



Real Estate Assets

REQUEST FOR PRELIMINARY REVIEW

for installation/modification of Wireless Communication Facility on City-owned property

05/17/2021

Date

The City of San Diego
Real Estate Assets Department
1200 Third Avenue, Suite 1700
San Diego, California 92101

RE: Site Name: Rancho Bernardo Community Park Project # MRSDL032014
Site Address: 18448 West Bernardo Road, San Diego (the "Property")
Agreement: Agreement dated 01/24/2007 (the "agreement") between The City of
San Diego ("City") and New Cingular Wireless PCS, LLC, ("Lessee" or "Permittee" or
"Licensee").

New Cingular Wireless PCS, LLC
Applicants Name/Carrier is seeking Consent from the City to perform the following to the above
referenced site:

- ☒ Modify, upgrade or changes to existing equipment or Site as describe in the attached plans /
photos.
- ☐ Installation of a New Wireless Communication Facility on City owned property.
- ☐ Apply for New Permit/New Agreement on existing facility – **NO** modifications or changes to
existing equipment or site.
- ☐ Apply for New Permit/New Agreement on existing facility – with modifications or changes to
existing equipment or site.

Describe proposed project below:

On the light pole, remove (3) RRUs. Install (6) coaxial cables from the equipment area. No
change to equipment shrouds or appearance.

On the ground in the equipment area, remove (2) equipment cabinets. Install (3) RRUs, (1)
BBU, (1) mounting kit, (1) Purcell upgrade kit, (3) 2 pole lug adapters and (1) DC9 surge
protector. Install (1) power plant with (8) batteries, (9) rectifiers and (6) power extend
converters. Install new battery cabinet. Relocate (12) batteries from existing power cabinet
which is being removed to a new battery cabinet.

Pursuant to Improvements and Alterations, section of the above referenced agreement, *Lessee/ Permittee/Licensee shall not construct any improvements, structures or installations of the Premises or make any alterations to the Premises (with the exception of equipment replacement or repairs) without City's prior written approval.*

In order to comply with such requirements, New Cingular Wireless PCS, LLC would like to request City's consent to submit to Development Services Department for review of the proposed items above.

Sincerely, Ryan Larson, agent for New Cingular Wireless PCS, LLC.

Applicant Signature: Ryan Larson Digitally signed by Ryan Larson
DN: cn=Ryan Larson, o=SD, email=rlarson@sd7.com, c=US
Date: 2021.06.17 12:36:56 -07'00'

☐ **A one-time, non-refundable Processing Fee (\$4,920 for long term agreements - \$980 for Short term or ROE Permits) payable to City Treasurer, MUST be paid at the time of request for applicable agreement. This fee applies even if the agreement is never executed.**

City Parks and Rec Department has provided its consent and approval to allow applicant to submit application for Required Permits needed for the proposed items listed herein, **with the understanding that the Department will be allowed to review the improvement plans prior to any permits being issued** and that a pre-construction meeting will be conducted with staff before any work begins, if required.

7/1/2021 Shelly Stowell, Deputy Director Shelly Stowell Digitally signed by Shelly Stowell
Date: 2021.07.01 13:52:20 -07'00'
Date Print Name & Title Signature

City of San Diego, acknowledgment and consent for Rancho Bernardo Park.
Site Location

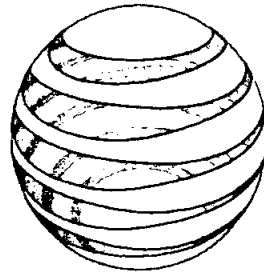
7/19/21 Penny Maus, Director Real Estate Assets [Signature]
Date Print Name & Title Signature

For READ ONLY

- ☐ Approved and Stamped plans received and attached
☒ Scan as Amendment to Agreement when executed
☐ Processing fee received



**Real Estate
Assets**



at&t

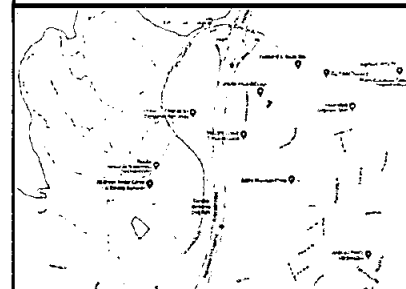
RANCHO BERNARDO COMMUNITY PARK

SD0058
5G NR RADIO
FA:10085093
18448 WEST BERNARDO ROAD
SAN DIEGO, CA 92127
MRSDL032014

DRAWING INDEX

T-1:	TITLE SHEET
GN-1:	GENERAL NOTES
GN-2:	GENERAL NOTES (CONT.)
A-1:	SITE PLAN
A-2:	ENLARGED SITE PLAN
A-3:	EQUIPMENT PLANS
A-4:	ANTENNA PLANS
A-5:	ELEVATIONS
A-6:	ELEVATIONS
A-7:	EQUIPMENT DETAILS
A-8:	EQUIPMENT DETAILS
E-1:	SINGLE-LINE DIAGRAM & PANEL SCHEDULE
G-1:	GROUNDING PLAN
G-2:	GROUNDING DETAILS

VICINITY MAP



PLANS PREPARED BY:

MD7

MD7, LLC
10590 West Ocean Air Dr., Suite 300
San Diego, CA 92130
658-964-7435

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

REV.	BY	DATE	DESCRIPTION
1	JLD	05-05-2021	REVISED WFS CD
2	MC	05-05-2021	100% CONSTRUCTION
3	MC	05-05-2021	100% CONSTRUCTION
4	JLD	05-05-2021	100% CONSTRUCTION
5	JLD	05-05-2021	100% CONSTRUCTION
6	MC	05-05-2021	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:

RANCHO BERNARDO
COMMUNITY PARK

5G NR RADIO
SITE NUMBER:
SD0058 - 10085093

SITE ADDRESS:
18448 WEST BERNARDO ROAD
SAN DIEGO, CA 92127

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.

PROJECT TEAM

APPLICANT AGENT:
NAME: AT&T WIRELESS
ADDRESS: 5738 PACIFIC CENTER BLVD.
SAN DIEGO, CA 92121
CONTACT: ROBERT POLITO
PHONE: (658) 291-1915
EMAIL: RPOLITO@MD7.COM

SITE ACQUISITION:
NAME: MD7, LLC
ADDRESS: 10590 WEST OCEAN AIR DRIVE, SUITE 300
SAN DIEGO, CA 92130
CONTACT: ROBERT POLITO
PHONE: (658) 291-1915
EMAIL: RPOLITO@MD7.COM

RF ENGINEER:
NAME: AT&T
ADDRESS: 5738 PACIFIC CENTER BLVD.
SAN DIEGO, CA 92121
CONTACT: ROB SCHNEIDER
EMAIL: rs011@ATT.COM

ARCHITECT:
NAME: MD7 ARCHITECTURE SERVICES, INC.
ADDRESS: 10590 WEST OCEAN AIR DRIVE, SUITE 300
SAN DIEGO, CA 92130
CONTACT: CAROL YOUNG
PHONE: (619) 236-0061
EMAIL: NYRITT@md7.com

ARCHITECT:
NAME: MARGO MARTINEZ
CONTACT: NICHOLAS BRITT
PHONE: (658) 997-1011
EMAIL: NBRITT@md7.com

ZONING:
NAME: MD7, LLC
ADDRESS: 10590 WEST OCEAN AIR DRIVE, SUITE 300
SAN DIEGO, CA 92130
CONTACT: ROBERT POLITO
PHONE: (658) 291-1915
EMAIL: RPOLITO@MD7.COM

ENGINEER:
NAME: PNP ENGINEERING
ADDRESS: 17671 IRVINE BLVD., STE 113
TUSTIN, CA 92780
CONTACT: JOSHUA KANG
PHONE: (949) 351-5020
EMAIL: jpkang123@gmail.com

SITE INFORMATION

PROPERTY OWNER:
THE CITY OF SAN DIEGO
1200 3RD AVE SUITE 1700 MS 51A
SAN DIEGO, CA 92101
CONTACT: CAROL YOUNG
(619) 236-0061

STRUCTURE HEIGHT: 72'-0"

PARCEL NUMBER: 272-110-43

LATITUDE (NAD 83): 33° 2' 50.100"

LONGITUDE (NAD 83): 117° 4' 27.840"

ZONING JURISDICTION: CITY OF SAN DIEGO

ZONING DISTRICT: CP-1-1

OCCUPANCY GROUP: S-1

CONSTRUCTION TYPE: V-B

OTHER WIRELESS FACILITIES: N/A

POWER COMPANY: SDG&E

TELEPHONE COMPANY: AT&T

PROJECT SUMMARY

CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, TOOLS, TRANSPORTATION, ETC. TO FULLY EXECUTE WORK. WORK REQUIREMENTS DETAILED ON THE DRAWINGS AND SPECIFICATIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

ALL NEW EQUIPMENT INDICATED IN DRAWINGS IS AN UNMANNED TRANSMISSION FACILITY FOR TELECOMMUNICATION CELLULAR SERVICES.

- REMOVE (3) EXISTING RRUS
- REMOVE (2) EXISTING AT&T CABINETS
- RELOCATE (12) EXISTING BATTERIES
- INSTALL (2) NEW AT&T RRUS AT GROUND LEVEL
- INSTALL (15) NEW 85U RISS ON (6) PURCELL CABINET
- INSTALL (6) NEW 48VDC POWER EXTEND CONVERTERS
- INSTALL (1) NEW EMERSON NETSURE 721 POWER PLANT
- INSTALL (8) NEW 142V/100 FT BATTERIES
- INSTALL (1) NEW 48VDC NET/XTEND FLEX BATTERY CABINET
- INSTALL (9) NEW EMERSON ZIC-48 RECTIFIERS
- INSTALL (1) NEW PURCELL UPGRADE KIT
- INSTALL (3) NEW 2 POLE LUG ADAPTERS
- INSTALL (1) NEW MOUNTING KIT
- INSTALL (8) NEW 1/2" COAX FROM EQUIPMENT TO ANTENNAS
- INSTALL (1) NEW DC-8 SURGE SUPPRESSOR AT EQUIPMENT LEVEL

THE SIZE, HEIGHT AND DIRECTION OF ANTENNAS SHALL BE ADJUSTED TO MEET SYSTEM REQUIREMENTS.

DRIVING DIRECTIONS

FROM AT&T OFFICE:

1. HEAD NORTHEAST ON PACIFIC CENTER BLVD TOWARD WIRELESS WAY
2. TURN RIGHT ONTO PACIFIC HEIGHTS BLVD
3. TURN LEFT ONTO MIRA MESA BLVD
4. TURN RIGHT TO MERGE ONTO I-15 N
5. MERGE ONTO I-15 N
6. TAKE EXIT 28 FOR W BERNARDO DR/POWERMADO RD
7. TURN LEFT ONTO W BERNARDO DR/POWERMADO RD
8. TURN RIGHT ONTO RANCHO BERNARDO COMMUNITY PARK DRIV
9. 1448 WEST BERNARDO ROAD ON THE LEFT SIDE

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR SITE MODIFICATIONS.

AT&T COMPLIANCE _____ DATE _____

AT&T RF ENGINEER _____ DATE _____

AT&T OPERATIONS _____ DATE _____

AT&T PM _____ DATE _____

CONSTRUCTION _____ DATE _____

SITE ACQUISITION _____ DATE _____

SITE OWNER _____ DATE _____

CONFIDENTIAL AND PROPRIETARY

NOT FOR DISCLOSURE OUTSIDE TELECOMMUNICATION CLIENT WITHOUT PERMISSION.

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

DRAWING SYMBOLS



ELEVATION NUMBER
SHEET NUMBER FOR
ELEVATION



DETAIL NUMBER
SHEET NUMBER FOR DETAIL



REVISION



REFER ELECTRICAL FOR
ADDITIONAL SYMBOLS

CODE COMPLIANCE

2019 CALIFORNIA BUILDING CODE
2019 CALIFORNIA RESIDENTIAL CODE
2019 CALIFORNIA TITLE 24
2019 CALIFORNIA FIRE CODE
2019 CALIFORNIA ENERGY CODE
2019 CALIFORNIA PLUMBING CODE

2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA ELECTRICAL CODE
TIA-222 CODE

IN THE EVENT OF CONFLICT, THE MOST
RESTRICTIVE CODE SHALL PREVAIL.



NOTE
48 HOURS PRIOR TO DIGGING,
CONTRACTOR TO NOTIFY ALL UTILITY
COMPANIES TO LOCATE ALL
UNDERGROUND UTILITIES.
Know your below.
Call before you dig.

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZE.

GENERAL NOTES:

- DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE. THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY. UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT AND LABOR DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PROJECT THROUGH INSPECTION OF THE JOB SITE, DRAWINGS AND SPECIFICATIONS, SO AS TO THOROUGHLY UNDERSTAND THE WORK. ANY AND ALL DISCREPANCIES AND OMISSIONS SHALL BE REPORTED AND CLARIFICATION SHALL BE OBTAINED FROM THE ARCHITECT PRIOR TO WORK BEING DONE. ANY WORK THAT PROCEEDS OTHERWISE SHALL BE, IF INCORRECTLY PERFORMED, REPLACED OR REPAIRED WITH THE COST FOR SAME BEING BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS IN FIELD. IF DIMENSIONAL ERROR OCCURS OR CONDITIONS NOT COVERED IN THE DRAWINGS ARE ENCOUNTERED, CONTRACTOR SHALL NOTIFY THE ARCHITECT BEFORE COMMENCING THAT PORTION OF THE WORK.
- CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- THE STRUCTURAL COMPONENTS OF THIS PROJECT ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
- DRAWINGS ASSUME THE EXISTING BUILDING TO BE IN COMPLIANCE WITH CODE REQUIREMENTS. ANY VIOLATIONS OF CODES IN EXISTING BUILDING DISCOVERED DURING THE COURSE OF CONSTRUCTION WILL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE BUILDING OWNER OR THEIR REPRESENTATIVES.
- CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- DETAILS ARE USUALLY KEPT ONCE ON THE DRAWINGS AND ARE TYPICAL FOR SIMILAR CONDITIONS THROUGHOUT. UNLESS OTHERWISE NOTED, DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK.
- DIMENSIONS ARE FROM FINISH FACE TO FACE. (UNLESS NOTED OTHERWISE)
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION AND UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY OCCUR DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY. IN ADDITION THE CONTRACTOR SHALL FOLLOW ALL SAFETY REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION OVER HIS WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE IN A CLEAN AND SAFE CONDITION, INCLUDING PROPER REMOVAL OF WASTE MATERIAL. WASTE MATERIAL SHALL NOT BE STORED WITHIN OR NEAR THE BUILDING. DUMPSTERS PROVIDED FOR THE DISPOSAL OF WASTE MATERIAL SHALL BE REMOVED AWAY FROM THE BUILDING BUT MAY BE STORED ON SITE ONLY. PROTECT EXISTING ASPHALT PAVING SURFACE AND REPAIR AT NO EXPENSE TO THE BUILDING OWNER ANY DAMAGE CAUSED BY THE USE OF THE DUMPSTERS.
- THE ARCHITECT/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT SPECIAL INSPECTOR, AS REQUIRED, PER SECTION 1704 OF THE INTERNATIONAL BUILDING CODE (IBC).
- CONTRACTOR SHALL GUARANTEE IN WRITING ALL LABOR, MATERIALS, AND WORKMANSHIP INSTALLED BY HIM FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR AFTER DATE OF ACCEPTANCE OF THE WORK BY THE OWNER EXCEPT AS MODIFIED HEREIN OR ON OTHER DRAWINGS. SHOULD DEFECTS OCCUR, ALL WORK SHALL BE REPLACED OR PROPERLY REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL COMBUSTIBLE FLUIDS, INCLUDING PAINTS, PRIMERS, SEALERS, SOLVENTS AND ADHESIVES, COMPLY AND ARE BEING USED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S WRITTEN INSTRUCTIONS. CONTRACTOR SHALL PROVIDE STORAGE FOR SUCH MATERIALS AWAY FROM THE BUILDING. USE OF THE BUILDING FOR SUCH STORAGE IS PROHIBITED.
- CONTRACTOR TO HAVE ALL EASEMENTS AND UNDER GROUND UTILITIES LOCATED AND MARKED PRIOR TO COMMENCING SITE WORK.
- ELECTRICAL, MECHANICAL, AND PLUMBING PERMITS SHALL BE THE RESPONSIBILITY OF THEIR RESPECTIVE SUB-CONTRACTORS.
- OWNER SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS PER LOCAL FIRE MARSHALL. CONTRACTOR TO INSTALL.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH PROPERTY OWNER REPRESENTATIVE INCLUDING BUT NOT LIMITED TO SCHEDULE, PROCEDURES, SECURITY, AND CONSTRUCTING LOADING AND UNLOADING.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE JURISDICTION'S CURRENT ADOPTED VERSION OF INTERNATIONAL BUILDING CODE (IBC), (IPC), (IMC) AND NEC.
- SEAL ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLY WITH U.L. LISTED OR F.M. APPROVED MATERIALS TO MAINTAIN RATING INTEGRITY OF ASSEMBLY.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REDLINING THE CONSTRUCTION PLANS TO ILLUSTRATE THE AS-BUILT CONDITION OF THE SITE. THIS WILL BE DONE AFTER THE SITE HAS BEEN AWARDED THE FINAL INSPECTION. TWO COPIES OF REDLINED DRAWINGS WILL BE PROVIDED TO CLIENT / PROJECT MANAGER.

ELECTRICAL (UNLESS NOTED OTHERWISE):

- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING, FILING, AND FEES IN CONJUNCTION WITH THE PROJECT.
- ALL LABOR AND MATERIAL SHALL CONFORM TO ALL LOCAL, STATE, AND NATIONAL CODES, RULES, REGULATIONS AND STANDARDS.
- ALL EQUIPMENT, WIRING, AND MATERIALS MUST HAVE A UL LABEL.
- ALL WORK SHALL BE DONE BY QUALIFIED AND EXPERIENCED JOURNEYMEN AND PERFORMED IN A WORKMANLIKE MANNER AND SHALL PROCEED IN AN ORDERLY MANNER SO AS NOT TO HOLD UP THE PROGRESS OF THE PROJECT.
- THOROUGHLY TEST ALL LINES, FEEDERS, EQUIPMENT, AND DEVICES WITH MAXIMUM LOADS TO ASSURE PROPER OPERATION.
- CONDUITS AND FITTINGS FOR OUTSIDE APPLICATIONS SHALL BE RIGID OR NON-METALLIC UNLESS OTHERWISE NOTED.
- ALL WIRES SHALL BE COPPER. USE OF ALUMINUM CONDUCTORS WILL NOT BE PERMITTED. SEE ELECTRICAL PLANS FOR SIZING AND LOCATIONS. USE PROPER SIZE CONNECTORS PER LOCAL, STATE, AND NATIONAL CODES.
- CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES.
- PROVIDE PULL BOXES WHERE SHOWN AND WHERE REQUIRED BY CODES AND UTILITY COMPANIES.
- ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES, AND CABINETS WITH APPROVED PLASTIC TAGS.
- ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC. ALL SWEEPS OR BENDS, AND ABOVE-GROUND CONDUITS SHALL BE RIGID GALVANIZED STEEL OR PVC SCHEDULE 80. ALL CONDUITS NOT TERMINATING INTO A CLOSED AREA MUST BE SEALED TO PREVENT ENTRY OF ANY MOISTURE OR FOREIGN OBJECTS. ALL CONDUIT RISERS TO INCLUDE SLIP TYPE EXPANSION JOINT.

GROUNDING (UNLESS NOTED OTHERWISE):

- THE GROUNDING SYSTEM CONNECTIONS SHALL BE MADE WITH EXOTHERMIC WELDS AND/OR MECHANICAL TWO-LUG COMPRESSION CONNECTORS AS INDICATED ON PLANS. USE ONLY STAINLESS STEEL SCREWS, BOLTS WASHERS, AND NUTS FOR FASTENING.
- CLEAN SURFACES THOROUGHLY BEFORE APPLYING GROUND LUGS OR CLAMPS. IF SURFACE IS COATED, THE COATING MUST BE REMOVED DOWN TO THE BARE METAL. AFTER THE COATING HAS BEEN REMOVED, APPLY A NON-CORROSIVE APPROVED COMPOUND TO THE CLEANED SURFACE AND INSTALL LUGS OR CLAMPS. WHERE GALVANIZING IS REMOVED FROM METAL, IT SHALL BE PAINTED OR TOUCHED UP WITH COLD GALVANIZING PAINT SUCH AS GLAVIMOX OR EQUAL.
- ALL CLAMPS, SLEEVES, AND SUPPORTS USED TO SUPPORT OR CHANNEL THE GROUNDING SYSTEM CONDUCTORS AND PVC CONDUITS SHALL BE PVC TYPE NON-CONDUCTIVE. DO NOT USE METAL BRACKETS OR SUPPORTS THAT WOULD FORM A COMPLETE RING AROUND ANY GROUNDING CONDUCTOR.
- ALL GROUNDING CONNECTIONS SHALL BE COATED WITH TAB KOPR SHIELD ANTI-CORROSIVE AGENT. NO SUBSTITUTIONS ARE PERMITTED. VERIFY THE PRODUCT WITH TELECOMMUNICATION CLIENT PRIOR TO USAGE.

PRODUCTS (UNLESS NOTED OTHERWISE):

- GENERAL REQUIREMENTS: ALL MATERIALS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND STANDARD PRODUCTS OF THE VARIOUS MANUFACTURERS WITH ALL MATERIALS AND EQUIPMENT TO BE NEW, CLEAN, UNDAMAGED, AND FREE OF DEFECTS AND CORROSION.
- ACCEPTABLE PRODUCTS: THE PRODUCT OF A SPECIFIED OR APPROVED MANUFACTURER WILL BE ACCEPTABLE ONLY WHEN THE PRODUCT COMPLIES WITH OR IS MODIFIED AS NECESSARY TO COMPLY WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- COMMON ITEMS: WHERE MORE THAN ONE OF ANY SPECIFIC ITEM IS REQUIRED, ALL SHALL BE OF THE SAME TYPE AND MANUFACTURER.
- UL LISTING: ALL MATERIALS AND EQUIPMENT SHALL BE UNDERWRITERS LABORATORIES (UL) LISTED AND LABELED, WHERE UL STANDARDS AND LISTINGS EXIST FOR SUCH MATERIALS OR EQUIPMENT.

EPOXY AND EXPANSION ANCHORS

- EPOXY OR EXPANSION ANCHORS SHALL NOT BE USED EXCEPT WHERE SPECIFICALLY SHOWN ON THE PLANS OR WHEN APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
- DRILLED HOLES SHALL BE PREPARED AND ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND THE CURRENT ICC REPORT.
- SPECIAL INSPECTION SHALL BE DONE IN ACCORDANCE WITH BUILDING CODE AND THE SPECIFIC INSPECTION REQUIREMENTS SET FORTH IN THE CURRENT ICC REPORT.
- ANCHOR RODS USED FOR EPOXY ANCHORS SHALL BE THE TYPE SPECIFIED IN THE REFERENCED ICC REPORT.
- THE ANCHOR SIZE AND EMBEDMENT SHALL BE AS INDICATED ON THE PLANS.
- WHERE PERMITTED, EPOXY ANCHORING SHALL BE COMPLETED WITH THE FOLLOWING ALLOWED PRODUCTS:
MULTI RE-500 50 (ICCF ESR-1917, LARR-2570) - CONCRETE ONLY
MULTI HIT-HY 150 (ICCF ESR-6185, LARR-256526) - MASONRY WALL ONLY
MULTI HIT-HY 20 (ICCF ESR-4815, LARR-24884) - BRICK WALL ONLY
- WHERE PERMITTED, THE FOLLOWING EXPANSION ANCHORS MAY BE USED:
MULTI KWIK BOLT T2 (ICCF ESR-1917, LARR-2570) - CONCRETE ONLY
SIMPSON STRONG-BOLT (ICCF ESR-1771, LARR-2570) - CONCRETE ONLY
MULTI KWIK BOLT 3 (ICCF ESR-1386, LARR-2577) GROUT/FILLED MASONRY ONLY
SIMPSON WEDGE-ALL (ICCF ESR-1386, LARR-24882) - GROUT FILLED MASONRY ONLY

FLASHING AND SHEET METAL

- ALL FLASHING, COUNTER FLASHING, COPING AND ALL OTHER SHEET METAL SHALL BE OF NOT LESS THAN NO. 26 U.S. GAUGE CORROSION-RESISTANT METAL U.N.C. ALL METAL MUST BE GALVANIZED AFTER FABRICATION.
- FLASH AND COUNTER FLASH AT ALL ROOF TO WALL CONDITIONS, G.I. FLASH AND CALK WOOD BEAMS AND OUTLOOKERS PROJECTING THROUGH EXTERIOR WALLS OR ROOF SURFACES.
- FLASH ALL EXTERIOR OPENINGS WITH APPROVED WATERPROOFING, WHICH CONFORMS TO THE STANDARDS OF LOCAL AND STATE CODES.
- ALL CONNECTIONS TO BUILDING WALLS OR ROOFS MUST BE FLASHED AND MADE WATERTIGHT USING LIKE MATERIALS IN ACCORDANCE WITH NRCA ROOFING STANDARDS AND DETAILS. CONTRACTOR SHALL OBTAIN DETAILING CLARIFICATION FOR SITE-SPECIFIC CONDITIONS FROM ARCHITECT/ENGINEER, IF NECESSARY, BEFORE PROCEEDING. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE.

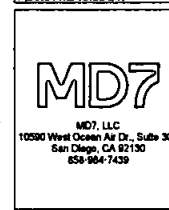
STRUCTURAL STEEL

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST REVISED EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION, 16th EDITION, WHICH INCLUDES SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, CODE OF STANDARD PRACTICE AND AISC STRUCTURAL WELDING CODE. IDENTIFY AND MARK STEEL PER CBC 2203.
- STRUCTURAL STEEL SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER/ARCHITECT PRIOR TO FABRICATION.
- GROUTING OF COLUMN BASE PLATES: BASE PLATES SHALL BE DRYPACKED OR GROUTED WITH NON-SHRINK, NON-FERROUS GROUT. MINIMUM COMPRESSIVE STRENGTH SHALL BE 4,000 PSI AT 28 DAYS. ALL SURFACES SHALL BE PROPERLY CLEANED OF FOREIGN MATERIAL PRIOR TO GROUTING.
- ALL EXPOSED WELDS SHALL BE FILLED AND GROUND SMOOTH WHERE METAL COULD COME IN CONTACT WITH THE PUBLIC.
- NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THRU STRUCTURAL STEEL MEMBERS. BOLT HOLES SHALL CONFORM TO AISC SPECIFICATION, AND SHALL BE STANDARD HOLES UNLESS OTHERWISE NOTED. NO CUTTING OR BURSTING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT PRIOR CONSENT OF THIS ENGINEER. HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED.
- WELDING: CONFORM TO AWS D1.1. WELDERS SHALL BE CERTIFIED
- BOLTING: ASTM A307 BOLTS SHALL BE INSTALLED "SNUG TIGHT" PER AISC SECTION RC3C & (C). ASTM A325 BOLTS SHALL CONFORM TO RC3C SECTION 8 (D).
- FABRICATION: CONFORM TO AISC SPECIFICATION SEC. 12 "FABRICATION" AND AISC CODE SEC. 8 "FABRICATION AND DELIVERY" PERFORM WORK ON PREMISES OF A FABRICATOR APPROVED BY THE BUILDING OFFICIAL.
- GALVANIZING: ALL EXPOSED STEEL OUTSIDE THE BUILDING ENVELOPE SHALL BE HOT-DIPPED GALVANIZED. APPLY FIELD TOUCH-UPS PER ASTM A153.
- ALL FRAMING CONNECTORS SUCH AS CONCRETE ANCHORS, HOLD-DOWNS, POST BASES, FRAMING CAPS, HANGER AND OTHER MISCELLANEOUS STRUCTURAL METALS SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE CO. OR APPROVED EQUAL.
- ALL STRUCTURAL STEEL EXPOSED TO EARTH SHALL HAVE 3" CONCRETE COVER.
- MATERIALS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

ANCHOR BOLTS/RODS:	ASTM F1554, GRADE 36
BAR & PLATES:	ASTM A36
BOLTS IN WOOD:	ASTM A307
BOLTS - HIGH STRENGTH:	ASTM A325SC OR A325N
C, M, AND ANGLE SHAPES:	ASTM A36
DEFORMED WELDED WIRE FABRIC:	ASTM A497
GROUT:	EMBECCO OR EQUIVALENT
OTHER STRUCTURAL SHAPES:	ASTM A36
REINFORCING BARS (WELDED):	ASTM A706, GRADE 60, DEFORMED BARS
REINFORCING BARS (REGULAR):	ASTM A615, GRADE 60, DEFORMED BARS
SMOOTH WELDED WIRE FABRIC:	ASTM A195
STEEL GRATING:	ANISINAMMI MSG 531-00
STEEL PIPE:	ASTM A53, GRADE B
TIE WIRE:	16.5 GAGE OR HEAVIER, BLACK ANNEALED
TUBE STEEL & PIPE COLUMNS:	ASTM A500, GRADE B
W - SHAPES:	ASTM A992, GRADE 50
WELDING ELECTRODES:	ET0XX FOR STRUCTURAL STEEL E60XX FOR REINFORCING BARS E60XX FOR LIGHT GAUGE AND METAL DECK



PLANS PREPARED BY:



MD7, LLC

10590 West Ocean Ave., Suite 300

San Diego, CA 92130

619-904-7439

PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

1. JO 15-01-2025 REVISED BNS CS

2. NC 04-06-2024 100% CONSTRUCTION

3. NC 12-06-2024 100% CONSTRUCTION

4. JC 12-06-2024 100% CONSTRUCTION

5. JC 04-06-2021 100% CONSTRUCTION

6. NC 06-01-2021 100% CONSTRUCTION

7. NC 06-01-2021 100% CONSTRUCTION

8. NC 06-01-2021 100% CONSTRUCTION

9. NC 06-01-2021 100% CONSTRUCTION

10. NC 06-01-2021 100% CONSTRUCTION

11. NC 06-01-2021 100% CONSTRUCTION

12. NC 06-01-2021 100% CONSTRUCTION

13. NC 06-01-2021 100% CONSTRUCTION

14. NC 06-01-2021 100% CONSTRUCTION

15. NC 06-01-2021 100% CONSTRUCTION

16. NC 06-01-2021 100% CONSTRUCTION

17. NC 06-01-2021 100% CONSTRUCTION

18. NC 06-01-2021 100% CONSTRUCTION

19. NC 06-01-2021 100% CONSTRUCTION

20. NC 06-01-2021 100% CONSTRUCTION

21. NC 06-01-2021 100% CONSTRUCTION

22. NC 06-01-2021 100% CONSTRUCTION

23. NC 06-01-2021 100% CONSTRUCTION

24. NC 06-01-2021 100% CONSTRUCTION

25. NC 06-01-2021 100% CONSTRUCTION

26. NC 06-01-2021 100% CONSTRUCTION

27. NC 06-01-2021 100% CONSTRUCTION

28. NC 06-01-2021 100% CONSTRUCTION

29. NC 06-01-2021 100% CONSTRUCTION

30. NC 06-01-2021 100% CONSTRUCTION

31. NC 06-01-2021 100% CONSTRUCTION

32. NC 06-01-2021 100% CONSTRUCTION

33. NC 06-01-2021 100% CONSTRUCTION

34. NC 06-01-2021 100% CONSTRUCTION

35. NC 06-01-2021 100% CONSTRUCTION

36. NC 06-01-2021 100% CONSTRUCTION

37. NC 06-01-2021 100% CONSTRUCTION

38. NC 06-01-2021 100% CONSTRUCTION

39. NC 06-01-2021 100% CONSTRUCTION

40. NC 06-01-2021 100% CONSTRUCTION

41. NC 06-01-2021 100% CONSTRUCTION

42. NC 06-01-2021 100% CONSTRUCTION

43. NC 06-01-2021 100% CONSTRUCTION

44. NC 06-01-2021 100% CONSTRUCTION

45. NC 06-01-2021 100% CONSTRUCTION

46. NC 06-01-2021 100% CONSTRUCTION

47. NC 06-01-2021 100% CONSTRUCTION

48. NC 06-01-2021 100% CONSTRUCTION

49. NC 06-01-2021 100% CONSTRUCTION

50. NC 06-01-2021 100% CONSTRUCTION

51. NC 06-01-2021 100% CONSTRUCTION

52. NC 06-01-2021 100% CONSTRUCTION

53. NC 06-01-2021 100% CONSTRUCTION

54. NC 06-01-2021 100% CONSTRUCTION

55. NC 06-01-2021 100% CONSTRUCTION

56. NC 06-01-2021 100% CONSTRUCTION

57. NC 06-01-2021 100% CONSTRUCTION

58. NC 06-01-2021 100% CONSTRUCTION

59. NC 06-01-2021 100% CONSTRUCTION

60. NC 06-01-2021 100% CONSTRUCTION

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.

FRAMING

- ALL LUMBER SHALL BE GRADE MARKED DOUGLAS FIR-LARCH AND SHALL HAVE THE FOLLOWING MINIMUM GRADES:
JOISTS AND RAFTERS #1
BEAMS AND STRINGERS #1
PLATES #2
STUDS (2X4, 2X6, 2X8) #1
POSTS, COLUMNS AND TIMBER #1
- ALL FRAMING EXPOSED TO THE WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION SPECIFICATIONS. WHERE POSSIBLE, ALL CUTS AND HOLES SHOULD BE COMPLETED BEFORE TREATMENT. CUTS AND HOLES DUE TO ON-SITE FABRICATION SHALL BE BRUSHED WITH 2 COATS OF COPPER NAPHTHENE SOLUTION CONTAINING A MINIMUM OF 2% METALLIC COPPER IN SOLUTION (PER AWPA STD. 146).
- CUTTING OR NOTCHING OF WOOD STUDS OR PLATES SHALL NOT EXCEED 25% OF THE STUD/PLATE WIDTH AT EXTERIOR OR BEARING WALLS AND SHALL NOT EXCEED 40% OF THE STUD/PLATE WIDTH IN NONBEARING PARTITIONS. BORED HOLE DIAMETERS ARE LIMITED TO 40% OF THE STUD WIDTH IN ANY STUD AND MAY BE 60% IN NONBEARING PARTITIONS OR WHEN THE BORED STUD IS DOUBLED.
- DO NOT NOTCH JOISTS, RAFTERS, OR BEAMS EXCEPT WHERE SHOWN ON THE DETAILS. BORED HOLES THROUGH JOISTS SHALL NOT EXCEED 1/3 OF MEMBER DEPTH AND BE LOCATED AT LEAST 2" FROM THE TOP AND BOTTOM OF THE MEMBER.
- ALL BLOCKING AND BRIDGING SHALL BE PROVIDED AS REQUIRED PER GOVERNING CODE OR STANDARD OF PRACTICE.
- ALL JOIST, RAFTER & MISC. FRAMING SHALL HAVE FULL-DEPTH (OR METAL) BRIDGING AT ALL SUPPORTS, MIDSPAN AND AT A MAXIMUM SPACING OF 8'-0" O.C. IN BETWEEN UNLESS NOTED OTHERWISE.
- PROVIDE DOUBLE JOISTS UNDER ALL PARTITIONS THAT ARE PARALLEL TO JOISTS. USE 2-180 NAILS AT 16" O.C. TO NAIL DOUBLE JOISTS TOGETHER.
- THE CONTRACTOR SHALL CAREFULLY SELECT LUMBER TO BE USED IN LOADBEARING APPLICATIONS. THE LENGTH OF SPLIT ON THE WIDE FACE OF 2" NOMINAL LOADBEARING FRAMING SHALL BE LIMITED TO LESS THAN 1/2 OF THE WIDE FACE DIMENSION. THE LENGTH OF SPLIT ON THE WIDE FACE OF 7" (NOMINAL) AND THICKER LUMBER SHALL BE LIMITED TO 1/2 OF THE NARROW FACE DIMENSION.
- BOLT HOLES SHALL BE CAREFULLY CENTERED AND DRILLED NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. PROVIDE WASHERS BETWEEN BOLT HEADS OR NUTS AND WOOD. BOLTED CONNECTIONS SHALL BE SNUGGLED TIGHT BUT NOT TO THE EXTENT OF CRUSHING WOOD UNDER WASHERS.
- ALL BOLTS SHALL BE RE-TIGHTENED PRIOR TO APPLICATION OF PLASTER, PLYWOOD, ETC. AND BEFORE CLOSING IN COMPLETION OF THE JOB.
- PREFABRICATED METAL JOIST HANGERS, HURRICANE CLIPS, HOLD-DOWN ANCHORS AND OTHER ACCESSORIES SHALL BE AS MANUFACTURED BY "SMITHSON STRONG-TIE COMPANY" OR APPROVED EQUAL. INSTALL ALL ACCESSORIES PER THE MANUFACTURER'S REQUIREMENTS. ALL STEEL SHALL HAVE A MINIMUM THICKNESS OF 0.04 INCHES (PER ASTM A448, GRADE A) AND BE GALVANIZED (COATING G90).
- STRUCTURAL STEEL PLATE CONNECTORS SHALL CONFORM TO ASTM A-36 SPECIFICATIONS AND BE 1/4" THICK UNLESS OTHERWISE INDICATED.
- ALL PLATES, ANCHORS, NAILS, BOLTS, NUTS, WASHERS, AND OTHER MISCELLANEOUS HARDWARE THAT ARE EXPOSED OR IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIP GALVANIZED.
- BOLTS IN WOOD SHALL BE A MINIMUM OF 7 BOLT DIAMETERS FROM THE ENDS AND 4 BOLT DIAMETERS FROM THE EDGES.
- ALL SILL BOLTS SHALL BE PLACED STARTING 8" FROM THE ENDS OF A BOARD OR FROM A NOTCH AND SPACED AT INTERVALS AS NOTED ON THE PLANS.
- ALL SILL PLATE ANCHOR BOLTS AND HOLD-DOWN CONNECTOR BOLTS AT ALL PLYWOOD SHEAR PANELS SHALL HAVE THE FOLLOWING PLATE WASHERS:
BOLT SIZE PLATE WASHER SIZE (ASTM A-36)
5/8" 0.220" X 3" X 3"
3/4" 5/16" X 3" X 3"
7/8" 5/16" X 3" X 3"
1" 3/8" X 3-1/2" X 3-1/2"
- TOP PLATES FOR ALL STUD WALLS SHALL BE 2-X. MINIMUM TOP PLATE LAP SHALL BE 48" WITH 18# NAILS AT 4" O.C. EACH SIDE OF SPLICE U.N.O. SPLICES IN UPPER AND LOWER PLATES SHALL BE STAGGERED 10" MINIMUM.
- ALL WOOD STUD WALLS SHALL HAVE 2X4 STUDS AT 16" O.C. WHEN HEIGHT BETWEEN LATERAL SUPPORTS IS LESS THAN 10'-0". WHEN HEIGHT BETWEEN LATERAL SUPPORTS MORE THAN 10'-0", USE 2X6 STUDS AT 16" O.C. WITH FULL DEPTH BLOCKING AT NOT MORE THAN 8' VERTICAL INTERVAL.
- ALL NAILS SHALL BE COMMON WIRE NAILS U.N.O. SEE FRAMING PLANS OR DETAILS FOR NAIL SIZES AND SPACING. NAILS THAT ARE NOT DETAILED OR NOTED SHALL BE IN ACCORDANCE WITH IRC TABLE 2304.2.1. FASTENING SCHEDULE. HOLES FOR NAILS SHALL BE PREDRILLED AT A SMALLER DIAMETER THAN THE NAIL WHERE NECESSARY TO PREVENT SPLITTING.
- LAG BOLTS SHALL HAVE LEAD HOLES BORED AS FOLLOWS:
SHANK PORTION SAME DIAMETER AND LENGTH AS SHANK
THREADED PORTION 0.6-0.75 OF DIAMETER OF THREAD

GOVERNING CODE: 2018 CALIFORNIA BUILDING CODE

- NEW DEAD LOADS (EQUIPMENT)
CABINETS = VARIES, SEE "REVISED 90% CD" SET, REV. 1," DATED 11/16/2018 BY MD7.
- MINIMUM LIVE LOADS
NOT APPLICABLE = NO LIVE LOAD
- SNOW LOADS
NOT APPLICABLE = NO SNOW LOAD
- WIND LOADS
A. BASIC WIND SPEED = 90 MPH
B. WIND LOAD IMPORTANCE FACTOR, I_w = 1.0
C. WIND EXPOSURE CATEGORY 'C' FOR MAIN WINDFORCE-RESISTING SYSTEM
D. WIND EXPOSURE CATEGORY 'C' FOR COMPONENTS AND CLADDING
E. ENCLOSURE WIND DESIGN PRESSURES (ASCE 7-10 CHAPTER 30)
GUST-EFFECT FACTOR, G = 0.85
FORCE COEFFICIENT, C_f = VARIES
F. EQUIPMENT / CABINETS WIND DESIGN PRESSURES (ASCE 7-10 CHAPTER 30)
GUST-EFFECT FACTOR, G = 0.85
FORCE COEFFICIENT, C_f = 1.4
G. PARAPET WIND DESIGN PRESSURES (ASCE 7-10 CHAPTER 30)
COMBINED NET PRESSURE COEFFICIENT, G_{Cpn} = +1.5 / -1.0
- EARTHQUAKE DESIGN DATA (NONSTRUCTURAL COMPONENTS ASCE 7-18 CHAPTER 13)
A. SEISMIC IMPORTANCE FACTOR, I_s = 1.0
B. OCCUPANCY CATEGORY = II
C. MAPPED SPECTRAL RESPONSE ACCELERATIONS
 S_a = 0.85g
 S_1 = 0.30g
D. SITE CLASS = D
E. CUMULATED SPECTRAL RESPONSE COEFFICIENTS
 S_{DS} = 0.85g
 S_{D1} = 0.40g
F. SEISMIC DESIGN CATEGORY = D
G. EQUIPMENT CABINETS
BATTERIES & COMMUNICATION EQUIPMENT (ASCE 7-18 TABLE 13.6-1)
AMPLIFICATION COEFFICIENT, a_p = 1.0
RESPONSE COEFFICIENT, R_p = 2.5
DESIGN ACCELERATION, F_p = $0.48 \times S_{DS} \times I_s \times W$
- DESIGN LOAD COMBINATIONS
A. D
B. D + L
C. D + (0.5W OR 0.7E)
D. D + (0.75D OR 0.7E) + (0.75L OR S OR R)
E. 0.6D + 0.5W
F. 0.6D + 0.7E



PLANS PREPARED BY:

MD7

MD7, LLC
10590 West Ocean Ave. Suite 300
San Diego, CA 92110
858-964-7438

MD7 PROJECT NUMBER:

DRAWN BY: JAO CHECKED BY: AF

REV. BY: DATE DESCRIPTION

REV. BY	DATE	DESCRIPTION
1	JAO 04-04-2020	REVISED WPA CG
2	MC 04-04-2020	100% CONSTRUCTION
3	MC 04-04-2020	100% CONSTRUCTION
4	MC 04-04-2020	100% CONSTRUCTION
5	MC 04-04-2020	100% CONSTRUCTION
6	MC 04-04-2020	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION

SITE NAME:

RANCHO BERNARDO

COMMUNITY PARK

SG NR RADIO

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:

18448 WEST BERNARDO ROAD

SAN DIEGO, CA 92127

SHEET TITLE:

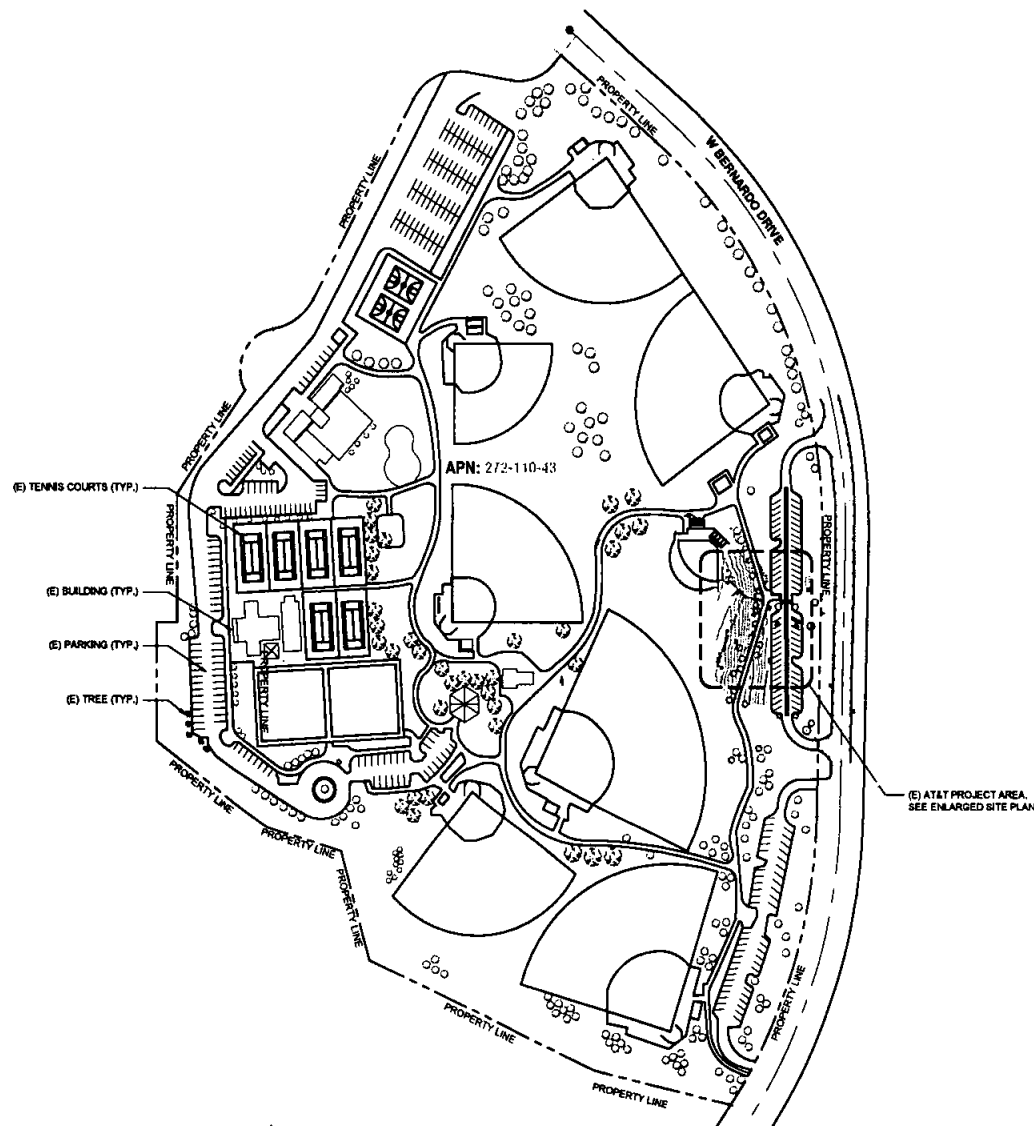
GENERAL NOTES

(CONT.)

SHEET NUMBER:

GN-2

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.



NOTE:
LOCATION & DIMENSIONS ON RIGHTS-OF-WAY AND
PROPERTY LINES ARE ASSUMED TO BE ACCURATE
BUT ARE PREPARED WITHOUT BENEFIT OF
RECORD-OF-SURVEY OR CURRENT SURVEY.

SITE PLAN

SCALE FOR 24" X 36" 1" = 100'-0" SCALE FOR 11x17" 1" = 200'-0"

GENERAL NOTES

THIS IS NOT A SITE SURVEY.
THESE DRAWINGS HAVE BEEN CREATED BY INFORMATION GATHERED AT THE
SITE, AS-SUITS PROVIDED BY AT&T AND WITHOUT A SURVEY. PLEASE
VERIFY ALL DIMENSIONS, LENGTHS, PROPERTY LINES AND CONDUIT RUNS.
ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET
HALF-WIDTHS HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND ARE
APPROXIMATE. REFER TO LAND SURVEY FOR COMPLETE SITE INFORMATION.

UNDERGROUND UTILITIES:
EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN. CONTRACTOR TO
LOCATE AND PROTECT ALL EXISTING UNDERGROUND UTILITIES DURING
CONSTRUCTION.

CONTRACTOR NOTES:

1. CONTRACTOR SHALL REPAIR ALL DAMAGE RESULTING FROM
CONSTRUCTION BACK TO PRE-CONSTRUCTION CONDITION AT
COMPLETION OF WORK.
2. CONTRACTOR SHALL COORDINATE SITE ACCESS TIMES AND EQUIPMENT
STAGING LOCATIONS WITH LANDLORD.



PLANS PREPARED BY:

MD7

MD7, LLC
10590 West Ocean Air Dr., Suite 300
San Diego, CA 92130
658-964-7438

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV.	DATE	DESCRIPTION
1	10-01-2023	REVISED R/W CO
2	09-05-2023	100% CONSTRUCTION
3	10-08-2023	100% CONSTRUCTION
4	12-08-2023	100% CONSTRUCTION
5	04-08-2021	100% CONSTRUCTION
6	05-07-2021	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:

SITE NAME:

**RANCHO BERNARDO
COMMUNITY PARK**

SGNR RADIO

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:
18445 WEST BERNARDO ROAD
SAN DIEGO, CA 92127

SHEET TITLE:

SITE PLAN

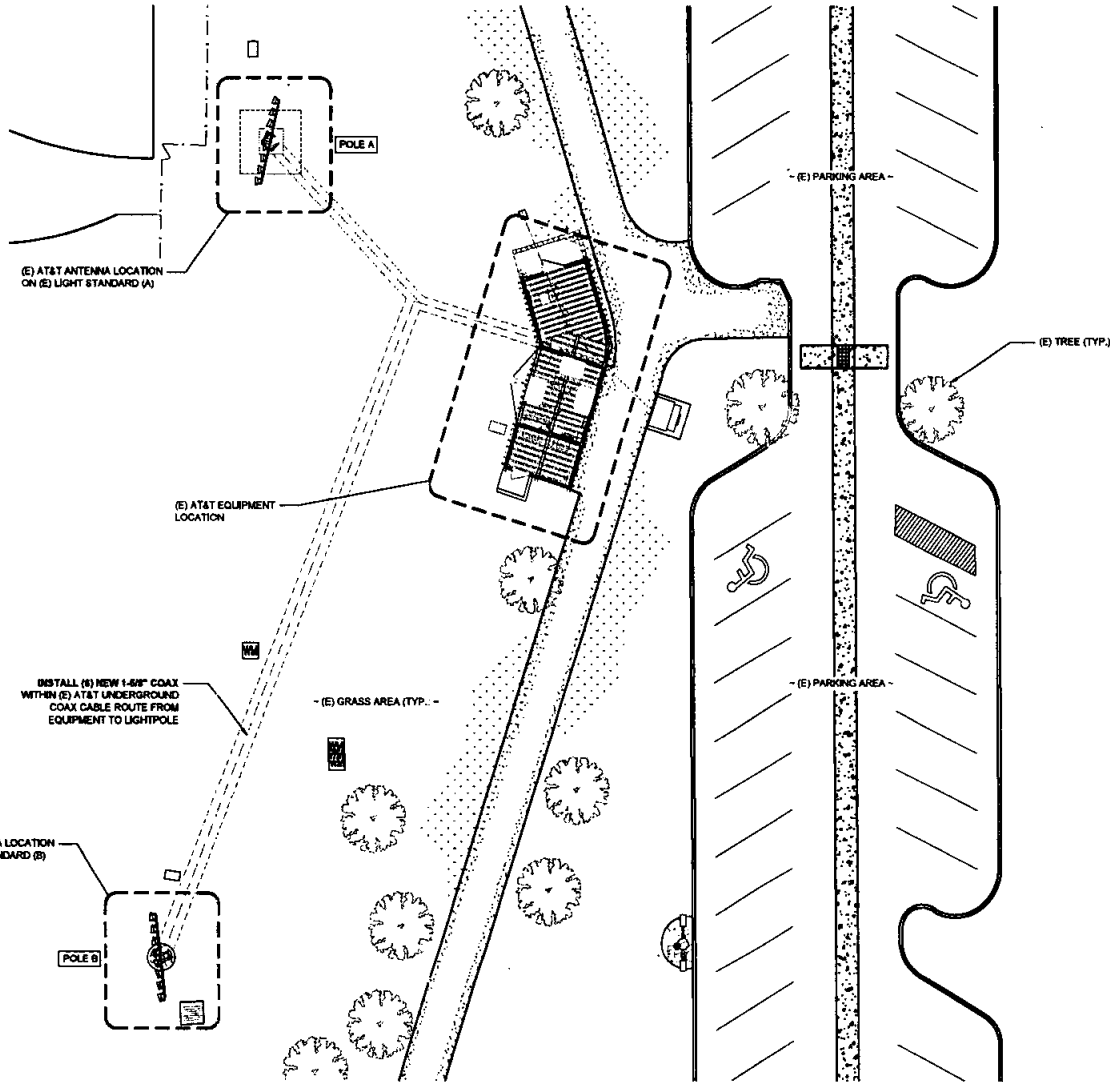
SHEET NUMBER:

A-1

LEGEND

PROPERTY LINE
ROAD CENTERLINE

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.



NOTE:
LOCATION & DIMENSIONS ON RIGHTS-OF-WAY AND PROPERTY LINES ARE ASSUMED TO BE ACCURATE BUT ARE PREPARED WITHOUT BENEFIT OF RECORD-OF-SURVEY OR CURRENT SURVEY.

1
A-2

ENLARGED SITE PLAN

SCALE FOR 24" X 36" 1" = 40' SCALE FOR 11.5" X 17" 1" = 20'

GENERAL NOTES

THIS IS NOT A SITE SURVEY. THESE DRAWINGS HAVE BEEN CREATED BY INFORMATION GATHERED AT THE SITE. AS-BUILTS PROVIDED BY AT&T AND WITHOUT A SURVEY. PLEASE VERIFY ALL DIMENSIONS, LENGTHS, PROPERTY LINES AND CONDUIT RUNS. ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET HALF-WIDTHS HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND ARE APPROXIMATE. REFER TO LAND SURVEY FOR COMPLETE SITE INFORMATION.

UNDERGROUND UTILITIES:
EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN. CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING UNDERGROUND UTILITIES DURING CONSTRUCTION.

CONTRACTOR NOTES:

1. CONTRACTOR SHALL REPAIR ALL DAMAGE RESULTING FROM CONSTRUCTION BACK TO PRE-CONSTRUCTION CONDITION AT COMPLETION OF WORK.
2. CONTRACTOR SHALL COORDINATE SITE ACCESS TIMES AND EQUIPMENT STAGING LOCATIONS WITH LANDLORDS.

LEGEND

PROPERTY LINE
ROAD CENTERLINE



PLANS PREPARED BY:

MD7

MD7, LLC
10580 West Ocean Ave. Suite 300
San Diego, CA 92130
855-954-7438

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

REV.	BY	DATE	DESCRIPTION
1	MD	07-01-2023	REVISED 50% CD
2	MD	08-01-2023	100% CONSTRUCTION
3	MD	08-01-2023	100% CONSTRUCTION
4	MD	08-01-2023	100% CONSTRUCTION
5	MD	08-01-2023	100% CONSTRUCTION
6	MD	08-01-2023	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:

SITE NAME:

**RANCHO BERNARDO
COMMUNITY PARK**

5G NR RADIO

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:

18448 WEST BERNARDO ROAD

SAN DIEGO, CA 92127

SHEET TITLE:

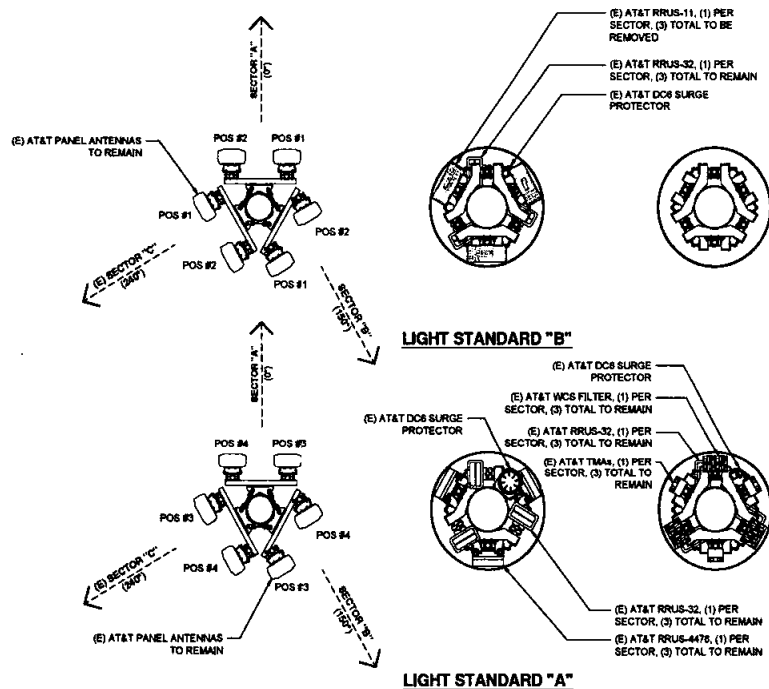
ENLARGED SITE PLAN

SHEET NUMBER:

A-2

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.

EXISTING ANTENNA AND TRANSMISSION CABLE SCHEDULE							
SECTOR	TECHNOLOGY	ANTENNA		RRU MODEL / QTY.	TMA / FILTER MODEL / QTY.	TRANSMISSION LINES (SIZE / LENGTH FT +/- 5)	
		MAKE / MODEL	AZIMUTH				
ALPHA SECTOR	A1	LTE 700/1900	COMMSCOPE SBNH-1065B	0°	61°-5'	RRUS-11 B12 (1) RRUS-32 B2 (1)	(6) FIBER ±10'
	A2	OTHER	KATHREIN 800-10795K	0°	61°-5'	-	-
	A3	LTE 700/1900	QUINTEL QS6655-3E	0°	61°-5'	RRUS-4478 B14 (1) RRUS-32 B66A (1)	(6) FIBER ±10' (2) 1-5/8" COAX ±225'
	A4	UMTS 850/LTE WCS	QUINTEL QS6655-3E	0°	61°-5'	RRUS-32 B30 (1)	ERICSSON TMA WCS-DMFQ-AMT-43 (1) (6) FIBER ±10' (2) 1-5/8" COAX ±225'
BETA SECTOR	B1	OTHER	KATHREIN 800-10795K	150°	61°-5'	-	-
	B2	LTE 700/1900	COMMSCOPE SBNH-1065B	150°	61°-5'	RRUS-11 B12 (1) RRUS-32 B2 (1)	(6) FIBER ±10'
	B3	LTE 700/1900	QUINTEL QS6655-3E	150°	61°-5'	RRUS-4478 B14 (1) RRUS-32 B66A (1)	(6) FIBER ±10' (2) 1-5/8" COAX ±225'
	B4	UMTS 850/LTE WCS	QUINTEL QS6655-3E	150°	61°-5'	RRUS-32 B30 (1)	ERICSSON TMA WCS-DMFQ-AMT-43 (1) (6) FIBER ±10' (2) 1-5/8" COAX ±225'
GAMMA SECTOR	C1	LTE 700/1900	COMMSCOPE SBNH-1065B	240°	61°-5'	RRUS-11 B12 (1) RRUS-32 B2 (1)	(6) FIBER ±10'
	C2	OTHER	KATHREIN 800-10795K	240°	61°-5'	-	-
	C3	LTE 700/1900	QUINTEL QS6655-3E	240°	61°-5'	RRUS-4478 B14 (1) RRUS-32 B66A (1)	(6) FIBER ±10' (2) 1-5/8" COAX ±225'
	C4	UMTS 850/LTE WCS	QUINTEL QS6655-3E	240°	61°-5'	RRUS-32 B30 (1)	ERICSSON TMA WCS-DMFQ-AMT-43 (1) (6) FIBER ±10' (2) 1-5/8" COAX ±225'



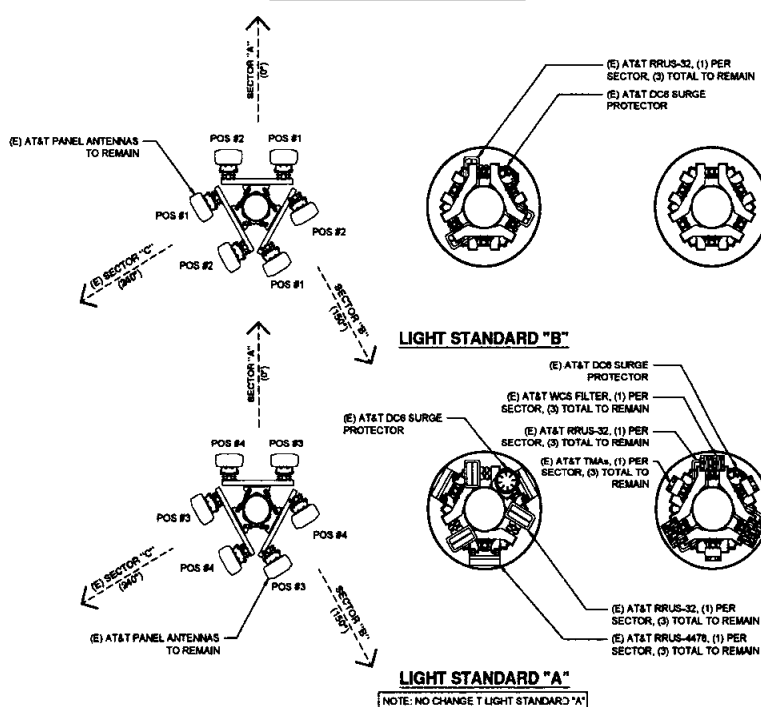
1
A.4 EXISTING ANTENNA PLAN

SCALE FOR 36" X 48" 1/4" = 1'-0" SCALE FOR 11' X 17' 1/2" = 1'-0"

NEW ANTENNA AND TRANSMISSION CABLE SCHEDULE							
SECTOR	TECHNOLOGY	ANTENNA		RRU MODEL / QTY.	TMA / FILTER MODEL / QTY.	TRANSMISSION LINES (SIZE / LENGTH FT +/- 5)	
		MAKE / MODEL	AZIMUTH				
ALPHA SECTOR	A1	LTE 700/1900	COMMSCOPE SBNH-1065B	0°	61°-5'	RRUS-32 B2 (1) RRUS-4448 B66B12 (1)	(2) 1-5/8" COAX ±225'
	A2	OTHER	KATHREIN 800-10795K	0°	61°-5'	-	-
	A3	LTE 700/1900	QUINTEL QS6655-3E	0°	61°-5'	RRUS-4478 B14 (1) RRUS-32 B66A (1)	(6) FIBER ±10'
	A4	UMTS 850/LTE WCS	QUINTEL QS6655-3E	0°	61°-5'	RRUS-32 B30 (1)	ERICSSON TMA WCS-DMFQ-AMT-43 (1) (6) FIBER ±10' (2) 1-5/8" COAX ±225'
BETA SECTOR	B1	OTHER	KATHREIN 800-10795K	150°	61°-5'	-	-
	B2	LTE 700/1900	COMMSCOPE SBNH-1065B	150°	61°-5'	RRUS-32 B2 (1) RRUS-4448 B66B12 (1)	(2) 1-5/8" COAX ±225'
	B3	LTE 700/1900	QUINTEL QS6655-3E	150°	61°-5'	RRUS-4478 B14 (1) RRUS-32 B66A (1)	(6) FIBER ±10'
	B4	UMTS 850/LTE WCS	QUINTEL QS6655-3E	150°	61°-5'	RRUS-32 B30 (1)	ERICSSON TMA WCS-DMFQ-AMT-43 (1) (6) FIBER ±10' (2) 1-5/8" COAX ±225'
GAMMA SECTOR	C1	LTE 700/1900	COMMSCOPE SBNH-1065B	240°	61°-5'	RRUS-32 B2 (1) RRUS-4448 B66B12 (1)	(2) 1-5/8" COAX ±225'
	C2	OTHER	KATHREIN 800-10795K	240°	61°-5'	-	-
	C3	LTE 700/1900	QUINTEL QS6655-3E	240°	61°-5'	RRUS-4478 B14 (1) RRUS-32 B66A (1)	(6) FIBER ±10'
	C4	UMTS 850/LTE WCS	QUINTEL QS6655-3E	240°	61°-5'	RRUS-32 B30 (1)	ERICSSON TMA WCS-DMFQ-AMT-43 (1) (6) FIBER ±10' (2) 1-5/8" COAX ±225'

* RRUS TO UTILIZE EXISTING COAX AND INSTALLED IN EQUIPMENT AREA AT GROUND LEVEL

** 61°-7' RAD CENTER IS A 6' ANT @ 64°-7' TIP



1
A.4 NEW ANTENNA PLAN

SCALE FOR 36" X 48" 1/4" = 1'-0" SCALE FOR 11' X 17' 1/2" = 1'-0"



PLANS PREPARED BY:

MD7

MD7, LLC
10590 West Ocean Air Dr., Suite 300
San Diego, CA 92130
858-964-7438

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

REV.	BY	DATE	DESCRIPTION
1	JLD	07-01-2020	REVISED WPS CD
2	MC	08-04-2020	100% CONSTRUCTION
3	MC	10-08-2020	100% CONSTRUCTION
4	JC	11-04-2020	100% CONSTRUCTION
5	JC	04-08-2021	100% CONSTRUCTION
6	MC	05-07-2021	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:

SITE NAME:

RANCHO BERNARDO COMMUNITY PARK

5G NR RADIO

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:

10400 WEST BERNARDO ROAD

SAN DIEGO, CA 92127

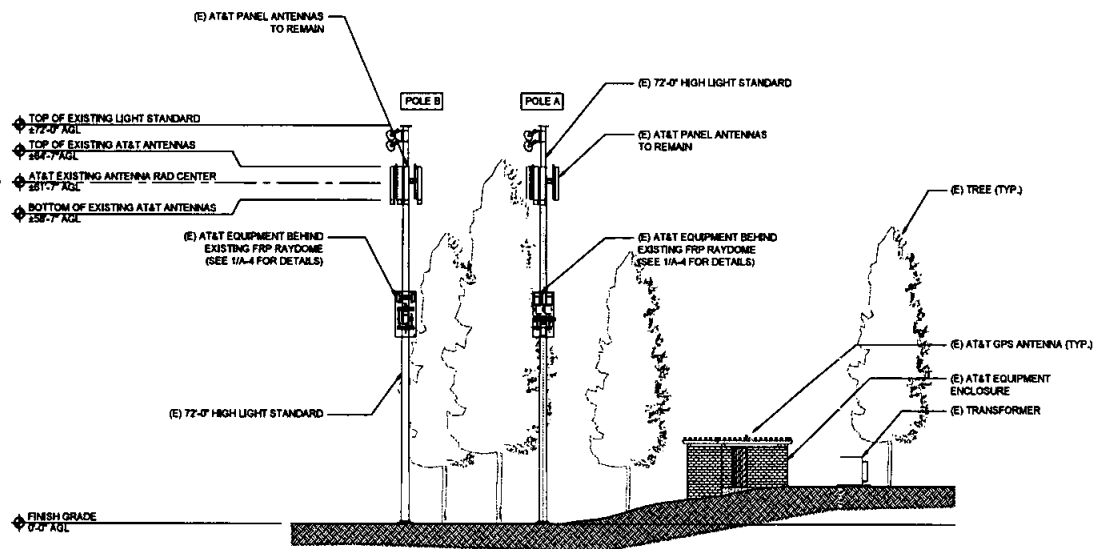
SHEET TITLE:

ANTENNA PLANS

SHEET NUMBER:

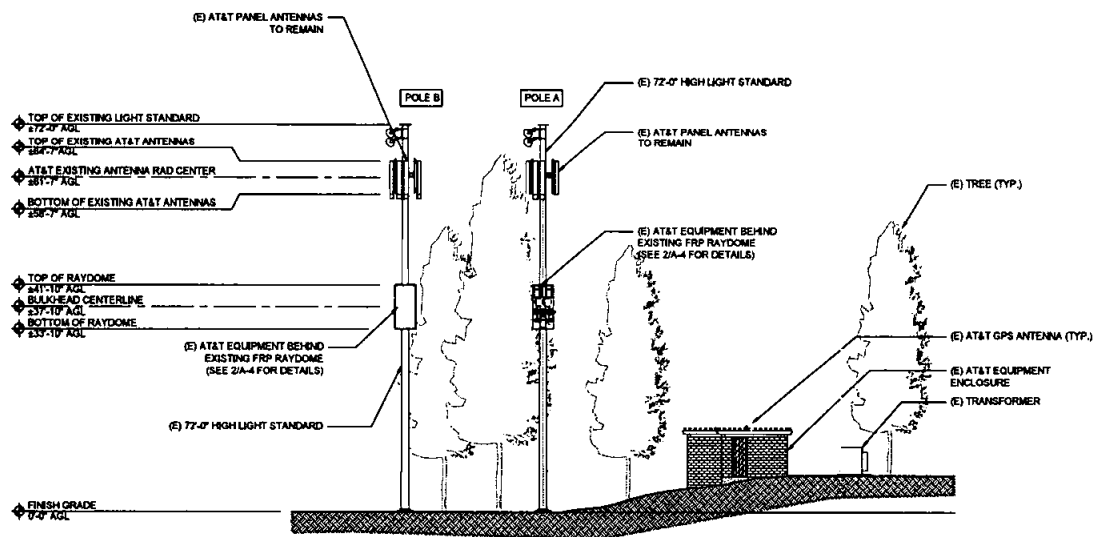
A-4

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.



EXISTING SOUTH ELEVATION

SCALE FOR 36X6 3/8" X 1/4" SCALE FOR 10X17 3/8" X 1/4"



NEW SOUTH ELEVATION

SCALE FOR 36X6 3/8" X 1/4" SCALE FOR 10X17 3/8" X 1/4"

GENERAL NOTES

1. THIS DRAWING IS FOR COORDINATION PURPOSES ONLY.
2. THE SIZE, HEIGHT AND DIRECTION OF ANTENNAS SHALL BE ADJUSTED TO MEET SYSTEM REQUIREMENTS, RE: CURRENT/FINAL NCR.
3. FOR ANTENNA AND EQUIPMENT DETAILS, REFERENCE CURRENT RF DESIGN AND DETAILS THIS SHEET, FOR MORE INFORMATION REFERENCE STRUCTURAL (BY OTHERS).
4. FOR TRANSMISSION CABLE ATTACHMENT AND ROUTING REFERENCE STRUCTURAL (BY OTHERS).
5. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR TO CHECK & VERIFY DIMENSIONS & LAYOUT OF EXISTING EQUIPMENT/ANTENNAS AS MARKED ON THE DRAWINGS. REPORT ANY DISCREPANCIES TO THE ARCHITECT OF RECORD IMMEDIATELY.



PLANS PREPARED BY:

MD7

MD7, LLC
10500 West Ocean Air Dr., Suite 300
San Diego, CA 92130
658-984-7439

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

REV.	BY	DATE	DESCRIPTION
0	JLD	05-01-2021	100% CONSTRUCTION
1	JLD	10-01-2021	REVISED NCR'S
2	MC	08-08-2021	100% CONSTRUCTION
3	MC	10-08-2021	100% CONSTRUCTION
4	JLD	11-08-2021	100% CONSTRUCTION
5	JLD	04-08-2021	100% CONSTRUCTION
6	MC	05-01-2021	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 01-07-2021

SITE INFORMATION:

SITE NAME:

**RANCHO BERNARDO
COMMUNITY PARK**

SG NR RADIO

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:
10400 WEST BERNARDO ROAD
SAN DIEGO, CA 92127

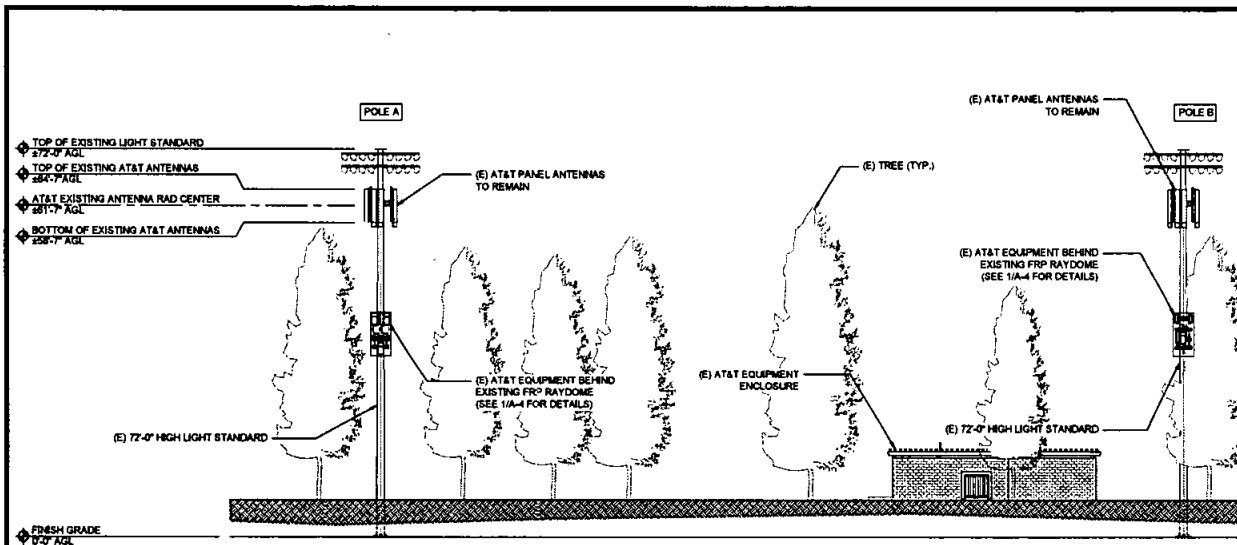
SHEET TITLE:

ELEVATIONS

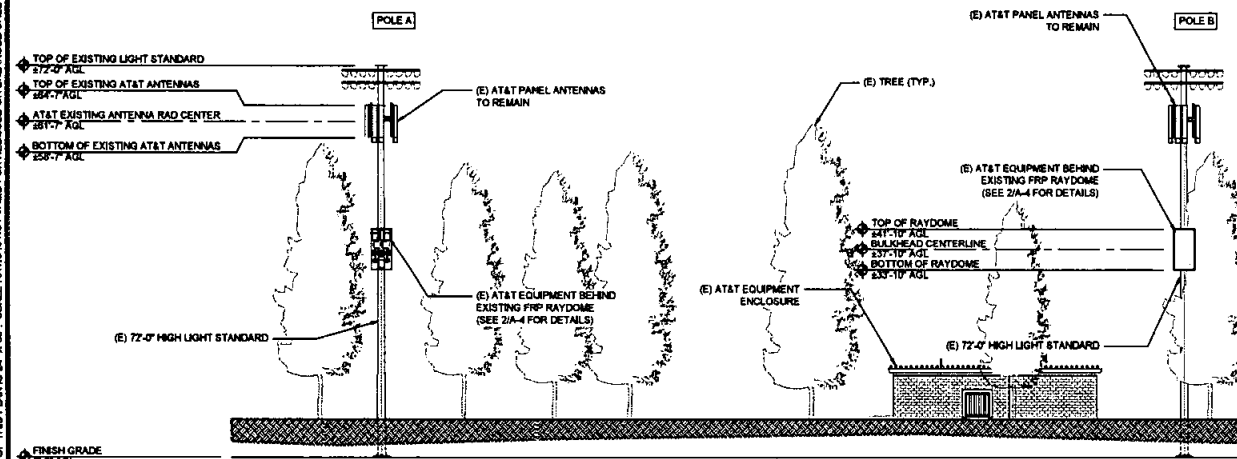
SHEET NUMBER:

A-5

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.



EXISTING WEST ELEVATION
SCALE FOR 24"X 36" 1/4" = 1'-0" SCALE FOR 11"X 17" 3/8" = 1'-0"



NEW WEST ELEVATION
SCALE FOR 24"X 36" 1/4" = 1'-0" SCALE FOR 11"X 17" 3/8" = 1'-0"

GENERAL NOTES

1. THIS DRAWING IS FOR COORDINATION PURPOSES ONLY.
2. THE SIZE, HEIGHT AND DIRECTION OF ANTENNAS SHALL BE ADJUSTED TO MEET SYSTEM REQUIREMENTS, RE: CURRENT/FINAL NCR.
3. FOR ANTENNA AND EQUIPMENT DETAILS, REFERENCE CURRENT RF DESIGN AND DETAILS THIS SHEET, FOR MORE INFORMATION REFERENCE STRUCTURAL (BY OTHERS).
4. FOR TRANSMISSION CABLE ATTACHMENT AND ROUTING REFERENCE STRUCTURAL (BY OTHERS).
5. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR TO CHECK & VERIFY DIMENSIONS & LAYOUT OF EXISTING EQUIPMENT/ANTENNAS AS MARKED ON THE DRAWINGS. REPORT ANY DISCREPANCIES TO THE ARCHITECT OF RECORD IMMEDIATELY.



PLANS PREPARED BY:

MD7

MD7, LLC
10590 West Ocean Ave. Suite 300
San Diego, CA 92130
658-984-7438

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

1	JAD	01-01-2023	REVISED NPS CD
2	MC	01-05-2023	100% CONSTRUCTION
3	MC	01-05-2023	100% CONSTRUCTION
4	JC	01-05-2023	100% CONSTRUCTION
5	JC	01-05-2023	100% CONSTRUCTION
6	MC	01-07-2023	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:

SITE NAME:

**RANCHO BERNARDO
COMMUNITY PARK**

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:

18448 WEST BERNARDO ROAD

SAN DIEGO, CA 92127

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-6

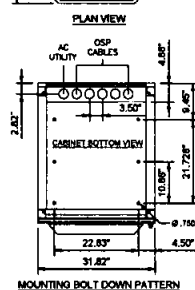
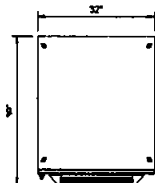
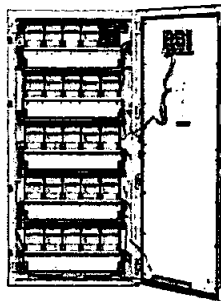
NETXTEND FLEX BATTERY CABINET FOR CELL SITES

TECHNICAL SPECIFICATIONS:

BATTERY SHELVES (5) SHELVES (12V - 12 STRING 48V - 6 STRING MAX)
THERMAL SOLUTION FREE AIR VENTED
GROUND BAR 100 POSITIONS
TERMINAL BLOCK 12-PAIR PHOENIX BLOCK

MECHANICAL SPECIFICATIONS:

DIMENSIONS 72" H x 32" W x 30" D
WEIGHT 4100 lbs.



EMERSON NETSURE - 512 DC POWER SYSTEM

DC POWER SYSTEM

FEATURES:

NOMINAL SYSTEM VOLTAGE -48 VDC or +24 VDC
CONTROL MICROPROCESSOR (ACU+)

RATED OUTPUT CAPACITY -

MAXIMUM CONFIGURATION

SYSTEM 333 amps at -48 VDC plus redundancy
400 amps at +24 VDC plus redundancy
RECTIFIER 2000 watts (41.7 A)
CONVERTER 1200 watts (30 A) -48 VDC to +24 VDC
DISTRIBUTION PANEL (TOP) Wired for (18) +24V and (12) -48 V
(BOTTOM) 320 -48 V Busbar Positions

ENVIRONMENTAL:

OPERATING TEMPERATURE -40 °F to 115 °F (-40 °C to 45 °C)
continuous operation
HUMIDITY 0% to 95% relative humidity,
non-condensing

THERMAL SOLUTIONS:

POWER CHAMBER 2500 watt open-mounted heat
exchanger, 2 RU available space
for surge protection
BATTERY CHAMBER Fan cooled, open air ventilation,
rises up to (2) battery strings

EQUIPMENT:

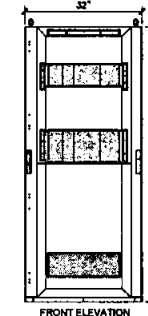
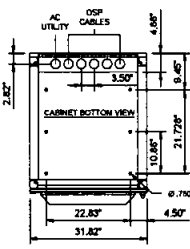
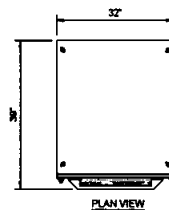
GROUND BAR 10 POSITIONS
TERMINAL BLOCK 12-position Phoenix alarm block
33-position Phoenix alarm
busbar block

SAFETY:

DC POWER SYSTEM UL 1801 Listed (UL & Canada),
NEBS Level 3
ENCLOSURE OR-481, UL 60900, and
Seismic Zone 4 compliant

MECHANICAL SPECIFICATIONS:

DIMENSIONS 72" H x 32" W x 30" D
WEIGHT 751 lbs.

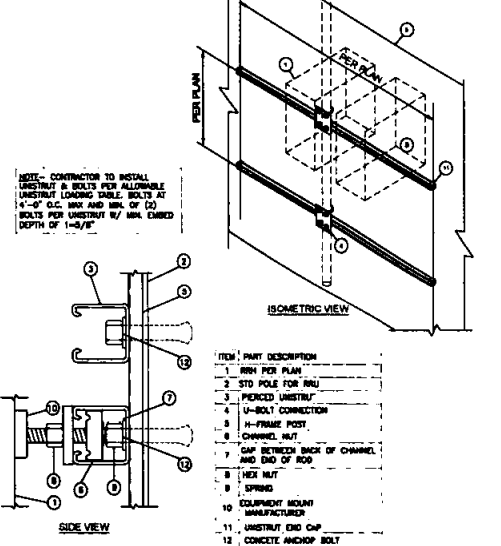


EMERSON NETXTEND FLEX BATTERY CABINET

10" = 1'-0"

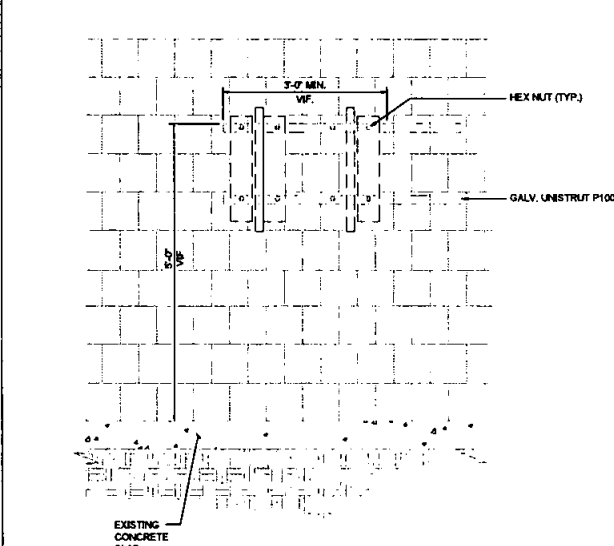
EMERSON NETSURE 512 DC POWER PLANT

1/4" = 1'-0"

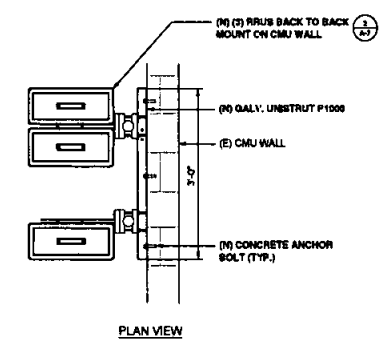


NOTE: CONTRACTOR TO INSTALL
UNISTRUT & BOLTS FOR ALLOWABLE
UNISTRUT LOADING TABLE. BOLTS AT
1/4"-5" O.C. MAX AND MIN. OF (2)
BOLTS PER UNISTRUT 8/ MIN. EMBED
DEPTH OF 1-3/8"

1. PART DESCRIPTION
2. RRUS PER PLAN
3. STD POLE FOR RRUS
4. PICKED UNISTRUT
5. U-BOLT CONNECTION
6. H-FRAME POST
7. CHANNEL NUT
8. GAP BETWEEN BACK OF CHANNEL
AND END OF ROD
9. HEX NUT
10. SPRING
11. EQUIPMENT MOUNT
MANUFACTURER
12. UNISTRUT END CAP
13. CONCRETE ANCHOR BOLT



EXISTING
CONCRETE
SLAB



NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.

RRUS MOUNTING DETAIL

10" = 1'-0"

WALL MOUNTED RRUS DETAIL

1/4" = 1'-0"



PLANS PREPARED BY:

MD7
MD7, LLC
10590 West Ocean Air Dr., Suite 300
San Diego, CA 92130
858-964-7438

PROJECT NUMBER:

DRAWN BY: CHECKED BY:

DATE: 05-07-2021

REVISION DATE: DESCRIPTION:

NO.	DATE	DESCRIPTION
1	05-07-2021	REVISED W/ C.D.
2	05-07-2021	100% CONSTRUCTION
3	05-07-2021	100% CONSTRUCTION
4	05-07-2021	100% CONSTRUCTION
5	05-07-2021	100% CONSTRUCTION
6	05-07-2021	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:

SITE NAME:

RANCHO BERNARDO COMMUNITY PARK

SG NR RADIO

SITE NUMBER:

SD0058 - 10085093

SITE ADDRESS:

18445 WEST BERNARDO ROAD

SAN DIEGO, CA 92127

SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER:

A-8

PHASE	SERVING VOLTAGE	SERVICE ENTRANCE AMPACITY	UTILITY'S CONTRIBUTION TO FAULT CURRENT WILL NOT EXCEED
1Ø	120/208V	200 AMPS OR LESS	42,000 AMPS
1Ø	120/240V	400 AMPS OR LESS	42,000 AMPS
1Ø	240 AMPS	400 AMPS	10,000 AMPS
3Ø	120/240V	1000 AMPS OR LESS (SEE NOTE 5)	42,000 AMPS
3Ø	208Y/120	3000 AMPS OR LESS	42,000 AMPS
3Ø	208Y/110	3001 AMPS - 4000 AMPS	65,000 AMPS
3Ø	120	800 AMPS OR LESS (SEE NOTE 6)	30,000 AMPS
3Ø	480Y/277	2000 AMPS OR LESS	30,000 AMPS
3Ø	480Y/277	2001 AMPS - 3000 AMPS	45,000 AMPS
3Ø	480/277	3001 AMPS - 4000 AMPS	65,000 AMPS

PHASE	SERVING VOLTAGE	SERVICE ENTRANCE AMPACITY	UTILITY'S CONTRIBUTION TO FAULT CURRENT WILL NOT EXCEED
1Ø	120/208	200 AMPS OR LESS	42,000 AMPS
1Ø	120/240	400 AMPS OR LESS	42,000 AMPS
2Ø	240/480	200 AMPS OR LESS	10,000 AMPS
2Ø	120/240	1000 AMPS OR LESS (SEE NOTE 5)	42,000 AMPS
3Ø	208Y/120	3000 AMPS OR LESS	42,000 AMPS
3Ø	208Y/120	3001 AMPS - 4000 AMPS	65,000 AMPS
3Ø	120	800 AMPS OR LESS (SEE NOTE 6)	30,000 AMPS
3Ø	480Y/277	3000 AMPS - 4000 AMPS	30,000 AMPS
3Ø	480Y/277	2001 AMPS - 3000 AMPS	45,000 AMPS
3Ø	480Y/277	3001 AMPS - 4000 AMPS	65,000 AMPS

_____ WIND COMPASS IN OR ABOVE
CLING

_____ WIND COMPASS IN OR UNDER
FLUTE OF UNDERCLING

_____ WIND COMPASS
HORIZONTAL TO HORIZONTAL CHAINS
AS ABOVE

_____ CONDUIT TURNED UP

_____ CONDUIT TURNED DOWN

____-____ 2-1/2" 1/2" 3/4" CONDUIT

____-____ 2-1/2" 1/2" 3/4" CONDUIT

____-____ 4-1/2" 1/2" 3/4" CONDUIT

____-____ 5-1/2" 3/4" CONDUIT

____-____ 6-1/2" 3/4" CONDUIT

____-____ 7-1/2" 3/4" CONDUIT

____-____ 8-1/2" 3/4" CONDUIT

____-____ 9-1/2" 1" CONDUIT

- | CODE | SYMBOL | FUNCTION |
|------|--------|--|
| ○ 10 | | LIGHTING OUTLET WITH PICTURE AS NOTED |
| ○ 11 | | FLUORESCENT FIXTURE |
| ● 12 | | SPOT LIGHT WITH ARROW AS INDICATED |
| ● 13 | | PICTURE TYPE
TOTAL NUMBER OF PRINTS |
| ■ 14 | | SINGLE RECEPTACLE, 120V 15 AMP
1-1/2" X 1" LON |
| ■ 15 | | DUPLEX RECEPTACLE, 120V, 15 AMP
1-1/2" X 1" LON |
| ■ 16 | | DOUBLE DUPLEX RECEPTACLE, 120V
1-1/2" X 2" LON |
| ■ 17 | | JUNCTION BOX (-200) |
| ○ 18 | | GAS DETECTOR |
| ○ 19 | | SMOKE DETECTOR |
| ○ 20 | | MANUAL RELEASE SWITCH |
| ○ 21 | | ALARM SYMBOL |
| ○ 22 | | AUDIBLE ALARM SYMBOL |

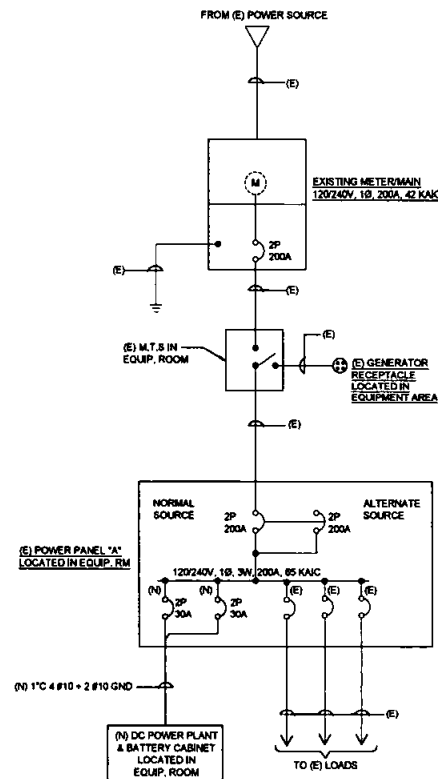
- 109) YAGILE SWITCH-SUBJECTS: HORNDAK
DUALITY SWITCHED, 442 (ON)
- | | |
|----------|-------------------|
| 2-2 FULF | P-PLST LEAD |
| 3-3 SW | D-DRAFT |
| 4-4 SW | DC-MEMORY CONTACT |
| K-OTHER | N-MEMORY SW |

- MOTOR CABLE
 POWER OR LIGHTING PANEL
 NON-EXHAUSTIBLE PANEL

- ☐ **RECEIVED**
☐ **FILE**
-X-X- **FILE**

- ABBREVIATIONS**
- OFF - ABOVE FURNISH FLOOR
CB - CIRCULAR BREAKER
END - END OF LINE

- EM - EMERGENCY BRICK UP
 EO - EMERGENCY POWER OFF
 EFO - GROUND FAULT CIRCUIT
 BREAKER
 EFP - GROUND FAULT PROTECTION
 J - JUNCTION
 L - LOW VOLTAGE
 MC - NOT IN CONTACT
 RL - REMOTE LIGHT
 PC - PHOTO CONTROL
 POC - POINT OF CONNECTION
 S - SELECT
 TS - THERMIST
 TP - TYPICAL
 UN - UNLESS OTHERWISE NOTED
 WP - WEATHERPROOF



SINGLE LINE DIAGRAM
SCALE: NONE

PANEL "A"									
VOLTAGE: 120/240V, 1PHASE, 200A, 65 KVA									
MAIN CB: 2P/200A									
(NOTE 5)									
VOLT AMPS								MOUNTING SURFACE	
								NEMA	
								LOCATION : EQUIPMENT AREA	
VOLT AMPS								VA AMPS	
A	B	DESCRIPTION		POLE	CKT	BKR	POLE	A	B
-	3500	QSM		2	50	1	2	40	2
3500	-			-	-	3	4	-	-
-	-	SPARE		1	30	5	8	75	2
-	-			-	-	7	8	-	-
1400	-	UMTS 3C 5C		1	20	9	10	20	2
-	1400			-	-	11	12	-	-
180	-	GFCI REC		1	20	13	14	20	2
-	200	HEATER MAT		1	20	15	16	-	-
-	-	SPACE		17	18	20	2	RECT #4	1400
-	-	SPACE		19	20	-	-	-	140
-	-	SPACE		21	22	20	2	SPARE	-
-	-	SPACE		23	24	-	-	-	-
-	-	SPACE		25	26	20	2	SPARE	-
-	-	SPACE		27	28	-	-	-	-
-	-	SPACE		29	30	-	-	SPACE	-
5,000 5,100		PHASE TOTALS						5,000 5,400	
Total Phase A:		13,480						26,960	
Total Phase B:		13,500						27,000	
		PHASE TOTALS						5,400 5,400	
		CONNECTED VA (CODE L)						26,960	
		CONNECTED VA (CODE L)						26,960	
		CONNECTED VA (CODE R)						26,960	
		CONNECTED VA (CODE R)						26,960	
		TOTAL CONNECTED KVA						0	
		DEMAND KVA						0	
		TOTAL ADJUSTED KVA						26,960	
		TOTAL PANEL AMPS						112	
		AMPS W/CL						112	

1. EQUIPMENT ENCLOSURES SHALL BE CLEARLY MARKED "CAUTION: SERIES RATED SYSTEM - 120/240 V, 3P, 25A BUS, 2004 MCM, 85,000 A/C RATING AVAILABLE, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED;" IN COMPLIANCE WITH 2015 NEC SECTION 110-22. ENCLOSURE EQUIPMENT SHALL ALSO BE MARKED WITH THE HIGHER SERIES RATED SYSTEM INTER-RATING RATING AS PER 2014 NEC SECTION 240-61C.
2. ALL NEW FEEDERS INDICATED ARE COPPER 75°C THINN, NO ALUMINUM SUBSTITUTION ALLOWED.
3. ELECTRICAL SYSTEMS SHALL BE GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (LATEST ADOPTED VERSION).
4. ALL EXTERIOR LOCAL EQUIPMENT TO BE WEATHERPROOF.
5. LABEL MAIN SERVICE DISCONNECT WITH RED TAG OR ENGRAVED PLACARD, WHITE LETTERS ON RED BACKGROUND.
6. NO RUNNING THREADS ARE PERMITTED, ALL EXTERIOR-LOCATED ELECTRICAL TERMINALS AND TERMINATIONS TO BE SEALED WITH RAINWIGHT FITTINGS.
7. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED BY A CITY OF SAN DIEGO RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE PLAN REVIEW DEPARTMENT.
8. NO PIPING, DUCTS OR EQUIPMENT HOOKUP TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.
9. CONTRACTOR SHALL PROVIDE NEW BRANCH CIRCUIT BREAKER IN LOCATION AS SHOWN ON PLAN OR OF SAME MANUFACTURE, RATING AND CAPACITY AS EXISTING CIRCUIT BREAKERS TO MAINTAIN PANEL BOARD SERIES RATING.

DATE: 05-07-2021

SITE INFORMATION:
SITE NAME:
RANCHO BERNARDO
COMMUNITY PARK
 5G NR RADIO
SITE NUMBER:
SD0058 - 10085093
SITE ADDRESS:
 18448 WEST BERNARDO ROAD
 SAN DIEGO, CA 92127
SHEET TITLE:

**SINGLE-LINE DIAGRAM &
PANEL SCHEDULE**

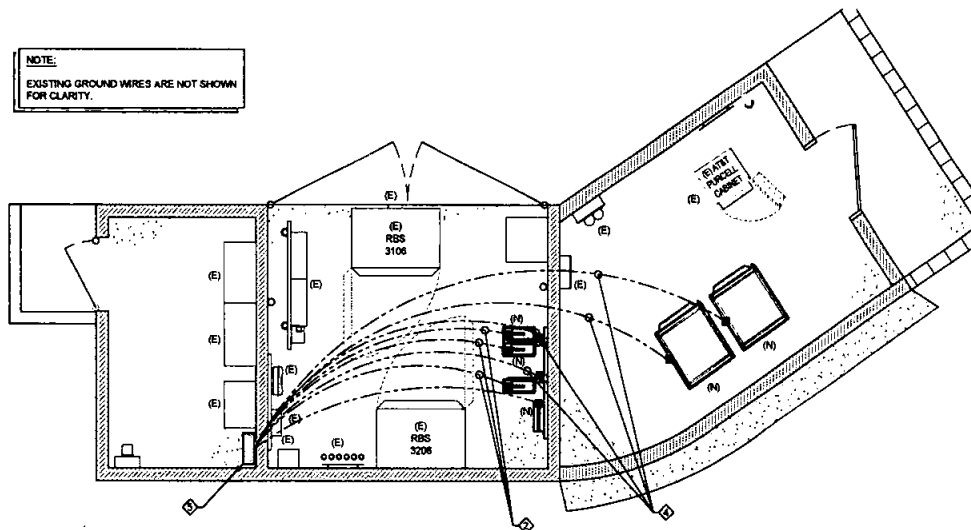
SHEET NUMBER:

E-1

KEY NOTES:

- ① N/A
- ② (N) #2 AWG INSULATED COPPER GROUND FROM NEW RRU
- ③ N/A
- ④ (N) #2 AWG INSULATED COPPER GROUND WIRE
- ⑤ (E) EQUIP. GROUND BAR, (V.L.F.)

NOTE:
EXISTING GROUND WIRES ARE NOT SHOWN FOR CLARITY.



EQUIPMENT ENCLOSURE

GENERAL NOTES

- GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
- THE SUBCONTRACTOR SHALL SUPPLY AT&T WITH THE RESULTS FROM PRE-CONSTRUCTION AND POST-CONSTRUCTION OHM TESTING (GROUNDING) RESULTS ON ALL MODIFIED CELL SITES AND AS REQUIRED BY AT&T STANDARD TP-76416.
- THE SUBCONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A "FALL OF POTENTIAL" TEST ON THE PROPOSED SUPPLEMENTAL GROUNDING FIELD PRIOR TO FINAL CONNECTION OF THE GROUNDING SYSTEM TO EQUIPMENT. THE TEST SHALL BE PERFORMED BY A QUALIFIED AND CERTIFIED TESTING AGENT. PROVIDE INDEPENDENT TEST RESULTS TO THE PROJECT MANAGER FOR REVIEW. THE GROUNDING SYSTEM RESISTANCE TO EARTH GROUNDING SHALL NOT EXCEED FIVE (5) OHMS. IF THE GROUNDING TEST EXCEEDS THE MAXIMUM OF (5) OHMS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUNDING RODS AND CONNECTIONS AS REQUIRED TO MEET THE (5) OHMS MAXIMUM.
- THE INSPECTOR HAVING JURISDICTION SHALL INSPECT ALL GROUNDING CONNECTIONS FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BEFORE BEING PERMANENTLY CONCEALED.
- SUBCONTRACTOR SHALL GROUND ALL EQUIPMENT, INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- THE CONDUIT ROUTING ARE DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.
- ALL ELECTRICAL EQUIPMENT AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES, INDICATING THE CIRCUITS ORIGIN AND ALL EQUIPMENT TERMINATIONS.
- SUBCONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS, CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- SUBCONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- WHEN TYPE "TC-ER" CABLE IS UTILIZED IN THE ELECTRICAL SYSTEM, TYPE "TC-ER" CABLE SHALL BE INSTALLED WITHIN A CABLE TRAY SYSTEM, CONDUIT SYSTEMS OR A COMBINATION OF BOTH AND SHALL BE ELECTRICALLY CONTINUOUS. ALL RACEWAYS SHALL BE APPROVED FOR THEIR PURPOSE.

LEGEND

- EXOTHERMIC ●
- MECHANICAL CONNECTION (TWO HOLE LUG OR EQUIVALENT) ■
- UNDERGROUND TELCO — UGT — UGT — UGT —
- UNDERGROUND TELCO/POWER — UGT/P — UGT/P —
- OVERHEAD POWER — OHP — OHP — OHP —
- UNDERGROUND POWER — UGP — UGP — UGP —
- ABOVE GROUND TELCO — AGT — AGT — AGT —
- ABOVE GROUND TELCO/POWER — AGT/P — AGT/P —
- CHEMICAL ELECTROLYTIC GROUNDING SYSTEM ⊕
- GROUND ROD WITH INSPECTION SLEEVE ⊕-R
- GROUNDING CONDUCTOR - - - - -
- GROUNDING BAR —●—
- TEST GROUND ROD WITH INSPECTION SLEEVE ⊕-R T
- EXOTHERMIC WITH INSPECTION SLEEVE ⊕-R



PLANS PREPARED BY:

MD7
MD7, LLC
10590 West Ocean Ave. Suite 300
San Diego, CA 92130
858-954-7438

MD7 PROJECT NUMBER:

DRAWN BY: CHECKED BY:

REV. BY: DATE: DESCRIPTION:

REV.	BY	DATE	DESCRIPTION
1	MD	04-11-2021	100% CONSTRUCTION
2	MD	04-11-2021	100% CONSTRUCTION
3	MD	04-11-2021	100% CONSTRUCTION
4	MD	04-11-2021	100% CONSTRUCTION
5	MD	04-11-2021	100% CONSTRUCTION
6	MD	04-11-2021	100% CONSTRUCTION

FOR SUBMITTAL

DATE: 05-07-2021

SITE NAME:

**RANCHO BERNARDO
COMMUNITY PARK**

SITE NUMBER:
SD0058 - 10085093

SITE ADDRESS:
18445 WEST BERNARDO ROAD
SAN DIEGO, CA 92127

SHEET TITLE:

GROUNDING PLAN

SHEET NUMBER:

G-1

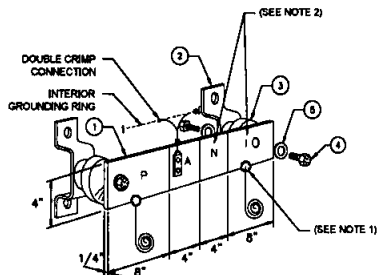
GROUNDING PLAN

NOT TO SCALE

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.

**NEWTON INSTRUMENT COMPANY, INC.
BUTNER, N.C.**

NO	REQUIRED	PART NUMBER	DESCRIPTION
1	1	14"x2"x2"	SOLID GROUNDING BAR
2	2	A-6058	WALL MOUNTING BRACKET
3	2	308-1-4	INSULATORS
4	4	2012-1	5/8"-11x1" M.H.C.B.
5	4	2015-4	5/8" LOCKWASHER



EACH GROUNDING-CONDUCTOR TERMINATING ON ANY GROUNDING BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

SECTION "P" - SURGE PROTECTORS

(EC) CELL REFERENCE GROUNDING BAR (IF COLLOCATED)
(EC) GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
(EC) TELCO GROUNDING BAR (#2 AWG)
(EC) COMMERCIAL POWER COMMON NEUTRAL/GROUNDING BOND (30)
(EC) FIBER GROUNDING BAR (#2 AWG)
(EC) POWER ROOM REFERENCE GROUNDING BAR (#2 AWG)
(AT&T) RECTIFIER FRAMES

SECTION "A" - SURGE ABSORBERS

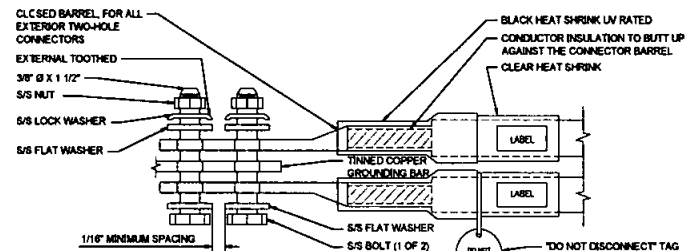
(EC) INTERIOR GROUNDING RING (#2 AWG)
(EC) EXTERNAL EARTH GROUNDING FIELD (BURIED GROUNDING RING) (#2 AWG)
(EC) METALLIC COLD WATER PIPE (IF AVAILABLE) (1/2 AWG)
(EC) BUILDING STEEL (IF AVAILABLE) (1/2 AWG)

SECTION "N" - NON-ISOLATED GROUNDING ZONE EQUIPMENT

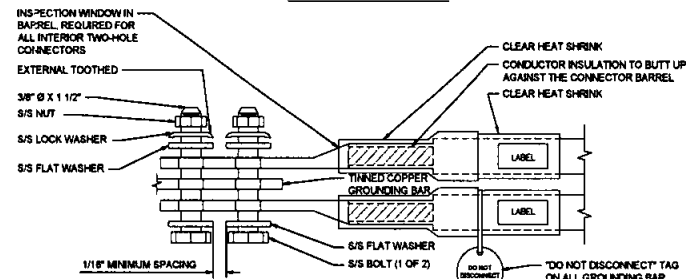
(EC) MISC NON-ISOLATED GROUNDING ZONE EQUIPMENT (AT&T)-48V POWER SUPPLY RETURN BARE

SECTION "I" - ISOLATED GROUNDING ZONE

(AT&T) ALL ISOLATED GROUNDING REFERENCE
(AT&T) GROUNDING WINDOW BAR



EXTERIOR TWO HOLE LUG



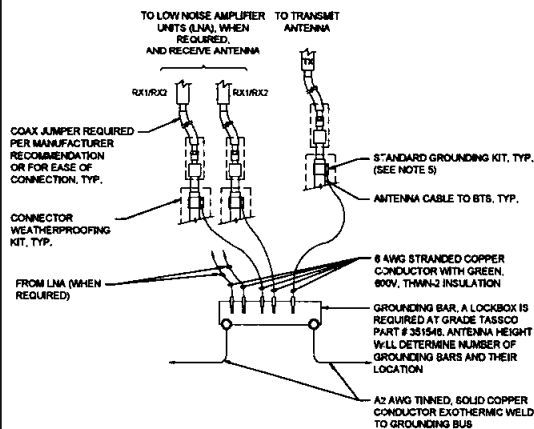
INTERIOR TWO HOLE LUG

1 (MGB) REFERENCE GROUNDING BAR

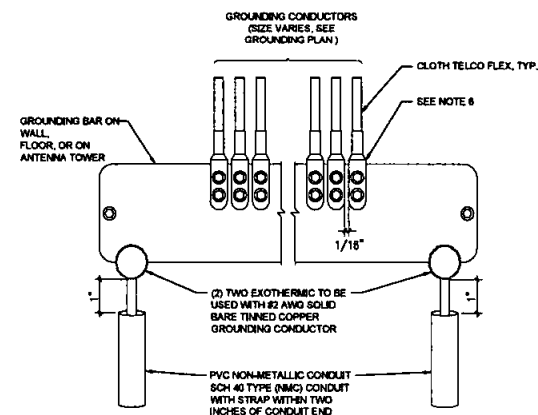
2 TWO HOLE LUG

NOTES:

- EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR, ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- ALL GROUNDING BARS SHALL BE STAMPED IN TO THE METAL "IF STOLEN DO NOT RECYCLE." THE CONTRACTOR SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS.
- ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER. ALL HARDWARE 1/4" STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTIOXIDANT COMPOUND BEFORE MATING.
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH AN ANTIOXIDANT COMPOUND BEFORE MATING.
- DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUNDING CONDUCTOR DOWN TO GROUNDING BUS.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUNDING TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
- SUPPLIED AND INSTALLED BY CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BAR AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.



4 ANTENNA GROUNDING BAR



5 GROUNDING CONDUCTOR TO GROUNDING BAR



PLANS PREPARED BY:

MD7
MD7, LLC
10590 West Ocean Ave Dr., Suite 300
San Diego, CA 92130
658-954-7439

DATE	BY	DESCRIPTION
1	JLD	10-01-2020
2	MC	10-08-2020
3	MC	10-08-2020
4	JLD	10-08-2020
5	JLD	10-08-2020
6	MC	05-07-2021

DATE	BY	DESCRIPTION
1	JLD	10-01-2020
2	MC	10-08-2020
3	MC	10-08-2020
4	JLD	10-08-2020
5	JLD	10-08-2020
6	MC	05-07-2021

FOR SUBMITTAL

DATE: 05-07-2021

SITE INFORMATION:
SITE NAME: **RANCHO BERNARDO COMMUNITY PARK**
SG NR RADIO
SITE NUMBER: **SD0058 - 10085093**
SITE ADDRESS: **10445 WEST BERNARD ROAD SAN DIEGO, CA 92127**
SHEET TITLE:

GROUNDING DETAILS

SHEET NUMBER:

G-2

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.



Real Estate Assets

REQUEST FOR PRELIMINARY REVIEW

for installation/modification of Wireless Communication Facility on City-owned property

8/28/2020

Date

The City of San Diego
Real Estate Assets Department
1200 Third Avenue, Suite 1700
San Diego, California 92101

RE: Site Name: CATALINA WATER TANK Project # 10086237
Site Address: 209 Catalina Boulevard, San Diego (the "Property")
Agreement: Agreement dated 1/25/2007 (the "agreement") between The City of San Diego ("City") and New Cingular Wireless PCS, LLC, ("Lessee" or "Permittee" or "Licensee").

Felicia Sauls/ AT&T is seeking Consent from the City to perform the following to the above
Applicants Name/Carrier
referenced site:

- ☒ Modify, upgrade or changes to existing equipment or Site as describe in the attached plans / photos.
- ☐ Installation of a New Wireless Communication Facility on City owned property.
- ☐ Apply for New Permit/New Agreement on existing facility – **NO** modifications or changes to existing equipment or site.
- ☐ Apply for New Permit/New Agreement on existing facility – with modifications or changes to existing equipment or site.

Describe proposed project below:

Install 30KW backup generator on 4' x 10' concrete pad and lease area within existing compound.

Per PUD, carrier must use (smaller Polar Generator) - CGresham

Pursuant to Improvements and Alterations, section of the above referenced agreement, *Lessee/ Permittee/Licensee shall not construct any improvements, structures or installations of the Premises or make any alterations to the Premises (with the exception of equipment replacement or repairs) without City's prior written approval.*

In order to comply with such requirements, Felicia Sauls would like to request City's consent to submit to Development Services Department for review of the proposed items above.

Sincerely, Felicia Sauls - Bluestream, agent for New Cingular Wireless PCS dba AT&T.

Applicant Signature: Felicia Sauls : Digitally signed by Felicia Sauls
Date: 2020.08.28 08:24:01 -05'00'

☐ **A one-time, non-refundable Processing Fee (\$4,920 for long term agreements - \$980 for Short term or ROE Permits) payable to City Treasurer, MUST be paid at the time of request for applicable agreement. This fee applies even if the agreement is never executed.**

City Public Utilities Department has provided its consent and approval to allow applicant to submit application for Required Permits needed for the proposed items listed herein, **with the understanding that the Department will be allowed to review the improvement plans prior to any permits being issued** and that a pre-construction meeting will be conducted with staff before any work begins, if required.

11/2/20

Date

Keli Balo, ADD

Print Name & Title

Keli Balo

Signature

Digitally signed by Keli Balo
Date: 2020.11.02 11:05:32 -08'00'

City of San Diego, acknowledgment and consent for Catalina Standpipe.

Site Location

12/23/2020

Date

Kristin Geitz, Interim Director, READ

Print Name & Title

[Signature]
Signature

For READ ONLY

☐
☒
☐

**Approved and Stamped plans received and attached
Scan as Amendment to Agreement when executed
Processing fee received**



Real Estate Assets

⏮ Reply all ▾ 🗑 Delete ⓧ Junk Block ...

FW: AT&T Catalina SP - Request for Preliminary Review - 09-09-20 To Print

① You replied on Mon 12/7/2020 12:31 PM

① Label: Inbox Expires: Never

SB

Swanson, Brian

Mon 12/7/2020 12:25 PM

To: Gresham, Carla



CATALINA WATER TANK_dsd...
292 KB

Carla,
I apologize. I thought that I had sent this to you. Please request that the carrier install a smaller generator if a smaller one will fulfill its needs here.
Brian

From: Balo, Keli <KBalo@sandiego.gov>

Sent: Monday, November 2, 2020 11:12 AM

To: Swanson, Brian <BSwanson@sandiego.gov>

Cc: Summers, Vicki <VSummers@sandiego.gov>; McGinnis, Nicole <NMcGinnis@sandiego.gov>; McLintock, Hudson <DMcLintock@sandiego.gov>

Subject: RE: AT&T Catalina SP - Request for Preliminary Review - 09-09-20

I have signed this form for the generator work at the Catalina site. They are welcome to proceed with plans at DSD, but they must be made aware that they are moving forward at risk. PUD will not be allowing the replacement of, or new installation of wireless facilities on our tanks in the future. AT&T needs to be aware of this so that they can decide if they want to invest in this new generation or if they should focus on the long term which will require them to move.

Keli

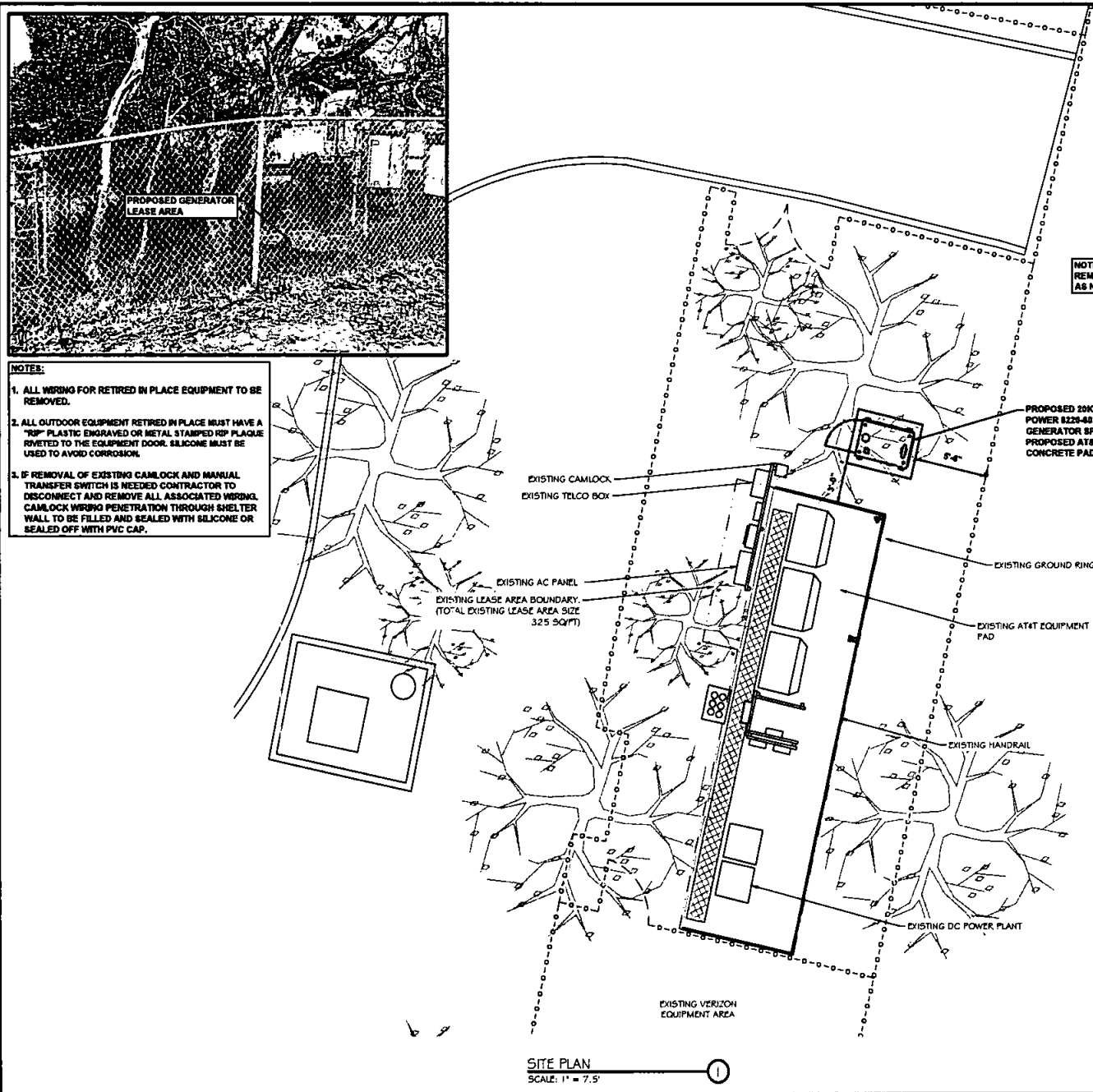
From: Swanson, Brian <BSwanson@sandiego.gov>

Sent: Tuesday, October 13, 2020 3:33 PM

To: Balo, Keli <KBalo@sandiego.gov>

Cc: Summers, Vicki <VSummers@sandiego.gov>; McGinnis, Nicole <NMcGinnis@sandiego.gov>; McLintock, Hudson <DMcLintock@sandiego.gov>; Swanson, Brian <BSwanson@sandiego.gov>

Subject: FW: AT&T Catalina SP - Request for Preliminary Review - 09-09-20



- NOTES:**
1. ALL WIRING FOR RETIRED IN PLACE EQUIPMENT TO BE REMOVED.
 2. ALL OUTDOOR EQUIPMENT RETIRED IN PLACE MUST HAVE A "RIP" PLASTIC ENGRAVED OR METAL STAMPED RIP PLAQUE RIVETED TO THE EQUIPMENT DOOR. SILICONE MUST BE USED TO AVOID CORROSION.
 3. IF REMOVAL OF EXISTING CAMLOCK AND MANUAL TRANSFER SWITCH IS NEEDED CONTRACTOR TO DISCONNECT AND REMOVE ALL ASSOCIATED WIRING. CAMLOCK WIRING PENETRATION THROUGH SHELTER WALL TO BE FILLED AND SEALED WITH SILICONE OR SEALED OFF WITH PVC CAP.

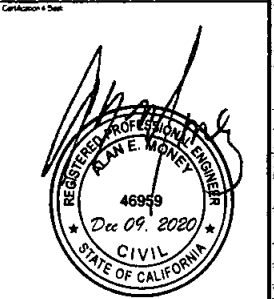
NOTE:
REMOVE TREES
AS NEEDED



TILLMAN
ENERGY HOLDINGS

KGPCo
 3305 MN-60
 FARIBAULT, MN 55021
 OFFICE: (507) 334-2268

RAMAKER
 employee-owned
 (608) 643-4100 www.ramaker.com



2	10/20/20	FINAL CONSTRUCTION DRAWINGS
1	04/20/20	FINAL CONSTRUCTION DRAWINGS
0	01/17/20	FINAL CONSTRUCTION DRAWINGS
DATE	DESCRIPTION	
DATE	ISSUED	12/08/2020
PROJECT TITLE:		

CATALINA WATER TANK
FA ID # 10086237

PROJECT INFORMATION
 209 CATALINA BLVD.
 SAN DIEGO, CA 92106

SHEET TITLE:
SITE PLAN
 0 3.75' 7.5' 15'
 1" = 7.5'
 22" x 34" 1" = 3.75'

SHEET NUMBER: **A-1**
 PROJECT NUMBER: **47849**

SCOPE OF WORK DETAILS

GENERAL:

- NEW POLAR POWER DIESEL GENERATOR INSTALLED BY GENERAL CONTRACTOR. SEE E-3.
- NEW 4'-0" X 5'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE A-3.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION.
- INNER AND OUTER TANK TESTING DOCUMENTATION SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 30, 21.5 ONCE TANK IS IN PLACE ON SITE.
- A CALIBRATION CHART OF PERMANENT AND DURABLE CONSTRUCTION SHALL BE LOCATED AT THE FILL BOX.

CONDUITS:

- INSTALL PULL STRING IN EACH CONDUIT.
- (2) NEW 2" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO DC PP. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO GROUND RING. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLE PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

GROUNDING:

- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR GROUND BAR. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 6'-0" APART.

H-FRAME:

- PROVIDE NEW H-FRAME IF REQUIRED, MATCH EXISTING H-FRAME MATERIAL FOR CONSTRUCTION OF NEW H-FRAME. USE ALL GALVANIZED COMPONENTS, WHITE PLASTIC END CAPS ON UNISTRUTS, WEATHER CAPS ON TOPS OF PIPE AND CONCRETE SUPPORTS BELOW FROST LINE. TOP OF FOOTING SHOULD BE AT LEAST 2' ABOVE EXISTING GROUND LEVEL. SLOPE THE GROUND AWAY FROM THE H-FRAME FOR POSITIVE WATER DRAINAGE OFF THE FORM.

DIESEL TANK CHECKLIST:

- READILY ACCESSIBLE MANUAL SHUTOFF VALVES SHALL BE INSTALLED ON SUPPLY PIPING AT THE POINT OF USE AND THE TANK (FC5002.2.2.1).
- SECONDARY CONTAINMENT-TYPE TANKS SHALL BE UL LISTED, UL-142, AND COMPLY WITH ALL OF THE FOLLOWING REQUIREMENTS; OTHERWISE TRADITIONAL SPILL CONTROL OR SECONDARY CONTAINMENT MEASURES, SUCH AS DIKING, SHALL BE UTILIZED (NFPA 30 22.1.1.4).
 - CAPACITY OF DIESEL TANK SHALL NOT EXCEED 50,000 GAL.
 - PIPING CONNECTIONS SHALL BE ABOVE THE LIQUID LEVEL.
 - MEANS SHALL BE PROVIDED TO PROTECT RELEASE OF LIQUID BY SIPHON FLOW.
 - MEANS TO DETERMINE LIQUID LEVEL IN TANK SHALL BE PROVIDED TO DRIVER.
 - MEANS TO PREVENT OVERFILLING BY AN ALARM AT 90% CAPACITY AND AUTOMATICALLY STOPPING DELIVERY OF LIQUID TO THE TANK AT 95% CAPACITY.
 - SPACING BETWEEN ADJACENT TANKS SHALL NOT BE LESS THAN 3'.
 - TANK SHALL BE PROTECTED AGAINST DAMAGE FROM VEHICLES.
 - INTERSTITIAL SPACE SHALL HAVE EMERGENCY VENTING.
 - INTEGRITY OF SECONDARY CONTAINMENT SHALL BE ESTABLISHED.
 - THE SECONDARY CONTAINMENT SHALL WITHSTAND THE HYDROSTATIC HEAD OF THE MAXIMUM AMOUNT OF LIQUID STORED IN THE PRIMARY TANK.

TANK LABELING AND PROTECTIONS

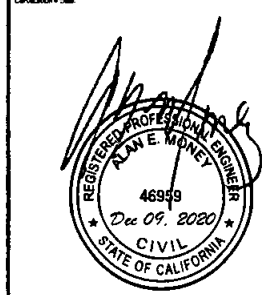
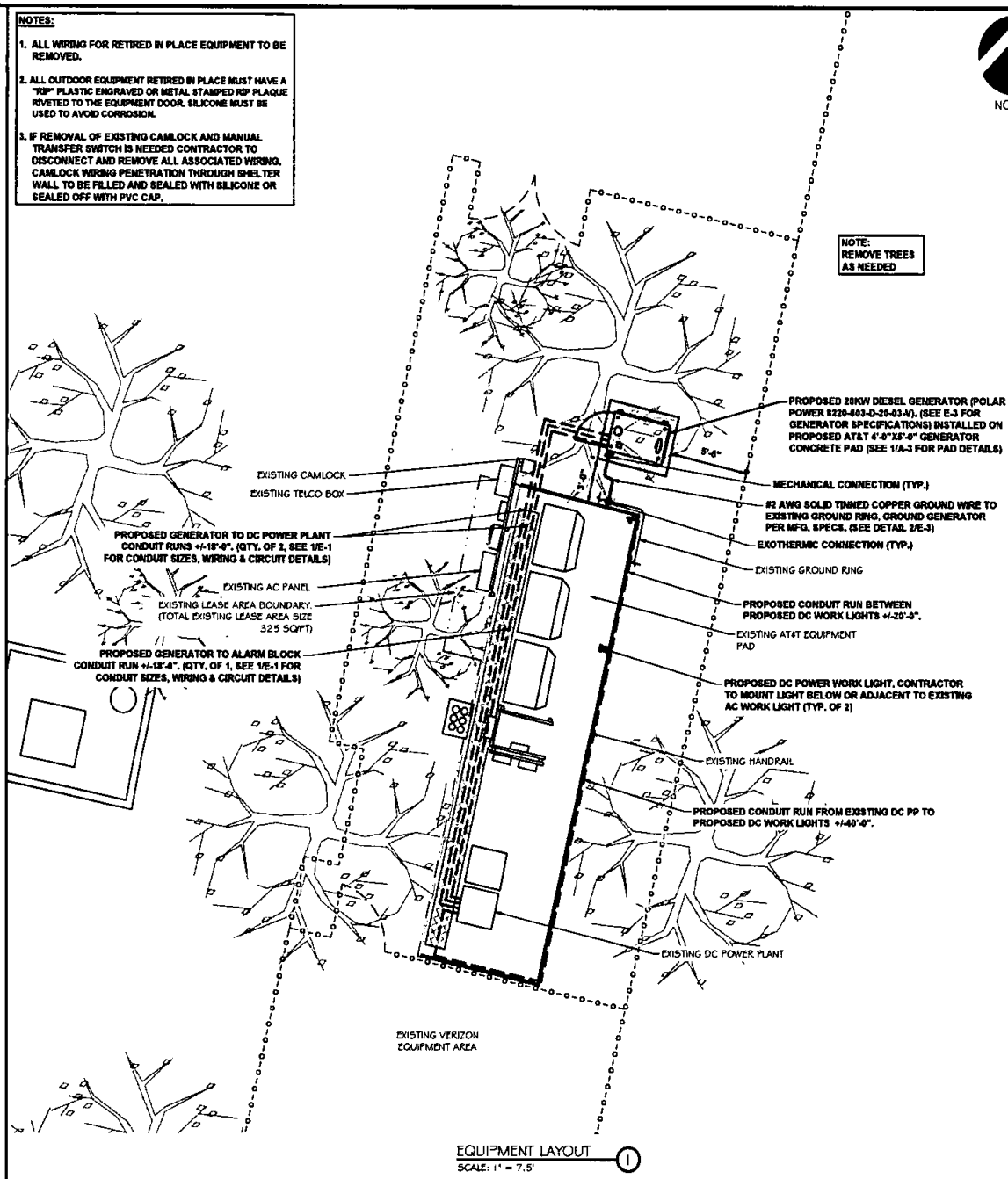
- THE FOLLOWING SIGNS AND LABELS SHALL BE AFFIXED TO THE TANK.
 - "DANGER FLAMMABLE LIQUIDS" (FC 5903.5.1)
 - NFPA 704 PLACARD (FC 5003.5)
 - "NO SMOKING" (FC 5704.2.3.1)
 - "DIESEL" (FC 5704.2.3.2)
- CRASH PROTECTION COMPLYING WITH FC 312 SHALL BE PROVIDED (FC 5003.9.3).
- A FIRE EXTINGUISHER WITH A MINIMUM RATING OF 2-A:20-B:C PER CFC 906.3, SHALL BE PROVIDED WITHIN 50' OF TANK (FC 5703.2.1).

GENERATOR FEATURES

- GENERATORS SHALL BE UL 2200 LISTED AND COMPLY WITH NFPA 37 AND NFPA 110, (FC 604.1 AND 604.1.1).
- MINIMUM 3' CLEARANCE SHALL BE MAINTAINED ON ALL SIDES. (NFPA 110 7.9.12.1).
- INSTALLATIONS SHALL HAVE A LABELED REMOTE MANUAL STOP (NFPA 110 5.6.5.6 & 5.6.5.6.1 AND NFPA 37 9.2.1.1).

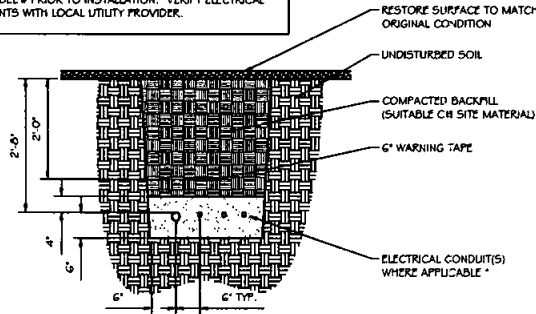
NOTES:

- ALL WIRING FOR RETIRED IN PLACE EQUIPMENT TO BE REMOVED.
- ALL OUTDOOR EQUIPMENT RETIRED IN PLACE MUST HAVE A "TOP" PLASTIC ENGRAVED OR METAL STAMPED RSP PLAQUE RIVETED TO THE EQUIPMENT DOOR. SILICONE MUST BE USED TO AVOID CORROSION.
- IF REMOVAL OF EXISTING CAMLOCK AND MANUAL TRANSFER SWITCH IS NEEDED CONTRACTOR TO DISCONNECT AND REMOVE ALL ASSOCIATED WIRING. CAMLOCK WIRING PENETRATION THROUGH SHELTER WALL TO BE FILLED AND SEALED WITH SILICONE OR SEALED OFF WITH PVC CAP.



2	1/26/20	FINAL CONSTRUCTION DRAWINGS
1	5/4/20	FINAL CONSTRUCTION DRAWINGS
0	9/1/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED: 12/08/2020
PROJECT TITLE:		
CATALINA WATER TANK		
FA ID # 10086237		
PROJECT INFORMATION:		
209 CATALINA BLVD.		
SAN DIEGO, CA 92106		
SHEET TITLE:		
EQUIPMENT LAYOUT		
0 2.5' 5' 10'		
1 1/4" x 1 7/8" - 1" = 5'		
22" x 34" - 1" = 2.5'		
SHEET NUMBER		
A-2		
DRAWING NUMBER		
47849		

NOTE:
VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR
MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL
REQUIREMENTS WITH LOCAL UTILITY PROVIDER.



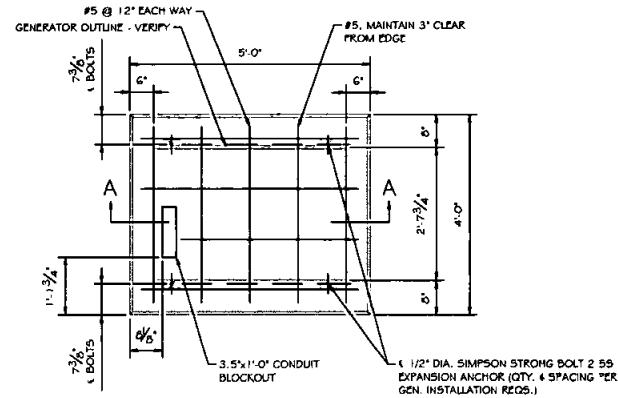
* SEPARATION DIMENSION TO BE VERIFIED WITH
LOCAL UTILITY COMPANY REQUIREMENTS

- NOTES:
1. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E.
SERVICE POLE, BTS EQUIPMENT, ETC.)
3. INSTALL UTILITY PULLBOXES PER NEC.

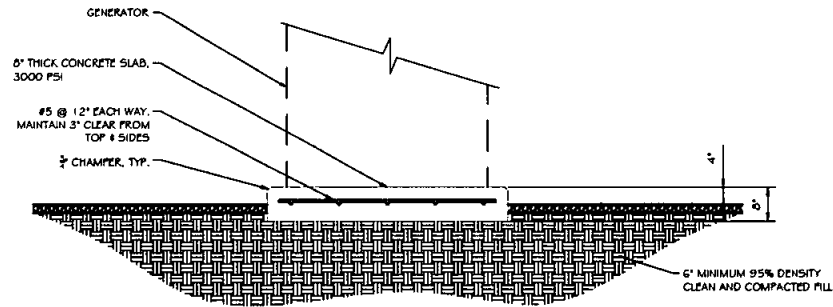
UTILITY CONDUIT TRENCH
SCALE: NTS

STRUCTURAL GENERAL NOTES

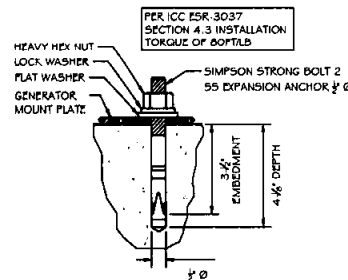
- 1.0 GENERAL CONDITIONS
- 1.1 DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
- 1.2 IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, TECH. CONSTRUCTION MANAGER, THE OWNER, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVER & HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTIONS WITH THE WORK.
- 1.3 DO NOT SCALE DRAWINGS
- 1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
- 1.5 DESIGN LOADS ARE (GENERAL):
LIVE LOAD : 100 PSF
EQUIPMENT SIZE : 73.23' H, 70.50' W, 40.51' D
WEIGHT WITH WOODEN SHIPPING SKID : 1371 LBS
ENCLOSED GENERATOR
- 2.0 FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
- 3.0 CONCRETE
- 3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:
DESIGN : ACI 318-11
CONSTRUCTION : ACI 301
DETAILING : CRSI MANUAL OF STANDARD PRACTICE
REIN. STEEL : ASTM A 615 GRADE 60, DEFORMED
MIXING : ASTM C 94, READY MIX CONCRETE
AIR ENTRAINMENT : ACI 318 AND ASTM C-260
AGGREGATE : ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)
- 3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 3000 PSI MINIMUM
- 3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
- 3.4 PROVIDE AIR ENTRAINMENT CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
- 3.5 MAXIMUM AGGREGATE SIZE: 3/4"
- 3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
- 3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- 4.0 FOUNDATION & EXCAVATION NOTES
- 4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1000 PSF.
- 4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED PRIOR FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY* AT OPTIMUM MOISTURE CONTENT (ASTM D 1557).
- 4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.



FOUNDATION PLAN
SCALE: NTS



SECTION A-A
SCALE: NTS



ANCHOR BOLT DETAIL
SCALE: NTS



TILLMAN
ENERGY HOLDINGS

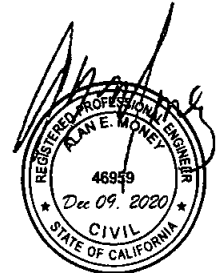


3305 MN-80
FARIBAULT, MN 55021
OFFICE: (507) 334-2268



employee-owned
(608) 643-4100 www.ramaker.com

Certification & Seal



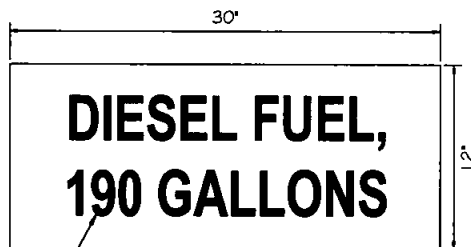
2	1/2/20	FINAL CONSTRUCTION DRAWINGS
1	5/4/20	FINAL CONSTRUCTION DRAWINGS
0	8/17/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED
PROJECT TITLE:	CATALINA WATER TANK	

FA ID # 10086237

PROJECT INFORMATION:
209 CATALINA BLVD.
SAN DIEGO, CA 92106
SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

SHEET NUMBER: A-3
PROJECT NUMBER: 47849

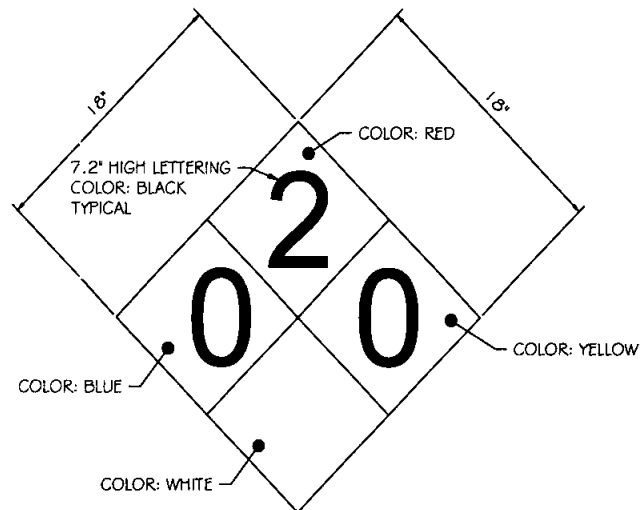


3" HIGH LETTERING

PLACED ON (2) VISIBLE SIDES OF
PROPOSED GENERATOR TANK

FUEL SIGN DETAIL
SCALE: NTS

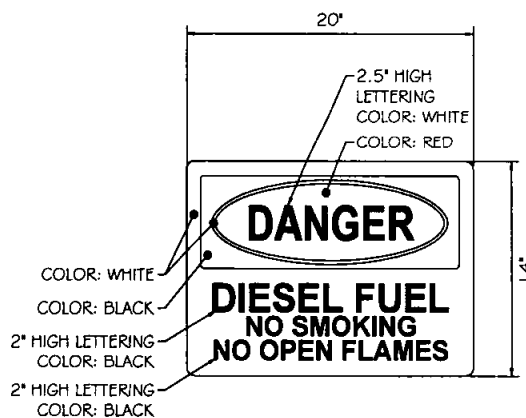
①



PLACED ON (2) VISIBLE SIDES OF
PROPOSED GENERATOR TANK

NFPA 704 DIESEL FUEL SIGN DETAIL
SCALE: NTS

②



COLOR: WHITE

COLOR: BLACK

2" HIGH LETTERING

COLOR: BLACK

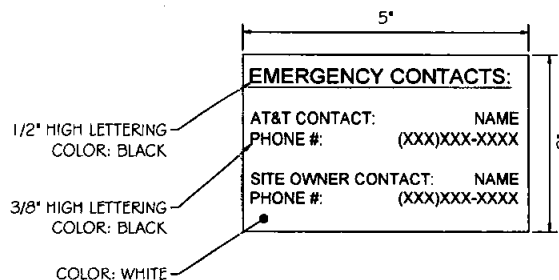
2" HIGH LETTERING

COLOR: BLACK

PLACED ON VISIBLE SIDE OF
PROPOSED GENERATOR TANK

NO SMOKING / NO OPEN FLAMES DETAIL
SCALE: NTS

③



1/2" HIGH LETTERING
COLOR: BLACK

3/8" HIGH LETTERING
COLOR: BLACK

COLOR: WHITE

PLACED ON EXTERIOR OF EXISTING SHELTER
OR NEAR EXISTING AT&T LEASE AREA

EMERGENCY CONTACT SIGN DETAIL
SCALE: NTS

④



TILLMAN
ENERGY HOLDINGS

KGPCo
3305 MN-60
FARIBAULT, MN 55021
OFFICE: (507) 334-2268

RAMAKER
employee-owned
(608) 643-4100 www.ramaker.com

Certification Data



2	12/8/20	FINAL CONSTRUCTION DRAWINGS
1	8/4/20	FINAL CONSTRUCTION DRAWINGS
0	8/17/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE	PHASE	FINAL
DATE ISSUED	12/08/2020	
PROJECT TITLE:		
CATALINA WATER TANK		
FA ID # 10086237		
PROJECT INFORMATION:		
209 CATALINA BLVD.		
SAN DIEGO, CA 92106		
SHEET TITLE:		
SIGNAGE DETAILS		
SCALE: NONE		
SHEET NUMBER		
A-4		
PROJECT NUMBER		
47849		

Engine cooling

System coolant capacity (gal/L)	2.2/8.3
Maximum operation air temperature on radiator (°C/°F)	94/129
Maximum ambient temperature (°C/°F)	49/120

Exhaust

Exhaust flow at rated output (cfm/cmm)	90/2.55
Exhaust temperature at rated output (°C/°F)	480/900

Alternator

Alternator Model	8220
Type	Permanent Magnets, NdFeB
Weight (lb/kg)	46.5/21
Regulation Type	Variable engine speed
Stator	3 phase/32 poles
Overcurrent Protection (A)	20 kW - 500
Disconnect Means	Pull fuse block or Circuit breaker
Voltage Range (VDC)	44 to 60
Alternator Exhaust Flow (cfm/cmm)	130 to 180 / 3.68 to 5.1
MTBF (hr)	100,000+

Enclosure

Model	88-25-0603
Type	Weather Protective
Materials	Powder coated aluminum
Door Hardware	Three Point with Padlock Hasp, and Removable Side Panels
Mounting	Secure Mounting Tabs
Dims.	L 50" x W 32" x H 72"

Optional: L2 option

Weight

Dry Weight (lb/kg)	867/393.25
--------------------	------------

Starter Supercapacitor

Model	20-16-0001
Storage Rating (Ah)	500
Voltage (VDC)	13-14.4
Weight (lb/kg)	12.1/5.5
Operating Temperature (°C/°F)	-40 to 65 / -40 to 149
Service Life (year)	10 to 15

Charger

Model	00-10-0015
Input Voltage (VDC)	37 to 62
Output Voltage (VDC)	14 to 14.4
Recharge time from 0 VDC (min)	10
Recharge time from 8 VDC (min)	2
Weight (lb/kg)	2.2/1

Standards

Certification	Intertek 400376
UL Listing	UL STD 2200
Standards	CSA STD C22.2 No. 100

Controller features

Controller Type	Supra Model 250
4-Line Plain Text OLED Display	Simple user interface for ease of operation
Engine Run Hours Indication	Standard
Programmable Start Delay	Standard
Run/Alarm/Maintenance Logs	Standard
Engine Start Sequence	Cyclic cranking: 5 sec on, 45 sec rest (3 attempts maximum)
Starter Supercapacitor Charger	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed	Standard
Automatic High Engine Temperature Shutdown	Standard
Field Upgradeable Firmware	Standard
Glow Plug Delay	Automatic With Temperature
Engine Start Delay	Adjustable, Set at 60 sec
Return to Utility Delay	Adjustable, Set at 60 sec
Engine Cool-down	Adjustable, Set at 60 sec
Exerciser	Programmable

Monitoring

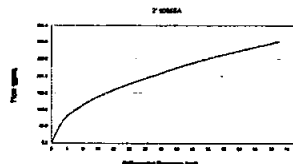
Alarm monitoring and remote control through Ethernet.

Contact closure alarm board

Shutdown Alarm	Standard
Warning Alarm	Standard
Engine Run	Standard
E-Stop/Depressed	Standard

OPV

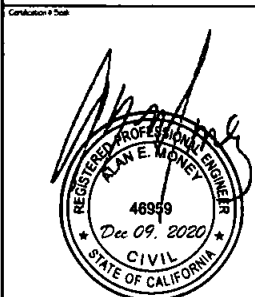
Min / Max Flow Pressure	5 PSI / 100 PSI
Connection	2" Male NPT Riser
Fluid Compatibility	Diesel, Biodiesel
Standards	ULC-S661-10 / NFPA 30, 30A



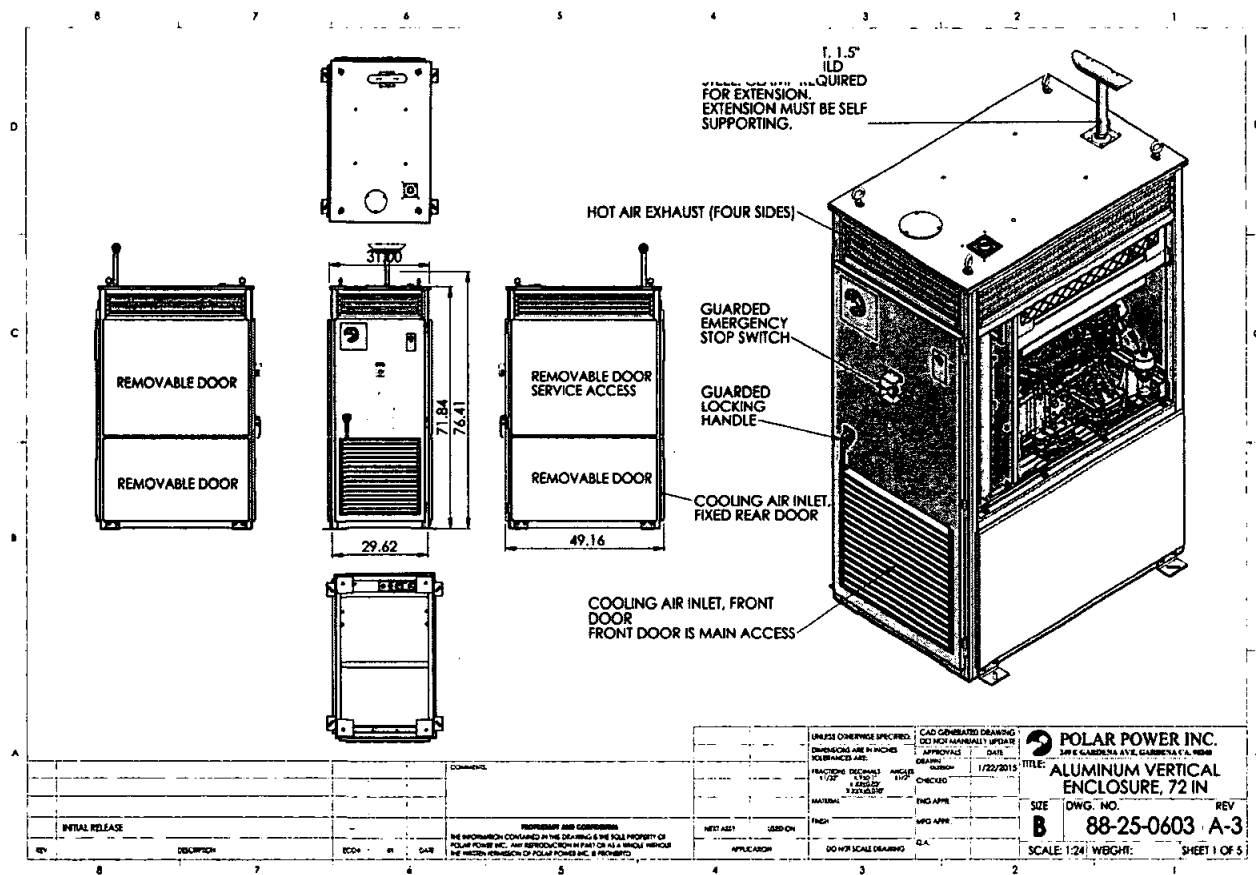
TILLMAN
ENERGY HOLDINGS

KGPCo
 3305 MN-60
 FARIBAULT, MN 55021
 OFFICE: (507) 334-2268

RAMAKER
 employee-owned
 (608) 643-4100 www.ramaker.com



2	1/20/20	FINAL CONSTRUCTION DRAWINGS
1	8/4/20	FINAL CONSTRUCTION DRAWINGS
0	9/1/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE	PHASE	FINAL
PROJECT TITLE:	DATE	12/08/2020
CATALINA WATER TANK		
FA ID # 10086237		
PROJECT INFORMATION:		
209 CATALINA BLVD.		
SAN DIEGO, CA 92106		
SHEET TITLE:		
POLAR POWER 20KW GENERATOR SPEC		
SCALE: NONE		
SHEET NUMBER		
E-3.1		
PROJECT NUMBER		
47849		



POLAR POWER 20KW GENERATOR SPECIFICATIONS (1)
SCALE: NT5

☐ **DRAWING FOR PN 8220-603-D-20-03-V**



TILLMAN 
ENERGY HOLDINGS

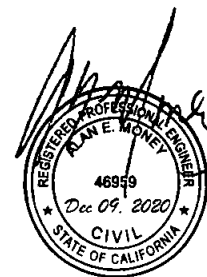


3305 MN-60
FARIBAULT, MN 55021
OFFICE: (507) 334-2268



RAMAKER
employee-owned
(608) 643-4100 www.ramaker.com

Continued on next page



2	12/8/20	FINAL CONSTRUCTION DRAWINGS
1	9/4/20	FINAL CONSTRUCTION DRAWINGS
0	8/17/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE PHASE	FINAL	DATE ISSUED 12/08/2020
PROJECT TITLE		

CATALINA WATER TANK
FA ID # 10086237

PROJECT INFORMATION:

209 CATALINA BLVD.
SAN DIEGO, CA 92106

SHEET TITLE:

POLAR POWER 20KW GENERATOR SPEC

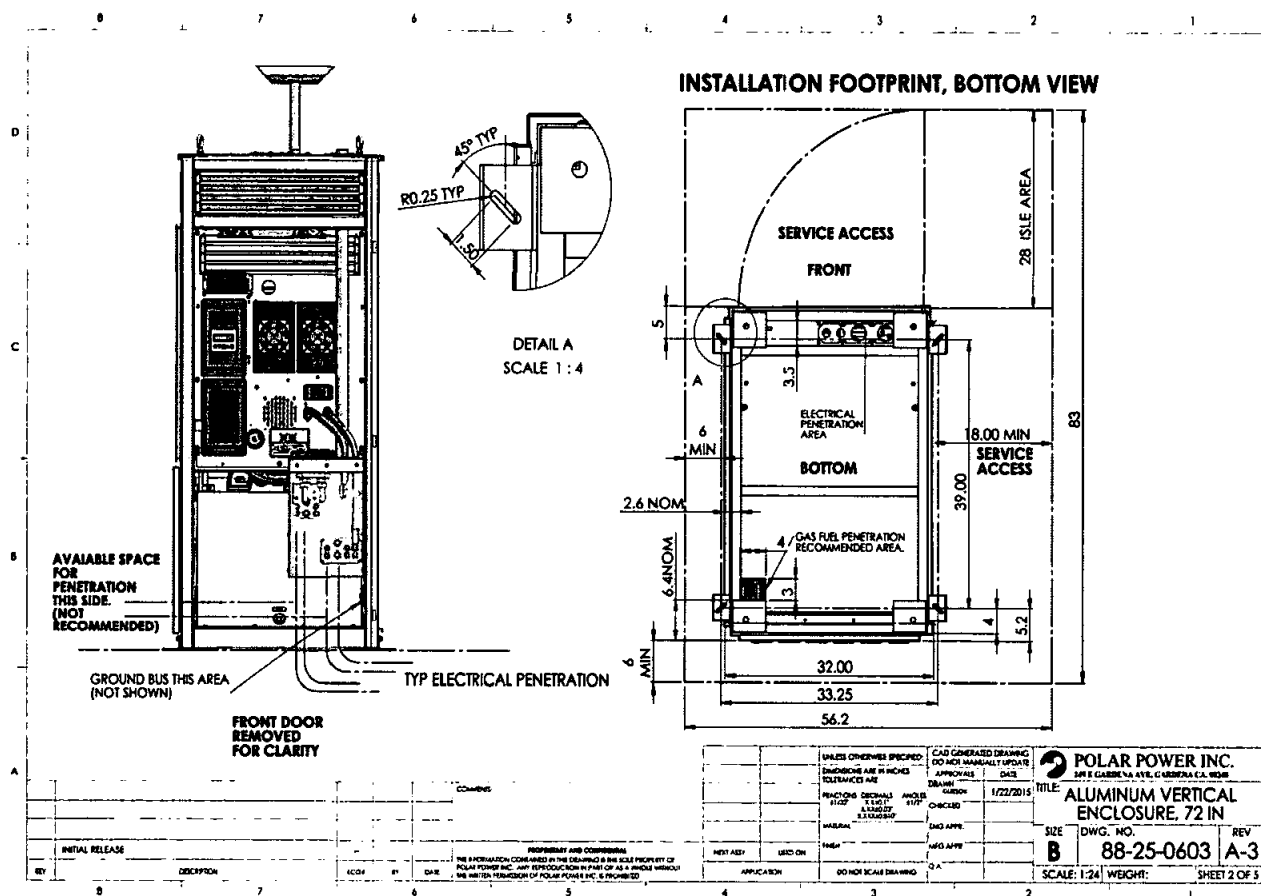
SCALE: NONE

SCALE: NONE

SHEET NUMBER E-3.2

PROJECT: 27849

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



POLAR POWER 20KW GENERATOR SPECIFICATIONS
SCALE: NTS

☐ **PLANNING FOR PN 8220-603-D-20-03-V**



TILLMAN 
ENERGY HOLDINGS



3305 MN-60
FARIBAULT, MN 55021
OFFICE: (507) 334-2268



RAMAKER
employee-owned
(608) 643-4100 www.ramaker.com



2	12/5/20	FINAL CONSTRUCTION DRAWINGS
1	5/4/20	FINAL CONSTRUCTION DRAWINGS
0	5/17/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE PHASE	FINAL	DATE ISSUED 12/05/2020
PROJECT TITLE:		

CATALINA WATER TANK
FA ID # 10086237

PROJECT INFORMATION:

209 CATALINA BLVD.
SAN DIEGO, CA 92106

SHEET TITLE:

POLAR POWER 20KW GENERATOR SPEC

SCALE: NONE

SHEET NUMBER E-3.3

PROJECT NUMBER 47849

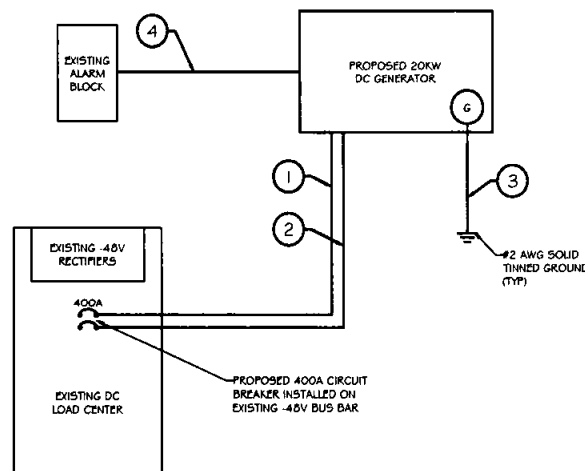
NO.	FROM	TO	WIRES	CONDUIT SIZE	FUNCTION
①	DC GENERATOR	DC LOAD CENTER	(2) 4/0 RHW	2"	POSITIVE POWER FEEDS FROM GENERATOR TO DC LOAD CENTER
②	DC GENERATOR	DC LOAD CENTER	(2) 4/0 RHW	2"	NEGATIVE POWER FEEDS FROM GENERATOR TO DC LOAD CENTER
③	DC GENERATOR	GROUND CONNECTION	#2 SOLID TINNED	1"	GENERATOR GROUND CONNECTION
④	DC GENERATOR	ALARM BLOCK	(1) CATS	1"	ALARM CIRCUIT

CIRCUIT DETAIL
SCALE: NTS

WIRE	ALARM
BROWN	GENERATOR RUNNING
BROWN / WHITE	CRITICAL FAULT
GREEN	CRITICAL FAULT
GREEN / WHITE	CRITICAL FAULT
BLUE	MINOR FAULT
BLUE / WHITE	MINOR FAULT
ORANGE	LOW FUEL
ORANGE / WHITE	LOW FUEL
BROWN / WHITE *	FUEL LEAK

*CATS CABLE ONLY, FROM 2ND CATS CABLE

ALARM WIRING IDENTIFICATION CHART ②
SCALE: NTS



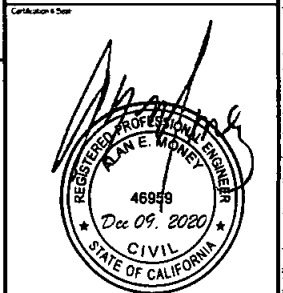
PROPOSED WIRING DIAGRAM ③
SCALE: NTS



3305 MN-60
FARIBAULT, MN 55021
OFFICE: (507) 334-2268



RAMAKER
employee-owned
(608) 643-4100 www.ramaker.com



2	12/06/20	FINAL CONSTRUCTION DRAWINGS
1	08/02/20	FINAL CONSTRUCTION DRAWINGS
0	06/17/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED
PHASE	FINAL	DATE ISSUED
PROJECT TITLE	CATALINA WATER TANK FA ID # 10086237	
PROJECT INFORMATION	209 CATALINA BLVD. SAN DIEGO, CA 92106	
SHEET TITLE	WIRING DETAILS	
SCALE	NONE	
SHEET NUMBER	E-1	
PROJECT NUMBER	47849	

House #	House #	UnitID	GF CID	SGL (amt)	UNIT 1 ARGUS REC 1 (amt)	House #	House #	UnitID	GF CID	SGL (amt)	UNIT 2 ARGUS REC 1 (amt)
1					EMPTY	2					GFCI Receipt
3	SINGLE	ON	NO	15	Argus Heater	4	SINGLE	ON	NO	20	Site Lights
5	DUAL	ON	NO	*	Argus Rec 4-5	6	DBL	DUAL	NO	50	Argus Rec 1-3
7	DUAL	ON	NO	30	Argus Rec 4-5	8	DBL	DUAL	NO	*	Argus Rec 1-3
9					EMPTY	10	SINGLE	ON	NO	15	Argus Receptacle
11					EMPTY	12	SINGLE	ON	NO	20	Purce II
13	DUAL	ON	NO	*	UMTS	14	DBL	DUAL	NO	50	GSM 1900
15	DUAL	ON	NO	50	UMTS	16	DBL	DUAL	NO	*	GSM 1900
17	DUAL	ON	NO	*	UMTS 3C/4C	18	SINGLE	ON		20	ATS
19	DUAL	ON	NO	50	UMTS 3C/4C	20	SINGLE	ON		20	BLOCKHEATER
21					EMPTY	22	SINGLE	ON		20	BATTERY CHARGER
23					EMPTY	24					EMPTY
25					EMPTY	26					EMPTY
27					EMPTY	28					EMPTY
29					EMPTY	30					EMPTY
31					EMPTY	32					EMPTY
33					EMPTY	34					EMPTY
35					EMPTY	36					EMPTY
37					EMPTY	38					EMPTY
39					EMPTY	40					EMPTY
41					EMPTY	42					EMPTY

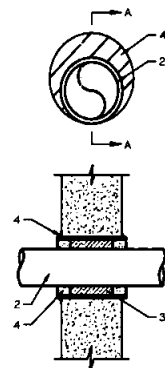
PROPOSED 20A BREAKERS FOR ATS, BLOCK HEATER
AND BATTERY CHARGER ON NEW AT&T GENERATOR

EXISTING PANEL SCHEDULE

SCALE: NT9

NOTE:
CONTRACTOR TO LABEL WIRES WITH P-TOUCH OR
SIMILAR LABELS ONLY. ABSOLUTELY NO
HANDWRITTEN LABELS.

*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN
SEQUENCE SINGLE BREAKER POSITION FOR
GENERATOR, BATTERY CHARGER, BATTERY HEATER
AND BLOCK HEATER



NOTE:

- NOTE:
1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-MR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
 2. GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU S-FLTER WALL

U.L. SYSTEM NO. C-AJ-1150
CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902
F RATING = 3 HR
T RATING = 0 HR

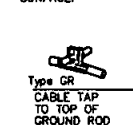
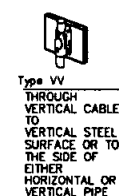
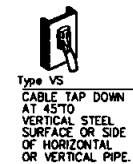
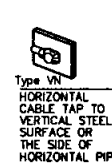
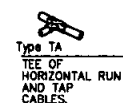
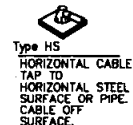
1. FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9C-27 CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES.
2. THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0" (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
 - a. SIZE TYPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
 - b. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
 - c. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 4-1/2" DIAMETER RIGID PVC CONDUIT.
3. PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL IS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
4. FILL VOID, OR CAVITY MATERIAL*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL, AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONDUIT. A MINIMUM 1/2" THICKNESS OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CPG60 IS OR CPG64 SEALANT IS

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR PS-ONE
SEALANT

* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)

SCALE: NTS



CADWELD DETAILS

SCALE: NTS



TILLMAN 
ENERGY HOLDINGS



3305 MN-60
FARIBAULT, MN 55021
OFFICE: (507) 334-2268



RÂMAKER

(608) 643-4100 www.ramaker.com



2	1/28/20	FINAL CONSTRUCTION DRAWINGS
1	9/4/20	FINAL CONSTRUCTION DRAWINGS
0	8/17/20	FINAL CONSTRUCTION DRAWINGS
MARK	DATE	DESCRIPTION
ISSUE FOR ASB	FINAL	DATE (MM/DD/YY) 12/08/2020

CATALINA WATER TANK
FA ID # 10086237

PROJECT INFORMATION

209 CATALINA BLVD.
SAN DIEGO, CA 92106

SHEET TITLE:
PANEL 4 PENETRATION DETAILS

SCALE: NONE

SHEET NUMBER F-2

PROJECT NUMBER	47849
----------------	-------