

PLANNING COMMISSION
City and Borough of Juneau
Michael Satre, Chairman

COMMITTEE OF THE WHOLE
Wireless Telecommunication Master Plan and Ordinance
April 8, 2014

I. ROLL CALL

Dennis Watson, Vice Chairman, called the Committee of the Whole (COW) meeting of the City and Borough of Juneau (CBJ) Planning Commission (PC), held in the Assembly Chambers of the Municipal Building, to order at 5:13 pm.

Commissioners present: Dennis Watson, Vice Chairman; Karen Lawfer, Bill Peters, Paul Voelckers, Dan Miller, Gordon Jackson, Ben Haight

Commissioners absent: Mike Satre, Chairman; Nicole Grewe

A quorum was present

Staff present: Hal Hart, Planning Director; Travis Goddard, Planning Manager

II. REGULAR AGENDA

TXT2009-00007: Continued discussion of Draft Wireless Telecommunication Ordinance and Master Plan.
Applicant: City and Borough of Juneau
Location: Borough-wide

Staff Recommendations

No recommendation is made regarding the results of the survey. Staff will use both the WCF (Wireless Communication Facilities) issue matrix and its staff report to provide policy and regulation recommendations. However, Attachment C shows the potential policy and regulatory implications identified by staff during the review and analysis of survey results. (Please note: no statistical analysis for significance, error, or deviation was completed at the time this document was completed.)

Mr. Goddard gave an overview of the comments received on the Draft Wireless Telecommunication Master Plan and Ordinance. He said the staff edited the initial draft Ordinance and sent it to CityScape for finalization of the current edits. The staff just recently received the version of the Ordinance reflecting those edits. That draft was posted on the web site.

The staff has been focusing on compiling all of the comments it has received on the Master Plan and Ordinance, said Mr. Goddard. He displayed a spreadsheet compiled by the Department showing the date of the comment, the issue, the possible implications to the Master Plan, and how this would affect the related Ordinance.

Mr. Goddard told the Commission that the Ordinance has not yet been changed to reflect any of these comments, because of the delay between reciprocal communication with CityScape, and staff did not want to assume that all comments were immediately incorporated in the next draft. Mr. Goddard said he would present the major issues, and the Commission could decide if a policy was needed; and if it should be reflected in changes to the Ordinance. This would occur after the Commission decided that it should be added, rather than creating different versions of the Ordinance each time a policy or change was discussed.

The staff has compiled the results of the surveys taken at the public meetings, said Mr. Goddard. He said he could present those results and the staff's analysis of those results to the Commission, or he could present a second report prepared by the staff, which addresses the major results of the public comment received.

Mr. Watson said since the report was just presented to the Commission, that they would not have time to digest that information and review it at this meeting. He said he would prefer they review the results of the public comment which the Commission already had copies of.

Mr. Goddard said they planned to narrow the focus of the issues with the Plan and the Ordinance the Commission was interested in addressing, so at the following meeting on April 15, the Commission could identify which issues merited further research, or if they wanted them included in the Master Plan and Ordinance. Mr. Goddard said they envisioned the Special meeting immediately following the COW meeting on April 15 would be the time the Commission received public comment. Mr. Goddard said after listening to the public comment, the Commission could decide if it was prepared to forward a recommendation to the Assembly, and what changes it wanted to see in the recommendation which would be forwarded to the Assembly.

Ms. Lawfer asked if the version of the Ordinance on the web site contained primarily standard edits rather than substantive changes.

Mr. Goddard said the version contained standard edits rather than substantive changes. He said the staff had made a few substantive changes to the Ordinance, but not on policy.

Mr. Voelckers said what he thought Mr. Goddard had stated was that next week the Commission would be presented with discussion ideas, not necessarily a revised Ordinance. Mr. Voelckers said if this was the case, then the Commission was substantially off the schedule.

Mr. Goddard replied that the discussion that evening was meant to narrow and clarify edits, culminating at the April 15, meeting in the final discussions of the Ordinance and the recommendations the Commission would be making to the Assembly. Mr. Goddard said time-wise this is off schedule, but still within the parameters that the schedule represented.

Mr. Voelckers asked if they would actually have a revised version of the Ordinance next week, or if they would be talking about a revised version of the Ordinance next week.

Mr. Goddard said this would be better to discuss at the end of the meeting, as the staff report included specific wording on various issues from which the Commission may choose to select.

LIGHTING

The most prominent issue was the topic of lighting, said Mr. Goddard, which is also entwined with the height of cell towers. There is a classification system which matches height and light requirements. This language has very specific parameters, said Mr. Goddard, such as prescribing a very specific type of beacon and the number of flashes per minute depending upon the height and type of cell tower.

Mr. Goddard said the Federal Aviation Administration (FAA) has language which dictates that any type of construction that may affect the national air base system needs to be reviewed by the FAA. That language applies to construction, rather than temporary structures such as a crane used to aid in the construction, said Mr. Goddard. Mr. Goddard said the FAA language is phrased to give local jurisdictions the authority approach the FAA or to make its own decision regarding the matter.

The Master Plan specifically has Policy Number Two which affirms CBJ support for the protection of aviation safety, said Mr. Goddard. He said therefore there is both background information and the policy to support it. The FAA Circular goes on to address when lighting and obstruction markings are required, said Mr. Goddard. Generally it specifies 200 feet above ground level, and it allows for exceptions if an FAA aeronautical study is performed and it is justified through the process.

Mr. Goddard continued following the FAA Circular by stating that Chapter 22 of the Circular recommends minimum levels of marking and lighting systems. Mr. Goddard interpreted this to mean that there are exceptions where local governing bodies can have input.

Mr. Goddard said the lighting standard does not necessarily need to be changed, specifically because the Conditional Use Permit process which must be followed by new tower applications would require the evaluation standard of being "in harmony with the neighborhood". Mr. Goddard interpreted this to mean that the Planning Commission could make case-by-case decisions with each new Conditional Use Permit application involving a cell tower, as to whether the proposed lighting would be consistent with the harmony of the neighborhood. He said this would mean they could let the FAA handle the requirements and address the neighborhood harmony issue with each Conditional Use Permit.

The other option the Commission could follow would be to adopt local lighting standards that are more strict or less strict than those ordained by the FAA. The Commission could change the notification standards if there was a light at the top of a tower. If the tower was not lit, or it was a co-location, it should get the benefit of having the regular notification system, said Mr. Goddard. However, if the tower applicant made the choice to raise the tower to the level where it required additional public scrutiny, that could be addressed on each case through the

public notice process rather than having an across-the-board decision on the requirements for cell towers, he explained.

The Commission could adopt lighting standards that are more strict than FAA standards, said Mr. Goddard. The language would have to be drawn up, and then the FAA and Federal Communications Commission (FCC) would need to be approached, said Mr. Goddard, to approve the CBJ's proposal.

It could also be up the applicant to obtain FAA and FCC approval, and then come to the Commission for the Conditional Use Permit, and then go back to the FAA and FCC to ascertain that the Conditional Use Permit conditions were in alliance with their standards. It would lengthen the time of the process and increase the costs and be duplicative in nature, commented Mr. Goddard.

Mr. Voelckers asked why having regulations more strict than the FAA could mean less lighting.

Mr. Goddard said "more strict" would have to be defined; does it mean more lighting or less lighting than that required by the FAA.

Mr. Watson commented that his experience with federal regulations was that a more strict imposition of regulations than those recommended by the federal government were allowed. If community regulations were less strict than federal regulations then the higher requirement would be the ruling regulation.

Ms. Lawfer asked for a brief description of what areas in Juneau would be governed by FAA regulations.

Mr. Goddard said he could not find a specific map for Juneau, but that the area would be air space subject to air traffic control. As the planes get closer to the airport, the tighter the scrutiny by the FAA, said Mr. Goddard.

Mr. Miller said the discussion about FAA rules was a surprise to him, and that he personally could not imagine why CBJ would want to take on the liability of setting up a plan separate from that of the FAA.

RADIO FREQUENCIES

The second most prominent concern was that of radio frequencies, said Mr. Goddard. There are two letters by the CBJ Law Department posted on the web site, which outline the position that the FCC Act of 1996 prohibits local jurisdictions from regulating wireless communication facility approvals based upon the environmental effects of radio frequency emissions. This has been determined to include the health effects, said Mr. Goddard. The CBJ does have the authority to regulate based upon environmental effects other than radio frequency emissions, said Mr. Goddard.

The CBJ does have the ability to regulate on issues such as setbacks, location and aesthetics, said Mr. Goddard, because they are not directly related to the radio frequency emissions. Therefore, the staff focused on location and structural issues that were raised throughout the

process. Mr. Goddard mentioned that Policy Two of the Master Plan does affirm the CBJ's desire to protect public health and safety. There are also three separate statements in the proposed Ordinance which address the various concerns regarding health and safety the City has in implementing the Ordinance.

Mr. Miller asked if the staff had yet received an answer to the question of whether adding more arrays on a cell tower (co-location) changed the emissions for the total unit, and how that is regulated.

Mr. Goddard said he spoke with a public relations officer from one of the cellular companies, and was told that the emissions on one tower add up but are not cumulative. The FCC does regulate the cumulative impact of the tower, said Mr. Goddard, to ensure that the entire emissions generated by the tower do not exceed the FCC standards.

Mr. Miller asked if there were any guidelines as to what percentage of a tower one array might take up, and the effect this would have on further arrays on that tower and their allowable emissions.

Mr. Goddard said he could not answer that specific question, but that his understanding was that emissions emanating from towers were based not just on a single tower with several arrays, but on the emissions from towers clustered within a specified area.

Mr. Miller asked if there were FCC employees who monitored these tower emissions.

Mr. Goddard said he did not know the answer to that question.

Mr. Voelckers said his impression was that the Commission would like this Ordinance to have more detail as to how the FCC rules and regulations are applied to the cell towers. Mr. Voelckers said he agreed with Mr. Miller, about the impression that there was a lot of ambiguity about total power levels on co-located towers, and how the actual testing about how to prove compliance with FCC specified levels is accomplished. Mr. Voelckers said he felt these types of questions are germane for the local jurisdiction. Mr. Voelckers said he did not feel they were second-guessing FCC levels, but were interested in establishing a better linkage to prove those regulations are being met.

Mr. Haight stated that maybe the methodology would be more appropriate as part of the Master Plan.

Ms. Lawfer said she would like to be able to determine what percentage of emissions one tower was using in the affected area so that the CBJ would know how many more emissions would be allowed for that area. Ms. Lawfer asked if the DAS (Distributed Antenna System) systems were covered by FCC regulations as well.

She was told that they are also covered by FCC regulations. Ms. Lawfer said she had wanted to check since DAS were listed under a separate section.

Mr. Goddard said this is one of the issues the staff raised, and that it is not covered in the

Master Plan.

ENVIRONMENTAL IMPACTS

Mr. Goddard said that any possible environmental impacts of the tower construction were already addressed by existing federal or state regulations, with the exception of the effect of the towers on migratory birds. A specific concern in this area is directed at the guy wires which hold up certain towers. The Fish and Wildlife service has issued valuable guidelines, said Mr. Goddard. He said the staff had developed language for towers with proposed guy wires that they were prohibited, unless the applicant could show that the wires were structurally required. There are guidelines for towers with guy wires, such as the establishment of flutter tags on the wires so they would be noticeable to birds.

Mr. Voelckers said that usually these situations are driven by economics, and that it may be placing an undue burden on the applicant.

Mr. Goddard said that his vision in this area was that guy wires were not encouraged in the community, unless they could be convinced through the Conditional Use permitting process that the wires were required for more than just economic reasons.

Mr. Haight said the predominant towers were un-guyed towers, because wireless companies wanted to acquire as little property as possible on which to erect their towers. He added that the addition of guy wires required more property. Mr. Haight did say that he felt it was appropriate to have the language in the document.

PUBLIC NOTICE

Mr. Goddard next addressed the issue of public notice. He said the issue had arisen several times as to what constitutes adequate public notice. Mr. Goddard said the location of the cell tower determined from how far away and how many people would be affected by its view. The question of what is adequate public notice can be very complex, said Mr. Goddard. He said the staff presented seven options for the Commission to consider on adequate public notice:

1. Provide no public notice
2. Authorize the Planning Director to determine adequate public notice on a case-by-case basis
3. Increased distance standard for mailing notices
4. Increased notification standards not based upon a strict distance measurement
5. More than one sign could be required on the property and posted throughout the community
6. Require more than one publication in the newspaper
7. Alternative method of notice be added to the list of required notice methods

Mr. Watson said he thought there was not a way to force the public to read anything, regarding public notices.

Mr. Haight said it is case-dependent. There are towers sitting among the trees which are less

visible to the public than towers sitting over the hillside or over the water. Mr. Haight said this type of circumstance should require the Director to make a decision. Mr. Haight said a minimum standard should be set for newspaper and radio announcements, and if the Director saw the need for additional notice that it be provided.

Mr. Goddard said the staff would like to set a standard for the Conditional Use Permit for the construction of a tower; if there is no light on the tower, "normal" notice would be the standard, but if there was a light on the tower, extra notice would be required. Mr. Goddard said this is one tool to encourage low-impact, possibly camouflaged, unlit towers.

Mr. Miller said a threshold could almost be set according to the height of the tower as far as public notice was concerned.

Mr. Goddard said his personal feeling was to have a process in place where the extra notice requirement was triggered when a light was part of the tower plan, so that a definite trigger for the notice existed.

Mr. Watson said he felt that over-communicating was more important than not providing enough notice.

Referring to Number Six in the public notice standards, Mr. Peters asked at what point the cost was borne by the applicant.

Mr. Goddard said that was a policy decision left up to the Commission.

BALLOONS

Balloon testing (flying a balloon to simulate what a tower at a certain height would look like) is already part of the proposed Ordinance, said Mr. Goddard. The Planning Commission had asked about incorporating a lit balloon into the balloon test. Balloons can be lit, said Mr. Goddard, but the light was through the entire balloon, which may not provide an accurate simulation of a light at the top of a tower. A balloon would certainly be effective in notifying the public that a tower was being considered for the proposed location, said Mr. Goddard.

Mr. Watson said when a balloon is flown high enough to affect an aircraft that substantial planning and research is required.

SIGNAGE

Safety signage on the fences surrounding the towers was a topic for discussion, said Mr. Goddard. The Building Code requires signage on the cabinet itself, and on the shelter, once a certain level of voltage is reached, he added. He asked if the Commission also wanted the signage on the fence that surrounded the compound. The Building Code would require signage on the fence if there was a building trigger, said Mr. Goddard.

The question before the Commission was whether the Commission felt a third level of signage was required, whether it was dictated by the Building Code or not.

Mr. Haight said he had not seen a wireless tower with that type of signage, except for towers

with guy wires.

Mr. Watson asked to which building code Mr. Goddard referred.

Mr. Goddard said this was the National Electrical Code, not the CBJ Building Code.

Mr. Watson said there is nothing in Title 19 that addresses cell towers. He said both he and several Assembly members had expressed concern they were not addressed in Title 19. Mr. Watson said the Assembly members met with Charlie Ford, CBJ Building Official, and expressed their opinion that this needed to be addressed in Title 19. This needs to be accomplished so there are not conflicting ordinances within the CBJ, said Mr. Watson. He added that he had submitted comments as well.

TOWER INSPECTION AND REMOVAL

Mr. Goddard said the Ordinance as proposed requires that a staff engineer design the wireless facility tower as part of the submittal information. There is a requirement in the abandonment section which requires inspection of the facility every two years, and to provide notification that it is still structurally sound.

The tower removal section of the proposed Ordinance includes the previously mentioned structural integrity report every two years, and the Planning Director can require removal of a structure after a certain process is followed, said Mr. Goddard. The Director can provide 60 days' notice to the tower owner, and if there is no response, then theoretically code enforcement action could be initiated, said Mr. Goddard. The staff suggests that language be added to the Master Plan requiring a policy that after 12 consecutive months of non-use, or after 180 days of cessation of the tower functioning, that the Borough policy is that the structure be removed for safety purposes.

Mr. Miller said that the requirement of a structural report every two years seemed arduous.

Mr. Voelckers said he felt this was a good point. He felt some of the inspection requirements should be connected with the size of the tower.

Mr. Haight said that the other types of towers in the Borough do not receive that type of structural analysis, and that from his experience working with cell towers, that they go through a stringent analysis just to erect the tower. They are erected following strict standards, said Mr. Haight.

Mr. Goddard said he thought a five year time frame may be appropriate, with the inspection coming up the same time as renewal of a five year lease.

PROPERTY APPRAISALS

The question of the effect of cell towers on property appraisals proved to be a very interesting question, said Mr. Goddard. The proposed code does allow the Planning Director to ask for additional information on a case-by-case basis. The Conditional Use Permit process does allow for reviews of impacts on property values and harmony, said Mr. Goddard. One question that was raised was if co-locations had the same impact as newly erected towers on property

values, he said. If the code is designed to encourage the construction of cell towers that are smaller, and less obvious, then the automatic requirement of an appraisal may push prospective applicants in the other direction, said Mr. Goddard. If the co-location towers simply require a building permit, then should the building permit process be delayed for a theoretically low-impact structure, he said.

Mr. Goddard also voiced the concern that the CBJ may not have the technical expertise to review appraisals on a regular basis. There are not a lot of appraisers in the area capable of making this type of determination, said Mr. Goddard. The Borough could conceivably need to go outside of Juneau to obtain appraisers that could do the job, he said, which could lead to a lot of additional expenses.

Mr. Miller said whenever an appraisal is obtained, it states that it is based upon a professional opinion. The entire issue is about opinions, said Mr. Miller. He said he felt opinions were a problem and that the Commission should avoid them at all cost.

CAMOUFLAGE AND CONCEALMENT

Camouflage and concealment were issues, said Mr. Goddard, both because of the dislike for them because they looked fake, and for the desire for them as concealing mechanisms for the towers. He said the opinions on concealment were fairly evenly split, but that all seemed to desire that the towers be in harmony with the area in which they were erected.

The proposed code does have a definition for concealment, said Mr. Goddard, and it falls within areas such as, a tower is considered concealed if it fits in with the surrounding landscape, including developmental landscape such as buildings. Another description of concealment states that the tower not considerably impact a viewshed, said Mr. Goddard, and that it not extend higher than the dominant background feature or skyline.

Mr. Voelckers said there are cell towers that are literally concealed.

Mr. Goddard said he agreed, and that he felt that fit into the definition of a tower fitting into the surrounding landscape.

Mr. Goddard said the staff did their best to interpret the survey results to determine what the community felt about camouflage and concealment. He said the Commission would need to determine if it preferred this issue to be dictated by regulation, or if it would prefer going back to the Conditional Use Permit standard where the Commission would make these determinations on a case-by-case basis.

Mr. Miller said the attempt to camouflage towers to look like trees in Alaska was unsuccessful because of the icing involved.

Mr. Goddard said that ham radio towers were addressed in the proposed Ordinance.

HEIGHT AND SETBACK REQUIREMENTS

Height and setback requirements under certain circumstances could lead to small, locational hurdles that may not be intentional, said Mr. Goddard. He said it could force an applicant into

selecting the least harmonious location based upon setback requirements.

Mr. Voelckers asked if the staff had done any research into what other communities required; if it was common practice to tie height and setback into the tower placement requirements.

Mr. Goddard said they have observed this being required in communities and also not required.

Mr. Haight inquired how many structures of this type existed that do not have setback requirements.

Currently the existing zoning setback is applied, said Mr. Goddard, which is assessed from the property line. The National Electrical Code (NEC) has setbacks that are required based upon the voltage emanating from the structure, said Mr. Goddard.

Under questioning from Mr. Voelckers, Mr. Goddard clarified that he was referencing the Land Use Code, not the Building Code. The height limitation does not include towers, and the setbacks are determined by zone, he clarified, not the structure or the use.

DISCUSSION

Mr. Haight said he felt a lot of the focus was on the lighting issue. He said understandably, anything over 200 feet was required to have a light, according to the FAA Circular, with the type of light dictated by the situation. Mr. Haight said he did notice that the FAA did acknowledge neighborhood harmony, with respect to flashing lights. He said he felt that flashing lights were an issue. Mr. Haight said he felt the CBJ could control the height of towers, to avert the FAA required lighting for the taller towers. Flashing lights on the shorter towers puts those lights right at eye level, said Mr. Haight. When the lights are raised on a tower a few hundred feet high, they are not at eye level, and are serving their purpose, he added.

Ms. Lawfer asked at what point is a fence required around a tower.

Mr. Goddard said he believed the standard was 660 volts for a fence to be required. He added that generally the wireless facilities were less than 220 volts. This requirement is stipulated within the NEC.

Mr. Watson said he would like to try to resolve the language in the proposed code requiring a structural report.

Mr. Miller said this also tied in with the setback requirements; if a tower was built so that it was structurally sound, there were not the concerns that it would topple over. Therefore, the setback requirements were not as big of an issue, he added.

Mr. Voelckers said he liked the idea of incentivizing applicants to encourage CBJ desired outcomes. He said he felt it would be a good idea to tie the tower inspection requirement to the height of the tower, since higher towers are potentially more dangerous, and at the same time this would encourage applicants to build shorter, less obtrusive towers.

Mr. Haight said he felt that a five year structural report was appropriate. A setback could be

defined, typical for the zone, he said.

Mr. Watson said he felt that a five year tower inspection requirement was a good number to work with.

Mr. Voelckers said that he felt a five year interval sounded about right for the inspection requirement.

Mr. Miller said since the Commission was given a big packet of information to study right before the meeting, and that he did not want to continue the Draft Ordinance discussion that evening after the regular meeting. He wanted to have a chance to study the information prior to continuing with the discussion. He said he felt the Commission had a long way to go to complete the edits and review of the Draft Wireless Ordinance and Master Plan, and he expressed doubts that this would happen by the conclusion of the two meetings on April 15, 2014.

Ms. Lawfer said the list of items she would like to address included signage, effect of towers on property values, setback requirements, height and lighting, and public notices.

III. **OTHER BUSINESS** - None

IV. **REPORT OF REGULAR AND SPECIAL COMMITTEES** - None

V. **ADJOURNMENT**

The meeting was adjourned at 6:47 p.m.