

January 11, 2019

Crystal Orr, Planning Specialist Coos County Planning Department 225 N. Adams

RECEIVED

COOS COUNTY
PLANNING DEPARTMENT OF THE

RE: ATT "Jordan Cove Road" - Special Trenching Project for Fiber/Conduit Installation

Dear Ms. Orr:

Coquille, OR 97423

On behalf of AT&T Mobility, Lynx Consulting is submitting to Coos County a combined submittal package of Administrative Conditional Use Permit, a Special Flood Hazard Area Permit, and a Commercial Building Permit Application.

AT&T owns and operates an existing wireless facility known as "Jordan Cove" located at the Roseburg Forest Product property at 66425 Jordan Cove Road. Specifically, the wireless communication facility is located at the wood chipper on Roseburg's property along the shoreline.

Fiber optic cable needs to run to this site. This will consist of installing an approximately 3100 l.f. path of 4" underground conduit, starting to the NE and underneath the existing railroad tracks, then extending south to the adjacent property line of the shoreline and continuing west until it ties into the existing site.

The scope of work is as follows:

AT&T proposes to modify an existing wireless facility with the following scope of work:

Add (9) 2' x 3' utility vaults, per plan

Add (1) 2" schedule 40 PVD conduit stubbed up near PPL #044400(to be trenched) per plan

Add (1) encased 4" schedule 40 PVC conduit from Vault #1(MMP) to Vault #2(to be bored)

Add (7) 4' Schedule 40 PVC conduit from Vault #2 through Vault #9 (to be trenched)

Add (3) cell maxcell to all proposed conduit

Proof (1) existing 2" schedule 40 conduit path from Vault #9 to existing AT&T equipment on wood chipper

The written cost estimate of this work, as provided by general contractor Pioneer Group and enclosed, is \$172,547. The length of construction is one to three weeks dependent on weather and other conditions.

There is no work taking place directly in the shoreline but rather on lands adjacent to. The trenching will be just over two feet in depth to accommodate the 4" PVC fiber conduit, and will be backfilled with satisfactory native or imported soil along with utility cautionary tape. The existing surfaces will be restored to the original conditions as prior to excavations.



Enclosed is the ACUP Permit Application, the Special Flood Hazard Area Application, the Commercial Building Permit Application, and four sets of construction plans (signed and stamped) sized 11 x 17". Also enclosed is the owner's consent and a copy of the construction cost estimate.

We are also enclosing two checks, one for \$443.70 for the Flood Hazard Application, and one for \$1,479.00 for the ACUP.

Because the building permit cost estimate is so high (\$172,547) we would like to ask Coos County calculate the amount of the plan check and review fee and let us know so we may send you a check for the appropriate amount.

If you have any questions or need additional information, please let me know. I can be reached at 435 877 1871 ex. 105 and my email is <u>Azavales@lynxconsulting.org</u>.

Thank you for your consideration.

Sincerely.

Aileen Zavales

Lynx Consulting, Inc.

Enclosures

Aileen Zavales

From:

Aileen Zavales

Sent:

Thursday, December 20, 2018 12:35 PM

To:

Aileen Zavales

Subject:

FW: OR503 North Bend_Agent Authorization

Hi Olivia, this is fully approved.

AT&T authorizes Lynx Consulting to make application to Coos County for a underground fiber installation in support of an existing telecommunication facility located at 66237 Jordan Cove Rd, North Bend, OR.

Thanks,
Gary Del Rio
AT&T Mobility PNW TxSA/MW PM
503-593-4113

From: Olivia Wright < owright@lynxconsulting.org>
Sent: Thursday, December 20, 2018 10:20 AM
To: DEL RIO, GARY D < gd2515@att.com>

Subject: OR503 North Bend_Agent Authorization

Hello Gary,

AT&T site, North Bend is located in Coos County, OR. This jurisdiction requires ownership authorization for Lynx Consulting to submit for Zoning and Building Permit Approval. Please reply with approval of the following:

AT&T authorizes Lynx Consulting to make application to Coos County for a underground fiber installation in support of an existing telecommunication facility located at 66237 Jordan Cove Rd, North Bend, OR.

Thank you,

Olivia Wright | Lynx Consulting, Inc.

17311 135th Ave NE, Suite A-100, Woodinville, WA 98072 | 47.752967°, -122.159964° Cell (253) 653-9787 | Office (425) 877-1871 ext. 4 | Fax (425) 354-3277 owright@lynxconsulting.org | www.lynxconsulting.org



Pioneer Communications Group PO Box 569 Woodinville, WA 98072 425-481-5500 Fax 425-481-5510 www.piogrp.com

QUOTE Vendor #14404397

October 23, 2018

AT&T Attn: Gary Del Rio gd2515@att.com

We are pleased to provide a proposal for the following services:

Standard ETTCS Room Ready with FAP:

| Item | QTY | Total |
|---|-----|------------|
| Trenching and installing underground 4" conduit 3100 feet to include shoreline and bore under railroad tracks with 150' of HDPE, install 9 vaults | 1 | 113,940.00 |
| Materials for trenched path, conduit, (9) 233LA vaults, 3 cell maxcell | 1 | 48,832.00 |
| Window existing 2" conduit, remove spare copper, proof path with maxcell, coordinate civil work to new cabinet with turf vendor | 1 | 1625.00 |
| FAP Install and storage | 1 | \$2,100.00 |
| Install all cable, wire, innerduct, fuses, breakers, and proof paths at site | 1 | \$2,100.00 |
| Materials at site: wire for power, grounding, lugs, hardware, innerduct, for FAP and LEC | 1 | \$3,600.00 |
| COP | 1 | \$350.00 |

Labor and Materials Total: \$172,547.00

Exclusions:

- Sales tax
- Permissions or permits

We remain available for any further assistance or questions

Jonathan Stone Project Manager (509) 701-6122 jonathan.stone@piogrp.com Ron Rippley General Manager (509) 366-9105

ron.rippley@piogrp.com

PIONEER GRØUP





Coos County Planning Department Conditional Use Application

| | FEE: \$1479.00 Official Use Only |
|---|----------------------------------|
| 1 | 061 711 |
| Т | Receipt No. 206 310 |
| ١ | Check No./Cash 10172 |
| l | Date 1/14 19 |
| 1 | Received By A. Ohloble |
| - | File No. <u>AUI-19-002</u> |

| | File No. Mod 1100 |
|--|--|
| Please place a check mark on the appropriate type of review th | nat has been requested. |
| Administrative Conditional Use Site Plan Review Hearings Body Co | onditional Use |
| An incomplete application will not be processed. Applicant the form and addressing all criteria. Attach additional sheets to | is responsible for completing answer questions if needed. |
| A. Applicant: | |
| Name: Alun ZWAUS. Max Consulting FAT T Address: 17311 135" ARE NE A 100 State: WA | Telephone: 24 972 1308 |
| | Zip code |
| 3. Owner: | |
| Name: Riseberg Forest Products Address: ULYDS Drain Core Ra | |
| City: North Band State: WA | Zip Code: 7 459 |
| C. As applicant, I am (check one): Please provide do | cumentation. |
| The owner of the property (shown on deed of record); | |
| The purchaser of the property under a duly executed we written consent of the vendor to make such application | |
| A lessee in possession of the property who has written of such application (consent form attached). | consent of the owner to make |
| The agent of any of the foregoing who states on the ap | · Control of the cont |
| duly authorized agent and who submits evidence of being by his principal (consent form attached). | ng duly authorized in writing |
| D. Description of Property: | |
| Fownship $\frac{\partial 55}{\partial x}$ Range $\frac{13W}{2}$ Section $\frac{\partial 4}{\partial x}$ Ta | ex Lot 300 |
| Tax Account 31010009 - 32 Acetot Size 278. 84 AC | |

| E. Required Information (please check off as you complete) |
|---|
| 1. Existing Use Industrial |
| 2. Site Address <u>(ale 237</u> Jordan Rd 3. Access Road NA |
| 4. Is the Property on Farm/Forest Tax Deferral |
| 5. Current Land Use (timber, farming, residential, etc.) Industrial |
| 6. Major Topography Features (streams, ditches, slopes, etc.) |
| 7. Letter from Natural Resource Conservation Service (for Forest/Farm dwellings only). NA |
| 8. List all lots or parcels that the current owner owns, co-owns or is purchasing which have a common boundary with the subject property on an assessment map. |
| 9. Identify any homes or development that exists on properties identified in #8. |
| 10. A copy of the current deed of record. |
| 11 Covenants or deed restrictions on the property, if unknown contact title company. |
| 12. A detailed parcel map of the subject property illustrating the size and location of existing and proposed uses, structures and roads on an 8½" x 11" paper to scale. Applicable distances must be noted on the parcel map along with slopes. (See example plot map) |
| Proposed use and Justification Please attach an explanation of the requested proposed use and findings (or reasons) regarding how your application and proposed use comply with the following the Coos County Zoning and Land Development Ordinance (LDO). Pursuant to the LDO, this application may be approved only if it is found to comply with the applicable criteria for the proposed use. Staff will provide you with the criteria; however, staff cannot provide you with any legal information concerning the adequacy of the submitted findings, there is no guarantee of approval and the burden rests on the applicant. (You may request examples of a finding) |
| Please note staff has identified the applicable criteria based on the information received from the applicant. |
| Applicable Criteria: Suggested and beneal Contents Trending Trying Att of Site Heard on Chapter Devising G. Authorization: All areas must be initialed by all applicant(s) prior to the Planning Department accepting any application. |
| I hereby attest that I am authorized to make the application for a conditional use and the statements within this application are true and correct to the best of my knowledge and belief. I affirm that this is a legally created tract, lot or parcel of land. I understand that I have the right to an attorney for verification as to the creation of the subject property. I understand that any action |

authorized by Coos County may be revoked if it is determined that the action was issued based upon false statements or misrepresentation.

M

ORS 215.416 Permit application; fees; consolidated procedures; hearings; notice; approval criteria; decision without hearing. (1) When required or authorized by the ordinances, rules and regulations of a county, an owner of land may apply in writing to such persons as the governing body designates, for a permit, in the manner prescribed by the governing body. The governing body shall establish fees charged for processing permits at an amount no more than the actual or average cost of providing that service. The Coos County Board of Commissioners adopt a schedule of fees which reflect the average review cost of processing and set-forth that the Planning Department shall charge the actual cost of processing an application. Therefore, upon completion of review of your submitted application/permit a cost evaluation will be done and any balance owed will be billed to the applicant(s) and is due at that time. By signing this form you acknowledge that you are response to pay any debt caused by the processing of this application. Furthermore, the Coos County Planning Department reserves the right to determine the appropriate amount of time required to thoroughly complete any type of request and, by signing this page as the applicant and/or owner of the subject property, you agree to pay the amount owed as a result of this review. If the amount is not paid within 30 days of the invoice, or other arrangements have not been made, the Planning Department may chose to revoke this permit or send this debt to a collection agency at your expense.

W

I understand it is the function of the planning office to impartially review my application and to address all issues affecting it regardless of whether the issues promote or hinder the approval of my application. In the event a public hearing is required to consider my application, I agree I bare the burden of proof. I understand that approval is not guaranteed and the applicant(s) bear the burden of proof to demonstrate compliance with the applicable review criteria.

A

As applicant(s) I/we acknowledge that is in my/our desire to submit this application and staff has not encouraged or discouraged the submittal of this application.

Applicant(s) Original Signature

Applicant(s) Original Signature

Date



Commercial Plan Review Submittal Checklist

Department of Consumer & Business Services
Building Codes Division • 1535 Edgewater NW, Salem, OR
Mailing address: P.O. Box 14470, Salem, OR 97309
(503) 373-1210, Fax: (503) 378-3656, TTY: (503) 373-1358
www.oregonbcd.org

| DEPARTMENT | USE | ONLY |
|-----------------------|-----|------|
| Plan review no.: | | |
| Permit no.: | | |
| Office: | | |
| BCD employee initials | 3: | |

| JOB INFORMATION | OWNER |
|--|--|
| Name: AT+T OR 503 North Bend | Name: Ruseberg Firest Products |
| Address: 6 V237 Juruhn Cove Rd | Address: 44245 Jordan Core Rd |
| City: Noon Bond State: M ZIP: 97459 | City: NAT BEN State: OR ZIP: 97459 |
| Phone: () Fax: () | Phone: () Fax: () |
| ARCHITECT / ENGINEER | APPLICANT |
| 0 1 1 1 10 1 0 1 | Added Towards I as Contillar |
| Name: Best white It lynx costing | Name: Millen Zavalis, lynx Consisting |
| Address: 135 The Me Ariou | Address: 17311 1353 Are NE 14100 |
| City: Wolfmile State: M ZIP: 13M2 | City: Work NATE State: ZIP: The |
| Phone: (753) 251 2335 Fax: () | Phone: (411) 877 1871 Fax: (411) 377 3777 |
| REVIEW | INFORMATION |
| Declaration of value: \$ 172 547. Building sq. 1 | ft.: Review fee: \$ |
| Building use (be specific): installation of 3 | 100 LF 4" contrib fiber upticable |
| Check type of review: ☐ Fire and life safety ☐ Structural | ☐ Mechanical ☐ Sprinkler ☐ Alarm |
| | QUIREMENTS CHECKLIST |
| Three sets of plans and the following items are required for | |
| Initials Date | |
| 1 Site plan: changes of occupancy, addition | as alterations and new construction |
| 2 Floor/roof plans: including dimensions, | |
| 3 Floor/roof framing: framing member siz | |
| 4 Foundation plan: wall dimensions and fo | TO A PART OF THE P |
| 5 Building elevations: minimum two views | |
| 6 Building cross-sections: structural members | |
| 7 Structural calculations: new or change of | 20 to 1990 (1990 - 1970 (1990 - 1970 (1990 1990 1990 1990 1990 1990 1990 19 |
| 8 Electrical: exits, fire alarms, and fire and | |
| The state of the s | ated or cooled, submit on Oregon Energy Code guideline forms. |
| Residential (motels, SR, apartments): | |
| | e of all construction materials, and methods of construction |
| 11 Architect/engineer stamp: over 4,000 sc | ft. or 20' height — Architect law-ORS 671.030, Engineer law-ORS 672.020 |
| 12 Mechanical plans: equipment location, s | |
| 13 Disabled access: indicate compliance me | asures |
| 14 Minimum scale: 1/8"-minimum paper si | ze: 8½" X 11" on all plans |
| Other agency clearances: | |
| 15 Department of Environmental Quality or | local sanitary authority |
| 16 Local planning department: zoning, speci | al land use. Building is in flood plain? Yes No |
| ADDITION OF THE STATE OF THE ST | rint name: Allen Zavale Date: 1-11-201 |
| APPLICANT: P | rint name: Living Date: Date: |



PROJECT DESCRIPTION

REMOVE EXISTING ANTENNAS FRAMES. REMOVE (3) EXISTING ANTENNAS, (1) PER SECTOR, INSTALL NEW ANTENNAS FRAMES (DESIGNED BY OTHERS). INSTALL (6) NEW ANTENNAS, (2) PER SECTOR, INSTALL (9) NEW RRH UNITS, (3) PER SECTOR. INSTALL (2) SURGE SUPPRESSORS. INSTALL (4) DC POWER AND (1) FIBER TRUNKS. REMOVE EXISTING NORTEL GSM CABINET. INSTALL NEW ETTCS FLX12 CABINET. INSTALL (1) NEW LTE FLX12 PURCELL CABINET WITH 1C/2C/3C RADIO CARDS ON TOP OF NEW ETTCS FLX12 CABINET.

PROJECT INFORMATION

66237 JORDON COVE ROAD NORTH BEND, OR 97459 SITE ADDRESS:

43' 25' 31.368" -124' 15' 27 864"

COOS COUNTY

EXISTING USE: NEW USE:

ZONING DISTRICT: UNMANNED TELECOMMUNICATIONS FACILITY UNMANNED TELECOMMUNICATIONS FACILITY CONSTRUCTION TYPE: XX MAP AND TAXLOT 25\$13040000300

RF DATA SHEET

DATE UPDATED: 07/11/2017

LATITUDE:

LONGITUDE

JURISDICTION:

VERSION: 1.00

DRAWING INDEX REV 10129848-OR503-T-1 TITLE SHEET 10129848-OR503-GN-1 **GENERAL NOTES** 10129848-OR503-A-1 **OVERALL SITE PLAN** 0 10129848-OR503-A-2 **EXISTING ENLARGED EQUIPMENT PLAN** 0 10129848-OR503-A-3 **NEW ENLARGED EQUIPMENT PLAN** 0 10129848-OR503-A-4 **EXISTING & NEW SELF SUPPORT TOWER ELEVATIONS** 0 10129848-OR503-A-5 **DETAILS & SPECIFICATIONS** 0 10129848-OR503-RF-1 **EXISTING & NEW ANTENNA CONFIGURATION** 0 10129848-OR503-RF-2 **RF & EQUIPMENT DETAILS** 0 10129848-OR503-E-1 SCHEMATIC GROUNDING PLAN 10129848-OR503-E-2 **GROUNDING DETAILS** 0

LEGAL DESCRIPTION

TOWNSHIP 25S, RANGE 3W, LOT 4300 COOS COUNTY, OREGON

SITE PROJECT PARTICIPANTS

| | NAME | COMPANY | NUMBER |
|----------|-----------------------|--------------------------|--------------|
| A/E | JON BOUTILIER | WYCO FIELD SERVICES, LLC | 602-796-9068 |
| SAC | AMANDA NATIONS | TAEC | 206-778-1578 |
| RF | ANNE LE | AT&T WIRELESS | 425-614-5641 |
| LANDLORD | JOHN GRABEL | ROSEBURG FOREST PRODUCTS | 541-756-4307 |
| SAC MNGR | TERESA STEMLER | MASTEC NETWORK SOLUTIONS | 425-214-9728 |
| A&E MNGR | TERESA STEMLER | MASTEC NETWORK SOLUTIONS | 425-214-9728 |



PROJECT SCOPE: 1C/2C/3C **SITE NUMBER: OR503 SITE NAME: NORTH BEND CONSTRUCTION DRAWINGS**

VICINITY MAP

DIRECTIONS: (19801 SW 72ND AVE #220, TUALATIN, OR 97062):

GET ON I-5 S FROM SW SAGERT ST AND SW MARTINAZZI AVE FOR 1.4 MI, HEAD SOUTHEAST ON SW 72ND

AVE TOWARD SW SAGERT ST FOR 489 FT., TURN RIGHT AT THE 1ST CROSS STREET ONTO SW SAGERT ST FOR

0.4 MI, TURN RIGHT ONTO SW MARTINAZZI AVE FOR 0.4 MI, TURN RIGHT ONTO SW TUALATIN-SHERWOOD RD

FOR 0.2 MI, CONTINUE ONTO SW NYBERG ST FOR 0.1 MI, TURN RIGHT ON MERGE ONTO I-5 S TOWARD SALEM

FOR 0.2 MI, FOLLOW I-5 S TO OR-38 W IN DOUGLAS COUNTY. TAKE EXIT 162 FROM I-5 S FOR 127 MI, MERGE ONTO 1-5 S FOR 127 MI, TAKE EXIT 162 FOR OR-38/OR-99 TOWARD DRAIN/ELKTON FOR 0.3 MI, FOLLOW OR-38 W AND US-101 S TO JORDAN COVE RD IN COOS COUNTY FOR 80.2 MI, MERGE ONTO OR-38 W FOR 6.3 MI, TURN RIGHT ONTO OR-38 W/W B AVE, CONTINUE TO FOLLOW OR-38 W FOR 5.3 MI,

CONTINUE STRAIGHT TO STAY ON OR-38 W FOR 44.3 MI, CONTINUE STRAIGHT ONTO FIR AVE/UMPQUA AVE, CONTINUE TO FOLLOW UMPQUA AVE FOR 0.5 MI, TURN LEFT ONTO US-101 S FOR 21.3 MI, TURN RIGHT ONTO JORDAN COVE RD/TRANS PACIFIC LN FOR 0.8 MI, KEEP RIGHT TO CONTINUE ON TRANS PACIFIC LN FOR 0.7 MI, TURN LEFT ONTO JORDAN COVE FOR 312 FT., CONTINUE STRAIGHT ONTO JORDAN COVE RD



DIG INFO



CALL OREGON ONE CALL (800) 332-2344 CALL 3 WORKING DAYS BEFORE YOU DIG!



APPLICABLE BLDG. 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), 2015 AS ADOPTED BY THE LOCAL JURISDICTION]

ELECTRICAL CODE:

[NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 - 2014, 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

AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD. THIRTEENTH EDITION TIA/FIA 222-G. STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS

TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

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

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

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.



AT&T MOBILITY RTC BUILDING 3 16221 NF 72ND WAY REDMOND, WA 98052



Network Solutions

1203 114th AVE SE BELLEVUE, WA 98004



4240 E. ELWOOD ST.

PHOENIX, AZ 85040

ADDRESS 66237 JORDON COVE ROAD NORTH BEND, OR 97459

> SITE NUMBER OR503

SITE NAME NORTH BEND



| ١ | | | |
|-----|------|--------------|----------------------------------|
| | DRAW | DRAWN BY: CW | CHECKED BY:CW APPROVED BY:JI |
| | | FA #: | 10129848 |
| SH | 찙 | DATE | DESCRIPTION |
| EET | < | 5/5/17 | PRELIMINARY CONSTRUCTION DRAWING |
| TIT | ω | 8/17/17 | CLIENT COMMENTS |
| LE | 0 | 8/25/17 | SUBMITTAL CONSTRUCTION DRAWINGS |
| | | | |
| | | | |
| | | | |
| | | | |

TITLE SHEET

SHEET NUMBER

T=1

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR — MASTEC
 - SUBCONTRACTOR GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER AT&T MOBILITY
 - OEM ORIGINAL EQUIPMENT MANUFACTURE
- 2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 4. DELETED
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 6. DELETED
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- B. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR
- 9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR. ROUTING OF TRENCHING SHALL BE APPROVED BY CONTRACTOR.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- 11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OFF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
- 14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS UNLESS OTHERWISE SPECIFIED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
- 15. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- CONSTRUCTION SHALL COMPLY WITH AT&T MOBILITY SPECIFICATION 25741-000-3APS-AOOZ-00002, "GENERAL CONSTRUCTION SERVICES."
- 17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK MAY NEED TO BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- 19. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

ELECTRICAL INSTALLATION NOTES:

- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

ELECTRICAL INSTALLATION NOTES CONT.:

- 4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- 6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
 ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE
 CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PLANELOAD AND
 CIRCUIT ID'S).
- 8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS WHERE PERMITTED SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES. USE LOW PROFILES TIE WRAPS.
- 10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 'C' (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (6 AWG OR LARGER), 600 V, OIL RESISTANT THINN OR THWN—2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 'C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED. UNLESS OTHERWISE SPECIFIED.
- 12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- 13. POWER WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 'C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- 14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75'C (90'C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- 18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- 20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID—TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID—TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 24. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- 26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- 27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

ELECTRICAL INSTALLATION NOTES CONT .:

- 28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

GROUNDING NOTES:

- 1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE—SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- 3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL—OF—POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. TESTS SHALL BE PERFORMED IN ACCORDANCE WITH 25471—000—3PS—EG00—0001, DESIGN & TESTING OF FACILITY GROUNDING FOR CELL SITES.
- 4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- 6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED WITH STAINLESS STEEL HARDWARE TO THE BRIDGE AND THE TOWER GROUND BAR.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- 11. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 12. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF EIA/TIA 222. FOR TOWERS BEING BUILT TO REV G OF THE STANDARD.



AT&T MOBILITY RTC BUILDING 3 16221 NE 72ND WAY REDMOND, WA 98052



Network Solutions

1203 114th AVE SE BELLEVUE, WA 98004



4240 E. ELWOOD ST. PHOENIX, AZ 85040

ADDRESS 66237 JORDON COVE ROAD NORTH BEND, OR 97459

> SITE NUMBER OR503

SITE NAME NORTH BEND

SEAL

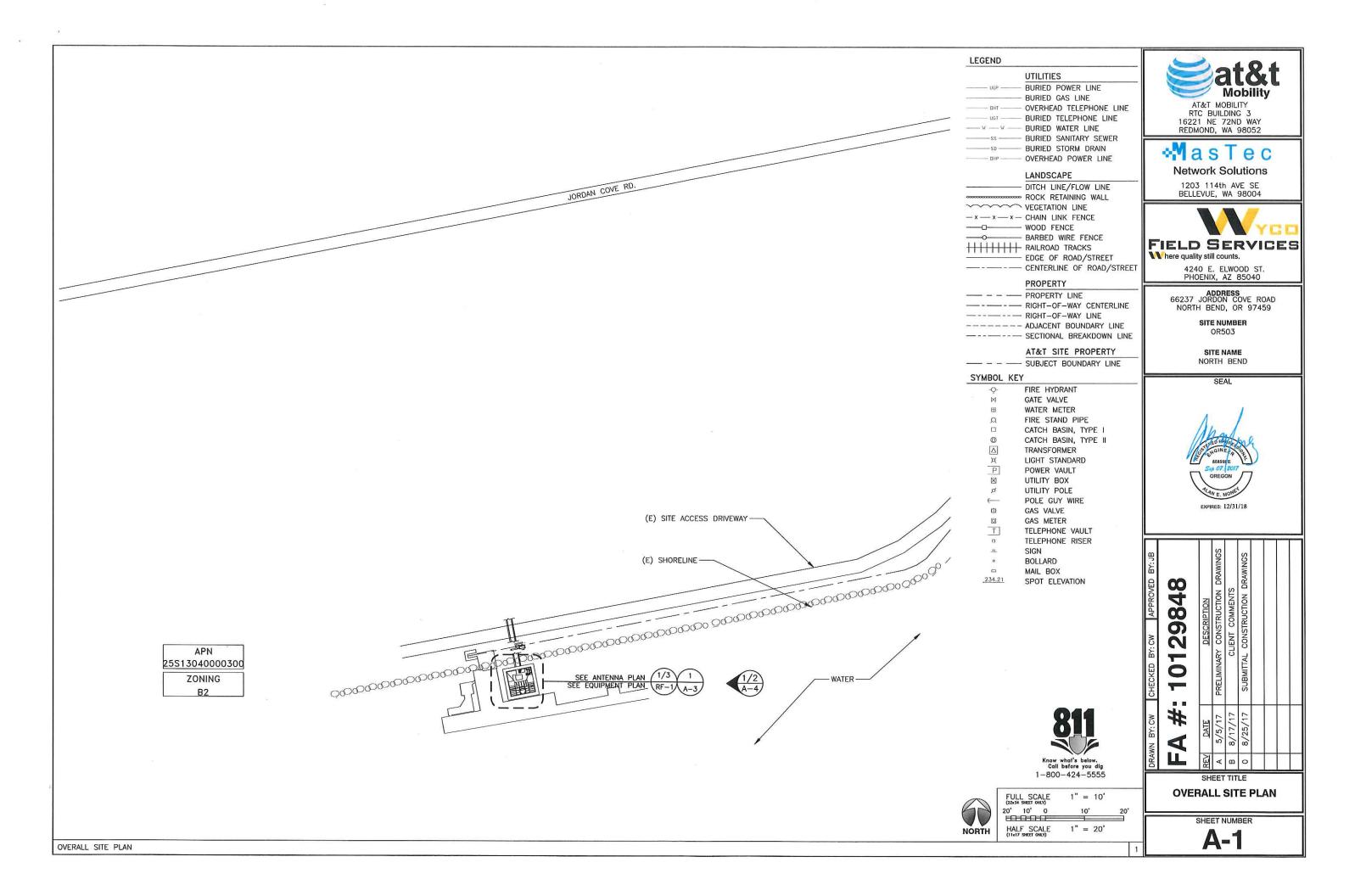


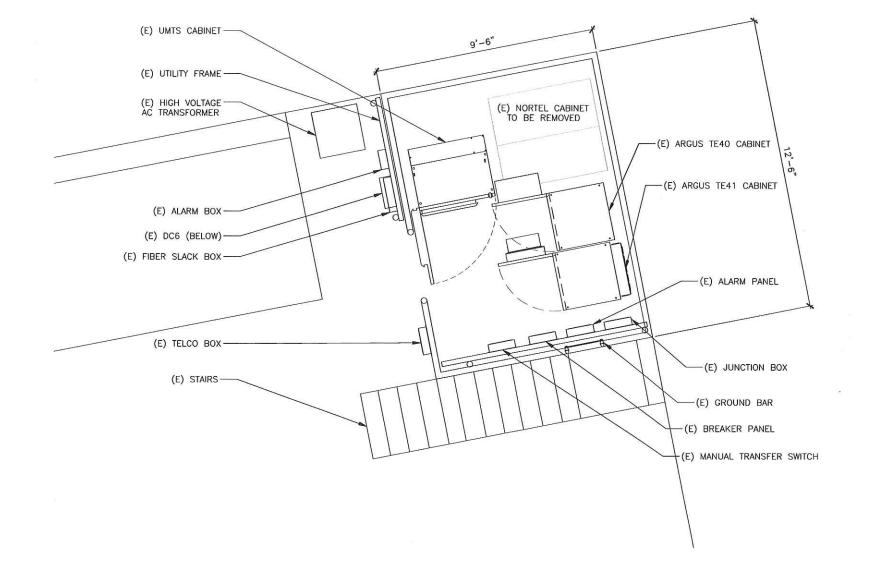
GENERAL NOTES

SHEET NUMBER

GN-

GENERAL NOTES







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SITE NAME NORTH BEND

SEA



| APPROVED BY: JB | 9848 | DESCRIPTION | PRELIMINARY CONSTRUCTION DRAWINGS | CLIENT COMMENTS | SUBMITTAL CONSTRUCTION DRAWINGS | | |
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| CHECKED BY: CW | 10129848 | DE | PRELIMINARY CO | CLIENT | SUBMITTAL CON | | |
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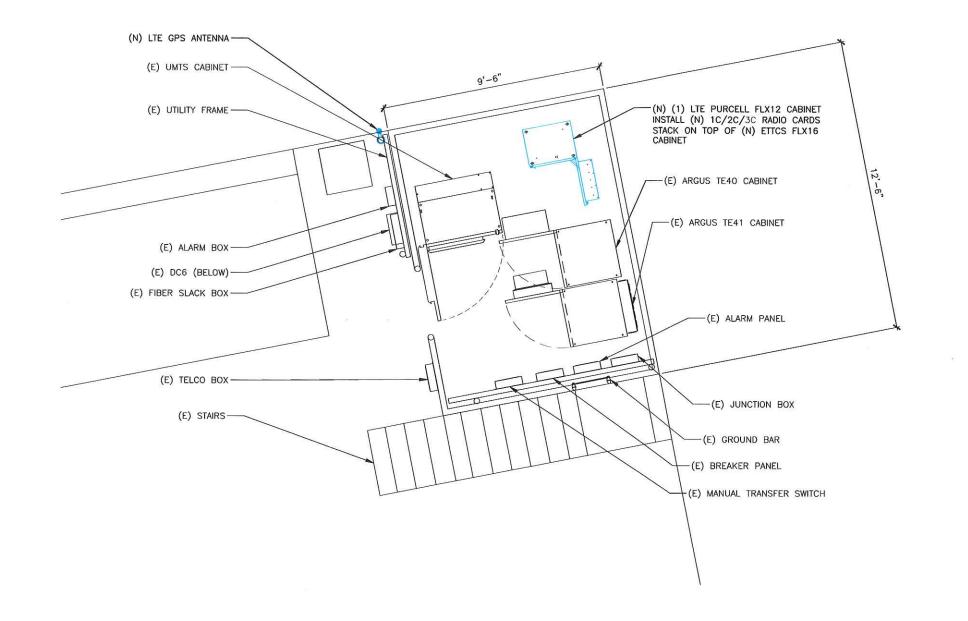
SHEET TITLE
EXISTING ENLARGED
EQUIPMENT PLAN

SHEET NUMBER

A-2

NORTH

FULL SCALE 1/2" = 1'-0"
4' 2' 0 2' 4'
HALF SCALE (11s17 SKEET ONLY)
1/4" = 1'-0"





AT&T MOBILITY RTC BUILDING 3 16221 NE 72ND WAY REDMOND, WA 98052



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SITE NUMBER OR503

SITE NAME NORTH BEND



| DRAWN BY: CW | r: CW | CHECKED BY: CW APPROVED BY: JB |
|--------------|---------|-----------------------------------|
| 4 | FA #: | 10129848 |
| | DATE | DESCRIPTION |
| 5/5 | 5/5/17 | PRELIMINARY CONSTRUCTION DRAWINGS |
| 8/1 | 8/17/17 | CLIENT COMMENTS |
| 8/2 | 8/25/17 | SUBMITTAL CONSTRUCTION DRAWINGS |
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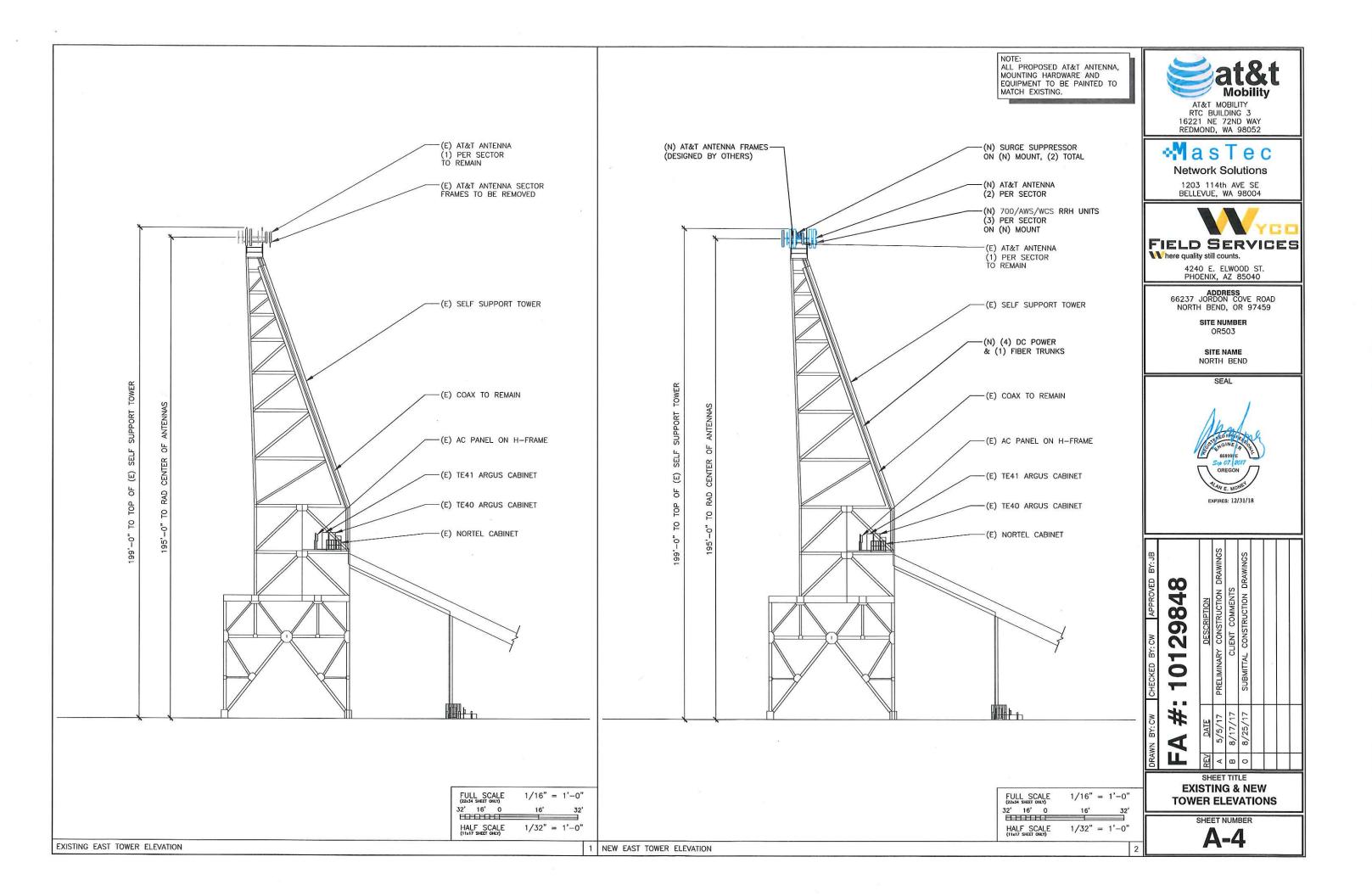
SHEET TITLE **NEW ENLARGED EQUIPMENT LAYOUT**

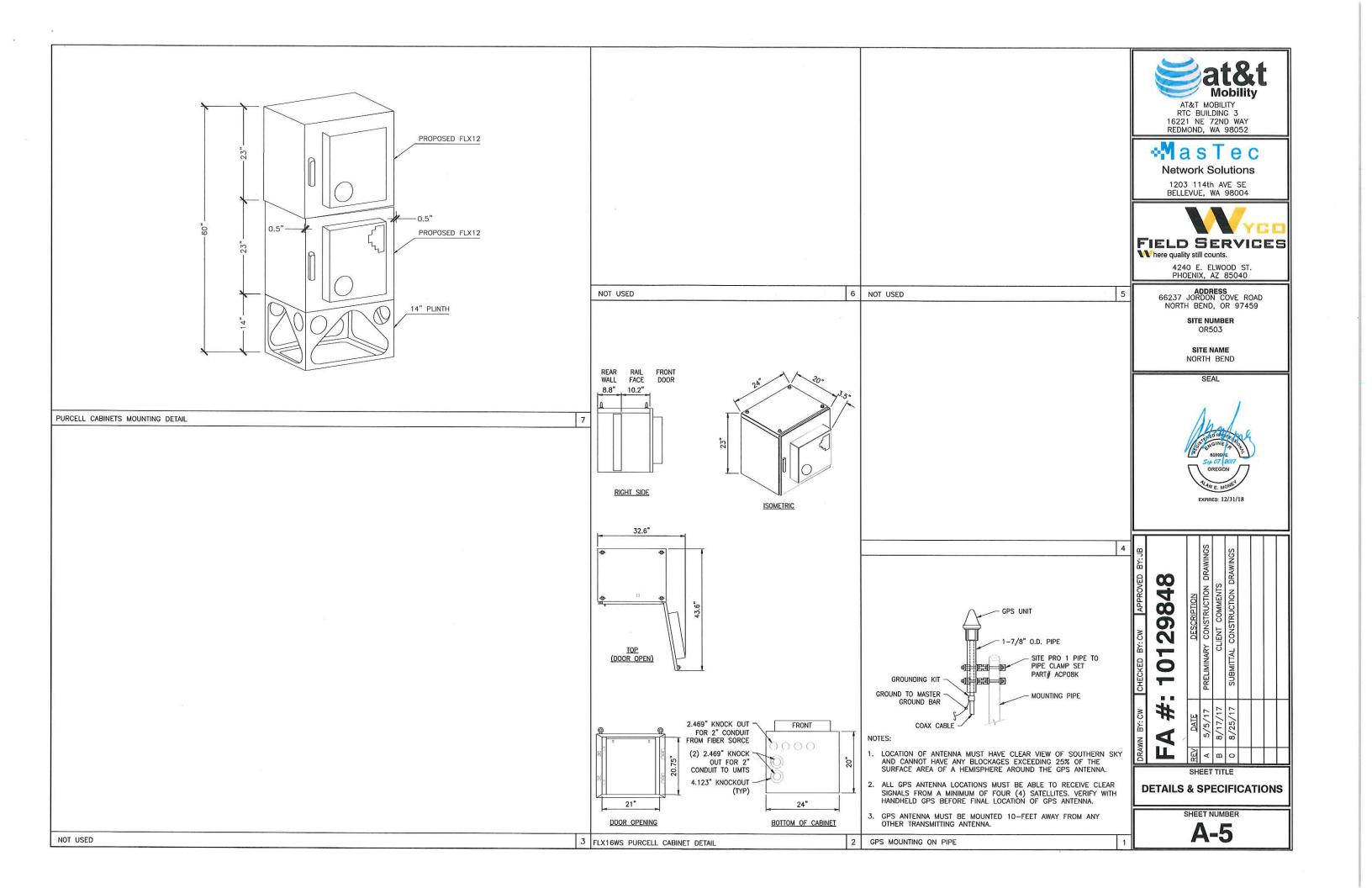
SHEET NUMBER

A-3

NORTH

1/2" = 1'-0"HALF SCALE (11x17 SHEET ONLY) 1/4" = 1'-0"





| | | | 000 05 | | | | LIMAL. | | | | 1 | | | |
|-----------|---------|------------|-----------------|----------|------------|---------------|---------------|-----|----------------|-----|-------------------|--------|----------------|---------|
| SECTOR A | AZIMUTH | RAD CENTER | POS. OF ANT. | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | TMA | RRH | NUMBER OF COAX | COAX Ø | COAX LENGTH | DIPLEXE |
| GSM 1900 | 25* | 195'0" | 1 | KATHREIN | 742-215 | 2./5. | 0, | NO | (1) LGP 17501 | - | 2 | 1-5/8" | 220'0" | NO |
| UMTS 1900 | 25' | 195'0" | 2 | KATHREIN | 742-215 | 5'/5' | 0. | NO | (2)2-LGP 17501 | 320 | 4 | 1-5/8" | 220'0" | NO |
| SECTOR B | AZIMUTH | RAD CENTER | POS. OF ANT. | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | TMA | RRH | NUMBER OF COAX | COAX Ø | COAX LENGTH | DIPLEXE |
| GSM 1900 | 155 | 195'0" | 1 | CELLMAX | CMA-B/3324 | 0.\0 | 2. | NO | (1) LGP 17501 | ě | 2 | 1-5/8" | 220'0" | NO |
| UMTS 1900 | 155* | 195'0" | 2 | CELLMAX | CMA-B/3324 | 0.\0. | 3. | NO | (2)2-LGP 17501 | 1=0 | 4 | 1-5/8" | 220'0" | NO |
| SECTOR C | AZIMUTH | RAD CENTER | POS. OF ANT. | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | TMA | RRH | NUMBER OF COAX | COAX ø | COAX LENGTH | DIPLEXE |
| GSM 1900 | 195* | 195'0" | 1 | CELLMAX | CMA-B/3324 | 0.\0 | 2. | NO | (1) LGP 17501 | =7 | 2 | 1-5/8" | 220'0" | NO |
| UMTS 1900 | 195* | 195'0" | 2 | CELLMAX | CMA-B/3324 | 0,\0, | 3' | NO | (2)2-LGP 17501 | =0 | 4 | 1-5/8" | 220'0" | NO |

| SECTOR A | AZIMUTH | RAD CENTER | POS. OF ANT. | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | TMA | RRH | NUMBER OF COAX | COAX Ø | COAX LENGTH | DIPLEXED |
|-------------|---------|------------|-----------------|----------|-------------------------------|---------------|---------------|-----|----------------|------------|-------------------|--------|----------------|----------|
| LTE 700/AWS | 25* | 195'0" | 1 | KMW | ET-X-UW-70- 16-70-18-IR-AT | 0.\0. | 0. | NO | | (1)700/AWS | = | FIBER | 220'0" | NO |
| LTE WCS | 25* | 195'0" | 2 | KMW | ET-X-UW-70- 16-70-18-IR-AT | 0. | 0, | NO | - | (1)WCS | = | FIBER | 220'0" | NO |
| UMTS 1900 | 25' | 195'0" | 4 | KATHREIN | 742-215 | 5'/5' | 0, | NO | (2)2-LGP 17501 | | 4 | 1-5/8" | 220'0" | NO |
| SECTOR B | AZIMUTH | RAD CENTER | POS. OF ANT. | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | ТМА | RRH | NUMBER OF COAX | COAX Ø | COAX LENGTH | DIPLEXE |
| LTE 700/AWS | 135 | 195'0" | 1 | KMW | ET-X-UW-70- 16-70-18-IR-AT | 0.\0. | 0, | NO | - E | (1)700/AWS | - | FIBER | 220'0" | NO |
| LTE WCS | 135' | 195'0" | 2 | KMW | ET-X-UW-70- 16-70-18-IR-AT | 0' | 0, | NO | | (1)WCS | - | FIBER | 220'0" | NO |
| UMTS 1900 | 155* | 195'0" | 4 | CELLMAX | CMA-B/3324 | 0.\0. | 3. | NO | (2)2-LGP 17501 | - | 4 | 1-5/8" | 220'0" | NO |
| SECTOR C | AZIMUTH | RAD CENTER | POS. OF ANT. | VENDOR | MODEL | ELEC. TILT | MECH. TILT | RET | ТМА | RRH | NUMBER OF COAX | COAX ø | COAX LENGTH | DIPLEXE |
| LTE 700/AWS | 205* | 195'0" | 1 | KMW | ET-X-UW-70- 16-70-18-IR-AT | 0,\0, | 0, | NO | - | (1)700/AWS | | FIBER | 220'0" | NO |
| LTE WCS | 205* | 195'0" | 2 | KMW | ET-X-UW-70- 16-70-18-IR-AT | 0, | 0, | NO | - | (1)WCS | =: | FIBER | 220'0" | NO |
| UMTS 1900 | 195* | 195'0" | 4 | CELLMAX | CMA-B/3324 | 0.\0. | 3. | NO | (2)2-LGP 17501 | - | 4 | 1-5/8" | 220'0" | NO |

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RTC BUILDING 3 16221 NE 72ND WAY REDMOND, WA 98052

⊹MasTec

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ADDRESS 66237 JORDON COVE ROAD NORTH BEND, OR 97459

SITE NUMBER OR503

SITE NAME NORTH BEND



| 10129848 | DESCRIPTION | PRELIMINARY CONSTRUCTION DRAWINGS | CLIENT COMMENTS | SUBMITTAL CONSTRUCTION DRAWINGS |
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EXISTING & NEW ANTENNA CONFIGURATION

SHEET NUMBER

RF-1

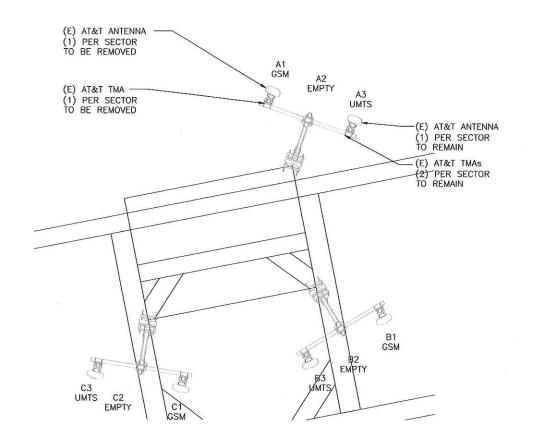
* <u>DO NOT</u> USE COAX LENGTHS FOR CUT LENGTHS: <u>ESTIMATES ONLY</u>
* CONFIRM THAT GENERAL CONTRACTOR IS USING LATEST VERSION OF RFDS.

NEW ANTENNA SCHEDULE

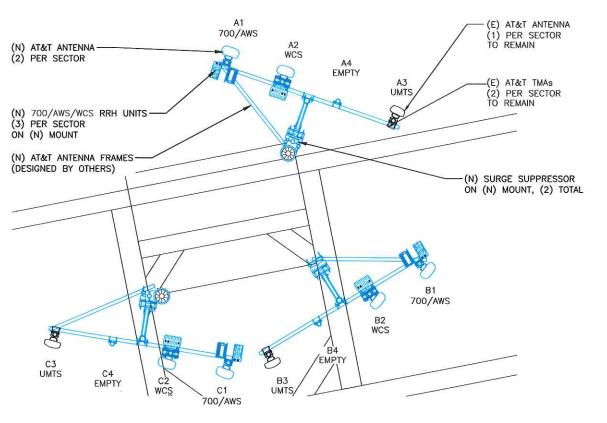
ANY EXISTING GSM TMA UNITS ARE TO BE REMOVED

EXISTING ANTENNA SCHEDULE

NOTE: STRUCTURAL ANALYSIS REQUIRED & DONE BY OTHERS

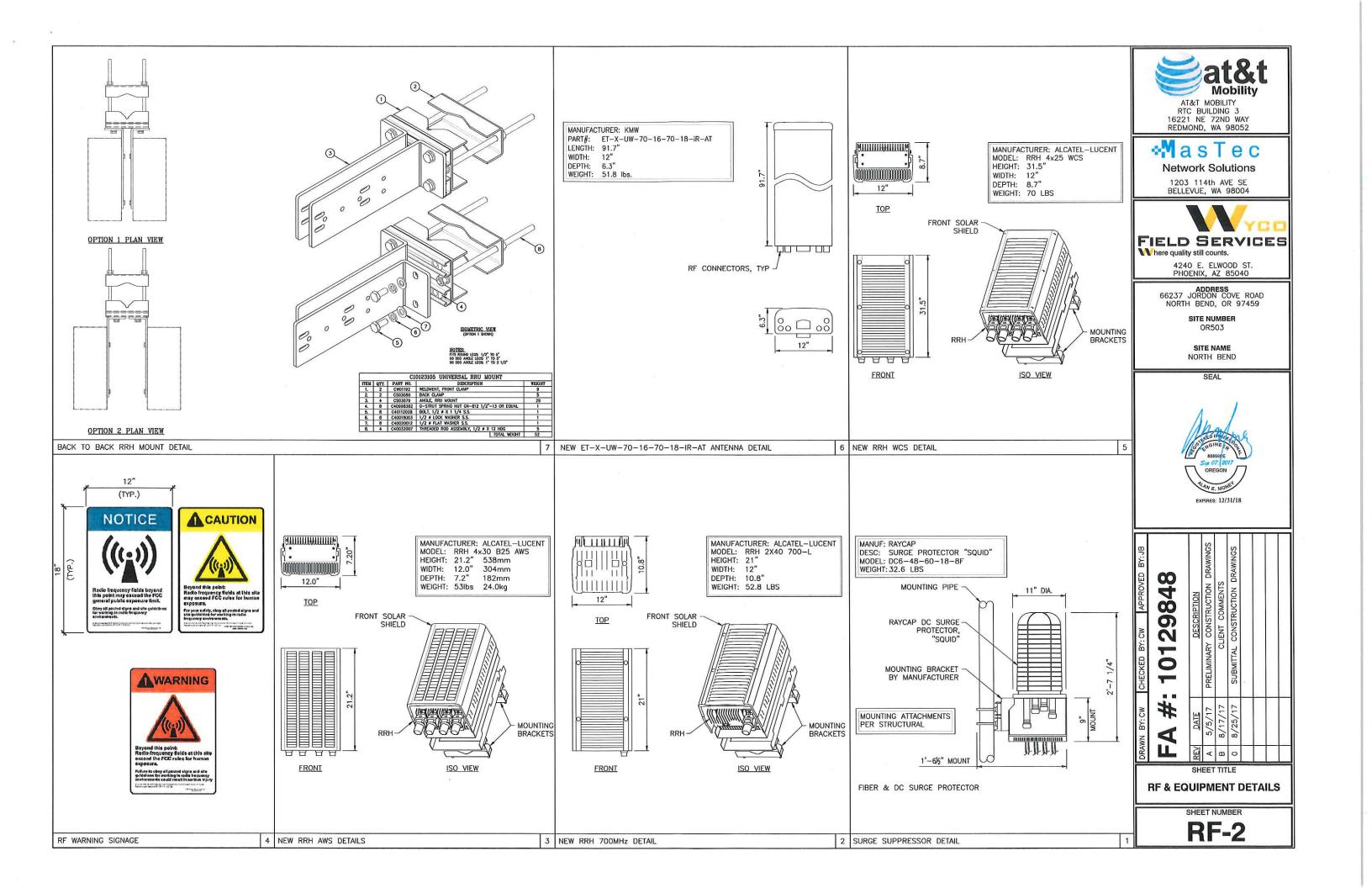


FULL SCALE (22+34 SHEET OHLY) 3/8" = 1'-0"HALF SCALE 3/16" = 1'-0"



NORTH

| FU (22x | LL 34 SHE | SCA! | LΕ | 3/8" = 1'-0' | | | |
|------------|--------------|---------------|----|--------------|------|-----|-------|
| 4' | 2' | 0 | 1' | 2' | 3' | | 6' |
| HA | LF | SCA ET ONL | LE | | 3/16 | , = | 1'-0" |



| SYMBOL | DESCRIPTION | | | | | |
|--------|-------------------------|--|--|--|--|--|
| 8 | COPPER GROUND ROD | | | | | |
| | TEST WELL | | | | | |
| Δ | CADWELD CONNECTION | | | | | |
| | GROUND BAR | | | | | |
| | MECHANICAL CONNECTION | | | | | |
| 1111 | FIELD VERIFY & TIE INTO | | | | | |

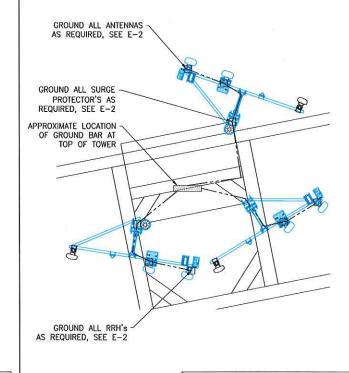


GENERAL GROUNDING NOTES:

- GROUNDING SHALL BE INSTALLED 6" BELOW FROST DEPTH OR 30" BELOW GRADE, WHICHEVER IS GREATER. CONFIRM FROST DEPTH WITH
- 2. ALL DETAILS ARE SHOWN IN GENERAL TERMS, ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
- 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.
- 4. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- 5. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE, GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY AT&T REPRESENTATIVE.
- REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING
- 7. 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
- 8. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

GENERAL ROD NOTES (WHERE APPLICABLE):

- 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 PLATFAUL
- 2 POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFOREMENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.





| FU. | JLL 34 SHE | SCA! | E | 3 | 3/8" | = | 1'-0" | | |
|----------|---------------|------|----|----|-------|---|-------|--|--|
| 4' EE | 2' 1 [] | 0 | 1' | 2' | 3' | | 6' | | |
| | LF | | | Ş | 3/16" | = | 1'-0" | | |



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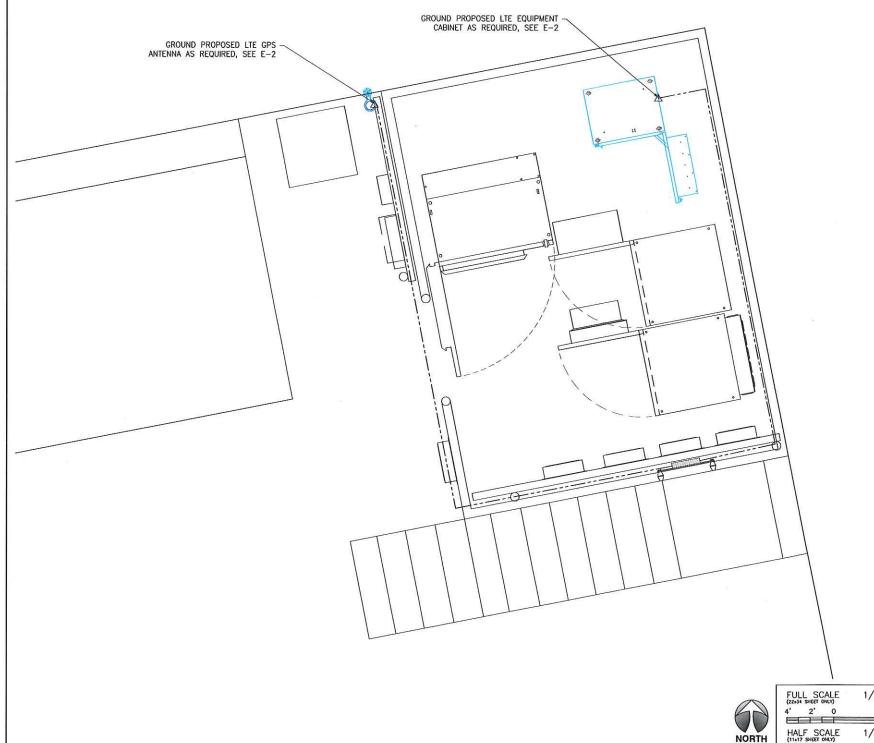
> SITE NUMBER OR503

SITE NAME NORTH BEND



SCHEMATIC GROUNDING PLAN

SHEET NUMBER



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

1 ANTENNA PLAN

GROUNDING PLAN

