HOMER ADVISORY PLANNING COMMISSION
491 E PIONEER AVENUE
HOMER, ALASKA

JUNE 4, 2014
5:30 WEDNESDAY
COWLES COUNCIL CHAMBERS

WORK SESSION AGENDA

1. Call to Order 5:30 p.m.

2. Staff Report PL 14-52, Creating the East End Residential Commercial Mixed Use District **pg. 217 of packet**

3. Discussion of Items on the Regular Meeting Agenda

4. Public Comments
   The public may speak to the Planning Commission regarding matters on the work session agenda that are not scheduled for public hearing or plat consideration. (3 minute time limit).

5. Commission Comments

6. Adjournment

HOMER ADVISORY PLANNING COMMISSION
491 E PIONEER AVENUE
HOMER, ALASKA

JUNE 4, 2014
6:30 WEDNESDAY
COWLES COUNCIL CHAMBERS

REGULAR MEETING AGENDA

1. Call to Order

2. Approval of Agenda

3. Public Comment

The public may speak to the Planning Commission regarding matters on the agenda that are not scheduled for public hearing or plat consideration. (3 minute time limit).

4. Reconsideration

5. Adoption of Consent Agenda

All items on the consent agenda are considered routine and non-controversial by the Planning Commission and are approved in one motion. There will be no separate discussion of these items unless requested by a Planning Commissioner or someone from the public, in which case the item will be moved to the regular agenda and considered in normal sequence.

A. Approval of Minutes of May 21, 2014 meeting **pg. 5**

6. Presentations

7. Reports

A. Staff Report PL 14-49, City Planner's Report **pg. 13**

8. Public Hearings

Testimony limited to 3 minutes per speaker. The Commission conducts Public Hearings by hearing a staff report, presentation by the applicant, hearing public testimony and then acting on the Public Hearing items. The Commission may question the public. Once the public hearing is closed the Commission cannot hear additional comments on the topic. The applicant is not held to the 3 minute time limit.

A. Staff Report PL 14-50, Ordinance 14-XX amending Homer City Code to include "Open Air Businesses" as a permitted use in the Central Business District and General Commercial 2 Districts and remove "Farmers' Market" as a permitted use from the Central Business District. **pg. 19**

9. Plat Consideration

A. Staff Report PL 14-51, Bidarka Heights Unit 3 Knutson Replat Preliminary Plat **pg. 27**

10. Pending Business

A. Staff Report PL 14-53, Changeable copy and internally lit sign in the Gateway Business District **pg. 37**
B. Staff Report PL 14-54, Towers **pg. 49**

11. New Business

A. Staff Report PL 14-52, Creating the East End Residential Commercial Mixed Use District **pg. 217**

12. Informational Materials

A. City Manager's Report from the May 27, 2014 City Council Meeting **pg. 227**

13. Comments of the Audience

Members of the audience may address the Commission on any subject. (3 minute time limit)

14. Comments of Staff

15. Comments of the Commission

16. Adjournment

Meetings will adjourn promptly at 9:30 p.m. An extension is allowed by a vote of the Commission.
Next regular meeting is scheduled for June 18, 2014. A work session will be held at 5:30 pm.

Session 14-10, a Regular Meeting of the Homer Advisory Planning Commission was called to order by Chair Venuti at 6:30 p.m. on May 21, 2014 at the City Hall Cowles Council Chambers located at 491 E. Pioneer Avenue, Homer, Alaska.

PRESENT: COMMISSIONERS BOS, ERICKSON, HIGHLAND, SLONE, STEAD, STROOZAS, VENUTI

STAFF: CITY PLANNER ABBOUD
DEPUTY CITY CLERK JACOBSEN

Approval of Agenda

Chair Venuti called for a motion to approve the agenda.

HIGHLAND/SLONE SO MOVED

There was no discussion.

VOTE: NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

Public Comment

The public may speak to the Planning Commission regarding matters on the agenda that are not scheduled for public hearing or plat consideration. (3 minute time limit).

Kyra Wagner, city resident, offered clarification to the definition of farmers' market in code that item four could include photography as items for sale. She supports it remaining a permitted use and not a conditional use in the manner the Commission sees appropriate, either considering it an open air market, or incorporating farmers' markets in the open air definition. She encouraged having it in other zones as a permitted use as well.

Reconsideration

None

Adoption of Consent Agenda

All items on the consent agenda are considered routine and non-controversial by the Planning Commission and are approved in one motion. There will be no separate discussion of these items unless requested by a Planning Commissioner or someone from the public, in which case the item will be moved to the regular agenda and considered in normal sequence.

A. Approval of Minutes of May 7, 2014 meeting
B. Decision and Findings for Conditional Use Permit CUP 2014-06, Request for a new Harbormaster building with overslope development and located within the required setback area at 4311 Freight Dock Road

Chair Venuti called for a motion to adopt the consent agenda.

HIGHLAND/SLONE SO MOVED

There was no discussion.

VOTE: NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

Presentations

Reports

A. Staff Report PL 14-43, City Planner's Report

City Planner Abboud reviewed his report. They talked briefly about the public safety building status and the mixed use zoning proposed by Councilmember Van Dyke.

Public Hearings

Testimony limited to 3 minutes per speaker. The Commission conducts Public Hearings by hearing a staff report, presentation by the applicant, hearing public testimony and then acting on the Public Hearing items. The Commission may question the public. Once the public hearing is closed the Commission cannot hear additional comments on the topic. The applicant is not held to the 3 minute time limit.

A. Staff Report PL 14-44, Conditional Use Permit 2014-07 Request for a reduction of the 20 foot building setback along Lee Drive in the Central Business District at 564 E. Pioneer Avenue

City Planner Abboud reviewed the staff report.

Kenton Bloom, surveyor, and Leslie Mastick property owner and applicant, addressed the Commission. Ms. Mastick gave a brief overview of the history of Homer's Jeans and the building. She is looking forward to the expansion and upgrade of her building. Mr. Bloom commented that he included the additional information relating to the building to show the process conforms with the goals and ideals of the Comp Plan and Community Design Manual. He also suggested an informal discussion about Lee Drive and parking near the park to plan a better fit for everything.

Chair Venuti opened the public hearing.

Ken Castner, city resident, commented in support of the reduction of the set back.

There were no further comments and the public hearing was closed.

There was brief discussion clarifying why the building isn't eligible for non-conforming and that approval of the CUP will resolve the setback issue, and that the building improvements don't require conditional use permitting.

Question was raised regarding the future of Lee Drive. City Planner Abboud commented that unless there is a big improvement in the area, the city may have a need to improve the road; otherwise it would be up to the neighbors to initiate improvements.

BOS/SLONE MOVED TO ADOPT STAFF REPORT PL 14-44 AND APPROVE CUP 14-07 REQUEST FOR REDUCTION OF THE 20 FT BUILDING SETBACK ALONG LEE DRIVE AT 564 E. PIONEER AVENUE WITH FINDINGS 1-10 AND CONDITION 1.

There was no discussion.

VOTE: NON OBJECTION: UNANIMOUS CONSENT.

Motion carried.

Plat Consideration

A. Staff Report PL 14-45, Ditton 2014 Replat Tract A Preliminary Plat

City Planner Abboud reviewed the staff report.

Kenton Bloom, surveyor, explained they are subdividing to create another lot for the family to build another home. There are no objections to the comments or recommendations.

Discussion ensued regarding development of a hammerhead type turnaround instead of a cul-de-sac because of the terrain limitations. They also discussed the area where the spring and drainages are. Mr. Bloom explained that the plat notes the water courses, but they are not designated wetlands based on the criteria of ACOE. He also clarified they are willing to provide drainage easements if they are needed.

SLONE/HIGHLAND MOVED TO ADOPT STAFF REPORT PL 14-45 AND APPROVE DITTON 2014 REPLAT TRACT A PRELIMINARY PLAT WITH STAFF COMMENTS AND RECOMMENDATIONS.

ERICKSON/SLONE MOVED TO AMEND CONDITION 4 THAT INSTEAD OF PROVIDING A DEDICATION OF A CUL-DE-SAC THAT THEY PUT IN A HAMMERHEAD DRIVEWAY.

City Planner Abboud didn't have additional feedback relating to the motion as this is something that Public Works would need to speak to. He wasn't sure if it dedication of a hammerhead would be required.

There was discussion regarding whether it is appropriate to designate or dedicate a hammerhead, and if they even need to dedicate any turnaround space. The biggest issue is access is for emergency vehicles. They spoke briefly about what the Borough would require and it was suggested that hammerheads are accepted by the Borough.

VOTE: (Amendment) NO: HIGHLAND, ERICKSON, STEAD, VENUTI, STROOZAS, SLONE, BOS

Motion failed.

ERICKSON/ BOS MOVED TO REMOVE CONDITION NUMBER 4, PROVIDE DEDICATION FOR A ¼ CUL-DE-SAC AT AT THE END OF SEASCAPE DRIVE.

There was no discussion.

VOTE: (Amendment)NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

There was no further discussion on the main motion as amended.

VOTE (Main motion as amended): NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

Pending Business

A. Staff Report PL 14-46, Draft Ordinance on Heliports

The Commission reviewed and agreed that the graphs for heliports and helipads are as they had agreed on previously. The agreed by consensus that it could go forward for public hearing.

New Business

A. Staff Report PL 14-47, Draft Ordinance on Towers

City Planner Abboud reviewed the staff report. He touched on options which include doing nothing, drafting something with the attorney, forming a task force, or working with a consultant.

The Commission talked briefly about the challenges of changing technology and the necessity of having towers where they are needed. There are many different designs for towers, as well as ways to work with topography and deal with line of sight across water. It was suggested that hearing from ACS and/or GCI about what their needs are could be helpful. There are federal regulations that need to be considered as well.

The consensus of the group was that they would like staff to research the regulations of other Alaskan communities and how they determined their regulations.

B. Staff Report PL 14-48, Ordinance 14-20 Farmer's Market/Open Air Business for CBD, GC1, and GC2 Districts

Chair Venuti noted for the record that the Commission heard from Farmers' Market representative and talked about this at the worksession. City Planner Abboud asked that they make a motion and recommendation on open air and what they may or may not modify. His goal is to have something

laid out so the Commission can hold a public hearing. He encouraged the group to make recommendations relating to what they feel is most appropriate as Planning Commissioners.

ERICKSON/BOS MOVED TO ALLOW OPEN AIR BUSINESS IN THE CBD, GC1, AND GC2.

Question was raised if they want to keep flea markets in the definition of open air business, but no action was taken relating to that.

It was suggested the intent of making a requirement for a CUP in the designated districts is to protect the activity at the current location, and avoid a secondary effort in the CBD.

Another point of view is that putting barriers on business from doing what they want to try to do. It was noted that in the code, farmers' market can be in any area and the ordinance as proposed is unnecessary, redundant, and in conflict with itself. It should be rejected and not re-written. Disagreement was also expressed about trying to protect the current Farmers' Market.

Point was also raised that this is seasonal in the summer when people are out and looking for things to do. The more that's out there is better for the community and the tourists.

City Planner Abboud suggested they may want to consider not having open air business in the CBD where there could be flea markets along Pioneer Avenue in parking lots of businesses or empty lots. It could be better in the more industrial areas like it is now. He added that there aren't time restrictions in the code.

Commissioners continued to debate the motion and it was suggested they should hear from Councilmember Roberts before making a decision.

SLONE/BOS MOVED TO POSTPONE TO THE NEXT MEETING.

There was no discussion.

VOTE: NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

The Commission agreed to discuss further.

ERICKSON/SLONE MOVED TO RECONSIDER.

There was no discussion.

VOTE: NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

Discussion continued on the motion to allow open air business in CBD, GC1, and GC2.

They continued to discuss differing views of leaving it as an allowable use, and changing it to allowable as a CUP. They briefly touched on whether to expand it further into marine industrial. They acknowledged that this will come back for a public hearing and they can make continue to make amendments after they get feedback from the public.

VOTE: YES: SLONE, STEAD, STROOZAS, VENUTI, BOS, ERICKSON
NO: HIGHLAND

Motion carried.

ERICKSON/ BOS MOVED TO REMOVE REFERENCES TO FARMERS' MARKET AND INCLUDE IT UNDER OPEN AIR BUSINESS.

There was no discussion.

VOTE: YES: VENUTI, SLONE, BOS, ERICKSON, STEAD, HIGHLAND, STROOZAS

Motion carried.

Informational Materials

A. City Manager's Report from the May 12, 2014 City Council Meeting
B. KPB Plat Committee Notice of Decisions
- Homer East Road Kachemak Drive to Waterman Road ROW Map Time Extension Request
- Foothills Subdivision Sunset View Estates No. 2 Time Extension Request

There was brief discussion of the informational items.

Comments of the Audience

Members of the audience may address the Commission on any subject. (3 minute time limit)

None

Comments of Staff

City Planner Abboud commented that the tower CUP was remanded back to the Commission and he will let them know if the applicant wants to keep moving forward or try something else.

Comments of the Commission

Commissioner Slone said he will be absent at the next meeting and that he wished the Business After Dark chamber mixer had been better attended.

Commissioner Stroozas commented about another event Get to Know Homer at Islands and Ocean Visitor Center, and the attendance was terrible, so it isn't just them.

Commissioner Highland said she would like the consideration of the group when she has comments. She would appreciate patience.

Chair Venuti noted that mixers are better attended in the winter when there isn't as much going on. He expressed his interest in getting the Bridge Creek Watershed District back to the table to address increasing the usable space on the lots in that area.

Adjourn

There being no further business to come before the Commission, the meeting adjourned at 8:50 p.m. The next regular meeting is scheduled for June 4, 2014 at 6:30 p.m. in the City Hall Cowles Council Chambers.

_____
MELISSA JACOBSEN, CMC, DEPUTY CITY CLERK

Approved: _____

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STAFF REPORT PL 14-49

TO: Homer Advisory Planning Commission
FROM: Rick Abboud, City Planer
MEETING: June 4, 2014
SUBJECT: City Planner's Report

City Council – not anything in the Planning realm was found on the City Council Agenda.

Staff activities: I have been working with a short staff since the last meeting due to scheduled time off and illness.

Public Safety Building: I have attention a few meetings regarding planning for a new public safety building. This is in the very early stages of inception. I have been brought to the table in hopes of reinforcing what measures need to be taken to get a proposal that considers all relevant code provisions. Currently they are working up a schedule for public participation. The next meeting of the Public Safety Building Committee is scheduled for June 17th at 5:30pm in the City Council Chambers if you are interested in attending.

DOT Projects: I attended a meeting with DOT Planners and Engineers to discuss proposed scope of work for the rehabilitation of Pioneer Ave. They were also able to provide information on the proposed Lake Street project and the repaving of the Sterling Highway from Pioneer Ave to the end of the spit.

Eat End Residential/Commercial Mixed Use: Working on ordinance. Please become familiar with the Est End area from around Pennock to Mariner Drive**.** Drive, walk, and/or bike are all great ways to get a look at what is currently going on and what can be envisioned for the future.

Towers: Included in your packet is the "summer reading project". This is just to give you an idea of all the angles on towers. They will not go away and I expect to see more applications in the future.

Attachment:
Pioneer Ave. rehabilitation overview and map

Pioneer Avenue Rehabilitation – Overview

Lane Widths

Highway Preconstruction Manual (HPCM) Section 1100 (PG 1100-16) references HPCM Section 1600 for rehabilitation projects and *A Policy on Geometric Design of Highways &* Streets (Green Book) for reconstruction projects. Given we are considering design minimums, the Green Book was used.

Green Book, 2011 6th Edition, Section 4-3 (PG 4-7 and 4-8)
In urban settings, recommend 11ft (minimum 10ft in low speed settings)
Center TWLTL, recommend 11-16ft (minimum 10ft in conjunction with 10ft drive lanes)

Municipality of Anchorage (MOA) Design Criteria Manual, Jan 2007, Section 1.6 (PG 1-18 - 1-22)
Urban and rural center TWLTL, recommend 14ft
Central Business District center TWLTL, recommend 11ft

Bike Lane Widths

Guide for the Development of Bicycle Facilities, 2012 4th Edition, Chapter 4.5 (PG 4-7)
For curbed sections, minimum 5ft to face of curb for Class A Bike Lanes

Safety Factors

Highway Safety Improvement Program (HSIP) Handbook, March 2013 (PG A-14, A-18)
TWLTL for this road segment provides a ~32% crash reduction factor over no TWLTL
Adding bike lanes has a crash reduction factor of 10% for bike related crashes

Widening Pros and Cons

	Pro	Con
Widen to the Left (North)	• ROW appears to be wider, may not need as many acquisitions	• Relocate underground utilities u • Greater excavation into uphill embankment • Retaining wall required (6'x150') • May require additional roadside drainage work
Widen to the Right (South)	• Avoids fiber optic line • Downhill grade, no crown shift and less excavation required	• ENSTAR gas line relocation (no cost if done within 5 years) • ~25 Luminaire relocations • ~13 fire hydrant relocations, likely to relocate entire line • Retaining wall required (6'x150') • Possible full ROW acquisitions

Pioneer Avenue Rehabilitation – Overview

Functional Classification	Rural Minor Arterial		
Posted Speed Limit	25-mph		
Length	0.988-miles		
AADTs	**Pioneer Ave**	**East End Road**	**Lake Street**
	7360 (2012)	8057 (2012)	5210 (2012)
	7410 (2011)	8073 (2011)	5250 (2011)
	7460 (2010)	8104 (2010)	5288 (2010)
	7396 (2009)	8053 (2009)	4349 (2009)
Intersections	Sterling Hwy – Stop Controlled (sign) Main Street – Stop Controlled (beacon to be installed 2014/2015) Lake Street – Stop Controlled (beacon)		

Preventative Maintenance (1R)

Scope:

- ROW acquisitions less likely, none assumed in estimate
- Rehabilitation of structural section, maintain location of existing C&G and sidewalks
- Lane widths reduced to design minimum of 10ft, TWLTL reduced to 10ft, two 4.5ft bike lanes added
- C&G, curb ramp, drainage, and signing improvements as needed
- Pedestrian refuges included
- Additional lighting not included

Cost Summary (Planning Level):

Phase 2 - Design:	$465,000
Phase 3 - ROW:	$50,000
Phase 4 - Construction:	$2,300,000
Phase 7 - Utilities:	$100,000
SUBTOTAL	$2,915,000
Contingency	20%
TOTAL	$3,498,000

Resurfacing, Restoration, & Rehabilitation (3R)

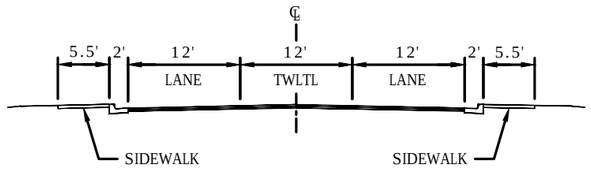
Scope:

- ROW acquisitions required
- Rehabilitation of structural section, maintain existing lane widths
- Widen roadway to right or left to add 5ft bike lane in each direction
- No on street parking
- Reconstruction of drainage, sidewalks, utilities, and lighting
- Crosswalks, traffic calming features, lighting upgrades and landscaping included

Cost Summary (Planning Level):

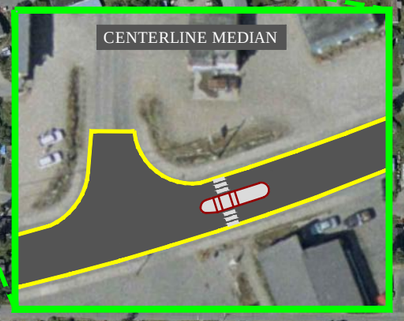
Phase 2 - Design:	$1,300,000
Phase 3 - ROW:	$750,000
Phase 4 - Construction:	$5,770,000
Phase 7 - Utilities:	$650,000
Subtotal	$8,470,000
Contingency	20%
TOTAL	$10,164,000

EXISTING
TYPICAL SECTION



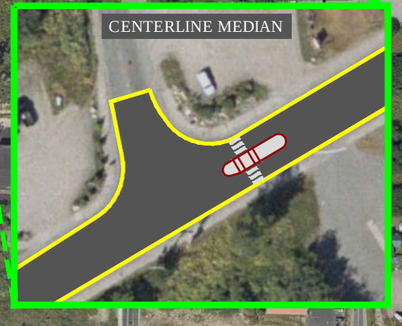
EXISTING ROADWAY

CENTERLINE MEDIAN



STOP CONTROLLED BEACON

CENTERLINE MEDIAN



MAIN ST

PIONEER AVENUE

SVEDLUND ST

KACHEMAK WAY

HEATH ST

LAKE STREET

BARTLETT ST

STERLING HIGHWAY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PIONEER AVENUE REHABILITATION

0 150 300
APPROXIMATE SCALE: 1" = 150'

PROPOSED ROADWAY

City of Homer
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Staff Report 14-50

TO: Homer Advisory Planning Commission
FROM: Rick Abboud, City Planner
DATE: June 4, 2014
SUBJECT: Open Air Business/Farmers Markets in CBD, GC1 and GC2 Districts

Introduction As a result of the motion made at the last meeting, we are having a public hearing regarding the addition of Open Air Business in the districts listed above. Open Air Business is includes Farmers Market by definition. As amended, this use would be permitted outright in all districts. Definitions are included below.

"Business, open air" or "open air business" means the retail sale or display of merchandise or services, including but not limited to farmers' markets and flea markets, conducted outdoors or under a canopy for protection from the elements and held on a regular or periodic basis. Open air business does not include (1) outdoor display or sales of goods or services by a retail or wholesale business that is principally located in a building, or (2) sales, services or rentals of any kind of boat or motorized vehicle.

"Farmers' market" means a location where the primary activity is the sale of goods:
1. Grown upon the land that the seller controls, in the case of fruits, nuts, vegetables, other plant products, or other processed agricultural products;
2. Bred, raised, cultivated or collected by the seller, in the case of animal, poultry, viticulture, vermiculture, aquaculture, eggs, honey and bee products;
3. Cooked, canned, preserved, or otherwise significantly treated by the seller, in the case of prepared foods; or
4. Created, sewn, constructed, or otherwise fashioned from component materials by the seller.

Review: Open Air Businesses such as flea markets are commonly found in industrial zones, as it is not viewed to have much of a negative impact relative to other industrial uses that might create noise, odor, or be unpleasant to view. Flea markets found to operate as an Open Air Business generally present an unpleasant site when various items in various states of repair or condition are placed on the ground and scattered about.

A comparison of flea markets to garage sales was made. I find outrightly permitting flea markets in the CBD quite different that an occasional garage sale. We made a design manual to guide development in the CBD and quite pointedly restrict the outdoor display of retail or wholesale goods when the business is primarily located in a building. Flea markets are commonly found along well traveled commercial corridors in rather bleak lots, usually old parking lots with little or no landscaping. Garage sales are, for the vast majority, one weekend events in a garage or driveway and generally do not fill entire front yards. PLEASE DO NOT DETRACT FROM ALL THE EFFORTS MADE TO BEAUTIFY OUR CENTRAL BUSINESS DISTRICT BY ALLOWING UNFETTERED FLEA MARKETS TO COLOCATE OR LOCATE ADJACENT TO ESTABLISHED BUSINESSES.

I find no issue with allowing Open Air Business in the GC1 or especially GC2 districts. It is already allowed outright in GC1 and the activity is one that should not detract from the GC2.

Farmers Markets are already permitted outright in the CBD. This concept has already gained community acceptance and have not heard of any concern about the activity from the public.

Staff Recommendation: Make a motion to strike "Open Air Business" as a permitted use in the CBD and add "Farmers Market" in its place, as currently found in code.

Attachments:

1. Ordinance 14-20 revision

Ordinance Details

CITY OF HOMER

ORDINANCE 14-20 (Revised June 4, 2014)

AN ORDINANCE OF THE HOMER CITY COUNCIL AMENDING HOMER CITY CODE 21.18.020, PERMITTED USES AND STRUCTURES AND 21.26.030, PERMITTED USES AND STRUCTURES, TO ADD OPEN AIR BUSINESS AS A PERMITTED USE IN THE CENTRAL BUSINESS DISTRICT AND GENERAL COMMERCIAL 2 ZONING DISTRICTS AND ELIMINATE FARMERS MARKET CENTRAL BUSINESS DISTRICT ZONING.

WHEREAS, The Homer City Code defines a Farmers market as a location where the primary activity is the sale of goods grown upon the land of the seller; and

WHEREAS, Farmers' markets are permitted outright in the Town Center Zoning district; and

WHEREAS, Farmers' markets have become popular and necessary parts of communities nation-wide; and

WHEREAS, Farmers' markets should be centrally located in relation to an area's population.

WHESEAS, Farmers market is inclusive of the definition of open air business

NOW, THEREFORE, THE CITY OF HOMER ORDAINS:

Section 1. Homer City Code 21.18.020, Permnitted uses and structures, is amended to read as follows:

21.18.020 Permitted uses and structures.

The following uses are permitted outright in the Central Business District, except when such use requires a conditional use permit by reason of size, traffic volumes, or other reasons set forth in this chapter:

a. Retail business where the principal activity is the sale of merchandise and incidental services in an enclosed building;

b. Personal service establishments;

c. Professional offices and general business offices;

d. Restaurants, clubs and drinking establishments that provide food or drink for consumption on the premises;

e. Parking lots and parking garages, in accordance with Chapter 21.55 HCC;

f. Hotels and motels;

g. Mortuaries;

h. Single-family, duplex, and multiple-family dwellings, including townhouses, but not including mobile homes;

i. Floatplane tie-up facilities and air charter services;

j. Parks;

k. Retail and wholesale sales of building supplies and materials, only if such use, including storage of materials, is wholly contained within one or more enclosed buildings;

l. Customary accessory uses to any of the permitted uses listed in the CBD district; provided, that a separate permit shall not be issued for the construction of any detached accessory building prior to that of the main building;

m. Mobile homes, provided they conform to the requirements set forth in HCC 21.54.100;

n. Home occupations, provided they conform to the requirements of HCC 21.51.010;

o. Ministorage;

p. Apartment units located in buildings primarily devoted to business or commercial uses;

q. Religious, cultural, and fraternal assembly;

r. Entertainment establishments;

s. Public, private and commercial schools;

t. Museums and libraries;

u. Studios;

v. Plumbing, heating and appliance service shops, only if such use, including the storage of materials, is wholly within an enclosed building;

w. Publishing, printing and bookbinding;

x. Recreational vehicle parks only if located south of the Sterling Highway (Homer Bypass) from Lake Street west to the boundary of the Central Business District abutting Webber Subdivision, and from Heath Street to the west side of Lakeside Village Subdivision, provided they shall conform to the standards in HCC 21.54.200 and following sections;

y. Taxi operation limited to a dispatch office and fleet parking of no more than five vehicles; maintenance of taxis must be conducted within an enclosed structure, and requires prior approval by the City Planner of a site, access and parking plan;

z. Mobile food services;

aa. Itinerant merchants, provided all activities shall be limited to uses permitted outright under this zoning district;

bb. Day care homes and facilities; provided, however, that outdoor play areas must be fenced;

cc. Rooming house, bed and breakfast and hostel;

dd. Auto repair and auto and trailer sales or rental areas, but only on Main Street from Pioneer Avenue to the Sterling Highway, excluding lots with frontage on Pioneer Avenue or the Sterling Highway, subject to the following additional requirements: Vehicles awaiting repair or service, inoperable vehicles, vehicles for parts, and vehicles awaiting customer pickup shall be parked indoors or inside a fenced enclosure so as to be concealed from view, on all sides. The fence shall be a minimum height of eight feet and constructed to prohibit visibility of anything inside of the enclosure. The portion of any vehicle exceeding eight feet in height may be visible outside of the fence. Vehicle parts (usable or unusable), vehicle service supplies, and any other debris created in the repair or servicing of vehicles shall also be stored indoors or inside the fenced enclosure out of view of the public;

ee. **Open air business** ~~**Farmers' market**~~;

ff. Dormitory;

gg. Financial institutions;

hh. As an accessory use, one small wind energy system per lot having a rated capacity not exceeding 10 kilowatts;

ii. One detached dwelling unit, excluding mobile homes, as an accessory building to a principal single-family dwelling on a lot. [Ord. 11-44(S) § 3, 2011; Ord. 11-23(A) § 4, 2011; Ord. 09-34(A) § 10, 2009; Ord. 08-29, 2008].

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Section 2. Homer City Code 21.26.020, Conditional uses and structures, is amended to read as follows:

The following uses are permitted outright in the General Commercial 2 District, except when such use requires a conditional use permit by reason of size, traffic volumes, or other reasons set forth in this chapter:

a. Production, processing, assembly and packaging of fish, shellfish and seafood products;

b. Construction, assembly and storage of boats and boat equipment;

c. Manufacture and assembly of pottery and ceramics, musical instruments, toys, novelties, small molded products, electronic instruments and equipment and electrical devices;

d. Research and development laboratories;

e. Trade, skills or industrial schools;

f. Publishing, printing and bookbinding facilities;

g. Auto, trailer, truck, recreational vehicle and heavy equipment sales, rentals, service and repair, excluding storage of vehicles or equipment that is inoperable or in need of repair;

h. Storage and distribution services and facilities, including truck terminals, warehouses and storage buildings and yards, contractors' establishments, lumberyards and sales, or similar uses;

i. Airports and air charter operations;

j. Heliports;

k. Underground bulk petroleum storage;

l. Cold storage facilities;

m. Parking lots and parking garages, in accordance with Chapter 21.55 HCC;

n. Mobile commercial structures;

o. Accessory uses to the uses permitted in the GC2 district that are clearly subordinate to the main use of the lot or building, such as wharves, docks, restaurant or cafeteria facilities for employees; or caretaker or dormitory residence if situated on a portion of the principal lot; provided, that separate permits shall not be issued for the construction of any type of accessory building prior to that of the main building;

p. Taxi operation;

q. Mobile food services;

r. Itinerant merchants, provided all activities shall be limited to uses permitted outright under this zoning district;

s. Recreational vehicle parks, provided they shall conform to the standards in Chapter 21.54 HCC;

t. Hotels and motels;

u. Dormitory;

v. As an accessory use, one small wind energy system per lot.

x. Open air business

ENACTED BY THE CITY COUNCIL OF HOMER, ALASKA, this ____ day of _____ 2014.

CITY OF HOMER

_____
MARY E. WYTHE, MAYOR

ATTEST:

_____

JO JOHNSON, MMC, CITY CLERK

City of Homer
www.cityofhomer-ak.gov

Planning
491 East Pioneer Avenue
Homer, Alaska 99603
Planning@ci.homer.ak.us
(p) 907-235-3106
(f) 907-235-3118

Staff Report PL 14-51

TO:	Homer Advisory Planning Commission
THROUGH:	Rick Abboud, City Planner
FROM:	Dotti Harness-Foster, Planning Technician
DATE:	June 4, 2014
SUBJECT:	Bidarka Heights Unit 3 Knutson Replat Preliminary Plat

Requested Action: Preliminary Plat approval for the removal of a common lot line.

GENERAL INFORMATION

Applicants:	Tracey Knutson PO Box 1026 Girdwood, AK 99587	Johnson Surveying Gerard Johnson, PLS PO Box 27 Clam Gulch, AK 99568
Location:	Highland Drive east of Rogers Loop	
Parcel ID:	17501067 and 17501066	
Size of Existing Lot(s):	4.05 and 1.78 acres	
Size of Proposed Lots(s):	5.85 acres	
Zoning Designation:	Rural Residential District	
Existing Land Use:	Both lots are vacant.	
Surrounding Land Use:	North: Residential South: Vacant East: Vacant West: Vacant	
Comprehensive Plan:	Chapter 4 Goal 1 Objective B: Promote a pattern of growth characterized by a concentrated mixed use center and a surrounding ring of moderate to high density residential and mixed use areas with lower densities in outlying areas.	
Wetland Status:	The 2005 wetland mapping shows a wetland-upland complex and a depression area along the south west portion of the lot. The depression area is noted on the plat.	
Flood Plain Status:	Zone D, flood hazards undetermined.	
BCWPD:	Not within the Bridge Creek Watershed Protection District.	
Utilities:	City water and sewer is not available.	
Public Notice:	Notice was sent to 18 property owners of 21 parcels as shown on the KPB tax assessor rolls.	

Analysis: This subdivision is within the Rural Residential District. The plat removes a common lot line making one 5.835 acre parcel.

Preliminary Approval, per KPB code 20.12.0060 Form and Contents Required. The commission will consider a plat for preliminary approval if it contains the following information at the time it is presented and is drawn to a scale of sufficient size to be clearly legible.

1. Within the title block:
   a. Names of the subdivision which shall not be the same as an existing city, town, tract or subdivision of land in the borough, of which a map or plat has been previously recorded, or so nearly the same as to mislead the public or cause confusion;
   b. Legal description, location, date, and total area in acres of the proposed subdivision;
   c. Name and address of owner and registered land surveyor;
   d. Scale.

Staff Response: The plat meets these requirements.

2. North point;

Staff Response: The plat meets these requirements.

3. The location, width and name of existing or platted streets and public ways, railroad rights-of-way and other important features such as section lines, political subdivision or municipal corporation boundaries abutting the subdivision.

Staff Response: The plat meets these requirements.

4. A vicinity map, drawn to scale showing location of proposed subdivision, north arrow if different from plat orientation, township and range, section lines, roads, political boundaries and prominent natural and manmade features, such as shorelines or streams.

Staff Response: The city boundaries are not displayed.

5. All parcels of land including those intended for private ownership and those to be dedicated for public use or reserved in the deeds for the use of all property owners in the proposed subdivision together with the purposes, conditions or limitation of such reservations.

Staff Response: Private parcels are shown. No public use areas other than Rights of Way are noted.

6. The names and widths of public streets and alleys and easements including drainage easements existing and proposed, within the subdivision. [Additional City of Homer HAPC policy: Drainage easements are normally thirty feet in width centered on the drainage. Final width of the easement will depend on the ability to access the drainage with heavy equipment.]

Staff Response: Carry forward plat note #5 from the preceding plat 2008-05 Homer Recording District: "The 5 ft. adjacent to side lot lines is a utility easement." Show the 5 ft. utility easement on the side lot lines and include

the easement vacation for the lot line that is being vacated. There is an existing 200 f.t drainage easement on the southeast portion of the proposed parcel.

7. The names of adjacent subdivisions or an indication that the adjacent land is not subdivided.

Staff Response: The lots to the south and to the west are in the Bidarka Heights Unit 3 Inama Addition. Tract 3, to the east, is a 21.21 acre parcel is in the Bidarka Heights Unit 3 Fogle Addition.

8. Approximate location of areas subject to inundation, flooding or storm water overflow. Indicate if a recognized flood plain is present. Identify and locate the major drainage systems.

Staff Response: The plat meets these requirements.

9. Approximate locations of areas subject to tidal inundation including the mean high water line.

Staff Response: The plat meets these requirements (not applicable to this area).

10. Block and lot numbering per Section 20.16.110 of the borough subdivision code.

Staff Response: The plat meets these requirements.

11. The general location of existing water and sewer utilities, and the intent and methods of the subdivision to utilize and access such utilities.

Staff Response: The plat meets these requirements. Lots will be served by onsite sewer and water.

12. Provide a contour map of the subdivision and road profiles if road grades exceed 6% on arterial and 10% on other streets.

Staff Response: The plat meets these requirements. No Rights of Way are to be dedicated by this plat.

13. Identify and locate on the plat all areas in excess of 20% grade.

Staff Response: The plat meets these requirements. Grades greater than 20% are shaded.

PUBLIC WORKS COMMENTS: Carry forward the note #5 from the preceding plat 2008-05 HRD. The 5 ft. adjacent to side lot lines is a utility easement." Show the 5 ft. utility easement on side lot lines, including the easement vacation for the lot line being vacated by this plat. Recommend changing the "Former Lot line" to "Lot Line being Vacated by this Plat."

FIRE DEPARTMENT COMMENTS: Fire Chief Painter did not have any concerns.

STAFF COMMENTS/RECOMMENDATIONS:

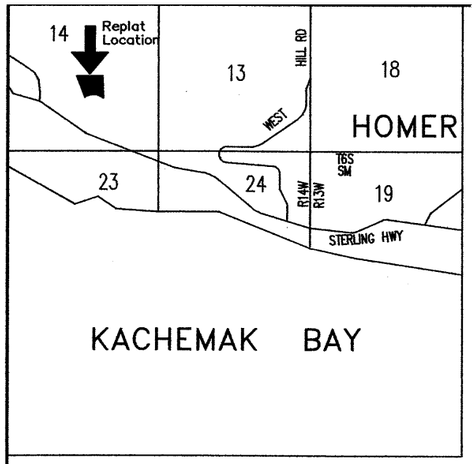
Planning Commission recommend approval of the preliminary plat with the following comments:

1. Add labels for the adjacent lands to include the subdivision names.

2. Carry forward plat note #5 from the preceding plat 2008-05 Homer Recording District: "The 5 ft. adjacent to side lot lines is a utility easement."
3. Show the 5 ft. utility easement on the side lot lines and include the easement vacation for the lot line that is being vacated.
4. Add note #5, development activities subject to City of Homer zoning regulations.
5. Add note#6, lot contains wetlands. Contact Army Corps of Engineers prior to any development activity.
6. Eliminate, "which would interfere with the ability of a utility to use the easement" from note # 1.

ATTACHMENTS

1. Preliminary Plat
2. Public Notice



VICINITY 1" = 1 mile MAP

Bidarka Heights Unit 3
Knutson Replat

Preliminary Plat

A replat combining Lots 2D & 2E Bidarka Hts. Unit 3 Inama Addn., HRD 2008–5.
Located in the SW 1/4 & SE 1/4 Section 14, T6S R13W, SM, City of Homer, Alaska
Homer Recording District, Kenai Peninsula Borough

RECEIVED
MAY 16 2014
CITY OF HOMER
PLANNING/ZONING

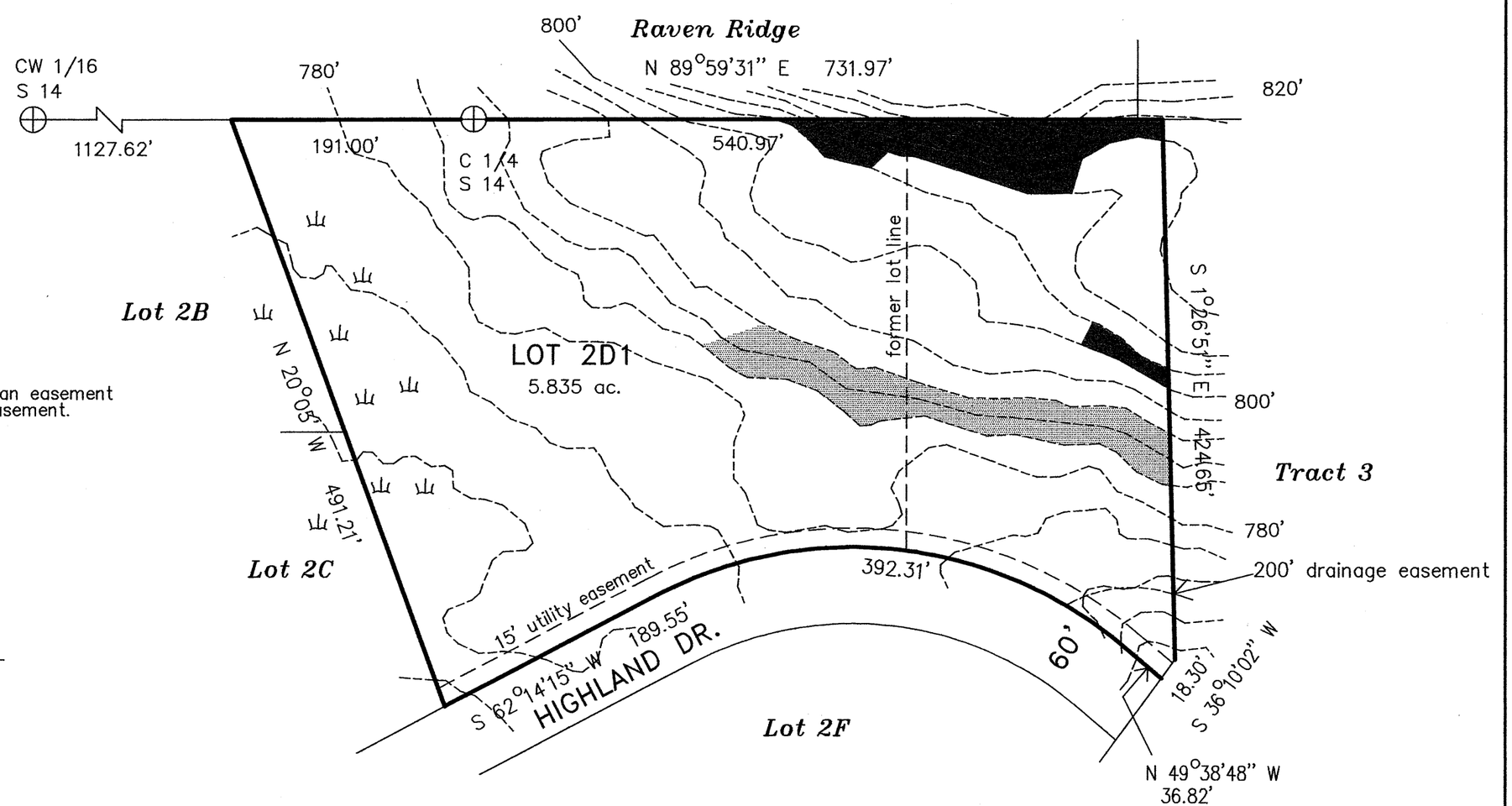
Prepared for

Tracey Knutson
P.O. Box 1026
Girdwood, AK 99587

Prepared by

Johnson Surveying
Box 27
Clam Gulch, Ak 99568

SCALE 1'' = 100' 5.835 Acres 14 May, 2014



NOTES

1. No permanent structure shall be constructed or placed within an easement which would interfere with the ability of a utility to use the easement.
2. Contour interval 4.0'. Swamp area indicated by ⅄
3. Shaded areas indicate a grade of 20% or greater.
4. Lots to be served by onsite well and septic.

WASTEWATER DISPOSAL

20.14.020
The parent subdivision for lots resulting from this platting action was approved by the Kenai Peninsula Borough on 11/13/2006. Wastewater treatment and disposal systems must meet the regulatory requirements of the Alaska Department of Environmental Conservation.

NOTICE OF SUBDIVISION

Public notice is hereby given that a preliminary plat has been received proposing to subdivide or replat property. You are being sent this notice because you are an affected property owner within 500 feet of a proposed subdivision and are invited to comment.

Proposed subdivision under consideration is described as follows:

Bidarka Heights Unit 3 Knutson Replat Preliminary Plat

The location of the proposed subdivision(s) affecting you is provided on the attached map(s). A preliminary plat showing the proposed subdivision may be viewed at the City of Homer Planning and Zoning Office. Subdivision reviews are conducted in accordance with the City of Homer Subdivision Ordinance and the Kenai Peninsula Borough Subdivision Ordinance. A copy of the Ordinance is available from the Planning and Zoning Office. **Comments should be guided by the requirements of those Ordinances.**

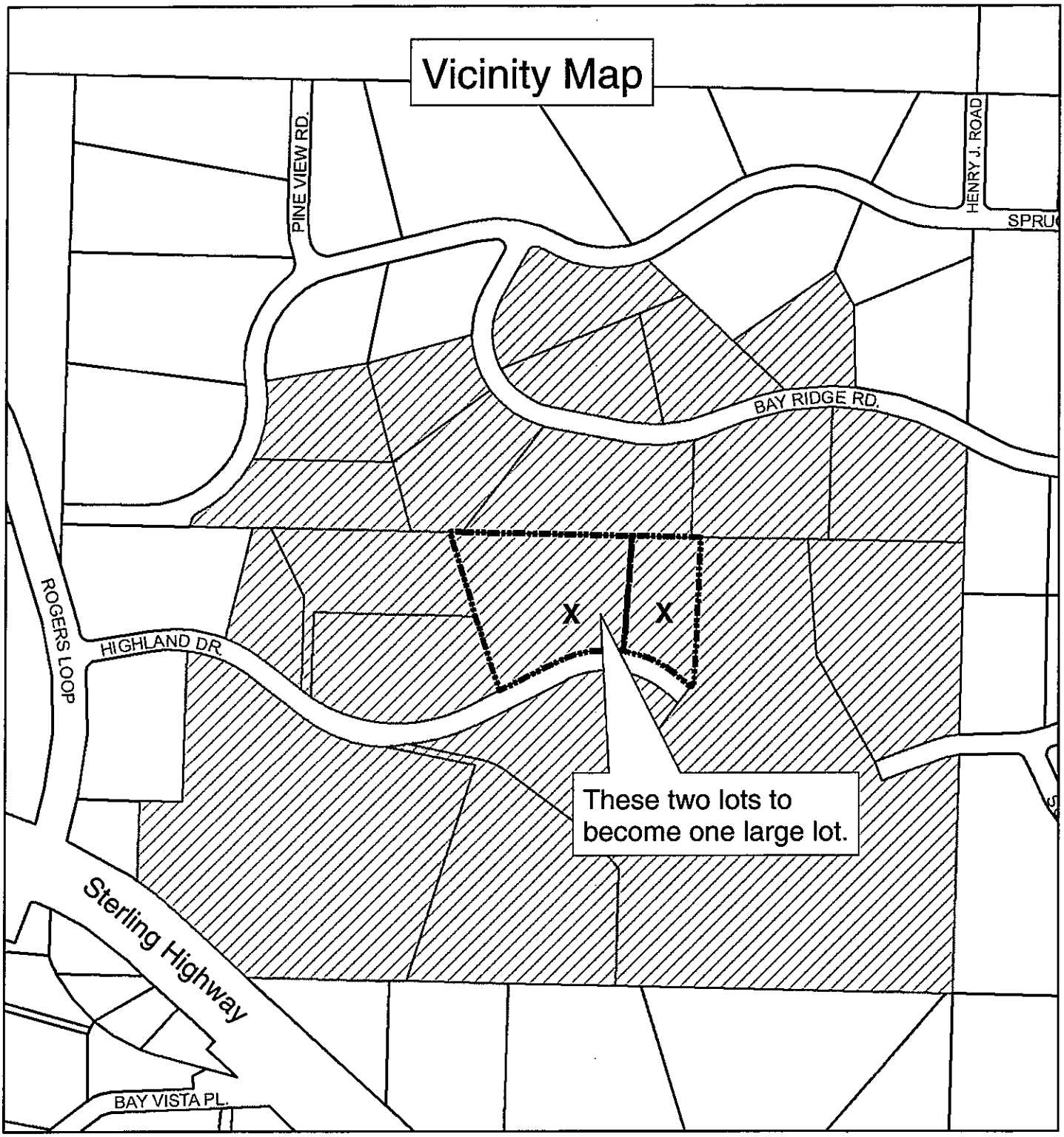
A public meeting will be held by the Homer Advisory Planning Commission on Wednesday, June 4, 2014 at 6:30 p.m. at Homer City Hall, Cowles Council Chambers, 491 East Pioneer Avenue, Homer, Alaska.

Anyone wishing to present testimony concerning these matters may do so at the meeting or by submitting a written statement to the Homer Advisory Planning Commission, 491 East Pioneer Avenue, Homer, Alaska 99603, by 4:00 p.m. on the day of the meeting.

The complete proposal is available for review at the City of Homer Planning and Zoning Office located at Homer City Hall. For additional information, please contact Travis Brown in the Planning and Zoning Office, 235-3106.

NOTICE TO BE SENT TO PROPERTY OWNERS WITHIN 500 FEET OF PROPERTY.

VICINITY MAP ON REVERSE



CITY OF HOMER · ALASKA · MARCH 31, 1964

City of Homer
Planning and Zoning Department
5/21/14

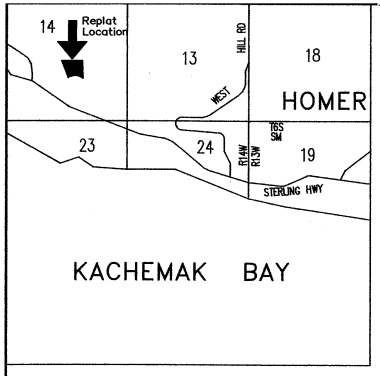
Bidarka Heights Unit 3
Knutsen Replat
Preliminary Plat

Marked lots are witin 500 feet and property owners notified.

Feet
0 250 500

N

Disclaimer:
It is expressly understood the City of Homer, its council, board, departments, employees and agents are not responsible for any errors or omissions contained herein, or deductions, interpretations or conclusions drawn therefrom.



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Located in the SW 1/4 & SE 1/4 Section 14, T6S R13W, SM, City of Homer, Alaska
Homer Recording District, Kenai Peninsula Borough

Prepared for

Tracey Knutson
P.O. Box 1026
Girdwood, AK 99587

Prepared by

Johnson Surveying
Box 27
Clam Gulch, Ak 99568

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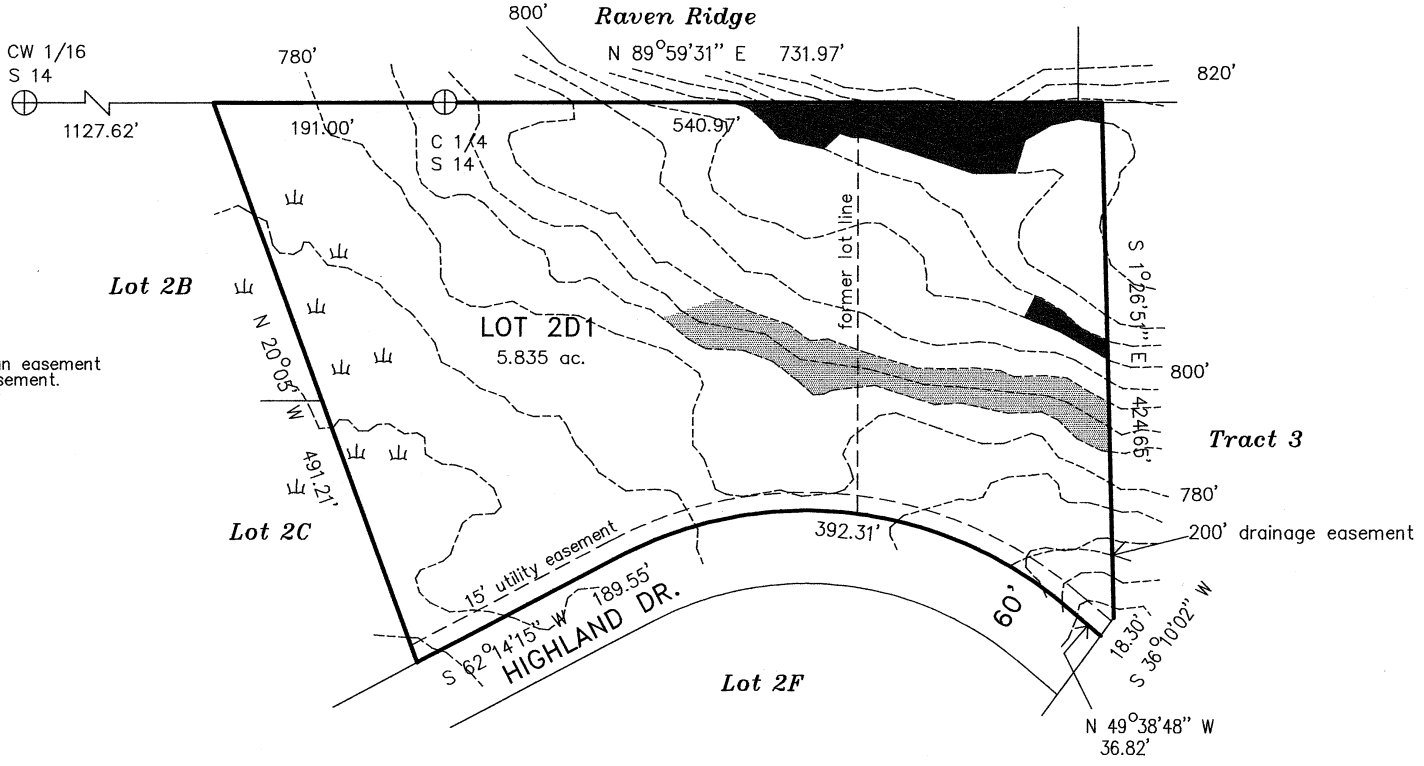
MAY 16 2014
CITY OF HOMER
PLANNING/ZONING

SCALE 1'' = 100' 5.835 Acres 14 May, 2014

35



NOTES

1. No permanent structure shall be constructed or placed within an easement which would interfere with the ability of a utility to use the easement.
2. Contour interval 4.0'. Swamp area indicated by
3. Shaded areas indicate a grade of 20% or greater.
4. Lots to be served by onsite well and septic.

WASTEWATER DISPOSAL

20.14.020
The parent subdivision for lots resulting from this platting action was approved by the Kenai Peninsula Borough on 11/13/2006. Wastewater treatment and disposal systems must meet the regulatory requirements of the Alaska Department of Environmental Conservation.

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Planning@ci.homer.ak.us
(p) 907-235-3106
(f) 907-235-3118

Staff Report PL 14-53

TO: Homer Advisory Planning Commission (HAPC)
THROUGH: Rick Abboud, City Planner
FROM: Dotti Harness-Foster, Planning Technician
DATE: June 4, 2014
SUBJECT: Changeable copy and internally lit sign in the Gateway Business District

Background: At the May 7, 2014 HAPC meeting the Commission discussed Staff Report PL 14-41 which puts forth two requests to amend the sign standards in the Gateway Business District. If approved, the two amendments to Table 3 in Homer's Sign Code 21.60.060 would:

1. Allow changeable copy signs in the GBD, and
2. Allow internally illuminated signs in the GBD.

Permanently mounted: The commission discussed the need for changeable copy signs to be permanently mounted. Homer's Sign Code requires that all changeable copy signs be permanently mounted, HCC 21.60.060 Table 3 (c). **"Changeable copy signs must be wall- or pole-mounted, and may not be flashing."**

Churches are Institutions (per Table 1 (a) HCC 21.60.060) and Institutions may have an internally lit, changeable copy sign in the residential districts with a maximum sign area of 20 sf Table 2 Part A HCC 21.60.060. Since the GBD is not a residential district this code provision for institutions does not apply.

Gateway Business District: The attached draft ordinance only makes changes to the GBD which runs west from the Homer Middle School along both sides of the Sterling Highway, south to Kachemak Bay, and ends just past the corner of West Hill Road and Carriage Court where Story Real Estate is located. SR 14-41 pg 2.

Motions are needed to move this draft ordinance to public hearing.

a) If no motion(s) are made, the attached draft ordinance will move forward to public hearing to allow changeable copy signs and internally illuminated signs in the GBD.

b) If the Commission does not recommend changeable Copy signs in the GBD, a motion is needed to clearly documenting the reasoning.

c) If the Commission does not recommend Illumination Internal signs in the GBD, a motion is needed clearly documenting the reasoning.

Attachments

1. Staff Report PL 14-41 presented at the May 7, 2014 HAPC meeting (with attachments)
2. May 7, 2014 HAPC minutes

City of Homer
www.cityofhomer-ak.gov

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491 East Pioneer Avenue
Homer, Alaska 99603
Planning@ci.homer.ak.us
(p) 907-235-3106
(f) 907-235-3118

STAFF REPORT PL 14-41

TO: Homer Advisory Planning Commission
THROUGH: Julie Engebretsen, Deputy City Planner
FROM: Dotti Harness-Foster, Planning Technician
MEETING: May 7, 2014
SUBJECT: Draft Ordinance 14-xx, Amending Homer City Code HCC 21.60.060, Table 3, Permitted Sign Characteristics

INTRODUCTION: The Faith Lutheran Church Planning Board submitted a letter, requesting a change to the sign code to allow internally lit, changeable copy signs in the Gateway Business District (GBD). At the meeting of April 16th, the Planning Commission reviewed the request, and initiated a code amendment per 21.95.010. This item is not currently scheduled for public hearing; this staff report is an introduction to the issue and for discussion purposes. A public hearing, with a complete draft ordinance, will be on the May 21st HAPC agenda.

When reviewing this staff report, a key question emerges: Will allowing changeable copy and/or internally lit signs provide an attractive gateway to residents and visitors as they enter Homer on the Sterling Highway?

BACKGROUND:
For years the church has used temporary signs such as banners to notify the public of upcoming events because permanent changeable copy signs are not allowed in the GBD. The church requests two amendments to Homer's Sign Code HCC 21.60.060, Table 3:

1. To allow changeable copy signs, and
2. To allow internally illuminated signs.

If both amendments are approved, a principal building in the GBD would be allowed one permanently mounted, internally lit, changeable copy sign. For the most part, the sign standards in the GBD are the same standards as in the other business districts with the exception of Table 3 (HCC 21.60.060). Table 3 does not allow changeable copy or illumination internal signs in the GBD.

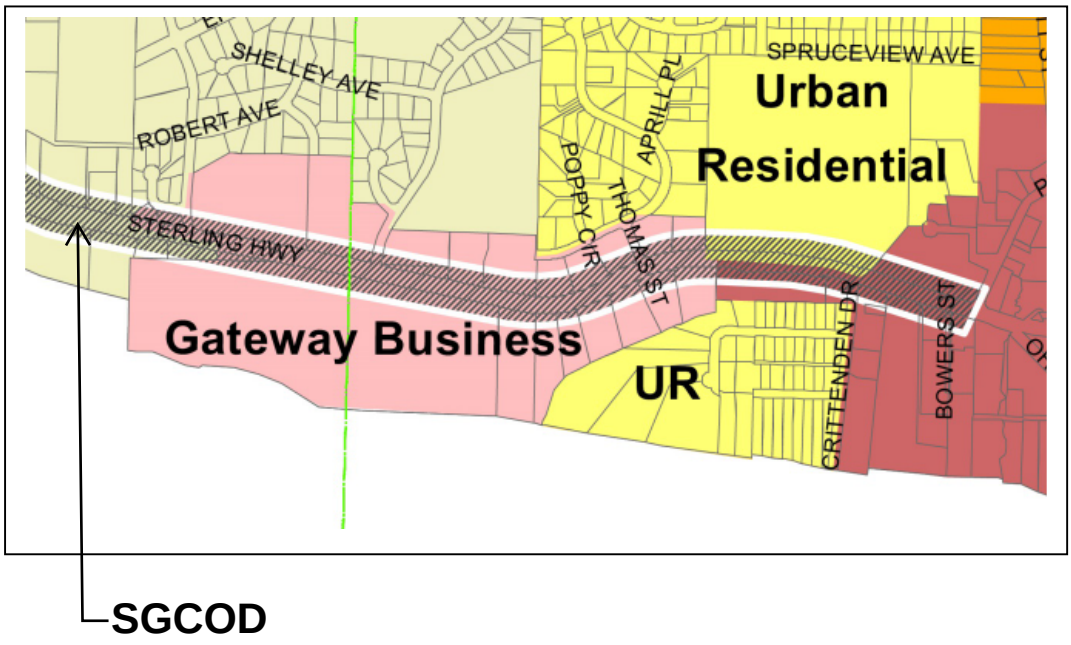
ANALYSIS:
Changeable copy signs can be internal or externally lit. In Homer all changeable copy signs must be permanently mounted and the lettering can only change one time per day, with an exemption for time and temperate, HCC 21.60.040 Definitions:

> ""Changeable copy sign" means a sign that includes characters, letters, or illustrations that can be changed or rearranged without altering the face or the surface of the sign, and on which the message changes less often than one time per day; provided, that a changing electronic or mechanical indication of time or temperature does not cause a sign to be a changeable copy sign."

Internally lit also referred to as Illumination Internal signs: If the light source is not external; it's internal. Technology changes rapidly, so by today's standards internal light sources may include LED, Electronic Message Center, back lit and halo lighting. In general, internally lit signs are more legible because the light bulbs are better maintained and the light source can't be misdirected. Regardless of the district, Homer's Sign Code does not allow animated signs, HCC 21.60.080(e) Design, construction, and maintenance.

> "Illumination, if used, shall not be animated. Light rays shall shine only upon the sign or upon the lot on which the sign is located, and no direct light or significant glare shall be cast onto any adjacent lot, street, or right-of-way."

Gateway Business District and Overlay District: The GBD runs west from the Homer Middle School along both sides of the Sterling Highway, south to Kachemak Bay, and ends just past the corner of West Hill Road and Carriage Court where Story Real Estate is located. Permitted uses include: retail, restaurants, hotels, financial institutions, churches, schools and entertainment establishments. The portion of parcels that front and are within 150 feet of the centerline of the Sterling Highway are within the narrow Scenic Gateway Corridor Overlay District (SGCOD). The SGCOD does not affect signage in the GBD because the SGCOD requires that signs comply with the sign code as it applies to the GBD.



Purpose of the GBD:

> "The purpose of the Gateway Business District is primarily to promote mixed use development, with an emphasis on visitor-oriented business. Conflicts between residential and business uses are resolved in favor of business. Among the goals of the Gateway Business District regulations are the minimization of future traffic congestion along the Sterling Highway corridor, and preservation of the favorable experience residents and visitors have when entering Homer by way of the Sterling Highway."

Purpose of the SGCOD:

> a. The primary purpose of the Scenic Gateway Corridor Overlay District is to make additional provisions for preservation of scenic vistas, to enhance the compatibility of development and to minimize future traffic congestion and maintain safety along the Sterling Highway corridor.
>
> b. The Scenic Gateway Corridor Overlay District shall overlap and overlay existing zoning districts. The intent of this district is to have development that is sensitive to the "Gateway" of Homer and provide an additional layer of protection for the panoramic views of the Gateway while furthering the primary purposes of the district.

The 2010 Comprehensive Plan references the Gateway as a mixed use, "visitor-oriented area that should be developed in a manner that provides an attractive gateway to Homer." Ch 4. pg 5. This aligns with the Chapter 4 Land Use goals:

Goal 2: Maintain the quality of Homer's natural environment and scenic beauty." Ch 4, pg 4-1.
Goal 4: Support the development of a variety of well-defined commercial/business districts for a range of commercial purposes.

Illumination Internal Signs: Discuss how internally lit signs relates to the purpose of the GBD and the Comprehensive Plan. Some considerations are:

- Attractiveness, or not, between internally lit and externally lit signs.
- Legible: Research indicates the internally lit signs are more legible because the light is more evenly distributed.
- Public safety: When a sign is more legible, motorist have more time to react.
- Lighting levels: Homer does not have sign brightness or luminance levels.

Changeable copy sign code amendment: Staff supports changeable copy signs because a permanently mounted changeable copy sign is more attractive than temporary signs such as banners or sandwich boards. This combined with Homer's Sign standards upholds the purpose of the GBD.

HCC 21.95.040 Planning Department review of code amendment states that: The Planning Department shall evaluate each amendment to this title that is initiated in accordance with HCC 21.95.010 and qualified under HCC 21.95.030, and may recommend approval of the amendment only if it finds that the amendment:

a. Is consistent with the comprehensive plan and will further specific goals and objectives of the plan.

Finding 1: This amendment is consistent with the 2010 Comprehensive Plan Chapter 4 Land Use Goal because a permanently mounted, changeable copy sign is more attractive than temporary signs such as banners or sandwich boards.

Finding 2. Homer's Sign standards restrict the sign size and sign height (10 ft) which helps to further the goals and objectives of the Comprehensive Plan. This amendment to allow changeable copy signage is not contrary to the goal and objectives of the comprehensive plan.

b. Will be reasonable to implement and enforce.

Finding 3: This amendment will is reasonable to implement and enforce.

c. Will promote the present and future public health, safety and welfare.

Finding 4: This amendment promotes health, safety and welfare by allowing uses in the GBD to notify the public of community events by using permanently mounted, changeable copy signs.

d. Is consistent with the intent and wording of the other provisions of this title.

Finding 5: This amendment is consistent with the intent, wording and purpose of HCC Title 21.

STAFF COMMENTS/RECOMMENDATIONS:

1. Changeable Copy Signs: Planning staff recommends amending HCC 21.60.060 Table 3 to allow Changeable Copy signs.

2. Illumination Internal Signs: Discuss how internally lit signs relates to the purpose of the GBD and the Comprehensive Plan.

ATTACHMENTS

1. Letter from Faith Lutheran Church stamp dated March 19, 2014
2. Draft Ordinance dated May 7, 2014.

Faith Lutheran Church Planning Board

1000 Soundview Ave.

Homer, AK. 99603

To: Homer Advisory Planning Commission

City of Homer

Planning and Zoning Office

491 E. Pioneer Ave.

We at Faith Lutheran Church need to replace our sign. We are located at the corner of Soundview and the Sterling Hwy, across from West Homer Elementary in the Gateway Business District. Our current sign is falling over and looks run down. Last summer we put out banners attached to our current sign to notify the public about various events and services such as Easter service, Vacation Bible School, Faith Lutheran Youth Group etc. We received a letter from planning and zoning that these banners violate the sign code in our zoning district. In the fall of 2013 we voted as a congregation to replace our sign with a new sign having our church name on top and an area of changeable type on the bottom. Upon receiving a quote for an acceptable sign, we took the new sign plan to the Planning and Zoning department and learned that changeable copy, internally lit signs are not allowed in the Gateway Business District. As a church, we have various events for the community throughout the year and would like to be able to communicate times and dates to the passing public. The sign that we are wanting to install does this in a clean, simple manner and complies with the rest of the sign code.

We at Faith Lutheran Church are requesting an amendment to Homer City Code 21.60.060 Table 3 to allow changeable copy signs in the Gateway Business District.

We would also request to amend Homer City Code 21.60.060 Table 3 to allow an internally illuminated sign in the Gateway Business District.

According to HCC 21.95.010, a member of the Planning Commission may initiate an amendment to this Title.

Respectfully submitted:

Faith Lutheran Church Planning Board

Buck Jones, President

Buck Jones 299-1857

RECEIVED

MAR 19 2014

CITY OF HOMER
PLANNING/ZONING

Pastor Gary Syth

Gretchen McCullough, Director Christian Education

Milli Martin, Finance Director

John Baker, Elders Board

Jacob Baker, Director Church Properties

Tamekia Jones, Director of Education

Carol Clark, Director of Parish Activities

Martha Hendrickson, Director of Pre-School Education

Carol Cordes, Secretary

Merlin Cordes, Past President
Past Director of Finance
Past Director of Church Properties

CITY OF HOMER
HOMER, ALASKA

Planning

DRAFT ORDINANCE 14-presented May 7, 2014

AN ORDINANCE OF THE CITY COUNCIL OF HOMER, ALASKA, AMENDING TABLE 3 PERMITTED SIGN CHARACTERISTICS BY ZONING DISTRICT, FOLLOWING HOMER CITY CODE 21.60.060, SIGNS ON PRIVATE PROPERTY, TO PERMIT CHANGEABLE COPY SIGNS AND ILLUMINATION INTERNAL IN THE GATEWAY BUSINESS DISTRICT.

THE CITY OF HOMER ORDAINS:

Section 1. Table 3, Permitted Sign Characteristics by Zoning District, following Homer City Code 21.60.060, Signs on private property, is amended to read as follows:

	Table 3.													
Sign Type	RR	UR	RO	INS (a)	CBD	TC	GBD	GC1	GC2	EEMU	MC	MI	OSR	PS(e)
Animated (b)	N	N	N	N	P	P	N	P	N	P	P	N	N	N
Changeable Copy (c)	N	N	N	P	P	P	**P**~~N~~	P	P	P	P	P	N	PH
Illumination Internal	N	N	N	P	P	P	**P**~~N~~	P	P	P	P	P	N	N
Illumination External	N	N	N	P	P	P	P	P	P	P	P	P	N	PH
Neon (d)	N	N	N	N	P	P	N	P	P	P	P	P	N	N

Notes to Table 3

a. The INS column does not represent a zoning district. It applies to institutional uses permitted under the zoning code in the RR, UR and RO zoning districts. Institutional is defined as an established organization or corporation of a public, non-profit or public safety/benefit nature, *i.e.,* schools, churches and hospitals.

b. Animated signs may not be neon or change colors or exceed three square feet in area.

c. Changeable Copy signs must be wall or pole mounted, and may not be flashing.

d. Neon signs may not be flashing and may not exceed 32 square feet.

e. The PS column does not represent a zoning district. It applies to Public Signs permitted under the zoning code, in all zoning districts.

Section 2. This Ordinance is of a permanent and general character and shall be included in the City Code.

[**Bold and underlined added.** ~~Deleted language stricken through.~~]

ENACTED BY THE CITY COUNCIL OF HOMER, ALASKA, this _____ day of _____ 2014.

CITY OF HOMER

_____
MARY E. WYTHE, MAYOR

ATTEST:

_____
JO JOHNSON, CMC, CITY CLERK

YES:
NO:
ABSTAIN:
ABSENT:

First Reading:
Public Hearing:
Second Reading:
Effective Date:

Reviewed and approved as to form:

_____
Walt E. Wrede, City Manager
Date: _____

_____
Thomas F. Klinkner, City Attorney
Date: _____

[**Bold and underlined added.** ~~Deleted language stricken through.~~]

HIGHLAND/BOS - MOVED TO CHANGE HELIPADS BEING PERMITTED OUTRIGHT IN THE BRIDGE CREEK WATER PROTECTION (BCWP) TO REQUIRE A CUP FOR HELIPADS.

There was a discussion on the pros and cons to allowing helipads by CUP process only.

VOTE. NO. STEAD, STROOZAS.
VOTE. YES. VENUTI, HIGHLAND, BOS, ERICKSON.

Motion carried.

Staff explained the table for GC2 that Heliports are permitted outright at the airport and that helipads are allowed only by CUP process for GC2.

Commissioners requested the following changes:
- under the RO Helipads CUP needed insert Hospital.
- remove the permitted outright from the table for Helipad
- remove the permitted outright from the table for Heliports and include an explanation for the airport

NEW BUSINESS

A. Staff Report PL 14-41, Draft Ordinance 14-XX Amending Homer City Code 21.60.060 Table 3 Permitted Sign Characteristics by Zoning District to permit Changeable Copy and Internally Illuminated signs in the Gateway Business District

Staff reviewed the report. Recommendation to allow changeable copy signage and discuss allowing internally lit signage at this meeting.

A lengthy discussion was entertained on the pros and cons of changeable copy and whether the signage was internally lit or externally lit. Staff requested the commission come to consensus on what they would like to see and then the public can weigh in on the guidelines as presented. Currently signage that is externally lit is allowed.

Staff stated that the commission initiated an ordinance. This item can be postponed and discussed later. They can vote on it. The commissioners can recommend no changes be made and Council will make the final decisions.

Staff confirmed any commissioner can initiate a zoning ordinance referencing HCC 21.95.010. The next step is a public hearing held by the commission; the commission will then submit a recommendation to City Council will make the final decision.

Further discussion covered allowing permanent changeable copy signs on private property in the gateway business district, urban residential, rural residential and residential office districts; adding the word “permanent”; adding portable signs not permitted.

Staff summarized the recommendations of the commission and stated this would be back before the commission in June.

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Staff Report PL 14-54

TO: Homer Advisory Planning Commission
THROUGH: Rick Abboud, City Planner
FROM: Julie Engebretsen, Deputy City Planner
DATE: June 4, 2014
SUBJECT: Towers

Introduction

Staff has begun researching communication tower ordinances. There is a lot of information available! The attachments are provided for staff and the Commission to begin familiarizing ourselves with the terms and types of regulations found in other parts of the state. Staff found the information from Juneau particularly helpful. Towers in Juneau and Mat-Su are contentious and draft regulations are regularly the subject of newspaper headlines.

In the Mat-Su Borough, a special task form was formed, and recently concluded their work. However, their recommendations were not adopted. So for the time being the Borough has some regulation, but they may not be addressing the concerns of citizens in that region. This issue has been ongoing for at least two years. The Juneau Assembly will be considering their draft ordinance in June. Staff is watching the process to see if they are more successful than the Mat-Su Borough with these new regulations.

Included in the attachments is code information from Kenai, Soldotna, Mat-Su Borough, and several attachments submitted by Kevin Dee, Bridge Creek Watershed PD land owner. Mr. Dee pointed out to staff that Juneau is undergoing a lengthy process to address towers. Staff has included the Juneau information as background material; there is great information on the history of the industry and changes in technology.

Next Steps:

- Staff will try to boil down the types of regulations and the options for Homer. Some common themes appear to be: Regulate by zoning district, regulate by height, regulate for structural safety, and by setback distances.
- Staff will speak with other planning departments on their regulations and the outcome of that regulation.

- Staff will also speak with representatives of the wireless communication industry, and may try to arrange a guest speaker at a future work session.

Attachments

1. Soldotna code language
2. City of Kenai 14.20.255 communications towers and communications antenna's.
3. CityScape Consultants document, part of Juneau tower process underway
4. City and Borough of Juneau Draft Wireless Telecommunications Master Plan
5. Draft ordinance from Juneau
6. Mat-Su definitions and code for Tall Towers
7. Sample ordinance provided by Mr. Dee
8. Ordinance 14-18, Homer City Council and minutes of April 28th Council meeting
9. Staff report 14-47 and minutes of May 21st HAPC meeting

Soldotna code language

"Transmission Towers (Radio, Television, Other)" means a tall structure or tower situated to receive or transmit microwave impulses which carry radio, telephone or television messages.

Rural Residential zone language, CUP: **Transmission towers**, including radio, television, and other communication **towers**, provided a setback equal to the height of the **tower** or structure is maintained on all sides of the structure and no approach or other airspace zones of the airport are penetrated;

Towers are allowed by CUP in the following zones: Commercial, Parks and recreation, Institutional, Industrial.

Kenai Municipal Code

towers allowed outright or by CUP in all but one zone, citywide

14.20.255 Communications towers and communications antenna(s).

(a) The purpose of this section is to establish a process, rules and standards for the construction of wireless telecommunication facilities to:

(1) Protect and promote the public health, safety and welfare;

(2) Provide guidelines for the siting and design of wireless communication facilities;

(3) Protect the City's environmental resources and to minimize adverse impacts on visual resources;

(4) Ensure that wireless telecommunication facilities are compatible with adjacent land uses;

(5) Minimize the number of towers by encouraging the joint use (co-location) of facilities and by maximizing the use of existing towers and structures;

(6) Allow competition in telecommunications service; and

(7) Enhance the ability to provide wireless telecommunication services to City residents, businesses and visitors.

(b) Definitions. For purpose of this section, the following definitions apply:

(1) "Communications tower" means a tower, monopole, pole or similar structure which supports a telecommunications antenna operated above ground in a fixed location, free-standing, guyed, or on a building or other structure. An amateur radio tower is not a "communications tower" under this section.

(2) "Communications antenna(s)" means any device used for the transmission or reception of radio, television, wireless telephone, pager, commercial mobile radio service or any other wireless communications signals, including without limitation omni-directional or whip antennas and directional or panel antennas, owned or operated by any person or entity required to be licensed by the Federal Communications Commission (FCC) to operate such device. This definition shall not include private residence mounted satellite dishes or television antennas or amateur radio equipment including without limitation ham or citizen band radio antennas.

(3) "Carrier on wheels" or "cell on wheels (COW)" means a self-contained site that can be moved to a location and set up to provide personal wireless services on a temporary or emergency basis. A COW is normally vehicle-mounted and contains a telescoping boom as the antenna support structure.

(4) "Height" of a communications tower is the distance from the base of the tower, including any foundation, to the top of the structure.

(5) "Stealth communications facility" means any telecommunications tower/antenna that is integrated as an architectural feature of a structure so that the purpose of the facility for providing wireless services is not readily apparent to a casual observer.

(c) Permits.

(1) Administrative Permit.

(A) If allowed as a principal permitted use under KMC 14.22.010 a communications tower shall be permitted by the Planner upon a determination that all of the applicable conditions of this section have been met.

(B) Permitted Height Above Structure. In all zones, the Planner may issue a permit for a communications tower to be mounted on an existing building, or structure other than a freestanding or guyed communications tower, as long as it does not extend more than thirty feet (30′) above the

highest part of the structure and the applicable conditions of this section have been met. For example, if a building was constructed to its maximum allowed height of thirty-five feet (35′) in a zone, a communications tower/antenna may be placed on it provided that it is not more than thirty feet (30′) above the highest part of the building.

(2) Conditional Use Permit. If allowed as a conditional use under KMC 14.22.010 and after notice and public hearing as set forth under KMC 14.20.280, a communications tower shall be permitted by the Planning and Zoning Commission upon a determination that all of the conditions of this section and KMC 14.20.150 have been met.

(3) Application Requirements. A written narrative shall be submitted with the application explaining why the proposed site has been chosen, why the proposed telecommunication facility is necessary, why the requested height was chosen, ability of the facility to accommodate other providers, and any other information requested. The applicant for a permit for construction of a communications tower must file with the Planning and Zoning Department an application accompanied by the following documents, if applicable:

(A) One (1) copy of specifications for proposed structures and communications antenna(s), including description of design characteristics and material;

(B) A site plan drawn to scale showing property boundaries, tower location, tower height, guy wires and anchors, existing structures, photographs or elevation drawing depicting typical design of proposed structures, parking fences, landscape plan, and existing land uses on adjacent property;

(C) A current map, or update for an existing map on file, showing locations of applicant's communications towers/antenna(s), facilities and proposed communications towers/antenna(s) which are reflected in public records, serving any property within the city;

(D) A report from a structural engineer registered under AS 08.48 in the State of Alaska showing the communications tower/antenna capacity by type and number, and a certification that the tower/antenna is designed to withstand winds in accordance with the latest revision of ASI/EIA/TIA/222 standards ("Structural standards for steel communications antenna towers and communications antenna supporting structures");

(E) Identification of the owners of the communications tower/antenna(s) and equipment to be located on the site;

(F) Written authorization from the site owner for the application;

(G) Evidence that a valid FCC license for the proposed activity has been issued;

(H) A line of sight analysis showing the potential visual and aesthetic impacts on adjacent residential districts including photo simulations of the proposed facility from each direction shall be provided showing the tower, all antennas, structures, and equipment facilities, demonstrating the true impact of the facility on the surrounding visual environment. The Planning Department will assist in specifying recommended vantage points and the requested number of photo simulations;

(I) A written agreement, on a form approved by the City Attorney, to remove the communications tower/antenna(s) within one hundred eighty (180) days after the communications tower/antenna(s) is substantially unused for a period of twelve (12) consecutive months. If a facility is unused or if a facility becomes obsolete due to changing

technology, it shall be the responsibility of the tower owner and/or property owner to remove the tower and to restore the site to its original condition within sixty (60) days. If the tower is not removed within this sixty (60) day period, the City of Kenai may notify the tower owner that it will contract for removal at the cost of the owner.

(J) A cell phone coverage map showing the applicant's cell phone coverage within the City of Kenai;

(K) Evidence that applicable conditions in subsection (b)(4) are met;

(L) Additional information required by the Planning and Zoning Department for determination that all applicable zoning laws are met.

(4) Conditions. For permits issued under subsections (b) and (c) of this section, the applicant must show that all applicable conditions are met as follows:

(A) Location and Visual Impact. The proposed communications tower/antenna or accessory structure will be placed in a reasonably available location which will minimize the visual impact on the surrounding area and allow the facility to function in accordance with minimum standards imposed by the applicable communications regulations and applicant's technical design requirements.

(B) Inability to Locate on an Existing Structure. The applicant must show that a proposed communications tower/antenna and equipment cannot be accommodated and function as required by applicable regulations and applicant's technical requirements without unreasonable modifications on any existing structure or tower under control of the applicant.

(C) Necessity for Location in a Residential District. Applicant for a permit in a residential district must show that the area cannot be adequately served by a facility placed in a nonresidential district for valid technical reasons.

(D) Location on public property or other private property not suitable. Prior to consideration for a permit for location on private property which must be acquired, applicant must show that available publicly owned sites, and available privately owned sites occupied by a compatible use, are unsuitable for operation of the facility under applicable communications regulations and applicant's technical design requirements.

(E) Design for Future Use. The applicant must show that a new communications tower is designed to accommodate additional communications antenna(s) equal in number to applicant's present and reasonable foreseeable future requirements.

(F) Safety Code Met. The applicant must meet all applicable health, nuisance, noise, fire building and safety code requirements.

(G) Paint. Towers and attached antennas must be painted or coated in a color that blends with the surrounding environment. Muted colors, earth tones, and subdued hues, such as gray, shall be used. All associated structures such as equipment buildings, including the roofs, shall be painted with earth tone colors unless otherwise required under KMC 14.20.150 or by State or Federal law or regulations.

(H) Distance from Existing Tower. A permit for a proposed communications tower within one thousand feet (1,000′) of an existing communications tower shall not be issued unless the applicant certifies that the existing tower does not meet applicant's structural specifications and applicant's technical design requirements, or that a collocation agreement could not be obtained.

(I) FCC Rules. The applicant must show by certificate from a engineer properly licensed in the State of Alaska that the proposed facility will contain only equipment meeting FCC rules.

(J) Application of Zoning Rules. Land development regulations, visibility, fencing, screening, landscaping, parking, access, lot size, exterior illumination, sign, storage, and all other general zoning district regulations except setback height, shall apply to the use. Setback and height conditions in this section shall apply.

(K) Setback. In all zones, a communications tower must be a minimum distance equal to the height of the communications tower from all lot lines. No variance from the setback requirements of this section may reduce the minimum setback distance to below a distance equal to fifty percent (50%) of the height of the tower from a lot line.

(L) No advertising is permitted of the communication tower with the exception of identification signage.

(M) No signs or lighting shall be mounted on a communications tower except those reasonably needed for safety purposes or as required by the Federal Communications Commission, Federal Aviation Administration or other government agency with jurisdiction.

(N) The communications towers shall be secured by a fence with a minimum height of eight feet (8′) to limit accessibility to the public.

(d) Height.

(1) The height limitation on communications towers permitted or allowed by conditional use are as follows:

(A) In the RR-1, RS, RS1, RS2, RU, CC, LC CMU and TSH districts a freestanding communications tower with height not exceeding thirty-five feet (35′) may be permitted; height exceeding thirty-five feet (35′) requires a variance.

(B) In the CG, ED, R, IL and C Districts a freestanding or guyed communications tower with height not exceeding one hundred fifty feet (150′) may be permitted; height exceeding one hundred fifty feet (150′) requires a variance.

(C) In the IH District a freestanding or guyed communications tower with height not exceeding three hundred feet (300′) may be permitted; height exceeding three hundred feet (300′) requires a variance.

(D) In the RR district a freestanding or guyed communications tower with height not exceeding one hundred fifty feet (150′) may be permitted on lots larger than ten (10) acres; height exceeding one hundred fifty feet (150′) requires a variance.

(E) In the RR District a freestanding tower with height not exceeding thirty-five feet (35′) may be permitted on lots of one (1) acre or less; height exceeding thirty-five feet (35′) requires a variance.

(F) Height Limitation Near the Kenai Municipal Airport. Regardless of zone, all communications tower(s)/antenna(s) in aircraft-approach zones and within eight thousand feet (8,000′) of the main runway shall be subject to height limitation on the basis of obstruction criteria as shown on the current FAA-approved Kenai Airport Master Plan drawings which are on file at Kenai City Hall. No variance may be granted under KMC 14.20.190 that deviates from this requirement.

(G) Height Variances. A freestanding or guyed communications tower/antenna exceeding height limitations may be permitted by the Planning and Zoning Commission as a variance under KMC 14.20.180. No height variance may be granted that exceeds one hundred fifty percent (150%) of the maximum height allowed under this section.

(e) Amateur Radio Towers. The Planner shall issue a permit for an amateur radio tower if the applicant meets the criteria of KMC Title 4 (Uniform Codes) and AS 29.35.141 (including height limitations).

(f) Antennas Located on Existing Structures.

(1) Antennas and accessory equipment are permitted in all zoning districts when located on any existing structure, including, but not limited to, buildings, water tanks, utility poles, broadcast towers or any existing support structure in accordance with the requirements of this section.

(2) Antennas and accessory equipment may exceed the maximum building height limitations, subject to the height limitation of this section and provided the antennas and accessory equipment are in compliance with the requirements of this section.

(3) Each antenna mounted on an existing structure and any accessory equipment shall meet the following standards:

(A) Omni-directional or whip antennas shall not exceed twenty feet (20′) in length and not exceed seven inches (7″) in diameter and shall be of a color that is identical or similar to the color of the supporting structure to make the antenna and related accessory equipment visually unobtrusive.

(B) Directional or panel antennas shall not exceed ten feet (10′) in length and two feet (2′) in width and shall be of a color that is identical or similar to the color of the supporting structure to make the antenna and related accessory equipment visually unobtrusive.

(C) Cylinder-type antennas shall not exceed ten feet (10′) in length and not exceed twelve inches (12″) in diameter and shall be of a color that is identical to or similar to the color of the supporting structure to make the antenna and related accessory equipment visually unobtrusive.

(D) Satellite and microwave dishes shall not exceed ten feet (10′) in diameter. Dish antennas greater than three feet (3′) in diameter shall be screened with an appropriate architectural treatment that is compatible with or integral to the architecture of the building to which they are attached. This screening requirement shall not apply to dishes located upon towers or monopoles.

(E) Other antenna types not specifically mentioned above shall be permitted if they are not significantly greater in size and will have a visual impact no greater than the antennas listed above. This provision is specifically included in this section to allow for future technological advancements in the development of antennas.

(g) Stealth Communications Facilities. It is the intent of this section that use of stealth communications facilities within the City of Kenai is encouraged.

(h) Variances. Variances from other general zoning district regulations, including setbacks, may be granted as allowed under KMC 14.20.180.

(i) Exemptions. Ordinary maintenance of existing telecommunications towers, antennas and support structures shall be exempt from the requirements of this section. In addition, the following facilities are not subject to the provisions of this section: (1) antennas used by residential households solely for noncommercial broadcast and radio reception; (2) satellite antennas used solely for residential and household purposes; (3) the Planner may issue an administrative permit for COWS to be used temporarily for testing purposes or emergency communications. "Temporary" shall mean the COW is removed within seventy-two (72) hours following the termination of testing or emergency communication needs.

(j) Decision. A decision to issue or deny a permit must be in writing and supported by substantial evidence in the record. No decision regulating the placement, construction or modification of a communications tower may be made on the basis of environmental (i.e., health) effects of radio frequency emission if the facility complies with Federal Communications Commission (FCC) regulations.

(k) Appeals. The applicant may appeal to the Board of Adjustment pursuant to KMC 14.20.290. Failure of the Planning and Zoning Commission to act on an application which is determined to be complete

under this section within forty-five (45) days, unless extended by agreement, may be considered by the applicant to be a denial of the permit which is subject to appeal to the Board of Adjustment.

(Ord. 2425-2009)

CityScape
Consultants, Inc.

From Juneau process

Parameters of Local Jurisdiction over Wireless Infrastructure

The development and deployment of wireless infrastructure (e.g. towers) has presented challenges to local government since the beginning of the wireless revolution in the early 1990's. Following the sale of spectrum by the US Government, the various wireless providers who paid millions wanted to deploy service and receive a return on their investment, but found they were being stymied by local government's regulations on construction of towers.

The industry went back to Congress for relief and as a result a portion of the 1996 Telecommunications Act (Section 704, codified at 47 USC §332(c)) contained the following provisions:

(A) the regulation of placement, construction, and modification of personal wireless services facilities by any state or local government shall not unreasonably discriminate among providers of functionally equivalent services;

(B) the regulation of the placement, construction, and modification of personal wireless service facilities by any state or local government shall not prohibit or have the effect of prohibiting the provision of personal wireless services;

(C) once an applicant files a request for authorization to place, construct, or modify a personal wireless service facility, the governmental entity shall act on the application "within a reasonable period of time after the request is duly filed";

(D) no state or local governmental entity may regulate the placement, construction, or modification of personal wireless service facilities on the basis of environmental effects of radio frequency emissions to the extent that such emissions comply with FCC regulations; and

(E) any decision by a state or local governmental entity to deny an application to place, construct, or modify a personal wireless service facility shall be in writing and supported by substantial evidence contained in a written record.

There's been plenty of court decisions since 1996 interpreting Section 704 and what constitutes "unreasonable discrimination" and prohibition of services, so that part of the law is fairly settled at this point as to what is permitted and what isn't. So the next issue that the wireless industry had with local government was with how long it took to process applications for wireless siting, since Section 704 required local government to act "within a reasonable period of time". The industry told the FCC that many local governments sat on their applications for extended periods of time and that services could not be deployed because of the delays. As a result of their desire to get speed into the process, the industry first went to the FCC, and had the FCC issue a Declaratory Ruling in 2009 requiring local government to

move along applications, in the case of co-locations requiring decisions in 90 days and for new locations in 150 days. This put an administrative burden on local government to make decisions which they may not be adequately informed upon in an expedited fashion, or otherwise they will be deemed approved.

Arlington and San Antonio Texas challenged the FCC's authority to impose those timelines on local government decisions, and the case went all the way to the Supreme Court, which in the 2013 session found that the FCC did in fact have authority to impose those timelines on local government, and thus (absent an intervening state law with different timelines) a local government is bound to make a decision on a wireless facility application in either 90 or 150 days, depending on the type of facility. The clock starts upon submission of a "complete" application and the local government must notify the applicant within 30 days of initial submission if the application is incomplete, otherwise the clock continues to run. IF the local government fails to adjudicate an application within those timelines, the applicant can go to US District Court and file suit against the community, which the court is supposed to address on an "expedited basis". Presumptions will be made in favor of the applicant in the case of a community failing to act within the timeline, with the community being required to overcome those presumptions with evidence as to why a decision could not be reached within those parameters.

Still unsatisfied with local governments' efforts to regulate placement of wireless facilities, the wireless industry went back to Congress and got a small paragraph inserted in the Middle Class Tax Relief and Job Creation Act of 2012, known as Section 6409 (now codified at 47 USC §1455(a)), which says:

SEC. 6409. WIRELESS FACILITIES DEPLOYMENT.
(a) FACILITY MODIFICATIONS.

(1) IN GENERAL. Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) ELIGIBLE FACILITIES REQUEST. For purposes of this subsection, the term ''eligible facilities request'' means any request for modification of an existing wireless tower or base station that involves —
(A) collocation of new transmission equipment;
(B) removal of transmission equipment; or
(C) replacement of transmission equipment.

(3) APPLICABILITY OF ENVIRONMENTAL LAWS. Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

Section 6409 mandates that local government MUST approve certain types of applications if they met the prescribed standards. Note however that Congress did not define what it meant by "substantially change the physical dimensions" or what was an "existing wireless tower or base station". In the absence of any standards or definitions, the wireless industry expressed its opinions on Congressional intent as to those terms, which led to conflicting findings.

Into the void stepped the FCC in January 2013, issuing an "Informal Guidance" to assist local government in ascertaining Congressional intent. The "Informal Guidance" had no binding effect, but was useful in illustrating what the FCC thought was the intent of Congress in Section 6409. A full copy of the "Informal Guidance" is attached to this memo. In the Informal Guidance, the FCC adopted a previously developed definition of "substantially change" from other legislation to be the definition for purposes of Section 6409, involving increases in height, width, addition of equipment and expansion of compound size. The "Informal Guidance" also offered its interpretation of what an "existing wireless tower or base station" meant, finding that a wireless tower was "any structure built for the sole or primary purpose of supporting FCC-licensed antennas and their associated facilities..." and an existing base station was "a structure that ***currently*** supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a base station." (emphasis added). As noted above, the FCC's "Informal Guidance" had no binding effect however, and was merely a statement of what the FCC staff thought Congress intended. Nevertheless, the wireless industry adopted the "Informal Guidance" in part and lobbied for new state legislation in several jurisdictions which used parts of the "Informal Guidance" as standards to require local governments in those states to require approval of wireless infrastructure (see recent legislation in North Carolina and Georgia as examples[1]).

Unsatisfied with just the "Informal Guidance" and emboldened by the Supreme Court's affirmation of their authority to impose certain conditions upon the local approval of wireless facilities in the 2013 "Shot Clock" ruling, the FCC issued a Notice of Proposed Rulemaking[2] in September 2013 soliciting comments from all interested parties on a variety of wireless siting issues, including:

- Streamlining the environmental and historic preservation review processes for newer technologies, including small cells and distributed antenna systems;
- Removing barriers to the deployment of temporary towers, that are used in cases of emergencies or to add capacity during short term events;
- The meaning of terms included in a provision of the Middle Class Tax Relief and Job Creation Act of 2012 which states "a State or local government may not deny, and

[1] North Carolina House Bill 664, S.L. 2013-185, Georgia House Bill 176

[2] *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies (FCC 13-122)*

shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station;" and

- Clarification of issues addressed in the Commission's "shot clock" order which set time periods for state and local governments to complete review of wireless siting applications.

Well over 200 comments were filed by local government and industry representatives, as well as the general public, and the FCC has not yet issued a Report and Order arising from the Notice of Proposed Rulemaking, but it is anticipated that the Report and Order will adopt the 4 prong test for "substantially change" used in the "Informal Guidance" as the guidepost for determining if an application for collocation MUST be approved without public hearing. The greater question will be what the FCC decides happens IF a local government fails to meet the Shot Clock timelines on an application, as one option would be a "deemed approved" which would permit the applicant to just obtain a building permit and construct if the local government failed to act. A host of other issues covered by the NPRM will also be decided in the Report and Order, and local governments will likely have to adapt to those issues absent a successful judicial challenge to the FCC's findings.

Based on the current state of federal regulation of wireless infrastructure, it is important for local government to balance their legitimate local planning and zoning requirements with the expressed federal preference for the deployment of wireless infrastructure to ensure the availability of a variety of wireless services to all Americans. It is anticipated with the forthcoming 2015 TV Spectrum auction (where TV stations will give up some of their spectrum for the FCC to auction off to wireless providers) that the demand for further infrastructure will only increase to permit the auction winners to recover their investments in that spectrum. It is therefore important to have regulations that accomplish your local objectives while still remaining compliant with the applicable federal rules, and having the ability to adjust those regulations as needed when further clarification of the federal rules becomes available.

(Informal Guidance Memo from FCC Attached)

PUBLIC NOTICE

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

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WIRELESS TELECOMMUNICATIONS BUREAU OFFERS GUIDANCE ON INTERPRETATION OF SECTION 6409(a) OF THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012

DA 12-2047
January 25, 2013

On February 22, 2012, the Middle Class Tax Relief and Job Creation Act of 2012 (Tax Act)[1] became law. Section 6409(a) of the Tax Act provides that a state or local government "may not deny, and shall approve" any request for collocation, removal, or replacement of transmission equipment on an existing wireless tower or base station, provided this action does not substantially change the physical dimensions of the tower or base station.[2] The full text of Section 6409(a) is reproduced in the Appendix to this Public Notice.

To date, the Commission has not received any formal petition to interpret or apply the provisions of Section 6409(a). We also are unaware of any judicial precedent interpreting or applying its terms. The Wireless Telecommunications Bureau has, however, received informal inquiries from service providers, facilities owners, and state and local governments seeking guidance as to how Section 6409(a) should be applied. In order to assist interested parties, this Public Notice summarizes the Bureau's understanding of Section 6409(a) in response to several of the most frequently asked questions.[3]

What does it mean to "substantially change the physical dimensions" of a tower or base station?

Section 6409(a) does not define what constitutes a "substantial[] change" in the dimensions of a tower or base station. In a similar context, under the *Nationwide Collocation Agreement* with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers, the Commission has applied a four-prong test to determine whether a collocation will effect a "substantial increase in the size of [a] tower."[4] A proposed collocation that does not involve a substantial increase in

[1] Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96, H.R. 3630, 126 Stat. 156 (enacted Feb. 22, 2012) (Tax Act).

[2] *Id.*, § 6409(a).

[3] Although we offer this interpretive guidance to assist parties in understanding their obligations under Section 6409(a), *see, e.g., Truckers United for Safety v. Federal Highway Administration*, 139 F.3d 934 (D.C.Cir. 1998), the Commission remains free to exercise its discretion to interpret Section 6409(a) either by exercising its rulemaking authority or through adjudication. With two exceptions not relevant here, the Tax Act expressly grants the Commission authority to "implement and enforce" this and other provisions of Title VI of that Act "as if this title is a part of the Communications Act of 1934 (47 U.S.C. 151 et seq.)." Tax Act § 6003.

[4] 47 C.F.R. Part 1, App. B, Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, § I.C (*Nationwide Collocation Agreement*).

size is ordinarily excluded from the Commission's required historic preservation review under Section 106 of the National Historic Preservation Act (NHPA).[5] The Commission later adopted the same definition in the *2009 Declaratory Ruling* to determine whether an application will be treated as a collocation when applying Section 332(c)(7) of the Communications Act of 1934.[6] The Commission has also applied a similar definition to determine whether a modification of an existing registered tower requires public notice for purposes of environmental review.[7]

Under Section I.C of the *Nationwide Collocation Agreement*, a "substantial increase in the size of the tower" occurs if:

> 1) [t]he mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or
>
> 2) [t]he mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or
>
> 3) [t]he mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or
>
> 4) [t]he mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

Although Congress did not adopt the Commission's terminology of "substantial increase in size" in Section 6409(a), we believe that the policy reasons for excluding from Section 6409(a) collocations that substantially change the physical dimensions of a structure are closely analogous to those that animated the Commission in the *Nationwide Collocation Agreement* and subsequent proceedings. In light of the Commission's prior findings, the Bureau believes it is appropriate to look to the existing definition of "substantial increase in size" to determine whether the collocation, removal, or replacement of equipment

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[5] *See* 16 U.S.C. § 470f, *see also* 47 C.F.R. § 1.1307(a)(4) (requiring applicants to determine whether proposed facilities may affect properties that are listed, or are eligible for listing, in the National Register of Historic Places).

[6] *See* Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, WT Docket No. 08-165, *Declaratory Ruling*, 24 FCC Rcd. 13994, 14012, para. 46 & n.146 (2009) (*2009 Declaratory Ruling*), *recon. denied*, 25 FCC Rcd. 11157 (2010), *pet. for review denied sub nom. City of Arlington, Texas v. FCC*, 668 F.3d 229 (5th Cir.), *cert. granted*, 113 S.Ct. 524 (2012); 47 U.S.C. § 332(c)(7).

[7] *See* 47 C.F.R. § 17.4(c)(1)(B); National Environmental Policy Act Compliance for Proposed Tower Registrations, WT Docket No. 08-61, *Order on Remand*, 26 FCC Rcd. 16700, 16720-21, para. 53 (2011).

on a wireless tower or base station substantially changes the physical dimensions of the underlying structure within the meaning of Section 6409(a).

What is a "wireless tower or base station"?

A "tower" is defined in the *Nationwide Collocation Agreement* as "any structure built for the sole or primary purpose of supporting FCC-licensed antennas and their associated facilities."[8] The Commission has described a "base station" as consisting of "radio transceivers, antennas, coaxial cable, a regular and backup power supply, and other associated electronics."[9] Section 6409(a) applies to the collocation, removal, or replacement of equipment on a wireless tower or base station. In this context, we believe it is reasonable to interpret a "base station" to include a structure that currently supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a base station.[10] Moreover, given the absence of any limiting statutory language, we believe a "base station" encompasses such equipment in any technological configuration, including distributed antenna systems and small cells.

Section 6409(a) by its terms applies to any "wireless" tower or base station. By contrast, the scope of Section 332(c)(7) extends only to facilities used for "personal wireless services" as defined in that section.[11] Given Congress's decision not to use the pre-existing definition from another statutory provision relating to wireless siting, we believe the scope of a "wireless" tower or base station under Section 6409(a) is not intended to be limited to facilities that support "personal wireless services" under Section 332(c)(7).

May a state or local government require an application for an action covered under Section 6409(a)?

Section 6409(a) states that a state or local government "may not deny, and shall approve, any eligible facilities request...." It does not say that a state or local government may not require an application to be filed. The provision that a state or local government must approve and may not deny a request to take a covered action, in the Bureau's view, implies that the relevant government entity may require the filing of an application for administrative approval.

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[8] *See Nationwide Collocation Agreement,* § I.B.

[9] *See* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 10-133, *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, Fifteenth Report,* 26 FCC Rcd. 9664, 9481, para. 308 (2011).

[10] *See also* 47 C.F.R. Part 1, App. C, Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, § II.A.14 (defining "tower" to include "the on-site fencing, equipment, switches, wiring, cabling, power sources, shelters, or cabinets associated with that Tower but not installed as part of an Antenna as defined herein").

[11] 47 U.S.C. § 332(c)(7)(A). "Personal wireless services" is in turn defined to mean "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services." *Id.* § 332(c)(7)(C)(1).

Is there a time limit within which an application must be approved?

Section 6409(a) does not specify any period of time for approving an application. However, the statute clearly contemplates an administrative process that invariably ends in approval of a covered application. We believe the time period for processing these applications should be commensurate with the nature of the review.

In the *2009 Declaratory Ruling*, the Commission found that 90 days is a presumptively reasonable period of time to process collocation applications.[12] In light of the requirement of Section 6409(a) that the reviewing authority "may not deny, and shall approve" a covered request, we believe that 90 days should be the maximum presumptively reasonable period of time for reviewing such applications, whether for "personal wireless services" or other wireless facilities.

Wireless Telecommunications Bureau contact: Maria Kirby at (202) 418-1476 or by email: Maria.Kirby@fcc.gov.

-FCC-

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[12] *See 2009 Declaratory Ruling*, 24 FCC Rcd. at 14012-13, paras. 46-47.

APPENDIX

SEC. 6409. WIRELESS FACILITIES DEPLOYMENT.

(a) FACILITY MODIFICATIONS.

(1) IN GENERAL. Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) ELIGIBLE FACILITIES REQUEST. For purposes of this subsection, the term ''eligible facilities request'' means any request for modification of an existing wireless tower or base station that involves —
(A) collocation of new transmission equipment;
(B) removal of transmission equipment; or
(C) replacement of transmission equipment.

(3) APPLICABILITY OF ENVIRONMENTAL LAWS. Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

City and Borough of Juneau, AK

DRAFT Wireless Telecommunications Master Plan

May 15, 2014

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Table of Contents

Chapter 1 Wireless Telecommunications Master Plan

Purpose

The Wireless Telecommunications Master Plan (WMP) serves as a planning tool for the City & Borough of Juneau (CBJ) that guides the future development of wireless telecommunication facilities. This plan provides a short history of wireless communication technology, explanation of current technology, service area maps, and an inventory of telecommunication sites in the borough. The WMP meets the goals and objectives of the 2013 CBJ Comprehensive Plan. Specific land use permitting requirements for wireless communication facilities are provided in the CBJ Land Use Code, Title 49. These permitting requirements are consistent with the policies provided in the WMP.

Background

Wireless communication technology has been rapidly evolving during the past 20 years with the increase in cell phone and internet use and the advent of smart phones. Demand for data (internet) service coverage has grown tremendously due to the popularity of smart phones. This high demand for data service has strained existing telecommunication facilities and resulted in a surge of new infrastructure, such as towers and antenna arrays.

Due to the remote location of Juneau and its regional and state importance, the use of wireless technologies is critical and heavily relied upon. In the past 10 years, Juneau has seen an increase in new towers and antenna arrays. Juneau experiences a summer seasonal spike in cellular and data usage from the more than one million cruise ship tourists who visit annually. Also, high marine use places another unique service demand: the need for cell and data service over waterways. Further, the mountainous terrain presents another challenge in service coverage.

Since 2005, the public has shown a growing concern in new towers, health effects from radio frequency emissions, and trends in wireless infrastructure. New towers have become most controversial in residential neighborhoods. The permitting process for new wireless infrastructure may be unclear and unpredictable for developers and general public. To better understand wireless technology and improve the permitting process, the CBJ and Cityscape Consultants, Inc. (CityScape) partnered to create the *Wireless Telecommunications Master Plan* and associated *Personal Wireless Service Facility Development Standards*.

The need for CBJ to manage the development of wireless telecommunication infrastructure is indicated by the following policies of the 2013 Comprehensive Plan:

POLICY 12.11. TO PLAN FOR AND TO ESTABLISH LAND USE CONTROLS ON WIRELESS COMMUNICATIONS FACILITIES IN A MANNER THAT IS APPROPRIATE FOR THE COMMUNITY AND WITHIN THE PARAMETERS ESTABLISHED BY FEDERAL LAW.

- 12.11 - SOP1 Facilitate the provision of high quality, consistent wireless communication services to residents, business, and visitors.

- 12.11 - SOP2 Avoid potential injury to persons and properties from tower failure and windstorm hazards through structural standards and setback requirements.

- 12.11 - SOP3 Accommodate the growing need and demand for wireless communication services.

- 12.11 - SOP4 Encourage coordination between suppliers and providers of wireless communication services.

- 12.11 - SOP5 Minimize the potential for WCFs to cause interference to other radio services.

- 12.11 - DG1 Encourage developers and tenants of WCF to locate them, to the extent possible, in areas where the adverse impact on the community is minimal.

- 12.11 - DG2 Encourage the location and co-location of WCF on existing structures to minimize the need for additional structures.

- 12.11 - IA1 Conduct a planning process and adopt a CBJ *Wireless Master Plan*.

- 12.11 - IA2 Adopt new Specified Use Provisions in the Land Use Code that provide a uniform and comprehensive framework for evaluating proposals for WCF.

- 12.11 - IA3 Establish standards for location, structural integrity, and compatibility with surrounding neighborhoods to minimize the impacts of WCFs on surrounding land uses.

- 12.11 - IA4 Establish predictable and balanced codes governing the construction and location of WCF.

- 12.11 - IA5 Ensure that any new local regulation or restriction on WCFs responds to the policies embodied in federal law.

- 12.11 - IA6 Include provisions that encourage the use of locations identified in the CBJ *Wireless Master Plan* as preferred locations for wireless communications infrastructure in any ordinance that regulates WCFs.

- 12.11 - IA7 Use zoning restrictions to encourage concealment technologies for new wireless communication infrastructure to lessen adverse effects to surrounding neighborhoods.

The *Wireless Telecommunications Master Plan* and *Personal Wireless Service Facility Development Standards* help achieve conformance with those policies and consistency with the 2013 Comprehensive Plan.

Wireless Telecommunications Master Plan Policies

The policies and implementing actions shown below shall guide the development of Wireless Communication Facilities (WCF).

Public Health & Safety

Ensuring the safety and health of the public with the development of wireless communication facilities is critical. Many antenna array are placed on tall towers near buildings and roads. Having towers and antenna array meet local building codes will minimize tower failure during high wind and snow/ ice conditions. Further, antenna arrays send radio waves when distributing cell and data signal. This emits levels of electromagnetic frequencies that, if not controlled, can be harmful. The Federal Communication Commission (FCC) establishes a maximum emission level to preserve human health and safety. Also, with the construction of new and improved towers reaching above the treeline, it is important that the Federal Aviation Administration (FAA) and the Juneau International Airport (JIA) are notified to ensure aviation safety and compliance with aviation regulations.

POLICY 1. TO ENSURE THE PROTECTION OF THE HEALTH AND SAFETY OF THE PUBLIC WITH THE DEVELOPMENT OF WIRELESS COMMUNICATION FACILITIES.

POLICY 2. TO PROTECT AVIATION SAFETY BY COORDINATING WITH FEDERAL AVIATION ADMINISTRATION (FAA) WITH THE DEVELOPMENT OF WIRELESS COMMUNICATION FACILITIES.

Implementing Actions:

1. Require permits for all wireless communication facilities to ensure building and land use code compliance.
2. Adopt standards that establish a minimum setback distance that towers must be located away from adjacent property lines or buildings (i.e., fall zones).
3. Require compliance with minimum FCC radio frequency emission standards.
4. Adopt standards that allow for the development of wireless communication facilities in remote areas for emergency communication.

Natural Environment

Wireless communication facilities shall be located and designed in a way that avoids harming sensitive environments. Best Management Practices shall be used to lessen impacts. The placement of wireless communication facilities shall avoid highly sensitive wetlands, riparian vegetation, eagle nests, and other protected areas. Coordination with State and Federal agencies that manage sensitive environments shall be ensured with the development of wireless communication facilities.

POLICY 3. TO PROTECT THE NATURAL ENVIRONMENT WITH THE DEVELOPMENT OF WIRELESS COMMUNICATION FACILITIES.

Implementing Actions:

1. Ensure that new wireless communication facilities are located away from, or built using BMPs to minimize impacts to, sensitive environments such as wetlands, anadromous streams, eagle nests, etc.
2. Coordinate with State and Federal jurisdictions when wireless communication facilities may impact sensitive environments.
3. Ensure that wireless communication facilities are located away from geophysical hazards, such as flood zones, or are built to withstand such forces.

Neighborhood Harmony

Property value and neighborhood harmony shall be preserved with the development of wireless communication facilities. The fabric and overall feel of residential neighborhoods shall be preserved with new and improved wireless communication facilities through the adoption of design standards. The permitting process shall include incentives to support preferred development methods. Having a clear permitting process for the public to follow and participate in will improve decision making. Encourage the development of camouflaging wireless communication facilities to reduce impacts to residential neighborhoods.

POLICY 4. TO PROTECT THE PUBLIC INTEREST, PROPERTY VALUE, AND NEIGHBORHOOD HARMONY WITH THE DEVELOPMENT OF WIRELESS COMMUNICATION FACILITIES.

Implementing Action

- The CBJ shall adopt regulations that are predictable for the public to ensure fair and timely participation.
- The CBJ shall adopt regulations that require new wireless communication facilities in residential zones to be designed in a manner that minimizes impacts to residences.
- In residential neighborhoods, the CBJ shall seek experts in the industry for determining effects to property value from new wireless communications facilities, where necessary.

- The CBJ shall provide permitting incentives for new towers that encourage designs and locations that have minimal intrusions toward residential property.
- The CBJ shall encourage the use of public lands, buildings, and structures as locations for future wireless communications infrastructure to minimize impacts to private property.
- The CBJ shall adopt regulations that encourage wireless communication facilities to be designed to blend in with the surrounding environment.
- The CBJ shall encourage concealed technologies for new or rebuilt wireless communication facilities.

Land Use Efficiency

Due to the shortage of buildable land, especially residential, the CBJ shall encourage developers to utilize existing structures for future collocations or attachments of antenna array. This will reduce the need for new towers and increase the efficiency of land use. Existing towers shall be reinforced to allow for future collocations.

POLICY 5. PROMOTE LAND USE EFFICIENCY WITH THE COLLOCATION OF WIRELESS COMMUNICATION FACILITIES TO EXISTING STRUCTURES.

Implementing Action

- The CBJ shall incentivize the collocation of antenna arrays onto existing towers and structures to reduce the need for new towers.
- The CBJ shall establish incentives for reconstructing existing structures to accommodate future antenna arrays.

Scenic Corridors/ Viewsheds

Unique scenic corridors and viewshed in the borough have been mapped in the 2013 Comprehensive Plan. These areas capture the quintessential feeling of Juneau and Alaska and, therefore, shall be preserved.

POLICY 6. TO PRESERVE THE SCENIC VIEWSHEDS AND CORRIDORS LISTED IN THE 2013 COMPREHENSIVE PLAN WITH THE DEVELOPMENT OF WIRELESS COMMUNICATION FACILITIES.

Implementing Action:

- Wireless communication infrastructure shall be located outside of, or blend in with existing vegetation, the mapped scenic viewsheds and corridors of the 2013 Comprehensive Plan.

Intergovernmental Coordination

Due to the various uses of wireless communication facilities, the CBJ shall coordinate with other State and Federal agencies, such as the FAA and FCC, for assuring safe locations and designs.

POLICY 7. TO COORDINATE WITH STATE AND FEDERAL GOVERNMENT ENTITIES WITH THE DEVELOPMENT OF WIRELESS COMMUNICATION FACILITIES.

Amendment and Updating

The Assembly shall update the Wireless Telecommunications Master Plan every ten years or more frequently depending on the growth of wireless communication infrastructure. This update shall include the re-modeling of the service coverage maps (as provided in Chapter 3 of the WMP) and constitute as a substantial change to the Master Plan.

Amending the WMP, or minor change, shall be done on an as-needed basis at the Director's discretion. An amendment shall not have the effect of changing any policies or substantially revise any service coverage maps within the Master Plan.

Chapter 2 The Telecommunications Industry

Introduction

Telecommunications is the transmission, emission and/or reception of radio signals, whether it is in the form of voice communications, digital images, sound bytes or other information, via wires and cables; or via space, through radio frequencies, satellites, microwaves, or other electromagnetic systems. Telecommunications includes the transmission of voice, video, data, broadband, wireless and satellite technologies and others.

Traditional landline telephone service utilizes an extensive network of copper interconnecting lines to transmit and receive a phone call between parties. Fiber optic and T-1 data lines increase the capabilities by delivering not only traditional telephone, but also high-speed internet and, in some situations cable television, and are capable of substantially more. This technology involves an extensive network of fiber optic lines situated either above or below ground locations.

Wireless telephony, also known as wireless communications, includes mobile phones, pagers, and two-way enhanced radio systems and relies on the combination of landlines, cable and an extensive network of elevated antennas most typically found on communication towers to transmit voice and data information. The evolution of this technology is known as first, second, third, fourth and fifth generation (1G through 5G) of wireless deployment.

Wireless handsets

1G 1984 Mobria Cell Phone
Image: J. Bundy

During the early 1980's, the first generation (1G) of 800 megahertz (MHz) band cellular systems was launched nationwide. The 1G portable cell phones were boxy in shape and operated much like an AM and FM radio station. The 800 MHz frequency allows the radio signal from the base station to travel between three and five miles depending on topography and line of site between the base stations. Customers using a cell phone knew when they traveled outside of the service area because a static sound on the phone similar to the sound of a weak AM or FM radio station was heard through the handset. The signal either faded or remained crackling until the subscriber was within range of a transmitting base station.

Originally, the 800 MHz band only supported an analog radio signal. Later technological advancements allowed 800 MHz systems to also support digital customers which allows for an increased number of subscriber transmissions per base station.

The 1990's marked the deployment of the 1900 MHz band Personal Communication Systems (PCS). This second generation (2G) of wireless technology primarily supported a digital signal, which audibly was clearer than the analog signal. The handsets were a fraction of the size of the 1G cell phones and the first handsets provided expanded services such as paging and the ability

to send text messaging through the handheld unit. However 2G had some network functionality trade-offs. The technology of 2G included a static free signal but with a higher rate of disconnects or dropped calls thus the deployment of 2G required significantly more base stations for several reasons. First, the propagation signal in 1900 MHz is limited to a 2-4 mile range so the number of required base stations almost tripled just to provide basic 2G coverage in the same geographic area as a 1G service area. Second, the industry was reluctant to share tower space with a competitor and many service providers resisted collocating on the same tower. Third, subscriber base and usage grew rapidly and the industry needed more sites to improve network coverage demands by their customers.

2G Motorola Phone
Image: amazon.com

2G Nokia Phone
Image: htcevoforum.net

2G Motorola Phone
Image: superstock.com

Third and fourth generation (3G and 4G) wireless handsets offer a wide variety of tools and services including access to e-mail, news, music and videos; built in cameras and videos; global positioning services (GPS); internet commerce; and thousands of applications from games to flashlights for downloading onto the handset. These applications require large amounts of bandwidth and service providers continue to upgrade existing base stations and add additional base stations to improve and increase network capacity. To improve network functionality service providers purchased licenses to operate in the 1700-1800, and 2100-2400 MHz frequencies.

2G Phone (left)
4G Phone (right)
Image: answers.com

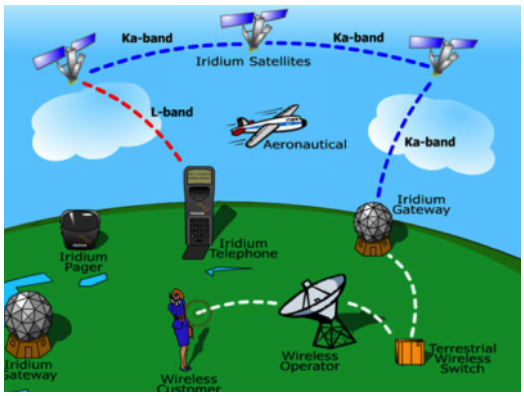
The operating footprint is similar to the 1900 MHz footprint and helped to increase bandwidth in smaller geographic areas. With the advances of 4G the service providers are purchasing licenses in the 700 MHz frequencies. The 700 MHz platform has a service area similar to 800 MHz and will allow the service providers to broadcast a larger propagation footprint. The need for additional infrastructure for 3G and 4G is significant nationwide and continuous deployment of new base stations will be necessary as the industry transitions to fifth and sixth generation (5G and 6G) utilizing the 700, 800, 1700-1900, and 2100-2400 MHz frequencies. LTE is used as a marketing name and is not reflective of the actual download speed as defined as 3G and 4G.

Unlike 1G and 2G (initial launch of cellular and PCS wireless service with the goal and objective of providing initial wireless coverage); 3G through 5G deployments will be focused on compressing more data in existing and future bandwidths. Fourth generation network technology (the platform for smartphones) emphasizes improving network capacity and

maximizing the use of bandwidth for faster and more efficient transfers of data. Fifth generation wireless will bring faster data transfers and additional wireless services such as using your phone for credit card transactions and other similar functions. Like all previous generations of wireless deployment, 5G will require more sites.

Satellite technologies

Satellite growth has surpassed the highest expectations of only a few years ago. The reason is simple - cost. Previously, relaying information, data, and other related materials were cumbersome and required many relay stations in very specific locations and relatively close together. Initially satellite use was expensive because of the rarity and limited amount of available airtime needed. Satellite airtime has become more affordable with the deployment of additional satellites and advanced technologies that allow more usage of the same amount of bandwidth. Competition always holds down cost, and that is what has occurred. In addition, satellite services are in the early stages of designing more localized networks; contributing to the already rapid growth.



Iridium Satellite Routing System
Image: wcclp.com

Satellite technology has its limitations, which are all based on the Laws of Physics. Some licensees of satellite services such as SiriusXM Radio and satellite telephone services petitioned the Federal Communications Commission (FCC) and have been allowed additional deployment of land-based supplemental transmission relay stations for the ability to compete more aggressively with existing ground base services, and overcome obstacles typical to satellite technology. Subscribers found the delay in talk times unacceptable along with fade and signal dropout. The FCC is looking favorably upon this request, even though the existing land-based services are strongly objecting for various reasons. SiriusXM Radio was successful in obtaining ground base supplemental transmitters, and is rapidly becoming one of the largest users of ground base transmitters. This will place more demands on governmental agencies as another service begins to construct a land-based infrastructure.

Wireless facilities

Wireless communication facilities are comprised of four main apparatuses: 1) an electronic base station; 2) feed lines; 3) antenna or antenna array; and 4) an antenna support facility.

Base station and feed lines

Base stations are the wireless service provider's specific electronic equipment used to transmit and receive radio signals, and is usually mounted within a facility including, but not limited to: cabinets, shelters, pedestals or other similar enclosures generally used to contain electronic equipment for said purpose. Feed lines are the coaxial copper cables used as the interconnecting media between the transmission/receiving base station and the antenna. The base station and

feed lines shown in Figure 1 is a typical model for providers operating in the 1900 MHz frequencies and ground space for this equipment cabinet is around eight (8) square feet.

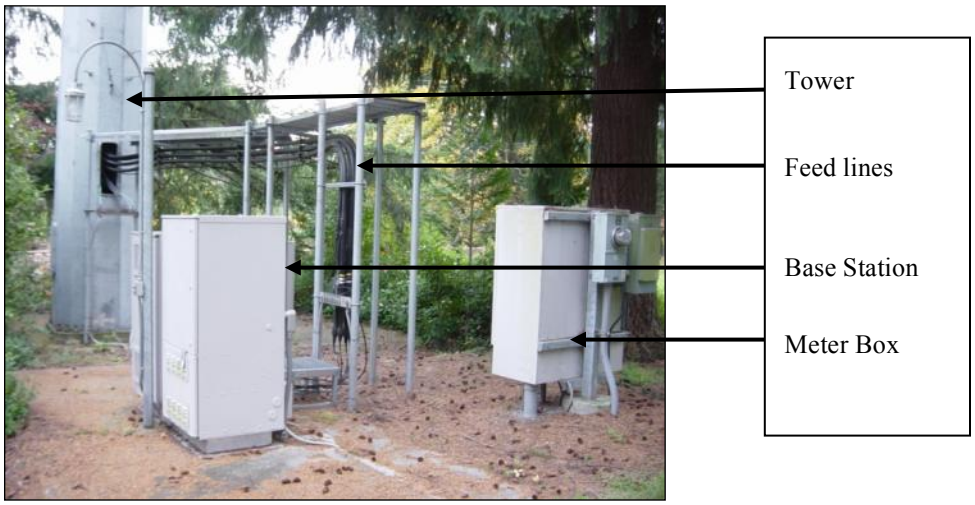


Figure 1: Example of 1900 MHz Wireless Infrastructure Ground Equipment

The electronics operating the 800 MHz wireless systems within the base station can generate substantial heat, therefore the base stations for providers operating in the 800 MHz frequencies are much larger and generally need an equipment cabinet a minimum of four hundred (400) square feet to house the equipment. The only noise that might be produced from the vicinity of any base station would be from an air conditioner or a backup generator that might be necessary in instances of no power or power failure. Figure 2 is a picture of an 800 MHz base station.

Figure 2: Example of 800 MHz Base Station

Antennas and antenna arrays for wireless telecommunications

Antennas can be a receiving and/or transmitting facility. Examples and purposes of antennas include: a single omni-directional (whip) antenna or grouped sectorized (also known as panel antennas). These antennas are used to transmit and/or receive two-way radio, Enhanced Specialized Mobile Radio (ESMR), cellular, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) signals. The single sectionalized or sectionalized panel antenna array is also used for transmitting and receiving cellular, PCS or ESMR wireless telecommunication signals.

Omni-Directional
Whip Type Antenna

Sectorized (panel)
Antenna Array

Figure 3: Examples of Directional and Panel Antennas

The antenna can also be concealed. Concealment techniques include: faux dormers; faux chimneys or elevator shafts encasing the antenna feed lines and/or equipment cabinet; and painted antenna and feed lines to match the color of a building or structure. A concealed attached facility is not readily identifiable as a wireless facility. Various examples of antennas attached to buildings and structures are shown in the following pictures.

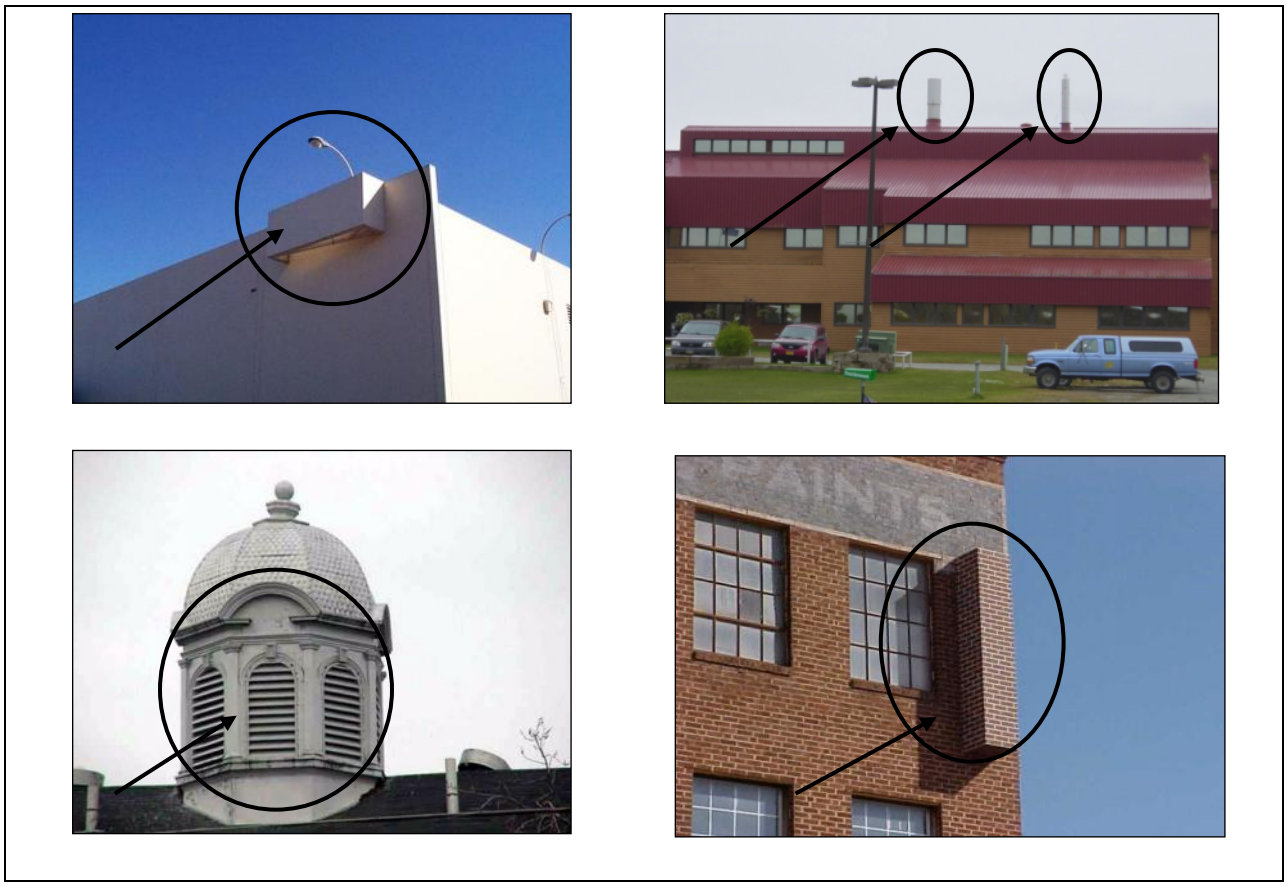


Figure 4: Examples of Concealment Techniques

Support facilities for the antenna

A variety of structures can be used for mounting the antenna(s) such as towers, buildings, water tanks, existing 911 tower facilities, tall signage and light poles; provided that, 1) the structure is structurally capable of supporting the antenna and the feed lines; and, 2) there is sufficient ground space to accommodate the base station and accessory equipment used in operating the network. Antenna support structures can also be concealed in some circumstances to visually blend-in with the surrounding area.

Figure 5 on the following page provides examples of several antenna support structures. The flagpole and light standard are concealed towers. The antennas are flush-mounted onto a monopole and a fiberglass cylinder is fitted over the antenna concealing them from view. The bell tower is a concealed lattice tower. The antennas are hidden above the bells and behind the artwork at the top of the structure.

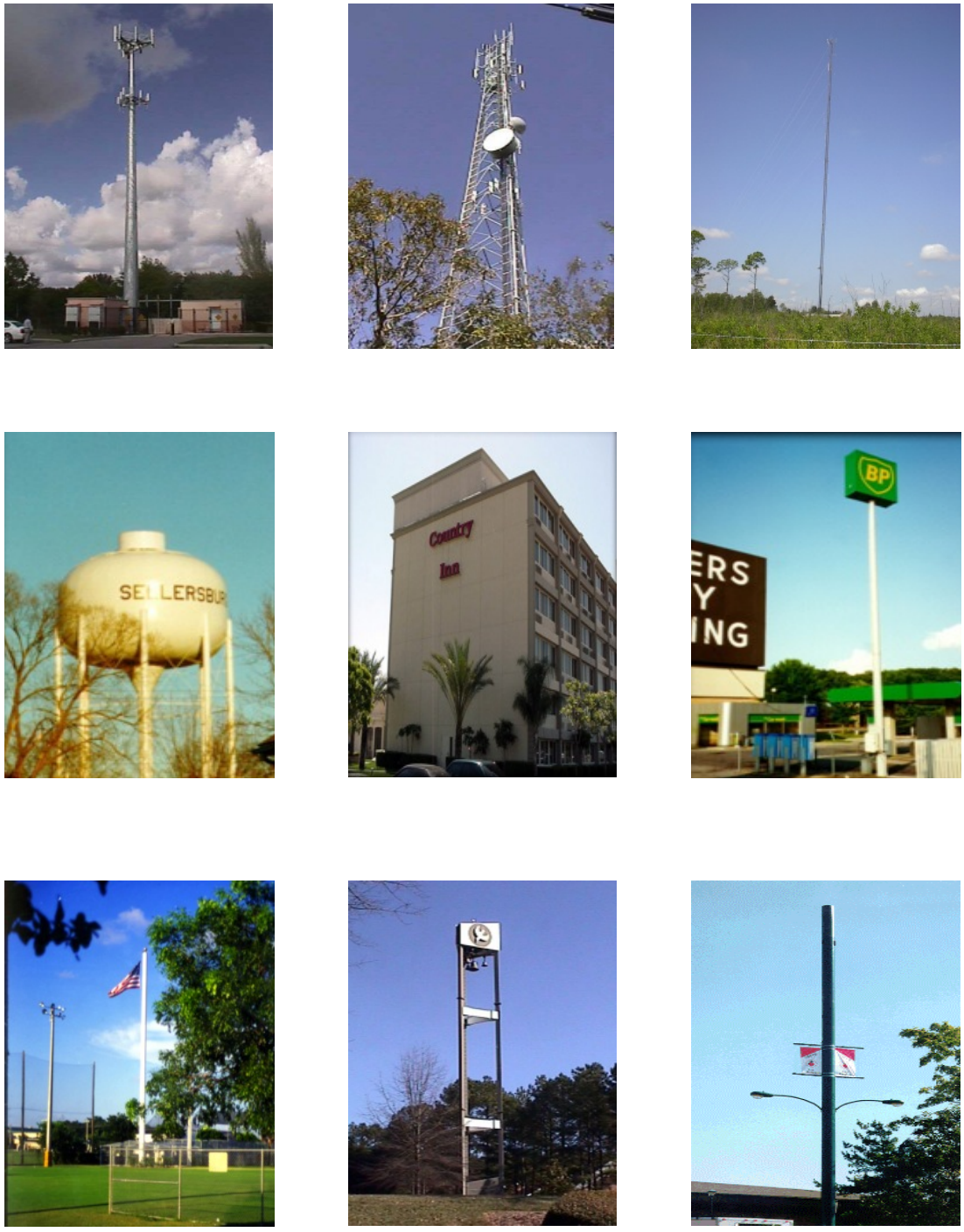
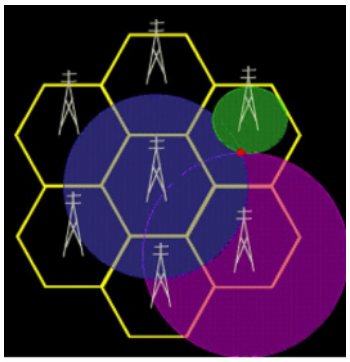


Figure 5: Examples of Antenna Support Facilities

Wireless infrastructure

To design the wireless networks, radio frequency (RF) engineers overlay hexagonal cells representing circles on a map creating a grid system. These hexagons represent an area equal to the proposed base station coverage area. The center of the hexagon pinpoints the theoretical "perfect location" for a base station (antenna support facility). Next, coverage predictions are shown from the base station within the hexagon. The propagation pattern is generally circular and the size of the coverage area is affected by many variables such as antenna mounting elevation, topography, land cover, and size of the immediate subscriber base. The illustration to the left shows a smaller coverage area in green and the largest coverage area in pink. The difference in coverage areas could be relative to the antenna mounting elevations (a lower antenna mounting elevation on the tower in the green circle and a higher antenna mounting elevation on the tower in the pink shaded circle); or differences in network capacity or topography. The grid systems are unique to each service provider and maintained by each individual wireless provider's engineering department.



Hexagonal Grid with Circular Coverage from Base Stations
Image: 5freshminutes.IT

Antenna network capacity

The number of base station sites in a grid network not only determines the limits of geographic coverage, but the number of subscribers (customers) the system can support at any given time. Each provider is different but a single carrier can only process or turn over a certain number of calls per minute, and at any particular time only a certain number of calls can occur simultaneously. This process is referred to as network capacity. As population, tourists and local wireless customers increase, excessive demand is put on the existing system's network capacity. When the network capacity reaches its limit, a customer will frequently hear a rapid busy signal, or get a message indicating all circuits are busy, or commonly a call goes directly to voicemail without the phone ring on the receiving end of the call.

As the wireless network reaches design network capacity, it causes the service area to shrink, further complicating coverage objectives. Network capacity can be increased several ways. The service provider can shift channels from an adjacent site, or the provider can add additional base stations with additional infrastructure.

A capacity base station has provisions for additional calling resources that enhance the network's ability to serve more wireless phone customers within a specific geographic area as its primary objective. An assumption behind the capacity base station concept is that an area already has plenty of radio signals from existing coverage base stations, and the signals are clear. But there are too many calls being sent through the existing base stations resulting in capacity blockages at the base stations and leading to no service indications for subscribers when attempting to place a call.

According to data from SNL Kagan, the federal penetration rates of subscribers with wireless telephone service for the United States indicate a level of around eighty-four percent (84%) and it is predicted to be at one hundred percent (100%) by the end of 2013. This does not mean that every person will have a cell phone; rather, many people will have more than one phone creating the effect of one cell phone per person.

Thus, subscriber density for 3G and 4G is what controls the separation distance between base stations. The existing network design, based on local wireless penetration rates and usage, has each site facilitating the use of between 1750 and 2500 separate devices. As wireless devices increase in number *and* usage (particularly more intensive bandwidth usage like e-mail, Facebook, and mobile TV), each site will need to *decrease* its geographic area and serve a smaller number of subscribers in order to avoid overloading its systems.

Wireless broadband

Wireless broadband is analogous to the communications of voice via wireless phones but for the transmission of high speed wireless data along with standard voice communications. Wireless broadband is the transfer of data (wireless broadband) via radio waves between computers, hand held wireless phones and other wireless devices. First generation wireless deployments launched the analog hand held phones operating in the 800 MHz frequency. Second generation wireless deployments launched the digital wireless voice network in the 800 and 1900 MHz frequencies. Third and fourth generation wireless deployments add the capability of wireless data networks, now including the 2400 and 700 MHz frequencies, although many carriers are using their designated voice channels for broadband.

Traditional service providers such as AT&T, Verizon, and Sprint/Nextel have added wireless broadband to their platforms. Newer wireless handsets (smartphones) can communicate via voice (phone) and access the wireless broadband (internet). Additionally there are service providers such as Clearwire and other smaller regional services whose business plan is to provide wireless data/internet (broadband) (but not traditional voice service) to its subscriber base as an alternative to local cable and dial up internet service providers.

The infrastructure for wireless broadband is similar to that in use for wireless phones; i.e. an elevated antenna with a base station for each service provider. The service area can be reduced in order to maintain an acceptable download speed which will lead to the need for more infrastructure. For example, during maximum usage periods in order to cover a geographic area of approximately five square miles the following would be anticipated:

- 1G – Analog - 1 cell site
- 2G – Cell phone - Digital TDM – 6 cell sites
- 3G – Smartphone - Digital CDMA – 14 sites
- 4G – Universal personal communicator device - Digital CFDM or LTE - 36 sites

Complete fourth generation broadband network deployment is anticipated to begin in 2013 beginning in the urban markets.

Summary

Wireless handsets used for personal wireless services have changed significantly from the initial launch of the cellular phones in the 1980's. The infrastructure that is the backbone of these handsets has not changed as much from a visual perspective. The wireless networks still need elevated antennas above tree lines and rooftops to transmit and receive the communication information between wired and wireless devices. Moisture contained within leaves and pine needles absorb and refract the signal and create an unpredictable propagation variable. There are no antennas currently on the market that can manipulate nature and the laws of physics to eliminate the changes in the propagation characteristics from antennas placed within the tree line. Wireless antennas can function below the tree line but not at the same performance level as compared to antennas placed in the same location above the tree line. For this reason, the industry will continue to prefer placement of their antenna arrays above the tree line to achieve optimal propagation from the infrastructure and maximize their investment in the communities they are servicing. The antenna sizes used have changed minimally over the years. Recent inclusion of remote radio heads in the antenna will generally mean larger and more complex antennas as compared to the earlier 2G installations.

The structures on which the antennas mount have changed very little, other than generally becoming shorter in geographic areas where taller towers are permitted. The monopole and lattice towers remain the most widely used tower infrastructure nationwide for deployment practices. It is likely that diameters of monopoles will need to increase to allow additional space inside for more coaxial lines to accommodate additional antenna and antenna types. Concealment techniques continue to be used to mitigate the visual impact in areas of concern as identified by local governments.

Mergers and acquisitions (Sprint and Nextel for example) will bring about a temporary downsizing and consolidation of infrastructure for the companies involved but overall the industry will continue to need more and more infrastructure with transitions to 3G, 4G, 5G and beyond. The antenna elements will need to be closer together and above tree lines and rooftops.

Chapter 3 Engineering Analysis

Base station network design is founded on the principles of a grid system that is maintained by each wireless provider's engineering department. The hexagonal cells on the grid represent the radius equal to the proposed cells' coverage area. Common points of adjoining hexagons pinpoint the theoretical perfect location for a prospective new base station. For these reasons, deviation from these specified locations can significantly affect the wireless provider's deployment network.

Search area within proposed coverage areas

The search area for new wireless infrastructure is ideally specified in a document provided to site search consultants in pursuit of a lease for property on which to place their facilities, whether a new tower, a rooftop or some other existing structure that could accommodate wireless antennas. From an engineering perspective, any location within the proposed search area is considered to be acceptable for the provider, with certain considerations based on terrain and sometimes population balance.

Search Area Radii

Search areas for the 800 MHz frequencies and 1900 MHz (PCS) frequencies are computed in Tables 1 and 2. The tables utilize the "Okumura-Hata" propagation path loss formula for 800 MHz, and the "COST-231" formula for 1900 MHz. Maximum coverage radii for typical in-vehicle coverage is calculated for various tower heights, and is de-rated by twenty percent to account for a reasonable handoff zone, then divided by four to obtain a search area radius for each tower height. Thus, 800 MHz antenna mounted at the 100-foot elevation would have a search area radius of 0.72 miles, and 0.36 miles for 1900 MHz.

Okumura-Hata Coverage Predictions

Antenna mounting height	50'	80'	100'	115'	150'
Radius, miles	2.53	3.20	3.60	3.88	3.91
Allow for handoff	2.03	2.56	2.88	3.10	3.60
Search area, miles	0.51	0.64	0.72	0.78	0.90

Table 1: Okumura-Hata Coverage Predictions for 800 MHz

COST 231 Coverage Predictions

Antenna mounting height	50'	80'	100'	115'	150'
Radius, miles	1.33	1.64	1.82	1.95	2.32
Allow for handoff	1.07	1.31	1.46	1.56	1.79
Search area, miles	0.27	0.33	0.36	0.39	0.45

Table 2: COST 231 Coverage Predictions for 1900 MHz

Wireless search areas are usually circles of approximately one-quarter the radius of the proposed cell. In practice it is fairly simple to determine whether the search area radius is reasonable. The distance from the closest existing site is determined, halved, and a handoff overlap of about twenty percent is added. One fourth of this distance is the search area radius. CityScape provides the Coverage Prediction tables for antenna mounting elevations between 50 and 150 feet to allow communities the opportunity to evaluate this variable. Generally in areas where initial coverage is the objective taller towers allow the antenna to service a larger geographic coverage area and additional collocations by other service providers. Shorter tower limit the geographic coverage area and reduce the number of collocations resulting in a greater number of towers within each search area.

Tower height and antenna mounting elevation considerations

Taller structures (towers, rooftops, and water tanks) may offer more opportunity for collocation, which could theoretically decrease the number of additional towers and antennas required in an area, but capacity issues could circumvent any advantage of taller towers. The extent to which height may increase collocation opportunities must be verified by an RF engineering review on a case-by-case basis. In geographic areas where there is a larger wireless phone subscriber base or terrain concerns, build-out plans may require lower antenna mounting elevations, especially in densely populated areas. Antennas located at higher elevations on the antenna support facility are indicative of rural areas. In some cases, the wireless providers seek to limit the height in more populous geographic areas because they may need differing heights on a single tower to reduce the potential for interference between the same provider and/or a competing wireless provider.

Master plan design process

This chapter evaluates wireless coverage for the most populated areas of the City and Borough of Juneau (CBJ) and is accomplished by:

- Researching the inventory of existing antenna locations on support structures and buildings and evaluating the possible 800 MHz and 1900 MHz coverage from those sites; and

- Designing an engineered search radii template based on the average existing antenna mounting elevations and applying it over the jurisdictional boundary of the CBJ to evaluate theoretical build-out conditions; and

- Forecasting future infrastructure needs based on the status of the existing deployments and locations of the subscriber base.

Basic coverage predictions and wireless coverage handoff

CityScape provides a series of maps to help visualize the number of antenna locations that would be necessary to provide wireless communications coverage throughout the more urbanized areas of the CBJ. To accomplish this task, CityScape has created a series of root mean square (RMS)

theoretical coverage and handoff maps by randomly selecting existing antenna locations throughout the defined geographical boundary. This hypothetical network demonstrates the minimum number of base station locations required for one provider to provide complete coverage throughout the study area. In order to complete this analysis an antenna mounting elevation must be determined. CityScape has reviewed the existing tower inventory for the CBJ and determined the average tower height used for wireless telecommunications purposes to be around 88 feet. Thus, 88 feet was chosen for the mounting elevation for the theoretical RMS maps.

According to the Okumura-Hata propagation path loss formula in Table 1 coverage for 800 MHz, a reasonable coverage area for an antenna mounted at 80 feet for cellular deployment on flat terrain is about 3.20 miles. This means a single antenna mounted at 80 feet with flat terrain and minimal subscribers would provide a wireless signal to a 3.20 mile geographic radius. Using these three variables (flat terrain, 800 MHz and 80-foot antenna mounting elevations) CityScape has created a wireless network grid covering the CBJ. Figure 6 illustrates that it requires fifteen towers centrally located within the study area to provide complete 800 MHz cellular coverage. These sites represent a theoretical build-out for antennas mounted at the 88-foot elevation at equal dispersion, in a perfect radio frequency environment, with no consideration of topographic and population variables. The black dot within the circle indicates the antenna location. The smaller circle shown within the larger circle represents the limits of the search area for locating the tower. The fifteen cells would theoretically provide wireless service throughout the study area for one provider to address coverage objectives and not capacity objectives.

Referring to the "COST-231" formula for 1900 MHz a reasonable coverage area for an antenna mounted at 80 feet for a PCS site on flat terrain is approximately 1.82 miles. The coverage reduction from 3.2 miles to 1.64 miles reflects the variable change from 800 MHz to 1900 megahertz. Figure 7 illustrates it would take up to forty-nine antenna locations to cover the same geographic area as in Figure 6. These 1900 MHz PCS sites represent a theoretical build-out of one antenna mounted at the 88-foot elevation at equal dispersion for one PCS provider; *with no consideration of terrain or demographic variables.*

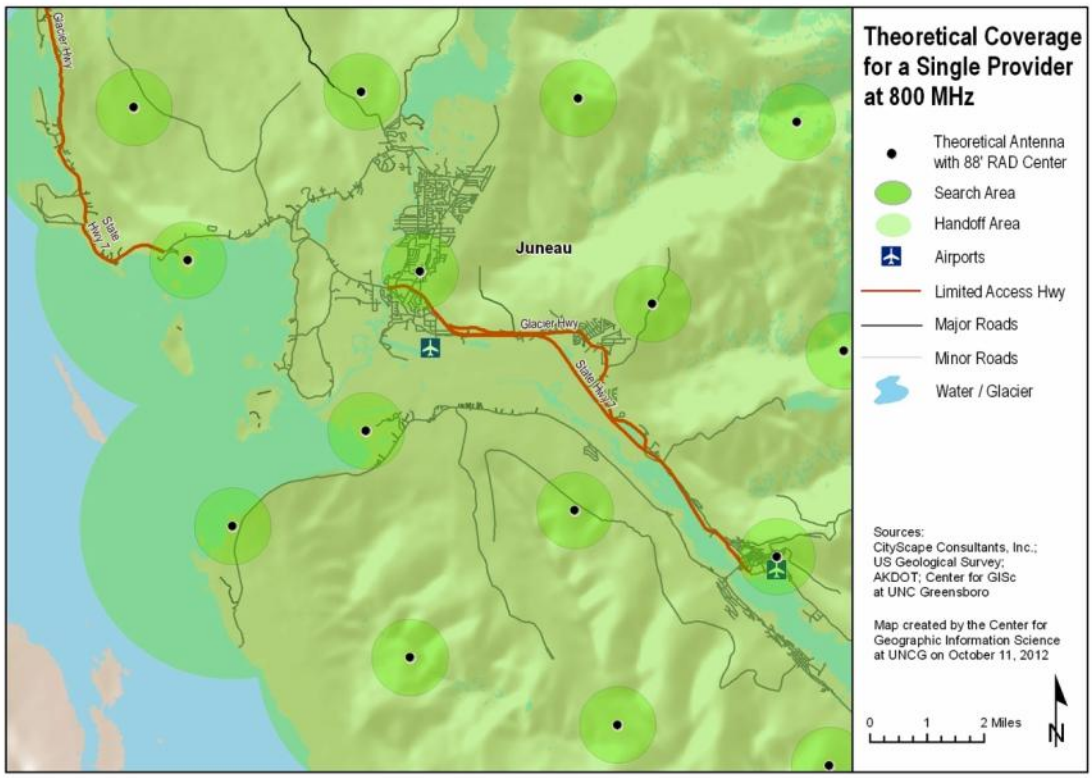


Figure 6: RMS 800 MHz Handoff and Search Areas at 88' Antenna Mounting Elevations

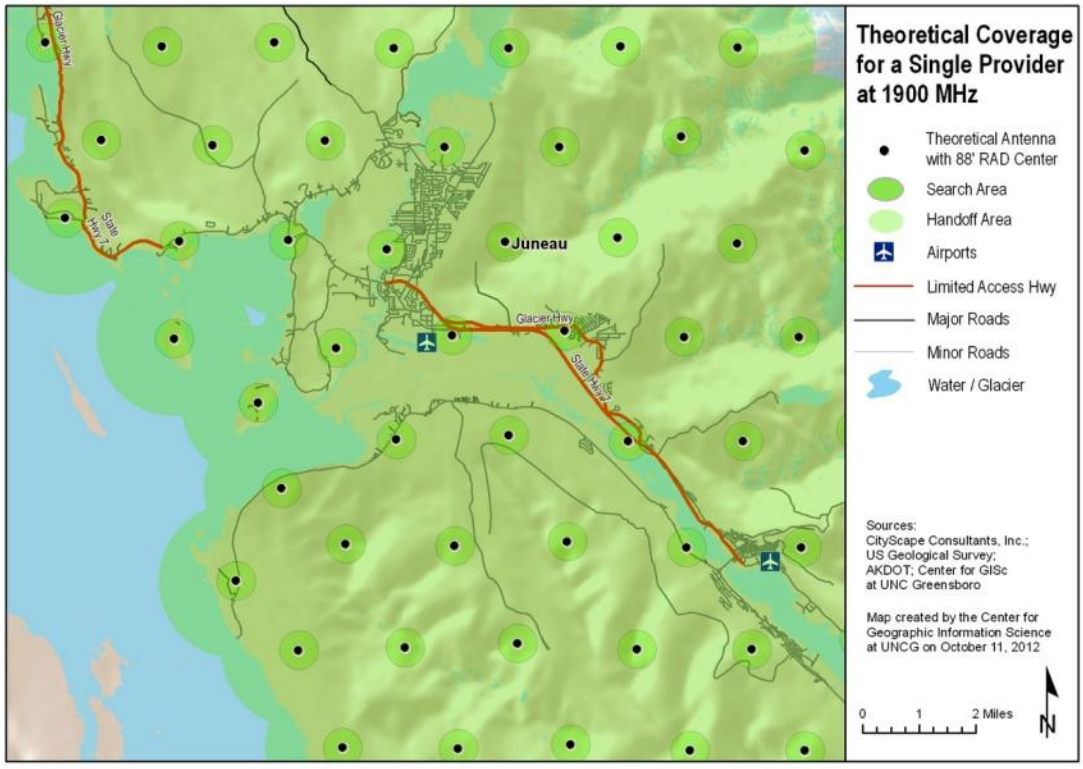


Figure 7: RMS 1900 MHz Handoff and Search Areas at 88' Antenna Mounting Elevations

Topographic variable on theoretical coverage

As previously described in flat terrain and sparsely populated areas, base station prediction is an easier art. The impact terrain has on a service area can be the most dramatic. Radio frequency propagation is line-of-sight technology. Line of sight works best with an unobstructed path between the base station and the handset. There are some variations of this principle. The analogy of a light bulb works well to explain how a wireless signal gets from point A to point B.

In this manner communication signals perform very similar to light. The areas closest to the light are illuminated the brightest. Adding a lampshade over the light bulb dims the light. Walls, closed doors, and other opaque object obscure the light. Similarly for best results in wireless communications there should be nothing in the transmission line of sight path between antenna point A and antenna point B, but that is usually impossible. Reflected or refracted signal will fill in some geographic areas but at a reduced power level.

Therefore, on flat terrain service areas with minimal vegetation, the coverage network from each antenna propagates in an even circular pattern. In areas with varying terrain conditions, the line of-sight coverage will be altered by higher and lower ground elevations. The CBJ has significant topographical variations so terrain greatly alters the theoretical maps.

Using the same random grid antenna locations identified in Figure 6 and Figure 7; Figures 8 and 9 illustrate how wireless service coverage is affected when the topographic variables are added to the propagation formulas. The areas in tan identify geographic area that would have no coverage due to the topography.

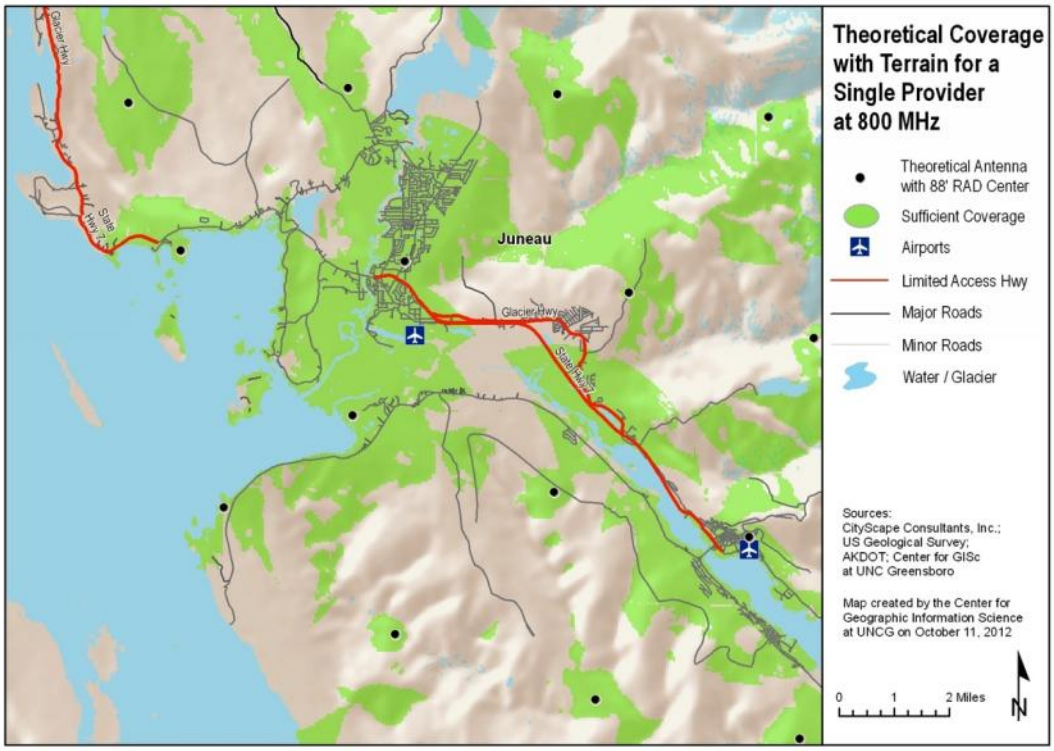


Figure 8: 800 MHz Handoff at 88' Antenna Mounting Elevations with Terrain

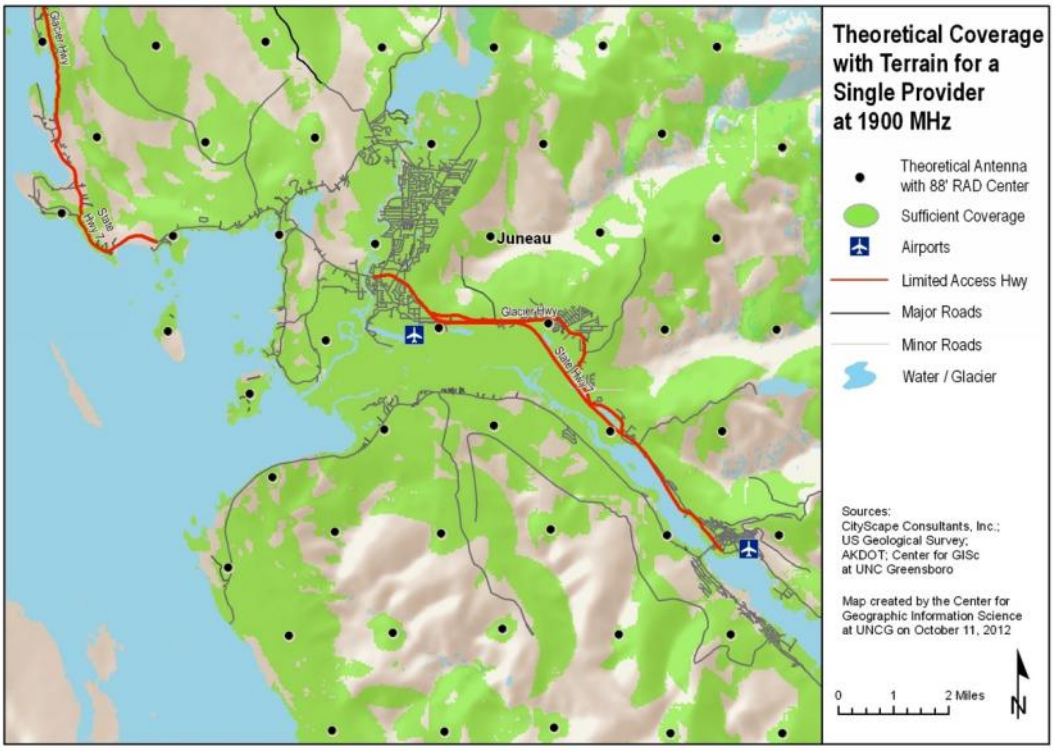


Figure 9: 1900 MHz Handoff with 88' Antenna Mounting Elevations with Terrain

Signal strength on theoretical coverage

Signal strength

The theoretical maps to this point in the master plan illustrate general coverage area from identified sites. Propagation mapping is a process that illustrates the level of coverage from an individual antenna site. Signal strength, in this application, is a term used to describe the level of operability of a handheld portable phone. The stronger the signal between the elevated antenna and the handheld wireless phone, the more likely the phone and all the built-in features will work. A reduced signal decreases the opportunity for satisfactory service caused by dropped calls or failed calls on the wireless device. Distance between the wireless handset and the elevated antennas, in addition to existing obstructions such as topography, buildings, and the physical location of the person using the handset (indoors or outdoors) are variables that affect signal strength.

The level of propagation signal strength is shown through the gradation of colors from yellow to blue. The geographic areas in yellow identify superior signal strength; green equates to areas with average signal strength; shades of blue symbolize acceptable signal strength; and tan shades show marginal or no signal strength. Generally, the closer the proximity to the antenna, the brighter shades of yellow within the geographic service area; which means the better quality of wireless service between the elevated antenna and the wireless handset. As distance increases between the handset and the antenna the green, blue, and tan shades appear indicating geographic service areas with good, marginal, sporadic, or no signal strength, respectively. Table 3 below provides further explanation of the color-coding relative to propagation signals.

Signal Strength Color	Signal Strength Title	Signal Strength Description
Yellow	Superior	Signal strength strong enough to receive signal in many buildings
Green	Average	Signal strength strong enough to receive signal in a car, but not inside most buildings
Blue	Acceptable	Signal strength strong enough to receive signal outside for many handsets, but no expectation of receiving a signal in a car or building

Table 3: Signal Strength

Seasonal variables

Vegetative land cover also affects radio frequency propagation. For example, pine needles absorb radio frequency emissions that distort the propagation from the antenna. Leaf foliage has a similar effect on propagation. Geographic land areas predominately covered by deciduous vegetation will have improved network coverage in the winter when the leaves are off the trees.

Using the same random antenna locations identified in Figure 6 and Figure 7; Figures 10 and 11 illustrate the various levels of signal coverage from the theoretical antenna locations including the foliage (clutter) variable. While the industry standards identify green and blue shades as "average" and "acceptable" coverage; customers tend to indicate otherwise. Most early twenty-first century wireless subscribers are demanding superior signal strength (yellow) in their residences, schools, offices, outdoor spaces and places frequented for shopping and entertainment. As consumers continue the trend of terminating traditional land line phone services and using the wireless handset as the primary mode of communication having signal strength inside buildings is paramount to meeting these expectations. The industries "average" and "acceptable" coverage variables do not meet customer demands and expectations. Figures 10 and 11 show many geographic areas with yellow/superior signal strength throughout most of the valley indicating generally a good level of coverage form these random locations.

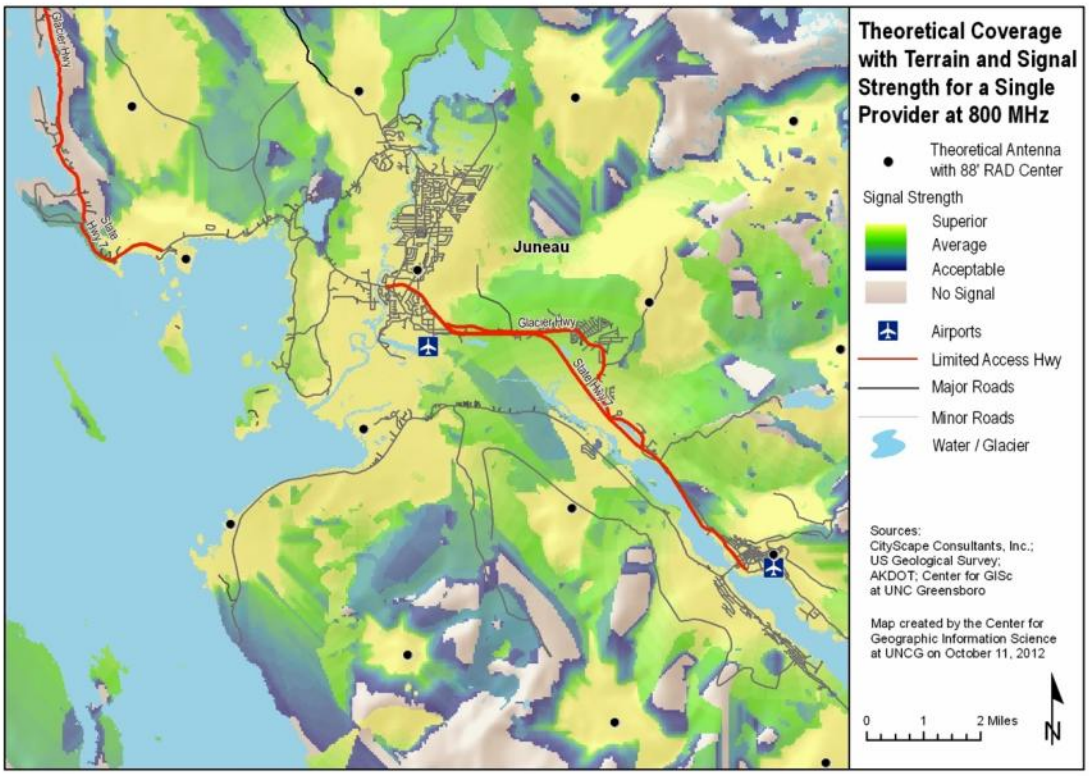


Figure 10: RMS Coverage and Signal Strength for a Single Theoretical 800 MHz Wireless Provider

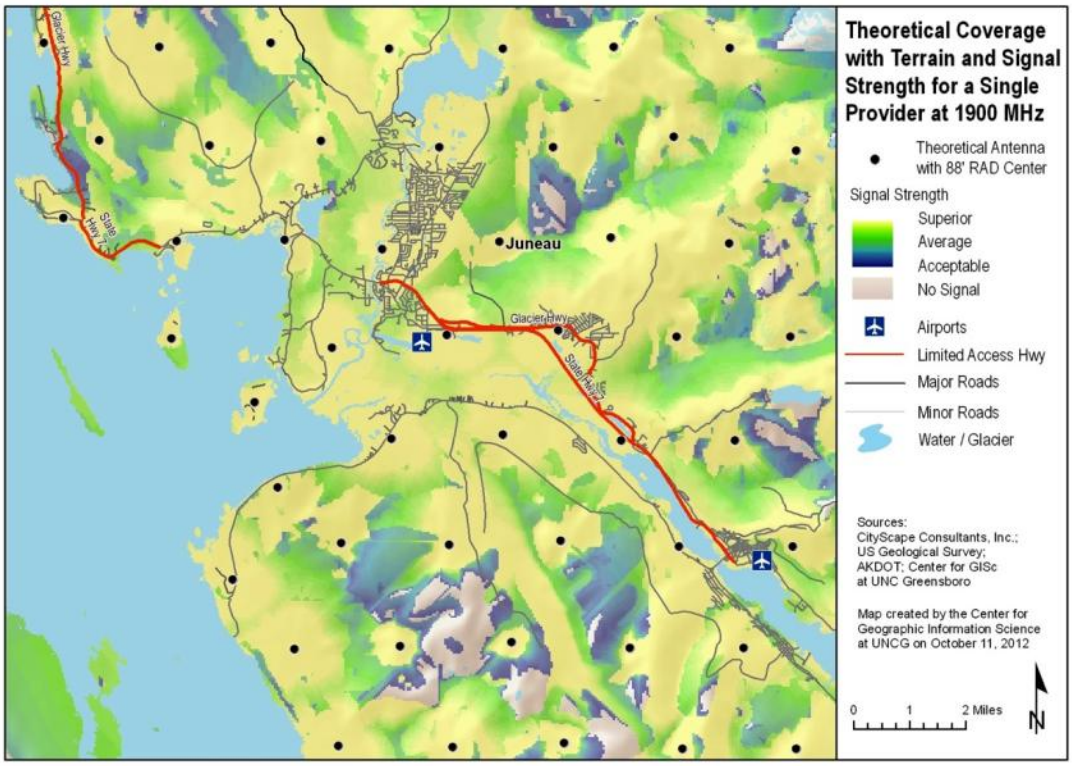


Figure 11: RMS Coverage and Signal Strength for a Single Theoretical 1900 MHz Wireless Provider

The industry and infrastructure

Prior to the granting of the cellular licenses in 1980 for the first phase of deployment, the United States was divided into 51 regions by Rand McNally and Company. These regions are described as Metropolitan Trading Areas (MTA). The spectrum auction conducted by the Federal Government for the 1900 MHz bands for 2G (PCS), further divided the United States into 493 geographic areas called Basic Trading Areas (BTA). The CBJ is located in the "Alaska" MTA (a.k.a. MTA 49) and the "Juneau-Ketchikan, AK" BTA (a.k.a. BTA 221).

Presently throughout the CBJ AT&T and Alaska Communications Systems are licensed to operate in the A and B blocks of cellular services allocated in the 800 MHz band.

Personal Communications Services (PCS) licensees and service providers for wireless phone and broadband operating in the 1700 - 2200 MHz bands include: AT&T Wireless; Alaska Communication Systems; MTA Wireless; T-Mobile; GCI and Sprint Nextel.

The recent transition to digital broadcasting (DTV) from the 700 MHz frequency has enabled the FCC to reassign the 700 MHz band for public safety radio communications and licensed wireless service providers. Public safety entities include police, fire, ambulance, rescue, and other emergency responders will use the spectrum to improve public safety networks. Licensed service providers and local and regional providers of wireless voice and/or data services will use 700 MHz to improve in-building network coverage.

The following service providers have purchased licenses to offer more advanced services in the 700 MHz frequencies: AT&T Wireless; Access 700, LLC; Echostar; Triad 700; and Verizon Wireless.

Per Section 704 of the Telecommunications Act of 1996, all service providers will require uninterrupted and continuous handoff service throughout the CBJ.

Combined there are ten known service providers that will each want to compete for the subscriber base in Juneau. Each of these wireless voice and data providers will need towers and/ or above ground antenna mounting locations to improve network coverage and capacity equating to an ongoing need to deploy more infrastructure, especially in areas of greater residential density.

Existing antenna locations

Mapping the existing antenna sites creates a base map from which observations and analysis are derived relative to current and future deployment patterns. The CBJ provided existing facility locations to CityScape and other locations were attained from tower owners and the FCC database. Multiple facilities were found through various antenna locater search engines or found in the field during the site assessment process. Once these sites were mapped CityScape assessed each of the existing antenna locations throughout the CBJ study area to identify the following: 1) the location of existing telecommunications facilities currently within the CBJ; and 2) the availability of future potential collocations on the existing structures.

The assessment is achieved through actual site visits to each of the base station locations. The wireless infrastructure assessment for CBJ identifies 60 existing wireless communication facilities within the study area. Antennas mounted on towers and buildings are symbolized with a black dot. These antenna locations are identified in Figures 12 and 13. Figure 12 illustrates all the sites on a larger scale map and Figure 13 illustrates sites number 2-60 on a smaller scale map.

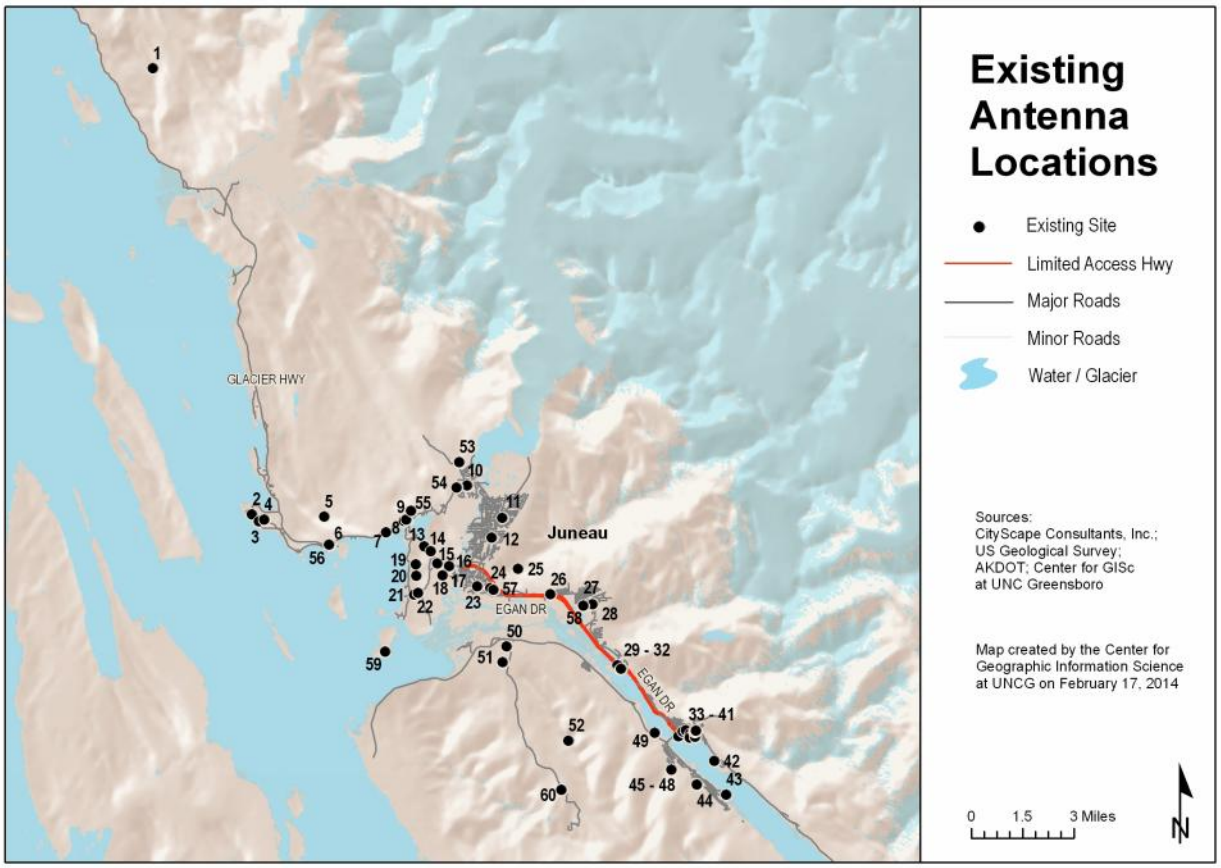


Figure 12: Existing Antenna Locations (large scale map)

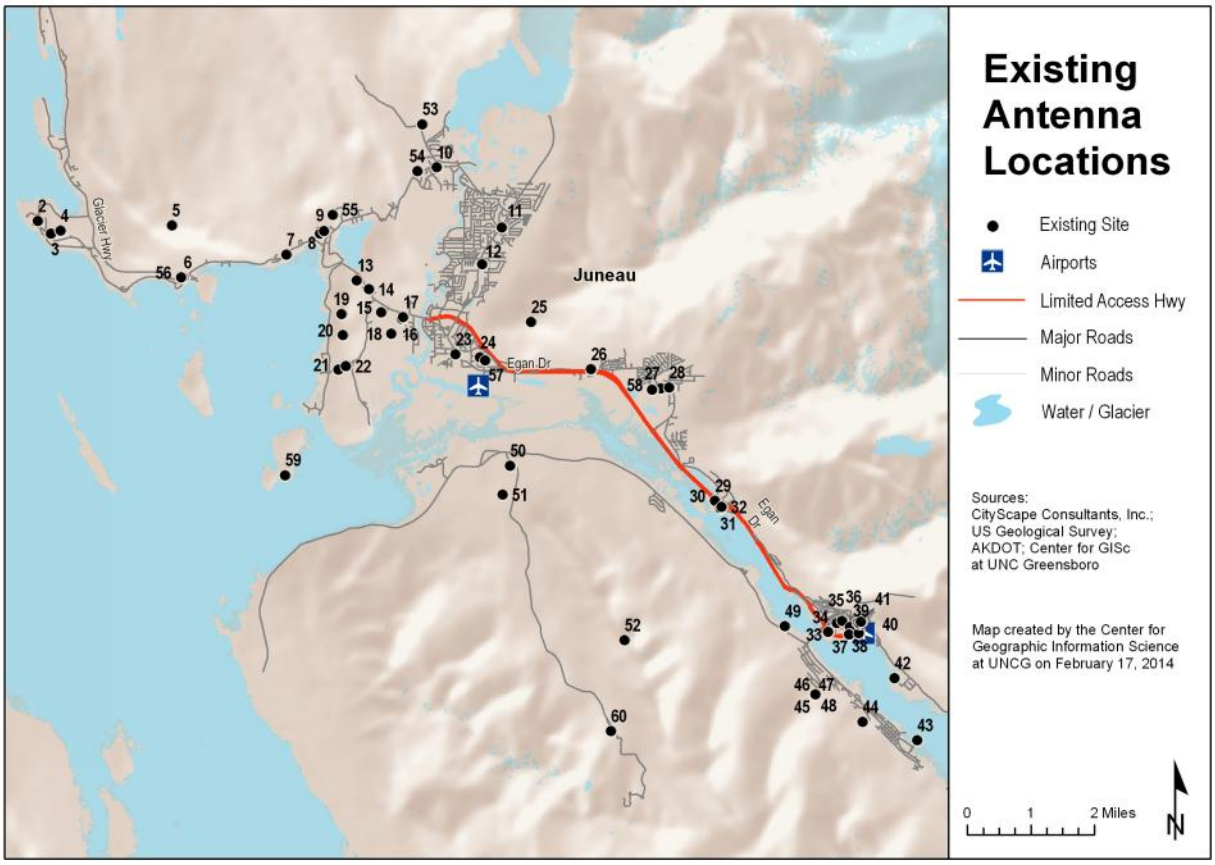


Figure 13: Existing Antenna Locations (small scale map)

Generally, the wireless infrastructure deployment patterns (antenna and tower locations) are concentrated in the downtown and airport areas with most of the remaining sites located parallel the major thoroughfares. Very few of the towers are located on the mountaintops. The FAA and other public safety agencies predominantly use the sites found in these locations.

Table 4 provides a summary of the total number of sites assessed within the CBJ study area by type, height, and ownership. CityScape and the CBJ have identified 60 total sites and some of these sites are home to multiple structures. While doing the research on each of these properties CityScape identified some discrepancies between the height approved for certain antenna structured by the FCC and the actual height approved by the CBJ. This is likely because the tower applicant requested the Antenna Structure Registration permit prior to applying for approval by the CBJ for the new facility. In most cases the tower height approved by the CBJ is lower than what was approved by the FCC. In these cases both approved heights are listed in the infrastructure inventory in Chapter four; however, only the approved tower height by the CBJ is used in the summary provided in Table 4.

60 Total Number of Existing Antenna Locations Identified within Study Area	60 Total Facilities Identified Within CBJ Study Area
Guy Towers	5
Monopoles	7
Lattice Towers	22
Wooden Pole Towers	8
Painted Monopoles	5
Rooftop Guy Towers	4
Rooftop Lattice Towers	2
Rooftop Attached Antenna	2
Other	1
Unknown	4
Total	**60**
Heights of Infrastructure Identified within Study Area	
> = 35' < 82'	18
> = 90 < = 110'	14
> = 130' < 160'	9
> = 175' < 199'	3
> = 200' < 350+'	4
Unknown	12
Total	**60**
Ownership of Infrastructure Identified within Study Area	
ACS (service provider)	2
AlaskaCom (service provider)	4
AT&T (service provider)	2
Atlas Tower USA	2
Broadcast Companies	5
Cingular (service provider)	4
CBJ (public safety)	7
GCI (service provider)	1
Global Tower Partners (tower owner)	6
Government other then CBJ (Federal/State)	12
Other	3
SBA (tower owner)	1
Unknown	10
Total	**60**

Table 4: Summary of Identified Antenna Locations

Theoretical coverage from existing antenna locations

The next step in the evaluation process is to examine the coverage from all known existing antenna locations to determine if any area of the CBJ has unsatisfactory or no service at all. CityScape theorizes how existing antenna locations might be used by the wireless industry.

For example, CityScape asks the following questions. First, "would network coverage gaps be visible if a single Cellular (800 MHz) and PCS (1900 MHz) provider utilized the identified antenna locations?" And second, "does the CBJ have adequate existing infrastructure suitable for providers to meet complete network coverage objectives?"

Figures 14 and 15 are RMS maps that demonstrate the theoretical coverage for a single 800 MHz service provider with antenna mounted at the top mounting position of all known support structures currently used for 800 MHz. Figure 14 does not include the terrain variable and 15 does include the variable of topography.

Figures 16 and 17 are RMS maps that illustrate the propagation (level of signal strength) for a single 1900 MHz network service provider from the top mounting elevation of all known support structures currently used for 1900 MHz. Figure 16 is without the terrain variable and Figure 17 includes the terrain variable.

Figures 18 and 19 are propagation maps that illustrate the approximate quality of service coverage from the sites identified in Figures 14 and 15. These maps include topography, urban density (population and vegetative ground cover) and known tower height variables.

Please note, of the 60-antenna/tower locations only around 25 of the sites are utilized for wireless telecommunication purposes. Generally the public safety, government and broadcast towers do not have any of the wireless service providers equipment on them and it is unlikely that the public service agencies will allow future collocations by the industry. For this reason only the locations used by the wireless telecommunications industry are shown on this sequence of maps. Additionally, CityScape can generally determine the operating frequency of the service provider by the equipment at each site. The maps in this sequence also differentiate between the 700/800 MHz service providers and the 1700 - 2100 MHz service providers to give a more realistic perception of the generalize coverage.

The map sequence illustrate relatively good coverage from the existing towers for 800 MHz provided a single service provider had equipment at each of the sites identified; and it demonstrates that for 1900 MHz many areas throughout the valley have marginal network coverage and capacity. It is very important to keep in mind that no one single 800 MHz or 1900 MHz wireless provider has equipment at all of these sites. For this reason the coverage pattern by the individual wireless providers is not as widespread throughout much of the CBJ valley as shown on these map. However, the zoning policies in place presently appear to allow facilities in these locations and thus do not appear to be creating a barrier to entry.

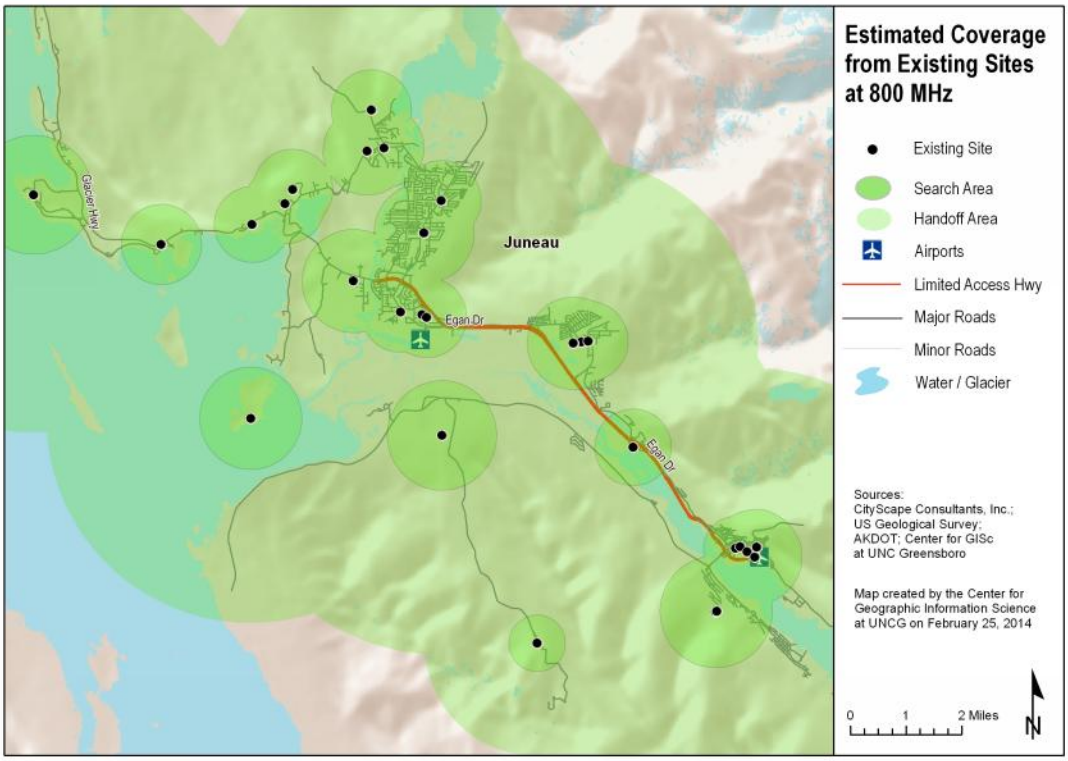


Figure 14: RMS Coverage for a Single Theoretical 800 MHz Wireless Provider without Terrain

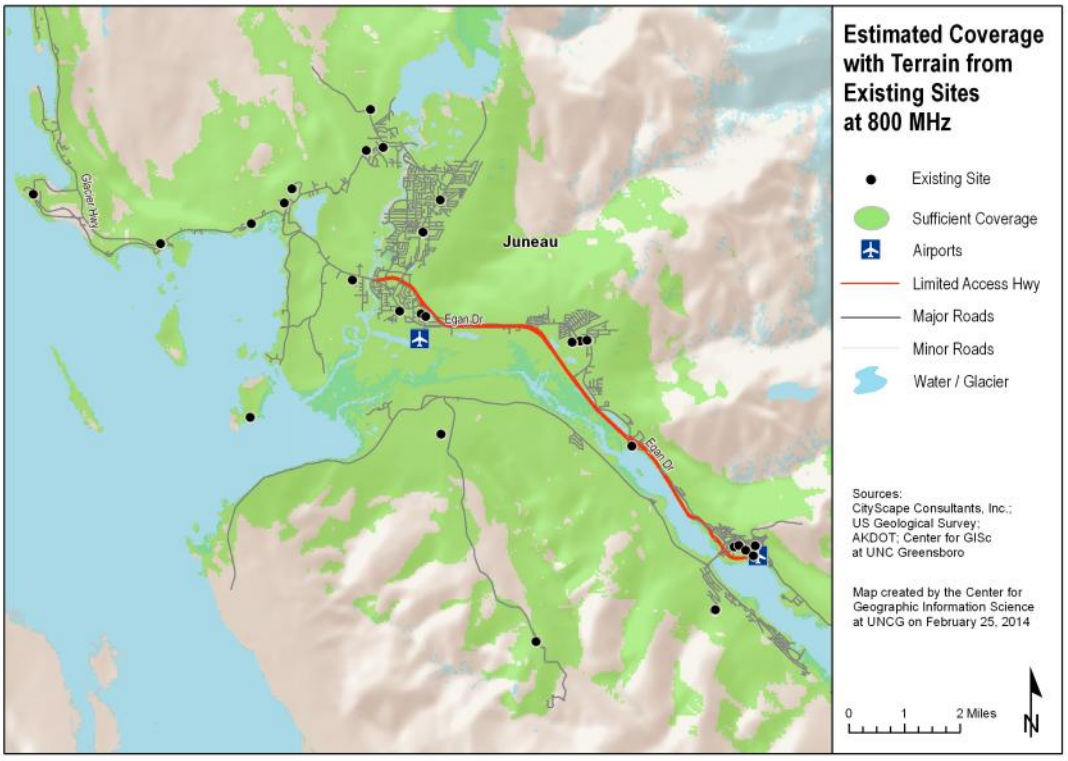


Figure 15: RMS Coverage for a Single Theoretical 800 MHz Wireless Provider with Terrain

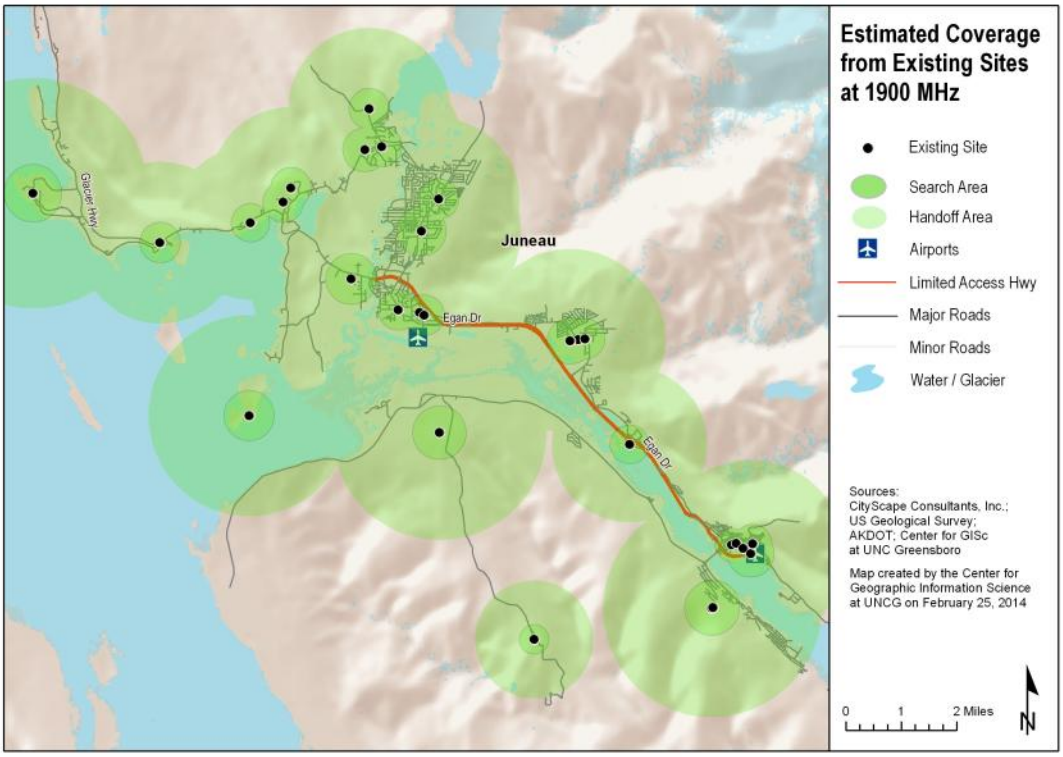


Figure 16: RMS Coverage for a Single Theoretical 1900 MHz Wireless Provider without Terrain

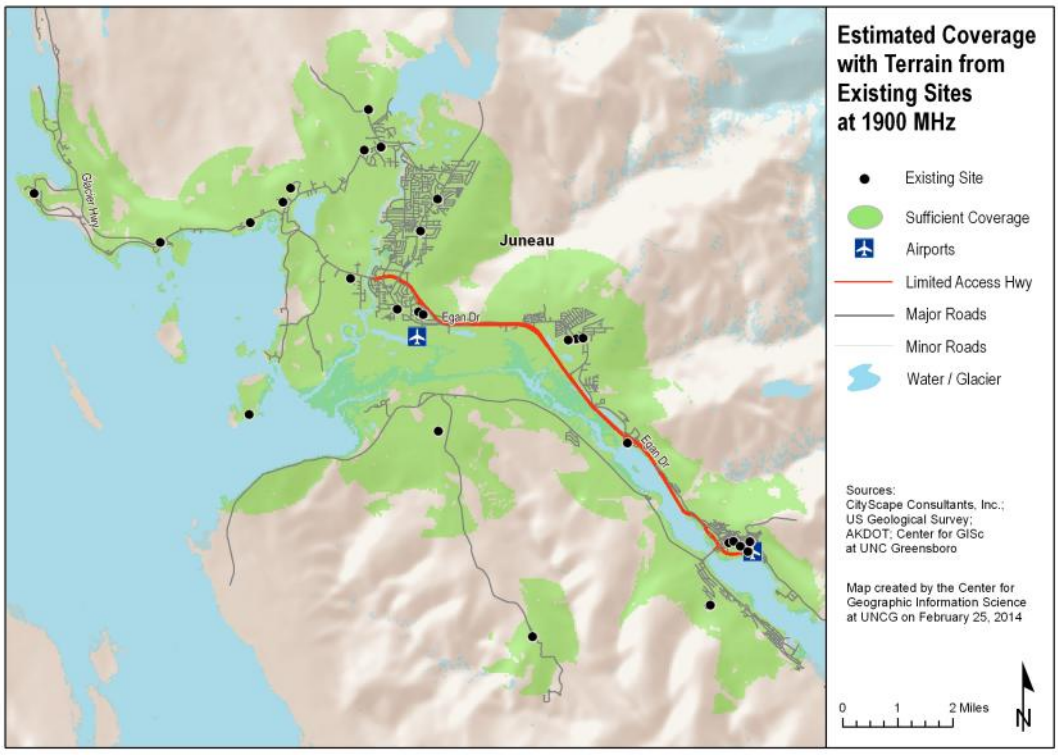


Figure 17: RMS Coverage for a Single Theoretical 1900 MHz Wireless Provider with Terrain

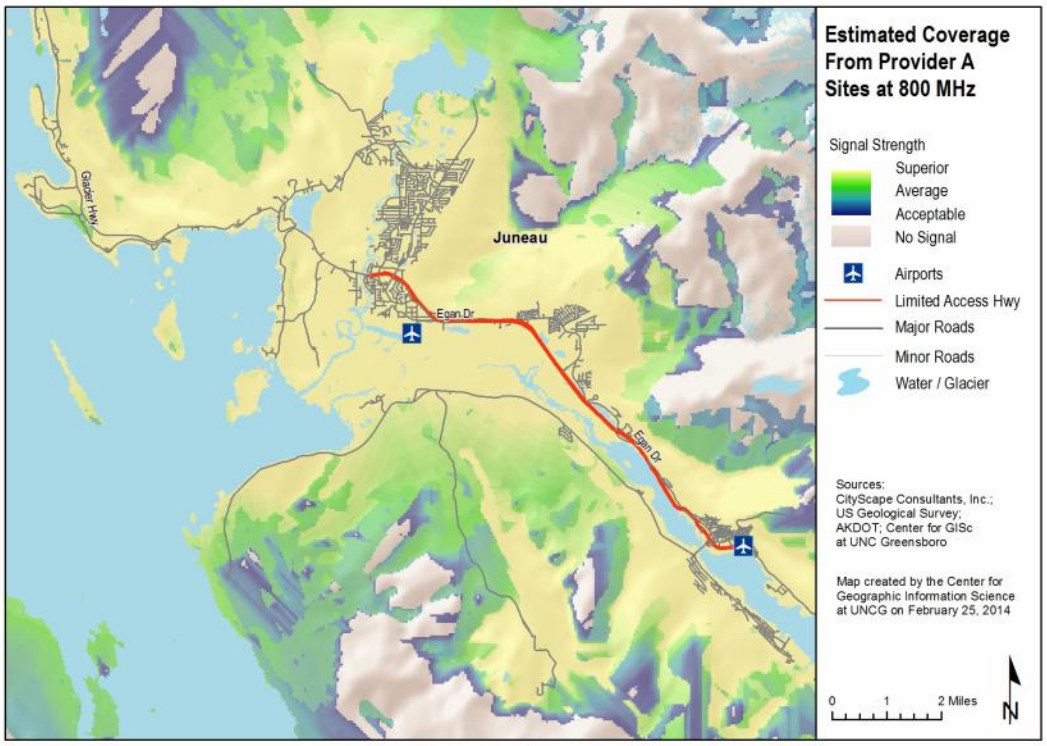


Figure 18: Coverage for a Single Wireless Provider from Existing Antenna Locations with Terrain and Signal strength and Urban Density for 800 MHz

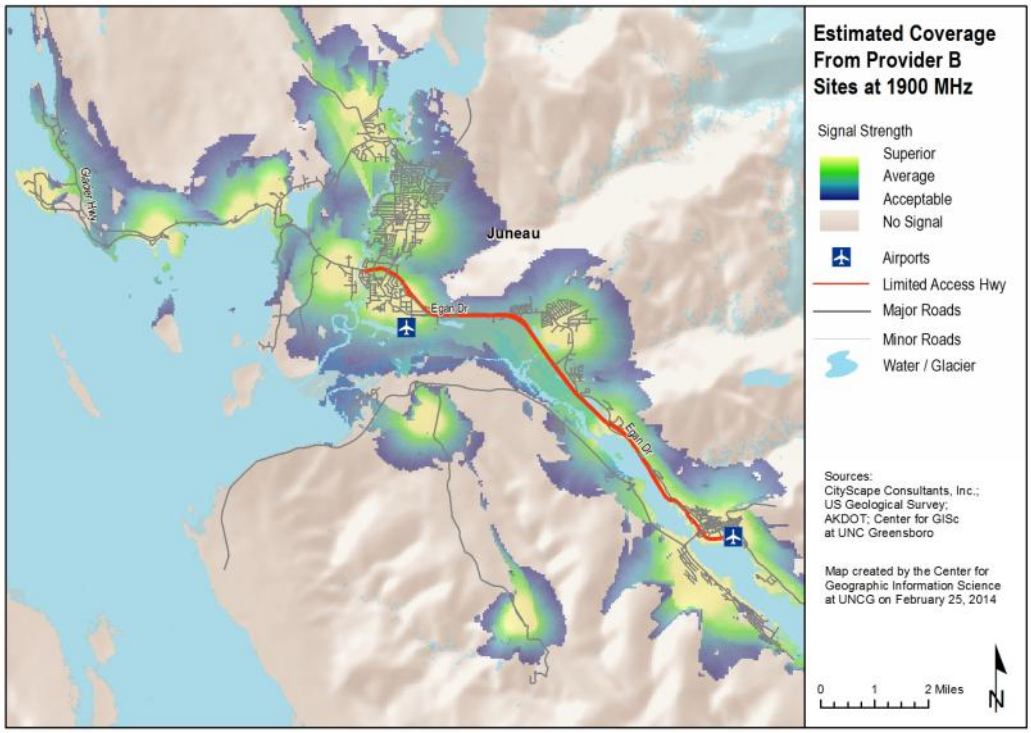


Figure 19: Coverage for a Single Wireless Provider from Existing Antenna Locations with Terrain and Signal Strength and Urban Density for 1900 MHz

Future tower site projections

Up to this point the Master Plan has focused on existing wireless base station coverage, however current network coverage is only one aspect of wireless service. The primary objective of the first phase of network development is to create coverage over a large service area. When network coverage is achieved wireless service providers begin to monitor the number of calls. Once the number of simultaneous calls reaches a predetermined maximum number, and the facility cannot support the subscriber base, the wireless network exceeds the capacity design of the system. Exceeding network capacity equates to overloading the network which results in lost service, dropped calls, rapid busy signals, and the inability to make calls. To overcome problems caused by over-capacity challenges, additional antenna and base stations are required.

According to 2009 data the federal penetration rates of subscribers with wireless telephone service for the United States indicate a level of around 77 percent. Cell phone service is projected to have increased to about 80 percent by the end of 2010, and may exceed that with the success of "smartphones."

Carriers use base population estimates for their network design. Population density is what controls the separation distance between base stations. The existing network design, based on local wireless penetration rates and usage, has each site facilitating the use of between 1750 and 2500 separate devices. As wireless devices increase in number AND usage (particularly more intensive bandwidth usage like email, facebook, and mobile tv), each site will need to *decrease* its geographic area and serve a smaller number of subscribers in order to avoid overloading its systems. In other words, the 1750 to 2500 users per site will shrink significantly over the next 10 years, with estimates ranging from 500 to 1200 devices per site, depending on the particular carrier, services offered, and number of overall subscribers. Concurrent with the shrinkage of number of users per site will be an increase in the total number of sites needed in order to provide service to subscribers.

Each wireless phone and/or broadband network has unique deployment needs, and might need antennas at varying heights. Just because one provider locates on a building, does not mean that building height will work for the next provider. Additionally, the rapid change in how people are using technology will continue to impact the existing network infrastructure. More and more devices on the market can transfer data via cell signals (Kindles, iPads, Nintendo DS, etc.) The addition of wireless objects such as these coupled with the ongoing popularity of text messaging will require new antenna locations not due to increased wireless network traffic, but the evolvement of high speed wireless broadband devices, even if the population is not growing at a similar rate.

As a result of the present growth models and the current wireless market penetration rate, and the rate of wireless network evolution from 3G to 5G, CityScape's prediction for future antenna deployment is based on network growth from the existing antenna locations. Currently in the CBJ there are about twenty-five antenna locations used for wireless telecommunication purposes. Each year in the future the number of new collocations, antenna attachments, and tower facilities will vary. Subscriber demand on the network will control future deployments.

To effectively and efficiently provide network coverage throughout the Valley over the next ten years CityScape anticipates it will require about twenty-nine new antenna locations *following conventional deployment practices* to provide a comprehensive network to fill in the service coverage and capacity gaps. Yearly increases cannot be anticipated to increase evenly as customer demand on the network will control future deployments. As a rule of thumb the CBJ could anticipate an average (of any combination) of approximately two new tower sites and/or two to four collocations and/or antenna attachments per year over the next ten years. This estimation is based on the mathematics of the population density; subscriber base and usage; transient movement through the CBJ and how many calls a base station can simultaneously serve at any given time.

This projection model is based on new tower heights at the 88-foot mounting elevation on a tower estimated to be around 130' to allow for maximum collocation opportunities and the reduction of multiple towers within the same geographic search areas. The geographic areas of where these new facilities will be needed are shown by a brown dot in Figure 20.

Unique to the CBJ is another deployment scenario that offers a very different approach to wireless deployment. After studying the geographic area, CityScape had determined the vast majority of the Valley could be served by deploying "rim shots". Rim shot are directional signals from the transmitting antenna aimed toward the valley floor from an elevation on a tower located in the surrounding hillside. The towers are not proposed to be located on or near the mountain tops; rather from the 200' - 500' elevations above mean sea level to blend into the hillside.

This pattern of deployment is presently evidenced at one tower site in the CBJ. On the Global Tower Company tower located at the water reservoir site the collocations are all mounted on one side of the tower to provide a directional signal to the downtown Juneau area. CityScape believes this pattern of rim shots can be duplicated throughout the CBJ and would be an effective deployment method resulting in less required infrastructure throughout the Valley. CityScape estimates it would take approximately eighteen new antenna locations utilizing this *alternative deployment pattern* to meet the same coverage objectives of the proposed twenty-nine facilities anticipated for a more conventional deployment. The rim shot deployment pattern is shown in Figure 21.

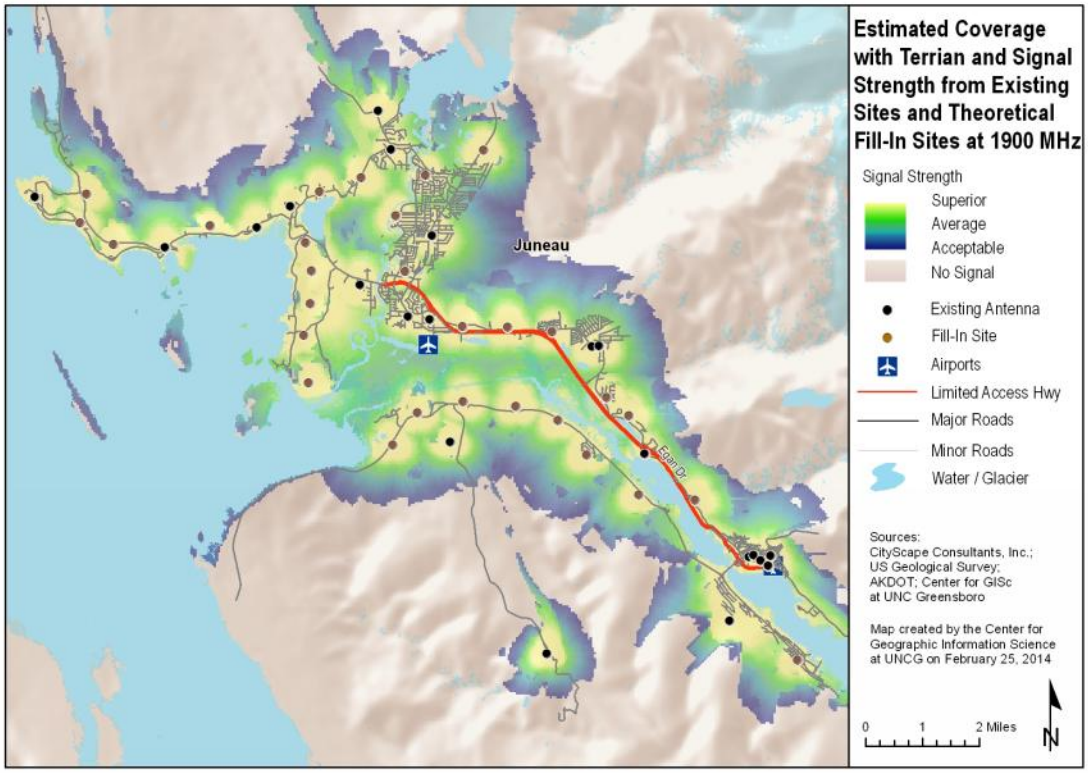


Figure 20: **Projected New Infrastructure Infill Sites for Conventional Deployment**

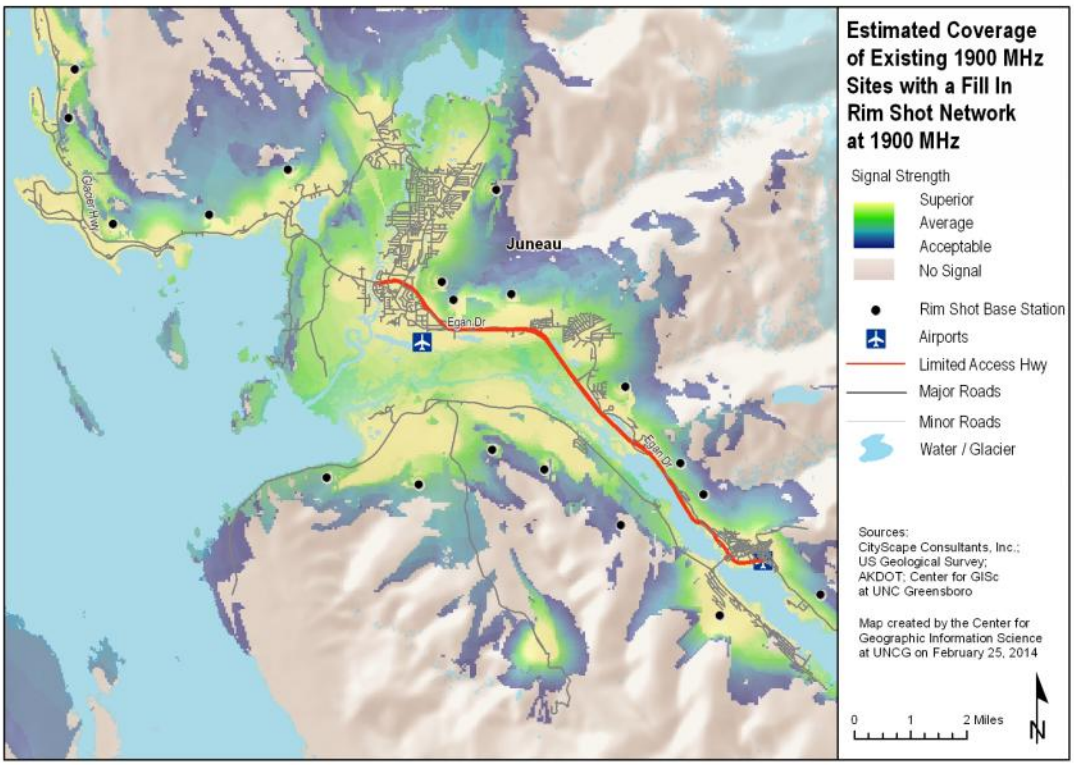


Figure 21: **Projected New Infrastructure Infill Sites for Rim Shot Deployment**

Chapter 4 Federal Telecommunications Act, Rulings and Policies

Wireless infrastructure and local zoning

With the deployment of first generation wireless, there were only two competing wireless cellular (800 MHz) providers. But with the deployment of 2G, and six competing PCS (1900 MHz) providers, the wireless marketplace became furiously competitive. "Speed to market" and "location, location, location" became the slogans for the competing 1G and 2G providers. The concept of collocation or sharing base stations was not part of the initial tower deployment strategy as each provider sought to have the fastest deployment and largest customer base resulting in a quick return on their cost of deployment. This resulted in an extraneous amount of new tower construction without the benefit of local land use management.

Coincidently, as local governments began to adopt development standards for the wireless communications industry, the industry strategy changed again. The cost associated with each provider developing an autonomous inventory of base stations put a financial strain on their ability to deploy their networks. As a result, most of the wireless providers divested their internal real estate departments and tower inventories. This change gave birth to a new industry of vertical real estate; and it includes a consortium of tower builders, tower owners, site acquisition and site management firms.

No longer was a tower being built for an individual wireless service provider, but for a multitude of potential new tenants who would share the facility without the individual cost of building, owning and maintaining the facility. Sharing antenna space on the tower between wireless providers is called collocation.

This industry change could have benefited local governments who adopted new tower ordinances requiring collocation as a way to reduce the number of new towers. But, *initially* it did not; because the vertical real estate business model for new towers is founded on tall tower structures intended to support as many wireless providers and other wireless services as possible. As a result, local landscapes became dotted with all types of towers and communities began to adopt regulations to restrict or even prohibit tall communication towers within their jurisdictional boundaries.

Wireless deployment came to a halt in many geographical areas as all involved in wireless deployment became equally frustrated with the situation. Second generation wireless providers had paid a large sum of money for the rights to provide wireless services. Collectively the 2G wireless providers paid over twenty-three billion dollars to the US Treasury (which at that time helped the Federal government pay off the annual deficit by 1998) for the licenses to build and operate these networks. Furthermore, the license agreements between the wireless providers and the FCC mandated the networks be deployed within a specific time period and at that time many local government agencies were prohibiting the deployments through new zoning standards.

Robert F. Roche of the Cellular Telecommunications Industry Association (CTIA) stated in The Unpredictable Certainty: White Papers (1997)

> "…the wireless paradigm has resulted in more than 200,000 new jobs, and almost $19 billion in private-sector investment…and in spite of these gains and the promise of another $50 billion in investment over the next 10 years, there are impediments to this success…Some local jurisdictions are preventing the deployment of antennas, either through outright bans, extensive delays, or application of unscientific "local technical standards" to radio frequency emissions…"

Roche further suggests the CTIA should:

> "…1) urge President Clinton to direct federal agencies to make available federal land and sites for telecommunications infrastructure; 2) urge the FCC to develop national standards on radio frequency emissions over local standards; and 3) urge the FCC to advocate the primacy of national telecommunications policy over local policies that are hostile to competition…"

This perplexing situation prompted the adoption of Section 704 of the Federal Telecommunication Act of 1996.

Federal Telecommunications Act of 1996

The Federal Communications Commission (FCC) policies impacting deployment of wireless facilities are, with certain exceptions, unchanged since the enactment of the 1996 Telecommunications Act. The overall concept as passed by Congress was to facilitate the creation of a wireless infrastructure to parallel the wired infrastructure that existed in the United States. The FCC's mandate has been to work towards accomplishing that goal, and the current Commission in particular has paid great attention to moving that task forward.

Section 704 of the Federal Telecommunications Act of 1996 retains local governments' zoning authority over the deployment of wireless telecommunication facilities subject to several specific requirements.

First, zoning regulations and decisions may not unreasonably discriminate among the wireless providers, and may not prohibit or have the effect of prohibiting the deployment of wireless infrastructure. For example, some communities adopted development standards restricting the distance between towers to three miles. In some geographic locations with sparse populations this may have been adequate for 1G deployment; however the Laws of Physics make it impossible for 2G wireless deployments to meet this spacing requirement. Unknowingly some communities inadvertently prohibited the deployment of 2G.

Second, local governments must act on applications for new wireless infrastructure within a "reasonable" amount of time

Third, the local government must provide in writing a reason for any denials and the decision must be supported by substantial evidence.

Fourth, local government cannot deny an application for a new wireless facility or the expansion of an existing facility on the grounds that radio frequency emissions are harmful to the environment or to human health (provided federal standards are met by the wireless provider).

Additionally, the FCC provided two Fact Sheets to further explain the goals and objectives of the Act. Included in Fact Sheet 1 is the suggestion for local government to the use of third party professional review of site applications. Specifically stated, "Local zoning authorities may wish to retain a consulting engineer to evaluate the proposals submitted by wireless communications licensees. The consulting engineer may be able to determine if there is some flexibility as to the geographic location of the tower."

The full text of Section 704 of the 1996 Telecommunication Act is provided in Appendix A.

Federal Communications Commission Declaratory Ruling November 18, 2009

In states where there is no specific state statutory obligation on local jurisdictions (which includes the Commonwealth of Virginia) the FCC's Declaratory Ruling will apply and impose upon local jurisdictions a timeline in which it must act upon wireless siting applications. The November 18, 2009 *Declaratory Ruling*[1] regarding timelines for local government to act upon a wireless siting application specifies a local government agency has thirty (30) days from receipt of an application for a new tower or collocation to determine if the application is complete or incomplete. Additionally the FCC provided the following deadlines for the local government decision process:

> Collocation – local government agencies have ninety (90) days from the date the application is filed to render a decision for approval or denial of the collocation.
>
> New towers – government agencies have one hundred fifty (150) days from the date the application is filed to provide a decision on the proposed request.

If a jurisdiction fails to act on an application within those timelines, an applicant will have the opportunity to file suit in federal court and seek judicial determination of the application. Several jurisdictions challenged the FCC's authority to impose a "shot clock" on such local zoning decisions. On January 23, 2012, the Fifth Circuit Court of Appeals decided *City of Arlington, Texas v. FCC*, 668 F.3d 229 (5th Cir. 2012), and found that the FCC was legally empowered to impose the "shot clock" on local governments in jurisdictions without state statutory provisions that are more restrictive. There have been some other federal district court cases that have addressed the "shot clock" issue tangentially but are not relevant for this discussion. Of note and importance because of recent Congressional action was the FCC's definition in the *Declaratory Ruling* of what constitutes a collocation application, which the FCC defined as "a substantial increase in the size of the tower" as set forth in the National Programmatic Agreement.[2]

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[1] *Declaratory Ruling*, FCC 09-99 (Released November 18, 2009)

[2] . A "[s]ubstantial increase in the size of the tower" occurs if:

> (1) [t]he mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the

Having established a procedural timeline for action on wireless siting applications, the FCC has recently also enacted regulations that impose additional burdens on applicants seeking to construct new towers for wireless services. Effective **June 18, 2012**, new federal procedural obligations (unrelated to any local procedural obligations) imposed on any applicant who is:

(1) planning to build *any* new tower that would have to register through the FCC's Antenna Structure Registration (ASR) system (typically towers that exceed 200 feet in height, but sometimes less). The only exceptions are for (a) towers to be built on sites for which some other federal agency has responsibility for environmental review or (b) cases in which an emergency waiver has been granted; or

(2) modifying an existing registered tower by (a) increasing its overall height by more than 10% or 20 feet, or (b) adding lighting to a previously unlit structure, or (c) modifying existing lighting from a more preferred configuration to a less preferred configuration; or

(3) amending a pending application involving either of the foregoing situations and the amendment would (a) change the type of structure, or (b) change the structure's coordinates, or (c) increase the overall height of the structure or (d) change from a more preferred to a less preferred lighting configuration or (e) an Environmental Assessment is required.

If an applicant's proposed tower or tower modifications fall into one of these categories, an applicant must follow new processes and procedures with the FCC in order to obtain approval of its proposed facility, including:

(1) Filing a partially-completed Form 854 in the FCC's ASR system. This will consist of information previously required on Form 854, plus tower lighting information ***and*** specification of the date on which the applicant wants the FCC to post the application on the Commission's website for comments; and

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nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or (2) [t]he mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or (3) [t]he mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or (4) [t]he mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

47 C.F.R. Part 1, App. B—Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, Definitions, Subsection C.

(2) Publishing a notice ("in a local newspaper or by other means") regarding the application on or before the date the applicant has designated in its application for posting of the application on the FCC's website. The comment period will be open for 30 days, during which time members of the public can ask the FCC for further environmental review.

(3) If, after the comment period, FCC staff concludes that no additional environmental review is required, the applicant will then move on to Table 1, Step 1 of the process. In that step, the applicant will have to amend its application to reflect (a) the FAA's study number and issue date (if those haven't already been provided in the initial application), (b) the date of the local public notice, and (c) a certification that the proposed construction will have no significant environmental impact; OR,

(4) If, after considering the initial filing and any public comments, the FCC decides that more review is required, it will require the submission of an Environmental Assessment. If an Environmental Assessment is required, the FCC will first have to issue a Finding of No Significant Impact before the applicant can proceed to Step Two with the necessary amendment of its application.

All of the foregoing processes were adopted after FCC consideration of multiple petitions by parties concerned about the effect of tower construction on the environment, including the effect on migratory birds and tower strikes by such birds.

These new provisions will significantly extend the timeline for federal approval of new construction or modification of towers that meet the conditions above[3], which may have the effect in some instances of slowing the deployment of wireless facilities where the proposed facilities fall into one of the three (3) categories above.

Applicants may also seek local approval of their proposal at the same time the federal processes are underway on parallel paths, and thus it is unclear at this time what impact the federal processes may have on the processing and adjudication by local government of wireless siting applications.

In addition to the FCC's recent actions, Congress also recently involved itself in wireless siting issues by including language in recent legislation signed by the President on February 22, 2012 that impacts local governments' consideration of wireless siting applications.

The Middle Class Tax Relief & Job Creation Act of 2012 – HR 3630

In Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, Congress further eroded local government's jurisdiction over wireless facilities through the following language:

(a) FACILITY MODIFICATIONS.—

[3] The new requirements are imposed on proposals for either new towers or modifications that, generally speaking, do constitute a "substantial change" as that term is defined by the FCC.

> (1) IN GENERAL.—Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.
>
> (2) ELIGIBLE FACILITIES REQUEST.—For purposes of this subsection, the term "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves—
> (A) collocation of new transmission equipment;
> (B) removal of transmission equipment; or
> (C) replacement of transmission equipment.
>
> (3) APPLICABILITY OF ENVIRONMENTAL LAWS.—Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

Note that Section 6409 applies where an application for modification of an existing wireless facility does not involve a "substantial change" to the physical dimensions of such tower or base station.

Congress did not define "substantial change" in the legislation. In order to determine what constitutes "substantial change", the only currently available definition arises from the FCC's National Programmatic Agreement (see footnote 2), which is also the definition endorsed by the wireless industry.

Under this new Congressional requirement, local governments must approve any application for collocation, removal or replacement of wireless equipment if the proposed modifications to an existing facility do not involve a "substantial change" (and as noted above, the only currently available definition of "substantial change" is that defined by the FCC in the National Programmatic Agreement). This further degradation of local governmental authority over wireless facilities (and the willingness of wireless providers to suggest to local governments that this new statutory mandate provides a basis to immediately grant their application) is impacting wireless deployment by emboldening the wireless industry to increase deployment efforts despite local government concerns. Although this is recent legislation and there does not yet appear to be any reported decisions involving Section 6409, Cityscape is aware of at least one lawsuit being commenced citing Section 6409 as jurisdictional authority (despite the fact that the applicant who has sought judicial relief was *granted* authority by the local government to modify their facility with certain conditions).

Since the CBJ adopted the Personal Wireless Services Facility Development Standards the Federal government has adopted additional policies that should be integrated into the existing regulations in order to harmonize them with applicable federal law. For example, the timeline as described in the "shot clock" *Declaratory Ruling* should be integrated to indicate that collocation applications shall be reviewed and adjudicated by the CBJ within ninety days of completed submission, and an application for a new facility shall be reviewed and adjudicated by the CBJ within one hundred fifty days of complete application submission.

Furthermore, the CBJ's regulations should recognize the provisions of Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 to permit equipment collocations, removals and replacements on existing eligible facilities that do not "substantially change" the physical dimensions of the tower structure, via well-defined collocation and related approval processes that meet the ninety (90) day shot clock standards.

Chapter 5 Inventory

Purpose of the inventory

Procedure

CityScape conducted an assessment of the existing antenna locations throughout the CBJ by driving to all locations. Data for the assessments was obtained from a number of sources including actual permits obtained from the CBJ for wireless infrastructure, research of FCC registered site locations, direct information from existing wireless service providers and tower owners active in the CBJ, the CBJ GIS, and through actual site visits to each location.

Inventory catalog existing antenna(s) and towers

Pictures of existing antennas mounted on towers and rooftops are included in the inventory catalog. Existing antenna site locations are identified numerically in Figure 21.

Structural evaluation

Based on a visual inspection of antenna arrays already on existing antenna support structures, CityScape has made a judgment as to whether each support structure is likely to physically accommodate more antennas. The number of estimated collocations is referenced as future antenna collocation possibilities. The suggested collocation is based on visual observations only. In this consideration, adding antennas equates to adding another wireless antenna platform consisting of several antennas and associated heavy coaxial cable. Prior to mounting new antennas and related equipment, the structure must be examined and analyzed by a structural engineer for its ability to support the proposed addition.

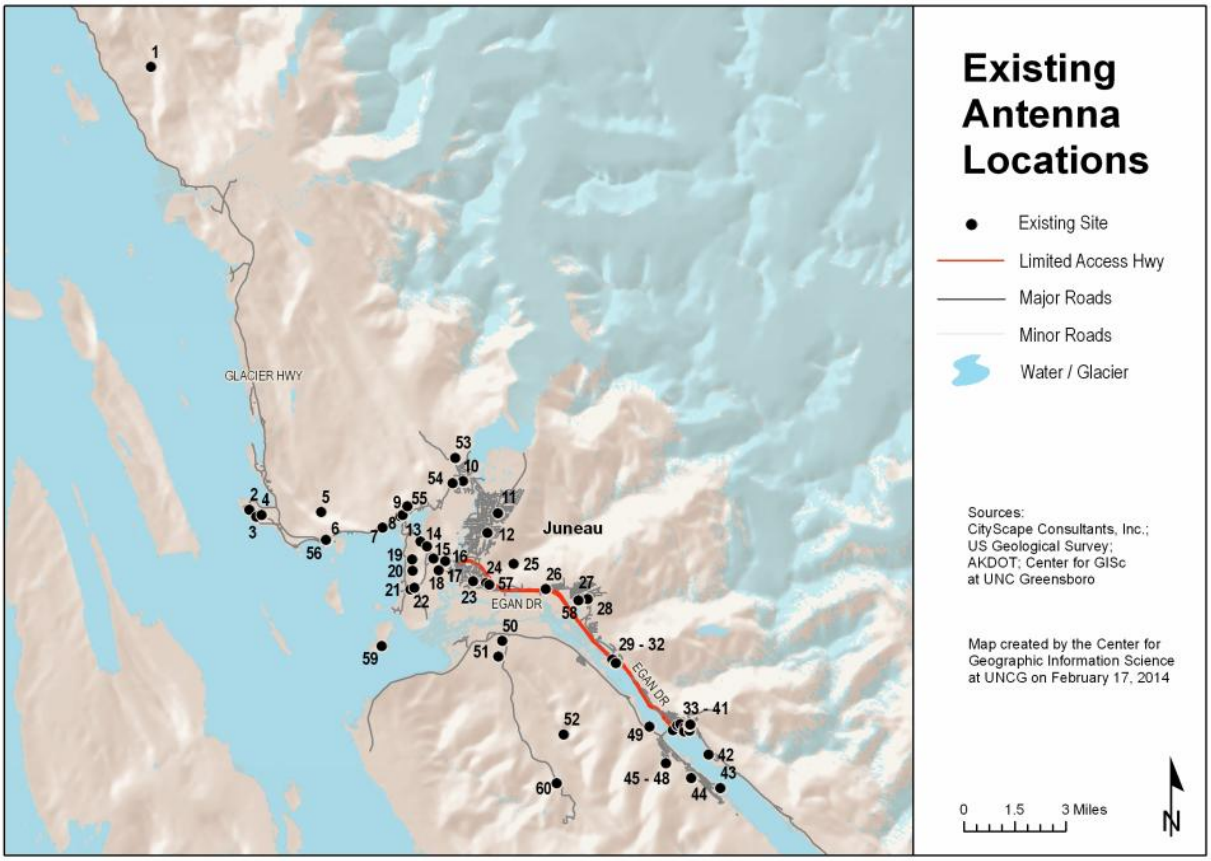
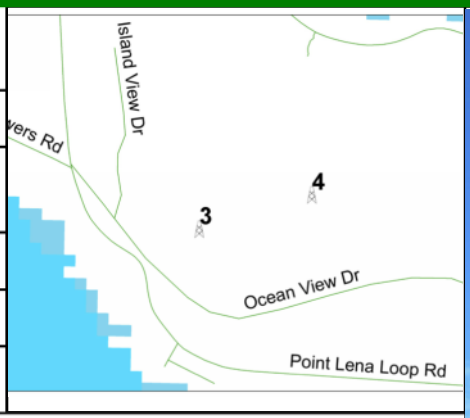


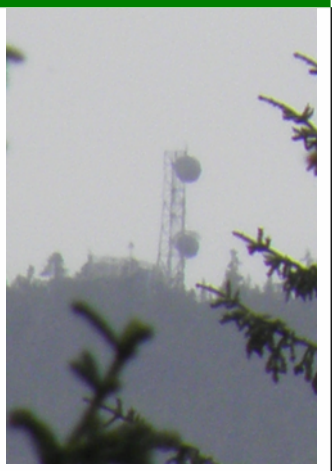
Figure 21: Existing Inventory

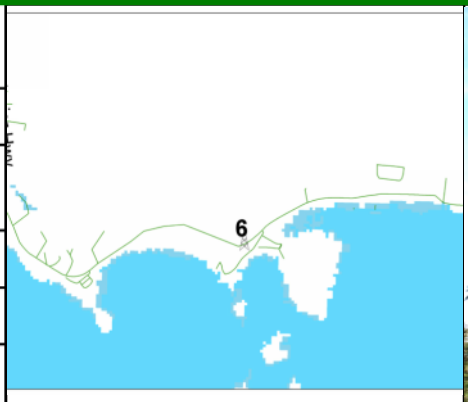
Site 1		Site Map	Site Photo
Owner:	AT&T/AlaskaCom		
Identification:	Bessie Mountain		
Address:	Unknown		
Latitude:	58-34-42.82 N		
Longitude:	-134-51-16.49 W		
Access:	Air		
Site Details			
Type:	Lattice used primarily for microwave backhaul.		
Height:	60' per the CBJ		
Collocations:	Existing: Yes, approximately 2	Future: 2	
Observations:	Site was not assessed by CityScape Consultants, Inc.		
Comments:	Photo provided by the CBJ.		

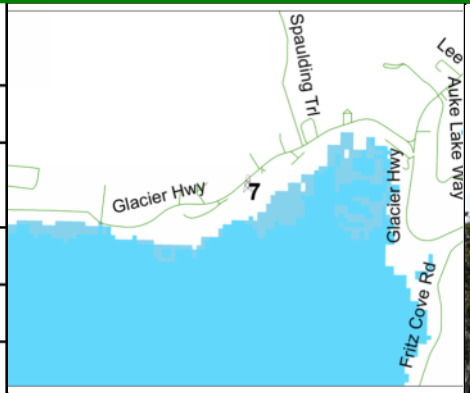
Site 2		Site Map	Site Photo
Owner:	AlaskaCom		
Identification:	FCC: 1005565		
Address:	17103 Lena Loop Rd.		
Latitude:	58-23-27.8 N		
Longitude:	-134-46-6.5 W		
Access:	Vehicle		
Site Details			
Type:	Lattice used for microwave backhaul and collocations.		
Height:	FCC antenna structure registration indicates 220'.		
Collocations:	Existing: Yes, approximately 2	Future: 3	
Observations:	Ground space available for base stations; site secured by fence and locked gate.		
Comments:	Lattice tower will provide great opportunities for collocation.		

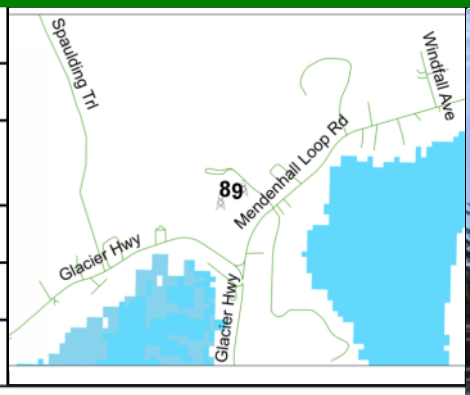
Site 3		Site Map	Site Photo
Owner:	City and Borough of Juneau		
Identification:	FCC: 1247302		
Address:	17099 Point Lena Loop Road		
Latitude:	58-23-17.5 N		
Longitude:	-134-45-45.8 W		
Access:	Vehicle		
Site Details			
Type:	Lattice used primarily for microwave backhaul		
Height:	80' per the CBJ.		
Collocations:	Tower is not available for collocation.	Future 3	
Observations:	Site was not assessed by CityScape Consultants Inc. Photo provided by the CBJ.		
Comments:	The CBJ should establish a policy for use of this tower by the wireless industry.		

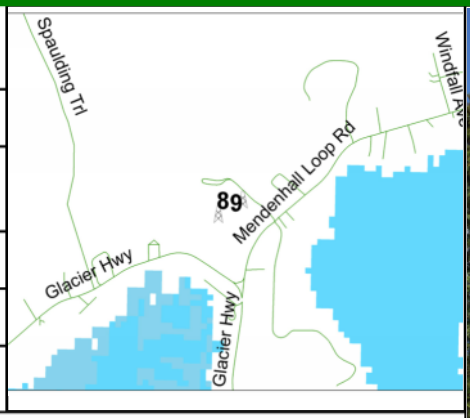
Site 4		Site Map	Site Photo
Owner:	State of Alaska		
Identification:	FCC: 1241297		
Address:	Lena Point		
Latitude:	58-23-20 N		
Longitude:	-134-45-31 W		
Access:	Vehicle		
Site Details			
Type:	Guy		
Height:	185'		
Collocations:	No	Future 0	
Observations:	Site is not accessible to the public.		
Comments:	Tower is used for air traffic safety and not available for collocations.		

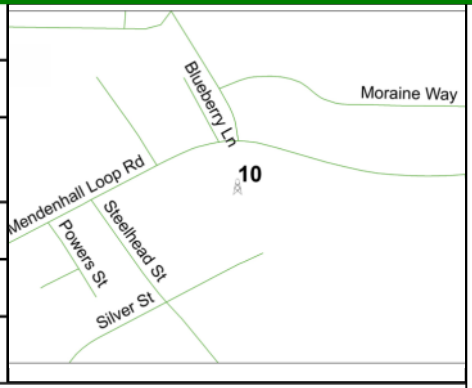
Site 5		Site Map	Site Photo
Owner:	Unknown		
Identification:	Auke Mountain		
Address:	Unknown		
Latitude:	58-23-25.98 N		
Longitude:	-134-42-37.01 W		
Access:	Unsure		
Site Details			
Type:	Not Available		
Height:	60’		
Collocations:	Existing: Unsure	Future: Unsure	
Observations:	Site was not found or assessed by CityScape Consultants Inc.		
Comments:	Site Provided to CityScape by the CBJ; very little information is available.		

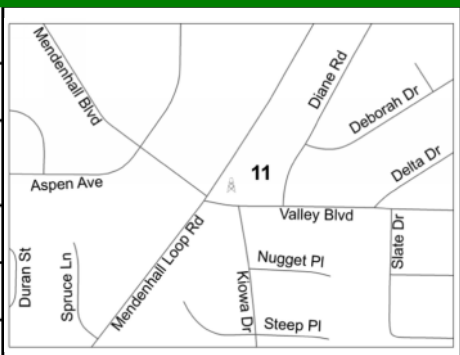
Site 6		Site Map	Site Photo
Owner:	New Cingular Wireless		
Identification:	FCC: 1282723		
Address:	14080 Glacier Highway		
Latitude:	58-22-43.35 N		
Longitude:	-134-42-17.71 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	FCC indicates 98’; CBJ indicates 100’		
Collocations:	Existing: Yes, approximately 2	Future: 1-2	
Observations:	FCC identification on tower but no other tower ownership or contact information on site.		
Comments:	Site is clean with easy access directly off of Glacier Highway.		

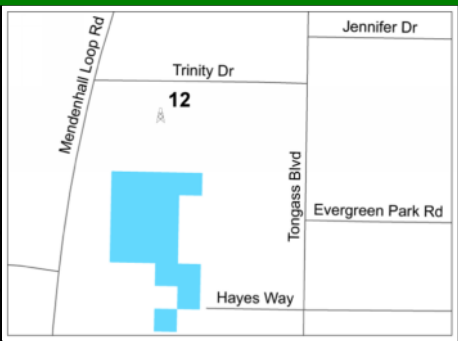
Site 7		Site Map	Site Photo
Owner:	New Cingular Wireless PCS, LLC		
Identification:	FCC: 1282723		
Address:	12401 Glacier Highway		
Latitude:	58-23-3.2 N		
Longitude:	-134-39-37 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	90' per the CBJ		
Collocations:	Existing: Yes, approximately 2	Future 2	
Observations:	No site ownership identification and no FAA ASR number posted.		
Comments:	Site is on a small hill and easily accessible from Glacier Highway.		

Site 8		Site Map	Site Photo
Owner:	First Student		
Identification:	Unknown		
Address:	12364 Glacier Highway		
Latitude:	58-23-20.94 N		
Longitude:	-134-38-45.52 W		
Access:	Vehicle		
Site Details			
Type:	Rooftop Tower		
Height:	100' per the CBJ		
Collocations:	Existing: Yes, approximately 2	Future: none	
Observations:	The rooftop tower appears to be used for both dispatch and a wireless collocation		
Comments:	Ownership of the tower is assumed to be by the business owner.		

Site 9		Site Map	Site Photo
Owner:	GCI Communications Corp		
Identification:	FCC: 1263789		
Address:	12364 Glacier Highway		
Latitude:	58-23-23 N		
Longitude:	-134-38-39 W		
Access:	Vehicle		
Site Details			
Type:	Monopole		
Height:	100' per the CBJ		
Collocations:	Existing: Yes, 2	Future: 1	
Observations:	Site has FAA and ownership information.		
Comments:	Tower has wires from the tower to a nearby tree and wrapping around the tree and leading to a nearby utility pole.		

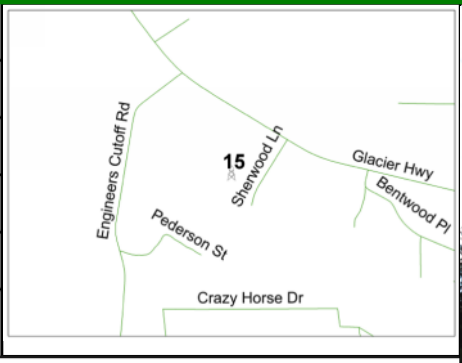
Site 10		Site Map	Site Photo
Owner:	Unknown		
Identification:	Not posted on site		
Address:	9741 Mendenhall Loop Road		
Latitude:	54-24-16.51 N		
Longitude:	-134-35-44.21 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	100' per the CBJ.		
Collocations:	Existing: 1 tenant	Future: 1	
Observations:	No tower ownership identification on the site and outside storage of non-tower related items are in the green shelter.		
Comments:	Site is easily accessible.		

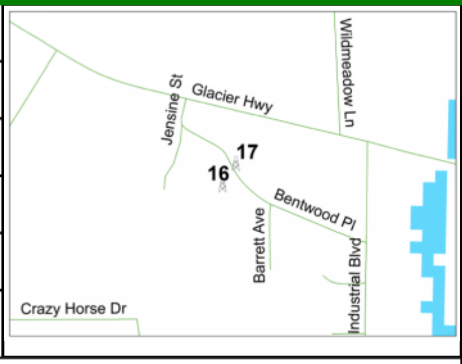
Site 11		Site Map	Site Photo
Owner:	ACS Wireless, Inc.		
Identification:	FCC: 1241641		
Address:	8503 Valley Boulevard		
Latitude:	58-23-29.5 N		
Longitude:	-134-33-53 W		
Access:	Vehicle		
Site Details			
Type:	Brown Monopole		
Height:	100’		
Collocations:	Existing: 1 Tenant	Future: 0 - 1	
Observations:	No tower ownership or FAA identification posted on site.		
Comments:	Site is secured with a fence and locking gate and is easily accessible by vehicle.		

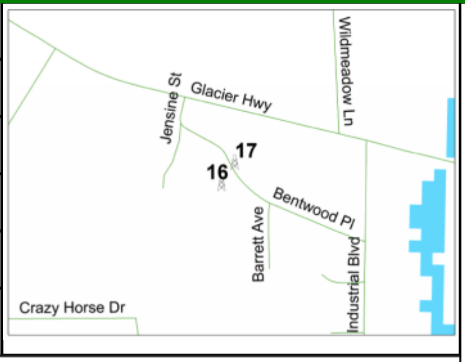
Site 12		Site Map	Site Photo
Owner:	Global Tower, LLC		
Identification:	FCC: 1242713		
Address:	8748 Trinity Drive		
Latitude:	58-22-55.8 N		
Longitude:	-134-34-26.3 W		
Access:	Vehicle		
Site Details			
Type:	Monopole		
Height:	163’ per the FCC antenna structure registration and the CBJ indicates 150’ tower height.		
Collocations:	Existing: Yes, 4	Future: none	
Observations:	Tower has reinforced metal strips to increase structural capacity of the tower.		
Comments:	Tower is used by multiple service providers indicating this is a good location for a site. It is likely another tower will be needed in the vicinity to accommodate future service providers.		

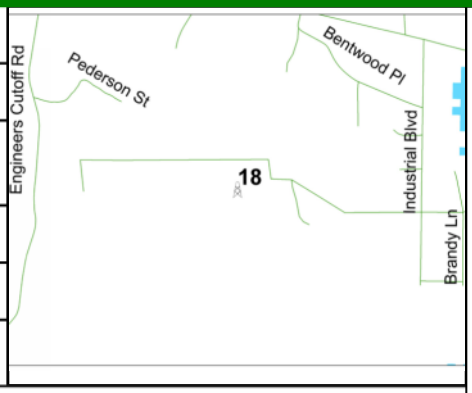
Site 13		Site Map	Site Photo
Owner:	City and Borough of Juneau		
Identification:	FCC: 1205353		
Address:	10745 Glacier Highway		
Latitude:	58-22-42.8 N		
Longitude:	-134-37-46.4 W		
Access:	Vehicle		
Site Details			
Type:	Guy tower used for public safety		
Height:	150' per the CBJ.		
Collocations:	Existing: No, public safety equipment only	Future: 1	
Observations:	FAA identification is posted on the tower.		
Comments:	The CBJ should to decide if they are going to lease space on tower for collocations.		

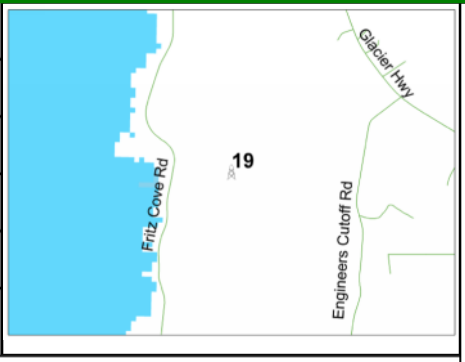
Site 14		Site Map	Site Photo
Owner:	Calvary Fellowship		
Identification:	FCC: 1250045		
Address:	Glacier Highway		
Latitude:	58-22-35.8 N		
Longitude:	-134-37-27.4 W		
Access:	Vehicle		
Site Details			
Type:	Tree with broadcast equipment		
Height:	FCC indicates approval for 82'; the CBJ indicates a height of 90'.		
Collocations:	Existing: No	Future: 0	
Observations:	Tree branches removed and equipment mounted onto tree		
Comments:	Regulations should be amended to prevent future similar installations.		

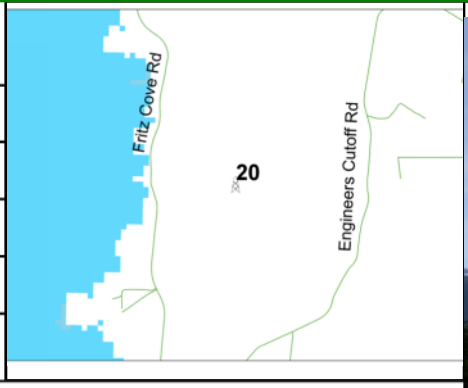
Site 15		Site Map	Site Photo
Owner:	State of Alaska		
Identification:	FCC: 1003201		
Address:	2760 Sherwood Lane		
Latitude:	58-22-17 N		
Longitude:	-134-37-8 W		
Access:	Vehicle		
Site Details			
Type:	Lattice used primarily for microwave backhaul		
Height:	142' per the FCC antenna structure registration.		
Collocations:	Existing: No	Future: 0	
Observations:	Tower is secured with a fence and locked gate. FAA identification not posted on tower.		
Comments:	Tower is located at the DMV and an unlikely candidate for collocations.		

Site 16		Site Map	Site Photo
Owner:	Alascom, Inc.		
Identification:	FCC: 1005560		
Address:	10087 Jensine Street		
Latitude:	58-21-11.8 N		
Longitude:	-134-36-35.4		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	158' per the FCC antenna structure registration.		
Collocations:	Existing: Yes, approximately 2	Future: 2	
Observations:	Site is secured with a fence and locked gate.		
Comments:	The lattice tower is a very good tower for future collocations.		

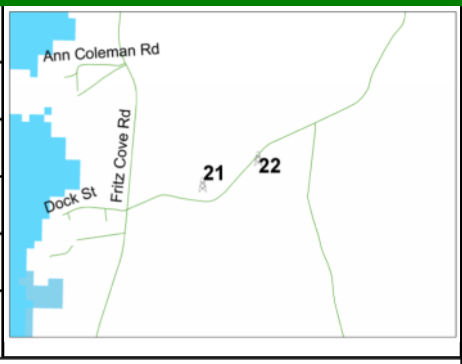
Site 17		Site Map	Site Photo
Owner:	AlaskaCom		
Identification:	Not available		
Address:	10087 Jensine Street		
Latitude:	58-22-12.23 N		
Longitude:	-134-36-33.77 W		
Access:	Vehicle		
Site Details			
Type:	Small Guy tower next to lattice tower		
Height:	60' per the CBJ (although it appears shorter)		
Collocations:	Existing: No	Future: 0	
Observations:	Shorter tower is to the right of the lattice tower identified as Site 16.		
Comments:	Height and type of tower structure made it not a good option for collocation.		

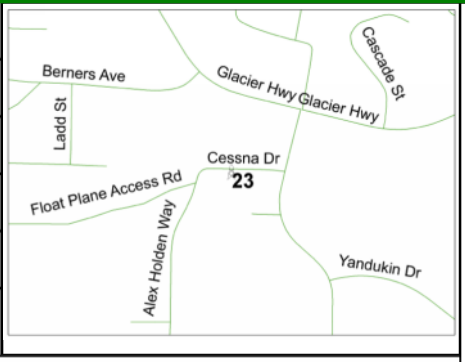
Site 18		Site Map	Site Photo
Owner:	Unsure		
Identification:	FAA Tower		
Address:	10020 Crazy Horse Drive		
Latitude:	58-21-59.71 N		
Longitude:	-134-36-51.78 W		
Access:	Vehicle		
Site Details			
Type:	Monopole		
Height:	60' per the CBJ.		
Collocations:	Existing: No	Future: 0	
Observations:	No tower ownership posted on tower.		
Comments:	Signage at the site indicates the tower is used for air traffic control purposes.		

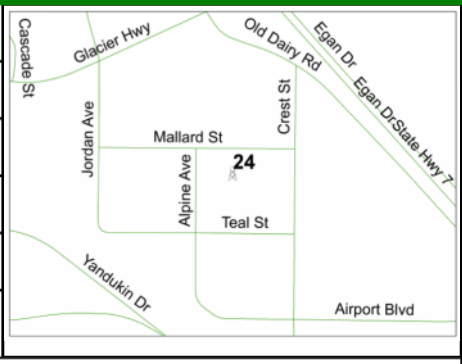
Site 19		Site Map	Site Photo
Owner:	Unknown		Picture Unavailable
Identification:	Fritz Cove		
Address:	Fritz Cove Road		
Latitude:	58-22-15.19 N		
Longitude:	-134-38-9.75 W		
Access:	Unsure		
Site Details			
Type:	Unsure		
Height:	90' per the CBJ		
Collocations:	Existing: Unsure	Future: Unsure	
Observations:	CityScape Consultants, Inc. was not able to assess this site.		
Comments:	Site information provided by the CBJ. The ridgeline photo shows three towers but CityScape could not find access to this facility.		

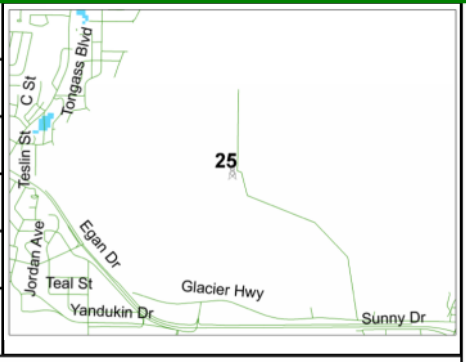
Site 20		Site Map	Site Photo
Owner:	City and Borough of Juneau		
Identification:	FCC: 1247301		
Address:	Pederson Hill		
Latitude:	58-21-58 N		
Longitude:	-134-38-7.5 W		
Access:	Vehicle		
Site Details			
Type:	Guy Tower		
Height:	40' per the CBJ		
Collocations:	Existing: No	Future: 0	
Observations:	The tower (a.k.a. "Mendenhall Peninsula) is used by the CBJ for public safety communications.		
Comments:	Site was not assessed by CityScape Consultants. The photo was provided by the CBJ.		

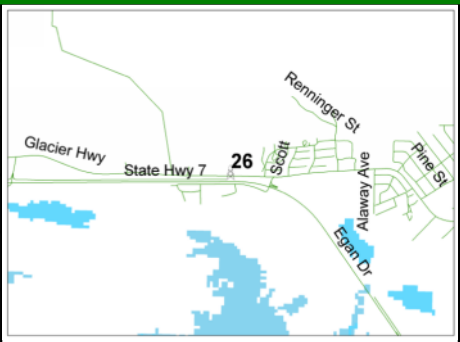
Site 21		Site Map	Site Photo
Owner:	Unsure		
Identification:	FAA Tower		
Address:	1600 Engineers Cut Off		
Latitude:	58-21-29.64 N		
Longitude:	-134-38-13.44 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	60' per the CBJ.		
Collocations:	Existing: No	Future: 0	
Observations:	Tower will likely be exclusively used by the FAA.		
Comments:	Signage at the site indicates the tower is used for air traffic control purposes.		

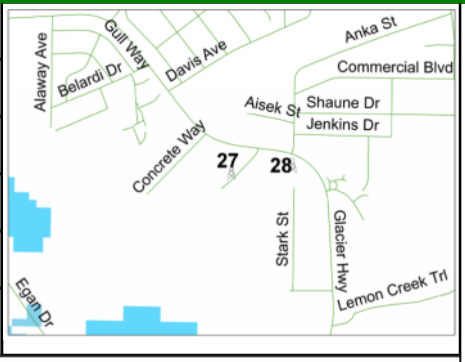
Site 22		Site Map	Site Photo
Owner:	Unsure		
Identification:	FAA Tower		
Address:	Engineers Cut Off		
Latitude:	58-21-32.51 N		
Longitude:	-134-38-2.22 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	FAA		
Collocations:	Existing: No	Future: 0	
Observations:	Tower is likely used exclusively by the FAA		
Comments:	Signage at the site indicates the tower is used for air traffic control purposes.		

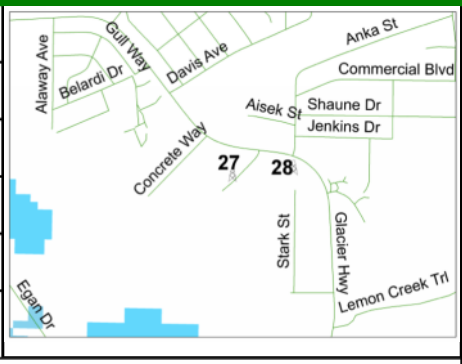
Site 23		Site Map	Site Photo
Owner:	ACS Wireless Inc.		
Identification:	FCC: 1275626		
Address:	9229 Cessna Drive		
Latitude:	58-21-43.4 N		
Longitude:	-134-35-10.7 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	100’ per FCC antenna structure registration.		
Collocations:	Existing: Yes, 2	Future: 2	
Observations:	Future collocations will likely require structural reinforcements of the tower.		
Comments:	Actually 2 wood poles side by side. The shorter pole hosts a microwave dish.		

Site 24		Site Map	Site Photo
Owner:	Global Tower, LLC		
Identification:	FCC: 1236722		
Address:	8725 Mallard Street		
Latitude:	58-21-41.08 N		
Longitude:	-134-34-32.7 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	FCC antenna structure registration indicates 80’; the CBJ indicates 70’.		
Collocations:	Existing: Yes, approximately 2	Future: 0-1	
Observations:	Future collocations will likely require structural reinforcements of the tower.		
Comments:	Equipment shelter(s) match principal building on site.		

Site 25		Site Map	Site Photo
Owner:	Unknown		Picture Unavailable
Identification:	Heintzleman Ridge		
Address:	Unknown		
Latitude:	58-22-10.97 N		
Longitude:	-134-33-13.7 W		
Access:	Unknown		
Site Details			
Type:	Unknown		
Height:	Unknown		
Collocations:	Existing: Unknown	Future: Unknown	
Observations:	CityScape Consultants, Inc. did not assess this site.		
Comments:	Site location was provided by the CBJ and was not found by CityScape Consultants, Inc.		

Site 26		Site Map	Site Photo
Owner:	State of Alaska		
Identification:	FCC: 1244555		
Address:	6860 Glacier Highway		
Latitude:	58-21-32.8 N		
Longitude:	-134-31-39.4 W		
Access:	Vehicle		
Site Details			
Type:	Lattice used primarily for microwave backhaul		
Height:	70’ per the FCC antenna structure registration		
Collocations:	Existing: No	Future: 0	
Observations:	Tower is easily accessible from Glacier Highway and would likely have to be rebuilt to accommodate collocations.		
Comments:	Tower is owned by the State and used by the AK Marine Highway System.		

Site 27		Site Map	Site Photo
Owner:	Global Tower, LLC		
Identification:	FCC: 1242712		
Address:	5594 Tonsgard Court		
Latitude:	58-21-17.8 N		
Longitude:	-134-29-49.4 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	FCC antenna structure registration identifies tower height at 105'; the CBJ indicates 80'.		
Collocations:	Existing: Yes, 3	Future: 0-2	
Observations:	Tower property identified.		
Comments:	Future collocations will likely require structural reinforcements of the tower.		

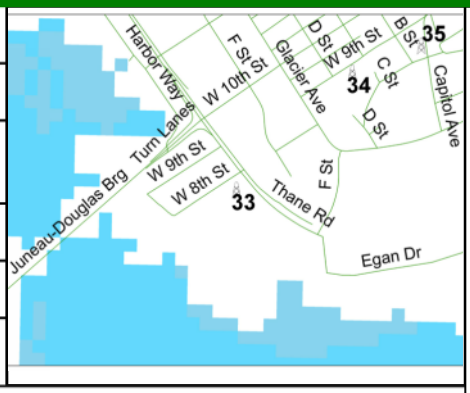
Site 28		Site Map	Site Photo
Owner:	Unknown		
Identification:	Unknown		
Address:	5541 Glacier Highway		
Latitude:	58-21-18.58 N		
Longitude:	-134-29-37 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	100' per the CBJ.		
Collocations:	Existing: Yes, 2	Future: 3	
Observations:	No tower ownership information provided on site.		
Comments:	Site is easily accessible off Glacier Highway.		

Site 29		Site Map	Site Photo
Owner:	Alaska Broadcast Communications, Inc.		
Identification:	FCC: 1029038		
Address:	3161 Channel Drive		
Latitude:	58-19-46 N		
Longitude:	-134-28-23 W		
Access:	Vehicle		
Site Details			
Type:	Lattice used for radio broadcasting		
Height:	325' per the FCC antenna structure registration.		
Collocations:	Existing: No	Future: 3	
Observations:	A good site for future collocations.		
Comments:	Presently a broadcast tower for KINO		

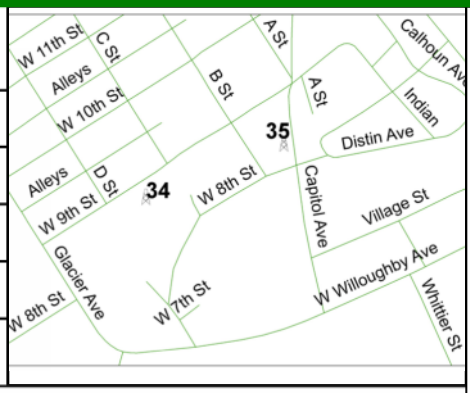
Site 30		Site Map	Site Photo
Owner:	Alaska Broadcast Communications, Inc.		
Identification:	Unknown		
Address:	3161 Channel Drive		
Latitude:	58-19-46 N		
Longitude:	-134-28-23 W		
Access:	Vehicle		
Site Details			
Type:	Short lattice tower next to Site 29		
Height:	80'		
Collocations:	Existing: No	Future: 0	
Observations:	Tower used for microwave backhaul to support broadcast signal.		
Comments:	Use of shorter tower for collocation is very unlikely.		

Site 31		Site Map	Site Photo
Owner:	New Cingular Wireless		
Identification:	FCC: 1283764		
Address:	3156 Channel Drive		
Latitude:	58-19-40 N		
Longitude:	-134-28-15 W		
Access:	Vehicle		
Site Details			
Type:	Monopole Tower		
Height:	FCC antenna structure registration indicates a height of 98; the CBJ indicates 92'.		
Collocations:	Existing: No	Future: 2	
Observations:	Tower ownership property identified.		
Comments:	This tower is a good facility for future collocations.		

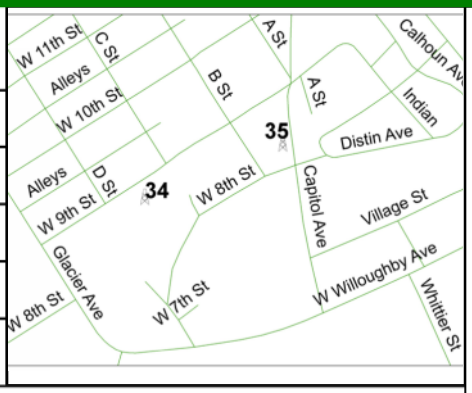
Site 32		Site Map	Site Photo
Owner:	State of Alaska		
Identification:	Unsure		
Address:	3132 Channel Drive		
Latitude:	58-19-41.04 N		
Longitude:	-134-28-12.54 W		
Access:	Vehicle		
Site Details			
Type:	Lattice used primarily for microwave backhaul		
Height:	50' per the CBJ.		
Collocations:	Existing: No	Future: 0	
Observations:	The base station equipment for the is tower is located within the adjacent building.		
Comments:	Tower is owned by the AK DOT and Public Facilities and collocation is unlikely.		

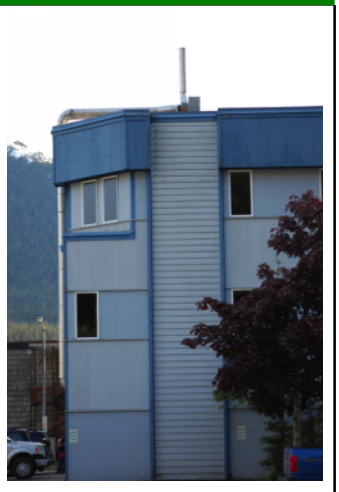
Site 33		Site Map	Site Photo
Owner:	Cycle Alaska		
Identification:	Unknown		
Address:	1107 Eighth Street		
Latitude:	58-17-59.5 N		
Longitude:	-134-25-24.49 W		
Access:	Vehicle		

Site Details		
Type:	Rooftop Guy Tower	
Height:	Unknown	
Collocations:	Existing: No	Future: None
Observations:	Facility appears to be used for dispatch and surveillance devices by retailer.	
Comments:	Unlikely candidate for collocation unless tower is improved structurally.	

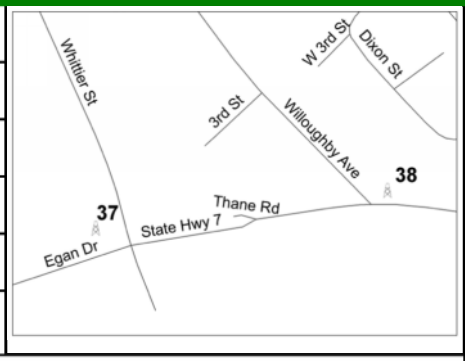
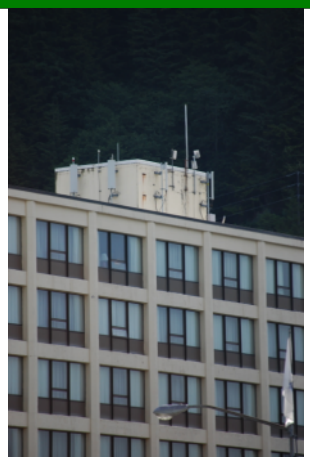
Site 34		Site Map	Site Photo
Owner:	US Federal Government		
Identification:	FCC: 1046332		
Address:	Ninth Street		
Latitude:	58-18-6.8 N		
Longitude:	-134-25-11 W		
Access:	Vehicle		

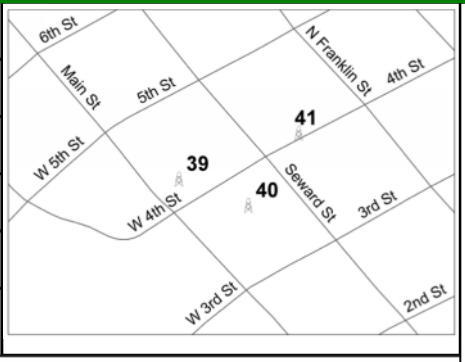
Site Details		
Type:	Rooftop Guy Tower; Rooftop Attachments	
Height:	220’ per the FCC antenna structure registration.	
Collocations:	Existing on tower: No	Future Rooftop Attachments: Unlimited
Observations:	Rooftop and sides are building are used presently by multiple entities and service providers.	
Comments:	Rooftop tower is owned by Capital Community Broadcasting Ind., DBA KTOO FM & TV	

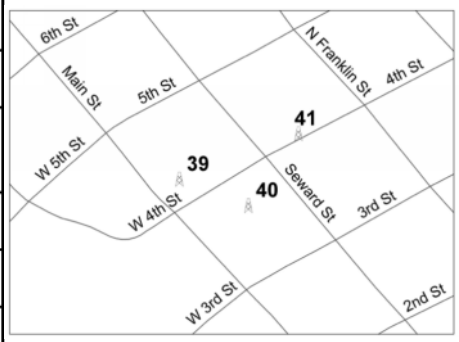
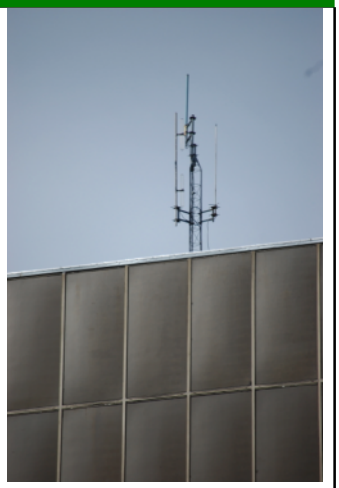
Site 35		Site Map	Site Photo
Owner:	New Cingular Wireless		
Identification:	FCC: 1265743		
Address:	740 Capitol Ave		
Latitude:	58-18-8.5 N		
Longitude:	-134-25-2.9 W		
Access:	Vehicle		
Site Details			
Type:	Monopole Tower Painted Brown		
Height:	FCC antenna structure registration indicates 50'; CBJ indicates 40'.		
Collocations:	Existing: 1 Tenant	Future: 0-1	
Observations:	FAA identification not found on tower or on tower site.		
Comments:	Low tower height will not likely support additional collocations.		

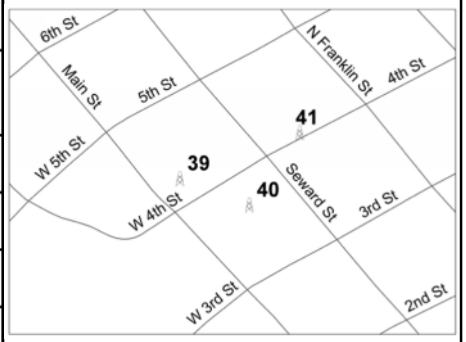
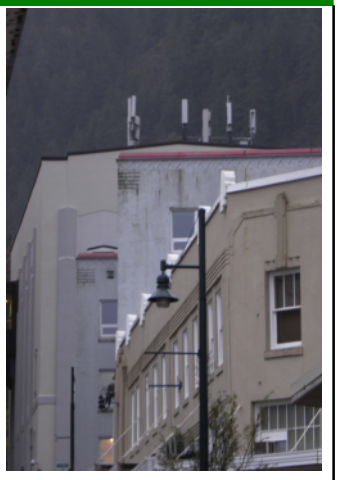
Site 36		Site Map	Site Photo
Owner:	Unknown		
Identification:	Unknown		
Address:	410 W. Willoughby Avenue		
Latitude:	58-18-3.71 N		
Longitude:	-134-24-50.4 W		
Access:	Vehicle		
Site Details			
Type:	Potential Location for a Concealed Rooftop Attachment		
Height:	Unknown		
Collocations:	None	Future: Unlimited	
Observations:	The metal tubing along side the building going up to rooftop is similar to concealment rooftop infrastructure found in Wasilla, AK.		
Comments:	This type installation would be a good use of rooftop antenna concealment.		

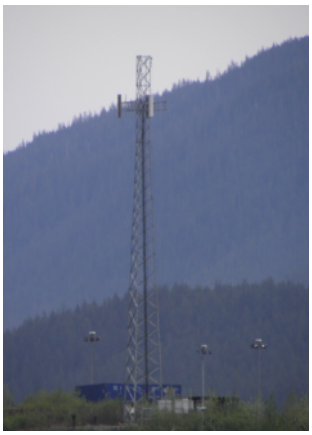
Site 37		Site Map	Site Photo
Owner:	KTOO		
Identification:	Unknown		
Address:	360 Whittier Street		
Latitude:	58-17-57.7 N		
Longitude:	-134-24-51.49 W		
Access:	Vehicle		
Site Details			
Type:	Short Lattice Rooftop Tower; Rooftop Satellite Dishes		
Height:	Unknown		
Collocations:	Existing: Maybe 1 tenant	Future: 0	
Observations:	Short lattice rooftop tower (not shown in picture) appears to have 1 collocation.		
Comments:	Potential for collocation is minimal.		

Site 38		Site Map	Site Photo
Owner:	Goldbelt Hotel		
Identification:	Unknown		
Address:	51 Egan Drive		
Latitude:	58-17-59.01 N		
Longitude:	-134-24-46.31 W		
Access:	Vehicle		
Site Details			
Type:	Rooftop Attachments		
Height:	Unknown		
Collocations:	Existing: Yes, approximately 2	Future: Unlimited	
Observations:	Antenna attachments appear to be only on the parapet.		
Comments:	Rooftop could likely support a new structure on which additional attachments could be placed.		

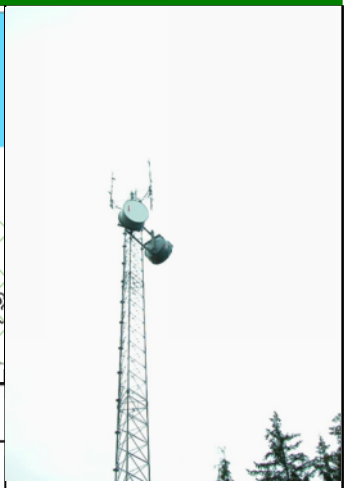
Site 39		Site Map	Site Photo
Owner:	State of Alaska		
Identification:	Unknown		
Address:	120 E. 4th Street		
Latitude:	58-18-6.12 N		
Longitude:	-134-24-38.45 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Rooftop Tower with Small Dish		
Height:	Unknown		
Collocations:	Existing: No	Future: Unlimited	
Observations:	A good location for future collocations.		
Comments:	The existing rooftop tower could be concealed by a faux architectural feature.		

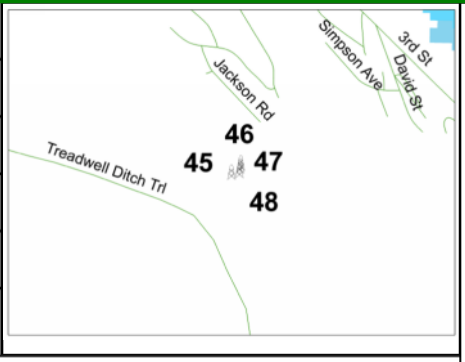
Site 40		Site Map	Site Photo
Owner:	Federal Government		
Identification:	District Courthouse		
Address:	Main Street & East 4th Street		
Latitude:	58-18-5.33 N		
Longitude:	-134-24-36.58 W		
Access:	Vehicle		
Site Details			
Type:	Guy Rooftop Mount		
Height:	Unknown		
Collocations:	Existing: No	Future: Unlimited rooftop attachments	
Observations:	A good location for future collocations.		
Comments:	The existing rooftop tower could be concealed by a faux architectural feature.		

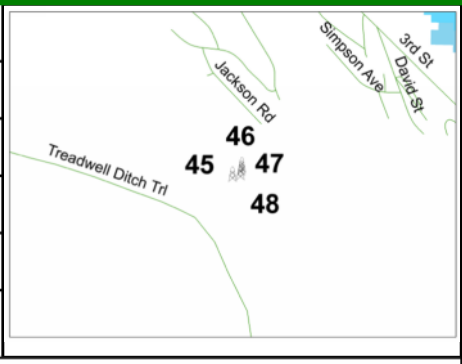
Site 41		Site Map	Site Photo
Owner:	Unknown		
Identification:	Thomas B. Stewart Legislative Building		
Address:	206 4th Street		
Latitude:	58-18-8.1 N		
Longitude:	-134-24-33.55 W		
Access:	Vehicle		
Site Details			
Type:	Rooftop Attachments		
Height:	Unknown		
Collocations:	Existing: Yes, approximately 2	Future: Unlimited	
Observations:	Antenna attachments not clearly visible for most angles of the street.		
Comments:	The existing rooftop attachments could be concealed by a faux architectural feature.		

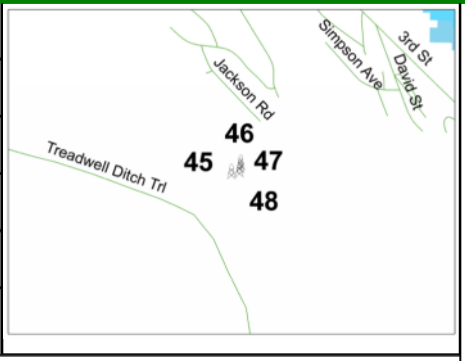
Site 42		Site Map	Site Photo
Owner:	SBA Towers III, LLC		
Identification:	FCC: 1278455		
Address:	1076 Jacobsen Drive		
Latitude:	58-17-22.2 N		
Longitude:	-134-23-40.1 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	130’ per the FCC antenna structure registration.		
Collocations:	Existing: No	Future: 4	
Observations:	Tower appears vacant.		
Comments:	Typically if a tower is abandoned then the local government has policies in place to require the removal of the facility. This tower is in a good location for future collocations but visually a different type and lower height would benefit the viewshed.		

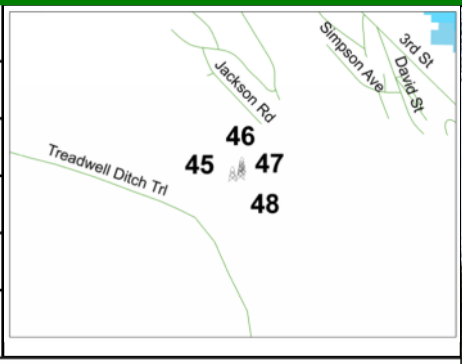
Site 43		Site Map	Site Photo
Owner:	US Coast Guard		
Identification:	Unknown		
Address:	Savikko Road		
Latitude:	58-16-31.44 N		
Longitude:	-134-23-3.91 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	Unknown		
Collocations:	Existing: No	Future: 0	
Observations:	A good location for collocation but the tower would need to rebuilt.		
Comments:	The US Coast Guard may not be willing to lease space on their tower.		

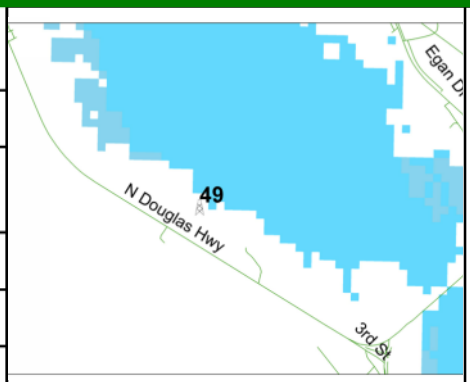
Site 44		Site Map	Site Photo
Owner:	City and Borough of Juneau		
Identification:	Crow Hill		
Address:	4000 Crow Hill Drive		
Latitude:	58-16-45.95 N		
Longitude:	-134-24-29.02 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	80’ per the CBJ.		
Collocations:	Existing: No	Future: 2	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	The CBJ should establish a policy for use of this tower by the wireless industry.		

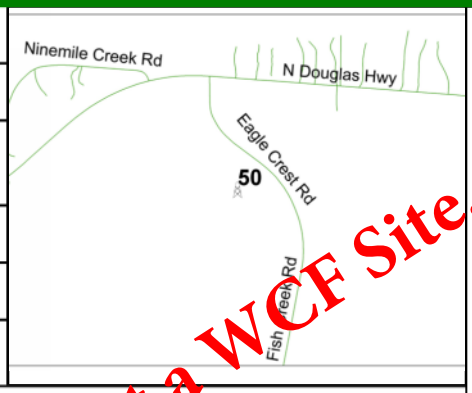
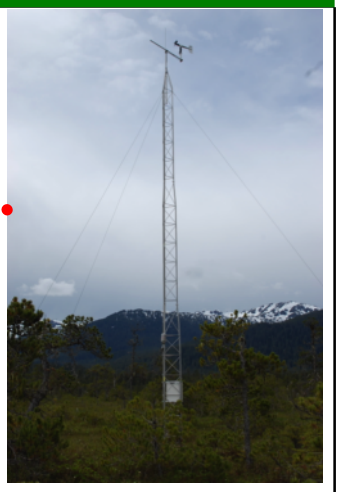
Site 45		Site Map	Site Photo
Owner:	Unknown		
Identification:	Water Reservoir		
Address:	3000 Jackson Road		
Latitude:	58-17-7.24 N		
Longitude:	-134-25-44.98 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	150’ per the CBJ.		
Collocations:	Existing: Yes, approximately 2	Future: 3	
Observations:	A good opportunity for collocations.		
Comments:	Tower ownership is not provided on this site. The CBJ should require nameplate ownership signage.		

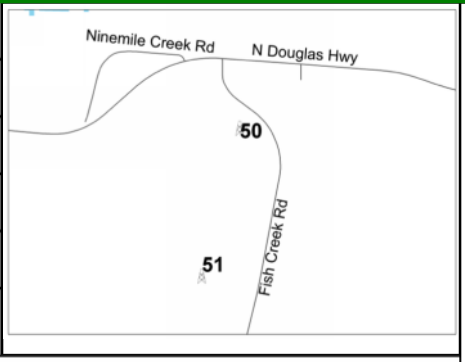
Site 46		Site Map	Site Photo
Owner:	Global Tower, LLC		
Identification:	FCC: 1282197		
Address:	3000 Jackson Road		
Latitude:	58-17-7.44 N		
Longitude:	-134-25-43.36 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	185’ per the FCC antenna structure registration.		
Collocations:	Existing: Yes, 2	Future: 3	
Observations:	A good location for collocations. The antenna on this tower is mounted “directionally”.		
Comments:	Directionally mounted antenna on towers at a similar ground elevation may be a solution to having fewer towers in the valley.		

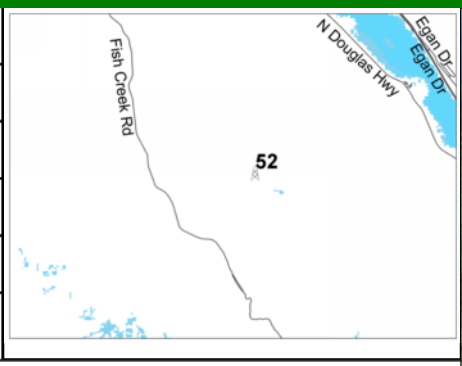
Site 47		Site Map	Site Photo
Owner:	Unknown		
Identification:	Water Reservoir		
Address:	3000 Jackson Road		
Latitude:	58-17-7.9 N		
Longitude:	-134-25-43.2 W		
Access:	Vehicle		
Site Details			
Type:	Monopole Tower		
Height:	90' per the CBJ.		
Collocations:	Existing: No	Future: 0	
Observations:	This tower could be removed provided the equipment could be mounted on one of the other existing towers within the compound.		
Comments:	CBJ policy should promote collocation over multiple towers on the same zone lot with ample space available for collocations.		

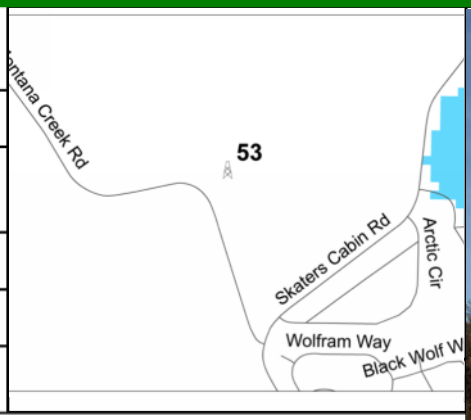
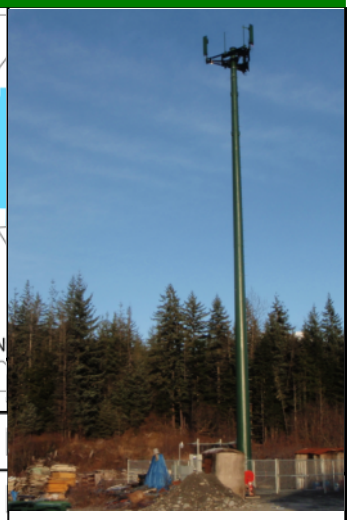
Site 48		Site Map	Site Photo
Owner:	Unknown		
Identification:	Water Reservoir		
Address:	3000 Jackson Road		
Latitude:	58.17.8 N		
Longitude:	-134-25-43 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	50' per the CBJ.		
Collocations:	Existing: No	Future: 0-1	
Observations:	This tower could be removed provided the equipment could be mounted on one of the other existing towers within the compound.		
Comments:	CBJ policy should promote collocation over multiple towers on the same zone lot with ample space available for collocations.		

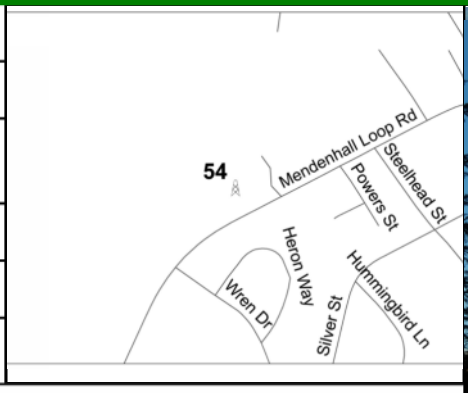
Site 49		Site Map	Site Photo
Owner:	Alaska-Juneau Communications, Inc.		
Identification:	FCC: 1028325		
Address:	North Douglas Highway		
Latitude:	58-18-4 N		
Longitude:	-134-26-32 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	FCC antenna structure registration indicates height of 278'; the CBJ indicates 300'.		
Collocations:	Existing: No	Future: 5	
Observations:	The equipment within and around the tower compound needs improvement. Copper cables between the tower base and equipment shelter are in areas overgrown with vegetation.		
Comments:	Ongoing site maintenance should be required through the zoning ordinance.		

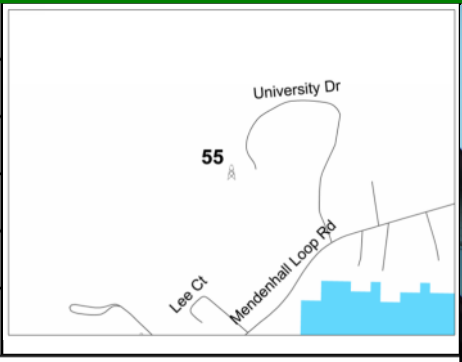
Site 50		Site Map	Site Photo
Owner:	United States		
Identification:	Unknown		
Address:	4000 Eagle Crest Road		
Latitude:	58-20-12.6 N		
Longitude:	134-33-43.4 W		
Access:	Vehicle & Foot		
Site Details			
Type:	Guy Tower		
Height:	Unknown		
Collocations:	Existing: No	Future: 0	
Observations:	Site is nicely developed with long boardwalks to preserve ground cover.		
Comments:	Facility is used for monitoring and recording weather conditions. Collocations are unlikely.		

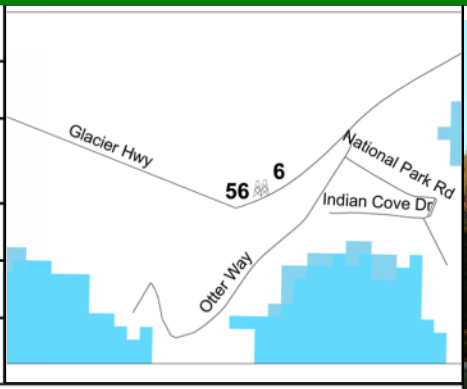
Site 51		Site Map	Site Photo
Owner:	Atlas Tower, LLC		
Identification:	FAA: 1284253		
Address:	Fish Creek Road		
Latitude:	58-19-50 N		
Longitude:	-134-33-54.9 W		
Access:	Vehicle		
Site Details			
Type:	Monopole painted green		
Height:	175' per the FAA.		
Collocations:	Existing: 1 tenant	Future: 3	
Observations:	The tower appears to be new.		
Comments:	Painted green tower appear to be visually effective in the natural setting. A light was added to this pole by the applicant at the request of local helicopter companies; this light conflicts with the issued Conditional Use permit for the facility.		

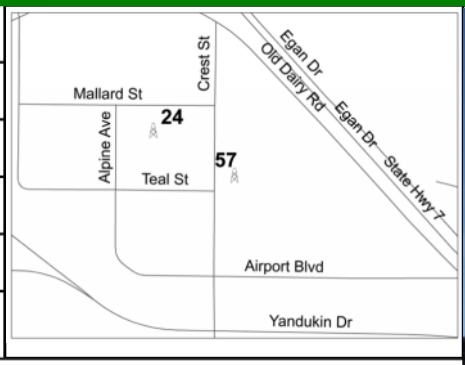
Site 52		Site Map	Site Photo
Owner:	CBJ		
Identification:	Unknown		
Address:	Saddle Mountain		
Latitude:	58-17-50.7 N		
Longitude:	-134-30-41.2 W		
Access:	Airplane		
Site Details			
Type:	Lattice Towers		
Height:	40'; 40'; and 35' per the CBJ.		
Collocations:	Existing: None	Future: 4	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	The CBJ should establish a policy for use of this tower by the wireless industry.		

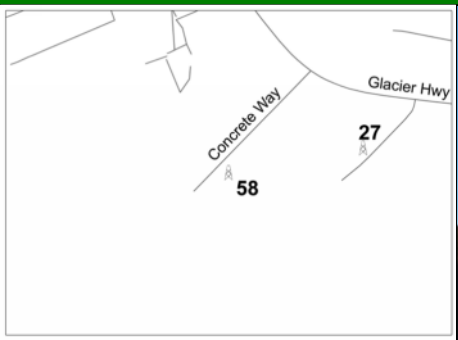
Site 53		Site Map	Site Photo
Owner:	Alaska Wireless Network		
Identification:	FCC: 1284234		
Address:	5600 Montana Creek Road		
Latitude:	58-24-51.74 N		
Longitude:	-134-36-7.59 W		
Access:	Vehicle		
Site Details			
Type:	Monopole painted green		
Height:	CBJ approved 100'; FCC approved 104' per the antenna structure registration.		
Collocations:	Existing: 1 tenant	Future: 0-2	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Tower built for GCI as the launch tenant. Site is also known as Coogan. Painted green tower appear to be visually effective in the natural setting.		

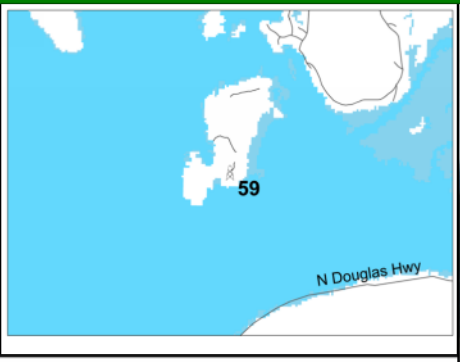
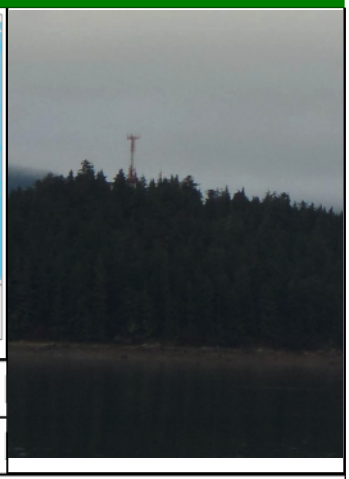
Site 54		Site Map	Site Photo
Owner:	Global Tower, LLC		
Identification:	FCC: 1284964		
Address:	10200 Mendenhall Loop Road		
Latitude:	58-24-13.19 N		
Longitude:	-134-36-14.46 W		
Access:	Vehicle		
Site Details			
Type:	Monopole		
Height:	CBJ approved 119'; FCC approved 130' per the antenna structure registration.		
Collocations:	Existing: 1 tenant	Future: 0-4	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Tower built for Verizon as the launch tenant. Site is also known as Mendenhall Glacier.		

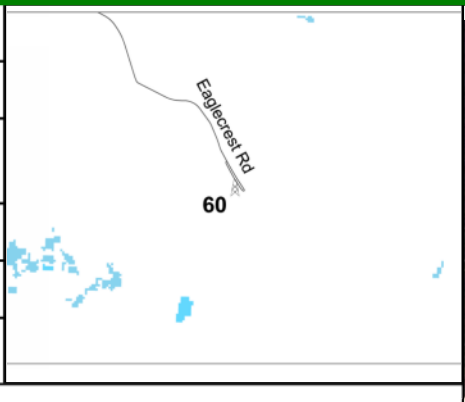
Site 55		Site Map	Site Photo
Owner:	AT&T Towers		
Identification:	FCC: 1286087		
Address:	4300 University Drive		
Latitude:	58-23-36.59 N		
Longitude:	-134-38-25.59 W		
Access:	Vehicle		
Site Details			
Type:	Monopole		
Height:	CBJ approved 100'; FCC approved 110' per the FCC antenna structure registration.		
Collocations:	Existing: 1 tenant	Future: 0-1	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Site is also known as Auke Bay.		

Site 56		Site Map	Site Photo
Owner:	Cellco Partnership		
Identification:	FCC: 1285072		
Address:	14080 Glacier Highway		
Latitude:	58-22-43.32 N		
Longitude:	-134-42-21.24 W		
Access:	Vehicle		
Site Details			
Type:	Painted Monopole		
Height:	CBJ approved 100'; FCC approved 69' per the FCC antenna structure registration.		
Collocations:	Existing: 1 tenant	Future: 0-2	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Tower built for Verizon as the launch tenant. Site is also known as Auke Bay Alt #3. The tower at site 6 which is 100' should have accommodated this collocation.		

Site 57		Site Map	Site Photo
Owner:	Global Tower, LLC		
Identification:	FCC: 1236722		
Address:	Crest Street		
Latitude:	58-21-38.75 N		
Longitude:	-134-34-24.41 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	CBJ approved 100'; FCC approved 70' per the FCC antenna structure registration		
Collocations:	Existing: 1 tenant	Future: 0-2	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Tower built for Verizon as the launch tenant. Had site 24 (70') been modified or constructed originally 15' - 20' taller then this site (#57) would not have been necessary.		

Site 58		Site Map	Site Photo
Owner:	Atlas Tower USA		
Identification:	FCC: 1284968		
Address:	5753 Concrete Way		
Latitude:	58-21-16.36 N		
Longitude:	-134-30-3.06 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Towers		
Height:	CBJ approved 130'; FCC approved 135' per the FCC antenna structure registration.		
Collocations:	Existing: 1 tenant	Future: 0-3	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Tower built for Verizon as the launch tenant. Site also known as Lemon Creek. Had site 27 (70') been modified or constructed originally 15' - 20' taller then this site (#58) would not have been necessary.		

Site 59		Site Map	Site Photo
Owner:	Atlas Tower USA		
Identification:	FCC: 1287767		
Address:	Unknown		
Latitude:	58-20-2.32 N		
Longitude:	-134-39-34.46 W		
Access:	Vehicle		
Site Details			
Type:	Lattice Tower		
Height:	155’ per CBJ and the FCC antenna structure registration.		
Collocations:	Existing: 1 tenant	Future: 0-4	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Tower built for Verizon as the launch tenant.		

Site 60		Site Map	Site Photo
Owner:	AT&T		
Identification:	FCC: 1288896		
Address:	3000 Fish Creek Road		
Latitude:	58-16-36.01 N		
Longitude:	-134-31-0.88 W		
Access:	Vehicle		
Site Details			
Type:	Wood Pole		
Height:	50’ per the CBJ and the FCC antenna structure registration		
Collocations:	Existing: 1 tenant	Future: 0-1	
Observations:	CityScape Consultants, Inc. did not assess this site. The site photo was provided by the CBJ.		
Comments:	Given the low height if this tower is it not likely to support any additional collocations.		

Appendix A

SEC. 704. FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS.

(a) NATIONAL WIRELESS TELECOMMUNICATIONS SITING POLICY- Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:

`(7) PRESERVATION OF LOCAL ZONING AUTHORITY-

`(A) GENERAL AUTHORITY- Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

`(B) LIMITATIONS-

`(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

`(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

`(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

`(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

`(iii) Any decision by a State or local government or place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

`(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

`(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any7 court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any

person adversely affected by an act or failure to act
by a State or local government or any instrumentality
thereof that is inconsistent with clause (iv) may
petition the Commission for relief.
`(C) DEFINITIONS- For purposes of this paragraph--
`(i) the term `personal wireless services' means
commercial mobile services, unlicensed wireless
services, and common carrier wireless exchange access
services;
`(ii) the term `personal wireless service facilities'
means facilities for the provision of personal wireless
services; and
`(iii) the term `unlicensed wireless service' means
the offering of telecommunications services using duly
authorized devices which do not require individual
licenses, but does not mean the provision of
direct-to-home satellite services (as defined in
section 303(v)).'.

(b) RADIO FREQUENCY EMISSIONS- Within 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93-62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions.

(c) AVAILABILITY OF PROPERTY- Within 180 days of the enactment of this Act, the President or his designee shall prescribe procedures by which Federal departments and agencies may make available on a fair, nondiscriminatory basis, property, rights-of-way, and easements under their control for the placement of new telecommunications services that are dependent, in whole or in part, upon the utilization of Federal spectrum rights for the transmission or reception of such services. These procedures may establish a presumption that requests for the use of property, rights-of-way, and easements by duly authorized providers should be granted absent unavoidable direct conflict with the department or agency's mission, or the current or planned use of the property, rights-of-way, and easements in question. Reasonable fees may be charged to providers of such telecommunications services for use of property, rights-of-way, and easements. The Commission shall provide technical support to States to encourage them to make property, rights-of-way, and easements under their jurisdiction available for such purposes.

Presented by: The Manager
Introduced:
Drafted by: A. G. Mead

ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2014-____

An Ordinance Amending the Land Use Code of the City and Borough to Provide for the Regulation of Wireless Communication Facilities and Providing for a Penalty

NOW, THEREFORE, BE IT ENACTED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the City and Borough of Juneau Municipal Code.

Section 2. New Article. Article IX. – Wireless Communication Facilities, is created to read:

ARTICLE IX. – WIRELESS COMMUNICATION FACILITIES

49.65.900 Purpose.

It is the purpose of this article to establish reasonable regulations for the placement, construction and modification of wireless communication facilities (WCF) consistent with the Telecommunications Act of 1996 and applicable law and:

(a) Promote the health, safety, and general welfare of the public and the City and Borough;

(b) Minimize the impacts of WCFs by establishing standards for siting, design and screening and by requiring consistency with the City and Borough's Wireless Telecommunications Master Plan;

(c) Encourage the collocation of antennas on existing structures thereby minimizing new visual impacts and reducing the need for new towers;

(d) Maintain the natural surroundings and character of the City and Borough;

(e) Preserve neighborhood harmony and scenic viewsheds and corridors as indicated in the Comprehensive Plan of the City and Borough of Juneau;

(f) Accommodate the growing need and demand for wireless communications services;

(g) Respond to the policies embodied in the Telecommunications Act of 1996 in such a manner as not to unreasonably discriminate between providers of functionally equivalent personal wireless services or to prohibit or have the effect of prohibiting personal wireless services; and

(h) Respond to the policies embodied in Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012.

49.65.910 Applicability.

(a) This article shall apply to the development activities including installation, construction, or modification of all WCFs including, but not limited to, existing towers, proposed towers and collocated facilities on existing structures.

(b) All applications for WCF are subject to the standards in this article to the extent that they do not violate Federal limitations on local siting standards and are not otherwise inconsistent with Federal law. The provisions of this article are not intended to and shall not be interpreted to prohibit or to have the effect of prohibiting personal wireless

services. This article shall not be applied in such a manner as to unreasonably discriminate between providers of functionally equivalent personal wireless services.

(c) Exempt Facilities. The following are exempt from this article:

(1) Noncommercial, FCC licensed amateur (ham) radio antennas;

(2) Satellite earth stations and/or antennas used for private television reception;

(3) A government-owned or temporary, commercial WCF installed upon the declaration of a state of emergency by federal, state, or local government, or a written determination of public necessity by the director; except that such facility must comply with all federal and state requirements. The WCF shall be exempt from the provisions of this article for up to one week after the duration of the state of emergency; and

(4) A temporary, commercial WCF installed for providing coverage of a special event such as news coverage or sporting event, subject to approval by the director. The WCF shall be exempt from the provisions of this article for up to one week after the duration of the special event.

(d) All WCFs existing on or before the effective date of this article shall be allowed to continue as they presently exist, provided, however, that any proposed modification to an existing WCF, including collocation, must comply with this article.

49.65.920 Location Preference for new WCFs.

(a) Locating a new antenna array or new tower shall be in accordance with the following location preferences, one being the highest priority and six being the lowest priority:

(1) Collocated antenna on existing WCF;

(2) Attached concealed antenna;

(3) Attached non-concealed antenna;

(4) Concealed freestanding new WCFs;

(5) Nonconcealed freestanding new WCFs;

(6) Any WCF requiring air navigation lighting.

(b) If the proposed location is not the highest priority listed above, then a detailed explanation justifying why a site of a higher priority was not selected must be submitted with the WCF application, as required by section 49.65.960. Any application seeking approval to locate a WCF in a lower-ranked location may be denied unless the applicant demonstrates to the satisfaction of the director or planning commission the following:

(1) That despite diligent efforts to adhere to the established hierarchy, doing so is not technically feasible or is commercially impractical;

(2) The reason or reasons why the application should be approved for the proposed location; and

(3) The hardship that would be incurred by the applicant if the application is not approved for the proposed location.

49.65.930 General Requirements.

(a) *Concealed and non-concealed antenna.*

(1) Antennas shall be mounted on WCFs so as to present the smallest possible silhouette, profile, or cross-section, unless applicant provides sufficient evidence that doing so would prohibit the applicant from properly deploying the network. New antenna mounts shall be flush-mounted onto existing WCFs, unless it is demonstrated through RF propagation analysis that flush-mounted antennas will not meet the network objectives of the desired coverage area.

(2) Attached, concealed feed lines and antennas shall be designed to architecturally match the facade, roof, wall, or structure on which they are affixed so that they blend with the existing design, color, and texture of the structure.

(b) *Security of WCFs.* All WCFs shall be located, fenced or otherwise secured in a manner that prevents unauthorized access.

(1) All antennas, towers and other supporting structures, including guy wires, shall be made inaccessible to individuals and constructed or shielded in such a manner that they cannot be climbed or accessed.

(2) Transmitters and telecommunications control points must be installed in a manner to be readily accessible only to persons authorized to operate or service them.

(c) *Signage.* WCFs shall contain a sign no larger than four square feet with text in a sufficient font size to provide adequate notification to persons in the immediate area of the presence of an antenna that has transmission capabilities. The sign shall contain the name(s) of the owner(s) and operator(s) of the facility, an emergency phone number(s), and FCC registration number, if applicable. The sign shall be on the equipment shelter or shed of the applicant and be visible from the access point of the site. The sign shall not be lighted unless authorized by the City and Borough or unless applicable provisions of law require such lighting. No other signage, including advertising, shall be permitted on any WCF, unless required by law.

(d) *Lighting.* Notice is required to be provided to the FAA, on a form prescribed by the FAA, if the facility falls under notification requirements mentioned in 14 CFR Part 77. The applicant is responsible for determining whether notification is required. Any lighting required by the FAA must be of the minimum intensity and number of flashes per

minute (i.e., the longest duration between flashes) allowable by the FAA. Dual lighting standards. Strobe lights at night are prohibited unless required by the FAA. The lights shall be oriented so as not to project directly onto surrounding property, consistent with FAA requirements.

(e) *Design criteria.*

(1) All freestanding WCFs up to 120 feet in height shall be engineered and constructed to accommodate no fewer than four antenna arrays. All WCFs between 121 feet and 150 feet shall be engineered and constructed to accommodate no fewer than five antenna arrays. All WCFs between 151 feet and taller shall be engineered and constructed to accommodate no fewer than six antenna arrays.

(2) All utilities at a WCF site shall be installed underground and in compliance with all ordinances, rules and regulations of the City and Borough, including, but not limited to, the National Electrical Code where appropriate. The director may waive or vary the requirements of underground installation of utilities whenever, in the opinion of the director, such variance or waiver shall not be detrimental to the health, safety, or general welfare of the community or the environment, or the visual and scenic characteristics of the area.

(3) All appurtenant or associated facilities of a WCF shall maximize use of building materials, colors and textures designed to blend with the structure to which it may be affixed, or to harmonize with the natural surroundings, which shall include the utilization of concealed or concealment technology. If located in or abutting a Residential, Commercial or Mixed-Use district, the appurtenant or associated facility shall either be

placed inside an enclosed structure, fenced, or screened with sight-obscuring foliage as tall as the structure.

(4) Use of ground or guy-wires shall only be permitted in the Rural Reserve (RR) and Industrial (I) zoning districts, and only on roof-tops in the Light Commercial (LC), General Commercial (GC), Waterfront Commercial (WC), and Waterfront Industrial (WI) districts.

(f) *Setbacks.*

(1) Unless otherwise provided, a WCF tower shall be setback from the nearest property line a distance equal to the height of the tower except that this setback may be reduced to one-half of the height of the tower if the applicant submits a report stamped by a professional engineer registered in the State of Alaska that certifies that the tower is designed and engineered to collapse upon failure within the distance from the tower to the property line. Other setback reductions, to the minimum required by the applicable zoning district, may be had by obtaining written agreement from the adjacent property owner(s).

(2) Setbacks may be modified by the director to no less than 20 feet from a property line only if there is significant existing vegetation, topography, or some other land feature that will provide a higher level of screening of the WCF.

(3) Any appurtenant structure shall be located so as to comply with the applicable minimum setback requirements for the property on which it is situated.

(4) With respect to collocation on an existing nonconforming building or structure, the existing permitted nonconforming setback shall prevail.

(g) WCF shall not significantly affect the Natural Areas identified in the Comprehensive Plan of the City & Borough of Juneau.

(h) WCFs shall be consistent with the City and Borough's Wireless Telecommunications Master Plan.

(i) *Visibility*.

(A) WCF shall be configured and located in a manner that shall minimize adverse effects including visual impacts on the landscape and adjacent properties and shall be maintained in accordance with the requirements of this article.

(B) WCFs shall be designed to either resemble the surrounding landscape and other natural features where located in proximity to natural surroundings, or blend in with the urban environment, through matching or complementing existing structures and specific design considerations such as architectural designs, height, scale, color, and texture.

(j) *Structural assessment*. The owner of a freestanding WCF tower shall have a structural assessment of the tower by a professional engineer, licensed in the State of Alaska, if the tower is adjacent to a dwelling, parking lot, playground, or right-of way, and shall submit the structural assessment report, signed by the engineer who conducted the assessment, to the director by July 1 every fifth year from the date of issuance of the building permit.

49.65.940 Permit application process for all WCFs.

(a) Applications, on a form specified by the director, and site plans for all WCFs shall be submitted to the director.

(b) At the time that a person submits an application for a permit for any type of WCF, such person shall pay a nonrefundable application fee to the CBJ, as set forth in

Chapter 49.85.100. In addition to the application fee, the director may require a technical review by a third party expert, the actual costs of which shall be borne by the applicant. The technical expert review may address some or all of the following, at the discretion of the director:

(1) The accuracy and completeness of the items submitted with the application;

(2) The applicability of analysis and techniques and methodologies proposed by the applicant;

(3) The validity of conclusions reached by the applicant;

(4) Whether the proposed WCF complies with applicable approval criteria set forth in this article; and

(5) Other matters deemed to be relevant to determining whether a proposed WCF complies with the provisions of this article.

(6) Based on the results of the technical review, the director may require changes or additional documentation before the application will be considered complete.

(c) *Permit types.*

(1) A special use permit, in addition to any applicable building permits, are required of all WCFs, unless otherwise provided. When a special use permit is required, an applicant must obtain the special use permit approval prior to issuance of a building permit.

(2) Unless lighting of the completed WCF will be required by the FAA or FCC, applications for those WCF listed in Table 1, which meet the performance criteria identified in section 49.65.930, shall be approved or denied by the director.

TABLE 1

WCF Type	**Zoning Districts**	**Maximum Height**	**Min. Distance to D-1 – D-18 Districts**
Eligible Collocation, Removal or Replacement of Transmission Equipment as provided in CBJ 49.65.950	All	Not more than 10% of existing structure or 20 feet (unless the increased height requires an existing unlit WCF to become lit)	N/A
Concealed Attached	All	≤ 20 Feet[1]	N/A
Non-concealed Attached	D-1 – D-18	≤ 5 Feet [1]	N/A
Non-concealed Attached	Non-Residential and Mixed Use	≤ 20 Feet [1]	N/A
New Concealed Tower	WI, WC, GC, LC, and RR	≤ 10 Feet above Max. Height of Zoning District	N/A
New Concealed Tower	I	≤ 90 Feet	> 500 Feet
New Concealed Tower	D-1 – D-18	Compliant with Max Height of Zoning District	N/A
New Non-Concealed Tower	RR & I	≤60 Feet	>500 Feet

Note: (fn. 1) Rooftop and attachment heights are identified as above the highest point of the existing structure.

(d) *Director's decision.* Except for applications eligible for the streamlined process in section 49.65.950 or those applications requiring a special use permit, applications shall be approved or denied, in writing, by the director.

(1) The director shall review the submitted application for completeness and shall notify the applicant within 30 days of receipt of the initial submission whether the

application is deemed complete. If rejected as incomplete, the director shall identify the deficiencies in the application, which if cured, would make the application complete.

(2) The director shall review all completed applications for compliance with the requirements of section 49.65.930. The director may notify an applicant of a failure to comply with section 49.65.930 and may allow the applicant to resubmit a revised application. Any period of time from when the director notifies the applicant to the date the revised application is received shall not count for the purposes of calculating the 120 day deadline in subsection (3).

(3) Applications not meeting the requirements of this article shall be rejected. The director's decision to approve or deny an application shall be in writing and supported by substantial evidence. The director's decision shall be postmarked to the applicant by the 120th calendar day from the date of receipt of the final application.

(4) If the director denies an application, the applicant may, within 20 days from the postmarked date of the notice of denial, appeal the director's denial in accordance with section 49.20.110.

49.65.950 Collocations and other modifications to existing facilities pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012.

(a) Modifications to facilities that involve the collocation, removal or replacement of transmission equipment on an existing wireless tower or base station that do no substantially change the physical dimensions of the existing tower or base station, shall be eligible for a streamlined application process.

(b) For the purposes of this section, "substantial change" means:

(1) The mounting of the proposed antenna would increase the existing height of the WCF by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this subsection if necessary to avoid interference with existing antenna or unless the increased height requires an existing unlit WCF to become lit;

(2) The mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter;

(3) The mounting of the proposed antenna would involve adding an appurtenance to the body of an existing WCF that would protrude from the edge of the existing WCF more than twenty feet, or more than the width of the WCF at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this subsection if necessary to shelter the antenna from inclement weather or to connect the antenna to the structure via a cable; or

(4) The mounting of the proposed antenna would involve excavation outside the existing WCF site, defined as the current boundaries of the leased or owned property surrounding the WCF and any access or utility easements currently related to the site.

(c) The following streamlined process shall be used for eligible applications:

(1) The director shall review the submitted application for completeness and shall notify the applicant within 30 days of receipt of the initial submission whether the

application is deemed complete. If rejected as incomplete, the director's shall identify the deficiencies in the application, which, if cured, would make the application complete.

(2) The director shall review all completed applications for compliance with the requirements of section 49.65.930. The director may notify an applicant of a failure to comply with section 49.65.930 and may allow the applicant to resubmit a revised application. Any period of time from when the director notifies the applicant to the date the revised application is received shall not count for the purposes of calculating the 90 day deadline in subsection (3).

(3) Applications not meeting the requirements of this article shall be rejected. The director's decision to approve or deny an application shall be in writing and supported by substantial evidence. The director's decision shall be postmarked to the applicant by the 90th calendar day from the date of receipt of the final application.

(4) If the director does not respond in writing to the applicant within the specified timeframe, then the application shall be deemed approved.

(5) If the director denies an application, the applicant may, within 20 days from the postmarked date of the notice of denial, appeal the director's denial in accordance with section 49.20.110.

(d) Applications that are not eligible for the streamlined process shall be processed in accordance with 49.65.940(d).

49.65.960 General application submittal requirements for all WCFs.

An application for a special use permit for a WCF shall be signed on behalf of the applicant by the person preparing the same and with knowledge of the contents and representations made therein and attesting to the truth and completeness of the

information. The landowner, if different than the applicant, shall also sign the application. All information submitted in an application shall be provided by a person qualified to provide the information. All applications for the construction or installation of a new WCF shall be accompanied by the following documentation, except applications for collocation or modification under section 49.65.950 are exempt from providing the documentation required by subsections (o), (p), or (q):

(a) In addition to the information required by 49.65.920(b), an affidavit demonstrating compliance with 49.65.920. If a lower ranking alternative is proposed the affidavit must address why higher ranked options are not technically feasible or commercially impracticable given the location of the proposed wireless communications facility;

(b) A signed statement from a qualified person, together with a statement of that person's professional qualifications, certifying that radio frequency emissions from the antenna array(s), both individually and cumulatively considering any other facilities located on or immediately adjacent to the proposed facility, complies with FCC standards;

(c) Name, address, email address, and phone number of all persons preparing the application and any required submittals;

(d) Name, address and phone number of the property owner, operator, and applicant;

(e) Postal address and tax map parcel number of the property;

(f) Zoning designation of the property on which the proposed WCF will be situated;

(g) Size of the property stated both in square feet and lot line dimensions, and a diagram showing the location of all lot lines;

(h) Locations of any dwellings within a radius equal to the height of the proposed tower from its base;

(i) Location, size and height of all structures on the property which is the subject of the application;

(j) Location, size and height of all proposed and existing antennae and all appurtenant structures;

(k) Type, locations and dimensions of all proposed and existing landscaping and fencing;

(l) The number, type and design of the WCFs proposed and the basis for the calculations of the WCFs capacity to accommodate multiple collocations;

(m) A detailed description of the proposed WCF and all related fixtures, structures, appurtenances and apparatus, including height above preexisting grade, materials, color and lighting;

(n) Certification that the applicant is in compliance with all applicable laws pertaining to the type of service offered;

(o) Certification that a geotechnical study has been conducted, and a statement that, taking into account the subsurface and substrata and the proposed drainage plan, the site is adequate to assure the stability of the proposed WCF on the proposed site;

(p) Propagation studies of the proposed site and all adjoining in-service or existing sites;

(q) Applicant shall disclose in writing any agreement in existence prior to submission of the application that would limit or preclude the ability of the applicant to share any new WCF that it constructs;

(r) Applicant shall furnish written certification by a professional engineer, licensed in the State of Alaska, that the WCF, foundation and appurtenant attachments are designed and will be constructed to meet EIA/TIA 222 G (as amended) and local building code structural requirements for loads, including wind, snow and ice loads for the specified number of collocations required in section 49.65.930(c)(1).

(s) Certification by a professional engineer licensed in the State of Alaska that the WCF was constructed, repaired, modified or restored in strict compliance with all current applicable technical, safety and safety-related laws adopted by the City and Borough, state, or federal government, and in compliance with accepted and responsible workmanlike industry practices and recommended practices of the National Association of Tower Erectors; and

(t) Proof of FAA compliance with 14 CFR Part 77, if applicable.

49.65.970 Special use permit applications.

No person shall be permitted to site, place, build, construct, modify, or prepare any site for the placement or use of WCF, except for those WCF identified in section 49.65.940, Table 1, as of the effective date of this article without having first obtained a special use permit. All applicants for a special use permit and any modification of such facility shall comply with the requirements set forth in this section.

(a) *Pre-application meeting.* Prior to submission of an application, the applicant shall meet with the director for the purpose of discussing the site and development proposal,

and to address any issues that will help to expedite the review and permitting process, including the scope of the visual assessment the applicant will be required to provide as part of the special use permit process. A pre-application meeting may also include a site visit, as determined by the director. No statement by either the applicant or director shall be regarding as binding or authoritative for purposes of this section.

(b) *Additional required application submittals.*

(1) In addition to the fee required in 49.65.940(b), the applicant shall pay an additional special use permit application fee as set forth in 49.85.100.

(2) In addition to the documentation required by section 49.65.960, the following additional documentation must be submitted with any special use permit application:

(A) Certification of compliance with the design criteria listed in section 49.65.930;

(B) *A visual impact assessment.* The scope of the required assessment will be reviewed at the pre-application meeting, but the planning commission may require submission of a more detailed visual analysis after submittal of the following required information. The visual impact assessment must include:

(i) A "zone of visibility map" which shall be provided in order to determine locations where the tower may be seen;

(ii) An analysis demonstrating that the WCF will be sited so as to have the least adverse visual impact on the environment and its character, on existing vegetation, and on the properties in the area; and

(iii) Pictorial representations of "before and after" views from key viewpoints as may be appropriate, including but not limited to roadways, parks, public lands, historic districts, and any other location where the site is visible to a large number of visitors, travelers or residents. Guidance will be provided concerning the appropriate key sites at the pre-application meeting;

(iv) Description of the visual impact of the tower base, guy wires (if applicable) and accessory buildings from abutting properties and streets;

(v) The applicant shall demonstrate in writing and/or by drawing how it shall effectively screen from view the base of its proposed WCF tower and all related facilities and structures; and

(C) The applicant shall provide evidence that the proposed facility is designed to meet the minimum height requirement necessary for effective functioning of the provider's network.

(c) *Director's Review*.

(1) The director shall review the application for completeness.

(2) Incomplete applications shall be rejected and the applicant notified in writing within 30 days of receipt of the initial submission. If rejected, the director's decision shall identify the deficiencies in the application, which, if cured, would make the application complete.

(3) Once an application is deemed complete, the director shall schedule it for a hearing before the planning commission, and shall give notice to the applicant and the public in accordance with subsection (d).

(d) *Public notice*. Public notice of planning commission consideration of a special use permit shall be provided as follows:

(1) Permit consideration shall be included as an item in the posted agenda.

(2) Notice of the hearing and the agenda item shall be published in a newspaper of general circulation in the City and Borough a minimum of ten days prior to the date of the meeting.

(3) The applicant shall post a sign on the site at least 14 days prior to the hearing at a location determined by the director. The sign shall be between four square feet and 32 square feet in area, shall have a red background, and shall indicate in white lettering, 216-point or larger, that a special use permit for a WCF has been sought for the site, the date of the hearing thereon, and that further information is available from the director. The applicant shall maintain the sign and shall remove it within 14 days after final action on the application.

(4) The director shall mail notice of the application and the public hearing to the owners of record of all property located within 500 feet of the site.

(e) *Planning Commission determination.* The planning commission is authorized to review, analyze, evaluate and make decisions with respect to reviewing special use permits for WCFs.

(1) The planning commission may impose any conditions on a special use permit:

(A) Required to ensure compliance with the design criteria specified in section 49.65.930; and

(B) That are consistent with the purposes of this article, which may include conditions related to the aesthetic effect of the WCF and compatibility with other WCFs. Factors relevant to aesthetic effects are: the protection of the view in sensitive or particularly scenic areas, scenic corridors/viewsheds identified in the Comprehensive Plan of the City and Borough of Juneau, and in historic sites; the concentration of WCFs in the proposed area; and whether the height, design, placement or other characteristics of the proposed facility could be modified to have a less intrusive visual impact.

(2) The planning commission may deny an application for any of the following reasons.

(A) Conflict with safety and safety-related codes and requirements;

(B) Conflict with traffic needs or traffic laws, or definitive plans for changes in traffic flow or traffic laws;

(C) Conflict with the historic nature of a neighborhood;

(D) The use or construction of a WCF that is contrary to an already stated purpose of a specific zoning or land use designation;

(E) Presence of another approved WCF application within the geographic search area;

(F) The proposed site is on, or eligible to be on, the National Register of Historic Places;

(G) With respect a new concealed or non-concealed tower, the applicant fails to demonstrate that no existing structure or tower can accommodate the applicant's proposed use without increasing the height of the existing tower or structure or otherwise creating a greater visual impact; or that use of such existing facilities would

prohibit or have the effect of prohibiting personal wireless services in the search area to be served by the proposed tower; and

(H) Conflicts with the provisions of this article.

(3) The planning commission shall deny any application for WCF in the following locations:

(A) State or local wildlife refuges;

(B) In any area designated as a public park, unless screened so as to minimize visual and noise impacts, and as long as public use will not be disrupted, as determined by the planning commission; and

(C) Any area designated as a Scenic Corridor/Viewshed identified in the Comprehensive Plan of the City and Borough of Juneau.

(4) The planning commission shall condition a permit on a requirement to construct WCF within a reasonable period of time, which may not exceed 18 months.

(f) Any and all representations made by the applicant to the planning commission on the record during the application process, whether written or verbal, shall be deemed a part of the application and may be relied upon in good faith by the commission.

(g) A holder of a special use permit granted under this article shall obtain, at its own expense, all permits and licenses required by applicable law, rule, regulation or code, and must maintain the same, in full force and effect, for as long as required by the City and Borough or other governmental entity or agency having jurisdiction over the applicant.

(h) The planning commission's decision shall be in writing and mailed to the applicant, postmarked by the 150th day of receipt of a completed application. A decision to

deny a request to place, construct or modify a WCF shall be supported by substantial evidence.

(i) If the planning commission denies a request to place, construct or modify a WCF, the applicant may, within 20 days from the postmarked date of the decision, appeal the planning commission's decision in accordance with section 49.20.110.

49.65.980 Extent and parameters of special use permit for WCFs.

(a) Special use permits may not be assigned or transferred without providing prior notice to the City and Borough, on a form acceptable to the director.

(b) Special use permits may, following a hearing upon prior notice to the applicant, be revoked, canceled, or terminated for a violation of the conditions and provisions of the special use permit for WCFs or for a material violation of this article after prior written notice to the applicant and the holder of the special use permit.

(c) The holder of a special use permit shall notify the City and Borough of any intended modification of a WCF and shall apply to the director to modify, relocate or rebuild any WCF.

(d) A special use permit shall become void 18 months after its effective date if no substantial construction progress has been made. A new application must be submitted for a voided permit, including the payment of any required fees, and a new permit obtained. No permit shall be renewed more than once.

49.65.990 Interference with public safety equipment.

In order to facilitate the regulation, placement, and construction of antenna, and to ensure that all parties are complying to the fullest extent possible with the rules,

regulations, and/or guidelines of the FCC, each owner of an antenna, antenna array or applicant for a collocation shall agree in a written statement to the following:

(a) Compliance with "good engineering practices" as defined by the FCC in its rules and regulations;

(b) Compliance with FCC regulations regarding susceptibility to radio frequency interference, frequency coordination requirements, general technical standards for power, antenna, bandwidth limitations, frequency stability, transmitter measurements, operating requirements, and any and all other federal statutory and regulatory requirements relating to radio frequency interference (RFI);

(c) In the case of an application for collocated telecommunications facilities, the applicant, together with the owner of the subject site, shall use their best efforts to provide a composite analysis of all users of the site to determine that the applicant's proposed facilities will not cause radio frequency interference with the City and Borough's public safety communications equipment and will implement appropriate technical measures, as described in antenna element replacements, to attempt to prevent such interference; and

(d) Whenever the City and Borough has encountered radio frequency interference with its public safety communications equipment, and it believes that such interference has been or is being caused by one or more antenna arrays, the following steps may be taken:

(1) The City and Borough shall provide notification to all wireless service providers operating in the City and Borough of possible interference with the public safety communications equipment, and upon such notifications, the owners shall use their best efforts to cooperate and coordinate with the City and Borough among themselves to investigate and mitigate the interference, if any, utilizing the procedures set forth in the

joint wireless industry-public safety "Enhanced Best Practices Guide," released by the FCC in Appendix D of FCC 04-168 (released August 6, 2004), including the "Good Engineering Practices," as may be amended or revised by the FCC from time to time in any successor regulations.

(2) If any equipment owner fails to cooperate with the City and Borough in complying with the owner's obligations under this section or if the FCC makes a determination of radio frequency interference with the City and Borough public safety communications equipment, the owner who failed to cooperate and/or the owner of the equipment which caused the interference shall be responsible, upon FCC determination of radio frequency interference, for reimbursing the City and Borough for all costs associated with ascertaining and resolving the interference, including but not limited to any engineering studies obtained by the City and Borough to determine the source of the interference. For the purposes of this subsection, failure to cooperate shall include failure to initiate any response or action as described in the "Enhanced Best Practices Guide" within 24 hours of the City and Borough's notification.

49.65.1000 Transfer of Ownership

In the event a WCF provider or owner transfers ownership of a WCF to a different provider or owner, the previous and new service provider or owner shall notify the director no less than 10 days from the date of transfer. The new provider or owner shall include the name, address and phone number of the person to be responsible for the WCF.

49.65.1010 Non-use and abandonment.

(a) Notwithstanding section 49.10.600, the director may require removal of a WCF under the following circumstances, which are deemed detrimental to the health, safety, and welfare interests of the City and Borough:

(1) WCFs with a permit that have not been used as a WCF for a period exceeding 90 consecutive days or a total of 180 days in any 365-day-period, except for periods caused by force majeure or acts of God, in which case, repair or removal shall commence within 90 days.

(2) Permitted WCFs that have fallen into such a state of disrepair that create a public health or safety hazard, which shall be deemed a nuisance per se.

(3) WCFs that have been located, constructed, or modified without first obtaining all permits required by law, or that have been located, constructed or modified in a manner inconsistent with the applicable permit requirements, which shall be deemed a nuisance per se.

(b) If the director makes such a determination as noted in subsection (a) of this section, the director shall notify the permittee in writing that said WCF is to be removed.

(c) Within 90 days of the postmarked date of the director's notice, the permittee, or its successors or assigns, shall dismantle and remove such WCF, and all associated structures and facilities, from the site and restore the site as close to its original condition as is possible, such restoration being limited only by physical or commercial impracticability proven to the satisfaction of the director.

(d) If the WCF is not removed or substantial progress has not been made to remove the WCF within 90 days after the permit holder has received notice, the City and

Borough may remove or cause to be removed the WCF at the sole expense of the owner or permit holder.

(e) If, the City and Borough removes or causes to be removed a WCF and the owner of the WCF does not claim and remove it from the site to a lawful location within ten days, then the City and Borough may take steps to declare the WCF abandoned, and sell it and its components.

(f) Notwithstanding anything in this section to the contrary, the director may approve a temporary use permit/agreement for the WCF, for no more than 90 days, during which time a suitable plan for removal, conversion, or relocation of the affected WCF shall be developed by permit holder or owner, subject to the approval of the director. If such a plan is not developed, approved and executed within the 90-day time-period, then the City and Borough may take possession of and dispose of the affected WCF in the manner provided in this section.

49.65.1020 Conflict with other ordinances.

Where this article differs or conflicts with other ordinances, unless the right to do so is preempted or prohibited by the state or federal government, the more restrictive or protective of the City and Borough and the public shall apply.

49.65.1030 Violations

Violations of this article or any special use permit obtained pursuant to this article shall be subject to the provisions of section 49.10.600 through 49.10.660.

Section 3. Amendment of Section. CBJ 49.80.120 Definitions, is amended by the addition of the following definitions to be incorporated in alphabetical order:

Amateur Radio Antenna means any tower used for amateur radio (ham) transmissions consistent with FCC regulations.

Antenna means communications equipment that transmits and receives electromagnetic radio signals used in the provision of all types of wireless communications services.

Antenna array means A single or group of antenna elements and associated mounting hardware, transmission lines, or other appurtenances which share a common attachment device such as a mounting frame or mounting support structure for the sole purpose of transmitting or receiving electromagnetic waves.

Antenna support structure means a structure that is primarily constructed for the purpose of holding antenna but on which one or more antennas may be mounted, including buildings, water tanks, pole signs, church steeples, and electric power transmission towers.

Appurtenant or associated facilities means an accessory facility or structure serving or being used in conjunction with (WTF), and located on the same property or lot as the (WTF), including but not limited to, utility or transmission equipment storage sheds or cabinets.

Base station means a facility consisting of radio transceivers, antenna, coaxial cable, a regular and back-up power supply, and other electronics associated with the operation of a WCF.

Collocation means the placement of an antenna on an existing WCF for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

Commercially impracticable means the inability to perform an act on terms that are reasonable in commerce. The inability to achieve a satisfactory financial return on investment or profit, standing alone, shall not be considered "commercial impracticability" and shall not render an act or the terms of an agreement commercially impracticable.

Concealed means a tower, ancillary structure, or equipment compound that is not readily identifiable as such, and is designed to be aesthetically compatible with existing and proposed building(s) and uses on a site. There are two (2) types of concealed facilities: 1)

Antenna Attachments, including painted antenna and feed lines to match the color of a building or structure, faux windows, dormers or other architectural features that blend with an existing or proposed building or structure and 2) Freestanding. Freestanding concealed towers usually have a secondary, obvious function, which may include church steeple, windmill, bell tower, clock tower, light stanchion, flagpole with or without a flag, or tree.

Equipment cabinet or shelter means a small structure shelter, cabinet or vault used to house and protect the electronic equipment necessary for processing wireless communication signals. Associated equipment may include air conditioning and emergency generators.

FAA means the Federal Aviation Administration or its duly designated and authorized successor agency.

FCC means the Federal Communications Commission or its duly designated and authorized successor agency.

Feed lines means cables used as the interconnecting media between the transmission/receiving base station and the antenna.

Flush mounted means any antenna or antenna array attached directly to the face of the support structure or building in a manner that permits mechanical beam tilting if necessary but such that no portion of the antenna extends above the height of the support structure or building.

Guy wire means any wire or cable that provides structural support between a tower and the ground.

Monopole WCF means a style of free-standing WTF consisting of a single shaft usually composed of two or more hollow sections that are in turn attached to a foundation. This type of WTF is designed to support itself without the use of guy wires or other stabilization devices. These facilities are mounted to a foundation that rests on or in the ground or on a building's roof.

Non-concealed means a WCF that has not been treated, camouflaged, or disguised to blend with its surroundings and is readily identifiable.

Radio frequency emissions means any electro-magnetic radiation or other communication signal emitted from an antenna that is regulated by the FCC.

Satellite earth station means a parabolic or dish antenna that is mounted to a structure, which may include associated equipment cabinets, necessary for the transmission or reception of wireless communication signals with satellites.

Tower means a structure that is built for the sole or primary purpose of supporting equipment for the transmission and/or reception of radio frequency signals or other wireless

communications or meteorological purposes, and usually consisting of an antenna or antenna array, transmission cables, equipment cabinets, and their associated facilities.

Tower base means the foundation, usually concrete, on which the tower and other support equipment is situated. For measurement calculations, the tower base is that point on the foundation reached by dropping a perpendicular from the geometric center of the tower.

Unipole means a wireless communication structure in which antennas are mounted inside a RF transparent cylinder. This design may also be referred to as a concealed monopole, flagpole, light pole, free standing pole, or roof mounted pole on existing structures.

Wireless Communication Facility (WCF) means any manned or unmanned location for the transmission and/or reception of radio frequency signals or other wireless communications, and usually consisting of an antenna or group of antennas, transmission cables, and equipment cabinets, and may include an antenna support structure. The following developments shall be considered a WCF: developments containing new, mitigated, or existing antenna support structures, public antenna support structures, replacement antenna support structures, collocation on existing antenna support structures, attached wireless communications facilities, concealed wireless communication facilities, and non-concealed wireless communication facilities. Excluded from the definition are: noncommercial amateur radio, amateur ham radio and citizen band antennas, satellite earth stations and antenna support structures, and antennas and/or antenna arrays for AM/FM/TV/HDTV broadcasting transmission facilities.

Specific types of WCFs include:

Attached WCF means an antenna or antenna array that is secured to an existing building or structure with any accompanying pole or device which attaches it to the building or structure, together with transmission cables, and an equipment cabinet, which may be located either on the roof or inside/outside of the building or structure. An attached wireless communications facility is considered to be an accessory use to the existing principal use on a site.

Concealed WCF, sometimes referred to as a concealed or camouflaged facility, means a WCF, ancillary structure, or WCF equipment compound that is not readily identifiable as such, and is designed to be aesthetically compatible with existing and proposed building(s) and uses on a site. There are two types of concealed WCFs: 1) attached and 2) freestanding. 1) Examples of concealed attached facility include, but are not limited to the following: painted antenna and feed lines to match the color of a building or structure, faux windows, dormers or other architectural features that blend with an existing or proposed building or structure. 2) Freestanding concealed WCFs usually have a secondary, obvious function which may be, but is not limited to the following: church steeple, windmill, bell tower, clock tower, cupola, light standard, flagpole with or without a flag, or faux tree.

Freestanding WCF means any manned or unmanned location for the transmission and/or reception of radio frequency signals, or other wireless communications, and usually consisting of an antenna or group of antennas, feed lines, and equipment cabinets, and may include an antenna support structure. A freestanding WCF includes, but is not limited to the following: guyed, lattice, or monopole support structures.

Non-concealed WCF means a wireless communication facility that is readily identifiable as such and can be either freestanding or attached.

Section 4. Amendment of Section. CBJ 49.85.100 is amended to add a subsection (1) to read:

(18) Wireless Communication Facility Application Fees.

(A)	Application fees required by 49.65.940(b):	$350
(B)	Additional fee required for special use permit applications required by 49.65.970(b)(1):	$500
(C)	Technical expert review fee specified in 49.65.940(b):	$4000

Section 5. Effective Date. This ordinance shall be effective 30 days after its adoption.

Adopted this _____ day of _____, 2014.

_____
Merrill Sanford, Mayor

Attest:

_____
Laurie J. Sica, Municipal Clerk

Matsu definitions and code for Tall Towers

17.60.010 DEFINITIONS.

(A) For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

- "Alternative tower structure" means tall structures such as: clock towers, sculptures, steeples, light poles, buildings, artificial trees, and similar alternative-design structures and architectural features that support, conceal, or camouflage antennas or other uses requiring height.

- "Antenna" means a rod, wire, or set of wires used in sending and receiving electromagnetic waves.

- "Collocation" means the location of more than one use or attachment, such as an antenna, on the same structure or site; also the location of more than one structure on the same site.

- "Tall structure" means a structure that is high or tall, relative to its surroundings. The term includes, but is not limited to, flag poles, sculpture, buildings, elevators, storage or processing facilities, water tanks, derricks, cranes, signs, chimneys, area illumination poles, towers, supports for communication, and power transmission lines.

- "Tower" means a type of tall structure not intended for occupancy and includes, but is not limited to, antenna, monopoles, self-supporting lattice, guyed structures, and alternative type structures for uses including, but not limited to, telecommunication as in receiving or transmission of television, microwave, cellular telephone, common carrier, personal communications service (pcs), or other radio wave signals. A tower may be free standing or attached to a structure.

- "Tower farm" means a lot or contiguous group of lots used as a location for more than one tower.

- "Tower line route" means the route traversed by two or more towers supporting common service as in electrical power, communications, or lighting.

- "Tower service area grid" means the service area and locations of two or more towers providing common service as in a cellular telephone service area.

- "Width of a structure" means the horizontal distance measured from the outermost points of the structure including attachments and structural supports but excluding guy wires and transmission lines strung between towers as in the case of electrical power lines.

17.60.145 TALL STRUCTURES, INCLUDING BUT NOT LIMITED TO TOWERS, TOWER FARMS, TOWER ROUTES, AND TOWER SERVICE AREA GRIDS.

(A) Tall structures, tower farms, tower routes, tower service area grids, and their uses are subject to regulation in order to protect the public health, safety, and welfare from the negative impacts of tall structures and their uses including but not limited to physical danger, electromagnetic variations, reduced light, air, and open space, reduced property values, glare, noise, vibration, damage due to collapse, odor, runoff, drainage, litter, and loss of quiet enjoyment of residential property. These standards are in addition to all other applicable laws.

(B) Exemptions. The following are exempt from the requirement for a conditional use permit under the provisions of this section:

(1) church spires, religious icons, and flag poles displaying official government or religious flags;

(2) minor customary and incidental fixtures and attachments located above 100 feet, or the maximum allowable height for the structure, placed upon other structures which are not otherwise regulated as tall structures, such as buildings less than the maximum height allowed in the district. Exempt minor fixtures shall not increase the maximum height of the structure to more than 135 feet or ten feet above the maximum allowable height for the structure, except that, a maximum of four "whip" or "pole" type antennas, less than six inches in diameter at the base each, may be placed to increase the height of the structure to a maximum of 145 feet or 20 feet above the maximum allowable height for the structure. Exempt minor fixtures shall not require safety lights or be illuminated. Exempt minor fixtures include but are not limited to: elevator shafts, cupolas, vent pipes, heating and air conditioning equipment, dish type antennas, and minor architectural features. Signs are not exempt under this section;

(3) towers and antennas utilized for temporary emergency services of 180 days or less in response to a local disaster;

(4) a temporary wireless communication facility shall be allowed for a maximum of 90 days during the construction of a permitted, permanent facility;

(5) temporary tall structures, including but not limited to: drilling derricks and construction cranes, which are on site less than 120 consecutive days, or 180 days total within a consecutive 12-month period, and are not intended to routinely reoccur on the same site;

(6) support structures less than 185 feet in height when used exclusively for illuminating major arterial highways;

(7) routine maintenance and repair of legal nonconforming or permitted tall structures and related equipment may be performed without issuance or amendment of a conditional use permit. Equipment, including lines and antennas, may also be removed from, added to or reoriented

upon a legal tall structure. All work allowed under this subsection shall comply with the performance standards of this section, subject to the following guidelines:

(a) allowed work shall not require additional air safety or strobe lighting and shall not substantially change the profile or other characteristics of the tall structure to increase the negative visibility or other impacts across lot lines as regulated by this chapter.

(b) allowed work shall not increase the width of the tall structure by more than five feet at any point.

(c) allowed work shall not increase the height of the tall structure by more than five feet, except that a maximum of four "whip" or "pole" antennas less than six inches in diameter, each, at the base may be placed to increase the height of the existing tall structure a maximum of 20 feet;

(8) licensed amateur (ham) radio stations, except that, modification or use of such towers for commercial use shall require a conditional use permit in accordance with this section;

(9) structures within the boundaries of the port district as defined in MSB 18.02.

(C) Performance standards. The following standards shall apply to regulated structures and uses:

(1) The ability of utility services to efficiently provide such services to the community shall be protected to the extent feasible. The best balance between cost efficient service provided to the public by the use and protection of the public interest will be pursued by the planning commission in accordance with these standards.

(2) The planning commission may vary or waive one or more of the standards and requirements of this chapter based upon specific findings that the change will result in better overall implementation of the goals of this chapter and the comprehensive plan.

(3) The number of tall structures, tower line routes, tower service area grids, and antenna farms authorized by the borough shall be the minimum reasonably required to provide services.

(4) To the extent feasible, location of tall structures, tower line routes, and tower farms shall be in compatible areas where the adverse impact of the use is minimized. Tall structure location is generally more favored in industrial and agricultural districts designated by borough code, nonresidential areas, and areas where the tall structure will not unduly detract from land values or economic value related to tourism or cultural values.

(5) Tower line routes and tower service area grids subject to this chapter shall be reviewed for those areas where the regulated tall structures will have impact. The planning commission shall not unreasonably expand the permit review to areas or uses not specifically addressed by this chapter.

(6) Tall structures may be principal or accessory structures on a lot. A different existing use or an existing structure on the same lot shall not preclude the installation of a tall structure on the lot.

(7) Tall structures for telecommunications, lighting, and electrical transmission that are constructed and maintained in accordance with the provisions of a permit issued under this chapter shall not be deemed to constitute the expansion of a pre-existing nonconforming use or structure.

(8) Conditions may be required for design, scheduling, fences, walls, warning signs, camouflage, vegetation, setbacks, collocation, use of existing and alternative structures, tower farms, and other mitigation.

(9) Unless specifically provided for by code, signs intended for view across lot lines shall not be permitted on tall structures except for warning signs required to address safety issues on the site.

(10) The proposed development shall not interfere with the approaches to any existing airport or airfield, including water bodies supporting aircraft use.

(11) Tall structures shall be constructed, configured, and maintain color schemes to reduce adverse visual impact.

(12) Tall structures shall use nonstrobe type red lights for night air safety illumination unless otherwise required by law. The negative impact across lot lines caused by tall structure lights and illumination on the site shall be minimized. Scenic and night sky views, traffic safety, enjoyment of residential and other lawful uses shall be protected. Conditions may be required for lighting: type, wattage, brightness, shrouds, direction, location, height, and other buffers.

(13) Surrounding topography and development shall be used to reduce negative impacts. Height above nearby ridge lines, hills, trees, and buildings shall be the minimum needed to reasonably conduct the use.

(14) Visibility of tall structures and aerial lines from public parks, trails, and water bodies will be minimized.

(15) Aerial lines crossing parks, trails, and water bodies will be minimized.

(16) For purposes of determining whether the installation of a tall structure or antenna complies with district development regulations including, but not limited to, setback requirements, lot size and coverage requirements, and other requirements, the dimensions of the entire lot shall control, even though the antennas or tall structures may be located on leased parcels within such lots.

(17) In residential districts designated by code, towers must be set back at least the minimum required distance for structures in the zoning district, and may be required to be set back a greater distance to a maximum distance equal to the height of the tower.

(18) In districts designated by code for commercial use, and public or institutional use, towers must be set back at least the minimum required distances for structures in the zoning district, and may be required to be set back a greater distance to a maximum of equal the height of the tower.

(19) In areas outside of special land use districts and in districts designated by code for agricultural and industrial use, towers must be set back at least the minimum required distances for structures in the zoning district.

(20) Guys, guy anchors, and accessory facilities must meet zoning district setback requirements.

(21) Towers over 100 feet in height shall not be located within one-quarter of a mile from another existing tower that is over 100 feet in height except as authorized in tower farms, tower service area grids, or tower line routes.

(22) Adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way.

(D) Upon issuance of a permit under this chapter, the permittee shall provide all necessary documentation to maintain current information sufficient to demonstrate continued compliance with permit conditions.

(E) The property owner and the permittee shall be responsible for maintaining all aspects of the operation, improvements, development, and site in compliance with the terms and conditions of the permit and all applicable local, state, and federal requirements.

(F) Authorized representatives of the borough shall be allowed to inspect the site and related records at reasonable time for the purpose of monitoring compliance with all permit conditions. Upon reasonable notice from the borough, the permittee shall provide necessary assistance to facilitate authorized inspections.

(G) As part of the application for conditional use permit under this section, the applicant shall provide the following supporting information:

(1) Written confirmation from the applicable community council that a pre-application public meeting was held with the applicant to discuss issues related to the siting of the proposed tall structure.

(2) A plan of development and operations describing the proposed use in detail sufficient to demonstrate compliance with all applicable borough ordinances, standards, and conditions. At a minimum this submittal shall also include:

(a) Name, title and contact telephone numbers for persons in charge of the operation and who will be responsible for compliance with the permit.

(b) Legal description of the subject parcel and borough tax account number. A location by latitude and longitude may also be required at the discretion of the planning director if appropriate to implement the requirements of this chapter.

(c) Current maps at appropriate scale, showing: the location of the proposed use, the locations of other tall structure facilities operated by the applicant, and those proposed by the applicant that are within the borough or outside of the borough but within one-half mile of the borough boundary, the designated residential districts and the existing residential uses within one-half mile of the proposed use.

(d) Evidence of compliance with applicable local, state, and federal laws regarding the proposed use of the property.

(e) An organization chart or description identifying the lines of responsibility and general function of the organization that will own and operate the facility.

(f) A description of all major types of activities proposed to occur on the site including at a minimum the purpose, number, type, and general performance specifications of all tall structures and antennas, on-site staffing, accessory structures, equipment such as generators, and plans for collocation of other tall structures, and antennas on the site.

(g) A general description of the security and safety measures proposed to protect the public safety.

(h) A site plan, drawn to scale under the seal of a qualified Alaska registered surveyor, clearly indicating all site boundaries, location of existing and proposed tall structures, antennas, other structures, and other development on site, means of access, screening and fencing, topography, landscaping, drainage management, adjacent public easements, and rights-of-way.

(i) Elevation drawings of the facilities depicting existing and proposed tall structures, other structures, landscaping, proposed color(s), method of camouflage, and illumination. Photo simulations may be used to provide required information.

(j) Certification by a qualified Alaska licensed professional engineer that the structural integrity of the tall structure is in compliance with applicable safety standards.

(k) Signed statements by the applicant containing the following information:

(i) confirmation the proposed use is not part of a larger network or explanation of the proposed facility’s function in a network;

(ii) the feasibility of locating the facility in a district where the tall structure would be permitted as an administratively approved use;

(iii) an explanation of why the proposed facility cannot be located on an existing facility;

(iv) a description of how the tall structure will accommodate collocation of additional antennas and other compatible services for future users or why such collocation is not feasible;

(v) agreement by the applicant and landlord to remove the facility within 90 days after abandonment, or termination of the permit; and

(vi) assurance the proposed uses and structures shall comply with all Federal Aviation Administration, Federal Communications Commission, and other applicable federal, state, and local laws and regulations.

(Ord. 12-157(SUB), § 2, 2013)

ORDINANCE No._____
AMENDING THE ZONING ORDINANCE
TO PROVIDE REGULATIONS FOR
PERMITTING COMMUNICATIONS TOWERS

WHEREAS, communications technology has produced an increased need for installation of towers and antennae to serve areas within municipalities; and

WHEREAS, the Mayor and Council desire to enact zoning regulations which will permit the placement of communications towers and antennae in locations which will allow telecommuncations services to be rendered in conformity with the authority in the federal Telecommunications Act of 1996, and the goals of the municipal comprehensive plan and zoning ordinance to serve and protect the public health, safety, convenience, order, appearance, prosperity, and general welfare pursuant to Title 6, Chapter 29, South Carolina Code of Laws (1976), as amended;

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Council of the City/Town of _____, that the Zoning Ordinance is amended by adding the following provisions:

Chapter/Article/Division _____
COMMUNICATIONS TOWER and ANTENNA

Section_____-1. Definitions.

a. "Communications tower" as used in this ordinance shall mean a tower, pole, or similar structure which supports a telecommunications antenna operated for commercial purposes above ground in a fixed location, free-standing, guyed, or on a building.

b. "Telecommunications,"as defined in the federal Telecommunications Act of 1996, means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

c. "Antenna" means a device, dish or array used to transmit or receive telecommunications signals.

d. "Height" of a communication tower is the distance from the base of the tower to the top of the structure.

Section_____-2. Communications tower and antenna permitted as conditional use.

A communications tower and/or antenna may be permitted by the Zoning Administrator without further review upon determination that all of the applicable conditions in this ordinance are met.

a. Districts in which conditional uses are permitted; height limitations.

DISTRICTS	PERMITTED HEIGHT - FREE-STANDING OR GUYED TOWER
Residential [list districts]	Free-standing tower with height not exceeding 100 feet is a permitted conditional use; height exceeding 100 feet requires special exception.
Commercial [list districts]	Free-standing or guyed tower with height not exceeding 180 feet is a permitted conditional use; height exceeding 180 feet requires special exception.
Industrial [list districts]	Free-standing or guyed tower with height not exceeding 360 feet is a permitted conditional use; height exceeding 360 feet requires special exception.
Development; Agricultural [list districts]	Free-standing or guyed tower with height not exceeding 500 feet is a permitted conditional use; height exceeding 500 feet requires special exception.
Planned Development	Tower with height specified in approved plan is permitted under conditions set forth in plan.
	PERMITTED HEIGHT ABOVE STRUCTURE
All districts	Tower and/or antenna mounted on building, water tank or structure other than a free-standing or guyed communications tower must not extend more than 30 feet above the highest part of the structure.
	SPECIAL EXCEPTIONS AND VARIANCES
All districts except planned development	Free-standing or guyed tower and/or antenna exceeding height limitations may be permitted by the Zoning Board of Appeals as a special exception. See requirements for special exceptions in Section_____-3.
All districts	Variances from conditions imposed by this section may not be granted by the Zoning Board of Appeals. Variances from other general district regulations may be granted under standards in S.C. Code ' 6-29-800.

b. Application requirements:	The applicant for a conditional use zoning permit for construction of a communications tower or placement of a commercial telecommunication antenna on an existing structure other than a tower previously permitted must file with the Zoning Administrator an application accompanied by a fee of $_____and the following documents, if applicable:
specifications;	1. One copy of typical specifications for proposed structures and antennae, including description of design characteristics & material.
site plan;	2. A site plan drawn to scale showing property boundaries, tower location, tower height, guy wires and anchors, existing structures, photographs or elevation drawings depicting typical design of proposed structures, parking, fences, landscape plan, and existing land uses on adjacent property; [site plan not required if antenna is to be mounted on an approved existing structure];
tower location map;	3. A current map, or update for an existing map on file, showing locations of applicant's antennae, facilities, existing towers, and proposed towers which are reflected in public records, serving any property within the city;
antenna capacity; wind load;	4. A report from a structural engineer registered in South Carolina showing the tower antenna capacity by type and number, and a certification that the tower is designed to withstand winds in accordance with ANSI/EIA/TIA 222 (latest revision) standards.
antenna owners;	5. Identification of the owners of all antennae and equipment to be located on the site;
owner authorization;	6. Written authorization from the site owner for the application;
FCC license;	7. Evidence that a valid FCC license for the proposed activity has been issued;
visual impact analysis;	8. A line of sight analysis showing the potential visual and aesthetic impacts on adjacent residential districts;
removal agreement;	9. A written agreement to remove the tower and/or antenna within 180 days after cessation of use;
conditions met;	10. Evidence that applicable conditions in subsection c. are met; and
additional information.	11. Additional information required by the Zoning Administrator for determination that all applicable zoning regulations are met.

c. Conditions:	Applicant must show that all applicable conditions are met.
location, visual impact	1. The proposed communications tower, antenna or accessory structure will be placed in a reasonably available location which will minimize the visual impact on the surrounding area and allow the facility to function in accordance with minimum standards imposed by applicable communications regulations and applicant's technical design requirements.
Inability to locate on existing structure	2. Applicant must show that a proposed antenna and equipment cannot be accommodated and function as required by applicable regulations and applicant's technical design requirements without unreasonable modifications on any existing structure or tower under the control of applicant.
Necessity for location in residential district	3. Applicant for a permit in a residential district must show that the area cannot be adequately served by a facility placed in a non-residential district for valid technical reasons.
public property or other private property not suitable	4. Prior to consideration of a permit for location on private property which must be acquired, applicant must show that available publicly owned sites, and available privately owned sites occupied by a compatible use, are unsuitable for operation of the facility under applicable communications regulations and applicant's technical design requirements.
	5. Applicant must show that a new tower is designed to accommodate additional antennae equal in number to applicant's present and future requirements.
design for multiple use	6. Applicant must show that all applicable health, nuisance, noise, fire, building and safety code requirements are met.
safety codes met	7. A communications tower must not be painted or illuminated unless otherwise provided by state or federal regulations.
paint; illumination	8. A permit for a proposed tower site within 1,000 feet of an existing tower shall not be issued unless the applicant certifies that the existing tower does not meet applicant's structural specifications and applicant's technical design requirements, or that a collocation agreement could not be obtained.
distance from existing tower	

c. Conditions (cont.)	9. Applicant must show by certificate from a registered engineer that the proposed facility will contain only equipment meeting FCC rules, and must file with the Zoning Administrator a written indemnification of the municipality and proof of liability insurance or financial ability to respond to claims up to $1,000,000.00 in the aggregate which may arise from operation of the facility during its life, at no cost to the municipality, in form approved by the municipal attorney.
indemnity; claim resolution	
application of zoning regulations	10. Land development regulations, visibility, fencing, screening, landscaping, parking, access, lot size, exterior illumination, sign, storage, and all other general zoning district regulations except setback and height, shall apply to the use. Setback and height conditions in this section apply.
minimum setbacks	11. A tower must be a minimum distance equal to one-half the height of the tower from property designated historic or architecturally significant, and must be set back from all lot lines distances equal to the district setback requirements or 25% of the tower height, whichever is greater.

d. Appeal to Board	Applicant may appeal to the Board of Zoning Appeals as follows:
time limit for action by zoning administrator on complete application	1. Failure of the Zoning Administrator to act on an application which is determined to be complete under this section within 45 days, unless extended by agreement, may be considered by applicant to be a denial of a permit which is subject to appeal to the Board of Zoning Appeals.
Variance	2. Applicant may appeal to the Board for a variance from general zoning district regulations and setback requirements in this section, but not from any other conditions in this section. Towers exceeding height limitations may be permitted only by special exception pursuant to Section_____-3.
Special exception	3. Applicant may apply directly to the Board for a permit for any tower as a special exception pursuant to Section_____-3.

Section_____-3. Special exceptions.

A tower, pole, or antenna may be permitted by special exception granted by the Board of Zoning Appeals after public hearing and findings of fact based on the following criteria:

Special exception criteria:	The Board of Zoning Appeals must find and conclude:
application; conditions	1. All application requirements and conditions imposed by Section _____-2 of this ordinance for conditional uses are met except height limitations and setbacks.
height limitations	2. If additional tower height is requested, total tower height will not exceed 150% of the maximum height permitted in the district as a conditional use.
necessity for additional height	3. Applicant has demonstrated that additional height above that permitted by conditional use regulations is necessary for service to occupants of an area within the municipality.
setback requirements; additional conditions	4. Setback requirements and such additional conditions are established by the Board as it deems necessary to remove danger to health and safety, and to protect adjacent property.
denial on substantial evidence	5. The Telecommunications Act of 1996 requires that a denial of a permit be supported by substantial evidence.
variance prohibited	6. The Board may not grant a variance from the standards imposed for a communications tower or antenna in connection with granting a special exception, except as permitted by Section_____-2d.

Resolution/Ordinance No. 29-13

The County Board of Supervisors of the County of Polk does ordain as follows:

TELECOMMUNICATION TOWERS, ANTENNAS & RELATED FACILITIES

Article I Purpose and Intent

The purpose of the regulations and requirements of this Ordinance is to:

A. Accommodate communication, radio, and television needs while protecting the public health, safety and general welfare;
B. Minimize adverse visual impacts of wireless communication service and other transmission facilities through careful site and design standards;
C. Avoid potential damage to adjacent properties from the construction, location and operation of wireless communication service and other transmission facilities through structural standards and setback requirements;
D. Maximize the use of existing and approved towers, buildings or structures to accommodate new wireless communication service and other transmission antennas to minimize the number of towers needed to serve the county and adverse visual impacts; and
E. Minimize hazards to birds.

Article II Definitions

The following definitions apply to the provisions of this ordinance:

"Abandoned Facility" Any Transmission Facility that is unused for the purpose for which the permit was granted for 18 consecutive months shall be considered abandoned.

"Antenna" Any device or equipment used for the transmission or reception of electromagnetic waves, which may include omni-directional Antenna (rod), directional Antenna (panel) or parabolic Antenna (disc).

"Co-location" The location of more than one Antenna or set of Antennas on the same Tower or structure.

"Committee" A subcommittee of the Polk County Board known as the Revolving Loan Fund, Planning, Zoning, and Land Records Committee, and is the permitting authority under this ordinance where required.

"Conditional Use Permit" or "CUP" A Land Use Permit issued by the Committee after a public hearing.

"Department" The Polk County Zoning Department, and is the permitting authority under this ordinance where required.

"FAA" Federal Aviation Administration.

"FCC" Federal Communications Commission.

"Guyed Tower" A telecommunication Tower that is supported in whole or in part by guy wires and ground anchors or other means of support besides the superstructure of the Tower itself.

"Height" The distance measured from ground level to the highest point on a Tower or structure, including any antenna.

"High Power Transmission Line" A 69 kV or greater electric transmission line with Towers at least 75 feet in height.

"Lattice Tower" A telecommunication Tower that consists of vertical and horizontal supports and crossed metal braces.

"Monopole" A telecommunication Tower of a single pole design.

"Non-Conforming" Any pre-existing telecommunication facility that was in existence prior to January 26, 1999, and that has not been issued a Conditional Use Permit or was issued a Conditional Use Permit prior to January 26, 1999. This definition shall only apply to this ordinance and shall not apply to the Polk County Comprehensive Land Use Ordinance.

"Pre-existing Transmission Facility" Any Transmission Facility constructed prior to January 26, 1999.

"St. Croix River Buffer Zone" The St. Croix River Buffer Zone is the area located outside the St. Croix Riverway District and within two miles of the St. Croix River, measured from the ordinary high water mark.

"Stealth Facility" A Wireless Communication Service Facility or other Transmission Facility which appropriately models or mimics in size, shape, scale and color something which exists in the immediate landscape, which could legally be placed there or already exists there at the time an application is submitted, (e.g., a silo in farm settings or a tree in forested lands), and which is unrecognizable to a casual observer as a Transmission Facility.

"Tower" Any structure that is designed and constructed primarily for the purpose of supporting one or more Antennas including Guy Towers, Monopole towers and Lattice Towers.

"Tower Accessory Structure" Any structure located at the base of a Tower for housing base receiving or transmitting equipment.

"Transmission Facility" Any Wireless Communication Service Facility, radio or television Tower, or any WCSF equipment or accessory structure other than an electric transmission line.

"Wireless Communication" Any wireless telecommunication service as defined in the Telecommunications Act of 1996, including FCC licensed commercial wireless telecommunications services such as cellular, personal communication services (PCS), specialized mobile radio (SMR), enhanced specialized mobile radio (ESMR), paging and similar services that currently exist or may be developed.

"Wireless Communication Service Facility (WCSF)" All equipment, buildings, structures and Towers with which a Wireless Communication service carrier or provider broadcasts and receives the radio frequency waves that carry its services, and all locations of said equipment, buildings and structures.

Article III Special Provisions: Pre-existing or Non-Conforming Transmission Facilities and Exceptions to this Ordinance

A. Any Pre-existing or Non-Conforming Transmission Facility shall not be required to meet the requirements of this Ordinance, except for the provisions of Article X - Biennial Report.
B. Any Pre-existing or Non-Conforming Transmission Facility shall comply with all FCC and FAA rules and regulations.
C. Any addition or change to a Pre-existing or Non-Conforming Transmission Facility shall comply with all applicable requirements of this Ordinance, provided that such modifications that make the Transmission Facility less visible or add a Co-location Antenna without increasing the height of the Transmission Facility are exempt from requirements adopted after January 26, 1999.
D. Exceptions from this Ordinance. The following are permitted without Committee approval (no permit required):

1. Television Antennas, satellite dishes, receive-only Antennas and free standing Antennas 45 feet or less in height; provided however, that the primary use of such equipment is not part of a Transmission Facility and that such equipment is only ancillary to the primary use of the site where located.
2. Antenna and associated Towers, poles and masts that are owned or operated by federally licensed amateur radio operators, or citizen band radio operators.
3. Antennas mounted on utility poles where the Antenna is 30 feet or less in height above the highest part of the utility pole.

E. Any owner of a Pre-existing Transmission Facility shall accept all additional Co-location Antennas on reasonable terms, so long as adverse visual impacts do not result.
F. Transmission Facilities approved by the Department with a Land Use Permit may be modified if the modification is in compliance with the provisions of this Ordinance. The Department may approve the modification only after the applicant submits a modified Land Use Permit application and the appropriate fee under the current fee schedule as adopted by the Polk County Board.
G. Transmission Facilities approved by the Committee under a CUP may be modified only after a public hearing by the Committee. The Committee may approve the application and the Department may issue a Land Use Permit only after the applicant submits a modified CUP application and the appropriate fee under the current fee schedule as adopted by the Polk County Board.

Article IV General Requirements

A. Any Transmission Facility shall comply with all FCC and FAA rules and regulations.
B. Design and installation of any Transmission Facility shall comply with the manufacturer's specifications. Plans shall be approved and certified by a registered professional engineer.
C. Installation of any Transmission Facility shall comply with all applicable state and local building and electrical codes.
D. For leased sites, written authorization for siting a Transmission Facility must be obtained from the property owner and indicate the duration of the lease term.
E. Any Transmission Facility must be adequately insured against personal injury, wrongful death, and property damage claims.
F. Any Abandoned Facility must be removed and site restored within a reasonable time, but not more than three months after removal is requested by the County. Upon removal, the site shall be restored to its original or an improved condition. Any below grade anchoring elements used to secure the structure, shall be removed to a depth of at least 8 feet below ground level. If removal or restoration is not completed, the County is authorized to complete the removal and site restoration and charge the cost to the performance bond.
G. Proposals to erect a new Transmission Facility shall be accompanied by any required federal, state or local agency license or application for such license.
H. Only one Tower is permitted on a parcel of land. Additional Towers may be permitted on a parcel of land with a CUP if the additional Tower is located within 200 feet of the existing Tower(s) and all other requirements of this Ordinance are met.
I. The Monopole is the required Tower structure for non-Stealth Facilities. Guy or Lattice Towers are prohibited.
J. Transmission Facility Height.
   1. All Transmission Facilities shall be built to the minimum Height required to meet the applicant’s needs and are not to exceed a maximum Height of 200 feet.

2. District Height Limitations. The requirements set forth in this Ordinance shall govern the design and siting of a Transmission Facility that exceeds the Height limitations specified for the zoning district in which the Transmission Facility is located.

K. Applications for Structures on Publicly-owned Lands.
   1. The applicant must provide documentation to the permitting authority proof of acceptance (either by approved permit or other documentation) by the applicable governing authority that has jurisdiction over the publicly-owned land.
   2. For applications within the St Croix Riverway District, the permitting authority may allow location of a Stealth Facility on National Park Service-owned lands within the Riverway provided that the applicant is able to show by clear and convincing evidence that there is no viable location outside the Riverway Boundary for locating a Stealth Facility that can accommodate the applicant's requirements.

L. Adequate parking for maintenance of Transmission Facilities must be available.

Article V Provisions for Non-Wireless Communication Service Facilities

In the event that an applicant has received a license from the FCC, has applied or intends to apply to the FCC for a license to build a Transmission Facility that does not meet the standards and requirements of this Ordinance, the Committee shall consider the application under the following conditions:

A. The application shall meet all the requirements under Article IX (with respect to the content of the application), shall include a copy of the license granted by the FCC, a copy of the application pending or a copy of the application that the applicant intends to make to the FCC and shall include any further information that the Committee may reasonably deem necessary for its consideration.
B. The applicant must show by clear and convincing evidence that:
   1. the public would be uniquely and materially benefited by the service that the applicant proposes to provide and that it is not one of the services defined as Wireless Communication; or,
   2. the public health or safety will be substantially and materially benefited should the application be permitted and that it is not one of the services defined as Wireless Communication.
C. The applicant must show that there is no feasible alternative to the proposed non-Wireless Communication Service Facility that would meet all of the standards and requirements of this Ordinance.
D. Any permit granted under the provisions of this Ordinance for a non-Wireless Communication Service Facility for which a license has not yet been issued by the FCC shall be conditioned upon the granting of such license on the same terms and conditions as are represented in the application made under this Ordinance within one year's time. A copy of the FCC license when granted shall be immediately delivered to the Committee for review and any substantial deviation from said terms and conditions shall invalidate the permit granted under this Ordinance.
E. Permits for Non-Wireless Communication Service Facility shall not be granted without notice to the public in a legal newspaper of record and to owners of contiguous property by certified mail at least 60 days prior to the first public hearing on the application. The Committee shall hold no less than two public hearings on an application for a Non-Wireless Communication Service Facility permit.

Article VI Prohibitions

A. No Transmission Facility may be installed on a parcel within a major subdivision (as defined in the Polk County Subdivision Ordinance) created for residential purposes.
B. No advertising message or sign shall be affixed to any Transmission Facility.
C. No Transmission Facility shall be artificially illuminated unless required by FCC or FAA regulations.
D. No part of any Transmission Facility shall extend across or over any right-of-way, public street, highway, sidewalk, or property line.
E. A temporary mobile Transmission Facility site is not permitted except in the case of equipment failure, equipment testing, equipment replacement, or emergency, and provided that prior authorization is obtained from the Department. Use of a temporary site for testing purposes shall be limited to 24 hours, and the use of a temporary site for equipment failure, equipment replacement, or emergency shall be limited to 30 days, unless extended for good cause in writing by the Department.

Article VII District Requirements

A. A County Land Use Permit may be issued by the Department. The Department shall not issue such a county Land Use Permit prior to ten working days after mailing notice of the application to the town in which the Transmission Facility is proposed to be located. Any other Transmission Facility shall be regulated in accordance with the regulations applicable to the zoning district (as defined in the Polk County Comprehensive Land Use Ordinance) in which the facility is located. All requirements of the zoning district other than the standards provided in this Ordinance must be met. A Stealth Facility is permitted with a County Land Use Permit within any zoning district and any area not zoned by any County Zoning Ordinance. The following are the use standards for the various districts:

1. Agricultural, Exclusive Agricultural, Commercial, Restricted Commercial, Industrial, Restricted Industrial Districts, and any area not zoned by a County Zoning Ordinance.
   a. The following are permitted with a County Land Use Permit from the Department issued under this Ordinance:
      (1) Any Antenna attached to an existing Tower or structure and not extending more than 20 feet above the highest point of the Tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.
      (2) Any Transmission Facility within the easement of a high power transmission line or within 50 feet of the transmission line easement on the same side of the road up to a maximum height of 200 feet.
      (3) Any Stealth Facility.
   b. The following may be permitted with a Conditional Use Permit issued by the Committee under the provisions of this Ordinance:
      (1) Any Antennas attached to an existing Tower or structure extending more than 20 feet above the highest point of the tower or structure and where the height of the addition would not increase the total height to over 200 feet.
      (2) Any Transmission Facility to a maximum height of 200 feet.

2. Residential District
   a. The following are permitted with a County Land Use Permit issued by the Department under the provisions of this Ordinance:
      (1) Any Antenna attached to an existing Tower or structure and not extending more than 20 feet above the highest point of the Tower or structure and where the height of the addition would not increase the total height to over 200 feet.
      (2) Any Transmission Facility within the easement of a high power transmission line or within 50 feet of the transmission line easement on the same side of the road up to a maximum height of 200 feet.
      (3) Any Stealth Facility.

3. Shoreland, Floodplain, Forestry, Recreational, Conservancy, St. Croix River Buffer Zone and St. Croix Riverway Districts. No Transmission Facility except a Stealth Facility is allowed in these districts except:
   a. With a Conditional Use Permit issued by the Committee under the provisions of this Ordinance, an Antenna attached to an existing Tower or structure and not extending more than 20 feet above the highest point of the Tower or structure and where the height of the addition would not increase the total height to over 200 feet.
   b. With a County Land Use Permit issued by the Department under the provisions of this Ordinance, a Stealth Facility in the St. Croix Riverway District, only after Wisconsin Administrative Code Chapter NR 118 is amended to permit a Stealth Facility.

Chart of District Requirements

	Agricultural, Exclusive Agricultural, Commercial, Restricted Commercial, Industrial, Restricted Industrial, and any area not under County Zoning		Residential		Shoreland, Floodplain, Forestry, Recreational, Conservancy, St. Croix River Buffer Zone, St. Croix Riverway	
Facility Type	Allow	Permit	Allowed	Permit	Allowed	Permit
Monopole, 200' max. adjacent to trans-mission line	Yes	Land Use	Yes	Land Use	-----	-----
Stealth	Yes	Land Use	Yes	Land Use	Yes	Land Use
Co-locate antenna >20'	Yes	CUP	-----	-----	-----	-----
Co-Locate, antenna = or < 20'	Yes	Land Use	Yes	Land Use.	Yes	CUP
Monopole, 200' max.	Yes	CUP	-----	-----	-----	-----

Article VIII Performance Standards

A. Except as provided in this Ordinance, any Transmission Facility must meet the dimensional standards applicable to the parcel within the zoning district in which it is located. Where the Transmission Facility is the principal use on a parcel, the parcel shall meet the minimum lot size requirements of the zoning district in which the parcel is located. On a parcel of land that already has a principal use, the Transmission Facility shall be considered an accessory use and a smaller area of land may be leased for it, provided that all requirements of this Ordinance are met.

B. Setbacks and Separation
    1. Generally, any Tower shall be set back from the nearest property line a distance equal to 125% of the Height of the Tower. This setback may be reduced up to one-half the Height of the tower if the applicant submits an engineering report from a registered professional engineer that certifies that the Tower is designed and engineered to collapse upon failure within the distance from the Tower to the property line.
    2. No Tower shall be located within 500 feet of any residence unless the owner of the residence agrees in writing.
C. Screening and Landscaping. The Transmission Facility shall be located on the site so as to have the least visual impact. The site shall be landscaped and maintained with a buffer of plant materials that effectively screens the view of all Tower accessory structures, equipment and improvements at ground level from adjacent properties year around. Existing mature vegetation and natural landforms on the site shall be preserved to the maximum extent possible.
D. Security Fencing and Lighting.
    1. Any Transmission Facility shall be reasonably protected against unauthorized access. The bottom of the Tower from ground level to 12 feet above ground shall be designed to prevent unauthorized climbing and shall be enclosed with a minimum of a 6 feet high chain link fence with a locked gate.
    2. Security lighting for on-ground structures and equipment is permitted, as long as it is down-shielded to keep light within the boundaries of the site.
E. Color and Materials. Any Transmission Facility shall use building materials, colors, textures, screening, and landscaping that blend the Transmission Facility with the surrounding natural features and built environment to the greatest extent possible.

Article IX Permit Requirements and Conditional Use Application

The construction or installation of any Transmission Facility requires a County Land Use Permit or Conditional Use Permit under this ordinance. The permit will specify the use or uses allowed. Within ninety (90) days from the date of submittal of the Conditional Use Permit application, the Committee shall consider and decide upon the question of issuance of the Conditional Use Permit. Action by the Committee may be postponed past the 90-day limit by written agreement between the Committee and the applicant, or upon determination by the Committee that additional information is required. On behalf of the County, the Department or Committee will employ independent technical experts to review materials submitted by the applicant. The applicant shall pay the costs of such review and/or independent analysis. The Polk County Land Information Department may issue a Conditional Use Permit after review and a public hearing of the Committee, provided that the Committee has determined that such conditional use is in accordance with the purpose and intent of this Ordinance. Before a public hearing is scheduled, the applicant shall conduct an informational presentation to the Town Board in the Town in which the proposed Transmission Facility is to be located. Subsequent to the presentation, the Town Board shall provide the Department with notification of an advisory recommendation. The Town Board is encouraged to participate in an advisory role in the public hearing with the Committee to review material presented by the applicant and independent technical expert.

A. Application Submittal Information
    1. A completed County Land Use Permit or Conditional Use Permit application and appropriate fee under the current fee schedule as adopted by the Polk County Board.

2. Applications. In addition to the application requirements of Section XVI of the Polk County Comprehensive Land Use Ordinance, all applications for County Land Use Permits or Conditional Use Permits for new Transmission Facilities shall include the following information: (applications for land use permits for Stealth Facilities may omit the requirements of section g., below)
    a. A report from a registered professional engineer and other professionals which:
        1. describes the Transmission Facility's height and design, including a cross section and elevation;
        2. certifies the Transmission Facility's compliance with structural and electrical standards;
        3. describes the Transmission Facility's capacity, including the potential number and type of antennas that it can accommodate;
        4. describes the lighting to be placed on the Transmission Facility if required by the FCC or FAA;
        5. certifies that the Transmission Facility will not cause destructive interference with previously established public safety communications systems; and
        6. describes how the requirements of Articles IV, VI, VII, and VIII of this Ordinance will be met by the proposed Transmission Facility.
    b. Each application shall include a facility plan containing the following information:
        1. Written description of the type of consumer services each applicant will provide to its customers (radio, television, cellular, PCS, SMR, ESMR, paging or other anticipated Wireless Communication services).
        2. A list of all of the applicant's existing sites, existing sites to be upgraded or replaced, and proposed sites within the County.
        3. Map of the County that shows the applicant's existing and proposed geographic service areas.
    c. Landowner Acknowledgement. Written acknowledgement by the landowner and lessee of a leased site that they will abide by all applicable terms and conditions of the County Land Use Permit or Conditional Use Permit, including the restoration and reclamation requirements of Article IV F. of this Ordinance, and a copy of the lease.
    d. A performance bond in a form acceptable to the Department in an amount sufficient to provide for removal of the Transmission Facility and restoration of the site.
    e. Copies of letters informing each government unit (City, Village, Town or Township) in which the proposed site is located and the adjacent government units (in Wisconsin and Minnesota) of the application.
    f. Copies of letters informing contiguous landowners by certified mail and class 2 publication of notice in the County's newspaper of record as appointed by the County Board.
    g. Additional Information and Analysis: The Department or Committee may, at their discretion, require a visual analysis of the proposed Transmission Facility, including photo simulations of the view of the vicinity of the Transmission Facility before and after the proposed Transmission Facility is built. The photos shall be taken from approximately one mile north, south, east, and west from the proposed Transmission Facility. The simulation may include a photo montage, field mock-up, view-shed analysis, or other techniques, which identify the potential visual impacts of the proposed Transmission Facility. Consideration shall be given to views from public areas as well as from private residences. The analysis shall assess the cumulative impacts of the proposed Transmission Facility and other

existing transmission facilities in the area. The analysis shall identify and include all feasible mitigation measures consistent with the technological requirements of the proposed service.

3. Co-location/Sharing of Facilities. Prior to setting a public hearing, the applicant must review Co-location alternatives with the independent technical expert. No new Tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the Committee and independent technical expert that no existing Tower or structure can accommodate the applicant's proposed Antenna. Examples of supporting evidence are:
   a. No Tower or structure is located within the geographic area that meets the applicant's engineering requirements.
   b. No existing Tower or structure is of sufficient Height to meet the applicant's engineering requirements.
   c. No existing Tower or structure can be modified at reasonable cost to support applicant's proposed Antenna.
   d. Electromagnetic interference would interfere with an existing or proposed system.
   e. The fees, cost, or contractual provisions required by the applicant to share an existing Tower or structure or to adapt an existing Tower or structure for sharing are substantially more expensive than new construction considering factors such as, without limitation, depreciation, technical obsolescence, maintenance and land acquisition.
   f. The applicant establishes other facts that render co-location unsuitable.

Article X Biennial Report

Owners, providers or permittees shall submit each even numbered year on or before January 31, a Transmission Facility information report, on a County form provided by the County. The report shall detail the use, maintenance and condition of the Transmission Facility since the previous report, availability of the Transmission Facility for added co-location and other information reasonably deemed necessary by the Department. The report shall be accompanied by a two-year renewal of the performance bond in a form acceptable to the Department in an amount sufficient to provide for removal of the Transmission Facility and restoration of the site. Failure to submit the report, or a delay longer than sixty days after the County sends the Transmission Facilities Information Report form to the owner/provider or permittee shall result in a late fee of $200.00 per week until received. Failure to submit the report by July 1 of each even-numbered year, shall result in the County taking Revocation Enforcement action under Article XIII.

Article XI Safety Inspection

If the County has reason to believe that a Transmission Facility is a safety risk, it may require the permit holder to perform an inspection by a registered engineer and provide a copy of the inspection results to the Department within sixty days. The County shall provide the owner with information forming the basis for belief that the Transmission Facility is a safety risk before requiring inspection.

Article XII Appeal Procedures

Any person aggrieved by any decision of the Committee regarding its evaluation of the appeal must, within 30 days after the filing of the decision of the Committee in the Office of the Department, commence an action in the circuit court seeking any remedy available by certiorari.

Article XIII Enforcement and Penalties

A. Revocation. Grounds for revocation of the Conditional Use Permit, or County Land Use Permit, shall be limited to one of the following findings as determined by the Department:
   1. The owner of such site, service provider and/or tower owner fails to comply with the requirements of this Ordinance as it existed at the time of the issuance of the permit.
   2. The permittee has failed to comply with the conditions of approval.
   3. The facility has not been properly maintained.

B. Revocation Process.
   1. The owner of such site, service provider and/or tower owner shall be notified by certified mail of non-compliance by the Committee or Department.
   2. The owner may bring the site into compliance to the satisfaction of the Committee within thirty (30) days from the date the notice was mailed.
   3. If compliance is not obtained within thirty (30) days, the Department shall notify the Committee of non-compliance and request permission to proceed with the revocation process (this time period may be extended by staff to adjust for seasonal limitations).
   4. The Department shall petition the Committee for a public hearing before the Committee upon publication of a Class 2 notice in the legal newspaper of Polk County.
   5. A copy of hearing notice shall be mail by certified mail to the owner of record of the Transmission Facility site at least two weeks prior to the hearing date.
   6. A representative of the Department shall appear at the hearing before the Committee to present the evidence of non-compliance. All other interested parties may also give testimony to the Committee.
   7. A written decision of the Committee will be made within thirty (30) days of the hearing.

Article XIV Severability

If any section, subsection, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid, such a decision shall not affect the remaining portions of this Ordinance. The Polk County Board of Supervisors declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof irrespective of the fact that any one or more such provisions be declared unconstitutional or invalid.

Article XV Fee Schedules

Upon recommendation of the Committee, the Polk County Board of Supervisors shall, from time to time, establish and review fees that are applicable to this Ordinance. No application shall be considered filed with the County unless and until said application is accompanied by the appropriate application fee.

Article XVI County Zoning Ordinances

Any reference in this Ordinance to a Polk County Zoning Ordinance includes the Comprehensive Land Use Ordinance, Floodplain Zoning Ordinance, Lower St Croix Scenic Riverway Ordinance, Shoreland Protection Zoning Ordinance, and Subdivision Ordinance, as each existed at the time this

Ordinance went into effect and any amendments made subsequently to any of these Polk County Ordinances. Each said Ordinance is applicable and incorporated to the extent referenced herein.

CITY OF HOMER
HOMER, ALASKA

Zak

ORDINANCE 14-18

AN ORDINANCE OF THE CITY COUNCIL OF HOMER, ALASKA, AMENDING HOMER CITY CODE 21.03.04, DEFINITIONS USED IN ZONING CODE, THE TITLE OF HOMER CITY CODE 21.58 AND HOMER CITY CODE 21.58.010, PURPOSE AND APPLICATION; AND ENACTING HOMER CITY CODE 21.58.040, COMMUNICATIONS TOWER REQUIREMENTS; TO DEFINE AND ESTABLISH STANDARDS FOR COMMUNICATIONS TOWERS.

THE CITY OF HOMER ORDAINS:

Section 1. Homer City Code 21.03.040 is amended by adding a definition of "communications tower" to read as follows:

"Communications tower" means a fixed vertical structure that supports equipment that transmits or receives radio, microwave or other electromagnetic communication signals, including a monopole or lattice tower, plus its accompanying base plates, anchors, guy cables and hardware.

Section 2. The title of Homer City Code 21.58 is amended to read as follows:

Chapter 21.58 Small Wind Energy Systems and Communications Towers

Section 3. Homer City Code 21.58.010 is amended to read as follows:

21.58.010 Purpose and application. The purpose of this chapter is to establish minimum health and safety standards for small wind energy systems and communications towers. It applies to small wind energy systems and communications towers in all districts where they are allowed as permitted or conditional uses.

Section 4. Homer City Code 21.58.040 is enacted to read as follows:

21.58.040 Communications tower requirements. a. An application for a communications tower shall include the following information:

1. A level one site plan that shows the location of the communications tower.

2. Specifications for the communications tower including an illustration or picture of the communications tower prepared to scale, total tower height, tower color and, if proposed, the location of ladders and/or climbing pegs.

3. Tower foundation blueprints or drawings.

4. Evidence of compliance with, or exemption from, Federal Aviation Administration requirements.

b. Dimensional Requirements.

1. A communications tower may be installed only on a lot having an area not less than one acre.

2. The distance from a communications tower to the closest property line may not be less than 1.1 times its total height.

3. All guy wires, cables and other accessory support structures for a communications tower must be on the same lot as the communications tower, but may be located within required setback areas, and shall be properly jacketed to comply with visibility safety standards.

c. Tower standards.

1. A communications tower shall not interfere with television, microwave, navigational or radio reception.

2. The lowest part of a climbing apparatus that provides access to equipment on a communications tower shall be at least 12 feet above the ground, and the tower shall have no handholds or footholds below the climbing apparatus.

3. No artificial lighting shall be mounted on a communications tower, and a communications tower shall not be illuminated with artificial lighting, except when required by the Federal Aviation Administration.

d. Signs. No sign, flag or pennant may be attached to a communications tower except for the following:

1. A sign identifying the owner or operator of the communications tower.

2. Signs warning of dangers associated with the communications tower.

e. The City may abate as a nuisance under HCC 21.90.070 a communications tower that is not operational for a period of at least 12 consecutive months.

Section 5. This Ordinance is of a permanent and general character and shall be included in the City Code.

ENACTED BY THE CITY COUNCIL OF THE CITY OF HOMER, ALASKA, this _____ day of _____, 2014.

CITY OF HOMER

_____
MARY E. WYTHE, MAYOR

ATTEST:

_____
JO JOHNSON, MMC, CITY CLERK
AYES:
NOES:
ABSTAIN:
ABSENT:

First Reading:
Public Reading:
Second Reading:
Effective Date:

Reviewed and approved as to form:

_____ _____
Walt Wrede, City Manager Thomas F. Klinkner, City Attorney

Date: _____ Date: _____

[Added language underlined. ~~Deleted language stricken through.~~]

Motion carried.

ORDINANCE(S)

A. **Ordinance 14-18,** An Ordinance of the City Council of Homer, Alaska, Amending Homer City Code 21.03.04, Definitions Used in Zoning Code, the Title of Homer City Code 21.58 and Homer City Code 21.58.010, Purpose and Application; and Enacting Homer City Code 21.58.040, Communications Tower Requirements; to Define and Establish Standards for Communications Towers. Zak. Recommended dates: Introduction April 28, 2014, Refer to Planning Commission.

Mayor Wythe called for a motion for the adoption of Ordinance 14-18 for introduction and first reading by reading of title only.

ZAK/BURGESS - SO MOVED.

Council discussed expanding the definition of towers and sending the ordinance to the Planning Commission for review and recommendations. About 80% of the current towers may be noncompliant if they were held to the proposed standard.

VAN DYKE/ZAK - MOVED TO AMEND TO STRIKE THE WORD "COMMUNICATIONS" AND REPLACE WITH "ANY TOWERS" THROUGHOUT THE DOCUMENT.

Council discussed whether the amendment was needed before sending the ordinance to the Planning Commission.

VOTE: YES. LEWIS, BURGESS, ZAK, VAN DYKE
VOTE: NO. ROBERTS, HOWARD

Motion carried.

BURGESS/ROBERTS - MOVED THAT WE REFER THIS TO THE PLANNING COMMISSION.

There was no discussion.

VOTE: (refer) YES. NON OBJECTION. UNANIMOUS CONSENT.

Motion carried.

VOTE: (main motion as amended) YES. NON OBJECTION. UNANIMOUS CONSENT.

City of Homer
www.cityofhomer-ak.gov

Planning
491 East Pioneer Avenue
Homer, Alaska 99603
Planning@ci.homer.ak.us
(p) 907-235-3106
(f) 907-235-3118

Staff Report PL 14-47

TO:	Homer Advisory Planning Commission
THROUGH:	Rick Abboud, City Planner
FROM:	Julie Engebretsen, Deputy City Planner
DATE:	May 21, 2014
SUBJECT:	Draft Ordinance on "Towers"

Introduction

Council referred Ordinance 14-18(A) to the HAPC on 4/28/14. The ordinance defines "Communications tower," and amended the Wind Energy System of code to include communication towers. Council further amended the ordinance to state "Towers" not just communication towers, however they may be defined.

Analysis

Staff has already begun receiving comment from the public about towers. This is a highly technical subject, and really needs the guidance of a professional qualified to discuss federal law, and tower construction standards. Fortunately, Homer is not the only Alaskan community grappling with this issue.

Staff recommends we outline the process of how this ordinance will be crafted. Usually, staff and the attorney draft an ordinance with HAPC oversight. For towers, this could take a really long time, and probably take a lot of attorney time (expense) because none of us has expertise in this field. I don't think this will result in a good ordinance for Homer.

Some options for a new ordinance:

1. Do nothing
2. Draft in house/with attorney
3. Form a task force
4. Hire a consultant to write it for us
5. Enter into a term contact with a consultant. The consultant provides the ordinance drafting for free, in exchange for a term contract to review all new tower applications in a time frame (like 3 years). This is similar to how we deal with traffic impact analysis, or term engineering contracts. We already have at least one consultant knocking on our door.
6. ???

Staff recommendation

1. Staff research what regulations other Alaskan communities have, and how they arrived at those rules. What were the pros and cons of the process, and the resulting regulations? We can speak with those communities and see what works and what doesn't.
    - Kenai and Soldotna have cell tower regulations.
    - Mat-Su Borough recently had a task force.
    - Juneau has a tower moratorium and new ordinance in front of its assembly.

2. Present the information and options to the City Council and HAPC, via memo. Staff would provide a recommendation on how to proceed. The HAPC and CC could discuss this at a work session and provide staff direction. If the decision is to hire a consultant, the budget will need to be amended.

3. If the HAPC agrees with this approach, staff will start researching with the goal of a complete memo for the June 18th meeting.

ERICKSON/ BOS MOVED TO REMOVE CONDITION NUMBER 4, PROVIDE DEDICATION FOR A ¼ CUL-DE-SAC AT AT THE END OF SEASCAPE DRIVE.

There was no discussion.

VOTE: (Amendment)NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

There was no further discussion on the main motion as amended.

VOTE (Main motion as amended): NON OBJECTION: UNANIMOUS CONSENT

Motion carried.

Pending Business

A. Staff Report PL 14-46, Draft Ordinance on Heliports

The Commission reviewed and agreed that the graphs for heliports and helipads are as they had agreed on previously. The agreed by consensus that it could go forward for public hearing.

New Business

A. Staff Report PL 14-47, Draft Ordinance on Towers

City Planner Abboud reviewed the staff report. He touched on options which include doing nothing, drafting something with the attorney, forming a task force, or working with a consultant.

The Commission talked briefly about the challenges of changing technology and the necessity of having towers where they are needed. There are many different designs for towers, as well as ways to work with topography and deal with line of sight across water. It was suggested that hearing from ACS and/or GCI about what their needs are could be helpful. There are federal regulations that need to be considered as well.

The consensus of the group was that they would like staff to research the regulations of other Alaskan communities and how they determined their regulations.

B. Staff Report PL 14-48, Ordinance 14-20 Farmer's Market/Open Air Business for CBD, GC1, and GC2 Districts

Chair Venuti noted for the record that the Commission heard from Farmers' Market representative and talked about this at the worksession. City Planner Abboud asked that they make a motion and recommendation on open air and what they may or may not modify. His goal is to have something

City of Homer
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Staff Report 14-52

TO: Homer Advisory Planning Commission
FROM: Rick Abboud, City Planner
DATE: June 4, 2014
SUBJECT: Creation of the East End Residential/Commercial Mixed Use District

Introduction The City Council endorsed forwarding Comprehensive Plan recommendations regarding a Commercial District on the near end of East End Road. In the Land Use Chapter of your Comprehensive Plans you will find the depiction (HCP 4-7) and proposed description (HCP 4-5) of such a district. The District is referred to as the East End RO Commercial MU, quite a mouthful. I would be open to a more succinct name. I now refer to it as East End Residential/Commercial Mixed Use. Perhaps East End Commercial or something to that effect without a geographical reference would be a better name.

> *NC Neighborhood Commercial East End Road – limited numbers of small scale, local serving commercial areas, designed to meet the convenience commercial service needs of neighborhood residents. The objectives behind this recommendations category might also be met through the Planned Unit Development process or an overlay zone allowing more commercial and retail uses than the underlying Residential Office District.*

Review: I have crafted and ordinance that basically replicates the RO District. At the last meeting, I provided a matrix of all the uses as designated by districts. I asked that Commissioners review the uses for inclusion in this district. I assume that we could easily accommodate the uses of the current RO district and would consider additional commercial opportunities.

I have also included a map of the area to use as discussion for proposed inclusion in the district.

Remember this is a good time to review the concepts forwarded in the comprehensive as they relate to land use. The plan is a product of forwarding those values.

Staff Recommendation: Discuss and make consensus or motion to include additional uses or other amendments to the ordinance and bring back to PC for further work.

Attachments:

1. Ordinance 14-xx EERCMUD
2. Area map

CITY OF HOMER
HOMER, ALASKA

ORDINANCE 14-__

AN ORDINANCE OF THE CITY COUNCIL OF HOMER, ALASKA, AMENDING HOMER CITY CODE xx.xx.xxx, CREATING THE EAST END RESIDENTIAL C OMMERCIAL MIXED USE DISTRICT.

THE CITY OF HOMER ORDAINS:

Section 1. HCC xx.xx. East end residential commercial mixed use district:

xx.xx.010 Purpose. Allow a number of small scale commercial developments to be mixed with residential uses. Opportunities for commercial and retail uses are to be more extensive than the Rural Office District.

Section 2. HCC xx.xx.020, Permitted uses and structures.

The following uses are permitted outright in the Residential Office District:

a. Single-family and duplex dwelling, excluding mobile homes;

b. Multiple-family dwelling, provided the structure conforms to HCC 21.14.040(a)(2) and excluding mobile homes;

c. Public parks and playgrounds;

d. Rooming house, bed and breakfast and hostel;

e. Home occupations; provided they conform to the requirements of HCC 21.51.010;

f. Professional offices and general business offices;

g. Personal services;

h. Museums, libraries and similar institutions;

i. Nursing facilities, convalescent homes, homes for the aged, assisted living homes;

j. Religious, cultural and fraternal assembly;

k. Storage of the occupant's personal commercial fishing gear in a safe and orderly manner and separated by at least five feet from any property line as an accessory use incidental to a permitted or conditionally permitted principal use;

l. Private exterior storage of the occupant's personal noncommercial equipment, including noncommercial trucks, boats, campers and not more than one recreational vehicle in a safe and orderly manner and separated by at least five feet from any property line as an accessory use incidental to a permitted or conditionally permitted principal use;

m. Other customary accessory uses to any of the permitted uses listed in the Residential Office District; provided, that no separate permit shall be issued for the construction of any detached accessory building prior to that of the main building;

n. The outdoor harboring or keeping of dogs, small animals and fowl as an accessory

use in a manner consistent with the requirements of the Homer City Code and as long as such animals are kept as pets and their numbers are such as not to unreasonably annoy or disturb occupants of neighboring property;

o. Day care homes; provided, however, that outdoor play areas must be fenced;

p. Recreational vehicles, subject to the standards set out in HCC 21.54.320;

q. As an accessory use, one small wind energy system per lot having a rated capacity not exceeding 10 kilowatts;

r. One detached dwelling unit, excluding mobile homes, as an accessory building to a principal single-family dwelling on a lot.

Section 3. HCC xx.xx.xxx, Conditional uses and structures.

xx.xx.030 Conditional uses and structures. The following uses may be permitted in the East End Residential Commercial Mixed Use District when authorized by conditional use permit issued in accordance with Chapter 21.71 HCC:

a. Planned unit developments, excluding all industrial uses;

b. Townhouses;

c. Public or private schools;

d. Hospitals and medical clinics;

e. Public utility facilities and structures;

f. Mortuaries;

g. Day care facilities; provided, however, that outdoor play areas must be fenced;

h. More than one building containing a permitted principal use on a lot;

i. Group care homes;

j. One small wind energy system having a rated capacity exceeding 10 kilowatts; provided, that it is the only wind energy system of any capacity on the lot;

k. Other uses approved pursuant to HCC 21.04.020

Section 4. HCC xx.xx.040, Dimensional requirements. The following dimensional requirements shall apply to all structures and uses in the East End Residential Commercial Mixed Use District.

a. The minimum lot size is 7,500 square feet.

b. Building Setbacks.

1. Buildings shall be set back 20 feet from all dedicated rights-of-way.

2. Residential buildings shall be set back from all other lot boundary lines according to the number of stories as follows:

Number of Stories	**Setback (in feet)**
1 story	5 feet
1 1/2 stories	6 feet

[**Bold and underlined added**. ~~Deleted language stricken through~~.]

Number of Stories	Setback (in feet)
2 stories	7 feet
2 1/2 stories	8 feet

3. Nonresidential buildings shall be set back 15 feet from all other lot boundary lines, except that this setback may be reduced to not less than the setback that would apply under subsection (b)(2) of this section if the reduction is approved by the State Fire Marshal.

c. The maximum building height shall be 35 feet.

d. Detached accessory buildings may not occupy more than 25 percent of a required rear or side yard and no portion of a required front yard, and shall be located at least five feet from the nearest part of a main building and five feet from all property lines.

e. No lot shall contain more than 8,000 square feet of building area (all buildings combined), nor shall any lot contain building area in excess of 30 percent of the lot area, without an approved conditional use permit.

Section 5. HCC xx.xx.050, Site and access.

a. A zoning permit for any nonresidential use or structure shall not be issued by the City without an approved site plan and an approved level two right-of-way access plan that conform to the standards of Chapter 21.73 HCC.

b. All access points to rights-of-way shall conform to the standards of a level two right-of-way access plan stated in Chapter 21.73 HCC. This applies to all uses and structures.

Section 6. HCC xx.xx.060, Traffic requirements.

A conditional use permit is required for every use that:

a. Is estimated to generate more than 100 vehicle trips during any hour of the day calculated utilizing the Trip Generation Handbook, Institute of Transportation Engineers, 9th Edition;

b. Is estimated to generate more than 500 vehicle trips per day calculated utilizing the Trip Generation Handbook, Institute of Transportation Engineers, 9th Edition;

c. Is estimated to generate an increase in the traffic to more than 100 vehicle trips during any hour of the day due to a change in land use or intensity of use; or

d. Is expected to generate traffic that will detract from the safety of, or degrade by one level of service, the highway, road, street, alley or intersection.

Section 8. HCC xx.xx.070, Site development standards.

[**Bold and underlined added**. ~~Deleted language stricken through~~.]

a. All single-family and duplex residential development in the East End Residential Commercial Mixed Use District shall comply with the level one site development standards contained in HCC 21.50.020.
b. All multifamily residential and all commercial development on lands in this district shall conform to the level two site development standards set forth in HCC 21.50.030.

Section 9. HCC xx.xx.080, Nuisance standards.

The nuisance standards of HCC 21.59.010 apply to all development, uses, and structures in this zoning district.

Section 10, HCC xx.xx.090 Lighting Standards.

The level one lighting standards of HCC 21.59.030 apply to all development, uses, and structures in this zoning district.

Section 11. This Ordinance is of a permanent and general character and shall be included in the City Code.

ENACTED BY THE CITY COUNCIL OF HOMER, ALASKA, this _____ day of _____ 2014.

CITY OF HOMER

_____
MARY E. WYTHE, MAYOR

ATTEST:

_____
JO JOHNSON, CMC, CITY CLERK

YES:
NO:
ABSTAIN:
ABSENT:

First Reading:

[**Bold and underlined added**. ~~Deleted language stricken through~~.]

Public Hearing:
Second Reading:
Effective Date:

Reviewed and approved as to form:

_____	_____
Walt E. Wrede, City Manager	Thomas F. Klinkner, City Attorney
Date: _____	Date: _____

[**Bold and underlined added**. ~~Deleted language stricken through~~.]

East Hill Road

Mariner Drive

Blackwell

Paul Banks El

Church

East End Rd

Pennock

Mattox Rd

Mobile Home Park

N

0 250 500 Feet

Legend

Subject Properties

Current Zoning

Zone

Residential Office

Urban Residential

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MANAGER'S REPORT
May 27, 2014

TO: MAYOR WYTHE / HOMER CITY COUNCIL

FROM: WALT WREDE

UPDATES / FOLLOW-UP

NOTE: Some of these items appeared in the last report. I have updated them and brought them back in case the Council wanted to discuss.

1. Construction Update: At the last meeting, there was a discussion about all of the work that is taking place around the harbor this spring. Local residents seem pleased with all of the activity and the results. I thought it might be a good idea to remind and/or inform the public that this is simply the tip of the iceberg. This work is nothing compared to what you will see this fall. There will be a lot of activity and we will really need patience and understanding from the public and harbor users. The City will be replacing Ramp 3 to make it ADA compliant. Ramp 7 will be removed and re-installed later. The City will also be replacing a number of older floats in the harbor and installing water and electric service to systems that don't presently have it. The Load and Launch ramp will be completely rebuilt and construction will begin on the new Port and Harbor building. Just to add to the fun, DOT/PF will be repaving the Spit Road and doing major repairs at the eroded area which threatens the road.
2. More Natural Gas Conversions: This meeting agenda contains a public hearing and second reading on an ordinance appropriating money for additional gas conversions at City facilities, including some of the older restrooms around the harbor. The Finance Department reports significant savings so far. Right now, the heating bill at City Hall is about 70% lower each month.
3. Traffic Calming / Old Town: On Tuesday, May 20, City staff had a second meeting with Old Town Neighborhood representatives. Chief Robl, Chief Painter, Julie Engebretsen, and I were in attendance. The purpose of the meeting was to follow-up on a set of requests that the neighborhood presented regarding short term measures that could be taken to reduce speeding and reckless driving. The group addressed the Planning Commission also, as planned. Attached for your information is a correspondence from the Association that contains a specific, updated request for assistance. Old Town residents are hoping that the City could provide some funding and assistance this summer and use the neighborhood as a traffic calming pilot project. At the time this

report was written, the staff was working to put together some cost estimates for the improvements.

4. Ramp 7. The Seldovia Village Tribe has decided to rebuild the damaged float and reinstall Ramp 7 this summer. They have agreed to rebuild the float and install the ramp according to the engineer's recommendations, which will cost more money that the original plan, but hopefully, increase the safety factor. At the time this report was written, the City and SVT were working out the details in writing that addressed project scope, work windows, safety, inspections, and so on.
5. Pioneer Ave Upgrades: DOT/PF has issued STIP Amendment 9. This amendment calls for repaving and other upgrades for Pioneer Avenue along with Lake Street. This is a good opportunity for the public to have some input on Pioneer Avenue improvements. DOT/PF staff planners are coming down here on May 23 to discuss this with us. At that time we will learn more about the design and public participation processes.
6. Proposed Bed Tax: A Council packet several months ago contained a flyer produced by the Kenai Peninsula Tourism Marketing Council which described its Borough-wide bed tax proposal. Since that time, I have had several conversations with the Executive Director of the organization and I think I now have a better understanding of the intent behind the proposal, how the tax would work, and what it could be used for. There are definitely advantages and disadvantages to Homer associated with the proposal and I would be happy to provide my thoughts on it if you wish. As I understand it, the Homer Chamber Board is currently neutral on the proposal. Since this proposal may end up on the ballot at some point, I invited the Director to come down and address the Council as a Visitor at a future meeting. She said she would like to do so.
7. Lease Update: Leases have now been negotiated and executed with the new owners of the Happy Face Restaurant, Snug Harbor Seafoods, and ACS.
8. i-PADs: Council members requested information about the i-Pads in terms of how much money they were saving and what the benefits are in terms of efficiency and productivity (That also translates into savings). Attached is a report from the Finance Director on the subject.
9. Andrea Petersen Moving On: By now, most of you probably know that HR Director Andrea Petersen has accepted a job with a big firm based in Reno, Nevada. We are very sorry to see her go but we wish her the best of luck in her new endeavor. I believe that Andrea has done an excellent job for the City during the time she was here. She was dealt a bad hand with the health insurance plan because she started at a time it was obvious that serious changes were necessary. She handled what was, and will continue to be, a difficult situation very professionally. Andrea made many important contributions and helped to move the City forward in important areas, especially employee wellness and training on safety, supervisory skills, team building, communication, and job related expectations. Andrea was a real advocate for the employees. When employees leave the City, we conduct an exit interview and ask questions regarding the employee's work experience. We also ask for comments and suggestions about how we might improve the work environment. Some of what Andrea has to say is attached. I have included it because I think her comments are important for the Council to hear going forward.
10. The Projected Surplus: I have to give you some bad news here. Recall that several months ago, we projected that the General Fund might have a surplus of around $300,000 at the end of 2013. By surplus, we meant that we thought revenues might exceed expenditures

by that amount. I hope you also remember that we said that the surplus was subject to the audit and we would not know definitively until then. The auditors have pretty much completed their work and Council is scheduled to hear a presentation from them on June 9. I wanted you to know in advance that the auditors made several "adjustments" which have basically wiped out the projected surplus. There were two adjustments which affected the surplus. First, the property tax revenue that came in from the oil drilling rig Endeavor was not transferred to the Permanent Fund as it was supposed to be. That transfer has been made and it wiped out about half of the surplus. Second, you will recall that the City received a big increase in the jail contract. The funds were for FY 2014. The State made a payment early, back in December of 2013. The Finance Department booked it as revenue in 2013. The Auditors said no, it should all be booked as revenue in 2014. This wiped out the rest of the projected surplus. So, I know there were a number of ideas people had about how the surplus should be spent. I personally was looking forward to putting some money into depreciation and hopefully, providing some relief to the employees. Council scheduled a workshop at 4 PM on June 9th to talk about the surplus and how it should be spent. That is probably not necessary now and it could be cancelled.

11. Library Aide / Temporary Part Time: Things are extremely busy at the library now that the summer months have arrived. The Library Director is having a difficult time with staffing levels, scheduling, coverage, and meeting the service needs of library patrons. The Port and Harbor and the Parks Division at Public Works both add seasonal employees to meet expanded demand in the summer. I believe this makes sense at the library as well. I have authorized Ann to hire a temporary/seasonal, part time, library aide for the months of June, July, and August. This will cost about $7,000. Ann believes, and the Finance Department has confirmed that she has enough money to do this in her existing budget. It would simply mean reallocating funds from her casual temporary employee line item. In other words, instead of relying so much on a group of casual employees that can come in when needed if they are available, she will use some of the funds for a full time position for three months. This move will cover this year. If a permanent part time seasonal position is created, that will have to be done by Council and the position authorization would be included in next year's budget.
12. Regular Part Time Receptionist / Public Works: Public Works has only one administrative assistant type position. That is very slim considering the number of employees, the scope of services, the number of projects, and the size of the budget. PW is simply swamped right now with lots of projects, activities, and public contact. PW used to have two administrative assistant type positions but one has been left vacant due to budget cuts several years ago. There is no back-up for the one person we have if she is ill or takes vacation. She often must leave her post to perform her duties. There is no one to cross train with her because everyone else is fully tasked. There are many times when there is no one at the reception desk and the Director or the Superintendent are answering the phone or talking to walk-in customers. Public Works probably received more contact with the public than any other department with the possible exception of the Port and Harbor. The solution proposed is a regular, part-time, receptionist position. This would cost about $30,000. I wanted to give you a heads up that I will be proposing this either at mid-year or as part of next year's budget. PW has other pressing needs as well, including help in the building maintenance/custodial division.

13. Beluga Slough Trail: As you know, there was a recent celebration surrounding the completion of the Beluga Slough Trail improvements and installation of new interpretative signs. Many people, including the Mayor, noticed that there was still a section of the trail that was not improved and contained the old plastic material that has been problematic. That section was not fixed in part because there was not enough funding and also because it was not on City land or on a City trail easement. It was in better shape that the rest of the trail and was not as high a priority. Last week Carey was notified that the U.S. Fish and Wildlife Service has located the money to replace this part of the trail. The estimated cost is $100,000. At the time this was written, we were seeking more details in order to provide you with a recommendation. Basically, it sounds like USFWS would like to provide the City a grant and have the City handle all of the construction. They did ask if the City would be able to provide a match. At this point, we are suggesting that the City match will be in-kind in the form of financial and project management.
14. Ham Operators: Nick Poolos has completed training to be a ham radio operator, extra class privileges. Tom Sulczynski has completed training at a lesser level. This is valuable to the City. Having two IT staff members that are able to talk on and operate ham radios could be vital in emergencies when cell phone towers, phones, and other forms of communication might be down.

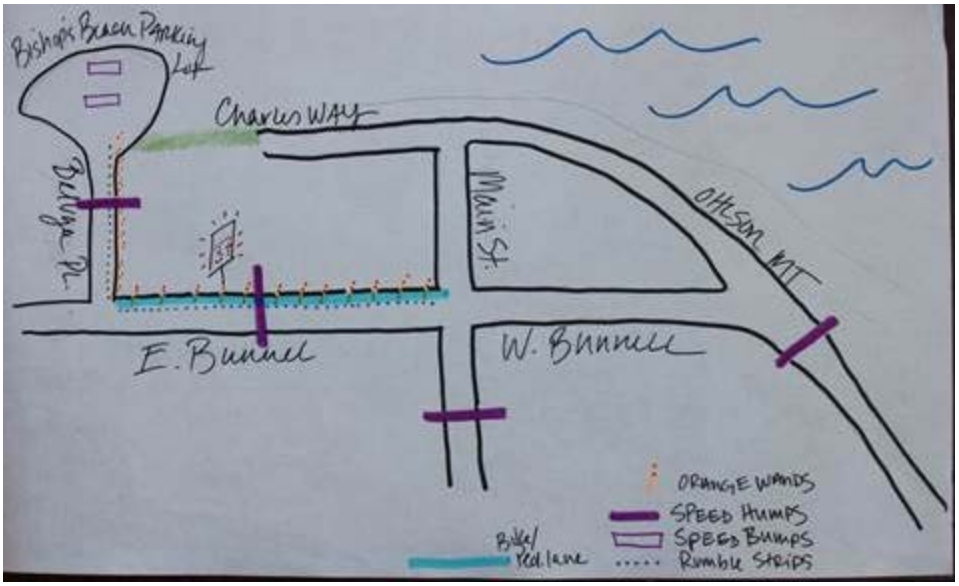
ATTACHMENTS

1. Old Town Neighborhood Association Correspondence
2. Memorandum from Finance Director re: I-Pads
3. Exit Interview / Andrea Petersen

From:	Walt Wrede
To:	Jo Johnson
Subject:	FW: Revised letter from Old Town neighbors and a visual
Date:	Wednesday, May 21, 2014 11:48:22 AM

Attachment to Managers Report

From: Brianna Allen [mailto:brianna@bunnellarts.org]
Sent: Tuesday, May 20, 2014 4:43 PM
To: Walt Wrede
Cc: Asia Freeman
Subject: Revised letter from Old Town neighbors and a visual



Dear Walt, Carey, Mark and Bob,

Thank you for the support you've provided to improve Old Town walkability with the widened paved shoulder for pedestrians, crosswalk striping and increased signage.
Old Town Neighbors met two weeks ago to evaluate how these improvements are working. We also discussed our immediate priorities for improving neighborhood safety for pedestrians this summer and subsequently expressed them to Planning and Zoning. We met with the full support of that committee upon sharing our concerns.
As the lane striping wore off last winter, the widened road is enticing speeding traffic. There have been several near misses with people jumping into the ditch to avoid speeding vehicles. We are convinced someone could get hit any day. We are more than willing to pledge ourselves to Old Town safety. Here are our priorities:
(1) Install speed humps and bumps this summer. Old Town residents will put up with the noise of speed bumps for the added safety. Four *speed humps* are needed, one each on Main approaching Bunnell, one on Ohlson at the corner of the Elks and condominiums, on East Bunnell, one on Beluga Place approaching the beach. We recognize the challenges the City faces in installing speed humps as both a financial commitment and a policy issue. Removable speed bumps are needed at the Bishop's Beach parking lot as the parking lot is that last surface people drive on before they hit the untamed beach highway.

(2) Install rumble strips, (3) a solar powered speed awareness sign and (4) delineating

orange wands at the inner edge of the bike lane to clearly inform users and demarcate the existing pedestrian lane. The *suggested* speed limit signs are not working to slow traffic. In light of this and the existing pressures on Homer's police force, we want physical and semi permanent traffic calming incentives that are physical objects, not dependent on police enforcement. We noticed what a tremendous difference it made last week to have the speed trailer in the neighborhood last week and are grateful for the temporary impact.

We'd like you to consider Old Town Neighborhood as a "test" site for traffic calming options that concern other neighborhoods. After all, Bunnell to Beluga is not a road that dead ends at Bishop's Beach. It is the entrance to an historic beach "highway" and drivers are just getting revved up as they approach it.

Thank you for your time and attention and all the hard work you've put into supporting our neighborhood efforts!

Sincerely,
Old Town Neighbors
Asia Freeman,
Brianna Allen

Brianna M. Allen
Old Town Development Coordinator
Bunnell Street Arts Center

Cost- Benefit Analysis – iPad

Costs:

Number of iPad purchased: 20

1. Total cost: $13,706
2. Average cost per unit: $685

Benefits:

1. Benefit (per year): Using less paper (City Council Packet Production & Distribution), $1214 in savings

Printing Cost: per page	$ 0.0061				
Paper Cost: Per page	$ 0.0070				
Delivery Method	**Traditional Delivery**		**Current: Combined Delivery**		**Savings**
	e-copy	Paper copy	e-copy (iPad)	Paper Copy	
# of packets per meeting -Regular	0	26	12	14	12
# of packets per meeting -Supplemental	0	35	8	27	8
# of pages printed per meeting (Avg)	0	9,512	N/A	5,300	4,212
meetings)	0	209,261	N/A	116,601	92,660
Per year Cost & Savings		$ 2,741	N/A	$ 1,527	**$ 1,214**

2. Benefit: Labor cost (City Clerk's time), negligible
    a. Estimated paper production hours decreased by 4 – 6 units per month due to decreased volume
    b. Estimated electronic file compilation hours increase by 6 hours per month.
3. IT (labor, software, and compliance): Year 1 saving $2380, and $1090 thereafter.
4. Benefits: Other (not quantified in monetary terms)
    a. Greatly improved file accessibility for all users, especially the Project Manager's ability to manage City projects
    b. File (pdf) is searchable, Google index capable and ADA compliant
    c. Increased email communication capabilities and compliance
    d. Possible time savings due the increased efficiency stated above.

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Memorandum

TO:	MAYOR WYTHE AND COUNCIL
THROUGH:	WALT WREDE
FROM:	ANDREA PETERSEN
DATE:	May 21, 2014
SUBJECT:	Exit Interview

Opening

As many of you are aware, I have accepted a position in the corporate office of a large corporation located in Reno, Nevada and have submitted my resignation effective June 3. This has been a bitter sweet decision for me and my family since Homer has been our home for 10 years; however, it is time I spread my wings and get out of my comfort zone. I wanted to take moment before my departure to say thank you to City Manager, Walt Wrede, for giving me the opportunity to work with some amazing and very dedicated people. The City of Homer employees take pride in their work and it shows throughout the City. I truly appreciate their enthusiasm and hard work!

The City infrastructure continues to grow through projects and expansions; however a workforce strategy is not being evaluated which is resulting in overworked employees. Over time, this will cause increased turnover. Below is my workforce strategy recommendation for Council to consider.

Workforce Strategic Plan

Workforce planning is grounded in its contribution to organizational performance. It will provide Council and management with a way to align the workforce with the business plan, and address current and future workforce issues. Workforce planning assists with the following:

- Project and respond to organization-wide staffing needs.
- Influence development of job classes.
- Deploy staff and organize work.
- Manage organizational culture.
- Anticipate and manage risk.

Incorporating the workforce strategic plan within the overall strategic plan is extremely beneficial and highly recommended. Strategic business plans create direction and a foundation for allocating resources. The goals, objectives, strategies, and performance measures within the business plan should highlight the key workforce priorities. Workforce planning requires leadership, commitment, and cooperation. While workforce planning is chiefly a responsibility of management, several business units contribute, including the City Council, City Manager, Finance, and Personnel. The following should be included in the workforce strategic plan.

FTE Analysis

The definition of FTE (full time equivalent) is the number of working hours that represents one full-time employee during a fixed time period, such as one month or one year. FTE simplifies work measurement by converting work load hours into the number of people required to complete that work. FTE analysis is the methodical analysis of current work activities with related time and cost measures. This helps managers understand the root causes and driving forces of workload levels, organizational performance, and productivity improvement opportunities. There are several departments that have not been able to add additional staff due to budget constraints. Conducting an FTE analysis will assist the Council with the workforce strategic plan.

Establishing a Compensation Philosophy

A compensation philosophy is an organization's commitment to how it values employees. A consistent compensation philosophy would provide the City and the employees a frame of reference when budgeting wages and benefits. The goal of a compensation philosophy is to attract, retain, and motivate employees. For companies in the private sector, this usually requires a competitive pay philosophy. For companies in the public sector, this means a well-rounded philosophy, with a focus on benefits and work life. Establishing a compensation philosophy will also assist Council with other budgetary allocations. Total compensation can be challenging for many organizations. The biggest challenge is to have a good balance of offered benefits to the actual base compensation. Although offering excellent benefits is a smart recruitment strategy, benefits do not always allow employees to financially keep up with inflation. Currently, there are approximately 13 employees who are at the top of the wage scale and have not received a step-increase annually based on their performance for several years, yet these employees are some of the City's top performers. In the next year and half, another 11 employees will hit the top of the wage scale and will no longer be eligible for a step-increase based on their performance. This means that 23% of regular full-time employees will no longer receive a step-increase based on their performance yet the City still expects them to perform at a high level.

Closing

Once again, I am very thankful for the opportunity to work for the City of Homer. There have been some great times and some challenging ones as well! I would not have been a viable candidate for my new position without the experiences and knowledge I have gained here. Thank you again and please let me know if you have any questions or concerns regarding my recommendations.