



**CITY OF**  
**PORTLAND, OREGON**  
**OFFICE OF THE CITY AUDITOR**  
**Hearings Office**

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**DECISION OF THE HEARINGS OFFICER**

**I. GENERAL INFORMATION**

**File No.:** LU 09-149439 CU AD (HO 4100003)

**Applicants:** Keith Ashcroft, Property Owner  
Eastside Van & Storage Company  
4836 SE Powell Blvd.  
Portland, OR 97206-3144

Brandon Fowler, Lessee  
AT&T Mobility  
19801 SW 72nd Ave.  
Tualatin, OR 97062

**Applicants'**  
**Representatives:** Richard J. Busch  
Busch Law Firm PLLC  
22525 SE 64<sup>th</sup> Pl., Suite #288  
Issaquah, WA 98027

John Silenzi  
Goodman Networks  
7360 SW Hunziker Rd., Suite 206  
Portland, OR 97223

**Hearings Officer:** Gregory J. Frank

**Bureau of Development Services (BDS) Staff Representative:** Sylvia Cate

**Site Address:** 4836 SE POWELL BLVD

**Legal Description:** TL 9900 1.04 ACRES, SECTION 07 1S 2E; TL 9700 0.26 ACRES,  
SECTION 07 1S 2E; TL 9800 0.46 ACRES, SECTION 07 1S 2E

**Tax Account No.:** R992070500, R992071700, R992072380

**State ID No.:** 1S2E07CA 09900, 1S2E07CA 09700, 1S2E07CA 09800

**Quarter Section:** 3435

**Neighborhood:** Creston-Kenilworth

**Business District:** Foster Area

**District Neighborhood Coalition:** Southeast Uplift

**Plan District:** None

**Other Designations:** None

**Zoning:** CG, General Commercial

**Land Use Review:** Type III, CU AD, Conditional Use and Adjustment

**BDS Staff Recommendation to Hearings Officer:** Approval with conditions

**Public Hearing:** The hearing was opened at 1:30 p.m. on April 21, 2010 in the 3<sup>rd</sup> floor hearing room, 1900 SW 4<sup>th</sup> Avenue, Portland, Oregon, and was closed at 2:48 p.m. The Applicants (note: "Applicants" refers to both applicants, AT&T Mobility and Eastside Van & Storage Company) waived their rights granted by ORS 197.763 (6)(e), if any, to an additional 7 day time period to submit written rebuttal into the record. The record was closed at the end of the hearing.

**Testified at the Hearing:**

Sylvia Cate, BDS Staff Representative

Richard Busch, Busch Law Firm PLLC, 22525 SE 64th Pl., Ste. 288, Issaquah, WA 98027

Nellie Korn, Creston-Kenilworth Neighborhood Association Land Use Chair, 4140 SE 37th Ave., Apt. 16, Portland, OR 97202

David Soloos, Program Manager, City of Portland Office of Cable Communications and Franchise Management

Prineet Pottmeyer, 19801 SW 72nd Ave., Tualatin, OR 97062

**Proposal:**

There is an existing wireless facility at 4836 SE Powell Boulevard (three tax lots hereafter collectively referred to as the "Site") consisting of a 45-foot monopole hosting antennas ("Old Pole"), and associated equipment cabinets located at grade behind a fenced enclosure ("Associated Equipment"). AT&T Mobility ("Applicant AT&T") leases a portion of the Site ("Leased Area") from Applicant Keith Fowler, Eastside Van & Storage ("Owner"). Applicant AT&T proposes to install an 80-foot monopole ("New Pole") within a fenced compound, approximately 30 feet to the east of the shorter Old Pole and then migrate all antennas to the New Pole. Once all antennas are migrated to the New Pole, the Old Pole will be demolished.

Applicant AT&T proposes to replace and update the Associated Equipment. Applicant AT&T proposes to upgrade the existing enclosure fence to a cedar board-on-board fence. Because of the existing conditions at the Site, Applicant AT&T proposes to place the required landscaping along the south and north sides of the Lease Area (25 feet x 5 feet of landscaping) along the west end of the Lease Area to provide additional buffering to the residentially-zoned property west of the Site. In order to propose this specific landscaping configuration, an Adjustment is required. (See Exhibits C-1, C-2, C-3 and C-4). Because the proposed New Pole does not meet the height limit of the base zone, because the facility is within 50 feet of an R zone, and because the proposed New Pole is less than 2,000 feet away from any other monopole, a Type III Conditional Use review is required.

**Relevant Approval Criteria:**

In order to be approved, this proposal must comply with the approval criteria of Title 33, Portland City Code ("PCC"), Zoning Code. The applicable approval criteria are:

- 33.815.225 B 1-6, Conditional Use
- 33.274.040 C, Mandatory Development standards
- 33.805.040 A-F, Adjustments

PCC Section 33.700.080 states that Land Use Review applications are reviewed under the regulations in effect at the time the application was filed, provided that the application is complete at the time of filing, or complete within 180 days. This application was filed on August 7, 2009, and determined to be complete on January 27, 2010.

**Note:** Effective November 18, 2009, the FCC imposed a Declaratory Ruling which requires local governments to issue a final decision on land use reviews for wireless facilities within a time frame that is significantly different than the ORS 120-day clock. Further, the FCC imposed a mandatory 150-day review period for all 'pending' land use applications for wireless facilities that were 'pending' on November 18, 2009, regardless of whether the application had been deemed complete or not. The above referenced Type III Conditional Use request was submitted to the City on August 7, 2009. Applicants submitted the missing information on January 27, 2010, and the application was deemed complete on that date.

However, the FCC's Declaratory Ruling considers this application 'pending' as of November 18, 2009 and therefore, the City must issue a final decision no later than April 17, 2010 unless the Applicants extend this 'shot clock.' As a comparison, under the ORS 120-day timeline, the City would have until May 27, 2010 to render a final decision on this application.

The Applicants recognize the unusual twist the FCC's shot clock imposes on processing a Type III Conditional Use Review in Oregon, and signed an extension to provide the City 60 additional days within which to process this application. With the first signed extension of the FCC shot clock, the City had until June 16, 2010 to render a final decision in this matter,

unless an additional extension was granted by the Applicants. *Because the Applicants requested cancellation of the March 22, 2010 hearing and a reschedule to April 21, 2010, Applicants signed a second FCC shot clock extension giving the City until August 20, 2010 to render a final decision.*

## II. ANALYSIS

**Site and Vicinity:** The Site is comprised of three tax lots; all three tax lots are in one ownership. The entire Site has the City of Portland CG zoning designation. The Site has frontage along SE Powell Boulevard. The specific tax lot involved with this proposal is 20,220 square feet in area and is developed with an 8,000 square-foot building. The specific tax lot and building are south of another portion of the Site, which is developed with a pizza restaurant. Immediately abutting to the east of the Leased Area are buildings associated with a business operating under the name East Side Van & Storage Company. The Old Pole and Associated Equipment were built in 1994 via building permit 1994 005937 CO. Under the zoning regulations in effect at that time, the facility was allowed by right because it was located in the CG zone and the Old Pole met the height limit of the zone.

Directly north of the Site, and across SE Powell Boulevard, are properties zoned CG and developed with allowed uses in the CG zone. This commercial zoning pattern runs approximately 100 feet deep along the north edge of SE Powell Boulevard; behind these properties are lots in both the R5 and R 2.5 zones, both of which are single-dwelling residential. Approximately 200 feet to the northeast of the Site are parcels in the CG zone with a short stretch of the 'b,' or Buffer overlay zone. This cluster of CG is located at the intersection of SE Powell Boulevard and SE Foster Road, and is developed with commercial buildings, a billboard, and a monopole ("T-Mobile Pole"), which was approved by the City in 1996 via case file number LUR 96-01112 CU. The T-Mobile Pole is nonconforming due to its location within the Buffer zone.

Note: An amendment to the Portland Zoning Code in November 1997 revised the Buffer overlay chapter to prohibit monopoles within the Buffer zone. However, the T-Mobile Pole was approved prior to this amendment and therefore, is considered a legal nonconforming use and development). City records indicate that the T-Mobile Pole is 100-feet high and hosts as many as four wireless facilities. The T-Mobile Pole is not a collocation opportunity due to the structural loads already affixed to it.

Abutting the Site on the west and south is a large sized property, zoned R5, and is developed with the Creston Elementary School and associated uses. Abutting the R5 zoned school property, along its westerly property line, is the City-owned Creston Park. The Creston Park property is zoned OS, Open Space. To the southeast of the Site are lots within the R5 zone.

**Zoning:** The Site is located in the General Commercial zone (CG). The CG zone is intended to allow auto-accommodating commercial development in areas already predominantly built in this manner and in most new commercial areas. The zone allows a full range of retail and service businesses with a local or regional market. Industrial uses are allowed, but are limited in size to

avoid adverse effects different in kind or amount than commercial uses, and to ensure that they do not dominate the character of the commercial area. Development is expected to be generally auto-accommodating, except where a CG property is adjacent to a transit street or in a Pedestrian District. The zone's development standards promote attractive development, an open and pleasant street appearance, and compatibility with adjacent residential areas. Development is intended to be aesthetically pleasing for motorists, transit users, pedestrians, and the businesses themselves.

The Creston-Kenilworth Neighborhood Association Land Use Chair ("C-K NA"), on behalf of C-K NA, indicated that the Association's goal was to redevelop the area in the vicinity of the Site as more neighborhood-oriented, pedestrian, bike and transit friendly. The C-K NA Land Use Chair stated that "sticking the proposed eyesore on this lot is one more obstacle to that goal." (Exhibit H-9). The Hearings Officer, in this quasi-judicial case, must apply the laws and rules in effect on the date the application was deemed complete. The Hearings Officer may not take into consideration goals that have not been formally adopted by City Council in rendering this decision. Therefore, the Hearings Officer did not consider the "goal" comments made by the C-K NA Land Use Chair in Exhibit H-9.

**Land Use History:** City records indicate there are no prior land use reviews for the Site. Case File LU 04-021795 CU is annotated as void/withdrawn. City records indicate that this application was determined not to be necessary to replace two antennas and increase the wattage, as the proposed antenna replacements are exempt from review per PCC 33.274.030 B. Two variances, VZ 001-64 and VZ 54-68 are recorded against the Site, but are not germane to the current proposal.

**Agency Review:** A "Request for Response" was mailed February 12, 2010. The following Bureaus have responded with no issues or concerns:

- Water Bureau
- Fire Bureau
- Bureau of Parks-Forestry Division
- Bureau of Environmental Services (BES)
- Life Safety Division of BDS notes that a building permit will be required.

Portland Bureau of Transportation (PBOT), Engineering section, responded that the proposed work is located well out of the public right-of-way. Additionally, there appears to be sufficient parking in the adjacent lot for service vehicles and access. No work or impact is proposed for the public right-of-way. PBOT has no objection to this proposal.

The Site Development Section of BDS responded with no objection to the proposed Conditional Use to install the New Pole, or to the proposed Adjustment to landscape requirements. At the time of building permit review, Site Development will require a geotechnical report and erosion control plan.

**Neighborhood Review:** A Notice of Proposal in Your Neighborhood was mailed on March 1, 2010. At time of publication of the staff report (Exhibit H-5), 11 letters or emails in opposition to the proposal were received from the C-K NA, notified property owners, and other interested persons in response to the proposal.

The following issues and concerns were raised by the public prior to the issuance of the BDS Staff Report (Exhibit H-5):

- The height and 'unsightly, ugly' appearance of the monopole and the concern that it is impossible to 'completely screen' the monopole; the davit arms are too long, the mounting is a 'top hat' and does not meet the criterion to be sleek or uncluttered.
- Concerns that cell towers 'are not supposed to be built near public spaces and the proximity of the site to Creston Elementary School, Creston Park and Creston Pool.
- Concerns that cell phone towers reduce real estate values of surrounding residential homes.
- Concerns regarding the growing evidence that supports the negative health effects of cell phone tower radiation, and particularly the effects on school-aged children.

Issues that related to relevant approval criteria were addressed by BDS staff in the staff report (Exhibit H-5).

At the public hearing the C-K NA Land Use Chair testified and submitted a written statement. (Exhibit H-9) In addition to the above-expressed concerns, the C-K NA Land Use Chair raised the following issues:

- Placement of the New Pole at the Site would frustrate long-term Association planning goals (see comments in the Zoning section above).
- Applicant AT&T did not consider utilizing the "Holgate House" roof.
- Financial hardships that may be suffered by Applicant AT&T should not be considered as persuasive arguments against locating antenna on street utility poles on Division, Holgate and/or 42<sup>nd</sup> Street.
- Applicant AT&T did not support its claim of "numerous" dropped calls.
- BDS' conclusion that "public benefits" outweighed impacts was not supported.

The Hearings Officer will address the C-K NA comments made at the hearing, where relevant to an approval criteria, in the findings below.

## **ZONING CODE APPROVAL CRITERIA**

### **PCC 33.815.225 Radio Frequency Transmission Facilities**

These approval criteria allow Radio Frequency Transmission Facilities in locations where there are few impacts on nearby properties. The approval criteria are:

**B. Approval criteria for facilities operating at 1,000 watts ERP or less, proposing to locate on a tower in an OS or R zone, or in a C, E, or I zone within 50 feet of an R zone:**

1. The applicants must prove that a tower is the only feasible way to provide the service, including documentation as to why the proposed facility cannot feasibly be located in a right-of-way;

**Findings:** The Site is located in the General Commercial zone and is within 50 feet of the R5 Residential zone, which abuts the Site along the west and south property lines. The Old Pole, built in 1994, comprises a Lease Area approximately 11 feet deep and approximately 80 feet in length, as shown on Exhibit C-2. The Old Pole is 45-feet tall located near the west Site property line and behind two large deciduous trees. The Associated Equipment shelter and related equipment cabinets are placed in a linear fashion to the east of the Old Pole, directly in front of a warehouse structure. The existing wireless facility is currently providing services to Applicant AT&T's customers.

The proposal is to place the New Pole, an 80-foot tall monopole, within the same Lease Area, but further east from the Old Pole (70 feet from the west property line). The New Pole will be placed further away from the R5 zoned land abutting to the west (Creston Elementary School) and the OS zoned City-owned Creston Park that is west of the school property. Based on the drawings submitted and aerial photographs available via the City's GIS mapping, it appears that the New Pole would be approximately 120 feet from the closest part of the school building, and 335 feet from the east property line of Creston Park.

During construction of the proposed New Pole, the antenna on the Old Pole will remain on the air until the New Pole is ready to receive a migration of the antennas. The migration is expected to occur during a low service period, most likely late at night, to minimize service disruption as much as possible. After the migration, Applicant AT&T proposes to remove the Old Pole; a requirement of PCC 33.274.040 C. 12.

Prior to addressing this approval criterion in the context of this specific application, the Hearings Officer finds it would be of assistance to the readers of this decision to provide some history related to the Site, and an overview of a federal law relevant to cell tower decisions. The Hearings Officer notes that many changes have taken place in the wireless industry and in the Portland Zoning Code since 1994, when the Site was first developed with the Old Pole. In 1994, the Old Pole was built for an entity called Cellular One, which provided cellular telephony services. This installation has since been acquired by AT&T. Two years later, Congress passed the 1996 Telecommunications Act ("96 Telecom Act") which removed a number of longstanding regulatory barriers to wireless and land-wire based telecommunications services. Along with multiple radio frequency spectrum auctions the 96 Telecom Act fostered explosive growth in new classifications of wireless services; including PCS (Personal Communication Services) and EMRS (Enhanced Mobile Radio Services) to compete directly with mobile cellular services.

Fourteen years later, wireless mobile handheld telephones have not only decreased significantly in size and weight, but the wireless services available to these devices goes well beyond voice communications. Data transmission, digital photography and video, email, Internet access, voice mail, voice communications and related applications are available from wireless service providers. Many of these newer services are marketed under the term 3G technology. Emerging services and higher transmission speeds are coming to market under the term 4G and or 'broadband' technologies. Each of these technologies require additional 'bandwidth' within a service provider's allocated broadcast frequencies, and thus wireless providers provide these services via a myriad of frequency ranges via their FCC license. As a result, many of the existing older wireless facilities have been steadily upgraded over the years as the specific service provider acquires more spectrum by which to provide these services. The upgrades include switching out old antennas for newer antennas capable of transmitting multiple signals simultaneously and/or adding additional, separate antennas and associated equipment cabinets to an existing facility. Each individual service provider configures and upgrades their facilities consistent with the radio frequency ranges they operate within and the specific technology they utilize for their services and products.

Since the passage of the 96 Telecom Act, the Portland Zoning Code provisions regulating wireless facilities have been amended five times to keep up with the changing technology, new FCC standards, and to work in concert with policies enacted by City Council allowing wireless facilities to be hosted on utility poles in the public right-of-way. Wireless telecommunication facilities installed in the right-of-way are encouraged by the City via a number of policies, including right-of-way franchise agreements and revisions to the Zoning Code itself. For example, approval criteria for Conditional Use reviews for wireless facilities mounted on new monopoles are now subject to the above criterion, which requires the Applicants to demonstrate why a new tower is the only feasible way to provide service, including documentation as to why the proposed facility cannot feasibly be located in a right-of-way.

One, of many, objectives of the City in allowing wireless facilities to be placed in the public right-of-way is to foster co-location of these facilities on existing or replacement structures in the right-of-way. Co-location of antennas minimizes the visual impact of wireless facilities by reducing the number of monopoles in the City, particularly in residential areas, that are necessary to provide wireless telecommunications service to the community. In adopting this policy, the Portland City Council made a conscious policy choice to try to take the pressure off of private property owners, residential neighborhoods, and the planning process by co-locating as many of these facilities in the public right-of-way as possible. This policy recognizes that the presence of wireless facilities co-located with other facilities in and of itself tends to reduce visual clutter and intrusiveness.

Further, it is important to note that the legislative/City Council comments included in the proposed amendments to Title 33 and associated approval criteria for new wireless/cell towers included the following statement:



“These amendments make the review criteria consistent with the changes recommended in 33.274, Radio Frequency Transmission Facilities. The changes in that chapter make Title 33 consistent with the City Council adopted Cable Office right-of-way franchise policy for wireless facilities and FCC regulations. An addition to the criterion requires documentation as to why the facility cannot be placed in the right-of-way. This is consistent with the City Council approved utilities franchise policy, which seeks to encourage RF facilities to be placed in the ROW whenever feasible. However, the range of reasons why a facility cannot be located in the right-of-way includes: pole height, location, and availability; the feasibility of placing the facility in the right-of-way; the lack of a signed agreement with the City; and the applicant’s business preferences for placement on private property.” (Exhibit G-7 contains the full commentary regarding this issue).

Additionally, this Hearings Officer determined in findings in Case File LU 05-119251 CU AD (HO 405020), that the definition for ‘feasible’ as applied to this criterion established the following as the most appropriate way to address this criterion:

“The Portland Zoning Code places the burden of proof upon the applicants to show that each and every one of the relevant approval criteria has been satisfied (Portland City Code 33.800.060). 33.815.225.B.1, the approval criteria being presently discussed, requires that substantial evidence be in the record that the proposed tower ‘is the only feasible way to provide the service...’ Portland City Code 33.700.070 D. states, in part, that ‘words used in the zoning code have their dictionary meaning unless they are listed in Chapter 33.910, Definitions.’ The word ‘feasible’ is not defined in 33.910. Feasible is defined in Webster’s New Collegiate Dictionary as ‘capable of being done or carried out’ and also as ‘reasonably likely.’ A synonym to feasible, which is defined in 33.910, is the word ‘practicable.’ The Code (33.910) defines practicable as ‘capable of being done after taking in to consideration cost, existing technology, and logistics in light of overall project purposes.’ For the purposes of the analysis of this approval criterion, the Hearings officer adopts the definition of ‘practicable’ as the working definition of ‘feasible.’”

The Hearings Officer finds that a United States Ninth Circuit Court of Appeals case is worthy of mention and review. *T-Mobile USA, Inc. v. City of Anacortes*, 572 F3d 987 (9<sup>th</sup> Cir 2009). The Hearings Officer acknowledges many courts have addressed the siting of wireless facilities. However, the Hearings Officer finds that the *T-Mobile* case is worthy of mention because it is a recent case decided by the Ninth Circuit Court and the decision sets forth a straightforward analytical approach in dealing with siting of wireless facilities.

The court in *T-Mobile*, initially, undertook a review of the 96 Telecom Act. The court in *T-Mobile* noted that the two primary purposes of the 96 Telecom Act were to (1) “promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers, and encourage the rapid deployment of new telecommunications technologies” 110 Stat. at 56, and (2) “to preserve the authority of State and local governments over zoning and land use matters except” in limited circumstances. On its

face these two federal legislative purposes appear to be contradictory; reduce regulation and maintain local authority over land use decisions. In the end, the *T-Mobile* court found that the 96 Telecom Act permits local jurisdictions to exercise their land use authority unless the exercise of that authority encroaches upon a specific 96 Telecom Act provision. In essence, the *T-Mobile* court decided that the 96 Telecom Act would act to preempt local land use regulations in limited instances.

The court, in *T-Mobile* stated that one such limited instance is “that local regulations ‘shall not prohibit or have the effect of prohibiting the provision of personal wireless services.’” *T-Mobile @ 992, Sprint Telephony PCS, L.P. v. County of Sand Diego*, 543 F3d 571 (9<sup>th</sup> Cir 2008).

The *T-Mobile* analytical approach is to allow a jurisdiction to establish approval criteria for the siting of wireless facilities. In this case, the approval criteria include PCC 33.815.225 B. and PCC 33.274.040 C. The court in *T-Mobile* specifically acknowledged that issues such as height, proximity to residential uses, the nature of nearby uses, topography and tree/foilage coverage, and aesthetics are legitimate concerns for a locality and may be considered in approval criteria for locating a wireless facility. *T-Mobile @ 994, Sprint @ 580* See also *Voice Stream PCS I, LLC v. City of Hillsboro*, 301 FSupp2d 1251, 1255 (D Or 2004).

The court in *T-Mobile* indicated that if a local jurisdiction determined that its approval criteria had not been satisfied (application denied) the court would then look to see if the 96 Telecom Act exception (does the denial have the effect of prohibiting the provision of personal wireless services) had been violated. The test to determine if a local government decision resulted in effectively denying wireless service is the “least intrusive means” test. The *T-Mobile* court stated “under the least intrusive means standard, the provider has the burden of showing the lack of available and technologically feasible alternatives.” *T-Mobile @ 995*.

The *T-Mobile* court held that a local jurisdiction would violate the 96 Telecom Act’s effective prohibition clause if the local decision (denial) prevented a wireless provider from closing a ‘significant gap’ in service coverage. *T-Mobile @ 995*. The court in *T-Mobile* described its analytical approach by saying that the appropriate analysis generally involves “(1) the showing of a ‘significant gap’ in service coverage, and (2) some inquiry into the alternative facilities or site locations.” *T-Mobile @ 995*. Ultimately, the court in *T-Mobile* requires a wireless service provider/applicant to “show that the manner in which it proposes to fill the significant gap in services is the least intrusive on the values that the denial sought to serve.” *T-Mobile @ 995*.

The *T-Mobile* court stated that a “significant gap” in service exists “whenever a provider is prevented from filling a significant gap in *its own* service coverage.” *T-Mobile @ 995, MetroPCS, inc. v. City of San Francisco*, 400 F3d 715, 733 (9<sup>th</sup> Cir 2005). The court in *T-Mobile* found that the wireless provider/applicant has the burden to show a lack of available and technologically feasible alternatives. *T-Mobile @ 993, MetroPCS @ 734*.

The essence of the *T-Mobile* decision is that local governments have the right to exercise their land use authority, so long as the exercise of that authority does not have the effect of prohibiting

the provision of telecommunications services (effectively prohibiting a provider from filling a gap in that provider's service). Restated, in this case, the *T-Mobile* decision directs the City of Portland to apply all relevant approval criteria, but if the approval criteria are not met, then the City must consider whether or not the recommended denial will effectively prohibit an applicant's ability to fill in a gap in *its* service coverage. The City is preempted from denying an application if the wireless applicant's right to fill in a gap in *its* service if the application represents the least intrusive means.

The Hearings Officer will consider, within the findings for this approval criterion, whether or not Applicant AT&T provided substantial evidence that the New Pole at the Site is the only feasible way to provide service; including whether Applicant AT&T provided substantial evidence why the proposed facility cannot be feasibly located in the public right-of-way. The Hearings Officer shall address the *T-Mobile* least intrusive means test at the end of this decision in a section titled "Discussion of the 96 Telecom Act & the Least Intrusive Means to Close Significant Gap."

Applicant AT&T, in its application (Exhibit A-1) and in a "Declaration of Prineet Pottmeyer" (Exhibit H-8 through H-8i – hereafter the "Declaration", attached), described the objectives underlying its request in this case. In summary, Applicant AT&T indicated that it had identified a significant gap in coverage in the vicinity of the Site. (Exhibit A-8, pages 2 -5). Applicant AT&T identified, through coverage propagation maps (Exhibits H-8a, H-8b, and H-8c) and summary of customer complaints (Exhibit H-8, page 3), specific area that Applicant AT&T's service gap exists. Applicant AT&T described its objectives in providing its wireless service; coverage, call handoff, interference and quality of service. (Exhibit H-8, pages 4 and 5). Applicant AT&T also described how it determined a "search ring" (area to be covered by a wireless site - Exhibit H-8, pages 5 and 6). Finally, Applicant AT&T described its attempts to locate a feasible location for its wireless operation that would service the "search ring." (Exhibit H-8, pages 6 – 8). Applicant AT&T, through its attorney (Richard Busch) and Ms. Pottmeyer (the author of the Declaration), reviewed Applicant AT&T's goals, the underlying reasons it believes a "service gap" exists, and its investigation of possible alternative locations for a wireless site to serve the "search ring."

The BDS staff representative (Ms. Cate) testified that Applicant AT&T had been provided a list of utility poles in the public right-of-way to be considered as possible alternative locations for the proposed wireless facility. (See Exhibit H-10). The BDS staff representative stated that Applicant AT&T was encouraged to seek a location on a utility pole in the public right-of-way. The BDS staff representative stated that she concluded the location of the Applicant AT&T's wireless facility on one or more utility poles was not feasible/practicable.

The C-K NA Land Use Chair (Ms. Korn) testified at the hearing and suggested that an alternative ("Holgate House") not referenced in the application materials (Exhibit A-1) or BDS staff report (Exhibit H-5) should be considered. The C-K Land Use Chair also testified that the City should not consider, as a relevant factor in the alternatives analysis, profit (or lack thereof) to the Applicant AT&T.

Ms. Pottmeyer, Applicant AT&T's radio frequency ("RF") engineer testified that locating a wireless facility at the Holgate House (SE 39<sup>th</sup>/SE Holgate) was not feasible. Ms. Pottmeyer stated that the height (above ground level) of the Old Pole is 218 feet and that Holgate House height is 165. She concluded that a facility of sufficient height could not be located at the Holgate House. Further, Ms. Pottmeyer stated that locating the wireless facility at the Holgate House would be "too close" to another Applicant AT&T wireless facility.

As stated in the legislative history of amendments to this approval criteria, the "range of reasons why a facility cannot be located in the right-of-way includes: pole height, location, availability; the feasibility of placing the facility in the right-of-way; the lack of a signed agreement with the City; and an applicant's business preferences for placement on private property." (Exhibit G-7). The Hearings Officer finds that the statements made in the Declaration, the testimony of the BDS staff representative, Applicant AT&T's attorney and Applicant AT&T's RF engineer are credible. The Hearings Officer finds that Applicant AT&T did consider the location of a wireless facility on utility poles in the search ring and that none of the poles would technologically and/or economically meet Applicant AT&T's service goals (the service gap would not be filled). The Hearings Officer finds that locating the proposed wireless facility at the Site is the only feasible way to provide service; fill in the service gap as identified in Exhibits H-8a, H-8b and H-8c.

Therefore, based on the evidence in the record, the Hearings Officer finds that that this approval criterion is met.

2. The tower, including mounting technique, must be sleek, clean, and uncluttered;

**Findings:** Applicant AT&T notes, in Exhibit A-4, that the proposal has been revised such that the proposed 12 antennas will be mounted in three sectors of four antennas each, supported by davit arms that are no greater than five feet in length, in order to comply with the development standard of PCC 33.274.040.D. 2.a. Given the number of antennas per sector and the stated RF engineering need for each antenna to be located such that the "rad center" or "radiation center" is at 74 feet, it does not appear feasible to the Hearings Officer to condition the proposed monopole mounting technique to be flush-mounted or contained within a unicell-style cylinder.

The Hearings Officer finds that requiring all of the antennas to be flush mounted to the pole would not only require a taller pole to provide enough surface area upon which to mount, but it would also result in differing heights of the antennas that work on line-of-sight with adjacent wireless facilities to achieve proper signal coverage and "hand off" of calls as a mobile customer travels through the area. Similarly the Hearings Officer finds, given the number of antennas proposed, enclosing all of them within an RF transparent fiberglass enclosure would result in a significant amount of bulk at the top of the New Pole, which would increase its visual impacts, not lessen them. The Hearings Officer finds that the proposed mounting technique is a compromise that ensures adequate signal coverage without utilizing an overly robust mounting structure.

The Hearings Officer finds this approval criterion is met.

3. The visual impact of the tower on the surrounding area must be minimized. This can be accomplished by one or more of the following methods:
  - a. Limiting the tower height as much as possible given the technical requirements for providing service and other factors such as whether the tower will provide co-location opportunities;
  - b. Planting trees around the tower as a way to soften its appearance. The variety and spacing of the trees will be determined based on the site characteristics, tower height, and other co-location factors;
  - c. Shielding the tower and antennas from view by enclosing or concealing them within another structure that has less visual impact.
  - d. Placing the tower away from land uses that are more sensitive to the visual impacts, such as adjoining residences or open spaces; or
  - e. Other methods that adequately minimize visual impact;

**Findings:** This criterion requires the Applicant AT&T to utilize at least one of the above methods to minimize the visual impact on the surrounding area. Applicant AT&T's narrative (Exhibit A-4), indicates that the proposed New Pole would be relocated further away from the abutting property to the west, which is developed with the Creston Elementary School. Applicant AT&T revised the initial proposal, submitted at the Pre-Application Conference, for the New Pole to be reduced in height from 100 feet to be 80 feet. The Hearings Officer finds that limiting the height of New Pole to 80 feet will achieve Applicant AT&T's desired signal coverage objectives. The Hearings Officer finds that this approval criterion satisfies PCC 33.815.225 B.3.d by locating the New Pole further away from the Creston School property (residentially zoned property). For these reasons, the Hearings Officer finds this approval criterion is met.

4. Accessory equipment associated with the facility must be adequately screened. If a new structure will be built to store the accessory equipment, the new structure must be designed to be compatible with the desired character of the surrounding area;

**Findings:** The existing Lease Area on the Site is enclosed by a security chain link fence that is in generally poor condition (Exhibit A-2). Applicant AT&T proposes to replace the chain link fence with a new chain link fence that has new cedar sight-obscuring slats. Because the Lease Area abuts the north façade of an existing building, the Accessory Equipment is not visible from the south from adjacent properties or public rights-of-way. Views of the Lease Area are obscured by an existing building on the Site, and located north of the pizza shop. Views from the west are partially blocked by trees and vegetation. Views from the east are blocked by another existing

building on the Site. Applicant AT&T does not propose to build a new structure to house the Accessory Equipment. Applicant AT&T proposes to remove the equipment shelter currently within the Lease Area.

Applicant AT&T is, however, requesting an Adjustment to landscaping requirements (PCC 33.274.040.C.9 a. 1. and 2.) which is addressed below in this decision. Part of this standard requires a fence that must be at least 6-feet in height and be totally sight-obscuring. Fences have various visual screening properties that are defined in PCC Chapter 33.248, *Landscaping and Screening*. Applicant AT&T proposes a new fence that will meet the F-1, Partially Sight-Obscuring fence standard (See Figure 33.248-1), but state no reason for providing a partial screen. Applicant AT&T does note that the Lease Area for the existing facility is long and narrow, and that there are concerns that access into the facility is better achieved by allowing the proposed new chain link fence to be "...rolled open in place, as opposed to lifting a fence segment and placing it on the property with the possibility of disrupting the routines of surrounding businesses" (Exhibit A-2).

BDS Staff noted (Exhibit H-5, page 9) that the Leased Area is paved and occupies a portion of vehicle maneuvering area on the Site. However, BDS staff opined that fence gate technology is sufficiently advanced to not require a technician visiting the facility for routine maintenance to lift a fence segment and place it on the property. As evidenced on the submitted site plans, and corroborated by a BDS Staff's Site inspection, there is sufficient room to not only install a fence that meets the F-2, Totally Sight Obscuring standard, but there is also sufficient room to provide an access gate into the Lease Area. BDS indicated that a gate can swing in or out of the Lease Area, or roll parallel to the Lease Area to provide access without impinging on vehicle movements elsewhere on the Site. For example, a gate located along the north fence line, but directly south of the 'existing lawn' called out on Exhibit C-1, would not obstruct vehicle movements. Other locations for a suitable gate access into the Lease Area exist and can be configured to prevent impacts to the operations of the adjacent businesses on site. For example, even a gate that swings out into the paved area that could potentially hinder automotive maneuvers could be closed immediately after the technician has entered the Lease Area, thus posing a potential disruption to adjacent businesses for a few minutes at most.

The Hearings Officer finds comments referenced in the preceding paragraph by BDS staff are credible. The Hearings Officer concludes that a condition of approval is warranted that is consistent with Oregon State land use law [ORS 197.522], which requires local jurisdictions to issue approvals unless the application cannot be made consistent with the Comprehensive Plan and land use regulations through *imposition of reasonable conditions of approval*.

With a condition of approval that the existing chain link fence is replaced by a cedar board-on-board fence or similar fence, that meets the F-2 standard, the Hearings Officer finds this approval criterion can be found to be met.

5. Public benefits of the use outweigh any impacts which cannot be mitigated; and

**Findings:** This approval criterion requires the Hearings Officer to determine what, if any, public benefits will arise from approval of this application and then to compare those public benefits to impacts which cannot be mitigated if the application is approved.

The Hearings Officer finds that the public benefits that flow from an approval of this application include enhanced wireless telecommunication services to the immediately surrounding area, as well as any subscribers to this service who are traveling through this area and expect uninterrupted service. Improved wireless service provides a benefit in terms of information transfer and economic development for subscribing members of the public. In addition, improved wireless telecommunications has benefits in terms of increased access to police, fire, and paramedic services for subscribing members of the public.

The primary impact that cannot be mitigated, if the application is approved, is the visual impact of an 80-foot monopole.

BDS staff, in the staff report (Exhibit H-5) stated the following:

“Wireless services [aka cellular telephony] first became available to the public in 1985. According to the Federal Communications Commission, based on the Thirteenth Report of the Wireless Telecommunications Bureau, the most recent report available, there were approximately 263 million mobile telephone subscribers as of December 2007. This translates into a nationwide penetration rate of approximately 86 percent. Approximately 14.5 percent of adults live in households with only wireless phones, and have no landline service in their residences. Further, it is estimated that more than half the calls made to 9-1-1 come from wireless telephones.

This explosive growth in the wireless telecommunications industry was fostered by the passage of the 1996 Telecommunications Act which sought to remove barriers to entry and promote competition in the market place among service providers so that the consumer has a choice amongst providers and costs when purchasing such services. The Thirteenth Report [Exhibit G-8 contains a partial excerpt of the full 278 page report] concludes that ‘...providers continued to build out their networks and expand service availability... and continued to deploy networks based on EV-DO Rev. A or WCDMA/HSDPA technologies that allow them to offer mobile internet access service for mobile telephone handsets, PDAs, and laptops at speeds comparable to what many users get from fixed broadband connections, such as DSL.’ The report notes that nearly 91 percent of the US population continues to live in counties with four or more mobile telephone operators competing to offer service. The report concludes that the [wireless telecommunications] marketplace is effectively competitive.

It is important to note that rapid deployment of advanced wireless services and related competition among service providers is cited in the FCC’s findings within their Declaratory Ruling [WT Docket No. 08-165] regarding unreasonable delays by local governments in reviewing wireless applications. The FCC notes that ‘the promotion of advanced services and competition that Congress deemed critical in the Telecommunications Act of 1996 and

more recently in the Recovery Act' is in the public interest in findings 35-37 to ensure that local governments process such applications in a timeframe deemed reasonable as defined by the FCC in the Declaratory Ruling. [Exhibit G-9 contains the full text of the Declaratory Ruling].

Staff does not suggest that the processing of this case is an unreasonable delay, in fact Applicants have signed an extension of the now mandated FCC 'shot clock' in order for the City of Portland to process this application within a timeframe comparable to the customary ORS mandated 120-day clock for land use reviews. Rather, BDS staff suggests that the requested increase in height for a monopole at an existing wireless facility in order to provide a less obstructed signal and accommodate technology upgrades in order to provide 3G, 4G and related services, falls well within the generally recognized category of public benefits of wireless services.

Therefore, BDS staff concludes that the public benefits of the proposal are considerable. Further, staff concludes that the impacts that cannot be mitigated are limited to the visual impact of a taller [80-foot] monopole than the existing 45-foot monopole within the Leased Area of this wireless facility. However, the visual impact has been minimized to the extent possible via screening and relocation of the taller proposed monopole further away from the R and OS zoned lands that lie to the west and south of the Site. Due to existing buildings on the Site, the proposed new location for the taller monopole should not have any significant visual impacts to residentially zoned and developed properties to the east."

The C-K NA Land Use Chair stated "I do not see the 'considerable' public benefits asserted in the staff report. I see minor improvements unlikely to substantially benefit residents in the surrounding neighborhood." (Exhibit H-9).

The Hearings Officer finds that the public benefits referenced in this approval criterion are not limited to benefits in the "surrounding neighborhood" (as referenced by the C-K NA Land Use Chair in the preceding paragraph). Rather, the Hearings Officer finds that the reference, in this approval criterion relate to the City in general. The Hearings Officer finds that by the Applicant AT&T's improving its service (filling in a service gap) the City of Portland is benefitted.

Weighing the public benefits arising from approval of the application against the visual impacts of an 80-foot monopole is, at best, subjective. City Council has provided no meaningful direction as to how to conduct the balancing test. The Hearings Officer finds, from the federal perspective as set forth in the 96 Telecom Act, the provision of high quality wireless telecommunications service is a significant public benefit. *T-Mobile @ 991*, 47 U.S.C. Section 253. The Hearings Officer finds that public benefits resulting from approval of this application include the improvement of wireless telecommunications services within the area to be served by the New Pole.

On the other side of this approval criteria comparison, the Hearings Officer finds that the visual impact of the New Pole will be felt primarily by nearby neighboring properties and



pedestrians/motorists using SE Powell Boulevard in close proximity to the Site. The Hearings Officer finds that the height of the New Pole cannot be completely mitigated by trees, fences and/or foliage.

The Hearings Officer finds that the public benefits are significant and the impacts that cannot be mitigated are less significant. The Hearings Officer finds that the public benefits of the use outweigh any impacts which cannot be mitigated. The Hearings Officer finds that this approval criterion is met.

6. The regulations of PCC Chapter 33.274, Radio Frequency Transmission Facilities are met.

**Findings:** The relevant regulations and standards for this proposal, as discussed below, are the development standards of PCC Chapter 33.274 - Radio Frequency Transmission Facilities. As discussed in detail under PCC 33.274.040, all applicable regulations are met; except for landscaping which the Applicants have requested an Adjustment to the standard. With approval of the Adjustment, as recommended below, this criterion can be found to be met.

## **DEVELOPMENT STANDARDS**

Unless specifically required in the approval criteria listed above, this proposal does not have to meet the development standards in order to be approved during this review process. The plans submitted for a building or zoning permit must demonstrate that all development standards of Title 33 can be met, or have received an Adjustment or Modification via a land use review prior to the approval of a building or zoning permit.

### **33.274.040 Development Standards**

#### **A. Purpose.** The development standards:

- Ensure that Radio Frequency Transmission Facilities will be compatible with adjacent uses;
- Reduce the visual impact of towers and accessory equipment in residential and open space zones whenever possible;
- Protect adjacent populated areas from excessive radio frequency emission levels; and
- Protect adjacent property from tower failure, falling ice, and other safety hazards.

#### **B. When standards apply.** Unless exempted by PCC 33.274.030 above, the development standards of this section apply to all Radio Frequency Transmission Facilities.

Applications to modify existing facilities regulated by this chapter are only required to meet the standards of Paragraphs C. 3, C.4, C.5, C.6, and C.9, below, in addition to any previous conditions of approval. Increasing the height of a tower is not considered modification of an existing facility.

### **C. General requirements**

1. Tower sharing. Where technically feasible, new facilities must co-locate on existing towers or other structures to avoid construction of new towers. Requests for a new tower must be accompanied by evidence that application was made to locate on existing towers or other structures, with no success; or that location on an existing tower or other structure is infeasible.

**Findings:** Applicant AT&T notes that an existing monopole ("T-Mobile Pole") is located approximately 550 feet to the northeast of the Site. However, Applicant AT&T also notes that the T-Mobile Pole already hosts four wireless providers and cannot structurally accommodate additional wireless facilities. (See also Exhibit H-8, page 7). City records, including a building permit check sheet in response to the last collocated facility on the T-Mobile Pole also indicates that with the fourth wireless facility, the T-Mobile Pole is at 98% of maximum structural loading. Existing buildings on the Site are not tall enough to provide the height Applicant AT&T RF engineering has determined is necessary to achieve signal coverage goals. (See Exhibit H-8). The Hearings Officer finds this standard is met.

2. Grouping of towers. The grouping of towers that support facilities operating at 1,000 watts ERP or more on a site is encouraged where technically feasible. However, tower grouping may not result in radio frequency emission levels exceeding the standards of this chapter.

**Findings:** The existing wireless facility does not operate at 1,000 watts ERP or more. Therefore, the Hearings Officer finds that this standard is not applicable.

3. Tower finish. For towers not regulated by the Oregon Aeronautics Division or Federal Aviation Administration, a finish (paint/surface) must be provided that reduces the visibility of the structure.

**Findings:** The proposed New Pole would be metallic gray in color. This tower finish is consistent with other monopoles throughout the City. A gray finish helps the structure blend into the background and not stand out by being a color that provides a sharp contrast to the surrounding built environment. Exhibit A-1 includes documentation that the New Pole does not require aviation painting of red and white to alert pilots to its presence, due to its height below the 200-foot threshold that requires this color scheme. The Hearings Officer finds this standard is met.

4. Tower illumination. Towers must not be illuminated except as required for the Oregon State Aeronautics Division or the Federal Aviation Administration.

**Findings:** The tower does not require FAA registration nor lighting. The Hearings Officer finds this standard is met.

5. Radio frequency emission levels. All existing and proposed Radio Frequency Transmission Facilities are prohibited from exceeding or causing other facilities to exceed the radio frequency emission standards specified in Table 274-1, except as superseded by Part 1, Practice and Procedure, Title 47 of the Code of Federal Regulations, Section 1.1310, Radio Frequency Radiation Exposure Limits.

Table 274-1: Radio Frequency Emission Standards [1]			
Frequency Range	Mean Squared Electric ( $E^2$ ) Field Strength ( $V^2/m^2$ ) [2]	Mean Squared Magnetic ( $H^2$ ) Field Strength ( $A^2/m^2$ ) [3]	Equivalent Plane-Wave Power Density ( $mW/cm^2$ ) [4]
100 KHz – 3 MHz	80,000	0.5	20
3 MHz – 30 MHz	4,000 ( $180/f^2$ ) [5]	0.025 ( $180/f^2$ )	$180/f^2$
30 MHz – 300 MHz	800	0.005	0.2
300 MHz – 1500 MHz	4,000 ( $f/1500$ )	0.025 ( $f/1500$ )	$f/1500$
1500 MHz – 300 GHz	4,000	0.025	1.0

Notes:

[1] All standards refer to root mean square (rms) measurements gathered by an approved method.

[2]  $V^2/m^2$  = Volts squared per meter squared.

[3]  $A^2/m^2$  = Amperes squared per meter squared.

[4]  $mW/cm^2$  = Milliwatts per centimeter squared.

[5]  $f$  = Frequency in megahertz (MHz).

**Findings:** The Applicants have submitted an NIER Compliance letter (Exhibit B within Exhibit A-1) that demonstrates compliance with all applicable FCC emission levels. In addition, the Applicants submitted an Engineering Certification (Exhibit H-7). The facility will operate at less than 50 watts within the frequency range of 850-900 MHz [cellular band] and at less than 50 watts within the frequency range of 1900 – 2100 MHz [PCS band]. The maximum emission level allowed for general population/uncontrolled exposure limits per the FCC's standards are  $0.58 mW/cm^2$  for the cellular band and  $1.0 mW/cm^2$  for the PCS band. Documentation has been submitted by an AT&T RF engineer that power density calculations for each sector of the facility are below  $0.0009 mW/cm^2$ , or less than 0.2% of the maximum allowed by the FCC for exposure to the general public. These estimates are based on the assumption that the closest a member of the general public can get to any of the antenna is 96 feet, which includes both the height above grade of the antenna as well as the distance from the base of the proposed monopole which would be located within a secure, fenced compound. The Hearings Officer finds this standard is met.

*Hearings Officer's Note:* The Federal Telecommunications Act of 1996 prohibits a local government from denying a request to construct such facilities based on "harmful radio frequency emissions" as long as the wireless telecommunications facility meets the standards set by the FCC. Furthermore, the Act required the FCC to adopt standards for radio frequency emissions from wireless telecommunications by August, 1996. In a rule-making procedure, the FCC adopted standards effective August 1, 1996, which are virtually the same as those reflected in Table 274-1. Because this land use review was submitted after those standards took effect, this conditional use review cannot be denied on the issue of 'harmful radio frequency emission levels.'

6. Antenna requirements.

- a. Generally. The antenna on any tower or support structure must meet the minimum siting distances to habitable areas of structures shown in Table 274-2. Measurements are made from points A and B on the antenna to the nearest habitable area of a structure normally occupied on a regular basis by someone other than the immediate family or employees of the owner/operator of the antenna. Point A is measured from the highest point of the antenna (not the tower) to the structure, and Point B is measured from the closest point of the antenna to the structure.
- b. Exceptions. The antenna on any tower or support structure does not have to meet the minimum siting distance from Point A to the habitable areas of structures shown in Table 274-2 if the applicant submits a letter from a qualified licensed engineer showing that the placement of the antennas will not cause any habitable area of a structure to exceed the Federal Communication Commission's (FCC's) limits for human exposure to radio frequency electromagnetic fields.

<b>Table 274-2</b> <b>Distance Between Antenna and Habitable Area of Structure</b> (Where f is frequency in megahertz.)			
Effective Radiated Power	Frequency (MHz)	Point A:	Point B:
		Minimum Distance From Highest Point of Antenna To Habitable Area of Structure (feet)	Minimum Distance From Closest Portion Of Antenna To Habitable Area of Structure (feet)
< 100 watts		10	3

100 watts to 999 watts		15	6
1,000 watts to 9,999 Kw	< 7	11	5
	7 - 30	f/0.67	f/1.5
	30 - 300	45	20
	300 - 1500	780/vf	364/vf
	> 1500	20	10
10 Kw plus	< 7	17.5	8
	7 - 30	f/0.4	f/0.91
	30 - 300	75	33
	300 - 1500	1300/vf	572/vf
	1500	34	15

**Findings:** Table 274-2 notes that when the effective radiated power [ERP] of a wireless facility is less than 100 watts, then the top of the antenna must be a minimum of 10 feet from a habitable area of a structure, and the bottom of the antenna must be a minimum of 3 feet from a habitable area of a structure. All antennas are proposed to be mounted with a 'rad center' located at approximately 74 feet. Each antenna is approximately 8 feet in length. Therefore, the antennas will exceed the required separation distances. The Hearings Officer finds this standard is met.

7. Setbacks. All towers must be set back at least a distance equal to 20 percent of the height of the tower or 15 feet, whichever is greater, from all abutting R and OS zoned property and public streets. Accessory equipment or structures must meet the base zone setback standards.

**Findings:** The minimum setback required for a monopole 80 feet in height is 16 feet, or 20% of the height. The proposed new location of the New Pole is approximately 70 feet from the west property line that abuts a residential ("R") zoned parcel. The New Pole location is approximately 154 feet from the south property line that also abuts an R zoned parcel. The New Pole is approximately 200 feet from the nearest R zoned lot to the east and is setback from SE Powell Boulevard approximately 100 feet. The setback requirements for the CG zone require buildings to be set back five feet from a side property line abutting an R zoned property. The accessory equipment is located more than 43 feet from the west property line. The Hearings Officer finds this standard is met.

8. Guy anchor setback. Tower guy anchors must meet the main building setback requirements of the base zone.

**Findings:** The New Pole does not utilize guy anchors. The Hearings Officer finds this standard is not applicable.

9. Landscaping and screening. The base of a tower and all accessory equipment or structures located at grade must be fully screened from the street and any abutting sites as follows:
  - a. In C, E or I zones more than 50 feet from an R zone. A tower and all accessory equipment or structures located in the C, E, or I zones more than 50 feet from an R zone must meet the following landscape standard:
    - (1) Generally. Except as provided in (2), below, a landscaped area that is at least five feet deep and meets the L3 standard must be provided around the base of a tower and all accessory equipment or structures.
    - (2) Exception. If the base of the tower and any accessory equipment or structures are screened by an existing building or fence, then some or all of the required landscaping may be relocated subject to all of the following standards.
      - The building or fence must be on the site;
      - The fence must be at least six feet in height and be totally sight-obscuring;
      - The relocated landscaping must meet the L2 standard. The relocated landscaping cannot substitute for any other landscaping required by this Title; and
      - If any part of the base of the tower or accessory equipment is not screened by a building or fence, 5 feet of L3 landscaping must be provided.
  - b. In OS or R zones or within 50 feet of an R zone. A tower and all accessory equipment or structures located in an OS or R zone or within 50 feet of an R zoned site must meet the following landscape standards:
    - (1) Tower landscaping. A landscaped area that is at least 15 feet deep and meets the L3 standard must be provided around the base of the tower.
    - (2) Accessory equipment and structures. A landscaped area that is at least ten feet deep and meets the L3 standard must be provided around the base of all accessory equipment or structures located at grade.
  - c. In all zones, equipment cabinets or shelters located on private property that are associated with Radio Transmission Facilities mounted in a right-of-way must be screened from the street and any adjacent properties by walls, fences or vegetation. Screening must comply with at least the L3 or F2 standards of PCC Chapter 33.248, Landscaping and Screening, and be tall enough to screen the equipment.

**Findings:** Applicants request an Adjustment to the applicable landscaping standard, which is found above. As discussed below in this decision, with an approval of the Adjustment request, this criterion can be found to be met.

10. Tower design.

- a. For a tower accommodating a Radio Frequency Transmission Facility of 100,000 watts or more, the tower must be designed to support at least two additional transmitter/antenna systems of equal or greater power to that proposed by the Applicants and one microwave facility, and at least three two-way antennas for every 40 feet of tower over 200 feet of height above ground.
- b. For any other tower, the design must accommodate at least three two-way antennas for every 40 feet of tower, or at least one two-way antenna for every 20 feet of tower and one microwave facility.
- c. The requirements of Subparagraphs a. and b. above may be modified by the City to provide the maximum number of compatible users within the radio frequency emission levels.

**Findings:** The intent of this standard is to ensure that when a new tower or monopole is constructed it is of sufficient height as to allow collocation opportunities for other facilities. As noted in Exhibit A-1, the tower is designed to accommodate the AT&T facility at the top of the pole, while another service provider can feasibly be located on the pole at the 50 to 65-foot level. The Hearings Officer finds this standard is met.

11. Mounting device. The device or structure used to mount facilities operating at 1,000 watts ERP or less to an existing building or other non-broadcast structure may not project more than 10 feet above the roof of the building or other non-broadcast structure.

**Findings:** The mounting device for the antennas would attach the antennas to the proposed monopole, not a building or other non-broadcast structure. Therefore, the Hearings Officer finds this standard is not applicable.

12. Abandoned facilities. A tower erected to support one or more Federal Communication Commission licensed Radio Frequency Transmission Facilities must be removed from a site if no facility on the tower has been in use for more than six months.

**Findings:** As described in Exhibit A-4, when the New Pole is constructed, all of the antennas on the Old Pole will migrate to the New Pole at a time that will minimize service disruption to

customers, generally during the nighttime hours of 10:00 PM to 3:00 AM. Once the equipment has migrated to the New Pole, the Old Pole will be considered unnecessary and must be removed from the Lease Area. In order to underscore this requirement, the Hearings Officer finds a condition of approval that final inspection for the New Pole must include verification that the Old Pole has been removed. Prior to calling for final inspection, but no later than 30 days after antenna migration, the abandoned Old Pole must be removed. With such a condition, the Hearings Officer finds this standard can be found to be met.

**D. Additional requirements in OS, R, C, and EX zones and EG and I zones within 50 feet of an R zone.**

1. Purpose. These additional regulations are intended to ensure that facilities operating at 1,000 watts ERP or less have few visual impacts. The requirements encourage facilities that look clean and uncluttered.

**Findings:** The existing facility and the proposed modification to the existing facility are located in a commercial zone and the facility is within 50 feet of an R zone. Therefore, the standards below are applicable.

2. Standards. In addition to the regulations in Subsection C., above, facilities operating at 1,000 watts ERP or less located in OS, R, C, or EX zones or EG or I zones within 50 feet of an R zone must meet all of the following standards:
  - a. Antennas mounted on towers. Triangular "top hat" style antenna mounts are prohibited. Antennas must be mounted to a tower either on davit arms that are no longer than five feet, flush with the tower, within a unicell style top cylinder, or other similar mounting technique that minimizes visual impact.
  - b. Antennas mounted on existing buildings or other non-broadcast structures. This standard only applies to facilities located in OS or R zones or within 50 feet of an R zone. The visual impact of antennas that are mounted to existing buildings or other non-broadcast structures must be minimized. For instance, on a pitched roof, an antenna may be hidden behind a false dormer, mounted flush to the facade of the building and painted to match; mounted on a structure designed with minimal bulk and painted to fade into the background; or mounted by other technique that equally minimizes the visual impact of the antenna. The specific technique will be determined by the Conditional Use review.
  - c. Lattice. Lattice towers are not allowed.

**Findings:** Antennas must be mounted to a tower either on davit arms that are no longer than five feet. Applicants propose such a mounting scheme. No 'top hat' style mounting device is



proposed. The antennas are not proposed to be mounted on a building or other non-broadcast structure. No lattice tower is proposed. The Hearings Officer finds these standards are met.

**PCC 33.805.010 Purpose (Adjustments)**

The regulations of the zoning code are designed to implement the goals and policies of the Comprehensive Plan. These regulations apply citywide, but because of the city's diversity, some sites are difficult to develop in compliance with the regulations. The adjustment review process provides a mechanism by which the regulations in the zoning code may be modified if the proposed development continues to meet the intended purpose of those regulations. Adjustments may also be used when strict application of the zoning code's regulations would preclude all use of a site. Adjustment reviews provide flexibility for unusual situations and allow for alternative ways to meet the purposes of the code, while allowing the zoning code to continue providing certainty and rapid processing for land use applications.

**33.805.040 Approval Criteria**

Adjustment requests will be approved if the review body finds that the applicant has shown that approval criteria A. through F. below have been met.

- A. Granting the adjustment will equally or better meet the purpose of the regulation to be modified; and

**Findings:** Applicants requests an Adjustment to the landscaping standard found at PCC 33.274.040 C 9 a 1 & 2. The purpose statement for all of the development standards applicable to wireless facilities are found at PCC 33.274.040 A, *Purpose*, which states:

**Purpose.** The development standards:

- Ensure that Radio Frequency Transmission Facilities will be compatible with adjacent uses;
- Reduce the visual impact of towers and accessory equipment in residential and open space zones whenever possible;
- Protect adjacent populated areas from excessive radio frequency emission levels; and
- Protect adjacent property from tower failure, falling ice, and other safety hazards.

The landscaping standards are intended to help *reduce* the visual impact of facilities to ensure they will be compatible with adjacent uses.

The landscaping per se, does nothing in terms of radio frequency emission levels, nor protection to adjacent properties from tower failure, falling ice, etc. The setback requirements and distance of antennas from habitable space, as well as documentation of emission level calculations from facilities address the last two bullet statements.

The Site is in a General Commercial zone, not a residential or Open Space zone. However, the large property that abuts the Site on the west and south is zoned R5 and is developed with an elementary school. A significant portion of the Site is paved and if landscaping was installed around the perimeter of the Lease Area, the landscaping would impact the number of parking spaces on the subject site. In addition, because the Site as a whole includes three tax lots, a portion of the required landscaping would be placed on the area developed with a pizza and sandwich shop, which is part of the Site due to 'ownership', but does not include any of the Lease Area.

This specific wireless facility and Lease Area is unusual in that it comprises an area approximately 80 feet by 11 feet. A more typical Lease Area is generally 16 x 20. The landscaping standards are bifurcated in that if any portion of a facility is within 50 feet of an R or OS zone, more landscaping is required than if the facility is more than 50 feet away. In addition, the regulations at PCC 33.274.040 C 9 state that ground equipment supporting antennas hosted in the public right-of-way are required to be fenced to the F2 standard, regardless of the base zone or proximity to other zones.

In this instance, the New Pole would be placed 70 feet away from any abutting R zone. When a facility is more than 50 feet away from an R zone, and other buildings and fences are present on a site to screen portions of the facility, then the exception at 9.a.[2] allows placement of landscaping elsewhere on the Site when the base of the tower and any accessory equipment or structures are screened by an existing building or fence. However, even after the facility is modified as proposed, with removal of an existing equipment shed, demolition of the Old Pole and erection of the New Pole, the electrical pull box and a portion of one equipment cabinet will be approximately 46 feet from the west property line.

Given these circumstances, Applicant AT&T proposes to install five arborvitae, 6-feet in height, along the west fence line to further buffer the at-grade equipment from the R5 parcel to the west. Two existing trees on the Site, located on the pizza and sandwich shop tax lot, are significantly tall and mature trees that provide a buffering canopy for the Old Pole. According to the Applicant AT&T, these trees have grown to the point that they are blocking some of the signal coverage from the current configuration. The Hearings Officer finds that these trees should be retained in order to utilize the existing visual buffering that they provide for the existing facility and the New Pole.

Given that the entire south side of the Lease Area is immediately abutting an existing metal warehouse building, there is no need for landscaping as views of the facility are completely screened by this warehouse. A good portion of the facility is screened from SE Powell Boulevard by the pizza and sandwich shop. Across the paved parking lot to the east, the large building for the trucking warehouse fully blocks views of the facility from the east. Two areas remain that allow views of the base of the New Pole from the street or from the adjacent property to the west. The proposed arbor vitae along the west fence line would provide screening from the school site. As discussed earlier in this decision, a solid cedar board on board fence meeting

the F2, totally sight-obscuring fence standard would provide screening from the remaining view angles from SE Powell Boulevard, which is approximately 100 feet to the north.

Given the configuration of the Lease Area and the modifications proposed, and considering that if the Applicants could replace a utility pole along the SE Powell Boulevard frontage with a tall enough pole to achieve the identified signal coverage objectives, so that only an F2 fence would be required, the Hearings Officer finds that the proposed landscaping will equally meet the intent of the regulation being adjusted. Therefore, with the previous condition discussed earlier in this decision requiring the Lease Area to be enclosed by a board-on-board cedar fence meeting the F2 standard, the Hearings Officer finds this criterion is met.

- B. If in a residential zone, the proposal will not significantly detract from the livability or appearance of the residential area, or if in an OS, C, E, or I zone, the proposal will be consistent with the classifications of the adjacent streets and the desired character of the area; and

**Findings:** The proposal is within the C zone. The proposal has no impact on the classification of SE Powell Boulevard, which is the closest adjacent street. The desired character of the General Commercial zone was described earlier in this decision under the analysis section. There are no special requirements or limitations for fences or fence materials in the CG zone. The proposed adjustment to landscaping, along with an F2 fence to fully sight-obscure the ground level equipment and the base of the New Pole, is consistent with the desired character of the CG zoned area in immediate proximity to the Site. The Hearings Officer finds this approval criterion is met.

- C. If more than one adjustment is being requested, the cumulative effect of the adjustments results in a project which is still consistent with the overall purpose of the zone; and

**Findings:** Only one adjustment is requested. The Hearings Officer finds this approval criterion is not applicable.

- D. City-designated scenic resources and historic resources are preserved; and

**Findings:** City designated resources are shown on the zoning map by the 's' overlay; historic resources are designated by a large dot, and by Historic and Conservation Districts. There are no such resources present on the site. Therefore, the Hearings Officer finds this approval criterion is not applicable.

- E. Any impacts resulting from the adjustment are mitigated to the extent practical; and

**Findings:** The Hearings Officer finds that there are no discernible impacts that would result from granting the requested adjustment. This criterion is met.

- F. If in an environmental zone, the proposal has as few significant detrimental environmental impacts on the resource and resource values as is practicable;

**Findings:** The site is not within an environmental zone. This criterion is not applicable.

#### **Discussion of the 96 Telecom Act & the Least Intrusive Means to Close Significant Gap**

The 96 Telecom Act permits a local jurisdiction, such as the City of Portland, to exercise its historic land use decision-making powers in determining whether or not to approve or deny a wireless provider's application for a cell tower. If the local jurisdiction's decision, based upon substantial evidence that its own approval criteria have not been met, denies a wireless provider's application for a cell tower, the 96 Telecom Act will preempt the local jurisdiction's denial if the denial has the effect of preventing the wireless provider to fill in a significant gap in *its* service.

It should be noted that the Hearings Officer found that all of the relevant approval criteria had been met in this case. However, the Hearings Officer acknowledges the findings for PCC 33.815.225 B.2 (tower, including mounting technique, must be sleek, clean and uncluttered) and PCC 33.815 B.5 (public benefits of the use outweigh any impacts which cannot be mitigated), involved the exercise of rather subjective judgment by the Hearings Officer and it is possible, upon an appeal of the Hearings Officer's decision, that the review body could exercise its subjective judgment to result in a contrary conclusion; thus, result in a denial, based upon the approval criteria, of the application. Considering such possibility, the Hearings Officer provides the following findings related to the 96 Telecom Act (U.S.C. Sections 253 and 332).

The Hearings Officer notes that 47 U.S.C. 253 (a), in relevant part, states that "no State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications services." Various court decisions have addressed this federal law provision and have devised a test, referred to in this decision as the "Least Intrusive Means to Close a Significant Gap" test to determine if a local jurisdiction's action (ie. denial of an application) has the effect of prohibiting the ability of a wireless provider/applicant to fill a service gap in *its* service. *T-Mobile @ 993, MetroPCS @ 731, Level 3 Comme'ns, L.L.C. v City of St. Louis*, 477 F3d 528 (8<sup>th</sup> Cir 2007).

The "Least Intrusive Means to Close a Significant Gap" test requires a wireless provider cell tower applicant to (1) show that a 'significant gap' in *its* service coverage does in fact exist and (2) show that the manner in which it proposes to fill the significant gap in *its* service, is the least intrusive on the values that the denial sought to serve. *T-Mobile @ 995*. If denial of this application were based upon PCC 33.815.225 B.2, a finding would be required that the wireless provider/applicants failed to demonstrate that the proposed cell tower appearance was "sleek, clean, and uncluttered." If denial of this application were based upon PCC 33.815.225 B.5 a finding would be required that the wireless provider/applicants failed to provide satisfactory evidence that the public benefits of the proposed project outweighed the impacts from the project

that could not be mitigated. In summary, the value that a denial of the application, on the basis of PCC 33.815.225 B.2 and/or B.5 sought to service would be visual appearance.

The Applicants, in this case, provided information regarding alternative designs for antenna and concluded that "enclosing" the antenna would require an even taller cell tower pole. The Hearings Officer found, in a very subjective analysis, that the public benefits of the proposed New Pole outweighed the impacts (visual appearance of the tall pole).

The Hearings Officer found, in the findings for PCC 33.815.225 B.1., that a significant service gap in Applicants' service did exist. (See Exhibits H-8a through H-8i). The Hearings Officer found, in the findings for PCC 33.815.225 B.1, that the Applicants conducted an intensive investigation of alternative locations and, for valid reasons, concluded that the New Pole at the Site alternative was the only feasible/practicable location that would fill in *its* service gap. The Hearings Officer found that Applicants did investigate alternative heights of the New Pole and also investigated alternative means of attaching and/or positioning antenna. The Hearings Officer found that the proposed New Pole was the only feasible/practicable alternative; it was the least intrusive means to fill in Applicants' service gaps.

The Hearings Officer finds, in this case, that Applicants have provided substantial evidence that it conducted an alternatives analysis and the result of such analysis was that the New Pole at the Site represented the least intrusive means to fill in *its* service gap in the vicinity of the Site. The Hearings Officer finds that if a body reviewing this case upon appeal finds that any of the relevant approval criteria are not met and that denial of the application, based upon Portland City Code provisions, is warranted such denial would violate the 96 Telecom Act. The Hearings Officer finds, based upon the facts of this case, Applicants have carried its burden to demonstrate that the New Pole at the Site is the least intrusive means to fill in *its* identified service gap.

### III. CONCLUSIONS

There is an existing wireless facility at the Site, consisting of the Old Pole, and Associated Equipment located at grade behind a fenced enclosure. Applicant AT&T, proposes to install an the New Pole within the Leased Area, approximately 30 feet to the east of the existing, Old Pole, and then migrate all antennas to the New Pole. The enclosure fence will be upgraded to a cedar board-on-board fence.

Because of the existing conditions of the Site and Leased Area [extensively paved] Applicant AT&T proposes to place the required landscaping along the south and north sides of the Lease Area (25 x 5 feet) and place it along the west end of Leased Area and the east property line extending southward, to provide additional buffering to the residentially zoned property to the west. In order to propose this specific landscaping configuration, an Adjustment is required.

Applicant AT&T identified a gap in its wireless telecommunications service. Applicant AT&T provided an analysis of alternative locations, including on utility poles in the public right of way, on the top of buildings, on other cell tower poles and concluded that the only feasible/practicable

alternative was to build a new cell tower/pole at the Site. Applicant AT&T provided evidence that the proposed height of the new cell tower/pole was the lowest that would allow its service gap to be filled.

The Hearings Officer, upon reviewing all evidence in the record, concluded that all of the relevant approval criteria had been met (with conditions). The Hearings Officer reviewed the 96 Telecom Act and found that the City of Portland was authorized to conduct this review and apply its approval criteria. The Hearings Officer also found that the 96 Telecom Act preempted the City of Portland's ability to deny this application if the denial resulted in an effective prohibition of the Applicants to fill in a service gap in *its* own wireless service.

#### IV. DECISION

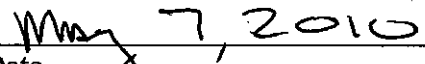
Approval of:

- A Conditional Use to replace an existing 45-foot tall monopole with an 80-foot monopole, and associated equipment modifications and upgrades within an existing lease area; and
- An Adjustment to 33.274.040 C 9 a 1 & 2, to allow alternative landscaping installed on the site

subject to the following conditions:

- A. As part of the building permit application submittal, the following development-related conditions (B through C) must be noted on each of the four required site plans or included as a sheet in the numbered set of plans. The sheet on which this information appears must be labeled "ZONING COMPLIANCE PAGE - Case File LU 09-149439 CU AD." All requirements must be graphically represented on the site plan, landscape, or other required plan and must be labeled "REQUIRED."
- B. The existing chain link fence must be replaced by a cedar board-on-board fence or similar, that meets the F-2 standard.
- C. Final inspection for the facility must include verification that the old monopole has been removed. Prior to calling of final inspection, but no later than 30 days after antenna migration, the abandoned 45-foot monopole must be removed.

  
Gregory J. Frank, Hearings Officer

  
Date

<b>Application Determined Complete:</b>	January 27, 2010
<b>Report to Hearings Officer:</b>	April 9, 2010
<b>Decision Mailed:</b>	May 7, 2010
<b>Last Date to Appeal:</b>	4:30 p.m., May 21, 2010
<b>Effective Date (if no appeal):</b>	May 24, 2010 Decision may be recorded on this date.

**Conditions of Approval.** This project may be subject to a number of specific conditions, listed above. Compliance with the applicable conditions of approval must be documented in all related permit applications. Plans and drawings submitted during the permitting process must illustrate how applicable conditions of approval are met. Any project elements that are specifically required by conditions of approval must be shown on the plans, and labeled as such.

These conditions of approval run with the land, unless modified by future land use reviews. As used in the conditions, the term "Applicant" includes the Applicants for this land use review, any person undertaking development pursuant to this land use review, the proprietor of the use or development approved by this land use review, and the current owner and future owners of the property subject to this land use review.

**Appeal of the decision.** ANY APPEAL OF THE HEARINGS OFFICER'S DECISION MUST BE FILED AT 1900 SW 4<sup>TH</sup> AVENUE, PORTLAND, OR 97201 (823-7526. Until 3:00 p.m., Tuesday through Friday, file the appeal at the Development Services Center on the first floor. Between 3:00 p.m. and 4:30 p.m., and on Mondays, the appeal must be submitted at the Reception Desk on the 5th Floor. **An appeal fee of \$8,136.50 will be charged (one-half of the application fee for this case).** Information and assistance in filing an appeal can be obtained from the Bureau of Development Services at the Development Services Center.

**Who can appeal:** You may appeal the decision only if you wrote a letter which is received before the close of the record on hearing or if you testified at the hearing, or if you are the property owner or applicants. If you or anyone else appeals the decision of the Hearings Officer, only evidence previously presented to the Hearings Officer will be considered by the City Council.

**Appeal Fee Waivers:** Neighborhood associations recognized by the Office of Neighborhood Involvement may qualify for a waiver of the appeal fee provided that the association has standing to appeal. The appeal must contain the signature of the Chairperson or other person authorized by the association, confirming the vote to appeal was done in accordance with the organization's bylaws.

Neighborhood associations, who wish to qualify for a fee waiver, must complete the Type III Appeal Fee Waiver Request for Organizations Form and submit it prior to the appeal deadline. The Type III Appeal Fee Waiver Request for Organizations Form contains instructions on how to apply for a fee waiver, including the required vote to appeal.

BDS may also grant fee waivers to low income applicants appealing a land use decision on their primary residence that they own in whole or in part. In addition, an appeal fee may be waived for a low-income individual if the individual resides within the required notification area for the review, and the individual has resided at that address for at least 60 days. Individuals requesting fee waivers must submit documentation certifying their annual gross income and household size (copies of tax returns or documentation of public assistance is acceptable). Fee waivers for low-income individuals must be approved prior to filing your appeal; please allow three working days for fee waiver approval.

**Recording the final decision.**

If this Land Use Review is approved the final decision must be recorded with the Multnomah County Recorder. A few days prior to the last day to appeal, the City will mail instructions to the Applicants for recording the documents associated with their final land use decision. A building or zoning permit will be issued only after the final decision is recorded.

The Applicants, builder, or a representative may record the final decision as follows:

- **By Mail:** Send the two recording sheets (sent in separate mailing) and the final Land Use Review decision with a check made payable to the Multnomah County Recorder to: Multnomah County Recorder, P.O. Box 5007, Portland OR 97208. The recording fee is identified on the recording sheet. Please include a self-addressed, stamped envelope.
- **In Person:** Bring the two recording sheets (sent in separate mailing) and the final Land Use Review decision with a check made payable to the Multnomah County Recorder to the County Recorder's office located at 501 SE Hawthorne Boulevard, #158, Portland OR 97214. The recording fee is identified on the recording sheet.

For further information on recording, please call the County Recorder at 503-988-3034.

For further information on your recording documents, please call the Bureau of Development Services Land Use Services Division at 503-823-0625.

**Expiration of this approval.** An approval expires three years from the date the final decision is rendered unless a building permit has been issued, or the approved activity has begun.

Where a site has received approval for multiple developments, and a building permit is not issued for all of the approved development within three years of the date of the final decision, a new land use review will be required before a permit will be issued for the remaining development, subject to the Zoning Code in effect at that time.

Zone Change and Comprehensive Plan Map Amendment approvals do not expire.



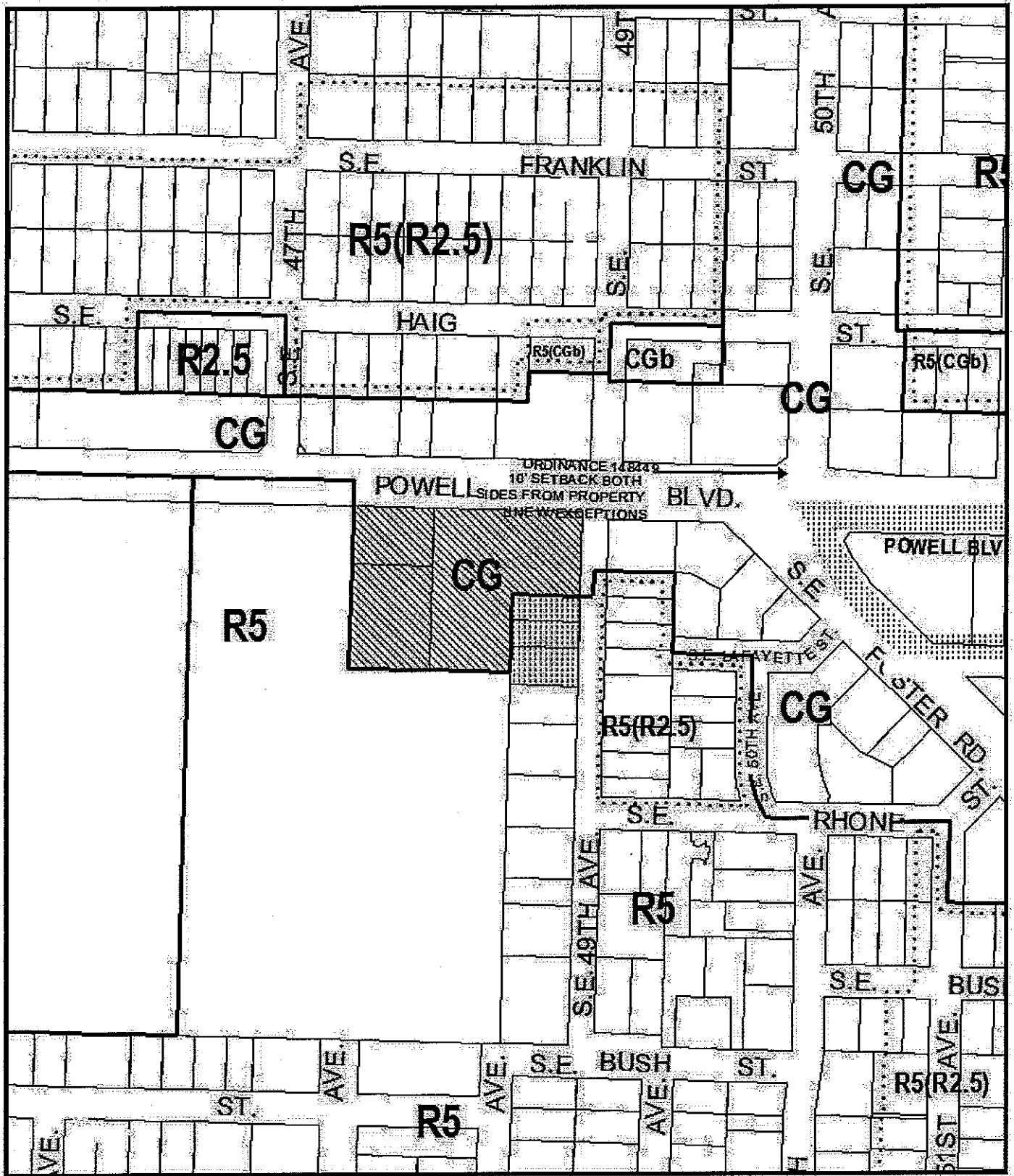
**Applying for your permits.** A building permit, occupancy permit, or development permit may be required before carrying out an approved project. At the time they apply for a permit, permittees must demonstrate compliance with:

- All conditions imposed herein;
- All applicable development standards, unless specifically exempted as part of this land use review;
- All requirements of the building code; and
- All provisions of the Municipal Code of the City of Portland, and all other applicable ordinances, provisions and regulations of the City.

**EXHIBITS**  
**NOT ATTACHED UNLESS INDICATED**

- A. Applicants' Statement
  - 1. Project Narrative [includes emission calculations and propagation maps]
  - 2. Adjustment to Landscaping Narrative
  - 3. Extension of FCC shot clock
  - 4. Additional narrative addressing approval criteria
  - 5. Site Utility Plans
  - 6. Second Extension of the FCC shot clock
- B. Zoning Map (**attached**)
- C. Plans & Drawings (**attached**)
  - 1. Proposed Site Plan (**attached**)
  - 2. Existing Site Plan (**attached**)
  - 3. North and East Elevations (**attached**)
  - 4. Landscaping Plan (**attached**)
- D. Notification information
  - 1. Request for response
  - 2. Posting letter sent to Applicants
  - 3. Notice to be posted
  - 4. Applicants' statement certifying posting
  - 5. Mailing list
  - 6. Mailed notice
  - 7. Second Posting Letter [for rescheduled hearing date]
  - 8. Second Mailed Notice [for rescheduled hearing date]
  - 9. Second Mailing List [for rescheduled hearing date]
- E. Agency Responses
  - 1. Bureau of Environmental Services
  - 2. Bureau of Transportation Engineering and Development Review
  - 3. Water Bureau
  - 4. Fire Bureau
  - 5. Site Development Review Section of Bureau of Development Services
  - 6. Bureau of Parks, Forestry Division
  - 7. Life Safety/Plans Examiner Section of Bureau of Development Services
- F. Letters
  - 1. Kate Glahn, Email March 1, 2010, strong concerns and opposition
  - 2. Nellie Korn, Email March 3, 2010, requesting additional information and questions regarding the proposal
  - 3. Hope Red, Email March 4, 2010; in opposition
  - 4. Dara Westling, Email March 4, 2010; in opposition
  - 5. Kerry Pinney; Email, March 4, 2010; in opposition
  - 6. M. Shawn Jaquiss; Letter March 4, 2010; in opposition
  - 7. Melissa Sheets, Email, March 4, 2010; in opposition

8. Terry and Vicki Hsu, Email March 4, 2010; in opposition
  9. Kate Glahn; Email with attachments, March 5, 2010; in opposition
  10. Mary Kelly; Email, March 5, 2010; in opposition
  11. Jessica Bell E mail March 4, 2010; in opposition
- G. Other
- 1A. Original LUR Application
  - 1B. Concurrent Adjustment application
  1. Site History Research
  3. Letter to Applicants: Incomplete application
  4. Pre Application Conference Summary Notes
  5. Memo to Hearings Officer February 8, 2010; Re: FCC Shot Clock
  6. Memo to Hearings Officer March 16, 2010; Re: FCC Shot Clock
  7. Memo to City Council May 19, 2004 Re: Legislative Intent of new criteria
  8. Executive Summary: Thirteenth Report of Wireless Telecommunication Bureau to FCC, adopted Jan 15, 2009
  9. Full Text FCC Declaratory Ruling WT Docket No. 08-165; November 18, 2009
- H. Received in the Hearings Office
1. 2/8/10 Memo with attachment - Cate, Sylvia
    - a. Request for Extension of Review Period as mandated by FCC Declaratory Ruling: WT Docket No. 08-165 - Cate, Sylvia
  2. Hearing Notice - Cate, Sylvia
  3. Request to reschedule - Cate, Sylvia
    - a. Request for extension - Cate, Sylvia
    - b. Memo to Hearings Officer from Cate - Cate, Sylvia
  4. Hearing Notice - Cate, Sylvia
  5. Staff Report - Cate, Sylvia
  6. PowerPoint presentation printout - Cate, Sylvia
  7. 4/14/10 Engineering Certification - Busch, Richard
  8. Declaration of Princeet Pottmeyer with attachments - Busch, Richard (**attached**)
    - a. ATOLL Signal Strength - Busch, Richard (**attached**)
    - b. ATOLL Signal Strength - Busch, Richard (**attached**)
    - c. Difference in Signal Strength - Busch, Richard (**attached**)
    - d. Customer Complaints - Busch, Richard (**attached**)
    - e. Map - Busch, Richard (**attached**)
    - f. ATOLL Signal Strength - Busch, Richard (**attached**)
    - g. ATOLL Signal Strength - Busch, Richard (**attached**)
    - h. ATOLL Signal Strength - Busch, Richard (**attached**)
    - i. ATOLL Signal Strength - Busch, Richard (**attached**)
  9. Testimony - Korn, Nellie
  10. E-mail re: Utility pole heights near SE Powell & 49<sup>th</sup> - Soloos, David



# ZONING



NORTH

File No. LU 09-149439 CU AD  
 1/4 Section 3435  
 Scale 1 inch = 200 feet  
 State Id 1S2E07CA 9900  
 Exhibit B (Mar 25, 2010)

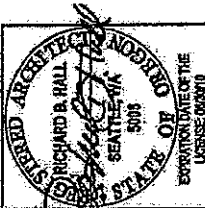


There is no special  
major gift of 2004

**INTEL**

PACIFIC TELECOM SERVICES

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FOSTER & POWELL

421d

1836 SE POWELL BLVD  
PORTLAND, OR 97206

[illegible]

**SHEET TITLE**  
**PROPOSED SILL PLAN**

**SHEET NUMBER**

2

## ZONING PLAN KEYED NOTES

- [illegible]

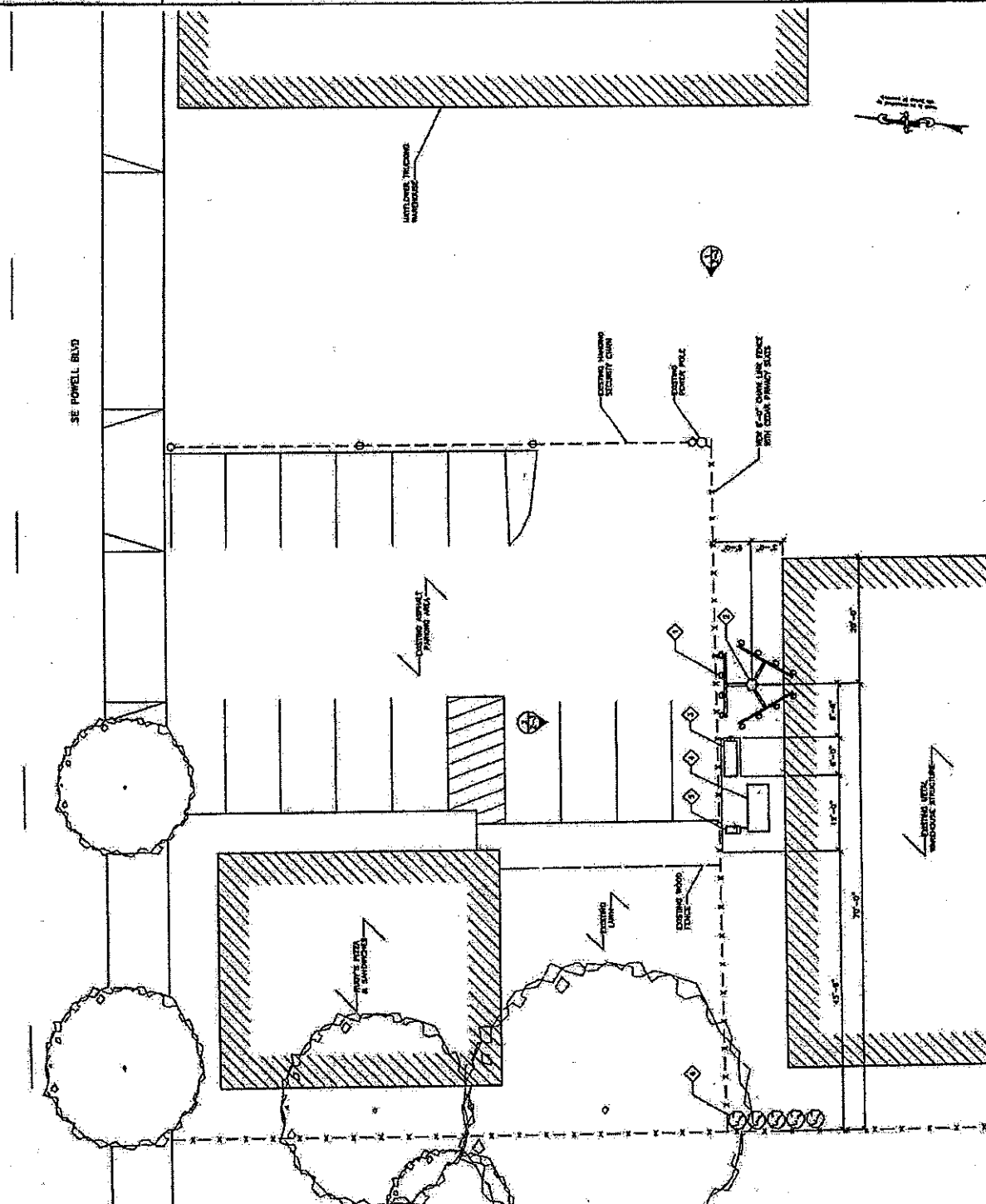


EXHIBIT C-1

# PROPOSED SITE PLAN

1531 DATE 1/6-1-66  
1532 BY 117 ESD 1/6-1-66  
1533 FOR ADMINISTRATIVE PURPOSES IS NECESSARY, IT WOULD NOT BE AN ENCLOSURE OTHER THAN TWO WHICH RELATES TO CAREER SERVICES & FORMLY MONROE.



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**SEAL**  
RICHARD B. HALL  
STATE OF  
WASHINGTON  
EXPIRATION DATE OF THE  
LICENSE 06/30/10

**FOSTER & POWELL**  
PR 74  
1435 SE POWELL BLVD  
PORTLAND, OR 97206

**REVISIONS**

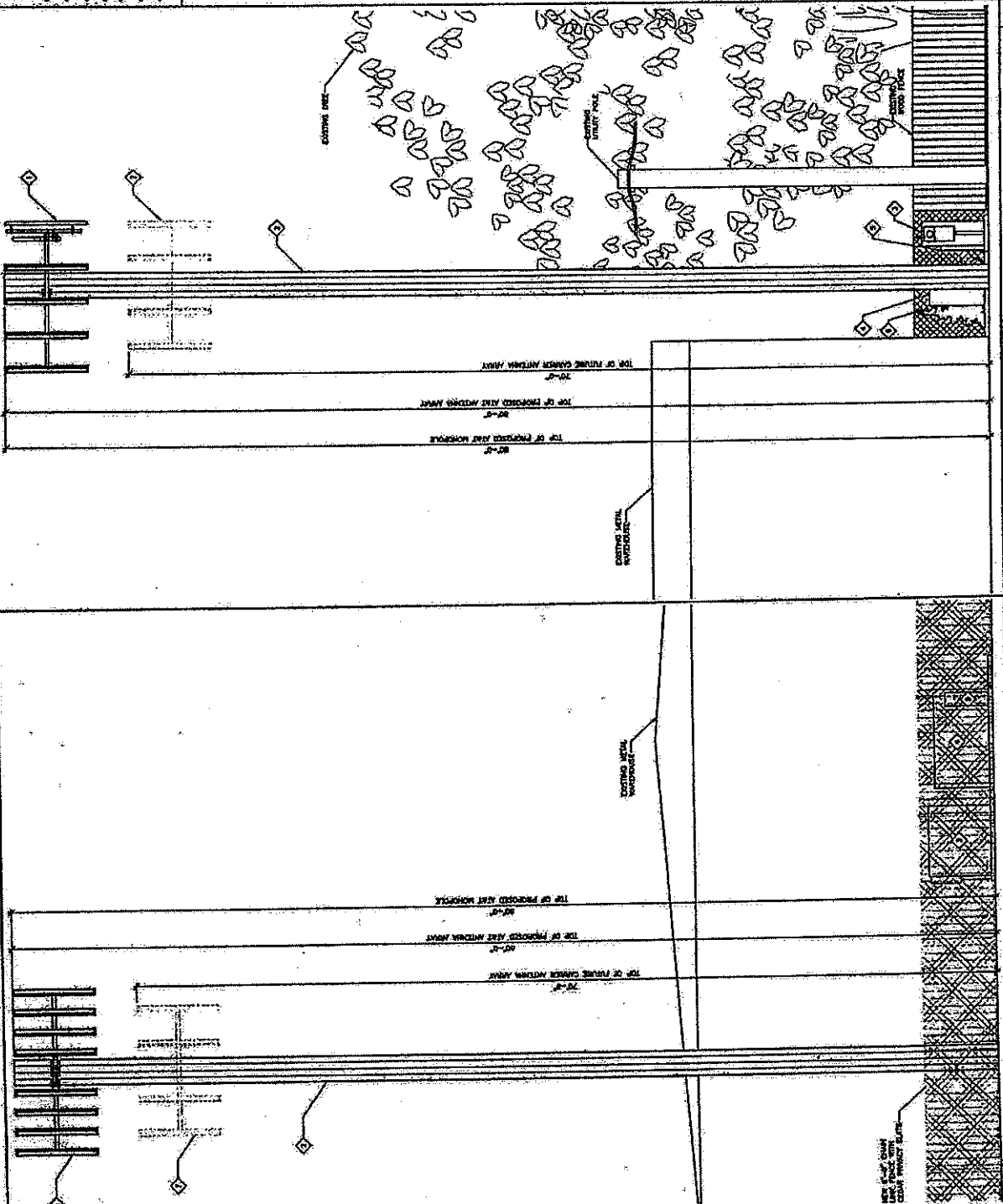
NO.	DATE	DESCRIPTION
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2	11/17/07	REVISIONS TO PERMITS
3	11/17/07	REVISIONS TO PERMITS
4	11/17/07	REVISIONS TO PERMITS
5	11/17/07	REVISIONS TO PERMITS
6	11/17/07	REVISIONS TO PERMITS
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20	11/17/07	REVISIONS TO PERMITS

**SHEET TITLE**  
NOTES & PERMITS

**SHEET NUMBER**  
73

- ZONING PLAN KEYED NOTES**
- 1. EXISTING AND PROPOSED ANTENNA HEIGHTS SHOWN WITH (X)
  - 2. EXISTING AND PROPOSED ANTENNA TYPES
  - 3. EXISTING AND PROPOSED ANTENNA LOCATIONS
  - 4. EXISTING AND PROPOSED ANTENNA SUPPORTS
  - 5. EXISTING AND PROPOSED ANTENNA FOUNDATIONS
  - 6. EXISTING AND PROPOSED ANTENNA ELECTRICAL
  - 7. EXISTING AND PROPOSED ANTENNA CABLES
  - 8. EXISTING AND PROPOSED ANTENNA ACCESS
  - 9. EXISTING AND PROPOSED ANTENNA MAINTENANCE
  - 10. EXISTING AND PROPOSED ANTENNA SAFETY
  - 11. EXISTING AND PROPOSED ANTENNA AESTHETICS
  - 12. EXISTING AND PROPOSED ANTENNA ENVIRONMENT
  - 13. EXISTING AND PROPOSED ANTENNA COMMUNITY
  - 14. EXISTING AND PROPOSED ANTENNA HISTORY
  - 15. EXISTING AND PROPOSED ANTENNA FUTURE

**EXHIBIT C-3**



**EAST ELEVATION**

**NOTR ELEVATION 2**

**SCALE** 1/4" = 1'-0"

**DATE** 11/17/07

**BY** R.B.H.

**CHECKED** R.B.H.

**APPROVED** R.B.H.

**NOTES**

1. EXISTING AND PROPOSED ANTENNA HEIGHTS SHOWN WITH (X)

2. EXISTING AND PROPOSED ANTENNA TYPES

3. EXISTING AND PROPOSED ANTENNA LOCATIONS

4. EXISTING AND PROPOSED ANTENNA SUPPORTS

5. EXISTING AND PROPOSED ANTENNA FOUNDATIONS

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10. EXISTING AND PROPOSED ANTENNA SAFETY

11. EXISTING AND PROPOSED ANTENNA AESTHETICS

12. EXISTING AND PROPOSED ANTENNA ENVIRONMENT

13. EXISTING AND PROPOSED ANTENNA COMMUNITY

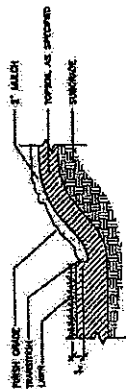
14. EXISTING AND PROPOSED ANTENNA HISTORY

15. EXISTING AND PROPOSED ANTENNA FUTURE

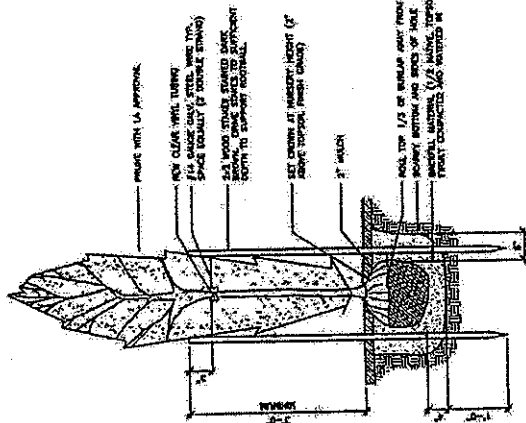
# PLANTING SCHEDULE:

SQA	BOTANICAL / COMMON NAME	QTY	SIZE	REMARKS
	PALE PACIFIC YEW / TAXUS PACIFIC	5	6'-8" DBH	VAR. 4-5' DBH

- NOTES:  
1. PLANTING SCHEDULE IS TO BE DETERMINED BY EXISTING CONDITIONS.  
2. ALL PLANTING SHALL BE TO EXISTING CONDITIONS UNLESS OTHERWISE NOTED.



BED EDGE DETAIL 3



TREE DETAIL 2

CONSTRUCTION DOCUMENTS IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY OF MCM. ANY USE OR REPRODUCTION OF ANY PART OF THESE DOCUMENTS WITHOUT THE WRITTEN PERMISSION OF MCM IS STRICTLY PROHIBITED.

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Fax: (206) 464-1110

**SEAL**  
SEALING ARCHITECTS  
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Phone: (206) 464-1100  
Fax: (206) 464-1110

**FOSTER & POWELL**  
PR74  
4035 SE POWELL BLVD  
PORTLAND, OR 97206

NO.	DATE	REVISIONS
1	10/1/00	ISSUED FOR CONSTRUCTION SET
2	10/1/00	ISSUED FOR CONSTRUCTION SET
3	10/1/00	ISSUED FOR CONSTRUCTION SET
4	10/1/00	ISSUED FOR CONSTRUCTION SET
5	10/1/00	ISSUED FOR CONSTRUCTION SET
6	10/1/00	ISSUED FOR CONSTRUCTION SET
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19	10/1/00	ISSUED FOR CONSTRUCTION SET
20	10/1/00	ISSUED FOR CONSTRUCTION SET

SHEET TITLE	LANDSCAPING PLAN
SHEET NUMBER	L-1

LANDSCAPING PLAN 1

EXHIBIT C-4



BEFORE THE HEARINGS OFFICER OF THE CITY OF PORTLAND

APPLICATION OF AT&T MOBILITY AND  
KEITH ASHCROFT, EASTSIDE VAN AND  
STORAGE CO.

FILE NUMBERS:

LU 09-149439 CU AD  
PC # 09-132077

DECLARATION OF PRINEET POTTMEYER  
Radio Frequency Performance Engineer  
New Cingular Wireless PCS, LLC

1 The following comments are provided in support of New Cingular Wireless' ("AT&T") Application to  
2 install a replacement wireless communications tower, 80' in height, at 4836 SE Powell Blvd., Portland.  
3 My comments are divided into the following sections:

- 4 1. Qualifications as Radio Frequency Engineering Expert
- 5 2. Significant Gap in AT&T's Service Area
- 6 3. Coverage Objectives
- 7 4. Determination of Search Rings
- 8 5. Feasibility of Alternate Sites
- 9 6. Antenna Design

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10 1. QUALIFICATIONS AS RADIO FREQUENCY ENGINEERING EXPERT

11 My name is Prineet Pottmeyer. I am currently employed by AT&T as a Radio frequency  
12 Performance Engineer in Portland, Oregon. I have been in this position for 10 years. Prior to my  
13 current position with AT&T, I was a Radio Frequency Engineer for AT&T Wireless in Chicago, Illinois  
14 from 1996 to 1999. I have special training and experience in the design and management of radio  
15 frequency spectrum for wireless communications networks like AT&T's Personal Communications  
16 Service network in Portland. I have almost 14 years experience in radio frequency engineering and  
17 wireless communications radio frequency network design, including the design of new wireless  
18 communications sites for new networks as well as sites to fill in coverage for existing networks.

1 My current responsibilities at AT&T include the supervision and oversight of more than 100  
2 wireless communications sites in AT&T's Oregon market. In my prior positions, my responsibilities  
3 included RF design and performance of wireless networks in Chicago, Illinois.

4 My formal professional education includes:

<u>Education</u>	<u>Institution</u>	<u>Dates</u>
Bachelor of Science in Electrical Engineering	Seattle University	1996

5 I have testified as an expert radio frequency engineering witness in prior administrative  
6 hearings.

7 **2. SIGNIFICANT GAP IN AT&T'S SERVICE AREA**

8 I have analyzed the current radio frequency design and coverage studies for AT&T's wireless  
9 communications network in east Portland. I have determined that there is a significant gap in coverage  
10 in AT&T's network around the intersection of Foster & Powell. I relied upon the following information in  
11 to conclude that there is a significant gap in coverage:

12 Coverage Propagation Maps. AT&T utilizes industry standard radio frequency propagation  
13 modeling software to project the existing and potential coverage area for AT&T's personal  
14 communications services. The software takes numerous factors into consideration when projecting the  
15 likely coverage from AT&T's system, including: the location of existing AT&T facilities, the topography  
16 of the area surrounding the proposed site, the "clutter" in the area surrounding the proposed site (height  
17 of buildings, trees and other obstructions), the propagation characteristics of AT&T's radio frequencies  
18 for this site, the number, type and configuration of the antennas, and the power output of the antennas.

19 I have attached three propagation maps as Exhibit 1, Exhibit 2 and Exhibit 3. Exhibit 1  
20 demonstrates the coverage propagation from AT&T's current sites in the area, including the existing 45'  
21 tall tower on the same property as the proposed site. Exhibit 2 demonstrates the coverage  
22 propagation if AT&T's application is approved, the 80' tall tower is constructed at the proposed location,

1 and the 45' tall tower is removed. The lighter green color on Exhibit 3 highlights the additional  
2 coverage that is provided once the antennas on the 80' tall tower are activated.

3 Customer Complaints. AT&T has received numerous customer complaints about the quality of  
4 service near the proposed site. AT&T's customers may notify AT&T of an area which has poor  
5 coverage through several ways, including contacting AT&T's customer service representatives to report  
6 the location of unacceptable service, and using an application called "Mark the Spot" which  
7 automatically notifies AT&T of unacceptable quality of service in a specific geographic area.

8 I compiled the complaints that were made during the 10 week period from February 1, 2010 to  
9 April 10, 2010, and geo-coded the locations of the complaints onto a map which is attached as  
10 Exhibit 4. As you can see, AT&T's customers' complaints also show that there are significant gaps in  
11 coverage in the same three general areas around the proposed site. The geo-coding process is  
12 accurate to within two or three city blocks, taking into consideration the delay in reporting an incident,  
13 the difference in performance among handsets, and customer memory.

14 The significant gaps are described as follows:

15 **TABLE 2.1 SIGNIFICANT GAPS IN COVERAGE**

<b><u>Geographic Area</u></b>	<b><u>From</u></b>	<b><u>To</u></b>	<b><u>Description of Gap</u></b>
43 <sup>rd</sup> & Woodward	48 <sup>th</sup> & Caruthers	39 <sup>th</sup> & Woodward 43 <sup>rd</sup> & Franklin	Dropped calls and outdoor coverage only over 15 city blocks
Clinton Park	60 <sup>th</sup> & Division	51 <sup>st</sup> & Tibbetts	Dropped calls and outdoor coverage only over 12 city blocks
50 <sup>th</sup> & Gladstone	52 <sup>nd</sup> & Foster	48 <sup>th</sup> & Cobra 54 <sup>th</sup> & Boise	Dropped calls and outdoor coverage only over 10 city blocks

16 AT&T must improve the quality of service within this significant gap in coverage.

17 **3. AT&T'S COVERAGE OBJECTIVES**

1 AT&T has evaluated the significant gap in coverage described above and has determined that it  
2 must provide higher quality service, both indoor and outdoor, in this geographic area.

3 When designing antenna sites in a high quality wireless communications network, radio  
4 frequency engineers must keep several objectives in mind, including:

5 1. Coverage. The antenna site must be located in an area where the  
6 radio frequency broadcasts will provide adequate coverage within the  
7 significant gap in coverage. Radio frequency engineers take into  
8 consideration the coverage objectives for the site as well as the terrain in  
9 and around the area to be covered. Since radio frequency broadcasts  
10 travel in a straight line and diminish as they travel further away from the  
11 antennas, it is generally best to place an antenna site near the center of  
12 the desired coverage area. However, in certain cases, the search ring  
13 may be located away from the center of the desired coverage area due to  
14 the existing coverage, the surrounding terrain, or other features which  
15 might affect the radio frequency broadcasts like buildings or sources of  
16 electrical interference.

17 2. Call Handoff. The antenna site must be located in an area where the  
18 radio broadcasts from this site will allow seamless call handoff with  
19 adjacent sites. "Call handoff" is a feature of a wireless communications  
20 system where the system will allow an ongoing telephone conversation to  
21 continue uninterrupted as the user travels from the coverage area of one  
22 antenna site to the coverage area of an adjacent antenna site. This  
23 requires coverage overlap for a sufficient distance and/or period of time to  
24 support the mechanism of the handoff.

25 3. Interference. The antenna site must be located in an area that will  
26 avoid creating interference with adjacent sites where a large number of

1           equally strong signals overload the telephone's capability of distinguishing  
2           the correct signal (also called "Pilot Pollution Interference" or "PPI"). If  
3           there is too much overlapping signal, the system and phone will  
4           experience interference or noise, resulting in: (a) dropped calls,  
5           (b) blocked outgoing calls, (c) blocked incoming calls, (d) coverage gaps,  
6           and (e) decreased system capacity.

7           4. Quality of Service. Users of wireless communications services want to  
8           use their services where they live, work, commute and play, including  
9           when they are indoors. AT&T's coverage objectives include the ability to  
10          provide indoor coverage in areas where there are residences, businesses  
11          and indoor recreational facilities.

12          AT&T's coverage propagation software systems use these and other factors (type of antenna;  
13          tilt of antenna; etc.) to predict the coverage that will be provided by the proposed site.

14          In light of these considerations, AT&T's coverage objectives for this proposed site include the  
15          industrial and residential area encompassed by S.E. Lincoln to the north, S.E. 60<sup>TH</sup> to the east, S.E.  
16          Steele. to the south, S.E. 42nd to the west, and the busy thoroughfare of Powell Blvd. The proposed  
17          site will also provide acceptable quality of service in the three significant gaps in coverage.

#### 18   4. DETERMINATION OF SEARCH RING

19          When designing a search ring for a proposed antenna site, radio frequency engineers take into  
20          consideration the coverage objectives for the site as well as the terrain in and around the area to be  
21          covered. Since radio frequency broadcasts travel in a straight line and diminish as they travel further  
22          away from the antennas, it is generally best to place an antenna site near the center of the desired  
23          coverage area.

24          The coverage provided by the existing 45' tall tower is affected by the surrounding trees and the  
25          sloped terrain in the area. The tree height around the existing site is equal to or higher than AT&T's

existing 45' tall tower. In addition, the terrain slopes downhill as you travel west and northwest from the existing site. The trees and downhill slope adversely affect the quality of service from the existing site. AT&T determined that it could provide quality service in the significant gaps by increasing the height of the antennas at 4836 SE Powell Blvd. and adding an antenna sector facing north. An increase in height and a sector add would help clear the surrounding tree line and increase the amount of signal coverage to the surrounding area. This is demonstrated through Exhibit 2, which shows uninterrupted coverage from the proposed site to S.E. Division to the north, S.E. 60<sup>th</sup> to the east, S.E. 39<sup>th</sup> to the west, and S.E. Steele to the south. The additional coverage within the significant gaps is shown in Exhibit 3, which is a propagation map that shows the difference in coverage before and after the installation of the proposed site.

Since AT&T's coverage objectives are to: (1) continue to provide service in the area covered by the existing site, plus (2) provide new coverage in the three significant gaps in coverage near the proposed site, AT&T's search ring focused on the area immediately around the existing site at 4836 SE Powell Blvd.

## 5. FEASIBILITY OF ALTERNATE SITES

When reviewing the search rings for this candidate, AT&T considered the following areas to provide service within the coverage objectives: (a) AT&T's existing site at 4836 SE Powell Blvd.; (b) T-Mobile's site at Foster Rd. & Powell Blvd.; (c) utility poles on Division; (d) utility poles on 42<sup>nd</sup>; (e) utility poles on Holgate, and (f) utility poles on Foster & Powell.

(a) AT&T's Existing Site at 4836 SE Powell Blvd. AT&T proposed this location for the new site because it is the least intrusive option to provide coverage in the significant gap in service. First, the proposed 80' tower with three sectors of antennas will provide service in the significant gap. (The site is approximately 218 feet above sea level. See the topographical map attached as Exhibit 5. The antenna tip height would be installed at 80 feet above ground level, which would be 298 feet above sea level.) Second, the net result will be no additional towers because once the new 80' tower is activated, the existing 45' tower will be removed. Third, the proposed site moves the antennas further away from

1 the nearby park and school by increasing the height of the antennas and moving them further toward  
2 the east. Finally, this is the only feasible location which will allow AT&T to provide service in the  
3 significant gaps in coverage while still providing quality service throughout the desired coverage area.

4 (b) T-Mobile Tower. The T-Mobile tower is not feasible for two reasons. (a) The highest  
5 available rad center/elevation is approximately 53' above ground level, which is just 9' higher than  
6 AT&T's antenna height at AT&T's existing site at 4836 SE Powell Blvd. The highest available  
7 elevation on the T-Mobile tower is not high enough to allow AT&T to meet its coverage objectives and  
8 provide service in the significant gap in coverage at 50<sup>th</sup> & Gladstone or in Clinton Park. (**Exhibit 6**)

9 (c) Utility Poles on Division. Division St. is approximately ½ mile north of the proposed site.  
10 The elevation of Division St. ranges from 160 feet above sea level (at SE 42<sup>nd</sup>) to 229 feet above sea  
11 level (at SE 60<sup>th</sup>). The maximum antenna tip height along Division St. is 97 feet above ground level. I  
12 have attached a propagation map of the coverage that would be provided by a site located at Division  
13 and 46<sup>th</sup> (**Exhibit 7**). Exhibit 7 demonstrates that a site at this location would not be feasible because it  
14 would not provide coverage in the significant gap at 50<sup>th</sup> & Gladstone. Essentially, a site on Division St.  
15 would be too far north to provide service in the significant gap in coverage. In addition, a site on  
16 Division would be too close to two existing AT&T sites, PR47 and PX88, and could create pilot point  
17 interference due to too much overlapping coverage. Therefore the utility poles along Division are not  
18 feasible alternatives to the proposed site.

19 (d) Utility Poles on 42<sup>nd</sup> Ave. This street is quite simply too low and too far away from the  
20 desired coverage area. The elevation of 42<sup>nd</sup> St. is 161 feet above sea level at Division St., 186 feet  
21 above sea level at Powell, and 201 feet above sea level at Holgate Blvd., and 42<sup>nd</sup> Ave. is  
22 approximately 1/3 mile west of the proposed site. The maximum antenna tip height on 42<sup>nd</sup> Ave. is 83.5  
23 feet, so the tallest antenna height on 42<sup>nd</sup> Ave. would be 284 feet above sea level—14 feet lower than  
24 the elevation of the proposed site that is 1/3 mile further west of 42<sup>nd</sup> Ave. A site on 42<sup>nd</sup> Ave. would be  
25 too far away and too low to provide coverage in Clinton Park. (**Exhibit 8**.) Finally, a site on 42<sup>nd</sup> Ave.

would be too close to another AT&T site (PG05) and could cause pilot point interference. Therefore, a site 42<sup>nd</sup> Ave. is not be a feasible alternative to the proposed site.

(e) Utility Poles on Holgate. Holgate Blvd. is approximately ½ mile south of Powell Blvd. Holgate Blvd. is relatively level from SE 42<sup>nd</sup> Ave. to SE 52<sup>nd</sup> Ave., ranging in elevation from 218 feet at SE 42<sup>nd</sup> to 230 feet at SE 60<sup>th</sup> Ave. The maximum allowed antenna tip height on Holgate Blvd. is 92.5 feet above ground level. All of the utility poles along Holgate Blvd. would be too low to provide coverage in the significant gaps in coverage that are north of Powell Blvd. (Exhibit 9) Therefore, the utility poles along Holgate Blvd. are not feasible alternatives to the proposed site.

(f) Utility Poles on Foster and Powell. The maximum antenna tip height on these streets is 63 feet above ground level. These utility poles are in the same vicinity as the proposed site, and are at best at the same elevation above sea level as the proposed site. Since AT&T has already determined that the antenna tip height in this vicinity must be at least 80 feet above ground level in order to provide acceptable coverage in the significant gap, the utility poles along Foster and Powell are not high enough and therefore are not feasible alternatives to the proposed site.

(g) Existing technology and AT&T's business preferences. AT&T has a strong business preference for the proposed site because the proposed site already has a significant amount of capital and technology invested in the proposed site already, and can reuse some of its investment at the site (leasehold and utility services). AT&T would be forced to lose its investment in this site if it is ordered to relocate this site to a different parcel of land.

Conclusion. Based upon the information above, there are no other feasible alternative site candidates available,

## 6. ANTENNA DESIGN

The antennas are designed to be as sleek, clean and uncluttered as possible, given the maximum pole height of 80 feet above ground level and the need to provide service in the significant gaps in coverage. If the antennas were mounted closer to the pole, the three sets of antennas would need to be installed at three different elevations with the lowest antenna tip height at 80 feet above



1 ground level. If the antennas are mounted closer to the pole, the tower would need to be approximately  
2 20 feet taller than the proposed 80 tower in order to provide service in the desired coverage area.  
3 AT&T believes that it is less intrusive to install the proposed 80 foot tall tower with the antennas  
4 mounted at one rad center on davit arms.

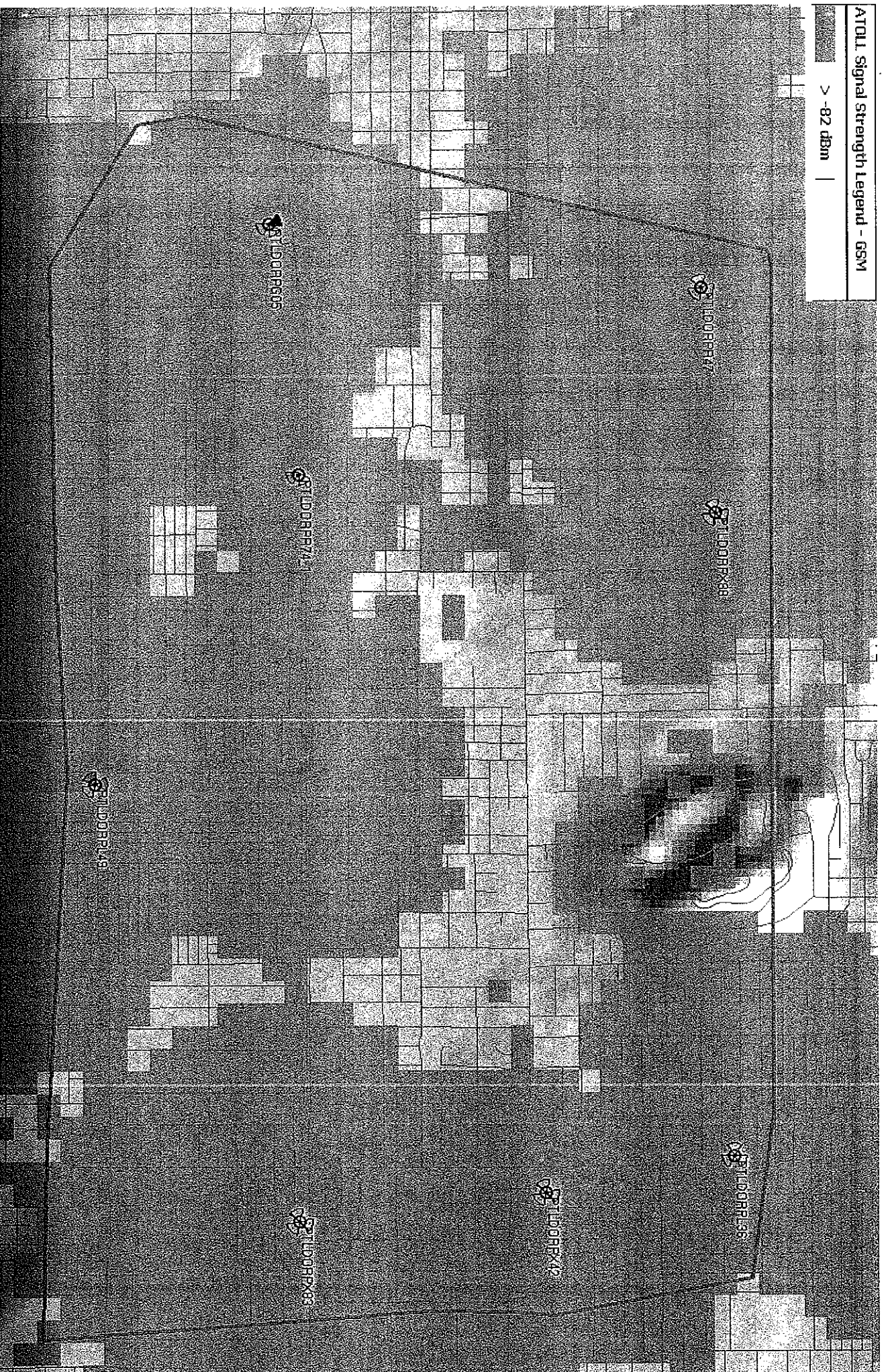
5 I certify under penalty of perjury under the laws of the state of Oregon that the foregoing is true  
6 and correct.

7 DATED this April 21, 2010 at Portland, Oregon.

8 \_\_\_\_\_  
9 Signature

ATOLL Signal Strength Legend - GSM

> -82 dbm



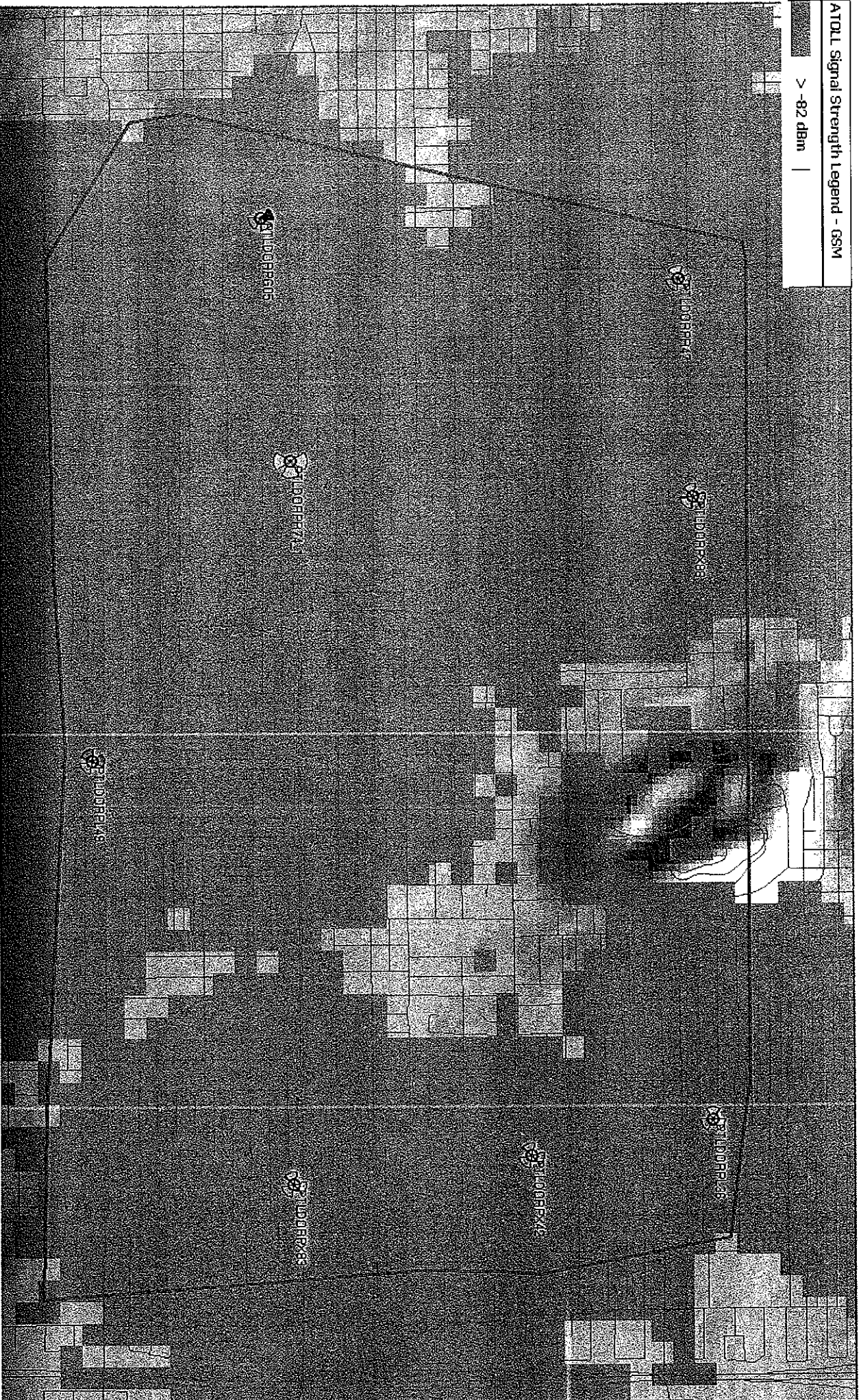
CITY OF PORTLAND  
HEARINGS OFFICE  
Exhibit #H-8a  
Case # 4100003  
Bureau Case # 09-149439 CU AD

Ex. 1



ATOLL Signal Strength Legend - GSM

> -82 dbm

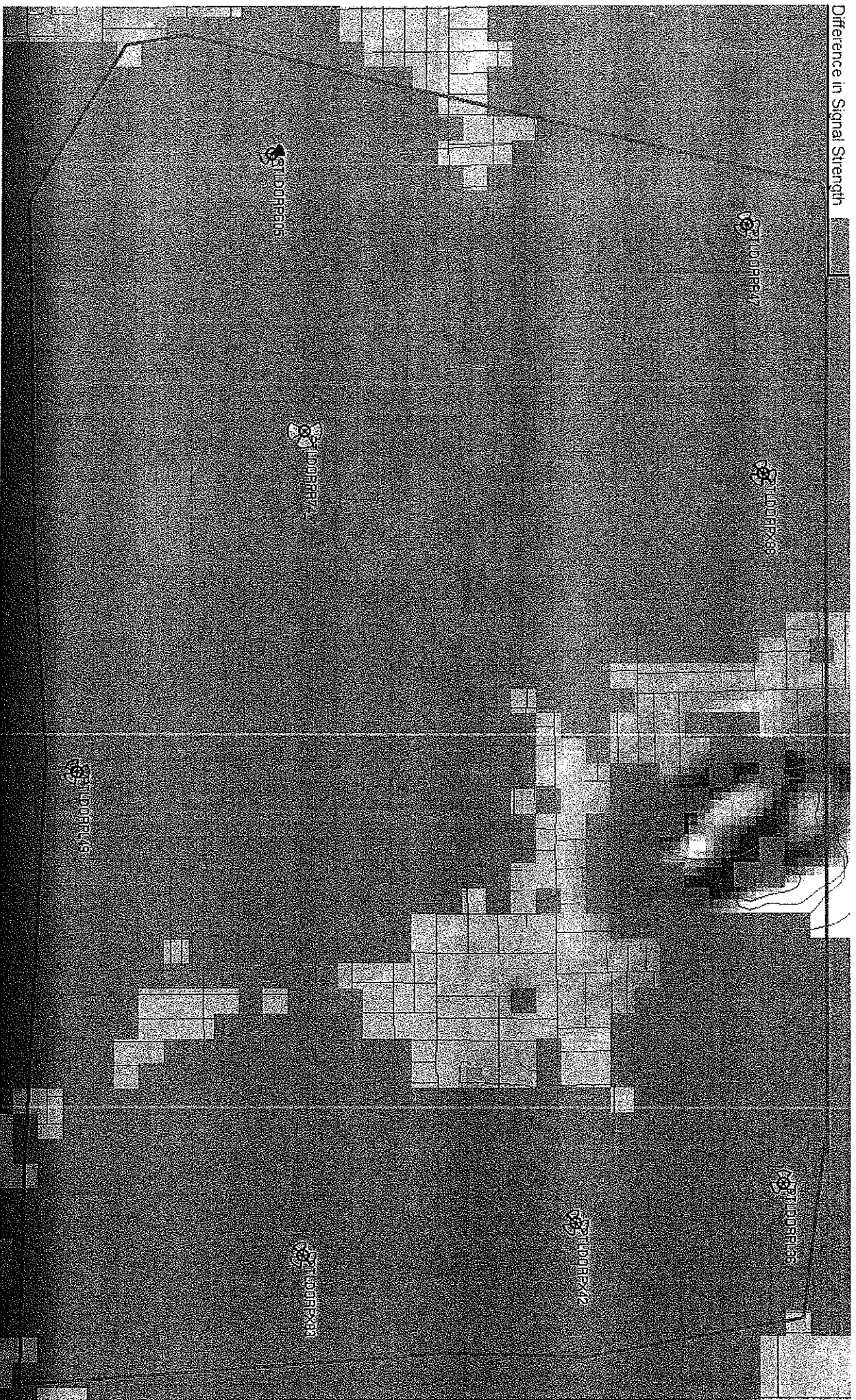


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Exhibit #H-8b  
Case # 4100003  
Bureau Case # 09-149439 CU AD

EX. 2



Difference in Signal Strength



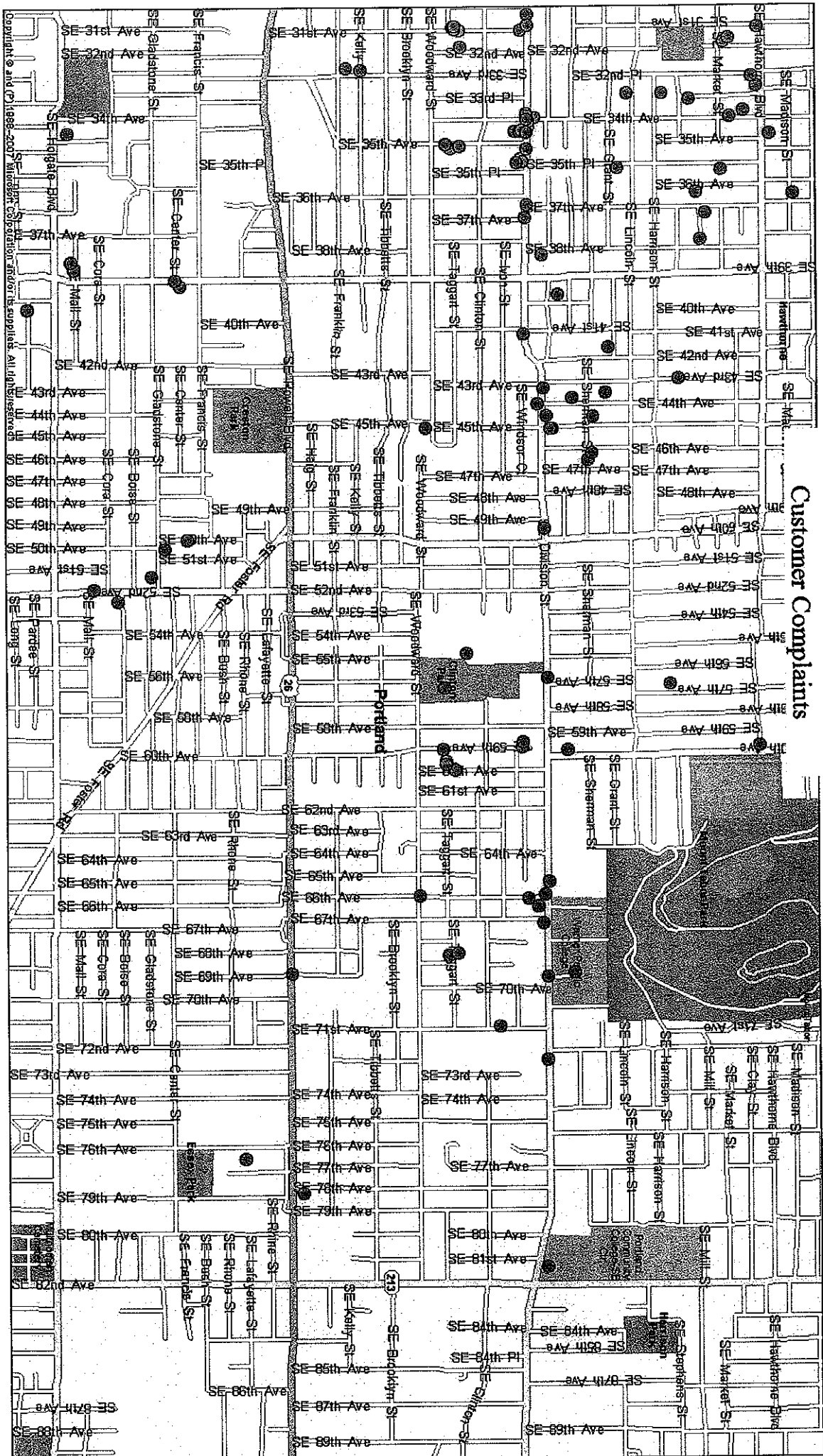
CITY OF PORTLAND  
HEARINGS OFFICE  
Exhibit #H-8c  
Case # 4100003  
Bureau Case # 09-149439 CU AD

Ex.3

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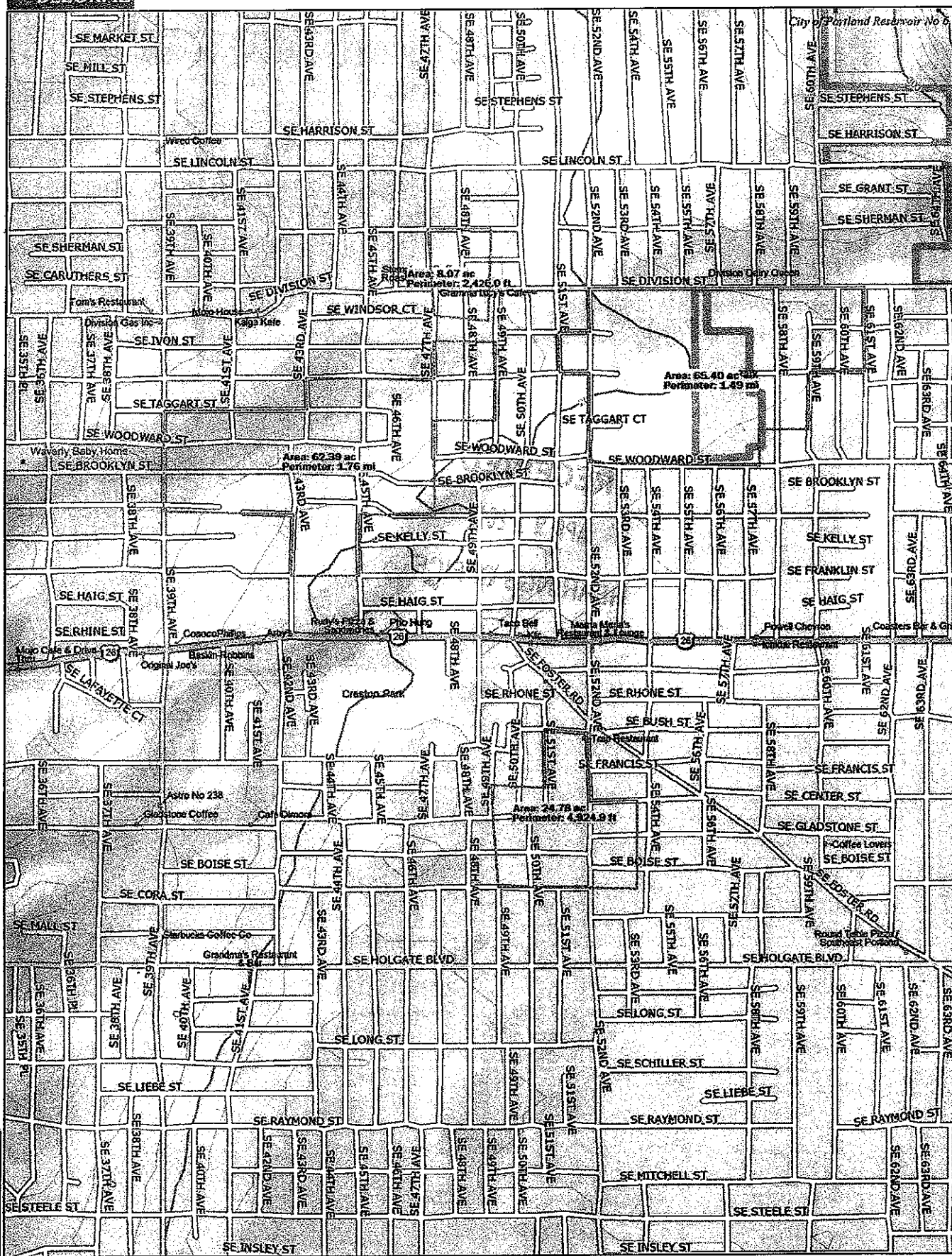
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## Customer Complaints



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Exhibit #H-8d  
Case # 4100003  
Bureau Case # 09-149439 CU AD

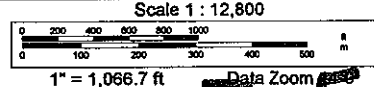
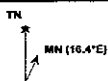
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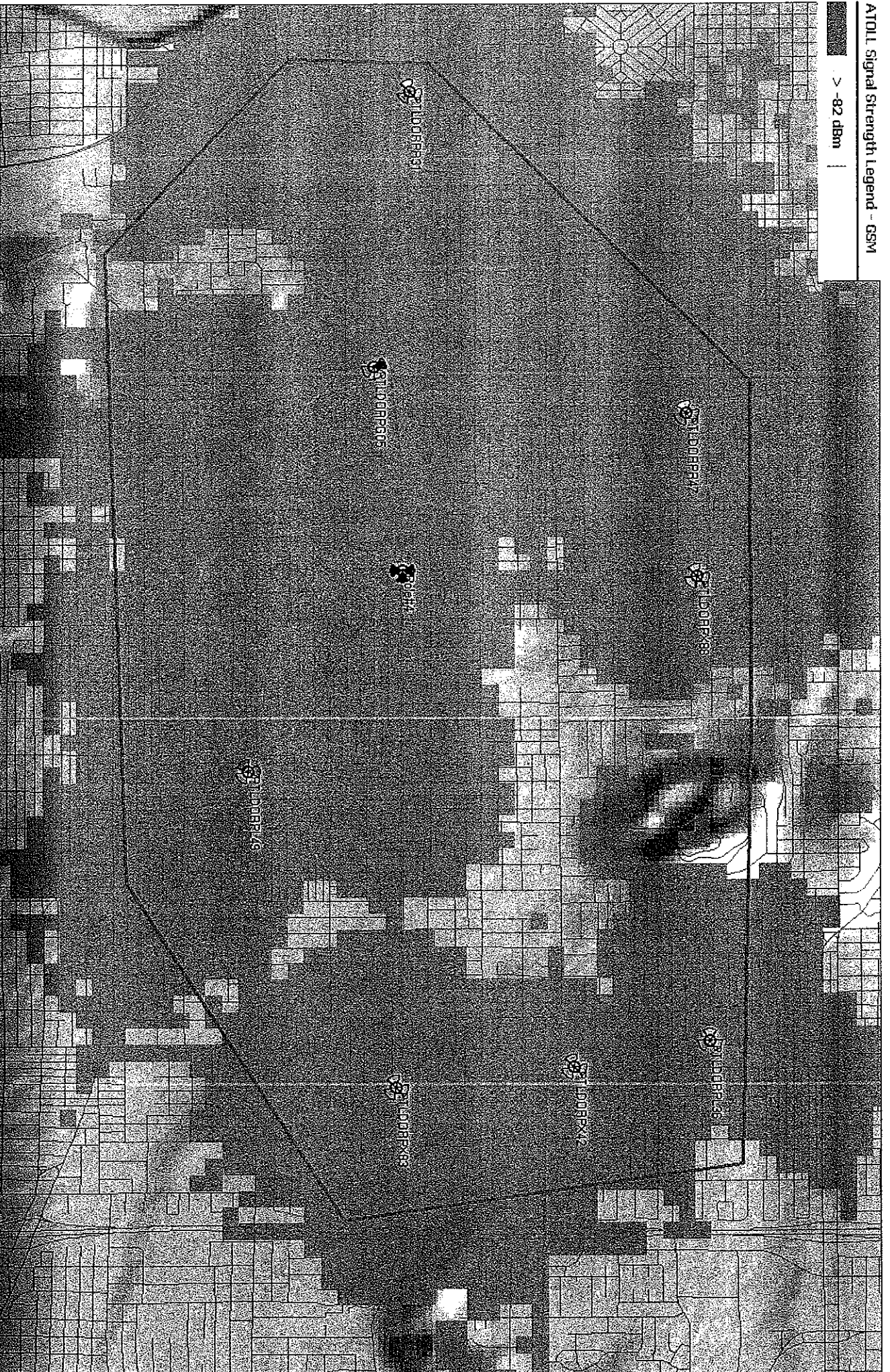
**Ex. 5**

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Case # 4100003  
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ATOLL Signal Strength Legend - GSM

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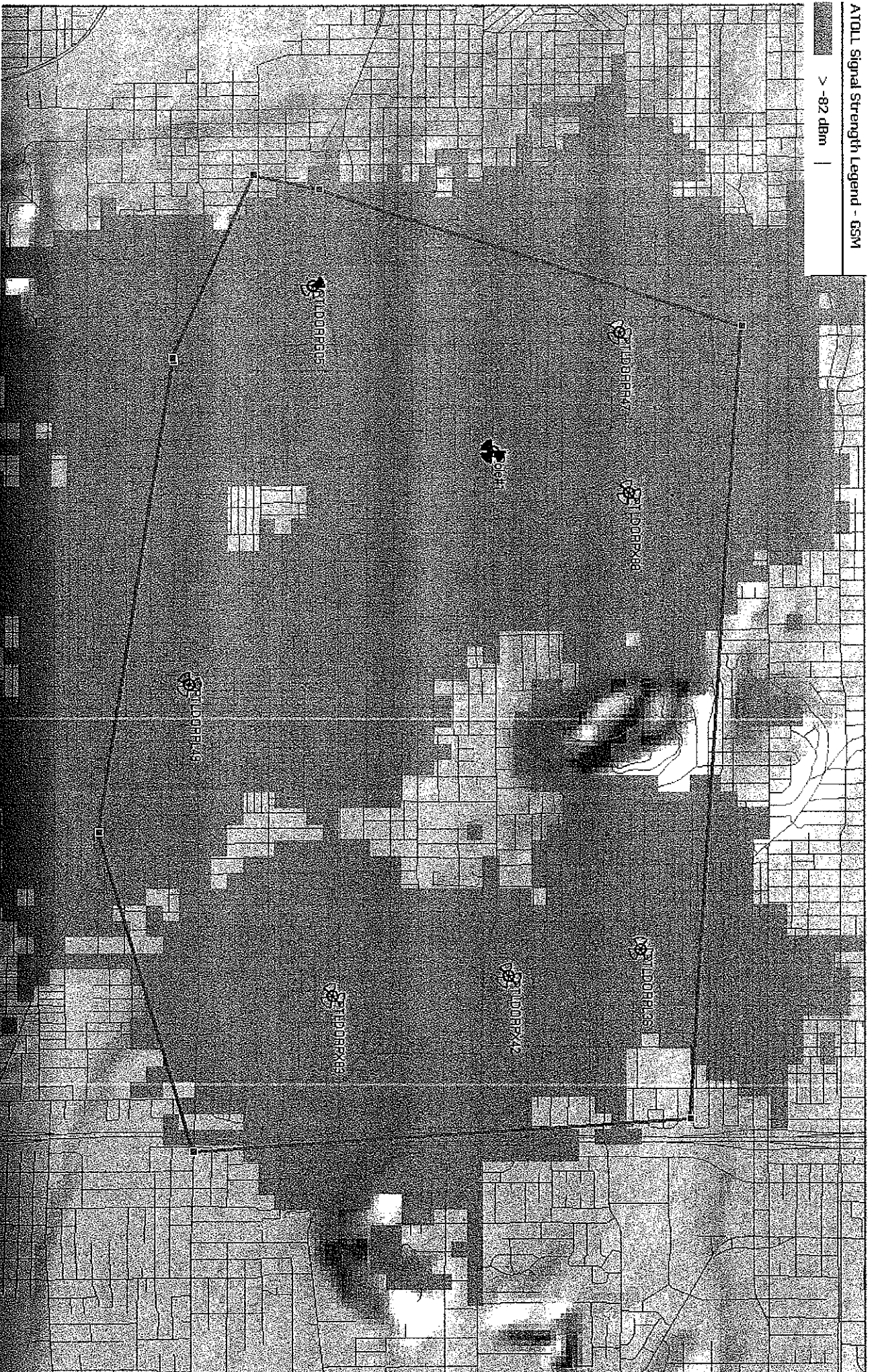
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Exhibit #H-8f  
Case # 4100003  
Bureau Case # 09-149439 CU AD

EX. 6



ATOLL Signal Strength Legend - GSM

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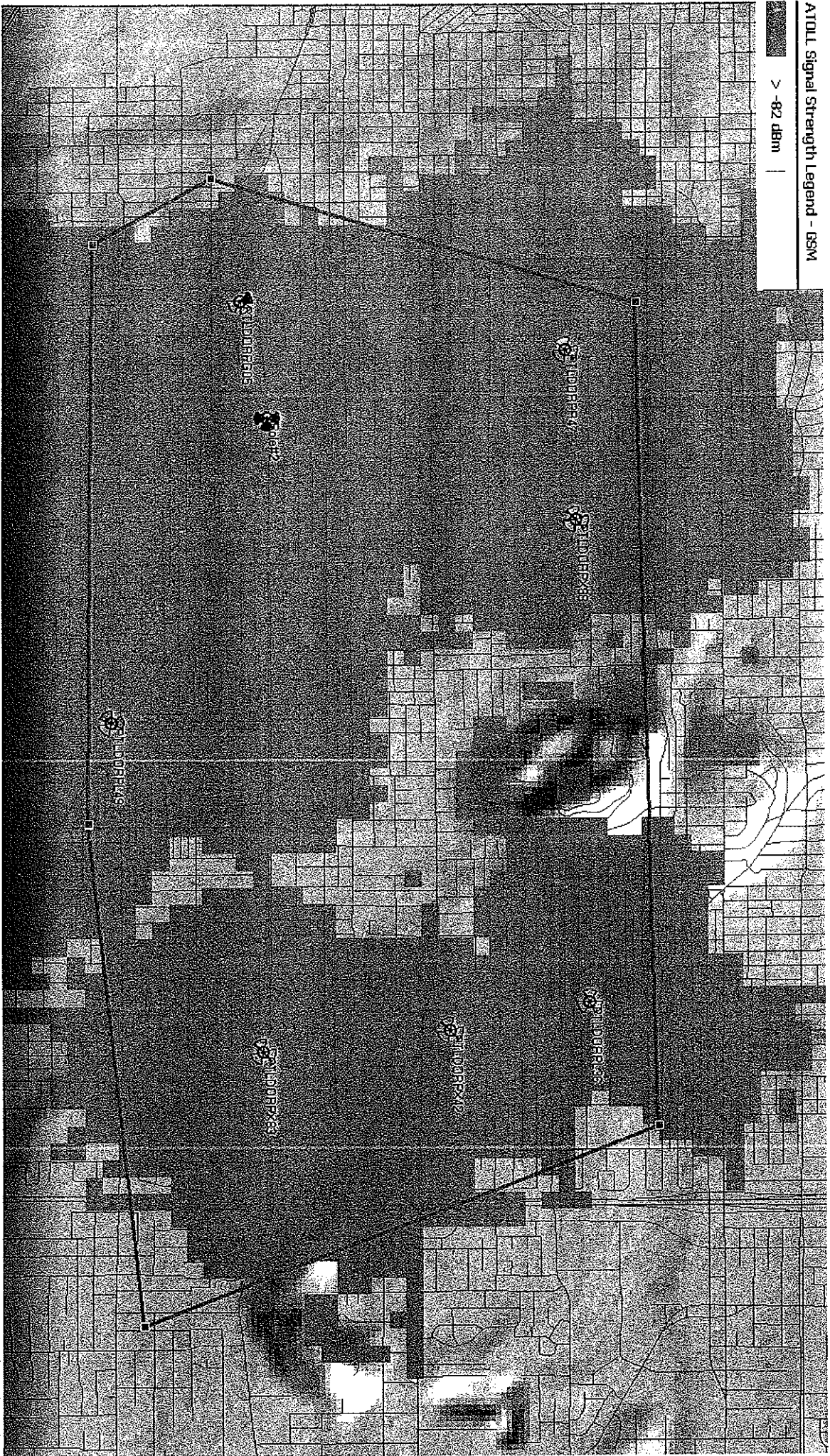
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Exhibit #H-8g  
Case # 4100003  
Bureau Case # 09-149439 CU AD

Ex.7



ATOLL Signal Strength Legend - GSM

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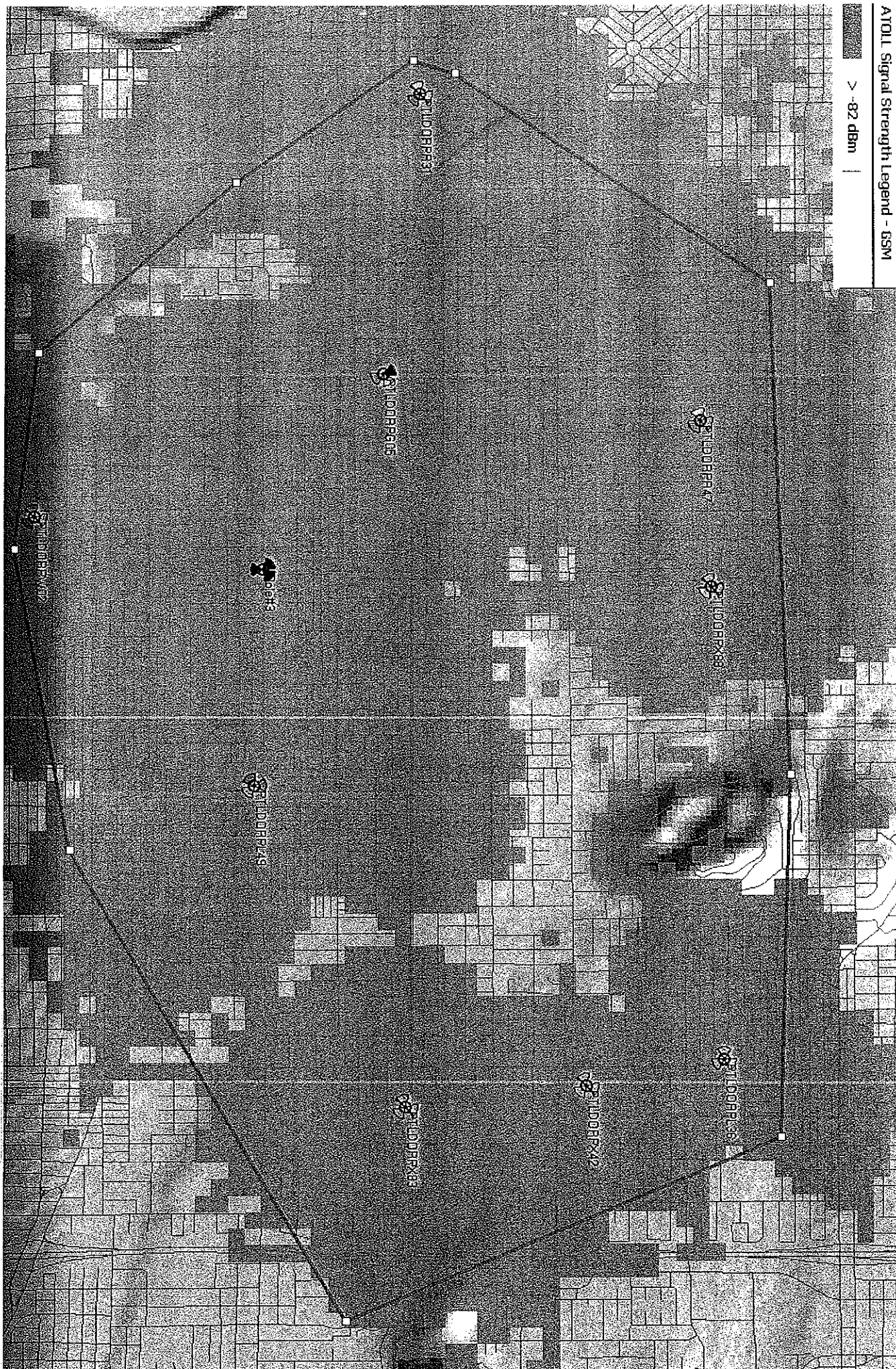
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Case # 4100003  
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Ex.8





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