

Alternative Sites Analysis

AT&T PS25 Camas School Relo
706 NE 14th Ave, Camas, WA 98607

Alternative Site Locations: As stated previously, a search ring is provided by the RF engineers that build the AT&T network. We reviewed their request and compared it to existing zoning, development requirements, land uses, existing conditions, etc. After this review, we identified multiple properties as potential sites. The map below shows each of these locations with a yellow pin (blue pins represent the existing AT&T facility on Garver Theater and the green pin is the proposed site):



ALTERNATIVE SITE LOCATIONS

Site Location		Site Description	Summary
1	211 NE 2 nd St. (45.584083/-122.403639)	Existing BNSF Railway Company Tower Zoning: Heavy Industrial (HI) <i>Alternative Site #1 in Attachment 4</i>	<ul style="list-style-type: none"> This is a 120ft tower, located outside the Search Ring, approximately 0.39 miles southwest of the proposed Facility with an available 103ft antenna tip height. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & H. This site is too geographically distant and too low in elevation to provide the coverage needed to establish a dominant signal within the Targeted Service Area. Collocation on this tower, at the available height, would only effectively cover 54.12% of the Targeted Service Area compared to 56.24% with the new site. This loss in coverage would be especially pronounced in the northern portion of the Targeted Service Area. For this site to be feasible and to maintain coverage to the north, the antenna tip height would need to be 250ft.
2	45.589981/-122.403741	Utility Pole Zoning: R-7.5 <i>Alternative Site #2 in Attachment 4</i>	<ul style="list-style-type: none"> An approximate 22ft wooden utility pole, approximately .08 miles northwest of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & I. The pole would need to be replaced by a metal pole to structurally support the required antennas, ancillary equipment, and existing equipment. Assuming a 20ft taller pole with an available tip height of 42ft, collocation on the replacement pole would cover 7.19% less of the Targeted Service Area than the proposed site, which does not meet AT&T's service objectives. In addition, the replacement pole would be significantly larger in diameter which would be more visually impactful to the surrounding area. Further, the parcel the utility pole is located on does not contain sufficient space for AT&T's associated ground equipment.
3	45.586864/-122.407667	Utility Pole Zoning: Downtown Commercial (DC) <i>Alternative Site #3 in Attachment 4</i>	<ul style="list-style-type: none"> An approximate 20ft wooden utility pole, approximately .27 miles southwest of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & J. The pole would need to be replaced by a metal pole to structurally support the required antennas, ancillary equipment, and existing equipment. Assuming a 20ft taller pole with an available tip height of 40ft, collocation on the replacement pole would cover 25.19% less of the Targeted Service Area than the proposed site, which does not meet AT&T's service objectives. In addition, the replacement pole would be significantly larger in diameter which would be more visually impactful to the surrounding area. Further, the property owner, Fort Camas LLC, was unresponsive to AT&T's inquiry to locate the associated ground equipment on the parcel.

ALTERNATIVE SITE LOCATIONS

Site Location		Site Description	Summary
4	120 NE 17 th Ave	Crown Park Zoning: NP (Neighborhood Park) Alternative #4 in Attachment 4	<ul style="list-style-type: none"> This parcel is owned by the City of Camas and is located outside the Search Ring, approximately 0.27 miles northwest of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & K. The projected coverage from a 60ft tower at this alternative site is 46.01% - 10.23% less than the proposed site. This loss is especially pronounced to the east and west of the existing site. For this site to be feasible, the tower would need to be at least 180ft to both shoot over the existing tall trees and close the coverage gap to the east given its location outside the Search Ring. In addition, the park is surrounded by residential zoning and the tower will be visible to the public, which will be more visually impactful than the proposed stealth Facility.
5	Parcel No. 82932000 (45.587972/ -122.412892)	Benton Park Zoning: OP (Open Space) Alternative #5 in Attachment 4	<ul style="list-style-type: none"> This parcel is located outside the Search Ring, approximately 0.49 miles southwest of the proposed Facility and is heavily vegetated by tall trees. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & L. Pursuant to 18.07.050, no communication facilities are allowed in this zone. Further, the open space zone is not listed in either CMC Table 18-35.1 or Table 18.35-2 for the location of a WCF.
6	630 NE Oak St	City of Camas Cemetery Zoning: R-7.5	<ul style="list-style-type: none"> The cemetery is located approximately 0.5 miles northeast of the proposed Facility and is adjacent to Doc Harris Stadium, Liberty Softball Field and Camas Transportation, which are all owned by the Camas School District. Residents were involved in the removal of AT&T's wireless facility located at the Garver Theater building, and the school district has decided to not permit any wireless facilities on their properties. As there are many residential homes to the south of the cemetery and the school district is bordering the cemetery, AT&T did not pursue this location. Additionally, this parcel is too geographically distant to provide the coverage needed to establish a dominant signal within the Targeted Service Area.
7	1101 NW Ash St (Parcel No. 8292000)	Fort James LLC Zoning: HI	<ul style="list-style-type: none"> This 26.49-acre parcel is owned by Fort James Camas LLC. The property owner was unresponsive to AT&T's inquiry to install a Facility on this parcel.

ALTERNATIVE SITE LOCATIONS

Site Location		Site Description	Summary
8	401 NE Adams St	Georgia Pacific Camas Mill Zoning: HI	<ul style="list-style-type: none"> This parcel is owned by Fort James Camas LLC and Georgia-Pacific Corporation. The property owners were unresponsive to AT&T's inquiry to install a Facility on any of their parcels. Further, Georgia Pacific Corporation does not typically authorize wireless facilities on their property.
9	Parcel No. 90973000 Parcel No. 90974000 Parcel No. 90975000 Parcel No. 91044006	Northwest Gospel Church Zoning: CC (Community Commercial)	<ul style="list-style-type: none"> These parcels are approximately 0.50 miles from the proposed Facility and are owned by Northwest Gospel Church. These parcels are too geographically distant and too low an elevation to provide the coverage needed to establish a dominant signal within the Targeted Service Area. Further, the parcels are overshadowed by existing tall trees, which will impact coverage. The parcels are not of sufficient size to accommodate a freestanding tower and the associated ground equipment without the loss of several parking spaces and disrupting on-site traffic circulation. Additionally, the roof style of the church is not conducive to antenna placement as it is a peaked roof.
10	1408 NE Everett St	Camas Hilltop Market Store Zoning: NC	<ul style="list-style-type: none"> This parcel is located within AT&T's Search Ring; however, the parcel is not of sufficient size to accommodate a freestanding tower and AT&T's associated ground equipment. A rooftop collocation is not feasible as the building is one-story, which is not a sufficient height to reasonably meet AT&T's service objectives within the Targeted Service Area. Pursuant to AT&T's RF engineers, a 59ft antenna tip height is the minimum height needed for a site within the Search Ring to best meet AT&T's service objectives within the Targeted Service Area.
11	1436 NE Everett St	Top Burger Zoning: NC	<ul style="list-style-type: none"> This parcel is located within AT&T's Search Ring; however, the parcel is not of sufficient size to accommodate a freestanding tower and AT&T's associated ground equipment. A rooftop collocation is not feasible as the building is one-story, which is not a sufficient height to reasonably meet AT&T's service objectives within the Targeted Service Area. Pursuant to AT&T's RF engineers, a 59ft antenna tip height is the minimum height needed for a site within the Search Ring to best meet AT&T's service objectives within the Targeted Service Area.
12	701 NE Garfield St	Christian Life Church Zoning: DC Alternative #6 in Attachment 4	<ul style="list-style-type: none"> This parcel is located approximately 0.03 miles south of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & M. The projected coverage from a 60ft tower at this alternative site is 50.05% - a loss of 6.19% in coverage from the proposed Facility. The property is at a lower elevation so coverage replacement is less, especially to the northwest where the elevation is higher. In addition, the property owner was unresponsive to AT&T's inquiry to locate a Facility on this parcel.

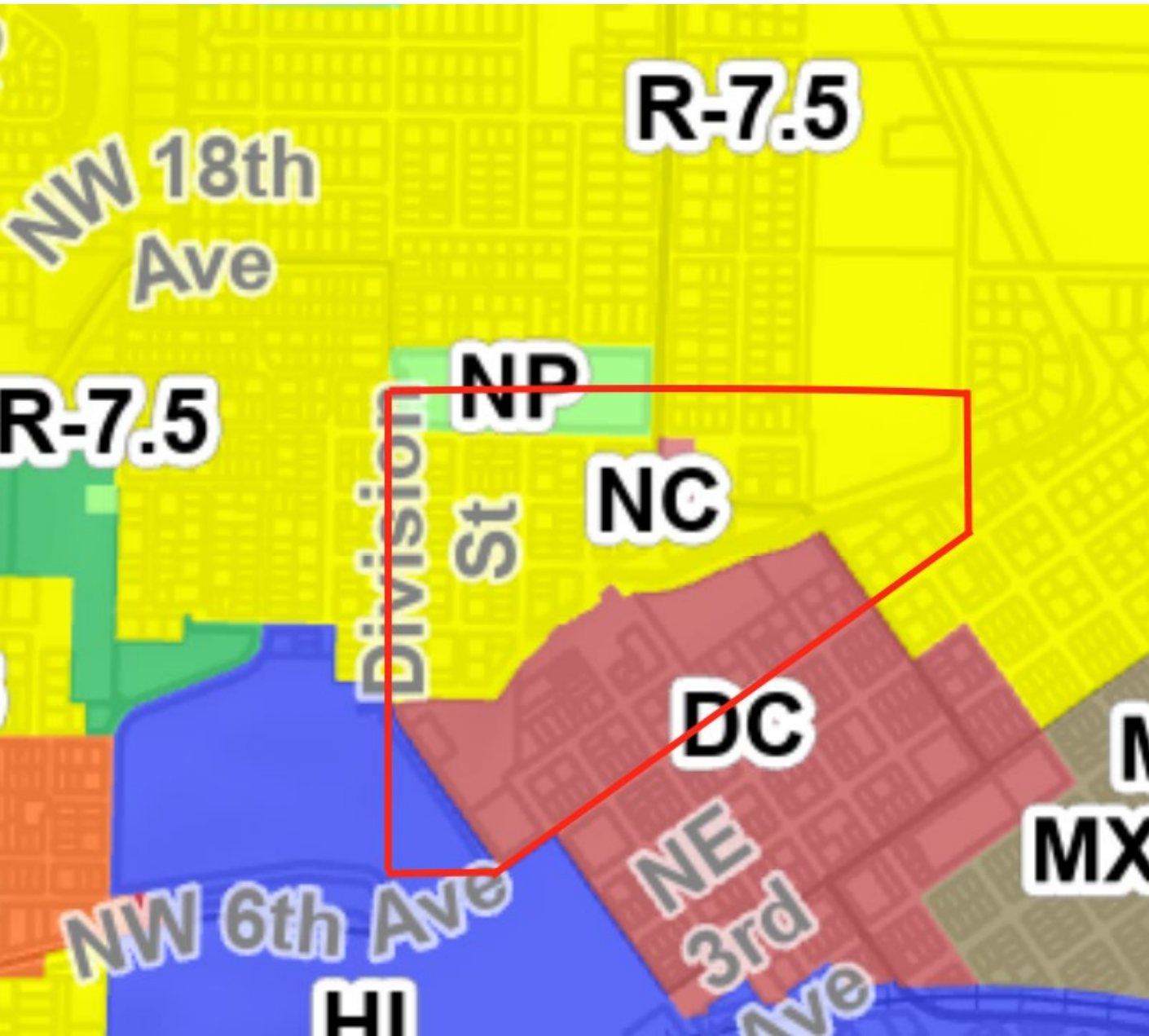
ALTERNATIVE SITE LOCATIONS

Site Location		Site Description	Summary
13	700 NE 4 th Ave	Riverview Bank Zoning: DC Alternative #7 in Attachment 4	<ul style="list-style-type: none"> This approximate 33ft two-story building is located outside AT&T's Search Ring, approximately 0.22 miles south of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & N. Assuming 10ft above the roofline, the projected coverage from a 43ft tip height at this alternative site would be 16.69% less than the projected coverage of the proposed Facility. This loss in coverage is especially pronounced to the Northwest. This site is too geographically distant and too low in elevation to provide the coverage needed to establish a dominant signal within the Targeted Service Area.
14	Parcel No. 986061996	Safeway Parking Lot Zoning: DC Alternative #8 in Attachment 4	<ul style="list-style-type: none"> This parcel is located outside AT&T's Search Ring, approximately 0.31 miles southeast of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & O. The projected coverage from a 60ft tower at this alternative site is 47.48% - 8.76% less than the proposed Facility. Coverage replacement will be limited to the northwest. A tower at this location would also require the loss of several parking spaces and will be more visually impactful to the surrounding area than the proposed stealth Facility.
15	824 NE 4 th Ave	Zion Lutheran Church Zoning: DC Alternative #9 in Attachment 4	<ul style="list-style-type: none"> This parcel is located outside AT&T's Search Ring, approximately 0.25 miles southeast of the proposed Facility. See Attachment 4—AT&T Radiofrequency (RF) Justification, Figures G & P. The projected coverage from a 60ft tower at this alternative site is 11.42% less than the projected coverage for the proposed Facility. Coverage replacement would be especially limited to the northwest. This site is too geographically distant and low in elevation to provide the coverage needed to establish a dominant signal within the Targeted Service Area.
16	213 NE Cedar St (45.584494/-122.403269)	Vacant Lot Zoning: DC	<ul style="list-style-type: none"> This parcel is large enough to accommodate a 60ft tower, but is located approximately 0.35 miles south of the proposed Facility. Since this parcel is substantially lower in elevation and so geographically distant, it cannot provide the coverage needed to establish a dominant signal within the Targeted Service Area.
17	Parcel No. 90911000 (45.588536/-122.40615)	Mill Ditch Open Space Zoning: DC	<ul style="list-style-type: none"> This parcel is owned by the City of Camas, approximately 0.14 miles southwest of the proposed Facility. The parcel is on a hill and is heavily vegetated by tall trees. The estimated location of the tower would be adjacent to NE Dallas St. to utilize NE Dallas St. for access. However, several trees would need to be removed, therefore, more than 50% of the height of the tower will be visible from the public street and will be more visually impactful than the proposed stealth Facility.

ALTERNATIVE SITE LOCATIONS

Site Location		Site Description	Summary
18	160 NE Joy St	Louis Bloch Park Zoning: NP	<ul style="list-style-type: none"> This parcel is owned by the City of Camas and is located outside the Search Ring, approximately 0.36 miles southeast of the proposed Facility. This site is too geographically distant to provide the coverage needed to establish a dominant signal within the Targeted Service Area. Moreover, the park is surrounded by residential zoning and the estimated location of the tower would be along NE Joy St. This would mean more than 50% of the height of the tower will be visible to the public, which will be more visually impactful than the proposed stealth Facility.
19	Parcel No. 90962000 (45.589594/-122.402461)	City of Camas property Zoning: R-7.5	<ul style="list-style-type: none"> This parcel is owned by the City of Camas, located approximately 0.06 miles southeast of the proposed Facility and is heavily vegetated by tall trees. The parcel is 0.47 acres and is surrounded by residential on three sides. Due to the small parcel size and required 1:1 tower setback from a residentially zoned parcel, the required tower setbacks cannot be met. Further, several trees would need to be removed for the installation of the Facility. Thus, more than 50% of the height of the tower will be visible to the public, which will be more visually impactful than the proposed stealth Facility.

Zoning Considerations & Siting Hierarchy



- The area within the Search Ring is primarily zoned R-7.5 or Downtown Commercial (DC) with some Neighborhood Commercial (NC) and Heavy Industrial (HI) parcels.
- Most parcels within R-7.5 are residential properties. Those that are not are mostly schools or religious facilities. The Camas School District will not allow WCFs.
- Several of the parcels zoned DC are owned by Fort Camas LLC, who was unresponsive to AT&T's inquiries to install a Facility on any of their parcels. The remaining DC parcels are too low in elevation or too small to accommodate a new Facility.
- The parcel zoned HI within the Search Ring is owned by Fort Camas LLC who were unresponsive to AT&T's inquiries.
- Please see Siting Hierarchy Table on the following pages for more details on the zoning considerations, as well as the Alternative Sites Analysis in the preceding pages.

Siting Hierarchy

Order of Preference for Siting a WCF	Available options for locating a WCF
<p><i>Collocations on Existing Towers or Structures</i></p>	<p>AT&T evaluated possible collocation on an existing tower outside of the Search Ring (approximately .39 miles southwest), as well as possible collocation on two separate utility structures within the Search Ring. The existing tower and utility structures were deemed technologically unfeasible for collocation (see Alternative Sites Analysis).</p> <p>Additionally, based on its analysis, AT&T has determined that there are no existing buildings within the identified Search Ring feasible for collocation as none are of a sufficient height to reasonably meet AT&T's service objectives within the Targeted Service Area (the structures in these areas are predominantly only one to two-story or residential). Pursuant to AT&T's RF engineers, a 59ft antenna tip height is the minimum height needed for a site within the Search Ring to best meet AT&T's service objectives within the Targeted Service Area.</p>
<p><i>City-owned or operated property, facilities and rights-of-way excepting therefrom, right-of-way and city facilities located in residential zones (R, MF zones) or gateways designated on the zoning maps of the City of Camas, and where the tower will not be located within one hundred fifty feet of a residential zone</i></p>	<p>AT&T considered (3) City-owned and operated properties within or near the Search Ring: (1) Crown Park, (2) Benton Park, and (3) City of Camas Cemetery. All properties were ruled out for a new Facility as detailed in the Alternative Sites Analysis.</p>
<p><i>HI, I, LIBP zones</i></p>	<p>There are no properties zoned I or LIBP within or adjacent to AT&T's Search Ring (or within a 0.5 mile radius). There are (2) properties zoned HI that were contacted (see Alternative Sites Analysis). The remaining properties, not owned by Fort James LLC or Georgia-Pacific Corporation, zoned HI are not of sufficient size to accommodate AT&T's facility. In addition, some of these parcels are in the shoreline overlay and floodplain.</p>
<p><i>BP zones</i></p>	<p>There are no properties zoned BP within or adjacent to AT&T's Search Ring or within a 0.5 mile radius.</p>
<p><i>RC and CC zones</i></p>	<p>There are no properties zoned CC within or adjacent to AT&T's Search Ring. There are (6) parcels zoned RC southeast of the proposed Facility but outside AT&T's Search Ring. (4) of those parcels are within 0.5 miles of the proposed Facility (see Alternatives Analysis)</p>

Siting Hierarchy (continued)

Order of Preference for Siting a WCF	Available options for locating a WCF
<p><i>NC and DC zones</i></p>	<p>Several of the DC zoned parcels located near the Georgia Pacific Camas Mill and within AT&T's Search Ring are owned by Fort Camas LLC. As noted herein, the property owner was unresponsive to AT&T's inquiry to install a Facility on any of their parcels.</p> <p>The remaining DC zoned parcels within the Search Ring are lower in elevation than the proposed Facility and are not of sufficient size to accommodate a freestanding tower and AT&T's associated ground equipment. There are no existing buildings feasible for collocation as none are of a sufficient height to reasonably meet AT&T's service objectives within the Targeted Service Area (the structures in these areas are predominantly only one to two-story or residential).</p> <p>The DC zoned parcels located outside AT&T's Search Ring, but within one-half mile of the proposed Facility are substantially lower in elevation than the proposed Facility and are too geographically distant to provide the coverage needed to establish a dominant signal within the Targeted Service Area. Further, most of the parcels are not of sufficient size to accommodate a freestanding tower and AT&T's associated ground equipment.</p> <p>Overall, AT&T considered (7) parcels within either the NC and DC zones for a new Facility. See Alternative Sites Analysis.</p>
<p><i>City-owned or operated property (not right-of-way) and facilities in any zone, as long as less than fifty percent of height of the tower is visible as viewed from a public street, public open areas (e.g. fields, playgrounds, parking areas), or property that is being used for residential purposes</i></p>	<p>AT&T considered (3) properties that were not feasible as detailed in the Alternative Sites Analysis.</p>
<p><i>Parcels of land in residential zones (R, MF zones) if otherwise mandated under CMC 18.35.050.C.</i></p>	<p>AT&T's proposed stealth WCF is located on a parcel zoned R-7.5. Most of the parcels north of AT&T's Search Ring and within one-half mile are also zoned R-7.5. The chosen parcel is nearby the existing Facility at Garver Theater to minimize loss of existing coverage. Moreover, the Stealth structure ensures the Facility blends with the surrounding community.</p>