



DEVELOPMENT SERVICES DEPARTMENT  
 ENVIRONMENTAL COORDINATOR  
 450 110<sup>th</sup> AVENUE NE, P.O. BOX 90012  
 BELLEVUE, WA 98009-9012

**DETERMINATION OF NON-SIGNIFICANCE**

**PROPONENT:** AT&T Mobility, North Bellevue Way, SD52

**LOCATION OF PROPOSAL:** 2405 Bellevue Way NE

**DESCRIPTION OF PROPOSAL:** To modify an existing WCF by adding 3 new panel antennas near the top of the existing PSE utility pole along with associated equipment.

**FILE NUMBER:** 11-118588 CA

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on \_\_\_\_\_.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on February 23, 2012.
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on \_\_\_\_\_. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5 p.m. on \_\_\_\_\_.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.

*[Signature]*  
 Environmental Coordinator

2/9/2012  
 Date

**OTHERS TO RECEIVE THIS DOCUMENT:**

- State Department of Fish and Wildlife
- State Department of Ecology,
- Army Corps of Engineers
- Attorney General
- Muckleshoot Indian Tribe

Joni Hatt  
2/14/11

### ENVIRONMENTAL CHECKLIST

4/18/02

*Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.*

#### INTRODUCTION

##### **Purpose of the Checklist:**

The State Environmental Policy Act (SEPA), Chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

##### **Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer or if a question does not apply to your proposal, write "do not know" or "does not apply." Giving complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include reference to any reports on studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

**Use of a Checklist for Nonproject Proposals:** *A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.*

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

**Attach an 8 ½" x 11 vicinity map which accurately locates the proposed site.**

**ENVIRONMENTAL CHECKLIST**

4/18/02

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

**BACKGROUND INFORMATION**

Property Owner: Puget Sound Energy

Proponent: AT&T mobility

Contact Person: ~~Robert Evans~~ Jessica Pierce, Ryka Consulting  
 (If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: ~~2312 N 58th St., Seattle, WA 98103~~ 918 S. Horton St Ste 1002 Seattle, WA 98134

Phone: ~~425-652-5727~~ 206.200.8333

Proposal Title: AT&T North Bellevue WAY

Proposal Location: ~~2401~~ 2405 Bellevue WAY NE, Bellevue WA 98004  
 (Street address and nearest cross street or intersection) Provide a legal description if available.  
NE 24th St & Bellevue way NE

Please attach an 8 1/2" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description: add antennas to existing wireless facility
2. Acreage of site: .27
3. Number of dwelling units/buildings to be demolished:
4. Number of dwelling units/buildings to be constructed:
5. Square footage of buildings to be demolished:
6. Square footage of buildings to be constructed:
7. Quantity of earth movement (in cubic yards):
8. Proposed land use: telecommunications
9. Design features, including building height, number of stories and proposed exterior materials:
10. Other

Estimated date of completion of the proposal or timing of phasing:

As soon as possible following permitting

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

not at this time

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

prior SEPA when facility first constructed

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

No

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

none known

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone) Map of existing and proposed zoning
- Preliminary Plat or Planned Unit Development  
Preliminary plat map
- Clearing & Grading Permit  
Plan of existing and proposed grading  
Development plans
- Building Permit (or Design Review) 11-118588CA  
Site plan  
Clearing & grading plan
- Shoreline Management Permit  
Site plan

A. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:  Flat  Rolling  Hilly  Steep slopes  Mountains  Other

b. What is the steepest slope on the site (approximate percent slope)? 1%

c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

unknown

ADP

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

no

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

none

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

no

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

none new

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

none necessary

## 2. AIR

a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

none

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

no

c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

none

## 3. WATER

a. Surface

(1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names.

no

appropriate, state what stream or river it flows into.

no

(2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans. no

(3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. none

(4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. no

(5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

no

(6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

no

b. Ground

(1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

no

(2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

none

ADD

c. Water Runoff (Including storm water)

(1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. *none*

(2) Could waste materials enter ground or surface waters? If so, generally describe. *no*

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: *no*

4. Plants

a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

*none*

c. List threatened or endangered species known to be on or near the site.

*none*

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

*none*

**5. ANIMALS**

a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

Birds: hawk, heron, eagle, songbirds, other:

Mammals: deer, bear, elk, beaver, other:

Fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

none known

c. Is the site part of a migration route? If so, explain.

unknown

d. Proposed measures to preserve or enhance wildlife, if any:

N/A - existing wdf

**6. Energy and Natural Resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.

electric

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

no

c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:

state of art efficient equipment

**7. Environmental Health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

no

(1) Describe special emergency services that might be required.

none

(2) Proposed measures to reduce or control environmental health hazards, if any.

none needed

b. Noise

(1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)? *none*

(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site. *none*

(3) Proposed measures to reduce or control noise impacts, if any:

*none needed*  
*complete construction activities between the hours of 7-6, M-F, 9-6 Sat.*

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?  
*residential adjacent, power station, telecom*

b. Has the site been used for agriculture? If so, describe.  
*unknown*

c. Describe any structures on the site.  
*"shed" used to house radio equipment, power substation*

d. Will any structures be demolished? If so, what?  
*no*

e. What is the current zoning classification of the site?  
*R 3-5*

f. What is the current comprehensive plan designation of the site?

~~unknown~~ *SF-Medium*

g. If applicable, what is the current shoreline master program designation of the site?  
*N/A*

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.  
*unknown*

i. Approximately how many people would reside or work in the completed project?  
*0*

j. Approximately how many people would the completed project displace?  
*0*

k. Proposed measures to avoid or reduce displacement impacts, if any: *none needed*

- i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: *none needed*

## 9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. *0*
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. *0*
- c. Proposed measures to reduce or control housing impacts, if any: *none*

## 10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? *84' - existing pole, not to be extended*
- b. What views in the immediate vicinity would be altered or obstructed? *none*
- c. Proposed measures to reduce or control aesthetic impacts, if any: *equipment painted to match existing, and antennas mounted close to pole. (w/in 6")*

## 11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? *none*
- b. Could light or glare from the finished project be a safety hazard or interfere with views? *no*

c. What existing off-site sources of light or glare may affect your proposal?

none

d. Proposed measures to reduce or control light or glare impacts, if any:

none

## 12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

unknown

b. Would the proposed project displace any existing recreational uses? If so, describe.

no

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

none needed

## 13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

no

b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

none

c. Proposed measures to reduce or control impacts, if any:

none needed

## 14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

24th NE is access.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

unknown

c. How many parking spaces would be completed project have? How many would the project eliminate?

no change to parking

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

no

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

no

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. *1 maintenance per month. Same as current.*
- g. Proposed measures to reduce or control transportation impacts, if any:  
*none needed.*

**15. Public Services**

- a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.  
*NO*
- b. Proposed measures to reduce or control direct impacts on public services, if any.  
*none needed.*

**16. Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.  
*electricity and telephone*

**Signature**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature.....*[Handwritten Signature]*.....

Date Submitted.....*6/30/11*.....

*AOP*







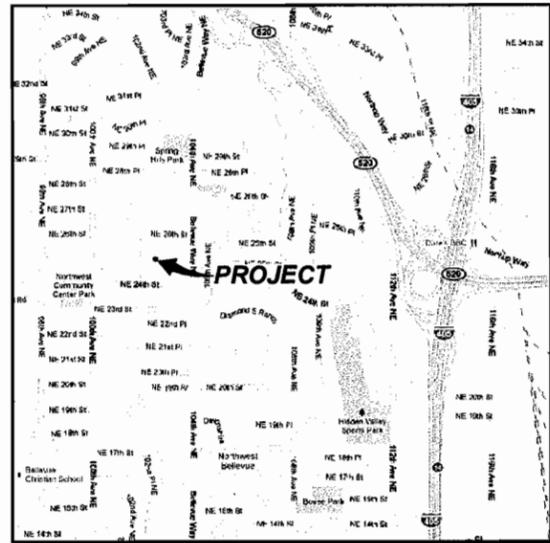
**at&t**  
Your world. Delivered.

**NORTH BELLEVUE WAY  
SD52**

2401 BELLEVUE WAY NE  
BELLEVUE, WA 98004

**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 AT&T MOBILITY CORPORATION SERVICES IS STRICTLY PROHIBITED.



**VICINITY MAP**  
NOT TO SCALE

**PROJECT INFORMATION**

**CODE INFORMATION:**  
ZONING CLASSIFICATION: R-3.5  
BUILDING CODE: 2009 IBC  
CONSTRUCTION TYPE: IIB  
OCCUPANCY: S-2  
JURISDICTION: CITY OF BELLEVUE  
PROPOSED BUILDING USE: TELECOM

**SITE LOCATION (NAD83):**  
LATITUDE: 47°37'55.23" N (47.632010° N)  
LONGITUDE: 122°12'08.18" W (122.202274° W)  
TOP OF STRUCTURE: 301.8' AMSL 82'-4" AGL  
BASE OF STRUCTURE: 219.5' AMSL 0'-0" AGL

**PROJECT LEASE AREA:** N/A  
**PARCEL NUMBER:** 2025059080 (EQUIPMENT)  
CITY OF BELLEVUE R.O.W. (POLE)

**NEW IMPERVIOUS AREA:** 0 SF  
**AREA OF PARCEL:** 0.27 ACRES

**GENERAL INFORMATION:**  
1. PARKING REQUIREMENTS ARE UNCHANGED.  
2. TRAFFIC IS UNAFFECTED.  
3. SIGNAGE IS PROPOSED.

**PROJECT DESCRIPTION:**  
AT&T MOBILITY CORPORATION PROPOSES TO MODIFY AN EXISTING UNSTAFFED TELECOMMUNICATIONS FACILITY WITH THE ADDITION OF (3) NEW PANEL ANTENNAS NEAR THE TOP OF THE EXISTING PSE UTILITY POLE, ALSO THE ADDITION OF (1) LTE 9412 eNODE-B COMPACT ENCLOSURE MOUNTED TO THE INTERIOR OF THE EXISTING BUILDING WALL AND THE ADDITION OF (1) GPS ANTENNA ON THE EXISTING BUILDING.

**UTILITY COMPANIES**

**POWER:** PUGET SOUND ENERGY  
PHONE: (888) 225-5773  
**TELEPHONE:** TBD

**PROJECT CONTACT LIST**

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

**PROJECT ENGINEER:**  
LDC, INC.  
14201 NE 200TH ST, SUITE 100  
WOODINVILLE, WA 98072  
CONTACT: RYAN ANDERSON, P.E.  
PHONE: (425) 806-1869  
FAX: (425) 482-2893

**STRUCTURAL ENGINEER:**  
PUGET SOUND ENERGY, INC.  
10885 NE 4TH ST  
BELLEVUE, WA 98004

**PROJECT SURVEYOR:**  
LDC, INC.  
14201 NE 200TH ST, SUITE 100  
WOODINVILLE, WA 98072  
CONTACT: LAWRENCE KNAPP, PLS  
PHONE: (425) 806-1869  
FAX: (425) 482-2893

**RF ENGINEER:**  
CONTACT: LUKASZ GRABARSKI  
PHONE: (425) 698-8272

**PROJECT CONSULTANT:**  
GOODMAN NETWORKS  
8815 122ND AVE NE  
KIRKLAND, WA 98033

**STRUCTURE OWNER:**  
PUGET SOUND ENERGY, INC.  
10885 NE 4TH ST  
BELLEVUE, WA 98004

**PROPERTY OWNER:**  
PUGET SOUND ENERGY, INC.  
10885 NE 4TH ST  
BELLEVUE, WA 98004

**PROJECT MANAGER:**  
CONTACT: WENDY LONG  
wlong@goodmannetworks.com  
PHONE: (206) 321-1116

**SITE ACQUISITION:**  
CONTACT: ROBERT EVANS  
revansconsult@comcast.net  
PHONE: (425) 652-5727

**PERMITTING AGENT:**  
CONTACT: ROBERT EVANS  
revansconsult@comcast.net  
PHONE: (425) 652-5727

**PRIMARY CONTACT:**  
CONTACT: ROBERT EVANS  
revansconsult@comcast.net  
PHONE: (425) 652-5727

**CONSTRUCTION MANAGER:**  
CONTACT: KEITH ELWELL  
kelth.elwell@telcopacific.com  
PHONE: (425) 753-3458

**DRAWING INDEX**

DWG NO.	DESCRIPTION
T-1	TITLE SHEET
G-1	GENERAL NOTES
G-2	GENERAL NOTES AND SYMBOLS
A-1	SITE PLAN
A-2	ENLARGED SITE PLAN
A-3	EXISTING ELEVATION
A-3.1	PROPOSED ELEVATION
A-4	CONSTRUCTION DETAILS
RF-1	ANTENNA CONFIGURATIONS
RF-2	RF DETAILS
E-1	SCHEMATIC GROUNDING PLAN
E-2	GROUNDING DETAILS

**LEGAL DESCRIPTION**

S 187.06 FT OF SW 1/4 OF SW 1/4 LESS W 1100 FT LESS E 160 FT  
LESS RD - TCO 17-1451

**DRIVING DIRECTIONS**

FROM SEATAC AIRPORT:

- MERGE ONTO I-405 (NORTH)
- TAKE EXIT 13B FOR NE 8TH ST
- FOLLOW SIGNS FOR NE 8TH ST W AND MERGE ONTO NE 8TH ST
- TURN RIGHT AT 104TH AVE NE/BELLEVUE WAY NE
- ARRIVE TO SITE, SITE IS ON LEFT HAND SIDE

**APPROVAL / SIGN OFF OF FINAL CONSTRUCTION DRAWINGS**

CONSULTANT GROUP SIGN OFF	DATE	SIGNATURE	AT&T SIGN OFF	DATE	SIGNATURE
CONSTRUCTION COORDINATOR			COMPLIANCE		
LANDLORD'S REPRESENTATIVE			CONSTRUCTION MANAGER		
PROJECT MANAGER			DEPLOYMENT MANAGER		
SITE ACQUISITION			E-911 ENGINEER	Y N INITIAL:	
ZONING			INTERCONNECT		
POWER/TELCO COORDINATOR			OPERATIONS		
			RF ENGINEER		
			RF ENGINEER MANAGER		
			SITE ACQUISITION MANAGER		

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



**LDC** Commercial Infrastructure Residential Telecom  
THE CIVIL ENGINEERING GROUP  
14201 NE 200th St, #100 Woodinville, WA 98072  
Ph: 425.806.1869 Fax: 425.482.2893  
www.LDCcorp.com

DATE:	02-23-11
DRAWN BY:	JFO
CHECKED BY:	RJA

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	02-23-11	PRELIMINARY CONSTRUCTION	RJA
2	05-27-11	FINAL CONSTRUCTION	RJA
3	01-17-12	REVISED PER COMMENTS	RJA



**SITE**  
SD52  
NORTH BELLEVUE WAY  
2401 BELLEVUE WAY NE  
BELLEVUE, WA 98004

**SHEET TITLE**  
TITLE SHEET

**SHEET NUMBER**  
T-1

Received  
FEB - 1 2012  
Permit Processing

Call 2 Business Days Before You Dig  
**1-800-424-5555**  
Utilities Underground Location Center  
(D.M.T.N.D.WA)

**GENERAL NOTES:**

- THE CONTRACTOR SHALL NOTIFY TOWER NETWORK CARRIER OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY, DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERROR, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER.
- PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION CONTRACT 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.
- FOR COLLOCATION SITES: CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.
- DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.
- THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
- DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCE. TOWER NETWORK CARRIER IS NOT RESPONSIBLE FOR ANY ERRORS RESULTING FROM THIS PRACTICE WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS.
- OWNER, CONTRACTOR, AND TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER SHALL MEET JOINTLY TO VERIFY ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
- THE CONTRACTOR SHALL PROVIDE TOWER NETWORK CARRIER PROPER INSURANCE CERTIFICATES NAMING TOWER NETWORK CARRIER AS ADDITIONAL INSURED, AND TOWER NETWORK CARRIER PROOF OF LICENSE(S) AND PE & PD INSURANCE.
- 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.
- GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED "FOR CONSTRUCTION" AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S SIGNED WET STAMP.
- A COPY OF GOVERNING AGENCY APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW, SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. THE PLANS ARE NOT TO BE USED BY THE WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION AS GOVERNING AGENCY APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS, IN GOOD CONDITION, COMPLETE WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES UNDER THE DIRECT CARE OF THE SUPERINTENDENT. THE CONTRACTOR SHALL SUPPLY TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER, WITH A COPY OF ALL REVISIONS, ADDENDA, AND/OR CHANGE ORDERS AT THE CONCLUSION OF THE WORK AS A PART OF THE AS-BUILT DRAWING RECORDS.
- THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND CROSS CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT AND SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
- THE CONTRACTOR HAS THE RESPONSIBILITY OF LOCATING ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR, OR SUBCONTRACTOR AS SPECIFIED IN THE AGREEMENT BETWEEN SUBCONTRACTOR AND CONTRACTOR, SHALL BEAR THE EXPENSES OF REPAIR AND/OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGE BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.
- THE REFERENCES ON THE DRAWINGS ARE FOR CONVENIENCE ONLY AND SHALL NOT LIMIT THE APPLICATION OF ANY DRAWING OR DETAIL.
- ALL DIMENSIONS ON THE PLANS ARE TO FACE OF STUD (F.O.S.) UNLESS NOTED OTHERWISE (U.N.O.).

**GENERAL NOTES CONT'D:**

- ALL EXISTING CONSTRUCTION, EQUIPMENT, AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
  - PROPERTY NOTED TO BE RETURNED TO THE OWNER.
  - PROPERTY NOTED TO BE REMOVED BY THE OWNER.
- THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE THE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES USED THROUGHOUT THE PROJECT. TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION.
- WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER ROUGH FRAMED FLOORS OR ROOFS SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING AND/OR BRACING IS TO BE PROVIDED WHERE THE STRUCTURE HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
- PRIOR TO THE POURING OF ANY NEW SLAB OVER AN EXISTING SLAB THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, CHASES, AND EQUIPMENT WHICH ARE TO BE IMPLEMENTED INTO THE NEW WORK. ALL ITEMS DESIGNATED TO BE ABANDONED SHALL BE NOTED AND DISCUSSED WITH THE OWNER AND TOWER NETWORK CARRIER CONSTRUCTION PROJECT MANAGER AS PART OF THE AS-BUILT DRAWING PACKAGE.
- 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.
- BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.
- 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.
- THE PROJECT, WHEN COMPLETED, SHALL COMPLY WITH LOCAL SECURITY CODES AND TITLE-24 ENERGY CONSERVATION REQUIREMENTS. (TITLE-24 WHEN APPLICABLE)
- ALL GLASS AND GLAZING IS TO COMPLY WITH CHAPTER 54 OF THE U.S. CONSUMER SAFETY COMMISSION - SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS (42 FR 1428, CFR PART 1201) AND LOCAL SECURITY REQUIREMENTS.
- 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 SMUDGES OF ANY NATURE.
- NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL MATCH IN FORM, TEXTURE, FINISH, AND IN MATERIALS EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKING, BLOCKING, AND/OR SLEEVES REQUIRED FOR THE INSTALLATION OF FIXTURES, MECHANICAL EQUIPMENT, PLUMBING, HARDWARE, AND FINISH ITEMS TO INSURE A PROPER AND COMPLETE JOB.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A PROJECT LEVEL, STRAIGHT, AND TRUE ACCORDING TO THE PLANS. THE CONTRACTOR SHALL COMPARE THE LINES AND LEVELS OF THE EXISTING CONDITIONS WITH THOSE SHOWN ON THE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. TOWER NETWORK CARRIER SHALL BE NOTIFIED OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES PRIOR TO ANY CONSTRUCTION.
- THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES.
- WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AND/OR REVISIONS AVAILABLE AS REQUIRED BY THE GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL MATERIALS AND SHALL NOT DO SO ON PUBLIC PROPERTY WITHOUT A PERMIT TO DO SO FROM THE GOVERNING AGENCIES FOR THIS PURPOSE.
- GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
- TRADES INVOLVED IN THE PROJECT SHALL BE RESPONSIBLE FOR THEIR OWN CUTTING, FITTING, PATCHING, ETC., SO AS TO BE RECEIVED PROPERLY BY THE WORK OF OTHER TRADES.
- ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT PREMISES AND SHALL BE LEFT IN A CLEAN (BROOM FINISH) CONDITION AT ALL TIMES BY EACH TRADE AS THEY PERFORM THEIR OWN PORTION OF THE WORK.
- TOWER NETWORK CARRIER DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER, GUARANTEE OR WARRANTY THAT MAY BE IN EFFECT IS DONE SO THROUGH THE COMPANY OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT ONLY: UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.
- CAUTION! CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. 1-800-424-5555.
- CONTRACTOR TO REPLACE AND/OR REROUTE ANY EXISTING UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCHING AND GENERAL CONSTRUCTION.
- CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO PLACEMENT OF MONOPOLE FOOTING AND OTHER STRUCTURES TO BE PLACED IN GROUND. SEE GENERAL NOTE #6 ON THIS SHEET.
- SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION.
- CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO TOWER NETWORK CARRIER ALONG WITH REDLINED CONSTRUCTION SET.

**GENERAL NOTES CONT'D:**

- CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED SET TO TOWER NETWORK CARRIER UPON COMPLETION.
- GENERAL 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 TOWER NETWORK CARRIER CONSTRUCTION MANAGER.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE AND ACCEPTED UNDER THIS CONTRACT; UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR. (EXCEPTION) THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATER-TIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY PERMITS AND/OR FEES WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL OBTAIN PERMIT AND MAKE FINAL PAYMENT FOR SAID DOCUMENT.
- THE ARCHITECT/ENGINEER IN CHARGE SHALL SIGN AND SEAL ALL DRAWINGS AND/OR SPECIFICATIONS.
- TOWER NETWORK CARRIER WILL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH DESIGN CONCEPT. TOWER NETWORK CARRIER PROJECT APPROVAL OF A SEPARATE ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.
- ALL ANTENNAS MOUNTED ON ROOF SUPPORT FRAMES TO BE PROVIDED BY TOWER NETWORK CARRIER COMMUNICATIONS.
- CONTRACTOR TO PROVIDE TRENCH AS REQUIRED TO INSTALL BOTH ELECTRICAL AND TELEPHONE UNDERGROUND CONDUITS (#40 PVC) PER S.C.E. WORKORDER. BACKFILL WITH CLEAN SAND AND COMPACT TO THE SATISFACTION OF THE DISTRICTS INSPECTOR. REPLACE FINISH GRADE WITH MATCHING MATERIALS (GRASS, ASPHALT, CONCRETE, ETC.)
- CONTRACTOR TO PROVIDE HEAVY STEEL PLATES AT OPEN TRENCHES FOR SAFETY AND TO PROTECT EXISTING GROUND SURFACES FROM HEAVY EQUIPMENT UTILIZED DURING CONSTRUCTION.
- CONTRACTOR TO PATCH AND REPAIR ALL GROUND SURFACES WITHIN THE CONSTRUCTION AREA AS NECESSARY TO PROVIDE A UNIFORM SURFACE AND MAINTAIN EXISTING SURFACE DRAINAGE SLOPES.
- CONTRACTOR TO REPLACE LANDSCAPE VEGETATION THAT WAS DAMAGED DUE TO CONSTRUCTION, AND TO MODIFY REMAINING IRRIGATION LINES TO OPERATING CONDITION, PROVIDING FULL COVERAGE TO IMPACTED AREAS.
- IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATION OF EXISTING ROOFING MATERIALS OCCUR, THE GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER AND BUILDING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY AUGMENTATION TO THE ROOF, AND HAVE THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S WARRANTY FOR MOISTURE PENETRATION OR AND OTHER FUTURE BREACH OF ROOFING INTEGRITY.
- IN THE CASE OF ROOFTOP SOLUTIONS WITH THE INSTALLATION OF ANTENNAS WITHIN CONCEALED (SHROUDED) SUPPORT FRAMES OR TRIPODS, THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE FRP DESIGNER/FABRICATOR TO ENSURE THAT THE FINAL FRP SHROUD IS SIMULATING (IN APPEARANCE) DESIGNATED EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. THE CONTRACTOR SHALL FURTHERMORE ENSURE THE USE OF COUNTERSUNK FASTENERS IN ALL FRP CONSTRUCTION. WHEN PHOTOSIMULATIONS ARE PROVIDED, THE CONTRACTOR SHALL ENSURE THAT FINAL CONSTRUCTION REPRESENTS WHAT IS INDICATED IN PHOTOSIMULATION. SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR, CONSTRUCTION COORDINATOR, AND ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.
- IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE ANCHORING TO A CONCRETE ROOF SLAB IS REQUIRED, CONTRACTORS SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF POST TENSION TENDONS WITHIN THE ROOF SLAB - RESULTING FROM AN UNDOCUMENTED DESIGN CHANGE IN THE EXISTING BUILDING "AS-BUILT DRAWING SET" - HAVING INDICATED AN ORIGINAL DESIGN SOLUTION OF REINFORCED CONCRETE W/ EMBEDDED STEEL REBAR. IN THE EVENT POST TENSION SLAB SOLUTION IS PRESENT, CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES (INCLUDED IN BID) FOR ALL PENETRATION AREAS WHERE ANCHORING OCCURS.
- GENERAL & SUB CONTRACTORS SHALL USE STAINLESS STEEL METAL LOCKING TIES FOR ALL CABLE TRAY TIE DOWNS AND ALL OTHER GENERAL TIE DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON TOWER NETWORK CARRIER PROJECTS. RECOMMENDED MANUFACTURE SHALL BE: PANDUIT CORP. METAL LOCKING TIES MODEL NO. MLT4S-CP UNDER SERIES-304 (OR EQUAL). PANDUIT PRODUCT DISTRIBUTED BY TRIARC.
- ALL WORK TO BE DONE BETWEEN HOURS OF 8:00 AM AND 5:00 PM, EXCLUDING HOLIDAYS.

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DATE: 2-23-11  
 DRAWN BY: JFO  
 CHECKED BY: RJA

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	2-23-11	PRELIMINARY CONSTRUCTION	RJA
2	5-27-11	FINAL CONSTRUCTION	RJA



**SITE**  
 SD52  
 NORTH BELLEVUE WAY  
 2401 BELLEVUE WAY NE  
 BELLEVUE, WA 98004

**SHEET TITLE**  
 GENERAL NOTES

**SHEET NUMBER**  
**G-1**

**DESIGN CRITERIA:**

- THE STRUCTURAL DESIGN OF THIS PROJECT IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2009 WITH WASHINGTON STATE BUILDING CODE AMENDMENTS (2009 IBC)
- DESIGN LOADS:**  
DESIGN DATA FOR BELLEVUE, WASHINGTON  
-ROOF SNOW LOAD \_\_\_\_\_ N/A (NOT A ROOFTOP SOLUTION)  
-BASIC WIND SPEED \_\_\_\_\_ 85 MPH  
-WIND EXPOSURE \_\_\_\_\_ C  
-SEISMIC ZONE \_\_\_\_\_ D

**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 2009 IBC. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS.

TYPE OF CONSTRUCTION	28 DAY STRENGTHS (f <sub>c</sub> )	W/C RATIO	MINIMUM CEMENT CONTENT PER CUBIC YARD
A. SLABS ON GRADE TOPPING SLABS CONCRETE PIERS	2,400 PSI	≤ .45	5 1/2 SACKS
B. ALL STRUCTURAL CONCRETE EXCEPT WALLS	4,000 PSI	≤ .45	6 1/2 SACKS
C. CONCRETE WALLS	4,000 PSI	≤ .45	6 1/2 SACKS

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 STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, C618, C889, AND C1017. TOTAL AIR CONTENT SHALL BE IN ACCORDANCE WITH ACI 318, SECTION 4.4.1.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1). GRADE 60, f<sub>y</sub>=60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, f<sub>y</sub>=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.
- REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OF 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, f<sub>y</sub>=60,000 PSI.
- NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL 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, EARTH FACE 3"  
- FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) 2"  
(#5 BARS OR SMALLER) 1 1/2"  
- SLABS AND WALLS (INTERIOR FACE) 3/4"
- BARS SHALL BE SUPPORTED ON CHAIRS OR DOBIE BRICKS.
- ANCHOR BOLTS TO CONFORM TO ASTM A307
- NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3,000 PSI MINIMUM).
- ALL EXPANSION ANCHORS TO BE HILTI BRAND. ADHESIVE ANCHORS REQUIRE TESTING TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER.

**STRUCTURAL STEEL NOTES:**

- SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO 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 2009 IBC 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. PLATES, SHAPES, ANGLES, AND RODS  
B. SPECIAL SHAPES AND PLATES  
C. PIPE COLUMNS  
D. STRUCTURAL TUBING  
E. ANCHOR BOLTS  
F. CONNECTION BOLTS
- ALL MATERIAL TO BE HOT DIPPED GALVANIZED AFTER FABRICATION PER A123/A123M-00.
- ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND AWS STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 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.C. "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.
- ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION SPECIFICATION AND IN ACCORDANCE WITH ASTM A36 UNLESS NOTED OTHERWISE.
- ALL WELDS TO BE 1/4" FILLET UNLESS NOTED OTHERWISE.
- TOUCH UP ALL FIELD DRILLING AND WELDING WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

**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.

**ABBREVIATED ROOF TOP SAFETY PROCEDURES (WHEN APPLICABLE):**

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

FALL PROTECTION METHODS AND EQUIPMENT ROOF TOP INSTALLATIONS

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

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

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

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

**SYMBOLS AND ABBREVIATIONS:**

A/C	AIR CONDITIONING	HORZ	HORIZONTAL	SHT	SHEET
AGL	ABOVE FINISH GRADE	HR	HOUR	SIM	SIMILAR
APPROX	APPROXIMATELY	HT	HEIGHT	SPEC	SPECIFICATION
BLDG	BUILDING	HVAC	HEATING VENTILATION AIR CONDITIONING	SF	SQUARE FOOT
BLK	BLOCKING			SS	STAINLESS STEEL
CLG	CEILING	ID	INSIDE DIAMETER	STL	STEEL
CLR	CLEAR	IN	INCH	STRUCT	STRUCTURAL
CONC	CONCRETE	INFO	INFORMATION	STD	STUD
CONST	CONSTRUCTION	INSUL	INSULATION	SUSP	SUSPENDED
CONT	CONTINUOUS	INT	INTERIOR	THRU	THROUGH
		IBC	INTERNATIONAL BUILDING CODE	TNNG	TINNED
				TYP	TYPICAL
DBL	DOUBLE DIAMETER			UNO	UNLESS NOTED OTHERWISE
DIA	DIAGONAL	LBS	POUNDS	VERT	VERTICAL
DIAG	DIAGONAL	MAX	MAXIMUM	VIF	VERIFY IN FIELD
DN	DOWN	MECH	MECHANICAL		
DET	DETAIL	MTL	METAL		
DWG	DRAWING	MFR	MANUFACTURE		
		MGR	MANAGER	W/	WITH
EA	EACH	MIN	MINIMUM	W/O	WITHOUT
ELEV	ELEVATION	MISC	MISCELLANEOUS	WP	WATER PROOF
ELEC	ELECTRICAL				
EQ	EQUAL				
EQUIP	EQUIPMENT	NA	NOT APPLICABLE		
EXT	EXTERIOR	NIC	NOT IN CONTRACT		
		NTS	NOT TO SCALE		
FIN	FINISH				
FLUOR	FLUORESCENT	OC	ON CENTER		
FLR	FLOOR	OD	OUTSIDE DIAMETER		
FT	FOOT				
		PLYWD	PLYWOOD		
GALV	GALVANIZED	PROJ	PROJECT		
GC	GENERAL CONTRACTOR	PROP	PROPERTY		
GRND	GROUND	PT	PRESSURE TREATED		
GYP BD	GYPSUM WALL BOARD	REQ	REQUIRED		
		RM	ROOM		
		RO	ROUGH OPENING		
— UGT —	UNDERGROUND TELECO				
— OHT —	OVERHEAD TELECO				
— UGP —	UNDERGROUND POWER				
— OHP —	OVERHEAD POWER				
— P —	PROPANE				
— UG —	UNDERGROUND UTILITY				
— COAX —	COAXIAL CABLE				
⊕	ANTENNA				
⊕	CENTERLINE				
(E)	EXISTING				
(P)	NEW				
(X/XX)	DETAIL NUMBER SHEET NUMBER				

**SPECIAL INSPECTIONS REQUIRED:**

- |   |  |   |
|---|--|---|
| SOILS COMPLIANCE PRIOR TO FOUNDATION INSPECTION   | <input type="checkbox"/> VERIFICATIONS OF MILL REPORT                        | <input type="checkbox"/> SPRAYED-ON- FIREPROOFING           |
| CONCRETE OVER 2400 PSI (5 1/2 SACK MIX) AT 28 DAYS  | <input type="checkbox"/> IDENTIFICATION OF STEEL AND AT JOB SITE             | <input type="checkbox"/> STRUCTURAL MASONRY                 |
| CONCRETE PLACEMENT AT SLAB ON GRADE   | <input type="checkbox"/> ADHESIVE BOLTS IN CONCRETE OR MASONRY               | <input type="checkbox"/> PRESTRESSED CONCRETE               |
| WRITTEN CERTIFICATION FOR PROPER PLACEMENT OF REINFORCEMENTS AT SLAB ON GRADE                 | <input type="checkbox"/> ANCHOR BOLTS INSTALLATION AND PLACEMENT IN CONCRETE | <input type="checkbox"/> ALL FIELD WELDING                  |
| FOUNDATION EXCAVATION AND FILL INCLUDING UTILITY TRENCHES                                     | <input type="checkbox"/> HIGH STRENGTH BOLTING                               | <input type="checkbox"/> REINFORCING PLACEMENT              |
| CERTIFICATION OF BUILDING PAD, FOUNDATION AND FILL BY THE GEOTECHNICAL ENGINEER OF THE RECORD |  | <input type="checkbox"/> DESIGNER SPECIFIED (SEE SHEET# __) |
|   |  | <input type="checkbox"/> OTHER _____                        |

SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED AND SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

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www.LDCcorp.com

DATE:	2-23-11
DRAWN BY:	JFO
CHECKED BY:	RJA

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	2-23-11	PRELIMINARY CONSTRUCTION	RJA
2	5-27-11	FINAL CONSTRUCTION	RJA

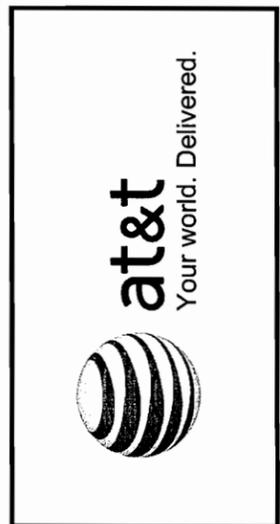
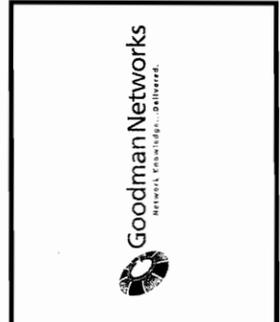
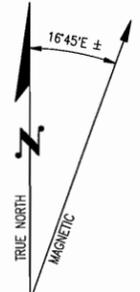
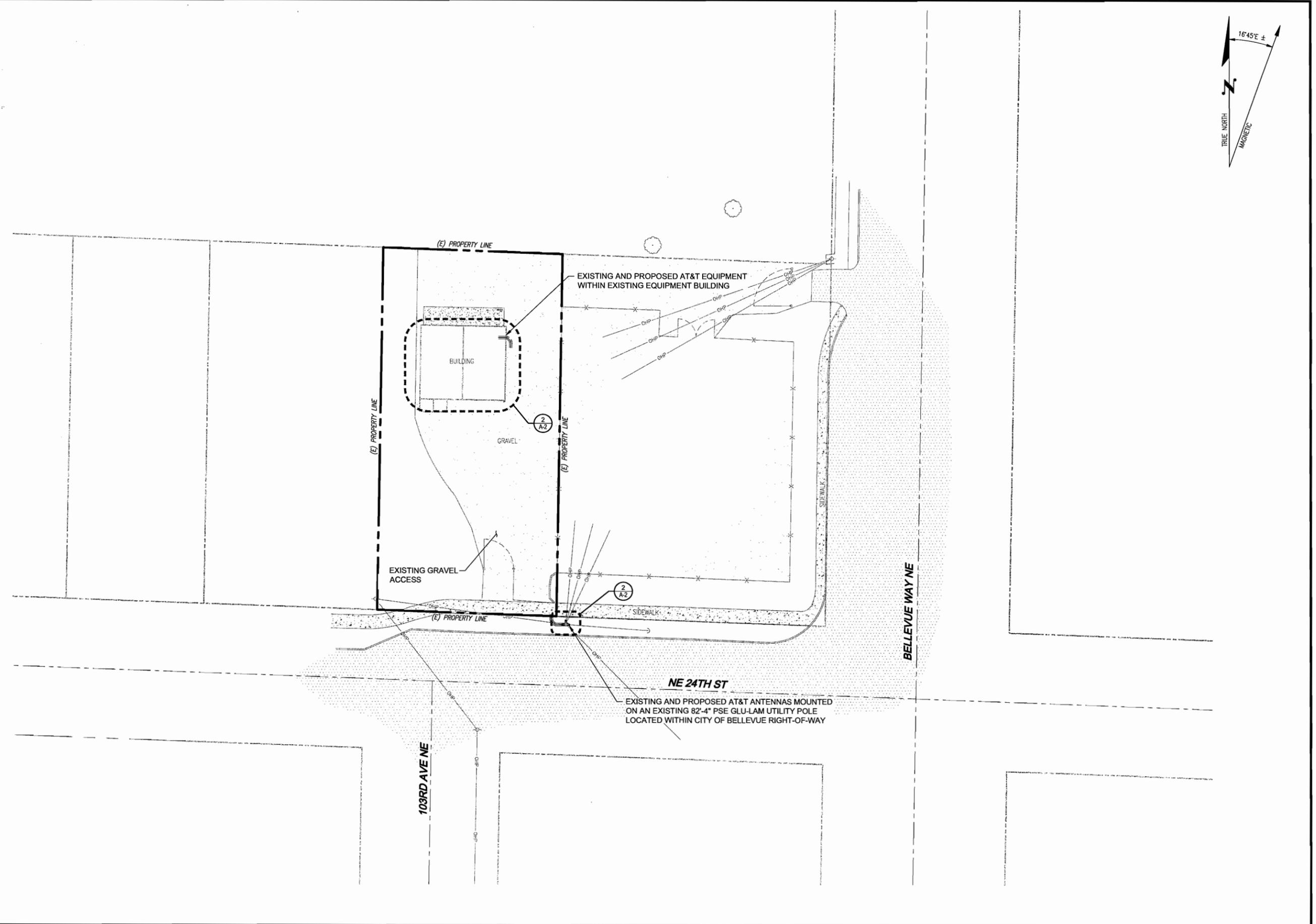


**SITE**  
SD52  
NORTH BELLEVUE WAY  
2401 BELLEVUE WAY NE  
BELLEVUE, WA 98004

**SHEET TITLE**  
GENERAL NOTES AND SYMBOLS

**SHEET NUMBER**  
G-2

Drawing: P:\2010\Telecom\10-647 AT&T - SD52 North Bellevue Way\Drawings\Construction\10647CD-A1-0.dwg Plotted: Jun 02, 2011 11:50am



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DATE: 2-23-11  
 DRAWN BY: JFO  
 CHECKED BY: RJA

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	2-23-11	PRELIMINARY CONSTRUCTION	RJA
2	5-27-11	FINAL CONSTRUCTION	RJA

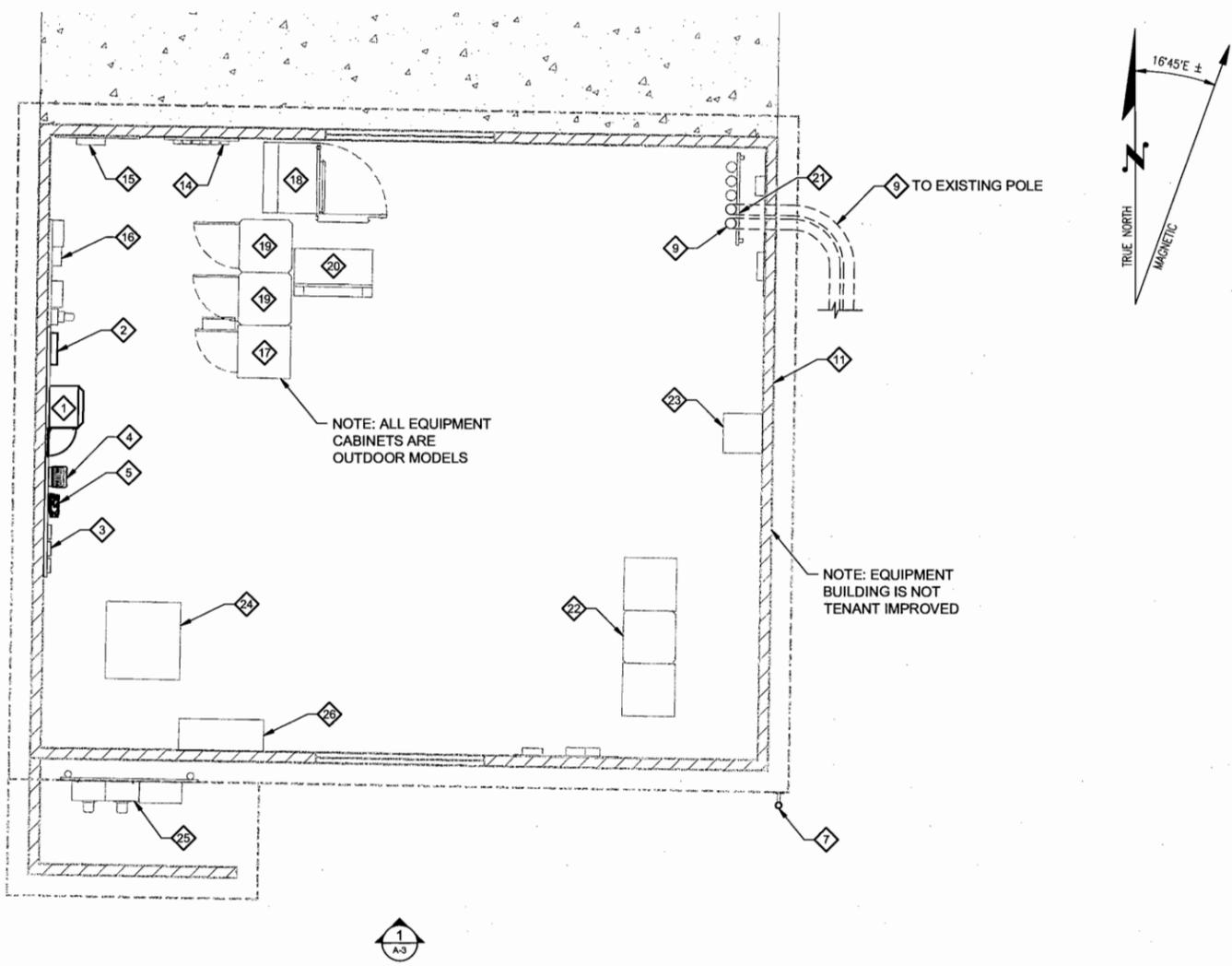


**SITE**  
 SD52  
 NORTH BELLEVUE WAY  
 2401 BELLEVUE WAY NE  
 BELLEVUE, WA 98004

**SHEET TITLE**  
 SITE PLAN

**SHEET NUMBER**  
**A-1**

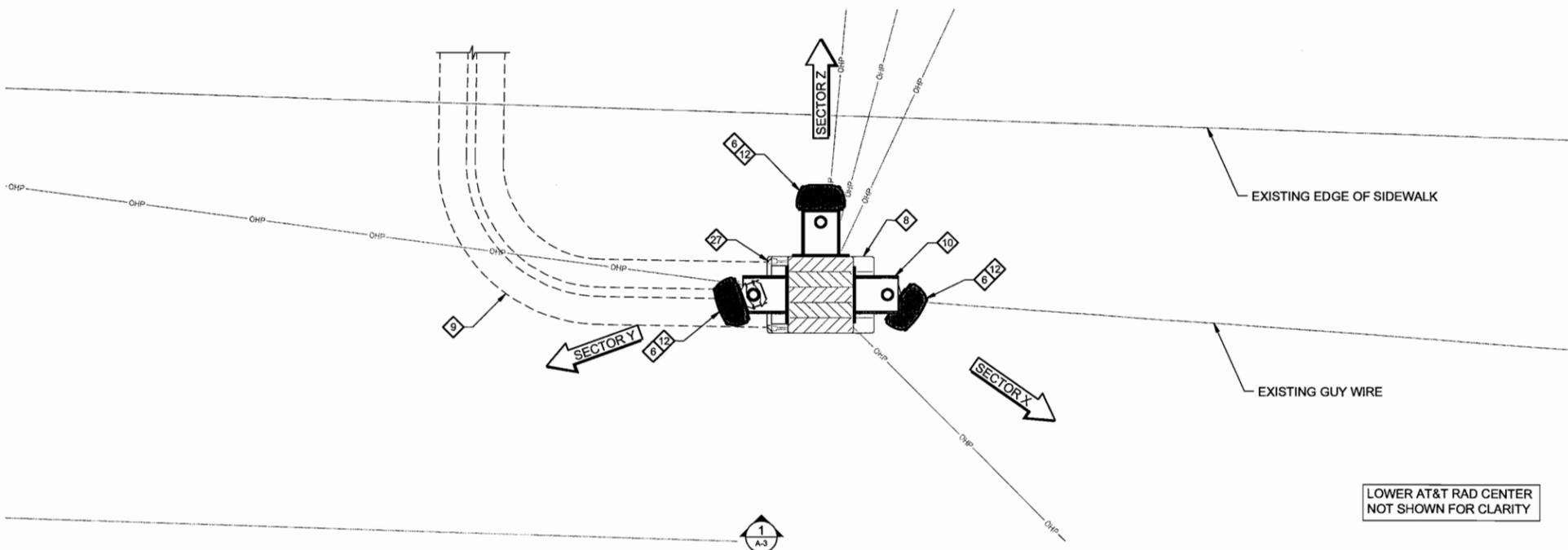
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**ENLARGED EQUIPMENT PLAN**

22"x34" SCALE: 1/4" = 1'-0" 11"x17" SCALE: 1/8" = 1'-0"

2



**ENLARGED ANTENNA PLAN**

22"x34" SCALE: 3/4" = 1'-0" 11"x17" SCALE: 3/8" = 1'-0"

1

**CONSTRUCTION PLAN KEYED NOTES**

- 1 PROPOSED AT&T LTE 9412 eNODE-B COMPACT ENCLOSURE UNISTRUT MOUNTED TO EXISTING BUILDING WALL EXPOSED STUDS. (2 A-4)
- 2 PROPOSED AT&T EXCESS FIBER CABLE ENCLOSURE UNISTRUT MOUNTED TO EXISTING BUILDING WALL EXPOSED STUDS. (1 A-4)
- 3 PROPOSED AT&T DIPLEXERS UNISTRUT MOUNTED TO EXISTING BUILDING WALL EXPOSED STUDS. (1 RF-2)
- 4 PROPOSED AT&T 700 MHZ RRH UNIT UNISTRUT MOUNTED TO EXISTING BUILDING WALL EXPOSED STUDS (TYP OF (3) STACKED). (3 RF-2)
- 5 PROPOSED AT&T AWS RRH UNIT UNISTRUT MOUNTED TO EXISTING BUILDING WALL EXPOSED STUDS (TYP OF (3) STACKED). (2 RF-2)
- 6 PROPOSED AT&T LTE PANEL ANTENNA TO BE ADDED AT TOP RAD CENTER. (1) LTE ANTENNA PER SECTOR FOR A TOTAL OF (3) NEW LTE ANTENNAS. (3 RF-1) (4 RF-2)
- 7 PROPOSED AT&T LTE GPS ANTENNA MOUNTED TO BUILDING EAVE NEXT TO EXISTING GPS ANTENNA. (7 RF-2)
- 8 EXISTING 82'-4" PSE GLU-LAM UTILITY POLE (TO REMAIN).
- 9 PROPOSED AT&T (2)-6"Ø CONDUIT FOR (6) RUNS OF 1-5/8" COAX.
- 10 PROPOSED AT&T ANTENNA PIPE MOUNT.
- 11 EXISTING EQUIPMENT BUILDING (TO REMAIN).
- 12 PROPOSED AT&T TWIN TMA (TOWER MOUNTED AMPLIFIER) MOUNTED BEHIND PROPOSED LTE ANTENNA. (6 RF-2)
- 14 EXISTING AT&T UNISTRUT MOUNTED DIPLEXERS (TO REMAIN).
- 15 EXISTING AT&T FIBER JUNCTION BOX MOUNTED TO BACKBOARD (TO REMAIN).
- 16 EXISTING AT&T UTILITY H-FRAME UNISTRUT MOUNTED TO WALL (TO REMAIN).
- 17 EXISTING AT&T ARGUS TE43 CABINET (TO REMAIN). (4 A-4)
- 18 EXISTING AT&T UMTS CABINET (TO REMAIN).
- 19 EXISTING AT&T GSM CABINET (TO REMAIN).
- 20 EXISTING AT&T E-911 EQUIPMENT CABINET ELEVATED ON 4x4 FRAME (TO REMAIN).
- 21 EXISTING AT&T COAX CABLE H-FRAME (TO REMAIN).
- 22 EXISTING CARRIER EQUIPMENT (TO REMAIN).
- 23 EXISTING WALL MOUNTED FAN (TO REMAIN).
- 24 EXISTING EQUIPMENT CABINET (TO REMAIN).
- 25 EXISTING AT&T METER BASE ON H-FRAME (TO REMAIN).
- 26 EXISTING AT&T TELCO CABINET (TO REMAIN).
- 27 PROPOSED AT&T GLU-LAM VERTICAL COAX SHROUD FOR (6) RUNS OF 1-5/8" COAX.

**SITE NOTES**

1. VERIFY ANTENNA MODEL, RAD CENTER & AZIMUTHS WITH LOCKDOWN SET RF SITE BUILD FORM.
2. ANALYSIS OF TOWER & FOUNDATION SHALL BE PERFORMED BY OTHERS & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PAINT ALL PROPOSED APPURTENANCES ON POLE TO MATCH EXISTING APPURTENANCES.



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DATE:	2-23-11
DRAWN BY:	JFO
CHECKED BY:	RJA

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	2-23-11	PRELIMINARY CONSTRUCTION	RJA
2	5-27-11	FINAL CONSTRUCTION	RJA

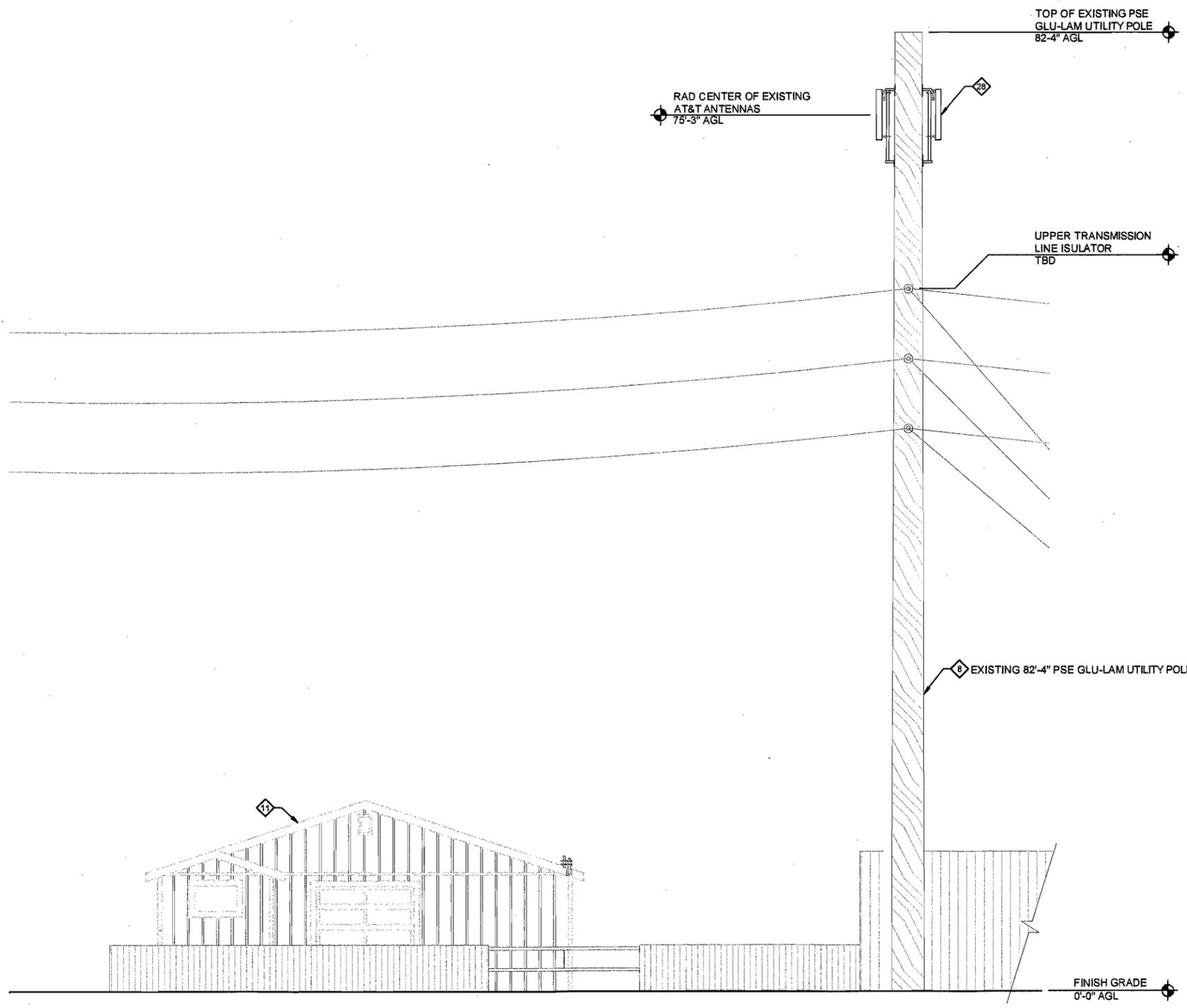


**SITE**  
 SD52  
 NORTH BELLEVUE WAY  
 2401 BELLEVUE WAY NE  
 BELLEVUE, WA 98004

**SHEET TITLE**  
 ENLARGED SITE PLAN

**SHEET NUMBER**  
**A-2**

Drawing: P:\2010\Telecom\10-647 A&T - SD52 North Bellevue Way\Drawings\Construction\10647CD-A3-0.dwg Plotted: Jan 30, 2012 - 3:05pm



**EXISTING SOUTH ELEVATION (LOOKING NORTH)**

22"x34" SCALE: 3/16" = 1'-0"    11"x17" SCALE: 3/32" = 1'-0"

**CONSTRUCTION PLAN KEYED NOTES**

◊ EXISTING 82'-4" PSE GLU-LAM UTILITY POLE (TO REMAIN).

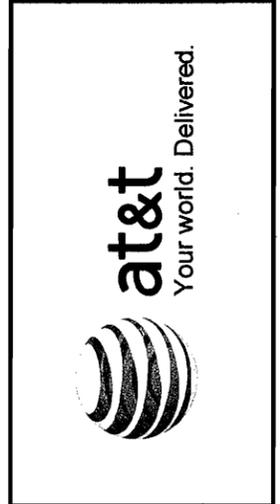
◊ EXISTING EQUIPMENT BUILDING (TO REMAIN).

◊ EXISTING AT&T ANTENNA TO BE RELOCATED.

**SITE NOTES**

1. VERIFY ANTENNA MODEL, RAD CENTER & AZIMUTHS WITH LOCKDOWN SET RF SITE BUILD FORM.
2. ANALYSIS OF TOWER & FOUNDATION SHALL BE PERFORMED BY OTHERS & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PAINT ALL PROPOSED APPURTENANCES ON POLE TO MATCH EXISTING APPURTENANCES.

1



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1	02-23-11	PRELIMINARY CONSTRUCTION	RJA
2	05-27-11	FINAL CONSTRUCTION	RJA
3	01-17-12	REVISED PER COMMENTS	RJA



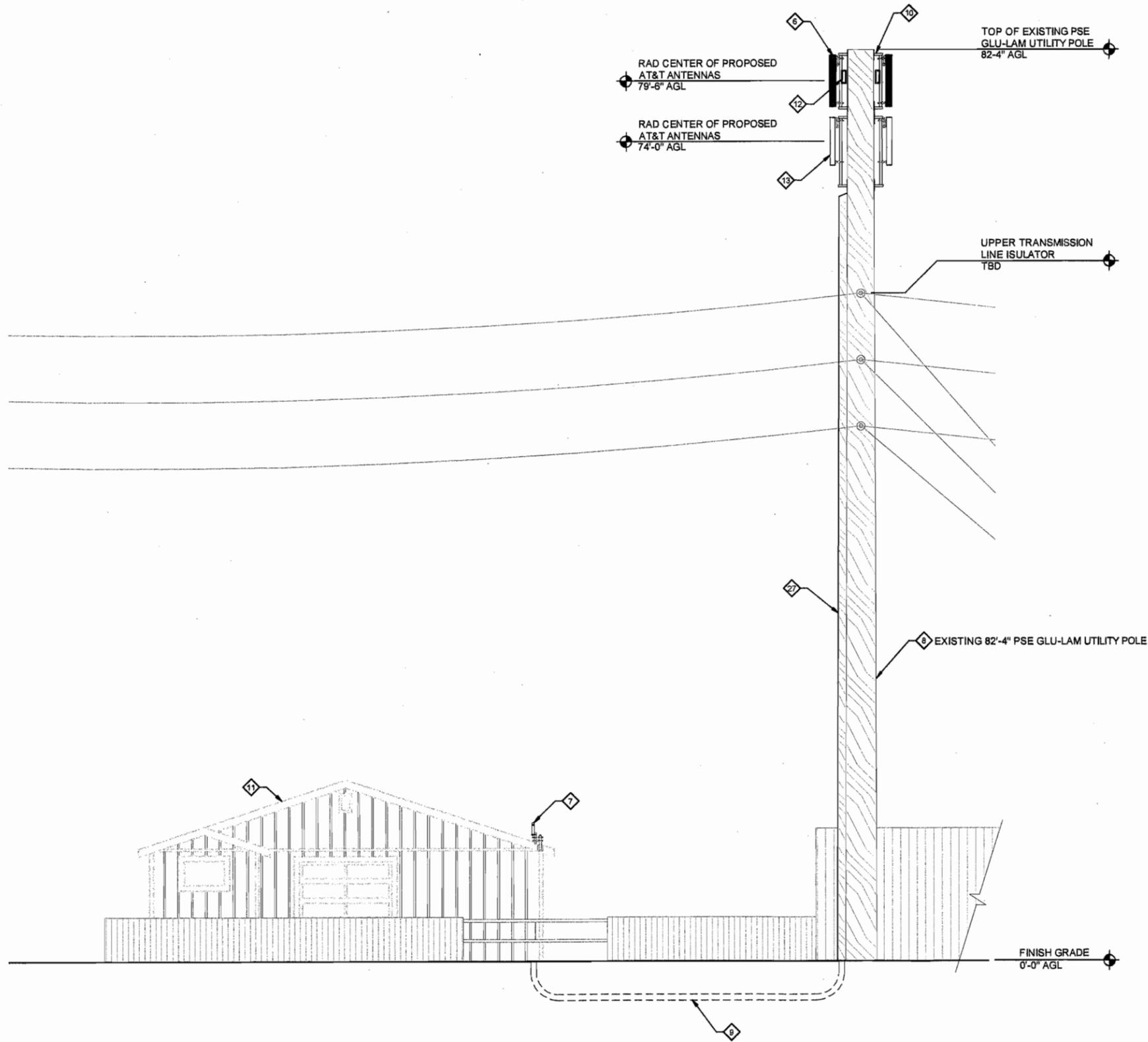
**SITE**  
 SD52  
 NORTH BELLEVUE WAY  
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 BELLEVUE, WA 98004

**SHEET TITLE**  
 EXISTING ELEVATION

**SHEET NUMBER**  
**A-3**

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 FEB - 1 2012  
 Permit Processing

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**CONSTRUCTION PLAN KEYED NOTES**

- 6 PROPOSED AT&T LTE PANEL ANTENNA TO BE ADDED AT TOP RAD CENTER. (1) LTE ANTENNA PER SECTOR FOR A TOTAL OF (3) NEW LTE ANTENNAS. (3 RF-1) (4 RF-2)
- 7 PROPOSED AT&T LTE GPS ANTENNA MOUNTED TO BUILDING EAVE NEXT TO EXISTING GPS ANTENNA. (7 RF-2)
- 8 EXISTING 82'-4" PSE GLU-LAM UTILITY POLE (TO REMAIN).
- 9 PROPOSED AT&T (2)-6"Ø CONDUIT FOR (6) RUNS OF 1-5/8" COAX.
- 10 PROPOSED AT&T ANTENNA PIPE MOUNT.
- 11 EXISTING EQUIPMENT BUILDING (TO REMAIN).
- 12 PROPOSED AT&T TWIN TMA (TOWER MOUNTED AMPLIFIER) MOUNTED BEHIND PROPOSED LTE ANTENNA. (6 RF-2) (5 RF-2)
- 13 RELOCATED EXISTING AT&T ANTENNA AND ANTENNA MOUNT.
- 27 PROPOSED AT&T GLU-LAM VERTICAL COAX SHROUD FOR (6) RUNS OF 1-5/8" COAX.

**SITE NOTES**

1. VERIFY ANTENNA MODEL, RAD CENTER & AZIMUTHS WITH LOCKDOWN SET RF SITE BUILD FORM.
2. ANALYSIS OF TOWER & FOUNDATION SHALL BE PERFORMED BY OTHERS & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PAINT ALL PROPOSED APPURTENANCES ON POLE TO MATCH EXISTING APPURTENANCES.

**PROPOSED SOUTH ELEVATION (LOOKING NORTH)**

22"x34" SCALE: 3/16" = 1'-0"    11"x17" SCALE: 3/32" = 1'-0"

1



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3	01-17-12	REVISED PER COMMENTS	RJA



**SITE**  
 SD52  
 NORTH BELLEVUE WAY  
 2401 BELLEVUE WAY NE  
 BELLEVUE, WA 98004

**SHEET TITLE**  
 PROPOSED ELEVATION

**SHEET NUMBER**  
**A-3.1**

**Received**  
**FEB - 1 2012**  
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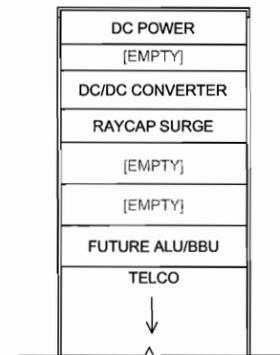
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REV	DATE	DESCRIPTION	BY
1	2-23-11	PRELIMINARY CONSTRUCTION	RJA
2	5-27-11	FINAL CONSTRUCTION	RJA



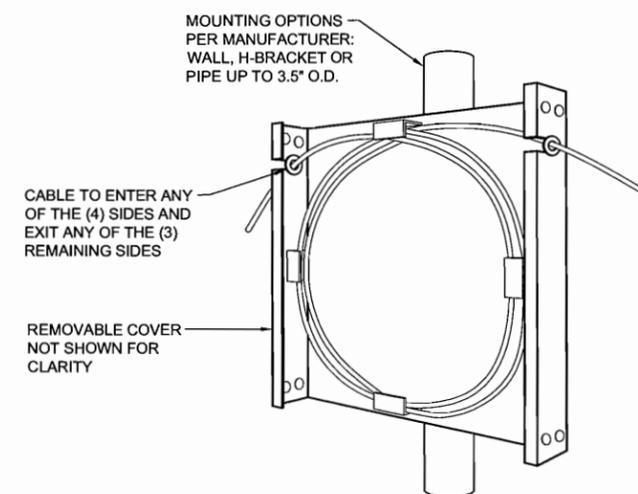
**SITE**  
SD52  
NORTH BELLEVUE WAY  
2401 BELLEVUE WAY NE  
BELLEVUE, WA 98004

**SHEET TITLE**  
CONSTRUCTION DETAILS

**SHEET NUMBER**  
**A-4**



**TE43 CABINET CONFIGURATION** NOT TO SCALE **4**

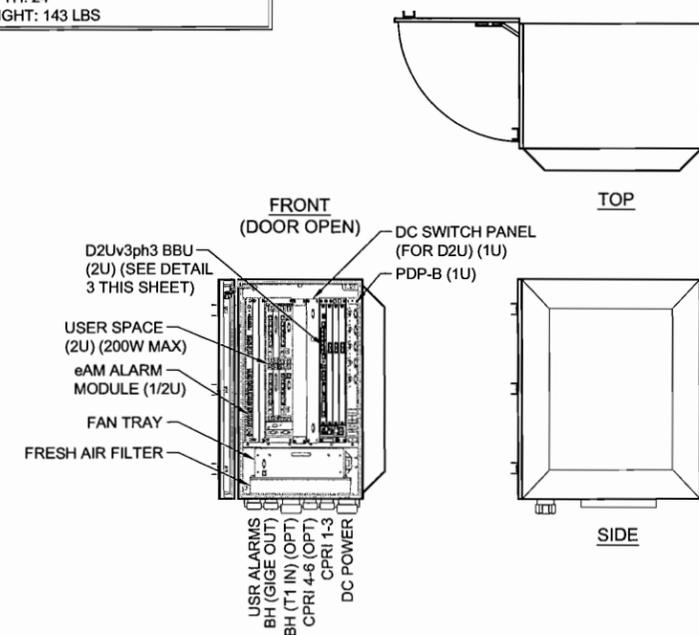


MANUFACTURER: ROSENBERGER  
MODEL: FB-15-ABOX CEQ 10505  
EXCESS FIBER CABLE ENCLOSURE  
DIMENSIONS: 18"Wx18"Hx4"D  
CAPACITY: 35M (115±) OF 10MM CABLE

**FIBER CABLE ENCLOSURE** NOT TO SCALE **1**

**NOT USED** NOT TO SCALE **5**

MANUFACTURER: ALCATEL - LUCENT  
MODEL: LTE 9412 eNODE-B  
COMPACT ENCLOSURE  
HEIGHT: 31"  
WIDTH: 20"  
DEPTH: 24"  
WEIGHT: 143 LBS

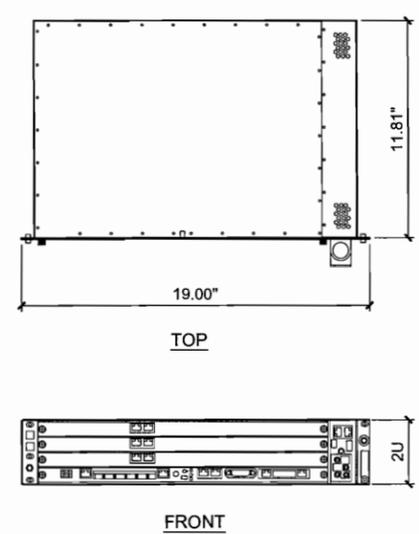


**NOTE**  
USER EQUIPMENT POWERED  
VIA SINGLE INPUT FEED

**LUCENT EQUIPMENT CABINET SPECIFICATIONS** NOT TO SCALE **2**

**FIBER CABLE ENCLOSURE** NOT TO SCALE **6**

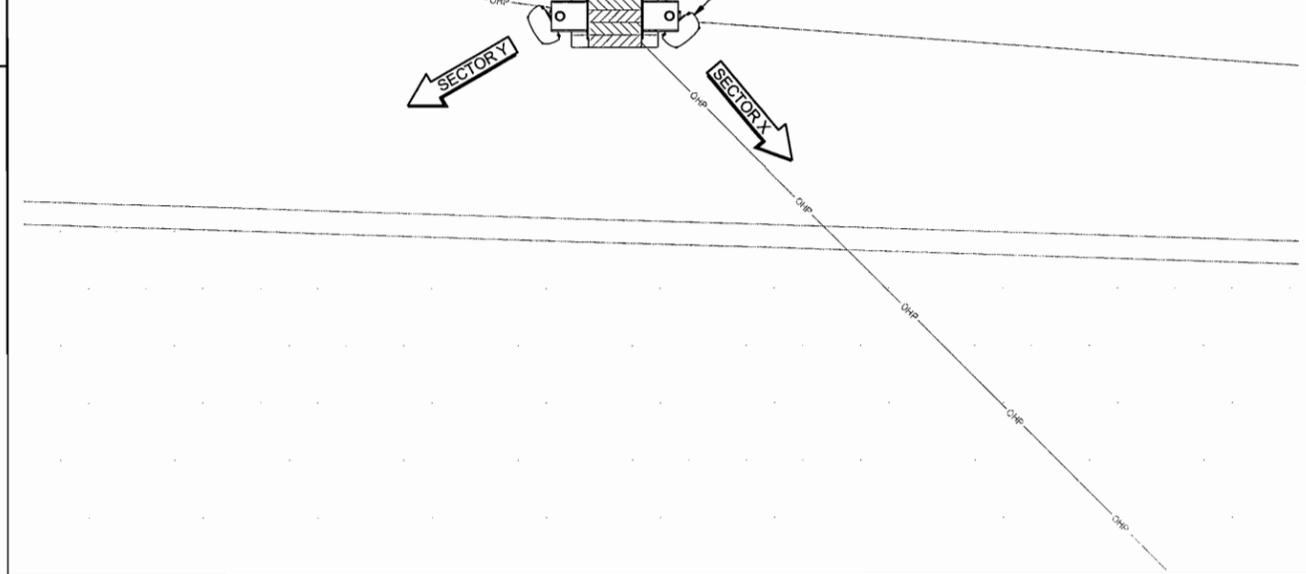
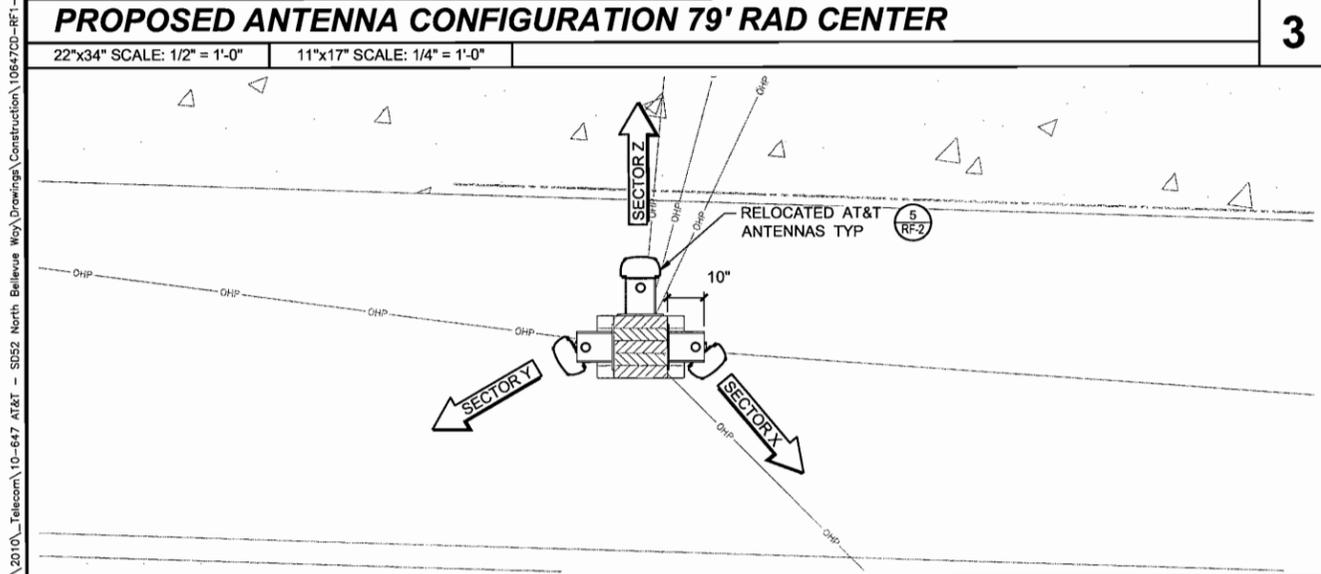
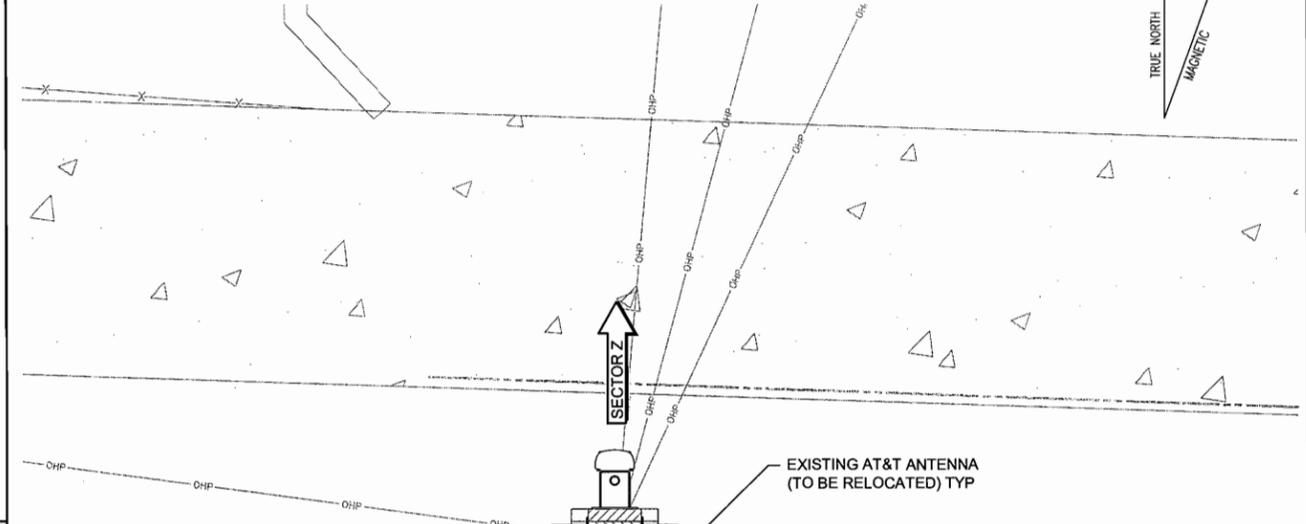
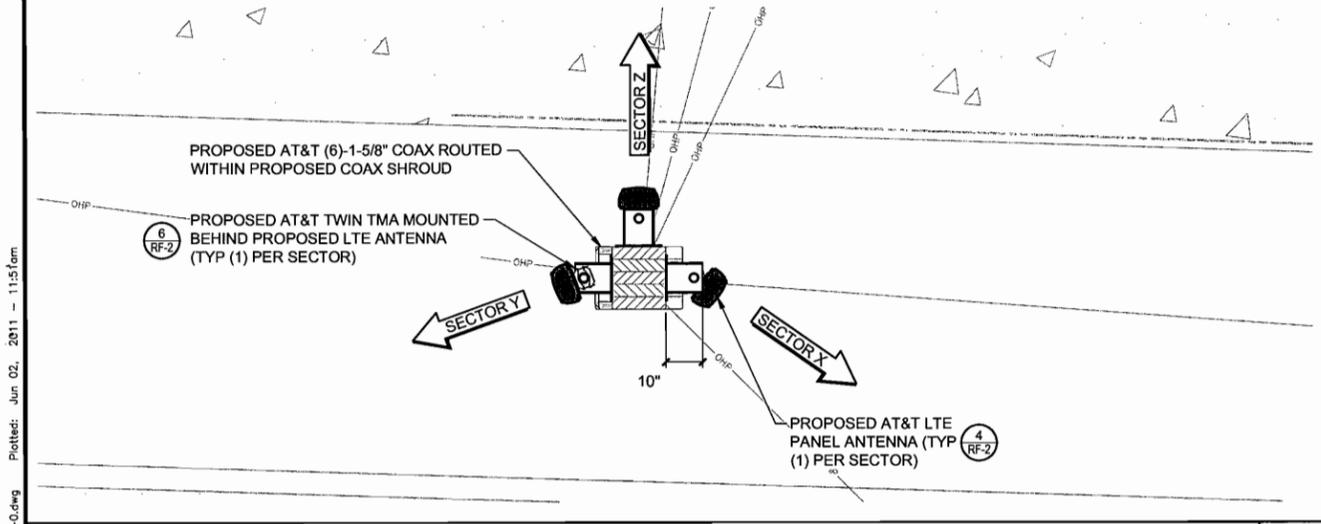
MANUFACTURER: ALCATEL - LUCENT  
MODEL: 9926 BBU  
HEIGHT: 19"  
WIDTH: 3.469"; 2U (RACK UNITS)  
DEPTH: 11.81"  
WEIGHT: 26 LBS



**RACK MOUNTED BBU DETAIL** NOT TO SCALE **3**

PROPOSED ANTENNA CONFIGURATION AND SCHEDULE													
SECTOR X	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF COAX	COAX Ø	COAX LENGTH	DIPLEXED
GSM 850	140°	74'	1	ANDREW	QBX LH-6565A-VTM	4°	0°	YES	NONE	2	7/8"	100'	YES
GSM 1900		2°				YES		LGP 21403	YES				G8 G9
UMTS 850		6°				YES		NONE	YES				
UMTS 1900		2°				YES		ANDEW MHA ETB19G8-12UB	YES				U8 U9 U9 1
UMTS 1900 1		2°				YES		ANDEW MHA ETB19G8-12UB	YES				
FUTURE (OFF)	125°	79'	1	KATHREIN	80010764	8°	2°	YES	TTAW-07BP111-001	2	1-5/8"	72'	YES
LTE 700		5°				YES		L7 FU					
SECTOR Y	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF COAX	COAX Ø	COAX LENGTH	DIPLEXED
GSM 850	240°	74'	1	ANDREW	QBX LH-6565A-VTM	2°	0°	YES	NONE	2	7/8"	100'	YES
GSM 1900		0°				YES		LGP 21403	YES				G8 G9
UMTS 850		2°				YES		NONE	YES				
UMTS 1900		0°				YES		LGP 21401	YES				U8 U9 U9 1
UMTS 1900 1		0°				YES		LGP 21401	YES				
FUTURE (OFF)	250°	79'	1	KATHREIN	80010764	5°	0°	YES	TTAW-07BP111-001	2	1-5/8"	72'	YES
LTE 700		12°				YES		L7 FU					
SECTOR Z	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF COAX	COAX Ø	COAX LENGTH	DIPLEXED
GSM 850	0°	74'	1	ANDREW	QBX LH-6565A-VTM	4°	0°	YES	NONE	2	7/8"	100'	YES
GSM 1900		2°				YES		LGP 21403	YES				G8 G9
UMTS 850		6°				YES		NONE	YES				
UMTS 1900		4°				YES		LGP 21401	YES				U8 U9 U9 1
UMTS 1900 1		4°				YES		LGP 21401	YES				
FUTURE (OFF)	0°	79'	1	KATHREIN	80010764	12°	0°	YES	TTAW-07BP111-001	2	1-5/8"	72'	YES
LTE 700		6°				YES		L7 FU					

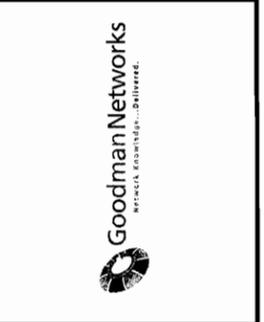
EXISTING ANTENNA CONFIGURATION AND SCHEDULE													
SECTOR X	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF COAX	COAX Ø	COAX LENGTH	DIPLEXED
GSM 850	140°	79'	1	ANDREW	QBX LH-6565A-VTM	4°	0°	YES	NONE	2	7/8"	100'	YES
GSM 1900		2°				YES		LGP 21403	YES				G8 G9
UMTS 850		6°				YES		NONE	YES				
UMTS 1900		2°				YES		ANDEW MHA ETB19G8-12UB	YES				U8 U9 U9 1
UMTS 1900 1		2°				YES		ANDEW MHA ETB19G8-12UB	YES				
SECTOR Y	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF COAX	COAX Ø	COAX LENGTH	DIPLEXED
GSM 850	240°	79'	1	ANDREW	QBX LH-6565A-VTM	2°	0°	YES	NONE	2	7/8"	100'	YES
GSM 1900		0°				YES		LGP 21403	YES				G8 G9
UMTS 850		2°				YES		NONE	YES				
UMTS 1900		0°				YES		LGP 21401	YES				U8 U9 U9 1
UMTS 1900 1		0°				YES		LGP 21401	YES				
SECTOR Z	AZIMUTH	RADCENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF COAX	COAX Ø	COAX LENGTH	DIPLEXED
GSM 850	0°	79'	1	ANDREW	QBX LH-6565A-VTM	4°	0°	YES	NONE	2	7/8"	100'	YES
GSM 1900		2°				YES		LGP 21403	YES				G8 G9
UMTS 850		6°				YES		NONE	YES				
UMTS 1900		4°				YES		LGP 21401	YES				U8 U9 U9 1
UMTS 1900 1		4°				YES		LGP 21401	YES				



**PROPOSED ANTENNA CONFIGURATION 74' RAD CENTER**  
 22"x34" SCALE: 1/2" = 1'-0"    11"x17" SCALE: 1/4" = 1'-0"    **2**

**EXISTING ANTENNA CONFIGURATION 79' RAD CENTER**  
 22"x34" SCALE: 1/2" = 1'-0"    11"x17" SCALE: 1/4" = 1'-0"    **1**

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DATE:	2-23-11
DRAWN BY:	JFO
CHECKED BY:	RJA

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	2-23-11	PRELIMINARY CONSTRUCTION	RJA
2	5-27-11	FINAL CONSTRUCTION	RJA

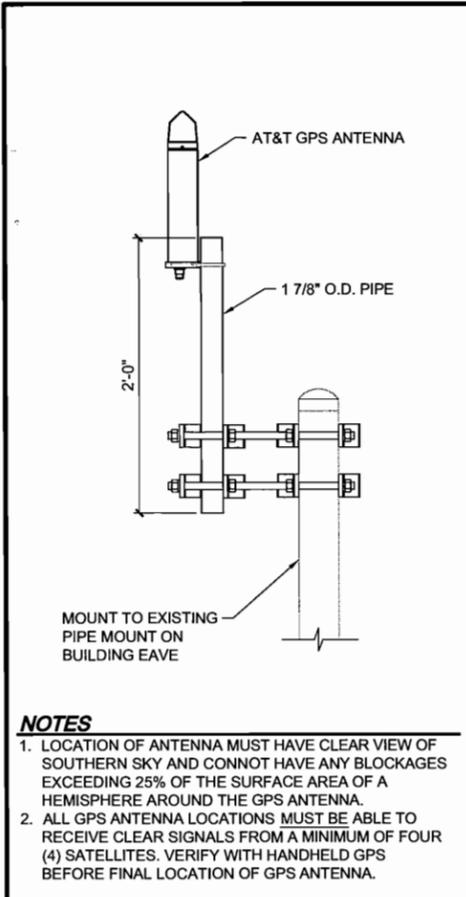


**SITE**  
 SD52  
 NORTH BELLEVUE WAY  
 2401 BELLEVUE WAY NE  
 BELLEVUE, WA 98004

**SHEET TITLE**  
 ANTENNA CONFIGURATIONS

**SHEET NUMBER**  
**RF-1**

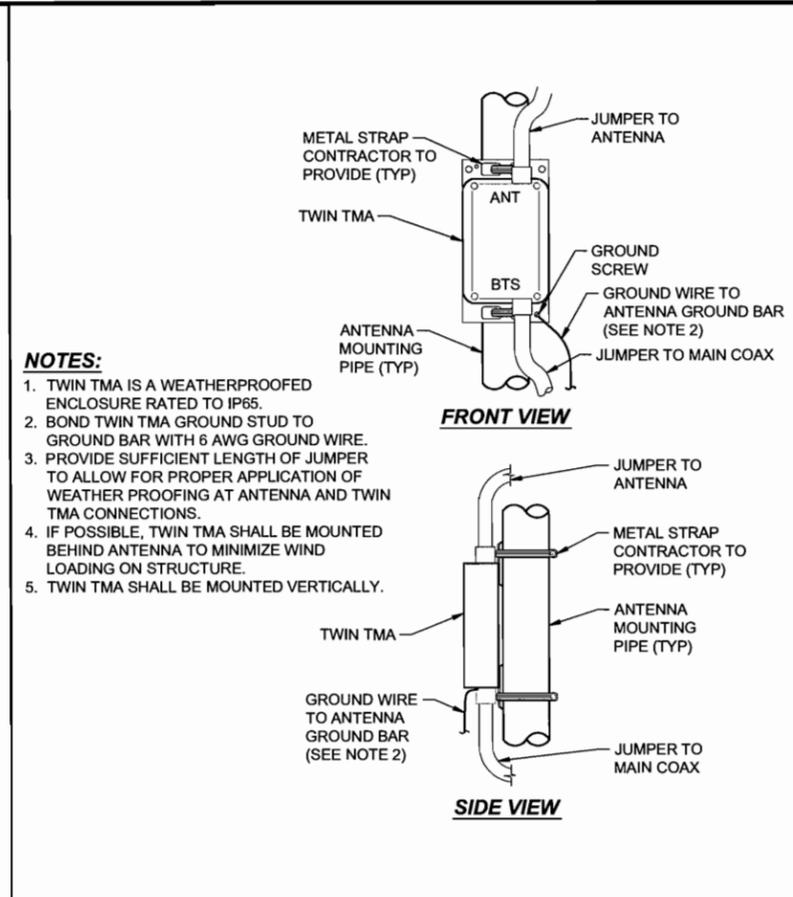
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**NOTES**

1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.

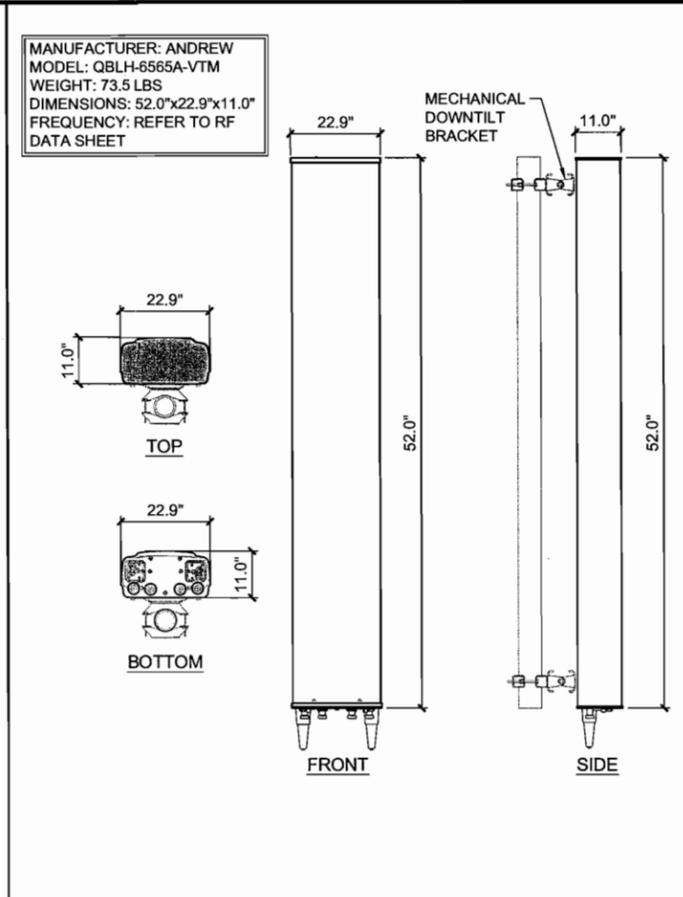
**GPS MOUNTING DETAIL** 7  
NOT TO SCALE



**NOTES:**

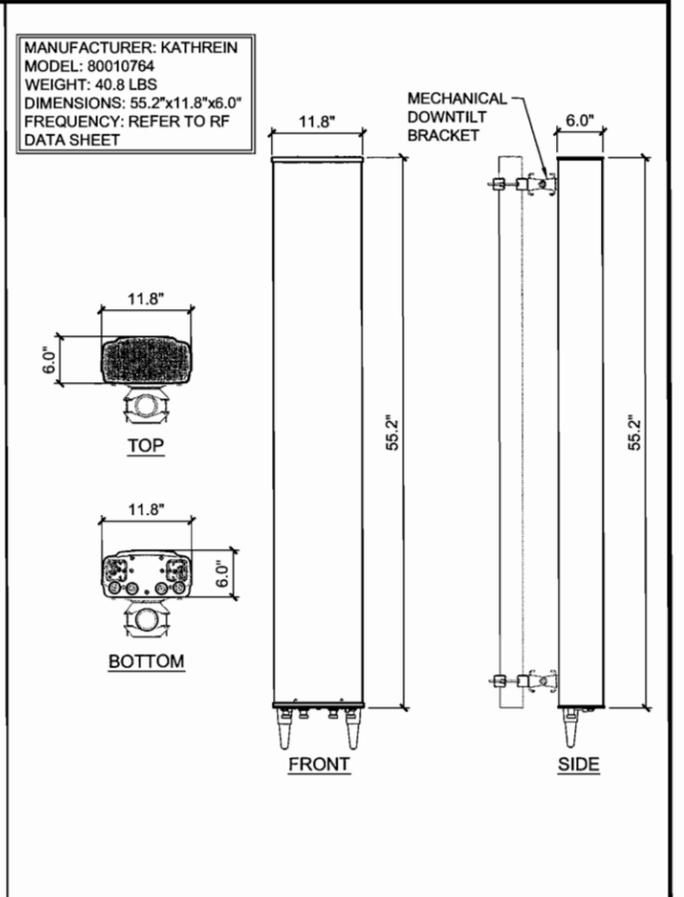
1. TWIN TMA IS A WEATHERPROOFED ENCLOSURE RATED TO IP65.
2. BOND TWIN TMA GROUND STUD TO GROUND BAR WITH 6 AWG GROUND WIRE.
3. PROVIDE SUFFICIENT LENGTH OF JUMPER TO ALLOW FOR PROPER APPLICATION OF WEATHER PROOFING AT ANTENNA AND TWIN TMA CONNECTIONS.
4. IF POSSIBLE, TWIN TMA SHALL BE MOUNTED BEHIND ANTENNA TO MINIMIZE WIND LOADING ON STRUCTURE.
5. TWIN TMA SHALL BE MOUNTED VERTICALLY.

**TWIN TMA DETAIL** 6  
NOT TO SCALE



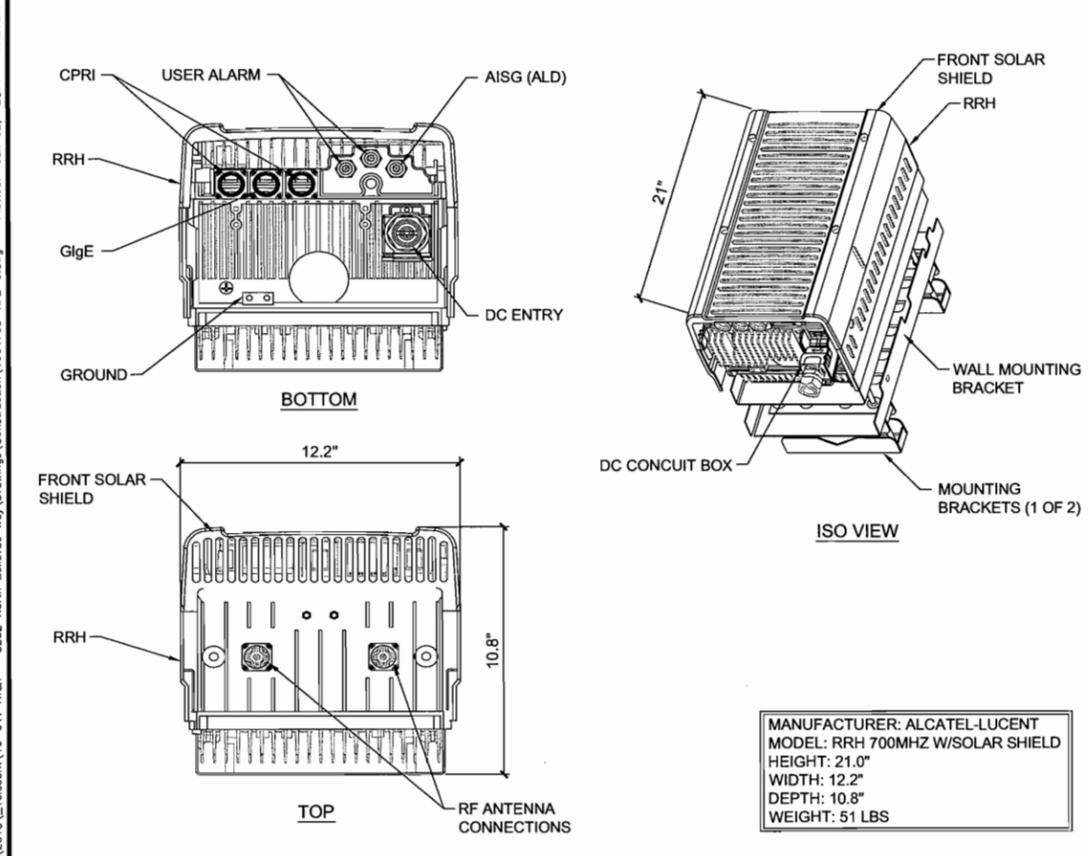
MANUFACTURER: ANDREW  
MODEL: QBLH-6565A-VTM  
WEIGHT: 73.5 LBS  
DIMENSIONS: 52.0"x22.9"x11.0"  
FREQUENCY: REFER TO RF DATA SHEET

**ANDREW ANTENNA SPECS** 5  
NOT TO SCALE



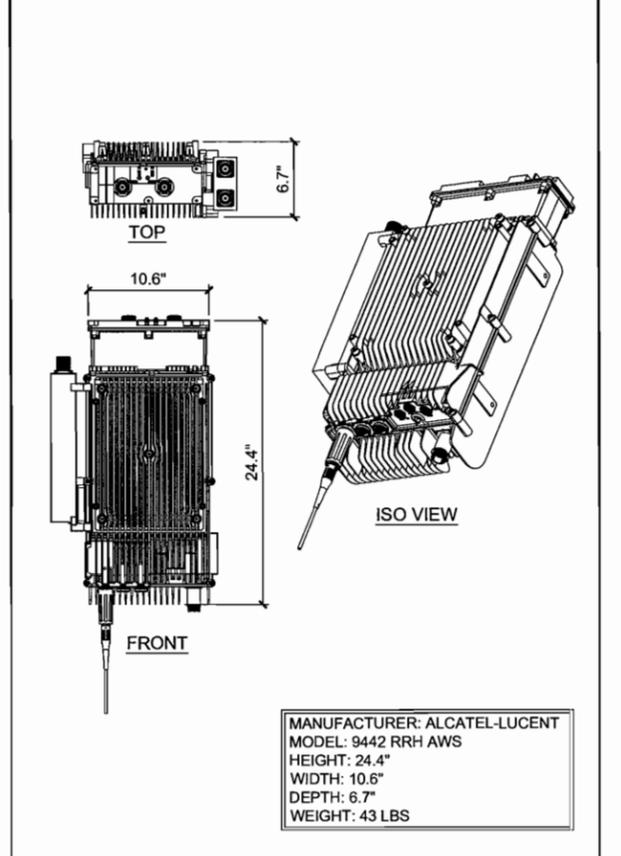
MANUFACTURER: KATHREIN  
MODEL: 80010764  
WEIGHT: 40.8 LBS  
DIMENSIONS: 55.2"x11.8"x6.0"  
FREQUENCY: REFER TO RF DATA SHEET

**KATHREIN ANTENNA SPECS** 4  
NOT TO SCALE



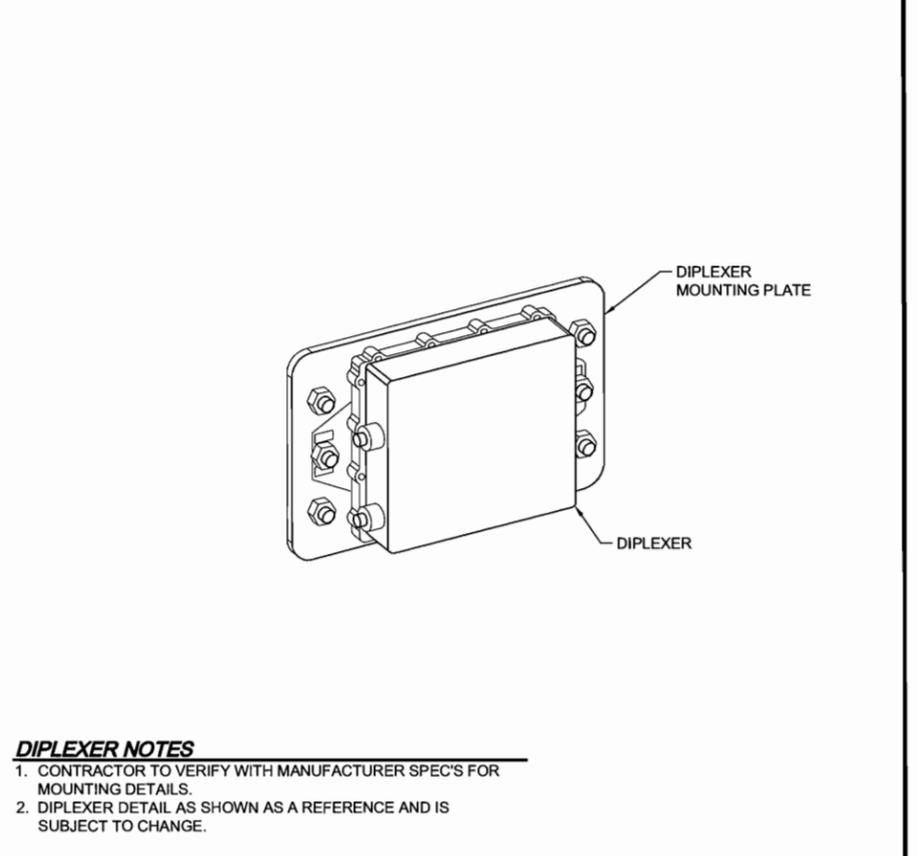
MANUFACTURER: ALCATEL-LUCENT  
MODEL: RRH 700MHZ W/SOLAR SHIELD  
HEIGHT: 21.0"  
WIDTH: 12.2"  
DEPTH: 10.8"  
WEIGHT: 51 LBS

**RRH 700MHZ DETAIL** 3  
NOT TO SCALE



MANUFACTURER: ALCATEL-LUCENT  
MODEL: 9442 RRH AWS  
HEIGHT: 24.4"  
WIDTH: 10.6"  
DEPTH: 6.7"  
WEIGHT: 43 LBS

**RRH AWS DETAIL** 2  
NOT TO SCALE



**DIPLEXER NOTES**

1. CONTRACTOR TO VERIFY WITH MANUFACTURER SPEC'S FOR MOUNTING DETAILS.
2. DIPLEXER DETAIL AS SHOWN AS A REFERENCE AND IS SUBJECT TO CHANGE.

**DIPLEXER DETAIL** 1  
NOT TO SCALE



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CHECKED BY:	RJA

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2	5-27-11	FINAL CONSTRUCTION	RJA

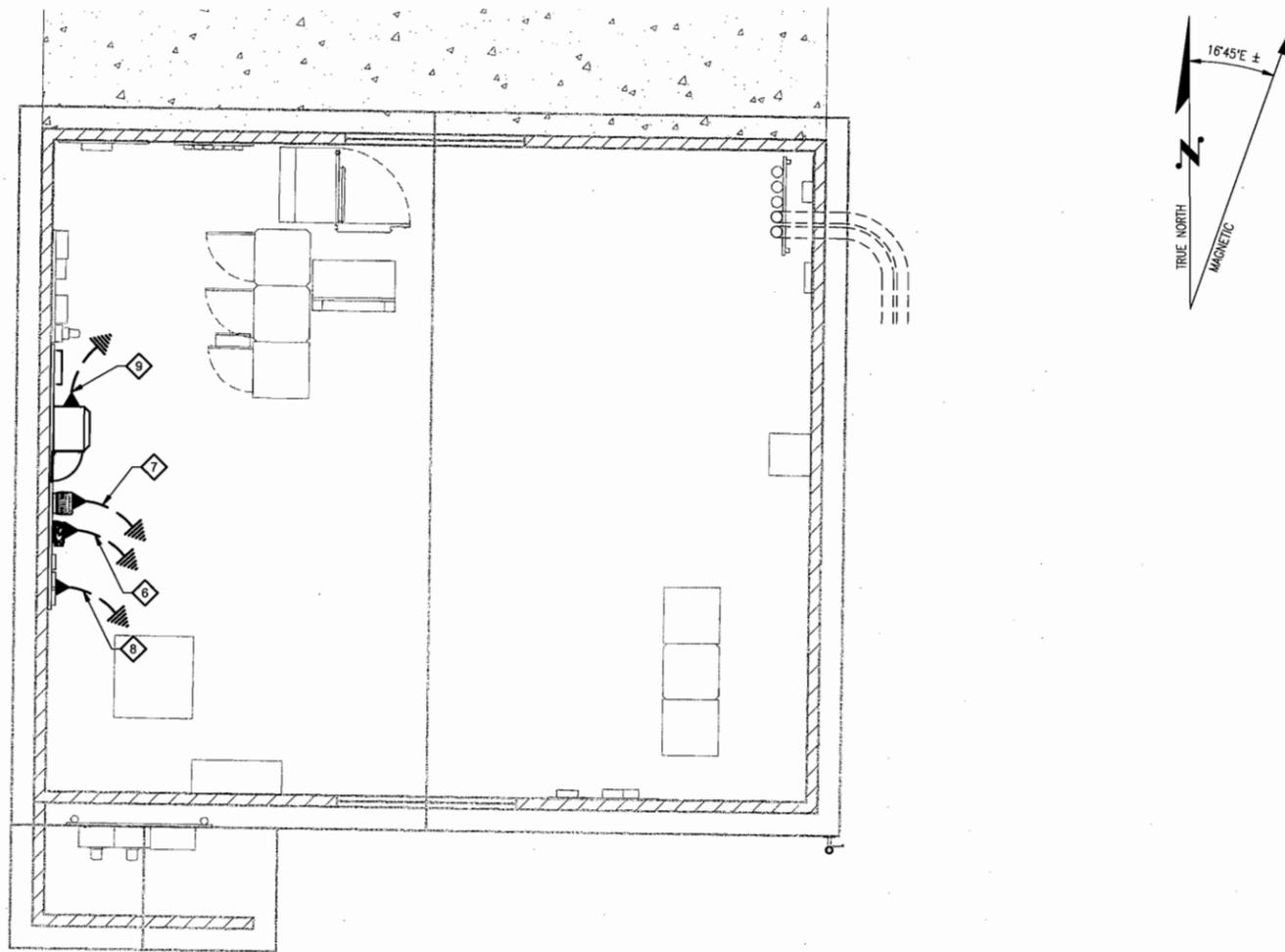


**SITE**  
SD52  
NORTH BELLEVUE WAY  
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BELLEVUE, WA 98004

**SHEET TITLE**  
RF DETAILS

**SHEET NUMBER**  
**RF-2**

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**GROUNDING KEYED NOTES**

- 1 CAD WELD (TYP). SEE DETAIL 2/E-2.
- 2 EXISTING ANTENNA GROUND BUS BAR NEAR ANTENNAS WITH COAX GROUND KIT. SEE DETAIL 6/E-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 5/E-2 FOR GROUND WIRE CONNECTIONS, AND SEE DETAIL 3/E-2 FOR COAX GROUNDING.
- 3 EXISTING POLE GROUND BUS BAR AT BASE OF POLE. SEE DETAIL 6/E-2 FOR GROUND BAR CONSTRUCTION.
- 4 #6 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUS BAR (TYP OF 3).
- 5 EXISTING GROUND FROM ANTENNA GROUND BUS BAR TO POLE GROUND BUS BAR (TYP OF (2) PLACES).
- 6 #6 AWG AWS RRH UNIT GROUND TIE INTO EXISTING SYSTEM GROUND RING (TYP OF 3).
- 7 #6 AWG 700 RRH UNIT GROUND TIE INTO EXISTING SYSTEM GROUND RING (TYP OF 3).
- 8 #6 AWG DIPLEXERS GROUND TIE INTO EXISTING SYSTEM GROUND RING.
- 9 #6 AWG LTE EQUIPMENT ENCLOSURE TO TIE INTO EXISTING SYSTEM GROUND RING.

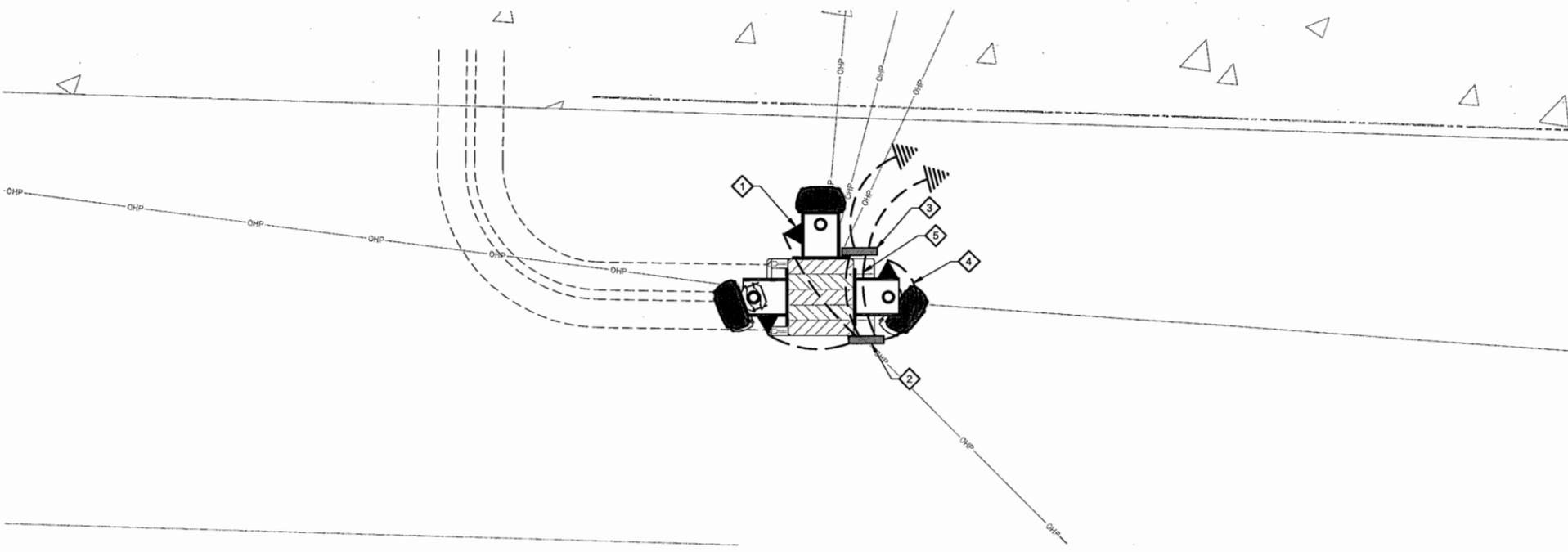
**GENERAL GROUNDING NOTES**

- 1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
- 2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
- 3. ALL GROUND CONNECTIONS SHALL BE CADWELDED. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- 4. CONTRACTOR TO VERIFY AND TEXT GROUND SOURCE, GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY AT&T, LLC REPRESENTATIVE.
- 5. REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
- 6. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED AT&T, LLC REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CALDWELDS AND GROUND RINGS.
- 7. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

**SCHEMATIC EQUIPMENT GROUNDING PLAN**

22"x34" SCALE: 1/4" = 1'-0"    11"x17" SCALE: 1/8" = 1'-0"

2



**SCHEMATIC ANTENNA GROUNDING PLAN**

22"x34" SCALE: 3/4" = 1'-0"    11"x17" SCALE: 3/8" = 1'-0"

1

**GROUNDING LEGEND**

- GROUND BAR
- GROUND INSPECTION WELL
- COPPER GROUND ROD
- CADWELD CONNECTION
- SIDE SPLICE CADWELD
- FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM

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

**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 AT&T, LLC. SERVICES ARE STRICTLY PROHIBITED.



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DRAWN BY:	JFO
CHECKED BY:	RJA

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2	5-27-11	FINAL CONSTRUCTION	RJA

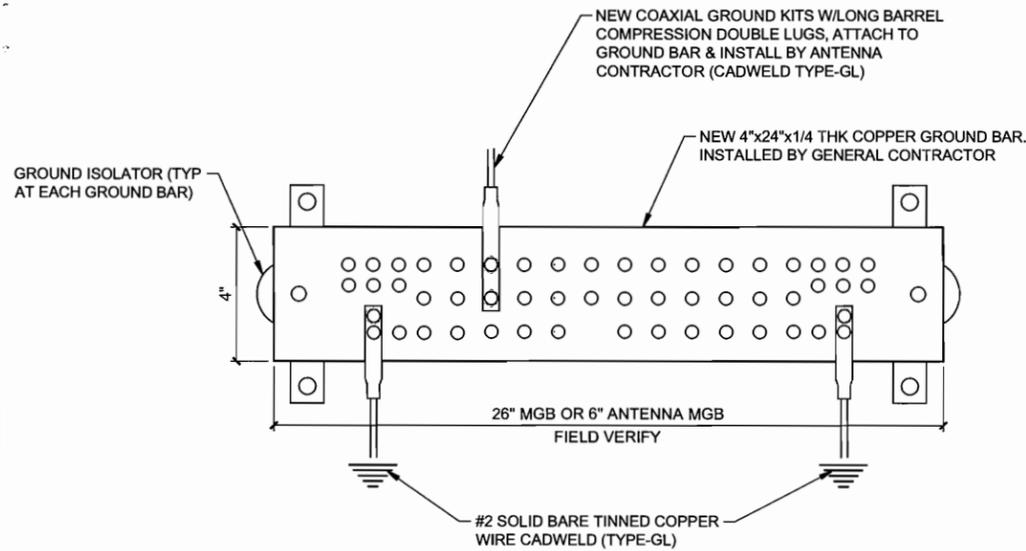


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 BELLEVUE, WA 98004

**SHEET TITLE**  
 SCHEMATIC  
 GROUNDING PLAN

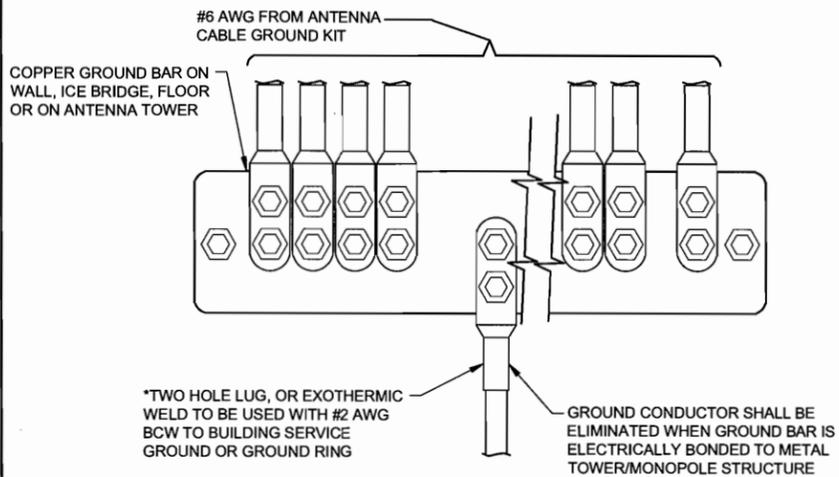
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**E-1**

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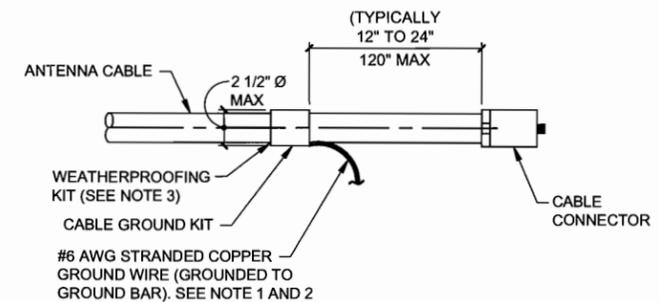
**NOTE**  
COAT ALL MECHANICAL CONNECTIONS WITH "NOOX" OR APPROVED EQUAL

**GROUND BAR**  
NOT TO SCALE **6**



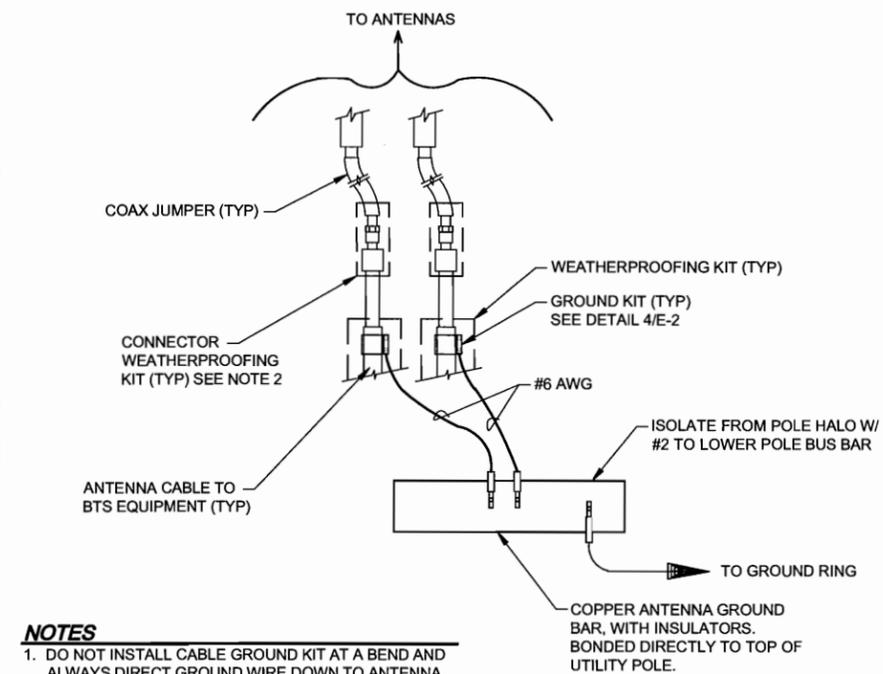
**NOTE**  
GROUND BARS AT BOTTOM OF TOWERS/MONOPLES SHALL ONLY USE EXOTHERMIC WELDS.

**GROUND WIRE INSTALLATION**  
NOT TO SCALE **5**



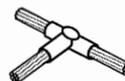
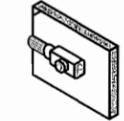
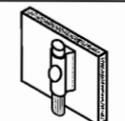
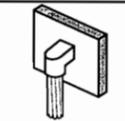
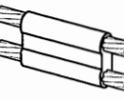
**NOTES**  
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.  
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.  
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

**CABLE GROUND KIT CONNECTION**  
NOT TO SCALE **4**



**NOTES**  
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.  
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

**GROUND CABLE CONNECTION**  
NOT TO SCALE **3**

 TYPE TA	 TYPE VN	 TYPE NC	 TYPE SS
 TYPE VV	 TYPE VS	 TYPE VB	 TYPE PT
 TYPE GT	 TYPE GY	 TYPE GR	 TYPE GL

**CADWELD GROUNDING CONNECTIONS**  
NOT TO SCALE **2**

**NOT USED**  
NOT TO SCALE **1**

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