

PROJECT DESCRIPTION

ANTENNA LEVEL: MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY WITH THE REMOVAL OF (3) PANEL ANTENNAS, ALL AT&T COAX CABLING AND THE RELOCATION OF (2) PANEL ANTENNAS ALONG WITH THE INSTALLATION OF (3) PROPOSED ACTIVE ANTENNAS c/w INTEGRATED RADIOS ON AN EXISTING ROOFTOP AND (1) PROPOSED DC6-48-60-18-8C-EV SURGE SUPPRESSOR PER SECTOR. INSTALL (3) NEW PIPE MOUNTS PER SECTOR FOR RRR AND SURGE SUPPRESSOR MOUNTING.

EQUIPMENT ROOM: REMOVE (1) EXISTING PATHFINDER -24VDC PDU WITH 7 PATHFINDER RECTIFIERS AND (3) RACKS OF ABSOLYTE BATTERIES. INSTALLATION OF (1) VERTIV -48VDC NETSURE 7100 PDU WITH 10 RECTIFIERS AND NO CONVERTER AND (1) -48VDC BATTERY RACK WITH (4) STRINGS OF 180AH BATTERIES (16 TOTAL).

PROJECT INFORMATION

SITE ADDRESS	7900 SE 28TH ST MERCER ISLAND, WA 98040	ZONING DISTRICT:	TC
LATITUDE:	47° 35' 08.304" N (47.5856400° N)	EXISTING USE:	UNMANNED TELECOMMUNICATIONS FACILITY
LONGITUDE:	122° 13' 55.416" W (-122.2320600° W)	PROPOSED USE:	UNMANNED TELECOMMUNICATIONS FACILITY
JURISDICTION:	CITY OF MERCER ISLAND	OCCUPANCY:	B
		A.P.N.	545230-1385

RF DATA SHEET

DATE ISSUED: 10/28/2021 VERSION: 2.00

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LEGAL DESCRIPTION

MERCER PARK ADD TGW A STRIP OF LAND 30.00 FT IN WIDTH & PLT AND IMMEDIATELY ADJ THE EAST SIDE OF THE PROP ABOVE DESC - WCH STRIP RUNS THE ENTIRE LENGTH OF THE EAST SIDE OF ABOVE DESC PROP BEING A POR OF VAC 80TH AVE SE - LESS POR OF LOTS 6 & 7 CONV TO KING COUNTY FOR ROAD - ALSO LESS ANY POR LY ELY OF A LINE DRAWN PLW & 30.00 FT WLY OF WHEN MEAS AT R/A TO THE 80TH CONN (80TH AVE SE) LINE SURVEY OF SR 90 M.I. W SHORE TO EAST CHANNEL BRIDGE SECTION 2, 76TH AVE VICINITY TO SHOREWOOD DR VICINITY AS CONV TO STATE OF WASHINGTON BY DEED UNDER REC NO 8307220413-LESS THAT POR LY WITHIN THE FOLG DESC PROP CONV TO CITY OF MERCER ISLAND FOR RD UNDER REC NO 8506250794

SITE PROJECT PARTICIPANTS

	NAME	COMPANY	NUMBER
A/E	LEE CAMPBELL	CORE ONE CONSULTING USA	778-805-2166
RF	GISELE LIMA	AT&T WIRELESS	425-919-3253
LANDLORD	T.B.D.	MERCER ISLAND COURT LLC	T.B.D.
SAC MANAGER	HANNAN RUTKOSKY	MASTEC NETWORK SOLUTIONS	253-579-3503
A&E MANAGER	DANIEL KELLY	MASTEC NETWORK SOLUTIONS	253-579-3503
CM	MIKE SUTHERBY	MASTEC NETWORK SOLUTIONS	253-579-3503



at&t

PROJECT SCOPE: 5G NR 1SR CBAND
 FA#: 10092489
 PTN#: 3801A0YFM1/3801A0XZQE/
 3801A0XX22
 PACE NUMBER: MRWOR052471/MRWOR051810/
 MRWOR051708
 SITE NUMBER: SD05
 SITE NAME: MERCER ISLAND
 ADDRESS: 7900 SE 28TH ST
 MERCER ISLAND, WA 98040
 OWNER INFO.: MERCER ISLAND COURT, LLC.
 c/o LIGHTHOUSE PROP, LLC.
 P.O. BOX 198
 ISSAQUAH, WA 98027

VICINITY MAP



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 (IBC), 2018 IBC WITH 2019 SBC 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.

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



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

APPROVAL / SIGN OFF OF CONSTRUCTION DRAWINGS

	DATE	SIGNATURE
SAQ MANAGER		
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 MOBILITY
 RTC BUILDING 3
 18221 NE 72nd WAY
 REDMOND, WA 98052



13555 SE 36TH ST SUITE 100
 BELLEVUE, WA 98006



13555 SE 36TH ST SUITE 100
 BELLEVUE, WA 98006

PROJECT NO: 2152U145

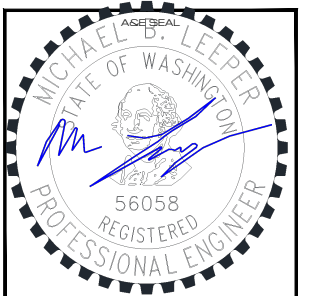
DRAWN BY: MP

CHECKED BY: LC

SUBMITTALS

DATE	REVISED PER	BY
2 SEP 21/22	REVISED PER CITY	OL
1 MAY 17/22	REVISED PER MASTEC	AV
0 MAR 24/22	FINAL CD'S	AF
C MAR 23/22	REVISED RRR MOUNTING	AF
B MAR 14/22	REVISED PER COMMENTS	AF
A FEB 10/22	ISSUED FOR 90% REVIEW	MP

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT NAMED IS STRICTLY PROHIBITED.



SITE
 MERCER ISLAND
 SD05
 7900 SE 28TH ST
 MERCER ISLAND,
 WA 98040

FA #: 10092489

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 COMPLETE 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 WATER TIGHT 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.



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



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 BELLEVUE, WA 98006



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PROJECT NO: 2152U145

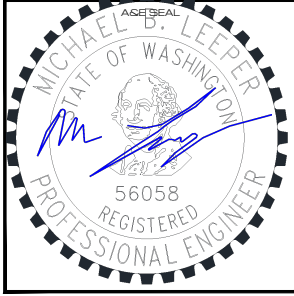
DRAWN BY: MP

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SUBMITTALS

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SITE
 MERCER ISLAND
 SD05
 7900 SE 28TH ST
 MERCER ISLAND,
 WA 98040

FA #: 10092489

SHEET TITLE
 GENERAL NOTES I

SHEET NUMBER
GN-1

DESIGN CRITERIA:

1. THE STRUCTURAL DESIGN OF THIS PROJECT IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2018 WITH w/2019 CBC.
2. **DESIGN LOADS:**
SEE STRUCTURAL

CONCRETE NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI-318.
2. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH CHAPTER 19 OF THE 2015 IBC. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS..

TYPE OF CONSTRUCTION	28 DAY STRENGTHS (f'c)	W/C RATIO	MINIMUM CEMENT CONTENT PER CUBIC YARD
A. STRUCTURAL SLABS AND CONCRETE PIERS	4,000 PSI	≤ .45	6 ½ SACKS
B. ALL STRUCTURAL CONCRETE EXCEPT WALLS	4,000 PSI	≤ .45	6 ½ SACKS
C. CONCRETE WALLS	4,000 PSI	≤ .45	6 ½ SACKS
D. SLABS ON GRADE/TOPPING SLABS (FOR EQUIPMENT CABINET)	2,500 PSI	≤ .45	6 ½ SACKS

CEMENT SHALL BE ASTM C150, PORTLAND CEMENT TYPE II U.N.O.

3. THE GENERAL CONTRACTOR SHALL SUPERVISE AND BE RESPONSIBLE FOR THE METHODS AND PROCEDURES OF CONCRETE PLACEMENT.
4. ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, C618, C989 AND C1017. TOTAL AIR CONTENT SHALL BE IN ACCORDANCE WITH TABLE 1904.2.1 OF THE 2015 IBC.
5. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy=60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy=40,000 PSI. GRADE 60 REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D14 ARE SUBMITTED.
6. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH AC1 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
8. SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy=60,000 PSI.
9. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE CONSULTANT.
10. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

- FOOTINGS AND OTHER UNFORMED SURFACES, EARTH FACE	3"
- FORMED SURFACES EXPOSED (LARGER) TO EARTH OR WEATHER	(#6 BARS OR 2" (#5 BARS OR SMALLER) 1 1/2"
- SLABS AND WALLS (INTERIOR FACE)	3/4"
11. BARS SHALL BE SUPPORTED ON CHAIRS OR DOBIE BRICKS.
12. ANCHOR BOLTS TO CONFORM TO ASTM A307.
13. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3,000 PSI MINIMUM).
14. ALL EXPANSION ANCHORS TO BE HILTI BRAND. ADHESIVE ANCHORS REQUIRE TESTING TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER.

BUILDING NOTES:

1. VERIFICATION THAT THE EXISTING BUILDING ROOF CAN SUPPORT THE PROPOSED ANTENNA LOADING IS TO BE COMPLETED PRIOR TO ANY MODIFICATIONS BY OTHERS.
2. PROVIDE SUPPORTS FOR THE ANTENNA COAX CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS. ANTENNA COAX CABLES ARE TO BE SUPPORTED AND RESTRAINED AT THE CENTERS SUITABLE TO THE MANUFACTURER'S REQUIREMENTS.

SAFETY PROGRAM:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND DOCUMENTING THEIR OWN SAFETY TRAINING PROGRAM.

ABBREVIATED ROOF TOP SAFETY PROCEDURES (WHEN APPLICABLE):

(AS PER "ACCIDENT PREVENTION PROGRAM" - BY PERMISSION OF WREN CONSTRUCTION, INC. - 03/01/99)

FALL PROTECTION METHODS AND EQUIPMENT ROOF TOP INSTALLATIONS

1. FOR WORK IS BEING PERFORMED WITHIN 25' OF AN UNPROTECTED ROOF EDGE, THE CONSTRUCTION SUPERVISOR SHALL DESIGNATE A TRAINED SAFETY MONITOR TO OBSERVE THE MOVEMENTS AND ACTIVITIES OF THE CONSTRUCTION WORKERS.
2. SAFETY MONITOR SHALL WARN CONSTRUCTION WORKERS OF HAZARDS (I.E., BACKING UP TOWARD A ROOF EDGE, ETC.) OR UNSAFE ACTIVITIES. THE SAFETY MONITOR MUST BE ON THE SAME ROOF AND WITHIN VISUAL AND VERBAL DISTANCE OF THE CONSTRUCTION WORKERS.
3. CONSTRUCTION INVOLVING WORKERS TO APPROACH WITHIN 6' OR LESS OF AN UNPROTECTED ROOF EDGE, REQUIRES WORKERS TO USE SAFETY LINE.
4. SAFETY LINE SHALL BE MINIMUM ½" DIAMETER NYLON, WITH A NOMINAL TENSILE STRENGTH OF 5400 LBS.
5. SAFETY LINE SHALL BE ATTACHED TO A SUBSTANTIAL MEMBER OF THE STRUCTURE.
6. SAFETY LINE LENGTH SHALL BE SET ALLOWING CONSTRUCTION WORKER TO REACH EDGE OF ROOF, BUT NOT BEYOND.
7. SAFETY BELTS SHALL BE WORN BY ALL CONSTRUCTION WORKERS.
8. MONTHLY SAFETY INSPECTION AND MAINTENANCE OF THE FALL PROTECTION EQUIPMENT SHALL OCCUR BY THE SAFETY COMMITTEE REPRESENTATIVES, INCLUDING:

INSPECTION OF CONSTRUCTION AREA FOR HAZARDS
USE OF AN INSPECTION CHECKLIST
INTERVIEWING COWORKERS REGARDING SAFETY CONCERNS
REPORTING AND DOCUMENTING ANY HAZARDS
REPORTING HAZARDS TO THE SAFETY COMMITTEE FOR CONSIDERATION
POSTING RESULTS OF INSPECTION AND ANY ACTION TAKEN
RECEIVING AN UNBIASED REVIEW OF ONE'S OWN WORK AREA BY ANOTHER COWORKER SAFETY REPRESENTATIVE

REFER TO ROOFTOP WORK AREA SAFETY PROTOCOL NATIONAL ASSOCIATION OF TOWER ERECTORS 2000 PUBLICATION

REFERENCED OSHA REGULATION/STANDARDS SHALL BE REVIEWED BY TOWER ERECTORS, EQUIPMENT INSTALLERS, AND TOWER/ROOF TOP CONTRACTORS/SUBCONTRACTORS
29 CFR 1926.500 - SCOPE, APPLICATION, AND DEFINITIONS
29 CFR 1926.501 - DUTY TO HAVE FALL PROTECTION
19 CFR 1926.502 - FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 30 KSI (LW), 7 KSI (CW) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE		
SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS
8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER	RANGE	
	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

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 A325-X. Fu=120 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.

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.



PROJECT NO: 2152U145

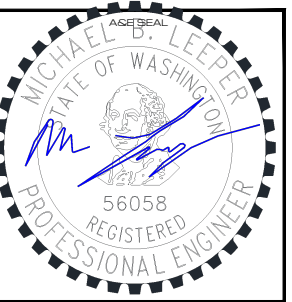
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SUBMITTALS

DATE	REVISION	BY
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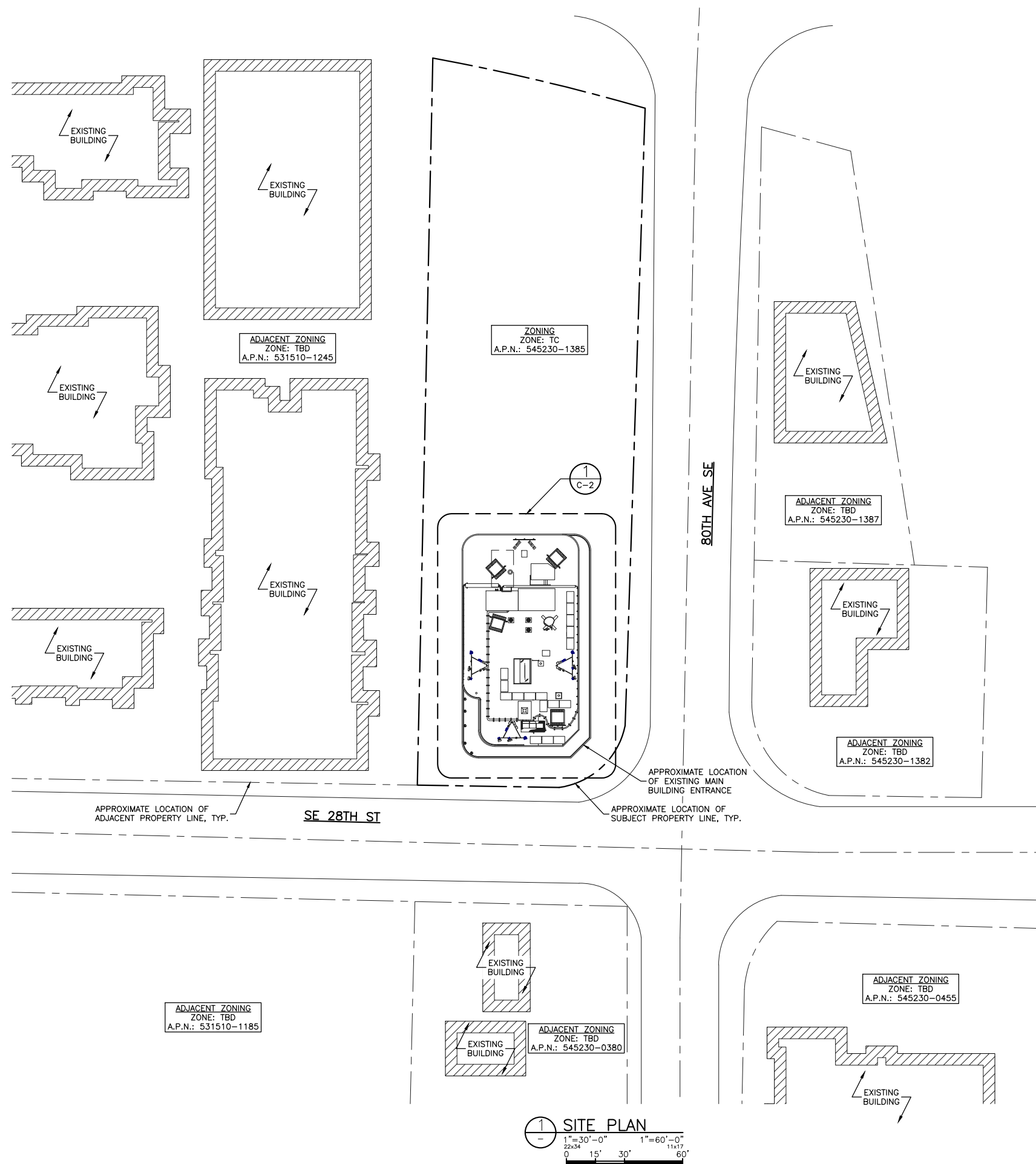
FA #: 10092489

SHEET TITLE
GENERAL NOTES II

SHEET NUMBER
GN-2



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



NOTES:

1. SITE PLAN INFORMATION OBTAINED FROM DRAWINGS PREPARED BY MASTEC NETWORK SOLUTIONS, DATED 07/27/2020.
2. CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.
3. THIS DRAWING DOES NOT REPRESENT A SURVEY.

LEGAL DESCRIPTION

MERCER PARK ADD TGV A STRIP OF LAND 30.00 FT IN WIDTH & PLT AND IMMEDIATELY ADJ THE EAST SIDE OF THE PROP ABOVE DESC - WCH STRIP RUNS THE ENTIRE LENGTH OF THE EAST SIDE OF ABOVE DESC PROP BEING A POR OF VAC BOTH AVE SE - LESS POR OF LOTS 6 & 7 CONV TO KING COUNTY FOR ROAD - ALSO LESS ANY POR LY ELY OF A LINE DRAWN PLW & 30.00 FT WLY OF WHEN MEAS AT R/A TO THE 80TH CONN (BOTH AVE SE) LINE SURVEY OF SR 90 M.I. W SHORE TO EAST CHANNEL BRIDGE SECTION 2, 76TH AVE VICINITY TO SHOREWOOD DR VICINITY AS CONV TO THE STATE OF WASHINGTON BY DEED UNDER REC NO 8307220413-LESS THAT POR LY WITHIN THE FOLG DESC PROP CONV TO CITY OF MERCER ISLAND FOR RD UNDER REC NO 8506250794

PROPERTY OWNER

MERCER ISLAND COURT LLC
CONTACT: T.B.D.
PHONE: T.B.D.

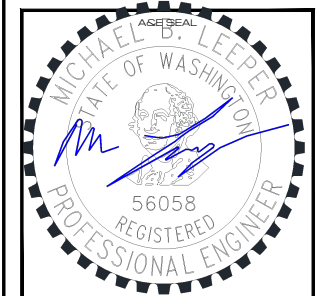


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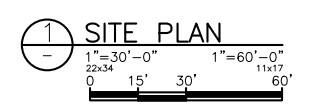
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SHEET TITLE
SITE PLAN

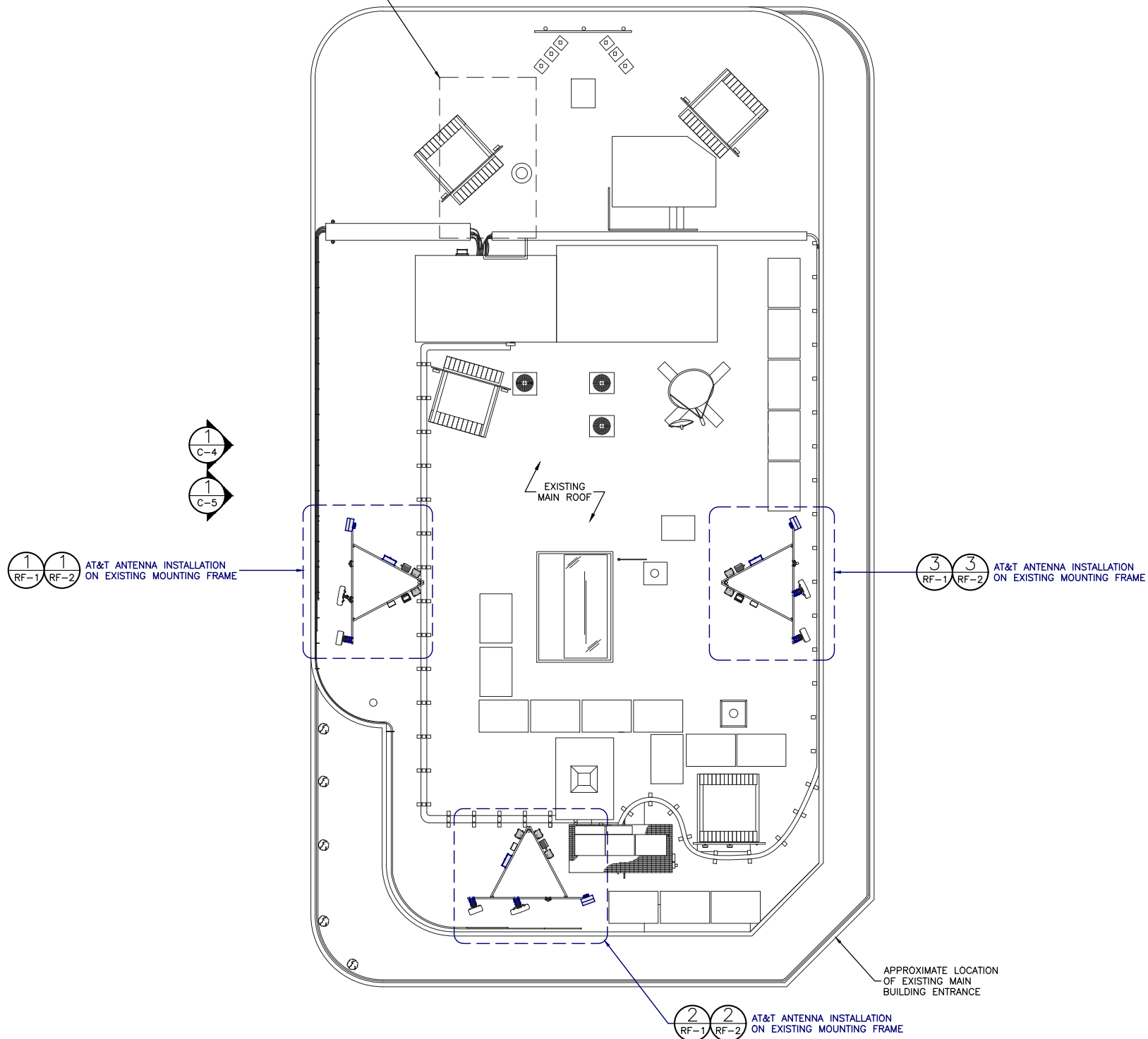
SHEET NUMBER
C-1





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

1 1
C-3A C-3B
HIDDEN LINE REPRESENTS APPROXIMATE LOCATION OF EXISTING AT&T EQUIPMENT ROOMS BELOW ON 2ND FLOOR



NOTES:

1. ROOF PLAN INFORMATION OBTAINED FROM DRAWINGS PREPARED BY MASTEC NETWORK SOLUTIONS, DATED 07/27/2020.
2. CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ROOF MEMBRANE DURING CONSTRUCTION. REPAIR ANY DAMAGE TO PRE-CONSTRUCTION CONDITIONS.



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



13555 SE 36TH ST SUITE 100
BELLEVUE, WA 98006



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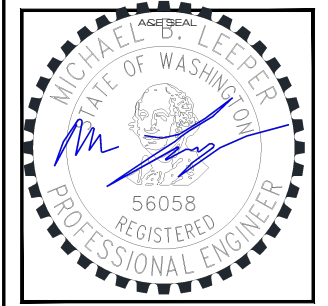
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MERCER ISLAND,
WA 98040
FA #: 10092489

SHEET TITLE
ROOF PLAN

SHEET NUMBER
C-2

1 ROOF PLAN
1/8"=1'-0" 1/16"=1'-0"
22x34 11x17
0 4' 8' 16'



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

NOTES:

- EQUIPMENT LAYOUT INFORMATION OBTAINED FROM DRAWINGS PROVIDED BY MASTEC NETWORK SOLUTIONS, DATED 07/27/2020.
- CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.

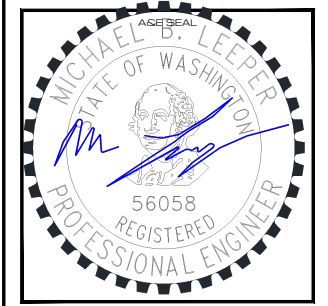


PROJECT NO: 2152U145
 DRAWN BY: MP.
 CHECKED BY: LC.

SUBMITTALS

2	SEP 21/22	REVISED PER CITY	OL
1	MAY 17/22	REVISED PER MASTEC	AV
0	MAR 24/22	FINAL CD'S	AF
C	MAR 23/22	REVISED RRR MOUNTING	AF
B	MAR 14/22	REVISED PER COMMENTS	AF
A	FEB 10/22	ISSUED FOR 90% REVIEW	MP

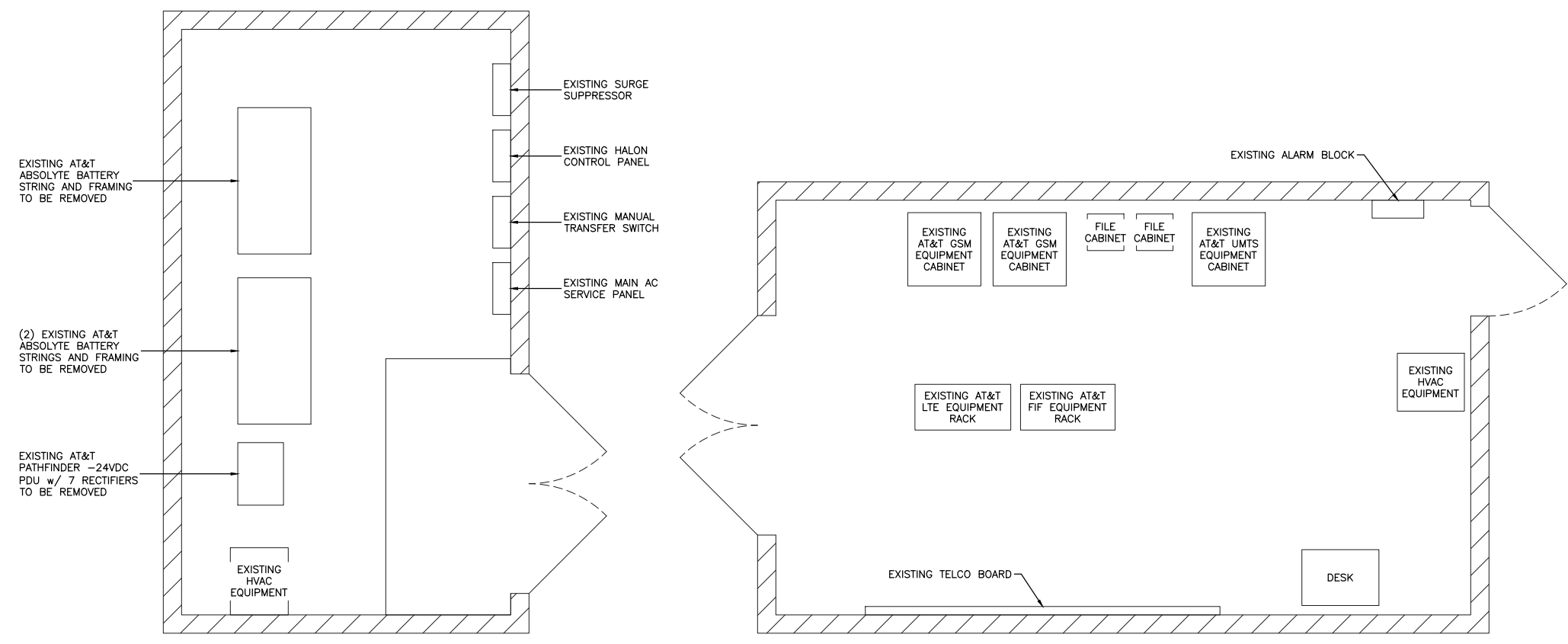
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SITE
 MERCER ISLAND
 SD05
 7900 SE 28TH ST
 MERCER ISLAND,
 WA 98040
 FA #: 10092489

SHEET TITLE
 EXISTING EQUIPMENT LAYOUT

SHEET NUMBER
C-3A



1 EXISTING EQUIPMENT LAYOUT
 1/2" = 1'-0" 22x34
 1/4" = 1'-0" 11x17
 0 1' 2' 4'



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NOTES:

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SCOPE OF WORK

- REMOVE EXISTING PATHFINDER -24VDC PDU WITH 7 PATHFINDER RECTIFIERS
- REMOVE (3) RACKS OF ABSOLYTE BATTERIES
- INSTALL VERTIV -48VDC NETSURE 7100 PDU WITH 10 RECTIFIERS AND NO CONVERTOR
- INSTALL -48VDC BATTERY RACK w/ 4 STRINGS OF 180AH BATTERIES (16 TOTAL)



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



13555 SE 36TH ST SUITE 100
BELLEVUE, WA 98006



13555 SE 36TH ST SUITE 100
BELLEVUE, WA 98006

PROJECT NO: 2152U145

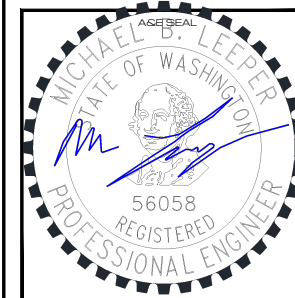
DRAWN BY: MP.

CHECKED BY: LC.

SUBMITTALS

2	SEP 21/22	REVISED PER CITY	OI
1	MAY 17/22	REVISED PER MASTEC	AV
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C	MAR 23/22	REVISED RRR MOUNTING	AF
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SD05
7900 SE 28TH ST
MERCER ISLAND,
WA 98040

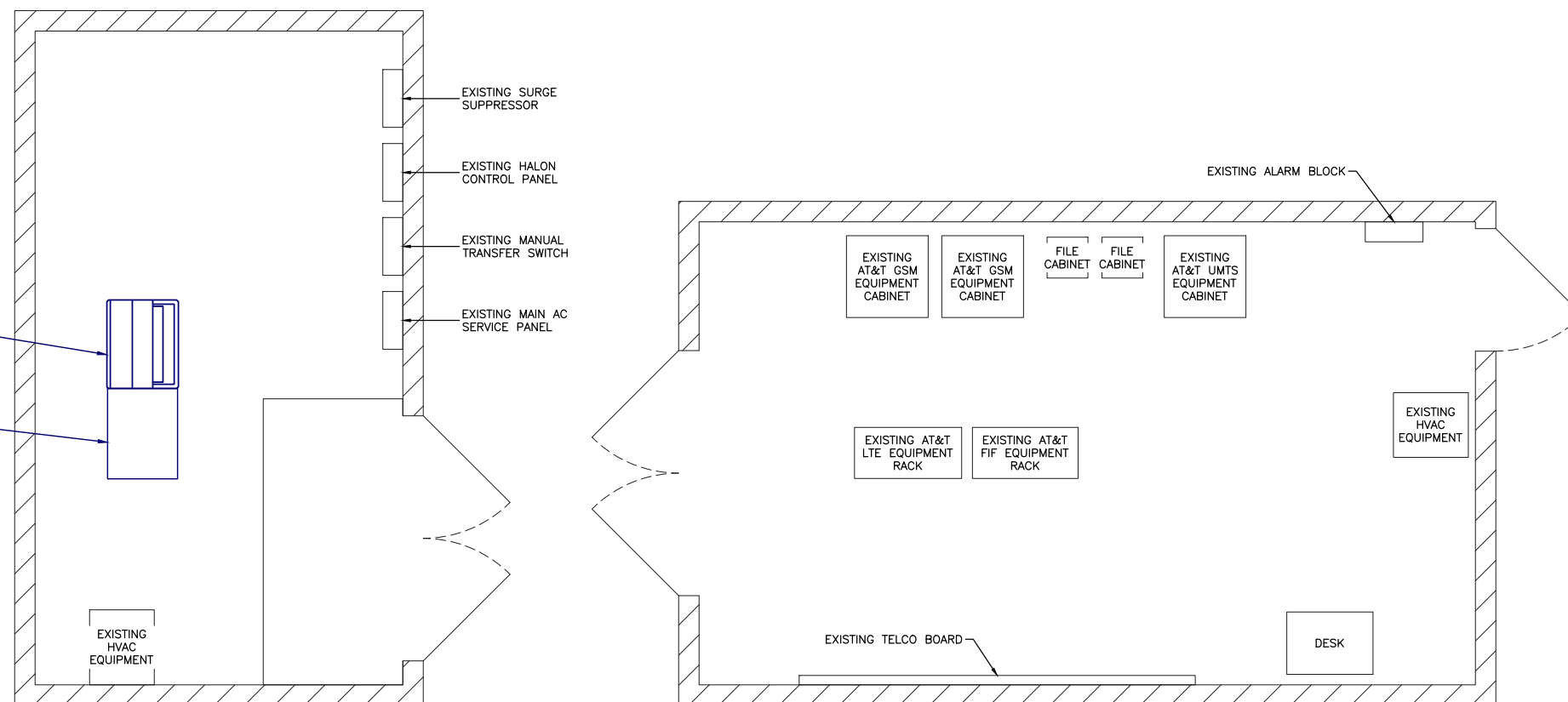
FA #: 10092489

SHEET TITLE
PROPOSED
EQUIPMENT LAYOUT

SHEET NUMBER
C-3B

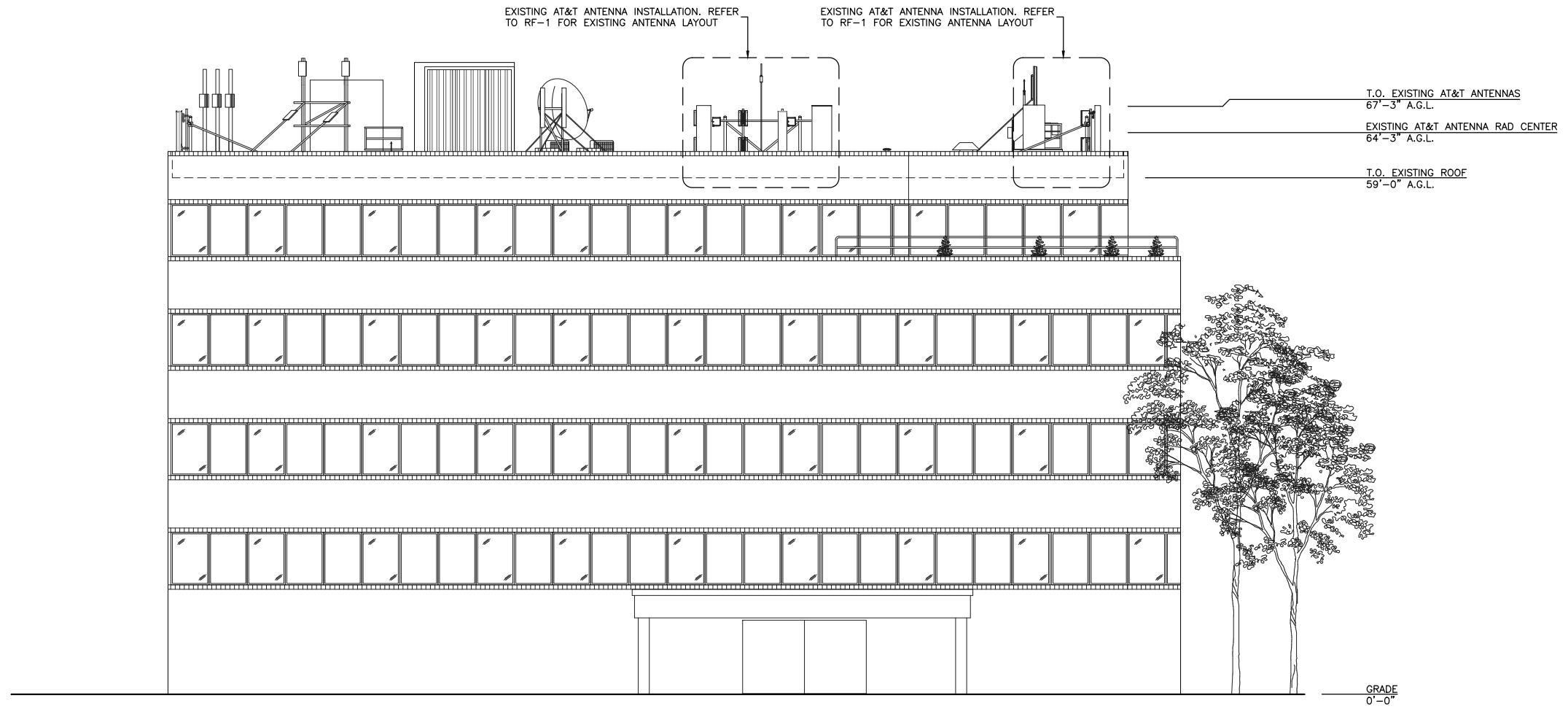
1
RF-4
PROPOSED AT&T VERTIV
-48VDC NETSURE 7100 INDOOR
POWER PLANT

PROPOSED AT&T -48VDC
BATTERY RACK C/W
(4) STRINGS OF 180AH
BATTERIES. (16 TOTAL)



1
-
1/2"=1'-0"
25x34
1/4"=1'-0"
11x17

NOTE:
1. ELEVATION IS DIAGRAMMATIC ONLY.



1
-
EXISTING WEST ELEVATION
1/8"=1'-0" 22x34
1/16"=1'-0" 11x17
0 4' 8' 16'



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PROJECT NO: 2152U145

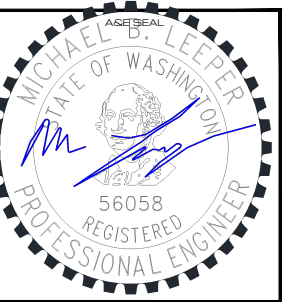
DRAWN BY: MP

CHECKED BY: LC

SUBMITTALS

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SD05
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MERCER ISLAND,
WA 98040

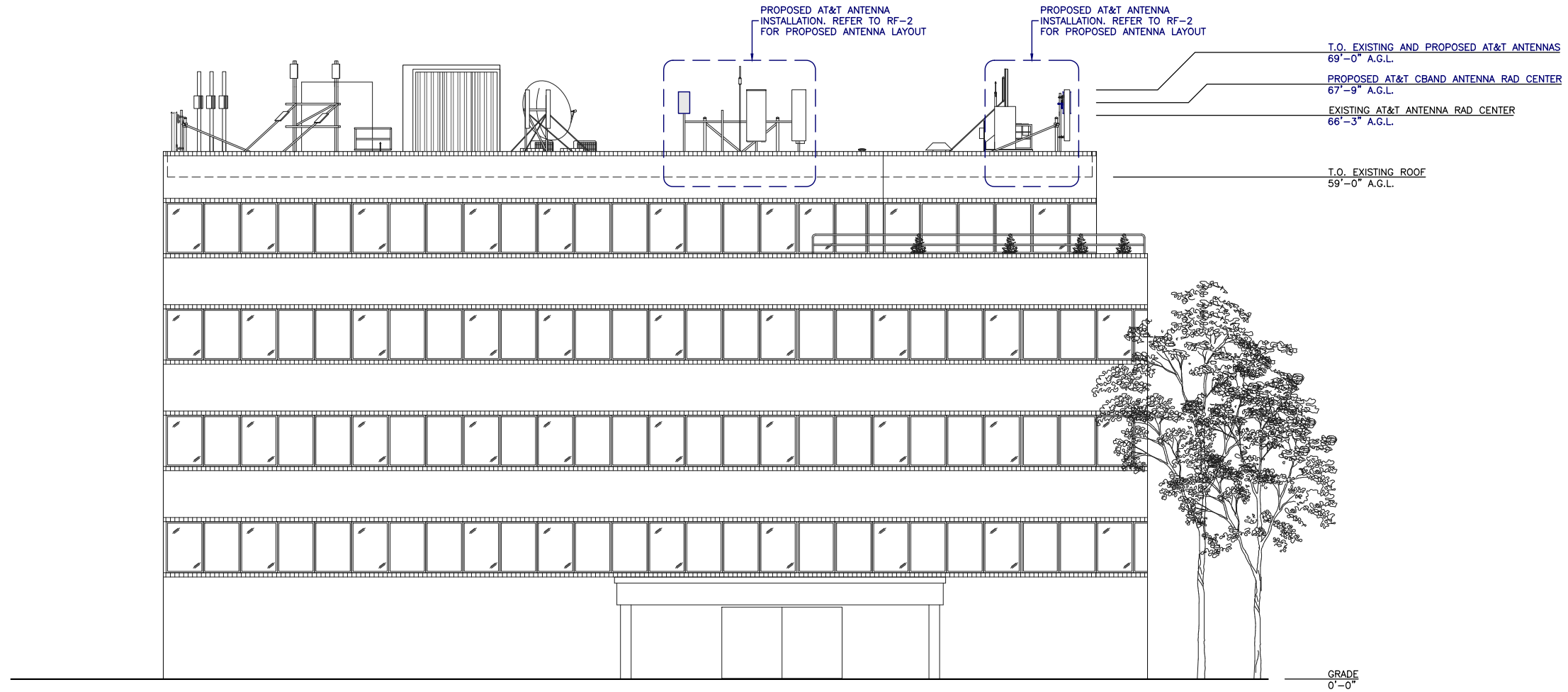
FA #: 10092489

SHEET TITLE
EXISTING WEST
ELEVATIONS

SHEET NUMBER
C-4

NOTE:
1. ELEVATION IS DIAGRAMMATIC ONLY.

ALL ANTENNAS MOVING UP
TO 69'-0" TIP HEIGHT



1 PROPOSED WEST ELEVATION
 1/8"=1'-0" 22x34
 1/16"=1'-0" 11x17
 0 4' 8' 16'



PROJECT NO: 2152U145

DRAWN BY: MP

CHECKED BY: LC

SUBMITTALS

2	SEP 21/22	REVISED PER CITY	OI
1	MAY 17/22	REVISED PER MASTEC	AV
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C	MAR 23/22	REVISED RRH MOUNTING	AF
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SITE
 MERCER ISLAND
 SD05
 7900 SE 28TH ST
 MERCER ISLAND,
 WA 98040

FA #: 10092489

SHEET TITLE
 PROPOSED WEST
 ELEVATION

SHEET NUMBER
 C-5

EXISTING ANTENNA CONFIGURATION AND SCHEDULE

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	EQUIPMENT
LTE 700						4°				1	DUAL RRH 4T4R B12/14					(2) EXISTING DC2-48-60-0-9E
LTE 1900	160°	64'-3"	1	CELLMAX	CMA-UBTMLBMLBHH-6516-16-21-21	2°	0°	NO	NONE	1	DUAL RRH 4T4R B25/66	1	FIBER	78'-0"±	NO	
LTE AWS						2°										
UMTS 850	160°	64'-3"	1	COMMSCOPE	SBNHH-1D65B	0°	0°	NO	NONE	1	RRH4x25-WCS-4R	1	FIBER	78'-0"±	NO	
LTE WCS						0°										
5G 850	160°	64'-3"	1	COMMSCOPE	NNH4-65B-R6	4°	0°	NO	NONE	1	RRH 4T4R B5	1	FIBER	78'-0"±	NO	
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	EQUIPMENT
UMTS 850	280°	64'-3"	1	COMMSCOPE	SBNHH-1D65B	2°	0°	NO	NONE	1	RRH4x25-WCS-4R	1	FIBER	78'-0"±	NO	(2) EXISTING DC2-48-60-0-9E
LTE WCS						0°										
LTE 700						2°										
LTE 1900	280°	64'-3"	1	CELLMAX	CMA-UBTMLBMLBHH-6516-16-21-21	2°	0°	NO	NONE	1	DUAL RRH 4T4R B12/14	1	FIBER	78'-0"±	NO	
LTE AWS						2°										
5G 850	280°	64'-3"	1	COMMSCOPE	NNH4-65B-R6	2°	0°	NO	NONE	1	RRH 4T4R B5	1	FIBER	78'-0"±	NO	
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	EQUIPMENT
UMTS 850	65°	64'-3"	1	COMMSCOPE	SBNHH-1D65B	2°	0°	NO	NONE	1	RRH4x25-WCS-4R	1	FIBER	78'-0"±	NO	(2) EXISTING DC2-48-60-0-9E
LTE WCS						0°										
LTE 700						2°										
LTE 1900	65°	64'-3"	1	CELLMAX	CMA-UBTMLBMLBHH-6516-16-21-21	2°	0°	NO	NONE	1	DUAL RRH 4T4R B12/14	1	FIBER	78'-0"±	NO	
LTE AWS						2°										
5G 850	65°	64'-3"	1	COMMSCOPE	NNH4-65B-R6	2°	0°	NO	NONE	1	RRH 4T4R B5	1	FIBER	78'-0"±	NO	

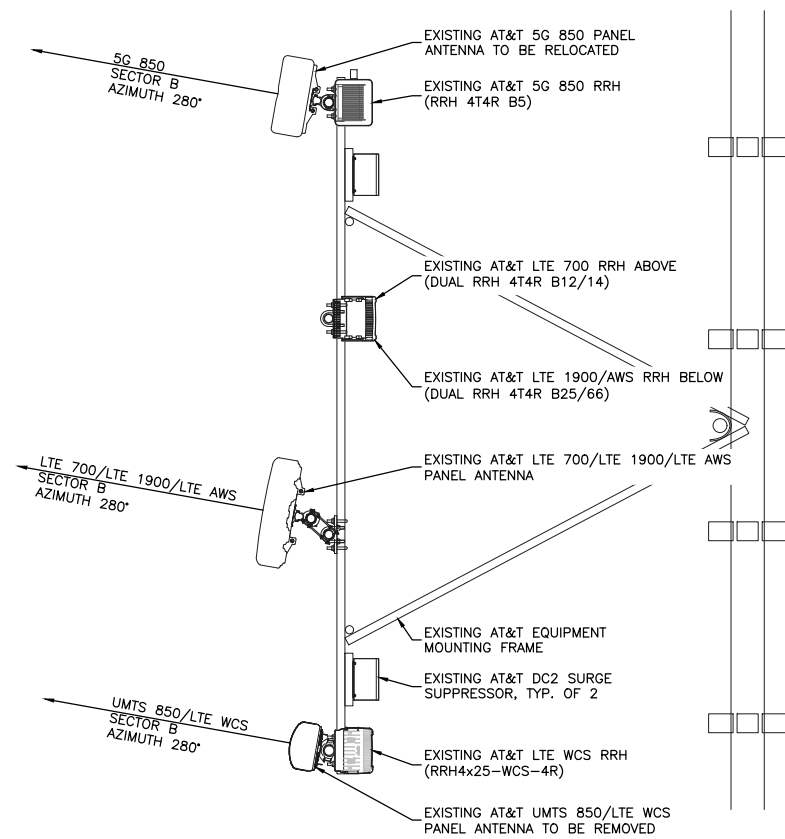


TRUE NORTH ARROW SHOWN ON THIS DRAWING IS APPROXIMATE ONLY AND MUST BE VERIFIED

NOTES:

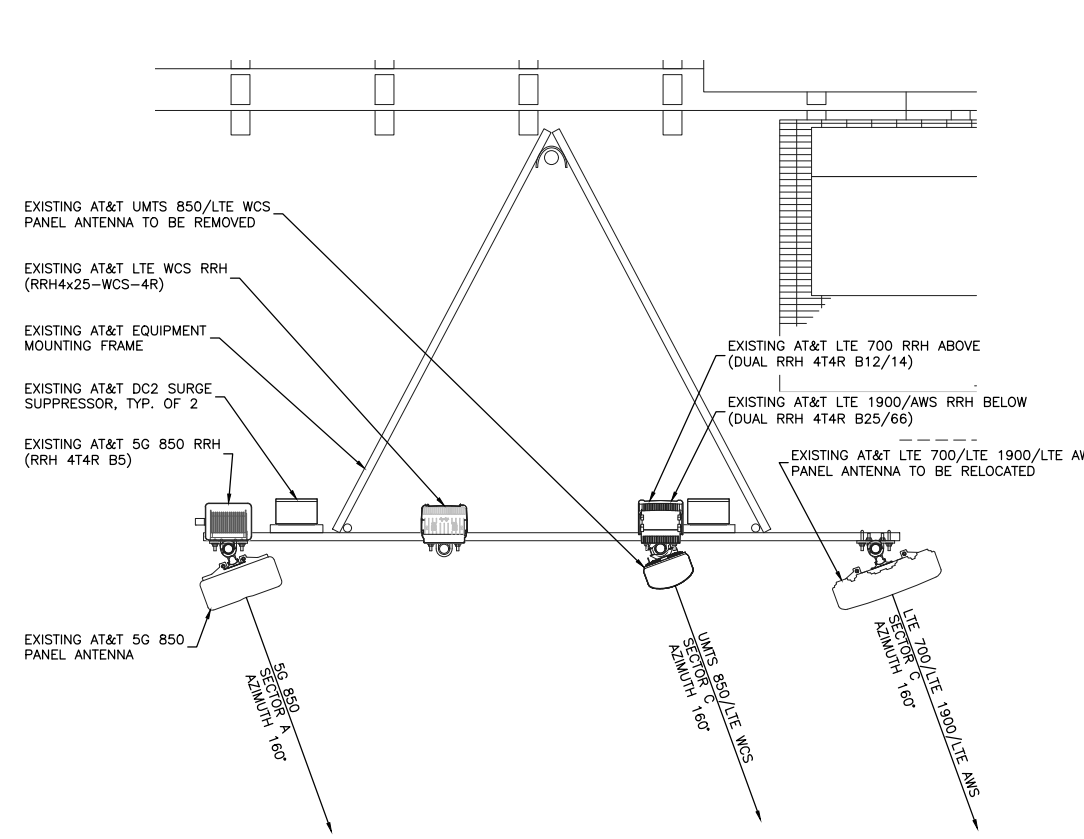
- EXISTING ANTENNA LAYOUT INFORMATION OBTAINED FROM DRAWINGS PROVIDED BY MASTEC NETWORK SOLUTIONS, DATED 07/27/2020.
- CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.

EXISTING ANTENNA CONFIGURATION AND SCHEDULE DATA WAS OBTAINED FROM AT&T RF DATA SHEET (DATED 10/28/2021) RFDS VERSION 2.0



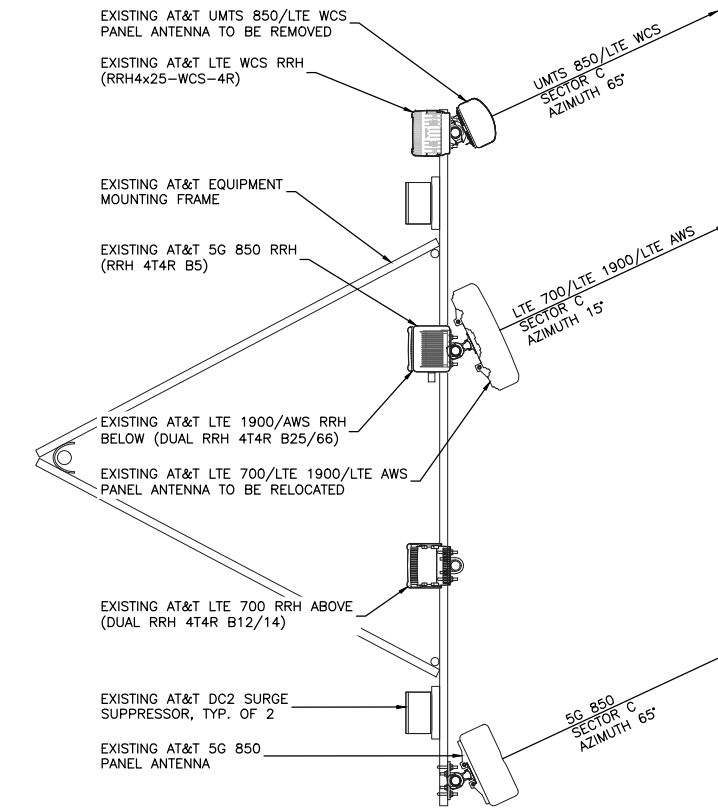
1 EXISTING ANTENNA CONFIGURATION (BETA)

1/2"=1'-0"
22x34
0 1' 2' 4'



2 EXISTING ANTENNA CONFIGURATION (ALPHA)

1/2"=1'-0"
22x34
0 1' 2' 4'



3 EXISTING ANTENNA CONFIGURATION (GAMMA)

1/2"=1'-0"
22x34
0 1' 2' 4'



AT&T MOBILITY
RTC BUILDING 3
18221 NE 72nd WAY
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13555 SE 36TH ST SUITE 100
BELLEVUE, WA 98006



13555 SE 36TH ST SUITE 100
BELLEVUE, WA 98006

PROJECT NO: 2152U145

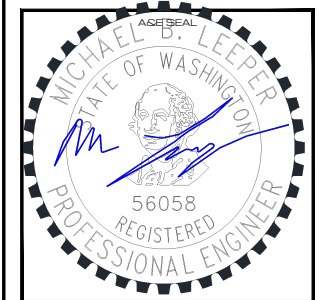
DRAWN BY: MP

CHECKED BY: LC

SUBMITTALS

DATE	REVISION	BY	APP
2 SEP 21/22	REVISED PER CITY	OL	
1 MAY 17/22	REVISED PER MASTEC	AV	
0 MAR 24/22	FINAL CD'S	AF	
C MAR 23/22	REVISED RRH MOUNTING	AF	
B MAR 14/22	REVISED PER COMMENTS	AF	
A FEB 10/22	ISSUED FOR 90% REVIEW	MP	

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SITE
MERCER ISLAND
SD05
7900 SE 28TH ST
MERCER ISLAND,
WA 98040

FA #: 10092489

SHEET TITLE

EXISTING ANTENNA CONFIGURATIONS

SHEET NUMBER

RF-1

PROPOSED ANTENNA CONFIGURATION AND SCHEDULE

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	EQUIPMENT
5G CBAND	160°	67°-9"	1	NOKIA	AEQK	0°	0°	NO	NONE	-	INTEGRATED RADIO	-	-	-	NO	
LTE 700						4°	0°			1	DUAL RRH 4T4R B12/14					(2) EXISTING DC2-48-60-0-9E AND
LTE 1900	160°	66°-3"	1	CELLMAX	CMA-UBTMLBMLBHH-6516-16-21-21	2°	0°	NO	NONE	1	DUAL RRH 4T4R B25/66	1	FIBER	78'-0"±	NO	(1) PROPOSED DC6-48-60-18-8C-EV
LTE AWS						2°	0°									
5G 850	160°	66°-3"	1	COMMSCOPE	NNH4-65B-R6	4°	0°	NO	NONE	1	RRH 4T4R B5	1	FIBER	78'-0"±	NO	
LTE WCS						2°	0°			1	RRH4x25-WCS-4R	1	FIBER	78'-0"±	NO	
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	EQUIPMENT
5G 850	280°	66°-3"	1	COMMSCOPE	NNH4-65B-R6	2°	0°	NO	NONE	1	RRH 4T4R B5	1	FIBER	78'-0"±	NO	
LTE WCS						2°	0°			1	RRH4x25-WCS-4R	1	FIBER	78'-0"±	NO	(2) EXISTING DC2-48-60-0-9E AND
LTE 700						2°	0°			1	DUAL RRH 4T4R B12/14					(1) PROPOSED DC6-48-60-18-8C-EV
LTE 1900	280°	66°-3"	1	CELLMAX	CMA-UBTMLBMLBHH-6516-16-21-21	2°	0°	NO	NONE	1	DUAL RRH 4T4R B25/66	1	FIBER	78'-0"±	NO	
LTE AWS						2°	0°									
5G CBAND	280°	67°-9"	1	NOKIA	AEQK	0°	0°	NO	NONE	-	INTEGRATED RADIO	-	-	-	NO	
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	EQUIPMENT
5G CBAND	65°	67°-9"	1	NOKIA	AEQK	0°	0°	NO	NONE	-	INTEGRATED RADIO	-	-	-	NO	
LTE 700						2°	0°			1	DUAL RRH 4T4R B12/14					(2) EXISTING DC2-48-60-0-9E AND
LTE 1900	65°	66°-3"	1	CELLMAX	CMA-UBTMLBMLBHH-6516-16-21-21	2°	0°	NO	NONE	1	DUAL RRH 4T4R B25/66	1	FIBER	78'-0"±	NO	(1) PROPOSED DC6-48-60-18-8C-EV
LTE AWS						2°	0°									
5G 850	65°	66°-3"	1	COMMSCOPE	NNH4-65B-R6	2°	0°	NO	NONE	1	RRH 4T4R B5	1	FIBER	78'-0"±	NO	
LTE WCS						2°	0°			1	RRH4x25-WCS-4R	1	FIBER	78'-0"±	NO	



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NOTES:

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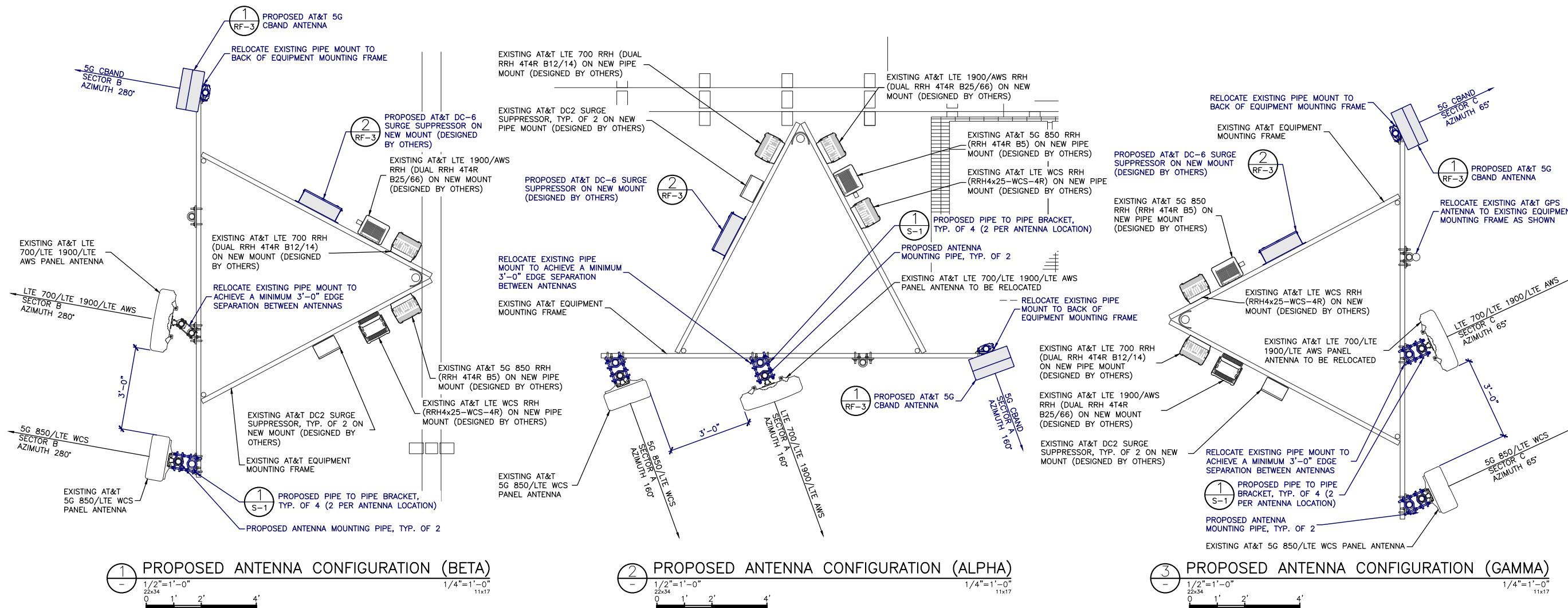
VERIFICATION THAT THE EXISTING ANTENNA MOUNTS ARE CAPABLE OF SUPPORTING THE PROPOSED ANTENNA LOADING IS TO BE PROVIDED PRIOR TO ANY EQUIPMENT MODIFICATION.
STRUCTURAL ANALYSIS AND DESIGN TO BE COMPLETED PRIOR TO FINAL CONSTRUCTION DESIGN COMPLETION

MOUNT ALL PROPOSED EQUIPMENT AS PER MANUFACTURER'S RECOMMENDATIONS

SCOPE OF WORK

- REMOVE (1) EXISTING SBNHH-1D65B PANEL ANTENNA, TYP. PER SECTOR
- RELOCATE ALL EXISTING AT&T PANEL ANTENNAS AS SHOWN.
- RELOCATE EXISTING ANTENNA PIPES TO NEW LOCATIONS AS REQUIRED.
- RELOCATE EXISTING GPS ANTENNA TO EXISTING EQUIPMENT MOUNTING FRAME AS SHOWN.
- INSTALL PIPE TO PIPE STANDOFF KITS c/w NEW ANTENNA MOUNTING PIPES AS SHOWN
- REMOVE ALL EXISTING AT&T UMTS COAX CABLING.
- INSTALL (1) PROPOSED NOKIA AEQK ACTIVE ANTENNA c/w INTEGRATED RADIO, TYP. PER SECTOR.
- INSTALL (1) PROPOSED DC6-48-60-18-8C-EV SURGE SUPPRESSOR, TYP. PER SECTOR.
- INSTALL (3) NEW PIPE MOUNTS FOR RRH AND SURGE SUPPRESSOR MOUNTING, TYP. PER SECTOR.

PROPOSED ANTENNA CONFIGURATION AND SCHEDULE DATA WAS OBTAINED FROM AT&T RF DATA SHEET (DATED 10/28/2021) RFDS VERSION 2.0



13555 SE 36TH ST SUITE 100
BELLEVUE, WA 98006



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PROJECT NO: 2152U145

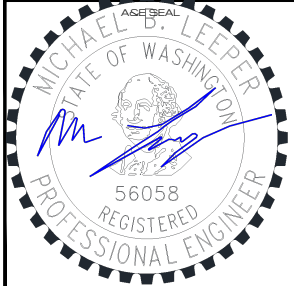
DRAWN BY: MP

CHECKED BY: LC

SUBMITTALS

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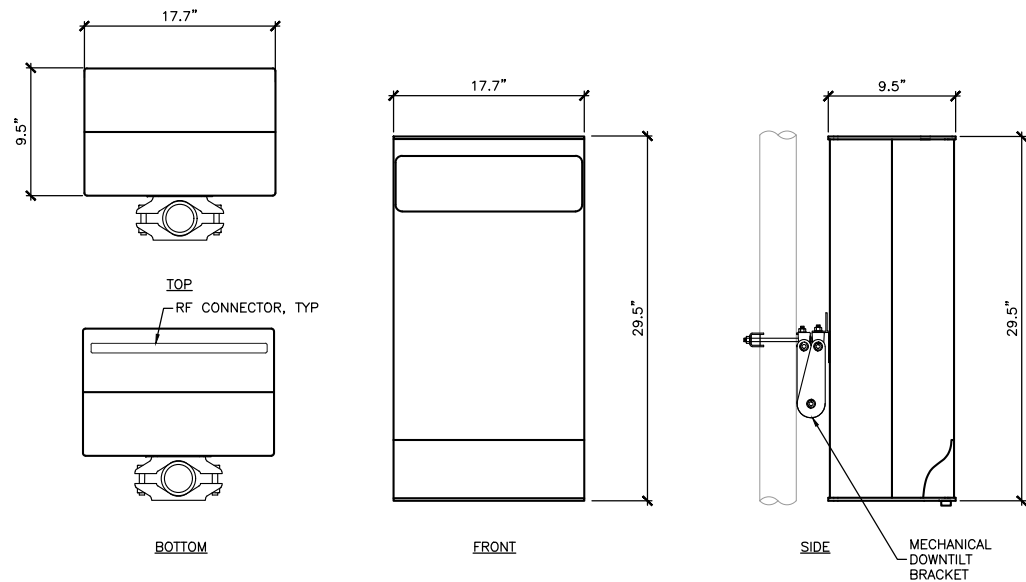


SITE
MERCER ISLAND
SD05
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MERCER ISLAND,
WA 98040

FA #: 10092489

SHEET TITLE
PROPOSED ANTENNA
CONFIGURATIONS II

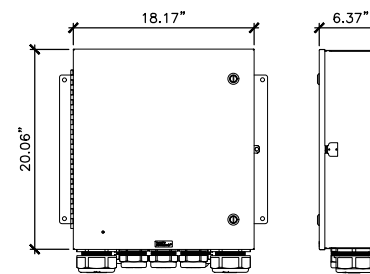
SHEET NUMBER
RF-2



MANUFACTURER: NOKIA
 MODEL: AEQK
 WEIGHT: 99.2 LBS
 DIMENSIONS: 29.5" X 17.7" X 9.5"

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

1 ANTENNA DETAIL
 N.T.S.



MANUFACTURER: RAYCAP
 MODEL: DC6-48-60-18
 HEIGHT: 20.06"
 WIDTH: 18.17"
 DEPTH: 6.37"
 WEIGHT: 34.9 LBS

2 SURGE SUPPRESSOR DETAIL
 N.T.S.



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 BELLEVUE, WA 98006

PROJECT NO: 2152U145

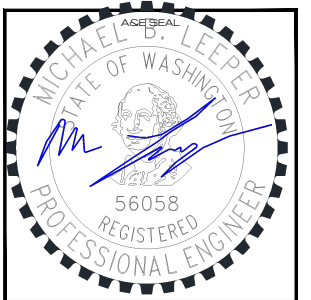
DRAWN BY: MP.

CHECKED BY: LC.

SUBMITTALS

2	SEP 21/22	REVISED PER CITY	OL
1	MAY 17/22	REVISED PER MASTEC	AV
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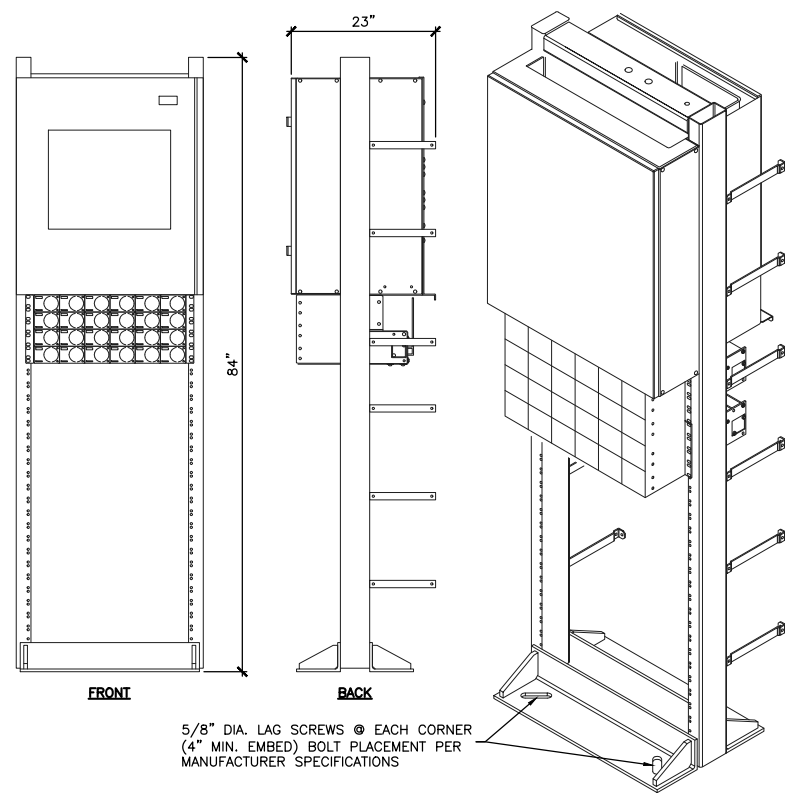


SITE
 MERCER ISLAND
 SD05
 7900 SE 28TH ST
 MERCER ISLAND,
 WA 98040

FA #: 10092489

SHEET TITLE
 RF & EQUIPMENT
 DETAILS I

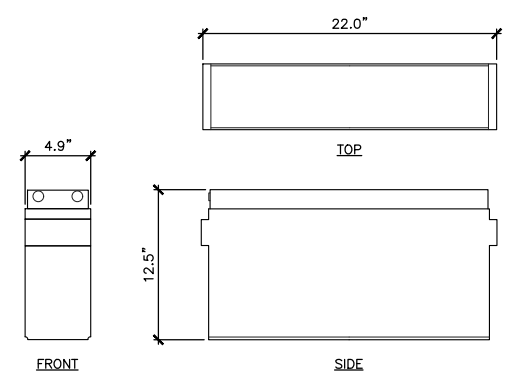
SHEET NUMBER
RF-3



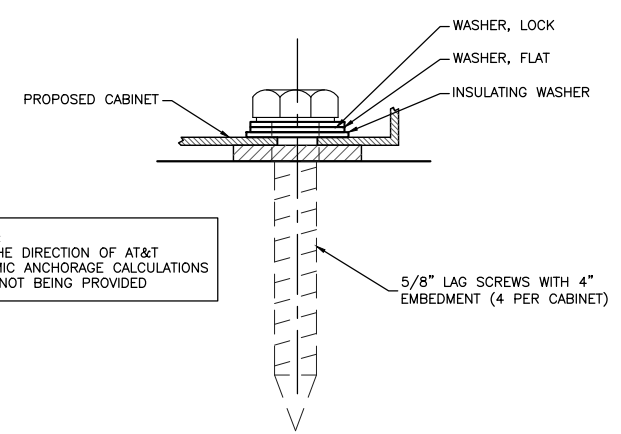
MANUFACTURER: VERTIV
 MODEL: NETSURE 7100 POWER SYSTEM
 HEIGHT: 84"
 WIDTH: 25"
 DEPTH: 23"
 COMPONENTS:
 (12) RECTIFIER ONLY POSITIONS
 (12) RECTIFIER/CONVERTER POSITIONS
 LVBD/MBD
 ETHERNET
 TEMP COMP
 (57) -48V (12) +24V CB POSITIONS
 (SHIPS ON 7FT ZONE 4 RACK)

1 VERTIV NETSURE 7100 POWER SYSTEM
 N.T.S.

MANUFACTURER: MARATHON
 MODEL: M12V180FT 12V 180AH BATTERY
 HEIGHT: 12.5"
 WIDTH: 4.9"
 DEPTH: 22.0"
 WEIGHT: 133.0 LBS



2 BATTERY DETAIL
 N.T.S.



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

3 ANCHORAGE DETAIL
 N.T.S.

BATTERY STORAGE SYS. THRESHOLD QUANTITIES

BATTERY TECHNOLOGY	CAPACITY
FLOW BATTERIES**	20kWh
LEAD ACID, ALL TYPES	70kWh
LITHIUM, ALL TYPES	50kWh
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

MAXIMUM ALLOWABLE BATTERY QUANTITIES:

BATTERY TECHNOLOGY	MAX. ALLOWABLE QUANTITIES	GROUP_H OCCUPANCY
FLOW BATTERIES**	600kWh	GROUP II 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

BATTERY CONSUMPTION CALCULATION:

NEW DC POWER PLANT WITH (16) BATTERIES (2.16 kWh)	34.56 kWh
TOTAL CONSUMPTION 2019 CFC, SECTION 1206: NOT APPLICABLE IF LESS THAN 70 kWh	34.56 kWh



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



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 BELLEVUE, WA 98006

PROJECT NO: 2152U145

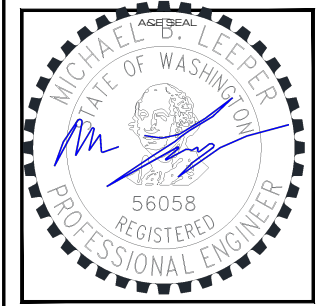
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SUBMITTALS

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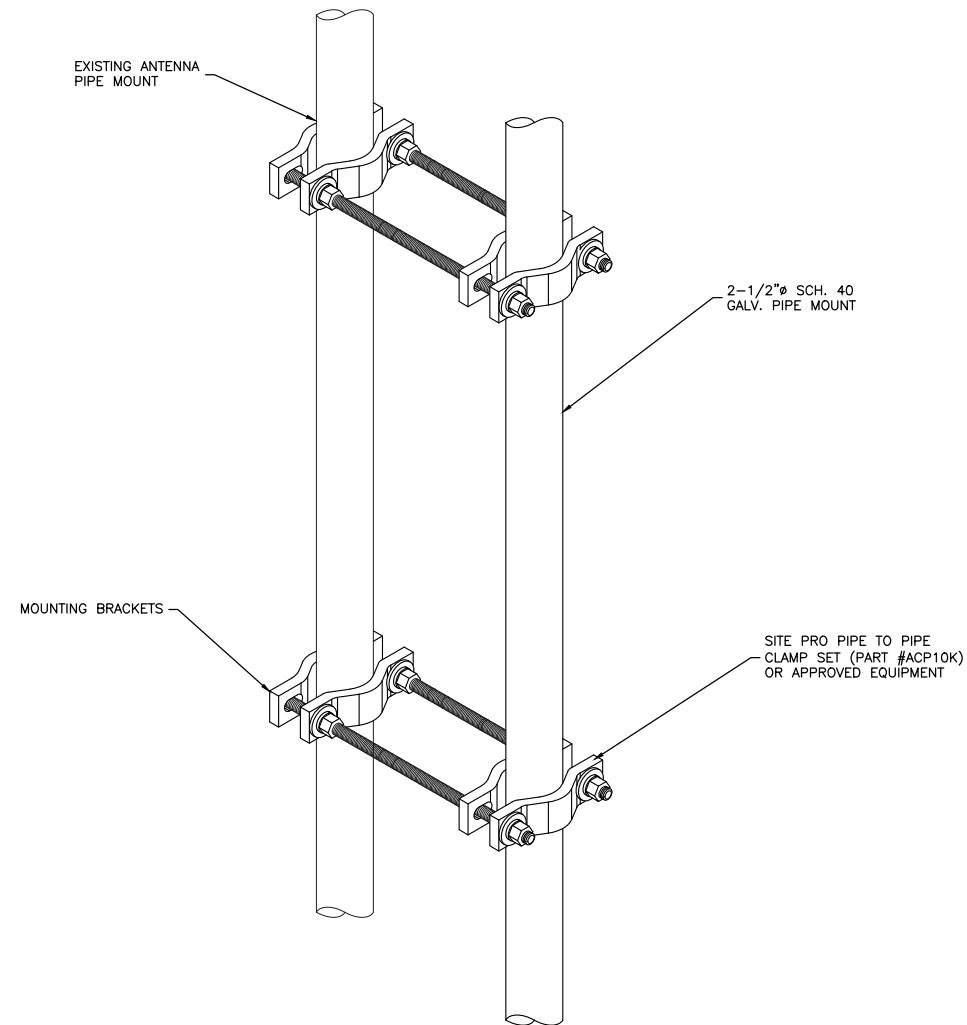
FA #: 10092489

SHEET TITLE
 RF & EQUIPMENT
 DETAILS II

SHEET NUMBER
 RF-4

NOTES:

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



1 PIPE TO PIPE DETAIL
- N.T.S.



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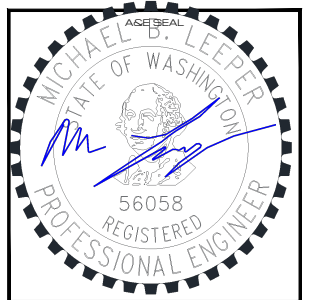
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SITE
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SD05
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WA 98040

FA #: 10092489

SHEET TITLE

STRUCTURAL DETAILS

SHEET NUMBER

S-1

GENERAL NOTES:

- 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.
- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT
- PERFORM DETAILED VERIFICATION OF WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND COMMENCING CONSTRUCTION. ISSUE A WRITTEN NOTICE TO THE CONSULTANT OF ANY DISCREPANCIES.
- OBTAIN ALL PERMITS, PAY ASSOCIATED FEES AND SCHEDULE INSPECTION.
- 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.
- CARRY OUT WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
- 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.
- 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.
- 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.
- 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.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR REQUESTING CONNECTION OF COMMERCIAL POWER FROM THE POWER COMPANY. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR.
- COORDINATE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING WITH LOCAL TELEPHONE COMPANY. APPLY FOR TELEPHONE SERVICE IMMEDIATELY UPON AWARD OF CONTRACT.

BASIC MATERIALS AND METHODS:

- ALL ELECTRICAL WORK SHALL CONFORM TO THE EDITION OF THE NEC ACCEPTED BY THE LOCAL JURISDICTION AND TO THE APPLICABLE LOCAL CODES AND REGULATIONS.
- 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.
- 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.
- 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.
- MAINTAIN ALL CLEARANCES AS REQUIRED BY NEC.
- 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.
- SILICONE SEAL AROUND ALL BOLTS AND SCREWS USED TO SECURE EQUIPMENT TO EXTERIOR OF BUILDING.
- MAKE NECESSARY CONNECTIONS FOR BATTERY IN EMERGENCY LIGHT FIXTURE. CONNECT EXTERIOR LIGHT FIXTURE (PROVIDED BY SHELTER MANUFACTURER) TO EXTERNAL JUNCTION BOX.

CONDUCTORS AND CONNECTORS:

- 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.
- ALL CONDUCTORS USED FOR GROUNDING SHALL BE COPPER AND SHALL HAVE GREEN INSULATION.
- 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.
- UNLESS NOTED OTHERWISE ALL LUGS SHALL BE TIN PLATED COPPER, TWO-HOLE, LONG BARREL, COMPRESSION TYPE.

RACEWAYS AND BOXES:

- ALL CONDUIT SHALL BE UL LABELED.
- ALL EMPTY CONDUITS INSTALLED FOR FUTURE USE SHALL HAVE A PULL CORD.
- SHEET METAL BOXES SHALL CONFORM TO NEMA OS1; CAST-METAL BOXES SHALL CONFORM TO NEMA B1 AND SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS NOTED OTHERWISE.

GROUNDING:

- ALL SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REVISION NEC.
- GROUND LUGS ARE SPECIFIED UNDER SECTION 3 "CONDUCTORS AND CONNECTORS".
- ALL GROUND LUG AND COMPRESSION CONNECTIONS SHALL BE COATED WITH ANTI-OXIDANT AGENT, SUCH AS NO-OX, NOALOX, PENETROX OR KOPRSHIELD.
- GROUND ALL EXPOSED METALLIC OBJECTS ON BUILDING EXTERIOR INCLUDING BUILDING TIE DOWN BRACKETS.
- PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
- DO NOT INSTALL GROUND RING OUTSIDE OF PROPERTY LINE.
- REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE.
- 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.
- REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY THERMO-WELDING WITH ERICO T-319 GALVANIZING BAR.
- ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE METALS BEING CONNECTED.
- 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.
- 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.
- FOR METAL FENCE POST GROUNDING, USE A HEAVY DUTY TYPE GROUNDING CLAMP OR EXOTHERMIC WELD CONNECTION TO POST.
- 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.
- 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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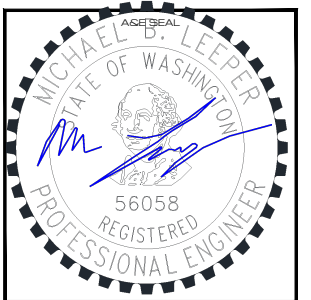
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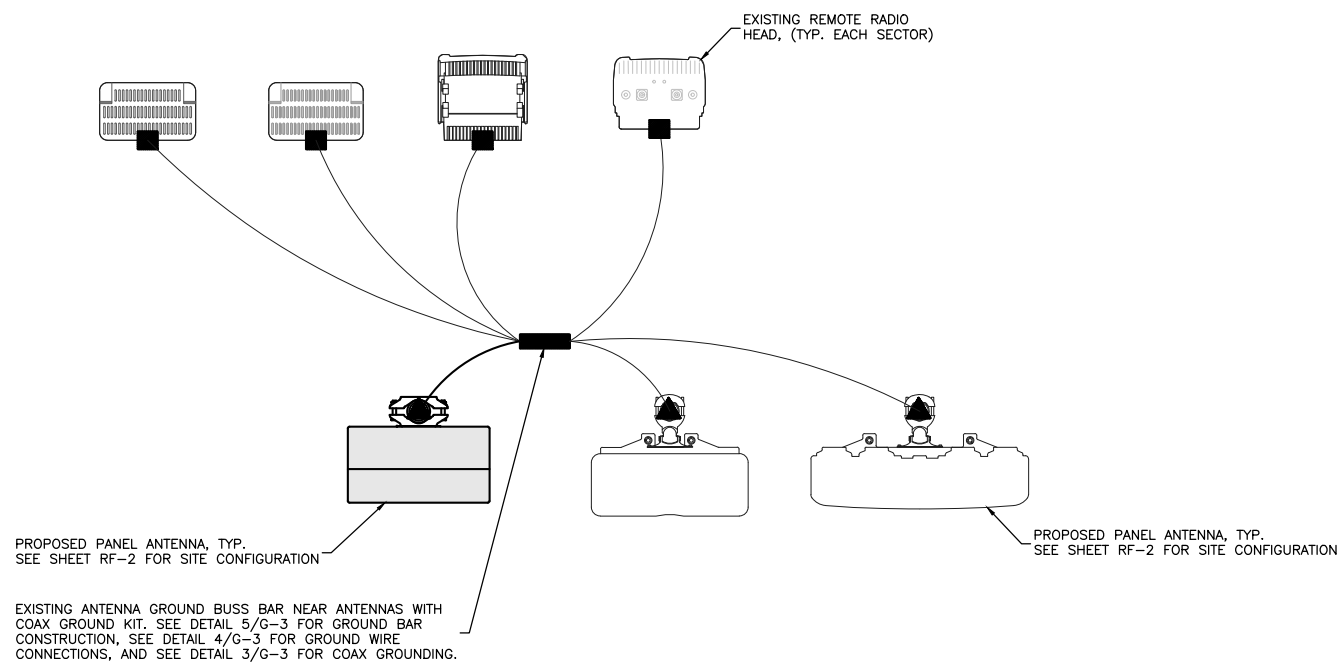


SITE
MERCER ISLAND
SD05
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MERCER ISLAND,
WA 98040

FA #: 10092489

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:

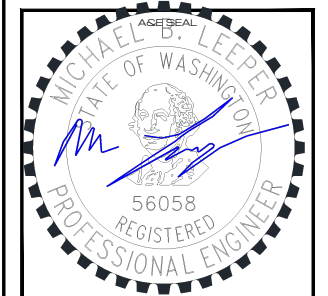
1. ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, 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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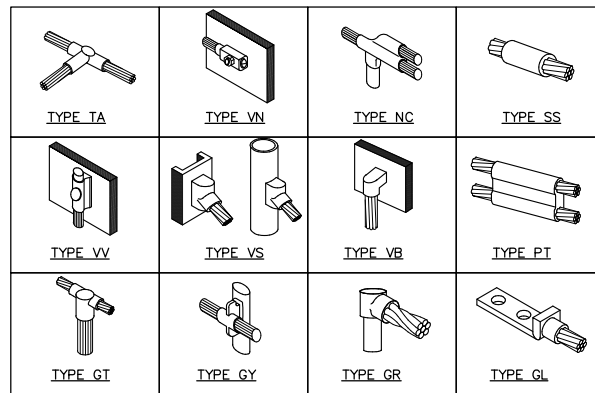


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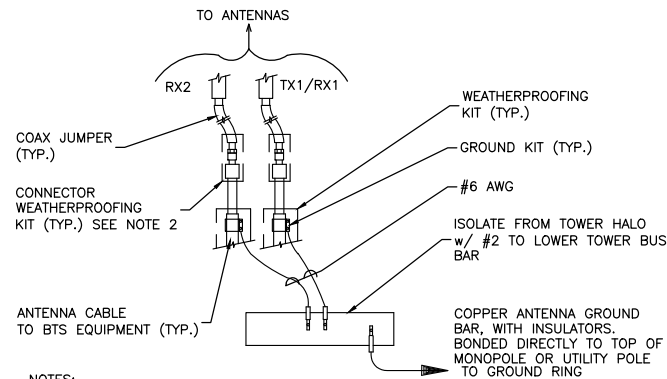
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SHEET TITLE
SCHEMATIC
GROUNDING PLAN

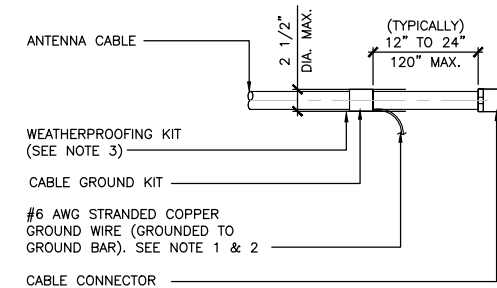
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G-2



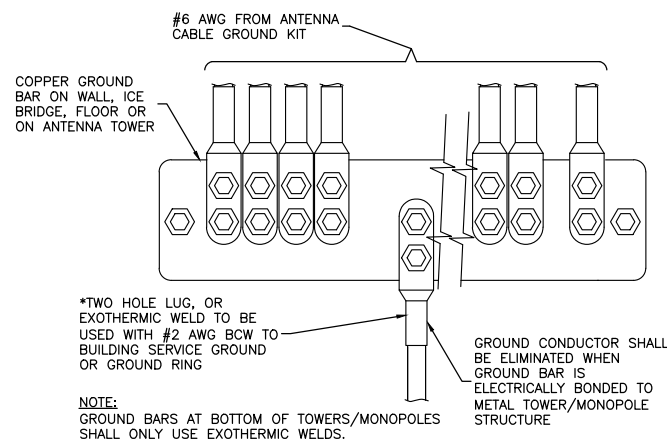
1 CADWELD GROUNDING CONNECTIONS
N.T.S.



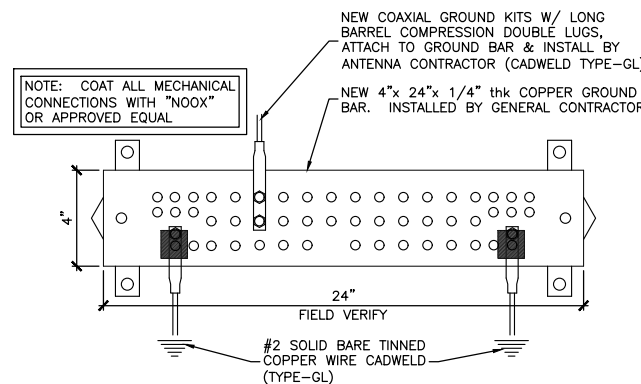
2 GROUND CABLE CONNECTION
N.T.S.



3 CABLE GROUND KIT CONNECTION
N.T.S.



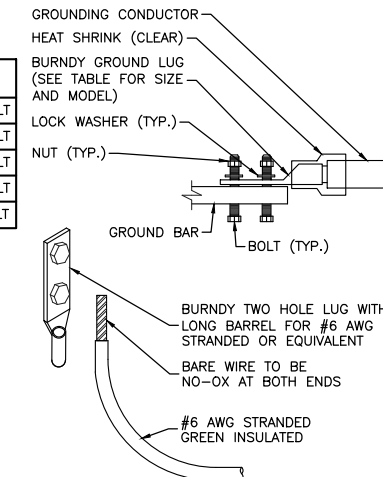
4 GROUND WIRE INSTALLATION
N.T.S.



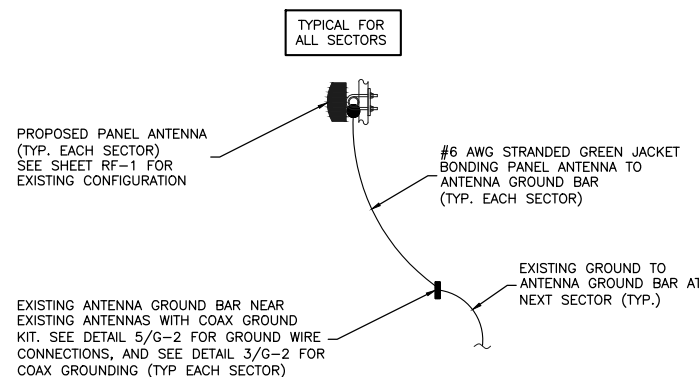
5 GROUND BAR
N.T.S.

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:
- 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.
 - COPPER SHIELD, ANTIOX, CR NO-OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
 - 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.

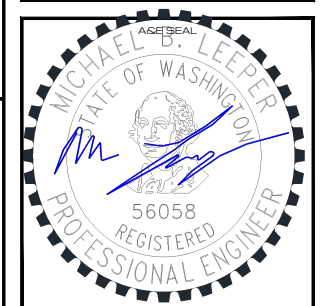


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