PROJECT DESCRIPTION

AT&T PROPOSES TO 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 RRH AND SURGE SUPPRESSOR MOUNTING.

PROJECT INFORMATION

ZONING DISTRICT:

UNMANNED TELECOMMUNICATIONS FACILIT

LINMANNED TELECOMMUNICATIONS FACILIT

545230-1385

EXISTING USE:

OCCUPANCY:

A.P.N.

PROPOSED USE:

SITE ADDRESS 7900 SE 28TH ST

MERCER ISLAND, WA 98040

47° 35' 08.304" N (47.5856400° N)

122° 13' 55.416" W

LONGITUDE: (-122.2320600° W)

LATITUDE:

JURISDICTION: CITY OF MERCER ISLAND

RE DATA SHEET

DATE ISSUED: 10/28/2021 VERSION: 2.00

| | DRAWING INDEX | REV |
|------|----------------------------------|-----|
| T-1 | TITLE SHEET | 0 |
| GN-1 | GENERAL NOTES I | 0 |
| GN-2 | GENERAL NOTES II | 0 |
| C-1 | SITE PLAN | 0 |
| C-2 | ROOF PLAN | 0 |
| C-3 | EQUIPMENT LAYOUT | 0 |
| C-4 | EXISTING WEST BUILDING ELEVATION | 0 |
| C-5 | PROPOSED WEST BUILDING ELEVATION | 0 |
| RF-1 | EXISTING ANTENNA CONFIGURATIONS | 0 |
| RF-2 | PROPOSED ANTENNA CONFIGURATIONS | 0 |
| RF-3 | RF & EQUIPMENT DETAILS | 0 |
| S-1 | STRUCTURAL DETAILS | 0 |
| G-1 | GROUNDING NOTES | 0 |
| G-2 | SCHEMATIC GROUNDING PLAN | 0 |
| G-3 | GROUNDING DETAILS | 0 |
| | | |
| 1 | | 1 |

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 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

SITE PROJECT PARTICIPANTS

| ı | | <u>NAME</u> | COMPANY | <u>NUMBER</u> |
|---|-------------|-----------------|--------------------------|---------------|
| | 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 |
| | | | | |



PROJECT SCOPE: 5G NR 1SR CBAND

FA#: 10092489

PTN#: 3801A0YFM1/3801A0XZQE/

3801A0XX22

PACE NUMBER: MRW0R052471/MRW0R051810/

MRW0R051708

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

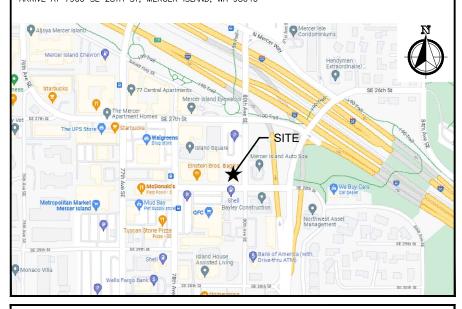
ISSAQUAH. WA 98027

VICINITY MAP

DEPART FROM SEATTLE-TACOMA INTERNATIONAL AIRPORT

HEAD SOUTH-EAST ON AIRPORT EXPRESSWAY TOWARDS DEPARTURES DR. USE LEFT LANE AND KEEP LEFT, SLIGHT LEFT ONTO AIRPORT EXPRESSWAY, KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR WA-518 E/I-5/I-405/SEATTLE/TACOMA AND MERGE ONTO WA-518 E, MERGE ONTO WA-518 E, TAKE THE EXIT ONTO WA-509 N TOWARDS SEATTLE (9.9 MI), TAKE EXIT 164A FOR I-90E TOWARD SPOKANE (0.7 MI), CONTINUE ONTO I-90E (0.8 MI), KEEP LEFT AT FORK TO STAY ON I-90E (3.2 MI), TAKE ÈXIT 7B FOR ISLAND CREST WAY (0.3 MI), CONTINUE ON ISLAND CREST WAY (377 FT), TURN RIGHT ONTO SE 30TH ST (295 FT), TURN RIGHT ONTO 80TH AVE SE (0.1 MI), DESTINATION WILL BE ON THE

ARRIVE AT 7900 SE 28TH ST. MERCER ISLAND, WA 98040



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.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 (AHÚ) 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]

[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

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 FLECTRONIC FOUIPMENT

IEEE C2 NATIONAL ELECTRIC SAFETY CODE. LATEST VERSION

TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS

ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL

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 BEGUIREMENT AND A SPECIFIC PROMISERS. REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

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



⊹MasTec Network Solutions

13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006



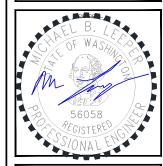
PROJECT NO: 2152U145

DRAWN BY:

CHECKED BY: LC

SUBMITTALS

FINAL CD's MAR 23/22 REVISED RRH MOUNTING REVISED PER COMMENTS A FFB 10/22 ISSUED FOR 90% REVIEW ME



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

FA#: 10092489

SHEET TITLE

TITLE SHEET

|⁻_ 1

GENERAL NOTES:

- 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 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.
- 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 SMALL VISIT THE CONSTRUCTION SHE WITH THE CONSTRUCTION CONTRACT OF 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
- 3. FOR COLLOCATION SITES: CONTACT TOWER OWNER REPRESENTATIVE FOR
- 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.
- 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.
- 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
- OWNER, CONTRACTOR, AND TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER SHALL MEET JOINTLY TO VERIFY ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.
- 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.
- 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 &
- 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
- 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 TATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF
- 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 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—RIULT DRAWING REFCORDS. AS-BUILT DRAWING RECORDS.
- 16. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED
- 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
- 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
- 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 POLIRING OF ANY NEW SLAB OVER AN EXISTING SLAB THE . 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 E MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND 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
- 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 Y 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
- 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 . 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
- 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 TH 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 JTILITIES 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 THE CALL STATES AND ASSESSED 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 THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY FERI 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 INTEGRIT
- 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 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 CONDINATOR, 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 DRAWING SEL — HAVING INJURIED AN ONIGINAL 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:

- PLANS PART OF THIS SET ARE COMPLEMENTARY. INFORMATION IS NOT LIMITED TO ONE PLAN. 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.
- 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 INCLUDE 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.
- THESE CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO CREATE A CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ARCHITECT AND THE CONTRACTOR.



REDMOND, WA 98052

⊹MasTec Network Solutions

13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006



13555 SF 36TH ST SUITE 100 BELLEVUE WA 98006

PROJECT NO: 2152U145

DRAWN BY:

CHECKED BY

LC SUBMITTALS

M.P.

FINAL CD's 0 MAR 24/22 MAR 23/22 REVISED RRH MOUNTING MAR 14/22 REVISED PER COMMENTS

A FEB 10/22 ISSUED FOR 90% REVIEW MF



MERCER ISLAND SD05 7900 SE 28TH ST MFRCER ISLAND. WA 98040

FA#: 10092489

GENERAL NOTES I

SHEET NUMBER

DESIGN CRITERIA:

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

CONCRETE NOTES:

- 1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI-318.
- 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 SL (FOR EQUIPMENT CABINET) | ABS 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
- 7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
- 8. SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60. fv=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" |
|------------|---|-----------------------------|
| – LARGE | FORMED SURFACES EXPOSED R) TO EARTH OR WEATHER (#5 BARS OR SMALLER) | (#6 BARS OR 2" 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
- 14. ALL EXPANSION ANCHORS TO BE HILTI BRAND. ADHESIVE ANCHORS REQUIRE TESTING TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER.

BUILDING NOTES:

- 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 FLEVATION 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:

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

- 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
- 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 1/2" DIAMETER NYLON, WITH A NOMINAL
- SAFETY LINE SHALL BE ATTACHED TO A SUBSTANTIAL MEMBER OF THE
- 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.
- 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:

- 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.
- 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.
- THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
- STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
- ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING
- 7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE

| INST | TALLATION 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 |

- WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
- STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT
- 10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED FOUAL.
- 11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
- 12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
- 13 ALL FRE PANELS TO BE FIBERPLATE CLADDING PANEL
- 14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE
- 15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME
- 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.

| m | | | |
|---------|-----------------------------|--|--|
| RANGE | RECOMMENDED | | |
| 2.0-4.0 | 3.0 | | |
| 1.5-3.5 | 2.5 | | |
| 4.0-5.0 | 5.0 | | |
| | RANGE 2.0-4.0 1.5-3.5 | | |

STEEL CONSTRUCTION NOTES:

- 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.
- ALL FIFLD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED
- 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
- 11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.

WOOD CONSTRUCTION NOTES:

- ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
- 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.

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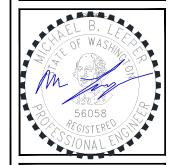
PROJECT NO: 2152U145

DRAWN BY: M.P.

CHECKED BY: LC

SUBMITTALS

FINAL CD's 0 MAR 24/22 MAR 23/22 REVISED RRH MOUNTING MAR 14/22 REVISED PER COMMENTS A FEB 10/22 ISSUED FOR 90% REVIEW MF



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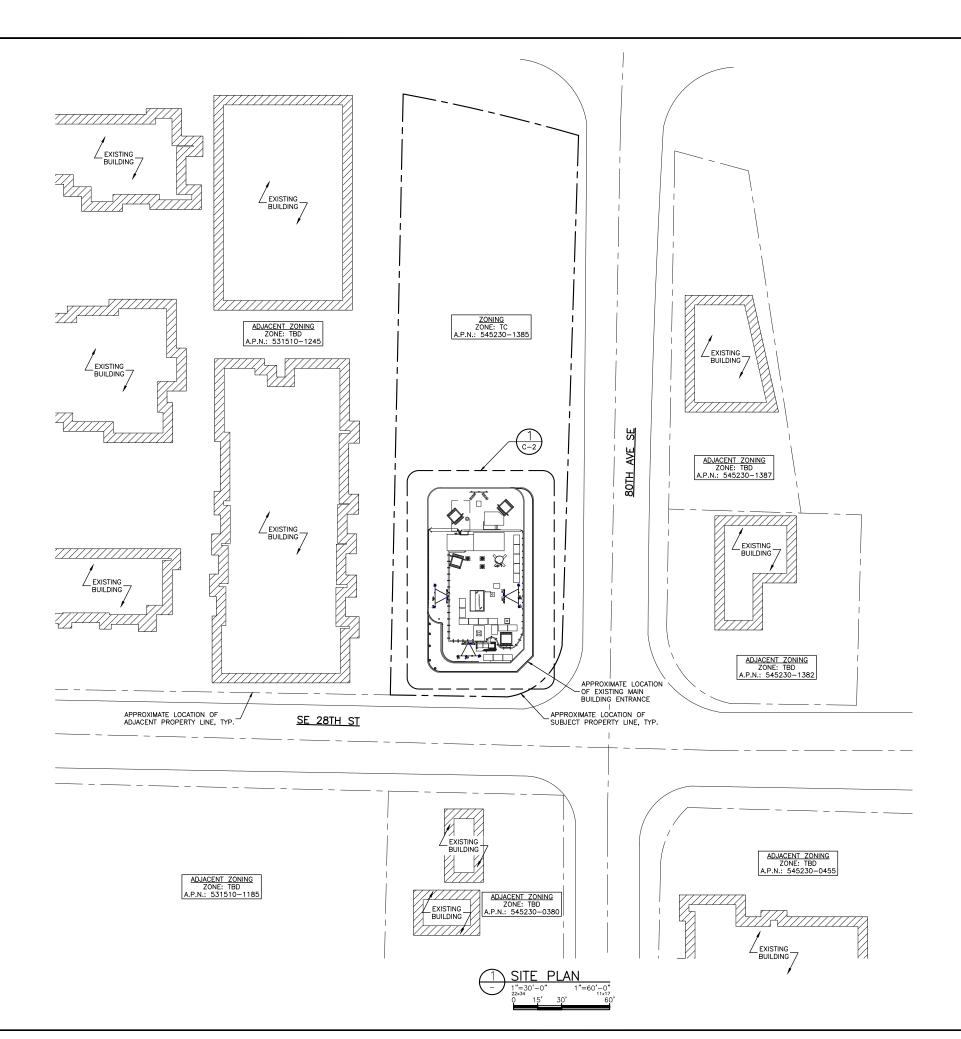
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SHEET TITLE

GENERAL NOTES II

GN-2





NOTES:

- 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 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 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 BOTH 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.

at&t

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

MasTec Network Solutions

13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006



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PROJECT NO: 2152U145

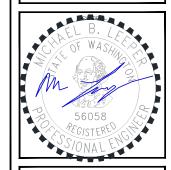
DRAWN BY: M.P.

CHECKED BY: L.C.

SUBMITTALS

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| С | MAR 23/22 | REVISED RRH MOUNTING | AF |
| В | MAR 14/22 | REVISED PER COMMENTS | AF |
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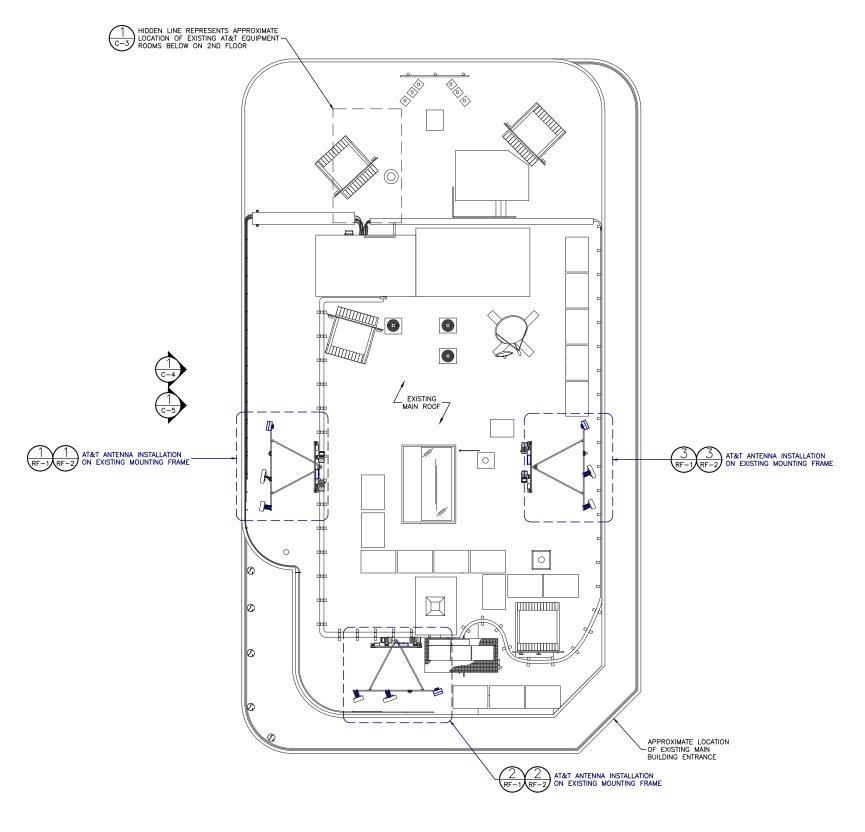
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SHEET TITLE

SITE PLAN

SHEET NUMBER







- 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.



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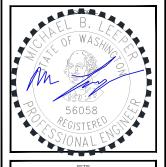
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FA#: 10092489

SHEET TITLE

ROOF PLAN







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.





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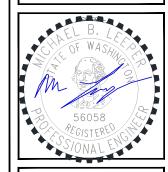
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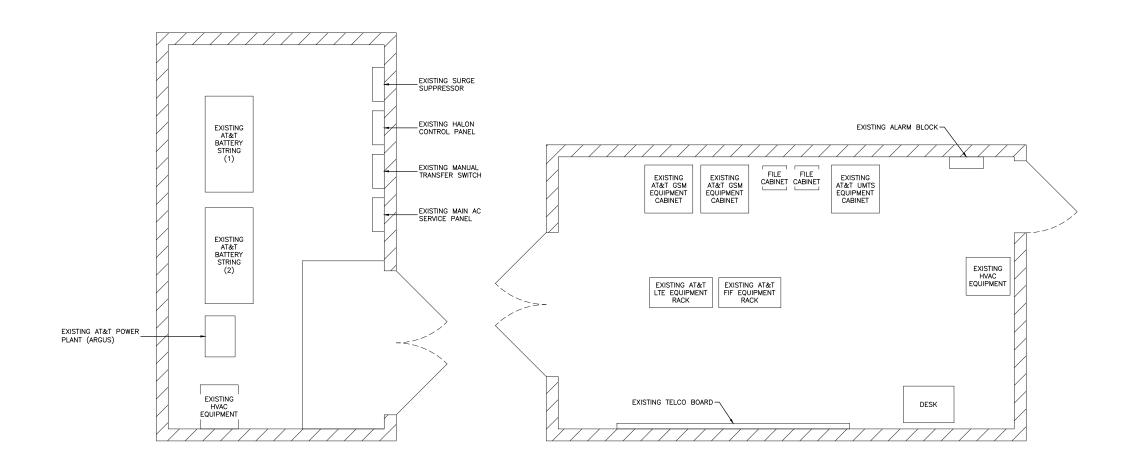
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FA #: 10092489

SHEET TITLE

EQUIPMENT LAYOUT

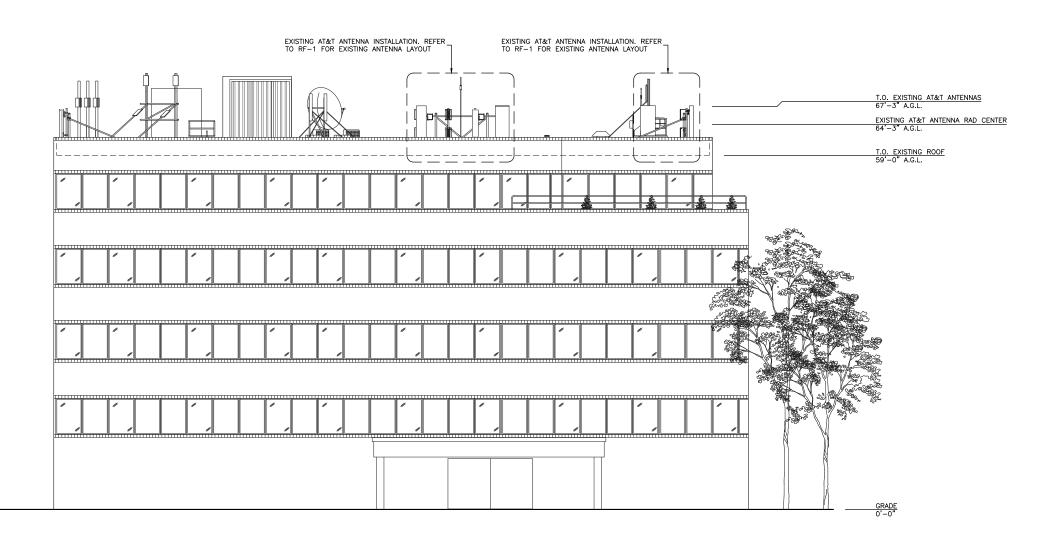




EQUIPMENT LAYOUT

NOTE:

1. ELEVATION IS DIAGRAMMATIC ONLY.



EXISTING WEST ELEVATION
1/8"=1'-0" 1/16"=1'-0"
1/16"=1'-0"
1/16"=1'-0"



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Network Solutions

13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006



13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006

PROJECT NO: 2152U145

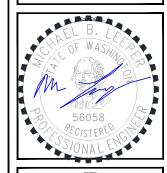
DRAWN BY: M.P.

CHECKED BY: L.C.

SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | Al |
|-------|-----------|------------------------|----|
| С | MAR 23/22 | REVISED RRH MOUNTING | Ai |
| В | MAR 14/22 | REVISED PER COMMENTS | Al |
| _ | FFD 10/00 | ICCUIED FOD OOM DEVIEW | |

THE INFORMATION CONTAINED IN THIS SET O DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THA WHICH RELATES TO THE CLIENT NAMED IS STRICT! Y DECIMIENTED.



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

FA#: 10092489

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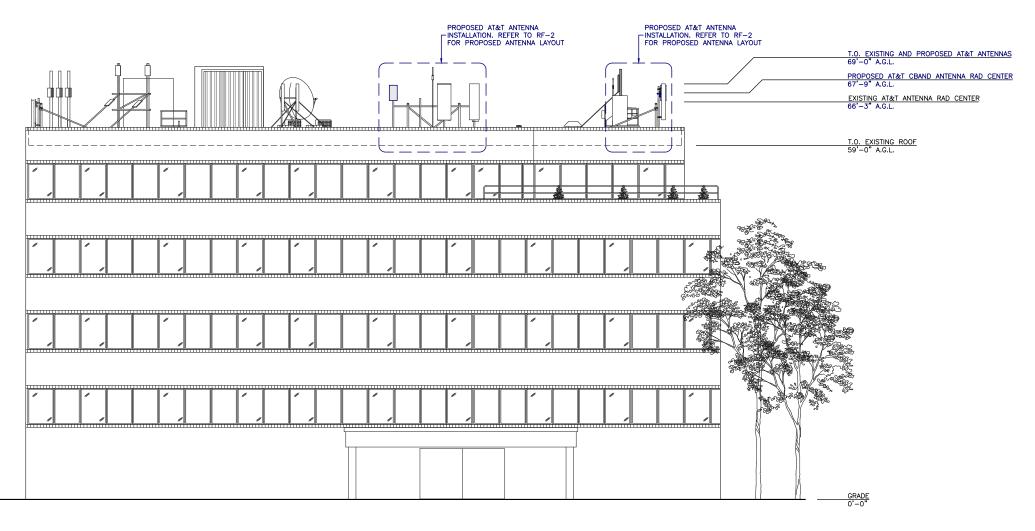
EXISTING WEST ELEVATIONS

SHEET NUMBER

NOTE:

1. ELEVATION IS DIAGRAMMATIC ONLY.

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







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PROJECT NO: 2152U145

DRAWN BY: M.P.

CHECKED BY:

SUBMITTALS

| ı | | | | |
|---|---|-----------|-----------------------|----|
| ı | 0 | MAR 24/22 | FINAL CD's | AF |
| ı | С | MAR 23/22 | REVISED RRH MOUNTING | AF |
| ı | В | MAR 14/22 | REVISED PER COMMENTS | AF |
| ı | Α | FEB 10/22 | ISSUED FOR 90% REVIEW | MF |

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WHICH RELATES TO THE CLIENT NAMED IS
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FA#: 10092489

SHEET TI

PROPOSED WEST ELEVATION



| | EXISTING ANTENNA CONFIGURATION AND SCHEDULE | | | | | | | | | | | | | | | |
|----------|---|-----------|-----------------------|-------------|-------------------------------|---------------|---------------|-----|------|--------------|-------------------------|----------------------|----------------|------------------|----------|--------------------------------|
| SECTOR A | AZIMUTH | RADCENTER | NUMBER OF ANTENNAS | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | ТМА | RRH COUNT | RRH MODEL NO. | NUMBER OF FEEDERS | FEEDER TYPE | FEEDER LENGTH | DIPLEXED | EQUIPMENT |
| LTE 700 | | | | | | 4* | | | | 1 | DUAL RRH 4T4R B12/14 | | | | | |
| 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* | | | | | BOAL 1881 41418 B207 00 | | | | | (2) EXISTING DC2-48-60-0-9E |
| UMTS 850 | 160* | 64'-3" | 1 1 | COMMSCOPE | SBNHH-1D65B | 0, | 0. | NO | NONE | _ | - | 2 | 7/8" | 78'-0"± | NO | DC2-48-60-0-9E |
| LTE WCS | | | | | SBITTIT TESSE | 0, | Ů | | | 1 | RRH4x25-WCS-4R | 1 | FIBER | 78'-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 | _ | - | 2 | 7/8" | 78'-0"± | NO | |
| LTE WCS | 200 | 04 - 3 | ' | COMINISCOFE | 3BN111-1203B | 0. | Ŭ | NO | NONE | 1 | RRH4x25-WCS-4R | 1 | FIBER | 78'-0"± | NO | |
| LTE 700 | | | | | | 2* | | | | 1 | DUAL RRH 4T4R B12/14 | | | | | (2) EXISTING |
| LTE 1900 | 280* | 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 | DC2-48-60-0-9E |
| 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 | - | - | 2 | 7/8" | 78'-0"± | NO | |
| LTE WCS | 65 | 64 -3 | ' | COMMSCOPE | 3BNRH-1003B | 0. | Ŭ | NO | NONE | 1 | RRH4x25-WCS-4R | 1 | FIBER | 78'-0"± | NO | |
| LTE 700 | | | | | | 2* | | | | 1 | DUAL RRH 4T4R B12/14 | | | | | (2) EXISTING |
| LTE 1900 | 65° | 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 | DC2-48-60-0-9E |
| LTE AWS | | | | | | 2* | | | | ' | DUAL MMT 414K B23/00 | | | | | |
| 5G 850 | 65° | 64'-3" | 1 | COMMSCOPE | NNH4-65B-R6 | 2* | 0, | NO | NONE | 1 | RRH 4T4R B5 | 1 | FIBER | 78'-0"± | NO | |

EXISTING ANTENNA CONFIGURATION AND SCHEDULE DATA WAS OBTAINED FROM AT&T RF DATA SHEET

(DATED 10/28/2021) RFDS VERSION 2.0



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.
- 2. CONTRACTOR TO SITE VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER.



*MasTec Network Solutions

13555 SE 36TH ST SUITE 100



13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006

PROJECT NO: 2152U145

DRAWN BY: M.P.

CHECKED BY: L.C.

SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | AF |
|---|-----------|-----------------------|----|
| С | MAR 23/22 | REVISED RRH MOUNTING | AF |
| В | MAR 14/22 | REVISED PER COMMENTS | AF |
| Α | FEB 10/22 | ISSUED FOR 90% REVIEW | MP |

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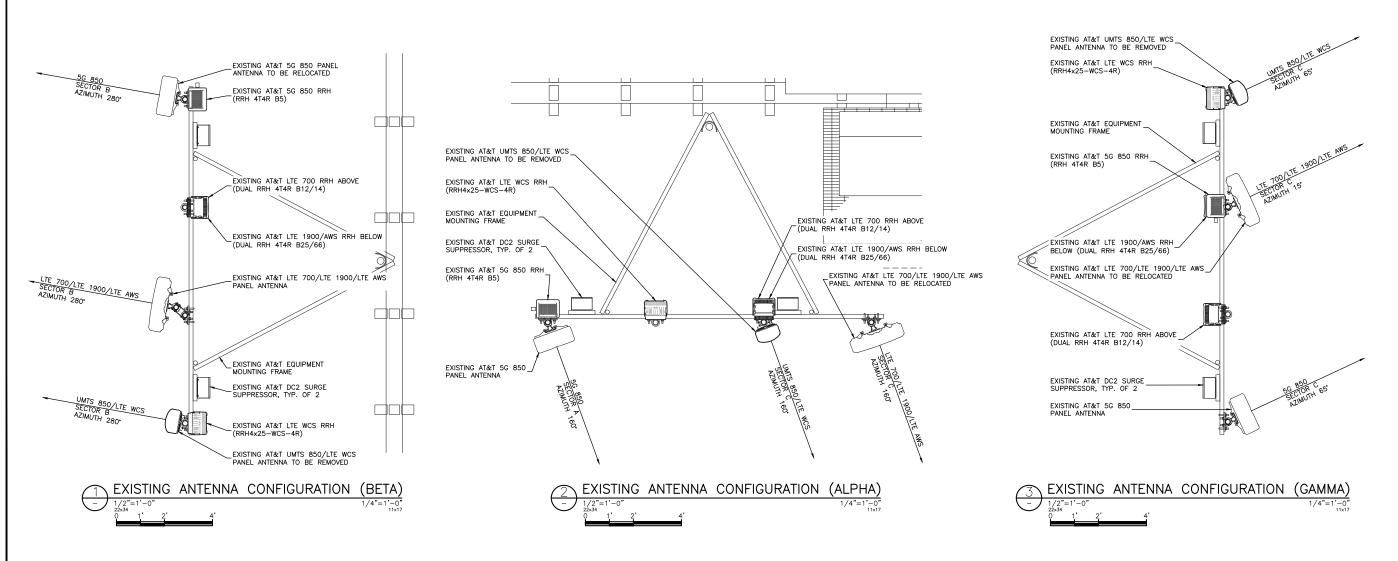


MERCER ISLAND SD05 7900 SE 28TH ST MERCER ISLAND, WA 98040

FA#: 10092489

EXISTING ANTENNA CONFIGURATIONS

PF-1



| | PROPOSED ANTENNA CONFIGURATION AND SCHEDULE | | | | | | | | | | | | | | | | | |
|----------|--|------------|-----------------------|------------------------------|-------------------------------|---------------|---------------|-----|------|--------------|-------------------------|----------------------|----------------|------------------|----------|-----------------------|--|--------------------|
| SECTOR A | SECTOR A AZIMUTH RADCENTER NUMBER OF ANTENNAS VENDOR MODEL ELEC. MECH. TILT TILT RET TMA RRH COUNT RRH MODEL NO. NUMBER OF FEEDER FEEDER DIPLEXED EQ | | | | | | | | | EQUIPMENT | | | | | | | | |
| 5G CBAND | 160° | 67'-9" | 1 | NOKIA | AEQK | 0. | 0* | NO | NONE | | INTEGRATED RADIO | _ | - | - | NO | | | |
| LTE 700 | | | | | | 4° | | | | 1 | DUAL RRH 4T4R B12/14 | | | | | (2) EXISTING | | |
| LTE 1900 | 160° | 66'-3" | 1 | CELLMAX | CMA-UBTMLBMLBHH-6516-16-21-21 | 2* | 0, | NO | NONE | _ | DUAL RRH 4T4R B25/66 | 1 | FIBER | 78'-0"± | NO | DC2-48-60-0-9E AND | | |
| LTE AWS | 1 | | | | | 2* | 1 | | | l ' | DUAL KKH 414K B23/00 | | | | | (1) PROPOSED | | |
| 5G 850 | 160° | 66'-3" | | COMMSCOPE | NNH4-65B-R6 | 4° | 0, | NO | NONE | 1 | RRH 4T4R B5 | 1 | FIBER | 78'-0"± | | DC6-48-60-18-8C-EV | | |
| LTE WCS | 160 | 66 -3 | | COMMSCOPE | NNH4-63B-R6 | 2* | 1 " | NO | NONE | 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 | 200 | 66 –3 | | COMMSCOPE | NNH4-03B-R0 | 2* | | NO | NONE | 1 | RRH4x25-WCS-4R | 1 | FIBER | 78'-0"± | INO | (2) EXISTING | | |
| LTE 700 | | | | | | 2. | | | | 1 | DUAL RRH 4T4R B12/14 | | | | | DC2-48-60-0-9E AND | | |
| LTE 1900 | 280* | 66'-3" | 1 | CELLMAX | CMA-UBTMLBMLBHH-6516-16-21-21 | 2* | 0, | NO | NONE | _ | DUAL RRH 4T4R B25/66 | 1 | FIBER | 78'-0"± | NO | (1) PROPOSED | | |
| LTE AWS | | | | | | 2* | | | | ' | DOAL KKH 414K B25/00 | | | | | | | DC6-48-60-18-8C-EV |
| 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* | | | | 1 | DUAL RRH 4T4R B12/14 | | | | | (2) EXISTING | | |
| LTE 1900 | 65° | 65* 66'-3" | 66'-3" 1 CELL | CELLMAX CMA-UBTMLBMLBHH-6516 | CMA-UBTMLBMLBHH-6516-16-21-21 | 2* | 0, | NO | NONE | 1 | DUAL RRH 4T4R B25/66 | 1 | 1 FIBER 7 | 78'-0"± | NO | DC2-48-60-0-9E AND | | |
| LTE AWS | | | | | | 2* | | | | ' | DOAL ((()) 414(B25) 00 | | | | | (1) PROPOSED | | |
| 5G 850 | 65° | 66'-3" | 1 | COMMSCOPE | NNH4-65B-R6 | 2* | 0. | NO | NONE | 1 | RRH 4T4R B5 | 1 | FIBER | 78'-0"± | NO | DC6-48-60-18-8C-EV | | |
| LTE WCS | 05 | 00 -3 | 1 | COMMSCOPE | 03H=00B=R0 | 2* | l | NO | NONE | 1 | RRH4x25-WCS-4R | 1 | FIBER | 78'-0"± | INU | | | |



B25/66) ON NEW MOUNT

NOTES:

- EXISTING ANTENNA LAYOUT INFORMATION OBTAINED FROM DRAWINGS PROVIDED 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.

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

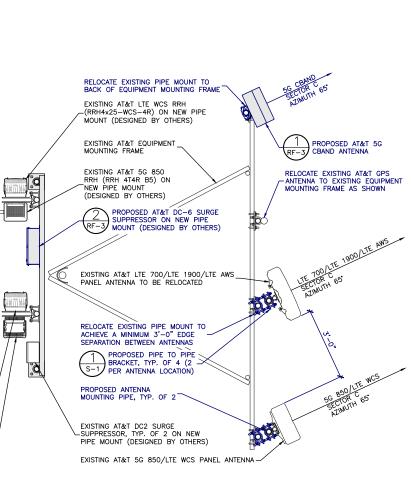
MOUNT ALL PROPOSED EQUIPMENT AS PER MANUFACTURER'S RECOMMENDATIONS

- REMOVE (1) EXISTING SBNHH-1D65B PANEL ANTENNA, TYP. PER SECTOR
- 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.
- ANTENNA c/w INTEGRATED RADIO, TYP. PER SECTOR
- INSTALL (1) PROPOSED DC6-48-60-18-8C-EV SURGE SUPPRESOR, TYP. PER SECTOR.

SCOPE OF WORK

- RELOCATE ALL EXISTING AT&T PANEL ANTENNAS AS

- INSTALL (1) PROPOSED NOKIA AEQK ACTIVE
- INSTALL (3) NEW PIPE MOUNTS FOR RRH AND SURGE SUPPRESSOR MOUNTING, TYP. PER SECTOR.



PROPOSED ANTENNA CONFIGURATION (GAMMA)



RTC BUILDING 3 18221 NE 72nd WAY REDMOND, WA 98052

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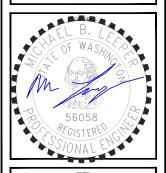
PROJECT NO: 2152U145

DRAWN BY: M.P.

CHECKED BY

LC SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | AF |
|----|-----------|-----------------------|----|
| O | MAR 23/22 | REVISED RRH MOUNTING | AF |
| в | MAR 14/22 | REVISED PER COMMENTS | AF |
| Α. | EER 10/22 | ISSUED FOR GOA BEALEM | MD |

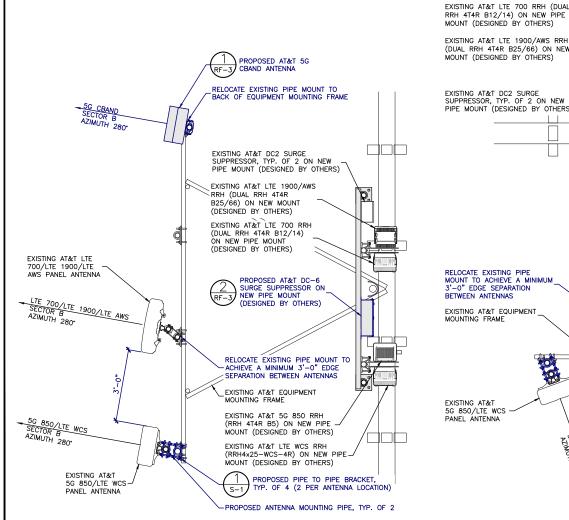


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FA#: 10092489

PROPOSED ANTENNA CONFIGURATIONS II

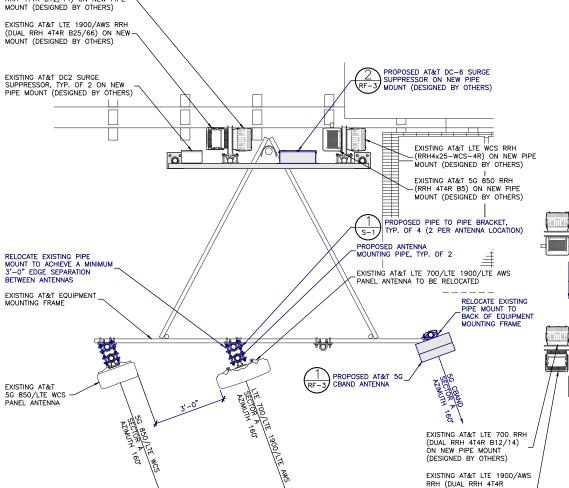
RF-2



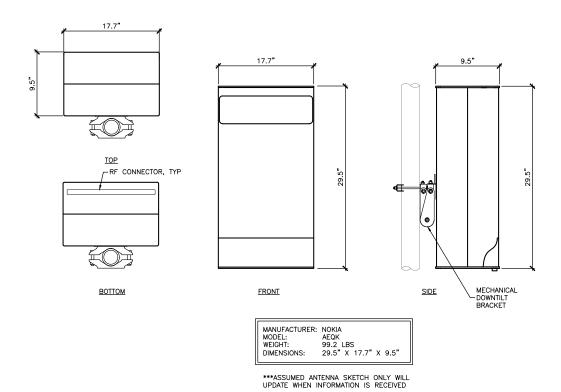
PROPOSED ANTENNA CONFIGURATION (BETA)

PROPOSED ANTENNA CONFIGURATION AND SCHEDULE DATA WAS OBTAINED FROM AT&T RF DATA SHEET

(DATED 10/28/2021) RFDS VERSION 2.0

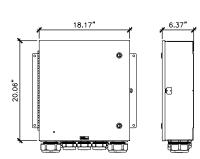


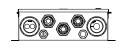
PROPOSED ANTENNA CONFIGURATION (ALPHA)



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

SURGE SUPPRESSOR DETAIL

N.T.S.



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PROJECT NO: 2152U145

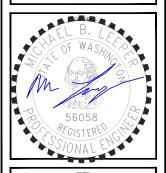
DRAWN BY: M.P.

CHECKED BY: L.C.

SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | AF |
|---|-----------|-----------------------|----|
| С | MAR 23/22 | REVISED RRH MOUNTING | ΑF |
| В | MAR 14/22 | REVISED PER COMMENTS | AF |
| Α | FEB 10/22 | ISSUED FOR 90% REVIEW | MP |

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FA #: 10092489

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RF & EQUIPMENT DETAILS

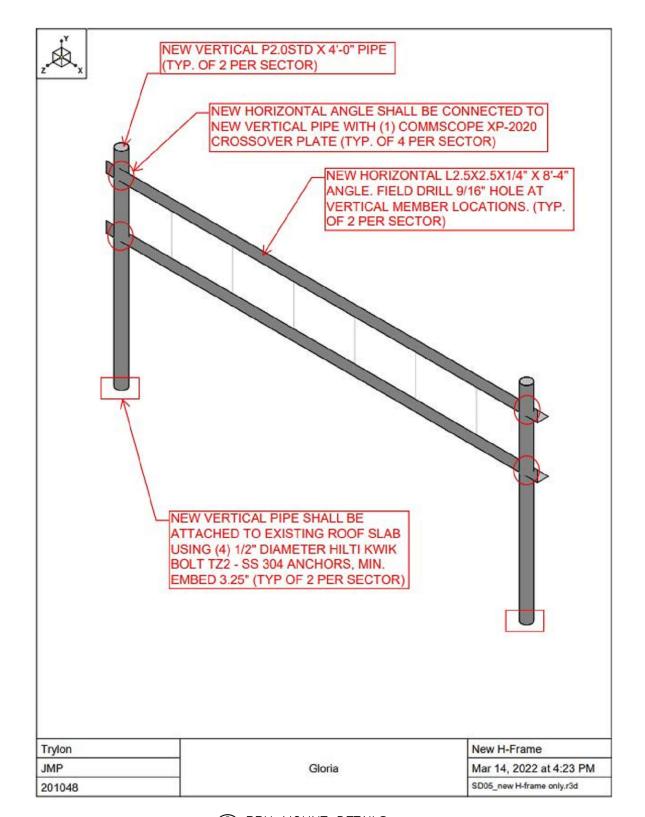
RF-3

EXISTING ANTENNA PIPE MOUNT 2-1/2"ø SCH. 40 GALV. PIPE MOUNT MOUNTING BRACKETS -SITE PRO PIPE TO PIPE - CLAMP SET (PART #ACP10K) OR APPROVED EQUIPMENT

1 PIPE TO PIPE DETAIL
N.T.S.

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.





MasTec
Network Solutions

13555 SE 36TH ST SUITE 100



13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006

PROJECT NO: 2152U145

DRAWN BY: M.P.

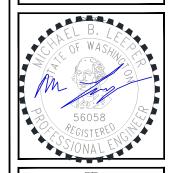
CHECKED BY: L.C.

.

SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | AF |
|---|-----------|-----------------------|----|
| С | MAR 23/22 | REVISED RRH MOUNTING | AF |
| В | MAR 14/22 | REVISED PER COMMENTS | AF |
| Α | FEB 10/22 | ISSUED FOR 90% REVIEW | MP |

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

FA#: 10092489

SHEET TIT

STRUCTURAL DETAILS

SHEET NUMBER

RRH MOUNT DETAILS

N.T.S.

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.
- 2. 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 COMMERCING 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
- 6. 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.
- 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.
- 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.
- 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.
- 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 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"
- 5. 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.
- 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.
- 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.
- 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
- 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.
- 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.





13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006



13555 SE 36TH ST SUITE 100

PROJECT NO: 2152U145

DRAWN BY: M.P.

CHECKED BY: LC

SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | Al |
|---|-----------|-----------------------|----|
| С | MAR 23/22 | REVISED RRH MOUNTING | Ai |
| В | MAR 14/22 | REVISED PER COMMENTS | A |
| | FFD 10/00 | ICCUED FOR AGE DEVIEW | |

THE INFORMATION CONTAINED IN THIS SET (
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ANY USE OR DISCLOSURE OTHER THAN THA
WHICH RELATES TO THE CLIENT NAMED IS
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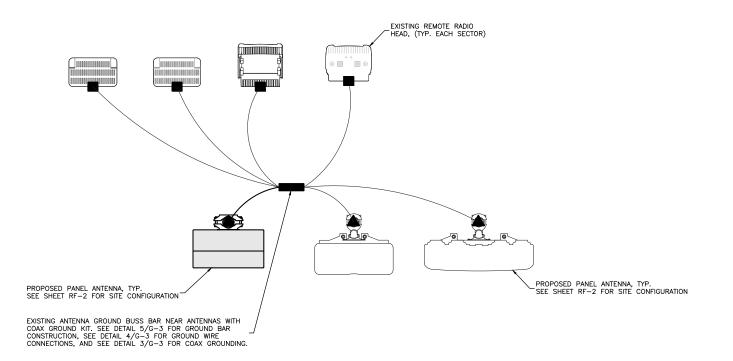
MERCER ISLAND SD05 7900 SE 28TH ST MERCER ISLAND, WA 98040

FA#: 10092489

SHEET TITLE

GROUNDING NOTES

G-1



<u>TYPICAL ANTENNA GROUNDING PLAN</u>

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, GROUND ALL ANIENNA 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 MER'S PRACTICES. MFR'S PRACTICES.



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





13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006

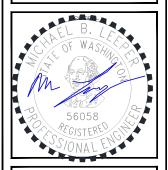
PROJECT NO: 2152U145

DRAWN BY: M.P.

CHECKED BY: L.C.

SUBMITTALS

| 0 | MAR 24/22 | FINAL CD's | AF |
|---|-----------|-----------------------|----|
| O | MAR 23/22 | REVISED RRH MOUNTING | AF |
| в | MAR 14/22 | REVISED PER COMMENTS | AF |
| | EED 10/22 | ICCUED FOR OUR BEVIEW | MD |



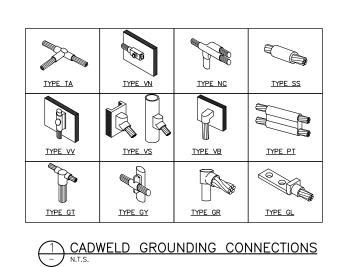
MERCER ISLAND SD05 7900 SE 28TH ST

MERCER ISLAND, WA 98040

FA#: 10092489

SCHEMATIC GROUNDING PLAN





#6 AWG FROM ANTENNA CABLE GROUND KIT

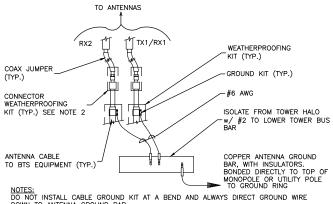
GROUND BARS AT BOTTOM OF TOWERS/MONOPOLES SHALL ONLY USE EXOTHERMIC WELDS.

GROUND WIRE INSTALLATION
N.T.S.

COPPER GROUND

*TWO HOLE LUG, OR EXOTHERMIC WELD TO BE

USED WITH #2 AWG BCW TO— BUILDING SERVICE GROUND OR GROUND RING



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

CABLE CONNECTOR

WEATHERPROOFING KIT (SEE NOTE 3)-

CABLE GROUND KIT

#6 AWG STRANDED COPPER

GROUND WIRE (GROUNDED TO GROUND BAR). SEE NOTE 1 & 2

ANTENNA CABLE

2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.

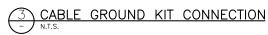
2 1/2" DIA. MAX.

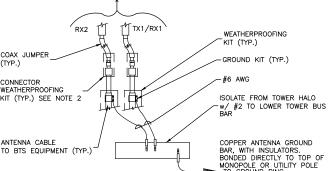
(TYPICALLY) 12" TO 24"

120" MAX.

GROUNDING CONDUCTOR

3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.





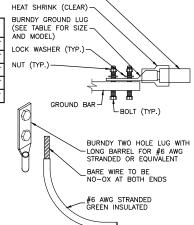
WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

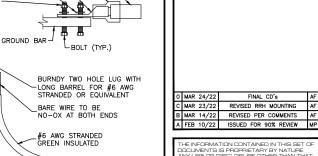
2 GROUND CABLE CONNECTION

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 YA26-2TC38 3/8" - 16 NC S 2 BOLT #2/0 AWG STRANDED #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.





FINAL CD's

AT&T MORILITY

RTC BUILDING 3 18221 NE 72nd WAY REDMOND, WA 98052

⊹MasTec

Network Solutions

13555 SE 36TH ST SUITE 100 BELLEVUE, WA 98006

CORE ONE

13555 SE 36TH ST SUITE 100

BELLEVUE, WA 98006

M.P.

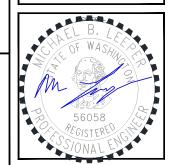
LC

SUBMITTALS

PROJECT NO: 2152U145

DRAWN BY:

CHECKED BY:



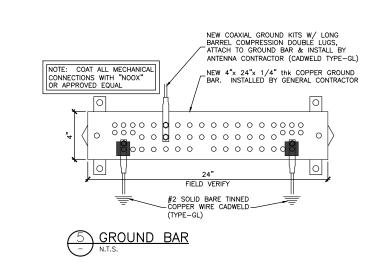
MERCER ISLAND SD05 7900 SE 28TH ST MERCER ISLAND, WA 98040

FA #: 10092489

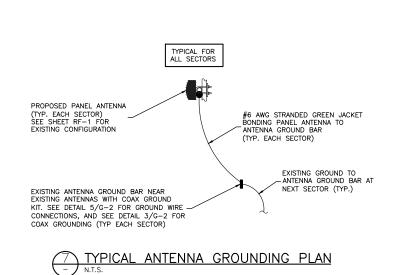
SHEET TITLE

GROUNDING DETAILS

G-3



6 MECHANICAL LUG CONNECTION



GROUND CONDUCTOR SHALL BE ELIMINATED WHEN GROUND BAR IS ELECTRICALLY BONDED TO

METAL TOWER/MONOPOLE STRUCTURE