

NOTICE OF DECISION

PLANNING DIVISION
555 LIBERTY ST. SE, RM 305
SALEM, OREGON 97301
PHONE: 503-588-6173
FAX: 503-588-6005



*Si necesita ayuda para comprender esta informacion, por favor llame
503-588-6173*

DECISION OF THE HISTORIC LANDMARKS COMMISSION

HISTORIC DESIGN REVIEW CASE NO. HIS16-33

APPLICATION NO. : 16-118830-DR

NOTICE OF DECISION DATE: **NOVEMBER 18, 2016**

APPLICATION SUMMARY: A proposal to modify the existing wireless transmission facility by adding three radio heads behind existing antennas on an existing water tank (1925) and adding three radio heads to ground shelter.

REQUEST: Major historic design review of a proposal to modify the existing wireless transmission facility by adding three radio heads behind existing antennas on an existing water tank (1925) and adding three radio heads to ground shelter within the Willamette Heritage Center/ Thomas Kay Historic Park, individually listed on the National Register of Historic Places, on property zoned CR (Retail Commercial), and located at 1313 Mill Street SE, 97301; Marion County Assessor Map and Tax Lot number: 073W26BC04100.

APPLICANT: Natalie Erlund, FDH Velocitel for AT & T

LOCATION: 1313 Mill Street SE

CRITERIA: Salem Revised Code (SRC) Chapter 230.065

FINDINGS: The findings are listed in the attached staff report.

DECISION: The Historic Landmarks Commission **APPROVED** Historic Design Review Case No. HIS16-33 with the following condition of approval:

Condition 1: Any new or replacement communication device(s), including but not limited to dishes, antennas and associated equipment shall not exceed the total number and cumulative size of the dishes, antennas and associated equipment currently approved for installation.

VOTE:

Yes 5 No 0 Absent 3 (Holton, Morris, Sund)

Andrew Hendrie, Chair
Historic Landmarks Commission

This Decision becomes effective on **December 6, 2016**. No work associated with this Decision shall start prior to this date unless expressly authorized by a separate permit, land use decision, or provision of the Salem Revised Code (SRC).

Application Deemed Complete: October 27, 2016
Public Hearing Date: November 17, 2016
Notice of Decision Mailing Date: November 18, 2016
Decision Effective Date: December 6, 2016
State Mandate Date: February 24, 2017

Case Manager: Kimberli Fitzgerald, AICP, Historic Preservation Officer
k Fitzgerald@cityofsalem.net, 503.540.2397

The rights granted by this decision must be exercised by **December 6, 2018**, or this approval shall be null and void. A copy of the decision is attached.

This decision is final unless written appeal from an aggrieved party is filed with the City of Salem Planning Division, Room 305, 555 Liberty Street SE, Salem OR 97301, no later than **5:00 p.m., December 5, 2016**.

Any person who presented evidence or testimony at the hearing may appeal the decision. The notice of appeal must contain the information required by SRC 300.1020 and must state where the decision failed to conform to the provisions of the applicable code section, SRC Chapter 230. The appeal must be filed in duplicate with the City of Salem Planning Division. The appeal fee must be paid at the time of filing. If the appeal is untimely and/or lacks the proper fee, the appeal will be rejected. The Hearings Officer will review the appeal at a public hearing. After the hearing, the Hearings Officer may amend, rescind, or affirm the action, or refer the matter to staff for additional information.

The complete case file, including findings, conclusions and conditions of approval, if any, is available for review at the Planning Division office, Room 305, City Hall, 555 Liberty Street SE, during regular business hours.

<http://www.cityofsalem.net/planning>

BEFORE THE SALEM HISTORIC LANDMARKS COMMISSION
MAJOR - Discretionary Review
Historic Review Case No. 16-33 / 16-118830-DR

TO: Historic Landmarks Commission

THROUGH: *AL* Lisa Anderson-Ogilvie, AICP, Planning Administrator

FROM: Kimberli Fitzgerald, *KF* AICP, Historic Preservation Officer

HEARING DATE: November 17, 2016

CASE NO.: Historic Design Review Case No. HIS16-33

APPLICATION SUMMARY: A proposal by AT & T to install six new remote radio heads for wireless service.

LOCATION: 1313 Mill Street SE (Marion County Assessor map and tax lot numbers: 073W26BC/4100)

REQUEST Major historic design review of a proposal to modify the existing wireless transmission facility by adding three radio heads behind existing antennas on an existing water tank (1925) and adding three radio heads to ground shelter within the Willamette Heritage Center/ Thomas Kay Historic Park, individually listed on the National Register of Historic Places, on property zoned CR (Retail Commercial), and located at 1313 Mill Street SE, 97301; Marion County Assessor Map and Tax Lot number: 073W26BC04100.

APPLICANT: Natalie Erlund, FDH Velocitel for AT & T

APPROVAL CRITERIA: Salem Revised Code (SRC) Chapter 230
230.065 General Guidelines for Historic Contributing Buildings

RECOMMENDATION: APPROVE with the following CONDITION:

Condition 1: Any new or replacement communication device(s), including but not limited to dishes, antennas and associated equipment shall not exceed the total number and cumulative size of the dishes, antennas and associated equipment currently approved for installation.

PROCEDURES

Historic Landmarks Commission Review & Decision

Under Salem Revised Code (SRC) Chapter 230, no development permit shall be issued without the approval of the Historic Landmarks Commission (HLC). The HLC shall approve, conditionally approve, or deny the application on the basis of the projects conformity with the criteria. Conditions of approval, if any, shall be limited to project modifications required to meet the applicable criteria.

According to Salem Revised Code (SRC) 230.020(f), historic design review approval shall be granted if the application satisfied the applicable standards set forth in Chapter 230. The HLC shall render its decision supported by findings that explain conformance or lack thereof with relevant design standards, state the facts relied upon in rendering the decision, and explain justification for the decision.

120-Day Requirement

The state mandated 120-day deadline to issue a final local decision, including any local appeals in this case, is February 24, 2017, unless an extension is granted by the applicant.

APPLICATION PROCESSING

Subject Application

1. On October 6, 2016, the applicant submitted materials for a Major Historic Design Review to add six new remote radio heads on the Willamette Heritage Center site.
2. Additional materials were submitted on October 10, 2016 and October 12, 2016. The application was deemed complete for processing on October 27, 2016.

Public Notice

1. Notice of the public hearing was mailed to the owners of all property within 250 feet of the subject property on October 27, 2016 (**Attachment A**).
2. The property was posted in accordance with the posting provision outlined in SRC 300.620.

TESTIMONY RECEIVED

Neighborhood Association Comments

The subject property is located within the South East Salem Neighborhood Association (SESNA). As of the date of publication, no comments were received from the neighborhood association.

Public Comments

All property owners within 250 feet of the subject property were mailed notification of the proposal on October 27, 2016. Notice of public hearing was also posted on the subject property. As of the date of publication, no comments have been received.

Public Agency Comments

As of the date of publication, no comments were received from any public agencies.

City Department Comments

The Building and Safety Division reviewed the proposal and indicated that the applicant must obtain required building permits.

FACTS & FINDINGS

Background Information

Thomas Kay Historic Park is individually listed on the National Register of Historic Places and includes Mission Mill (1889) and the associated structures, including the water tower (1925). While this tower is not the original 15,000 gallon redwood tower, this tower was constructed during the historic period and is a historic contributing accessory structure. The following early settlement houses are located on the site: Jason Lee House (1841), Methodist Parsonage (1841), John D. Boon House (1846), and Pleasant Grove Church (1858).

In 2013, the Historic Landmarks Commission (HLC) approved AT& T's proposal to remove three antennas, relocate three antennas and install nine new antenna panels on the water tower (HIS 13-16). Due to concerns about the cumulative adverse effect resulting from adding more antenna to the exterior of the water tower, the HLC added a condition of approval which limited future installation of antenna by this applicant to twelve. In 2014, the HLC approved the replacement of six antennas with three panel antennas on the water tower for Cricket, on the condition that any future replacement antenna would not exceed three by this applicant. These replacement antennas were not installed, and that decision expired on April 10, 2016. Cricket has since been acquired by AT & T. On July 21, 2016 the HLC approved HIS16-16 approving the replacement of six antennas and the removal of Cricket's six antennas. A total of twelve antennas and associated equipment are currently approved for installation on the water tower by this applicant with a condition of approval that future modifications to this antenna facility not exceed the total number and size of the antennas and associated equipment currently approved for installation.

Historic Design Review

SRC Chapter 230.065 specifies the standards and guidelines applicable to this project. The applicant is proposing to install six new remote radio heads and remove two equipment cabinets and remove and repurpose the mainline coax in the equipment shelter. Staff reviewed the project proposal and has the following findings for the applicable guidelines. For the applicant's full response, please refer to Attachment 3.

FINDINGS

(a) Except as otherwise provided in this Chapter, the property shall be used for its historic purpose, or for a similar purpose that will not alter street access, landscape design, entrance(s), height, footprint, fenestration, or massing.

Finding: The applicant will be removing two equipment cabinets and related coax, and installing three new remote radio heads (RRH's) behind existing antennas on the water tank and installing three new RRH's within the equipment shelter on the ground. While the original tower was not constructed for this use, the applicant has proposed to locate the RRH's behind the existing approved antennas minimizing the visual impact of this proposed alteration. The proposed new equipment does not significantly alter the appearance of the water tower. Staff recommends that the HLC find that this proposed use is compatible with the historic use and that this guideline has been met.

(b) Historic materials, finishes and distinctive features shall, when possible, be preserved and repaired according to historic preservation methods, rather than restored.

Finding: Staff recommends that the HLC find that there are no historic materials or features proposed for removal, reconstruction, or repair and that Guideline 230.065 (b) is not applicable to the evaluation of this proposal.

(c) Distinctive stylistic features or examples of skilled craftsmanship significance shall be treated with sensitivity.

Finding: Staff recommends that the HLC find that there are no distinctive stylistic features proposed for removal, reconstruction, or repair and Guideline 230.065 (c) does not apply to the evaluation of this proposal.

(d) Historic features shall be restored or reconstructed only when supported by physical or photographic evidence.

Finding: Staff recommends that the HLC find that there are no historic materials or features proposed for removal, reconstruction, or repair and that Guideline 230.065 (d) is not applicable to the evaluation of this proposal.

(e) Changes that have taken place to a historic resource over the course of time are evidence of the history and development of a historic resource and its environment, and should be recognized and respected. These changes may have acquired significance in their own right, and this significance should be recognized and respected.

Finding: Staff recommends that the HLC find that while the existing water tower is not the original tower, it was constructed in 1925, within the period of significance for the Thomas Kay Woolen Mill, and that the water tower is evidence of the history and development of the Thomas Kay Woolen Mill. The proposed addition of new equipment would not increase the total number of

equipment already on the tower, and the removal of the two existing equipment cabinets and location of 3 of the RRH's within the equipment shelter minimizes the visual impact to the tower and the adjacent Mill building and surrounding site. Staff recommends that the HLC find that this Guideline has been met.

(f) Additions and alterations to a historic resource shall be designed and constructed to minimize changes to the historic resource.

Finding: Locating three of the proposed RRH's behind the existing antennae on the tower and three within the equipment shelter, the proposed new RRH's will not be visible on the water tower. Additionally, the removal of the equipment cabinets results in a reduction of the overall equipment area (1,622 sq inches). The addition of the new RRH's will not be visible, and there will not be an adverse visual impact due to their addition. Staff recommends that the HLC find that the installation of the RRH's is compatible with the size and scale of the water tower and the surrounding buildings within the historic Thomas Kay Historic Park, and that SRC 230.065(f) has been met.

(g) Additions and alterations shall be constructed with the least possible loss of historic materials and so that significant features are not obscured, damaged, or destroyed.

Finding: While a total of twelve antennas have been approved for installation on the water tower, AT & T's current configuration only requires a total of nine antennas along with the reconfigured and relocated remote radio heads. This configuration and the smaller size of the remote radio heads ensures that the significant character defining features of the water tower are not obscured. Should the current proposal be approved by the HLC, the water tower would have a total of nine antennas with nine associated RRH's. Three RRH's would be located within the equipment shelter on the ground, meeting the applicable condition of approval. While the current proposal does not exceed a total of twelve antennas, the HLC has made it clear that their intent is to limit the cumulative adverse impact of too much wireless equipment attached to this historic resource. Therefore in order to continue to limit the cumulative adverse effect of future wireless modification proposals on this resource, staff recommends that the HLC adopt the following CONDITION of APPROVAL:

Condition 1: Any new or replacement communication device(s), including but not limited to dishes, antennas and associated equipment shall not exceed the total number and cumulative size of the dishes, antennas and associated equipment currently approved for installation.

(h) Structural deficiencies in a historic resource shall be corrected without visually changing the composition, design, texture or other visual qualities.

Finding: Staff recommends that the HLC find that the proposal does not include any plans to correct structural deficiencies, and that Guideline 230.065 (h) does not apply to the evaluation of this proposal.

(i) Excavation or re-grading shall not be allowed adjacent to or within the site of a historic resource which could cause the foundation to settle, shift, or fail, or have a

similar effect on adjacent historic resources.

Finding: Staff recommends that the HLC find that the proposal does not include any plans for excavation or regrading, and that Guideline 230.065 (i) does not apply to the evaluation of this proposal.

RECOMMENDATION

Based upon the information presented in the application, plans submitted for review, and findings as presented in this staff report, staff recommends that the Historic Landmarks Commission **APPROVE** the proposal with the following **CONDITION**:

Condition 1: Any new or replacement communication device(s), including but not limited to dishes, antennas and associated equipment shall not exceed the total number and cumulative size of the dishes, antennas and associated equipment currently approved for installation.

DECISION ALTERNATIVES

1. APPROVE the proposal as submitted by the applicant and indicated on the drawings.
2. APPROVE the proposal with conditions to satisfy specific guideline(s).
3. DENY the proposal based on noncompliance with identified guidelines in SRC 230, indicating which guideline(s) is not met and the reason(s) the guideline is not met.

Attachments: A. Hearing Notice and Vicinity Map
B. Excerpt from National Register Historic Resource Document
C. Applicant's Submittal Materials
D. HIS 16-16 Decision

Prepared by Kimberli Fitzgerald, ^{YF}AICP, Historic Preservation Officer



Attachment A

HEARING NOTICE

LAND USE REQUEST AFFECTING THIS AREA

Audiencia Pública

Si necesita ayuda para comprender esta informacion, por favor llame 503-588-6173

CASE NUMBER:	Historic Design Review Case No.HIS16-33
AMANDA APPLICATION NO:	16-118830-DR
HEARING INFORMATION:	Historic Landmarks Commission, Thursday, November 17, 2016, 5:30 P.M., Council Chambers, Room 240, Civic Center
PROPERTY LOCATION:	1313 Mill Street SE, Salem, OR 97301
OWNER(S):	Mission Mill Museum Association
APPLICANT / AGENT(S):	Natalie Erlund for FDH Velocitel for AT & T
DESCRIPTION OF REQUEST:	Major historic design review of a proposal to modify the existing wireless transmission facility by adding three radio heads behind existing antennas on an existing water tank (1925) and adding three radio heads to ground shelter within the Willamette Heritage Center/ Thomas Kay Historic Park, individually listed on the National Register of Historic Places, on property zoned CR (Retail Commercial), and located at 1313 Mill Street SE, 97301; Marion County Assessor Map and Tax Lot number: 073W26BC04100.
CRITERIA TO BE CONSIDERED:	<p><u>MAJOR HISTORIC DESIGN REVIEW</u></p> <p>General Guidelines for Historic Contributing Resources</p> <p>Pursuant to SRC 230.065, an application for a Major Historic Design Review proposing changes to a contributing building or structure may be approved if the proposal conforms to the following guidelines:</p> <ul style="list-style-type: none">(a) Except as otherwise provided in this Chapter, the property shall be used for its historic purpose, or for a similar purpose that will not alter street access, landscape design, entrance(s), height, footprint, fenestration, or massing.(b) Historic materials, finishes and distinctive features shall, when possible, be preserved and repaired according to historic preservation methods, rather than restored.(c) Distinctive stylistic features or examples of skilled craftsmanship significance shall be treated with sensitivity.(d) Historic features shall be restored or reconstructed only when supported by physical or photographic evidence.(e) Changes that have taken place to a historic resource over the course of time are evidence of the history and development of a historic resource and its environment, and should be recognized and respected. These changes may have acquired significance in their own right, and this significance should be recognized and respected.(f) Additions and alterations to a historic resource shall be designed and constructed to minimize changes to the historic resource.(g) Additions and alterations shall be constructed with the least possible loss of historic materials and so that significant features are not obscured, damaged, or destroyed.(h) Structural deficiencies in a historic resource shall be corrected without visually changing the composition, design, texture or other visual qualities.(i) Excavation or re-grading shall not be allowed adjacent to or within the site of a historic resource which could cause the foundation to settle, shift, or fail, or have a similar effect on adjacent historic resources.

HOW TO PROVIDE TESTIMONY:

Any person wishing to speak either for or against the proposed request may do so in person or by representative at the Public Hearing. Written comments may also be submitted at the Public Hearing. Include case number with the written comments. Prior to the Public Hearing, written comments may be filed with the Salem Planning Division, Community Development Department, 555 Liberty Street SE, Room 305, Salem, Oregon 97301. Only those participating at the hearing, in person or by submission of written testimony, have the right to appeal the decision.

HEARING PROCEDURE:

The hearing will be conducted with the staff presentation first, followed by the applicant's case, neighborhood organization comments, testimony of persons in favor or opposition, and rebuttal by the applicant, if necessary. The applicant has the burden of proof to show that the approval criteria can be satisfied by the facts. Opponents may rebut the applicant's testimony by showing alternative facts or by showing that the evidence submitted does not satisfy the approval criteria. Any participant may request an opportunity to present additional evidence or testimony regarding the application. A ruling will then be made to either continue the Public Hearing to another date or leave the record open to receive additional written testimony.

Failure to raise an issue in person or by letter prior to the close of the Public Hearing with sufficient specificity to provide the opportunity to respond to the issue, precludes appeal to the Land Use Board of Appeals (LUBA) on this issue. A similar failure to raise constitutional issues relating to proposed conditions of approval precludes an action for damages in circuit court.

Following the close of the Public Hearing a decision will be issued and mailed to the applicant, property owner, affected neighborhood association, anyone who participated in the hearing, either in person or in writing, and anyone who requested to receive notice of the decision.

CASE MANAGER:

KF
Kimberli Fitzgerald, Case Manager, City of Salem Planning Division, 555 Liberty Street SE, Room 305, Salem, Oregon 97301. Telephone: 503-540-2397; E-mail: kfitzgerald@cityofsalem.net.

NEIGHBORHOOD ORGANIZATION:

Southeast Salem Neighborhood Association (SESNA), Jeff Leach, Co-Land Use Chair; Phone: (503) 508-5499; Email: jeff503@fastmail.us; Darrin Brightman, Co-Land Use Chair; Phone: (503) 586-3964; Email: darrinsesna@gmail.com.

DOCUMENTATION AND STAFF REPORT:

Copies of the application, all documents and evidence submitted by the applicant are available for inspection at no cost at the Planning Division office, City Hall, 555 Liberty Street SE, Room 305, during regular business hours. Copies can be obtained at a reasonable cost. The Staff Report will be available seven (7) days prior to the hearing, and will thereafter be posted on the Community Development website:

www.cityofsalem.net/Departments/CommunityDevelopment/Planning/Historic/Pages/default.aspx

ACCESS:

The Americans with Disabilities Act (ADA) accommodations will be provided on request.


NOTICE MAILING DATE:

October 27, 2016

PLEASE PROMPTLY FORWARD A COPY OF THIS NOTICE TO ANY OTHER OWNER, TENANT OR LESSEE.

For more information about Planning in Salem:

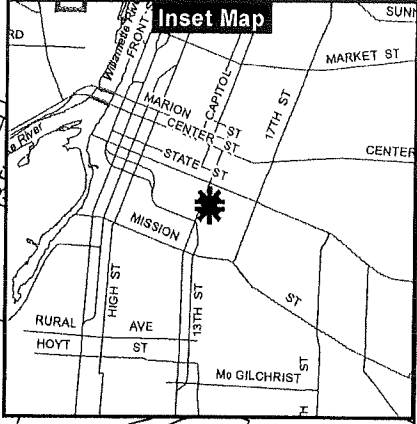
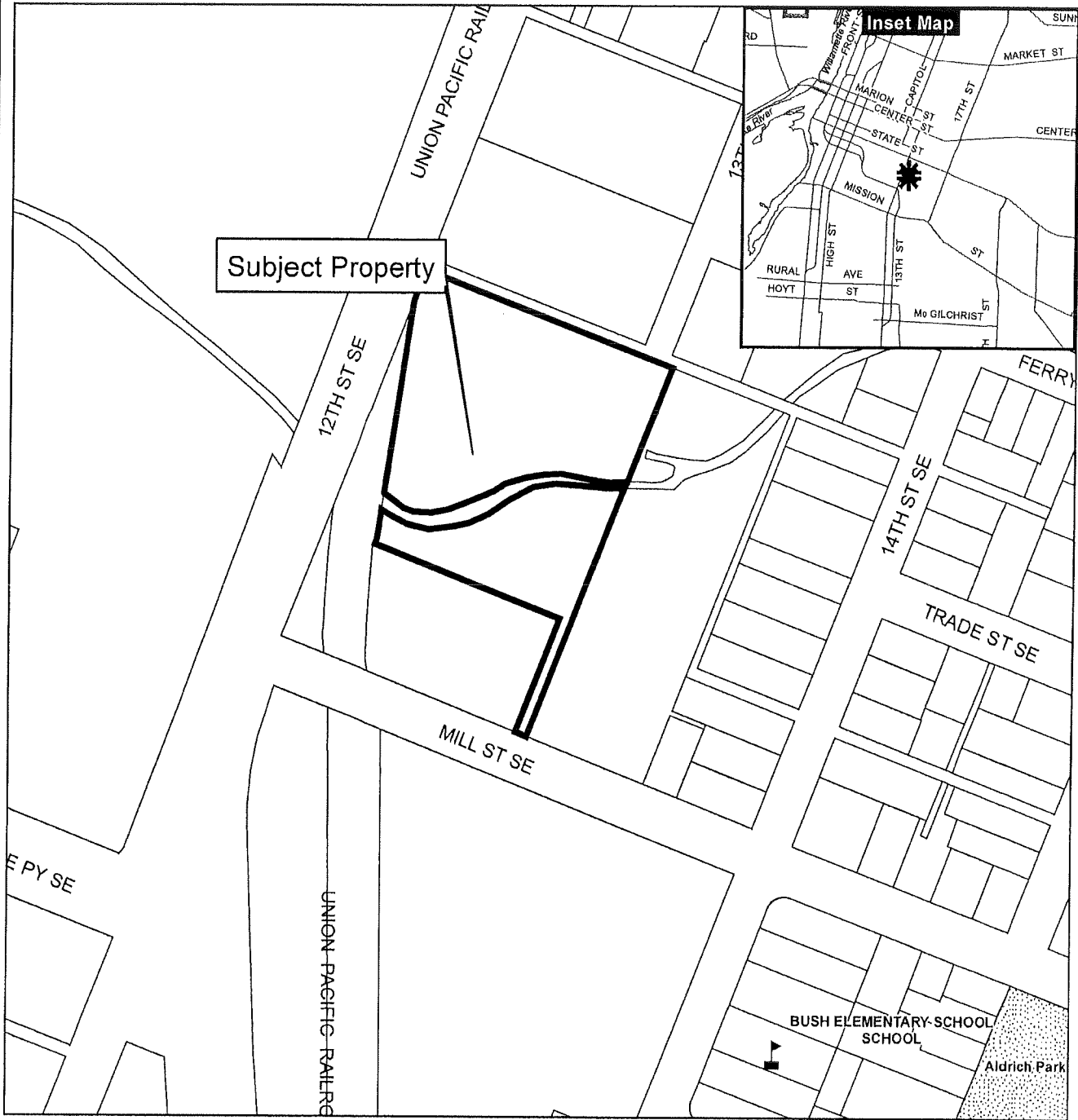
<http://www.cityofsalem.net/planning>

 **@Salem Planning**








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It is the City of Salem's policy to assure that no person shall be discriminated against on the grounds of race, religion, color, sex, marital status, familial status, national origin, age, mental or physical disability, sexual orientation, gender identity and source of income, as provided by Salem Revised Code Chapter 97. The City of Salem also fully complies with Title VI of the Civil Rights Act of 1964, and related statutes and regulations, in all programs and activities. Disability-related modification or accommodation, including auxiliary aids or services, in order to participate in this meeting or event, are available upon request. Sign language and interpreters for languages other than English are also available upon request. To request such an accommodation or interpretation, contact the Community Development Department at 503-588-6173 at least three business days before this meeting or event. TTD/TTY telephone 503-588-6439 is also available 24/7

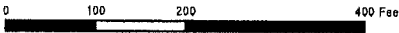
Vicinity Map 1313 Mill Street SE



Legend

-  Taxlots
-  Urban Growth Boundary
-  City Limits
-  Outside Salem City Limits
-  Historic District
-  Schools
-  Parks

CITY OF *Salem*
AT YOUR SERVICE
Community Development Dept.



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EXCERPT FROM THE NATIONAL REGISTER NOMINATION DOCUMENTS Thomas Kay Woolen Mill

Thomas Kay Woolen Mill PRIMARY (Contributing)
1313 Mill Street SE; Assessor's Map 073W26BC04100;
Owner: Mission Mill Museum, Salem, OR 97301

Description: Located on the eastern edge of Willamette University campus, the Thomas Kay Woolen Mill property is lined by a water course and large oak trees. The façade of the mill is the focal point of a park-like corridor through the campus which is created by the mill stream. The major component of the property (the mill and its warehouse, dye house, picker house and other back buildings) is to be partially restored as a museum of wool technology by the non-profit Mission Mill Association. The Kay Mill was constructed in 1898 during the mining boom and after the destruction of the Company's mill at Waterloo made it necessary to combine all operations in the mill at Salem. The second period of alterations occurred in 1904 when fuel oil supplanted wood as an auxiliary fuel for heating and dyeing. By 1915 28 looms were operating and the complex included the detached office and storage buildings, a 15,000 gallon Redwood water tank, the main mill building, a single story extension for dry finishing, a boiler room, picker house, carpenters and machine shop, housing for a turbine water wheel; dye house with drug and drying rooms, two wool warehouses an oil and bleach house and a shoddy and wood storage house. The third period of development came in 1925 when a new boiler room and other additions were constructed.

Cultural Data: The Thomas Kay Woolen Mill Company was founded in 1889 by native-born Englishman Thomas Kay, Squire Farrar, and C.P. Bishop. The existing mill was the largest plant of its type in the state, and it was the longest-lived woolen manufactory ever established in Salem. Until its sale to the Mission Mill Museum Association in 1965, it had been under continuous ownership and management by the family-controlled Thomas Kay Woolen Mill Company.



4004 Kruse Way Place
Suite 220
Lake Oswego, OR 97035

RECEIVED
NOV - 4 2016
COMMUNITY DEVELOPMENT

Historic Design Review Narrative

For a proposed modification to existing site: SA06 Mission Street

City of Salem
Community Development Department
555 Liberty Street SE, Rm 305
Salem, Oregon 97301

11/04/16

Attn: Kimberli Fitzgerald, AICP

RE: AT&T Mobility Application for a modification to AT&T's existing site.
AT&T site number: SA06
Site name: Mission Street
Site address: 1313 Mill St SE, Salem, OR 97301
Current Use: Water Tower & Wireless Transmission site
Zone Classification: IC

AT&T Mobility is in the process of a system wide upgrade of its facilities to support and improve its LTE platform. LTE will increase the speed and volume of data that can be transmitted and received over wireless devices. LTE is often referred to as 4G technology and is usually developed and installed in steps called 2C, 3C, 4C etc. This particular project is the upgrade for 4C and 5C.

AT&T Mobility is requesting Historic review and consideration for a modification to its existing site, previously entitled under HIS 16-16. I have included the following list of documentation:

- Historic Review Process Application Form
- Historic Alteration Review – Commercial Resource Worksheet
- Velocitel Check # 3662 for \$589.00, for a Historic Design review for the proposed Modification.
- This Narrative as required.
- Assessor's Map showing subject and surrounding property
- 11 x 17 Zoning Drawings
- Photo simulations
- Copy of the previously approved Decision (HIS 16-16) for reference
- Redacted copy of the Site Lease Agreement
- Specifications for equipment, both proposed and to be removed



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Existing Project Description synopsis:

The existing water tank site has existing AT&T antennas and associated equipment attached to the water tank legs. AT&T has been at this location since 1997. The current configuration consists of (9) AT&T antennas, and (9) RRH's (remote radio heads).

Impact of this proposed modification:

New Cingular Wireless LLC dba AT&T Mobility is proposing to add (3) RRH's to the existing array; they will be installed behind existing antennas and so will be hidden from view. (2) existing equipment cabinets will be removed from the existing ground shelter, and (3) new RRH's are proposed to be mounted on the wall at the cabinets' location. The total number of equipment proposed does not exceed the total number of equipment allowed on previous Historic Design Review decisions. All new equipment will be painted to match existing. No ground disturbance is proposed for this modification.

Detail of this proposed modification:

AT&T is proposing to remove the following from the existing installation:

- (2) equipment cabinets at ground shelter

AT&T will install the following at the existing installation:

- (1) AWS RRH per sector, (3) total, at water tank array
- (1) 850 RRH per sector, (3) total, at ground shelter

Result: Though some new equipment will be added, the visual impact will be minimal because equipment will be installed behind existing equipment. Furthermore, existing equipment (cabinets) will be removed. The area of the equipment being removed is more than the area of the equipment being added.

The following calculations show there is a net loss of equipment area:

Existing equipment to be removed (area in square inches):

(2) Cabinets @ 24x71= 3,408.00

Total equipment area to be removed= 3,408.00

Proposed equipment (area in square inches):

(3) RRHs @ 18.9x11.5= 652.05

(3) RRHs @ 31.5x12= 1134.00



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Total equipment area proposed = 1,786.05

Detail of this proposed modification:

The following sections address the review criteria relevant for this project:

(Responses are shown in italics)

230.065. General Guidelines for Historic Contributing Resources. In lieu of the standards for historic contributing buildings set forth in SRC 230.025 and SRC 230.040, an applicant may make a proposal for preservation, restoration, or rehabilitation activity, regardless of type of work, which shall conform to the following guidelines:

(a) Except as otherwise provided in this Chapter, the property shall be used for its historic purpose, or for a similar purpose that will not alter street access, landscape design, entrance(s), height, footprint, fenestration, or massing.

Though the original structure was not constructed for this use, this proposal will not alter the visual impact of the overall antenna installation as the proposed radio heads will be mounted behind the existing antennas.

This proposal will not alter street access, landscape design, entrances, height, footprint, fenestration or massing. No employees or customers will visit or work at this site, other than for a short period during the installation of this proposed modification, and by technical staff on a monthly basis or during emergencies. This site is, and will remain, an "unstaffed" facility. Guideline 230.065 (a) has been met.

(b) Historic materials, finishes and distinctive features shall, when possible, be preserved and repaired according to historic preservation methods, rather than restored.

(c) Distinctive stylistic features or examples of skilled craftsmanship significance shall be treated with sensitivity.

(d) Historic features shall be restored or reconstructed only when supported by physical or photographic evidence.

There is no proposal to remove, repair, reconstruct or disturb any historic materials, finishes, or distinctive feature, therefore Guidelines 230.065 (b) (c) (d) do not apply.

(e) Changes that have taken place to a historic resource over the course of time are evidence of the history and development of a historic resource and its environment, and should be recognized and respected. These changes may have acquired significance in their own right, and this significance should be recognized and respected.

The proposed modification will not adversely affect the surrounding historic property as AT&T has been in operation at this water tower location since 1997 and has become part of the environment in this part of Salem.



4004 Kruse Way Place
Suite 220
Lake Oswego, OR 97035

ENGINEERING INNOVATION

(f) Additions and alterations to a historic resource shall be designed and constructed to minimize changes to the historic resource.

(g) Additions and alterations shall be constructed with the least possible loss of historic materials and so that significant features are not obscured, damaged, or destroyed.

The proposed modification will minimize and provide the least visual impact to the historic structure and the surrounding area by maintaining the current overall visual impact while providing the necessary technical needs for today and into the future.

(h) Structural deficiencies in a historic resource shall be corrected without visually changing the composition, design, texture or other visual qualities.

There is no proposed correction of any structural deficiencies; therefore Guideline 230.065 (h) is not applicable for this application.

(i) Excavation or re-grading shall not be allowed adjacent to or within the site of a historic resource which could cause the foundation to settle, shift, or fail, or have a similar effect on adjacent historic resources. (Ord No. 34-10)

There is no proposed excavation or re-grading, therefore Guideline 230.065 (i) does not apply to this application.

Natalie Erlund

PNW LTE Site Acquisition Specialist
AT&T Turf Project

FDH Velocitel, Inc.

4004 Kruse Way Place, Suite 220
Lake Oswego, Oregon 97035
503-539-9247

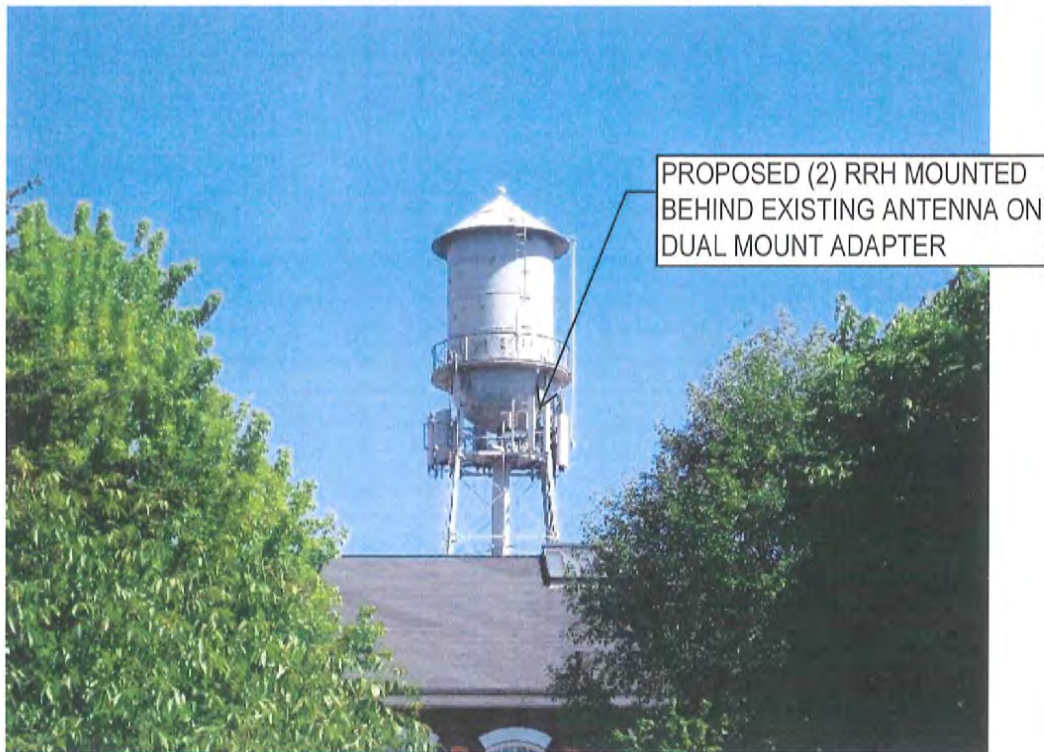
natalie.erlund@FDHvelocitel.com
www.FDHvelocitel.net

Attachments:

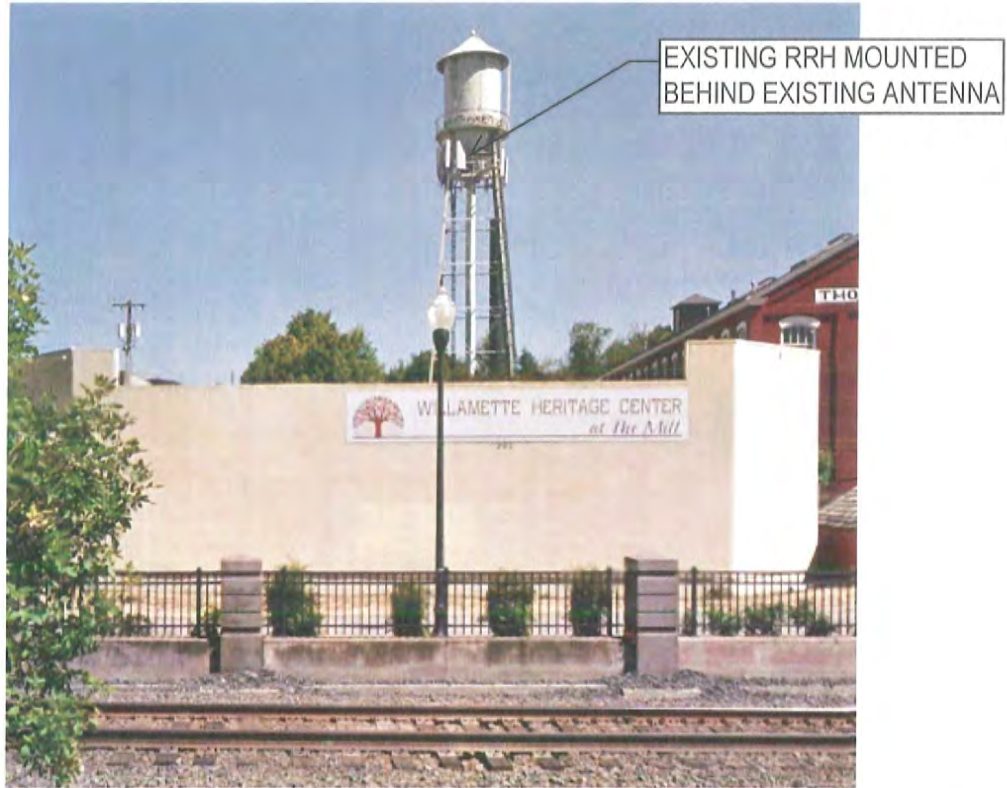
- Specifications for existing equipment to be removed
- Specifications for proposed equipment



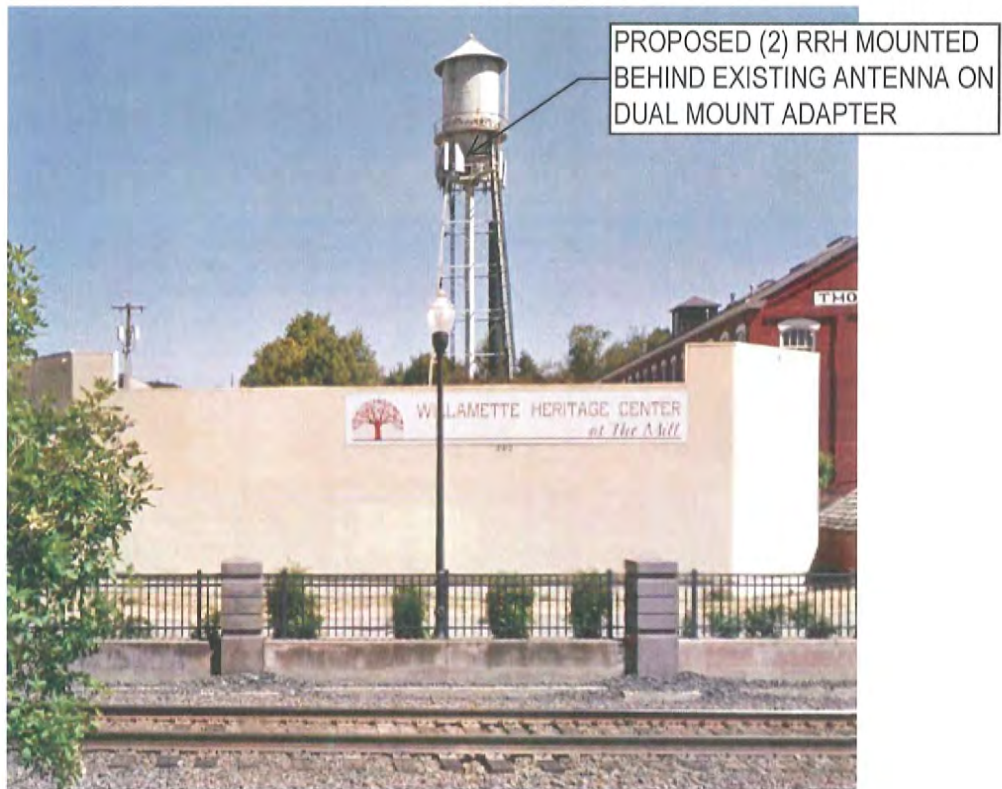
Existing



Proposed



Existing



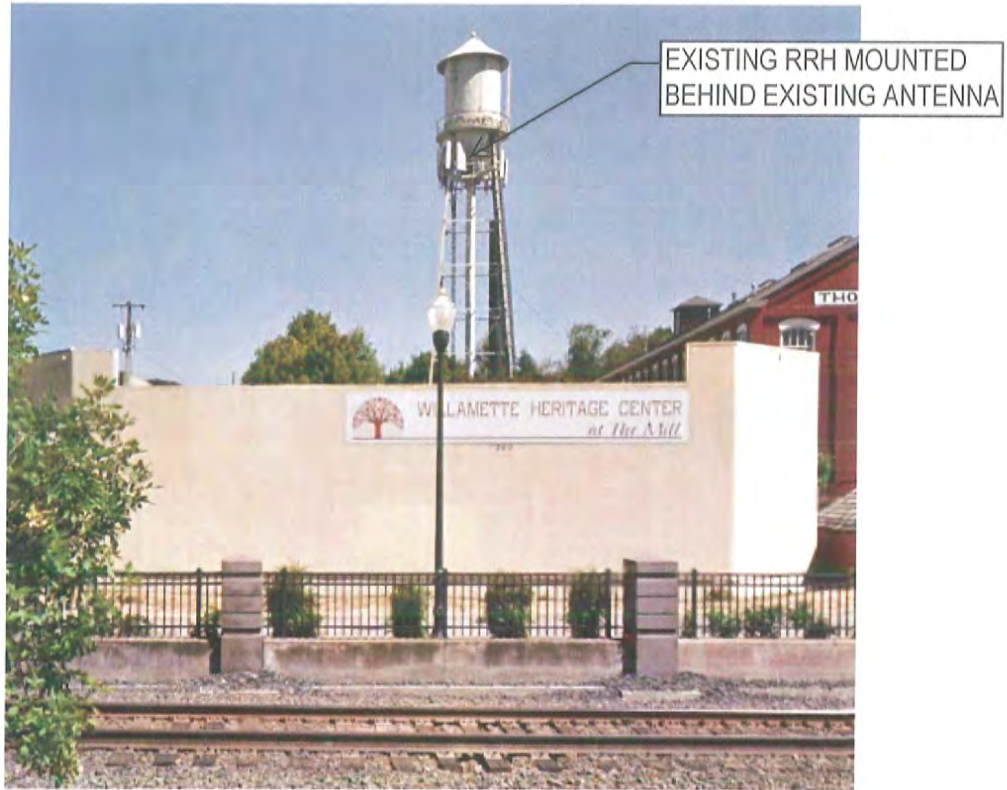
Proposed



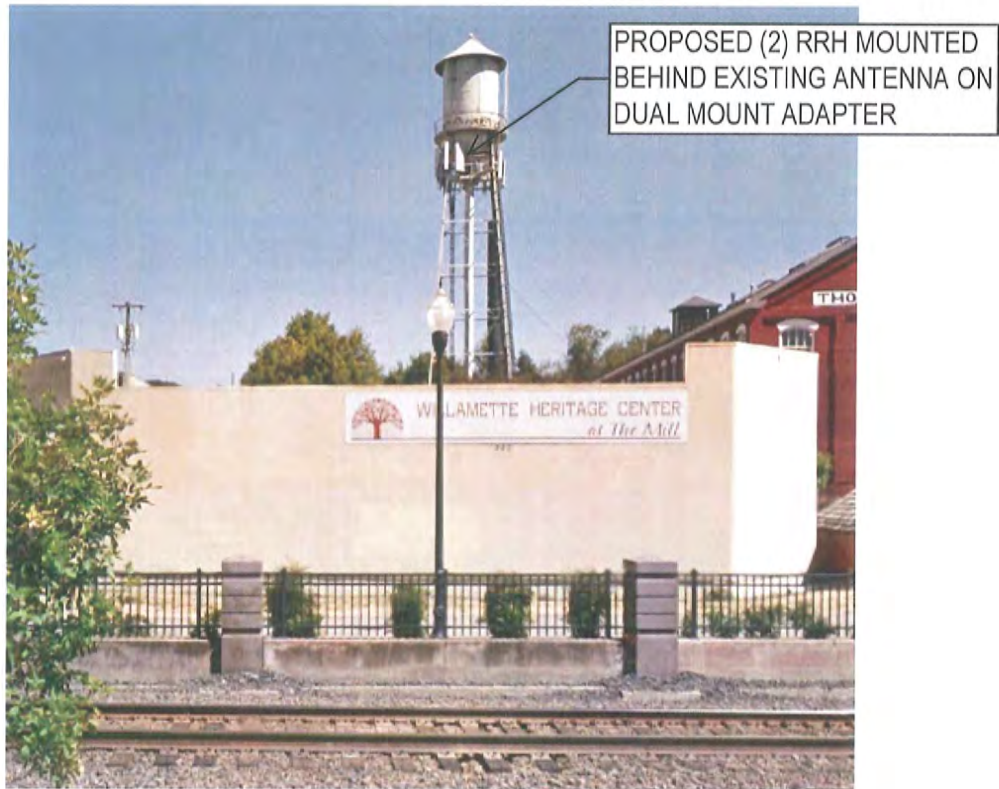
Existing



Proposed



Existing



Proposed

Mechanical Characteristics of Nokia UltraSite EDGE Base Station Indoor

TO BE REMOVED



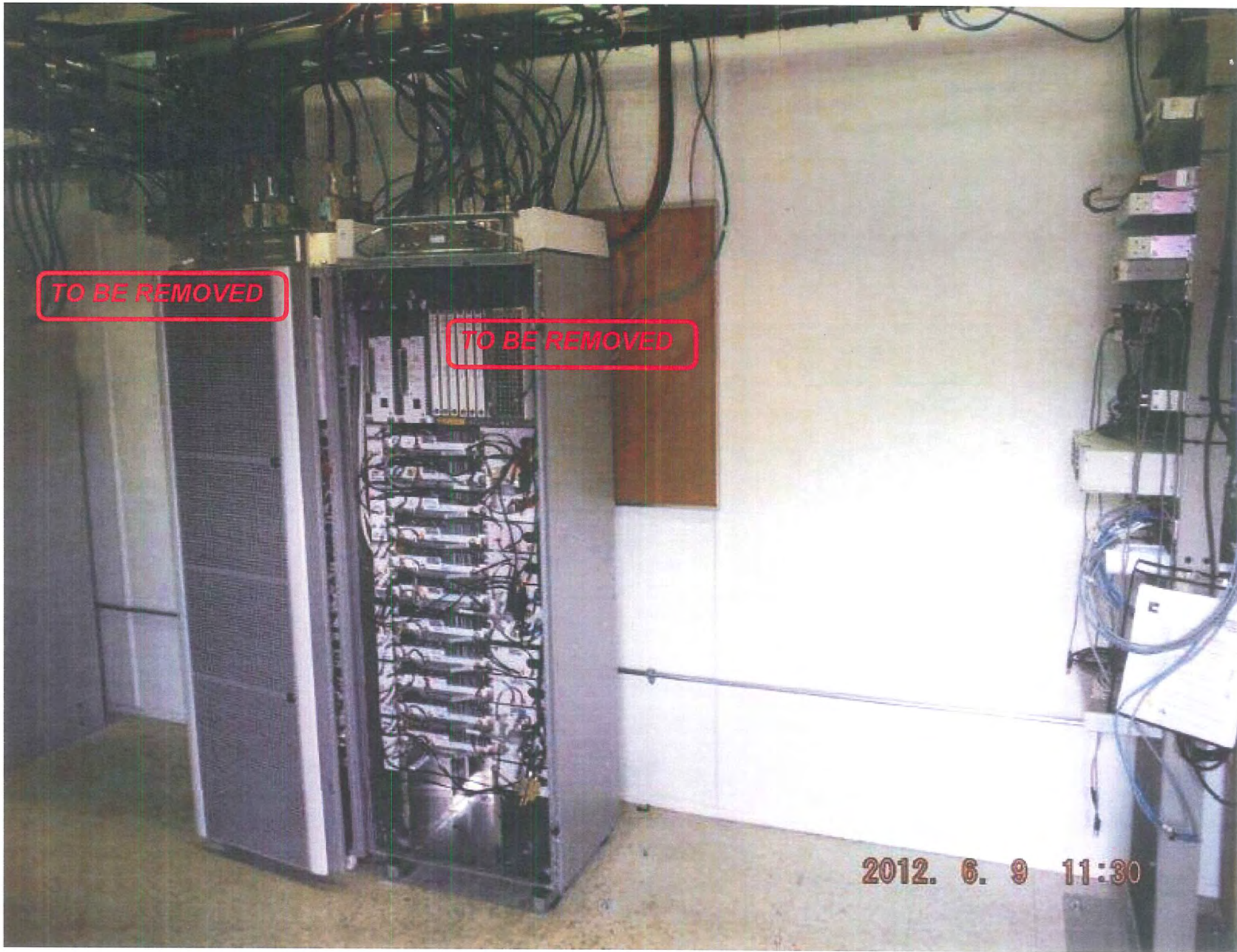
- ▶ **1800 x 600 x 570 mm (H x W x D)**
 - Identical footprint to IntraTalk BTS
 - Additional 50 mm free space required behind cabinet
- ▶ **Weight**
 - Max weight (12 TRX) 270
kg
 - Heaviest single part 58
kg (core mechanics)
 - Heaviest plug-in unit 18
kg (RTC)
- ▶ **Acoustic noise (max):** 73
dB(A)
- ▶ **Climatic conditions:** -5°C ... +50 °C
- ▶ **Ingress Protection Class:** IP
20
- ▶ **BTS core and cabinet door provides EMC shielding**

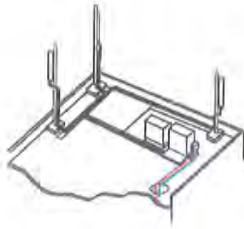


TO BE REMOVED

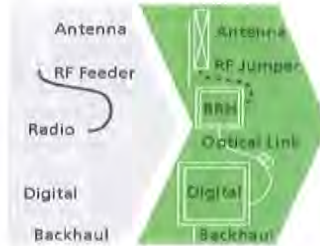
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2012. 6. 9 11:30

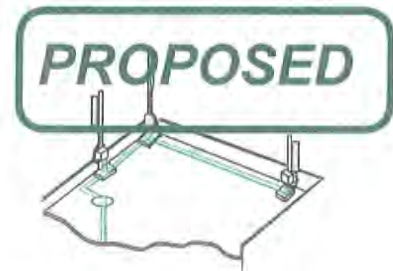




Macro



RRH for space-constrained cell sites



Distributed

FEATURES

- RRH2x60-850 integrates two power amplifiers of 60W each at antenna connector
- RRH2x60-850 can operate WCDMA, LTE or a mix of WCDMA and LTE
- RRH2x60-850 offers the possibility to operate the two radio chains independently (two blocks of 20MHz WCDMA anywhere in the band)
- RRH2x60-850 is a very compact and lightweight product
- Advanced power management techniques are embedded to provide

power savings, such as PA bias control or second PA path switch-off

BENEFITS

- MIMO deployment and/or WCDMA and LTE simultaneous operation with only one single unit per sector
- possibility to operate the radio-chains independently (2x20MHz anywhere in the band) addresses nearly all operators' spectrum configurations which is especially useful in case of disaggregated spectrum or RAN sharing

- RRH can be mounted close to the antenna, eliminating nearly all losses in RF cables and thus reducing power consumption by 50% compared to conventional solutions
- Distributed configurations provide easily deployable and cost-effective solutions, near zero footprint and noise-free solutions, with minimum impact on the neighborhood, which ease the deployment
- RETA and TMA support without additional hardware thanks to the AISG v2.0 port and the integrated Bias-T

TECHNICAL SPECIFICATIONS

Specifications listed are hardware capabilities. Some capabilities depend on support in a specific software release or future release.

Dimensions and weights

- HxWxD : 480x292.5x229.8mm (31.15l)
- Weight : 22.75kg (50lbs)

Electrical Data

- Power Supply : -48V DC (-40.5 to -57V)
- Power Consumption (ETSI average traffic load reference) : 115W for @1x20W; 255W @2x60W

RF Characteristics

- Frequency band: 850 (3GPP band 5)
- Output power: 2x60W at antenna connectors
- Technologies supported: W-CDMA and

LTE

- Instantaneous bandwidth: 20MHz (MIMO) or 2x20MHz (non MIMO)
- Rx diversity: 2-way uplink reception
- Typical sensitivity without Rx diversity (3GPP 25.104): -125.7 dBm for W-CDMA and -105 dBm for LTE

Connectivity

- Two CPRI optical ports for daisy-chaining and up to six RRH per fiber
- Type of optical fiber: Single-Mode (SM) and Multi-Mode (MM) SFPs
- Optical fiber length: up to 500m using MM fiber, up to 20km using SM fiber
- TMA/RETA : AISG 2.0 (RS485 connector and internal Bias-Tee)
- 6 external alarms
- Surge protection for all external ports (DC and RF)

Environmental specifications

- Operating temperature: -40°C to 55°C including solar load
- Operating relative humidity: 8% to 100%
- Environmental Conditions : ETS 300 019-1-4 class 4.1E
- Ingress Protection : IEC 60529 IP65
- Acoustic Noise : Noiseless (natural convection cooling)

Safety and Regulatory Data

- EMC : 3GPP 25113, EN 301 489-1, EN 301 489-23, GR 1089
- Safety : IEC60950-1, EN 60825-1
- Regulatory : CE Mark - European Directive : 2002/95/EC (ROHS); 2002/96/EC (WEEE); 1999/5/EC (R&TTE)
- Health : EN 50385

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ALCATEL-LUCENT RRH4X25-WCS

PROPOSED

The Alcatel-Lucent RRH4x25-WCS is the new addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solution, aimed at facilitating the RF site acquisition and civil engineering.

Supporting 2Tx/4Tx MIMO and 4 ways Rx diversity, it allows North American operators to have a compact radio solution to deploy LTE in the new Wireless Communication Services band (WCS - 2.3 GHz, 3GPP band 30), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent RRH4x25-WCS product has four transmit RF paths, delivering either 4x25 or 2x50 W RF output power, and four receive RF paths. It supports 4Rx diversity and offers the possibility to select, just by Software, 2Tx or 4Tx MIMO configurations with an instantaneous bandwidth of either 5MHz or 10MHz.

The Alcatel-Lucent RRH4x25-WCS is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts. Installation can easily be done by a single person because the Alcatel-Lucent RRH4x25-WCS is compact and weights less than 30 kg, eliminating the need for a crane to hoist the equipment to the rooftop.

Thanks to its small sizes and weight, the Alcatel-Lucent RRH4x25-WCS can be installed close to the antenna. Operators can therefore locate the Alcatel-Lucent RRH4x25-WCS where RF engineering is deemed ideal, minimizing trade-offs between available sites and RF optimum sites. The RF feeder and installation costs are reduced or even eliminated.

FEATURES

- Operating in 2.3 GHz band (WCS, 3GPP band 30)
- LTE 2Tx or 4Tx MIMO (switchable) and 4Rx Diversity
- Output power: Up to 2x50W or 4x25W
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in WCS band
- MIMO scheme operation selection (2Tx or 4Tx) by Software only
- Improves Downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4RxDiv capability and best in class Rx sensitivity
- Easy installation, with a unit that can be carried and set up by one person
- Flexible mounting options: Pole/Wall/Floor



TECHNICAL SPECIFICATIONS

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	WCS band (3GPP band 30) DL: 2350 - 2360 MHz UL: 2305 - 2315 MHz
Instantaneous bandwidth - #carriers	10MHz - 1 LTE carrier (5 or 10MHz)
RF output power	2x50W or 4x25W (by SW)
Noise figure – RX Diversity scheme	2.5 dB typ. (<3 dB max) – 2 or 4 ways Rx diversity
Sizes (HxWxD) in mm (in.)	800 x 305 x 220 (31.5" x 12" x 8.7") (with solar shield)
Volume	54 l
Weight in kg (lb) (w/o mounting HW)	31.5 (70)
DC voltage range	-40.5 to -57V at full performance, -38 to -57V at full performance (but power consumption)
DC power consumption (@ -48V)	500W typical @100% RF load in 2Tx operation, 550W typical in 4Tx operation
Environmental conditions	40°C (-40°F) / +55°C (+131°F) IP65
Wind load (@150km/h or 93mph)	Frontal:<300N / Lateral :<200N
Antenna ports	2 ports 7/16 DIN female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (@4.9 Gbps) SFP single mode dual fiber
AISG interfaces	1 AISG2.0 output (RS485) Integrated Bias Tee on 2 duplexed RF ports
Misc. Interfaces	6 external alarms (2 connectors) – 2 Tx monitor ports - 1 DC block
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / UL 60950-1 / FCC Part 27

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Your world. Delivered. MISSION STREET

1313 MILL STREET SE
SALEM, OR 97301

SA06 | 10127759

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE AT&T MOBILITY SERVICES IS STRICTLY PROHIBITED.



AT&T MOBILITY CORP.
18801 SW 72ND AVE., STE. 200
TUALATIN, OR 97002



4004 KRUISE WAY PLACE
BLDG. 4004, SUITE #220
LAKE OSWEGO, OR 97035
503-636-2500 (MAIN)
503-636-2501 (FAX)

SITE ID: SA06

MISSION STREET

1313 MILL STREET SE
SALEM, OR 97301

PROJECT:
LTE 4C 5C

ISSUED FOR:
CONSTRUCTION

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
A	07/21/16	PRELIM 2D	BT
0	09/23/16	FINAL CD	BT

DATE: 10/27/15
DRAWN BY: BT
CHECKED BY: PT
CURRENT ISSUE DATE:
09/23/16

STAMP:



THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

SHEET TITLE:
TITLE SHEET

SHEET NUMBER: **T-1**

REV. **0**

VICINITY MAP



GENERAL LOCATION MAP



DRIVING DIRECTIONS

DIRECTIONS FROM TUALATIN, OR: MERGE ONTO 1-5 S TOWARD SALEM. TAKE EXIT 256 FOR OR-213/MARKET ST. TOWARD LANCASTER MALL. TURN RIGHT ONTO MARKET STREET NE. TURN LEFT ONTO 17TH STREET NE. TURN RIGHT ONTO MILL STREET SE. DESTINATION WILL BE ON THE RIGHT. ARRIVE AT: 1313 MILL STREET SE, SALEM, OR 97301.

APPROVAL/SIGN OFF OF DRAWINGS

CONSULTANT GROUP SIGN OFF	DATE	SIGNATURE	AT&T SIGN OFF	DATE	SIGNATURE
CONSTRUCTION MANAGER			COMPLIANCE		
LANDLORD'S REPRESENTATIVE			CONSTRUCTION MANAGER		
PROJECT MANAGER			DEPLOYMENT MANAGER		
SITE ACQUISITION			EQUIPMENT ENGINEER		
ZONING			INTERCONNECT		
SITE ACQUISITION MANAGER			OPERATIONS		
PERMITS			RF ENGINEER		
			RF ENGINEER MANAGER		

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

PROJECT INFORMATION

APPLICANT:
FDH VELOCITEL ON BEHALF OF AT&T MOBILITY CORP.
4004 KRUISE WAY PL., SUITE #220
LAKE OSWEGO, OR 97035
NATALIE ERLIND
PH: (503) 539-9247

PROPERTY OWNER:
MISSION & MILL MUSEUM
C/O WILLAMETTE HERITAGE CENTER
1313 MILL ST SE #200
SALEM, OR 97301

PROJECT ENGINEER:
FDH VELOCITEL, INC.
4004 KRUISE WAY PL., SUITE #220
LAKE OSWEGO, OR 97035
PAUL TIBBOT, P.E.
PH: (503) 636-2500

CONSTRUCTION MANAGER:
FDH VELOCITEL, INC.
4004 KRUISE WAY PL., SUITE #220
LAKE OSWEGO, OR 97035
JAY TELFORD
PH: (503) 349-2149

CODE INFORMATION:
ZONING CLASSIFICATION: IC - INDUSTRIAL COMMERCIAL
BUILDING CODE: IBC 2014 OREGON STRUCTURAL SPECIALTY CODE (OSSC)
CONSTRUCTION TYPE: IIB
OCCUPANCY: U
JURISDICTION: CITY OF SALEM

SITE LOCATION: (BASED ON NAD 83)
TAX LOT #: 073W26BCD4100
LATITUDE: 44°56'06.5" N
LONGITUDE: 123°01'37.6" W
TOP OF STRUCTURE AGL: 104'-0"±
BASE OF STRUCTURE AMSL: 174'± A.M.S.L.

PROJECT AREA:
APPROXIMATE LEASE AREA: 1019 SQ. FT.

GENERAL INFORMATION:
1. PARKING REQUIREMENTS ARE UNCHANGED.
2. TRAFFIC IS UNAFFECTED.
3. NO SIGNAGE IS PROPOSED.

PROJECT DESCRIPTION:
AT&T MOBILITY PROPOSES THE FOLLOWING TO AN EXISTING UNSTAFFED RADIO TELECOMMUNICATIONS FACILITY CONSISTING OF AN ANTENNA ARRAY ON A 106'-0" SELF SUPPORT WATER TOWER AND AN EQUIPMENT SHELTER.

AT&T WILL REMOVE/REPLACE FROM TOWER:
• EXISTING GSM MAINLINE COAX WILL BE DECOMMISSIONED IN PLACE AND REPURPOSED FOR LTE 850 RRH SIGNAL TO EXISTING ANTENNA LOCATED ON SELF SUPPORT TOWER

AT&T WILL INSTALL ON TOWER:
• (1) LTE AWS RRH PER SECTOR (3) TOTAL
• (1) DOUBLE RRH MOUNT PER SECTOR (3) TOTAL

AT&T WILL INSTALL IN EXISTING EQUIPMENT SHELTER:
• (1) LTE 850 RRH PER SECTOR (3) TOTAL

DRAWING INDEX

IN USE	DWG. NO.	DESCRIPTION
X	T-1	TITLE SHEET
	SV-1	SURVEY
X	GN-1	GENERAL NOTES
X	A-1	OVERALL SITE PLAN
X	A-2	COMPOUND LAYOUT PLANS
X	A-3	EQUIPMENT LAYOUT PLANS
X	A-4	ELEVATIONS
	A-5	EQUIPMENT DETAILS
	A-6	EQUIPMENT DETAILS
	A-7	SITE DETAILS
	A-8	GRADING & EROSION CONTROL PLAN
	A-9	GRADING & EROSION CONTROL DETAILS
	A-10	GENERATOR DETAILS
	A-11	PROPANE TANK DETAILS
	A-12	SIGNAGE DETAILS
	A-13	SIGNAGE DETAILS
X	RF-1	ANTENNA CONFIGURATIONS
X	RF-2	RF DETAILS
	RF-3	RF DETAILS
X	RF-4	RF NOTES
X	G-1	GROUNDING PLAN
X	G-2	GROUNDING DETAILS
	G-3	GROUNDING DETAILS
	G-4	GROUNDING DETAILS
	E-1	UTILITY SITE PLAN
	E-2	ELECTRICAL DETAILS
	E-3	ELECTRICAL DETAILS
	S-1	SHELTER FOUNDATION DETAILS

LEGAL DESCRIPTION

LEGAL DESCRIPTION

GENERAL NOTES:

- VERIFY AND CONFIRM ALL DIMENSIONS AND CONDITIONS. NOTIFY AT&T AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE. THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGNOSTIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ALL REQUIREMENTS DEEMED NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.
- PRIOR TO THE SUBMISSION OF BIOS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN, PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
- AT&T, AND 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 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) AT&T, AND THE ARCHITECT/ENGINEER OF ANY OMISSIONS, 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.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 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.
- ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL, AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- 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.
- THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE. ENSURE THAT EXCAVATION DOES NOT AFFECT ADJACENT STRUCTURES.
- SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
- 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.
- CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- 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 SLUDGES OF ANY NATURE.
- THE 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.
- THE CONTRACTOR SHALL PROVIDE AT&T, PROPER INSURANCE CERTIFICATES HAVING AT&T AS ADDITIONAL INSURED, AND AT&T, PROOF OF LICENSE(S) AND PE AND PD INSURANCE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL INSPECTIONS.
- VERIFY AND CONFIRM ALL DIMENSIONS AND CONDITIONS. NOTIFY AT&T AND CAUTION CALL BEFORE YOU DIG BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION GIVEN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT REGIONAL UTILITY LOCATE SERVICE.
- CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO AT&T, ALONG WITH REQUINED CONSTRUCTION SET.

GENERAL NOTES: (CONTINUED)

- CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REWORKING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REWORKED SET TO AT&T, UPON COMPLETION.
- FOR CO-LOCATION SITES: CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WORK.
- CONTRACTOR IS TO COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. CONTRACTOR TO REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO NETWORK CARRIER REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.
- ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY AT&T CONSTRUCTION MANAGER.
- WHERE ANCHORING TO A CONCRETE ROOF SLAB, CONTRACTOR SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF POST TENSION TENDONS. CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES TO LOCATE THE TENDONS.
- CONTRACTOR SHALL USE STAINLESS STEEL METAL LOCKING RIES FOR ALL CABLE TRAY THE DOWNS AND ALL OTHER GENERAL THE DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON AT&T PROJECTS. RECOMMENDED MANUFACTURER SHALL BE: PANDUIT CORP. METAL LOCKING RIES MODEL NO. ML45-C UNDER SERIES-304 (OR EQUAL). PANDUIT PRODUCT DISTRIBUTED BY TRACOR OF TACOMA, WA.
- MAINTAIN THE INTEGRITY OF THE BUILDING ENVELOPE AND CONSTRUCT BARRIERS IN THE AREA OF WORK TO PREVENT DAMAGE FROM WEATHER AND CONSTRUCTION DUST AND DEBRIS.

SITE NOTES:

- CLEAR AND GRUB SITE OF ALL VEGETATION, PAVING, GRAVEL BASE AND OTHER DEBRIS NOT TO REMAIN. SUBGRADES ARE TO BE SET PRIOR TO LANDSCAPE INSTALLATION.
- ELEVATION OF SUBGRADE TO BE WITHIN .10 FOOT OF ELEVATIONS SHOWN ON PLAN MINUS DEPTH OF TOPSOIL, FILL, AND MULCH.
- ALL AREAS SHALL BE ROUGH GRADED WITHIN FOOT OF ELEVATIONS INDICATED BEFORE PAVING. ALL GRADES SHALL PRODUCE POSITIVE DRAINAGE AWAY FROM EQUIPMENT SLABS, BUILDINGS AND THROUGH ALL PLANTER AREAS TO AVOID LOW SPOTS AND STANDING WATER.
- NEW GRADES SHALL BLEND NATURALLY INTO EXISTING GRADES.
- IN LANDSCAPE AREAS, FINISH GRADES ARE TO FOLLOW THE GRADES AND EDGE DETAILS INDICATED AND BE MOUNDDED 6 INCHES IN THE CENTER OF THE BED ABOVE THE EDGE OF THE LANDSCAPE AREA.
- NOTIFY AT&T AND THE ARCHITECT IF MODIFICATIONS TO THE SHOWN GRADING SEEM NECESSARY AND OBTAIN APPROVAL PRIOR TO START OF WORK.
- FOOTINGS SHALL BEAR ON FIRM, NATURAL, UNDISTURBED SOIL, OR ON ENGINEERED FILL (COMPACTED TO 95%). ENSURE THAT EXCAVATIONS ARE FREE OF ORGANIC MATERIAL, DEBRIS, OR OTHER FOREIGN MATERIAL. NOTIFY ARCHITECT IF ANY UNUSUAL CONDITIONS ARE ENCOUNTERED.
- FILL AND SLAB BASE MATERIAL SHALL BE 3/4" MINUS CRUSHED ROCK PLACED IN 8" (MAXIMUM) LOOSE LIFTS AND COMPACTED TO 98% ASTM D1557 OR ASHSTO T-180.
- SPECIAL INSPECTION SHALL BE PERFORMED AS REQUIRED BY THE 2014 OSSC SECTION 1705 BY AN INDEPENDENT SPECIAL INSPECTOR APPROVED BY THE LOCAL JURISDICTION.

SPECIAL INSPECTIONS:

- CONTRACTOR SHALL PROVIDE REQUIRED SPECIAL INSPECTIONS PERFORMED BY AN INDEPENDENT INSPECTOR, APPROVED BY AT&T AND THE LOCAL JURISDICTION.
- THE SPECIAL INSPECTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL.

CONCRETE NOTES:

- 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 2014 OSSC. CEMENT SHALL BE ASTM C150, PORTLAND CEMENT TYPE II U.N.O.
- THE GENERAL CONTRACTOR SHALL SUPERVISE AND BE RESPONSIBLE FOR THE METHODS AND PROCEDURES OF CONCRETE PLACEMENT.
- ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C484, C618, C686 AND C1017. CONCRETE EXPOSED TO FREEZING AND THAWING WHILE MOIST SHALL BE AIR ENTRAINED IN ACCORDANCE WITH ACI 318, SECTION 4.4.1.
- 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.

CONCRETE NOTES: (CONTINUED)

- REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 318 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
- SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy=60,000 PSI.
- REINFORCING PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE CONSULTANT.
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
FOOTINGS AND OTHER UNFORMED SURFACES, EXPOSED TO EARTH AND OTHER UNFORMED SURFACES EXPOSED TO (≥ 6 BARS) 2"
TO EARTH OR WEATHER (< 6 BARS) 1 1/2"
SLABS AND WALLS (INTERIOR FACE) 3/4"
- BARS SHALL BE SUPPORTED ON CHAIRS OR DOBBE BRICKS.
- ANCHOR BOLTS TO CONFORM TO ASTM A307.
- NON-SHRINKING GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3,000 PSI MINIMUM).
- ALL EXPANSION ANCHORS TO BE HILTI BRAND. ADHESIVE ANCHORS REQUIRE TESTING TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER AND LOCAL JURISDICTION.

STRUCTURAL STEEL NOTES:

- SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO AT&T AND THE CONSULTANT FOR REVIEW PRIOR TO FABRICATION.
- STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) SHALL BE BASED ON THE A.I.S.C. SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS' LATEST EDITION. SUPERVISION SHALL BE IN ACCORDANCE WITH 2014 OSSC CHAPTER 22. BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE CONSULTANT. THE CONSULTANT SHALL BE FURNISHED WITH A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- TYPE OF MEMBER
- | | |
|-----------------------------------|----------------------|
| A. WIDE FLANGE SHAPES | ASTM A992, GRADE 50 |
| A. SHAPES, PLATES, ANGLES, & ROVS | ASTM A36, Fy 36 KSI |
| B. SPECIAL SHAPES AND PLATES | ASTM A572, Fy 50 KSI |
| C. PIPE COLUMNS | ASTM A53, Fy 35 KSI |
| D. STRUCTURAL TUBING | ASTM A500, Fy 46KSI |
| E. ANCHOR BOLTS | ASTM A307 |
| F. CONNECTION BOLTS | ASTM A325 TWIST-OFF |
- HOT DIP GALVANIZE AFTER FABRICATION PER A123/A123M-00 ALL STEEL EXPOSED TO WEATHER AND WHERE NOTED.
 - ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND AWS STANDARDS AND SHALL BE PERFORMED BY AWS D1.1 CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PRE-QUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70 XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS.
 - COLD-FORMED STEEL FRAMING MEMBERS SHALL BE OF THE SHAPE, SIZE, AND GAGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE A.I.S.S. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS."
 - BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4" DIA.) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
 - NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
(UNLESS NOTED OTHERWISE), PREPARATION AND PAINTING SHALL BE IN ACCORDANCE WITH THE SPECIFICATION AND IN ACCORDANCE WITH THE PAINT MANUFACTURERS WRITTEN INSTRUCTIONS.
 - ALL WELDS TO BE 1/4" FILLET UNLESS NOTED OTHERWISE.
 - TOUCH UP ALL FIELD DRILLING, WELDING AND CUT SURFACES WITH 2 COATS OF GALVANON (ZINC RICH PAINT) OR APPROVED EQUAL.

SAFETY PROCEDURES

FALL PROTECTION METHODS TO BE PER FEDERAL, STATE, LOCAL, OSHA, AT&T AND OWNER REQUIREMENTS.

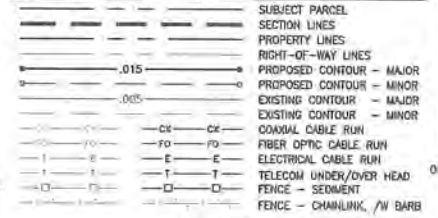
TOWER/POLE NOTES:

- VERIFICATION THAT THE EXISTING TOWER/POLE CAN SUPPORT THE PROPOSED ANTENNA LOADING IS TO BE DONE BY OTHERS.
- PROVIDE SUPPORTS FOR THE ANTENNA COAX CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS. ANTENNA COAX CABLES ARE TO BE SUPPORTED AND RESTRAINED AT THE CENTERS SUITABLE TO THE MANUFACTURER'S REQUIREMENTS.

SYMBOLS AND ABBREVIATIONS

A/C	AIR CONDITIONING	MAX	MAXIMUM
AGL	ABOVE GROUND LEVEL	MECH	MECHANICAL
APRO	APPROXIMATELY	MTL	METAL
AWS	ADVANCED WIRELESS SERVICE	MFR	MANUFACTURE
BBU	BATTERY BACKUP UNIT	MGR	MANAGER
BLDG	BUILDING	MIN	MINIMUM
BLK	BLOCKING	MISC	MISCELLANEOUS
CLG	CEILING	NA	NOT APPLICABLE
CLR	CLEAR	NET	NOT TO SCALE
CONC	CONCRETE	NC	NOT IN CONTRACT
CONST	CONSTRUCTION	OTS	ON CENTER
CONT	CONTINUOUS	OD	OUTSIDE DIAMETER
DBL	DOUBLE	PCS	PERSONAL COMMUNICATION SERVICE
Ø	DIAMETER		
DIAG	DIAGONAL	PDU	POWER DISTRIBUTION UNIT
DN	DOWN	PLYWD	PLYWOOD
DET	DETAIL	PROJ	PROJECT
DWG	DRAWING	PROP	PROPERTY
EA	EACH	PT	PRESSURE TREATED
ELEV	ELEVATION	REQ	REQUIRED
ELEC	ELECTRICAL	RF	RADIO FREQUENCY
EQU	EQUAL	RM	ROOM
EQUIP	EQUIPMENT	RO	ROUGH OPENING
EXT	EXTERIOR	RMT	REMOTE RADIO HEAD
FF	FIBER INTERFACE FRAME	SHT	SHEET
FIN	FINISH	SM	SMALL
FLUOR	FLUORESCENT	SPEC	SPECIFICATION
FLR	FLOOR	SF	SQUARE FOOT
FT	FOOT	SS	STAINLESS STEEL
GA	GAUGE	STL	STEEL
GALV	GALVANIZED	STRUCT	STRUCTURAL
GC	GENERAL CONTRACTOR	STU	STUCCO
GRND	GROUNDED	SUSP	SUSPENDED
GSM	GLOBAL SYSTEM MOBILE	THRU	THROUGH
GYP	GYPSONIUM BOARD	TMA	TOWER MOUNTED AMPLIFIER
HORIZ	HORIZONTAL	TND	TINNED
HRL	HOUR	TYP	TYPICAL
HT	HIGHT	UMTS	UNIVERSAL MOBILE TELECOMMUNICATION SERVICE
ID	INSIDE DIAMETER	VERT	VERTICAL
INCH	INCH	W/O	WITHOUT
INFO	INFORMATION	WTS	WIRELESS COMMUNICATION SERVICE
INSUL	INSULATION		
INT	INTERIOR		
LBS	POUNDS		
LTE	LONG TERM EVOLUTION	WP	WATER PROOF

LEGEND



Know what's below.
Call before you dig.

NOTE: STRUCTURAL DRAWINGS AND NOTES SHALL TAKE PRECEDENCE OVER ALL DRAWINGS AND NOTES.

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ENGINEERING INNOVATION
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BLDG 4004, SUITE #220
LAKE OSWEGO, OR 97035
503-636-2500 (MAIN)
503-636-2501 (FAX)

SITE ID: SA06
MISSION STREET
1313 MILL STREET SE
SALEM, OR 97301

PROJECT:
LTE 4C 5C

ISSUED FOR:
CONSTRUCTION

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
A	07/23/16	PRELIM 2D	BT
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SHEET TITLE:
GENERAL NOTES

SHEET NUMBER	REV.
GN-1	0



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MOBILITY

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FDH VELOCITEL
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REGISTERED PROFESSIONAL ENGINEER
77001PE
Paul D. Tibbot
OREGON
March 9, 2010
PAUL D. TIBBOT
RELEWS 05/30/18

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SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER: **A-1** REV: 0

22"X34" SCALE: 1:25
11"X17" SCALE: 1:50

OVERALL SITE PLAN | 1



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PROJECT:
LTE 4C 5C

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A	07/21/16	PRELIM 2D	BT
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TITLE: 10127759
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09/23/16

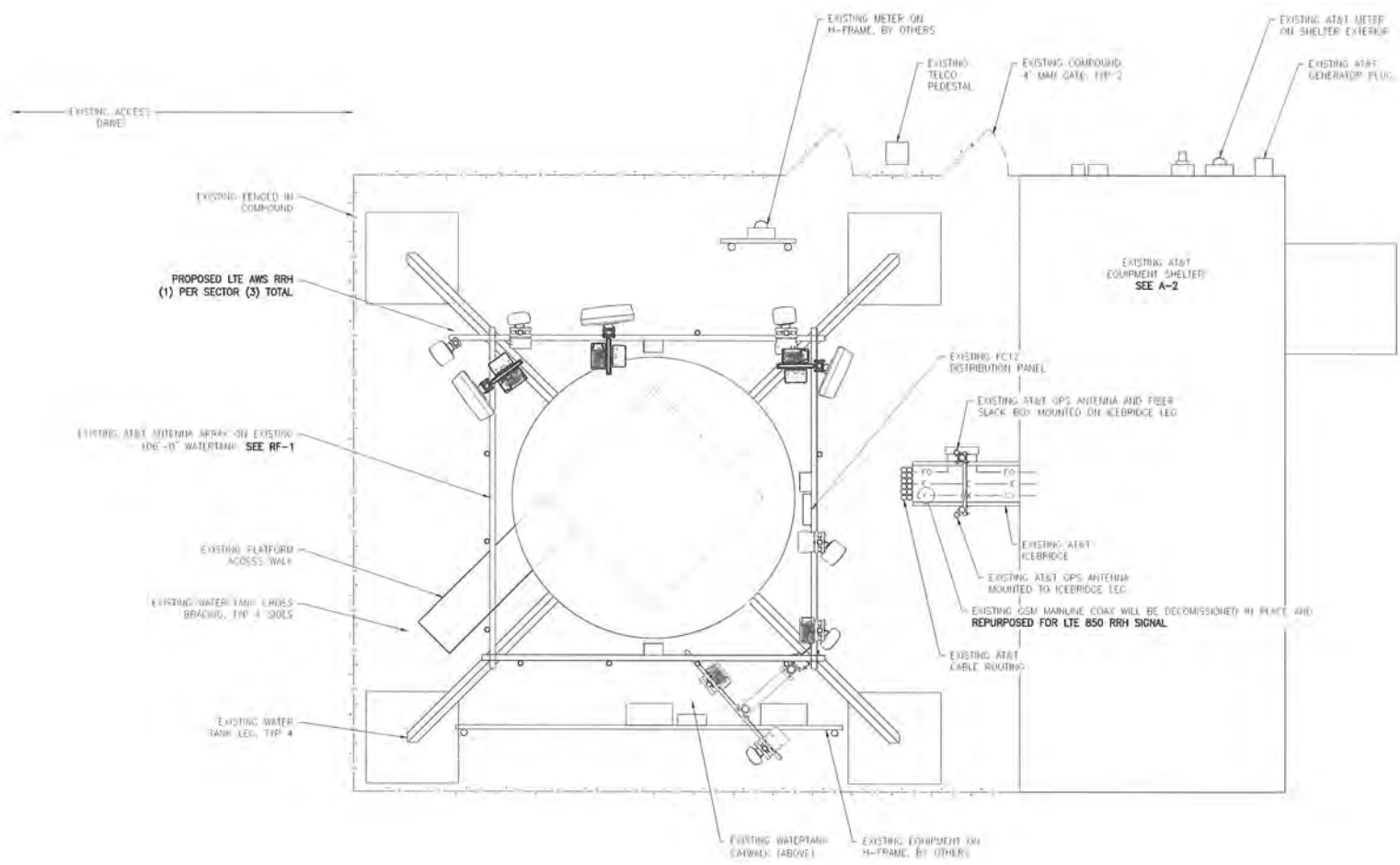
STAMP:

09/3/16
RENEWS 06/30/16

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SHEET TITLE:
COMPOUND LAYOUT PLANS

SHEET NUMBER: **A-2** REV: **0**



22'x34' SCALE: 1"=2.5'
11'x17' SCALE: 1"=5'

COMPOUND LAYOUT | 1

SUBMITTALS			
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D	09/23/16	FINAL CD	BT

DATE: 10/27/15
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CURRENT ISSUE DATE:
09/23/16

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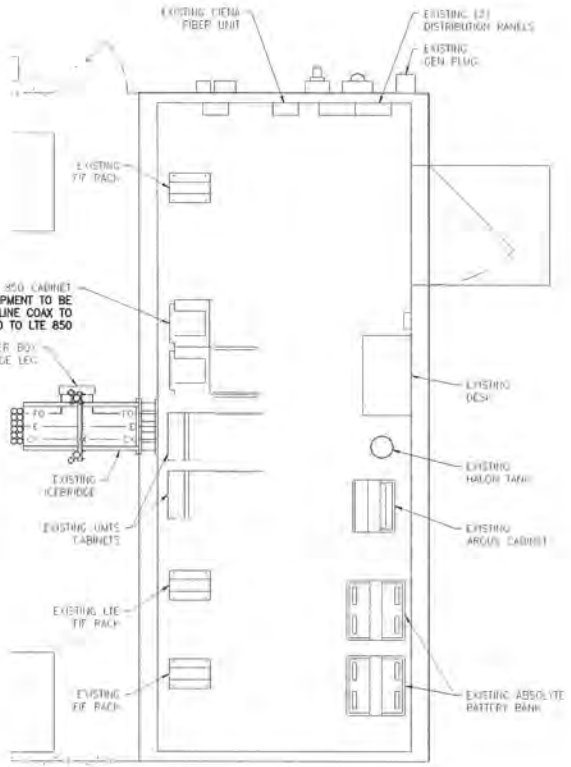


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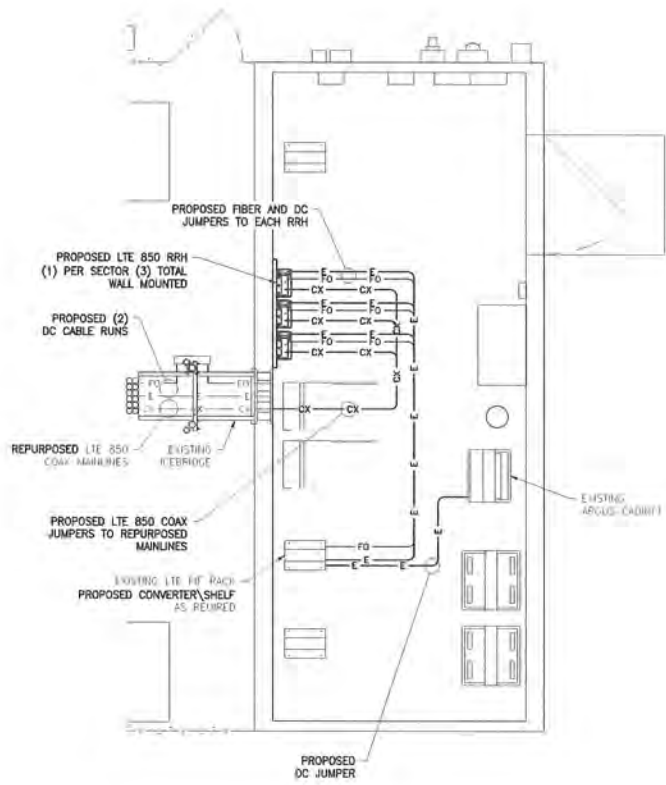
SHEET TITLE:
EQUIPMENT LAYOUT PLANS

SHEET NUMBER:
A-3

REV:
0



EXISTING EQUIPMENT LAYOUT 1



PROPOSED EQUIPMENT LAYOUT 1

22"X34" SCALE: 1"=2.5'
11"X17" SCALE: 1"=5' 0" 2.5' 5'

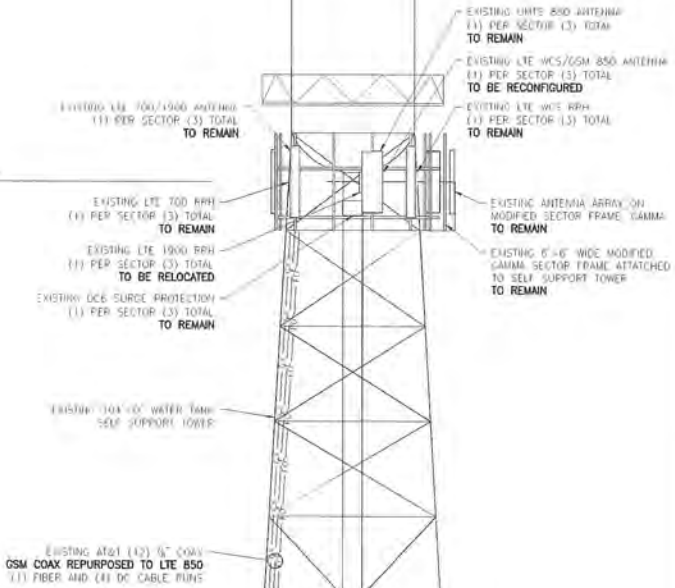
22"X34" SCALE: 1"=2.5'
11"X17" SCALE: 1"=5' 0" 2.5' 5'

1. PAINT PROPOSED ANTENNAS TO MATCH EXISTING (WHEN APPLICABLE).
 2. CONTRACTOR TO VERIFY RF DATA WITH VELOCITEL CONSTRUCTION MANAGER AND/OR RF ENGINEER PRIOR TO CONSTRUCTION

DO NOT EXCEED W/ CRANE
 125'-0" ± AGL

TOP OF EXISTING WATER TANK
 74'-7" ± AGL

EXISTING ANTENNA RAD CENTER
 74'-7" ± AGL



FOR GROUND EQUIPMENT, SEE A-2

GRADE (REF)
 0'-0" (ASSUMED)

EXISTING ELEVATION 2

22"x34" SCALE: NTS
 11"x17" SCALE: NTS

RECONFIGURED LTE WCS/850/WMS AND/800A
 (1) PER SECTOR (3) TOTAL

EXISTING AT&T (12) 9" COAX
 GSM COAX REPURPOSED TO LTE 850
 (1) FIBER AND (4) DC CABLE RUNS

PROPOSED LTE AWS RRH
 (1) PER SECTOR (3) TOTAL

RELOCATED LTE 1900 RRH
 (1) PER SECTOR (3) TOTAL

FOR GROUND EQUIPMENT, SEE A-2

GRADE (REF)
 0'-0" (ASSUMED)

PROPOSED ELEVATION 1

22"x34" SCALE: NTS
 11"x17" SCALE: NTS



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SITE ID: SA06
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 1313 MILL STREET SE
 SALEM, OR 97301

PROJECT:
LTE 4C 5C

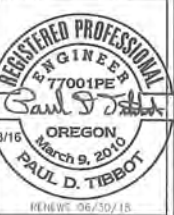
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SHEET TITLE: ELEVATIONS	
SHEET NUMBER: A-4	REV. 0

PROPOSED ANTENNA CONFIGURATION AND CABLE SCHEDULE

SA06 10094075		SUPPLIED BY AT&T WIRELESS, FROM RF CONFIG DATED: 06/28/16			BY: Floyd Lucas							
SECTOR	POS	TECHNOLOGY	ANTENNA MAKE	ANTENNA MODEL	ANTENNA RAD CENTER (FEET AGL)	AZIMUTH (DEGREES)	TMA MODEL	QTY	DC SURGE AND DISTRIBUTION (QTY)	FEEDER TYPE (LTE)	FEEDER LENGTH (FT)	MECHANICAL DOWNTILT (DEGREES)
A	1	LTE 700,1900	KMW	ET-X-LW-70-16-70-18-IR-AT-RA	74.5	15			(1) FC12 (3) DC6 (PANEL)	(1) FIBER (4) DC	100	2
	2	UMTS 850	TenXc Wireless	BSA-M65-19R010-02_L	74.5	15		0				
	3											
	4	LTE WCS\850\AWS	KMW	EPBQ-652L8H8	74.5	15		2				
B	1	UMTS 850	TenXc Wireless	BSA-M65-19R010-02_L	74.5	150						2
	2											2
	3	LTE WCS\850\AWS	Andrew	EPBQ-652L8H8	74.5	135						0
	4	LTE 700,1900		ET-X-LW-70-16-70-18-IR-AT-RA	74.5	150						2
C	1	LTE 700,1900	KMW	ET-X-LW-70-16-70-18-IR-AT-RA	74.5	255						0
	2											0
	3	UMTS 850	TenXc Wireless	BSA-M65-19R010-02_L	74.5	255						0
	4	LTE WCS\850\AWS	KMW	EPBQ-652L8H8	74.5	255						0

1. PAINT PROPOSED ANTENNAS TO MATCH EXISTING (WHEN APPLICABLE).
2. CONTRACTOR TO VERIFY RF DATA WITH VELOCITEL CONSTRUCTION MANAGER AND/OR RF ENGINEER PRIOR TO CONSTRUCTION

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SALEM, OR 97301

PROJECT:
LTE 4C 5C

ISSUED FOR:
CONSTRUCTION

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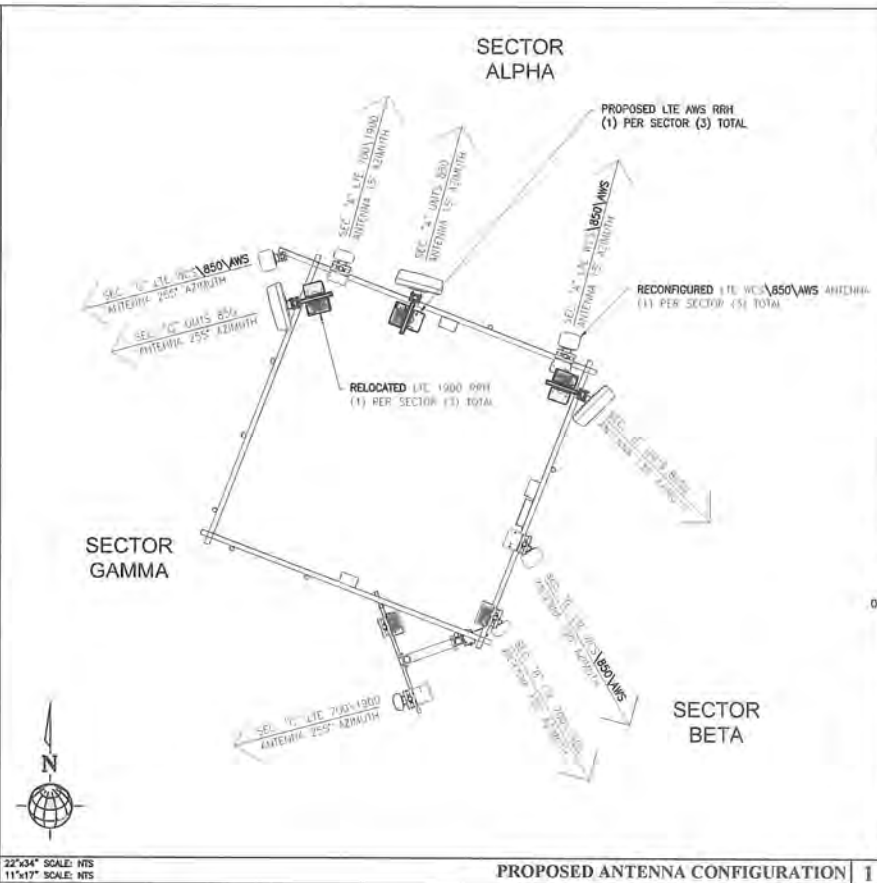
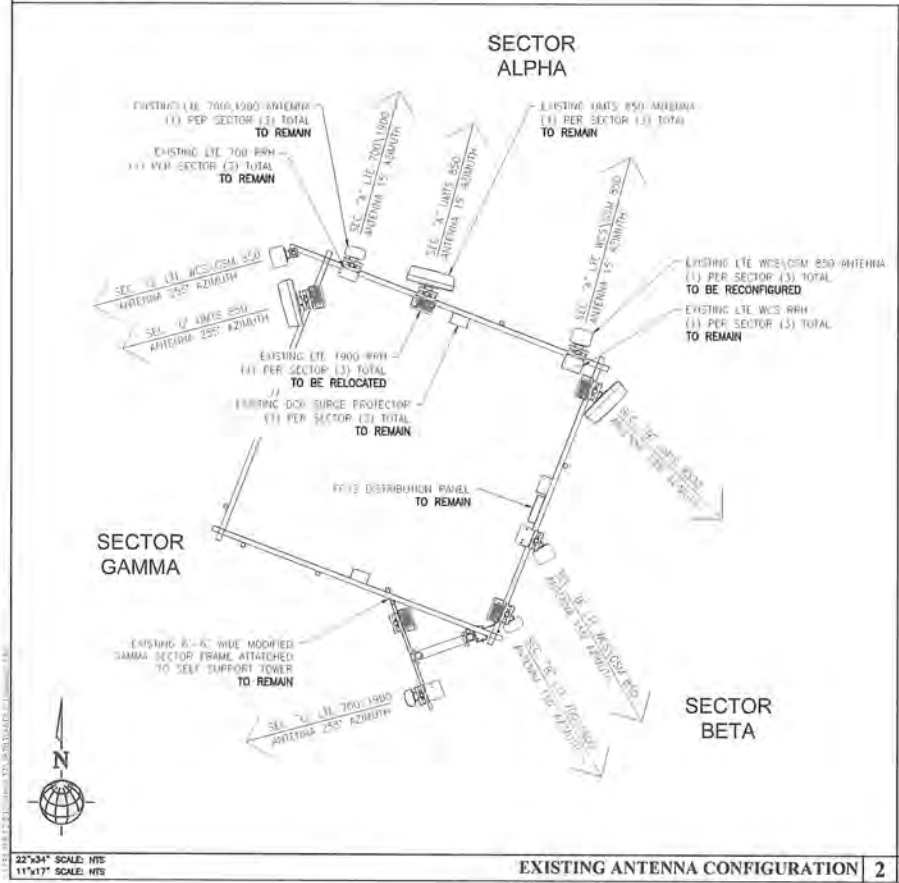
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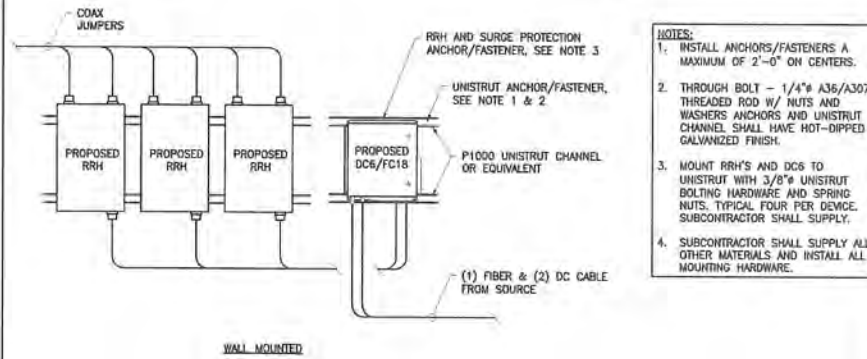
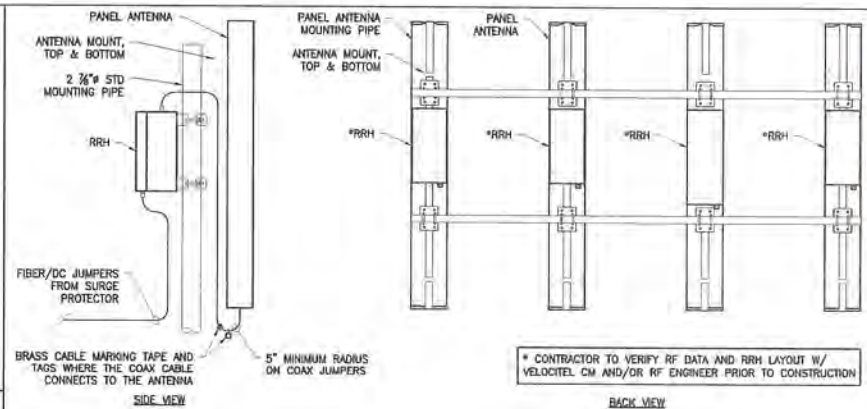
SHEET TITLE:
ANTENNA CONFIGURATIONS

SHEET NUMBER: **RF-1** REV: **0**



22"x34" SCALE: NTS
11"x17" SCALE: NTS
EXISTING ANTENNA CONFIGURATION 2

22"x34" SCALE: NTS
11"x17" SCALE: NTS
PROPOSED ANTENNA CONFIGURATION 1



- NOTES:**
1. INSTALL ANCHORS/FASTENERS A MAXIMUM OF 2'-0" ON CENTERS.
 2. THROUGH BOLT - 1/4" A36/A307 THREADED ROD W/ NUTS AND WASHERS ANCHORS AND UNISTRUT CHANNEL SHALL HAVE HOT-DIPPED GALVANIZED FINISH.
 3. MOUNT RRH'S AND DC6 TO UNISTRUT WITH 3/8" UNISTRUT BOLTING HARDWARE AND SPRING NUTS. TYPICAL FOUR PER DEVICE. SUBCONTRACTOR SHALL SUPPLY.
 4. SUBCONTRACTOR SHALL SUPPLY ALL OTHER MATERIALS AND INSTALL ALL MOUNTING HARDWARE.



SITE ID: SA06
MISSION STREET
1313 MILL STREET SE
SALEEM, OR 97301

PROJECT:
LTE 4C 5C

ISSUED FOR:
CONSTRUCTION

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
A	07/21/16	PRELIM 2D SET	BT
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SHEET TITLE:
RF DETAILS

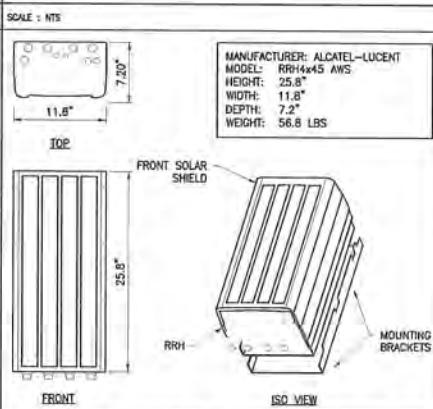
SHEET NUMBER: RF-2 **REV:** 0

NOT USED 9

NOT USED 8

NOT USED 7

NOT USED 6



VENDOR: COMMSCOPE
MODEL: MTC33280HD
WEIGHT: 40.91 LBS

EXISTING ANTENNA PIPE MOUNT

HD SWING ARM RRH MOUNT

DUAL RRH MOUNT WELDMENT

GALV. 3/8" X 5" BOLT KIT

GALV. 3/8" X 8" THREADED ROD

GALV. 3/8" LOCK WASHER

GALV. 3/8" FLAT HEAVY HEX NUT

3/8" SS LOCK WASHER

M-10 X 30MM HEX BOLT, SS

3/8" SS FLAT WASHER

SCALE: NTS

SCALE: NTS **AWS RRH UNIT WITH SOLAR SHIELD** 2

SCALE: NTS **850 RRH UNIT W/ SOLAR SHIELD** 1

NOT USED 4

SCALE: NTS **DUAL MOUNTING BRACKET - HD** 3

SWEEP TEST REQUIREMENTS:

AT&T MOBILITY PORTLAND, OR ANTENNA AND TRANSMISSION REQUIREMENTS

REQUIRED EQUIPMENT:

1. WILTRON/ANRITSU SITE MASTER S331A/B/C OR EQUIVALENT
2. OPEN, SHORT, LOAD
3. DIN FEMALE TO N TYPE MALE ADAPTER (LOW LOSS)
4. DIN MALE TO N TYPE MALE ADAPTER (LOW LOSS)
5. DIN FEMALE TO DIN FEMALE ADAPTER (LOW LOSS)
6. PHASE STABLE CABLE
7. TRUE-RMS MULTI-METER

FREQUENCIES TO BE USED:

- | | |
|-----------------------|-----------------|
| 1. PCS FREQUENCY BAND | 1850MHZ-1980MHZ |
| 2. TRANSMIT FREQUENCY | 1930MHZ-1940MHZ |
| 3. RECEIVE FREQUENCY | 1850MHZ-1860MHZ |

TRANSMISSION LINE AND ANTENNA SYSTEM TEST

1. INSERTION LOSS / CABLE LOSS
2. ANTENNA/TRANSMISSION LINE DISTANCE TO FAULT (RL)
3. ANTENNAS SYSTEM RETURN LOSS (A)
4. ANTENNA SYSTEM WITH DUPLEXER/TMA/ANTENNA RETURN LOSS
5. TRANSMISSION LINE CONTINUITY TEST

INSERTION LOSS

THIS TEST WILL MEASURE THE CABLE LOSS OF THE TRANSMISSION LINE AND JUMPERS BETWEEN THE CABINET AND ANTENNA.

TEST FREQUENCIES: F1=1850 F2=1980

1. ENTER THE FREQUENCIES TO BE USED IN F1 AND F2
2. RE-CALIBRATE TEST EQUIPMENT
3. CONNECT THE TWO JUMPERS GOING TO ANTENNA (BYPASS TMA) AND THE CABINET (BYPASS DUPLEXER) USING THE DIN (F) TO DIN (F) CONNECTORS
4. CONNECT A SHORT AT THE END OF THE LAST JUMPER BEFORE THE ANTENNA, OF THE LINE UNDER TEST.
5. CONNECT TEST EQUIPMENT TO THE LAST TX JUMPER (YELLOW/RED) BEFORE THE CABINET, OF THE LINE UNDER TEST.
6. PERFORM MEASUREMENT, THEN DUE STEP 10 THRU 12
7. DISCONNECT TX JUMPER, THEN CONNECT THE RX JUMPER (YELLOW/GREEN) TO DIN (F) ADAPTER
8. CONNECT TEST EQUIPMENT TO THE LAST RX JUMPER (YELLOW/GREEN) BEFORE THE CABINET, OF THE LINE UNDER TEST.
9. PERFORM MEASUREMENT, THEN DUE STEP 10 THRU 13
10. ADD THE MAX PEAK TO MIN VALLEY THIS VALUE SHOULD NOT BE GREATER THAN -40dB
11. PEAK MAX (M1) + (M2)/2 = CABLE INSERTION LOSS
12. RECORD CALCULATED/MEASURED VALUE ON SWEEP DATA SHEET, THEN SAVE SWEEP TO MEMORY LOCATION
13. REPEAT STEPS 1 THRU 12 FOR THE REST OF THE TRANSMISSION

ANTENNA TRANSMISSION LINE DISTANCE TO FAULT (RL):

THIS TEST IS A PERFORMANCE VERIFICATION AND FAILURE ANALYSIS TOOL FOR ANTENNA TRANSMISSION LINES AND CONNECTORS.

TEST FREQUENCIES: F1=1850 F2=1980

1. ENTER THE FREQUENCIES TO BE USED IN F1 AND F2.
2. RE-CALIBRATE TEST EQUIPMENT
3. CONNECT THE TWO JUMPERS GOING TO ANTENNA (BYPASS TMA) AND THE CABINET (BYPASS DUPLEXER) USING THE DIN (F) TO DIN (F) CONNECTORS
4. CONNECT THE ANTENNA TO THE LINE UNDER TEST
5. CONNECT TEST EQUIPMENT TO THE LAST TX JUMPER (YELLOW/RED) BEFORE THE CABINET OF THE LINE UNDER TEST
6. PERFORM MEASUREMENT, THEN DO STEP 10 THRU 12
7. DISCONNECT TX JUMPER, THEN CONNECT THE RX JUMPER (YELLOW/GREEN) TO DIN (F) ADAPTER
8. CONNECT TEST EQUIPMENT TO THE LAST RX JUMPER YELLOW/GREEN BEFORE THE CABINET, OF THE LINE UNDER TEST
9. PERFORM MEASUREMENT, VERIFY RESULTS WITH STEP 10 THRU 13
10. VERIFY EACH DIN CONNECTOR HAS A RL LESS THAN -320B, N TYPE -280B
11. VERIFY THE TRANSMISSION LINE HAS A RL LESS THAN -45dB
12. VERIFY THE ANTENNA HAS A RL LESS THAN -17dB
13. RECORD PASS/FAIL ON SWEEP DATA SHEET, THEN SAVE SWEEP TO A MEMORY LOCATION.
14. REPEAT STEPS 1 THRU 13 FOR THE REST OF THE ANTENNAS AND TRANSMISSION LINES.

ANTENNA SYSTEM RETURN LOSS:

THIS TEST MEASURES THE RL OF THE TRANSMISSION LINE TERMINATING INTO THE ANTENNA W/O TMA AND DUPLEXER.

1. ENTER THE FREQUENCIES TO BE USED IN F1 AND F2
2. RE-CALIBRATE EQUIPMENT
3. CONNECT THE TWO JUMPERS GOING TO ANTENNA (BYPASS TMA) AND THE CABINET (BYPASS DUPLEXER) USING THE DIN (F) TO DIN (F) CONNECTORS
4. CONNECT THE ANTENNA TO THE LINE UNDER TEST
5. CONNECT TEST EQUIPMENT TO THE LAST TX JUMPER (YELLOW/RED) BEFORE THE CABINET, OF THE LINE UNDER TEST.
6. PERFORM MEASUREMENT, VERIFY RESULTS WITH STEP 10 THRU 13
7. DISCONNECT TX JUMPER, THEN CONNECT THE RX JUMPER (YELLOW/GREEN) TO DIN (F) ADAPTER
8. CONNECT TEST EQUIPMENT TO THE LAST RX JUMPER (YELLOW/GREEN) BEFORE THE CABINET, OF THE LINE UNDER TEST
9. PERFORM MEASUREMENT VERIFY RESULTS WITH STEP 10 THRU 13
10. VERIFY ANTENNA SYSTEM USING 1 5/8" WAVE-GUIDE HAS A RL LESS THEN -17DB, 200 FT. MAX.
11. VERIFY ANTENNA SYSTEM USING 7/8" WAVE-GUIDE HAS A RL LESS THEN -16DB, 200 FT. MAX.
12. FOR SYSTEMS ABOVE 200 FT. 1 5/8" RL -15.5DB, 7/8"RL -14DB.
13. RECORD TEST RESULTS ON SWEEP DATA SHEET, THEN SAVE SWEEP TO A MEMORY LOCATION.
14. REPEAT STEPS 1 THRU 13 FOR THE REST OF THE ANTENNA SYSTEMS

ANTENNA SYSTEM WITH DUPLEXER AND TMA RETURN LOSS:

THIS TEST MEASURES THE RL OF THE COMPLETE ANTENNA NETWORK ON THE RX PATH. REMINDER THE TEST EQUIPMENT WILL TERMINATE INTO THE TMA ON THE RX PATH.

RX TEST FREQUENCIES: F1=1850 F2=1880

1. ENTER THE FREQUENCIES TO BE USED IN F1 AND F2
2. RE-CALIBRATE TEST EQUIPMENT
3. REMOVE DIN (F) TO DIN (F) CONNECTORS FROM BOTH TOP AND BOTTOM JUMPERS.
4. CONNECT TOP JUMPERS TO TMA AND CONNECT BOTTOM JUMPERS TO DUPLEXER
5. CONNECT TEST EQUIPMENT TO THE LAST TX JUMPER (YELLOW/RED)
6. PERFORM MEASUREMENT
7. VERIFY ANTENNA SYSTEM USING 1-3/8" WAVE-GUIDE HAS A RL LESS THAN -16.5DB, 200 FT. MAX.
8. VERIFY ANTENNA SYSTEM USING 3/4" WAVE-GUIDE HAS A RL LESS THAN -15.5DB, 200 FT. MAX.
9. FOR ANTENNA NETWORK ABOVE 200 FT. 1 5/8" RL-14dB 3/4 RL-13.5dB
10. RECORD TEST RESULTS ON SWEEP DATA SHEET, THEN SAVE SWEEP TO A MEMORY LOCATION
11. REPEAT STEPS 1 THRU 10 FOR THE REST OF THE ANTENNA NETWORKS

ANTENNA SYSTEM WITH DUPLEXER AND TMA RETURN LOSS:

THIS TEST MEASURES THE RL OF THE COMPLETE ANTENNA NETWORK ON THE RX PATH. REMINDER THE TEST EQUIPMENT WILL TERMINATE INTO THE TMA ON THE RX PATH.

RX TEST FREQUENCIES: F1=1930 F2=1940

1. ENTER THE FREQUENCIES TO BE USED IN F1 AND F2
2. RE-CALIBRATE TEST EQUIPMENT
3. REMOVE DIN (F) TO DIN (F) CONNECTORS FROM BOTH TOP AND BOTTOM JUMPERS.
4. CONNECT TOP JUMPERS TO TMA AND CONNECT BOTTOM JUMPERS TO DUPLEXER
5. CONNECT TEST EQUIPMENT TO THE LAST TX JUMPER (YELLOW/RED)
6. PERFORM MEASUREMENT
7. VERIFY ANTENNA SYSTEM USING 1-3/8" WAVE-GUIDE HAS A RL LESS THAN -15.5DB, 200 FT. MAX.
8. VERIFY ANTENNA SYSTEM USING 3/4" WAVE-GUIDE HAS A RL LESS THAN -14.5dB, 200 FT. MAX.
9. FOR ANTENNA NETWORK ABOVE 200 FT. 1 5/8" RL-14dB 3/4 RL-13.5dB
10. RECORD TEST RESULTS ON SWEEP DATA SHEET, THEN SAVE SWEEP TO A MEMORY LOCATION
11. REPEAT STEPS 1 THRU 10 FOR THE REST OF THE ANTENNA NETWORKS.

TRANSMISSION LINE CONTINUITY TEST:

THIS TEST WILL VERIFY THE CONTINUITY OF THE RX PATH BETWEEN THE BTS AND THE TMA FOR THE 15 VDC NETWORK

1. CONNECT A SHORT AT THE END OF THE LAST JUMPER BEFORE THE TMA OF THE LINE UNDER TEST
2. CONNECT MULTIMETER TO THE LAST JUMPER BEFORE THE BTS RX 1 (YELLOW/GREEN) PLACE THE BLACK LEAD ON THE OUTER PART OF THE CONNECT AND THE RED LEAD ON THE CENTER PIN OF THE CONNECTORS
3. VERIFY THE METER READS A SHORT
4. REMOVE SHORT AND VERIFY METER READS OPEN
5. RECORD PASS/FAIL ON SWEEP TEST DATA SHEET
6. RECONNECT JUMPERS TO THE TMA AND BTS
7. REPEAT STEPS 1 THRU 6 FOR THE REMAINING RECEIVE PATHS

CABLE MARKING TAGS

TO PROVIDE ADDITIONAL IDENTIFICATION EACH RF CABLE SHALL BE IDENTIFIED WITH A METAL TAG MADE OF STAINLESS STEEL OR BRASS AND STAMPED AS SHOWN. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE.

THE FOLLOWING ARE 3 DIFFERENT FORMATS TO BE USED FOR THE BRASS TAGS.

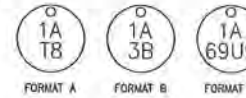
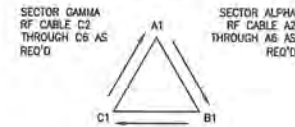


DIAGRAM OF BRASS TAG FORMATS

FORMAT A IS TO BE USED WHEN THERE IS ONLY ONE TECHNOLOGY BEING CARRIED ON A CABLE. FORMAT B IS USED WHEN TWO TECHNOLOGIES HAVE BEEN DUPLEXED ONTO ONE CABLE AND WILL BE BROKEN OUT THROUGH A DUPLEXER AT THE TOP OF THE TOWER. FORMAT C IS USED WHEN TWO TECHNOLOGIES HAVE BEEN QUADRAPLEXED ONTO ONE CABLE FOR ANTENNA PORT SHARING AT THE TOP OF THE TOWER.

THE FIRST NUMBER DESIGNATES THE ANTENNA POSITION, THE SECOND CHARACTER DESIGNATES THE PORT ON THE ANTENNA, THE THIRD CHARACTER DESIGNATES THE TECHNOLOGY TYPE, AND THE LAST NUMBER DESIGNATES THE FREQUENCY BAND OF THE TECHNOLOGY.



NOTE: SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR SITE TO DETERMINE THE SECTOR ORIENTATION.

CABLE MARKING LOCATIONS		
NO.	TAG	LOCATIONS
1.	X	END OF THE MAIN COAX RUN WHERE THE COAXIAL CABLE AND JUMPER TO THE ANTENNA ARE CONNECTED
2.	X	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER (AS APPLICABLE).
3.	X	END OF JUMPER AT BTS CABINET

X ~ ALL RF CABLE SHALL BE MARKED AS PER CABLE MARKING LOCATIONS TABLE.

CABLE COLOR MARKING

IN ADDITION TO THE IMPLEMENTATION OF BRASS TAGS, CONTRACTORS SHALL USE ONE BAND OF COLOR TYPE PER CABLE SECTOR DESIGNATION LABELING.

THE COLORS SHALL BE AS FOLLOWS:

- SECTOR A: RED
- SECTOR B: BLUE
- SECTOR C: GREEN

THE SECTOR DESIGNATIONS SHALL BE MARKED AS DESCRIBED ON THE CURRENT RF DATA SHEET (RFDS) AT TIME OF INSTALLATION. RF DATA SHEET IS TO REMAIN POSTED AT EVERY SITE.

COAX BOOT SPECIFICATION

ENTRY BOOTS TO SEAL COAX WITHIN 6" CONDUITS SHALL BE:

ROKTEC H SEAL H3-150 / 3X (28-54) / 20

SEE COAX CONDUIT EXIT SEAL DETAIL (WHEN APPLICABLE)

CONTRACTOR SHALL USE THE ABOVE PRODUCTS OR APPROVED EQUAL



SITE ID: SA06
MISSION STREET
1313 MILL STREET SE
SALEM, OR 97301

PROJECT: LTE 4C 5C

ISSUED FOR: CONSTRUCTION

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
A	07/21/16	PRELIM 2D	BT
D	09/23/16	FINAL CD	BT

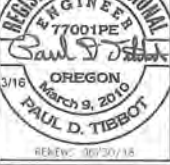
DATE: 10/27/15

DRAWN BY: BT

CHECKED BY: PT

CURRENT ISSUE DATE: 09/23/16

SCALE:



THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

SHEET TITLE:

RF NOTES

SHEET NUMBER: RF-4

REV: 0

GENERAL GROUNDING NOTES:

1. GROUNDING SHALL BE INSTALLED 6" BELOW FROST DEPTH OR 30" BELOW GRADE, WHICHEVER IS GREATER. CONFIRM FROST DEPTH WITH JURISDICTION.
2. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
3. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BBS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.

GENERAL GROUNDING NOTES (CONTINUED):

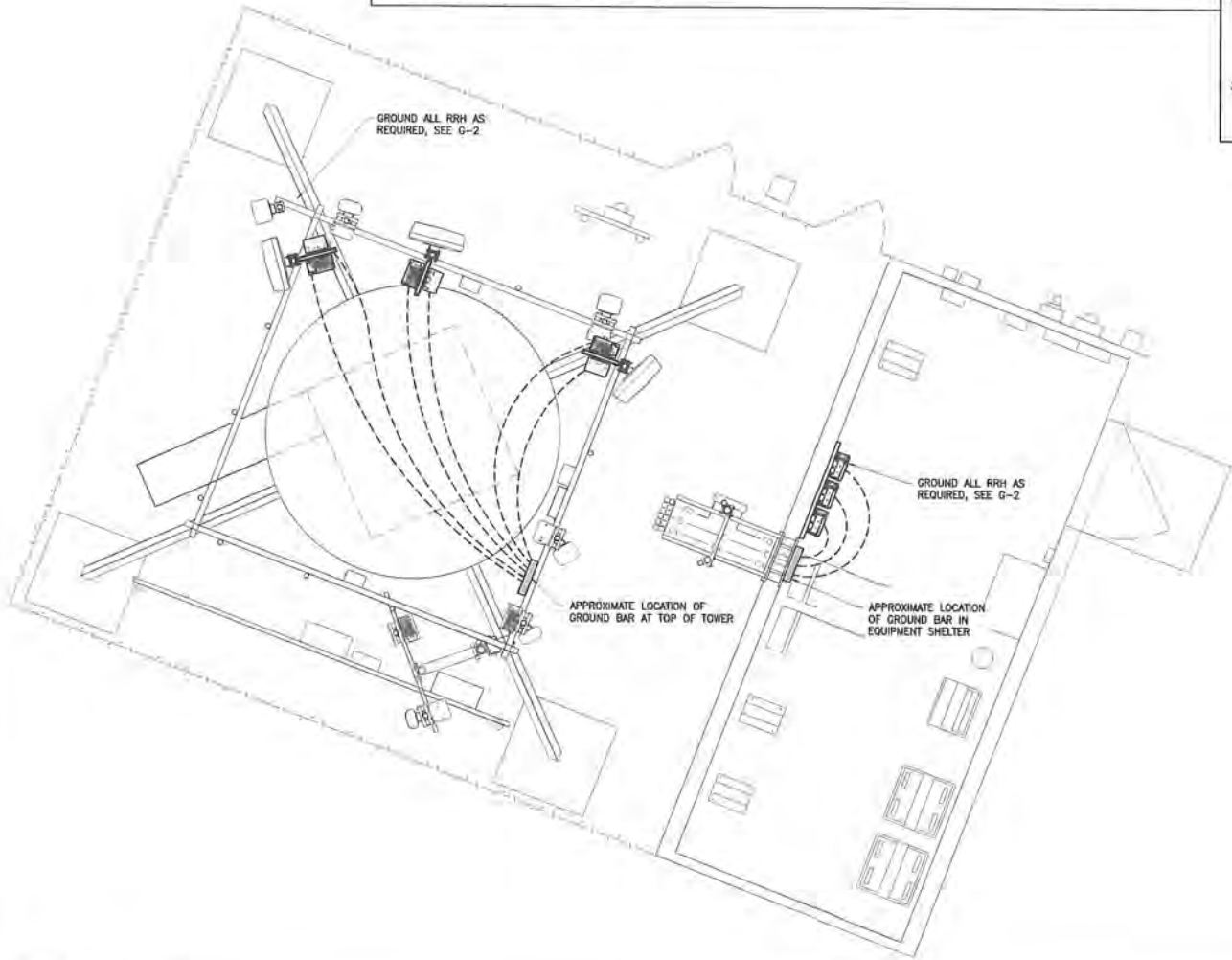
4. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
5. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY AT&T REPRESENTATIVE.
6. REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.

GENERAL GROUNDING NOTES (CONTINUED):

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 PLATEAU.
2. 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.



SYMBOL	DESCRIPTION
⊗	COPPER GROUND ROD
⊕	TEST WELL
△	CADWELD CONNECTION
—	GROUND BAR
⊠	MECHANICAL CONNECTION
---	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM

AT&T MOBILITY CORP.
19801 SW 72ND AVE., STE 200
TUALATIN, OR 97062

ENGINEERING INNOVATION
4004 KRUISE WAY PLACE
BLDG. 4004, SUITE #220
LAKE OSWEGO, OR 97035
503-636-2500 (MAIN)
503-636-2501 (FAX)

SITE ID: SA06
MISSION STREET
1313 MILL STREET SE
SALEM, OR 97301

PROJECT:
LTE 4C 5C

ISSUED FOR:
CONSTRUCTION

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
A	07/21/16	PRELIM 2D	BT
0	09/23/16	FINAL CD	BT

DATE: 10/27/09
DRAWN BY: BT
CHECKED BY: PT
CURRENT ISSUE DATE:
09/23/16

STAMP:

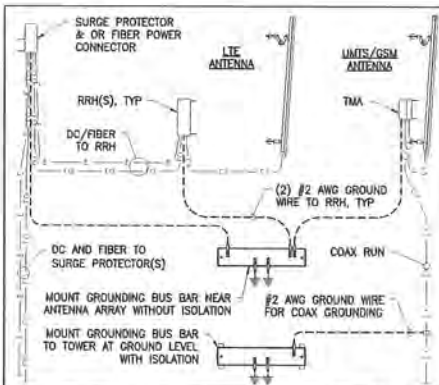
REGISTERED PROFESSIONAL ENGINEER
77001PE
Paul D. Tibbot
OREGON
March 9, 2010
PAUL D. TIBBOT
RENEWS 06/30/16

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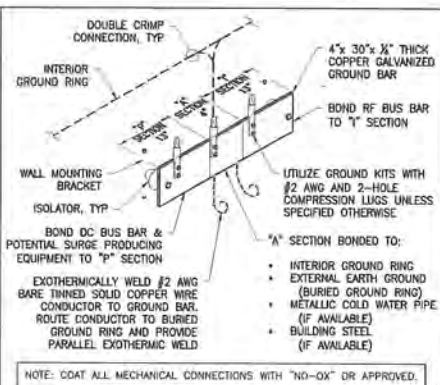
SHEET TITLE: GROUNDING PLAN	
SHEET NUMBER: G-1	REV: 0

22"x34" SCALE: 1"=2.5'
11"x17" SCALE: 1"=5'

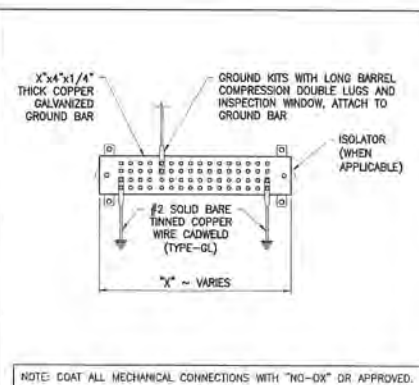
GROUNDING PLAN | I



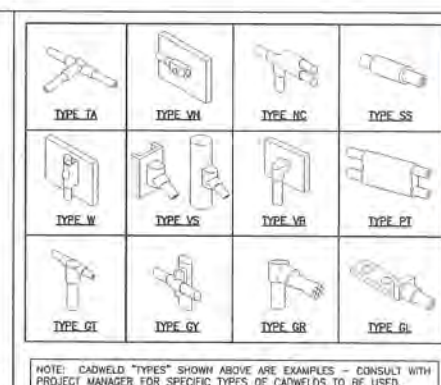
SCALE: NTS **GROUNDING SCHEMATIC DIAGRAM** 5



SCALE: NTS **CELL REF GROUND BAR (CRGB)** 4



SCALE: NTS **GROUND BAR** 3



SCALE: NTS **CAD WELD EXAMPLES** 2

AT&T MOBILITY CORP.
18801 SW 72ND AVE., STE. 200
TUALATIN, OR 97062

ENGINEERING INNOVATION
4004 KRUISE WAY PLACE
BLDG. 4004, SUITE #220
LAKE OSWEGO, OR 97035
503-636-2500 (MAIN)
503-636-2501 (FAX)

SITE ID: SA06
MISSION STREET
1313 MILL STREET SE
SALEM, OR 97301

PROJECT: LTE 4C 5C

ISSUED FOR: CONSTRUCTION

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
A	07/21/16	PRELIM 2D	BT
0	09/23/16	FINAL CD	BT

DATE: 10/27/15
DRAWN BY: BT
CHECKED BY: PT
CURRENT ISSUE DATE: 09/23/16

STAMP:

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SHEET TITLE: **GROUNDING DETAILS**

SHEET NUMBER: **G-2** REV: 0

NOT USED 1

*Si necesita ayuda para comprender esta información, por favor llame
503-588-6173*

DECISION OF THE HISTORIC LANDMARKS COMMISSION

MAJOR HISTORIC DESIGN REVIEW CASE NO. HIS16-16

APPLICATION NO. : 16-111056-DR

NOTICE OF DECISION DATE: JULY 22, 2016

REQUEST: Major historic design review of a proposal to modify an existing wireless communication facility, removing 6 antennae and replacing 6 wireless antennae and associated equipment with 6 antennae and associated equipment on an existing water tank (1925) within the Willamette Heritage Center/ Thomas Kay Historic Park, individually listed on the National Register of Historic Places, on property zoned CR (Retail Commercial), and located at 1313 Mill Street SE, 97301; Marion County Assessor Map and Tax Lot number: 073W26BC04100.

APPLICANT: Natalie Erlund, FDH Velocitel for AT & T

LOCATION: 1313 Mill St SE

CRITERIA: Salem Revised Code Chapter 230.065

DECISION: The Historic Landmarks Commission **GRANTED** Major Historic Design Review Case No. HIS16-16 subject to the following condition of approval:

Condition 1: Any new or replacement communication device(s), including but not limited to dishes, antennae and associated equipment shall not exceed the total number and cumulative size of the dishes, antennae and associated equipment currently approved for installation.



Andrew Hendrie, Chair, Historic Landmarks Commission

This Decision becomes effective on **August 9, 2016**. No work associated with this Decision shall start prior to this date unless expressly authorized by a separate permit, land use decision, or provision of the Salem Revised Code (SRC).

Application Deemed Complete:	<u>June 28, 2016</u>
Public Hearing Date:	<u>July 21, 2016</u>
Notice of Decision Mailing Date:	<u>July 22, 2016</u>
Decision Effective Date:	<u>August 9, 2016</u>
State Mandate Date:	<u>October 26, 2016</u>

The rights granted by this decision must be exercised by **August 8, 2018**, or this approval shall be null and void. A copy of the decision is attached.

NOTICE OF DECISION

PLANNING DIVISION
555 LIBERTY ST. SE, RM 305
SALEM, OREGON 97301
PHONE: 503-588-6173
FAX: 503-588-6005

CITY OF Salem
AT YOUR SERVICE

^{KF}
Case Manager: Kimberli Fitzgerald, AICP, Historic Preservation Officer
kfitzgerald@cityofsalem.net, 503.540.2397

This decision is final unless written appeal from an aggrieved party is filed with the City of Salem Planning Division, Room 305, 555 Liberty Street SE, Salem OR 97301, no later than **5:00 p.m., August 8, 2016.**

Any person who presented evidence or testimony at the hearing may appeal the decision. The notice of appeal must contain the information required by SRC 300.1020 and must state where the decision failed to conform to the provisions of the applicable code section, SRC Chapter 230. The appeal must be filed in duplicate with the City of Salem Planning Division. The appeal fee must be paid at the time of filing. If the appeal is untimely and/or lacks the proper fee, the appeal will be rejected. The Hearings Officer will review the appeal at a public hearing. After the hearing, the Hearings Officer may amend, rescind, or affirm the action, or refer the matter to staff for additional information.

The complete case file, including findings, conclusions and conditions of approval, if any, is available for review at the Planning Division office, Room 305, City Hall, 555 Liberty Street SE, during regular business hours.

<http://www.cityofsalem.net/planning>

Si necesita ayuda para comprender esta informacion, por favor llame 503-588-6173

DECISION OF THE SALEM HISTORIC LANDMARKS COMMISSION

CASE NO. Historic Review Case No. HIS16-16 / AMANDA No. 16-111056-DR

FINDINGS: Based upon the application materials, the facts and findings in the Staff Report dated July 21, 2016 incorporated herein by reference, and testimony provided at the Public Hearing of July 21, 2016, the Historic Landmarks Commission (HLC) finds that the applicant adequately demonstrated that their proposal complies with the applicable provisions of the Salem Revised Code (SRC) 230.065 as follows:

Criteria: 230.065. General Guidelines for Historic Contributing Resources.

FINDINGS

(a) Except as otherwise provided in this Chapter, the property shall be used for its historic purpose, or for a similar purpose that will not alter street access, landscape design, entrance(s), height, footprint, fenestration, or massing.

Finding: The HLC finds that while it is clear that the water tower was not constructed for this use, the impact of the removal of six antennas and replacement of the six antennas will improve the overall visual integrity of the water tower. By locating the proposed replacement antennas below the tower and placing them flush along the catwalk, adjacent to the legs painted to match, the proposed replacement antennas do not significantly alter the appearance of the water tower. The removal of all six Cricket antennas from the tank area, restores the visual integrity of this portion of the resource. The HLC find that this use is compatible and that 230.065(a) has been met for this proposal.

(b) Historic materials, finishes and distinctive features shall, when possible, be preserved and repaired according to historic preservation methods, rather than restored.

Finding: The HLC finds that there are no historic materials or features proposed for removal, reconstruction, or repair and that Guideline 230.065 (b) is not applicable to the evaluation of this proposal.

(c) Distinctive stylistic features or examples of skilled craftsmanship significance shall be treated with sensitivity.

Finding: The HLC finds that there are no distinctive stylistic features proposed for removal, reconstruction, or repair and Guideline 230.065 (c) does not apply to the evaluation of this proposal.

(d) Historic features shall be restored or reconstructed only when supported by physical or photographic evidence.

Finding: The HLC finds that there are no historic materials or features proposed for removal,

reconstruction, or repair and that Guideline 230.065 (d) is not applicable to the evaluation of this proposal.

(e) Changes that have taken place to a historic resource over the course of time are evidence of the history and development of a historic resource and its environment, and should be recognized and respected. These changes may have acquired significance in their own right, and this significance should be recognized and respected.

Finding: HLC finds that while the existing water tower is not the original tower, it was constructed in 1925, within the period of significance for the Thomas Kay Woolen Mill, and that the water tower is evidence of the history and development of the Thomas Kay Woolen Mill. The HLC further finds that the applicant will be decreasing the total number of antennas on the tower, and that the replacement antennas will be located below the main tower adjacent to the legs, minimizing the visual impact to the tower and the adjacent Mill building and surrounding site thereby meeting Guideline 230.065(e).

(f) Additions and alterations to a historic resource shall be designed and constructed to minimize changes to the historic resource.

Finding: The HLC finds that the antennas proposed for installation on the water tower will not have a significant adverse visual impact to the resource. The proposed location of the antennas minimizes the visual impact on the resource; therefore, the HLC finds that 230.065(f) has been met.

(g) Additions and alterations shall be constructed with the least possible loss of historic materials and so that significant features are not obscured, damaged, or destroyed.

Finding: The HLC finds that the water tank currently has eighteen antennas. Should the current proposal be approved by the HLC, the water tower would have a total of twelve antennas meeting the applicable condition of approval adopted under HIS13-16. While the current proposal does not exceed a total of twelve antennas, the HLC has made it clear that their intent is to limit the cumulative adverse impact of too much wireless equipment attached to this historic resource which would obscure the significant features of this resource. Therefore, in order to limit the cumulative adverse effect and for this proposal to better meet SRC 230.065(g), the HLC adopts the following CONDITION of APPROVAL:

Condition 1: Any new or replacement communication device(s), including but not limited to dishes, antennas and associated equipment shall not exceed the total number and cumulative size of the dishes, antennas and associated equipment currently approved for installation.

(h) Structural deficiencies in a historic resource shall be corrected without visually changing the composition, design, texture or other visual qualities.

Finding: The HLC finds that the applicant has not proposed any plans to correct structural deficiencies as part of this proposal and therefore SRC 230.065(h) does not apply to the

evaluation of this proposal.

(i) Excavation or re-grading shall not be allowed adjacent to or within the site of a historic resource which could cause the foundation to settle, shift, or fail, or have a similar effect on adjacent historic resources.

Finding: The HLC finds that the applicant has not proposed an excavation or regrading as part of this proposal and therefore SRC 230.065 (i) does not apply to the evaluation of this proposal.

DECISION: The Historic Landmarks Commission APPROVES the HIS16-16 proposal with the following CONDITION:

Condition 1: **Any new or replacement communication device(s), including but not limited to dishes, antennas and associated equipment shall not exceed the total number and cumulative size of the dishes, antennas and associated equipment currently approved for installation.**

VOTE: YES 5 NO 0 ABST 0 ABSENT 3 (Carmichael, Sund, Timbrook)