

TITLE NOTE

A DISCREPANCY EXISTS WITHIN THE PROVIDED TITLE REPORT AS TO THE VESTED OWNER(S) OF THE SUBJECT PARCEL. PIETER de BRUYN AND JOHANNA de BRUYN ARE LISTED IN SAID TITLE REPORT AS PARTIALLY VESTED OWNERS. THE de BRUYNS GRANTED THEIR INTEREST IN THE SUBJECT PARCEL TO ROBERT A. MERRIAM PER DOCUMENT NO. 2006-0723486, RECORDED OCTOBER 11, 2006. THIS DISCREPANCY MAY NEED TO BE ADDRESSED IN THE OWNERS SECTION ONCE RESOLVED.

TITLE REPORT INFORMATION

PRELIMINARY REPORT FILE NO. 08025859, DATED JULY 23, 2015, HAS BEEN PROVIDED BY COMMONWEALTH LAND TITLE COMPANY. THE FOLLOWING ITEMS, INCLUDED WITHIN SCHEDULE B-SECTION B, AFFECT THE SUBJECT PARCEL AND HAVE BEEN NUMBERED TO COORESPOND WITH SAID PRELIMINARY REPORT.

- 1 WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT DISCLOSED BY THE PUBLIC RECORD.
- 2 EASEMENT TO VISTA IRRIGATION DISTRICT FOR PIPELINE CONSTRUCTION AND MAINTENANCE AND RIGHT OF WAY, RECORDED IN BOOK 1125, PAGE 187 OF DEEDS.
NOTE: LOCATION CANNOT BE PLOTTED, BLANKET EASEMENT OVER SW 1/4, NW 1/4.
- 3 EASEMENT TO VISTA IRRIGATION DISTRICT FOR PIPELINE CONSTRUCTION AND MAINTENANCE AND RIGHT OF WAY, RECORDED OCTOBER 6, 1925 IN BOOK 1125, PAGE 187 OF DEEDS.
NOTE: LOCATION CANNOT BE PLOTTED, BLANKET EASEMENT OVER SW 1/4, NW 1/4.
- ④ EASEMENT TO SAN DIEGO GAS & ELECTRIC COMPANY FOR LINES, POLES AND WIRES FOR TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, RECORDED JANUARY 28, 1947, IN BOOK 2322, PAGE 359 OF OFFICIAL RECORDS.
NOTE: EASEMENT PLOTTED, ONLY THE CENTERLINE OF SAID EASEMENT IS DESCRIBED, NO WIDTH GIVEN. DOES NOT AFFECT LEASE PREMISES.
- ⑤ EASEMENT TO SAN DIEGO GAS & ELECTRIC COMPANY FOR LINES, POLES AND WIRES FOR TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, RECORDED JANUARY 28, 1947, IN BOOK 2322, PAGE 359 OF OFFICIAL RECORDS.
NOTE: EASEMENT PLOTTED, ONLY THE CENTERLINE OF SAID EASEMENT IS DESCRIBED, NO WIDTH GIVEN. DOES NOT AFFECT LEASE PREMISES.
- ⑦ EASEMENT TO SAN MARCOS COUNTY WATER DISTRICT FOR PIPELINES, RECORDED JULY 5, 1961, IN INSTRUMENT NO. 114664 OF OFFICIAL RECORDS.
NOTE: EASEMENT PLOTTED. DOES NOT AFFECT LEASE PREMISES.
- ⑧ REVERSIONSARY RIGHT IN AND TO AN EASEMENT FOR ROAD AND UTILITY PURPOSES ACCROSS COUNTY ROAD SURVEY NO. 881 AS DESCRIBED IN DEED TO COUNTY OF SAN DIEGO, RECORDED SEPTEMBER 5, 1941, IN BOOK 1269, PAGE 175 OF OFFICIAL RECORDS, LYING WITHIN THAT LAND DESCRIBED IN DEED TO RICHARD C. MERRIAM, RECORDED NOVEMBER 27, 1990 AS INSTRUMENT NO. 90-633157 OF OFFICIAL RECORDS.
NOTE: EASEMENT PLOTTED. DOES NOT AFFECT LEASE PREMISES.
- ⑨ EASEMENT TO COX COMMUNICATIONS CALIFORNIA, LLC, A DELAWARE LIMITED LIABILITY COMPANY, FOR AERIAL TELECOMMUNICATION FACILITIES, RECORDED MAY 27, 2014, AS INSTRUMENT NO. 2014-0214953 OF OFFICIAL RECORDS.
NOTE: EASEMENT PLOTTED. DOES NOT AFFECT LEASE PREMISES.

verizonwireless
15505 SAND CANYON AVE.
IRVINE, CA 92618

PLANS PREPARED BY:

NATIONAL
ENGINEERING & CONSULTING, INC.
27 ORCHARD, LAKE FOREST, CA 92630
PHONE: (949) 716-9990 | FAX: (949) 716-9997

CLIENTS

| NO. | DATE | DESCRIPTION | BY |
|-----|----------|-------------|----|
| 1 | 07/28/15 | PRELIM | MH |
| 2 | 08/25/15 | FINAL | RR |
| 3 | 02/18/16 | FINAL | RR |
| 4 | 06/06/16 | FINAL | RR |
| | | | |
| | | | |
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| | | | |
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SITE INFORMATION:

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069

SEAL:



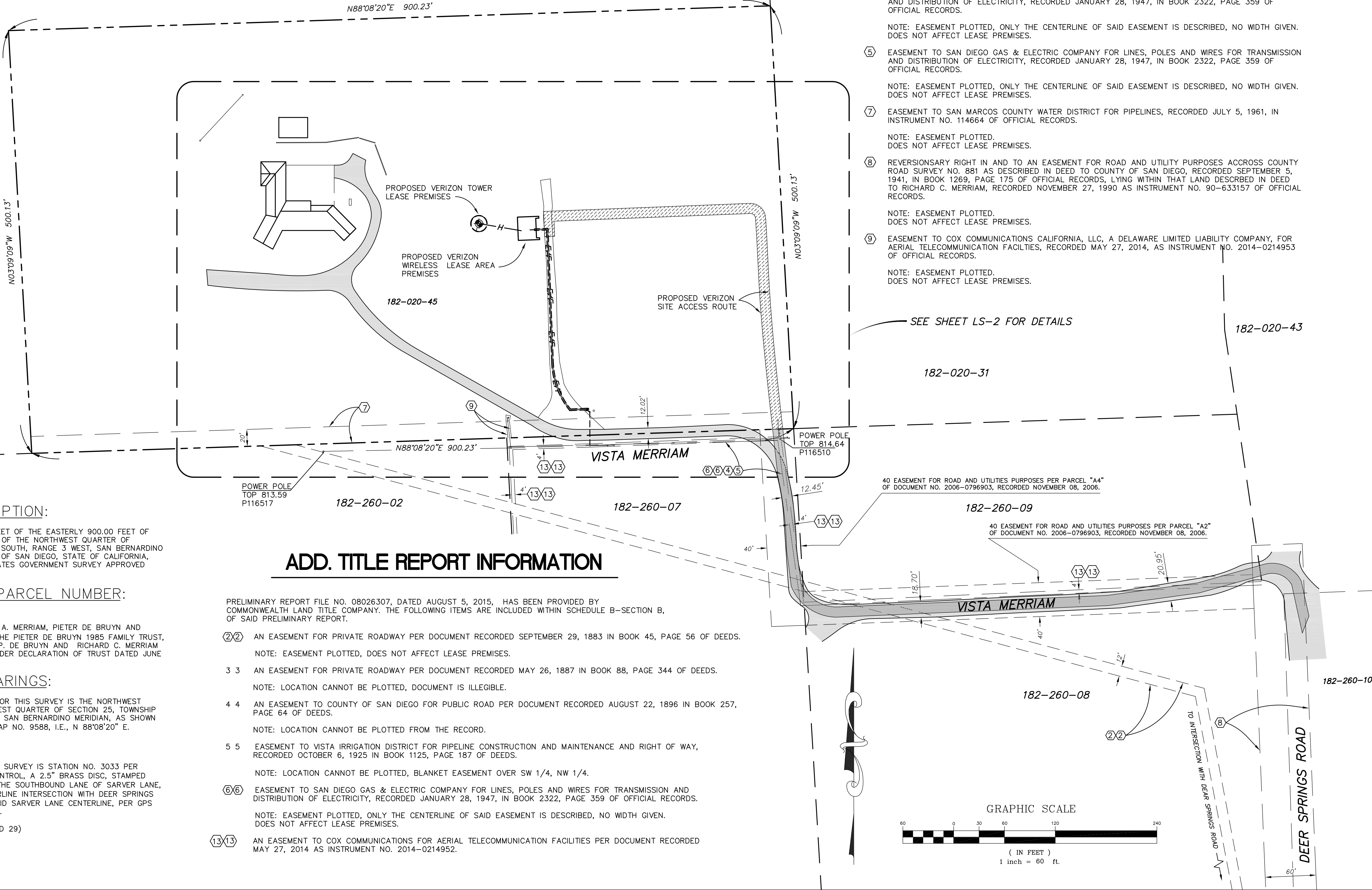
SHEET TITLE:

TOPOGRAPHIC SURVEY

SHEET NUMBER:

LS-1

182-020-44



LEGAL DESCRIPTION:

THE SOUTHERLY 500.00 FEET OF THE EASTERLY 900.00 FEET OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 11 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT SURVEY APPROVED DECEMBER 14, 1885.

ASSESSOR'S PARCEL NUMBER:

182-020-45

OWNERS: ROBERT A. MERRIAM, PIETER DE BRUYN AND JOHANNA DE BRUYN, OF THE PIETER DE BRUYN 1985 FAMILY TRUST, WILLIAN DE BRUYN, JOHN P. DE BRUYN AND RICHARD C. MERRIAM AND MARY F. MERRIAM UNDER DECLARATION OF TRUST DATED JUNE 17, 1982.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 11 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, AS SHOWN ON RECORD OF SURVEY MAP NO. 9588, I.E., N 88°08'20" E.

BENCHMARK:

THE BENCHMARK FOR THIS SURVEY IS STATION NO. 3033 PER COUNTY OF SAN DIEGO CONTROL, A 2.5" BRASS DISC, STAMPED "VWD 3033 LS 5669," IN THE SOUTHBOUND LANE OF SARVER LANE, 60' NORTHERLY OF CENTERLINE INTERSECTION WITH DEER SPRINGS ROAD, 5' WESTERLY OF SAID SARVER LANE CENTERLINE, PER GPS RECORD OF SURVEY 15376.

ELEVATION = 773.64 (NGVD 29)

ADD. TITLE REPORT INFORMATION

PRELIMINARY REPORT FILE NO. 08026307, DATED AUGUST 5, 2015, HAS BEEN PROVIDED BY COMMONWEALTH LAND TITLE COMPANY. THE FOLLOWING ITEMS ARE INCLUDED WITHIN SCHEDULE B-SECTION B, OF SAID PRELIMINARY REPORT.

- ②② AN EASEMENT FOR PRIVATE ROADWAY PER DOCUMENT RECORDED SEPTEMBER 29, 1883 IN BOOK 45, PAGE 56 OF DEEDS.
NOTE: EASEMENT PLOTTED, DOES NOT AFFECT LEASE PREMISES.
- 3 3 AN EASEMENT FOR PRIVATE ROADWAY PER DOCUMENT RECORDED MAY 26, 1887 IN BOOK 88, PAGE 344 OF DEEDS.
NOTE: LOCATION CANNOT BE PLOTTED, DOCUMENT IS ILLEGIBLE.
- 4 4 AN EASEMENT TO COUNTY OF SAN DIEGO FOR PUBLIC ROAD PER DOCUMENT RECORDED AUGUST 22, 1896 IN BOOK 257, PAGE 64 OF DEEDS.
NOTE: LOCATION CANNOT BE PLOTTED FROM THE RECORD.
- 5 5 EASEMENT TO VISTA IRRIGATION DISTRICT FOR PIPELINE CONSTRUCTION AND MAINTENANCE AND RIGHT OF WAY, RECORDED OCTOBER 6, 1925 IN BOOK 1125, PAGE 187 OF DEEDS.
NOTE: LOCATION CANNOT BE PLOTTED, BLANKET EASEMENT OVER SW 1/4, NW 1/4.
- ⑥⑥ EASEMENT TO SAN DIEGO GAS & ELECTRIC COMPANY FOR LINES, POLES AND WIRES FOR TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, RECORDED JANUARY 28, 1947, IN BOOK 2322, PAGE 359 OF OFFICIAL RECORDS.
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- ⑬⑬ AN EASEMENT TO COX COMMUNICATIONS FOR AERIAL TELECOMMUNICATION FACILITIES PER DOCUMENT RECORDED MAY 27, 2014 AS INSTRUMENT NO. 2014-0214952.



PLANS PREPARED BY:



CLIENTS

[illegible]

—SITE INFORMATION:

124 VISTA MERRIAM
SAN MARCOS, CA 92069

SEAL:

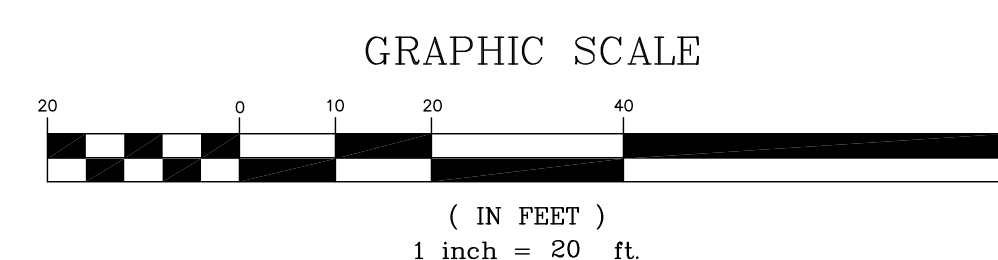
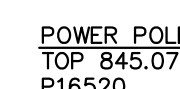


SHEET TITLE:


TOPOGRAPHIC SURVEY

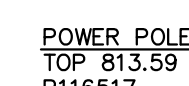
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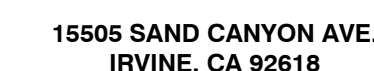
LS-2



GEOGRAPHIC COORDINATES


 LATITUDE: 33° 11' 41.92" N
 LONGITUDE: 117° 09' 17.46" W





NATIONAL
ENGINEERING & CONSULTING, INC.
27 ORCHARD, LAKE FOREST, CA 92631
PHONE: (949) 716-9990 | FAX: (949) 716-9995

| NO. | DATE: | DESCRIPTION: | BY: |
|-----|----------|--------------------|-----|
| 4 | 10/06/15 | CLIENT REVISION | JY |
| 5 | 10/16/15 | CLIENT REVISION | SE |
| 6 | 02/12/16 | PLANNING COMMENTS | JY |
| 7 | 02/18/16 | CLIENT REVISION | KH |
| 8 | 03/01/16 | UTILITY REVISION | KH |
| 9 | 04/19/16 | DESIGN REVISION | KH |
| 10 | 07/19/16 | LL DESIGN REVISION | JY |
| 11 | 08/17/16 | PLANNING UPDATES | KH |
| 12 | 11/15/16 | COUNTY COMMENTS | JY |
| 13 | 11/17/16 | RF CHANGES | JY |
| 14 | 10/02/17 | PLANNING COMMENTS | CN |

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

OVERALL SITE PLAN

A-1

PROPOSED VERIZON WIRELESS EQUIPMENT & ANTENNA LOCATION

REFER TO ENLARGED SITE
PLAN ON SHEET A-2

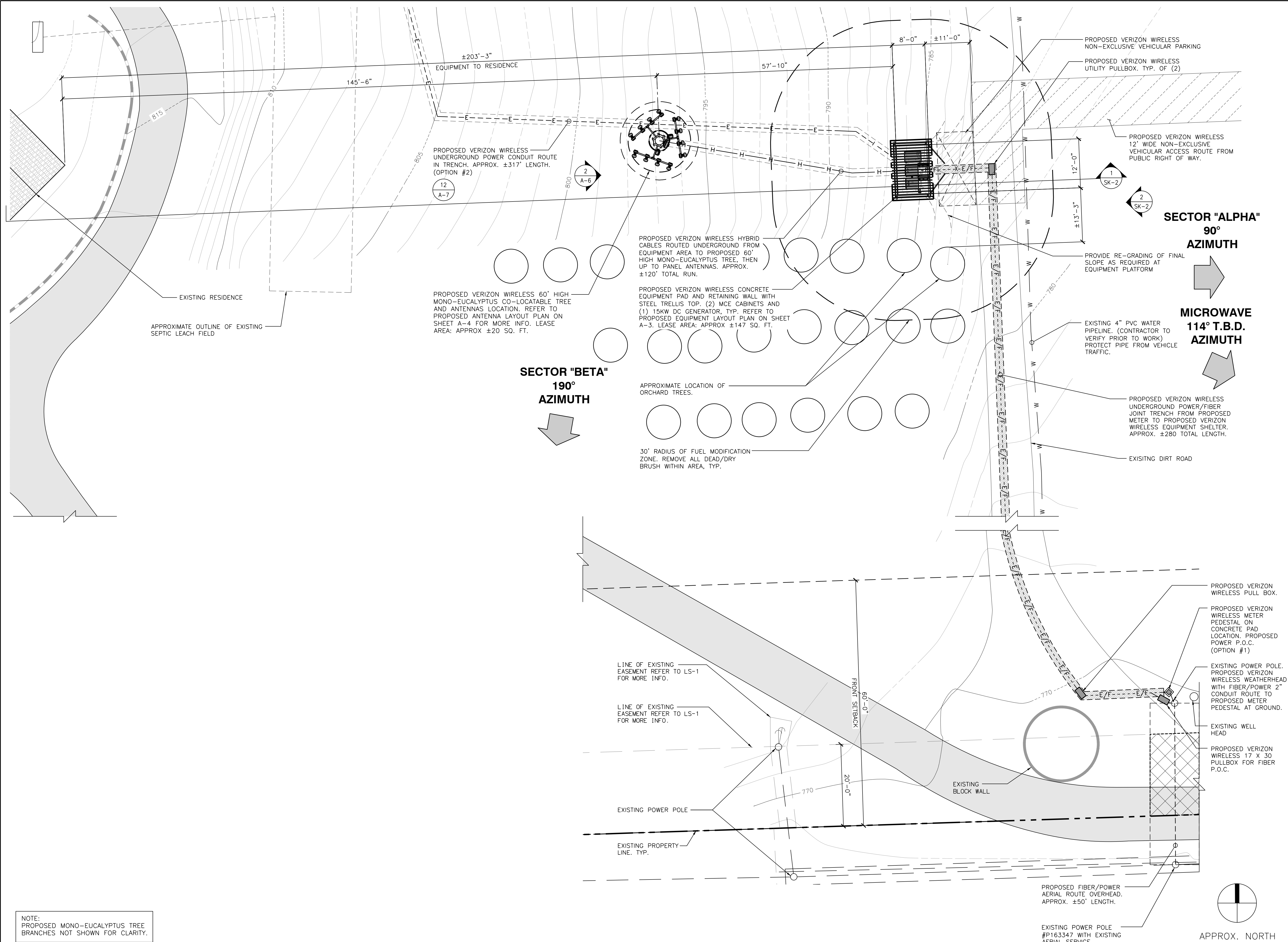
A hand-drawn vicinity map of San Marcos, California. The map shows several roads: Twin Oaks Valley Rd running vertically on the left, Deer Springs Rd running vertically on the right, and Vista Merriam running horizontally across the center. Sharper Ln is shown as a curved road at the top. Highway 15 is indicated by a shield symbol on the right. A small rectangle labeled 'SITE' is located on Deer Springs Rd, just south of its intersection with Vista Merriam. The text 'SAN MARCOS' is written in large, bold, capital letters in the lower right, and 'VICINITY MAP' is written below it.

NOTE: LANDLORD IS WORKING WITH COUNTY TO PERMIT & REMOVE UN-PERMITTED STRUCTURES ON SITE. SQUARE FOOTAGE CALCULATIONS NOT IN SCOPE OF WORK.

APPROX. NORTH

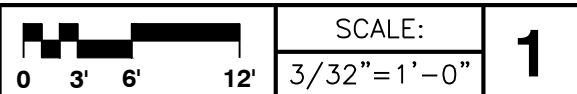
| | |
|---|---------------------|
|  | SCALE: 1"=50'-0" |
|---|---------------------|

OVERALL SITE PLAN



NOTE:
PROPOSED MONO-EUCALYPTUS TREE
BRANCHES NOT SHOWN FOR CLARITY.

ENLARGED SITE PLAN



15505 SAND CANYON AVE.
IRVINE, CA 92618

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CLIENTS

| NO. | DATE: | DESCRIPTION: | BY: |
|-----|----------|--------------------|-----|
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| 5 | 10/16/15 | CLIENT REVISION | SB |
| 6 | 02/12/16 | PLANNING COMMENTS | JY |
| 7 | 02/18/16 | CLIENT REVISION | KH |
| 8 | 03/01/16 | UTILITY REVISION | KH |
| 9 | 04/19/16 | DESIGN REVISION | KH |
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| 12 | 11/15/16 | COUNTY COMMENTS | JY |
| 13 | 11/17/16 | RF CHANGES | JY |
| 14 | 10/02/17 | PLANNING COMMENTS | CN |

SITE INFORMATION:

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

SEAL:

SHEET TITLE:

ENLARGED SITE PLAN

SHEET NUMBER:

A-2

EROSION CONTROL GENERAL NOTES

1. IN THE CASE OF EMERGENCY, CALL VERIZON WIRELESS AT (800) 264-6620 (24 HOUR PHONE NO.)
2. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. EROSION CONTROL DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY INSPECTOR.
4. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
5. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS, AND BASINS.
6. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARD DESILTING FACILITIES.
7. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
8. THE PERMITTEE AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND ENSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
9. ANY SLOPES WITH DISTURBED SOILS OR DENUDED VEGETATION MUST BE STABILIZED TO INHIBIT EROSION BY WIND AND WATER.
10. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
11. CONSTRUCTION SITES SHALL BE MAINTAINED BY IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMP) IN SUCH A MANNER THAT POLLUTANTS ARE NOT DISCHARGED FROM THE SITE TO THE MAXIMUM EXTENT PRACTICABLE.
12. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE, OR WIND.
13. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND AND WATER.
14. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
15. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
16. ALL NON-STORMWATER DISCHARGES, UNLESS ACCEPTED OR AUTHORIZED BY AN NPDES PERMIT, REQUIRE PRIOR APPROVAL BY THE STATE WATER RESOURCES CONTROL BOARD.
17. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.

SAN DIEGO STORM WATER QUALITY NOTES CONSTRUCTION BMPs:

THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD FOR THE SAN DIEGO REGION REISSUED (SDRWQCB) A MUNICIPAL STORM WATER, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (MS4), EFFECTIVE FEBRUARY 26, 2016. THIS PROJECT IS SUBJECT TO FOLLOW CRITERIA SET FORTH IN THE COUNTY OF SAN DIEGO BMP DESIGN MANUAL AND REFERENCES FOUND IN THE CALTRANS STORM WATER QUALITY HANDBOOK.

NOTES BELOW REPRESENT KEY MINIMUM REQUIREMENTS FOR CONSTRUCTION BMP'S.

1. STORMWATER BEST MANAGEMENT PRACTICES (BMPs) ARE REQUIRED AT ALL TIMES AND SHALL BE IN ACCORDANCE WITH THE COUNTY'S WATERSHED PROTECTION ORDINANCE.
2. OBTAIN AN APPROVED TRAFFIC CONTROL PERMIT PRIOR TO START OF ANY WORK IN THE RIGHT OF WAY.
3. COMPACTION SHALL BE ACHIEVED BY "MECHANICAL COMPACTION" METHODS AND GEOTECHNICAL COMPACTION REPORTS ARE REQUIRED FOR ALL COMPACTED SECTIONS OF THE TRENCH, EXCEPTIONS TO COMPACTION TESTING REQUIREMENTS AT THE DISCRETION OF THE DIRECTOR OF PUBLIC WORKS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF ALL SILT AND MUD ON ADJACENT STREET(S), DUE TO CONSTRUCTION VEHICLES OR ANY OTHER CONSTRUCTION ACTIVITY, AT THE END OF EACH WORK DAY, OR AFTER A STORM EVENT THAT CAUSES A BREACH IN INSTALLED CONSTRUCTION BMP'S WHICH MAY COMPROMISE STORM WATER QUALITY WITHIN ANY STREET(S). A STABILIZED CONSTRUCTION EXIT MAY BE REQUIRED TO PREVENT CONSTRUCTION VEHICLES OR EQUIPMENT FROM TRACKING MUD OR SILT ONTO THE STREET
5. ALL STOCKPILES OF SOIL AND/OR BUILDING MATERIALS THAT ARE INTENDED TO BE LEFT FOR A PERIOD GREATER THAN SEVEN CALENDAR DAYS ARE TO BE COVERED. ALL REMOVABLE BMP DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN FIVE DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
6. A CONCRETE WASHOUT SHALL BE PROVIDED ON ALL PROJECTS WHICH PROPOSE THE CONSTRUCTION OF ANY CONCRETE IMPROVEMENTS WHICH ARE TO BE POURED IN PLACE ON SITE.
7. THE CONTRACTOR SHALL RESTORE AL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER AFTER EACH RUN-OFF PRODUCING RAINFALL OR AFTER ANY MATERIAL BREACH IN EFFECTIVENESS.
8. ALL SLOPES THAT ARE CREATED OR DISTURBED BY CONSTRUCTION ACTIVITY MUST BE PROTECTED AGAINST EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.
9. THE STORAGE OF ALL CONSTRUCTION MATERIALS AND EQUIPMENT MUST BE PROTECTED AGAINST ANY POTENTIAL RELEASE OF POLLUTANTS INTO THE ENVIRONMENT.

NOTES:

- CONTRACTOR TO REDUCE TIME OF EXCAVATION & CONCRETE POUR TIME TO MINIMIZE SITE IMPACT.
- TEMPORARY FENCING TO BE INSTALLED IN A WAY SUCH THAT IT DOES NOT IMPEDE ACCESS TO ADJACENT STRUCTURE.

STOCKPILE STORAGE ITEMS:

- TRELLIS ITEMS
- STRUCTURAL STEEL
- CMU
- PREFABRICATED ITEMS; STAGING BEFORE PLACEMENT.

ANTICIPATED POLLUTANTS:

- TRASH AND DEBRIS
- MORTAR & CONCRETE WASTE

MATERIAL & WASTE MANAGEMENT CONTROL BMPs:

- WM-1 MATERIAL DELIVERY & STORAGE
- WM-4 SPILL PREVENTION AND CONTROL
- WM-8 WASTE & CONCRETE WASTE MANAGEMENT
- WM-5 SOLID WASTE MANAGEMENT
- WM-9 SANITARY WASTE MANAGEMENT

TEMPORARY RUNOFF CONTROL BMPs:

- SC-8 SAND BAGS

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

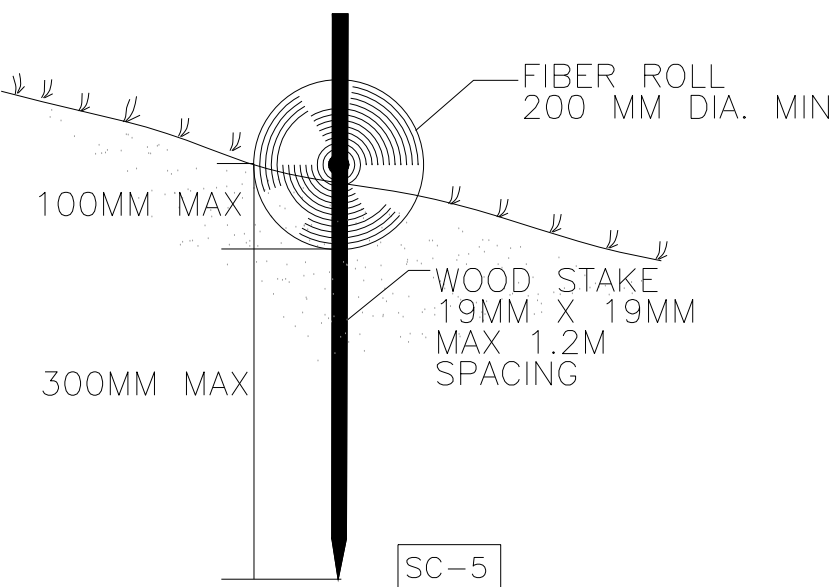
LEGEND

- FENCE WITH GREEN FABRIC
- STRAW WATTLES/FIBER ROLLS
- STABILIZED CONSTRUCTION ENTRANCE
- STONE

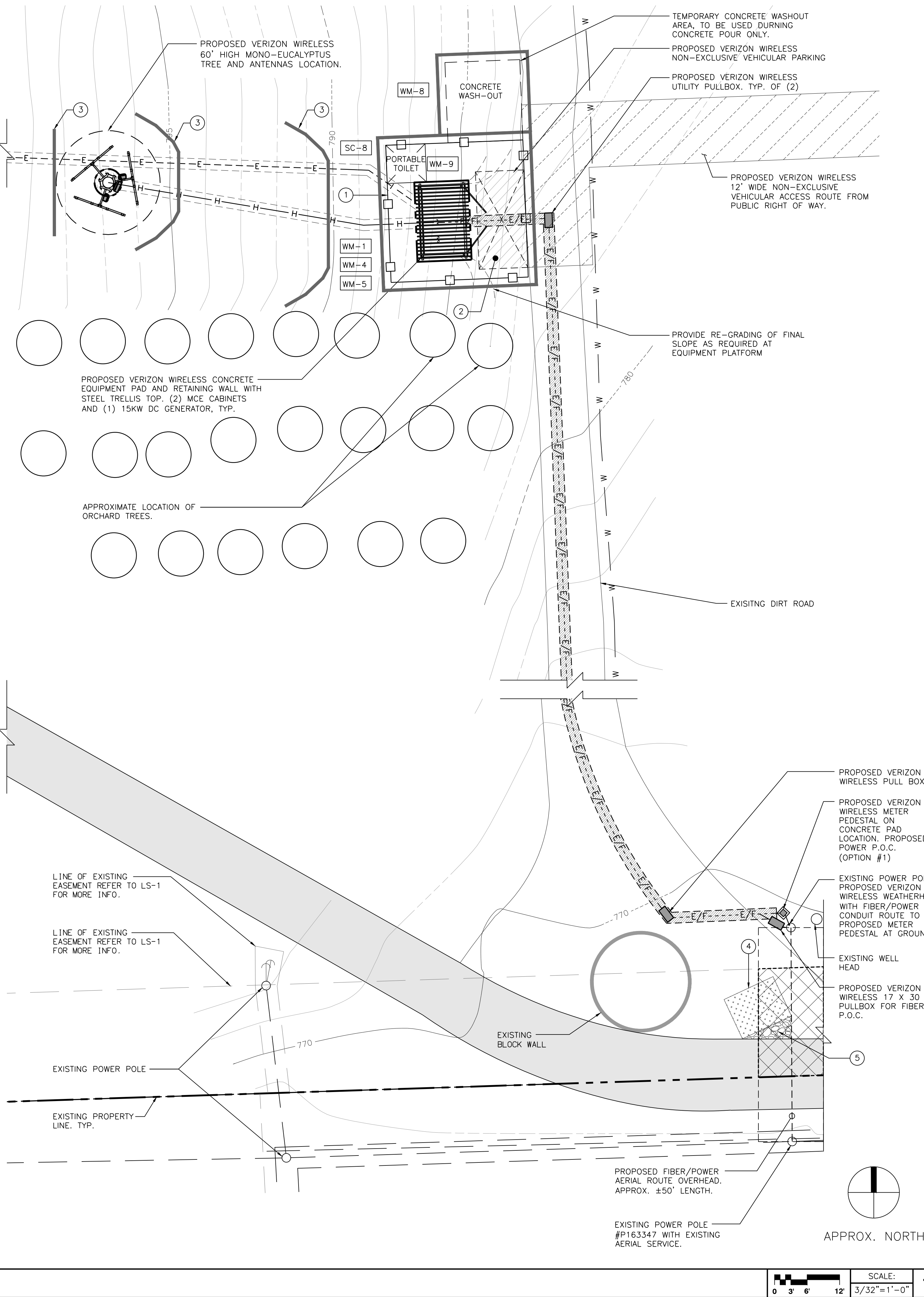
CONSTRUCTION NOTES

- 1 INSTALL TEMPORARY CHAINLINK FENCE WITH FILTER FABRIC
- 2 MATERIAL STOCK PILE AREA
- 3 INSTALL STRAW WATTLES
- 4 STEEL TRACK-OUT PLATE/STABILIZED CONSTRUCTION ENTRANCE
- 5 STONE FABRIC

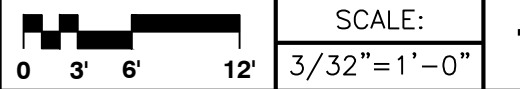
52 STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



51 FIBER ROLL DETAIL
INSLOPE AREA



WATER POLLUTION CONTROL PLAN



15505 SAND CANYON AVE.
IRVINE, CA 92618

PLANS PREPARED BY:

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CLIENTS

| NO. | DATE: | DESCRIPTION: | BY: |
|-----|----------|--------------------|-----|
| 4 | 10/06/15 | CLIENT REVISION | JY |
| 5 | 10/16/15 | CLIENT REVISION | SB |
| 6 | 02/12/16 | PLANNING COMMENTS | JY |
| 7 | 02/18/16 | CLIENT REVISION | KH |
| 8 | 03/01/16 | UTILITY REVISION | KH |
| 9 | 04/19/16 | DESIGN REVISION | KH |
| 10 | 07/19/16 | LL DESIGN REVISION | JY |
| 11 | 08/17/16 | PLANNING UPDATES | KH |
| 12 | 11/15/16 | COUNTY COMMENTS | JY |
| 13 | 11/17/16 | RF CHANGES | JY |
| 14 | 10/02/17 | PLANNING COMMENTS | CN |

SITE INFORMATION:

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

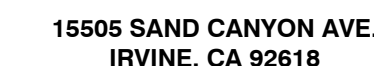
SEAL:

SHEET TITLE:

WATER POLLUTION CONTROL PLAN

SHEET NUMBER:

A-2.1



PLANS PREPARED BY:



CLIENTS

| NO. | DATE: | DESCRIPTION: | BY: |
|-----|----------|--------------------|-----|
| 4 | 10/06/15 | CLIENT REVISION | JY |
| 5 | 10/16/15 | CLIENT REVISION | SE |
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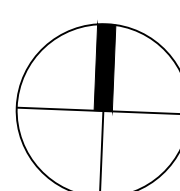
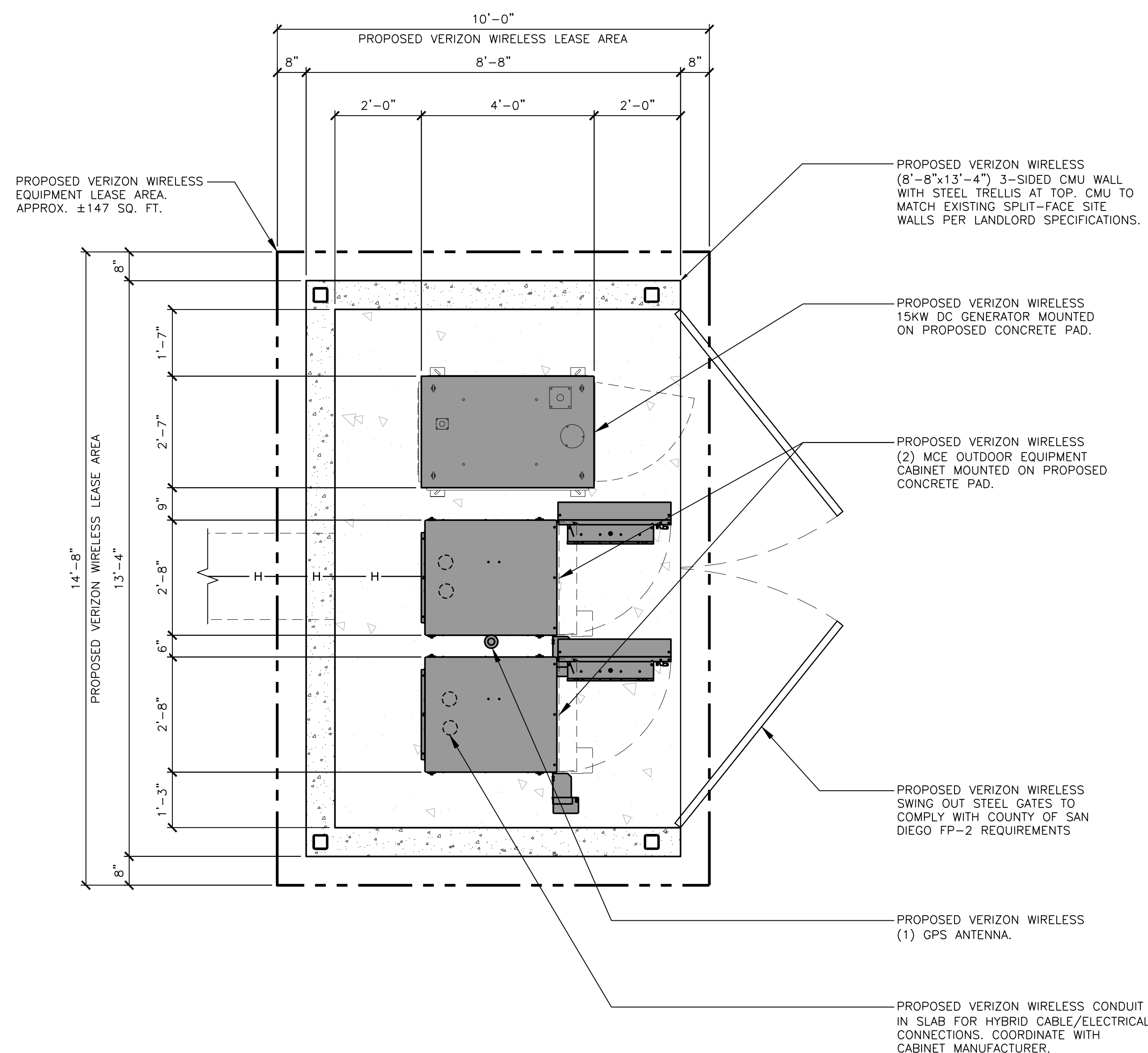
SEAL:

SHEET TITLE:

PROPOSED EQUIPMENT LAYOUT AND ENCLOSURE TRELLIS PLANS

SHEET NUMBER:

A-3



APPROX. NORTH

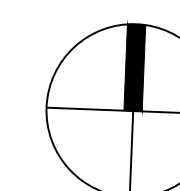
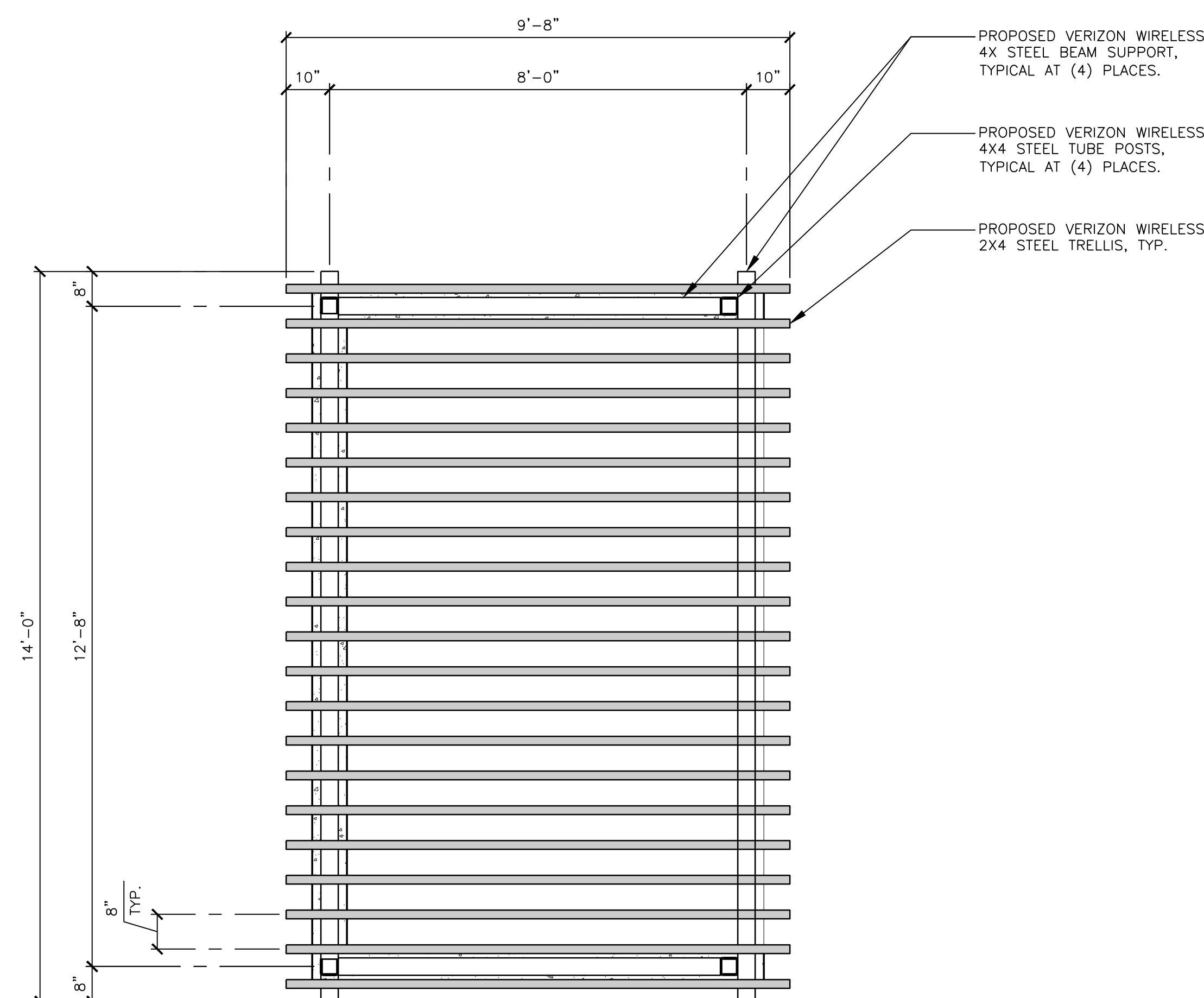
PROPOSED EQUIPMENT LAYOUT PLAN



SCALE:
1/2"=1'-

1

PROPOSED EQUIPMENT ENCLOSURE TRELLIS PLAN



APPROX. NORTH



| |
|---------|
| SCALE |
| 1/2"=1' |

2

| ANTENNA SECTOR | AZIMUTH | ANTENNA COUNTS | HYBRID TRUNK CABLE LENGTH |
|----------------|---------|----------------|---------------------------|
| ALPHA | 80° | (4) | 120'± |
| BETA | 200° | (4) | 120'± |
| GAMMA | 320° | (4) | 120'± |
| MW | 138° | (1) | 120'± |
| | | | |

NOTE:

- PROPOSED VERIZON WIRELESS —
19' DIAMETER MONO-EUCALYPTUS
DRIPLINE AND ANTENNA COVERAGE.

PROPOSED VERIZON WIRELESS 60'
HIGH MONO-EUCALYPTUS
CO-LOCATABLE TREE

PROPOSED VERIZON WIRELESS 5'-
DIAMETER CONCRETE FOOTING.

PROPOSED VERIZON WIRELESS 5'-
DIAMETER POLE FOOTING LEASE
AREA. APPROX. ±20 S.F.

PROPOSED VERIZON WIRELESS —
TRIPLE T-ARM.

PROPOSED VERIZON WIRELESS RAY
SURGE PROTECTOR, TYP. OF (2)
MOUNTED ON ANTENNA ARM.

PROPOSED VERIZON WIRELESS RRU
TYP. OF (4) PER SECTOR, (3)
SECTOR, (12) TOTAL.

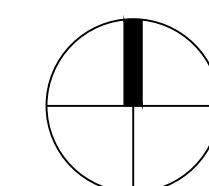
PROPOSED VERIZON WIRELESS PANEL ANTENNAS WITH RF-TRANSPARENT SOCKS TO MATCH TREE BRANCHES IN COLOR, TYP. OF (4) PER SECTOR, (3) SECTOR, (12) TOTAL.

SECTOR "ALPHA"
80°
AZIMUTH

**MICROWAVE
114° T.B.D.
AZIMUTH**

SECTOR "GAMMA"
320°
AZIMUTH

SECTOR "BETA"
200°
AZIMUTH



| | |
|------------|----------|
| SCALE: | 1 |
| 3/4"=1'-0" | |



15505 SAND CANYON AVE.
IRVINE, CA 92618

—PLANS PREPARED BY:—



—CLIENTS—

| NO. | DATE: | DESCRIPTION: | BY: |
|-----|----------|--------------------|-----|
| 4 | 10/06/15 | CLIENT REVISION | JY |
| 5 | 10/16/15 | CLIENT REVISION | SB |
| 6 | 02/12/16 | PLANNING COMMENTS | JY |
| 7 | 02/18/16 | CLIENT REVISION | KH |
| 8 | 03/01/16 | UTILITY REVISION | KH |
| 9 | 04/19/16 | DESIGN REVISION | KH |
| 10 | 07/19/16 | LL DESIGN REVISION | JY |
| 11 | 08/17/16 | PLANNING UPDATES | KH |
| 12 | 11/15/16 | COUNTY COMMENTS | JY |
| 13 | 11/17/16 | RF CHANGES | JY |
| 14 | 10/02/17 | PLANNING COMMENTS | CN |

— SITE INFORMATION: —

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

— SEAL: —

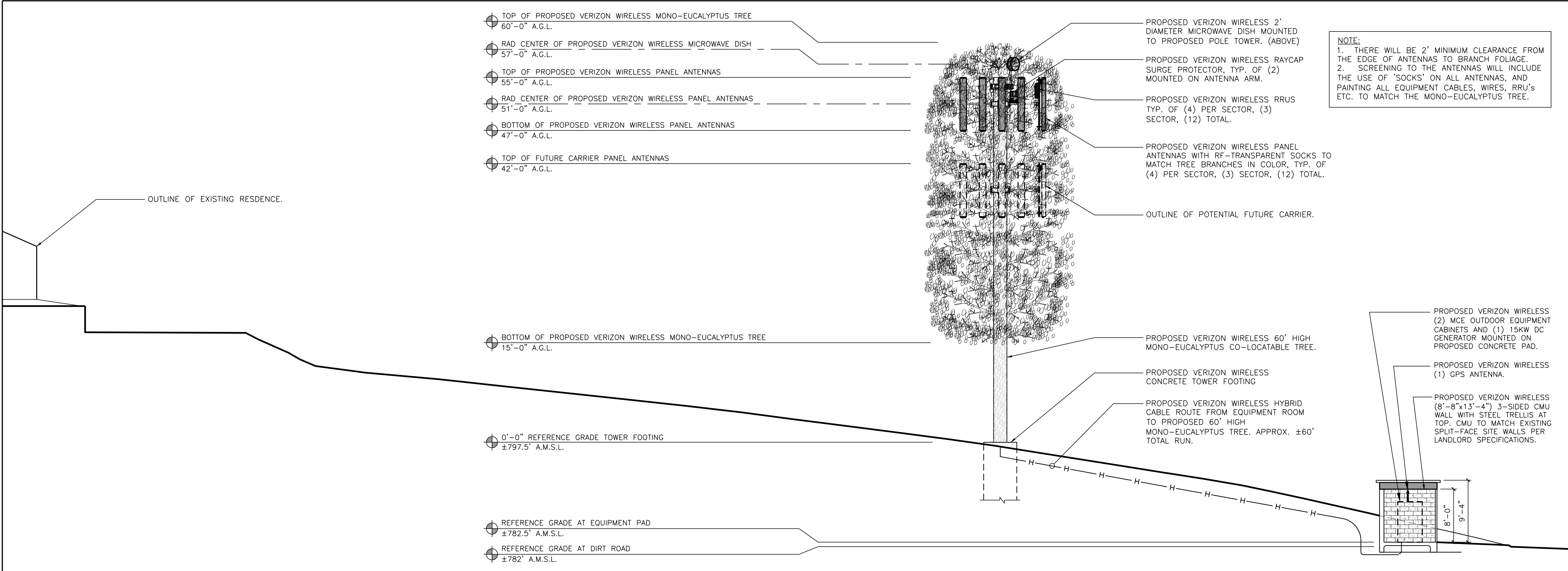
— SHEET TITLE: —

PROPOSED ANTENNAS LAYOUT PLAN

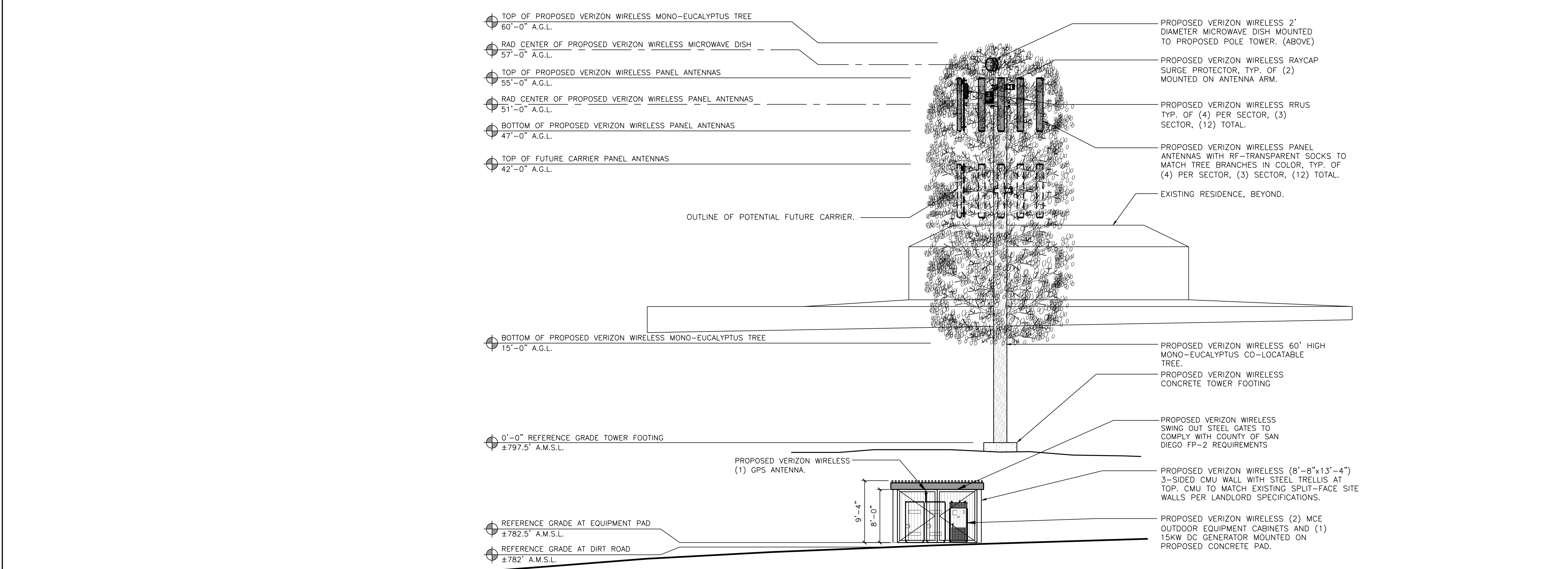
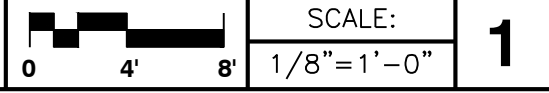
—SHEET NUMBER:—

A-4

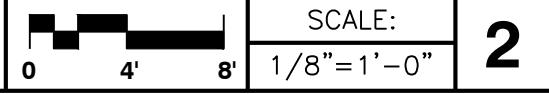
PROPOSED ANTENNA LAYOUT PLAN



PROPOSED SOUTH ELEVATION



PROPOSED EAST ELEVATION



15505 SAND CANYON AVE.
IRVINE, CA 92618

PLANS PREPARED BY:

NATIONAL
ENGINEERING & CONSULTING, INC.
27 ORCHARD LAKE FOREST, CA 92630
PHONE: (949) 716-9990 | FAX: (949) 716-9997

CLIENTS

| NO. | DATE: | DESCRIPTION: | BY: |
|-----|----------|--------------------|-----|
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SITE INFORMATION:

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

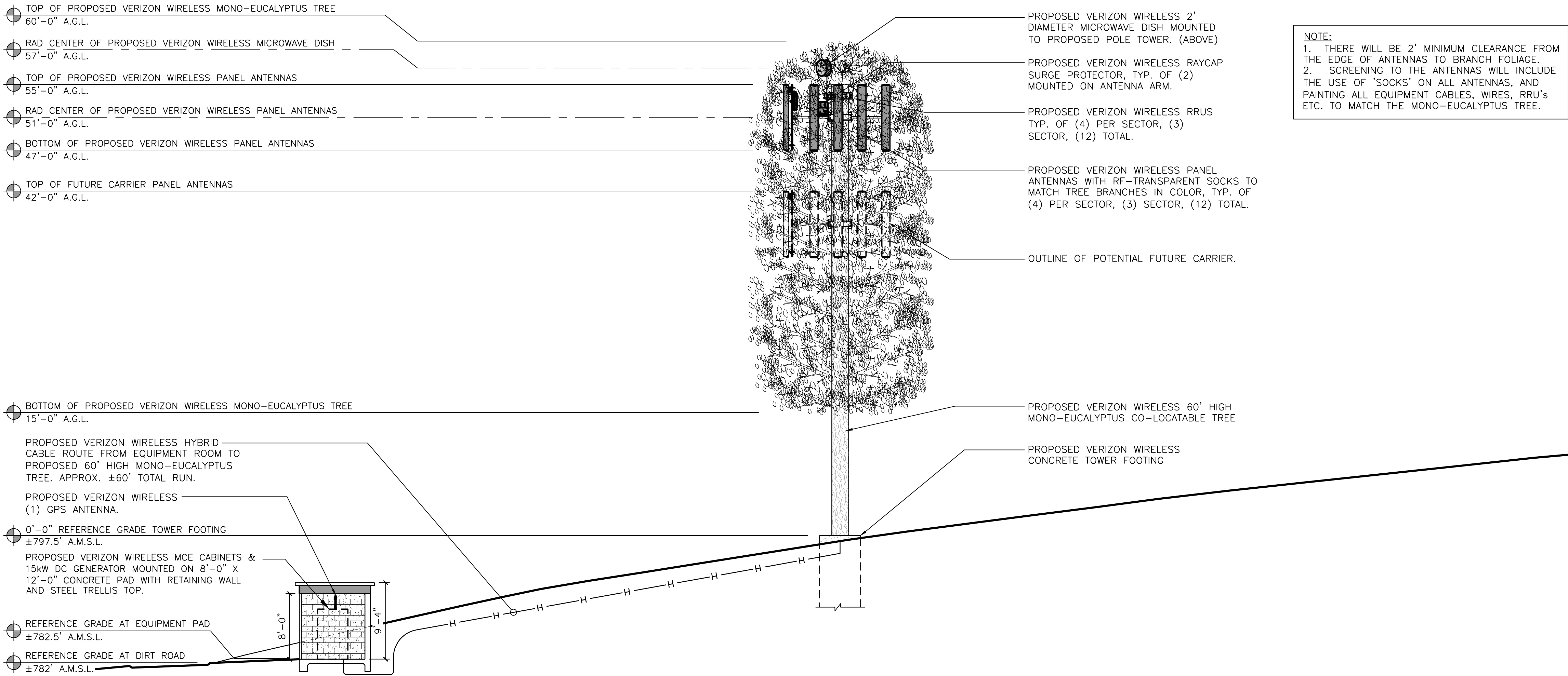
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SHEET TITLE:

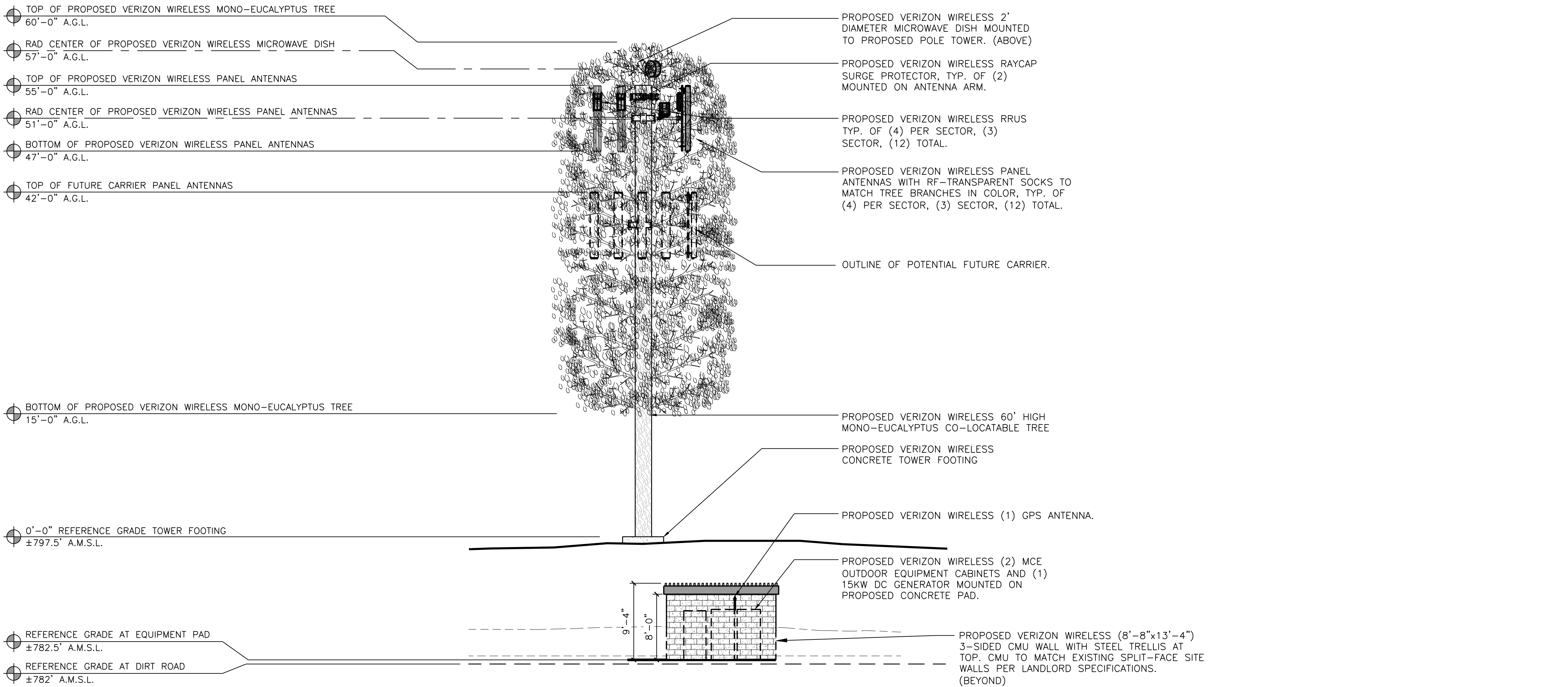
ELEVATIONS

SHEET NUMBER:

A-5



PROPOSED NORTH ELEVATION



PROPOSED WEST ELEVATION

verizon

15505 SAND CANYON AVE.
IRVINE, CA 92618

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27 ORCHARD, LAKE FOREST, CA 92630
PHONE: (949) 716-9990 | FAX: (949) 716-9997

CLIENTS

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| 12 | 11/15/16 | COUNTY COMMENTS | JY |
| 13 | 11/17/16 | RF CHANGES | JY |
| 14 | 10/02/17 | PLANNING COMMENTS | CN |

SITE INFORMATION:

**DEER
SPRINGS**

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

SEAL:

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-6

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| | | | | | | | | | | | |
|----------|---------------|---|----------|---------------|---|----------|---------------|---|----------|---------------|---|
| NOT USED | SCALE: N.T.S. | 1 | NOT USED | SCALE: N.T.S. | 2 | NOT USED | SCALE: N.T.S. | 3 | NOT USED | SCALE: N.T.S. | 4 |
|----------|---------------|---|----------|---------------|---|----------|---------------|---|----------|---------------|---|

SBNHH-1D65C

COLOR | RADOME MATERIAL: LIGHT GRAY | FIBERGLASS, UV RESISTANT

DIMENSIONS, HxWxD: 2453x301x181mm (96.0"x11.9"x7.1")

NET WEIGHT: 66.14 lbs

WIND LOAD, MAXIMUM: 879.0 N @ 150 KM/H

WIND SPEED, MAXIMUM: 197.6 LBF @ 150 KM/H

241.4 KM/H | 150.0 MPH

CONNECTOR INTERFACE, LOCATION, QUANTITY: 7-16 DIN FEMALE, BOTTOM, 6

Technical drawings of the SBNHH-1D65C antenna. The **FRONT VIEW** shows a rectangular antenna with a height of 96.6" and a width of 11.9". The **BOTTOM VIEW (CONNECTIONS)** shows the antenna from below with a width of 11.9" and a height of 7.1". The **SIDE VIEW** shows the antenna's profile with a height of 96.6" and a width of 7.1".

ERICSSON REMOTE RADIO UNIT-RRUS 12

COLOR: WHITE

DIMENSIONS: 20.4" TALL X 18.5" WIDE X 7.5" DEEP

WEIGHT: 50 LBS.

HORIZONTAL CLEARANCE: 8" MIN.

VERTICAL CLEARANCE: 16" MIN.

Technical drawings of the Ericsson Remote Radio Unit. The **FRONT VIEW** shows a rectangular unit with a height of 20.4" and a width of 18.5". The **SIDE VIEW** shows the unit's profile with a height of 20.4" and a width of 7.5". The **TOP VIEW** shows the unit from above with a height of 16" and a width of 18.5". The drawings also show the **MFR'S STANDARD MOUNTING BRACKETS** and **P1000 UNISTRUT AS ALTERNATE ATTACHMENT**.

Product Specifications

VHLPX4-11-6GR

4 ft VaisalaLine@ High Performance Low Profile Antenna, dual-polarized, 10.7-11.7 GHz; CPRG flange, gray antenna, gray radome

Image of the VHLPX4-11-6GR antenna, showing the gray radome and CPRG flange.

CHARACTERISTICS

General Specifications

| | |
|-----------------------------|---|
| Antenna Type | VHLPX - VaisalaLine@ High Performance Low Profile Antenna; dual-polarized |
| Diameter, nominal | 1.2 m 48" |
| Antenna Input | CPRG02 |
| Polarization | Dual |
| Reflector Construction | Chapman reflector |
| Antenna Color | Gray |
| Radome Color | Gray |
| Radome Material Description | Polymer |
| Flange Included | No |
| Package | Standard pack |

Electrical Specifications

| | |
|--|---|
| Operating Frequency Band | 10700 - 11700 MHz |
| Gain, Top Band | 40.8 dBi |
| Gain, Mid Band | 40.4 dBi |
| Gain, Low Band | 40.0 dBi |
| Front-to-Back Ratio | 57 dB |
| Cross Polarization Discrimination (XPD) | 30 dB |
| Beamwidth, Horizontal | 1.5° |
| Beamwidth, Vertical | 1.5° |
| VSWR | 1.30 |
| Return loss | 17.7 dB |
| Radiation Pattern Envelope Reference (RFE) | 7044d |
| Electrical Compliance | US FCC Part 101A Brazil Anatel Class 2 ETSI 302-217 Class 3 |

Electrical Specifications (Band 2)

| | |
|--------------------------|-------------------|
| Operating Frequency Band | 10700 - 11700 MHz |
|--------------------------|-------------------|

Andrew logo.

Product Specifications

Andrew logo.

| | |
|--|----------|
| Gain, Top Band | 40.8 dBi |
| Gain, Mid Band | 40.4 dBi |
| Gain, Low Band | 40.0 dBi |
| Front-to-Back Ratio | 57 dB |
| Cross Polarization Discrimination (XPD) | 30 dB |
| Beamwidth, Horizontal | 1.5° |
| Beamwidth, Vertical | 1.5° |
| VSWR | 1.30 |
| Return loss | 17.7 dB |
| Radiation Pattern Envelope Reference (RFE) | 7044d |

Mechanical Specifications

| | |
|-------------------------------|--------------------|
| Wind Velocity Operational | 70 mph 113 km/h |
| Wind Velocity Survival Rating | 155 mph 249 km/h |
| Fine Azimuth Adjustment | ±12° |
| Fine Elevation Adjustment | ±10° |
| Mounting Flange Diameter | 115 mm 4.5 in |
| Side Struts, Included | 1 inboard |
| Side Struts, Optional | 1 inboard |
| Net Weight | 101 lb 46 kg |

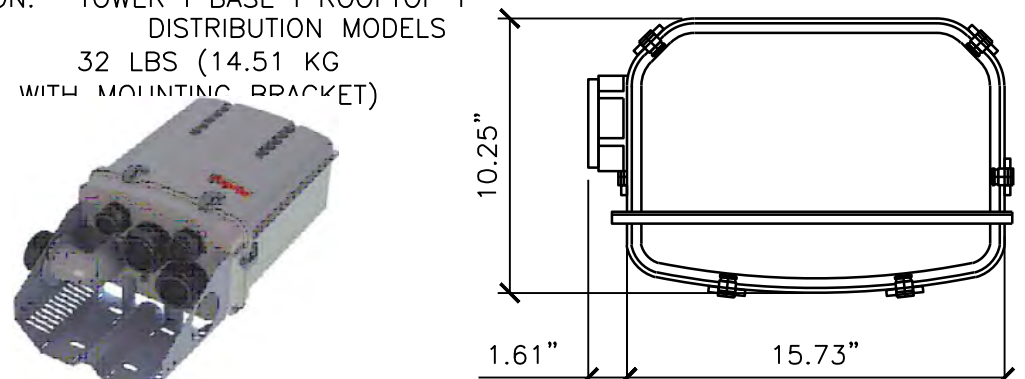
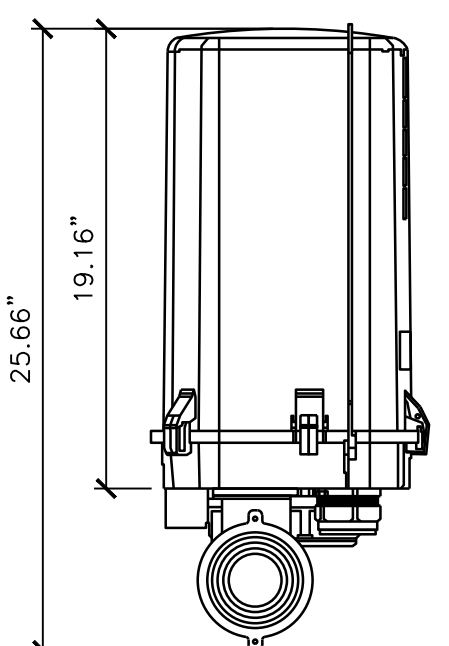
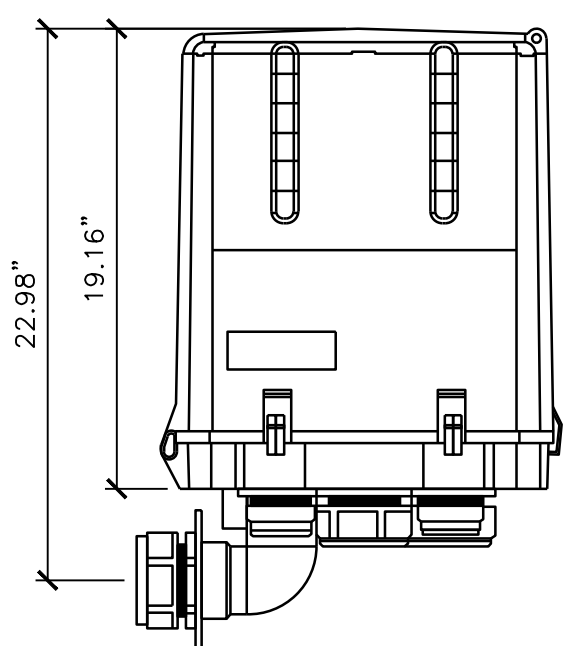
Wind Forces At Wind Velocity Survival Rating

| | |
|-------------------------------------|-----------------|
| Axial Force (F _A) | 3163 N 711 lb |
| Side Force (F _S) | 1507 N 332 lb |
| Twisting Moment (M _T) | 1570 Nm |
| Zap without ice | 7 in 170 mm |
| Zap with 1/2" (12 mm) Radial ice | 10 in 241 mm |
| Weight with 1/2" (12 mm) Radial ice | 254 lb 115 kg |

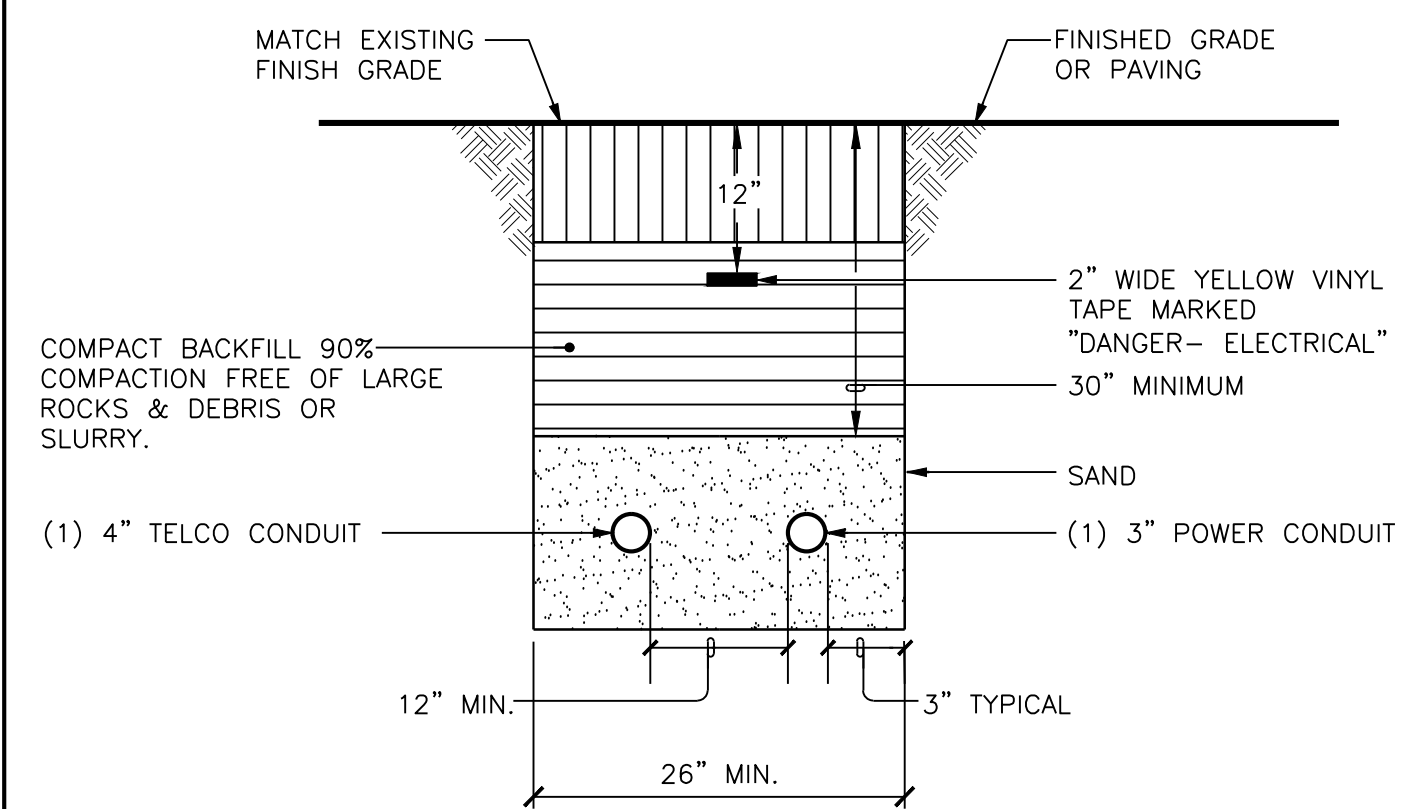
Wind Forces At Wind Velocity Survival Rating Image

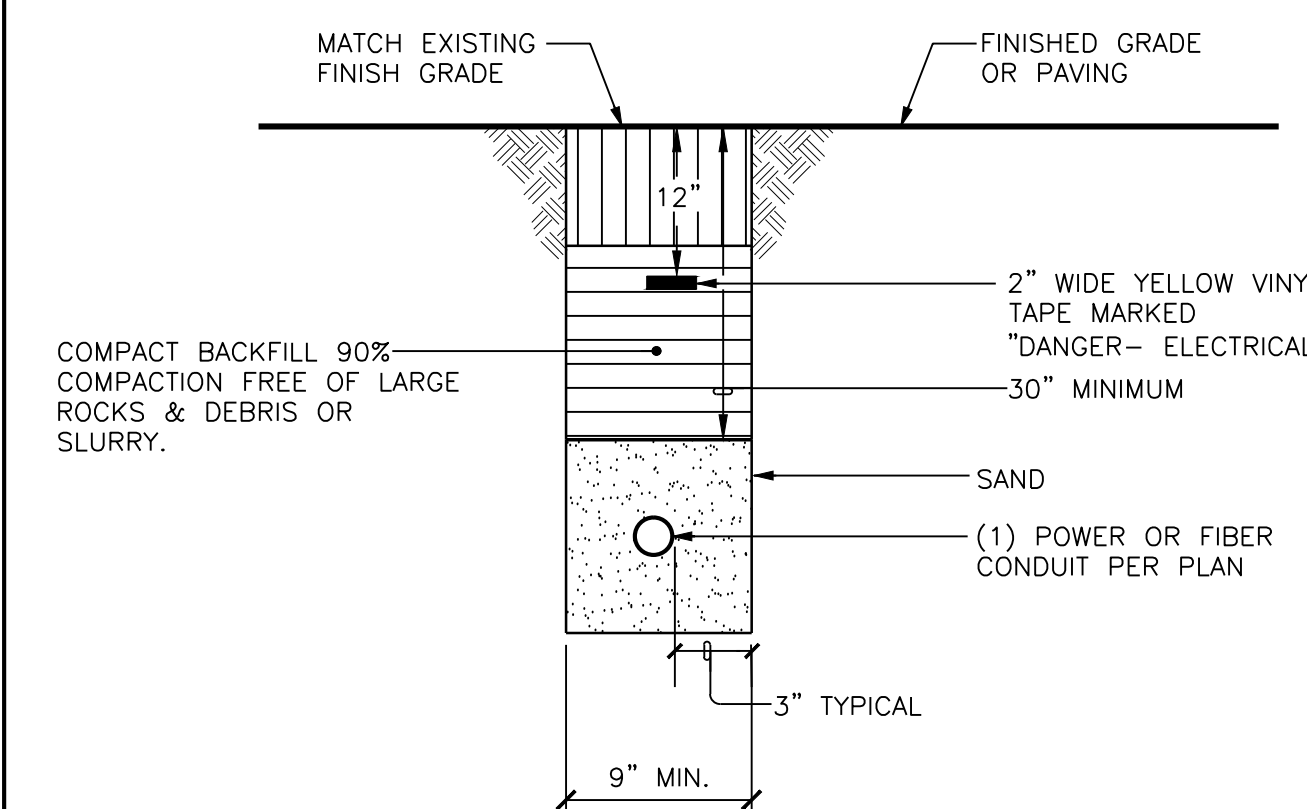
Diagram showing wind force vectors (F_z, F_x, F_y) and moments (M_x, M_y, M_z) on the antenna structure.

| | | | | | | | | |
|------------------------|---------------|---|------------------------|---------------|---|--------------------------|---------------|---|
| ANTENNA SPECIFICATIONS | SCALE: N.T.S. | 5 | RRUS REMOTE RADIO UNIT | SCALE: N.T.S. | 6 | MICROWAVE SPECIFICATIONS | SCALE: N.T.S. | 8 |
|------------------------|---------------|---|------------------------|---------------|---|--------------------------|---------------|---|

| | |
|---|---|
| RCMDC-3315V-PF-48 | |
| SPECIFICATIONS: DC SURGE PROTECTION FOR RRU/INTEGRATED | |
| ANTENNA RADIO HEAD | |
| APPLICATION: TOWER I BASE I ROOFTOP I DISTRIBUTION MODELS | |
| WEIGHT: 32 LBS (14.51 KG) | |
| (PROVIDED WITH MOUNTING BRACKET) | |
|  | |
| MOUNTING BRACKET INCLUDED | |
|  |  |

| | |
|--------------------|---|
| RRUS A2 RX: | |
| PRODUCT NAME: | RRUS A2 B2 (PCS) OR RRUS A2 B4 (AWS) |
| PART #: | KRC 261 286/1 OR KRC 161 290/1 |
| DIMENSIONS: | 16.4" x 15.1 x 3.4" |
| RX BRANCHES: | 2 |
| WEIGHT: | 22 LBS. |
| HW AVAILABILITY: | JAN. '14 |
| SW DEPENDENCY: | L13A |
| POWER: | 40 MHz. 1BW UP TO 20 MHz. CARRIER BANDWIDTH FOR LTE 2.5 Gbit/s CPRI |

| | |
|---|--|
|  | |
| MATCH EXISTING FINISH GRADE | |
| FINISHED GRADE OR PAVING | |
| 12" | |
| 2" WIDE YELLOW VINYL TAPE MARKED "DANGER- ELECTRICAL" | |
| 30" MINIMUM | |
| SAND | |
| (1) 4" TELCO CONDUIT | |
| (1) 3" POWER CONDUIT | |
| 12" MIN. | |
| 26" MIN. | |
| 3" TYPICAL | |

| | |
|---|--|
|  | |
| MATCH EXISTING FINISH GRADE | |
| FINISHED GRADE OR PAVING | |
| 12" | |
| 2" WIDE YELLOW VINYL TAPE MARKED "DANGER- ELECTRICAL" | |
| 30" MINIMUM | |
| SAND | |
| (1) POWER OR FIBER CONDUIT PER PLAN | |
| 12" MIN. | |
| 9" MIN. | |
| 3" TYPICAL | |

| | | | | | | | | | | | |
|-------------------------|---------------|---|-----------------------|---------------|----|--------------|---------------|----|-----------------------|---------------|----|
| RCMDC-3315-PF-48 DETAIL | SCALE: N.T.S. | 9 | RRUS-A2 SPECIFICATION | SCALE: N.T.S. | 10 | JOINT TRENCH | SCALE: N.T.S. | 11 | SINGLE CONDUIT TRENCH | SCALE: N.T.S. | 12 |
|-------------------------|---------------|---|-----------------------|---------------|----|--------------|---------------|----|-----------------------|---------------|----|



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PLANS PREPARED BY:



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SITE INFORMATION:

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

SEAL:

SHEET TITLE:

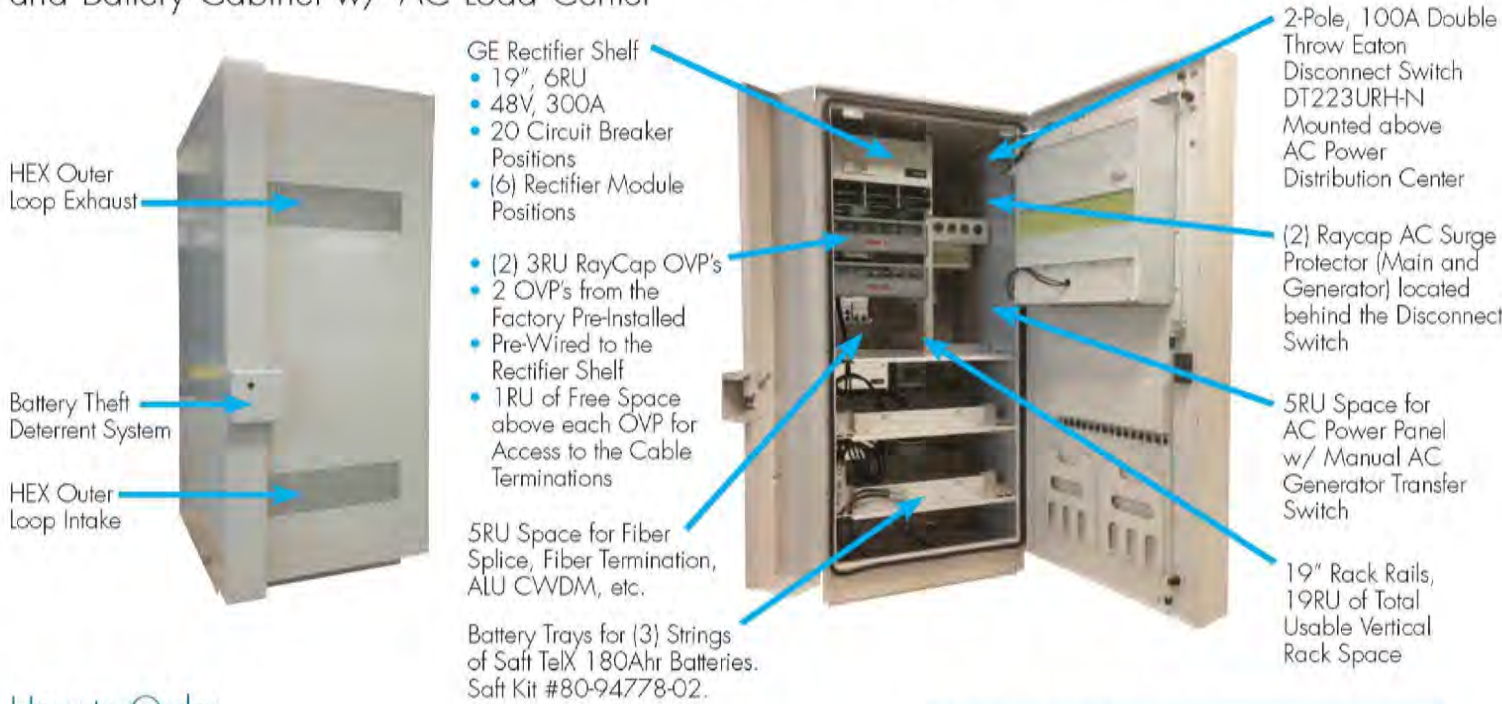
EQUIPMENT SPECIFICATIONS

SHEET NUMBER:

A-7

RBA72-32

RBA72-32 CRAN Cabinet w/ GE 48V-300A, Hex / Soft-DAC Power, Equipment, and Battery Cabinet w/ AC Load Center



How to Order

| Description | CommScope part # |
|---|------------------|
| RBA72-32 CRAN, 48V-300A, w/ AC Load Center and AC Generator Inlet | 760205971 |
| RBA72-32 CRAN, 48V-300A, w/ AC Load Center and w/o AC Generator Inlet | 760205989 |
| GE Energy Rectifier Module, 48V, 50A, NE050AC48TEZ | 109158878 |

Battery Voltage Configuration

RBA72-32 w/ 3 strings @ 48VDC, 540Ahr Total

Features

| | |
|--------------------|--|
| Dimensions | H 72" X D 42" X W 32" |
| As Shipped Weight | 500 lbs., no batteries |
| Total Weight | 2,000 lbs with batteries and rectifier modules |
| Cooling Technology | Heat exchanger with controller and variable speed fans |
| Alarm Block | Screw down terminal |
| Alarms | Door, fuse, fan, high battery temperature |

OPEX Savings

Reduced savings through optimized cooling solutions (Heat exchanger and battery direct air cooling)
High efficiency rectifier modules
Reduced maintenance—no compressor or filters

Additional Features

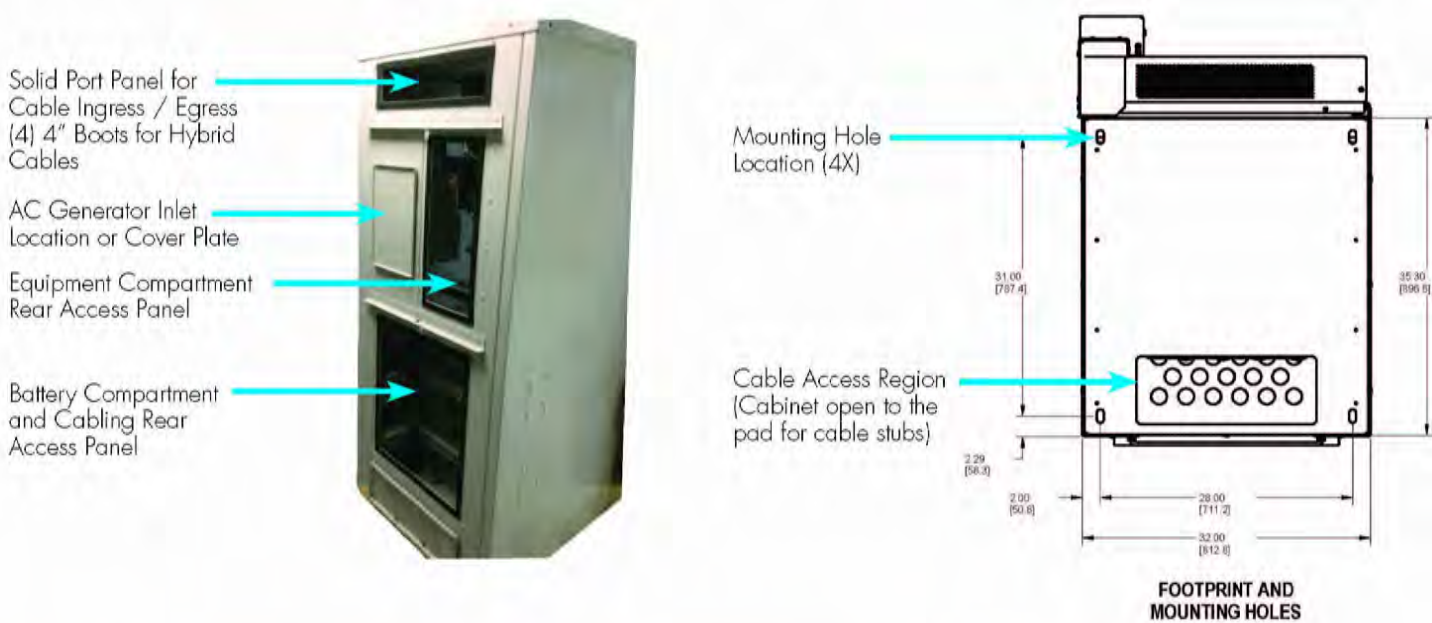
- GE Energy Pulsar controller included
- Sealed to outside environment
- Rear access panels (2)
- GR-487 Zone 4 compliant
- OSHA Safety Agency Listed
- Batteries and rectifier modules not included
- Internal AC Load Center
 - Main: 2-Pole, 100A
 - Generator: 2-Pole, 100A
 - Rectifier # 1: 2-Pole, 40A
 - Rectifier # 2: 2-Pole, 40A
 - Rectifier # 3: 2-Pole, 40A
 - GFCI: 1-Pole, 20A
- (2) Raycap AC Surge Protectors
- (2) Raycap RRH Rack Mount OVP Units that are pre-wired to the Power Plant
- (2) Raycap RRH Rack Mount OVP Units that are pre-wired to the Power Plant w/ (12) 25A Circuit Breakers installed

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RA108937-1-B-N [03/15]

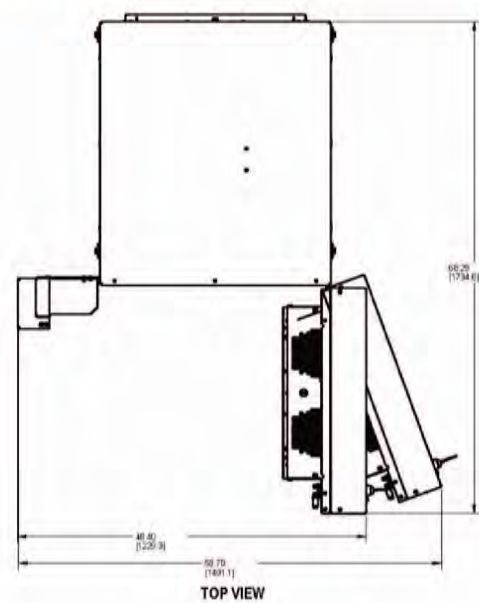


RBA72-32 CRAN Cabinet w/ GE 48V-300A, Hex / Soft-DAC Power, Equipment, and Battery Cabinet w/ AC Load Center

RBA72-32 Rear Cabinet View



RBA72-32 Cabinet Dimensions and Door Clearances (90° and 110° Open)



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RA108937-1-B-N [03/15]



8220Y-3TNV88 GENERATOR SPECIFICATIONS
15kW Diesel Fueled

ENGINE

Engine.....Yanmar 3TNV88
Cylinders.....3
Displacement.....1642 (cc)
Aspiration.....Natural
Emissions.....EPA and CARB Certified
Variable RPM1500RPM to 1850RPM
Engine Start SuperCapacitor14.4V
SuperCapacitor DC-DC Charger.....>1A
Muffler.....Dual
Radiator.....Aluminum with Electric Fan

FUEL SYSTEM

Type.....Diesel Fuel
Tank.....Double Wall – UL 142
Capacity.....54 Gallons

ALTERNATOR

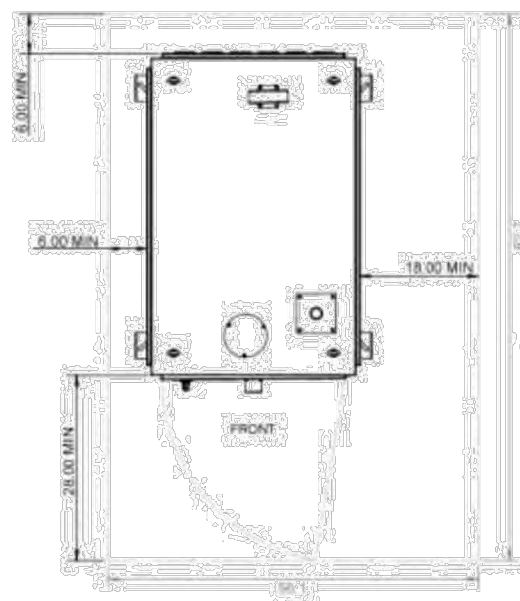
Type.....Permanent Magnet
Regulation Type.....RPM Control Output
Ripple.....Less than 50 millivolts RMS
No. of Poles.....32
Overcurrent Protection.....350A
Disconnect Means.....Fused Disconnect

ENCLOSURE

Model.....88-25-0603
Type.....Weather Protective
Materials Marine Grade
Aluminum

Sound Attenuated.....<65dBA @ 7 Meters Door
Hardware Three Point w/
Padlock Hasp and Spring-
Latched Removable Side
Doors

Mounting.....Secure
Mounting Tabs
Dimensions.....32" x 50" x 72"
Weight (Not
Fueled).....1248 lbs.



Genset UL 2200 LISTED
ETL listed per UL 2200 by Intertek Testing Labs.
Fuel tank is UL 142 Listed

For more information contact: info@polarpowerinc.com

ENGINE CONTROLLER

Engine Controller model.....Supra 250
Instrumentation.....Generator output
voltage, amperage, kW, Coolant, Temperature,
RPM, Hour meter, maintenance intervals, Starting
circuit voltage

Automatic Shutdown & Alarm for.....
Under/ Over-speed, Low Oil Pressure, High
Coolant Temp, Fail to Start

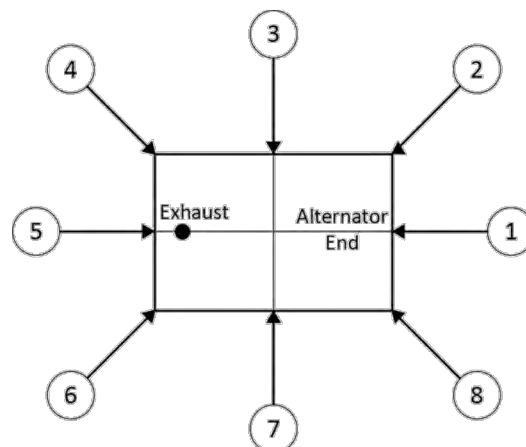
Warning Alarm for.....Low
Fuel Level, Fuel Tank Rupture Basin, Low/High
Engine Battery Voltage, High Water Temp, and
Low Oil Press. Pre-alarm
Glow Plug Delay.....Automatic with temp
Engine Start Delay.....Adj. set at 60 seconds
Return to Utility Delay.....Adj. set at 60 seconds
Engine Cool-Down.....Adj. set at 60 seconds
Exerciser.....Programmable/ bi-weekly

Contact Closure for Remote Indication
Shutdown Alarm, Warning Alarm, Engine Run,
Low Fuel Level, Fuel Leak, E-Stop Depressed

| | | | |
|-----------------|--------------------------------|-----------------------|-------------|
| Type of Test | Sound Test | Serial No. | n/a |
| Test No. | 080415 | Controller serial No. | n/a |
| Generator model | 8220Y-3TNV88-001 (15kW) Diesel | Observer | PV/JB |
| Enclosure model | 88-25-0603 | Date | 6 Jun. 2015 |

Sound Pressure Levels in dB(A)

| Position | Overall Level | Frequency Spectrum Levels | | | | | | | | |
|----------|---------------|---------------------------|------|------|------|------|------|------|------|------|
| | | Center Frequency (Hz) | | | | | | | | |
| | | 31.5 | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 1 | 64.4 | -- | 45.3 | 49.5 | 51.4 | 50.5 | 49.8 | 46.5 | 44.1 | 38.2 |
| 2 | 65.1 | -- | 47.2 | 48.4 | 49.9 | 49.1 | 46.8 | 46.1 | 45.4 | 38.6 |
| 3 | 63.8 | -- | 44.4 | 48.2 | 48.0 | 49.7 | 47.6 | 46.0 | 46.5 | 38.6 |
| 4 | 63.9 | -- | 44.8 | 48.1 | 45.9 | 50.4 | 48.7 | 47.2 | 46.8 | 40.0 |
| 5 | 64.7 | -- | 45.0 | 48.0 | 48.7 | 50.9 | 49.9 | 46.6 | 46.9 | 40.7 |
| 6 | 63.8 | -- | 44.4 | 47.7 | 48.5 | 49.9 | 49.1 | 46.7 | 47.2 | 40.9 |
| 7 | 64.7 | -- | 44.3 | 48.2 | 46.6 | 49.9 | 48.5 | 46.6 | 46.2 | 39.2 |
| 8 | 64.5 | -- | 46.0 | 47.1 | 46.4 | 49.6 | 48.3 | 46.9 | 46.2 | 40.5 |
| Average | 64.4 | -- | 45.2 | 48.1 | 48.2 | 50.0 | 48.6 | 46.6 | 46.2 | 39.6 |



Notes:

1. Generator operating at full rated load
2. Generator configuration includes quiet exhaust system
3. All measurement positions are 7 m (23 ft.) from center of generator set and 1 m (3.3 ft.) height
4. Test conducted outside on an asphalt surface, temperature 72°F, humidity 69%, wind 12 mph, barometer 29.65 inHg.
5. Meter used - Phonic PAA2, Serial No. OGA0H80208

15505 SAND CANYON AVE.
IRVINE, CA 92618

PLANS PREPARED BY:



CLIENTS

| NO. | DATE: | DESCRIPTION: | BY: |
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| 5 | 10/16/15 | CLIENT REVISION | SB |
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| 12 | 11/15/16 | COUNTY COMMENTS | JY |
| 13 | 11/17/16 | RF CHANGES | JY |
| 14 | 10/02/17 | PLANNING COMMENTS | CN |

SITE INFORMATION:

DEER SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

SEAL:

SHEET TITLE:

MCE CABINET AND
GENERATOR
SPECIFICATIONS

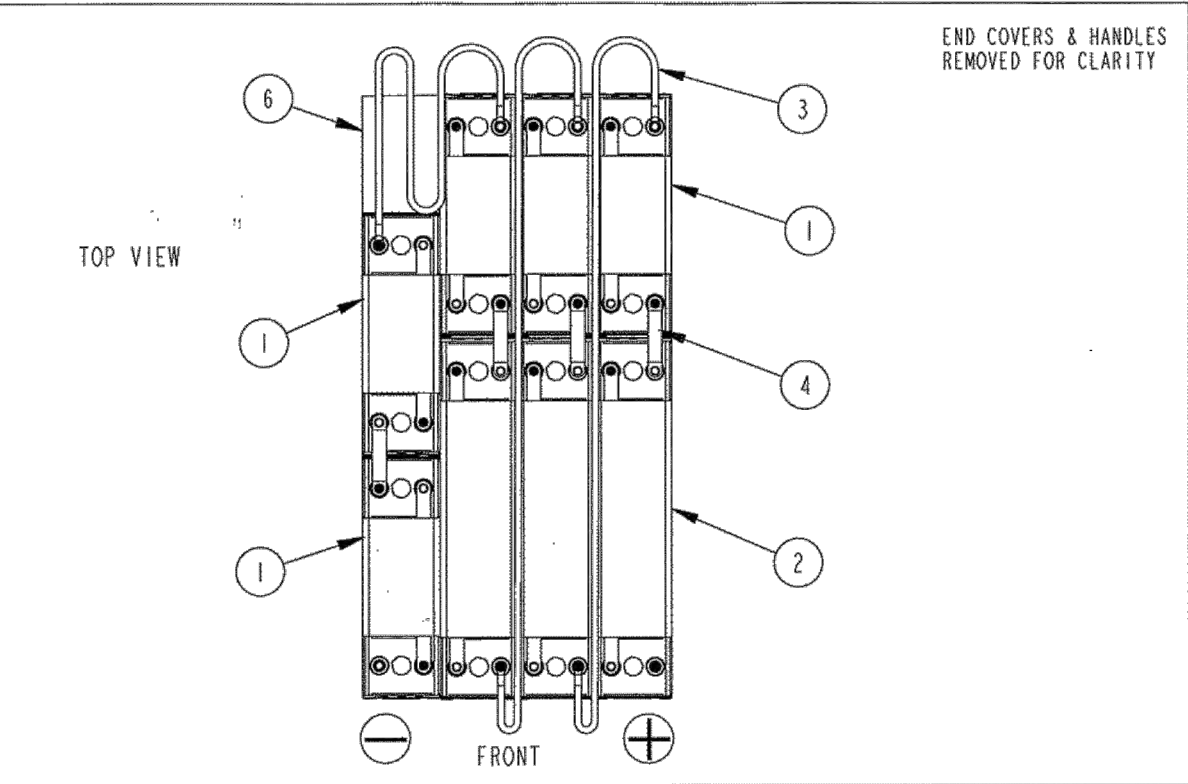
SHEET NUMBER:

A-8



String Instruction Sheet 80-94684-02

Tel.X 180 Ni-Cd Battery
Typical Application: Generic



This is a supplemental information sheet. Read the Tel.X Installation and Operation Instructions and the Tel.X Installation and Operation Manual before assembly.

SPECIAL INSTRUCTIONS:

- Prior to assembly, use the CHK column in the parts list to assure all parts & kit parts have been received.
- Use lugs & tubing from the Installation Kit to terminate the cables that connect to the positive and negative end of the string.
- Use corrosion inhibitor from the Installation Kit to completely coat exposed metal at all terminal and lug connections.
- Indicates positive terminal.

| PARTS LIST | | | | |
|------------|-----|-------------|---|-----|
| ITEM | CHK | PART No. | DESCRIPTION | QTY |
| 1 | | 80-03898-04 | BLOCK TLX180, 4-CELL | 3 |
| 2 | | 80-03898-06 | BLOCK TLX180, 4-CELL | 3 |
| 3 | | 80-03488-44 | CABLE ASSY #6 FOR 1/4 L: 1118 (44.007) | 3 |
| 4 | | 80-03979-14 | BUSBAR INTERLOCK W/TUBING (TLX) | 4 |
| 5 | | 80-03979-02 | KIT, INSTALLATION, TLX | 1 |
| 6 | | 80-04264-08 | TLX FILLER BLOCK 6.000" X 4.100" X 6.300" | 1 |

| *INSTALLATION KIT | | | | |
|-------------------|-------------|------------------------------------|-----|--|
| CHK | PART No. | DESCRIPTION | QTY | |
| | 64-06017-47 | LUG #6 FOR 1/4 | 2 | |
| | 80-03541-01 | LABEL, TEMP. COMPENSATION DISABLED | 1 | |
| | 80-03779-02 | TUBING HEAT SHRINK SELF SEALING | 2 | |
| | 80-04283-01 | LABELS NUMERICAL | 1 | |
| | 025544-001 | CORROSION INHIBITOR | 1 | |
| | 025583-000 | SCREW HEX M6 X 1 | 3 | |
| | 100110 | WASHER SPRING M6 | 3 | |

Soft America, Inc.: (229) 247-2331

www.softbatteries.com

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T-130-VZW

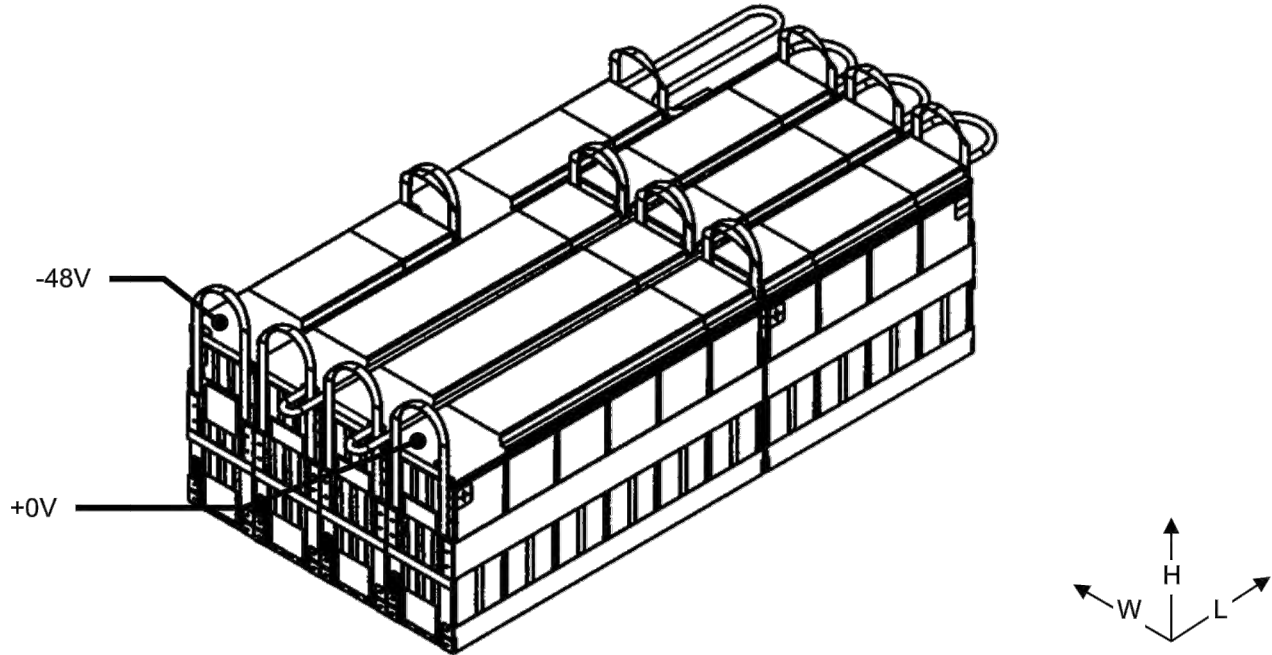
REV. **E**

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80-94684-02

Type: TLX 180 (x38) C₁₀: 172 Amp-hrs V_{Appl.}: 48 VDC Nom. Energy: 8.2 kWh



| STRING | | | |
|------------------|-------------|-------------------------------|---|
| Type | Soft P/N | String Dimensions (W x L x H) | (420 x 827 x 254) mm (16.54 x 32.56 x 10.00) inches |
| Battery String | 80-94684-02 | | |
| Installation Kit | 80-03928-02 | | |
| Cable | 80-03488-44 | | |
| Bus bar | 80-03979-14 | | |
| | | String Weight | 151.1 kg 333.1 lbs |

| BLOCKS / MODULES | | | | |
|------------------|-------------|-----|--|------------------|
| Type | Soft P/N | Qty | Block Dimensions (W x L x H) | Block Weight |
| TLX 180-4 | 80-03898-04 | 5 | (105 x 332 x 254) mm (4.13 x 13.07 x 10.00) inches | 16.0 kg 35.4 lbs |
| TLX 180-6 | 80-03898-06 | 3 | (105 x 495 x 254) mm (4.13 x 19.49 x 10.00) inches | 23.7 kg 52.3 lbs |

| CELL | | | | |
|---------|-------------|-----|------------|--------|
| Type | Soft P/N | Qty | CLEI | CPR |
| TLX 180 | 80-03832-01 | 38 | PWHYAM8TRA | 212341 |

Soft America, Inc.: (229) 247-2331

www.softbatteries.com

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T-130-VZW

REV. **E**

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BATTERY SPECIFICATIONS:

1. BATTERY MANUFACTURER: SAFT AMERICA, INC.
2. ADDRESS: 711 GIL HARBIN INDUSTRIAL BLVD VALDOSTA, GA 31601 (800) 308-9041
3. PHONE:
4. BATTERY TYPE: SAFT TLX180 (80-94684-02)
5. BATTERY WEIGHT: 333.1 LBS. PER STRING (8) BATTERIES
6. ELECTROLYTE QUANTITY: 8.09 GALLONS PER STRINGS
7. BATTERY QUANTITY: 24 MAXIMUM
8. TOTAL WEIGHT: (3) STRINGS X 333.1 LBS = 999.3 LBS
9. ELECTROLYTE QTY.: 3 STRINGS X 8.09 GALLONS = 24.27 GALLONS

NOTE: TOTAL BATTERY ELECTROLYTE STORED ON SITE: 24.27 GAL.

2013 CFC: 608.1 SCOPE. STATIONARY STORAGE BATTERY SYSTEMS HAVING AN ELECTROLYTE CAPACITY OF MORE THAN 50 GALLONS (189 L) FOR FLOODED LEAD-ACID, NICKEL CADMIUM (NI-CD) AND VALVE-REGULATED LEAD-ACID (VRLA), OR MORE THAN 1,000 POUNDS (454 KG) FOR LITHIUM-ION AND LITHIUM METAL POLYMER, USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTIBLE POWER SUPPLIES SHALL COMPLY WITH THIS SECTION (2013 CFC 608) AND TABLE 608.1.

THE REQUIRED PROTECTION FOR EACH TYPE OF BATTERY SHALL COMPLY WITH TABLE 608.1 OF THE 2013 CFC.

AN APPROVED, AUTOMATIC SMOKE DETECTION SYSTEM MUST BE INSTALLED IN ACCORDANCE WITH CFC SECTION 608.9 IN ROOMS CONTAINING STATIONARY BATTERY SYSTEMS.

BATTERY SPECIFICATIONS

GE

Infinity S System



Infinity S may be configured as a +24V or -48V single voltage power system or as a dual voltage power system that supports rectifiers and converters. The primary voltage is supported by +24V or -48V rectifiers and battery reserve, while secondary voltage is supported by DC-DC converters. Infinity-S includes dedicated 24V, 48V and return buses. The primary voltage capacity is 800A at 24V and 600A at 48V. Secondary (-48V) voltage capacity is up to 120A. The system includes low voltage battery disconnect option for the primary voltage. A low voltage load disconnect option can be used for load shedding to maintain critical loads.

Applications

- Wireless Telecom Networks
- Indoor/Outdoor Wireless
- Transmission
- Data Networks
- Off-Grid/On-Grid Renewable Energy Sites

Key Features

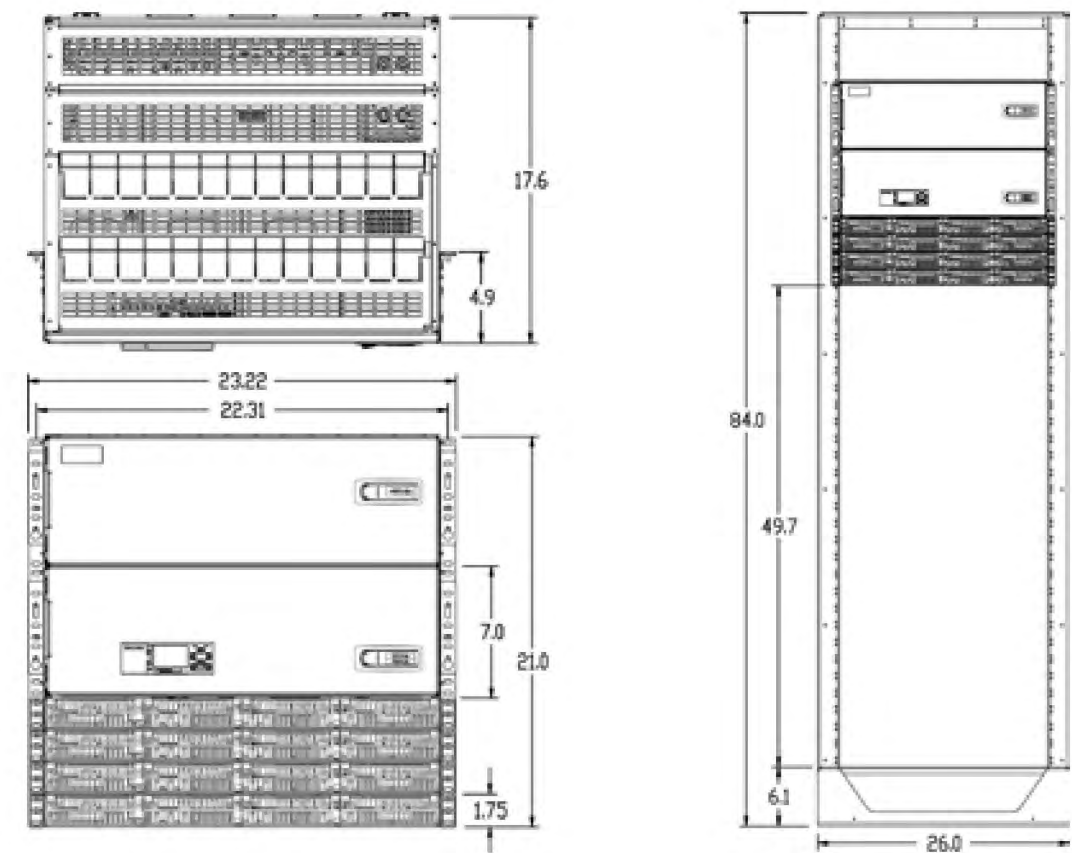
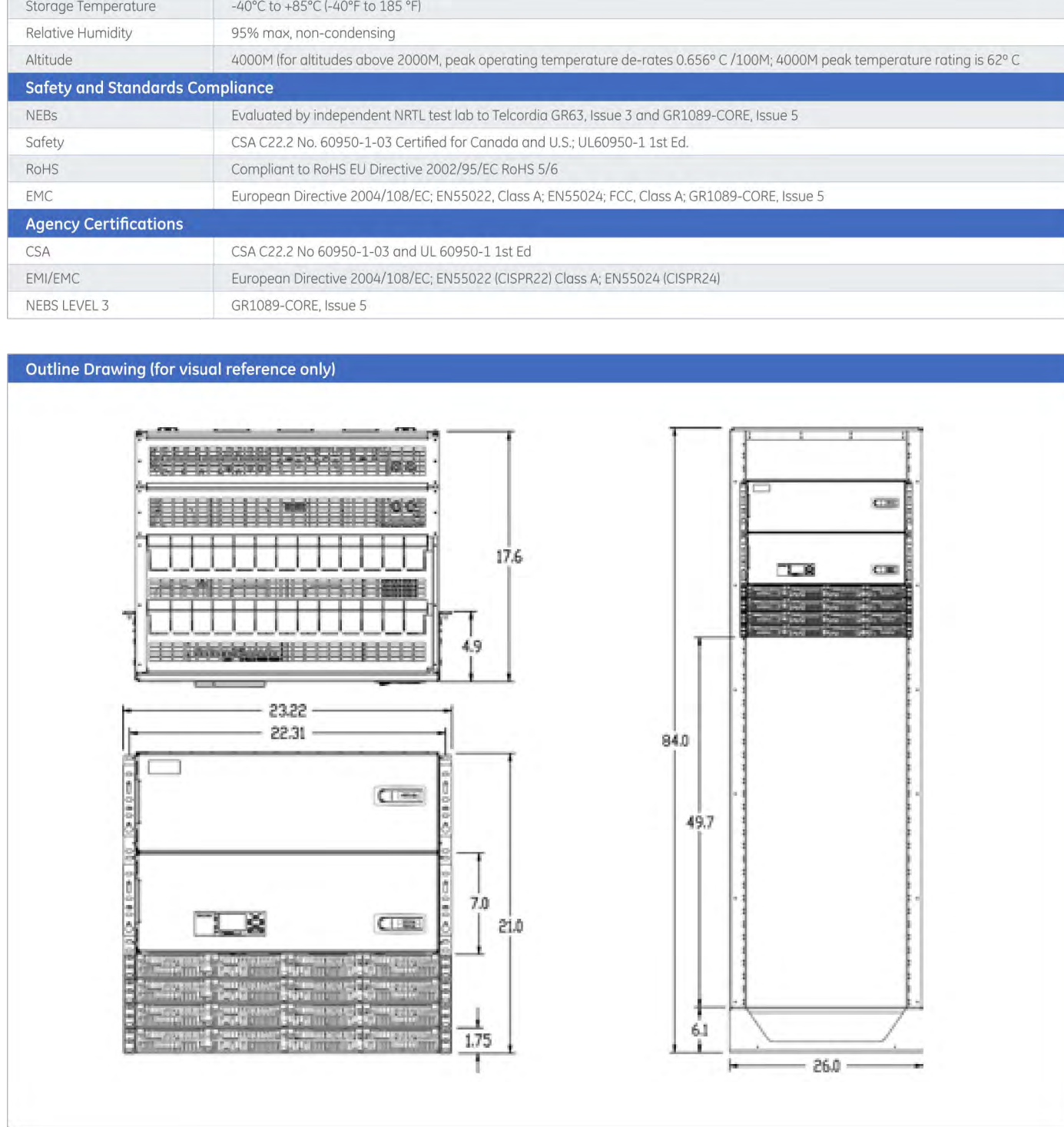
- Dual Voltage Flexibility
- Redundant fan cooling
- Front panel LED indicators
- 1U height, hi power density
- 220/110 V AC input
- Digital load sharing
- Hot pluggable
- RoHS compliant
- ECO Priority ready

Specifications

| Input | Min | Typ | Max |
|---------------------------|---|--------|----------------------|
| Voltage Range | 170Vdc | 220Vdc | 270Vdc |
| - High-Line | 89Vdc | 110Vdc | 140Vdc |
| - Low-Line | | | |
| Frequency | 45Hz | 60Hz | 66Hz |
| Power Factor | 98% | 99.5% | |
| Total Harmonic Distortion | | | 5% |
| Primary Output | | | |
| Nominal Voltage | 24Vdc | | -48Vdc |
| Output Current | 1,200A | | 800A |
| Va Setpoint (factory) | 27.2Vdc±1% | | -54.5Vdc±1% |
| Va Range | +21Vdc to +29Vdc | | -42Vdc to -58Vdc |
| Regulation | | ±0.5% | |
| Secondary Output | | | |
| Nominal Voltage | -48Vdc | | +24Vdc |
| Output Current | 1,200A | | 300A |
| Va Setpoint (factory) | -54.5Vdc±1% | | 27.25Vdc±1% |
| Va Range | -42Vdc to -58Vdc | | +21Vdc to +29Vdc |
| Regulation | | ±0.5% | |
| Mechanical | | | |
| | System Only | | Frame Mounted System |
| Height (in./mm) | 21.25 / 540 (Base system with 4 power shelves and 2 distributional) | | 8A / 213A |
| Width (in./mm) | 23 / 584.2 | | 26 / 660.4 |
| Depth (in./mm) | 21 / 533 | | 21 / 533 |
| Weight (lb./kg) | 108 / 49 (Base system with 4 power shelves and 2 distributional) | | 292 / 132 |

GE

Outline Drawing (for visual reference only)



GE

Key Features

Remote Access and Features

- Integrated 10/100Base-T Ethernet Network
 - TCP/IP
 - SNMP V2c for management
 - SMTP for email
 - Telnet for command-line interface
 - DHCP for plug-n-play
 - FTP for rapid backup and upgrades
 - HTTP for standard web pages and browsers
- Compatible with Galaxy Manager and other management packages
- Password protected security levels: User, Super-User, Administrator for all access
- Ground-referenced RS232 system port
- ANSI T1.317 command-line interface
- Modern access support
 - Remote via external modem
 - Callback security
- EasyView2, Windows-based GUI software for local terminal or Modem access
- ECO Priority controls and features
 - Advanced generator controls to help minimize fuel consumption for off-grid applications
 - ECO Energy Management allowing for non-ECO sources outputs to be minimized while ECO resources are available
 - Source and load trend logging

Integrated Monitoring Inputs/Outputs

- System plant voltage (accuracy ±0.04V, resolution 0.01V)
- One system shunt (accuracy ±0.5% full scale, resolution 1A)
 - Battery or load
 - Mounted in the return side of DC bus
- Up to 15 binary inputs
 - Six inputs close/open to battery
 - 9 input close/open to return
 - User assignable
- Up to 7 Form-C output alarms (60VDC @ 5A)
 - User assignable
- 1-Wire* bus devices
 - Up to 16 temperature probes (QS873)
 - Up to 6 mid-string monitors (ES771)

Standard System Features

- Monitor and control of more than 60 connected devices
 - Robust RS485 system bus
- Standard and user defined alarms
 - Alarm test
 - Assignable alarm severity: Critical, Major, Minor, Warning, and record-only
 - 10 alarm relays (7 user assigned)
- Rectifier management features
 - Automatic rectifier restart
 - Active Rectifier Management
 - ARM (energy efficiency)
 - Remote rectifier (on/off)
 - Reserve Operation
 - Automatic rectifier sequence control
 - N + K redundancy check
- Multiple Low Voltage Load and Low Voltage Battery Disconnect thresholds
- Configuration, statistics, and history
 - All stored in non-volatile memory
 - Remote/local backup and restore of configuration data
- Industry standard defaults
 - Customer specific configurations available
- Remote/local software upgrade
- Basic, busy hour, and trend statistics
- Detailed event history
- User defined events and derived channels

Standard Battery Management Features

- Float/boost mode control
 - Manual boost
 - Manual timed boost locally, T1.317, and remotely initiated
 - Auto boost terminated by time or current
- Battery discharge testing
 - Manual (local/remote)
 - Periodic
 - Plant Battery Test (PBT) input driven
 - Configurable threshold or 20% algorithm
 - Graphical discharge data
 - Rectifiers on-line during test
- Slope thermal compensation
 - High temperature
 - Low temperature
 - Step temperature
 - STC Enable/Disable, low temperature Enable/Disable
 - Configurable mV/°C slopes
- State of charge indication
- High temperature disconnect setting
- Reserve-time prediction
- Recharge current limit
- Emergency Power-Off input

Galaxy Manager Compatible

- Centralized web server and database with multiple user access to live or managed data with drill down to problem details
- Monitor and control of more than 40 connected devices
- Management information from polling or alarms received from alarm traps from multiple sites are available on one screen via the inter/intranet
- Trend user selected data over time
- Automatic or manual report generation
- Standard engineering tools like reserve time calculators and cable voltage drop analyzer

verizon

15505 SAND CANYON AVE.
IRVINE, CA 92618

PLANS PREPARED BY:



CLIENTS

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SITE INFORMATION:

DEER
SPRINGS

124 VISTA MERRIAM
SAN MARCOS, CA 92069
APN: 182-020-45-00

SEAL:

SHEET TITLE:

BATTERY
SPECIFICATIONS

SHEET NUMBER:

A-9

POWER REGULATION

SCALE:

N.T.S.

2