



MILPITAS PLANNING COMMISSION AGENDA REPORT

PUBLIC HEARING

Meeting Date: September 12, 2012

APPLICATION: **Conditional Use Permit No. UP12-0017 and Minor Site Development Permit No. MS12-0034, Sprint Wireless**

APPLICATION SUMMARY: A request to remove three (3) existing panel antennas with three new panel antennas, installation of six (6) new remote radio units, and replacement of existing equipment cabinets for an existing wireless telecommunication wireless monopole.

LOCATION: 1000 Jacklin Road (APN: 28-05-15)
APPLICANT: Crown Castle/Sprint, 5820 Stoneridge Mall Drive, Suite 300, Pleasanton, CA 94588

OWNER: Joe and Christine Gigantino, 1477 Dry Creek Road, San Jose, CA 95125

RECOMMENDATION: **Staff recommends that the Planning Commission: Adopt Resolution No. 12-036 subject to the conditions of approval.**

PROJECT DATA:
General Plan/
Zoning Designation: Highway Service (HWS)/ Highway Service (HS)
Overlay District: Site and Architectural Overlay (-S)
Specific Plan: N/A

Site Area: 1.14 acres
Existing Height of Monopole: 60-feet
Number of Existing Antennas: 11
Number of Proposed Antennas: 11

CEQA Determination: Categorical Exempt pursuant to Class 3, Section 15303 and Class 11, Section 15311 of the California Environmental Quality Act

PLANNER: Cindy Hom, Assistant Planner

PJ: 2837

ATTACHMENTS:
A. Resolution No. 12-036
B. Project Plans
C. Project Description
D. Power Density Study
E. Photo Simulations

LOCATION MAP



No scale

BACKGROUND

In May 1996, the Planning Commission approved Conditional Use Permit No. UP 1339 for a 60-foot monopole for a wireless telecommunication facility and construction of a 173 square-foot equipment shelter on the north side of the building. The Planning Commission granted subsequent amendments (UP1352 and UP1553) to allow co-location of two other carriers and construction of second equipment enclosure on the east side of the building.

On June 27, 2012, Jason Osborne with Crown Castle submitted an application for the removal of three (3) existing Sprint panel antennas with three (3) new panel antennas, installation of six (6) new remote radio units on an existing wireless telecommunication wireless monopole located and replacement of existing equipment cabinets within the equipment shelter on the east boundary. The application is submitted pursuant to Milpitas Municipal Code (MMC) XI-10-13.09 (Wireless Communication Facilities). Wireless communication facilities and structures that are not considered stealth by definition require Planning Commission review and approval.

PROJECT DESCRIPTION

The subject site encompasses 1.14 acres at the southwest quadrant of I-680 and Jacklin Road. The site is a land-locked parcel located behind the Shell gasoline station, near the I-680 southbound on-ramp. The site is zoned Highway Services, as is the gas station parcel to the north. The site is currently developed with a two-story, 17,204 square foot fitness facility, 256 square foot clock tower, and fifty-one (51) on-site parking spaces.

Surrounding land uses include commercial offices to the south and northwest, a childcare center to the west, and a Shell Gas Station to the north. Residential uses are found to the north, beyond Jacklin Road, to the west, beyond N. Hillview Drive, and to the east, beyond the I-680 freeway. An aerial photo is provided on the previous page.

The project proposes to remove and replace three (3) existing 4 ¼ -feet, panel antennas with three (3) 6-foot, 1-inch panel antennas that are collar mounted on the existing 60-foot tall monopole (one antenna per sector). The installation would also include six (6) new remote radio units (RRU's) that would be installed beneath the panel antennas (two RRU's per sector). The project would replace three (3) existing equipment cabinets with two (2) equipment cabinets and one (1) GPA antenna.

Aesthetics

The project site abuts next to Interstate 680 (I-680) which is a designated as a scenic highway in the Milpitas General Plan. Due to existing site conditions that are no opportunities for a stealth installation since the facility currently exists and has multiple carriers. There were no opportunities for the facility to be mounted on the building without major retrofit to the building and it would not provide the desired height. The clock tower already houses four carriers and is at capacity. A tree monopole would not be appropriate application since there are no other trees in the vicinity nor could it accommodate the installation of new trees without removal of required parking spaces. To ensure an aesthetics and harmonious development staff is recommending the below conditions:

- 1. The project shall improve the aesthetics (landscaping) along the on-ramp and the project as follows:*

- a. *Prior to building permit issuance, the owner or designee shall submit a detailed landscaping and irrigation plan for off-site landscaping improvements that will include ground cover and 36-inch box trees to the approval of the Planning Division.*
 - b. *Prior to building permit issuance, the owner or designee shall submit landscaping in the public right-of-way, and obtain proper review and approval from Cal-Trans.*
 - c. *Prior to building permit final, all landscaping and irrigation shall be installed and in good working order. All landscaping and irrigation shall be maintained in perpetuity.*
2. *The applicant shall replace the existing chain link fence with a new vinyl chain link fence with slats that shall be painted to match the building or install creeping vines to conceal the enclosure.*
 3. *The applicant shall paint panel antennas for all three carriers and monopole to earth tone color that complements the surrounding buildings to minimize visual impacts. Changes in the above listed colors shall be reviewed and approved by the Planning Division prior to application and or any future repainting of the structures for maintenance.*
 4. *The applicant shall perform annual inspections and perform necessary maintenance to ensure that the project maintains an aesthetic appearance in perpetuity.*

Development Standards

The project proposal does not propose any modifications to the main building or existing site improvements beyond the removal and replacement of existing panel antennas on an existing 60-foot tall monopole and installation of associated equipment within the existing equipment enclosure. The project complies with the Highway Service District development standards as demonstrated in Table 1.

Table 1
Development Standards for the Highway Service District

	<i>Zoning Ordinance</i>	<i>Existing</i>	<i>Proposed</i>
<u>Setbacks</u> (Minimum)			
Front to Primary Structure	Major Street – 50’ All other streets – 0’	53’	53’
Interior Side	0’ 15’ min if abutting any “R” district	83’ and 6’	83’ and 6’
Rear	0’ 15’ min if abutting any “R” district	5’	5’
<u>Floor Area Ratio</u> (Maximum)	50%	35%	35%

	<i>Zoning Ordinance</i>	<i>Existing</i>	<i>Proposed</i>
<u>Building Height</u> (Maximum)	None	62'-10'	62'-10'

ADOPTED PLANS AND ORDINANCES CONSISTENCY

General Plan

The table below outlines the project’s consistency with applicable General Plan Guiding Principles and Implementing Policies:

Table 2
General Plan Consistency

Policy	Consistency Finding
<i>Implementing Policies 2.a-G-1</i> <i>Maintains land use program that balances Milpitas’s regional and local roles by providing a highly amendable community environment and a thriving regional industrial center.</i>	Consistent. By providing for alternate telecommunications services for commercial and personal business without creating aesthetic disharmony, the project promotes a highly amenable community environment.
<i>Implementing Policy 2.a-I-3</i> <i>Encourage economic pursuits which will strengthen and promote development through stability and balance.</i>	Consistent. The project would encourage economic pursuits that will strengthen and promote development through stability and balance by enabling Sprint to provide improved coverage, which helps promote their service within the City and benefits Sprint customers.

Zoning Ordinance

The project complies with the Milpitas Zoning Ordinance in that wireless telecommunication facilities are conditionally permitted in the Highway Services (HS) Zoning District. The project complies with the development standards in terms of land use, setbacks, floor area ratio (FAR), and height.

The project, as conditioned will not be detrimental or injurious to property, improvements, public health, safety and general welfare in that Federal law preserves the City’s authority to regulate the placement, construction, and modification of personal wireless service facilities, so long as such regulations do not impose a blanket prohibition on the construction of such facilities or intrude into the regulation of radio frequency emissions, which are the sole province of the Federal Communications Commission and certain state regulations. Thus, the City has the power to conduct a limited review of wireless communication facilities for compliance with zoning and land use requirements. (47 U.S.C. 332((c)(7)(A).) Here, the proposed project complies with the City’s Zoning Ordinance. Wireless telecommunications facilities are conditionally permitted uses in all zoning districts including the Highway Services District.

Radio Frequency Emissions

The FCC has established guidelines that place limits on human exposure to RF fields generated by personal wireless service facilities. These guidelines have been endorsed by the U.S. Environmental Protection Agency and the Food and Drug Administration. The FCC requires all personal wireless facilities to comply with these guidelines.

Sprint facility would operate between 800-1900 MHz on a broad band frequency. The site will accommodate one channel per sector with three sectors for an effective radiated power level of approximately 1,542 watts. The RF emissions from the proposed Sprint facility will be at a level of 5% of the applicable public exposure limit. The cumulative predicted energy density from the proposed operations would not be more than 16% of the maximum in any accessible areas up to two meters above ground. The project would operate within the FCC limits for RF emissions.

ENVIRONMENTAL REVIEW

The Planning Division conducted an initial environmental assessment of the project in accordance with the California Environmental Quality Act (CEQA). Staff determined that the project is categorically exempt from further environmental review pursuant to Section 15301 (Existing Facilities) of the California Environmental Quality Act in that the project is a negligible expansion beyond the existing use. The project would also be categorically exempt under Section 15303 (New Construction of Structures). The project entails removal and replacement of existing panel antennas and installation of six RRU units on an existing monopole as well as installation of associated ground mounted equipment.

PUBLIC COMMENT/OUTREACH

Staff publicly noticed the application in accordance with City and State law. As of the time of writing this report, there have been no inquiries from the public.

CONCLUSION

The proposed facility will help provides for a reliable high speed wireless network that will enable businesses and individuals to access to the internet. The project will not be detrimental to public health or safety of persons working or residing in the neighborhood or materially injurious to public improvements and private properties in that it does not generate traffic, negative visual impacts or objectionable levels of noise, odors, or dust.

RECOMMENDATION

STAFF RECOMMENDS THAT the Planning Commission adopt resolution No. 12-036 approving Conditional Use Permit No. UP12-0017 and Minor Site Development Permit No. MS12-0034, subject to the attached Conditions of Approval.

Attachments:

- A. Resolution No. 12-036
- B. Project Plans
- C. Project Description
- D. Power Density Study
- E. Photo Simulations

RESOLUTION NO. 12-036**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT NO. UP12-0017 AND MINOR SITE DEVELOPMENT PERMIT NO. MS12-0034, SPRINT WIRELESS, A REQUEST LOCATE REMOVE AND REPLACE EXISTING PANEL ANTENNAS WITH NEW 6-FOOT TALL PANEL ANTENNAS AND ASSOCIATED EQUIPMENT INSTALLATION AT 1000 JACKLIN RD.**

WHEREAS, on June 27, 2012, Jason Osborne with Crown Castle submitted a conditional use permit and minor site development permit application to remove and replace existing panel antennas and install six remote radio units on an existing monopole as well as replace associated equipment for a wireless telecommunication facility located at 1000 Jacklin Road (APN 28-05-015). The property is located within the High Services Zoning district with Site and Architectural Overlay (HS-S); and

WHEREAS, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and recommends that the Planning Commission determine this project is categorically exempt; and

WHEREAS, on September 12, 2012, the Planning Commission held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties.

NOW THEREFORE, the Planning Commission of the City of Milpitas hereby finds, determines and resolves as follows:

Section 1: The recitals set forth above are true and correct and incorporated herein by reference.

Section 2: The project is categorically exempt from further environmental review pursuant to Class 1, Section 15301 (Existing Facilities) and Class 3, Section 15303 (New Construction) in that the project entails the removal and replacement of existing panel antennas and installation of six RRU units on an existing monopole as well as installation of associated ground mounted equipment.

Section 3: The project is consistent with the Milpitas General Plan in that the project provides updated technology that improves wireless service that supports surrounding businesses, residents, and facilitates communication.

Section 4: The project conforms to the Milpitas Zoning Ordinance in that the project is permitted in the Highway Service Zoning District with a conditional use permit. The project complies with the development standards in terms setbacks, FAR, and height. No additional parking is required considering the facility will be unmanned.

Section 5: The project will not be injurious or detrimental to property, improvements or to public health and safety in that it will not generate noise, odors, and will be within the allowable radio frequency emissions threshold under federal law. As conditioned, the proposed facility will not create a negative visual impact or detract from the existing architecture and provide for an aesthetic and harmonious development.

Section 6: The Planning Commission of the City of Milpitas hereby approves Conditional Use Permit No. UP12-0017 and Minor Site Development Permit Amendment No. MS12-0034, Sprint Wireless, subject to the above Findings, and Conditions of Approval attached hereto as Exhibit 1.

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Milpitas on September 12, 2012.

Chair

TO WIT:

I HEREBY CERTIFY that the following resolution was duly adopted at a regular meeting of the Planning Commission of the City of Milpitas on September 12, 2012, and carried by the following roll call vote:

COMMISSIONER	AYES	NOES	ABSENT	ABSTAIN
Lawrence Ciardella				
John Luk				
Rajeev Madnawat				
Sudhir Mandal				
Zeya Mohsin				
Gurdev Sandhu				
Steve Tao				
Garry Barbadillo				

EXHIBIT 1

CONDITIONS OF APPROVAL
CONDITIONAL USE PERMIT NO. UP12-0017 AND MINOR SITE DEVELOPMENT
PERMIT NO. MS12-0034, SPRINT WIRELESS.
1000 Jacklin Rd. (APN 28-05-015)

Planning Division

1. The owner or designee shall develop the approved project in conformance with the plans approved by the Planning Commission on September 12, 2012, in accordance with these Conditions of Approval.

Any deviation from the approved site plan, floor plans, elevations, materials, colors, landscape plan, or other approved submittal shall require that, prior to the issuance of building permits, the owner or designee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the owner or designee shall be required to apply for review and obtain approval of the Planning Commission, in accordance with the Zoning Ordinance. **(P)**

2. Conditional Use Permit No. UP12-0017 and Minor Site Development Permit No. MS12-0034 shall become null and void if the project is not commenced within two years from the date of approval, pursuant to Section 64.06(2) of the Zoning Ordinance of the City of Milpitas. If the project requires the issuance of a building permit, the project shall be deemed to have commenced when the date of the building permit is issued and/or a foundation is completed, if a foundation is a part of the project. If the project does not require the issuance of a building permit, the project shall be deemed to have commenced when dedication of any land or easement is required or complies with all legal requirements necessary to commence the use, or obtains an occupancy permit, whichever is sooner. **(P)**

Pursuant to Section 64.06(1), the owner or designee shall have the right to request an extension of Conditional Use Permit No. UP11-0026 if said request is made, filed and approved by the Planning Commission prior to expiration dates set forth herein. **(P)**

3. The project shall be operated in accordance with all local, state and federal regulations. **(P)**
4. Private Job Account - If at the time of application for building permit there is a project job account balance due to the City for recovery of review fees, the review of permits will not be initiated until the balance is paid in full and there is at least 25% of the initial account balance maintained. **(P)**
5. The project shall improve the aesthetics (landscaping) along the on-ramp and the project as follows:
 - a. Prior to building permit issuance, the owner or designee shall submit a detailed landscaping and irrigation plan for off-site landscaping improvements that will

include ground cover and 36-inch box trees to the approval of the Planning Division..

- b. Prior to building permit issuance, the owner or designee shall submit plans for landscaping in the public right-of-way, and obtain proper review and approval from Cal-Trans.
 - c. Prior to building permit final, all landscaping and irrigation shall be installed and in good working order. All landscaping and irrigation shall be maintained in perpetuity.
6. The applicant shall replace the existing chain link fence with a new vinyl chain link fence with slats that shall be painted to match the building or install creeping vines to conceal the enclosure.
7. The applicant shall paint panel antennas for all three carriers and monopole to earth tone color that complements the surrounding buildings to minimize visual impacts. Changes in the above listed colors shall be reviewed and approved by the Planning Division prior to application and or any future repainting of the structures for maintenance.
8. The applicant shall perform annual inspections and perform necessary maintenance to ensure that the project maintains an aesthetic appearance in perpetuity.

Planning = (P)

Engineering = (E)

Fire = (F)

Building = (B)



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
 1000 JACKLIN ROAD
 MILPITAS, CA 95035
 SANTA CLARA COUNTY

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
0	04/20/12	ISSUED FOR 90% ZONING	NL
1	06/07/12	ISSUED FOR 100% ZONING	CBK

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

TITLE SHEET

SHEET NUMBER: **T-1** REVISION: 1

NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193

MONOPOLE

1000 JACKLIN ROAD
 MILPITAS, CA 95035
 SANTA CLARA COUNTY
 LATITUDE: 37° 26' 46.0428" N (37.446123)
 LONGITUDE: 121° 53' 31.2324" W (-121.892009)
 SF BAY MARKET



REVIEWED
 By Tarun Sethi at 1:40 pm, Jun 12, 2012

SHEET	DESCRIPTION
T-1	TITLE SHEET
T-2	BATTERY SPECIFICATIONS & DATA CHART
T-3	ANTENNA SPECIFICATIONS & SCHEDULE
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
A-1	SITE PLAN
A-2	EXISTING EQUIPMENT & ANTENNA PLAN
A-2A	EQUIPMENT PLAN (DURING)
A-3	PROPOSED EQUIPMENT & ANTENNA PLAN
A-4	EXISTING & PROPOSED EAST ELEVATION
A-5	EXISTING & PROPOSED NORTH ELEVATION
A-6	EQUIPMENT DETAILS
A-7	ANTENNA & RRU MOUNTING DETAILS
RF-1	ANTENNA & CABLE COLOR CODING DETAILS
F-1	FIBER PLAN
F-2	FIBER ONE-LINE DIAGRAM
F-3	FIBER INSTALLATION DETAILS
E-1	ELECTRICAL SINGLE-LINE DIAGRAM & NOTES
E-2	DC POWER DIAGRAM & POWER CONDUIT DETAILS
E-3	POWER & TELCO DETAILS
G-1	GROUNDING ANTENNA ONE-LINE
G-2	SCHEMATIC GROUNDING PLAN
G-3	GROUNDING DETAILS

NOTE: DRAWING SCALE IS 24"x36" ON ALL SHEETS

SHEET INDEX

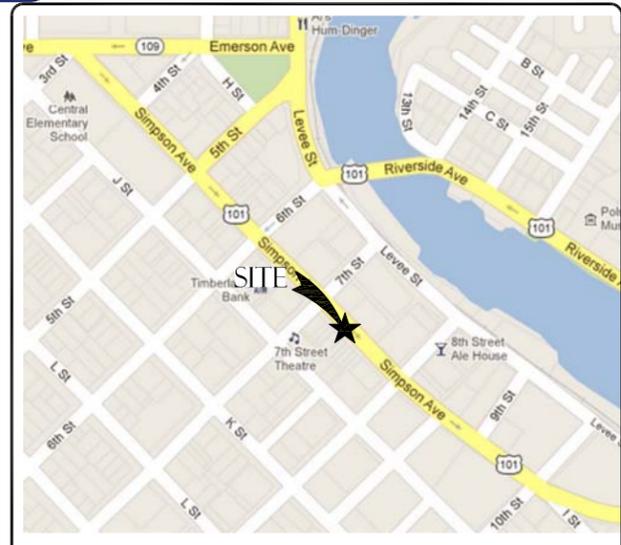
CALIFORNIA STATE CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- CALIFORNIA ADMINISTRATIVE CODE (INCL TITLE 24 & 25)
- 2010 CALIFORNIA BUILDING CODE
- CITY/COUNTY ORDINANCES
- BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
- 2010 MECHANICAL CALIFORNIA CODE
- ANSI/EIA-222-F LIFE SAFETY CODE NFPA-101
- 2010 CALIFORNIA PLUMBING CODE
- 2010 CALIFORNIA ELECTRICAL CODE
- 2010 LOCAL BUILDING CODE

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.



SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY

(3) EXISTING PANEL ANTENNA TO BE HOT-SWAPPED WITH (3) NEW PANEL ANTENNAS (1 ANTENNAS PER SECTOR), (6) RRU (2 PER SECTOR) AND (6) FILTER (2 PER SECTOR) TO BE INSTALLED AND MOUNTED ON EXISTING MONOPOLE.

(3) EXISTING EQUIPMENT CABINETS TO BE REMOVED & (2) NEW EQUIPMENT CABINETS AND (1) GPS ANTENNA TO BE INSTALLED AT EXISTING CONCRETE PAD

PHASE 1 - (1) EQUIPMENT CABINET TO BE INSTALLED
 PHASE 2 - (3) EQUIPMENT CABINETS TO BE REMOVED AND (1) EQUIPMENT CABINET TO BE INSTALLED

ANTENNA TRANSMISSION LINES FROM EQUIPMENT CABINETS TO ANTENNAS - PAINTED TO MATCH AS APPLICABLE PER PLANS.

INSTALL FIBER AND AAV (NID) EQUIPMENT
 EXISTING 200AMP POWER SERVICE TO REMAIN

PROJECT DESCRIPTION

APPLICANT:
 SPRINT
 6580 SPRINT PARKWAY
 OVERLAND PARK, KA 66251
 CONTACT: JASON OSBORNE
 PH: (415) 559-2121

PROPERTY INFORMATION:
 PROPERTY OWNER: RICHARD J. & JEAN L. KEHRIG, 1989 LIVING TRUST
 ADDRESS: 1000 JACKLIN RD. MILPITAS, CA 95035
 CONTACT: TBD
 PH: TBD

ZONING CLASSIFICATION: TBD
 BUILDING CODE: 2010 CBC
 CONSTRUCTION TYPE: TBD
 OCCUPANCY: UNMANNED TELECOM FACILITY
 JURISDICTION: CITY OF MILPITAS
 CURRENT USE: TELECOMMUNICATIONS FACILITY
 PROPOSED USE: TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S):
 028-05-015

PROJECT SUMMARY

ARCHITECT:
 THOMAS HOLLAND
 PACIFIC TELECOM SERVICES, LLC
 115 SANSOME STREET, SUITE 1400B
 SAN FRANCISCO, CA 94104

ZONING MANAGER
 REALCOM ASSOCIATES, LLC
 3825 HOPYARD ROAD, SUITE #182
 PLEASANTON, CA 94588
 CONTACT: JASON OSBORNE
 PH: (415) 559-2121

LEASING MANAGER
 REALCOM ASSOCIATES, LLC
 3825 HOPYARD ROAD, SUITE #182
 PLEASANTON, CA 94588
 CONTACT: TONY GABRIELLI
 PH: (925) 303-0197

CONSTRUCTION MANAGER
 CROWN CASTLE CM
 CONTACT: TERRY LEE BURCHERS
 PH: (925) 286-4875

POWER COMPANY:
 PACIFIC GAS AND ELECTRIC
 PH: (800) 743-5000

TELCO COMPANY:
 AT&T
 PH: T.B.D.

EQUIPMENT PROVIDER:
 SAMSUNG TELECOMMUNICATIONS AMERICA (STA)
 1301 EAST LOOKOUT DRIVE
 RICHARDSON, TX 75082
 PH: (972) 761-7000

PROJECT TEAM

At all new services & grounding trenches, provide "WARNING" tape at 12" below grade.

DIG ALERT
 "CALL BEFORE YOU DIG"
 1-800-227-2600

UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA AND NEVADA

CODE BLOCK

APPROVAL	SIGNATURE	DATE
PROJECT MANAGER		
CONSTRUCTION MANAGER		
RF ENGINEER		
SITE ACQUISITION		
PLANNING CONSULTANT		
PROPERTY OWNER		
SPRINT REPRESENTATIVE		

SIGNATURE BLOCK

VICINITY MAP

SAN JOSE INTERNATIONAL AIRPORT 1701 AIRPORT BOULEVARD

HEAD SOUTH-EAST ON TERMINAL DR 0.1 MI
 CONTINUE ONTO AIRPORT BLVD 0.7 MI
 SLIGHT LEFT TO STAY ON AIRPORT BLVD 30 FT
 SLIGHT RIGHT TO STAY ON AIRPORT BLVD 0.2 MI
 SLIGHT RIGHT TOWARDS SKYPORT DR 0.2 MI
 CONTINUE STRAIGHT ONTO SKYPORT DR 0.3 MI
 TURN RIGHT ONTO N 1ST ST 0.8 MI
 TURN RIGHT TO MERGE ONTO I-880 N TOWARDS OAKLAND 4.7 MI
 TAKE EXIT 8B FOR CALAVERAS BLVD/CA-237 TOWARDS MOUNTAIN VIEW 0.4 MI
 TURN RIGHT ONTO CA-237 E/W CALAVERAS BLVD 0.5 MI
 TURN LEFT ONTO N ABEL ST 1.0 MI
 CONTINUE ONTO JACKLIN RD
 DESTINATION WILL BE ON THE RIGHT 1.0 MI

1000 JACKLIN RD MILPITAS, CA 95035, USA

DRIVING DIRECTIONS



PACIFIC TELECOM SERVICES, LLC
115 SANSOME STREET, SUITE 1400B
SAN FRANCISCO, CA 94104

PROJECT INFORMATION:

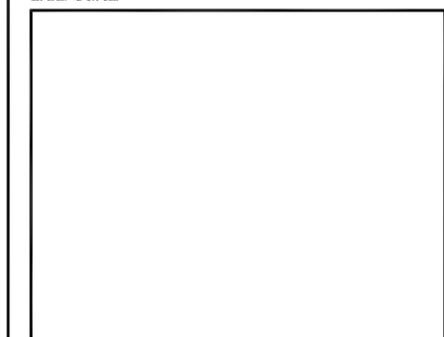
NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
1000 JACKLIN ROAD
MILPITAS, CA 95035
SANTA CLARA COUNTY

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
0	04/20/12	ISSUED FOR 90% ZONING	NL
1	06/07/12	ISSUED FOR 100% ZONING	CBK

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSURE



SHEET TITLE:

BATTERY SPECIFICATIONS & DATA CHART

SHEET NUMBER:

T-2

REVISION:

1

CFC CHAPTER 6 COMPLIANCE					
TOTAL ELECTROLYTE = 16 BATTERIES X 2.49 GAL./BATTERY = 39.84 GAL (SINCE <50 GAL OF ELECTROLYTE, CFC CHAPTER 6, SECTION 608 NOT APPLICABLE)					
BATTERY INFORMATION			BATTERY ELECTROLYTE DATA-12V MONOBLOCKS		
BATTERY MODEL	TOTAL # OF BATTERY UNITS INSTALLED	TOTAL ELECTROLYTE VOLUME(GAL.)- PER UNIT	TOTAL ELECTROLYTE WEIGHT (LBS.)- PER UNIT	% SULFURIC ACID BY VOLUME	ACID VOLUME/UNIT ELECTROLYTE VOLUME PER UNIT
NARADA POWER SOURCE CO. MODEL # 12NDT190 (+85-571) 288-27013	16	2.49 GAL.	27.249 LBS.	58%=1.45 GAL./2.49 GAL.	
% SULFURIC ACID BY WEIGHT = TOTAL ACID WEIGHT / TOTAL ELECTROLYTE WEIGHT		TOTAL SULPHURIC VOLUME (GAL.) = TOTAL UNITS X ELECTROLYTE VOLUME/UNITS	TOTAL SULPHURIC WEIGHT (LBS.) = TOTAL UNITS X ACID WEIGHT/UNIT		
40.8% = 11.124 LBS. / 27.249 LBS.		23.2 GAL. = 16 UNITS X 1.45 GAL./UNIT	177.98 LBS. = 16 UNITS X 11.124 LBS.		

BATTERY DATA CHART 2

stored energy solutions for a demanding world

Model: 12NDT190

Charging Procedures

Application	Temperature	Set Point	Alleviate Range	Max. Charge Current
Cycle	25°C	2.40	2.35-2.40	0.25C
Standby	25°C	2.25	2.23-2.27	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage (V/Cell)	1.80	1.70	1.55	1.30
Discharge Current (A)	0.20C(A)	0.20C(A)@84	0.50C(A)@1.00	1.00C(A)@1.00

NARADA POWER SOURCE CO., LTD. 72 JINGGUAN ROAD, CHONGSHAN TOWN, LIANAN ECONOMIC DEVELOPMENT ZONE, ZHEJIANG, CHINA 311305
Tel: (+86-571) 28827012 / 28827013 Fax: (+86-571) 23657180 Email: Int@narada.biz Website: www.naradabattery.com

stored energy solutions for a demanding world

Model: 12NDT190

Specifications

Parameter	Value
Battery Model	12NDT190
Nominal Voltage	12V
Rated Capacity	190Ah (10 hour rate) @ 1.80V/cell @ 25°C (77°F)
Typical Weight	60.5kg
Internal Resistance	Approx 3.8mΩ
Temperature Ranges	Operation (maximum): -40°C to 55°C (-40°F to 131°F) Operation (recommended): 15°C to 25°C (59°F to 77°F) Storage: -20°C to 40°C (-4°F to 104°F)
Floating Voltage	2.25V/cell @ 25°C (77°F)
Recommended Maximum Charging Current Limit	47.5A
Equalize and Cycle Service	2.35V-2.40V/cell @ 25°C (77°F)
Self Discharge	The residual capacity is above 90% after 90 days storage @ 25°C (77°F)
Terminal	M6 Female
Terminal Hardware Torque	10 ± 1.0Nm
Container Material	ABS (V0 optional)

Constant Current Discharge Characteristics Units: Amperes (25°C / 77°F)

Current (A)	1.60V	1.40V	1.20V	1.00V	0.80V	0.60V	0.40V	0.20V
1.60V	532	334	220	162	132	79.4	44.2	42.8
1.40V	498	328	216	161	131	75.7	33.9	42.7
1.20V	460	322	213	160	130	75.4	33.7	42.6
1.00V	426	308	205	157	129	74.7	33.4	42.4
0.80V	410	293	193	150	125	73.2	32.6	42.0
0.60V	374	265	184	144	122	71.3	31.6	41.5
0.40V	355	252	179	138	119	69.4	30.7	41.0
0.20V	339	249	178	138	119	69.4	30.7	41.0

Discharge Data with Constant Power Units: Watts per cell (25°C / 77°F)

Power (W)	1.60V	1.40V	1.20V	1.00V	0.80V	0.60V	0.40V	0.20V
1.60V	924	636	395	317	269	159	113	88.1
1.40V	877	600	392	315	268	159	113	87.8
1.20V	846	586	389	314	267	158	112	87.6
1.00V	781	566	382	308	265	157	112	87.1
0.80V	718	535	379	300	256	154	110	86.0
0.60V	697	507	359	291	249	150	108	85.0
0.40V	683	483	351	285	244	147	105	83.9



PRODUCTS	CONDITIONS TO AVOID
	Prohibit smoking, sparks, etc. from battery charging area. Avoid mixing acid with other chemicals.

SECTION 7: CONTROL MEASURES

1. Store lead acid batteries with adequate ventilation. Room ventilation is required for batteries utilized for standby power generation. Never recharge batteries in an unventilated, enclosed space. Remove vent caps. Follow shipping and handling instructions that are applicable to the battery type. To avoid damage to terminals and seals, do not double-stack industrial batteries.

STEPS TO TAKE IN CASE OF LEAKS OR SPILLS

If sulfuric acid is spilled from a battery, neutralize the acid with sodium bicarbonate (baking soda), sodium carbon (soda ash), or calcium oxide (lime). Flush the area with water directed to the sewage system. Do not allow unneutralized acid into the sewage system.

WASTE DISPOSAL METHOD:

Neutralized acid may be flushed down the sewer. Spent batteries must be treated as hazardous waste and disposed of according to local, state, and federal regulations. A copy of this material safety data must be supplied to any scrap dealer or secondary smelter with battery.

ELECTRICAL SAFETY

Due to the battery's low internal resistance and high cover density, high levels of short circuit can be developed across the battery terminals. Do not rest tools or cables on the battery. Use insulated tools only. Follow all installation instruction and diagrams when installing or maintaining battery systems.

SECTION 8: HEALTH HAZARD DATA

LEAD: The toxic effects of lead are accumulative and slow to appear. It affects the kidneys, reproductive, and central nervous system. The symptoms of lead overexposure are anemia, vomiting, headache, stomach pain (lead colic), dizziness, loss of appetite, and muscle and joint pain. Exposure to lead from a battery most often occurs during lead reclaim operations through the breathing or ingestion of lead dust and fumes. THIS DATA MUST BE PASSED TO ANY SCRAP OR SMELTER WHEN A BATTERY IS REBUILT.

SULFURIC ACID: Sulfuric acid is a strong corrosive. Contact with acid can cause severe burns on the skin and in the eyes. Ingestion of sulfuric acid will cause GI tract burns. Acid can be released if the battery case is damaged or if the vents are tampered with.

FIBERGLASS SEPARATOR: Fibrous glass is an irritant of the upper respiratory tract, skin and eyes. For exposure up to 10F/DC use MSA Comfort with type H filter. Above 10F/DC up to 50F/DC use Ultra-Twin with type H filter.

NTP or OSHA does not consider this product carcinogenic.

NARADA POWER SOURCE CO., LTD.
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Tel: (+86-571) 28827012 / 28827013 Fax: (+86-571) 23657180
Email: Int@narada.biz Website: www.naradabattery.com



MATERIAL SAFETY DATA SHEET

Jan. 15, 2010

SECTION 1: PRODUCTS AND MANUFACTURE

Product: Valve Regulated Lead Acid Battery (VRLA Battery)

Manufacturer: NARADA POWER SOURCE CO., LTD.

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SECTION 2: HAZARDOUS COMPONENTS

COMMERICAL NAME: BATTERIES WITH ABSORBED ELECTROLYTE, WET, NON-SPILLABLE
TECHNICAL NAME: BATTERIES CONTAINING A SOLUTION OF SULPHURIC ACID AND DISTILLED WATER, ABSORBED IN SEPARATORS

COMPONENTS	%WEIGHT	TLV	LD50 ORAL	LC50 INHALATION	LC50 CONTACT
Lead (Pb, PbO ₂ , PbSO ₄)	About 70%	-	(500) mg/kg	-	-
Sulfuric Acid DILUTED SULPHURIC ACID - H ₂ SO ₄	About 20%	1 mg/m ³	(2140) mg/kg	-	-
Fiberglass Separator	About 5%	-	-	-	-
ABS or PP	About 5%	-	-	-	-

SECTION 3: PHYSICAL DATA

COMPONENTS	DENSITY	MELTING POINT	SOLUBILITY (g/L)	ODOR	APPEARANCE
Lead	11.34	327.4°C (Boiling)	None	None	Shiny-Gray Metal
Lead Sulfate	6.2	1079°C (Boiling)	40 mg/l (15°C)	None	White Powder
Lead Dioxide	8.4	290°C (Boiling)	None	None	Brown Powder
Sulfuric Acid	About 1.3	About 114°C (Boiling)	100%	Acidic	Clear Colorless Liquid
Fiberglass Sep.	-	-	SLIGHT	TOXIC	WHITE FIBROUS GLASS
ABS or PP	-	-	NONE	NO ODOR	SOLID

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SECTION 9: SULFURIC ACID PRECAUTIONS

INHALATION: Acid mist formation process may cause respiratory irritation, remove from exposure and apply oxygen if breathing is difficult.

SKIN CONTACT: Acid may cause irritation, burns or ulceration. Flush with plenty of soap and water, remove contaminated clothing, and see physician if contact area is large or if blisters form.

EYE CONTACT: Acid may cause severe irritation, burns, cornea damage and blindness. Call physician immediately and flush with water until physician arrives.

INGESTION: Acid may cause irritation of mouth, throat, esophagus and stomach. Call physician. If patient is conscious, flush mouth with water, have the patient drink milk or sodium bicarbonate solution.

DO NOT GIVE ANYTHING TO AN UNCONSCIOUS PERSON.

SECTION 10: TRANSPORTATION REGULATIONS

Acceptable modes of transportation: air, rail, road and water.

Batteries must be protected so as to prevent short circuit and must be securely packed and marked on the container "Non-Spillable".

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SECTION 11: PROTECTION

EXPOSURE	PROTECTION	COMMENTS
SKIN	Rubber gloves, Apron, Safety shoes	Protective equipment must be worn if battery is cracked or otherwise damaged.
RESPIRATORY	Respirator (for lead)	A respirator should be worn during reclaim operations if the TLV is exceeded.
EYES	Safety goggles, Face Shield	

SECTION 12: FLAMMABILITY DATA

COMPONENTS	FLASHPOINT	EXPLOSIVE LIMITS	COMMENTS
Lead	None	None	
Sulfuric Acid	None	None	
Hydrogen	259°C	4% - 74.2%	Sealed batteries can emit hydrogen only if over charged (float voltage > 2.4 VPC). The gas enters the air through the vent caps. To avoid the chance of a fire or explosion, keep sparks and other sources of ignition away from the battery. Extinguishing Media: Dry chemical, foam, CO ₂ .
Fiberglass Sep.	-	-	Toxic vapors may be released. In case of fire, wear self-contained breathing apparatus.
478 Polystyrene	None	-	Temperatures over 300 °C (572°F) may release combustible gases. In case of fire, wear positive pressure self-contained breathing apparatus.

SECTION 13: REACTIVITY DATA

COMPONENT	Lead/lead compounds
STABILITY	Stable
INCOMPATIBILITY	Potassium, carbides, sulfides, peroxides, phosphorus, sulfur
DECOMPOSITION	Oxides of lead and sulfur
PRODUCTS	
CONDITIONS TO AVOID	High temperature, sparks and other sources of ignition
COMPONENT	Sulfuric Acid
STABILITY	Stable at all temperatures
POLYMERIZATION	Will not polymerize
INCOMPATIBILITY	Reactive metals, strong bases, most organic compounds
DECOMPOSITION	Sulfur dioxide, trioxide, hydrogen sulfide, hydrogen

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PROJECT INFORMATION:
 NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
 1000 JACKLIN ROAD
 MILPITAS, CA 95035
 SANTA CLARA COUNTY

ANTENNA SCHEDULE

	SECTOR	TECHNOLOGY	ANTENNA MODEL	RAD CENTER	AZIMUTH	RRU FREQ.	RRU MODEL	NUMBER OF RRU's	No. OF FILTERS	No. OF JUMPERS	JUMPER LENGTH (1/2" DIA)	RET CABLES LENGTH	EFFECTIVE TILT	No. OF HYBRID CABLES	HYBRID CABLE LENGTH (LINEAR FEET)	No. OF COAX CABLES	COAX DIA.	COAX LENGTH
ALPHA SECTOR	A1	800/1900 MHz	1900_800_KMW_65_TYPE_1	43'-0"	0°	800 MHz	RRH-C2	1	1	2	6'	35'-0"	6'	1	150'-0"	N/A	N/A	N/A
						1.9 GHz	RRH-P4	1	0	4	3'		3'					
	A2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A					
	A3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	
BETA SECTOR	B1	800/1900 MHz	P90-15-XLPP-RR	43'-0"	135°	800 MHz	RRH-C2	1	1	2	6'	35'-0"	6'	1	150'-0"	N/A	N/A	N/A
						1.9 GHz	RRH-P4	1	0	4	3'		2'					
	B2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A					
	B3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	
BETA SECTOR	C1	800/1900 MHz	1900_800_KMW_65_TYPE_1	43'-0"	240°	800 MHz	RRH-C2	1	1	2	6'	35'-0"	6'	1	150'-0"	N/A	N/A	N/A
						1.9 GHz	RRH-P4	1	0	4	3'		0'					
	C2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A					
	C3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	

NOTE: THE INFORMATION PROVIDED ABOVE MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING/ INSTALLING ANY EQUIPMENT

sec A and sec C
KMW
ET-X-TS-70-15-62-18-
iR

ANTENNA SCHEDULE 5

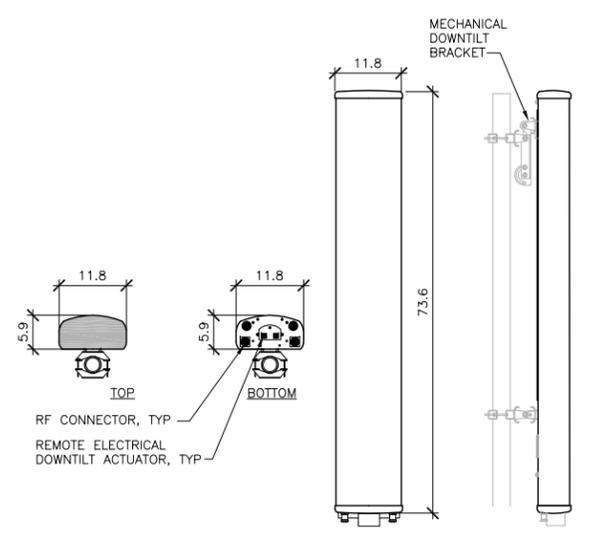
REV.	DATE	DESCRIPTION	INITIALS
0	04/20/12	ISSUED FOR 90% ZONING	NL
1	06/07/12	ISSUED FOR 100% ZONING	CBK

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:
 SHEET TITLE:
ANTENNA SPECIFICATIONS & SCHEDULE

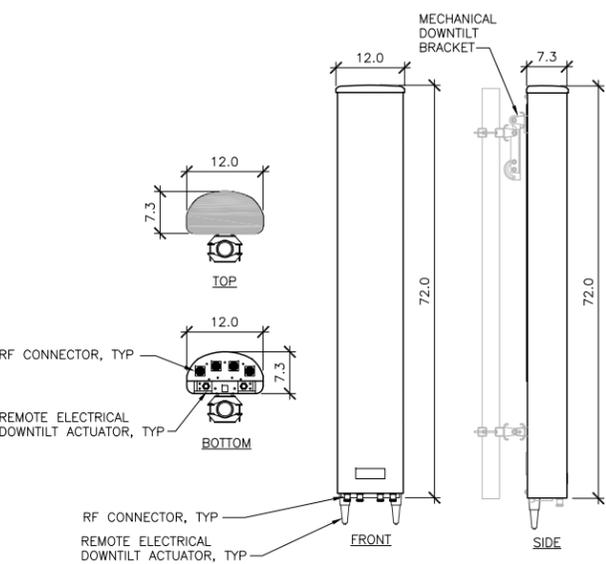
SHEET NUMBER: **T-3** REVISION: 1

1900_800_KMW_65_TYPE_1
 DIMENSIONS, HxWxD: 1829x300x150mm (73.8"x11.8"x5.9")
 WEIGHT, OUT PRE-MOUNTED BRACKETS: 41.9 lbs
 CONNECTOR: (6) 7/16 DIN FEMALE



ANTENNA SPECIFICATIONS 4

POWERWAVE P90-15-XLPP-RR
 DIMENSIONS, HxWxD: 1828x305x185mm (72"x12"x7.3")
 WEIGHT, WITH PRE-MOUNTED BRACKETS: 64.0 lbs
 CONNECTOR: (4) 7/16 DIN FEMALE



ANTENNA SPECIFICATIONS 3

NOT USED 2

NOT USED 1

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL BUILDING CODE, THE LATEST EDITION AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL CONSTRUCT SITE IN ACCORDANCE WITH THESE DRAWINGS AND SPRINT INTEGRATED CONSTRUCTION STANDARDS FOR WIRELESS SITES (LATEST REVISION). THE SPECIFICATION IS THE RULING DOCUMENT AND ANY DISCREPANCIES BETWEEN THE SPECIFICATION AND THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OF FIELD CONDITIONS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM AUTHORIZED REPRESENTATIVE OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST CONSTRUCTION SKILLS AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH THE SUPERINTENDENT OF BUILDINGS & GROUNDS AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATELY REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.
- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., MUST BE CLEARLY UNDERSTOOD THAT REINFORCING STEEL SHALL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES (UNLESS NOTED OTHERWISE). LOCATIONS OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT.
- REPAIR ALL EXISTING WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND IN WITH ADJACENT SURFACES.
- SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS.
- KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.
- MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF THE ENGINEER.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH JURISDICTIONAL OR STATE AND LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH LOCAL REGULATORY AUTHORITIES.
- LIGHT SHADED LINES AND NOTES REPRESENT WORK PREVIOUSLY DONE. DARK SHADED LINES AND NOTES REPRESENT THE SCOPE OF WORK FOR THIS PROJECT. CONTRACTOR SHALL VERIFY IF EXISTING CONSTRUCTION IS COMPLETE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND/OR WIRING CERTIFICATES REQUIRED FOR THE ELECTRICAL SERVICE UPGRADE. IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY COORDINATION AND SCHEDULING WITH THE SERVING ELECTRICAL UTILITY AND LOCAL INSPECTION AUTHORITIES.

ELECTRICAL NOTES

- ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
- ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL EXISTING CONDITIONS OF ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTAL OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:
 - A. UL – UNDERWRITERS LABORATORIES
 - B. NEC – NATIONAL ELECTRICAL CODE
 - C. NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
 - D. OSHA – OCCUPATIONAL SAFETY AND HEALTH ACT
 - E. SBC – STANDARD BUILDING CODE
 - F. NFPA – NATIONAL FIRE CODES
- DO NOT SCALE ELECTRICAL DRAWINGS, REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED.
- EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
- CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
- CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
- MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
- OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTH BY SPRINT.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
- THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
- ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
- PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
- DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO NOTES AND REQUIREMENTS 'EXCAVATION, AND BACKFILLING.
- MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURERS CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
- THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
- ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED – NO SUBSTITUTIONS.
- RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 – 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND

- PROVIDE TWO SEPARATE PULL STRINGS – 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITZ ZINC' OR 'GOLD GALV'.
- SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN/THHN INSULATION, 600 VOLT, COLOR CODED. UNLESS SPECIFIED DIFFERENT ON DRAWINGS.
- CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
- SERVICE: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY. OWNER OR OWNERS AGENT WILL APPLY FOR POWER.
- TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.
- ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH.
- CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOM".
- ALL BOLTS SHALL BE STAINLESS STEEL.

ANTENNA & COAX NOTES

- VERIFY EACH COAXIAL CABLE LENGTH, DIAMETER, ROUTING, COLOR CODING AND ALL APPURTENANCES WITH SAMSUNG.
- THE MAXIMUM COAXIAL CABLE LENGTH AND CORRESPONDING COAXIAL CABLE DIAMETER HAS BEEN ESTIMATED ON SHEET A-4. THIS CABLE LENGTH IS APPROXIMATE, AND IS NOT TO BE USED FOR FABRICATION OR CONSTRUCTION. ACTUAL ANTENNA CABLE LENGTH(S) MAY VARY FROM ESTIMATED MAXIMUM LENGTH AND MUST BE VERIFIED. COAXIAL CABLE SHALL BE PROVIDED BY SAMSUNG.
- ALL MAIN CABLES SHALL UTILIZE GROUND KITS, GROUNDED AS FOLLOWS:
 - A. NEAR ANTENNA RAD CENTER ELEVATION,
 - B. MIDDLE OF TOWER (MID-HEIGHT OF ANTENNA), IF CABLE RUN IS OVER 200',
 - C. BOTTOM OF TOWER,
 - D. AT MASTER GROUND BAR 3'-0" FROM MMBS-BBU CABINET.
- ALL TOP JUMPERS SHALL BE LENGTHS AS SHOWN, SUPPLIED BY SAMSUNG, AND INSTALLED BY CONTRACTOR.
- ALL MAIN CABLES SHALL BE COLOR CODED AS SHOWN ON SHEET RF-1 AND IN ACCORDANCE WITH SPRINT SPECIFICATIONS.
- BANDING SHALL BE IN ACCORDANCE WITH SHEET RF-1 AND AS FOLLOWS:
 - A. MAIN LINE COLOR BANDS SHALL BE 2" WIDE. MAINTAIN 1" SPACING BETWEEN COLORS.
 - B. FREQUENCY COLOR BANDS SHALL BE 2" WIDE WITH NO SPACE BETWEEN COLORS.
 - C. JUMPER COLOR BANDS SHALL BE 1" WIDE. WITH 1" SPACE.
 - D. START COLOR BANDS 2" BEYOND WEATHERPROOFING.
 - E. START SELECTOR COLOR NEXT TO END CONNECTORS.
- FINAL COAXIAL ANTENNA CABLE SIZES SHALL BE DETERMINED BY SAMSUNG RF ENGINEER. SEE ANTENNA SCHEDULE SHEET A-4.
- SEE CONSTRUCTION MANAGER FOR ANTENNA SUPPORT ASSEMBLY TYPE.
- ALL COAXIAL CABLE WILL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE AT DISTANCES NOT TO EXCEED 3' OR THE CABLE MANUFACTURERS SPECIFICATIONS WHICHEVER IS LESS, WITH HARDWARE SPECIFIED IN THE COAXIAL CABLE ROUTING DETAILS OF THE SUPPLIED STRUCTURAL REPORT.
- PROVIDE AT LEAST 6" OF SLACK IN THE MAIN COAXIAL CABLES AT THE ANTENNA MOUNTING ELEVATION TO PROVIDE FOR FUTURE CONNECTOR REPLACEMENT.



PACIFIC TELECOM SERVICES, LLC
115 SANSOME STREET, SUITE 1400B
SAN FRANCISCO, CA 94104

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
1000 JACKLIN ROAD
MILPITAS, CA 95035
SANTA CLARA COUNTY

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
0	04/20/12	ISSUED FOR 90% ZONING	NL
1	06/07/12	ISSUED FOR 100% ZONING	CBK
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET			

LICENSURE

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER: GN-1 REVISION: 1



PROJECT INFORMATION:

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 1000 JACKLIN ROAD
 MILPITAS, CA 95035
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LICENSURE:

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A-1

REVISION:

1

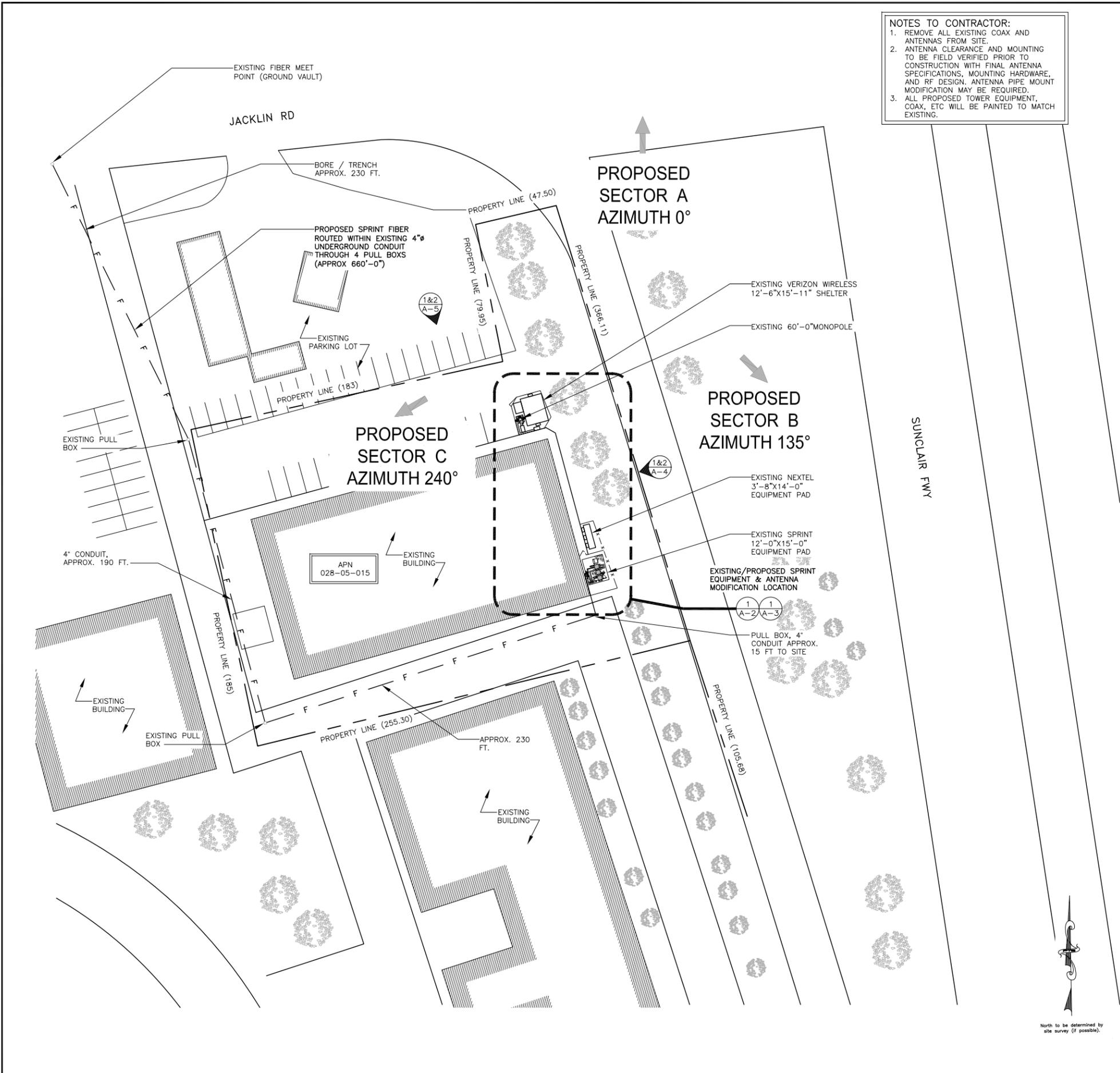
LEGEND

---	SUBJECT BOUNDARY LINE
- - - - -	RIGHT-OF-WAY CENTERLINE
---	RIGHT-OF-WAY LINE
- - - - -	ADJACENT BOUNDARY LINE
---	SECTIONAL BREAKDOWN LINE
COAX	COAXIAL CABLE LINE
FIBER	FIBER OPTIC CABLE LINE
OHP	OVERHEAD POWER LINE
UGP	BURIED POWER LINE
GAS	BURIED GAS LINE
OHT	OVERHEAD TELEPHONE LINE
UGT	BURIED TELEPHONE LINE
W	BURIED WATER LINE
SS	BURIED SANITARY SEWER
SD	BURIED STORM DRAIN
---	DITCH LINE/FLOW LINE
---	ROCK RETAINING WALL
---	VEGETATION LINE
X - X - X - X - X - X	CHAIN LINK FENCE
□ - □ - □ - □ - □ - □	WOOD FENCE
X - X - X - X - X - X - X - X	BARBED WIRE/WIRE FENCE
△	TRANSFORMER
⊗	LIGHT STANDARD
⊠	POWER VAULT
⊞	UTILITY BOX
⊕	UTILITY POLE
←	POLE GUY WIRE
⊞	GAS VALVE
⊞	GAS METER
⊞	TELEPHONE VAULT
⊞	TELEPHONE-RISER
⊞	FIRE HYDRANT
⊞	GATE VALVE
⊞	WATER METER
⊞	FIRE STAND PIPE
⊞	CATCH BASIN, TYPE I
⊞	CATCH BASIN, TYPE II
⊞	SIGN
⊞	BOLLARD
⊞	MAIL BOX
234.21	SPOT ELEVATION

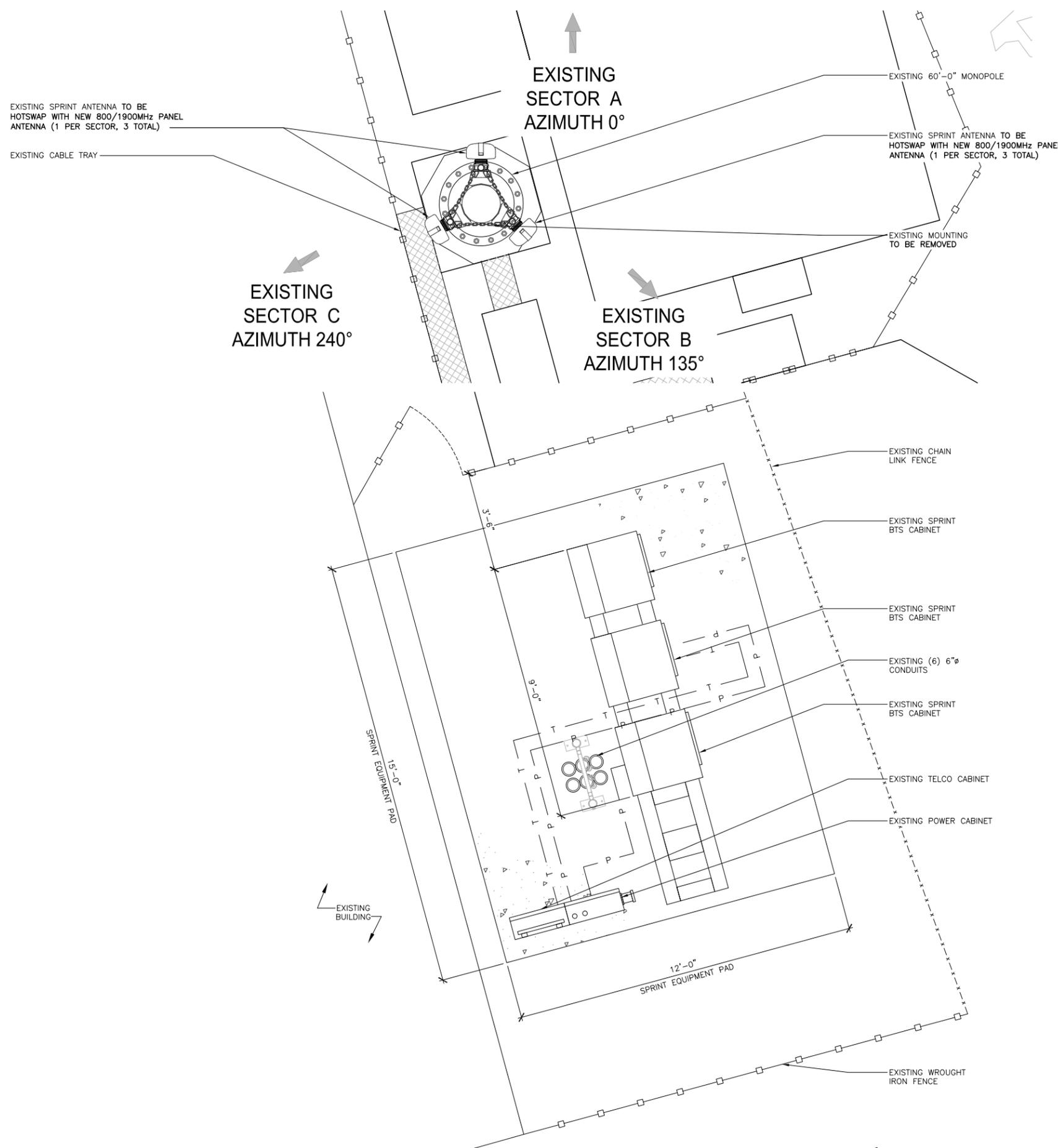
ABBREVIATIONS

A/C	AIR CONDITIONING	LBS	POUNDS
AGL	ABOVE GROUND LEVEL	MAX	MAXIMUM
APPROX	APPROXIMATELY	MECH	MECHANICAL
BLDG	BUILDING	MTL	METAL
BLK	BLOCKING	MFR	MANUFACTURE
CLG	CEILING	MGR	MANAGER
CLR	CLEAR	MIN	MINIMUM
CONC	CONCRETE	MISC	MISCELLANEOUS
CONST	CONSTRUCTION	NA	NOT APPLICABLE
CONT	CONTINUOUS	NIC	NOT IN CONTRACT
		NTS	NOT TO SCALE
DBL	DOUBLE	OC	ON CENTER
DIA	DIAMETER	OD	OUTSIDE DIAMETER
DIAG	DIAGONAL	PLYWD	PLYWOOD
DN	DOWN	PROJ	PROJECT
DET	DETAIL	PROP	PROPERTY
DWG	DRAWING	PT	PRESSURE TREATED
EA	EACH	REQ	REQUIRED
ELEV	ELEVATION	RM	ROOM
ELEC	ELECTRICAL	RO	ROUGH OPENING
EQ	EQUAL	RRH	RADIO REMOTE HEAD
EQUIP	EQUIPMENT	SHT	SHEET
EXT	EXTERIOR	SIM	SIMILAR
FIN	FINISH	SPEC	SPECIFICATION
FLUOR	FLOURESCENT	SF	SQUARE FOOT
FLR	FLOOR	SS	STAINLESS STEEL
FT	FOOT	STL	STEEL
GA	GAUGE	STRUCT	STRUCTURAL
GALV	GALVANIZED	STD	STUD
GC	GENERAL CONTRACTOR	SUSP	SUSPENDED
GRND	GROUND	THRU	THROUGH
GYP BD	GYP SUM WALL BOARD	TMA	TOWER MOUNT AMPLIFIER
		TNG	TINNED
HORZ	HORIZONTAL	TYP	TYPICAL
HR	HOUR	UNO	UNLESS NOTED OTHERWISE
HT	HEIGHT	VERT	VERTICAL
HVAC	HEATING VENTILATION AIR CONDITIONING	VIF	VERIFY IN FIELD
ID	INSIDE DIAMETER	W/	WITH
IN	INCH	W/O	WITHOUT
INFO	INFORMATION	WP	WATER PROOF
INSUL	INSULATION		
INT	INTERIOR		
IBC	INTERNATIONAL BUILDING CODE		

NOTES TO CONTRACTOR:
 1. REMOVE ALL EXISTING COAX AND ANTENNAS FROM SITE.
 2. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.
 3. ALL PROPOSED TOWER EQUIPMENT, COAX, ETC WILL BE PAINTED TO MATCH EXISTING.



24"x36" SCALE: 1" = 30'-0"
 11"x17" SCALE: 1" = 60'-0"



EXISTING SPRINT ANTENNA TO BE
HOTSWAP WITH NEW 800/1900MHz PANEL
ANTENNA (1 PER SECTOR, 3 TOTAL)

EXISTING CABLE TRAY

EXISTING
SECTOR A
AZIMUTH 0°

EXISTING 60'-0" MONOPOLE

EXISTING SPRINT ANTENNA TO BE
HOTSWAP WITH NEW 800/1900MHz PANEL
ANTENNA (1 PER SECTOR, 3 TOTAL)

EXISTING MOUNTING
TO BE REMOVED

EXISTING
SECTOR C
AZIMUTH 240°

EXISTING
SECTOR B
AZIMUTH 135°

EXISTING CHAIN
LINK FENCE

EXISTING SPRINT
BTS CABINET

EXISTING SPRINT
BTS CABINET

EXISTING (6) 6"Ø
CONDUITS

EXISTING SPRINT
BTS CABINET

EXISTING TELCO CABINET

EXISTING POWER CABINET

SPRINT EQUIPMENT PAD
15'-0"

SPRINT EQUIPMENT PAD
12'-0"

EXISTING
BUILDING

EXISTING WROUGHT
IRON FENCE



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MILPITAS, CA 95035
SANTA CLARA COUNTY

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LICENSURE:

SHEET TITLE:
EXISTING EQUIPMENT
& ANTENNA PLAN

SHEET NUMBER: **A-2** REVISION: 1

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"

EXISTING EQUIPMENT & ANTENNA PLAN | 1



PROJECT INFORMATION:

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LICENSURE:

SHEET TITLE:

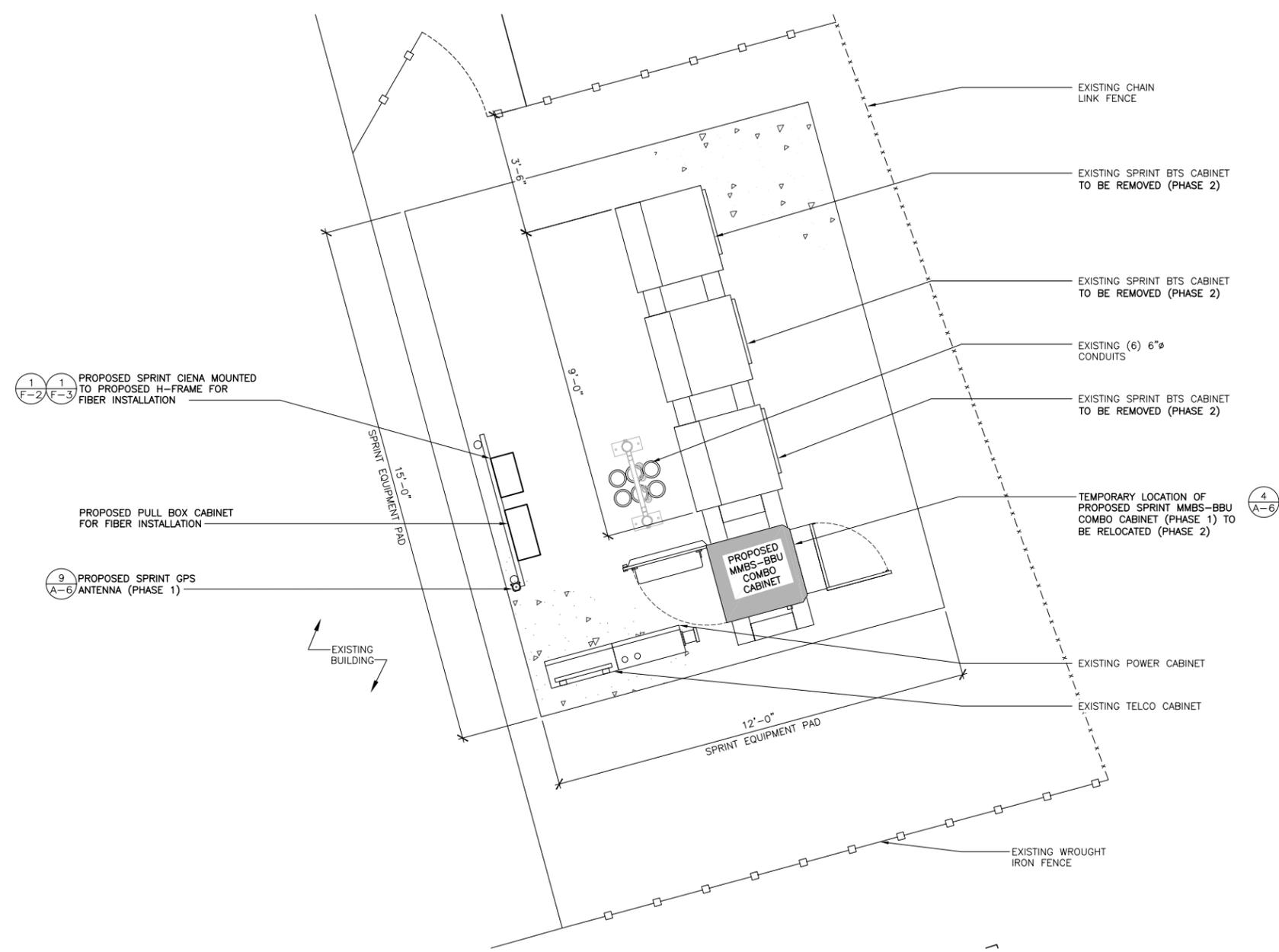
EQUIPMENT PLAN (DURING)

SHEET NUMBER:

A-2A

REVISION:

1

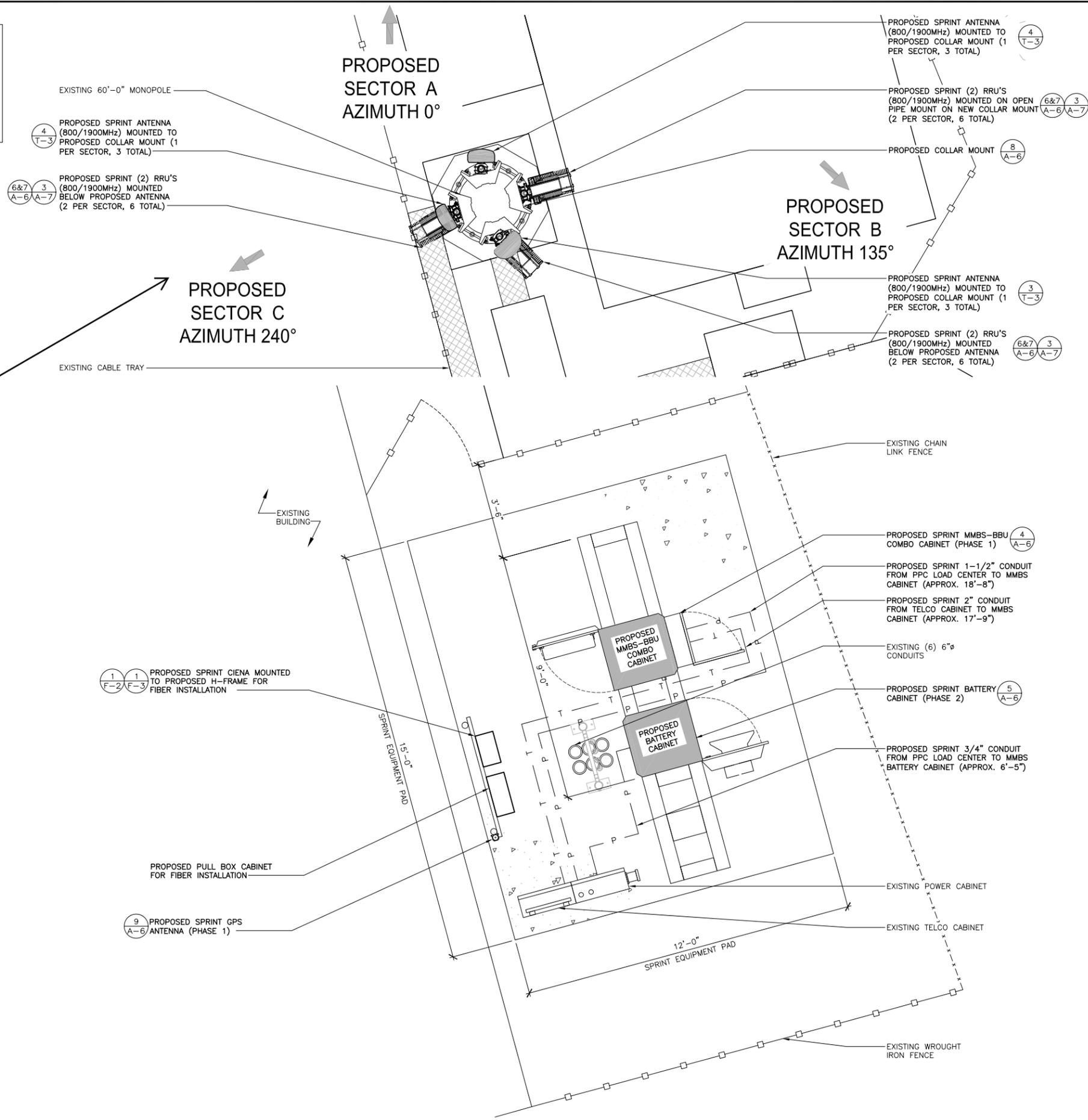


24"x36" SCALE: 1/2" = 1'-0"
 11"x17" SCALE: 1/4" = 1'-0"
 2' 1' 0" 2'

EQUIPMENT PLAN (DURING) 1

NOTES TO CONTRACTOR:
 1. REMOVE ALL EXISTING COAX AND ANTENNAS FROM SITE.
 2. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.
 3. ALL PROPOSED TOWER EQUIPMENT, COAX, ETC WILL BE PAINTED TO MATCH EXISTING.

Hot swaps not approved
 T-rm design required for the interim



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LICENSURE

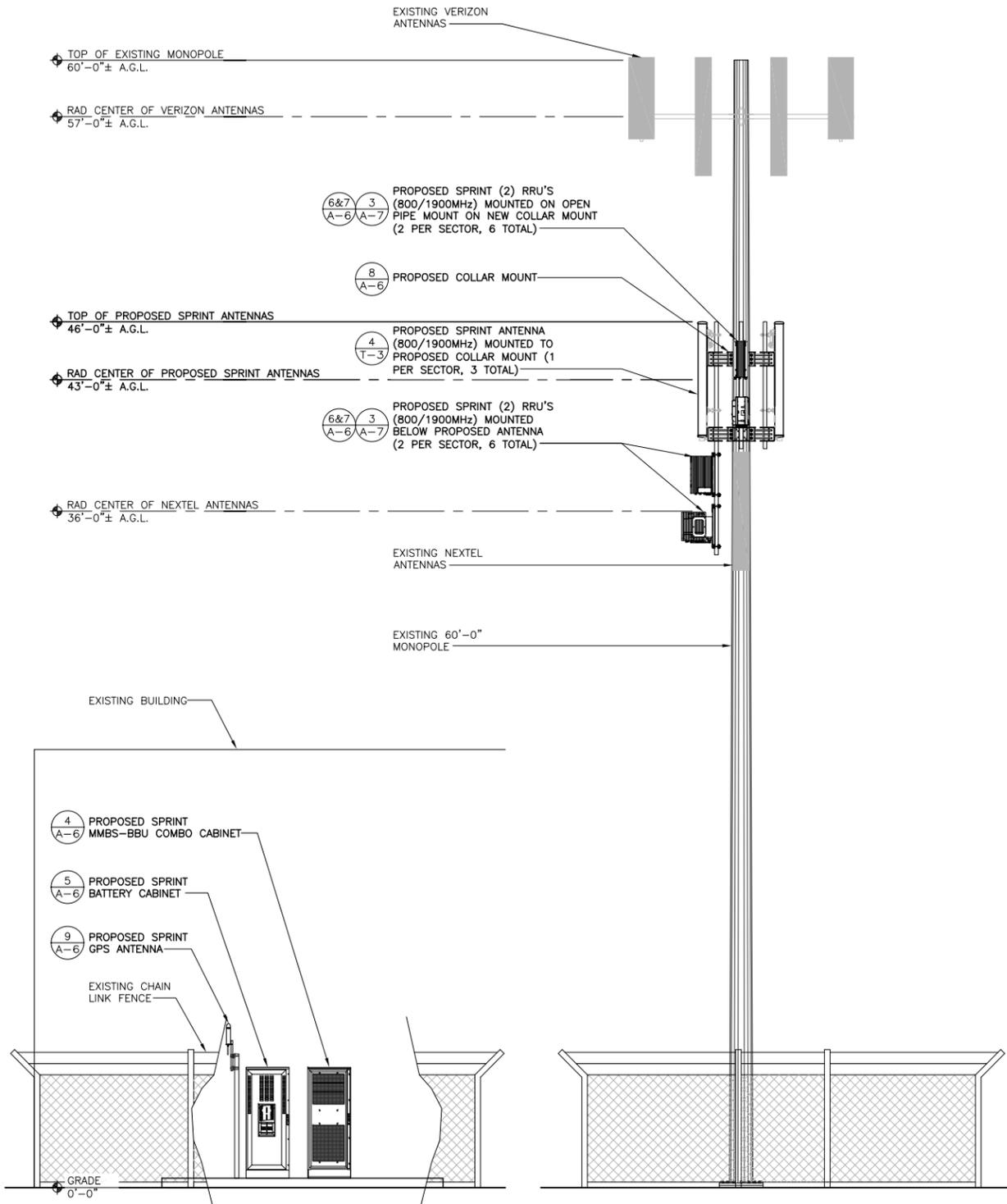
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PROPOSED EQUIPMENT & ANTENNA PLAN

SHEET NUMBER: **A-3** REVISION: **1**

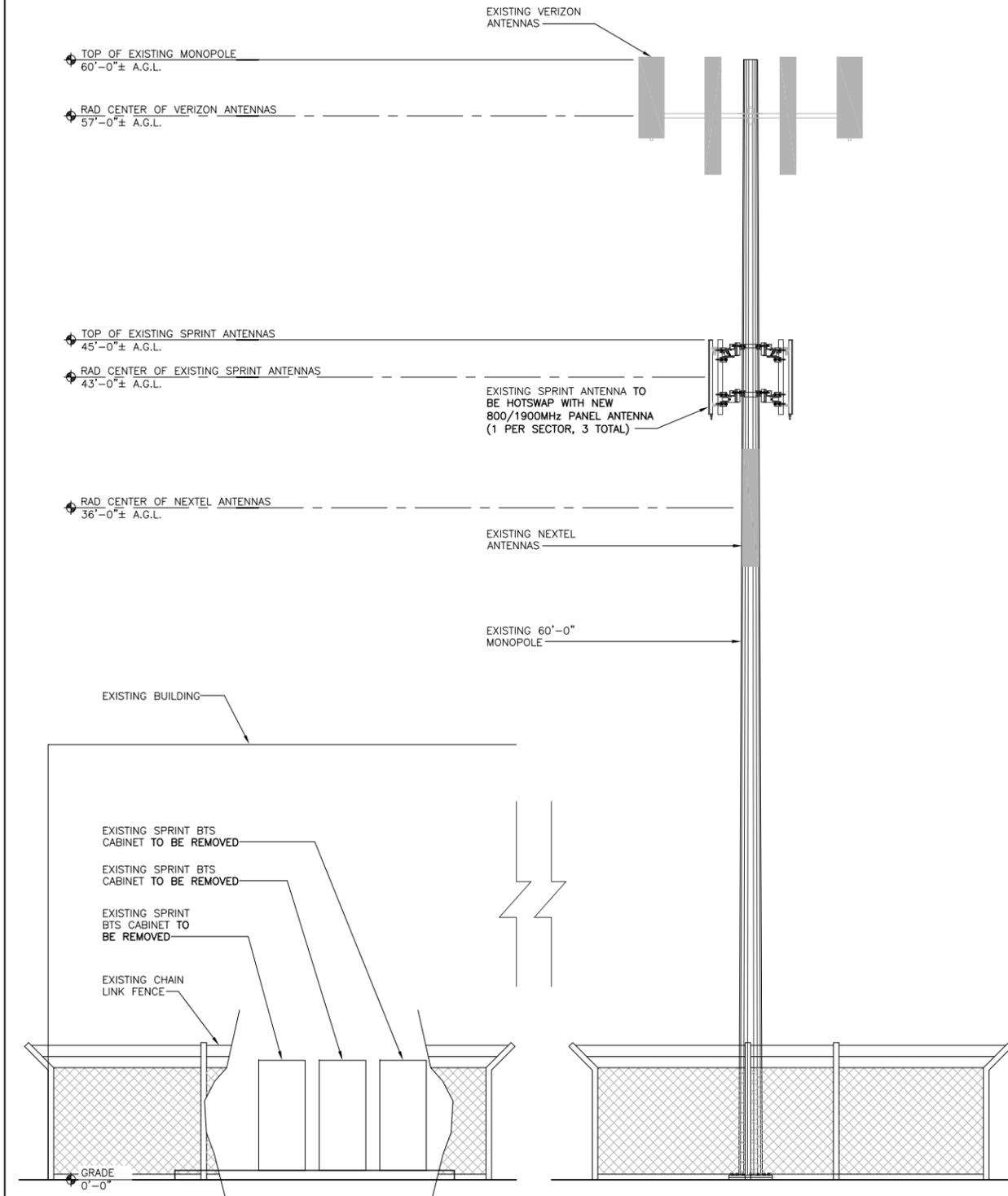
24"x36" SCALE: 1/2" = 1'-0"
 11"x17" SCALE: 1/4" = 1'-0"

PROPOSED EQUIPMENT & ANTENNA PLAN | 1

NOTES TO CONTRACTOR:
 1. REMOVE ALL EXISTING COAX AND ANTENNAS FROM SITE.
 2. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.
 3. ALL PROPOSED TOWER EQUIPMENT, COAX, ETC WILL BE PAINTED TO MATCH EXISTING.



PROPOSED EAST ELEVATION 2



EXISTING EAST ELEVATION 1



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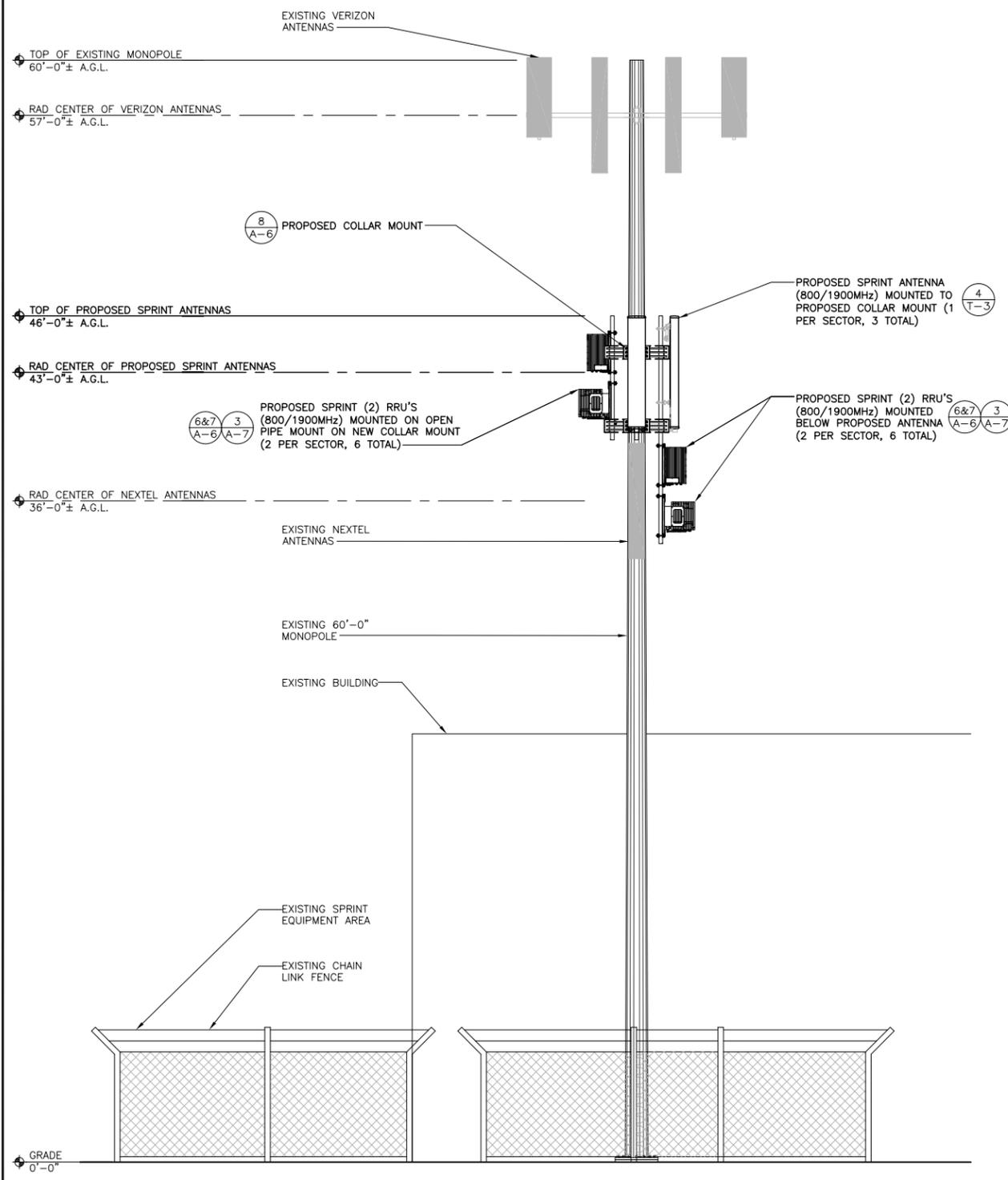
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE

SHEET TITLE:
 EXISTING & PROPOSED EAST ELEVATION

SHEET NUMBER: **A-4** REVISION: 1

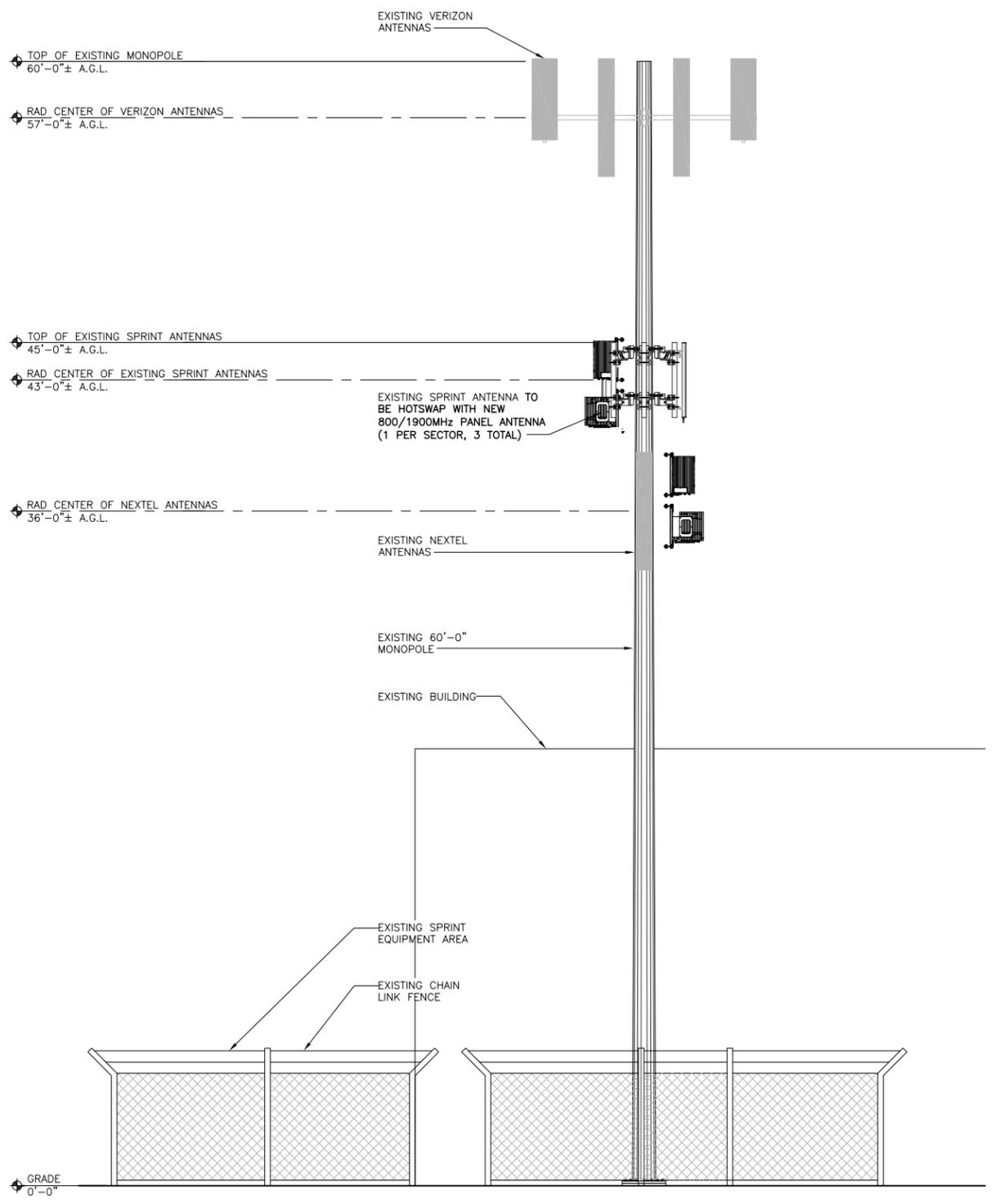
NOTES TO CONTRACTOR:
 1. REMOVE ALL EXISTING COAX AND ANTENNAS FROM SITE.
 2. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.
 3. ALL PROPOSED TOWER EQUIPMENT, COAX, ETC WILL BE PAINTED TO MATCH EXISTING.



24"x36" SCALE: 1/4" = 1'-0"
 11"x17" SCALE: 1/8" = 1'-0"



PROPOSED NORTH ELEVATION 2



24"x36" SCALE: 1/4" = 1'-0"
 11"x17" SCALE: 1/8" = 1'-0"



EXISTING NORTH ELEVATION 1



PROJECT INFORMATION:
 NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
 1000 JACKLIN ROAD
 MILPITAS, CA 95035
 SANTA CLARA COUNTY

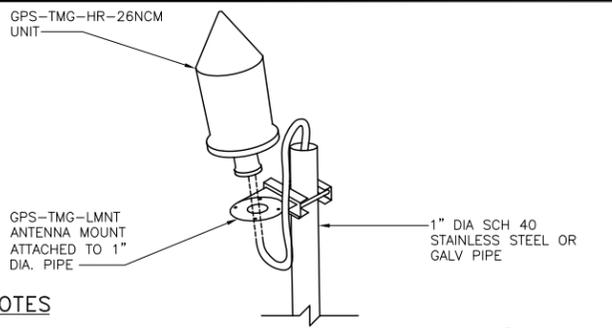
REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
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LICENSURE

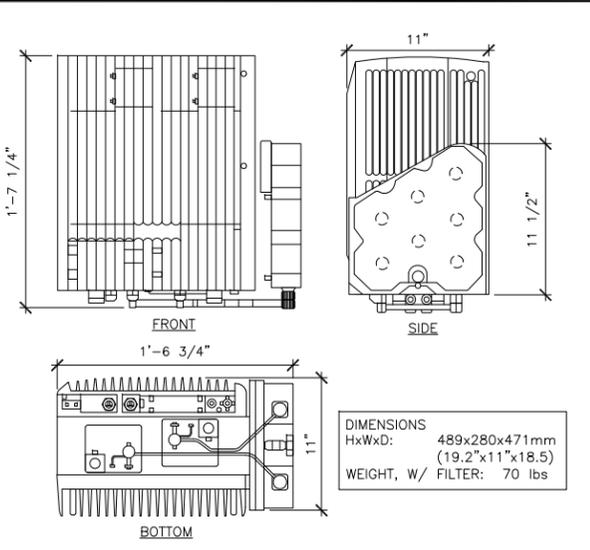
SHEET TITLE:
 EXISTING & PROPOSED NORTH ELEVATION

SHEET NUMBER: **A-5** REVISION: 1

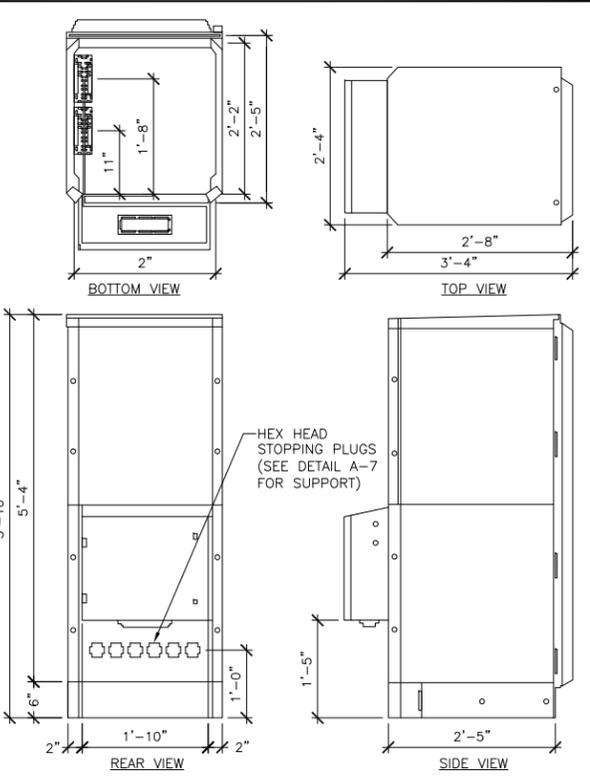


- NOTES**
1. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1" DIAMETER, SCHEDULE 40, GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 18 INCHES, 8'-0" IF MOUNTING TO PROPOSED MMBS-BBU) USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED.
 2. IT IS CRITICAL THAT THE GPS ANTENNA IS MOUNTED SUCH THAT IT IS WITHIN 2 DEGREES OF VERTICAL AND THE BASE OF THE ANTENNA IS WITHIN 2 DEGREES OF LEVEL.
 3. DO NOT SWEEP TEST GPS ANTENNA.
 4. ATTACH GPS MOUNTING PIPE TO PROPOSED MMBS-BBU USING (4) 8MMx15MM SS BOLTS AND (4) 1" PIPE STRAPS. GPS TO BE MOUNTED A MINIMUM OF 2'-0" ABOVE PROPOSED MMBS-BBU CABINET.

GPS ANTENNA MOUNT
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



800 MHz RRU UNIT
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



RADIO CABINET
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

NOTE: SIGN TO BE PERMANENTLY MOUNTED ON DOOR OF RBS CABINET

EMERGENCY SHUT DOWN

FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE, CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NUMBER.

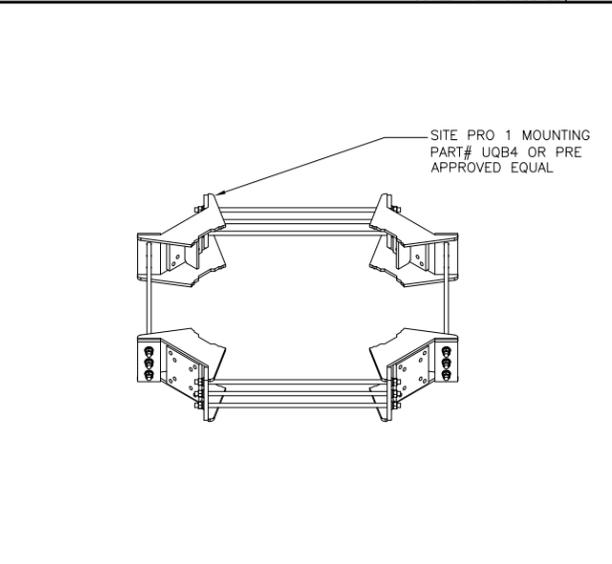
CONTACT PHONE NUMBER:
1-800-859-1400

SITE IDENTIFICATION NUMBER:
877193

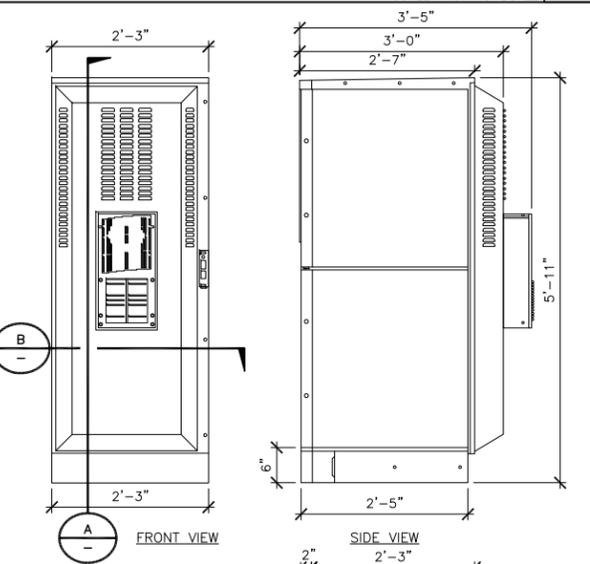
LOCATION OF EQUIPMENT:
 ROOF TOP
 MONOPOLE
 OTHER

THIS EQUIPMENT HAS BATTERY BACKUP:
 YES
 NO

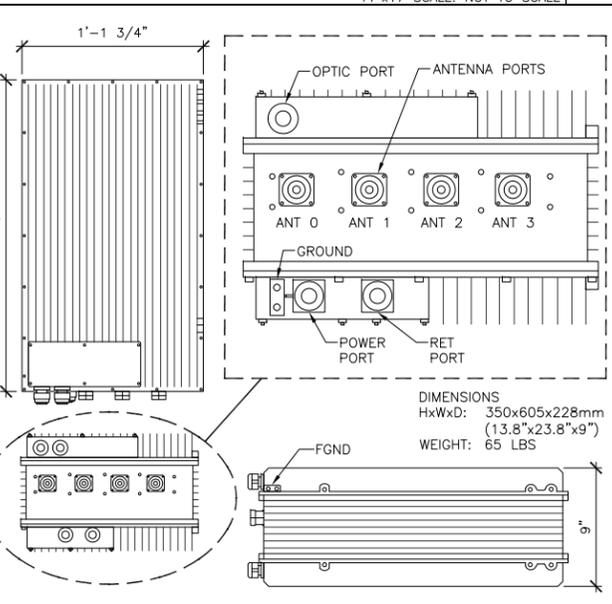
EMERGENCY SHUT-DOWN SIGNAGE
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



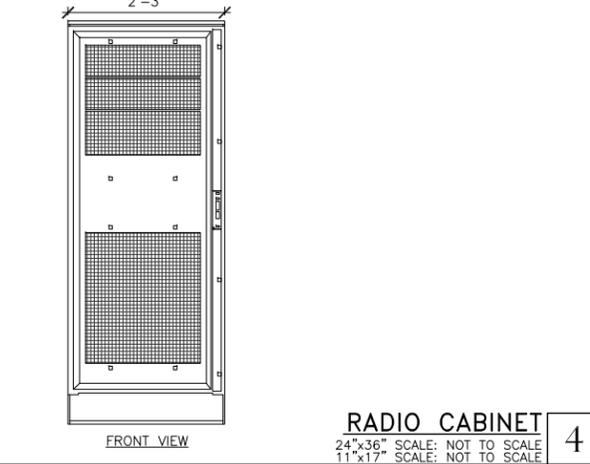
COLLAR MOUNT
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



BATTERY CABINET
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



1900 MHz RRU UNIT
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



RRU MOUNT
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

NOTICE TO WORKERS

RADIO FREQUENCY ANTENNAS ON THIS ROOF. PLEASE EXERCISE CAUTION AROUND ANTENNAS AND OBEY POSTED SIGNS AND/OR MARKINGS. FOR ACCESS TO RESTRICTED AREAS OR FOR FURTHER INFORMATION, PLEASE CALL 1-888-859-1400 (SITE NUMBER: 877193)

IN ACCORDANCE WITH FCC RULES 47 CFR 1.1310

AVISO A TRABAJADORES

EXISTEN ANTENAS DE RADIOFRECUENCIA EN ESTE TECHO. POR FAVOR USE PRECAUCION ALREDEDOR DE LAS ANTENAS Y OBEDEZCA A LAS ZONAS RESTRINGIDAS O PARA OBTENER MAS INFORMACION, LLAME AL TELEFONO 1-888-859-1400 (NUMERO DE SITIO: 877193)

DE ACUERDO A LAS REGLAS DE FCC 47 CFR 1.1310

工作人員注意

此屋宇房頂有射頻天線裝置
在天線範圍四周務請小心,並遵照各已張貼之指示及/或標識行事
如需進入禁區範圍或索取更多資料
請致電1-888-859-1400 此站區號:(877193)

依據 FCC 條例第 47 CFR1.1310 執行

AVISO A TRABAJADORES

工作人員注意

- NOTES:**
1. WARNING SIGN TO BE PERMANENTLY MOUNTED AT ANTENNA LOCATIONS, STAIRWELL SIDE OF THE ROOF ACCESS STAIRWELL, ROOF ACCESS DOOR, IN IN THE FIRE CONTROL ROOM WITHIN PROXIMITY OF THE SHUT-DOWN SIGNAGE AND AS NOTED IN THE PLAN.
 2. SIGN SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS.
 3. SIGNAGE SHALL BE CLEARLY LABELED IN A PHENOLIC LABEL WITH WHITE BACKGROUND AND BLACK LETTERING, SHALL BE READABLE FROM AT LEAST (15) FEET FROM THE SIGN.
 4. CONTRACTOR TO VERIFY WITH THE CARRIER THE CORRECT PHONE NUMBER PRIOR TO SIGN FABRICATION AND INSTALLATION

NOTICE

Radio frequency fields beyond this point may exceed the FCC general public exposure limit.

Obey all posted signs and site guidelines for safety in radio frequency environments.

SITE NO. 877193

RF WARNING SIGNAGE
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

Sprint

SAMSUNG

PTS
PACIFIC TELECOM SERVICES, LLC
115 SANSOME STREET, SUITE 1400B
SAN FRANCISCO, CA 94104

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NETWORK VISION MMBTS LAUNCH

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LICENSURE:

SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER:
A-6

REVISION:
1



PACIFIC TELECOM SERVICES, LLC
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MILPITAS, CA 95035
SANTA CLARA COUNTY

NOT USED 3
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

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LICENSURE:

SHEET TITLE:

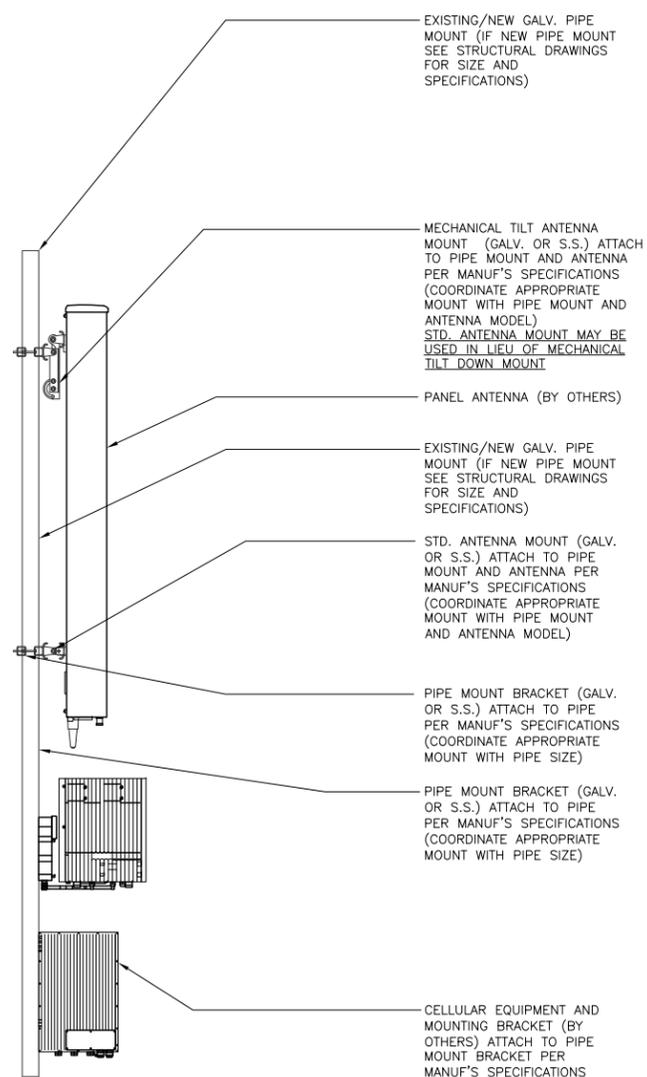
ANTENNA & RRU MOUNTING DETAILS

SHEET NUMBER:

A-7

REVISION:

1



800/1900 MHz ANTENNA & RRU MOUNTING

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

NOT USED 1
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
 1000 JACKLIN ROAD
 MILPITAS, CA 95035
 SANTA CLARA COUNTY

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
0	04/20/12	ISSUED FOR 90% ZONING	NL
1	06/07/12	ISSUED FOR 100% ZONING	CBK

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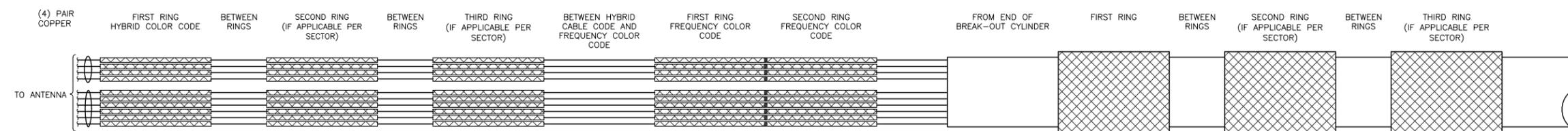
ANTENNA & CABLE
 COLOR CODING DETAILS

SHEET NUMBER:

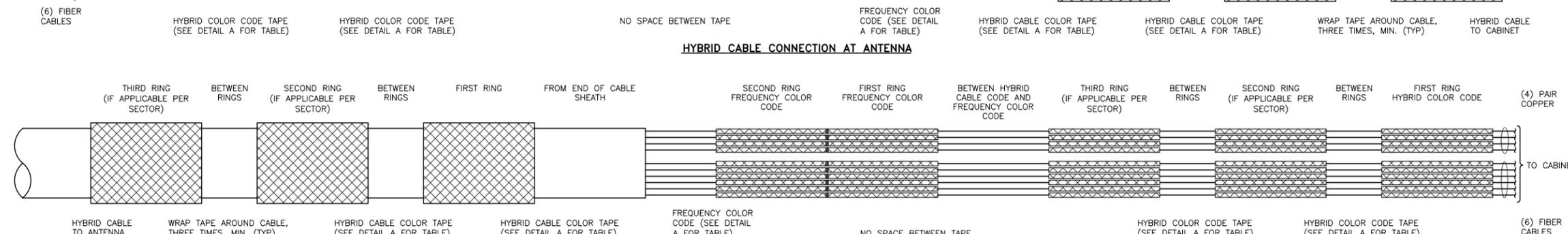
RF-1

REVISION:

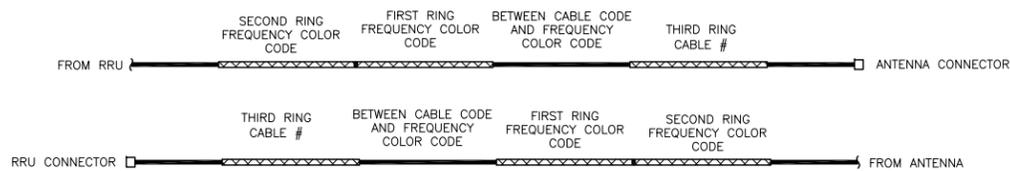
1



HYBRID CABLE CONNECTION AT ANTENNA



HYBRID CABLE CONNECTION AT CABINET



JUMPER CABLE CONNECTION AT RRU AND ANTENNA

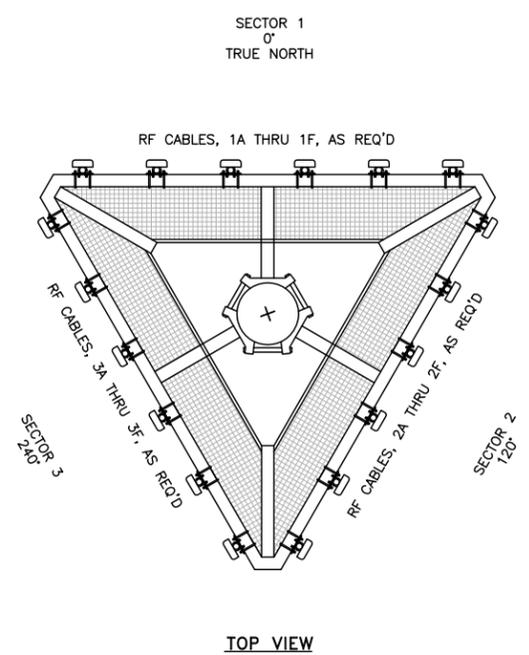
NOTES

- ALL CABLES SHALL BE MARKED AT THE TOP AND BOTTOM WITH 2" COLORED TAPE OR STENCIL TAG. COLOR TAPE SHALL BE OBTAINED FROM GRAYBAR ELECTRIC.
- THE FIRST RING SHALL BE CLOSEST TO THE END OF THE CABLE AND SPACED APPROXIMATELY 2" FROM AN END CONNECTOR, WEATHERPROOFING, OR BREAK-OUT CYLINDER, WITH 1" SPACE BETWEEN EACH RING.
- THE HYBRID CABLE COLOR SHALL BE APPLIED IN ACCORDANCE WITH THE "TYPICAL HYBRID CABLE COLOR CODE" TABLE ABOVE FOR THE RESPECTIVE SECTOR.
- INDIVIDUAL POWER PAIRS AND FIBER CABLES SHALL BE LABELED WITH BOTH THE HYBRID CABLE COLOR FOR THE RESPECTIVE SECTOR AND A FREQUENCY COLOR CODE IN ACCORDANCE WITH THE "FREQUENCY COLOR CODE FOR PAIRS AND FIBER CABLES OF HYBRID CABLE" TABLE ABOVE.
- A 2" GAP SHALL SEPARATE THE HYBRID CABLE COLOR CODE FROM THE FREQUENCY COLOR CODE.
- THE 2" COLOR RINGS FOR THE FREQUENCY CODE SHALL BE PLACED NEXT TO EACH OTHER WITH NO SPACES.
- THE 2" COLORED TAPE(S) SHALL EACH BE WRAPPED A MINIMUM OF 3 TIMES AROUND THE HYBRID CABLE OR INDIVIDUAL CABLES, AND THE TAPE SHALL BE KEPT IN THE SAME LOCATION AS MUCH AS POSSIBLE.
- COLOR BAND ON JUMPERS SHALL BE 1" WIDE WITH A 1" SPACE.

HYBRID CABLE COLOR SCHEME DETAIL

24"x36" SCALE: NOT TO SCALE
 11"x17" SCALE: NOT TO SCALE

3



ANTENNA SECTOR AND CABLE COLOR DEFINITION DETAIL

24"x36" SCALE: NOT TO SCALE
 11"x17" SCALE: NOT TO SCALE

2

FREQUENCY COLOR CODE	FIRST RING	SECOND RING
800 MHz	YELLOW	GREEN
1900 MHz	YELLOW	RED
1.6 GHz	YELLOW	BROWN

SECTOR	FIRST RING	SECOND RING	THIRD RING
1	GREEN	NO TAPE	NO TAPE
2	GREEN	GREEN	NO TAPE
3	GREEN	GREEN	GREEN

FREQUENCY	ANTENNA PORT	RRU PORT	CABLE COLOR
800 MHz	RET	RET	N/A
	800 MHz +45°	ANT 1	WHITE
	800 MHz -45°	ANT 0	BLUE
1900 MHz	PCS1 -45°	ANT 0	BLUE
	PCS1 +45°	ANT 1	WHITE
	PCS2 -45°	ANT 2	GREEN
	PCS2 +45°	ANT 3	BROWN
	RET	RET	RED
1.6 GHz	PCS1 -45°	ANT 0	BLUE
	PCS1 +45°	ANT 1	WHITE
	RET	RET	RED

HYBRID AND JUMPER CABLES COLOR CODING

24"x36" SCALE: NOT TO SCALE
 11"x17" SCALE: NOT TO SCALE

1



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SANTA CLARA COUNTY

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SHEET TITLE:

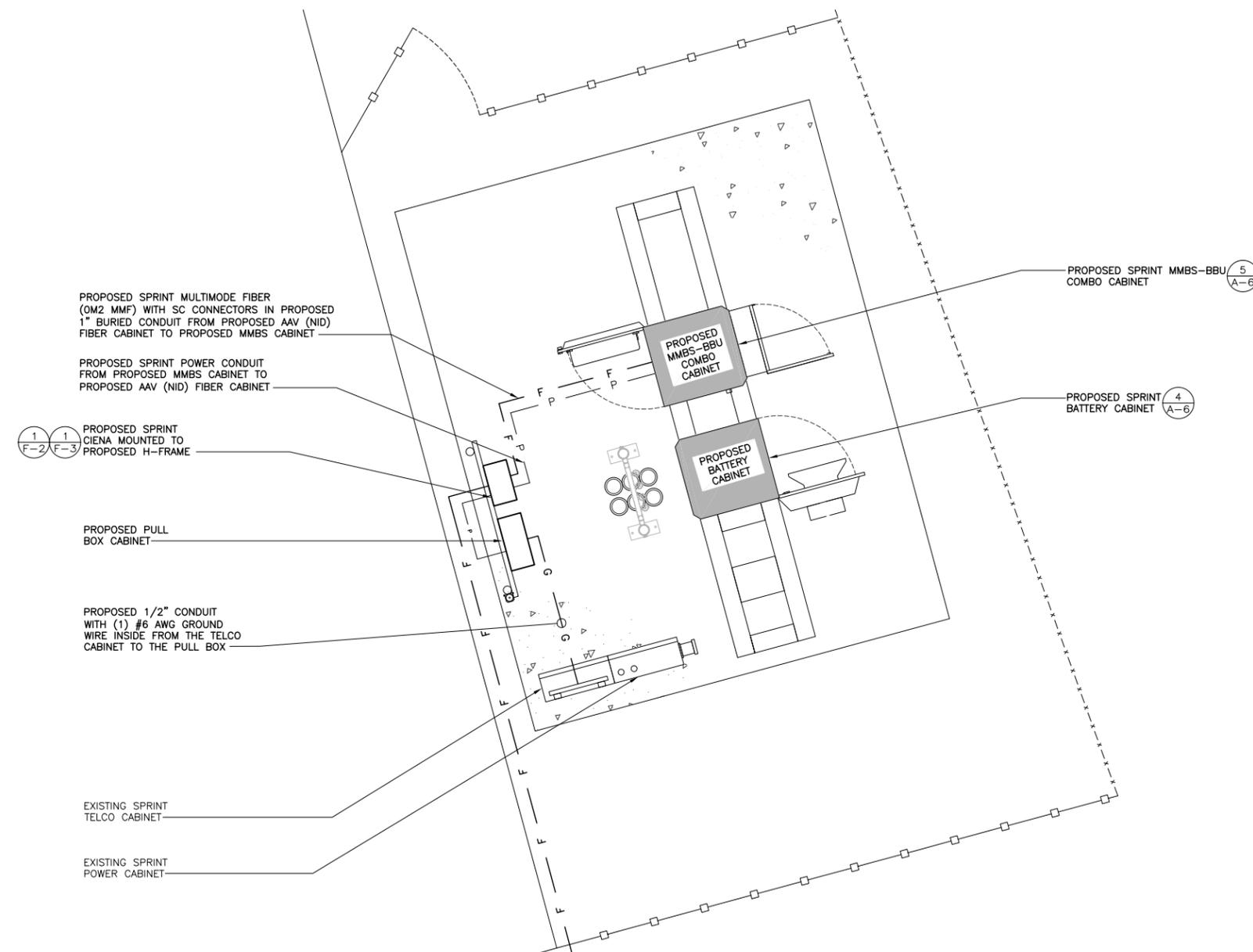
FIBER PLAN

SHEET NUMBER:

F-1

REVISION:

1



NOTES

- ALL ELECTRICAL EQUIPMENT AND CONTROLLING DEVICES SHALL BE PROVIDED WITH LAMBI COLD NAMEPLATES, INDICATING THE CIRCUITS ORIGIN AND ALL EQUIPMENT TERMINATIONS
- CONTRACTOR SHALL SUPPLY BREAKERS, CONDUITS AND CIRCUIT CONDUCTORS, AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH MANUFACTURER SPECIFICATIONS.
- FOR TYPICAL TRENCH DETAIL SEE SHEET F-3, DETAIL 3.



North to be determined by
site survey (if possible).

FIBER PLAN | 1

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



PROJECT INFORMATION:

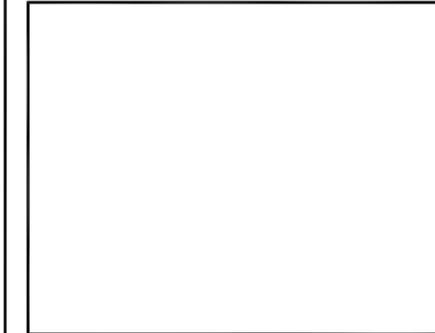
NETWORK VISION MMBTS LAUNCH
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LICENSURE:



SHEET TITLE:

FIBER ONE-LINE DIAGRAM

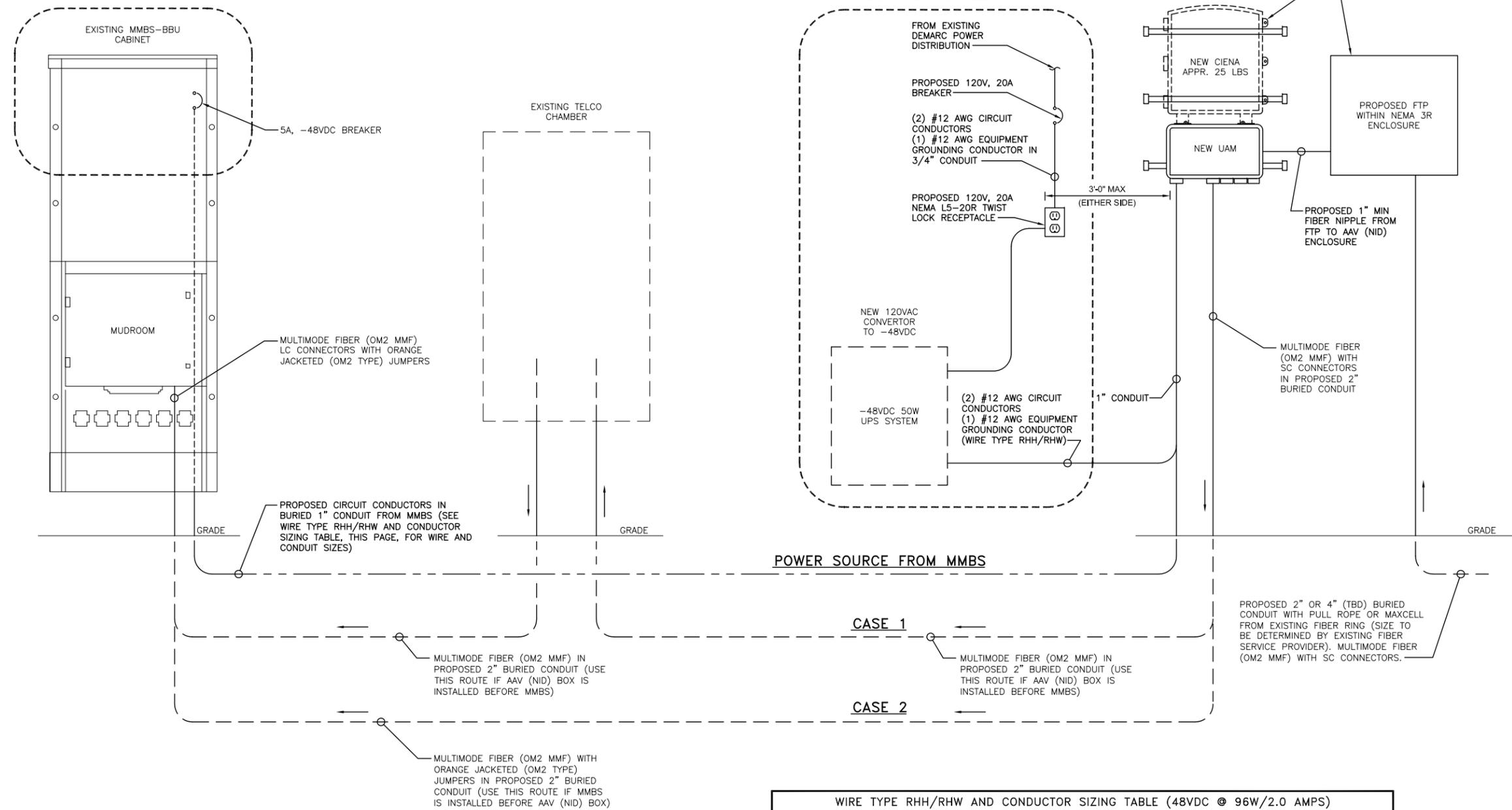
SHEET NUMBER:

F-2

REVISION:

1

FOR INDOOR AAV (NID)
 ALTERNATE POWER
 SOURCE INSTALLATION



WIRE TYPE RHH/RHW AND CONDUCTOR SIZING TABLE (48VDC @ 96W/2.0 AMPS)

DISTANCE (FT)	0'-180'	180'-280'	280'-460'	460'-720'
CIRCUIT CONDUCTOR SIZE	(2) #12 AWG	(2) #10 AWG	(2) #8 AWG	(2) #6 AWG
GND CONDUCTOR SIZE	(1) #12 AWG	(1) #12 AWG	(1) #12 AWG	(1) #10 AWG
CONDUIT SIZE	1"	1"	1"	1"

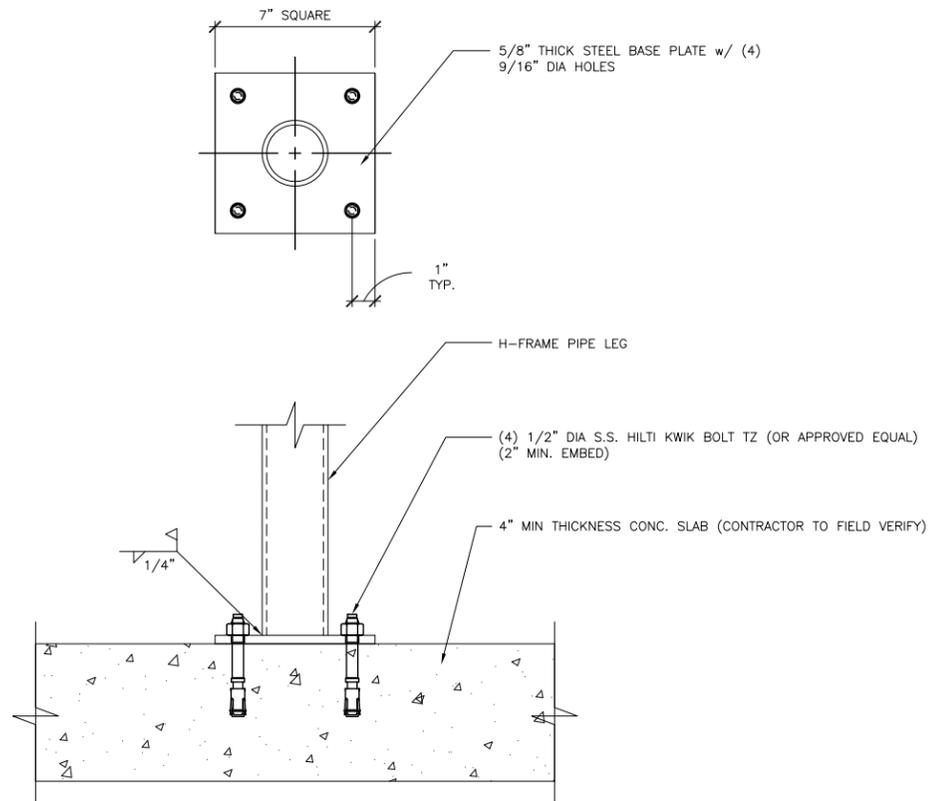
NOTES

1. CONTRACTOR SHALL FOLLOW ALL LOCAL MUNICIPAL CODES FOR CONDUIT SPECIFICATION AND INSTALLATION.
2. ALL UNISTRUT ENDS SHALL BE COLD-GALVANIZED AND CAPPED.
3. ALL INTERIOR CONDUITS SHALL BE EMT.
4. ALL ABOVE GROUND CONDUIT SHALL BE RIGID.
5. CASE 1 - FIBER PATH TO BE USED IF MMBS DOES NOT EXIST AND FIBER ARRIVES FIRST.
6. CASE 2 - FIBER PATH TO BE USED IF MMBS EXISTS AND FIBER IS ADDED AFTER MMBS IS ESTABLISHED.

FIBER ONE-LINE DIAGRAM

24"x36" SCALE: NOT TO SCALE
 11"x17" SCALE: NOT TO SCALE

1

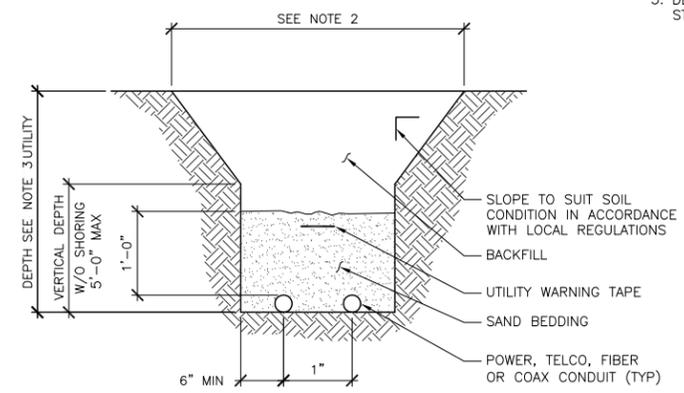


CONCRETE ATTACHMENT DETAIL
 24"x36" SCALE: 3" = 1'-0"
 11"x17" SCALE: 1-1/2" = 1'-0" **3**

CONDUIT SPACING SCHEDULE		
CONDUIT #1	MINIMUM CONDUIT SEPARATION	CONDUIT #2
POWER	* = 6 INCHES	POWER
POWER	* = 12 INCHES	TELCO, COMMUNICATIONS & CONTROL CIRCUITS
TELCO, COMMUNICATIONS & CONTROL CIRCUITS	* = 6 INCHES	TELCO, COMMUNICATIONS & CONTROL CIRCUITS

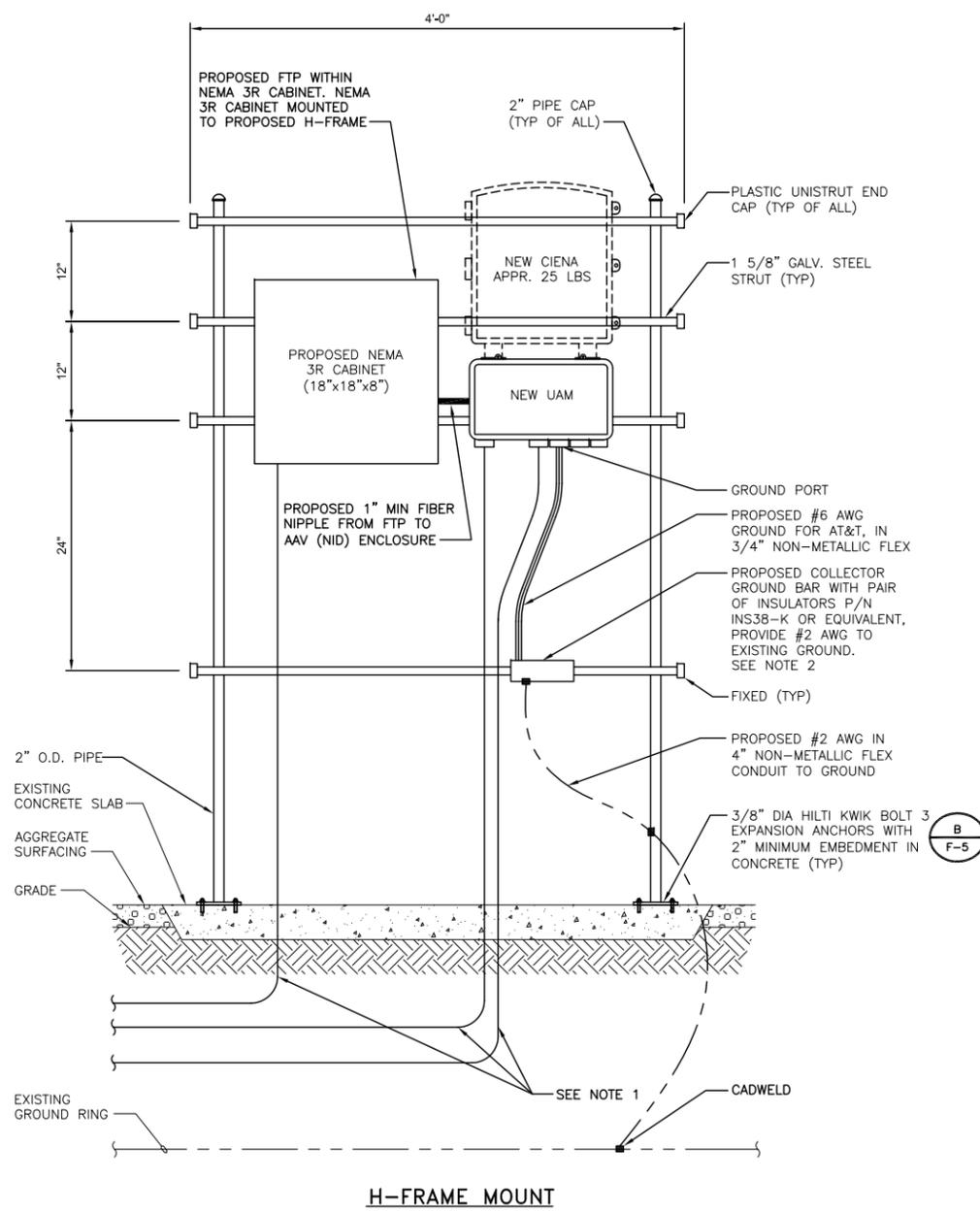
NOTES

1. DETAIL SHOWN IS FOR ONE CONDUIT. MULTIPLE CONDUITS CAN BE PLACED IN THE SAME TRENCH AS LONG AS A MINIMUM SEPARATION PER THE LOCAL UTILITY COMPANIES IS MAINTAINED. IN ALL CASES THE MINIMUM CENTER TO CENTER SPACING BETWEEN CONDUITS IS 1'-0" (NOT REQUIRED FOR COAX).
2. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
3. DEPTH PER LOCAL UTILITY OR CROWN CASTLE STANDARDS; WHICHEVER REQUIREMENT IS DEEPER.



"ONE CALL" SERVICE SHALL BE CALLED PRIOR TO EXCAVATION

TYPICAL TRENCH DETAIL
 24"x36" SCALE: NOT TO SCALE
 11"x17" SCALE: NOT TO SCALE **2**



H-FRAME MOUNT

1. REFER TO SHEET F-3 FOR CONDUIT ROUTING DETAIL.
2. CONTRACTOR TO SUPPLY GROUND TO NEAREST ACCESSIBLE MASTER GROUND OR MAIN GROUNDING SYSTEM.

AAV (NID) ENCLOSURE INSTALLATION DETAIL
 24"x36" SCALE: NOT TO SCALE
 11"x17" SCALE: NOT TO SCALE **1**



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LICENSURE:
 SHEET TITLE:
FIBER INSTALLATION DETAILS

SHEET NUMBER: **F-3** REVISION: **1**

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SANTA CLARA COUNTY

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SHEET TITLE:

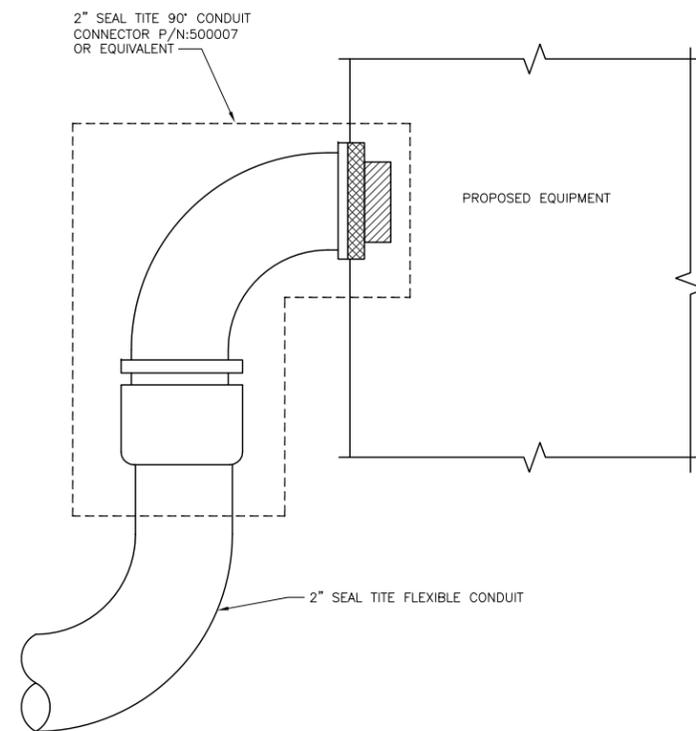
DC POWER DIAGRAM & POWER CONDUIT DETAILS

SHEET NUMBER:

E-2

REVISION:

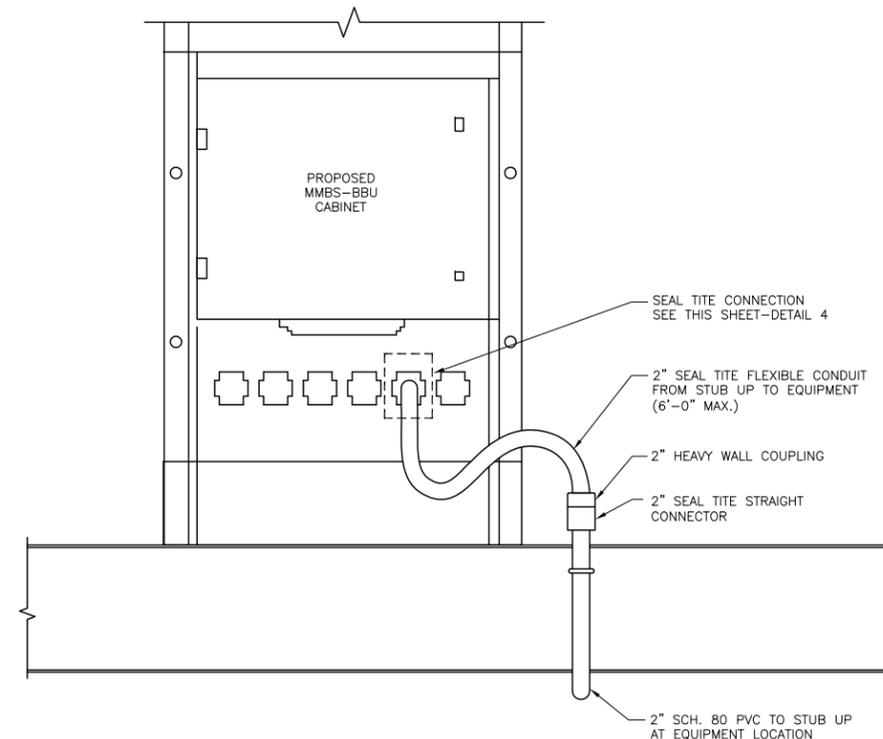
1



SEAL TITE POWER CONDUIT CONNECTION TO PROPOSED EQUIPMENT DETAIL

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

4



EQUIPMENT POWER CONDUIT CONNECTIONS

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

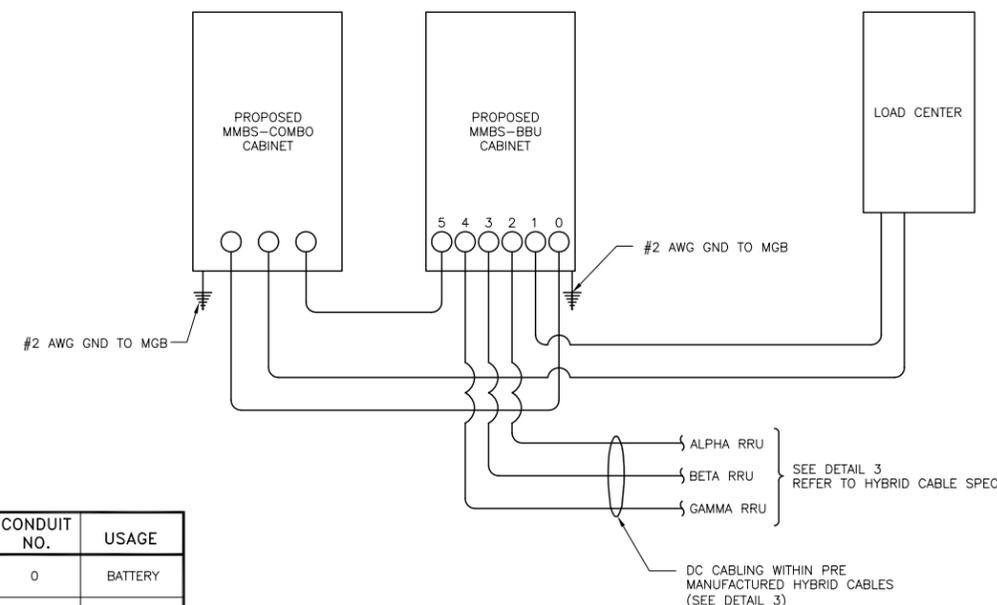
2

	TYPE 1	TYPE 2	TYPE 3
TOTAL LENGTH	~ 40m (131')	~ 70m (230')	~120m (394') (REQUIREMENT IS 300 FEET= 91.4m)
HYBRID POWER CABLE CONFIGURATION	(2) #8 AWG (6) #10 AWG	(2) #6 AWG (6) #8 AWG	(2) #4 AWG (6) #6 AWG
CABLE DIAMETER	32mm (1.25")	32mm (1.25")	36mm (1.41")
BENDING RADIUS	800mm (31.49")	800mm (31.49")	900mm (35.43")
OPTIC CABLE	LC/PC-T0-LC/PC SINGLE MODE	LC/PC-T0-LC/PC SINGLE MODE	LC/PC-T0-LC/PC SINGLE MODE
MMBS-BBU CABINET (POWER CABLE TERMINAL MAX SIZE AWG 6)	-	-	AWG 4-> AWG 6 CONVERSION KIT NEEDED
RRU POWER CABLE SPEC	(8) #10 AWG	(8) #10 AWG	(8) #10 AWG
MON USE POWER AND OPTIC CABLE PROTECTION	2 PAIR POWER AND OPTIC CABLE WITH PE PIPE	2 PAIR POWER AND OPTIC CABLE WITH PE PIPE	2 PAIR POWER AND OPTIC CABLE WITH PE PIPE

HYBRID CABLE TYPE

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

3



CONDUIT NO.	USAGE
0	BATTERY
1	AC/GROUND
2	RRU ALPHA
3	RRU BETA
4	RRU GAMMA
5	BATTERY

ELECTRICAL NOTES

- MINIMUM CABLE LENGTH BETWEEN THE DU AND BATTERY IS 70MM (2.75 in).
- MAXIMUM CABLE LENGTH DISTANCE IS 900mm (35.43" in).
- ROUTE DC CONDUCTORS IN CONDUITS TO PROPOSED MMBS-BBU CABINET 48VDC POWER DISTRIBUTION PANEL TO AND FROM PROPOSED MMBS-BATTERY CABINET.
- 48 VDC CABLES BETWEEN PROPOSED MMBS-BBU CABINET & RRU'S ARE FACTORY ASSEMBLED AND EQUIPPED WITH ONE PRE-TERMINATED END.

POWER DIAGRAM

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

1

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SANTA CLARA COUNTY

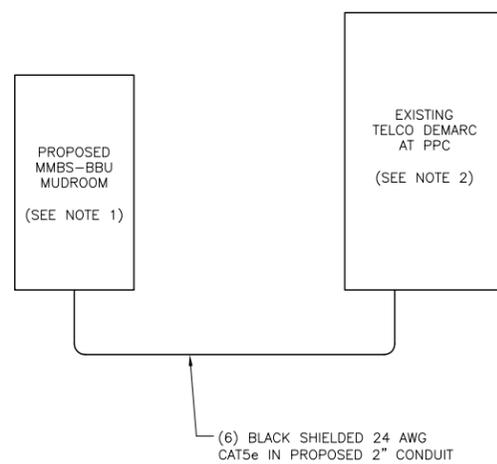
REVISIONS			
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LICENSURE:

SHEET TITLE:
POWER & TELCO DETAILS

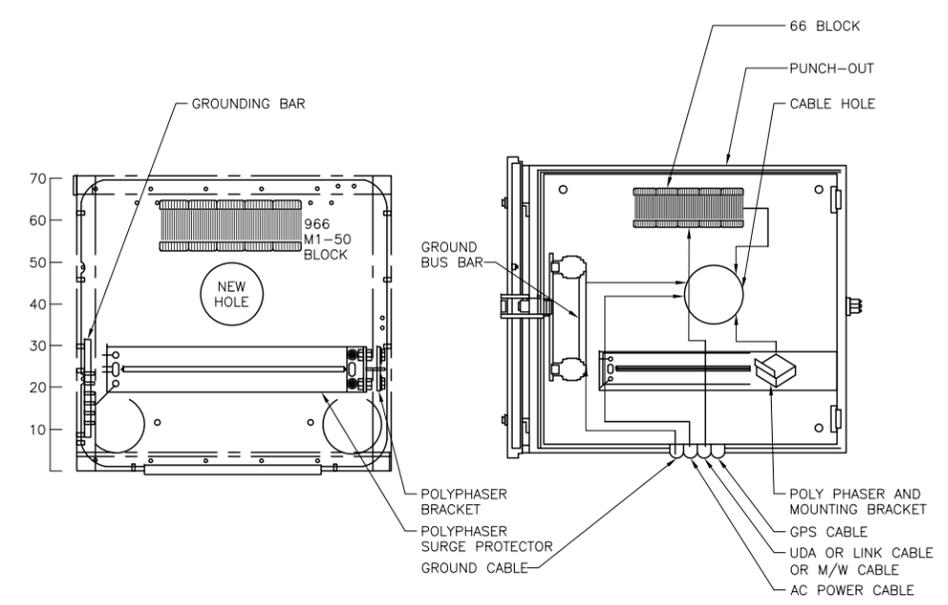
SHEET NUMBER: **E-3** REVISION: **1**



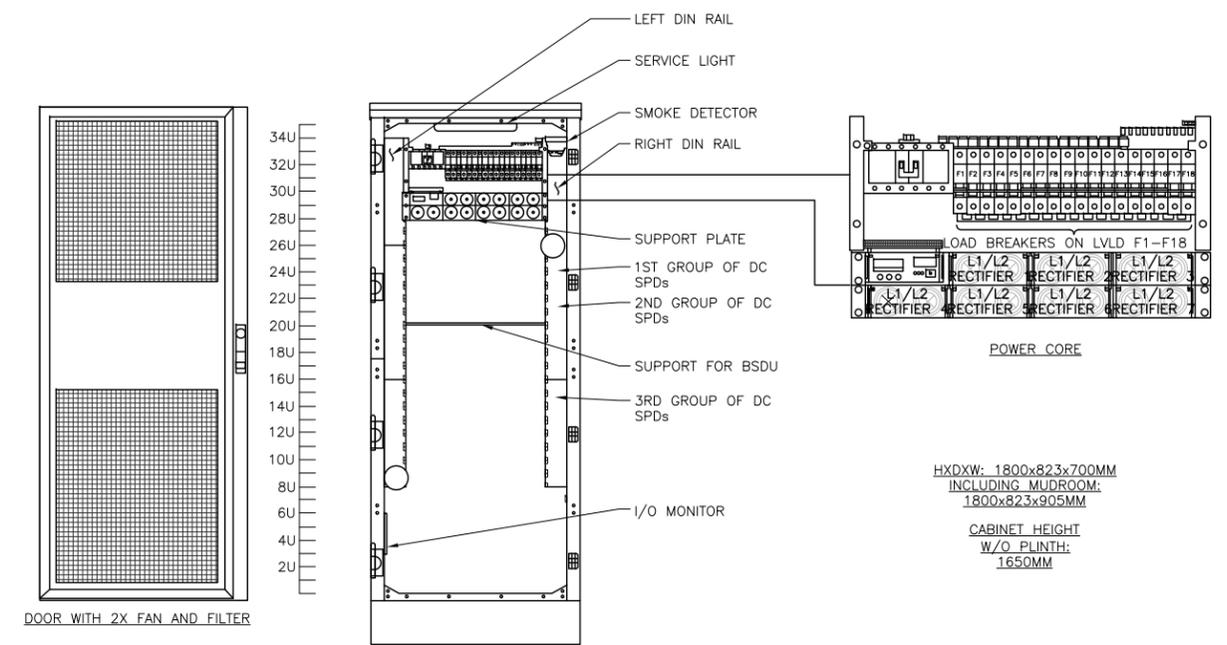
NOTES

- CONTRACTOR SHALL INSTALL RJ-45 ENDS ON ALL (6) RUNS OF CAT5e INTO MMBS-BBU MUDROOM.
- CONTRACTOR TO INSTALL NEW 66 BLOCK IN EXISTING TELCO BOX NEXT TO EXISTING PPC CABINET.

TELCO RISER DETAIL
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE **4**



MUDROOM ELECTRICAL DETAIL
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE **2**



NOT USED
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE **3**

MMBS-BBU ELECTRICAL DETAIL
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE **1**



PACIFIC TELECOM SERVICES, LLC
115 SANSOME STREET, SUITE 1400B
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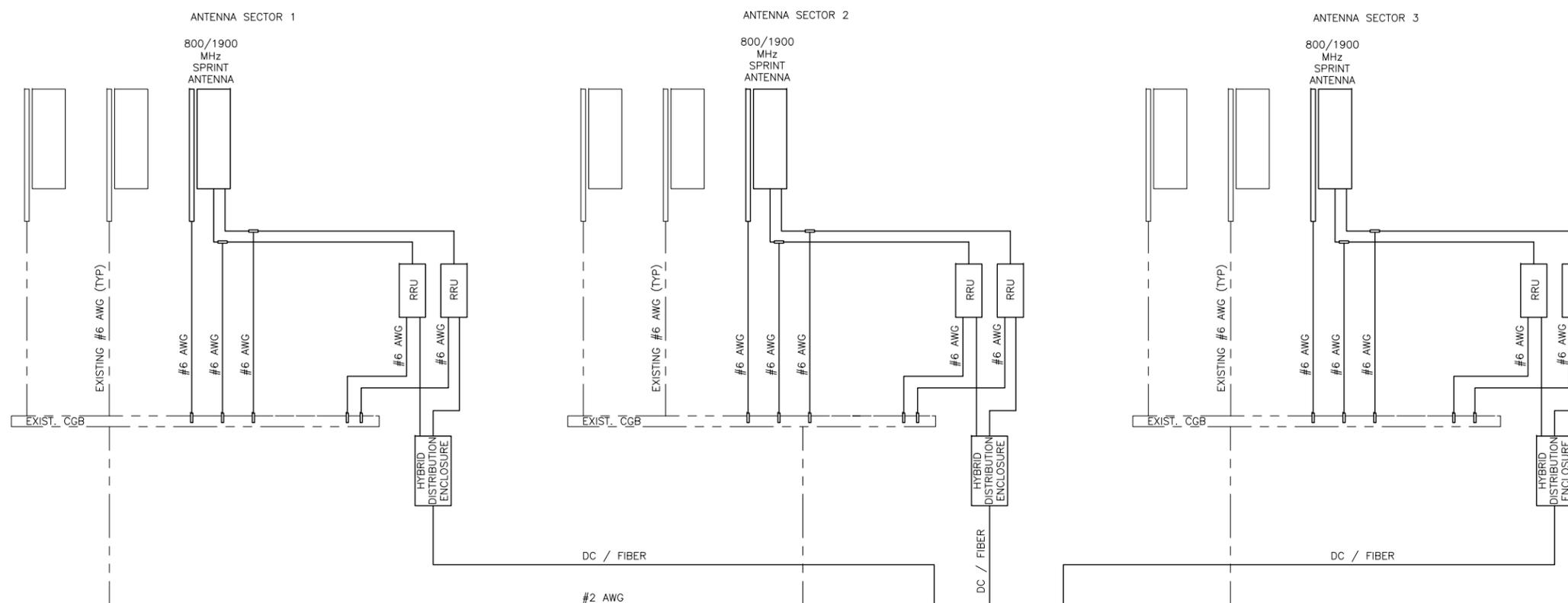
GROUNDING ANTENNA ONE-LINE

SHEET NUMBER:

G-1

REVISION:

1



LEGEND

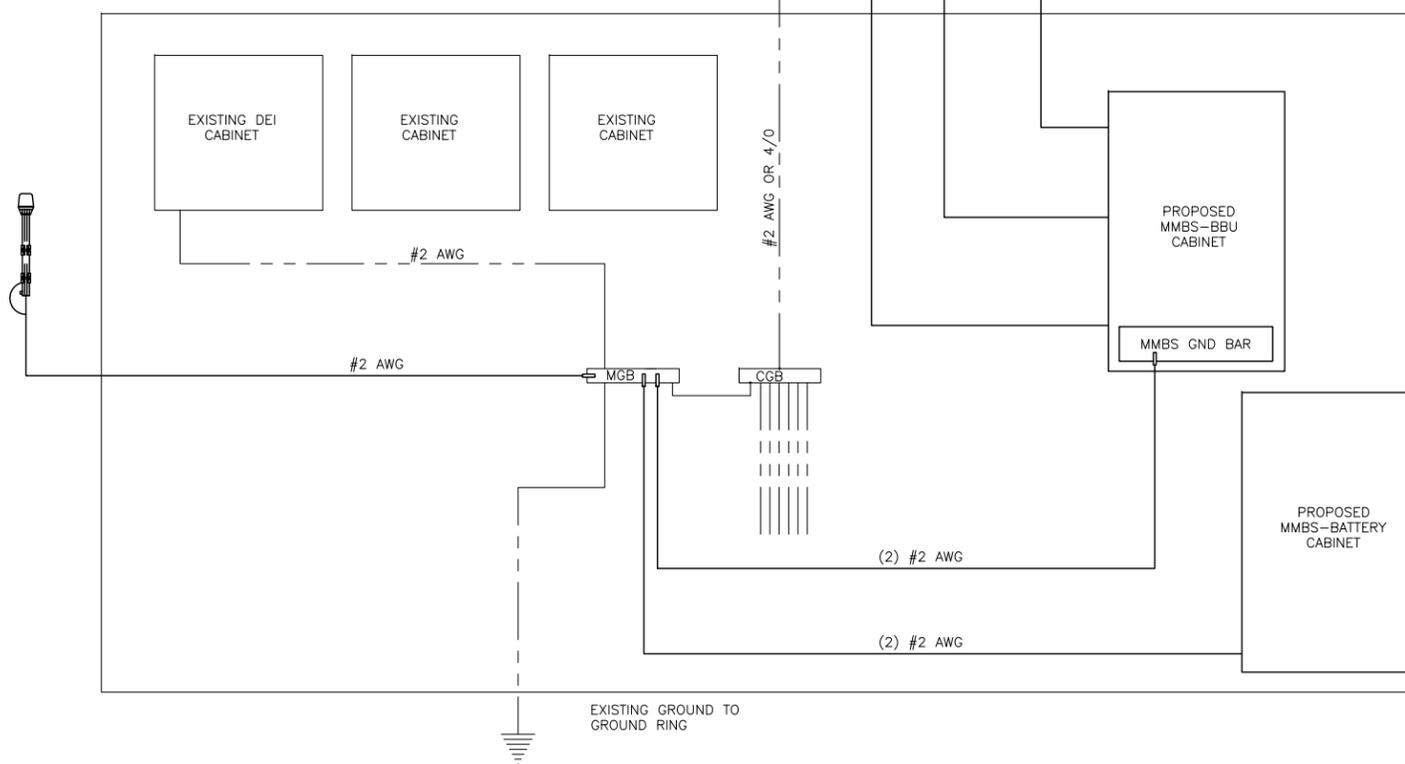
- CADWELDED CONNECTION
- ⊞ MECHANICAL CONNECTION
- COMPRESSION CONNECTION
- CGB COLLECTOR GROUND BAR
- MGB EXTERNAL GROUND BAR

GROUNDING NOTES

- CONNECTIONS
ALL GROUNDING CONNECTIONS SHALL BE MADE BY THE CADWELDED PROCESS CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, ETC. ALL CABLE TO GROUND RODS, GROUND RODS SPLICES AND LIGHTING PROTECTION SYSTEM AS INDICATED. GROUND FOUNDATION ONLY AS INDICATED BY PM. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE CADWELDED PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS.
- ALL CADWELDED CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF GALVITE (WHITE) PAINT. OR SILVERBRITE (ALUMINUM).
- ALL ELECTRICAL & MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTIOXIDANT COMPOUND APPLIED TO CONNECTION.
- GROUND TESTS:
GROUND TESTS SHALL BE PERFORMED AS REQUIRED BY SPRINT STANDARD PROCEDURES. GROUND GRID RESISTANCE SHALL NOT EXCEED 5-OHMS.
- CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
1. ONE (1) COPY TO OWNER REPRESENTATIVE
2. ONE (1) COPY TO ENGINEER
3. ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE
- ALL RADIO EQUIPMENT AND UTILITY CABINETS GROUNDS LEADS TO BE #2 AWG STRANDED GREEN JACKETED FROM BUSS TERMINAL.
- FOR ADDITIONAL GROUNDING NOTES SEE SHEET GN-1 OR GN-2.
- ALL ANTENNA MOUNT GROUNDS SHALL BE #2 AWG STRANDED GREEN JACKETED CABLE GROUNDS SHALL BE BLACK FROM MFR.
- ALL GROUND WIRES FROM GROUND BARS TO GROUND SHALL BE #2 AWG SOLD BARE AS REQUIRED.
- ALL ABOVE GROUND WIRES SHALL BE GREEN JACKETED. ALL GROUND WIRES PENETRATING INTO GROUND AND BELOW SHALL BE SOLID BARE.

PROPOSED GPS ANTENNA MOUNT TO PROPOSED MMBS-BBU CABINET

#2 AWG GROUNDING JUMPER



GROUNDING ANTENNA ONE-LINE

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

1



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LICENSURE:

SHEET TITLE:

SCHEMATIC GROUNDING PLAN

SHEET NUMBER:

G-2

REVISION:

1

GROUNDING KEYED NOTES:

- ① EXISTING ANTENNA GROUND BUS BAR (FIELD VERIFY)
- ② #6 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUS BAR (TYP OF 6). SEE DETAIL 2/G-3
- ③ #6 AWG GROUND FROM RRU TO ANTENNA GROUND BUSS BAR (90 DEG GROUND LUGS TO BE USED ON ALL RRU'S)
- ④ EXISTING GROUND BUS BAR AT BASE OF TOWER CONTINUING TO GROUND RING (FIELD VERIFY).
- ⑤ #6 AWG GROUND FROM ANTENNA GROUND BUS BAR TO BASE OF TOWER CONTINUING TO GROUND RING.
- ⑥ (2) #2 AWG GROUND FROM COMBO MMBS-BBU CABINET TO TIE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/G-3
- ⑦ (2) #2 AWG GROUND FROM BATTERY CABINET TO TIE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/G-3
- ⑧ CAD WELD (TYP). SEE DETAIL 1/G-3.
- ⑨ #6 AWG GPS MOUNT TO ANTENNA GROUND BUS BAR.
- ⑩ GC SHALL VERIFY (2) #2 AWG THHN GROUND LEADS FROM EACH OF SEVERAL REMOTE INDIVIDUAL BUSES TO BE COLLECTED AT ONE MAIN MGB AND FURTHER ROUTED TO TOWER GROUNDING SYSTEM (FINAL DESIGNATED POINT OF GROUNDING TO BE COORDINATED WITH TOWER OWNER).
- ⑪ ALL TOWER GROUND LEADS SHALL BE THERMOPLASTIC HIGH HEAT-RESISTANT NYLON-COATED (THHN).
- ⑫ WHERE APPLICABLE, GC'S ELECTRICAL SUBCONTRACTOR SHALL COORDINATE WITH CM AND TOWER OWNER ON TYING INTO EXISTING TOWER GROUNDING SYSTEM FOR NEW ELECTRICAL & TELCO PANEL(S) AT SAME LOCATION AS EXISTING ELECTRICAL & TELCO SERVICE.

GROUNDING NOTES & LEGEND

GENERAL GROUNDING NOTES

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
3. ALL GROUND CONNECTIONS SHALL BE CADWELDED. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY SPRINT WIRELESS, LLC. REPRESENTATIVE.
5. REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS. ELECTRICAL CONTRACTOR SHALL OBTAIN, REVIEW, PROVIDE TRAINING AND FULLY IMPLEMENT ALL GUIDELINES & REQUIREMENTS ASSOCIATED WITH SPRINT STANDARD GROUNDING METHODS FOR ROOF TOP INSTALLATIONS; INCLUDING METHOD FOR CONNECTIVITY FROM ROOF TOP MGB TO BUILDING GROUND SYSTEM (SPRINT STANDARD GROUNDING METHODS MOST RECENT REVISIONS SHALL BE REFERENCED)
6. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED SPRINT MOBILITY REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING
7. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE CONDITIONS.

GROUNDING ROD NOTES

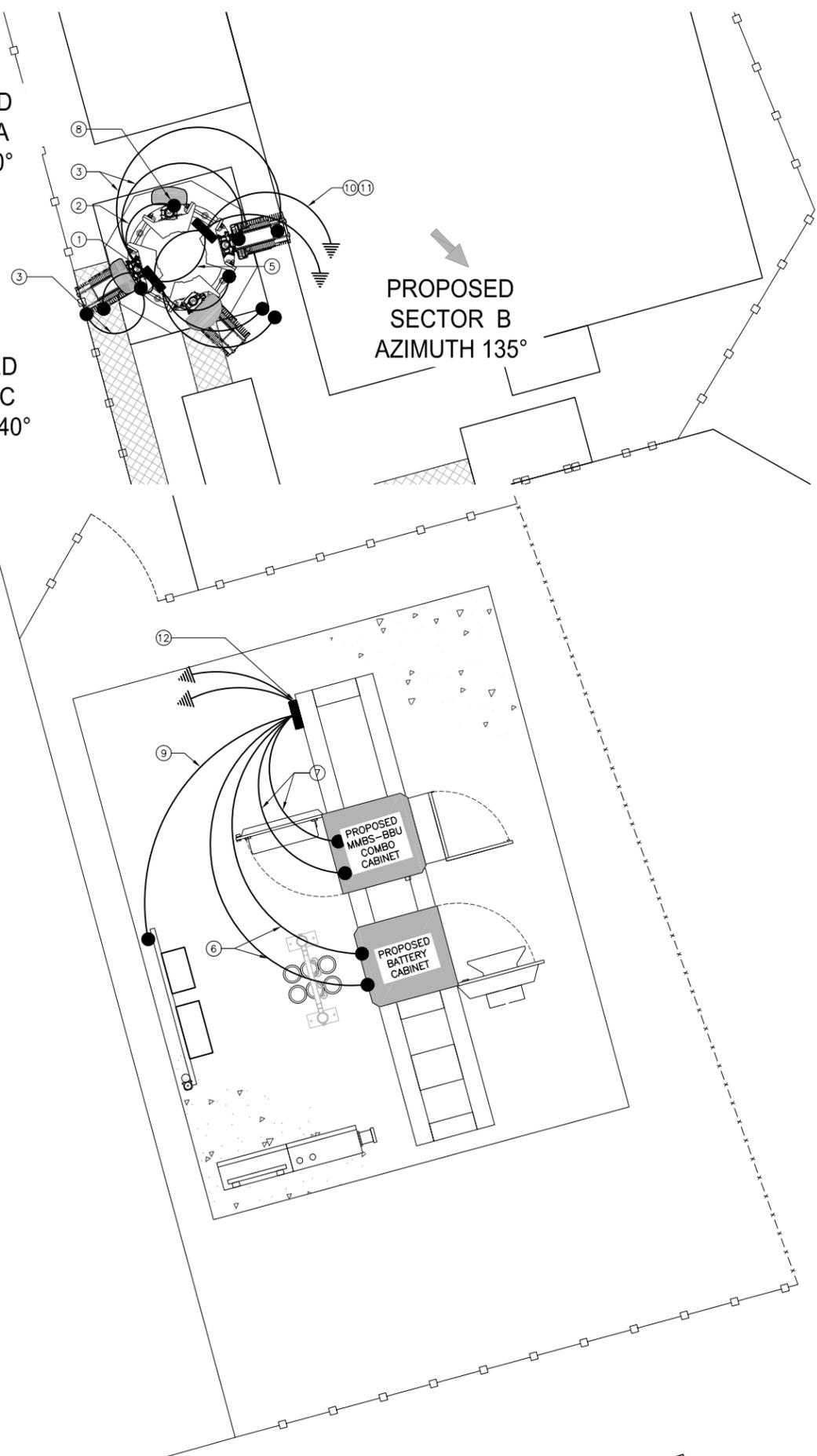
(WHERE APPLICABLE)

1. ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
2. POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFORE MENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.

PROPOSED
SECTOR A
AZIMUTH 0°

PROPOSED
SECTOR B
AZIMUTH 135°

PROPOSED
SECTOR C
AZIMUTH 240°



SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
⊗	COPPER GROUND ROD	⊗	TEST WELL
●	CADWELD CONNECTION	■	GROUND BAR
■	SIDE SPLICE CADWELD	—	GROUND RING
⊘	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM		

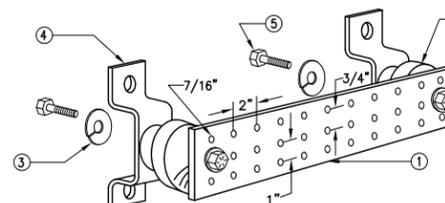
24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"

SCHEMATIC GROUNDING PLAN | 1



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
BAY HILL ATHLETIC CLUB
FS04XC190/877193
1000 JACKLIN ROAD
MILPITAS, CA 95035
SANTA CLARA COUNTY



NOTE:

1. GALVANIZED STEEL GROUND BAR, HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION. (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4 OR APPROVED EQUAL
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO., CAT. NO. 3015-8 OR APPROVED EQUAL
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO., CAT NO. A-6056 OR APPROVED EQUAL
5. 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO., CAT NO. 3012-1 OR APPROVED EQUAL
6. INSULATORS SHALL BE ELIMINATED WHEN BONDING DIRECTLY TO TOWER/MONOPOLE STRUCTURE. CONNECTION TO TOWER/MONOPOLE STRUCTURE SHALL BE PER MANUFACTURERS RECOMMENDATIONS.

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

10

GROUND BAR (IF REQUIRED)

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

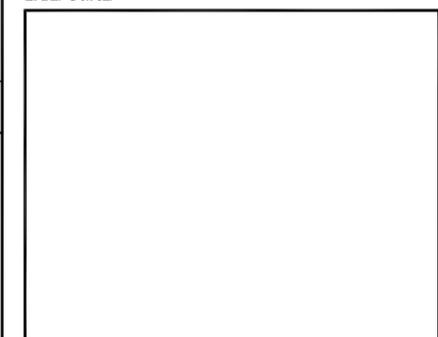
9

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
0	04/20/12	ISSUED FOR 90% ZONING	NL
1	06/07/12	ISSUED FOR 100% ZONING	CBK

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSURE



SHEET TITLE:

GROUNDING DETAILS

SHEET NUMBER:

G-3

REVISION:

1

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

8

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

7

NOT USED

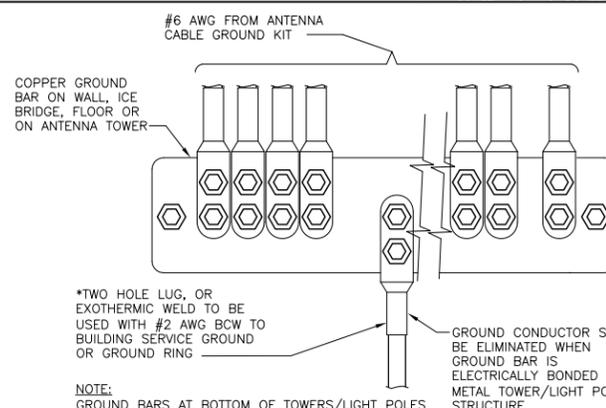
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

6

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

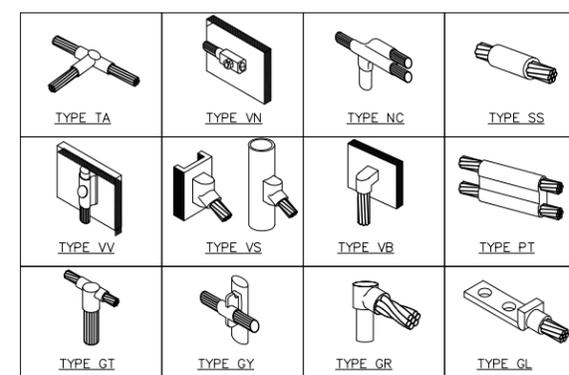
5



GROUND WIRE INSTALLATION

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

2



CADWELD GROUNDING CONNECTIONS

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

1

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

4

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

3



Project Description

Request for Conditional Use Permit
 1000 JACKLIN ROAD
 APN: 028-005-015
 Crown Castle Site # 877193 / Sprint #FS04XC190
 June 27, 2012

Nature of Request

Crown Castle, owner of a monopole located at the above address, requests permission for its tenant on the pole, Sprint PCS, to update its facility by replacing its existing panel antennas with new models, adding remote radio units, removing its (3) existing equipment cabinets and replacing them with (2) new equipment cabinets within the existing lease area, and installing fiber at the site.

Property Description

The subject site (APN 028-005-015) encompasses 1.14 acres south of Jacklin Road and west of I-680 and is largely occupied by a building that houses the Bay Hill Athletic Club. The property is bordered on the north by a Shell gasoline station, on the east by the I-680 southbound on-ramp, and on the south and west by other commercial structures. The site is zoned Highway Services, as is the gas station parcel to the north. The parcels to the west and south are zoned CO - Administrative and Professional Office, and are developed with offices and a child care center. There are residences to the north, beyond Jacklin Road, to the west, beyond N. Hillview Drive, and to the east, beyond the I-680 freeway.

Project Description

The wireless facility is a 60-foot monopole at the northeast corner of the athletic club building, bearing antennas by three carriers: Verizon antennas at 57' centerline, the three Sprint antennas at 43 feet, and Nextel at 36 feet. The equipment for the Sprint antennas is in a fenced area on a 12' x 15' concrete pad at the southeast corner of the building. The project proposes to:

- replace Sprint's (3) the panel antennas with new models, (1) per sector;
- install (6) new remote radio units, (2) per sector placed behind and below the antennas;
- replace the existing (3) equipment cabinets with (2) new cabinets and install a GPS antenna in the existing lease area;
- install fiber.

Statement of Operations

The existing Crown Castle/Sprint communication facility only requires electrical services and telephone services which are readily available to the site. No nuisances will be generated by the proposed facility modifications, nor will the facility injure the public health, safety, morals or general welfare of the community. Sprint technology does not interfere with any other forms of communication devices whether public or private. The operation of this facility provides wireless communications for residential, business and emergency communications.

The site is entirely self-monitored and connects directly to a central office where sophisticated computers alert personnel to any equipment malfunction or breach of security.

Because the Crown Castle facility is unstaffed, there are no regular hours of operation and no impact to surrounding traffic patterns. The existing entrance drive to the property provides ingress and egress for the technician that arrives infrequently to service the facility. No on-site water or sanitation services are required as a part of this proposal.

Zoning Analysis

The site has been used, with all requisite approvals, as a telecommunications facility since 1996. No changes in zoning are being proposed.

Compliance with Federal Regulations

Crown Castle has complied and will continue to comply with all FCC rules governing technical standards, interference protection, power and height limitations, and radio frequency standards. In addition, the company will comply with all FAA rules on site location and operation.



RF EMISSIONS COMPLIANCE REPORT

Crown Castle on behalf Sprint-Nextel

Site: Bay Hill Athletic Club 877193
Application #: 141837
1000 Jacklin Road
Milpitas, CA
3/29/2012

Report Status:

Sprint-Nextel Is Under 5% Threshold



A handwritten signature in black ink, appearing to read 'David Cotton, Jr.', written over a horizontal line.

David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838, Expires 2013-Jun-30
Date: 2012-Mar-29
Prepared By:

Sitesafe, Inc.

Engineering Statement in Re:
Electromagnetic Energy Analysis
Sprint-Nextel
Milpitas, CA

My signature on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and

That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of Sitesafe, Inc. in Arlington, Virginia; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by Sprint-Nextel (See attached Site Summary and Carrier documents), and that Sprint-Nextel's installations involve communications equipment, antennas and associated technical equipment at a location referred to as the "Bay Hill Athletic Club 877193" ("the site"); and

That Sprint-Nextel proposes to operate at the site with transmit antennas listed in the carrier summary and with a maximum effective radiated power as specified by Sprint-Nextel and shown on the worksheet, and that worst-case 100% duty cycle have been assumed; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio-frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio-frequency radiation must utilize the standards set by the FCC, which is the Federal Agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," defined as situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and (2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of Sprint-Nextel's operating frequency as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at two meters above ground level from the proposed Sprint-Nextel operation is no more than 4.078% of the maximum in any accessible area on the ground and

That it is understood per FCC Guidelines and OET65 Appendix A, that regardless of the existent radio-frequency environment, only those licenses whose contributions exceed five percent of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation is no more than 16.118% of the maximum in any accessible area up to two meters above the ground per OET-65; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET-65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy two meters above ground level where on-axis energy refers to maximum energy two meters above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere two meters above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier and frequency range indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding Radio Frequency Safety.

In summary, it is stated here that the proposed operation at the site would not result in exposure of the Public to excessive levels of radio-frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307 and that Sprint-Nextel's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals, and approved contractor personnel trained in radio-frequency safety; and that the instant analysis addresses exposure levels at two meters above ground level and does not address exposure levels on the tower, or in the immediate proximity of the antennas.

Sprint-Nextel
Bay Hill Athletic Club 877193
Site Summary

Carrier	Area Maximum Percentage MPE
Sprint-Nextel	1.792 %
Sprint-Nextel	2.286 %
Verizon Wireless	2.418 %
Verizon Wireless	3.248 %
Verizon Wireless	6.374 %
 Composite Site MPE:	 16.118 %

Sprint-Nextel
Bay Hill Athletic Club 877193
Carrier Summary

Frequency: 862 MHz
Maximum Permissible Exposure (MPE): 574.67 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 10.29701 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 1.79182 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
EMS	FS65-12-00DAL2	36	0	257	2.738131	0.476473	3.041768	0.52931
EMS	FS65-12-00DAL2	36	0	257	2.738131	0.476473	3.041768	0.52931
EMS	FS65-12-00DAL2	36	0	257	2.738131	0.476473	3.041768	0.52931
EMS	FS65-12-00DAL2	36	120	257	2.738131	0.476473	3.041768	0.52931
EMS	FS65-12-00DAL2	36	120	257	2.738131	0.476473	3.041768	0.52931
EMS	FS65-12-00DAL2	36	120	257	2.738131	0.476473	3.041768	0.52931

Sprint-Nextel
Bay Hill Athletic Club 877193
Carrier Summary

Frequency: 1900 MHz
Maximum Permissible Exposure (MPE): 1000 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 22.86197 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 2.2862 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
EMS	RR90-17-00DP	43	0	2000	7.580953	0.758095	19.642794	1.964279
EMS	RR90-17-00DP	43	120	2000	7.580953	0.758095	19.642794	1.964279
EMS	RR90-17-00DP	43	240	2000	7.518064	0.751806	19.642792	1.964279

**Verizon Wireless
Bay Hill Athletic Club 877193
Carrier Summary**

Frequency: 750 MHz
 Maximum Permissible Exposure (MPE): 500 $\mu\text{W}/\text{cm}^2$
 Maximum power density at ground level: 12.09113 $\mu\text{W}/\text{cm}^2$
 Highest percentage of Maximum Permissible Exposure: 2.41823 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
ANDREW	LNX-6512DS-VTM-0DT	36	150	1000	11.09889	2.219778	11.482707	2.296541
ANDREW	LNX-6512DS-VTM-0DT	56	220	1000	5.039464	1.007893	5.298151	1.05963
ANDREW	LNX-6512DS-VTM-0DT	56	340	1000	5.039464	1.007893	5.298151	1.05963

Verizon Wireless
Bay Hill Athletic Club 877193
Carrier Summary

Frequency: 1900 MHz
 Maximum Permissible Exposure (MPE): 1000 $\mu\text{W}/\text{cm}^2$
 Maximum power density at ground level: 32.47751 $\mu\text{W}/\text{cm}^2$
 Highest percentage of Maximum Permissible Exposure: 3.24775 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
ANDREW	DBXLH-6565A	36	150	2000	21.492199	2.14922	23.281301	2.32813
ANDREW	DBXLH-6565A	36	220	2000	21.492199	2.14922	23.281301	2.32813
ANDREW	DBXLH-6565A	56	340	2000	7.434346	0.743435	11.107245	1.110725

Verizon Wireless
Bay Hill Athletic Club 877193
Carrier Summary

Frequency: 850 MHz
Maximum Permissible Exposure (MPE): 566.67 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 36.11975 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 6.37407 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
ANDREW	DBXLH-6565A	36	150	1500	8.257438	1.457195	15.617578	2.756043
ANDREW	LNX-6512DS-VTM-ODT	36	150	1500	14.870408	2.62419	15.259209	2.692801
ANDREW	DBXLH-6565A	36	220	1500	8.257438	1.457195	15.617578	2.756043
ANDREW	LNX-6512DS-VTM-ODT	56	220	1500	6.762293	1.193346	7.033409	1.24119
ANDREW	DBXLH-6565A	56	340	1500	4.167104	0.735371	5.546254	0.978751
ANDREW	LNX-6512DS-VTM-ODT	56	340	1500	6.767465	1.194259	7.03341	1.24119

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:FS65-12-00DAL2 Antenna Worksheet (0 Sector)

Maximum Permissible Exposure (MPE):

574.67

ERP (Watts): 257 Height (feet): 36 Frequency (MHz): 862 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	1.0000	8633.80	8633.80	0.000115	0.000020	4998748
1.0	0.00	1.0000	863.34	863.29	0.011497	0.002001	49982
2.0	-0.10	0.9772	431.61	431.51	0.046002	0.008005	12492
3.0	-0.10	0.9772	287.67	287.53	0.103554	0.018020	5549
4.0	-0.30	0.9333	215.68	215.49	0.184219	0.032057	3119
5.0	-0.60	0.8710	172.47	172.24	0.288089	0.050131	1994
6.0	-0.90	0.8128	143.65	143.37	0.409761	0.071304	1402
7.0	-1.40	0.7244	123.05	122.73	0.555377	0.096643	1034
8.0	-2.00	0.6310	107.60	107.22	0.736564	0.128172	780
9.0	-2.60	0.5495	95.56	95.14	0.889170	0.154728	646
10.0	-3.30	0.4677	85.93	85.46	0.989900	0.172256	580
12.0	-6.00	0.2512	71.46	70.89	1.193292	0.207649	481
14.0	-8.20	0.1514	61.10	60.44	1.399727	0.243572	410
16.0	-12.30	0.0589	53.31	52.55	1.609789	0.280126	356
18.0	-18.90	0.0129	47.24	46.38	1.824099	0.317419	315
20.0	-29.90	0.0010	42.36	41.40	2.043329	0.355568	281
22.0	-20.10	0.0098	38.36	37.30	2.268203	0.394699	253
24.0	-15.80	0.0263	35.01	33.85	2.499514	0.434950	229
26.0	-14.10	0.0389	32.17	30.90	2.738131	0.476473	209
28.0	-13.80	0.0417	29.73	28.34	2.346631	0.408346	244
30.0	-14.60	0.0347	27.60	26.10	1.898306	0.330332	302
32.0	-15.80	0.0263	25.73	24.12	1.163804	0.202518	493
34.0	-18.90	0.0129	24.08	22.34	0.718611	0.125048	799
36.0	-22.60	0.0055	22.60	20.74	0.797554	0.138786	720
38.0	-26.50	0.0022	21.27	19.29	0.933039	0.162362	615
40.0	-24.40	0.0036	20.08	17.96	1.045775	0.181979	549
42.0	-21.20	0.0076	18.99	16.74	1.166270	0.202947	492
44.0	-18.60	0.0138	18.00	15.60	1.292156	0.224853	444
46.0	-17.10	0.0195	17.10	14.55	1.427635	0.248428	402
48.0	-16.70	0.0214	16.27	13.57	1.538886	0.267788	373
50.0	-16.50	0.0224	15.50	12.64	1.380038	0.240146	416
52.0	-17.00	0.0200	14.80	11.77	1.115745	0.194155	515
54.0	-17.10	0.0195	14.16	10.95	0.691396	0.120313	831
56.0	-18.00	0.0158	13.56	10.16	0.994131	0.172993	578
58.0	-19.20	0.0120	13.01	9.42	1.276346	0.222102	450
60.0	-20.00	0.0100	12.50	8.70	1.429703	0.248788	401
62.0	-20.60	0.0087	12.03	8.01	1.539618	0.267915	373
64.0	-21.40	0.0072	11.60	7.35	1.644398	0.286148	349
66.0	-22.20	0.0060	11.20	6.71	1.749974	0.304520	328
68.0	-22.70	0.0054	10.84	6.09	1.753698	0.305168	327
70.0	-23.00	0.0050	10.52	5.48	1.716601	0.298713	334
72.0	-24.70	0.0034	10.22	4.90	1.420067	0.247111	404
74.0	-25.20	0.0030	9.96	4.32	1.096276	0.190767	524
76.0	-27.00	0.0020	9.73	3.76	0.876157	0.152464	655
78.0	-28.00	0.0016	9.53	3.20	0.751077	0.130698	765
80.0	-31.20	0.0008	9.36	2.66	0.587407	0.102217	978
82.0	-35.30	0.0003	9.22	2.12	0.418892	0.072893	1371
84.0	-40.00	0.0001	9.11	1.58	0.285067	0.049606	2015
86.0	-40.00	0.0001	9.03	1.05	0.180735	0.031450	3179
88.0	-40.00	0.0001	8.99	0.53	0.058659	0.010208	9796
90.0	-35.60	0.0003	8.97	0.00	0.104773	0.018232	5484

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:FS65-12-00DAL2 Antenna Worksheet (0 Sector)

Maximum Permissible Exposure (MPE): 574.67

ERP (Watts): 257 Height (feet): 36 Frequency (MHz): 862 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	1.0000	8633.80	8633.80	0.000115	0.000020	4998748
1.0	0.00	1.0000	863.34	863.29	0.011497	0.002001	49982
2.0	-0.10	0.9772	431.61	431.51	0.046002	0.008005	12492
3.0	-0.10	0.9772	287.67	287.53	0.103554	0.018020	5549
4.0	-0.30	0.9333	215.68	215.49	0.184219	0.032057	3119
5.0	-0.60	0.8710	172.47	172.24	0.288089	0.050131	1994
6.0	-0.90	0.8128	143.65	143.37	0.409761	0.071304	1402
7.0	-1.40	0.7244	123.05	122.73	0.555377	0.096643	1034
8.0	-2.00	0.6310	107.60	107.22	0.736564	0.128172	780
9.0	-2.60	0.5495	95.56	95.14	0.889170	0.154728	646
10.0	-3.30	0.4677	85.93	85.46	0.989900	0.172256	580
12.0	-6.00	0.2512	71.46	70.89	1.193292	0.207649	481
14.0	-8.20	0.1514	61.10	60.44	1.399727	0.243572	410
16.0	-12.30	0.0589	53.31	52.55	1.609789	0.280126	356
18.0	-18.90	0.0129	47.24	46.38	1.824099	0.317419	315
20.0	-29.90	0.0010	42.36	41.40	2.043329	0.355568	281
22.0	-20.10	0.0098	38.36	37.30	2.268203	0.394699	253
24.0	-15.80	0.0263	35.01	33.85	2.499514	0.434950	229
26.0	-14.10	0.0389	32.17	30.90	2.738131	0.476473	209
28.0	-13.80	0.0417	29.73	28.34	2.346631	0.408346	244
30.0	-14.60	0.0347	27.60	26.10	1.898306	0.330332	302
32.0	-15.80	0.0263	25.73	24.12	1.163804	0.202518	493
34.0	-18.90	0.0129	24.08	22.34	0.718611	0.125048	799
36.0	-22.60	0.0055	22.60	20.74	0.797554	0.138786	720
38.0	-26.50	0.0022	21.27	19.29	0.933039	0.162362	615
40.0	-24.40	0.0036	20.08	17.96	1.045775	0.181979	549
42.0	-21.20	0.0076	18.99	16.74	1.166270	0.202947	492
44.0	-18.60	0.0138	18.00	15.60	1.292156	0.224853	444
46.0	-17.10	0.0195	17.10	14.55	1.427635	0.248428	402
48.0	-16.70	0.0214	16.27	13.57	1.538886	0.267788	373
50.0	-16.50	0.0224	15.50	12.64	1.380038	0.240146	416
52.0	-17.00	0.0200	14.80	11.77	1.115745	0.194155	515
54.0	-17.10	0.0195	14.16	10.95	0.691396	0.120313	831
56.0	-18.00	0.0158	13.56	10.16	0.994131	0.172993	578
58.0	-19.20	0.0120	13.01	9.42	1.276346	0.222102	450
60.0	-20.00	0.0100	12.50	8.70	1.429703	0.248788	401
62.0	-20.60	0.0087	12.03	8.01	1.539618	0.267915	373
64.0	-21.40	0.0072	11.60	7.35	1.644398	0.286148	349
66.0	-22.20	0.0060	11.20	6.71	1.749974	0.304520	328
68.0	-22.70	0.0054	10.84	6.09	1.753698	0.305168	327
70.0	-23.00	0.0050	10.52	5.48	1.716601	0.298713	334
72.0	-24.70	0.0034	10.22	4.90	1.420067	0.247111	404
74.0	-25.20	0.0030	9.96	4.32	1.096276	0.190767	524
76.0	-27.00	0.0020	9.73	3.76	0.876157	0.152464	655
78.0	-28.00	0.0016	9.53	3.20	0.751077	0.130698	765
80.0	-31.20	0.0008	9.36	2.66	0.587407	0.102217	978
82.0	-35.30	0.0003	9.22	2.12	0.418892	0.072893	1371
84.0	-40.00	0.0001	9.11	1.58	0.285067	0.049606	2015
86.0	-40.00	0.0001	9.03	1.05	0.180735	0.031450	3179
88.0	-40.00	0.0001	8.99	0.53	0.058659	0.010208	9796
90.0	-35.60	0.0003	8.97	0.00	0.104773	0.018232	5484

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:FS65-12-00DAL2 Antenna Worksheet (0 Sector)

Maximum Permissible Exposure (MPE):

574.67

ERP (Watts): 257 Height (feet): 36 Frequency (MHz): 862 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	1.0000	8633.80	8633.80	0.000115	0.000020	4998748
1.0	0.00	1.0000	863.34	863.29	0.011497	0.002001	49982
2.0	-0.10	0.9772	431.61	431.51	0.046002	0.008005	12492
3.0	-0.10	0.9772	287.67	287.53	0.103554	0.018020	5549
4.0	-0.30	0.9333	215.68	215.49	0.184219	0.032057	3119
5.0	-0.60	0.8710	172.47	172.24	0.288089	0.050131	1994
6.0	-0.90	0.8128	143.65	143.37	0.409761	0.071304	1402
7.0	-1.40	0.7244	123.05	122.73	0.555377	0.096643	1034
8.0	-2.00	0.6310	107.60	107.22	0.736564	0.128172	780
9.0	-2.60	0.5495	95.56	95.14	0.889170	0.154728	646
10.0	-3.30	0.4677	85.93	85.46	0.989900	0.172256	580
12.0	-6.00	0.2512	71.46	70.89	1.193292	0.207649	481
14.0	-8.20	0.1514	61.10	60.44	1.399727	0.243572	410
16.0	-12.30	0.0589	53.31	52.55	1.609789	0.280126	356
18.0	-18.90	0.0129	47.24	46.38	1.824099	0.317419	315
20.0	-29.90	0.0010	42.36	41.40	2.043329	0.355568	281
22.0	-20.10	0.0098	38.36	37.30	2.268203	0.394699	253
24.0	-15.80	0.0263	35.01	33.85	2.499514	0.434950	229
26.0	-14.10	0.0389	32.17	30.90	2.738131	0.476473	209
28.0	-13.80	0.0417	29.73	28.34	2.346631	0.408346	244
30.0	-14.60	0.0347	27.60	26.10	1.898306	0.330332	302
32.0	-15.80	0.0263	25.73	24.12	1.163804	0.202518	493
34.0	-18.90	0.0129	24.08	22.34	0.718611	0.125048	799
36.0	-22.60	0.0055	22.60	20.74	0.797554	0.138786	720
38.0	-26.50	0.0022	21.27	19.29	0.933039	0.162362	615
40.0	-24.40	0.0036	20.08	17.96	1.045775	0.181979	549
42.0	-21.20	0.0076	18.99	16.74	1.166270	0.202947	492
44.0	-18.60	0.0138	18.00	15.60	1.292156	0.224853	444
46.0	-17.10	0.0195	17.10	14.55	1.427635	0.248428	402
48.0	-16.70	0.0214	16.27	13.57	1.538886	0.267788	373
50.0	-16.50	0.0224	15.50	12.64	1.380038	0.240146	416
52.0	-17.00	0.0200	14.80	11.77	1.115745	0.194155	515
54.0	-17.10	0.0195	14.16	10.95	0.691396	0.120313	831
56.0	-18.00	0.0158	13.56	10.16	0.994131	0.172993	578
58.0	-19.20	0.0120	13.01	9.42	1.276346	0.222102	450
60.0	-20.00	0.0100	12.50	8.70	1.429703	0.248788	401
62.0	-20.60	0.0087	12.03	8.01	1.539618	0.267915	373
64.0	-21.40	0.0072	11.60	7.35	1.644398	0.286148	349
66.0	-22.20	0.0060	11.20	6.71	1.749974	0.304520	328
68.0	-22.70	0.0054	10.84	6.09	1.753698	0.305168	327
70.0	-23.00	0.0050	10.52	5.48	1.716601	0.298713	334
72.0	-24.70	0.0034	10.22	4.90	1.420067	0.247111	404
74.0	-25.20	0.0030	9.96	4.32	1.096276	0.190767	524
76.0	-27.00	0.0020	9.73	3.76	0.876157	0.152464	655
78.0	-28.00	0.0016	9.53	3.20	0.751077	0.130698	765
80.0	-31.20	0.0008	9.36	2.66	0.587407	0.102217	978
82.0	-35.30	0.0003	9.22	2.12	0.418892	0.072893	1371
84.0	-40.00	0.0001	9.11	1.58	0.285067	0.049606	2015
86.0	-40.00	0.0001	9.03	1.05	0.180735	0.031450	3179
88.0	-40.00	0.0001	8.99	0.53	0.058659	0.010208	9796
90.0	-35.60	0.0003	8.97	0.00	0.104773	0.018232	5484

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:FS65-12-00DAL2 Antenna Worksheet (120 Sector)

Maximum Permissible Exposure (MPE): 574.67
ERP (Watts): 257 Height (feet): 36 Frequency (MHz): 862 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	1.0000	8633.80	8633.80	0.000115	0.000020	4998748
1.0	0.00	1.0000	863.34	863.29	0.011497	0.002001	49982
2.0	-0.10	0.9772	431.61	431.51	0.046002	0.008005	12492
3.0	-0.10	0.9772	287.67	287.53	0.103554	0.018020	5549
4.0	-0.30	0.9333	215.68	215.49	0.184219	0.032057	3119
5.0	-0.60	0.8710	172.47	172.24	0.288089	0.050131	1994
6.0	-0.90	0.8128	143.65	143.37	0.415281	0.072265	1383
7.0	-1.40	0.7244	123.05	122.73	0.565942	0.098482	1015
8.0	-2.00	0.6310	107.60	107.22	0.740242	0.128812	776
9.0	-2.60	0.5495	95.56	95.14	0.889170	0.154728	646
10.0	-3.30	0.4677	85.93	85.46	0.989900	0.172256	580
12.0	-6.00	0.2512	71.46	70.89	1.193292	0.207649	481
14.0	-8.20	0.1514	61.10	60.44	1.399727	0.243572	410
16.0	-12.30	0.0589	53.31	52.55	1.609788	0.280126	356
18.0	-18.90	0.0129	47.24	46.38	1.824099	0.317419	315
20.0	-29.90	0.0010	42.36	41.40	2.043329	0.355568	281
22.0	-20.10	0.0098	38.36	37.30	2.268203	0.394699	253
24.0	-15.80	0.0263	35.01	33.85	2.499514	0.434950	229
26.0	-14.10	0.0389	32.17	30.90	2.738131	0.476473	209
28.0	-13.80	0.0417	29.73	28.34	2.346631	0.408346	244
30.0	-14.60	0.0347	27.60	26.10	1.900727	0.330753	302
32.0	-15.80	0.0263	25.73	24.12	1.163803	0.202518	493
34.0	-18.90	0.0129	24.08	22.34	0.718611	0.125048	799
36.0	-22.60	0.0055	22.60	20.74	0.799589	0.139140	718
38.0	-26.50	0.0022	21.27	19.29	0.936552	0.162973	613
40.0	-24.40	0.0036	20.08	17.96	1.049177	0.182571	547
42.0	-21.20	0.0076	18.99	16.74	1.166270	0.202947	492
44.0	-18.60	0.0138	18.00	15.60	1.292156	0.224853	444
46.0	-17.10	0.0195	17.10	14.55	1.427635	0.248428	402
48.0	-16.70	0.0214	16.27	13.57	1.538886	0.267788	373
50.0	-16.50	0.0224	15.50	12.64	1.380038	0.240146	416
52.0	-17.00	0.0200	14.80	11.77	1.115745	0.194155	515
54.0	-17.10	0.0195	14.16	10.95	0.691396	0.120313	831
56.0	-18.00	0.0158	13.56	10.16	0.994131	0.172993	578
58.0	-19.20	0.0120	13.01	9.42	1.280845	0.222885	448
60.0	-20.00	0.0100	12.50	8.70	1.433563	0.249460	400
62.0	-20.60	0.0087	12.03	8.01	1.543081	0.268518	372
64.0	-21.40	0.0072	11.60	7.35	1.647841	0.286747	348
66.0	-22.20	0.0060	11.20	6.71	1.749974	0.304520	328
68.0	-22.70	0.0054	10.84	6.09	1.753698	0.305168	327
70.0	-23.00	0.0050	10.52	5.48	1.707591	0.297145	336
72.0	-24.70	0.0034	10.22	4.90	1.411478	0.245617	407
74.0	-25.20	0.0030	9.96	4.32	1.096276	0.190767	524
76.0	-27.00	0.0020	9.73	3.76	0.864137	0.150372	665
78.0	-28.00	0.0016	9.53	3.20	0.751077	0.130698	765
80.0	-31.20	0.0008	9.36	2.66	0.577770	0.100540	994
82.0	-35.30	0.0003	9.22	2.12	0.412156	0.071721	1394
84.0	-40.00	0.0001	9.11	1.58	0.280008	0.048725	2052
86.0	-40.00	0.0001	9.03	1.05	0.176930	0.030788	3247
88.0	-40.00	0.0001	8.99	0.53	0.057334	0.009977	10023
90.0	-35.60	0.0003	8.97	0.00	0.104774	0.018232	5484

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:FS65-12-00DAL2 Antenna Worksheet (120 Sector)

Maximum Permissible Exposure (MPE):

574.67

ERP (Watts): 257 Height (feet): 36 Frequency (MHz): 862 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	1.0000	8633.80	8633.80	0.000115	0.000020	4998748
1.0	0.00	1.0000	863.34	863.29	0.011497	0.002001	49982
2.0	-0.10	0.9772	431.61	431.51	0.046002	0.008005	12492
3.0	-0.10	0.9772	287.67	287.53	0.103554	0.018020	5549
4.0	-0.30	0.9333	215.68	215.49	0.184219	0.032057	3119
5.0	-0.60	0.8710	172.47	172.24	0.288089	0.050131	1994
6.0	-0.90	0.8128	143.65	143.37	0.415281	0.072265	1383
7.0	-1.40	0.7244	123.05	122.73	0.565942	0.098482	1015
8.0	-2.00	0.6310	107.60	107.22	0.740242	0.128812	776
9.0	-2.60	0.5495	95.56	95.14	0.889170	0.154728	646
10.0	-3.30	0.4677	85.93	85.46	0.989900	0.172256	580
12.0	-6.00	0.2512	71.46	70.89	1.193292	0.207649	481
14.0	-8.20	0.1514	61.10	60.44	1.399727	0.243572	410
16.0	-12.30	0.0589	53.31	52.55	1.609788	0.280126	356
18.0	-18.90	0.0129	47.24	46.38	1.824099	0.317419	315
20.0	-29.90	0.0010	42.36	41.40	2.043329	0.355568	281
22.0	-20.10	0.0098	38.36	37.30	2.268203	0.394699	253
24.0	-15.80	0.0263	35.01	33.85	2.499514	0.434950	229
26.0	-14.10	0.0389	32.17	30.90	2.738131	0.476473	209
28.0	-13.80	0.0417	29.73	28.34	2.346631	0.408346	244
30.0	-14.60	0.0347	27.60	26.10	1.900727	0.330753	302
32.0	-15.80	0.0263	25.73	24.12	1.163803	0.202518	493
34.0	-18.90	0.0129	24.08	22.34	0.718611	0.125048	799
36.0	-22.60	0.0055	22.60	20.74	0.799589	0.139140	718
38.0	-26.50	0.0022	21.27	19.29	0.936552	0.162973	613
40.0	-24.40	0.0036	20.08	17.96	1.049177	0.182571	547
42.0	-21.20	0.0076	18.99	16.74	1.166270	0.202947	492
44.0	-18.60	0.0138	18.00	15.60	1.292156	0.224853	444
46.0	-17.10	0.0195	17.10	14.55	1.427635	0.248428	402
48.0	-16.70	0.0214	16.27	13.57	1.538886	0.267788	373
50.0	-16.50	0.0224	15.50	12.64	1.380038	0.240146	416
52.0	-17.00	0.0200	14.80	11.77	1.115745	0.194155	515
54.0	-17.10	0.0195	14.16	10.95	0.691396	0.120313	831
56.0	-18.00	0.0158	13.56	10.16	0.994131	0.172993	578
58.0	-19.20	0.0120	13.01	9.42	1.280845	0.222885	448
60.0	-20.00	0.0100	12.50	8.70	1.433563	0.249460	400
62.0	-20.60	0.0087	12.03	8.01	1.543081	0.268518	372
64.0	-21.40	0.0072	11.60	7.35	1.647841	0.286747	348
66.0	-22.20	0.0060	11.20	6.71	1.749974	0.304520	328
68.0	-22.70	0.0054	10.84	6.09	1.753698	0.305168	327
70.0	-23.00	0.0050	10.52	5.48	1.707591	0.297145	336
72.0	-24.70	0.0034	10.22	4.90	1.411478	0.245617	407
74.0	-25.20	0.0030	9.96	4.32	1.096276	0.190767	524
76.0	-27.00	0.0020	9.73	3.76	0.864137	0.150372	665
78.0	-28.00	0.0016	9.53	3.20	0.751077	0.130698	765
80.0	-31.20	0.0008	9.36	2.66	0.577770	0.100540	994
82.0	-35.30	0.0003	9.22	2.12	0.412156	0.071721	1394
84.0	-40.00	0.0001	9.11	1.58	0.280008	0.048725	2052
86.0	-40.00	0.0001	9.03	1.05	0.176930	0.030788	3247
88.0	-40.00	0.0001	8.99	0.53	0.057334	0.009977	10023
90.0	-35.60	0.0003	8.97	0.00	0.104774	0.018232	5484

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:FS65-12-00DAL2 Antenna Worksheet (120 Sector)

Maximum Permissible Exposure (MPE): 574.67
ERP (Watts): 257 Height (feet): 36 Frequency (MHz): 862 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	1.0000	8633.80	8633.80	0.000115	0.000020	4998748
1.0	0.00	1.0000	863.34	863.29	0.011497	0.002001	49982
2.0	-0.10	0.9772	431.61	431.51	0.046002	0.008005	12492
3.0	-0.10	0.9772	287.67	287.53	0.103554	0.018020	5549
4.0	-0.30	0.9333	215.68	215.49	0.184219	0.032057	3119
5.0	-0.60	0.8710	172.47	172.24	0.288089	0.050131	1994
6.0	-0.90	0.8128	143.65	143.37	0.415281	0.072265	1383
7.0	-1.40	0.7244	123.05	122.73	0.565942	0.098482	1015
8.0	-2.00	0.6310	107.60	107.22	0.740242	0.128812	776
9.0	-2.60	0.5495	95.56	95.14	0.889170	0.154728	646
10.0	-3.30	0.4677	85.93	85.46	0.989900	0.172256	580
12.0	-6.00	0.2512	71.46	70.89	1.193292	0.207649	481
14.0	-8.20	0.1514	61.10	60.44	1.399727	0.243572	410
16.0	-12.30	0.0589	53.31	52.55	1.609788	0.280126	356
18.0	-18.90	0.0129	47.24	46.38	1.824099	0.317419	315
20.0	-29.90	0.0010	42.36	41.40	2.043329	0.355568	281
22.0	-20.10	0.0098	38.36	37.30	2.268203	0.394699	253
24.0	-15.80	0.0263	35.01	33.85	2.499514	0.434950	229
26.0	-14.10	0.0389	32.17	30.90	2.738131	0.476473	209
28.0	-13.80	0.0417	29.73	28.34	2.346631	0.408346	244
30.0	-14.60	0.0347	27.60	26.10	1.900727	0.330753	302
32.0	-15.80	0.0263	25.73	24.12	1.163803	0.202518	493
34.0	-18.90	0.0129	24.08	22.34	0.718611	0.125048	799
36.0	-22.60	0.0055	22.60	20.74	0.799589	0.139140	718
38.0	-26.50	0.0022	21.27	19.29	0.936552	0.162973	613
40.0	-24.40	0.0036	20.08	17.96	1.049177	0.182571	547
42.0	-21.20	0.0076	18.99	16.74	1.166270	0.202947	492
44.0	-18.60	0.0138	18.00	15.60	1.292156	0.224853	444
46.0	-17.10	0.0195	17.10	14.55	1.427635	0.248428	402
48.0	-16.70	0.0214	16.27	13.57	1.538886	0.267788	373
50.0	-16.50	0.0224	15.50	12.64	1.380038	0.240146	416
52.0	-17.00	0.0200	14.80	11.77	1.115745	0.194155	515
54.0	-17.10	0.0195	14.16	10.95	0.691396	0.120313	831
56.0	-18.00	0.0158	13.56	10.16	0.994131	0.172993	578
58.0	-19.20	0.0120	13.01	9.42	1.280845	0.222885	448
60.0	-20.00	0.0100	12.50	8.70	1.433563	0.249460	400
62.0	-20.60	0.0087	12.03	8.01	1.543081	0.268518	372
64.0	-21.40	0.0072	11.60	7.35	1.647841	0.286747	348
66.0	-22.20	0.0060	11.20	6.71	1.749974	0.304520	328
68.0	-22.70	0.0054	10.84	6.09	1.753698	0.305168	327
70.0	-23.00	0.0050	10.52	5.48	1.707591	0.297145	336
72.0	-24.70	0.0034	10.22	4.90	1.411478	0.245617	407
74.0	-25.20	0.0030	9.96	4.32	1.096276	0.190767	524
76.0	-27.00	0.0020	9.73	3.76	0.864137	0.150372	665
78.0	-28.00	0.0016	9.53	3.20	0.751077	0.130698	765
80.0	-31.20	0.0008	9.36	2.66	0.577770	0.100540	994
82.0	-35.30	0.0003	9.22	2.12	0.412156	0.071721	1394
84.0	-40.00	0.0001	9.11	1.58	0.280008	0.048725	2052
86.0	-40.00	0.0001	9.03	1.05	0.176930	0.030788	3247
88.0	-40.00	0.0001	8.99	0.53	0.057334	0.009977	10023
90.0	-35.60	0.0003	8.97	0.00	0.104774	0.018232	5484

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:RR90-17-00DP Antenna Worksheet (0 Sector)

Maximum Permissible Exposure (MPE):		1000		1900		0.0	
ERP (Watts):	2000	Height (feet):	43	Frequency (MHz):	1900	Downtilt (Degrees):	0.0
Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.83	0.8260	8633.80	8633.80	0.000895	0.000089	1117760
1.0	-0.20	0.9550	863.36	863.29	0.089468	0.008947	11177
2.0	0.00	1.0000	431.66	431.51	0.357912	0.035791	2793
3.0	-0.40	0.9120	287.74	287.53	0.805453	0.080545	1241
4.0	-1.60	0.6918	215.78	215.49	1.432293	0.143229	698
5.0	-3.50	0.4467	172.60	172.24	2.200815	0.220081	454
6.0	-6.40	0.2291	143.80	143.37	2.643942	0.264394	378
7.0	-10.00	0.1000	123.23	122.73	3.088698	0.308870	323
8.0	-13.20	0.0479	107.79	107.22	3.535365	0.353536	282
9.0	-12.50	0.0562	95.79	95.14	3.984228	0.398423	250
10.0	-9.50	0.1122	86.18	85.46	4.435581	0.443558	225
12.0	-8.80	0.1318	71.76	70.89	5.346951	0.534695	187
14.0	-13.90	0.0407	61.45	60.44	6.271952	0.627195	159
16.0	-16.30	0.0234	53.71	52.55	3.777722	0.377772	264
18.0	-12.40	0.0575	47.69	46.38	4.649286	0.464929	215
20.0	-12.70	0.0537	42.87	41.40	5.754007	0.575401	173
22.0	-19.40	0.0115	38.92	37.30	6.721210	0.672121	148
24.0	-21.30	0.0074	35.62	33.85	5.108209	0.510821	195
26.0	-16.20	0.0240	32.83	30.90	4.586749	0.458675	218
28.0	-17.40	0.0182	30.44	28.34	5.328390	0.532839	187
30.0	-26.50	0.0022	28.36	26.10	6.134604	0.613460	163
32.0	-22.40	0.0058	26.55	24.12	6.254342	0.625434	159
34.0	-17.60	0.0174	24.95	22.34	3.750874	0.375087	266
36.0	-18.30	0.0148	23.53	20.74	3.724211	0.372421	268
38.0	-21.40	0.0072	22.26	19.29	4.155778	0.415578	240
40.0	-21.80	0.0066	21.12	17.96	4.605309	0.460531	217
42.0	-17.50	0.0178	20.09	16.74	3.746679	0.374668	266
44.0	-16.70	0.0214	19.15	15.60	4.108810	0.410881	243
46.0	-19.00	0.0126	18.31	14.55	4.485004	0.448500	222
48.0	-20.00	0.0100	17.53	13.57	5.678525	0.567853	176
50.0	-19.70	0.0107	16.83	12.64	6.140048	0.614005	162
52.0	-19.50	0.0112	16.19	11.77	6.618243	0.661824	151
54.0	-18.90	0.0129	15.60	10.95	7.096803	0.709680	140
56.0	-19.40	0.0115	15.06	10.16	7.580953	0.758095	131
58.0	-20.30	0.0093	14.56	9.42	7.136134	0.713613	140
60.0	-20.90	0.0081	14.11	8.70	5.305310	0.530531	188
62.0	-20.90	0.0081	13.69	8.01	5.595154	0.559515	178
64.0	-20.90	0.0081	13.32	7.35	5.877953	0.587795	170
66.0	-20.80	0.0083	12.98	6.71	6.143662	0.614366	162
68.0	-20.30	0.0093	12.67	6.09	5.605228	0.560523	178
70.0	-20.40	0.0091	12.39	5.48	4.893987	0.489399	204
72.0	-21.30	0.0074	12.14	4.90	5.164865	0.516486	193
74.0	-22.60	0.0055	11.92	4.32	5.309873	0.530987	188
76.0	-24.50	0.0035	11.72	3.76	5.429359	0.542936	184
78.0	-26.20	0.0024	11.56	3.20	5.528129	0.552813	180
80.0	-27.80	0.0017	11.42	2.66	4.639102	0.463910	215
82.0	-29.20	0.0012	11.31	2.12	3.230780	0.323078	309
84.0	-29.60	0.0011	11.22	1.58	1.882400	0.188240	531
86.0	-30.00	0.0010	11.16	1.05	1.164685	0.116468	858
88.0	-30.20	0.0010	11.12	0.53	0.787820	0.078782	1269
90.0	-30.60	0.0009	11.11	0.00	0.714101	0.071410	1400

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:RR90-17-00DP Antenna Worksheet (120 Sector)

Maximum Permissible Exposure (MPE): 1000
ERP (Watts): 2000 Height (feet): 43 Frequency (MHz): 1900 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.83	0.8260	8633.80	8633.80	0.000895	0.000089	1117760
1.0	-0.20	0.9550	863.36	863.29	0.089468	0.008947	11177
2.0	0.00	1.0000	431.66	431.51	0.357912	0.035791	2793
3.0	-0.40	0.9120	287.74	287.53	0.805453	0.080545	1241
4.0	-1.60	0.6918	215.78	215.49	1.432293	0.143229	698
5.0	-3.50	0.4467	172.60	172.24	2.200815	0.220081	454
6.0	-6.40	0.2291	143.80	143.37	2.643942	0.264394	378
7.0	-10.00	0.1000	123.23	122.73	3.088698	0.308870	323
8.0	-13.20	0.0479	107.79	107.22	3.535365	0.353536	282
9.0	-12.50	0.0562	95.79	95.14	3.984228	0.398423	250
10.0	-9.50	0.1122	86.18	85.46	4.435581	0.443558	225
12.0	-8.80	0.1318	71.76	70.89	5.346951	0.534695	187
14.0	-13.90	0.0407	61.45	60.44	6.271952	0.627195	159
16.0	-16.30	0.0234	53.71	52.55	3.772911	0.377291	265
18.0	-12.40	0.0575	47.69	46.38	4.640598	0.464060	215
20.0	-12.70	0.0537	42.87	41.40	5.739239	0.573924	174
22.0	-19.40	0.0115	38.92	37.30	6.721210	0.672121	148
24.0	-21.30	0.0074	35.62	33.85	5.108209	0.510821	195
26.0	-16.20	0.0240	32.83	30.90	4.586749	0.458675	218
28.0	-17.40	0.0182	30.44	28.34	5.328391	0.532839	187
30.0	-26.50	0.0022	28.36	26.10	6.096039	0.609604	164
32.0	-22.40	0.0058	26.55	24.12	6.254341	0.625434	159
34.0	-17.60	0.0174	24.95	22.34	3.750874	0.375087	266
36.0	-18.30	0.0148	23.53	20.74	3.705276	0.370528	269
38.0	-21.40	0.0072	22.26	19.29	4.129723	0.412972	242
40.0	-21.80	0.0066	21.12	17.96	4.580347	0.458035	218
42.0	-17.50	0.0178	20.09	16.74	3.746679	0.374668	266
44.0	-16.70	0.0214	19.15	15.60	4.108810	0.410881	243
46.0	-19.00	0.0126	18.31	14.55	4.485004	0.448500	222
48.0	-20.00	0.0100	17.53	13.57	5.678525	0.567853	176
50.0	-19.70	0.0107	16.83	12.64	6.140048	0.614005	162
52.0	-19.50	0.0112	16.19	11.77	6.618243	0.661824	151
54.0	-18.90	0.0129	15.60	10.95	7.096803	0.709680	140
56.0	-19.40	0.0115	15.06	10.16	7.580953	0.758095	131
58.0	-20.30	0.0093	14.56	9.42	7.063752	0.706375	141
60.0	-20.90	0.0081	14.11	8.70	5.245296	0.524530	190
62.0	-20.90	0.0081	13.69	8.01	5.532712	0.553271	180
64.0	-20.90	0.0081	13.32	7.35	5.810925	0.581093	172
66.0	-20.80	0.0083	12.98	6.71	6.143662	0.614366	162
68.0	-20.30	0.0093	12.67	6.09	5.605228	0.560523	178
70.0	-20.40	0.0091	12.39	5.48	4.838179	0.483818	206
72.0	-21.30	0.0074	12.14	4.90	5.105968	0.510597	195
74.0	-22.60	0.0055	11.92	4.32	5.309873	0.530987	188
76.0	-24.50	0.0035	11.72	3.76	5.369569	0.536957	186
78.0	-26.20	0.0024	11.56	3.20	5.528129	0.552813	180
80.0	-27.80	0.0017	11.42	2.66	4.600566	0.460057	217
82.0	-29.20	0.0012	11.31	2.12	3.205337	0.320534	311
84.0	-29.60	0.0011	11.22	1.58	1.867786	0.186779	535
86.0	-30.00	0.0010	11.16	1.05	1.155813	0.115581	865
88.0	-30.20	0.0010	11.12	0.53	0.781532	0.078153	1279
90.0	-30.60	0.0009	11.11	0.00	0.714102	0.071410	1400

Sprint-Nextel
Bay Hill Athletic Club 877193
EMS:RR90-17-00DP Antenna Worksheet (240 Sector)

Maximum Permissible Exposure (MPE):		1000		1900		Downtilt (Degrees):	
ERP (Watts):	2000	Height (feet):	43	Frequency (MHz):	1900		0.0
Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.83	0.8260	8633.80	8633.80	0.000895	0.000089	1117760
1.0	-0.20	0.9550	863.36	863.29	0.089468	0.008947	11177
2.0	0.00	1.0000	431.66	431.51	0.357912	0.035791	2793
3.0	-0.40	0.9120	287.74	287.53	0.805453	0.080545	1241
4.0	-1.60	0.6918	215.78	215.49	1.432293	0.143229	698
5.0	-3.50	0.4467	172.60	172.24	2.200815	0.220081	454
6.0	-6.40	0.2291	143.80	143.37	2.643942	0.264394	378
7.0	-10.00	0.1000	123.23	122.73	3.088698	0.308870	323
8.0	-13.20	0.0479	107.79	107.22	3.535365	0.353536	282
9.0	-12.50	0.0562	95.79	95.14	3.984228	0.398423	250
10.0	-9.50	0.1122	86.18	85.46	4.435581	0.443558	225
12.0	-8.80	0.1318	71.76	70.89	5.346951	0.534695	187
14.0	-13.90	0.0407	61.45	60.44	6.271952	0.627195	159
16.0	-16.30	0.0234	53.71	52.55	3.777722	0.377772	264
18.0	-12.40	0.0575	47.69	46.38	4.649286	0.464929	215
20.0	-12.70	0.0537	42.87	41.40	5.754007	0.575401	173
22.0	-19.40	0.0115	38.92	37.30	6.695563	0.669556	149
24.0	-21.30	0.0074	35.62	33.85	5.087631	0.508763	196
26.0	-16.20	0.0240	32.83	30.90	4.558937	0.455894	219
28.0	-17.40	0.0182	30.44	28.34	5.301299	0.530130	188
30.0	-26.50	0.0022	28.36	26.10	6.134604	0.613460	163
32.0	-22.40	0.0058	26.55	24.12	6.228322	0.622832	160
34.0	-17.60	0.0174	24.95	22.34	3.734495	0.373450	267
36.0	-18.30	0.0148	23.53	20.74	3.724211	0.372421	268
38.0	-21.40	0.0072	22.26	19.29	4.155778	0.415578	240
40.0	-21.80	0.0066	21.12	17.96	4.605309	0.460531	217
42.0	-17.50	0.0178	20.09	16.74	3.725586	0.372559	268
44.0	-16.70	0.0214	19.15	15.60	4.082713	0.408271	244
46.0	-19.00	0.0126	18.31	14.55	4.456518	0.445652	224
48.0	-20.00	0.0100	17.53	13.57	5.637447	0.563745	177
50.0	-19.70	0.0107	16.83	12.64	6.093279	0.609328	164
52.0	-19.50	0.0112	16.19	11.77	6.565063	0.656506	152
54.0	-18.90	0.0129	15.60	10.95	7.039057	0.703906	142
56.0	-19.40	0.0115	15.06	10.16	7.518064	0.751806	133
58.0	-20.30	0.0093	14.56	9.42	7.136134	0.713613	140
60.0	-20.90	0.0081	14.11	8.70	5.305310	0.530531	188
62.0	-20.90	0.0081	13.69	8.01	5.595154	0.559515	178
64.0	-20.90	0.0081	13.32	7.35	5.877953	0.587795	170
66.0	-20.80	0.0083	12.98	6.71	6.074647	0.607465	164
68.0	-20.30	0.0093	12.67	6.09	5.541307	0.554131	180
70.0	-20.40	0.0091	12.39	5.48	4.893987	0.489399	204
72.0	-21.30	0.0074	12.14	4.90	5.164865	0.516486	193
74.0	-22.60	0.0055	11.92	4.32	5.242637	0.524264	190
76.0	-24.50	0.0035	11.72	3.76	5.429359	0.542936	184
78.0	-26.20	0.0024	11.56	3.20	5.478428	0.547843	182
80.0	-27.80	0.0017	11.42	2.66	4.639102	0.463910	215
82.0	-29.20	0.0012	11.31	2.12	3.230780	0.323078	309
84.0	-29.60	0.0011	11.22	1.58	1.882400	0.188240	531
86.0	-30.00	0.0010	11.16	1.05	1.164685	0.116468	858
88.0	-30.20	0.0010	11.12	0.53	0.787820	0.078782	1269
90.0	-30.60	0.0009	11.11	0.00	0.706859	0.070686	1414

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:LNX-6512DS-VTM-0DT Antenna Worksheet (150 Sector)

Maximum Permissible Exposure (MPE): 500
 ERP (Watts): 1000 Height (feet): 36 Frequency (MHz): 750 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9979	8633.80	8633.80	0.000447	0.000089	1117759
1.0	0.00	1.0000	863.34	863.29	0.044737	0.008947	11176
2.0	-0.05	0.9886	431.61	431.51	0.178997	0.035799	2793
3.0	-0.17	0.9616	287.67	287.53	0.402935	0.080587	1240
4.0	-0.36	0.9204	215.68	215.49	0.716806	0.143361	697
5.0	-0.61	0.8690	172.47	172.24	1.120967	0.224193	446
6.0	-0.93	0.8072	143.65	143.37	1.615880	0.323176	309
7.0	-1.32	0.7379	123.05	122.73	2.202108	0.440422	227
8.0	-1.78	0.6637	107.60	107.22	2.795165	0.559033	178
9.0	-2.32	0.5861	95.56	95.14	3.150050	0.630010	158
10.0	-2.94	0.5082	85.93	85.46	3.506903	0.701381	142
12.0	-4.44	0.3597	71.46	70.89	4.227459	0.845492	118
14.0	-6.33	0.2328	61.10	60.44	4.958793	0.991759	100
16.0	-8.68	0.1355	53.31	52.55	5.702974	1.140595	87
18.0	-11.71	0.0675	47.24	46.38	6.462208	1.292442	77
20.0	-15.78	0.0264	42.36	41.40	7.238870	1.447774	69
22.0	-21.87	0.0065	38.36	37.30	8.035529	1.607106	62
24.0	-29.99	0.0010	35.01	33.85	8.854989	1.770998	56
26.0	-24.99	0.0032	32.17	30.90	9.700335	1.940067	51
28.0	-20.88	0.0082	29.73	28.34	10.574974	2.114995	47
30.0	-19.03	0.0125	27.60	26.10	11.098890	2.219778	45
32.0	-18.33	0.0147	25.73	24.12	8.946623	1.789325	55
34.0	-18.44	0.0143	24.08	22.34	6.630079	1.326016	75
36.0	-19.14	0.0122	22.60	20.74	4.347266	0.869453	115
38.0	-20.38	0.0092	21.27	19.29	2.436012	0.487202	205
40.0	-22.22	0.0060	20.08	17.96	1.469890	0.293978	340
42.0	-24.69	0.0034	18.99	16.74	1.707558	0.341512	292
44.0	-28.07	0.0016	18.00	15.60	1.900716	0.380143	263
46.0	-32.97	0.0005	17.10	14.55	2.099942	0.419988	238
48.0	-42.06	0.0001	16.27	13.57	2.310404	0.462081	216
50.0	-48.30	0.0000	15.50	12.64	2.531905	0.506381	197
52.0	-37.94	0.0002	14.80	11.77	2.764404	0.552881	180
54.0	-34.86	0.0003	14.16	10.95	2.864395	0.572879	174
56.0	-33.81	0.0004	13.56	10.16	2.581069	0.516214	193
58.0	-33.57	0.0004	13.01	9.42	2.007757	0.401551	249
60.0	-33.88	0.0004	12.50	8.70	1.302469	0.260494	383
62.0	-34.79	0.0003	12.03	8.01	0.664149	0.132830	752
64.0	-35.51	0.0003	11.60	7.35	0.217796	0.043559	2295
66.0	-36.21	0.0002	11.20	6.71	0.166669	0.033334	2999
68.0	-35.95	0.0003	10.84	6.09	0.176739	0.035348	2829
70.0	-35.26	0.0003	10.52	5.48	0.186594	0.037319	2679
72.0	-34.70	0.0003	10.22	4.90	0.195258	0.039052	2560
74.0	-33.83	0.0004	9.96	4.32	0.194740	0.038948	2567
76.0	-33.32	0.0005	9.73	3.76	0.162243	0.032449	3081
78.0	-32.94	0.0005	9.53	3.20	0.206240	0.041248	2424
80.0	-32.92	0.0005	9.36	2.66	0.250712	0.050142	1994
82.0	-32.90	0.0005	9.22	2.12	0.260046	0.052009	1922
84.0	-32.81	0.0005	9.11	1.58	0.267448	0.053490	1869
86.0	-32.70	0.0005	9.03	1.05	0.274498	0.054900	1821
88.0	-32.91	0.0005	8.99	0.53	0.273065	0.054613	1831
90.0	-33.49	0.0004	8.97	0.00	0.270181	0.054036	1850

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:LNX-6512DS-VTM-0DT Antenna Worksheet (220 Sector)

Maximum Permissible Exposure (MPE): 500
ERP (Watts): 1000 Height (feet): 56 Frequency (MHz): 750 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9979	8633.81	8633.80	0.000447	0.000089	1117761
1.0	0.00	1.0000	863.42	863.29	0.044728	0.008946	11178
2.0	-0.05	0.9886	431.78	431.51	0.178856	0.035771	2795
3.0	-0.17	0.9616	287.93	287.53	0.402223	0.080445	1243
4.0	-0.36	0.9204	216.02	215.49	0.714555	0.142911	699
5.0	-0.61	0.8690	172.90	172.24	1.115471	0.223094	448
6.0	-0.93	0.8072	144.16	143.37	1.604485	0.320897	311
7.0	-1.32	0.7379	123.65	122.73	2.156951	0.431390	231
8.0	-1.78	0.6637	108.27	107.22	2.740411	0.548082	182
9.0	-2.32	0.5861	96.33	95.14	3.150050	0.630010	158
10.0	-2.94	0.5082	86.78	85.46	3.506903	0.701381	142
12.0	-4.44	0.3597	72.48	70.89	4.227459	0.845492	118
14.0	-6.33	0.2328	62.29	60.44	4.958793	0.991759	100
16.0	-8.68	0.1355	54.67	52.55	5.039464	1.007893	99
18.0	-11.71	0.0675	48.76	46.38	4.402516	0.880503	113
20.0	-15.78	0.0264	44.06	41.40	3.414382	0.682876	146
22.0	-21.87	0.0065	40.23	37.30	2.290731	0.458146	218
24.0	-29.99	0.0010	37.05	33.85	1.264048	0.252810	395
26.0	-24.99	0.0032	34.37	30.90	0.508130	0.101626	983
28.0	-20.88	0.0082	32.10	28.34	0.597670	0.119534	836
30.0	-19.03	0.0125	30.14	26.10	0.678497	0.135699	736
32.0	-18.33	0.0147	28.44	24.12	0.759066	0.151813	658
34.0	-18.44	0.0143	26.95	22.34	0.841622	0.168324	594
36.0	-19.14	0.0122	25.64	20.74	0.924709	0.184942	540
38.0	-20.38	0.0092	24.48	19.29	1.009349	0.201870	495
40.0	-22.22	0.0060	23.44	17.96	1.003018	0.200604	498
42.0	-24.69	0.0034	22.52	16.74	0.874102	0.174820	572
44.0	-28.07	0.0016	21.69	15.60	0.672162	0.134432	743
46.0	-32.97	0.0005	20.95	14.55	0.449134	0.089827	1113
48.0	-42.06	0.0001	20.28	13.57	0.256589	0.051318	1948
50.0	-48.30	0.0000	19.67	12.64	0.113375	0.022675	4410
52.0	-37.94	0.0002	19.12	11.77	0.054750	0.010950	9132
54.0	-34.86	0.0003	18.63	10.95	0.060529	0.012106	8260
56.0	-33.81	0.0004	18.18	10.16	0.063084	0.012617	7925
58.0	-33.57	0.0004	17.77	9.42	0.065507	0.013101	7632
60.0	-33.88	0.0004	17.40	8.70	0.067459	0.013492	7411
62.0	-34.79	0.0003	17.07	8.01	0.069519	0.013904	7192
64.0	-35.51	0.0003	16.77	7.35	0.070100	0.014020	7132
66.0	-36.21	0.0002	16.49	6.71	0.063454	0.012691	7879
68.0	-35.95	0.0003	16.25	6.09	0.058771	0.011754	8507
70.0	-35.26	0.0003	16.04	5.48	0.072300	0.014460	6915
72.0	-34.70	0.0003	15.84	4.90	0.082008	0.016402	6096
74.0	-33.83	0.0004	15.68	4.32	0.088799	0.017760	5630
76.0	-33.32	0.0005	15.53	3.76	0.091498	0.018300	5464
78.0	-32.94	0.0005	15.41	3.20	0.090849	0.018170	5503
80.0	-32.92	0.0005	15.30	2.66	0.092660	0.018532	5396
82.0	-32.90	0.0005	15.22	2.12	0.094942	0.018988	5266
84.0	-32.81	0.0005	15.15	1.58	0.094703	0.018941	5279
86.0	-32.70	0.0005	15.11	1.05	0.094190	0.018838	5308
88.0	-32.91	0.0005	15.08	0.53	0.096470	0.019294	5182
90.0	-33.49	0.0004	15.07	0.00	0.092427	0.018485	5409

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:LNX-6512DS-VTM-0DT Antenna Worksheet (340 Sector)

Maximum Permissible Exposure (MPE): 500
 ERP (Watts): 1000 Height (feet): 56 Frequency (MHz): 750 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9979	8633.81	8633.80	0.000447	0.000089	1117761
1.0	0.00	1.0000	863.42	863.29	0.044728	0.008946	11178
2.0	-0.05	0.9886	431.78	431.51	0.178856	0.035771	2795
3.0	-0.17	0.9616	287.93	287.53	0.402223	0.080445	1243
4.0	-0.36	0.9204	216.02	215.49	0.714555	0.142911	699
5.0	-0.61	0.8690	172.90	172.24	1.115471	0.223094	448
6.0	-0.93	0.8072	144.16	143.37	1.604485	0.320897	311
7.0	-1.32	0.7379	123.65	122.73	2.156950	0.431390	231
8.0	-1.78	0.6637	108.27	107.22	2.740760	0.548152	182
9.0	-2.32	0.5861	96.33	95.14	3.150050	0.630010	158
10.0	-2.94	0.5082	86.78	85.46	3.506903	0.701381	142
12.0	-4.44	0.3597	72.48	70.89	4.227459	0.845492	118
14.0	-6.33	0.2328	62.29	60.44	4.958793	0.991759	100
16.0	-8.68	0.1355	54.67	52.55	5.039464	1.007893	99
18.0	-11.71	0.0675	48.76	46.38	4.401955	0.880391	113
20.0	-15.78	0.0264	44.06	41.40	3.413947	0.682789	146
22.0	-21.87	0.0065	40.23	37.30	2.291023	0.458205	218
24.0	-29.99	0.0010	37.05	33.85	1.264531	0.252906	395
26.0	-24.99	0.0032	34.37	30.90	0.508389	0.101678	983
28.0	-20.88	0.0082	32.10	28.34	0.597365	0.119473	837
30.0	-19.03	0.0125	30.14	26.10	0.677892	0.135578	737
32.0	-18.33	0.0147	28.44	24.12	0.758486	0.151697	659
34.0	-18.44	0.0143	26.95	22.34	0.840872	0.168174	594
36.0	-19.14	0.0122	25.64	20.74	0.925770	0.185154	540
38.0	-20.38	0.0092	24.48	19.29	1.009349	0.201870	495
40.0	-22.22	0.0060	23.44	17.96	1.001357	0.200271	499
42.0	-24.69	0.0034	22.52	16.74	0.872321	0.174464	573
44.0	-28.07	0.0016	21.69	15.60	0.670621	0.134124	745
46.0	-32.97	0.0005	20.95	14.55	0.449134	0.089827	1113
48.0	-42.06	0.0001	20.28	13.57	0.257277	0.051455	1943
50.0	-48.30	0.0000	19.67	12.64	0.113693	0.022739	4397
52.0	-37.94	0.0002	19.12	11.77	0.054750	0.010950	9132
54.0	-34.86	0.0003	18.63	10.95	0.060329	0.012066	8287
56.0	-33.81	0.0004	18.18	10.16	0.063084	0.012617	7925
58.0	-33.57	0.0004	17.77	9.42	0.065241	0.013048	7663
60.0	-33.88	0.0004	17.40	8.70	0.067459	0.013492	7411
62.0	-34.79	0.0003	17.07	8.01	0.069866	0.013973	7156
64.0	-35.51	0.0003	16.77	7.35	0.069672	0.013934	7176
66.0	-36.21	0.0002	16.49	6.71	0.063454	0.012691	7879
68.0	-35.95	0.0003	16.25	6.09	0.058771	0.011754	8507
70.0	-35.26	0.0003	16.04	5.48	0.071494	0.014299	6993
72.0	-34.70	0.0003	15.84	4.90	0.080918	0.016184	6179
74.0	-33.83	0.0004	15.68	4.32	0.090213	0.018043	5542
76.0	-33.32	0.0005	15.53	3.76	0.089822	0.017964	5566
78.0	-32.94	0.0005	15.41	3.20	0.090849	0.018170	5503
80.0	-32.92	0.0005	15.30	2.66	0.092660	0.018532	5396
82.0	-32.90	0.0005	15.22	2.12	0.094942	0.018988	5266
84.0	-32.81	0.0005	15.15	1.58	0.094703	0.018941	5279
86.0	-32.70	0.0005	15.11	1.05	0.096955	0.019391	5157
88.0	-32.91	0.0005	15.08	0.53	0.093457	0.018691	5350
90.0	-33.49	0.0004	15.07	0.00	0.095797	0.019159	5219

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:DBXLH-6565A Antenna Worksheet (150 Sector)

Maximum Permissible Exposure (MPE): 1000
ERP (Watts): 2000 Height (feet): 36 Frequency (MHz): 1900 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9977	8633.80	8633.80	0.000895	0.000089	1117759
1.0	-0.10	0.9772	863.34	863.29	0.089473	0.008947	11176
2.0	-0.70	0.8511	431.61	431.51	0.357994	0.035799	2793
3.0	-1.70	0.6761	287.67	287.53	0.762416	0.076242	1311
4.0	-3.50	0.4467	215.68	215.49	1.017279	0.101728	983
5.0	-6.10	0.2455	172.47	172.24	1.272765	0.127277	785
6.0	-9.90	0.1023	143.65	143.37	1.529032	0.152903	654
7.0	-15.90	0.0257	123.05	122.73	1.786242	0.178624	559
8.0	-22.20	0.0060	107.60	107.22	2.044556	0.204456	489
9.0	-16.70	0.0214	95.56	95.14	2.304141	0.230414	434
10.0	-13.40	0.0457	85.93	85.46	2.565165	0.256516	389
12.0	-12.30	0.0589	71.46	70.89	3.092224	0.309222	323
14.0	-16.00	0.0251	61.10	60.44	3.627167	0.362717	275
16.0	-23.10	0.0049	53.31	52.55	4.171506	0.417151	239
18.0	-19.20	0.0120	47.24	46.38	3.641123	0.364112	274
20.0	-18.60	0.0138	42.36	41.40	2.696438	0.269644	370
22.0	-24.30	0.0037	38.36	37.30	3.278399	0.327840	305
24.0	-32.80	0.0005	35.01	33.85	3.932204	0.393220	254
26.0	-22.10	0.0062	32.17	30.90	4.610949	0.461095	216
28.0	-21.70	0.0068	29.73	28.34	4.435524	0.443552	225
30.0	-25.80	0.0026	27.60	26.10	2.752992	0.275299	363
32.0	-21.10	0.0078	25.73	24.12	1.926708	0.192671	519
34.0	-15.80	0.0263	24.08	22.34	2.196072	0.219607	455
36.0	-13.40	0.0457	22.60	20.74	2.496516	0.249652	400
38.0	-13.00	0.0501	21.27	19.29	2.588990	0.258899	386
40.0	-14.00	0.0398	20.08	17.96	1.776871	0.177687	562
42.0	-16.10	0.0245	18.99	16.74	2.133490	0.213349	468
44.0	-18.80	0.0132	18.00	15.60	6.210925	0.621092	161
46.0	-22.10	0.0062	17.10	14.55	11.221227	1.122123	89
48.0	-25.00	0.0032	16.27	13.57	14.493670	1.449367	68
50.0	-25.80	0.0026	15.50	12.64	15.882578	1.588258	62
52.0	-23.90	0.0041	14.80	11.77	17.354057	1.735406	57
54.0	-22.30	0.0059	14.16	10.95	18.872738	1.887274	52
56.0	-22.10	0.0062	13.56	10.16	20.454510	2.045451	48
58.0	-23.30	0.0047	13.01	9.42	21.492199	2.149220	46
60.0	-25.50	0.0028	12.50	8.70	16.309422	1.630942	61
62.0	-28.60	0.0014	12.03	8.01	9.259323	0.925932	107
64.0	-32.50	0.0006	11.60	7.35	4.376782	0.437678	228
66.0	-33.90	0.0004	11.20	6.71	4.106924	0.410692	243
68.0	-30.10	0.0010	10.84	6.09	4.347385	0.434739	230
70.0	-27.10	0.0019	10.52	5.48	4.651144	0.465114	215
72.0	-25.80	0.0026	10.22	4.90	4.579871	0.457987	218
74.0	-25.60	0.0028	9.96	4.32	2.817571	0.281757	354
76.0	-26.50	0.0022	9.73	3.76	2.169766	0.216977	460
78.0	-27.50	0.0018	9.53	3.20	2.441816	0.244182	409
80.0	-28.50	0.0014	9.36	2.66	2.550025	0.255002	392
82.0	-29.40	0.0011	9.22	2.12	2.595278	0.259528	385
84.0	-30.10	0.0010	9.11	1.58	2.308003	0.230800	433
86.0	-30.50	0.0009	9.03	1.05	1.690663	0.169066	591
88.0	-30.70	0.0009	8.99	0.53	1.181762	0.118176	846
90.0	-31.40	0.0007	8.97	0.00	0.963806	0.096381	1037

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:DBXLH-6565A Antenna Worksheet (220 Sector)

Maximum Permissible Exposure (MPE): 1000
 ERP (Watts): 2000 Height (feet): 36 Frequency (MHz): 1900 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9977	8633.80	8633.80	0.000895	0.000089	1117759
1.0	-0.10	0.9772	863.34	863.29	0.089473	0.008947	11176
2.0	-0.70	0.8511	431.61	431.51	0.357994	0.035799	2793
3.0	-1.70	0.6761	287.67	287.53	0.762416	0.076242	1311
4.0	-3.50	0.4467	215.68	215.49	1.017279	0.101728	983
5.0	-6.10	0.2455	172.47	172.24	1.272765	0.127277	785
6.0	-9.90	0.1023	143.65	143.37	1.529032	0.152903	654
7.0	-15.90	0.0257	123.05	122.73	1.786242	0.178624	559
8.0	-22.20	0.0060	107.60	107.22	2.044556	0.204456	489
9.0	-16.70	0.0214	95.56	95.14	2.304141	0.230414	434
10.0	-13.40	0.0457	85.93	85.46	2.565165	0.256516	389
12.0	-12.30	0.0589	71.46	70.89	3.092224	0.309222	323
14.0	-16.00	0.0251	61.10	60.44	3.627167	0.362717	275
16.0	-23.10	0.0049	53.31	52.55	4.171506	0.417151	239
18.0	-19.20	0.0120	47.24	46.38	3.641123	0.364112	274
20.0	-18.60	0.0138	42.36	41.40	2.696437	0.269644	370
22.0	-24.30	0.0037	38.36	37.30	3.278399	0.327840	305
24.0	-32.80	0.0005	35.01	33.85	3.932204	0.393220	254
26.0	-22.10	0.0062	32.17	30.90	4.610949	0.461095	216
28.0	-21.70	0.0068	29.73	28.34	4.450066	0.445007	224
30.0	-25.80	0.0026	27.60	26.10	2.752993	0.275299	363
32.0	-21.10	0.0078	25.73	24.12	1.934088	0.193409	517
34.0	-15.80	0.0263	24.08	22.34	2.204484	0.220448	453
36.0	-13.40	0.0457	22.60	20.74	2.486990	0.248699	402
38.0	-13.00	0.0501	21.27	19.29	2.575994	0.257599	388
40.0	-14.00	0.0398	20.08	17.96	1.776871	0.177687	562
42.0	-16.10	0.0245	18.99	16.74	2.147668	0.214767	465
44.0	-18.80	0.0132	18.00	15.60	6.265778	0.626578	159
46.0	-22.10	0.0062	17.10	14.55	11.221220	1.122122	89
48.0	-25.00	0.0032	16.27	13.57	14.493670	1.449367	68
50.0	-25.80	0.0026	15.50	12.64	15.882580	1.588258	62
52.0	-23.90	0.0041	14.80	11.77	17.354057	1.735406	57
54.0	-22.30	0.0059	14.16	10.95	19.074322	1.907432	52
56.0	-22.10	0.0062	13.56	10.16	20.702005	2.070200	48
58.0	-23.30	0.0047	13.01	9.42	21.492199	2.149220	46
60.0	-25.50	0.0028	12.50	8.70	16.102901	1.610290	62
62.0	-28.60	0.0014	12.03	8.01	9.130434	0.913043	109
64.0	-32.50	0.0006	11.60	7.35	4.376782	0.437678	228
66.0	-33.90	0.0004	11.20	6.71	4.164899	0.416490	240
68.0	-30.10	0.0010	10.84	6.09	4.408755	0.440876	226
70.0	-27.10	0.0019	10.52	5.48	4.651144	0.465114	215
72.0	-25.80	0.0026	10.22	4.90	4.579871	0.457987	218
74.0	-25.60	0.0028	9.96	4.32	2.817571	0.281757	354
76.0	-26.50	0.0022	9.73	3.76	2.169766	0.216977	460
78.0	-27.50	0.0018	9.53	3.20	2.441816	0.244182	409
80.0	-28.50	0.0014	9.36	2.66	2.498557	0.249856	400
82.0	-29.40	0.0011	9.22	2.12	2.542898	0.254290	393
84.0	-30.10	0.0010	9.11	1.58	2.258540	0.225854	442
86.0	-30.50	0.0009	9.03	1.05	1.649584	0.164958	606
88.0	-30.70	0.0009	8.99	0.53	1.181763	0.118176	846
90.0	-31.40	0.0007	8.97	0.00	0.932238	0.093224	1072

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:DBXLH-6565A Antenna Worksheet (340 Sector)

Maximum Permissible Exposure (MPE): 1000
ERP (Watts): 2000 Height (feet): 56 Frequency (MHz): 1900 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9977	8633.81	8633.80	0.000895	0.000089	1117761
1.0	-0.10	0.9772	863.42	863.29	0.089455	0.008946	11178
2.0	-0.70	0.8511	431.78	431.51	0.357713	0.035771	2795
3.0	-1.70	0.6761	287.93	287.53	0.762416	0.076242	1311
4.0	-3.50	0.4467	216.02	215.49	1.017279	0.101728	983
5.0	-6.10	0.2455	172.90	172.24	1.272765	0.127277	785
6.0	-9.90	0.1023	144.16	143.37	1.529032	0.152903	654
7.0	-15.90	0.0257	123.65	122.73	1.786242	0.178624	559
8.0	-22.20	0.0060	108.27	107.22	2.044556	0.204456	489
9.0	-16.70	0.0214	96.33	95.14	2.304141	0.230414	434
10.0	-13.40	0.0457	86.78	85.46	2.355837	0.235584	424
12.0	-12.30	0.0589	72.48	70.89	0.920304	0.092030	1086
14.0	-16.00	0.0251	62.29	60.44	1.245826	0.124583	802
16.0	-23.10	0.0049	54.67	52.55	1.614933	0.161493	619
18.0	-19.20	0.0120	48.76	46.38	1.458700	0.145870	685
20.0	-18.60	0.0138	44.06	41.40	0.657521	0.065752	1520
22.0	-24.30	0.0037	40.23	37.30	0.789511	0.078951	1266
24.0	-32.80	0.0005	37.05	33.85	0.928033	0.092803	1077
26.0	-22.10	0.0062	34.37	30.90	0.667116	0.066712	1498
28.0	-21.70	0.0068	32.10	28.34	0.651241	0.065124	1535
30.0	-25.80	0.0026	30.14	26.10	2.318194	0.231819	431
32.0	-21.10	0.0078	28.44	24.12	4.363549	0.436355	229
34.0	-15.80	0.0263	26.95	22.34	5.277266	0.527727	189
36.0	-13.40	0.0457	25.64	20.74	5.858466	0.585847	170
38.0	-13.00	0.0501	24.48	19.29	6.335577	0.633558	157
40.0	-14.00	0.0398	23.44	17.96	6.868535	0.686854	145
42.0	-16.10	0.0245	22.52	16.74	7.402455	0.740245	135
44.0	-18.80	0.0132	21.69	15.60	7.434346	0.743435	134
46.0	-22.10	0.0062	20.95	14.55	5.602155	0.560215	178
48.0	-25.00	0.0032	20.28	13.57	3.504401	0.350440	285
50.0	-25.80	0.0026	19.67	12.64	1.930450	0.193045	518
52.0	-23.90	0.0041	19.12	11.77	1.415045	0.141505	706
54.0	-22.30	0.0059	18.63	10.95	1.481114	0.148111	675
56.0	-22.10	0.0062	18.18	10.16	1.568324	0.156832	637
58.0	-23.30	0.0047	17.77	9.42	1.607017	0.160702	622
60.0	-25.50	0.0028	17.40	8.70	1.664291	0.166429	600
62.0	-28.60	0.0014	17.07	8.01	1.533246	0.153325	652
64.0	-32.50	0.0006	16.77	7.35	1.072588	0.107259	932
66.0	-33.90	0.0004	16.49	6.71	0.622196	0.062220	1607
68.0	-30.10	0.0010	16.25	6.09	0.825099	0.082510	1211
70.0	-27.10	0.0019	16.04	5.48	0.863562	0.086356	1157
72.0	-25.80	0.0026	15.84	4.90	0.877435	0.087744	1139
74.0	-25.60	0.0028	15.68	4.32	0.907486	0.090749	1101
76.0	-26.50	0.0022	15.53	3.76	0.898727	0.089873	1112
78.0	-27.50	0.0018	15.41	3.20	0.906079	0.090608	1103
80.0	-28.50	0.0014	15.30	2.66	0.799758	0.079976	1250
82.0	-29.40	0.0011	15.22	2.12	0.689021	0.068902	1451
84.0	-30.10	0.0010	15.15	1.58	0.542144	0.054214	1844
86.0	-30.50	0.0009	15.11	1.05	0.437086	0.043709	2287
88.0	-30.70	0.0009	15.08	0.53	0.371497	0.037150	2691
90.0	-31.40	0.0007	15.07	0.00	0.341766	0.034177	2925

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:DBXLH-6565A Antenna Worksheet (150 Sector)

Maximum Permissible Exposure (MPE): 566.67
ERP (Watts): 1500 Height (feet): 36 Frequency (MHz): 850 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9977	8633.80	8633.80	0.000671	0.000118	844529
1.0	-0.10	0.9772	863.34	863.29	0.067105	0.011842	8444
2.0	-0.30	0.9333	431.61	431.51	0.268496	0.047382	2110
3.0	-0.60	0.8710	287.67	287.53	0.604403	0.106659	937
4.0	-1.00	0.7943	215.68	215.49	1.075209	0.189743	527
5.0	-1.50	0.7079	172.47	172.24	1.622609	0.286343	349
6.0	-2.20	0.6026	143.65	143.37	1.949317	0.343997	290
7.0	-3.00	0.5012	123.05	122.73	2.277225	0.401863	248
8.0	-4.00	0.3981	107.60	107.22	2.606542	0.459978	217
9.0	-5.20	0.3020	95.56	95.14	2.937478	0.518379	192
10.0	-6.50	0.2239	85.93	85.46	3.270250	0.577103	173
12.0	-10.20	0.0955	71.46	70.89	3.942182	0.695679	143
14.0	-16.60	0.0219	61.10	60.44	4.624164	0.816029	122
16.0	-29.50	0.0011	53.31	52.55	5.318126	0.938493	106
18.0	-23.40	0.0046	47.24	46.38	6.026126	1.063434	94
20.0	-17.40	0.0182	42.36	41.40	6.750376	1.191243	83
22.0	-15.30	0.0295	38.36	37.30	7.493276	1.322343	75
24.0	-14.80	0.0331	35.01	33.85	8.257438	1.457195	68
26.0	-15.60	0.0275	32.17	30.90	7.462944	1.316990	75
28.0	-17.50	0.0178	29.73	28.34	4.579072	0.808072	123
30.0	-21.10	0.0078	27.60	26.10	2.618586	0.462103	216
32.0	-28.10	0.0015	25.73	24.12	3.018926	0.532752	187
34.0	-39.00	0.0001	24.08	22.34	3.441128	0.607258	164
36.0	-26.00	0.0025	22.60	20.74	3.912084	0.690368	144
38.0	-21.60	0.0069	21.27	19.29	4.405122	0.777375	128
40.0	-19.30	0.0117	20.08	17.96	4.934701	0.870830	114
42.0	-18.10	0.0155	18.99	16.74	5.474052	0.966009	103
44.0	-17.70	0.0170	18.00	15.60	5.724957	1.010286	98
46.0	-17.90	0.0162	17.10	14.55	5.028770	0.887430	112
48.0	-18.70	0.0135	16.27	13.57	3.445065	0.607953	164
50.0	-20.20	0.0095	15.50	12.64	2.653543	0.468272	213
52.0	-22.40	0.0058	14.80	11.77	4.004781	0.706726	141
54.0	-25.70	0.0027	14.16	10.95	4.978275	0.878519	113
56.0	-30.70	0.0009	13.56	10.16	5.552173	0.979795	102
58.0	-40.00	0.0001	13.01	9.42	6.042086	1.066250	93
60.0	-40.00	0.0001	12.50	8.70	6.510721	1.148951	87
62.0	-35.50	0.0003	12.03	8.01	6.981670	1.232059	81
64.0	-32.10	0.0006	11.60	7.35	7.241941	1.277990	78
66.0	-31.10	0.0008	11.20	6.71	6.141284	1.083756	92
68.0	-30.70	0.0009	10.84	6.09	4.023446	0.710020	140
70.0	-30.80	0.0008	10.52	5.48	1.846910	0.325925	306
72.0	-31.60	0.0007	10.22	4.90	0.533676	0.094178	1061
74.0	-32.70	0.0005	9.96	4.32	0.568195	0.100270	997
76.0	-33.60	0.0004	9.73	3.76	0.597045	0.105361	949
78.0	-34.00	0.0004	9.53	3.20	0.607584	0.107221	932
80.0	-34.60	0.0003	9.36	2.66	0.623647	0.110055	908
82.0	-34.70	0.0003	9.22	2.12	0.527967	0.093171	1073
84.0	-34.50	0.0004	9.11	1.58	0.369146	0.065143	1535
86.0	-34.60	0.0003	9.03	1.05	0.313292	0.055287	1808
88.0	-35.10	0.0003	8.99	0.53	0.290391	0.051245	1951
90.0	-35.80	0.0003	8.97	0.00	0.274185	0.048386	2066

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:LNX-6512DS-VTM-0DT Antenna Worksheet (150 Sector)

Maximum Permissible Exposure (MPE): 566.67
ERP (Watts): 1500 Height (feet): 36 Frequency (MHz): 850 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density (µW/cm ²)	Percent of MPE	Times Below MPE
0.1	0.00	0.9993	8633.80	8633.80	0.000671	0.000118	844529
1.0	-0.03	0.9931	863.34	863.29	0.067105	0.011842	8444
2.0	-0.15	0.9661	431.61	431.51	0.268496	0.047382	2110
3.0	-0.32	0.9290	287.67	287.53	0.604403	0.106659	937
4.0	-0.57	0.8770	215.68	215.49	1.075209	0.189743	527
5.0	-0.89	0.8147	172.47	172.24	1.681451	0.296727	337
6.0	-1.28	0.7447	143.65	143.37	2.420578	0.427161	234
7.0	-1.75	0.6683	123.05	122.73	3.296943	0.581813	171
8.0	-2.31	0.5875	107.60	107.22	4.033297	0.711758	140
9.0	-2.96	0.5058	95.56	95.14	4.545380	0.802126	124
10.0	-3.70	0.4266	85.93	85.46	5.060302	0.892995	111
12.0	-5.51	0.2812	71.46	70.89	6.100032	1.076476	92
14.0	-7.86	0.1637	61.10	60.44	7.155314	1.262702	79
16.0	-10.87	0.0818	53.31	52.55	8.229133	1.452200	68
18.0	-14.94	0.0321	47.24	46.38	9.324675	1.645531	60
20.0	-21.17	0.0076	42.36	41.40	10.445361	1.843299	54
22.0	-33.01	0.0005	38.36	37.30	11.594906	2.046160	48
24.0	-26.57	0.0022	35.01	33.85	12.777349	2.254826	44
26.0	-21.53	0.0070	32.17	30.90	13.997143	2.470084	40
28.0	-19.46	0.0113	29.73	28.34	14.870408	2.624190	38
30.0	-18.71	0.0135	27.60	26.10	11.954302	2.109583	47
32.0	-18.79	0.0132	25.73	24.12	8.723376	1.539419	64
34.0	-19.61	0.0109	24.08	22.34	5.640735	0.995424	100
36.0	-21.15	0.0077	22.60	20.74	3.011312	0.531408	188
38.0	-23.50	0.0045	21.27	19.29	1.813013	0.319943	312
40.0	-26.92	0.0020	20.08	17.96	2.124388	0.374892	266
42.0	-31.60	0.0007	18.99	16.74	2.373608	0.418872	238
44.0	-35.18	0.0003	18.00	15.60	2.632054	0.464480	215
46.0	-33.32	0.0005	17.10	14.55	2.906624	0.512934	194
48.0	-31.10	0.0008	16.27	13.57	3.196595	0.564105	177
50.0	-30.13	0.0010	15.50	12.64	3.502002	0.618000	161
52.0	-29.96	0.0010	14.80	11.77	3.636616	0.641756	155
54.0	-30.31	0.0009	14.16	10.95	3.223091	0.568781	175
56.0	-31.22	0.0008	13.56	10.16	2.372234	0.418630	238
58.0	-32.89	0.0005	13.01	9.42	1.382419	0.243956	409
60.0	-35.20	0.0003	12.50	8.70	0.569511	0.100502	995
62.0	-37.71	0.0002	12.03	8.01	0.483668	0.085353	1171
64.0	-37.83	0.0002	11.60	7.35	0.515791	0.091022	1098
66.0	-35.55	0.0003	11.20	6.71	0.545231	0.096217	1039
68.0	-32.70	0.0005	10.84	6.09	0.576022	0.101651	983
70.0	-30.47	0.0009	10.52	5.48	0.577698	0.101947	980
72.0	-28.76	0.0013	10.22	4.90	0.453244	0.079984	1250
74.0	-27.46	0.0018	9.96	4.32	0.390091	0.068840	1452
76.0	-26.54	0.0022	9.73	3.76	0.788854	0.139210	718
78.0	-25.89	0.0026	9.53	3.20	1.255391	0.221540	451
80.0	-25.57	0.0028	9.36	2.66	1.696018	0.299297	334
82.0	-25.46	0.0028	9.22	2.12	1.933183	0.341150	293
84.0	-25.50	0.0028	9.11	1.58	1.971839	0.347972	287
86.0	-25.61	0.0027	9.03	1.05	1.980008	0.349413	286
88.0	-25.88	0.0026	8.99	0.53	1.975295	0.348582	286
90.0	-26.25	0.0024	8.97	0.00	1.922524	0.339269	294

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:DBXLH-6565A Antenna Worksheet (220 Sector)

Maximum Permissible Exposure (MPE): 566.67
ERP (Watts): 1500 Height (feet): 36 Frequency (MHz): 850 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9977	8633.80	8633.80	0.000671	0.000118	844529
1.0	-0.10	0.9772	863.34	863.29	0.067105	0.011842	8444
2.0	-0.30	0.9333	431.61	431.51	0.268496	0.047382	2110
3.0	-0.60	0.8710	287.67	287.53	0.604403	0.106659	937
4.0	-1.00	0.7943	215.68	215.49	1.075209	0.189743	527
5.0	-1.50	0.7079	172.47	172.24	1.622609	0.286343	349
6.0	-2.20	0.6026	143.65	143.37	1.949317	0.343997	290
7.0	-3.00	0.5012	123.05	122.73	2.277225	0.401863	248
8.0	-4.00	0.3981	107.60	107.22	2.606542	0.459978	217
9.0	-5.20	0.3020	95.56	95.14	2.937478	0.518379	192
10.0	-6.50	0.2239	85.93	85.46	3.270250	0.577103	173
12.0	-10.20	0.0955	71.46	70.89	3.942182	0.695679	143
14.0	-16.60	0.0219	61.10	60.44	4.624164	0.816029	122
16.0	-29.50	0.0011	53.31	52.55	5.318126	0.938493	106
18.0	-23.40	0.0046	47.24	46.38	6.026126	1.063434	94
20.0	-17.40	0.0182	42.36	41.40	6.750377	1.191243	83
22.0	-15.30	0.0295	38.36	37.30	7.493276	1.322343	75
24.0	-14.80	0.0331	35.01	33.85	8.257438	1.457195	68
26.0	-15.60	0.0275	32.17	30.90	7.462944	1.316990	75
28.0	-17.50	0.0178	29.73	28.34	4.590758	0.810134	123
30.0	-21.10	0.0078	27.60	26.10	2.618587	0.462104	216
32.0	-28.10	0.0015	25.73	24.12	3.030490	0.534792	186
34.0	-39.00	0.0001	24.08	22.34	3.454309	0.609584	164
36.0	-26.00	0.0025	22.60	20.74	3.897156	0.687733	145
38.0	-21.60	0.0069	21.27	19.29	4.388314	0.774408	129
40.0	-19.30	0.0117	20.08	17.96	4.934701	0.870830	114
42.0	-18.10	0.0155	18.99	16.74	5.502027	0.970946	102
44.0	-17.70	0.0170	18.00	15.60	5.754214	1.015450	98
46.0	-17.90	0.0162	17.10	14.55	5.028770	0.887430	112
48.0	-18.70	0.0135	16.27	13.57	3.445065	0.607953	164
50.0	-20.20	0.0095	15.50	12.64	2.653543	0.468272	213
52.0	-22.40	0.0058	14.80	11.77	4.004781	0.706726	141
54.0	-25.70	0.0027	14.16	10.95	5.010097	0.884135	113
56.0	-30.70	0.0009	13.56	10.16	5.594788	0.987316	101
58.0	-40.00	0.0001	13.01	9.42	6.042086	1.066250	93
60.0	-40.00	0.0001	12.50	8.70	6.452902	1.138747	87
62.0	-35.50	0.0003	12.03	8.01	6.917581	1.220749	81
64.0	-32.10	0.0006	11.60	7.35	7.241945	1.277990	78
66.0	-31.10	0.0008	11.20	6.71	6.210434	1.095959	91
68.0	-30.70	0.0009	10.84	6.09	4.064673	0.717295	139
70.0	-30.80	0.0008	10.52	5.48	1.846910	0.325925	306
72.0	-31.60	0.0007	10.22	4.90	0.533676	0.094178	1061
74.0	-32.70	0.0005	9.96	4.32	0.568195	0.100270	997
76.0	-33.60	0.0004	9.73	3.76	0.597045	0.105361	949
78.0	-34.00	0.0004	9.53	3.20	0.607584	0.107221	932
80.0	-34.60	0.0003	9.36	2.66	0.615750	0.108662	920
82.0	-34.70	0.0003	9.22	2.12	0.521282	0.091991	1087
84.0	-34.50	0.0004	9.11	1.58	0.364932	0.064400	1552
86.0	-34.60	0.0003	9.03	1.05	0.310114	0.054726	1827
88.0	-35.10	0.0003	8.99	0.53	0.290391	0.051245	1951
90.0	-35.80	0.0003	8.97	0.00	0.272096	0.048017	2082

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:LNX-6512DS-VTM-0DT Antenna Worksheet (220 Sector)

Maximum Permissible Exposure (MPE): 566.67
ERP (Watts): 1500 Height (feet): 56 Frequency (MHz): 850 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density (µW/cm ²)	Percent of MPE	Times Below MPE
0.1	0.00	0.9993	8633.81	8633.80	0.000671	0.000118	844531
1.0	-0.03	0.9931	863.42	863.29	0.067092	0.011840	8446
2.0	-0.15	0.9661	431.78	431.51	0.268285	0.047344	2112
3.0	-0.32	0.9290	287.93	287.53	0.603334	0.106471	939
4.0	-0.57	0.8770	216.02	215.49	1.071832	0.189147	528
5.0	-0.89	0.8147	172.90	172.24	1.673207	0.295272	338
6.0	-1.28	0.7447	144.16	143.37	2.390831	0.421911	237
7.0	-1.75	0.6683	123.65	122.73	3.166084	0.558721	178
8.0	-2.31	0.5875	108.27	107.22	3.979172	0.702207	142
9.0	-2.96	0.5058	96.33	95.14	4.545380	0.802126	124
10.0	-3.70	0.4266	86.78	85.46	5.060302	0.892995	111
12.0	-5.51	0.2812	72.48	70.89	6.100032	1.076476	92
14.0	-7.86	0.1637	62.29	60.44	6.762293	1.193346	83
16.0	-10.87	0.0818	54.67	52.55	6.201400	1.094365	91
18.0	-14.94	0.0321	48.76	46.38	4.988523	0.880328	113
20.0	-21.17	0.0076	44.06	41.40	3.441395	0.607305	164
22.0	-33.01	0.0005	40.23	37.30	1.925623	0.339816	294
24.0	-26.57	0.0022	37.05	33.85	0.784060	0.138364	722
26.0	-21.53	0.0070	34.37	30.90	0.719631	0.126994	787
28.0	-19.46	0.0113	32.10	28.34	0.832933	0.146988	680
30.0	-18.71	0.0135	30.14	26.10	0.940987	0.166057	602
32.0	-18.79	0.0132	28.44	24.12	1.052439	0.185725	538
34.0	-19.61	0.0109	26.95	22.34	1.166734	0.205894	485
36.0	-21.15	0.0077	25.64	20.74	1.278795	0.225670	443
38.0	-23.50	0.0045	24.48	19.29	1.265831	0.223382	447
40.0	-26.92	0.0020	23.44	17.96	1.070578	0.188925	529
42.0	-31.60	0.0007	22.52	16.74	0.757091	0.133604	748
44.0	-35.18	0.0003	21.69	15.60	0.436003	0.076942	1299
46.0	-33.32	0.0005	20.95	14.55	0.190840	0.033678	2969
48.0	-31.10	0.0008	20.28	13.57	0.169673	0.029942	3339
50.0	-30.13	0.0010	19.67	12.64	0.179016	0.031591	3165
52.0	-29.96	0.0010	19.12	11.77	0.188019	0.033180	3013
54.0	-30.31	0.0009	18.63	10.95	0.197558	0.034863	2868
56.0	-31.22	0.0008	18.18	10.16	0.205892	0.036334	2752
58.0	-32.89	0.0005	17.77	9.42	0.209122	0.036904	2709
60.0	-35.20	0.0003	17.40	8.70	0.187680	0.033120	3019
62.0	-37.71	0.0002	17.07	8.01	0.144569	0.025512	3919
64.0	-37.83	0.0002	16.77	7.35	0.129196	0.022799	4386
66.0	-35.55	0.0003	16.49	6.71	0.214897	0.037923	2636
68.0	-32.70	0.0005	16.25	6.09	0.318320	0.056174	1780
70.0	-30.47	0.0009	16.04	5.48	0.430029	0.075887	1317
72.0	-28.76	0.0013	15.84	4.90	0.533385	0.094127	1062
74.0	-27.46	0.0018	15.68	4.32	0.616865	0.108858	918
76.0	-26.54	0.0022	15.53	3.76	0.673803	0.118906	840
78.0	-25.89	0.0026	15.41	3.20	0.688527	0.121505	823
80.0	-25.57	0.0028	15.30	2.66	0.691369	0.122006	819
82.0	-25.46	0.0028	15.22	2.12	0.692337	0.122177	818
84.0	-25.50	0.0028	15.15	1.58	0.691268	0.121988	819
86.0	-25.61	0.0027	15.11	1.05	0.688624	0.121522	822
88.0	-25.88	0.0026	15.08	0.53	0.695323	0.122704	814
90.0	-26.25	0.0024	15.07	0.00	0.666089	0.117545	850

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:DBXLH-6565A Antenna Worksheet (340 Sector)

Maximum Permissible Exposure (MPE): 566.67
ERP (Watts): 1500 Height (feet): 56 Frequency (MHz): 850 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	-0.01	0.9977	8633.81	8633.80	0.000671	0.000118	844531
1.0	-0.10	0.9772	863.42	863.29	0.067092	0.011840	8446
2.0	-0.30	0.9333	431.78	431.51	0.268285	0.047344	2112
3.0	-0.60	0.8710	287.93	287.53	0.603334	0.106471	939
4.0	-1.00	0.7943	216.02	215.49	1.071832	0.189147	528
5.0	-1.50	0.7079	172.90	172.24	1.622609	0.286343	349
6.0	-2.20	0.6026	144.16	143.37	1.949317	0.343997	290
7.0	-3.00	0.5012	123.65	122.73	2.277225	0.401863	248
8.0	-4.00	0.3981	108.27	107.22	2.606542	0.459978	217
9.0	-5.20	0.3020	96.33	95.14	2.937478	0.518379	192
10.0	-6.50	0.2239	86.78	85.46	3.270250	0.577103	173
12.0	-10.20	0.0955	72.48	70.89	3.942182	0.695679	143
14.0	-16.60	0.0219	62.29	60.44	4.167104	0.735371	135
16.0	-29.50	0.0011	54.67	52.55	2.819846	0.497620	200
18.0	-23.40	0.0046	48.76	46.38	1.358623	0.239757	417
20.0	-17.40	0.0182	44.06	41.40	1.030247	0.181808	550
22.0	-15.30	0.0295	40.23	37.30	1.237126	0.218316	458
24.0	-14.80	0.0331	37.05	33.85	1.454271	0.256636	389
26.0	-15.60	0.0275	34.37	30.90	1.684419	0.297250	336
28.0	-17.50	0.0178	32.10	28.34	1.916509	0.338207	295
30.0	-21.10	0.0078	30.14	26.10	2.028418	0.357956	279
32.0	-28.10	0.0015	28.44	24.12	1.711427	0.302016	331
34.0	-39.00	0.0001	26.95	22.34	1.033817	0.182438	548
36.0	-26.00	0.0025	25.64	20.74	1.119991	0.197645	505
38.0	-21.60	0.0069	24.48	19.29	1.575135	0.277965	359
40.0	-19.30	0.0117	23.44	17.96	1.864579	0.329043	303
42.0	-18.10	0.0155	22.52	16.74	2.009246	0.354573	282
44.0	-17.70	0.0170	21.69	15.60	2.153368	0.380006	263
46.0	-17.90	0.0162	20.95	14.55	2.296192	0.405210	246
48.0	-18.70	0.0135	20.28	13.57	2.458818	0.433909	230
50.0	-20.20	0.0095	19.67	12.64	2.598094	0.458487	218
52.0	-22.40	0.0058	19.12	11.77	2.427712	0.428420	233
54.0	-25.70	0.0027	18.63	10.95	2.001268	0.353165	283
56.0	-30.70	0.0009	18.18	10.16	1.397289	0.246580	405
58.0	-40.00	0.0001	17.77	9.42	0.799471	0.141083	708
60.0	-40.00	0.0001	17.40	8.70	0.347182	0.061267	1632
62.0	-35.50	0.0003	17.07	8.01	0.181075	0.031954	3129
64.0	-32.10	0.0006	16.77	7.35	0.200655	0.035410	2824
66.0	-31.10	0.0008	16.49	6.71	0.208483	0.036791	2718
68.0	-30.70	0.0009	16.25	6.09	0.213258	0.037634	2657
70.0	-30.80	0.0008	16.04	5.48	0.214781	0.037902	2638
72.0	-31.60	0.0007	15.84	4.90	0.218495	0.038558	2593
74.0	-32.70	0.0005	15.68	4.32	0.219422	0.038721	2582
76.0	-33.60	0.0004	15.53	3.76	0.184238	0.032513	3075
78.0	-34.00	0.0004	15.41	3.20	0.166603	0.029400	3401
80.0	-34.60	0.0003	15.30	2.66	0.129225	0.022804	4385
82.0	-34.70	0.0003	15.22	2.12	0.129632	0.022876	4371
84.0	-34.50	0.0004	15.15	1.58	0.106667	0.018824	5312
86.0	-34.60	0.0003	15.11	1.05	0.107580	0.018985	5267
88.0	-35.10	0.0003	15.08	0.53	0.099359	0.017534	5703
90.0	-35.80	0.0003	15.07	0.00	0.097217	0.017156	5828

Verizon Wireless
Bay Hill Athletic Club 877193
ANDREW:LNX-6512DS-VTM-0DT Antenna Worksheet (340 Sector)

Maximum Permissible Exposure (MPE):

566.67

ERP (Watts): 1500 Height (feet): 56 Frequency (MHz): 850 Downtilt (Degrees): 0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Times Below MPE
0.1	0.00	0.9993	8633.81	8633.80	0.000671	0.000118	844531
1.0	-0.03	0.9931	863.42	863.29	0.067092	0.011840	8446
2.0	-0.15	0.9661	431.78	431.51	0.268285	0.047344	2112
3.0	-0.32	0.9290	287.93	287.53	0.603334	0.106471	939
4.0	-0.57	0.8770	216.02	215.49	1.069367	0.188712	529
5.0	-0.89	0.8147	172.90	172.24	1.673207	0.295272	338
6.0	-1.28	0.7447	144.16	143.37	2.390830	0.421911	237
7.0	-1.75	0.6683	123.65	122.73	3.166083	0.558721	178
8.0	-2.31	0.5875	108.27	107.22	3.978159	0.702028	142
9.0	-2.96	0.5058	96.33	95.14	4.545380	0.802126	124
10.0	-3.70	0.4266	86.78	85.46	5.060302	0.892995	111
12.0	-5.51	0.2812	72.48	70.89	6.100032	1.076476	92
14.0	-7.86	0.1637	62.29	60.44	6.767465	1.194259	83
16.0	-10.87	0.0818	54.67	52.55	6.201399	1.094365	91
18.0	-14.94	0.0321	48.76	46.38	4.983439	0.879430	113
20.0	-21.17	0.0076	44.06	41.40	3.437013	0.606532	164
22.0	-33.01	0.0005	40.23	37.30	1.928323	0.340292	293
24.0	-26.57	0.0022	37.05	33.85	0.785360	0.138593	721
26.0	-21.53	0.0070	34.37	30.90	0.721008	0.127237	785
28.0	-19.46	0.0113	32.10	28.34	0.831130	0.146670	681
30.0	-18.71	0.0135	30.14	26.10	0.938712	0.165655	603
32.0	-18.79	0.0132	28.44	24.12	1.049760	0.185252	539
34.0	-19.61	0.0109	26.95	22.34	1.163319	0.205292	487
36.0	-21.15	0.0077	25.64	20.74	1.282876	0.226390	441
38.0	-23.50	0.0045	24.48	19.29	1.265831	0.223382	447
40.0	-26.92	0.0020	23.44	17.96	1.066629	0.188229	531
42.0	-31.60	0.0007	22.52	16.74	0.754299	0.133112	751
44.0	-35.18	0.0003	21.69	15.60	0.434339	0.076648	1304
46.0	-33.32	0.0005	20.95	14.55	0.190840	0.033678	2969
48.0	-31.10	0.0008	20.28	13.57	0.170367	0.030065	3326
50.0	-30.13	0.0010	19.67	12.64	0.179747	0.031720	3152
52.0	-29.96	0.0010	19.12	11.77	0.188019	0.033180	3013
54.0	-30.31	0.0009	18.63	10.95	0.196654	0.034704	2881
56.0	-31.22	0.0008	18.18	10.16	0.205892	0.036334	2752
58.0	-32.89	0.0005	17.77	9.42	0.208112	0.036726	2722
60.0	-35.20	0.0003	17.40	8.70	0.187680	0.033120	3019
62.0	-37.71	0.0002	17.07	8.01	0.145419	0.025662	3896
64.0	-37.83	0.0002	16.77	7.35	0.128375	0.022654	4414
66.0	-35.55	0.0003	16.49	6.71	0.214897	0.037923	2636
68.0	-32.70	0.0005	16.25	6.09	0.318320	0.056174	1780
70.0	-30.47	0.0009	16.04	5.48	0.426699	0.075300	1328
72.0	-28.76	0.0013	15.84	4.90	0.529052	0.093362	1071
74.0	-27.46	0.0018	15.68	4.32	0.622233	0.109806	910
76.0	-26.54	0.0022	15.53	3.76	0.667649	0.117820	848
78.0	-25.89	0.0026	15.41	3.20	0.688527	0.121505	823
80.0	-25.57	0.0028	15.30	2.66	0.691369	0.122006	819
82.0	-25.46	0.0028	15.22	2.12	0.692337	0.122177	818
84.0	-25.50	0.0028	15.15	1.58	0.691268	0.121988	819
86.0	-25.61	0.0027	15.11	1.05	0.701109	0.123725	808
88.0	-25.88	0.0026	15.08	0.53	0.681116	0.120197	831
90.0	-26.25	0.0024	15.07	0.00	0.681741	0.120307	831

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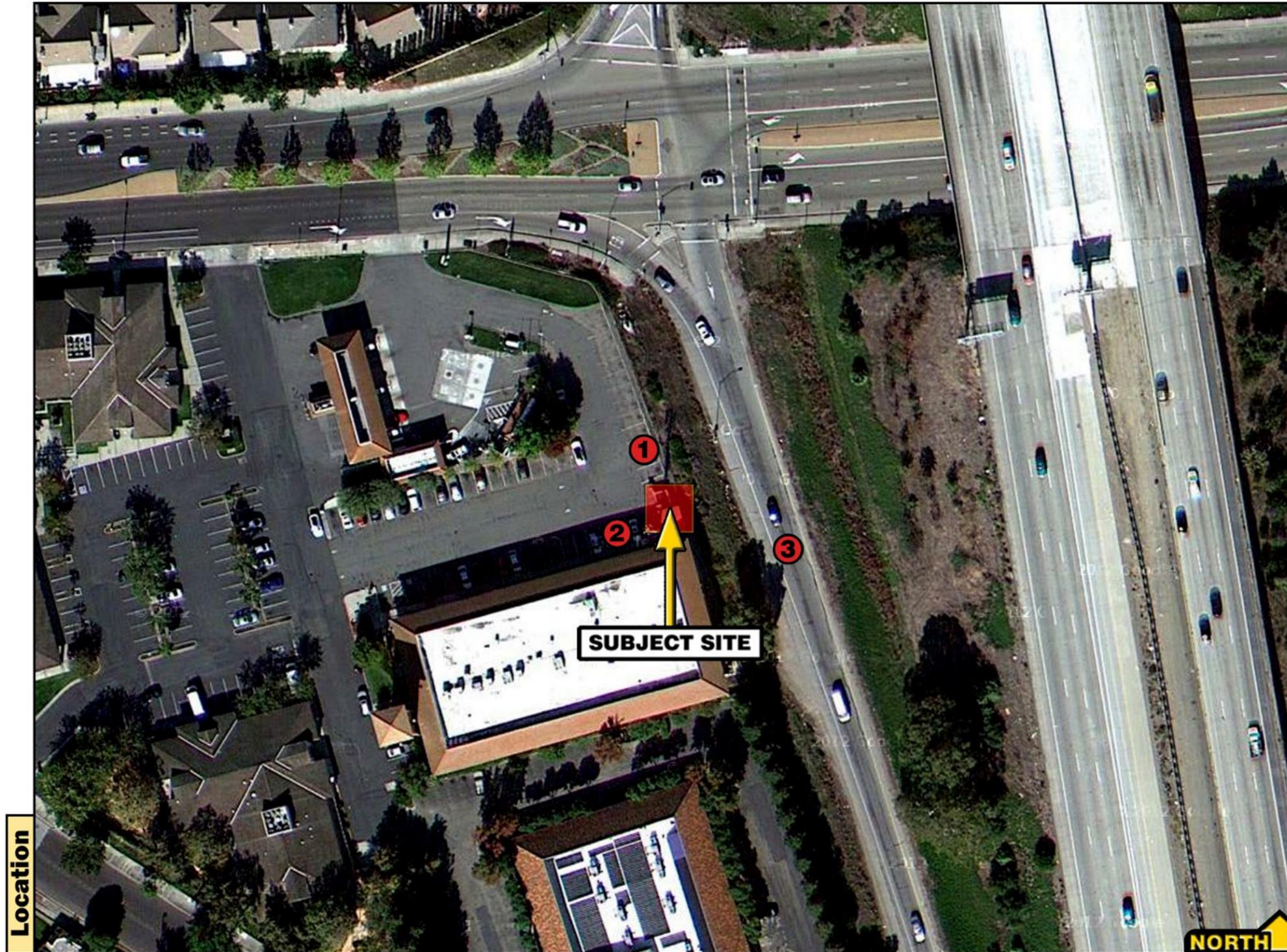
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MILPITAS, CA 95035**

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ATTACHMENT E

June 13, 2012



**Sprint PCS
6580 Sprint Parkway
Overland Park, KS 66251
Jason Osborne - Phone: (415) 559-2121**

Prepared by: CJL

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Pacific Telecom Services, LLC
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The illustration above is a representation of the proposed project based on information provided by the client. Actual construction may vary dependent on approved construction plans and therefore PTS (Pacific Telecom Services) is not responsible for any post production design changes. Monotree disclaimer: (In the event that the proposed installation includes a monotree) The proposed installation is an artistic representation of a tree, and not intended to be an exact reproduction of an actual living tree. The final installation will have cables, cable ports, and various attachments, such as antennas, nuts, and bolts. While every effort will be made to disguise these components, they will not be readily apparent to the casual observer or passerby. However, upon close scrutiny, the true nature of the installation will be apparent.

Sprint PCS
6580 Sprint Parkway
Overland Park, KS 66251
Jason Osborne - Phone: (415) 559-2121

Prepared by: CJL

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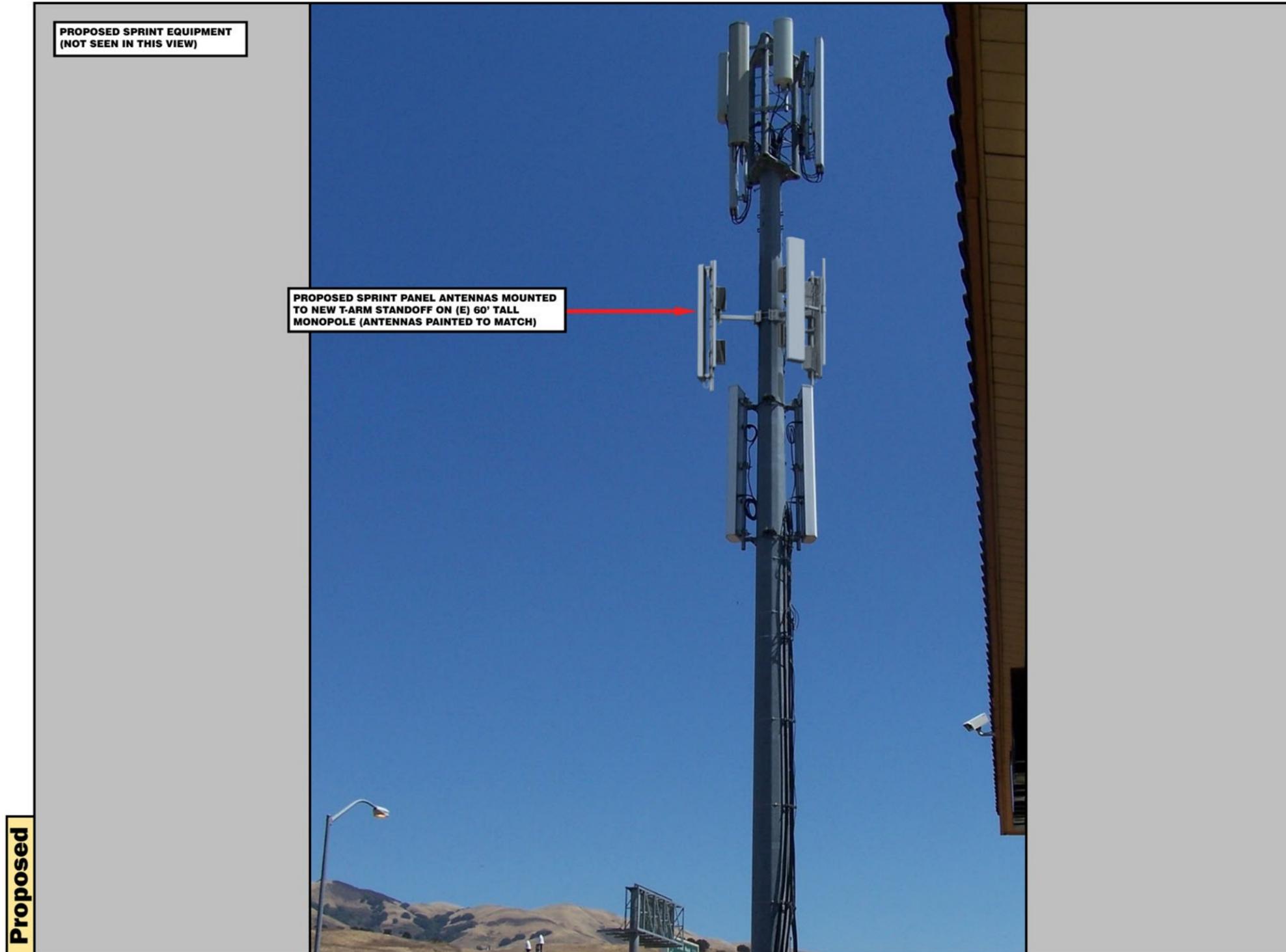
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View #: 2



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Jason Osborne - Phone: (415) 559-2121

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June 13, 2012

View #: 3



The illustration above is a representation of the proposed project based on information provided by the client. Actual construction may vary dependent on approved construction plans and therefore PTS (Pacific Telecom Services) is not responsible for any post production design changes. Monotree disclaimer: (In the event that the proposed installation includes a monotree) The proposed installation is an artistic representation of a tree, and not intended to be an exact reproduction of an actual living tree. The final installation will have cables, cable ports, and various attachments, such as antennas, nuts, and bolts. While every effort will be made to disguise these components, they will not be readily apparent to the casual observer or passerby. However, upon close scrutiny, the true nature of the installation will be apparent.

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