PROJECT DESCRIPTION

AT&T PROPOSES TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY WITH THE FOLLOWING:

ANTENNA LEVEL:

- AZIMUTH CHANGE 115/235/0
- SLIDE EXISTING 80010992 ANTENNA AT ALPHA P3 TO THE LEFT
- REUSE 80010992 ANTENNA TO P3 AB | P1 C
- INSTALL NEW 120716 ANTENNA ON P2 A BELOW P1
- INSTALL NEW AIR6472 B77G B77M TO P1 AB | P2 C
- INSTALL NEW 120726 ANTENNA ON P2 B | P3 C
- INSTALL NEW 4490 B5/B12A AND 4471 B30 RADIOS ON A3,B3,C1
- INSTALL NEW 4494 B14/B29 AND 4890 B25/B66 RADIOS ON A2,B2,C3
- INSTALL (3) DC9-48-60-24-PC16-EV AND (3) 24 PAIR FIBERS (1) PER SECTOR
- INSTALL (6) NEW 6AWG TRUNKS (2) PER SECTOR

GROUND

- INSTALL (1) VERTIV NETSURE 512 -48/58V POWER PLANT
- INSTALL (11) VERTIV -48 RECTIFIERS TO NEW PDU
- INSTALL (10) C48/58-2000 CONVERTERS TO NEW PDU
- INSTALL (2) STRINGS 190MAH BATTERIES
- INSTALL (1) DC12-48-60-0-25E
- INSTALL (1) FLX42
- INSTALL (1) COMMSCOPE 48V/24V DC CONV PS-CONV-48-24

- INSTALL (3) 25AMP BREAKERS FOR 4471
- INSTALL (3) 25AMP BREAKERS FOR 4494
- INSTALL (3) 50AMP BREAKERS FOR 4490
- INSTALL (3) 50AMP BREAKERS FOR 4890
- INSTALL (3) 50AMP BREAKERS FOR AIR6472
- INSTALL (2) 15AMP BREAKER FOR 6651
- INSTALL (1) 5AMP BREAKER FOR 6610
- INSTALL (1) 100AMP FOR FLX42

OEM

- INSTALL (2) 6651 TO NEW FLX42
- INSTALL (1) 6610 TO NEW FLX42
- INSTALL (1) SAU TO NEW FLX42

PROJECT INFORMATION

SITE ADDRESS	110 9TH AVE SW PUYALLUP, WA 98371	ZONING DISTRICT:	FAIR
		EXISTING USE:	UNMANNED TELECOMMUNICATIONS FACILITY
LATITUDE:	47° 11' 01.5" N (47.18472° N)	PROPOSED USE:	UNMANNED TELECOMMUNICATIONS FACILITY
		OCCUPANCY:	U
LONGITUDE:	122° 17' 47.5" W (-122.29611° W)	COUNTY:	PIERCE
JURISDICTION:	CITY PUYALLUP	APN:	0420331121

RF DATA SHEET

DATE ISSUED: T.B.D. VERSION: 1.00 REV: V1.0

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SITE PROJECT PARTICIPANTS

	NAME	COMPANY	NUMBER
A/E	DAN COSTELLO	CORE ONE CONSULTING USA	315-717-6547
RF	PIERO ROVANI	AT&T WIRELESS	T.B.D.
LANDLORD	JACLYN McCOY	CROWN CASTLE	602-845-1701
SAC MANAGER	SYDNEY SIGMUND	SMARTLINK GROUP	310-266-6676
A&E MANAGER	KAT YANEZ	MASTEC NETWORK SOLUTIONS	305-702-9100
CM	RON EVERSON	MASTEC NETWORK SOLUTIONS	305-702-9100

City of Puyallup Planning Division APPROVED
See permit conditions.
RNBrown
11/18/2024
9:14:04 AM

City of Puyallup Development Engineering APPROVED
See permit conditions.
AHunt
11/19/2024
11:05:09 AM

at&t

PROJECT SCOPE: LTE 1C RRH SWAP
FA#: 10102328
PTN#: 3801A1DEJN
3801A1DEHW/3801A1DCPP/3801A1DD70/3801A1DF83/
3801A1DF1Q/3801A1DD6N/3801A1DDAC/3801A1DFL8
IWM/PACE #: WSWOR0040221/MRWOR082373
WSWOR0040204/MRWOR083020/
WSWOR0040207/MRWOR083042/
WSWOR0040214/MRWOR082914/
WSWOR0040215/MRWOR082855/
WSWOR0040216/MRWOR083437/
WSWOR0040226/MRWOR082338/
WSWOR0040229/MRWOR082769/
WSWOR0040237/MRWOR083198
SITE NUMBER: TA48
SITE NAME: DOWNTOWN PUYALLUP
ADDRESS: 110 9TH AVE SW
PUYALLUP, WA 98371
SITE TYPE: ROOFTOP/BUILDING (SIDE-MOUNT)
OWNER INFO: WESTERN WASHINGTON FAIR ASSOCIATION

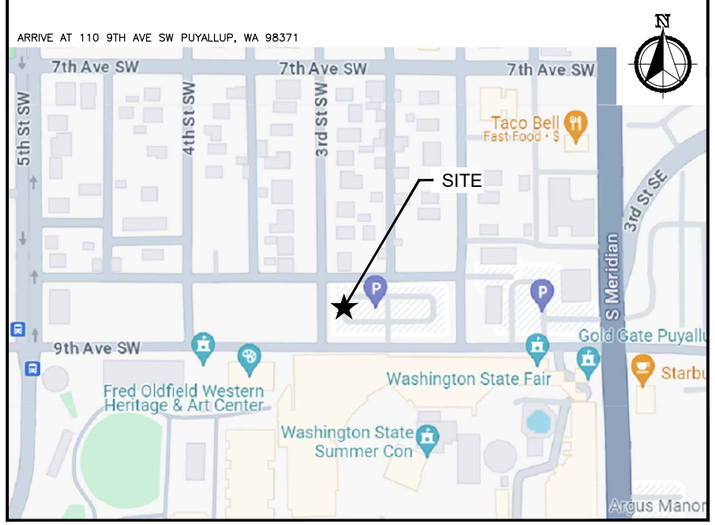
City of Puyallup Building REVIEWED FOR COMPLIANCE
SKinnear
10/29/2024
2:44:25 PM

VICINITY MAP

DEPART FROM AT&T REGIONAL OFFICE:

T.B.D.

ARRIVE AT 110 9TH AVE SW PUYALLUP, WA 98371



LEGAL DESCRIPTION

T.B.D.

SCALING DRAWINGS

SUBCONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

IF USING 11"x17" PLOT, DRAWINGS WILL BE AT HALF SCALE.

DIG INFORMATION

811
Know what's below.
Call before you dig

UULC:
UTILITIES UNDERGROUND LOCATION CENTER
1-800-424-5555 OR 811
WWW.CALLBEFOREYOUDIG.ORG/WASHINGTON
3 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

BUILDING CODES AND STANDARDS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
[INTERNATIONAL BUILDING CODE (2021 IBC) AS ADOPTED BY THE LOCAL JURISDICTION]

ELECTRICAL CODE:
[NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 – 2020 WITH 2020 SPECIALTY CODES, NATIONAL ELECTRICAL CODE, AS ADOPTED BY THE LOCAL JURISDICTION]
LIGHTNING PROTECTION CODE:
[NFPA 780 – 2002, LIGHTNING PROTECTION CODE]

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS.
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
ANSI/TIA 222, STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C2 NATIONAL ELECTRIC SAFETY CODE, LATEST VERSION

TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS

ANSI T1.311, FOR TELECOM – DC POWER SYSTEMS – TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

APPROVAL / SIGN OFF OF CONSTRUCTION DRAWINGS

	DATE	SIGNATURE
CONSTRUCTION COORDINATOR		
CONSTRUCTION MANAGER		
RF ENGINEER		
RF ENGINEER MANAGER		
PROJECT MANAGER		
AT&T SIGN OFF		
LANDLORD'S REPRESENTATIVE		

REVIEWERS SHALL CLEARLY PLACE INITIALS ADJACENT TO EACH REDLINE NOTE AS DRAWINGS ARE BEING REVIEWED

at&t
AT&T MOBILITY
RTC BUILDING 3
18221 NE 72nd WAY
REDMOND, WA 98052

MasTec
Network Solutions
5814 S 196TH ST
KENT, WA 98032

CORE ONE CONSULTING USA
13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

PROJECT NO: ----
DRAWN BY: ECC
CHECKED BY: D.C.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
A	MAY 28/24	ISSUED FOR REVIEW	ECC

A&E SEAL

PRCTI20241635

SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY TOWER NETWORK CARRIER OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY, DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERROR, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER.

2. PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.

3. FOR COLLOCATION SITES: CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.

4. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS 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, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.

5. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.

6. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCE. TOWER NETWORK CARRIER IS NOT RESPONSIBLE FOR ANY ERRORS RESULTING FROM THIS PRACTICE WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS.

7. OWNER, CONTRACTOR, AND TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER SHALL MEET JOINTLY TO VERIFY ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.

8. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.

9. THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.

10. THE CONTRACTOR SHALL PROVIDE TOWER NETWORK CARRIER PROPER INSURANCE CERTIFICATES NAMING TOWER NETWORK CARRIER AS ADDITIONAL INSURED, AND TOWER NETWORK CARRIER PROOF OF LICENSE(S) AND PE & PD INSURANCE.

11. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

12. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

13. ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE 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.

14. GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED "FOR CONSTRUCTION" AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S SIGNED WET STAMP.

15. A COPY OF GOVERNING AGENCY APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW, SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. THE PLANS ARE NOT TO BE USED BY THE WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION AS GOVERNING AGENCY APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS, IN GOOD CONDITION, COMPLETE WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES UNDER THE DIRECT CARE OF THE SUPERINTENDENT. THE CONTRACTOR SHALL SUPPLY TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER. WITH A COPY OF ALL REVISIONS, ADDENDA, AND/OR CHANGE ORDERS AT THE CONCLUSION OF THE WORK AS A PART OF THE AS-BUILT DRAWING RECORDS.

16. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.

17. THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND CROSS CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT AND SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.

19. THE CONTRACTOR HAS THE RESPONSIBILITY OF LOCATING ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR, OR SUBCONTRACTOR AS SPECIFIED IN THE AGREEMENT BETWEEN SUBCONTRACTOR AND CONTRACTOR, SHALL BEAR THE EXPENSES OF REPAIR AND/OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGE BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.

20. THE REFERENCES ON THE DRAWINGS ARE FOR CONVENIENCE ONLY AND SHALL NOT LIMIT THE APPLICATION OF ANY DRAWING OR DETAIL.

21. ALL DIMENSIONS ON THE PLANS ARE TO FACE OF STUD (F.O.S.) UNLESS NOTED OTHERWISE (U.N.O.).

22. ALL EXISTING CONSTRUCTION, EQUIPMENT, AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
    A. PROPERTY NOTED TO BE RETURNED TO THE OWNER.
    B. PROPERTY NOTED TO BE REMOVED BY THE OWNER.

23. THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE THE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES USED THROUGHOUT THE PROJECT. TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION.

24. WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER ROUGH FRAMED FLOORS OR ROOFS SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING AND/OR BRACING IS TO BE PROVIDED WHERE THE STRUCTURE HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.

25. PRIOR TO THE POURING OF ANY NEW SLAB OVER AN EXISTING SLAB THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, CHASES, AND EQUIPMENT WHICH ARE TO BE IMPLEMENTED INTO THE NEW WORK. ALL ITEMS DESIGNATED TO BE ABANDONED SHALL BE NOTED AND DISCUSSED WITH THE OWNER AND TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER AS PART OF THE AS-BUILT DRAWING PACKAGE.

26. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.

27. BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.

28. CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.

29. THE PROJECT, WHEN COMPLETED, SHALL COMPLY WITH LOCAL SECURITY CODES AND TITLE-24 ENERGY CONSERVATION REQUIREMENTS. (TITLE-24 WHEN APPLICABLE)

30. ALL GLASS AND GLAZING IS TO COMPLY WITH CHAPTER 54 OF THE U.S. CONSUMER SAFETY COMMISSION – SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS (42 FR 1428, CFR PART 1201) AND LOCAL SECURITY REQUIREMENTS.

31. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

32. CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

33. NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL MATCH IN FORM, TEXTURE, FINISH, AND IN MATERIALS EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.

34. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKING, BLOCKING, AND/OR SLEEVES REQUIRED FOR THE INSTALLATION OF FIXTURES, MECHANICAL EQUIPMENT, PLUMBING, HARDWARE, AND FINISH ITEMS TO ENSURE A PROPER AND COMPLETE JOB.

35. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A PROJECT LEVEL, STRAIGHT, AND TRUE ACCORDING TO THE PLANS. THE CONTRACTOR SHALL COMPARE THE LINES AND LEVELS OF THE EXISTING CONDITIONS WITH THOSE SHOWN ON THE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. TOWER NETWORK CARRIER SHALL BE NOTIFIED OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES PRIOR TO ANY CONSTRUCTION.

36. THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES.

37. WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AND/OR REVISIONS AVAILABLE AS REQUIRED BY THE GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.

38. THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL MATERIALS AND SHALL NOT DO SO ON PUBLIC PROPERTY WITHOUT A PERMIT TO DO SO FROM THE GOVERNING AGENCIES FOR THIS PURPOSE.

39. GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.

40. TRADES INVOLVED IN THE PROJECT SHALL BE RESPONSIBLE FOR THEIR OWN CUTTING, FITTING, PATCHING, ETC., SO AS TO BE RECEIVED PROPERLY BY THE WORK OF OTHER TRADES.

41. ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT PREMISES AND SHALL BE LEFT IN A CLEAN (BROOM FINISH) CONDITION AT ALL TIMES BY EACH TRADE AS THEY PERFORM THEIR OWN PORTION OF THE WORK.

42. TOWER NETWORK CARRIER DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER. GUARANTEE OR WARRANTY THAT MAY BE IN EFFECT IS DONE SO THROUGH THE COMPANY OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT ONLY: UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.

43. CAUTION! CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. 1-800-424-5555.

44. CONTRACTOR TO REPLACE AND/OR REROUTE ANY EXISTING UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCHING AND GENERAL CONSTRUCTION.

45. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO PLACEMENT OF MONOPOLE FOOTING AND OTHER STRUCTURES TO BE PLACED IN GROUND. SEE GENERAL NOTE #6 ON THIS SHEET.

46. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION.

47. CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO TOWER NETWORK CARRIER ALONG WITH REDLINED CONSTRUCTION SET.

48. CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED SET TO TOWER NETWORK CARRIER UPON COMPLETION.

49. WITH POWER COMPANY AS REQUIRED. CONTRACTOR TO REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO NETWORK CARRIER REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.

50. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY TOWER NETWORK CARRIER CONSTRUCTION MANAGER.

51. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPETE AND ACCEPTED UNDER THIS CONTRACT; UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.
(EXCEPTION) THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.

52. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.

53. THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY PERMITS AND/OR FEES WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL OBTAIN PERMIT AND MAKE FINAL PAYMENT FOR SAID DOCUMENT.

54. THE ARCHITECT/ENGINEER IN CHARGE SHALL SIGN AND SEAL ALL DRAWINGS AND/OR SPECIFICATIONS.

55. TOWER NETWORK CARRIER WILL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH DESIGN CONCEPT. TOWER NETWORK CARRIER PROJECT APPROVAL OF A SEPARATE ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.

56. ALL ANTENNAS MOUNTED ON ROOF SUPPORT FRAMES TO BE PROVIDED BY TOWER NETWORK CARRIER COMMUNICATIONS.

57. CONTRACTOR TO PROVIDE TRENCH AS REQUIRED TO INSTALL BOTH ELECTRICAL AND TELEPHONE UNDERGROUND CONDUITS (#40 PVC) PER S.C.E. WORKORDER. BACKFILL WITH CLEAN SAND AND COMPACT TO THE SATISFACTION OF THE DISTRICTS INSPECTOR. REPLACE FINISH GRADE WITH MATCHING MATERIALS (GRASS, ASPHALT, CONCRETE, ETC.)

58. CONTRACTOR TO PROVIDE HEAVY STEEL PLATES AT OPEN TRENCHES FOR SAFETY AND TO PROTECT EXISTING GROUND SURFACES FROM HEAVY EQUIPMENT UTILIZED DURING CONSTRUCTION.

59. CONTRACTOR TO PATCH AND REPAIR ALL GROUND SURFACES WITHIN THE CONSTRUCTION AREA AS NECESSARY TO PROVIDE A UNIFORM SURFACE AND MAINTAIN EXISTING SURFACE DRAINAGE SLOPES.

60. CONTRACTOR TO REPLACE LANDSCAPE VEGETATION THAT WAS DAMAGED DUE TO CONSTRUCTION, AND TO MODIFY REMAINING IRRIGATION LINES TO OPERATING CONDITION, PROVIDING FULL COVERAGE TO IMPACTED AREAS.

61. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATION OF EXISTING ROOFING MATERIALS OCCUR, THE GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER AND BUILDING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY AUGMENTATION TO THE ROOF, AND HAVE THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S WARRANTY FOR MOISTURE PENETRATION OR AND OTHER FUTURE BREACH OF ROOFING INTEGRITY.

62. IN THE CASE OF ROOFTOP SOLUTIONS WITH THE INSTALLATION OF ANTENNAS WITHIN CONCEALED (SHROUDED) SUPPORT FRAMES OR TRIPODS, THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE FRP DESIGNER/FABRICATOR TO ENSURE THAT THE FINAL FRP SHROUD IS SIMULATING (IN APPEARANCE) DESIGNATED EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. THE CONTRACTOR SHALL FURTHERMORE ENSURE THE USE OF COUNTERSUNK FASTENERS IN ALL FRP CONSTRUCTION. WHEN PHOTOSIMULATIONS ARE PROVIDED, THE CONTRACTOR SHALL ENSURE THAT FINAL CONSTRUCTION REPRESENTS WHAT IS INDICATED IN PHOTOSIMULATION. SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR, CONSTRUCTION COORDINATOR, AND ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

63. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE ANCHORING TO A CONCRETE ROOF SLAB IS REQUIRED, CONTRACTORS SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF POST TENSION TENDONS WITHIN THE ROOF SLAB – RESULTING FROM AN UNDOCUMENTED DESIGN CHANGE IN THE EXISTING BUILDING "AS-BUILT DRAWING SET" – HAVING INDICATED AN ORIGINAL DESIGN SOLUTION OF REINFORCED CONCRETE W/ EMBEDDED STEEL REBAR. IN THE EVENT POST TENSION SLAB SOLUTION IS PRESENT, CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES (INCLUDED IN BID) FOR ALL PENETRATION AREAS WHERE ANCHORING OCCURS.

64. GENERAL & SUB CONTRACTORS SHALL USE STAINLESS STEEL METAL LOCKING TIES FOR ALL CABLE TRAY TIE DOWNS AND ALL OTHER GENERAL TIE DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON TOWER NETWORK CARRIER PROJECTS. RECOMMENDED MANUFACTURE SHALL BE: PANDUIT CORP. METAL LOCKING TIES MODEL NO. MLT4S-CP UNDER SERIES-304 (OR EQUAL). PANDUIT PRODUCT DISTRIBUTED BY TRIARC.

65. ALL WORK TO BE DONE BETWEEN HOURS OF 8:00 AM AND 5:00 PM, EXCLUDING HOLIDAYS

SPECIAL NOTES:

1. PLANS PART OF THIS SET ARE COMPLEMENTARY. INFORMATION IS NOT LIMITED TO ONE PLAN. DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT, WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY THE OWNER ON OTHER PROJECTS OR EXTENSION TO THIS PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ARCHITECT. THESE PLANS WERE PREPARED TO BE SUBMITTED TO GOVERNMENTAL BUILDING AUTHORITIES FOR REVIEW FOR COMPLIANCE WITH APPLICABLE CODES AND IT IS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO BUILD ACCORDING TO APPLICABLE BUILDING CODES.

2. IF CONTRACTOR OR SUB-CONTRACTOR FIND IT NECESSARY TO DEVIATE FROM ORIGINAL APPROVED PLANS, THEN IT IS THE CONTRACTOR'S AND THE SUB-CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE ARCHITECT WITH 4 COPIES OF THE PROPOSED CHANGES FOR HIS APPROVAL BEFORE PROCEEDING WITH THE WORK. IN ADDITION THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY APPROVALS FROM THE BUILDING AUTHORITIES FOR THE PROPOSED CHANGES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY INSPECTIONS AND APPROVALS FROM BUILDING AUTHORITIES DURING THE EXECUTION OF THE WORK.

3. IN EVERY EVENT, THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL BE INTERPRETED TO BE A MINIMUM ACCEPTABLE MEANS OF CONSTRUCTION BUT THIS SHALL NOT RELIEVE THE CONTRACTOR, SUB-CONTRACTOR, AND/OR SUPPLIER/MANUFACTURER FROM PROVIDING A COMPLETE AND CORRECT JOB WHEN ADDITIONAL ITEMS ARE REQUIRED TO THE MINIMUM SPECIFICATION. IF ANY ITEMS NEED TO EXCEED THESE MINIMUM SPECIFICATIONS TO PROVIDE A COMPLETE, ADEQUATE AND SAFE WORKING CONDITION, THEN IT SHALL BE THE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE DRAWINGS. FOR EXAMPLE, IF AN ITEM AND/OR PIECE OF EQUIPMENT REQUIRES A LARGER WIRE SIZE (I.E. ELECTRICAL WIRE), STRONGER OR LARGER PIPING, INCREASED QUANTITY (I.E. STRUCTURAL ELEMENTS), REDUCED SPACING, AND/OR INCREASED LENGTH (I.E. BOLT LENGTHS, BAR LENGTHS) THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE BID/PROPOSAL. THESE DOCUMENTS ARE MEANT AS A GUIDE AND ALL ITEMS REASONABLY INFERRED SHALL BE DEEMED TO BE INCLUDED.

4. THESE CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO CREATE A CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ARCHITECT AND THE CONTRACTOR.

The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permitee on site for inspection.

Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

Separate Electrical Permit is required with the Washington State Department of Labor & Industries.
https://lni.wa.gov/licensing-permits/electrical/electrical-permits-fees-and-inspections
or call for Licensing Information: 1-800-647-0982

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BELLEVUE, WA 98006

PROJECT NO: ----

DRAWN BY: ECC

CHECKED BY: D.C.

City of Puyallup
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1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
A	MAY 28/24	ISSUED FOR REVIEW	ECC

AGE SEAL

PRCTI20241635

SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE
GENERAL NOTES I

SHEET NUMBER
GN-1

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
   A.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.
7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY EXISTING FIELD CONDITIONS AND ALL DIMENSIONS PRIOR TO ANY FABRICATION OR MODIFICATION. CONTACT CORE ONE CONSULTANTS USA IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
   - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
   - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
   - RECTANGULAR HSS TO BE A500, GRADE B. FY=46 KSI, U.N.O.
   - ROUND HSS TO BE A500, GRADE B. FY=42 KSI, U.N.O.
   - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
   - BOLTS TO BE A307-X. Fu=60 KSI, U.N.O.
   - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E80XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
   - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
   - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
   - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
   - CONCRETE REBAR: ADHESIVE - RE500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.

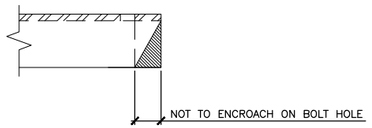
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
   b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
   c. MECHANICAL AND EPOXIED ANCHORAGES.
   d. FIBER REINFORCED POLYMER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP:



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13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

PROJECT NO: ----

DRAWN BY: ECC

CHECKED BY: D.C.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
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1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
A	MAY 28/24	ISSUED FOR REVIEW	ECC

A&E SEAL

PRCTI20241635

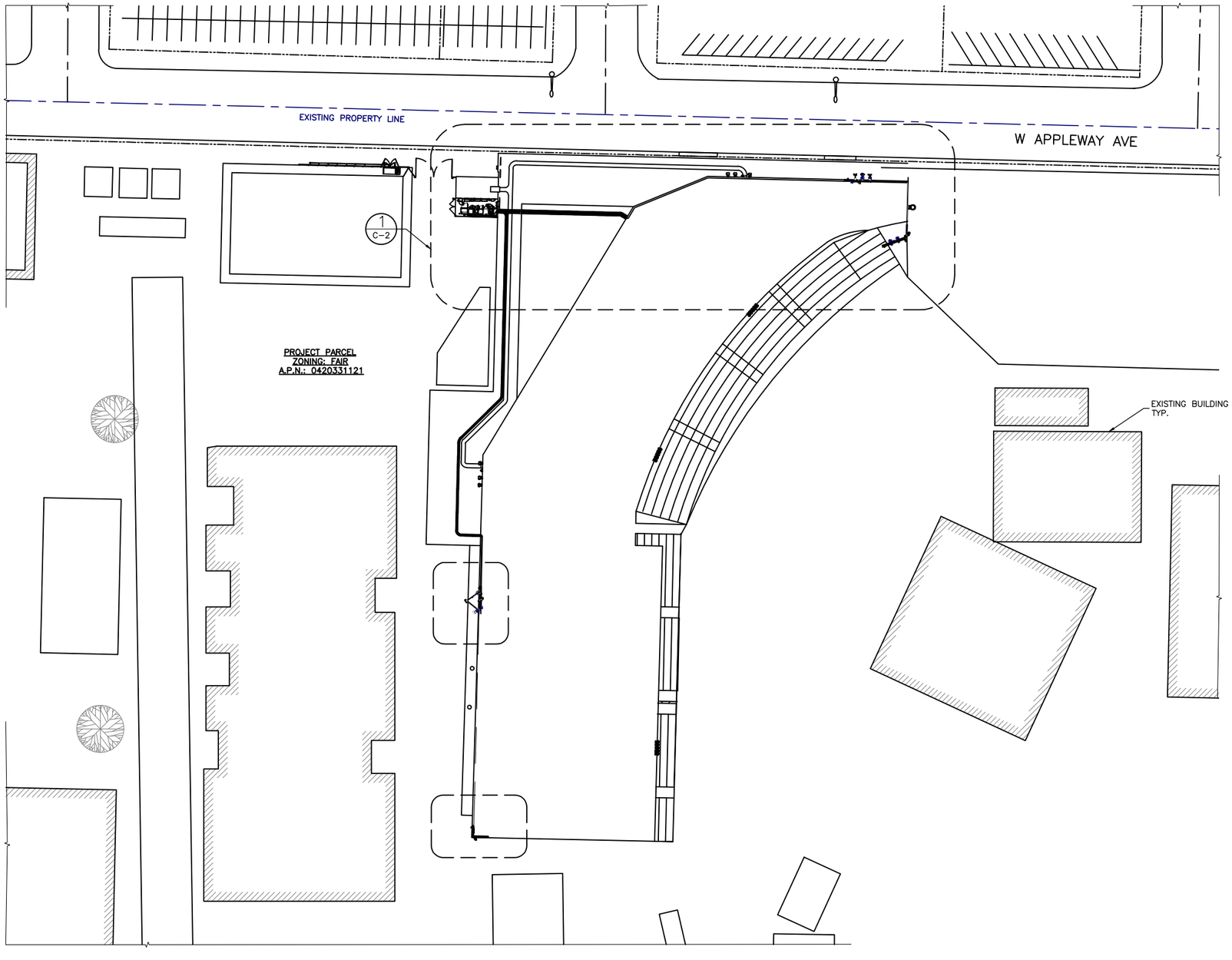
SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE
GENERAL NOTES II

SHEET NUMBER
GN-2

TRUE NORTH ARROW SHOWN ON THIS DRAWING IS APPROXIMATE ONLY AND MUST BE VERIFIED



1 SITE PLAN
1/32"=1'-0" 1/64"=1'-0"
22x34 11x17
0 16' 32' 64'

NOTES:

1. EXISTING INFORMATION OBTAINED FROM DRAWINGS PREPARED BY TRYLON DATED 11/16/2022.
2. CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.

LEGAL DESCRIPTION:

T.B.D.

PROPERTY INFO:

T.B.D.

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City of Puyallup
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Engineering	Public Works		
Fire	Traffic		

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PRCTI20241635

SITE

DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE

SITE PLAN

SHEET NUMBER

C-1

N

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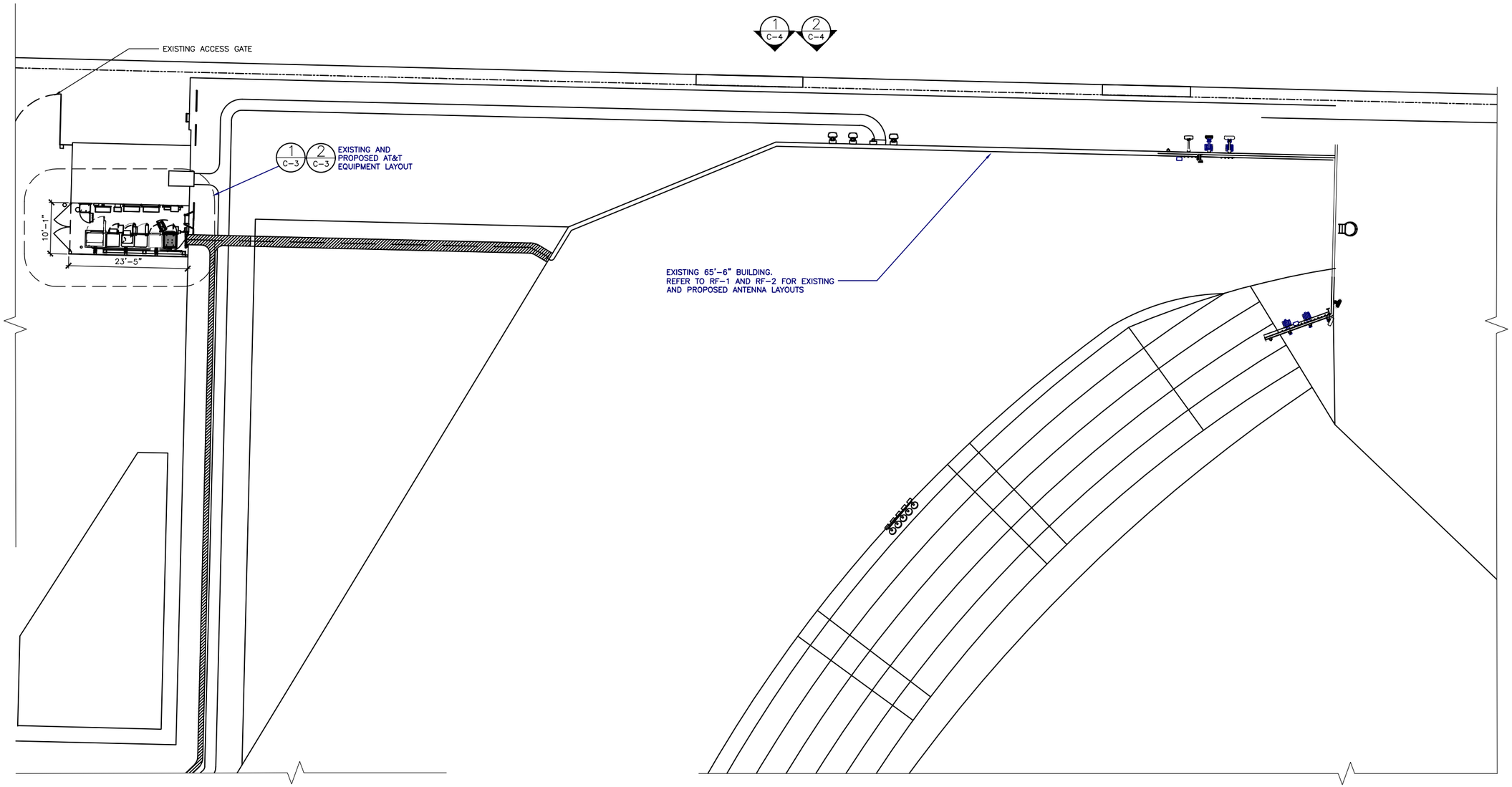

1 – ENLARGED SITE PLAN

3/32"=1'-0" (22x34) 3/64"=1'-0" (11x17)

0 3' 6' 12'

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SHEET TITLE

ENLARGED SITE PLAN

SHEET NUMBER

C-2

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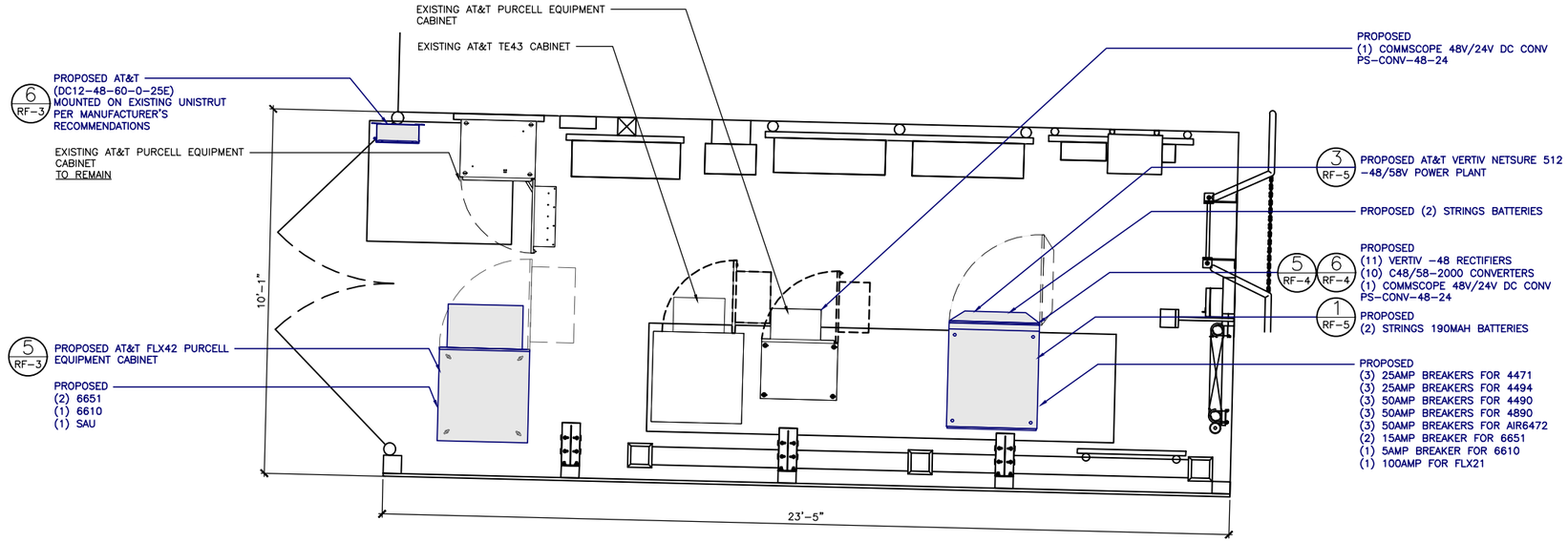


1 – PROPOSED EQUIPMENT LAYOUT

1/2"=1'-0" (22x34) 1/4"=1'-0" (11x17)

0 1' 2' 4'

NOTES:

1. EXISTING INFORMATION OBTAINED FROM DRAWINGS PREPARED BY TRYLON DATED 11/16/2022.
2. CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.

SCOPE OF WORK

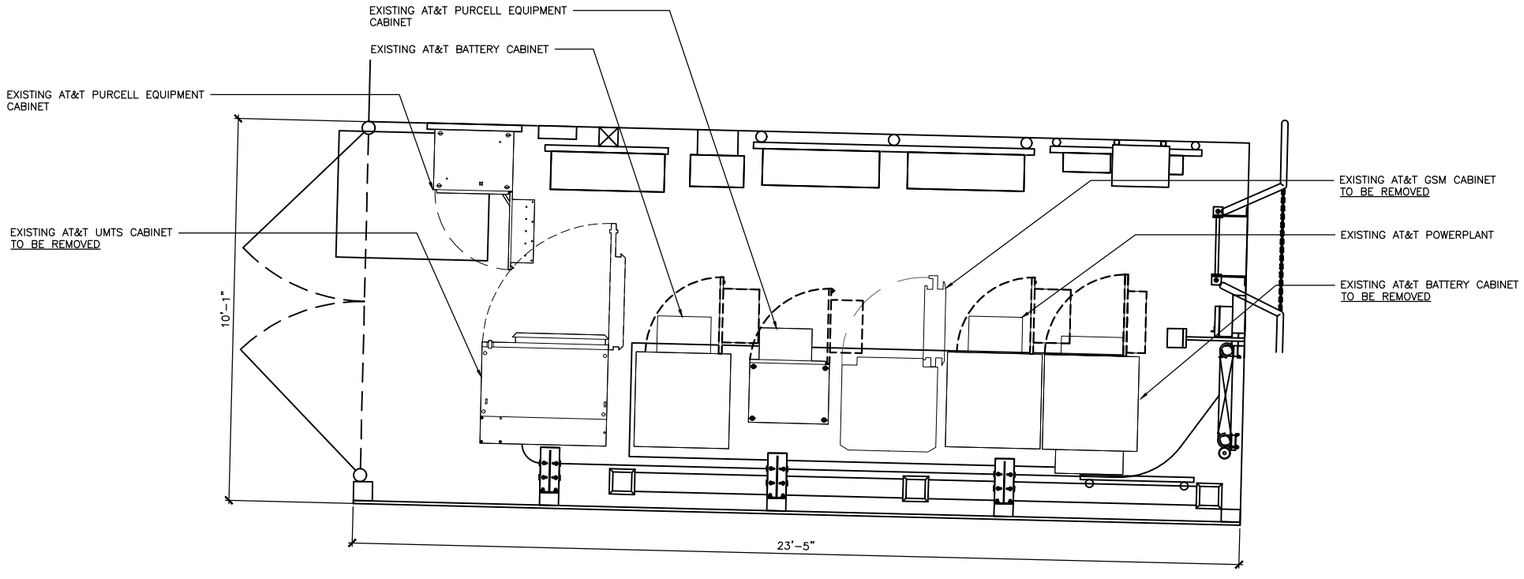
GROUND

- INSTALL (1) VERTIV NETSURE 512 -48/58V POWER PLANT
- INSTALL (11) VERTIV -48 RECTIFIERS TO NEW PDU
- INSTALL (10) C48/58-2000 CONVERTERS TO NEW PDU
- INSTALL (2) STRINGS 190MAH BATTERIES
- INSTALL (1) DC12-48-60-0-25E
- INSTALL (1) FLX42
- INSTALL (1) COMMSCOPE 48V/24V DC CONV PS-CONV-48-24
- INSTALL (3) 25AMP BREAKERS FOR 4471
- INSTALL (3) 25AMP BREAKERS FOR 4494
- INSTALL (3) 50AMP BREAKERS FOR 4490
- INSTALL (3) 50AMP BREAKERS FOR 4890
- INSTALL (3) 50AMP BREAKERS FOR AIR6472
- INSTALL (2) 15AMP BREAKER FOR 6651
- INSTALL (1) 5AMP BREAKER FOR 6610
- INSTALL (2) 100AMP FOR FLX42

OEM

- INSTALL (2) 6651 TO NEW FLX42
- INSTALL (1) 6610 TO NEW FLX42
- INSTALL (1) SAU TO NEW FLX42

TRUE NORTH ARROW SHOWN ON THIS DRAWING IS APPROXIMATE ONLY AND MUST BE VERIFIED



2 – EXISTING EQUIPMENT LAYOUT

1/2"=1'-0" (22x34) 1/4"=1'-0" (11x17)

0 1' 2' 4'

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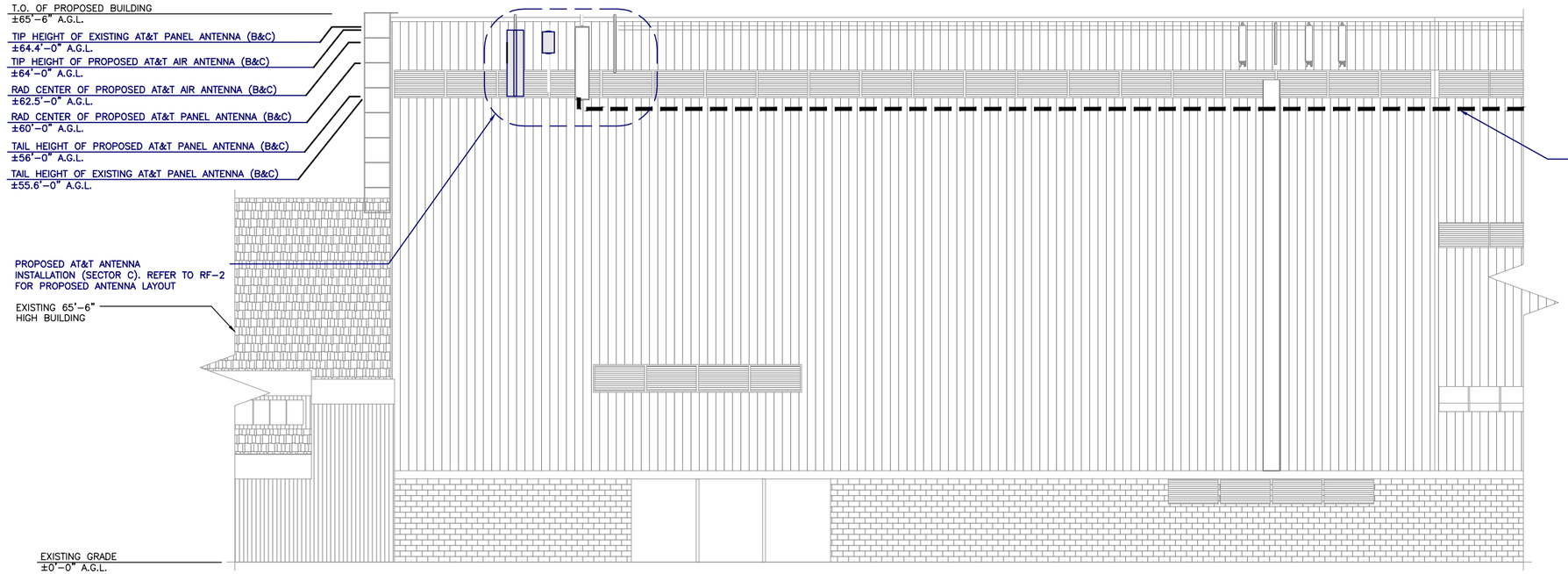
FA #: 10102328

SHEET TITLE

EXISTING & PROPOSED EQUIPMENT LAYOUTS

SHEET NUMBER

C-3



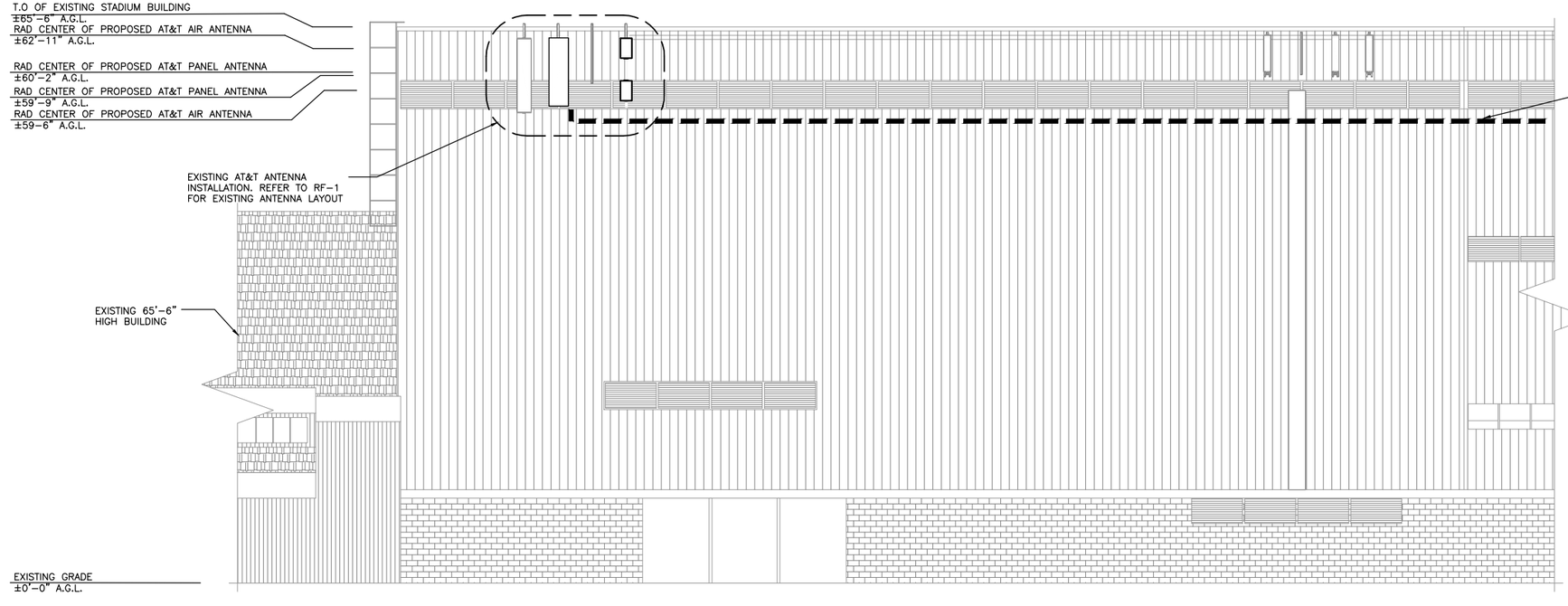
2 PROPOSED NORTH ELEVATION

1/8"=1'-0" (22x34) 1/16"=1'-0" (11x17)

0 4' 8' 16'

NOTES:

1. ELEVATION IS DIAGRAMMATIC ONLY.
2. PAINT ALL ANTENNAS, CABLE TRAY AND VISIBLE ANTENNA CABLES TO MATCH EXISTING BUILDING.



1 EXISTING NORTH ELEVATION

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City of Puyallup
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SHEET TITLE

EXISTING & PROPOSED ELEVATIONS

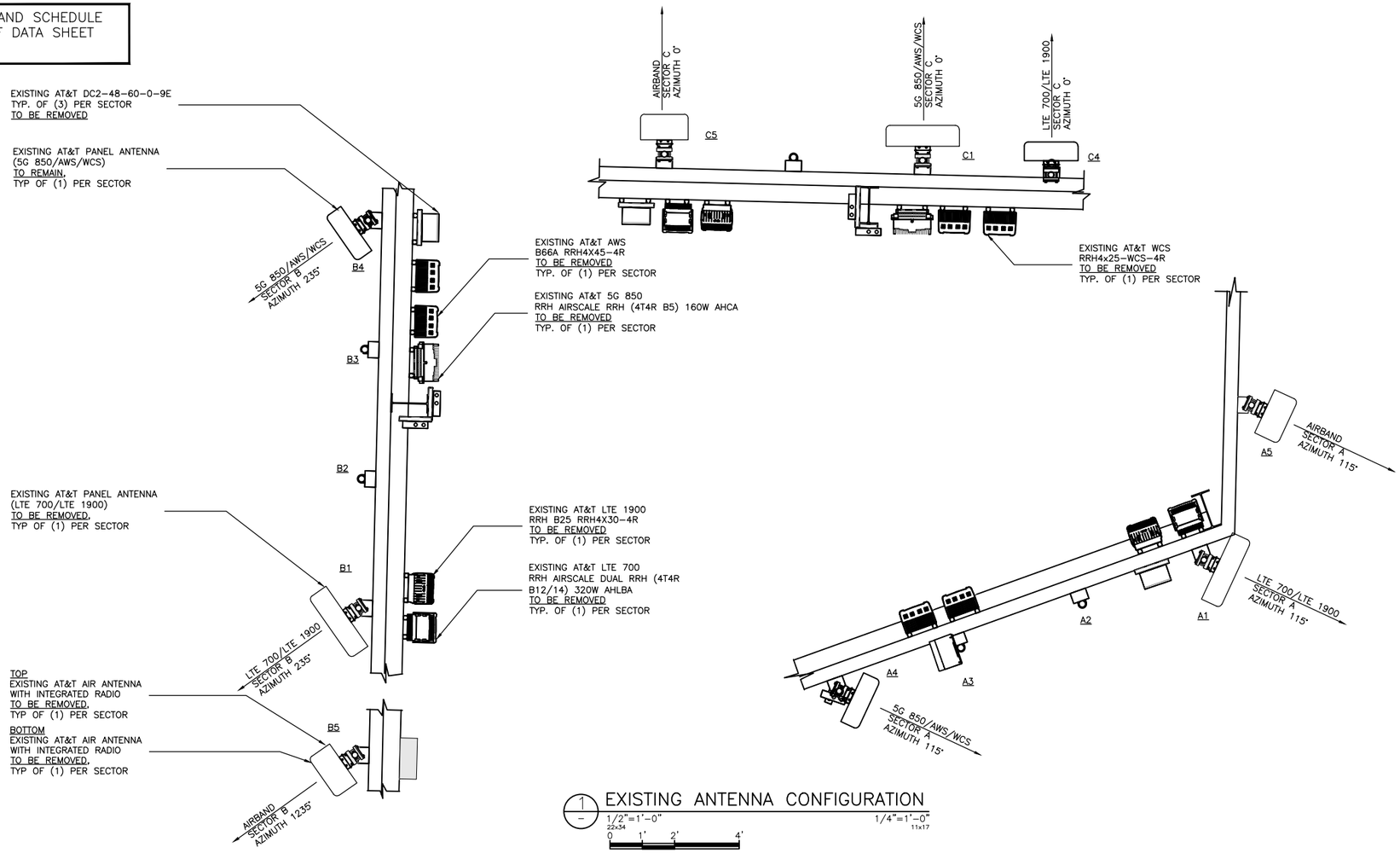
SHEET NUMBER

C-4

EXISTING ANTENNA CONFIGURATION AND SCHEDULE

POSITION	SECTOR A	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH COUNT	RRH MODEL NO.	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED	SQUID
A1	LTE 1900	115°	60'-1"	1	ROSENBERGER	CMA-UBTULB ULBHH-6517-1 7-21-21	0°	0°	NO	0	1	B25 RRH4X30-4R	–	–	120'-0"	NO	EXISTING (8) DC2-48-60-0-9E (3) FC12-PC6-10E (2) FIBER TRUNK 18P (4) DC TRUNKS 8AWG TO BE REMOVED
	LTE 700						0°	0°			1	AIRSCALE DUAL RRH 4T4R B12/14320W AHLBA					
A4	5G 850	115°	59'-9"	1	KATHREIN	80010992	0°	0°	NO	0	1	AIRSCALE RRH 4T4R B5 160W AHCA	–	–	120'-0"	NO	
	AWS						0°	0°			1	B66A RRH4X45-4R					
	WCS						0°	0°			1	RRH4X25-WCS-4R					
A5	AIRBAND	115°	62'-11"	1	NOKIA	AEQK+AEQU STACKED	0°	0°	NO	0	1	AIRSCALE MAA 64T64R 192AE N77	–	–	120'-0"	NO	
	AIRBAND		59'-6"				0°	0°	NO	0	1	AIRSCALE MAA 64T64R 192AE N77 200W	–	–		NO	
POSITION	SECTOR B	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH COUNT	RRH MODEL NO.	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED	
B1	LTE 1900	235°	60'-1"	1	ROSENBERGER	CMA-UBTULB ULBHH-6517-1 7-21-21	0°	0°	NO	0	1	B25 RRH4X30-4R	–	–	120'-0"	NO	
	LTE 700						0°	0°			1	AIRSCALE DUAL RRH 4T4R B12/14320W AHLBA					
B4	5G 850	235°	59'-9"	1	KATHREIN	80010992	0°	0°	NO	0	1	AIRSCALE RRH 4T4R B5 160W AHCA	–	–	120'-0"	NO	
	AWS						0°	0°			1	B66A RRH4X45-4R					
	WCS						0°	0°			1	RRH4X25-WCS-4R					
B5	AIRBAND	235°	62'-11"	1	NOKIA	AEQK+AEQU STACKED	0°	0°	NO	0	1	AIRSCALE MAA 64T64R 192AE N77	–	–	120'-0"	NO	
	AIRBAND		59'-6"				0°	0°	NO	0	1	AIRSCALE MAA 64T64R 192AE N77 200W	–	–		NO	
POSITION	SECTOR C	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH COUNT	RRH MODEL NO.	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED	
C1	LTE 1900	0°	60'-1"	1	ROSENBERGER	CMA-UBTULB ULBHH-6517-1 7-21-21	0°	0°	NO	0	1	B25 RRH4X30-4R	–	–	120'-0"	NO	
	LTE 700						0°	0°			1	AIRSCALE DUAL RRH 4T4R B12/14320W AHLBA					
C4	5G 850	0°	59'-9"	1	KATHREIN	80010992	0°	0°	NO	0	1	AIRSCALE RRH 4T4R B5 160W AHCA			120'-0"		
	AWS						0°	0°			1	B66A RRH4X45-4R	–	–		NO	
	WCS						0°	0°			1	RRH4x25-WCS-4R					
C5	AIRBAND	0°	62'-11"	1	NOKIA	AEQK+AEQU STACKED	0°	0°	NO	0	1	AIRSCALE MAA 64T64R 192AE N77	–	–	120'-0"	NO	
	AIRBAND		59'-6"				0°	0°	NO	0	1	AIRSCALE MAA 64T64R 192AE N77 200W	–	–		NO	

EXISTING ANTENNA CONFIGURATION AND SCHEDULE DATA WAS OBTAINED FROM AT&T RF DATA SHEET (TBD) VERSION: 1.0 REV: V1.0



1 – EXISTING ANTENNA CONFIGURATION

1/2"=1'-0" (22x34) 1/4"=1'-0" (11x17)

0 1' 2' 4'

N

TRUE NORTH ARROW SHOWN ON THIS DRAWING IS APPROXIMATE ONLY AND MUST BE VERIFIED

NOTES:

1. EXISTING INFORMATION OBTAINED FROM DRAWINGS PREPARED BY TRYLON DATED 11/16/2022.
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REDMOND, WA 98052

MasTec Network Solutions
5814 S 196TH ST
KENT, WA 98032

CORE ONE CONSULTING USA
13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

PROJECT NO: ----

DRAWN BY: ECC

CHECKED BY: D.C.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
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1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
A	MAY 28/24	ISSUED FOR REVIEW	ECC

A&E SEAL

PRCTI20241635

SITE

DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE

EXISTING ANTENNA CONFIGURATION

SHEET NUMBER

RF-1

PROPOSED ANTENNA CONFIGURATION AND SCHEDULE

POSITION	SECTOR A	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH COUNT	RRH MODEL NO.	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED	SQUID
A1	AIR BAND	115°	62.5'–0	1	ERICSSON	AIR6472 B77G B77M	0°	0°	NO	0	–	INTEGRATED RADIO	–	–	–	NO	PROPOSED (3) DC9–48–60–24–PC16–EV (3) FIBER TRUNK 24P (6) DC TRUNKS 6AWG
							0°	0°									
A2	LTE 1900	115°	56.5'–0"	1	CELLMAX	120716	0°	0°	NO	0	1	4890 B25/B66	–	–	120'–0"	NO	
	5G 850	115°					0°	0°	NO	0	1	4494 B14/B29	–	–	120'–0"	NO	
A3	LTE 700	115°	60'–0"	1	KATHREIN	80010992	0°	0°	NO	0	1	4471 B30	–	–	120'–0"	NO	
	5G 850						0°	0°			1	4490 B5/B12A					
POSITION	SECTOR B	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH COUNT	RRH MODEL NO.	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED	
B1	AIR BAND	235°	62.5'–0	1	ERICSSON	AIR6472 B77G B77M	0°	0°	NO	0	–	INTEGRATED RADIO	–	–	–	NO	
							0°	0°									
B2	LTE 1900	235°	60'–0"	1	CELLMAX	120726	0°	0°	NO	0	1	4890 B25/B66	–	–	120'–0"	NO	
	5G 850	235°					0°	0°	NO	0	1	4494 B14/B29	–	–	120'–0"	NO	
B3	LTE 700	235°	60'–0"	1	KATHREIN	80010992	0°	0°	NO	0	1	4471 B30	–	–	120'–0"	NO	
	5G 850						0°	0°			1	4490 B5/B12A					
POSITION	SECTOR C	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH COUNT	RRH MODEL NO.	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED	
C1	LTE 700	0°	60'–0"	1	KATHREIN	80010992	0°	0°	NO	0	1	4471 B30	–	–	120'–0"	NO	
	5G 850						0°	0°			1	4490 B5/B12A					
C2	AIR BAND	0°	62.5'–0	1	ERICSSON	AIR6472 B77G B77M	0°	0°	NO	0	–	INTEGRATED RADIO	–	–	–	NO	
		0°					0°	0°	NO	0			–	–	–	NO	
C3	LTE 1900	0°	60'–0"	1	CELLMAX	120726	0°	0°	NO	0	1	4890 B25/B66	–	–	120'–0"	NO	
	5G 850						0°	0°			1	4494 B14/B29					

PROPOSED ANTENNA CONFIGURATION AND SCHEDULE DATA WAS OBTAINED FROM AT&T RF DATA SHEET (TBD) VERSION: 1.0 REV: V1.0

TRUE NORTH ARROW SHOWN ON THIS DRAWING IS APPROXIMATE ONLY AND MUST BE VERIFIED

NOTES:

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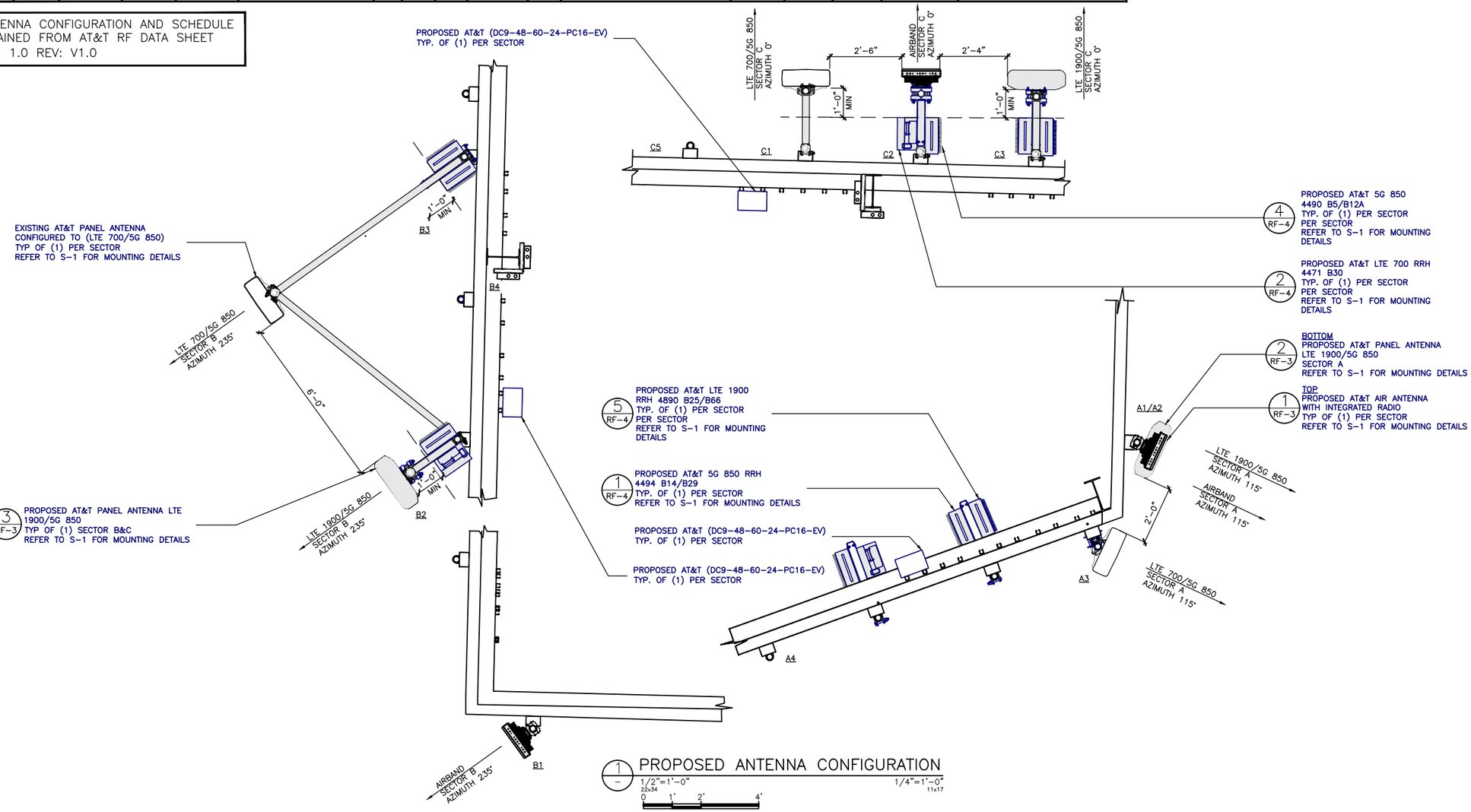

1 – PROPOSED ANTENNA CONFIGURATION

1/2"=1'–0" (22x34) 0 1' 2' 4'

1/4"=1'–0" (11x17)

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A&E SEAL

PRCTI20241635

SITE

DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

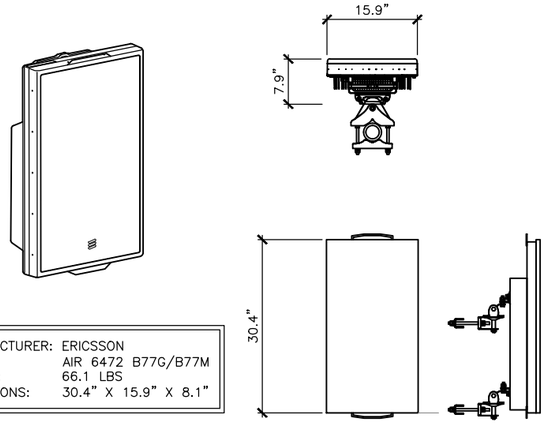
FA #: 10102328

SHEET TITLE

PROPOSED ANTENNA CONFIGURATION

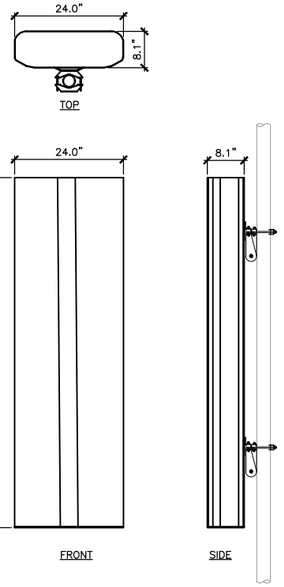
SHEET NUMBER

RF-2



MANUFACTURER:	ERICSSON
MODEL:	AIR 6472 B77G/B77M
WEIGHT:	66.1 LBS
DIMENSIONS:	30.4" X 15.9" X 8.1"

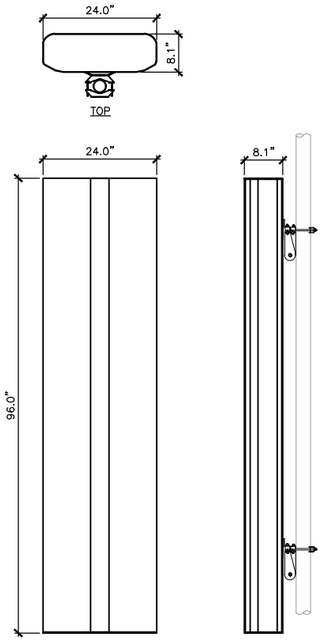
1 – ANTENNA DETAIL
N.T.S.



MANUFACTURER:	CELLMAX
MODEL:	120716
WEIGHT:	143 LBS
DIMENSIONS:	77" X 24.0" X 8.1"

***ASSUMED ANTENNA SKETCH ONLY WILL UPDATE WHEN INFORMATION IS RECEIVED

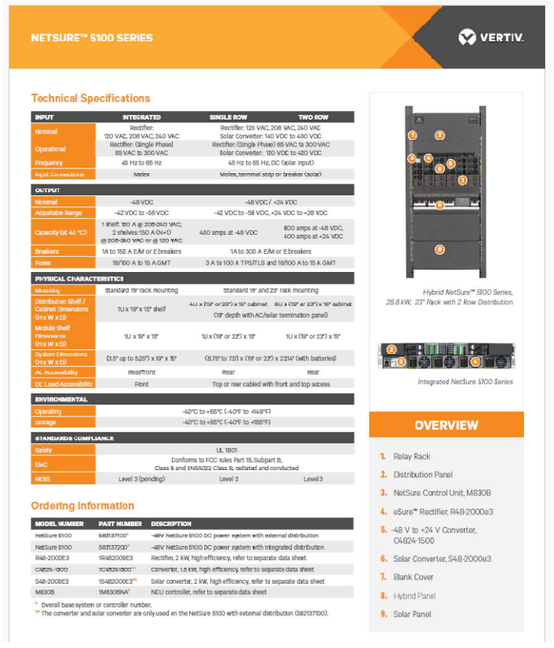
2 – ANTENNA DETAIL
N.T.S.



MANUFACTURER:	CELLMAX
MODEL:	120726
WEIGHT:	160 LBS
DIMENSIONS:	96.0" X 24.0" X 8.1"

***ASSUMED ANTENNA SKETCH ONLY WILL UPDATE WHEN INFORMATION IS RECEIVED

3 – ANTENNA DETAIL
N.T.S.

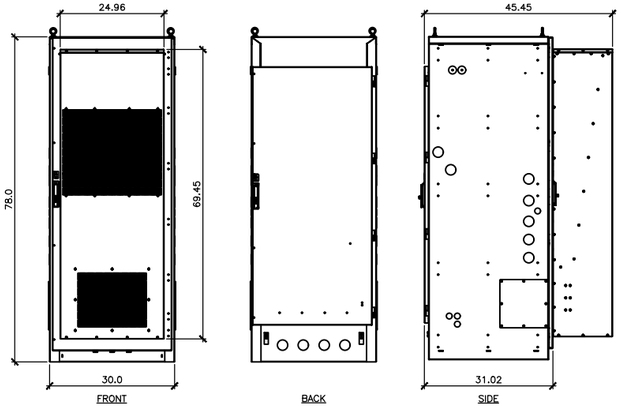


INPUT	INTEGRATED	SINGLE ROW	TWO ROW
Nominal Operational	Rectifier: 120 VAC, 208 VAC, 240 VAC Rectifier: (Single Phase) 85 VAC to 300 VAC	Rectifier: 120 VAC, 208 VAC, 240 VAC Solar Converter: 140 VDC to 400 VDC Rectifier: (Single Phase) 85 VAC to 300 VAC Solar Converter: 120 VDC to 420 VDC	
Frequency	45 Hz to 65 Hz	45 Hz to 65 Hz, DC (Solar Input)	
Input Connections	Molex	Molex, terminal strip or breakers (solar)	
OUTPUT			
Nominal	-48 VDC	-48 VDC / +24 VDC	
Adjustable Range	-42 VDC to -58 VDC	-42 VDC to -58 VDC, +24 VDC to +28 VDC	
Capacity (at 40 °C)	1 shelf: 150 A @ 208-240 VAC; 2 shelves: 150 A (N+1) @ 208-240 VAC or @ 120 VAC	400 amps at -48 VDC	800 amps at -48 VDC, 400 amps at +24 VDC
Breakers	1A to 150 A E/M or E breakers	1A to 300 A E/M or E breakers	
Fuses	1B/100 A to 15 A GMT	3 A to 100 A TPS/TLS and 1B/100 A to 15 A GMT	
PHYSICAL CHARACTERISTICS			
Mounting	Standard 19" rack mounting	Standard 19" and 23" rack mounting	
Distribution Shelf / Cabinet Dimensions (H x W x D)	1U x 19" x 15" shelf	44U x 24" or 23"W x 18" cabinet (19" depth with AC/solar termination panel)	86U x 24" or 23"W x 18" cabinet
Module Shelf Dimensions (H x W x D)	1U x 19" x 13"	1U x (19" or 23") x 13"	1U x (19" or 23") x 15"
System Dimensions (H x W x D)	(3.5" up to 5.25") x 19" x 15"	(5.75" to 7.51") x (19" or 23") x 23.14" (with batteries)	
AC Accessibility	Rear/front	Rear	Rear
DC Load Accessibility	Front	Top or rear cabled with front and top access	
ENVIRONMENTAL			
Operating	-40°C to +65°C (-40°F to +149°F)		
Storage	-40°C to +85°C (-40°F to +185°F)		
STANDARDS COMPLIANCE			
Safety	UL 1801		
EMC	Conforms to FCC rules Part 15, Subpart B, Class B and EN55022 Class B, radiated and conducted		
NEBS	Level 3 (pending)	Level 3	Level 3

MODEL NUMBER	PART NUMBER	DESCRIPTION
NetSure 5100	582137100*	-48V NetSure 5100 DC power system with external distribution
NetSure 5100	582137200*	-48V NetSure 5100 DC power system with integrated distribution
R48-2000E3	1948200003	Rectifier, 2 kW, high efficiency, refer to separate data sheet
C4824-1500	1048241500**	Converter, 1.5 kW, high efficiency, refer to separate data sheet
S48-2000E3	1548200003**	Solar converter, 2 kW, high efficiency, refer to separate data sheet
M830B	1M830BNA*	NCU controller, refer to separate data sheet

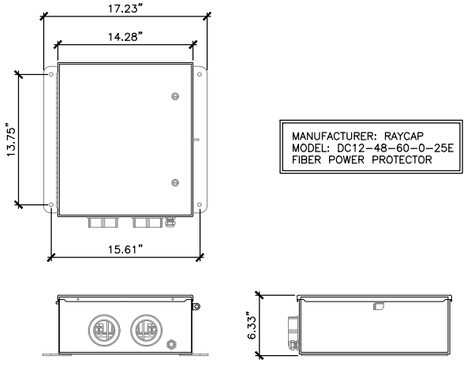
* Overall base system or controller number.
** The converter and solar converter are only used on the NetSure 5100 with external distribution (582137100).

4 – VERTIV NETSURE 5100 POWER SYSTEM
N.T.S.



MANUFACTURER:	PURCELL SYSTEMS
MODEL:	FLEXSURE FLX42-3031
WEIGHT:	440 LBS
DIMENSIONS:	78" X 30" X 31"

5 – FLX42 DETAILS
N.T.S.



MANUFACTURER: RAYCAP
MODEL: DC12-48-60-0-25E
FIBER POWER PROTECTOR

6 – DC12 DETAIL
N.T.S.

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Network Solutions
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CORE ONE
CONSULTING USA
13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

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AGE SEAL

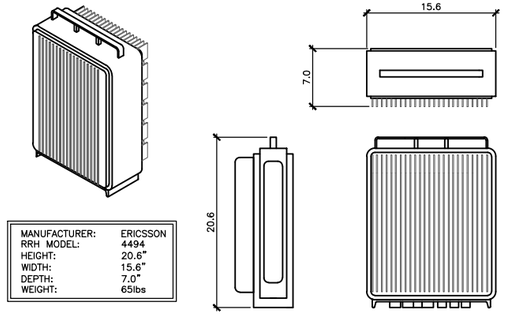
PRCTI20241635

SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

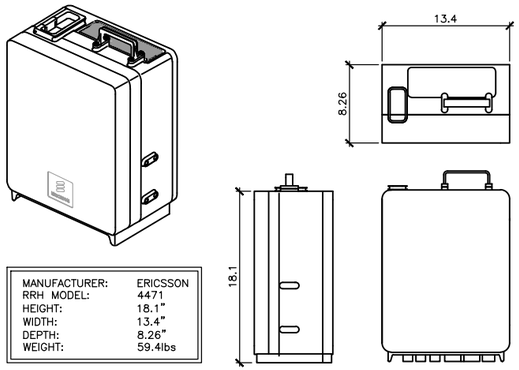
SHEET TITLE
RF & EQUIPMENT DETAILS I

SHEET NUMBER
RF-3



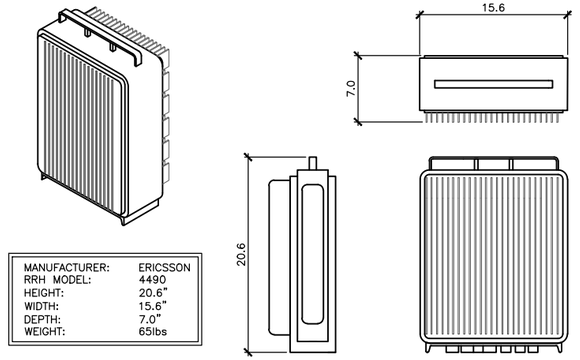
MANUFACTURER:	ERICSSON
RRH MODEL:	4494
HEIGHT:	20.6"
WIDTH:	15.6"
DEPTH:	7.0"
WEIGHT:	65lbs

1 RRH DETAIL
N.T.S.



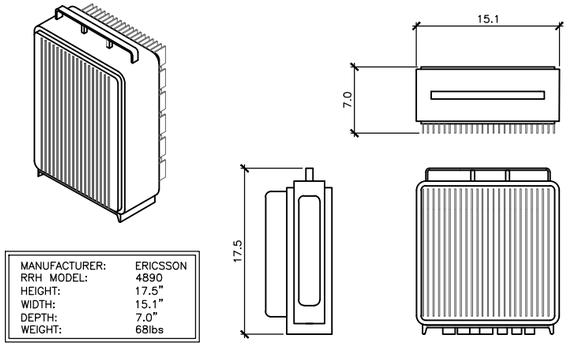
MANUFACTURER:	ERICSSON
RRH MODEL:	4471
HEIGHT:	18.1"
WIDTH:	13.4"
DEPTH:	8.26"
WEIGHT:	59.4lbs

2 RRH DETAIL
N.T.S.



MANUFACTURER:	ERICSSON
RRH MODEL:	4490
HEIGHT:	20.6"
WIDTH:	15.6"
DEPTH:	7.0"
WEIGHT:	65lbs

3 RRH DETAIL
N.T.S.



MANUFACTURER:	ERICSSON
RRH MODEL:	4890
HEIGHT:	17.5"
WIDTH:	15.1"
DEPTH:	7.0"
WEIGHT:	68lbs

4 RRH DETAIL
N.T.S.

Vertiv™ eSure™ Rectifier
R48-2000e3

VERTIV.

Benefits

- Optimize the amount of energy delivered and reduce power consumption with over 96% efficiency.
- Increase space for revenue generating equipment with modules that pack more power in a small space with high power density.
- Facilitate easy maintenance, expansion and system changes with hot swappable capabilities.
- Enjoy increased reliability and active load sharing with Digital Signal Processing (DSP) which translates into fewer components and optimized operation.
- Appreciate the flexibility to utilize in a variety of applications with a wide input voltage range of 85 VAC to 300 VAC and full power output at temperatures from -40°C to +65°C.

In addition to reducing power consumption and lowering operating cost, eSure™ high-efficiency rectifiers offer superior performance and uncompromised reliability.

Description

The 2000 watt high-efficiency eSure rectifier (model R48-2000e3) converts standard AC supply voltages into stable nominal -48 VDC voltage that is adjustable to application needs. This constant power rectifier designed with the latest patented switch-mode technology, uses DSP (Digital Signal Processing) for efficient operation.

The R48-2000e3 can be connected in parallel with other rectifiers and converters to support a variety of telecom applications. Unified remote management and control of the power system is enabled when combined with a Vertiv™ controller.

R48-2000e3 Efficiency Curve at 250 VAC Nominal

5 RECTIFIER DETAIL
N.T.S.

Vertiv™ eSure™ Converter
C48/58 -2000P3

VERTIV.

Key Benefits

Converter, 48 to 58 VDC, 2000 W Peak / 1600 W Average

- Reduce power consumption and lower operating costs with 96% peak efficiency.
- Easily add capacity with hot pluggable interchangeable components.
- Ensure high availability with wide input voltage range from 41 VDC to 58 VDC.
- Power your 5G sites in the harsh environments with operation from -40°C to +65°C.
- Enjoy peace of mind with high quality UL recognized design.

Easily support higher power 5G remote radios on cell towers with modular 2000 watt eSure™ power extend converters.

Description

The Vertiv™ eSure™ C48/58-2000P3 high-efficiency converter is designed to operate from a nominal -48 VDC source to provide nominal -58 VDC load power, which is adjustable to application needs up to 2000 watts peak, 1600 watts average. This constant power converter designed with the latest patented switchmode technology, uses digital signal processing (DSP) for efficient operation.

The eSure C48/58-2000P3 DC to DC converter is ideal for feeding high power remote radio heads (RRHs). 58 VDC is regulated over a wide input range to minimize voltage drop in the cable feeding the RRH and sustain operation to end of battery discharge. When redundancy is critical or loads are high, multiple eSure C48/58-2000P3 converters can be connected in parallel to support a variety of telecom applications. Unified remote management and control of the power system is enabled when combined with a Vertiv™ NetSure™ controller.

C48/58-2000P3 Efficiency Curve at 53.5 VDC Nominal Input

6 CONVERTER DETAIL
N.T.S.

AT&T MOBILITY
RTC BUILDING 3
18221 NE 72nd WAY
REDMOND, WA 98052

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AGE SEAL

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FA #: 10102328

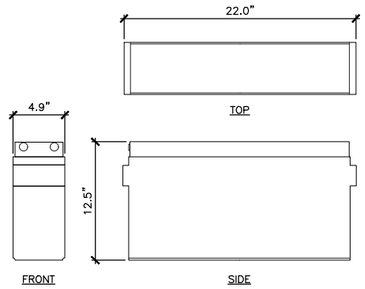
SHEET TITLE

RF & EQUIPMENT DETAILS II

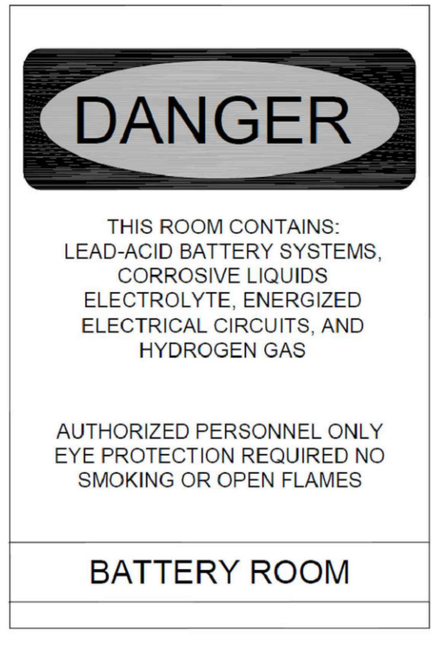
SHEET NUMBER

RF-4

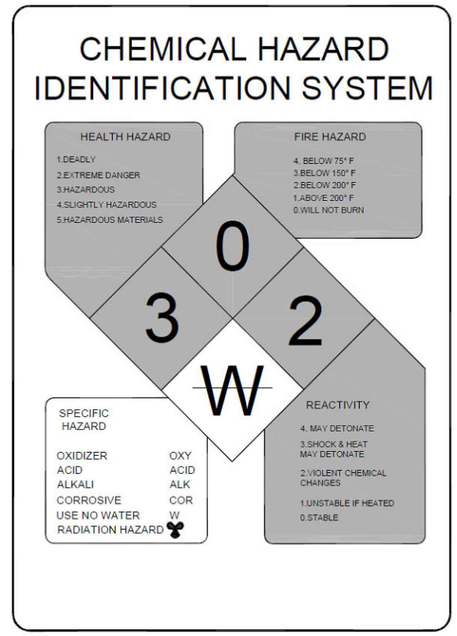
MANUFACTURER: MARATHON
MODEL: M12V180FT 12V 190AH BATTERY
HEIGHT: 12.5"
WIDTH: 4.90"
DEPTH: 22.0"
WEIGHT: 133.0 LBS



1 BATTERY DETAIL
N.T.S.



2 BATTERY DANGER SIGNAGE
N.T.S.



3 BATTERY HAZMAT SIGNAGE
N.T.S.

BATTERY CONSUMPTION CALCULATION:

EXISTING DC POWER PLANT WITH (8) BATTERIES (2.28 kWh)	18.24 kWh
TOTAL CONSUMPTION	18.24 kWh

NOT APPLICABLE IF LESS THAN 70 kWh

BATTERY STORAGE SYS. THRESHOLD QUANTITIES

BATTERY TECHNOLOGY	CAPACITY
FLOW BATTERIES**	20kWh
LEAD ACID, ALL TYPES	70kWh
LITHIUM, ALL TYPES	20kWh
NICKEL CADMIUM (Ni–Cd)	70kWh
SODIUM, ALL TYPES	20kWh***
OTHER BATTERY TECHNOLOGIES	10kWh

* FOR BATTERIES RATED IN AMP–HOURS, kWh SHALL BE EQUAL RATED VOLTAGE TIMES AMP–HOUR RATING DIVIDE BY 1000.
** SHALL INCLUDE VANADIUM, ZINC–BROMINE, POLYSULFIDE–BROMIDE AND OTHER FLOWING ELECTROLYTE–TYPE TECHNOLOGIES.
*** 70kWh FOR SODIUM–ION TECHNOLOGIES

2021 SFC, SECTION 1206.2

MAXIMUM ALLOWABLE BATTERY QUANTITIES:

BATTERY TECHNOLOGY	MAX. ALLOWABLE QUANTITIES	GROUP H OCCUPANCY
FLOW BATTERIES**	600kWh	GROUP H 2
LEAD ACID, ALL TYPES	UNLIMITED	N/A
LITHIUM, ALL TYPES	600kWh	GROUP H–2
NICKEL CADMIUM (Ni–Cd)	UNLIMITED	N/A
SODIUM, ALL TYPES	600kWh	GROUP H–2
OTHER BATTERY TECHNOLOGIES	200kWh	GROUP H–2***

* FOR BATTERIES RATED IN AMP–HOURS, kWh SHALL BE EQUAL RATED VOLTAGE TIMES AMP–HOUR RATING DIVIDE BY 1000.
** SHALL INCLUDE VANADIUM, ZINC–BROMINE, POLYSULFIDE–BROMIDE AND OTHER FLOWING ELECTROLYTE–TYPE TECHNOLOGIES.
*** 70kWh FOR SODIUM–ION TECHNOLOGIES

2021 SFC, SECTION 1206.2.9

4 BATTERY CALCULATIONS
N.T.S.

at&t
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RTC BUILDING 3
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MasTec
Network Solutions
5814 S 196TH ST
KENT, WA 98032

CORE ONE
CONSULTING USA
13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

PROJECT NO: ----
DRAWN BY: ECC
CHECKED BY: D.C.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
A	MAY 28/24	ISSUED FOR REVIEW	ECC

AGE SEAL

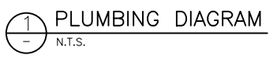
PRCTI20241635

SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE
MARATHON BATTERY INFO AND DETAIL

SHEET NUMBER
RF-5



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RTC BUILDING 3
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MasTec
Network Solutions
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A	MAY 28/24	ISSUED FOR REVIEW	ECC

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SITE

DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

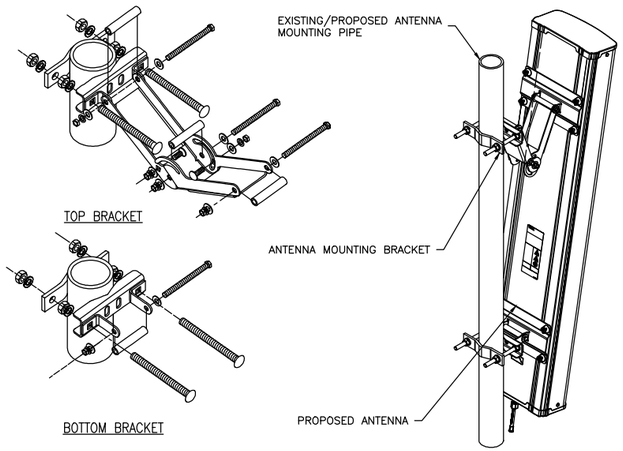
FA #: 10102328

SHEET TITLE

PLUMBING DETAIL

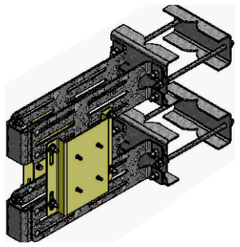
SHEET NUMBER

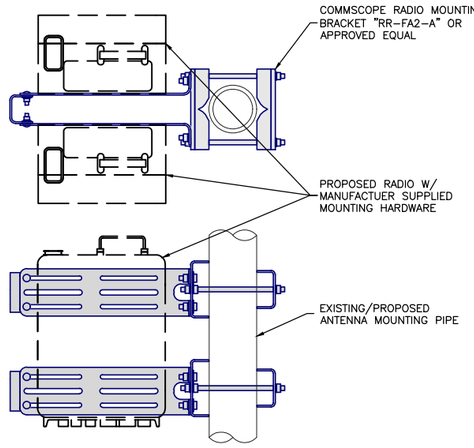
RF-6



1 — TYPICAL ANTENNA MOUNTING DETAIL
N.T.S.

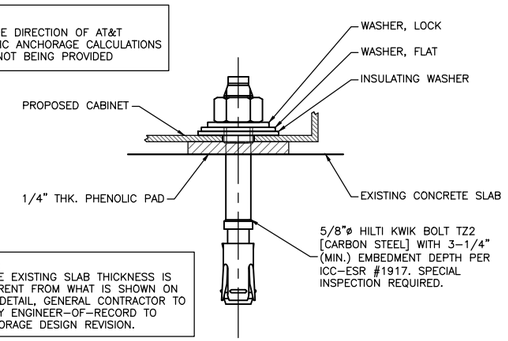
MANUFACTURER:	COMMSCOPE
MODEL:	RR-FA2-A
HEIGHT:	16.4"
LENGTH:	18"
WEIGHT:	39.2 lbs





2 — RADIO MOUNTING DETAIL
N.T.S.

NOTE:
AT THE DIRECTION OF AT&T SEISMIC ANCHORAGE CALCULATIONS ARE NOT BEING PROVIDED

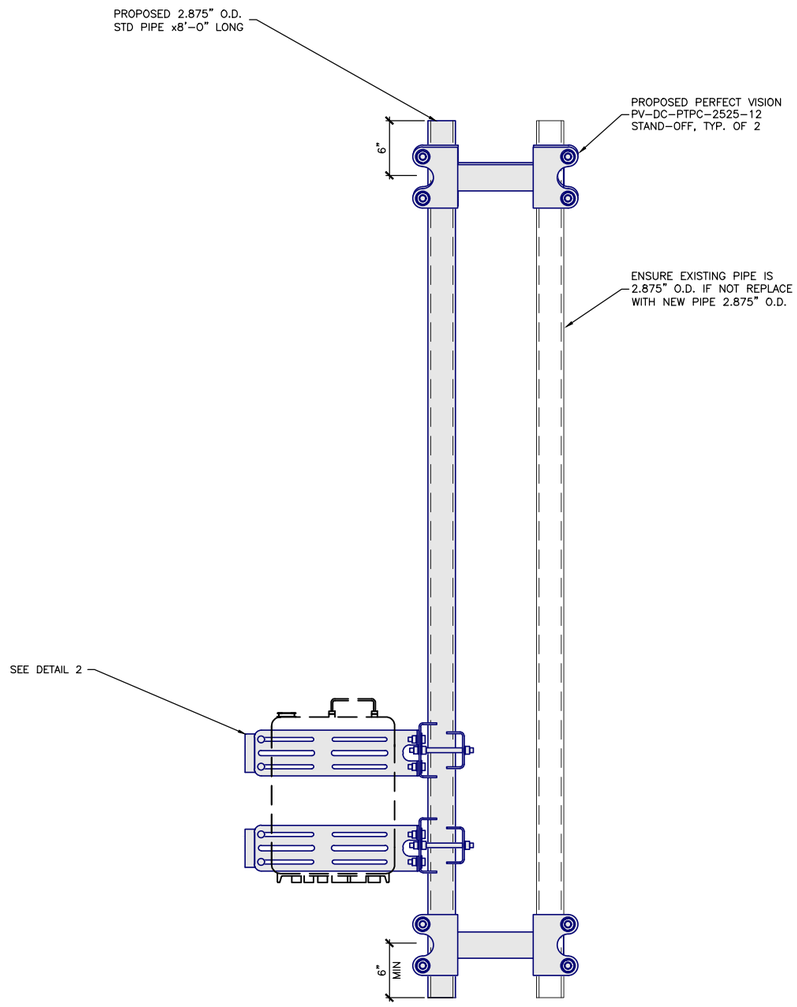


NOTE:
IF THE EXISTING SLAB THICKNESS IS DIFFERENT FROM WHAT IS SHOWN ON THIS DETAIL, GENERAL CONTRACTOR TO NOTIFY ENGINEER-OF-RECORD TO ANCHORAGE DESIGN REVISION.

3 — CABINET ANCHOR DETAIL
N.T.S.

NOTES:

1. REFER TO GN-1 FOR SPECIFICATIONS
2. CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.



4 — PIPE TO PIPE CLAMP DETAIL
N.T.S.

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A&E SEAL

PRCTI20241635

SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE
CONSTRUCTION DETAILS I

SHEET NUMBER
S-1

GENERAL NOTES:

1. EXAMINE THE SITE CONDITIONS VERY CAREFULLY AND THE SCOPE OF PROPOSED WORK TOGETHER WITH THE WORK OF ALL OTHER TRADES AND INCLUDE IN THE BID PRICE ALL COSTS FOR WORK SUCH AS EQUIPMENT AND WIRING MADE NECESSARY TO ACCOMMODATE THE ELECTRICAL SYSTEMS SHOWN AND SYSTEMS OF OTHER TRADES.
2. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT
3. PERFORM DETAILED VERIFICATION OF WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND COMMENCING CONSTRUCTION. ISSUE A WRITTEN NOTICE TO THE CONSULTANT OF ANY DISCREPANCIES.
4. OBTAIN ALL PERMITS, PAY ASSOCIATED FEES AND SCHEDULE INSPECTION.
5. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INSURANCE, AND SERVICES TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PRESENT IT AS FULLY OPERATIONAL TO THE SATISFACTION OF THE OWNER.
6. CARRY OUT WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
7. PRIOR TO BEGINNING WORK COORDINATE ALL POWER AND TELCO WORK WITH THE LOCAL UTILITY COMPANY AS IT MAY APPLY TO THIS SITE. ALL WORK TO COMPLY WITH THE RULES AND REGULATIONS OF THE UTILITIES INVOLVED.
8. FABRICATION AND INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM SHALL BE DONE IN A FIRST CLASS WORKMANSHIP PER NECA STANDARD 1–2000 BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH WORK AND SHALL SCHEDULE THE WORK IN AN ORDERLY MANNER SO AS NOT TO IMPEDE PROGRESS OF THE PROJECT.
9. DURING PROGRESS OF THE WORK, MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF THE ELECTRICAL SYSTEMS, LOCATING EACH CIRCUIT PRECISELY AND DIMENSIONING EQUIPMENT, CONDUIT AND CABLE LOCATIONS. UPON COMPLETION OF THE INSTALLATION, TRANSFER ALL RECORD DATA TO BLACK LINE PRINTS OF THE ORIGINAL DRAWINGS AND SUBMIT THESE DRAWINGS AS RECORD DRAWINGS TO THE CONSULTANT.
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
11. GENERAL CONTRACTOR IS RESPONSIBLE FOR REQUESTING CONNECTION OF COMMERCIAL POWER FROM THE POWER COMPANY. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR.
12. COORDINATE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING WITH LOCAL TELEPHONE COMPANY. APPLY FOR TELEPHONE SERVICE IMMEDIATELY UPON AWARD OF CONTRACT.

BASIC MATERIALS AND METHODS:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE EDITION OF THE NEC ACCEPTED BY THE LOCAL JURISDICTION AND TO THE APPLICABLE LOCAL CODES AND REGULATIONS.
2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW. MATERIALS AND EQUIPMENT SHALL BE THE STANDARD PRODUCTS OF MANUFACTURER'S CURRENT DESIGN. ANY FIRST–CLASS PRODUCT MADE BY A REPUTABLE MANUFACTURER MAY BE USED PROVIDING IT CONFORMS TO THE CONTRACT REQUIREMENTS AND MEETS THE APPROVAL OF THE CONSULTANT AND THE OWNER.
3. ARRANGE CONDUIT, WIRING, EQUIPMENT, AND OTHER WORK GENERALLY AS SHOWN, PROVIDING PROPER CLEARANCES AND ACCESS. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS AND FIT THE WORK IN EACH LOCATION WITHOUT SUBSTANTIAL ALTERATION. WHERE DEPARTURES ARE PROPOSED BECAUSE OF FIELD CONDITIONS OR OTHER CAUSES, PREPARE AND SUBMIT DETAILED DRAWINGS FOR ACCEPTANCE.
4. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS, FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS.
5. MAINTAIN ALL CLEARANCES AS REQUIRED BY NEC.
6. SEAL AROUND CONDUITS AND AROUND CONDUCTORS WITHIN CONDUITS ENTERING THE MODULAR CABINETS WHERE PENETRATION OCCURS WITH A SILICONE SEALANT TO PREVENT MOISTURE PENETRATION INTO BUILDING.
7. SILICONE SEAL AROUND ALL BOLTS AND SCREWS USED TO SECURE EQUIPMENT TO EXTERIOR OF BUILDING.
8. MAKE NECESSARY CONNECTIONS FOR BATTERY IN EMERGENCY LIGHT FIXTURE. CONNECT EXTERIOR LIGHT FIXTURE (PROVIDED BY SHELTER MANUFACTURER) TO EXTERNAL JUNCTION BOX.

CONDUCTORS AND CONNECTORS:

1. UNLESS NOTED OTHERWISE, ALL CONDUCTORS SHALL BE COPPER, MINIMUM SIZE #12 AWG, WITH THERMOPLASTIC INSULATION CONFORMING TO NEMA WC5 OR CROSS–LINKED POLYETHYLENE INSULATION CONFORMING TO NEMA WC7. (TYPES THHN OR THWN). INSULATION SHALL BE RATED FOR 90 CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC.
2. ALL CONDUCTORS USED FOR GROUNDING SHALL BE COPPER AND SHALL HAVE GREEN INSULATION.
3. FOR COPPER CONDUCTORS #6 AWG AND SMALLER USE 3M SCOTCH–LOK OR T&B STA–KON COMPRESSION TYPE CONNECTORS WITH INTEGRAL OR SEPARATE INSULATION CAPS. FOR COPPER CONDUCTORS LARGER THAN #6 AWG USE SOLDERLESS, IDENT HEX SCREW OR BOLT TYPE PRESSURE CONNECTORS OR DOUBLE COMPRESSION C–CLAMP CONNECTORS, UNLESS SPECIFIED OTHERWISE ON DRAWINGS.
4. UNLESS NOTED OTHERWISE ALL LUGS SHALL BE TIN PLATED COPPER, TWO–HOLE, LONG BARREL, COMPRESSION TYPE.

RACEWAYS AND BOXES:

1. ALL CONDUIT SHALL BE UL LABELED.
2. ALL EMPTY CONDUITS INSTALLED FOR FUTURE USE SHALL HAVE A PULL CORD.
3. SHEET METAL BOXES SHALL CONFORM TO NEMA OS1; CAST–METAL BOXES SHALL CONFORM TO NEMA 81 AND SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS NOTED OTHERWISE.

GROUNDING:

1. ALL SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REVISION NEC.
2. GROUND LUGS ARE SPECIFIED UNDER SECTION 3 "CONDUCTORS AND CONNECTORS".
3. ALL GROUND LUG AND COMPRESSION CONNECTIONS SHALL BE COATED WITH ANTI–OXIDANT AGENT, SUCH AS NO–OX, NOALOX, PENETROX OR KOPRSHIELD.
4. GROUND ALL EXPOSED METALLIC OBJECTS ON BUILDING EXTERIOR INCLUDING BUILDING TIE DOWN BRACKETS.
5. PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
6. DO NOT INSTALL GROUND RING OUTSIDE OF PROPERTY LINE.
7. REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE.
8. ALL EXTERIOR GROUNDING CONDUCTORS INCLUDING EXTERIOR GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING.
9. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY THERMO–WELDING WITH ERICO T–319 GALVANIZING BAR.
10. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE METALS BEING CONNECTED.
11. ALL EXTERNAL GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO EXTERIOR GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE TEE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZER SUCH AS HOLUB LECTROSOL #15–501.
12. CONTRACTOR SHALL NOTIFY AT&T WHEN THE BURIED GROUND RING IS INSTALLED SO THE REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACKFILLED WITH SOIL. CONTACT: AT&T PROJECT MGR.
13. FOR METAL FENCE POST GROUNDING, USE A HEAVY DUTY TYPE GROUNDING CLAMP OR EXOTHERMIC WELD CONNECTION TO POST.
14. WHERE MECHANICAL CONNECTORS (TWO–HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI–OXIDE COMPOUND SUCH AS "NO OXIDE A" BY DEARBORN CHEMICAL COMPANY ON ALL CONNECTORS.
15. BOND ALL EXTERIOR CONDUITS, PIPES AND CYLINDRICAL METALLIC OBJECTS WITH A PENN–UNION GT SERIES CLAMP, BLACKBURN GUV SERIES CLAMP OR A BURNDY GAR 3900BU SERIES CLAMP ONLY, NO SUBSTITUTES ACCEPTED.

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13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

PROJECT NO: ----

DRAWN BY: ECC

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City of Puyallup
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1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
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A&E SEAL

PRCTI20241635

SITE

DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

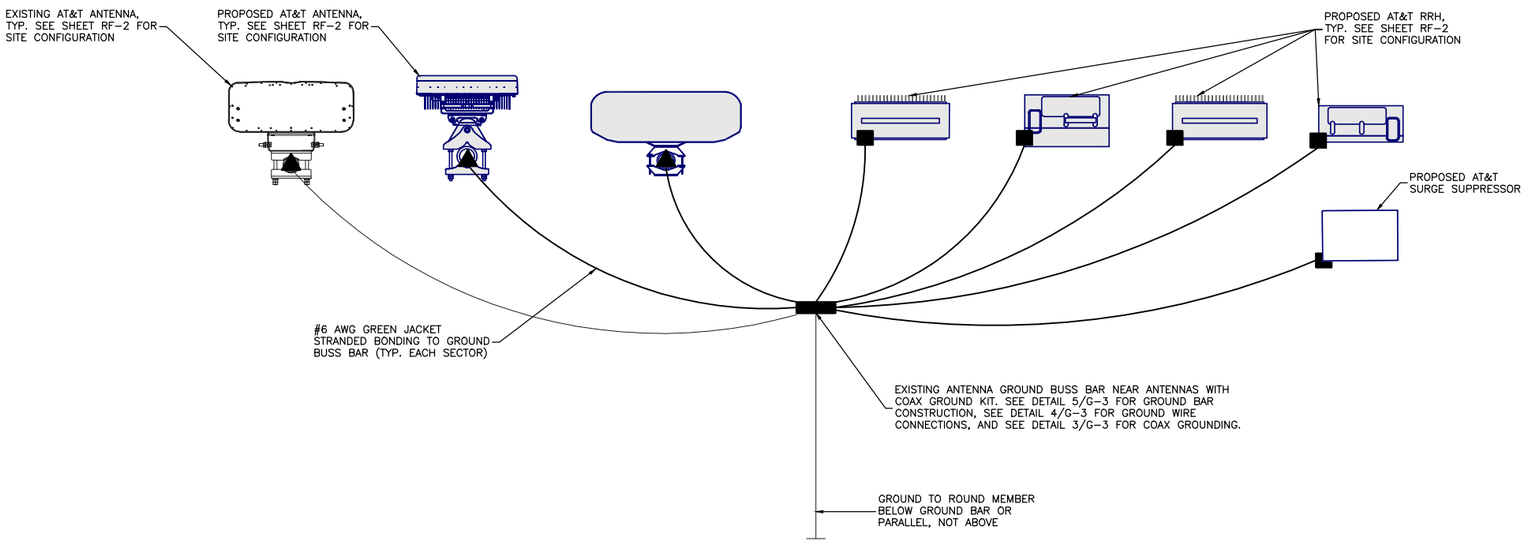
FA #: 10102328

SHEET TITLE

GROUNDING NOTES

SHEET NUMBER

G-1



1 – TYPICAL ANTENNA GROUNDING PLAN
N.T.S.

GROUNDING NOTES:

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
3. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY NETWORK CARRIER REPRESENTATIVE.
5. REFER TO CURRENT NEL; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
6. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED AT&T MOBILITY REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING
7. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

GROUNDING ROD NOTES:

1. ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.

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A&E SEAL

PRCTI20241635

SITE
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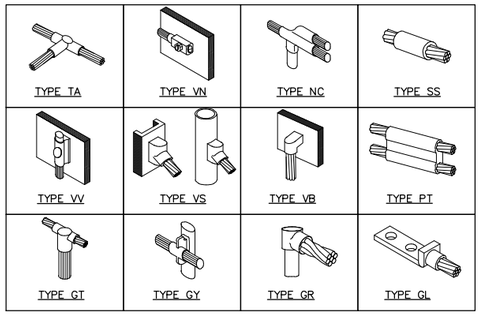
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

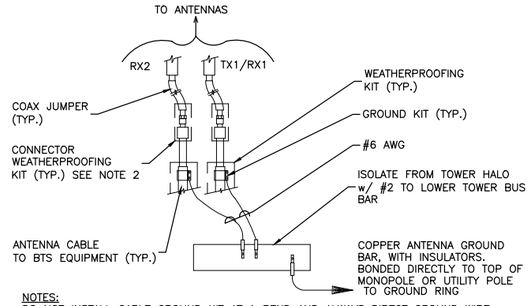
FA #: 10102328

SHEET TITLE
SCHEMATIC GROUNDING PLAN

SHEET NUMBER
G-2



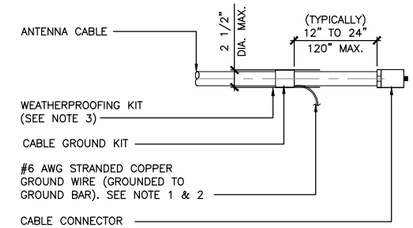
1 – CADWELD GROUNDING CONNECTIONS
N.T.S.



NOTES:
DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.

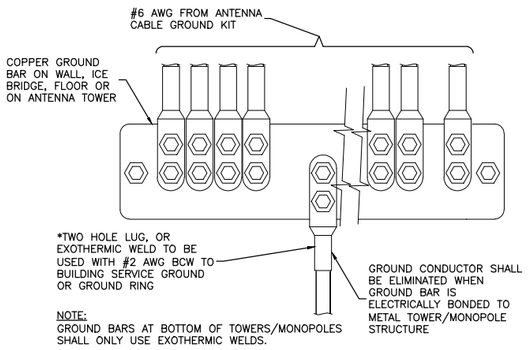
WEATHER PROOFING SHALL BE TWO–PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

2 – GROUND CABLE CONNECTION
N.T.S.



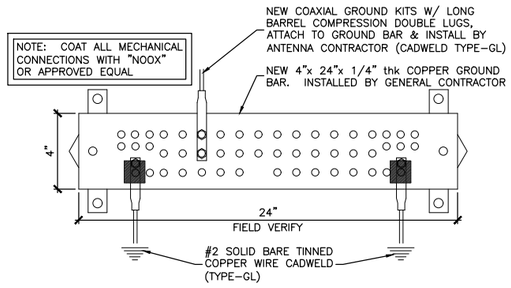
NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO–PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

3 – CABLE GROUND KIT CONNECTION
N.T.S.



NOTE:
GROUND BARS AT BOTTOM OF TOWERS/MONOPOLES SHALL ONLY USE EXOTHERMIC WELDS.

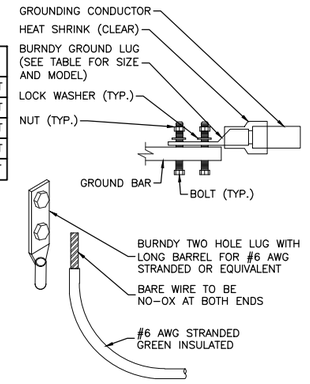
4 – GROUND WIRE INSTALLATION
N.T.S.



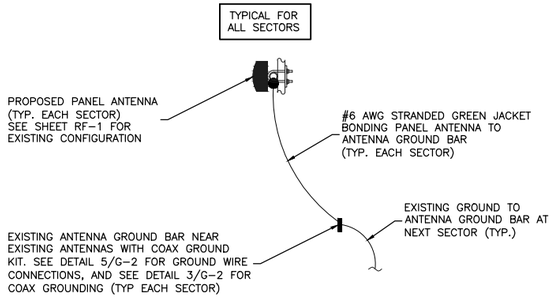
5 – GROUND BAR
N.T.S.

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C–2TC38	3/8" – 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C–2TC38	3/8" – 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C–2TC38	3/8" – 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26–2TC38	3/8" – 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28–2N	1/2" – 16 NC S 2 BOLT

NOTES:
1. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
2. COPPER SHIELD, ANTIOX, CR NO–OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
3. ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



6 – MECHANICAL LUG CONNECTION
N.T.S.



7 – TYPICAL ANTENNA GROUNDING PLAN
N.T.S.

at&t
AT&T MOBILITY
RTC BUILDING 3
18221 NE 72nd WAY
REDMOND, WA 98052

MasTec
Network Solutions
5814 S 196TH ST
KENT, WA 98032

CORE ONE CONSULTING USA
13555 SE 35TH ST, SUITE 100
BELLEVUE, WA 98006

PROJECT NO: ----

DRAWN BY: ECC

CHECKED BY: D.C.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

1	SEP 26/24	CLIENT COMMENTS	ECC
0	AUG 28/24	ISSUED FOR CONSTRUCTION	ECC
A	MAY 28/24	ISSUED FOR REVIEW	ECC

A&E SEAL

PRCTI20241635

SITE
DOWNTOWN PUYALLUP
TA48
110 9TH AVE SW
PUYALLUP, WA 98371

FA #: 10102328

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-3