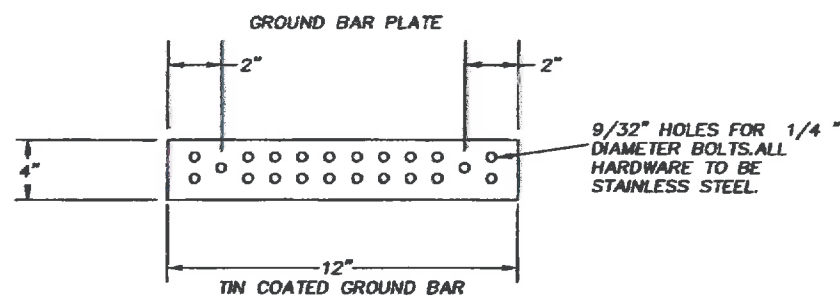
MISCELLANEOUS DETAILS SHEET  
D-2



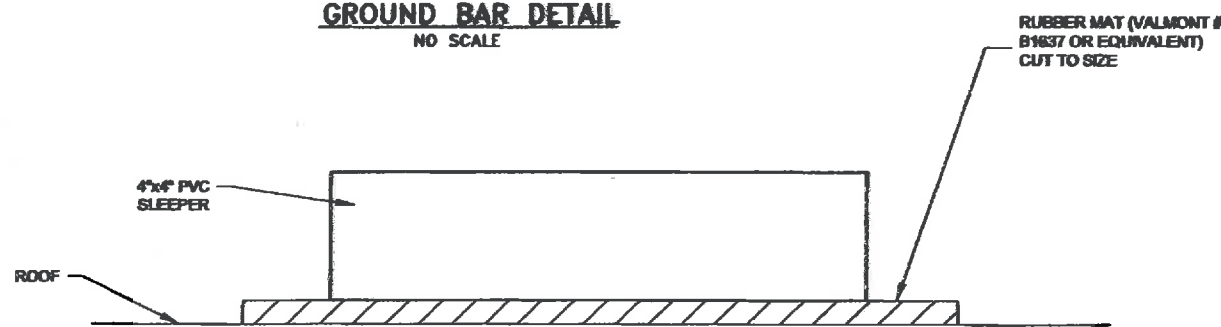
**GROUNDING RISER DIAGRAM**  
NO SCALE



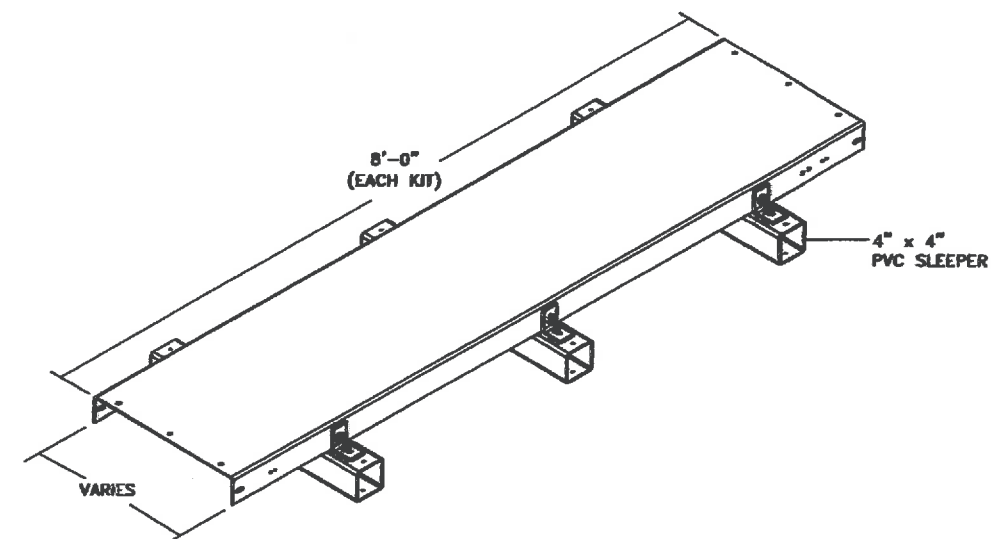
**CABLE CONNECTION TO STEEL FRAME DETAILS**  
NOT TO SCALE



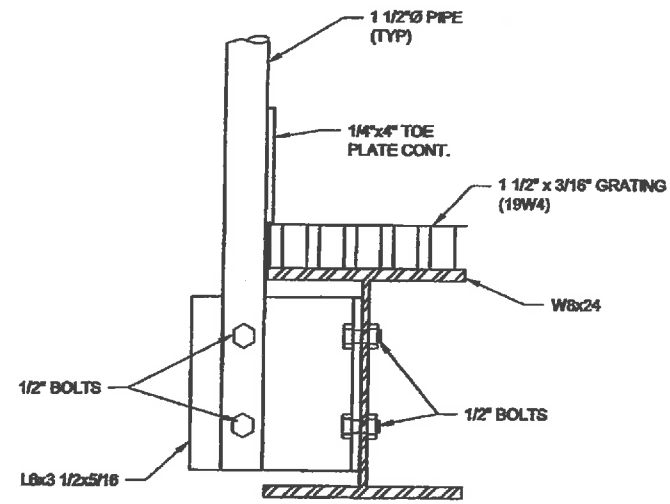
**GROUND BAR DETAIL**  
NO SCALE



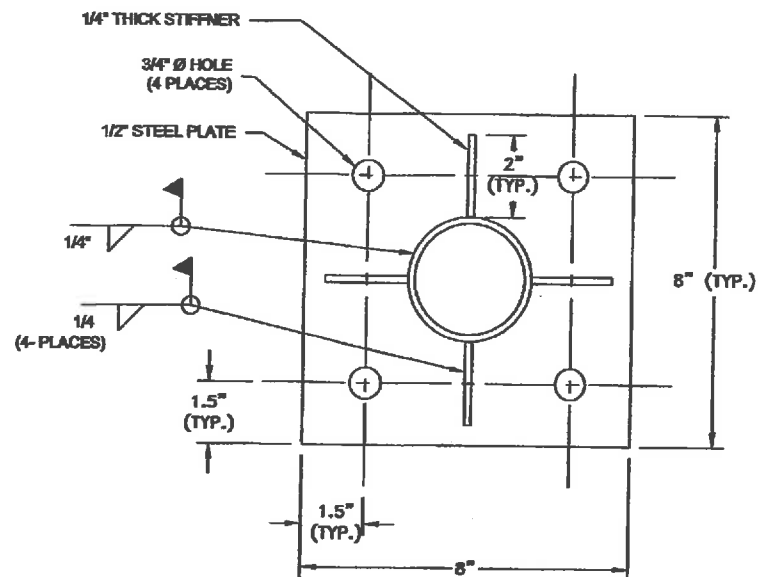
**PVC SLEEPER DETAIL**  
NOT TO SCALE



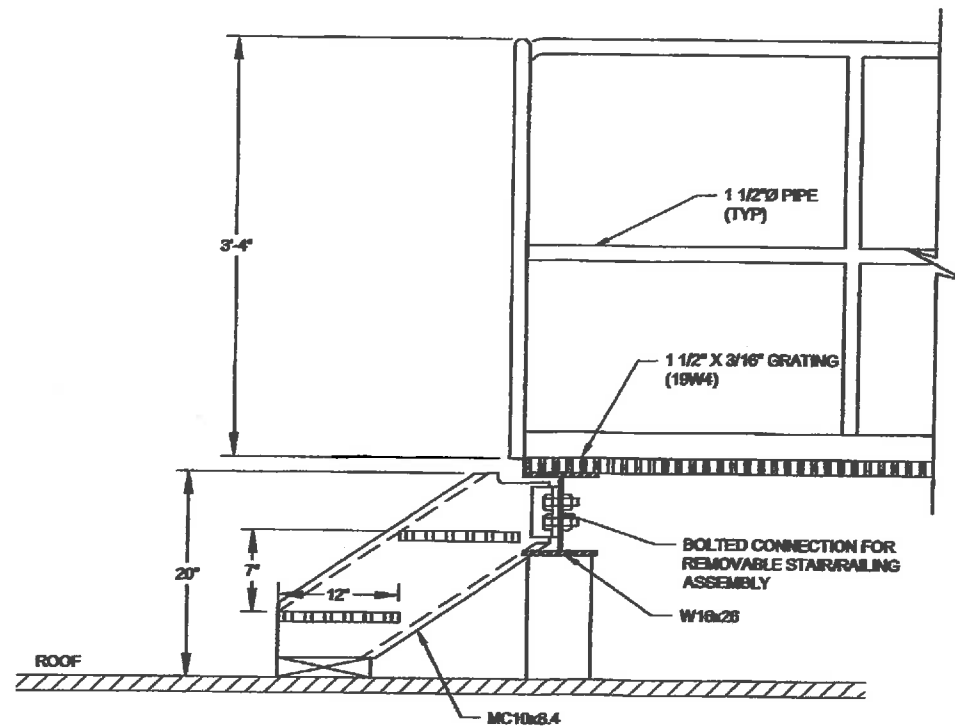
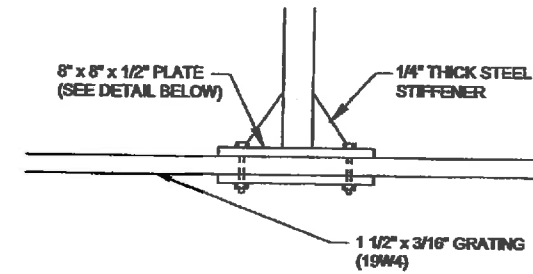
**COAX BRIDGE KIT DETAIL**  
NO SCALE



**EQUIPMENT PLATFORM RAILING DETAIL**  
NOT TO SCALE



**H-FRAME CONNECTION DETAILS FOR PPC AND DISTRIBUTION BOX**  
NOT TO SCALE



**PLATFORM STAIRS DETAIL**  
NOT TO SCALE



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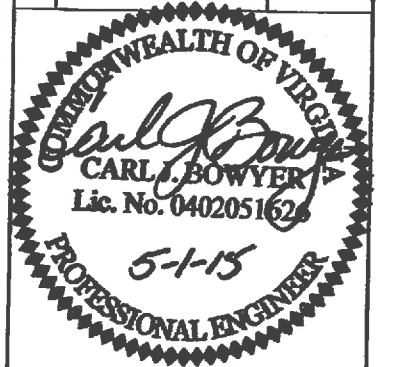
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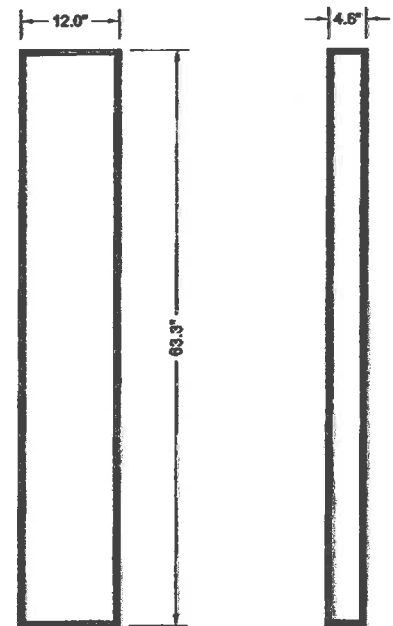
400 TRACY WAY  
SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE

PROJECT # R4022100-141667.01

MISCELLANEOUS DETAILS SHEET  
D-3



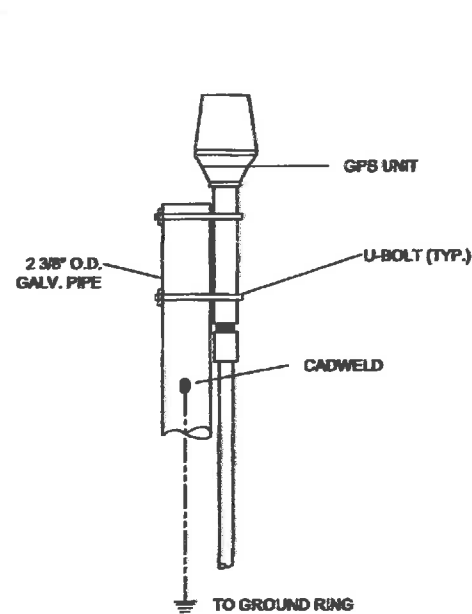
BOTTOM VIEW



FRONT VIEW

SIDE VIEW

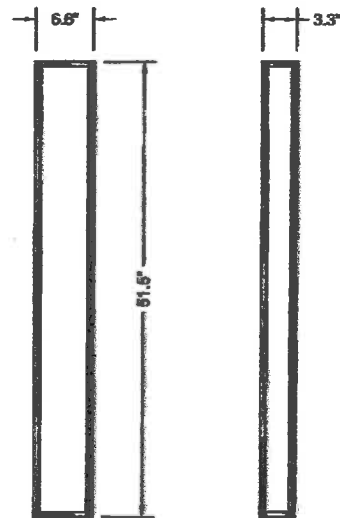
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NOT TO SCALE  
83.3"Lx12.0"Wx4.6"D  
33.0 LBS



GPS UNIT DETAIL  
NOT TO SCALE



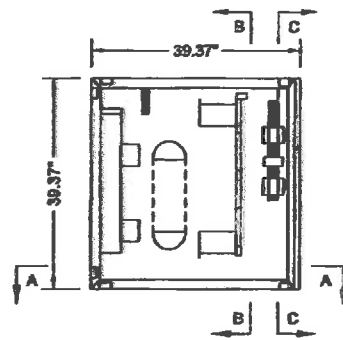
BOTTOM VIEW



FRONT VIEW

SIDE VIEW

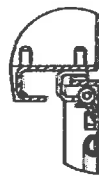
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19.4 LBS



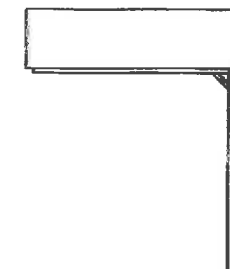
SECTION "C-C"



SECTION "B-B"



DETAIL "A"



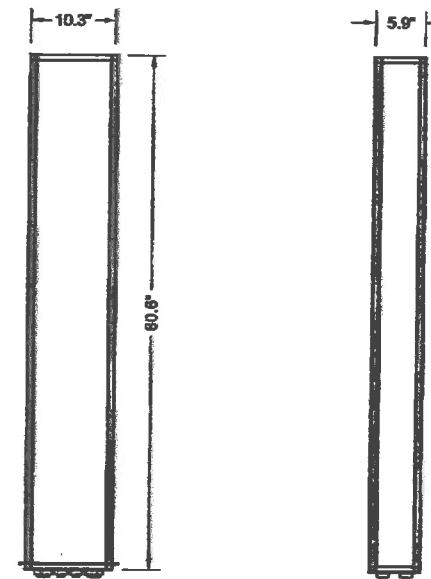
SECTION "A-A"

SEE DETAIL "A-A"

DISTRIBUTION BOX PLAN VIEW  
NOT TO SCALE



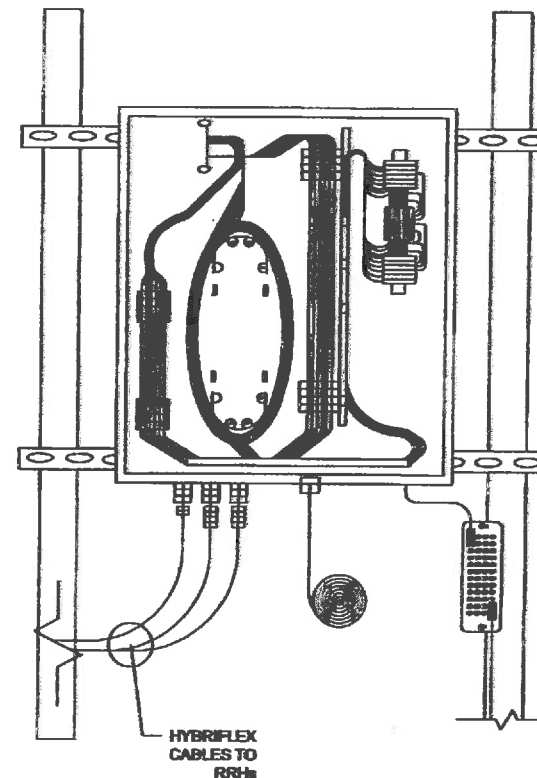
BOTTOM VIEW



FRONT VIEW

SIDE VIEW

800 10280V01  
NOT TO SCALE  
80.6"Lx10.3"Wx5.9"D  
48.3 LBS



DISTRIBUTION BOX ELEVATION VIEW  
NOT TO SCALE



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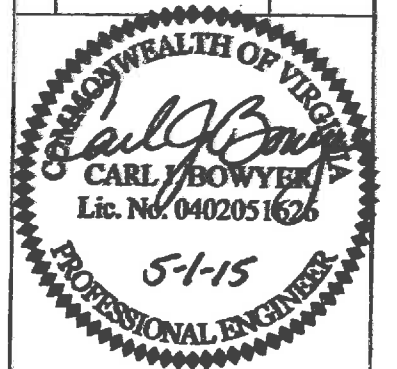
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**Mead & Hunt**

400 TRACY WAY  
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CHARLESTON, WV 25311  
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PROJECT # R4022100-141667.01

MISCELLANEOUS DETAILS SHEET  
D-4



1150 SHENANDOAH VILLAGE DRIVE  
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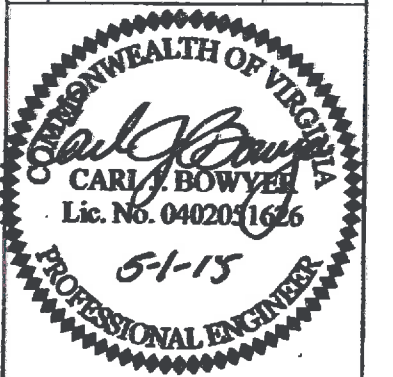
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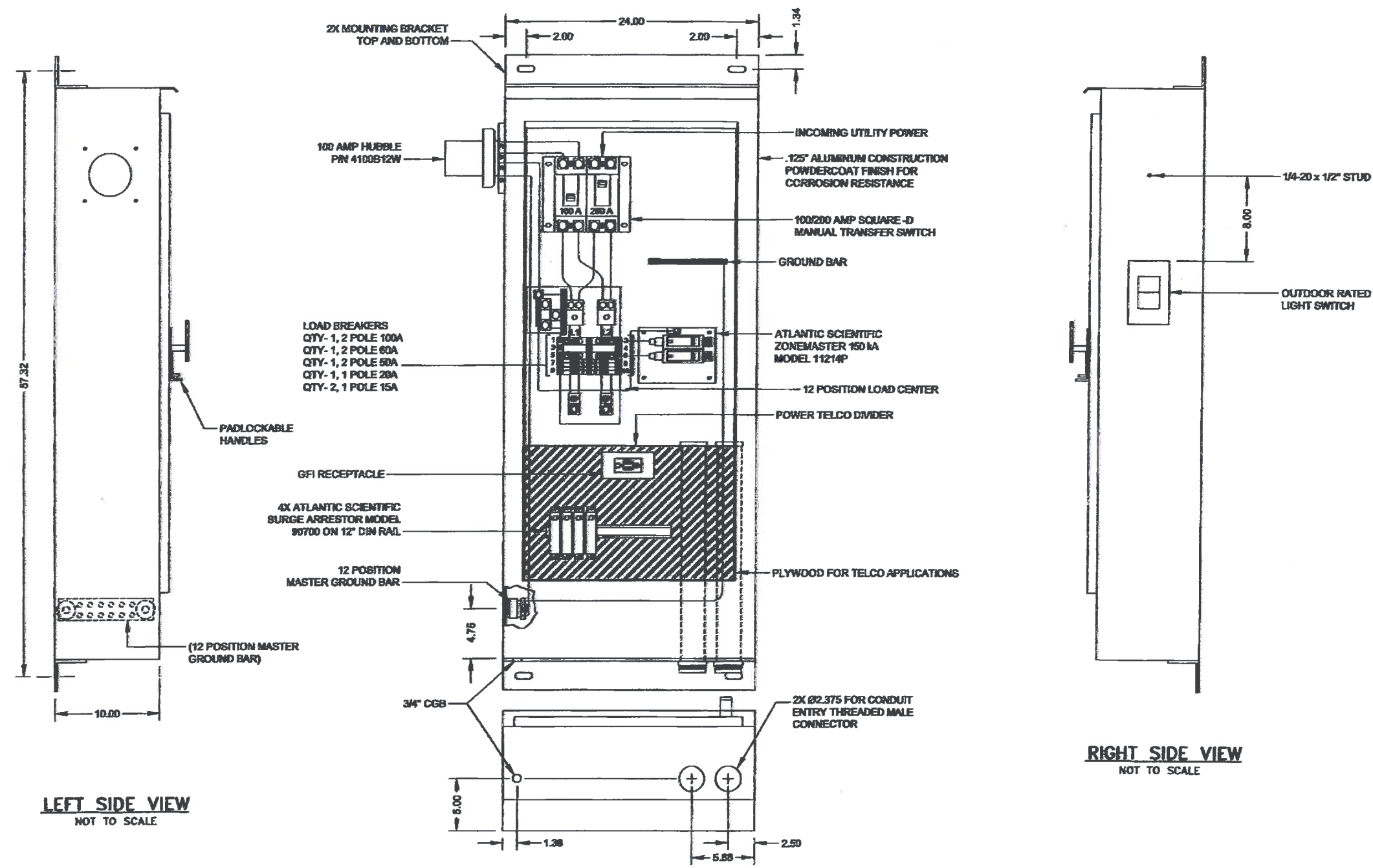
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PROJECT # R4022100-141667.01

PPC CABINET DETAILS SHEET  
D-5



NOTE:  
DIAGRAM PROVIDED FOR GENERAL ILLUSTRATIVE PURPOSES ONLY. PPC CABINET AS PER MANUFACTURER'S SPECIFICATIONS BASED ON ELECTRICAL REQUIREMENT FOR THE PROJECT.



**GENERAL NOTES - ELECTRIC WORK**

**A. WORK INCLUDED:**

THIS SPECIFICATION AND ACCOMPANYING DRAWINGS CONTEMPLATES THE PROVISIONS AND INSTALLATION REQUIRED BY THE ELECTRICAL CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE INSTALLATION OF THE ELECTRICAL WORK IN CONNECTION WITH NTELOS' TOWER SITE AND SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING:

1. THE PROVISIONS FOR THE INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH AN EQUIPMENT CABINET AND SECONDARY GROUNDING, EXISTING TOWER GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISIONS FOR THE INSTALLATION OF AN ELECTRICAL SERVICE AND ALL ASSOCIATED CONDUIT AND WIRING AS REQUIRED.
3. ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC. (UNLESS OTHERWISE NOTED)
4. ALL SPARE CONDUITS SHALL BE LEFT WITH A PULL WIRE FOR FUTURE USE. STUB BOTH ENDS OF SPARE CONDUIT 12 INCHES ABOVE FINISHED GRADE AND INSTALL PLUGS AT BOTH ENDS.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS AND CONDUIT, AND MAKE THE CONNECTION TO THE SERVICE EQUIPMENT WITHIN THE EQUIPMENT CABINET.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL A 200 LB TEST PULL LINE IN ALL SPARE CONDUIT.
7. THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL AND TELEPHONE SERVICE CONTACTS AT THE START OF CONSTRUCTION.
8. THE ABOVE GRADE CONDUIT RISERS SHALL BE GALVANIZED STEEL WITH MATCHING FITTINGS.
9. THE CONTRACTOR SHALL PERFORM ALL WORK SHOWN ON THE EQUIPMENT DRAWINGS, NOTED FIELD WORK, AND/OR AS OTHERWISE NOTED TO BE COMPLETED IN THE FIELD.
10. ALL WIRE SHALL BE (COPPER, 600V THW, 90°C) UNLESS NOTED OTHERWISE.
11. THE CONTRACTOR SHALL MAINTAIN A DISTANCE OF 12 INCHES BETWEEN EXISTING TELCO & ELECTRIC CONDUITS UNLESS NOTED OTHERWISE.
12. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE PROPOSED GROUNDING SYSTEM PRIOR TO TRENCHING.

**B. CODES, PERMITS AND FEES:**

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL ASSOCIATED FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL STATE, LOCAL, AND NATIONAL APPLICABLE CODES AND ORDINANCES RELATIVE TO THE DESIGN.
3. PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT, SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARDS SPECIFICATIONS OF THE FOLLOWING RECOGNIZED AUTHORITIES:  
 A.N.S.I. - AMERICAN NATIONAL STANDARDS INSTITUTE  
 I.E.E.E. - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS  
 N.E.C. - NATIONAL ELECTRIC CODE  
 N.E.M.A. - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION  
 N.F.P.A. - NATIONAL FIRE PROTECTION ASSOCIATION  
 U.L. - UNDERWRITERS LABORATORIES, INC.
4. THE CONTRACTOR SHALL BE LICENSED TO PERFORM WORK IN THE STATE, CITY, OR COUNTY IN WHICH THE WORK IS TO BE PERFORMED.

**C. GROUNDING ELECTRODE SYSTEM**

**1. CONNECTIONS**

ALL GROUNDING CONNECTIONS SHALL BE MADE UTILIZING AN EXOTHERMIC WELDED PROCESS (CADWELD OR APPROVED EQUAL), UNLESS OTHERWISE SHOWN. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, X'S, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES, AND LIGHTING PROTECTION SYSTEM AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE CADWELDED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.

**2. GROUND RODS**

ALL GROUND RODS SHALL BE 5/8" INCH STAINLESS STEEL OR COPPER CLAD STEEL COPPERWELD OR APPROVED EQUAL. THE MINIMUM NUMBER OF GROUNDING RODS REQUIRED SHALL BE THE NUMBER AS SHOWN AND AT THE LOCATIONS AS INDICATED ON THE PLANS. GROUNDING RODS SHALL BE DRIVEN VERTICALLY IN UNDISTURBED EARTH FOR ITS FULL LENGTH SO THAT THE TOP IS 24 INCHES BELOW FINISHED GRADE. ALL GROUND RODS SHALL BE AT LEAST 8 FEET APART UNLESS OTHERWISE NOTED.

**3. GROUNDING LEADS**

ALL GROUND LEADS CONNECTED TO BURIED GROUND RINGS SHALL BE #2 AWG TINNED SOLID COPPER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 8 FEET OF #2 AWG TINNED SOLID COPPER COILED AT EACH EQUIPMENT CABINET, COAX ENTRY GROUND BAR, PIPE BRIDGE SUPPORT FOUNDATIONS, AND TOWER FOUNDATIONS FOR TERMINATION BY THE ELECTRICAL CONTRACTOR. AFTER CABINET INSTALLATION, THE ELECTRICAL CONTRACTOR SHALL SPLICE GROUND RING LEAD TO #2 AWG INSULATED STRANDED COPPER WIRE SUPPLIED WITH CABINET.

**4. GROUND RING**

THE GROUND RING REQUIRED TO GROUND THE EQUIPMENT FRAME SHALL BE #2 AWG TINNED SOLID COPPER CABLE IN DIRECT CONTACT WITH THE EARTH AT A DEPTH OF NOT LESS THAN 24 INCHES. CONDUCTOR BENDS SHALL HAVE A MINIMUM RADIUS OF 12 INCHES. A 2 FOOT CLEARANCE FROM ANY FOUNDATION OR SIDEWALK SHALL BE MAINTAINED.

**5. BACKFILL**

BACK FILL MATERIAL SHALL BE NON-CORROSIVE, LOW RESISTIVITY MATERIAL, FREE OF STONE, DEBRIS, ETC. AND TAMPED DOWN THOROUGHLY IN LAYERS NOT EXCEEDING SIX (6) INCHES IN DEPTH, AND COMPACTED TO AT LEAST 95% OF ITS ORIGINAL DENSITY BEFORE EXCAVATION.

**6. MISCELLANEOUS**

ALL EXTERIOR METAL SHALL BE CONNECTED TO THE GROUNDING SYSTEM WITH HIGH PRESSURE 2-BOLD LUG BY BURNDY OR BY THE EXOTHERMIC WELDED PROCESS (CADWELD OR APPROVED EQUAL) AS APPLICABLE. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE EXOTHERMIC WELDED PROCESS (CADWELD OR APPROVED EQUAL) AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. ALL MECHANICAL FASTENER CONNECTIONS CONNECTED TO GROUND BARS SHALL BE LUBRICATED WITH A CORROSION INHIBITOR; THOMAS AND BETTS KOPR - SHIELD.

**7. UTILITY COMPANY COORDINATION**

ELECTRICAL CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH THE RULES AND GUIDELINES OF THE LOCAL UTILITY COMPANY. BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THE PROJECT AND SHALL DETERMINE ALL REQUIRED EQUIPMENT AND SERVICE CHARGES AND SHALL INCLUDE IT IN HIS BID COST.

**8. GROUND TEST**

GROUND TESTS SHALL BE PERFORMED UTILIZING A BIDDLE GROUND OHMMER OR THE METHOD OF USING TWO AUXILIARY GROUND RODS MAY BE USED AS DESCRIBED IN I.E.E.E. STANDARD No. 589, PARAGRAPH 3.42. THE I.E.E.E. METHOD REQUIRES THE USE OF AN A.C. TEST CURRENT. THE AUXILIARY TEST RODS MUST BE AT A SUFFICIENT DISTANCE AWAY FROM THE ROD UNDER TEST SO THAT THE REGIONS IN WHICH THEIR RESISTANCE IS LOCATED DOES NOT OVERLAP. THE CONTRACTOR SHALL MAINTAIN CONTINUITY OF ANY EXISTING GROUND RING BY SPLICING (VIA CADWELD) ANY CUT OR BROKEN SECTIONS WITH #2 SOLID TINNED COPPER TO THE EXISTING OR NEW GROUNDING SYSTEM.

**D. TESTING**

1. ALL TEST SHALL BE PERFORMED BY AUTHORIZED AND QUALIFIED PERSONNEL.
2. THE CONTRACTOR SHALL CONDUCT GROUND RESISTANCE TEST IN THE FORMAT AS FOLLOWS: TESTS SHALL BE PERFORMED UNDER DRY SOIL CONDITIONS WITH THE GROUND RODS CONNECTED AND WHEN NO STANDING OR GROUND WATER HAS BEEN PRESENT FOR THE PAST TEN DAYS. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS, THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.
3. THE CONTRACTOR SHALL CALL AN NTELOS REPRESENTATIVE FOR INSPECTION OF THE GROUNDING SYSTEM 48 HOURS PRIOR TO ITS COMPLETION. THE SYSTEM SHALL BE LEFT UNCOVERED UNTIL APPROVED.
4. UPON COMPLETION OF THE GROUNDING SYSTEM, THE ELECTRICAL CONTRACTOR SHALL MEGGER TEST THE GROUND SYSTEM. THE TEST IS TO BE PERFORMED BEFORE CONNECTING IT TO THE TOWER RING AND THEN AGAIN THEREAFTER. MAXIMUM RESISTANCE LEVEL IS 5 OHMS. THE LOCATION, DATE, TIME, WEATHER CONDITIONS, AND SOIL MOISTURE CONTENT SHALL BE RECORDED. IF 5 OHMS IS EXCEEDED WITHIN THE CURRENT CONFIGURATION, THE ELECTRICAL CONTRACTOR SHALL SUBMIT A QUOTE TO THE OWNER TO LOWER THE RESISTANCE TO 5 OHMS OR LESS.

**E. ELECTRICAL LOADS**

1. THE EQUIPMENT IS SET UP FOR A 200 AMP, 120/240 VOLT, SINGLE PHASE, THREE WIRE ELECTRICAL SERVICE. THE TOTAL CONNECTED LOAD IS 10.1 KILOVOLT-AMPERES (KVA).

**SPECIAL CONTRACTOR NOTES**

**NOTE 1:**

1. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ANY EXISTING GROUNDING GRID PRIOR TO TRENCHING.
2. CONTRACTOR SHALL MAINTAIN CONTINUITY OF EXISTING GROUND RING BY SPLICING (VIA CADWELD) ANY CUT OR BROKEN SECTIONS WITH #2 SOLID TINNED COPPER TO THE EXISTING OR NEW GROUNDING SYSTEM.

**NOTE 2:**

1. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL HAND DIG IN THE VICINITY OF ALL EXISTING LINES.

**F. TELCO**

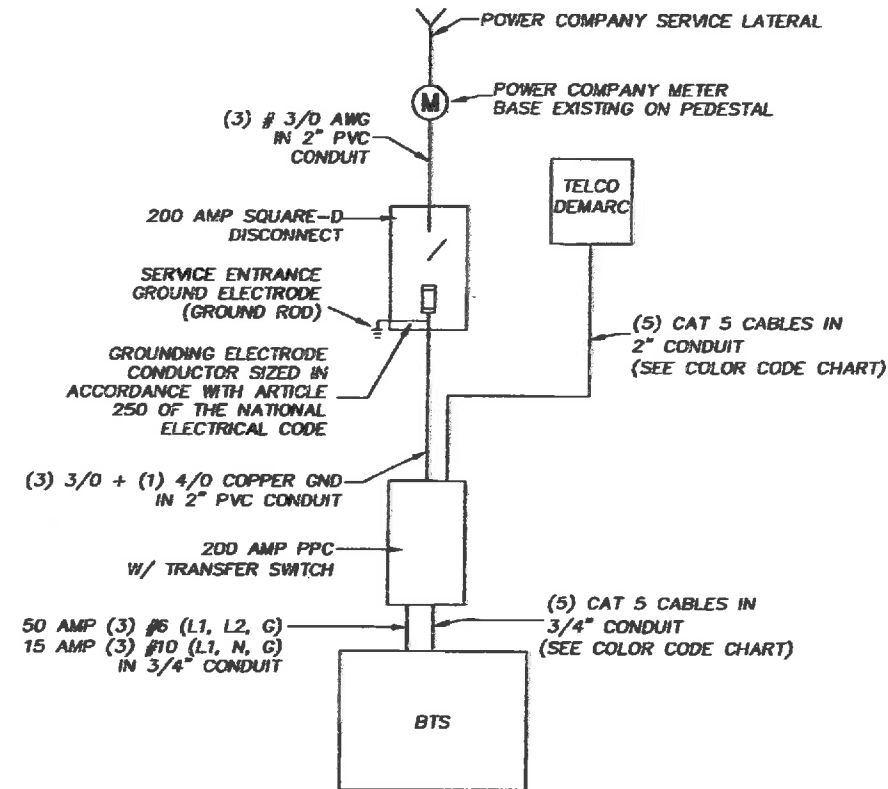
1. PULL BOX (12" x 12") TO BE INSTALLED ON THE END OF THE TELCO CONDUIT AT METERBOARD AND PPC CABINET.

**NOTES:**

1. THE SUBCONTRACTOR SHALL PROVIDE 200 AMP, SINGLE PHASE, 120/240 VAC 60HZ SERVICE FOR THE SITE.
2. THE SUBCONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY BEFORE THE START OF CONSTRUCTION. POWER AND TELEPHONE CONDUIT SHALL BE PROVIDED AND INSTALLED PER UTILITY REQUIREMENTS.
3. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO DRAWINGS PROVIDED BY PANEL MANUFACTURER.
4. THE SUBCONTRACTOR SHALL INSTALL SUFFICIENT LENGTHS OF CONDUIT INCLUDING ALL CONDUIT FITTINGS (NUTS, REDUCING BUSHINGS, ELBOWS, COUPLINGS, ETC.) NECESSARY FOR CONNECTING FROM CONDUIT TO THE INTERIOR OF THE BTS CABINET.
5. THE SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
6. AT THE END OF THE CONDUIT, CUT COIL AND TAPE A 10' FOOT PISTAL FOR TERMINATING BY BTS EQUIPMENT MANUFACTURER.
7. THE SUBCONTRACTOR SHALL VERIFY THAT THE MAIN BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR IS INSTALLED PROPERLY WHEN PANEL SERVICE ENTRANCE EQUIPMENT IS INSTALLED.
8. THE CONTRACTOR SHALL VERIFY THAT THE INSTALLATION PERFORMED BY HIS SUBCONTRACTOR CONFORMS TO THE CURRENT NATIONAL CODE.

**CABLE COLOR CODE CHART**

CAT-5 CABLE COLOR CODE CHART  
(CABLE JACKET NEEDS TO BE APPROPRIATE COLOR, NOT COLORED TAPE)  
 1) YELLOW  
 2) WHITE  
 3) BLUE  
 4) GREEN  
 5) YELLOW WITH ONE STRIPE BLACK TAPE  
 6) WHITE WITH ONE STRIPE BLACK TAPE  
 7) BLUE WITH ONE STRIPE BLACK TAPE  
 8) GREEN WITH ONE STRIPE BLACK TAPE  
 9) RED



**NOTE:**  
 DIAGRAM PROVIDED FOR GENERAL ILLUSTRATIVE PURPOSES ONLY AND THAT ANY CHANGES OR MODIFICATIONS SHALL BE ADDRESSED WITH THE OWNER.



1150 SHENANDOAH VILLAGE DRIVE  
 WAYNESBORO, VA 22980

SITE NAME: COURT SQUARE

SITE NUMBER: CV101

SITE ADDRESS: 500 COURT SQUARE  
 CHARLOTTESVILLE, VA 22902

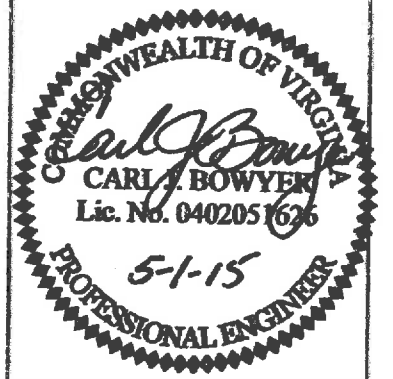
AREA: LEASE AREA = 208 SQ. FT.

BUILDING OWNER: 500 COURT SQUARE ASSOCIATION

LATITUDE: N38° 01' 54.98"

LONGITUDE: W78° 28' 41.02"

NO.	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	09/11/14
2	REISSUE FOR COMMENT	09/24/14
3	REISSUE FOR COMMENT	02/18/15
4	ISSUE FOR CONSTRUCTION	03/31/15
5	ISSUE FOR ZONING	05/01/15



400 TRACY WAY  
 SUITE 200  
 CHARLESTON, WV 25311  
 (304) 345-6712 PHONE

PROJECT # R4022100-141667.01

ELECTRICAL NOTES SHEET D-6

**GENERAL NOTES**

1. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNMENT AGENCIES.
2. ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND AT HIS EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
3. CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. LOCATION OF EXISTING SEWER, WATER OR GAS LINES, CONDUITS OR OTHER STRUCTURES ACROSS, UNDERNEATH, OR OTHERWISE ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND IF SHOWN, ARE ONLY APPROXIMATELY CORRECT. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES (INCLUDING TEST FITS BY HAND IF NECESSARY) IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE OWNER'S ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLANS. IF THERE APPEARS TO BE A CONFLICT, OR UPON THE DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS, CALL "MISS UTILITY" FOR ASSISTANCE.
5. EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY THE CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED OR REPLACED IN-KIND.
6. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO FAILURE TO MAINTAIN DRAINAGE STRUCTURES IN OPERABLE CONDITION.
7. THE CONTRACTOR SHALL COORDINATE THE REQUIREMENTS FOR AND LIMITS OF OVERHEAD AND/OR UNDERGROUND ELECTRICAL SERVICE WITH NTELOS.
8. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE (1) FULL YEAR FROM THE DATE OF ACCEPTANCE.
9. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE CHARGED EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY COUNTY INSPECTORS.
10. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE IN WHICH THE WORK IS TO BE PERFORMED. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
11. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERCEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
12. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND ANY FIELD MODIFICATIONS THERETO, TO INSURE THE SAFETY OF THE STRUCTURE'S COMPONENT PARTS, AND EMPLOYEES DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
13. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK PERFORMED ON THIS PROJECT. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE OWNER'S ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES.
14. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD WORKING QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND THE OWNER'S ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
16. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCAL BUILDING CODE.
17. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
18. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
19. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
20. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
21. THE ELECTRICAL AND RF STANDARDS AND SPECIFICATIONS SHOWN ON THESE PLANS HAVE BEEN PROVIDED BY THE CLIENT. MEAD & HUNT, INC. HAS NOT DESIGNED NOR PREPARED ANY OF THE ELECTRICAL AND RF STANDARDS AND SPECIFICATIONS. THEY HAVE BEEN PROVIDED FOR INFORMATION ONLY.
22. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.
23. COORDINATE THE CONSTRUCTION STAGING AREA WITH THE PROPERTY OWNER AND THE PROPERTY MANAGER WELL IN ADVANCE OF THE CONSTRUCTION START DATE.
24. THE CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AND PLAN DIMENSIONS, AND NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
25. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE WORK SITE ON A DAILY BASIS.



1150 SHENANDOAH VILLAGE DRIVE  
WAYNESBORO, VA 22980

SITE NAME: COURT SQUARE

SITE NUMBER: CV101

SITE ADDRESS: 500 COURT SQUARE  
CHARLOTTESVILLE, VA 22902

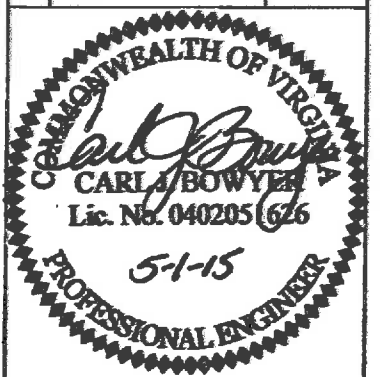
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400 TRACY WAY  
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PROJECT # R4022100-141667.01

GENERAL NOTES SHEET  
D-7



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## PRELIMINARY DRAWINGS

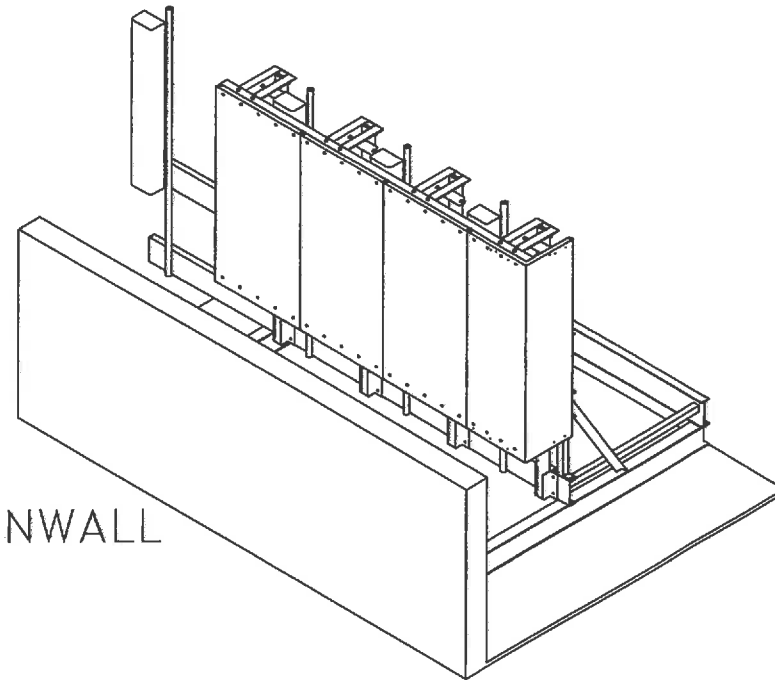
**NTELOS**  
**500 COURT SQUARE**  
**CHARLOTTESVILLE, VA 22902**

**STEALTH JOB #: NT14-01621W-17R0**

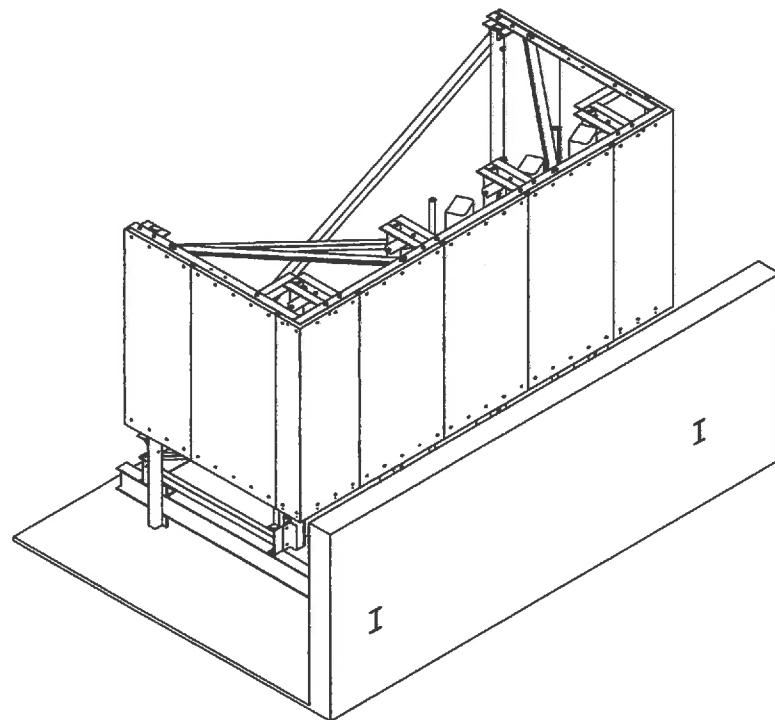
### DRAWING INDEX

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S3-S4	ASSEMBLY - ELEVATIONS BETA SCREENWALL
S5-S6	ASSEMBLY - ELEVATIONS GAMMA SCREENWALL

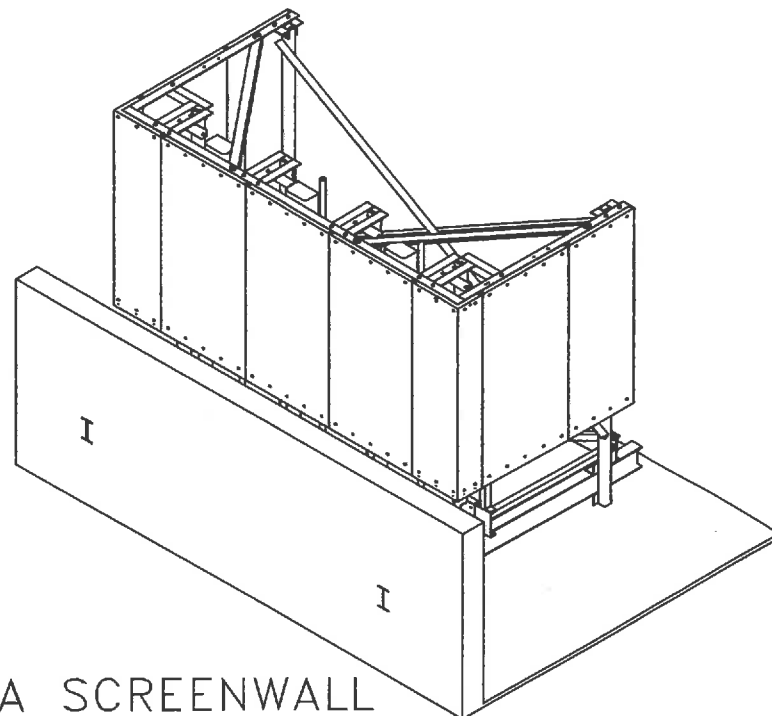
ALPHA SCREENWALL



BETA SCREENWALL



GAMMA SCREENWALL



**T1**  
REVISION  
12-22-14 **A**

**GENERAL**

1. THE TYPICAL NOTES SHALL APPLY FOR ALL CASES UNLESS OTHERWISE SPECIFICALLY DETAILED WITHIN THE DRAWINGS. SOME NOTES MAY NOT BE APPLICABLE IN PART OR IN WHOLE FOR EVERY PROJECT.
2. ANY ITEMS REFERENCED AS BEING ON "HOLD" ARE TO BE INCLUDED IN THE WORK AS SHOWN. HOWEVER, CONSTRUCTION OR FABRICATION IS NOT TO BEGIN UNTIL THE "HOLD" REFERENCE IS REMOVED.
3. DIMENSIONS CONTAINED WITHIN MUST BE FIELD VERIFIED AND CUSTOMER APPROVED PRIOR TO FABRICATION OF MATERIALS.
4. THE MODIFICATIONS DEPICTED IN THESE DRAWINGS ARE INTENDED TO PROVIDE STRUCTURAL SUPPORT FOR THE ADDITION OF THE ANTENNA SCREENING SYSTEMS OUTLINED WITHIN. THE EXISTING STRUCTURE OR BUILDING SHALL BE ANALYZED AND RETROFITTED AS REQUIRED, BY OTHERS, TO WITHSTAND THE LOADS IMPOSED BY THE NEW STEALTH® ENCLOSURE SHOWN ON THE DRAWINGS.
5. ANTENNA CONCEALMENT PRODUCTS SHALL BE INSTALLED BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK. CARE SHALL BE TAKEN IN THE INSTALLATION OF ANY AND ALL MEMBERS IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS AND PROCEDURES. ALL APPLICABLE OSHA SAFETY GUIDELINES ARE TO BE FOLLOWED. STEALTH® IS NOT PROVIDING FIELD INSTALLATION SUPERVISION.
6. THESE DRAWINGS INDICATE THE MAJOR OPERATIONS TO BE PERFORMED, BUT DO NOT SHOW EVERY FIELD CONDITION THAT MAY BE ENCOUNTERED. THEREFORE, PRIOR TO BEGINNING OF WORK THE CONTRACTOR SHOULD SURVEY THE JOB SITE THOROUGHLY TO MINIMIZE FIELD PROBLEMS.
7. PROTECTION OF EXISTING STRUCTURES DURING THE COURSE OF THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE STRUCTURAL INTEGRITY OF THIS STRUCTURE IS DESIGNED TO BE ATTAINED IN ITS COMPLETED STATE. WHILE UNDER CONSTRUCTION ANY TEMPORARY BRACING OR SHORING WHICH MAY BE REQUIRED TO MAINTAIN STABILITY PRIOR TO COMPLETION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
9. THE PLANS AND DETAILS WITHIN DO NOT INCLUDE DETAILS OR DESIGN FOR DRAINAGE FROM OR WATERPROOFING OF EXTERIOR OR INTERIOR SURFACES OF THE EXISTING BUILDING OR STRUCTURE. THESE DETAILS MUST BE COMPLETED BY OTHERS.

**STEALTHSKIN PANELS**

1. FASTENER HOLES IN STEALTHSKIN FOAM COMPOSITE PANELS ARE NOT FACTORY DRILLED AND MUST BE DRILLED IN THE FIELD.
2. PANEL FASTENERS TO BE SPACED 12" O.C. MAX. AND LOCATED 6" MAX. HORIZONTALLY FROM EACH EDGE AT TOP AND BOTTOM OF PANEL. MAINTAIN 1 1/2" MIN. EDGE DISTANCE FROM ALL EDGES. 4' WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM. 5' WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM.
3. WHEN FASTENER BOLT HEAD OR NUT BEARS DIRECTLY ON SURFACE OF STEALTHSKIN PANEL, TIGHTEN PANEL BOLTS ONLY 1/2 TURN PAST SNUG. APPLY THREAD LOCK COMPOUND TO THE THREADS OF METAL BOLTS. USE THIN BEAD OF EPOXY TO LOCK THE NUTS OF FRP BOLTS AND STEALTH® STAINLESS STEEL PANEL BOLTS. USE WASHER OR FLANGED HEAD BOLT, OR FASTENER WITH LARGE BEARING SURFACE.
4. PANELS WILL EXPAND AND CONTRACT DUE TO TEMPERATURE. WHEN INSTALLING PANELS IN COLD TEMPERATURES, EVENLY SPACE PANELS ALONG LENGTH OF SCREEN WALL WITH EQUAL GAPS BETWEEN PANELS TO ALLOW FOR EXPANSION DURING WARM TEMPERATURES.
5. ADJACENT FLAT PANELS ARE JOINED BY A VERTICAL FOAM SPLINE THAT IS INSERTED INTO GROOVES CUT INTO THE SIDE OF EACH PANEL. DO NOT LIFT PANELS BY GROOVES. PANELS MUST BE LIFTED WITH FORCE DIRECTED ONTO PANEL SURFACE.
6. ADJACENT RADIUS PANELS ARE JOINED BY A VERTICAL H-CHANNEL. INSERT PANELS INTO EACH SIDE OF H-CHANNEL.
7. RADIUS PANELS MUST BE EVENLY SPACED ALONG RADIUS SUPPORT. CONTRACTOR TO MEASURE LENGTH OF RADIUS SUPPORT AND DIVIDE BY THE NUMBER OF RADIUS PANELS TO DETERMINE PROPER SPACING. H-CHANNEL CONNECTORS ARE USED TO COVER THE GAP BETWEEN PANELS AND TO ALLOW FOR PANEL EXPANSION AND CONTRACTION.
8. SURFACES OF PANELS SHALL BE COATED WITH SUITABLE PAINT FOR UV PROTECTION. TOP EDGE OF PANEL MUST BE COVERED TO PREVENT WATER TRAVEL BETWEEN PANELS. USE SHERWIN WILLIAMS "COROTHANE II" OR PRE APPROVED EQUIVALENT.
9. EXPOSED TOP AND SIDE FOAM EDGES OF PANELS MUST BE COVERED OR COATED FOR UV PROTECTION. STEALTH® WILL PROVIDE PANEL EDGE CAPS TO BE FIELD APPLIED FOR THIS PURPOSE FOR MOST APPLICATIONS. PANEL EDGE CAPS TO BE SECURED WITH TEK SCREW INSTALLED @ 18" MAXIMUM SPACING ON THE INSIDE FACE OF THE PANEL.

**STRUCTURAL STEEL**

1. STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL AND SPECIFICATIONS.
2. STEEL I-SHAPE, ANGLE, CHANNEL, AND MISCELLANEOUS MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
3. STEEL PLATE MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
4. STEEL PIPE AND ROUND TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (42 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
5. STEEL RECTANGULAR AND SQUARE TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (46 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
6. STEEL WIDEFLANGE MEMBERS SHALL CONFORM TO ASTM A992 (50 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
7. BOLTS SHALL BE DOMESTIC, NEW HIGH STRENGTH GALVANIZED BOLTS, BEARING TYPE "X" (THREADS EXCLUDED), U.N.O., AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS, U.N.O.
8. STRUCTURAL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
9. BOLT HOLE EDGE DISTANCES SHALL BE A MINIMUM 1", U.N.O.
10. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OF THE AMERICAN WELDING SOCIETY (AWS) BY CERTIFIED WELDERS PER AWS D1.1 FOR STEEL AND AWS D1.2 FOR ALUMINUM. ALL WELDING SHALL BE PERFORMED IN A SHOP APPROVED BY THE BUILDING OFFICIAL. STEEL WELDS SHALL BE BY E70XX, LOW HYDROGEN ELECTRODES.
11. STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 SPECIFICATIONS AFTER FABRICATION OR PAINTED WITH RUST INHIBITIVE PRIMER.
12. STEEL HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM A153, U.N.O.
13. AFTER ANY FIELD HOLE PUNCHING / DRILLING OR CUTTING HAS BEEN COMPLETED, OR FOR ANY DAMAGED STRUCTURAL MEMBER, TOUCH UP ALL BARE MATERIAL AND WELDED AREAS WITH TWO COATS OF GAL-CON OR SIMILAR MATERIAL TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS.
14. ALL WELDED STEEL ASSEMBLIES AND INDIVIDUAL STEEL PARTS SHOULD HAVE THE PART NUMBER WELDED ONTO THE PART OR ASSEMBLY. THE PART NUMBERS SHOULD BE LOCATED CONSISTENTLY AND AWAY FROM ANY CONNECTION POINT TO AVOID ANY INTERFERENCE ISSUES WITH THE WELD.

**FRP STRUCTURAL MEMBERS**

1. FRP STRUCTURAL SHAPES SHALL BE STEALTH FRP SERIES 1525, MANUFACTURED USING THE PULTRUSION PROCESS.
2. IF PREFABRICATED MEMBERS DO NOT ASSEMBLE PER PLAN, CONTACT STEALTH® CONCEALMENT SOLUTIONS, INC. BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
3. FRP STRUCTURAL MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.
4. THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.
5. FRP BOLTS SHOULD BE TIGHTENED 1/2 TURN PAST SNUG AND LOCKED WITH EPOXY.



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WWW.STEALTHCONCEALMENT.COM

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DRAWING NOT TO SCALE, UNLESS SPECIFIED OTHERWISE DIMENSIONS SHOWN ARE IN INCHES

TOLERANCES	
DECIMALS X ± 1/16"	ANGULAR X ± 0.5°
.XXX ± 0.01"	

**NOTES & SPECIFICATIONS**

**NTELOS  
500 COURT SQUARE  
CHARLOTTEVILLE, VA 22902**

JOB #: NT14-01621W-17R0

DRAWN: BK

DESIGNED: BK

REVISED:

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ASSEMBLY - ELEVATIONS  
ALPHA SCREENWALL

NTELOS  
500 COURT SQUARE  
CHARLOTTESVILLE, VA 22902

JOB #: NT14-01621W-17R0

DRAWN: BK

DESIGNED: BK

REVISED:

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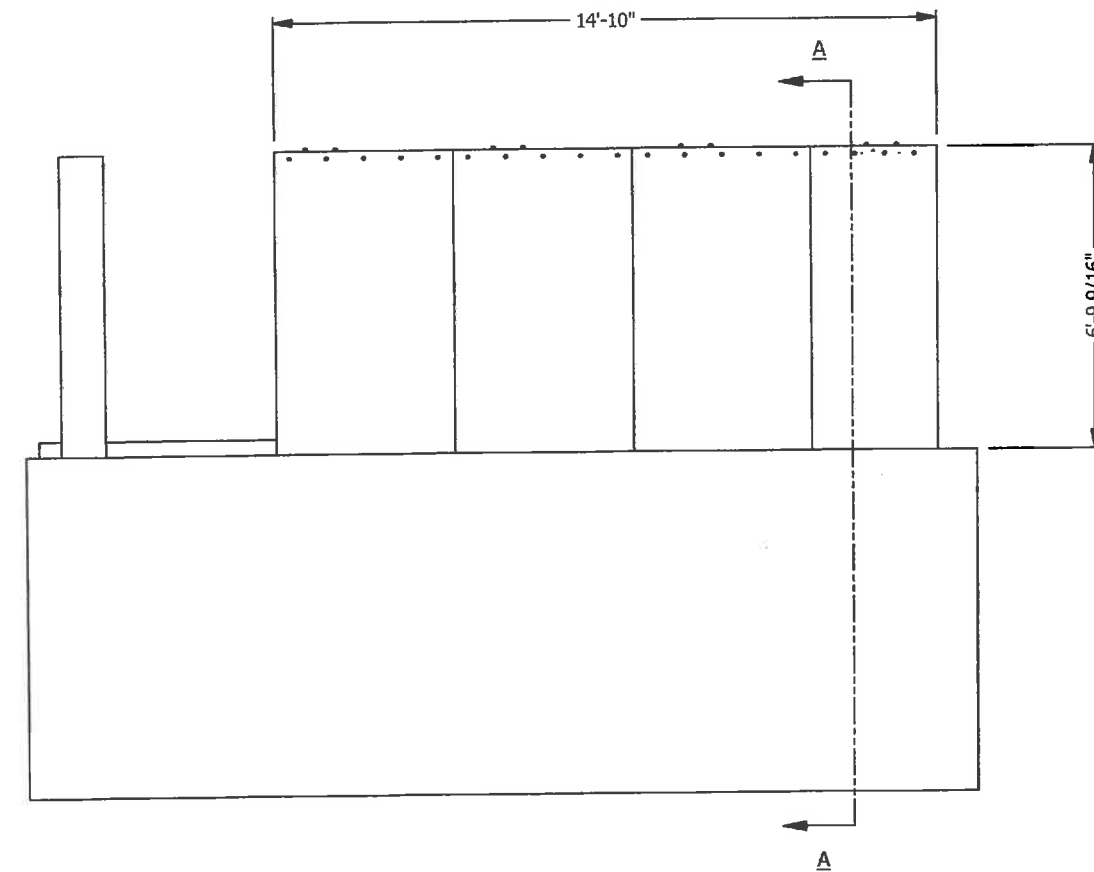
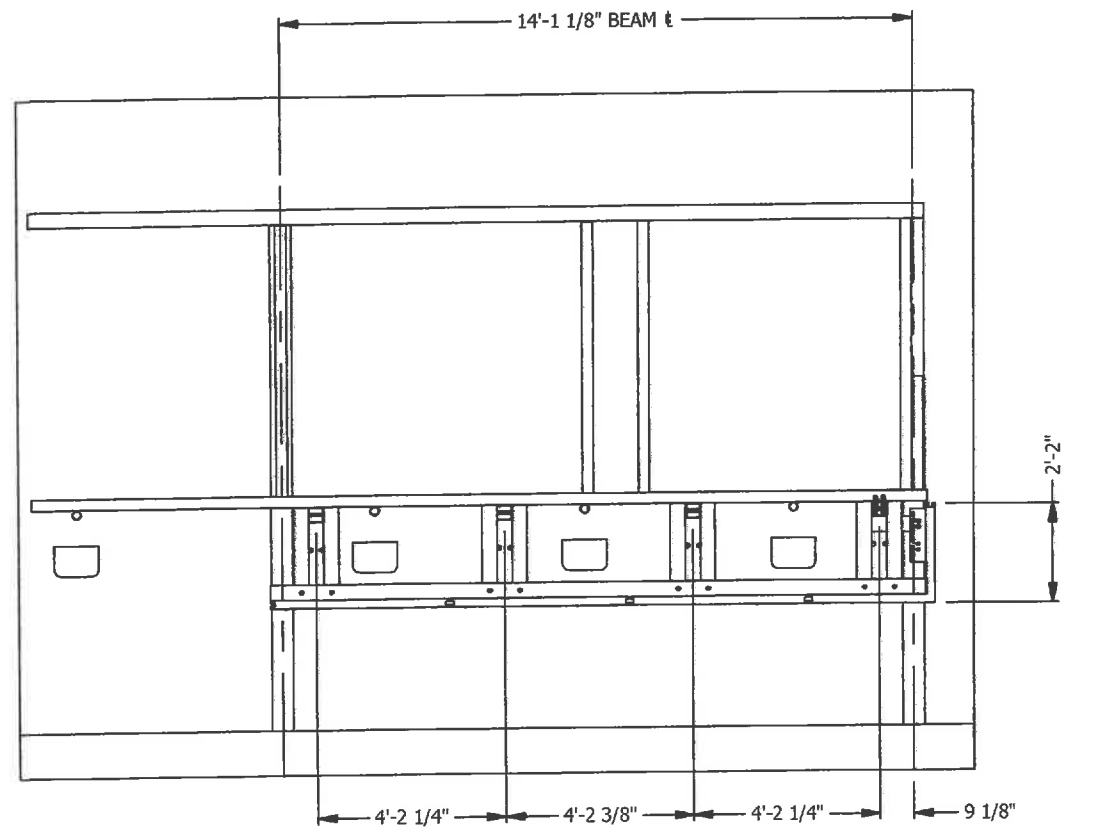
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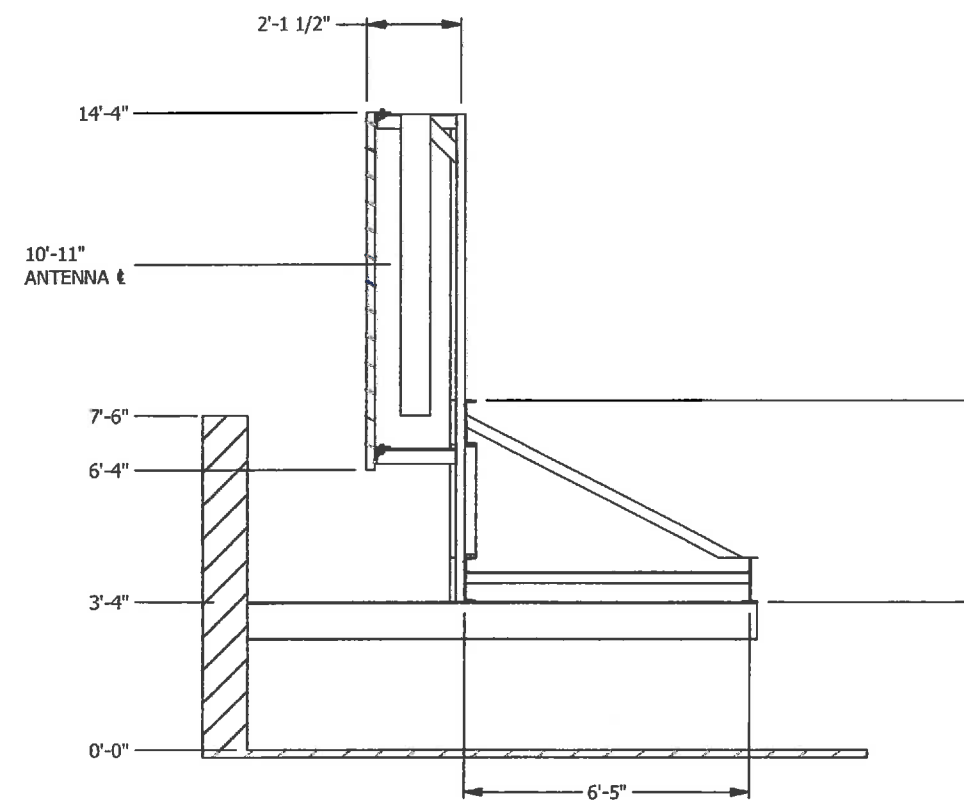
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**NOTES:**

- 1.) THE INTEGRITY OF THE EXISTING STRUCTURE MUST BE VERIFIED BY OTHERS.
- 2.) THE DIMENSIONS OF THE EXISTING STRUCTURE ARE BASED UPON STEALTH® SITE WALK DATED 12-11-14.
- 3.) THE ATTACHMENT TO EXISTING (DESIGN AND FASTENERS) MUST BE PROVIDED BY OTHERS. STEALTH® WILL ONLY SUPPLY FASTENER SIZE AND QUANTITY REQUIRED, FOR ATTACHMENT TO EXISTING.
- 4.) THE PANELS ARE TO BE PAINTED / TEXTURED ACCORDING TO THE CUSTOMER APPROVED SAMPLE(S).
- 5.) IT IS THE RESPONSIBILITY OF THE CUSTOMER TO VERIFY ANTENNA FIT AND COAX CLEARANCE.



ALPHA SCREENWALL



SECTION A-A



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**TOLERANCES**  
DECIMALS  
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.XXX ± 0.01"  
ANGULAR  
X ± 0.5°

ASSEMBLY - ELEVATIONS  
ALPHA SCREENWALL

NTELOS  
500 COURT SQUARE  
CHARLOTTEVILLE, VA 22902

JOB #: NT14-01621W-17R0

DRAWN: BK

DESIGNED: BK

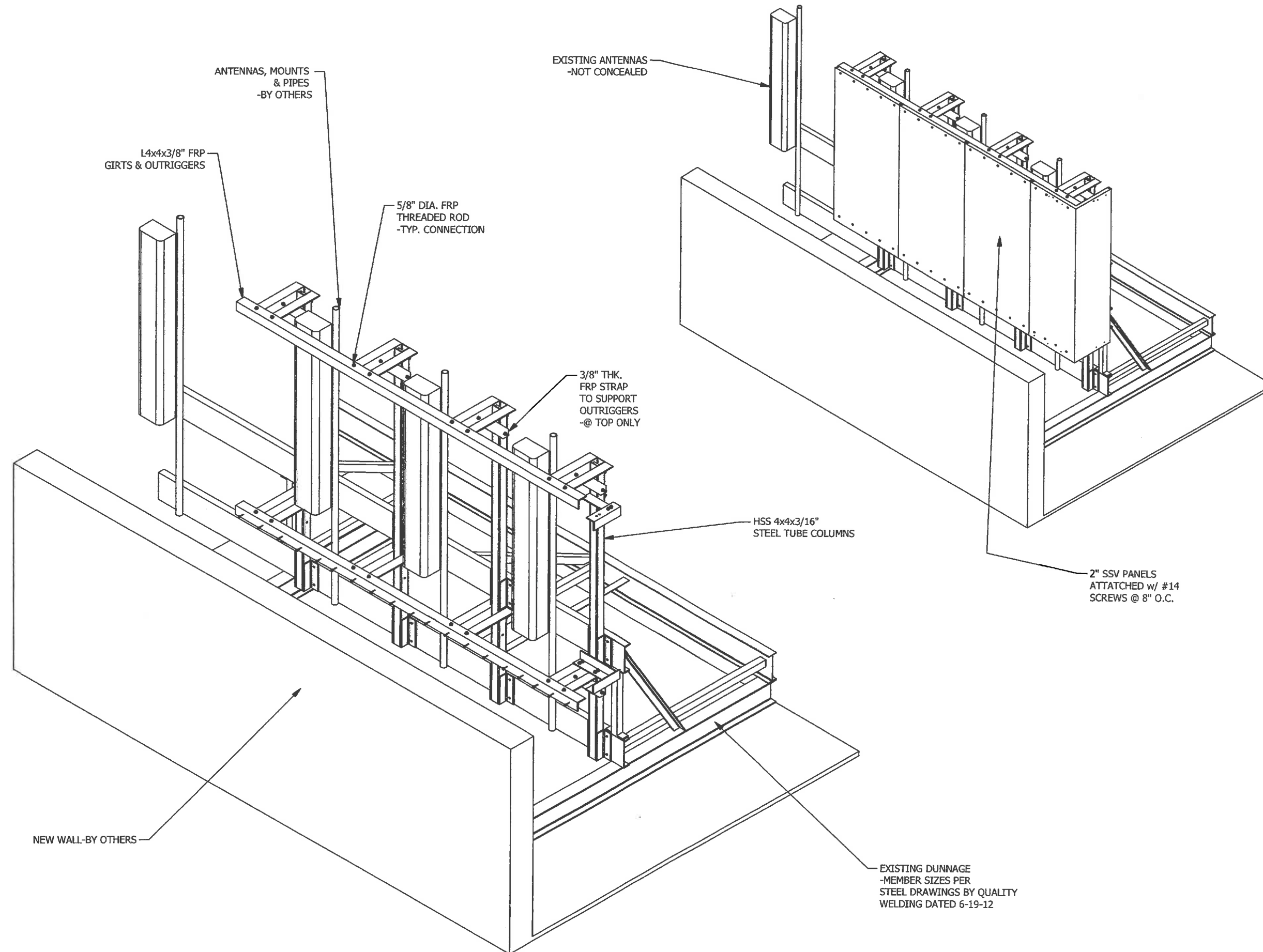
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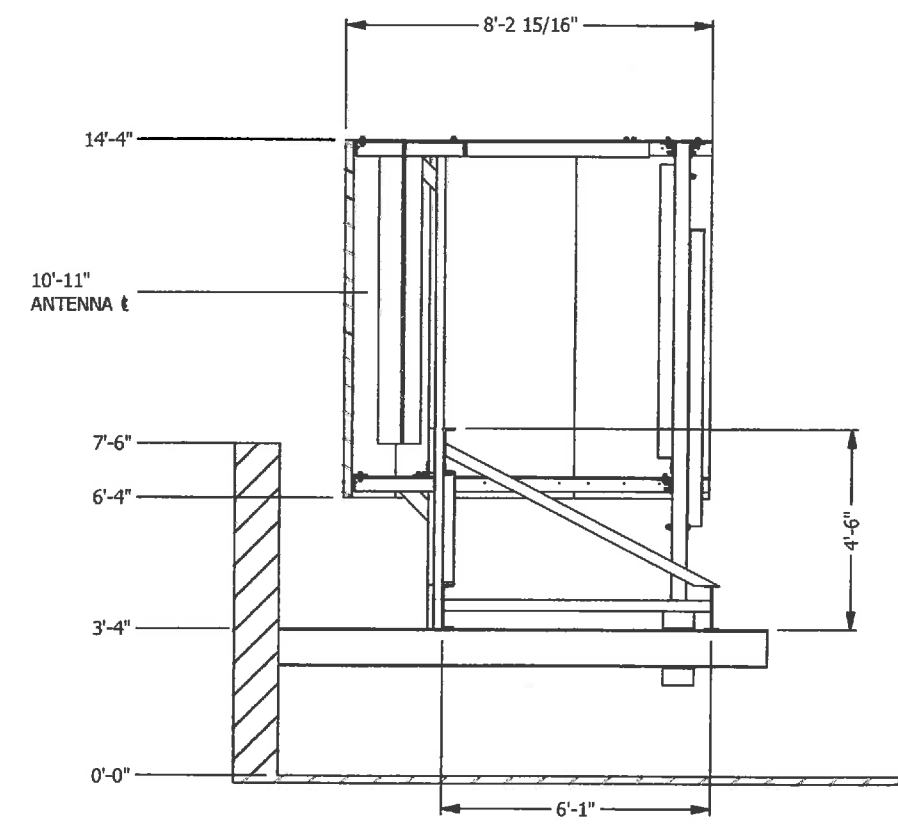
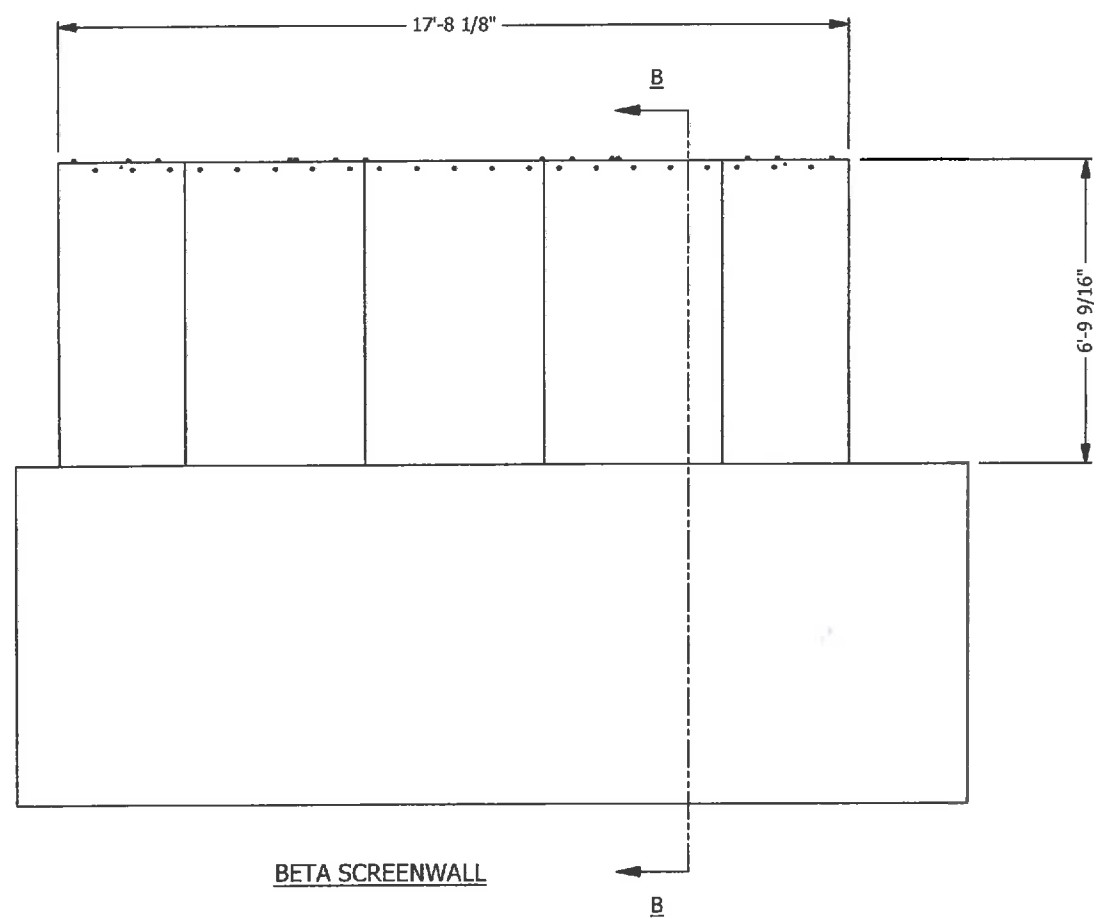
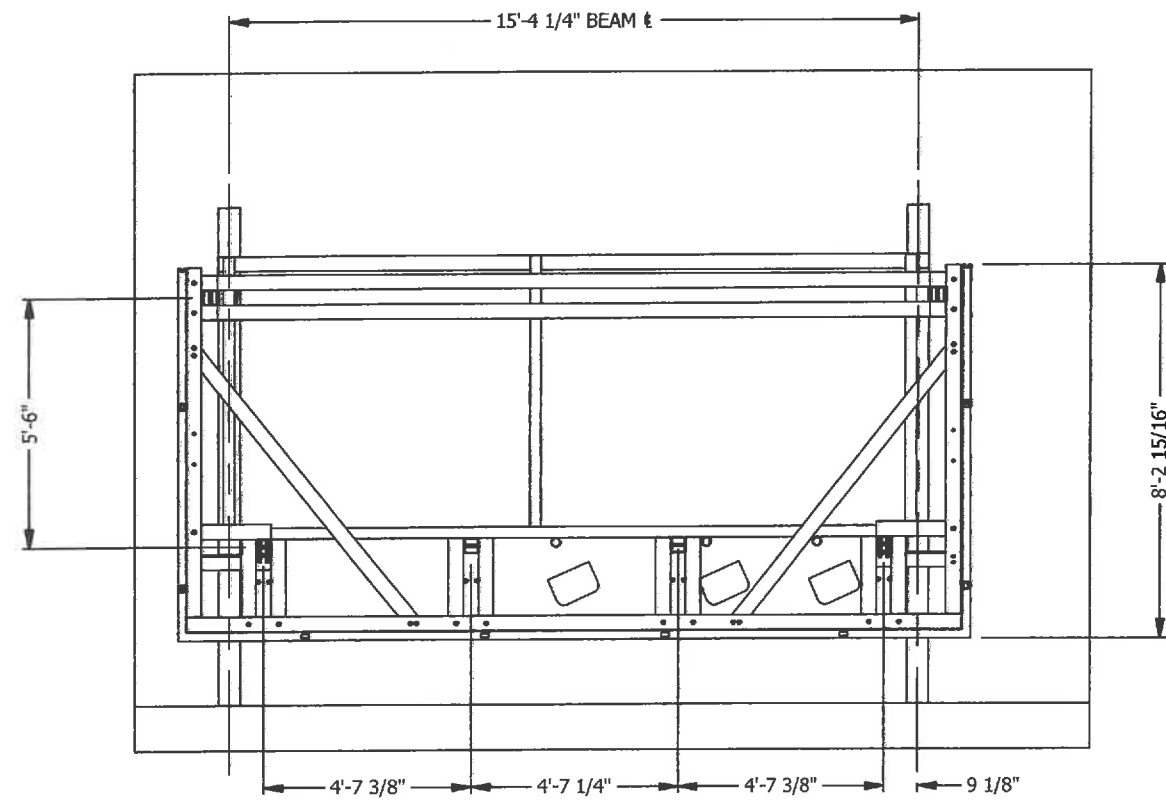
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BETA SCREENWALL

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DESIGNED: BK  
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ASSEMBLY - ELEVATIONS  
BETA SCREENWALL

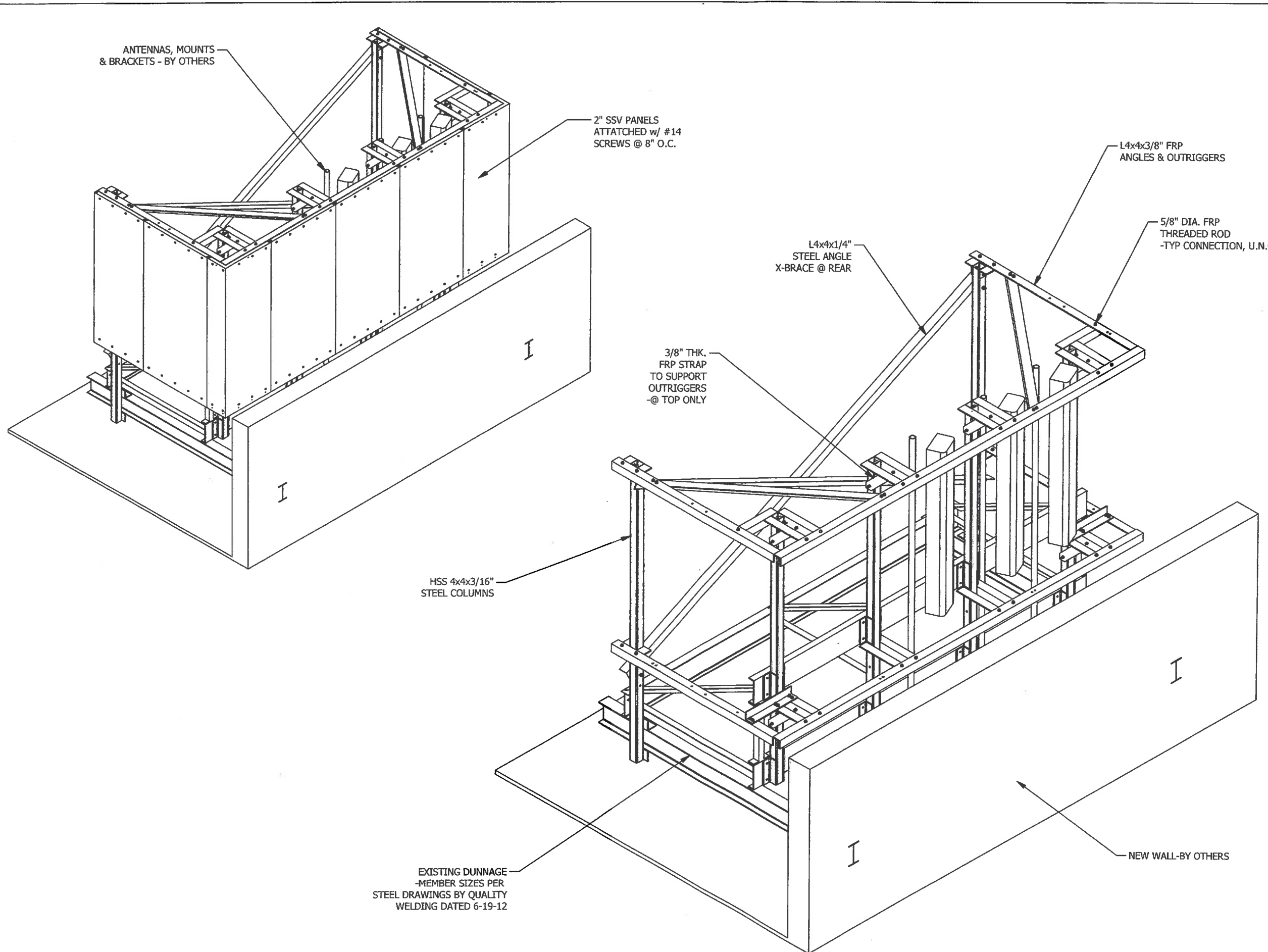
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TOLERANCES	
DECIMALS X ± 1/16"	ANGULAR X ± 0.5°
.XXX ± 0.01"	

ASSEMBLY - ELEVATIONS  
GAMMA SCREENWALL

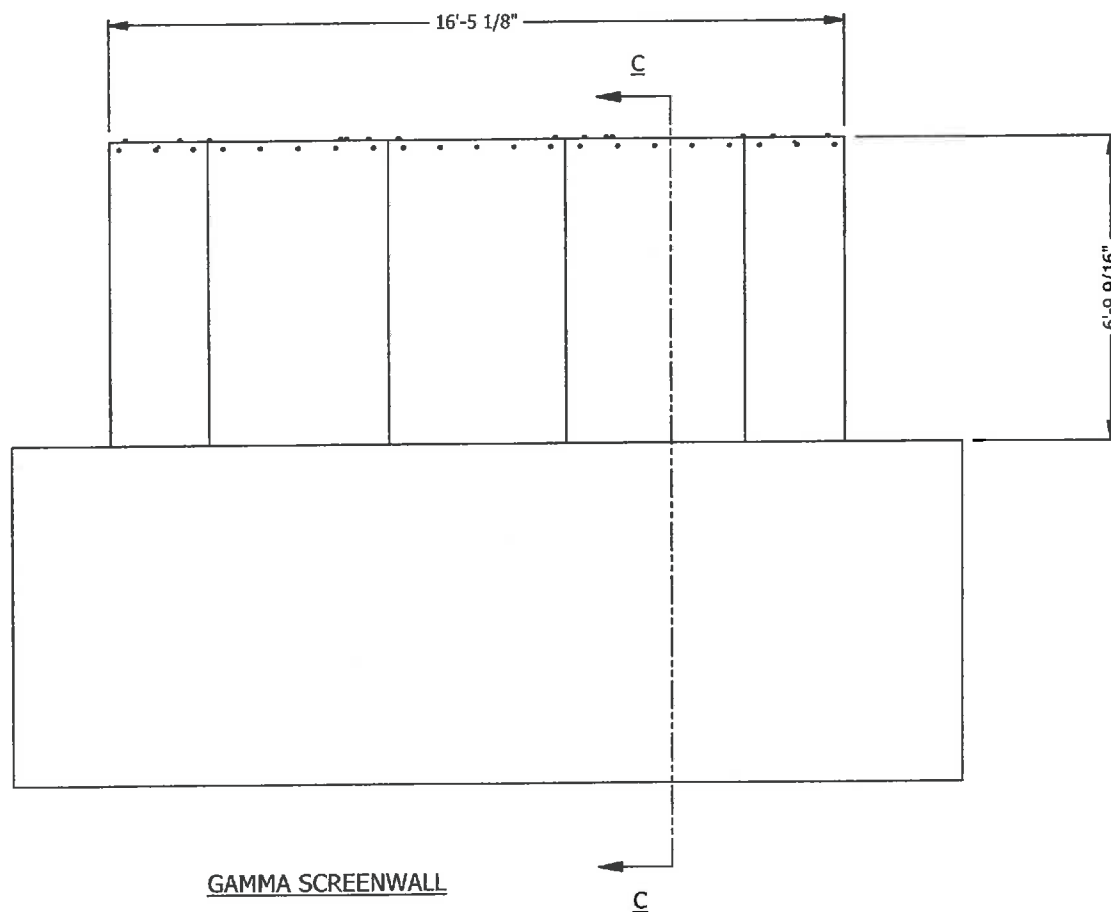
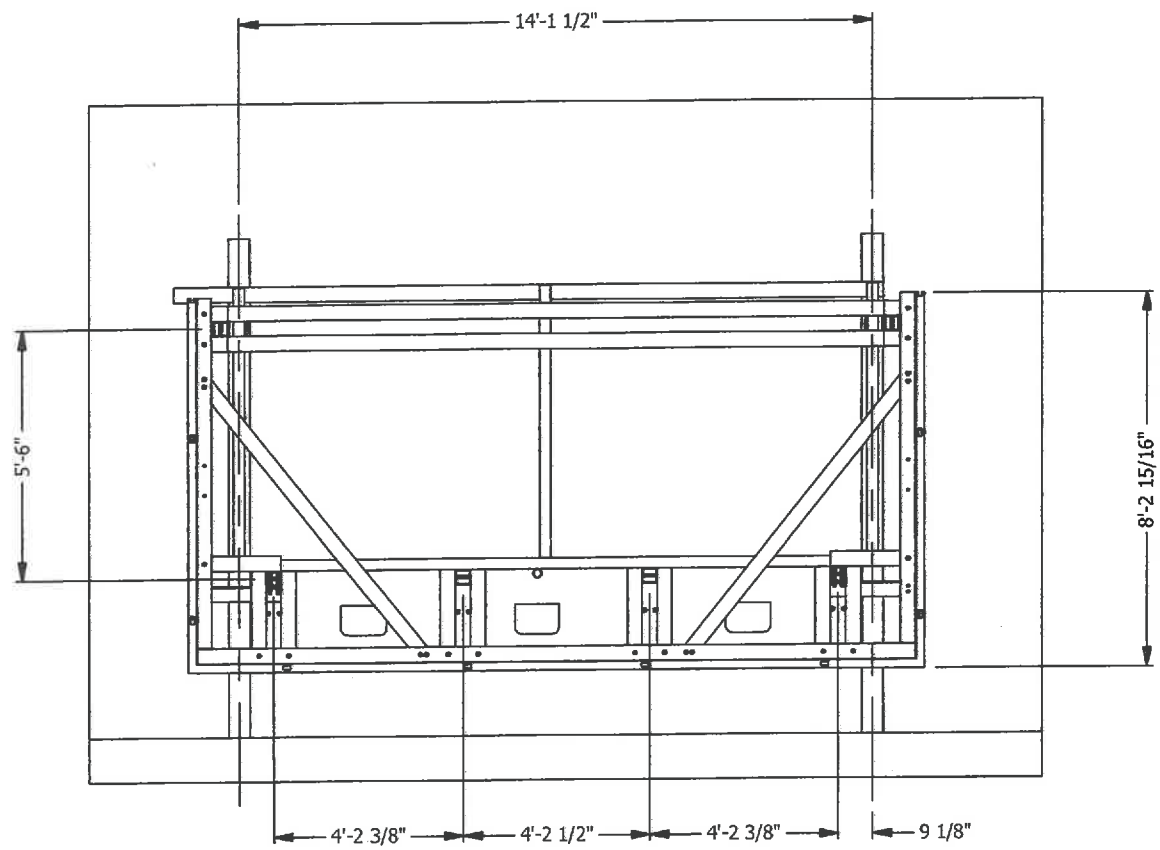
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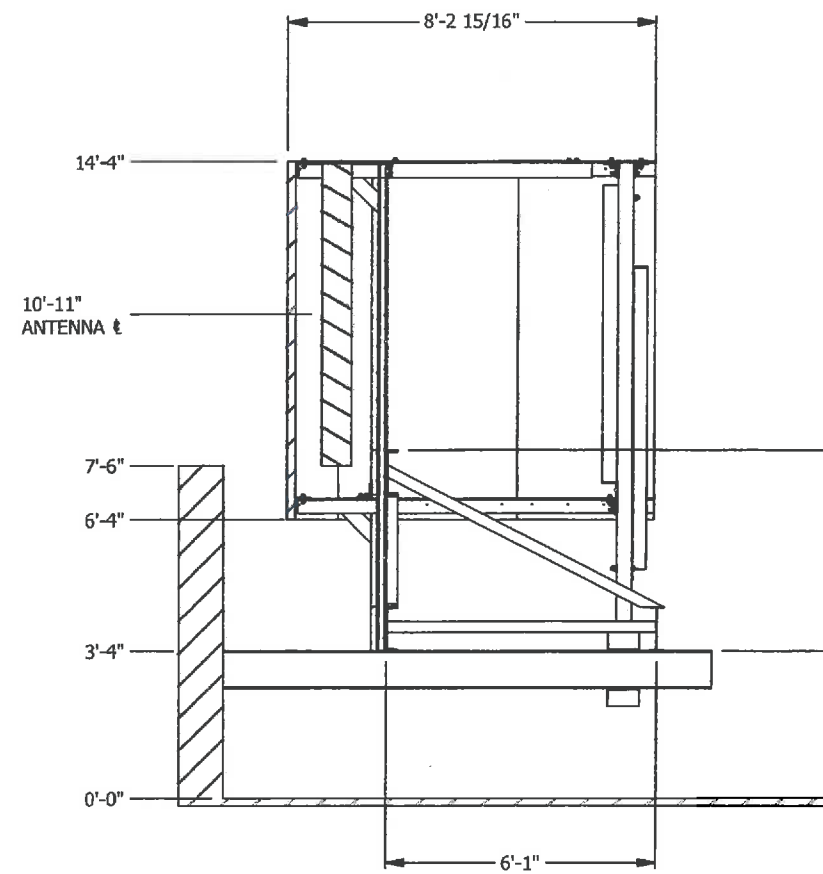
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GAMMA SCREENWALL



SECTION C-C



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**TOLERANCES**  
DECIMALS: X ± 1/16", .XXX ± 0.01"  
ANGULAR: X ± 0.5°

ASSEMBLY - ELEVATION  
GAMMA SCREENWALL

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