

Agenda

Planning Commission - Regular Meeting City and Borough of Juneau

December 14, 2021
Virtual Meeting Only
7:00 PM

This virtual meeting will be held by video and telephonic participation only. To join the webinar, paste this URL into your browser: <https://juneau.zoom.us/j/83598204446>. To participate telephonically, call: 1-346-248-7799 or 1-669-900-6833 or 1-253-215-8782 or 1-312-626-6799 or 1-929-436-2866 or 1-301-715-8592 and enter Webinar ID: 835 9820 4446.

I. LAND ACKNOWLEDGEMENT

II. ROLL CALL

III. REQUEST FOR AGENDA CHANGES AND APPROVAL OF AGENDA

IV. APPROVAL OF MINUTES

- A. November 9, 2021 Draft Minutes, Regular Planning Commission - APPROVED

V. BRIEF REVIEW OF THE RULES FOR PUBLIC PARTICIPATION

VI. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

VII. ITEMS FOR RECONSIDERATION

VIII. CONSENT AGENDA

- A. USE2016 0006: A Marijuana Retail License 5-Year Renewal for Rainforest Farms (USE2021 0022) - WITHDRAWN
- B. USE2021 0021: An extension of Conditional Use Permit USE2020 0001 for a new educational and research laboratory structure - APPROVED ON CONSENT
- C. USE2021 0017: A Conditional Use Permit for an addition of a second story to a nonconforming structure - REMOVED FROM CONSENT & APPROVED ON REGULAR AGENDA
- D. USE2021 0016: A Conditional Use Permit for an accessory apartment on an undersized lot - REMOVED FROM CONSENT & APPROVED AS AMENDED ON REGULAR AGENDA
- E. USE2021 0008: A Conditional Use Permit renewal for explosives storage in lower Hidden Valley - APPROVED ON CONSENT

IX. UNFINISHED BUSINESS

X. REGULAR AGENDA

- A. WCF2021 0010: Modificaiton to an approved facility - APPROVED

XI. OTHER BUSINESS

- A. 2021 Legislative Capital Priority List - APPROVED
- B. CIP Review
- C. APL2021 0006: An appeal related to BLD2021 0765 - VOTED TO HEAR THE APPEAL

XII. STAFF REPORTS

XIII. COMMITTEE REPORTS

XIV. LIAISON REPORT

XV. CONTINUATION OF PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

XVI. PLANNING COMMISSION COMMENTS AND QUESTIONS

XVII. EXECUTIVE SESSION

XVIII. SUPPLEMENTAL MATERIALS

- A. Additional Materials for December 14, 2021 Planning Commission

XIX. ADJOURNMENT

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

November 9, 2021 Draft Minutes, Regular Planning Commission - APPROVED

ATTACHMENTS:

	Description	Upload Date	Type
▣	November 9, 2021 Draft Minutes, Regular Planning Commission	11/23/2021	Minutes

Minutes
Planning Commission
Regular Meeting
 CITY AND BOROUGH OF JUNEAU
Michael LeVine, Chairman
 November 9, 2021

- I. **LAND ACKNOWLEDGEMENT** read by Chair LeVine
- II. **ROLL CALL**

Michael LeVine, Chairman, called the Regular Meeting of the City and Borough of Juneau (CBJ) Planning Commission (PC), held virtually via Zoom Webinar and telephonically, to order at 7:01p.m.

Commissioners present: All Commissioners present via video conferencing – Michael LeVine, Chairman; Nathaniel Dye, Vice Chairman; Paul Voelckers, Clerk; Travis Arndt, Deputy Clerk; Ken Alper; Dan Hickok; Mandy Cole; Josh Winchell; Erik Pedersen

Commissioners absent: None

Staff present: Jill Maclean, CDD Director; Allison Eddins, CDD Planner; Sherri Layne, Law

Assembly members: Alicia Hughes-Skandijs

- III. **REQUEST FOR AGENDA CHANGES AND APPROVAL OF AGENDA** – None
- IV. **APPROVAL OF MINUTES** – None
- V. **BRIEF REVIEW OF THE RULES FOR PUBLIC PARTICIPATION** Chair LeVine gave a brief overview of how to participate via Zoom format
- VI. **PUBLIC PARTICIPATION ON NON-AGENDA ITEMS** – None
- VII. **ITEMS FOR RECONSIDERATION** – None
- VIII. **CONSENT AGENDA**

USE2016 0005: A Marijuana Cultivation License 5-Year Renewal for Tree Logic, LLC –
(USE2021 0018)
Applicant: Tree Logic, LLC
Location: 5763 Glacier Highway

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the renewal of a five-year Special Use Permit. The permit would allow a Marijuana Cultivation License five-year renewal without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0005/USE2021 0018.*

The motion passed with no objection.

USE2016 0012: A Marijuana Manufacturing License 5-Year Renewal for Top Hat, LLC –
(USE2021 0012)
Applicant: Top Hat, LLC
Location: 2315 Industrial Boulevard

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the renewal of a five-year Special Use Permit. The permit would allow the renewal of a five-year Marijuana Manufacturing Special Use Permit without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0012/USE2021 0012.*

The motion passed with no objection.

USE2016 0013: A Marijuana Cultivation License 5-Year Renewal for Top Hat, LLC –
(USE2021 0013)
Applicant: Top Hat, LLC
Location: 2315 Industrial Boulevard

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the

renewal of a five-year Special Use Permit. The permit would allow the renewal of a five-year Marijuana Cultivation Special Use Permit without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0013/USE2021 0013.*

The motion passed with no objection.

USE2016 0017: A Marijuana Cultivation License 5-Year Renewal for The Fireweed Factory – (**USE2021 0014**)
Applicant: The Fireweed Factory
Location: 8415 Airport Boulevard

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the renewal of a five-year Special Use Permit. The permit would allow a Marijuana Cultivation License five-year renewal without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0017/USE2021 0014.*

The motion passed with no objection.

USE2016 0026: A Marijuana Retail License 5-Year Renewal for Fireweed Factory, LLC – (**USE2021 0015**)
Applicant: The Fireweed Factory
Location: 237 Front Street

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the renewal of a five-year Special Use Permit. The permit would allow a Marijuana Retail License five-year renewal without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0026/USE2021 0015.*

The motion passed with no objection.

USE2016 0027: A Marijuana Cultivation License 5-Year Renewal for Green Elephant –
(USE2021 0019)
Applicant: Green Elephant, LLC
Location: 101 Mill Street

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the renewal of a Five-Year Special Use Permit. The permit would allow a Marijuana Cultivation License 5-year renewal without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0027/USE2021 0019.*

The motion passed with no objection.

USE2016 0028: A Marijuana Retail License 5-Year Renewal for Green Elephant –
(USE2021 0020)
Applicant: Green Elephant
Location: 101 Mill Street

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year renewal. The permit would allow the renewal of a five-year Special Use Permit. The permit would allow a Marijuana Retail License five-year renewal without amended conditions.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2016 0028/USE2021 0020.*

The motion passed with no objection.

IX. UNFINISHED BUSINESS – None

X. REGULAR AGENDA

USE2021 0011: A Conditional Use Permit for a cold weather emergency shelter to be
located at Resurrection Lutheran Church
Applicant: Resurrection Lutheran Church
Location: 740 W. Tenth Street

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit. The permit would allow the development of a cold weather emergency shelter to be located at Resurrection Lutheran Church.

The approval is subject to the following conditions:

1. Prior to opening the facility, smoke detectors must be installed in the sleeping area and in each of shelter restrooms.
2. Prior to opening the facility, an alarm must be installed on the emergency exit door in the cold weather emergency shelter sleep area.
3. If new exterior lights are added to the church building, a lighting plan illustrating location and type of exterior light shall be provided to the Community Development Department.

Prior to Staff Presentation several Commissioners disclosed potential conflicts. Chair LeVine lives in the area. Mr. Winchell has served as a volunteer at a similar type facility. Ms. Cole runs a shelter for survivors of domestic and sexual violence. All declared they have no financial interest and felt they could be impartial. They were allowed to stay. Mr. Voelckers disclosed he owns a building nearby and felt it could potentially be seen as having an impact on his building and tenants and therefore he felt he should recuse himself. He was removed from the meeting for the duration of this hearing.

STAFF PRESENTATION – Planner Eddins presented **USE2021 0011**

Director Maclean clarified Conditional Use permits run with the land. If the Commission wants the permit to expire, they will need to add an expiration date.

QUESTIONS FOR STAFF –

Mr. Dye asked about parking requirements. His understanding was that with this change in use, they would need to be in compliance with certain parking regulations. Ms. Maclean explained that this is not a change of use permit, the church is remaining a church so there is not a change needed. Planner Eddins explained the parking was described in her presentation is related to the current uses already and added the warming shelter would use the current parking spaces as they would be using the spaces outside of hours currently used by the church.

Mr. Arndt asked how many people on average used the facility per night in the first year of the contract. Ms. Eddins did not have those numbers but said she had multiple conversations with the CBJ Chief Housing officer and she learned the average number of people per night never exceeded capacity.

Mr. Hickok asked why parking would be an issue with the shelter. Ms. Eddins explained an emergency shelter is classified as assisted living. Title 49 has parking requirements for assisted living facilities.

Mr. Dye asked if there was a pre-application conference. Ms. Eddins said she conducted the preapplication conference over the counter and accepted the application. She explained that St. Vincent de Paul informed CBJ that they would not be able to continue their contract. The church volunteered and came in for the pre-application conference and had the completed application completed that same day. However, the time crunch did not allow for the full information to be included in her packet.

APPLICANT PRESENTATION – Karen Lawfer, Congregation President, Resurrection Lutheran Church, spoke on behalf of the church. Ms. Lawfer described the activities and outreach the church conducts and that they have a space conducive to the cold weather shelter. If the permit is approved, they will begin interviewing for staff as soon as tomorrow.

Pastor Karen Perkins has worked with the warming shelter locally and explained the church has experience with the potential patrons through their food pantry ministry. There will be a site manager and they have planned extensive training for people working the shelter. As a shelter of last resort, they will accept patrons at all levels, including patrons that are intoxicated or have behavioral issues. Patrons will contribute by cleaning and helping in the shelter. The shelter will provide an evening and morning meal. Their proximity to public transportation is an advantage. They are working with public safety personnel and have reached out to the neighbors in the area to address concerns.

QUESTIONS FOR APPLICANT

Mr. Winchell asked what do they think they can do to address crime potential with the bank. Pastor Perkins said there is a limit to what they can do but she pointed out people with mental illness or experiencing homelessness do not have a higher incidence of violence.

Mr. Arndt asked what they anticipate the patrons will do during the hours outside of operating hours. Pastor Perkins said she does not expect them to stay in the area. Rather, she expects they would go elsewhere for warmth or food.

Mr. Hickok asked if there is a sense they will be taking residents from the new Glory Hall. Ms. Lawfer explained this is a shelter of last resort. If an individual is not able to utilize the Glory Hall or other emergency shelter, then they can use this shelter. People can be turned away from the other shelters due to intoxication or other reasons. They will not be turned away from Resurrection Lutheran.

Mr. Dye asked what the operating hours would be. Ms. Lawfer said they will be open a minimum of 11:00 P.M. to 6:30 A.M. They will only operate when they can be fully-staffed. Once they are fully-staffed they will be open beyond that when necessary. She gave an example of when there is a storm coming, they would open doors earlier to let them out of the weather. Pastor Perkins added while they may open early, unless there is an emergency, they will not stay open late in the mornings because of the other activities needs of the church. She does not expect to be open earlier than 10:00 pm unless there is some emergency reason to do so.

PUBLIC COMMENT

Alicia Bishop – spoke on behalf of the Harborview Elementary Site Council. They feel the shelter would negatively impact school and student safety.

Mr. Dye asked what the Site Council is and asked about the relationship between the council and the School District. Ms. Bishop explained the council is a decision-making body comprised of parents, teachers and the principal of Harborview Elementary looking at school safety and budget issues.

Mr. Dye asked what overlap times concerned the Site Council. Ms. Bishop said the 7:00 A.M. release could overlap with children going to school or catching buses.

Mr. LeVine asked what conditions might make the Council more comfortable with the shelter in the area. Ms. Bishop said the plan over burdens JPD. She would prefer a fuller plan on how they will deal with issues as they arise.

Tom Sullivan – Vice President, First National Bank of Alaska – expressed concerns regarding the safety of bank employees, customers, and school children in the area. He said allowing clients with issues that disallow them to stay at the other shelters brings more dangerous persons into the area. He felt the ATM, and night depository as well as drive thru areas would be potential vandalism targets.

Mr. Dye asked if there are any conditions that would make this a compatible use. Mr. Sullivan said No.

Marc Wheeler – 427 W 9th Street – owns a business in the area. Mr. Wheeler asked if a year-round shelter would be allowed or if it would be limited to a certain time period. He also had concerns that there might be an increase in derelict cars in the area.

Hilary Poole – spoke to say there were instances where the shelters were over capacity. She added the glory hall moving to the airport area has increased crime problems in that area. She

said access to public restrooms is a MUST and there are not many public restrooms in the area surrounding the church.

Jerrick Hope-Lang – is an indigenous homeowner in the area. He felt with the loss of the glory Hall shelter in the downtown area, this is a need.

Mr. Winchell asked Mr. Hope-Lang if he thought patrons would seek warmth during the day or mill around in the neighborhood area. Mr. Hope-Lang said his experience is that they will not mill around.

Ms. Cole asked if he is in support of the shelter being located in the Flats. He said he supports it 100%.

Doniece Gott – 120 Behrends Avenue – spoke in support of the warming shelter in Resurrection Lutheran. She has children in schools nearby.

Neil MacKinnon – co-owner of the laundry building across the street. They have had problems with homeless people in the laundromat ever since the church started their meal program and believes the problems will increase if the warming shelter is opened.

Mr. Dye asked if it would help if there was a condition that patrons must be bused out of the area when they leave the shelter in the morning. Mr. MacKinnon said he did not know where they would go but it would be better if they did not come to his business.

Naomi Davidson – 521 W 9th Street – has school-aged children in the area. She said this has moved too quickly for public input and she has concerns with increases in crime that could come with this. She felt this process has moved too quickly.

Mr. Dye asked what time the bus picks up her child and other children in the area. Ms. Davidson said children start to line up as early as 7:20 A.M. or 7:30 A.M.

Mr. Dye asked if she could think of a condition that would alleviate her concerns. He suggested having a phone number of someone to call with concerns. Ms. Davidson said that would be helpful. She added if the staffing plan included providing a presence in the area that would be good.

Mr. Hickok asked if it would help if people were let out later in the morning. Ms. Davidson had heard of that idea but did not support ‘detaining’ people. Rather, she would prefer to see a more robust and community-focused plan.

Mr. Pedersen asked what time school starts at Harborview. Ms. Davidson said the first bell is at 7:50 A.M. but buses and children walking arrive earlier than that. Children attending DZ school are at the bus stop by 7:30 A.M.

Mr. Winchell asked if it would empower the people in the area if there was a phone number to contact staff with concerns and to report problems with patrons. Ms. Davidson said it would be helpful.

At Ease 8:47 P.M. – 8:57 P.M.

ADDITIONAL APPLICANT COMMENTS – Ms. Lawfer thanked the public for their comments and said she wants to make sure people understand that it is important to keep a dialogue with the neighbors. Pastor Perkins said she agrees that it would be better to have a complete program but this is what they can do now. She added from her experience, the perception of threat is usually more than the actual threat. People utilizing a shelter are more likely to be mistreated than to mistreat. She thanked the public for their comments.

COMMISSIONER QUESTIONS

Mr. Winchell asked Pastor Perkins if she would be willing to provide a telephone or other contact option for neighbors to report concerns. Pastor Perkins said she would be and said they invite feedback at warmingshelter.org. Email addresses and direct phone numbers, including her cell phone number can also be found at the website.

Ms. Cole asked if patrons would have to stay overnight or would they have the option to come and go. Pastor Perkins said they would be required to stay. If they left, they would not be invited back until the next night the shelter is open.

Mr. Arndt asked if people would be allowed to consume alcohol on premises. Pastor Perkins said use or consumption of any intoxicating substances would not be allowed. Mr. Arndt asked if there had been any thought given to them operating out of the JACC facility. Pastor Perkins said they did not approach that at all. It was her understanding that the JACC is unavailable.

Mr. Hickok asked if they could address the issue of food container litter. Pastor Perkins said their food pantry program does not distribute food in to-go containers. The planned morning meals would be something like oatmeal or a nutrition bar and coffee.

Mr. Alper asked about the relationship between JPD and the proposed shelter. He wanted to know where the shelter perceived their perimeter of responsibility to be. Pastor Perkins said she would love to have staff on the street and at the bus stops but currently they do not have the

staff for that. She added that they also need to respect people's rights to be on public streets and bus stops and not be followed.

Mr. Alper asked what she foresees for hiring staff. Pastor Perkins said she expects it to be harder to hire than in the past but they do have interested parties ready to interview already.

Mr. Winchell asked if it would be proper protocol to leave a large garbage can near the entry/exit point of the facility. Pastor Perkins thought that was a good idea and said they will implement that.

COMMISSIONER QUESTIONS FOR STAFF

Mr. Dye asked if the applicant was required to obtain a nonconforming certificate for parking and other nonconforming aspects in order to apply for the permit. Ms. Eddins said they did not.

Mr. Pedersen asked if the permit was approved, would it run with the land? Ms. Eddins confirmed that it would unless the PC conditioned an expiration date. She suggested a closure date around May 1 and resuming around November 1.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2021 0011. Adding the following 6 conditions:*

4. *Prior to opening the facility exterior security cameras must be installed and functional.*
5. *The facility operating start time will not be before 9:00 P.M. and will end by 6:30 A.M. the next day.*
6. *The facility can operate November 1 through May 1.*
7. *When the facility is operating there must be a minimum of two staff present at all times*
8. *The permit will expire May 1, 2022.*
9. *The facility will provide a contact number to the surrounding neighbors that will actively be answered between the hours of 7:00 P.M. and 9:00 A.M. on the days that the cold weather emergency shelter is operating. The intent of this condition is to provide a way for the CWES to respond to issues as they occur in the surrounding area.*

Mr. Dye spoke to his motion saying there is a need to provide this shelter as soon as possible. He explained each of the conditions:

4. *Prior to opening the facility exterior security cameras must be installed and functional.*

The applicant has already said they will do this. Mr. Dye felt it would help to alleviate neighbor concerns if it were a required condition

5. *The facility operating start time will not be before 9:00 p.m. and will end by 6:30 A.M. the next day.*

This allows for flexibility beyond the minimum standard opening time but he feels the shelter should close by 6:30 A.M.

MOTION TO AMEND: *by Mr. Alper to change the morning end time to 7:00 A.M.*

Mr. Alper felt people are less likely to misbehave when there are other people around. He felt 6:30 A.M. is too early.

Mr. Winchell thought it would be appropriate to include flexibility in the case of weather fluctuations.

Mr. Hickok asked if Mr. Alper would be amenable to changing it to 8:00 A.M. Mr. Alper was not.

Mr. LeVine said he would not support the amendment as he felt the 6:30 A.M. closing time was appropriate.

Roll Call Vote:

Yes: Alper, Hickok,

No: Winchell, Pedersen, Cole, Arndt, Dye, LeVine

Motion to Amend Failed 2-6 on roll call

MOTION TO AMEND: *by Mr. Winchell to allow for the facility to remain open subject to extreme weather conditions.*

Ms. Cole spoke against the motion to amend saying there are other public facilities available for people to go into during the day and the purpose of this facility is to provide shelter at night when there are not other options. Mr. Winchell said he was not aware of other facilities open as early as 6:30 a.m. and reiterated his concern with people being sent out into extreme weather conditions.

Roll Call Vote:

Yes: Winchell, Alper,

No: Hickok, Pedersen, Cole, Arndt, Dye, LeVine

Motion to Amend Failed 2-6 on roll call

6. Facility can operate November 1 through May 1

Mr. Dye spoke to this saying Ms. Eddins had suggested these dates and he felt this gives guidelines as to when the facility will be operational.

7. When the facility is operating a minimum of two staff must be present at all times

Mr. Hickok asked if someone called in sick, would the shelter have to close for the night. Mr. Dye said yes. Ms. Eddins added the Pastor and her husband had said they would staff the facility if need be.

8. The permit will expire May 1, 2022.

Mr. Dye said this process has felt rushed but it is a life and safety issue. This gives an opportunity for the facility to open and the applicant has ample time between now and May 1 to see what modifications are in order and they can apply for those modifications when they apply for an extension.

Mr. Alper said he understood it to be a two-year contract and he is uncomfortable with forcing it to end in six-months. He suggested May 2023. Ms. Cole opposed an expiration date altogether. Mr. Winchell concurred with Mr. Alper. Mr. Arndt spoke to support Mr. Dye's motion for May 2022. Mr. Arndt felt allowing a test run period through May 2022 would also help with the public acceptance. Mr. Dye said that given the emergency nature of this, it is the fastest he has ever seen something go through the process and that is why he thinks the 6-month window is appropriate. Mr. Hickok agreed with Mr. Alper and Mr. Winchell that six-months is not long enough. Ms. Maclean clarified this application has met the minimum requirements for public notice. It was fast but did meet all requirements. Mr. Pedersen spoke in support of the motion. Mr. LeVine also had concerns with a short period but considering the life and death importance of the warming shelter, it is appropriate.

MOTION TO AMEND: *by Mr. Alper to make the expiration date May 1, 2023.*

Roll Call Vote:

Yes: Alper, Winchell, Hickok,

No: Pedersen, Cole, Arndt, Dye, LeVine

Motion to Amend Failed 3-5 on roll call

9. The facility will provide a contact number to the surrounding neighbors that will actively be answered between the hours of 7:00 P.M. and 9:00 A.M. on the days that the cold weather emergency shelter is operating. The intent of this condition is to provide a way for the CWES to respond to issues as they occur in the surrounding area.

Ms. Cole asked what happens if they are not open until 11:00 P.M. Mr. Dye said he picked the times based on two hours before the earliest the shelter could open and 9 am. He also said the condition does not dictate what will have to happen. Rather, it will give the community a point of contact. Ms. Cole said this would be burdensome because it would require them to pay somebody to be available to answer the phone during times outside of their operating hours. Mr. Hickok thought this could be alleviated by providing a website or email access Mr. Arndt said he was not in favor of the motion because he did not see how the staff could be expected to police the neighborhood when it is required that they be present at the facility at all times.

MOTION TO AMEND: *by Mr. Winchell to change the time in the condition to match the hours of operation.*

Mr. Winchell felt making the times in the condition match the hours of operation would mean staff would be on-site and able to communicate directly with people. Mr. Dye spoke against the motion saying that the public comment demonstrated concerns about what happens before and after the hours of operation. Mr. Winchell felt the phones would be answered during operating hours and if there was an issue outside of those times, JPD would be available.

Roll Call Vote:

Yes: Winchell, Hickok, Pedersen, Cole, Alper

No: Arndt, Dye, LeVine

Motion to Amend Passed 5-3 on roll call

MOTION TO AMEND: *by Mr. Alper to amend Condition #9 to add “and will remain active in social media forums widely used by neighborhood members.”*

Mr. Alper spoke to his motion saying he thinks it is important that they stay plugged-in in the way that the community generally communicates with each other.

Ms. Cole spoke against the motion to amend saying it is burdensome. Mr. LeVine agreed with Ms. Cole.

Roll Call Vote:

Yes: Alper, Hickok, Winchell

No: Cole, Arndt, Pedersen, Dye, LeVine

Motion to Amend Failed 3-5 on roll call

MOTION AS AMENDED: *by Mr. Dye to accept staff’s findings, analysis and recommendations and approve USE2021 0011. Adding the following 6 conditions:*

- 4. Prior to opening the facility exterior security cameras must be installed and functional.*
- 5. The facility operating start time will not be before 9:00 P.M. and will end by 6:30 A.M. the next day.*
- 6. The facility can operate November 1 through May 1.*
- 7. When the facility is operating there must be a minimum of two staff present at all times.*
- 8. The permit will expire May 1, 2022.*
- 9. The facility will provide a contact number to the surrounding neighbors that will be actively answered during operating hours on the days that the cold weather emergency shelter is operating. The intent of this condition is to provide a way for the CWES to respond to issues as they occur in the surrounding area.*

The amended motion passed with no objection.

At ease 9:58 P.M. – 10:09 P.M.

SMP2021 0005: A subdivision of a 20.49-acre lot into two lots to facilitate ownership transfer of a nonprofit wrestling center at 3321 Mendenhall Loop Road. The proposed wrestling center lot is 0.94 acres.

Applicant: TDLH, LLC

Location: 3221 Mendenhall Loop Road

Mr. Arndt recused himself as he is the applicant.

MOTION: *by Mr. LeVine to continue SMP2021 0005 to the next Regular or Special Planning Commission meeting*

The motion passed with no objection.

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and DENY the requested preliminary plat for the subdivision of a 20.49 acre lot into two lots to facilitate ownership transfer of a nonprofit wrestling center at 3221 Mendenhall Loop Road in a D15 zone.

~~If the Commission finds differently than the Director and approves this preliminary plat, the applicant could submit construction plans, and the final plat.~~

~~Recommended conditions for an approval include the following STANDARD conditions:~~

- ~~1. Prior to approval of the final plat, Certification from the CBJ Treasurer showing that all real property taxes and special assessments levied against the property for the year of recording have been paid.~~
- ~~2. Prior to approval of a final plat, the applicant shall submit a complete set of construction plans for all required improvements to the Community Development Department. The Director of Engineering & Public Works will review for compliance with CBJ 49.35.140.~~
- ~~3. Prior to approval of the final plat, the applicant has constructed all required improvements or provided a financial guarantee in accordance with CBJ 49.55.010.~~
- ~~4. Prior to approval of the final plat, the developer shall submit a final drainage plan for CBJ Engineering & Public Works approval. An Alaskan licensed engineer must prepare the plan [CBJ 49.35.510].~~

~~Recommended conditions for an approval include the following ADDITIONAL conditions:~~

- ~~5. Prior to submittal of the final plat, a plan showing 30 percent vegetative cover (at a minimum) shall be submitted for approval by the Commission.~~
- ~~6. Prior to submittal of the final plat, a construction plan will be submitted showing a barrier to vehicular traffic no less than 2 feet high shall be constructed along the front~~

~~property line to define the driveway(s). This barrier may consist of a vegetated berm, fence, planter box, or other structures/improvements approved by the Community Development Department. Advisory: Fences over six feet tall require a building permit prior to construction. No sight obscuring fence more than four feet tall may be constructed closer than 20 feet from the edge of a traveled way, and on corner lots, sight obscuring fences are limited to three feet in height within 20 feet of intersecting traveled ways [CBJ §49.25.430(4)(L)]. The construction plan will be approved by the Commission.~~

- ~~7. (If easement access is approved): Prior to submittal of the final plat, an access easement meeting the requirements of 49.35.210(b)(3) must be drafted on the draft plat and submitted for review and approval by the Commission.~~
- ~~8. (If easement access is approved). Prior to submittal of the final plat, an access and maintenance agreement meeting the requirements of 49.35.210(b)(3) will be drafted and submitted for review and approval by the Community Development Department.~~
- ~~9. Prior to submittal of the final plat, a construction plan will be submitted showing sufficient exterior lighting must be provided at the intersection of the proposed right-of-way and Mendenhall Loop Road to permit safe pedestrian access. Lighting will conform to CBJ Standard 118 unless another standard is approved. The construction plan will be approved by the Community Development Department.~~

XI. **OTHER BUSINESS** – None

XII. **STAFF REPORTS** – None

XIII. **COMMITTEE REPORTS** – None

XIV. **LIAISON REPORTS** – None

XV. **CONTINUATION OF PUBLIC PARTICIPATION ON NON-AGENDA ITEMS** – None

XVI. **PLANNING COMMISSION COMMENTS AND QUESTIONS** – None

XVII. **EXECUTIVE SESSION** – None

XVIII. **ADJOURNMENT** – 10:14 P.M.

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

USE2016 0006: A Marijuana Retail License 5-Year Renewal for Rainforest Farms (USE2021 0022) -
WITHDRAWN

AGENDA ITEM:

Case No.: USE2016 0006
Applicant: Blissful Awakenings, LLC
Location: 201 Seward Street
Proposal: A Marijuana Retail License 5-Year Renewal for Rainforest Farms (USE2021 0022)

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year Renewal. The permit would allow the renewal of a five-year marijuana retail Special Use Permit without amended conditions.

ATTACHMENTS:

	Description	Upload Date	Type
▣	Staff Report for USE2016 0006 (USE2021 0022)	12/7/2021	Staff Report



PLANNING COMMISSION STAFF REPORT
SPECIAL USE PERMIT RENEWAL USE2021 0022
HEARING DATE: DECEMBER 14, 2021

(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

DATE: December 7, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Joseph Meyers, Planner 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a five-year renewal of a Special Use Permit (USE2016 0006) for a marijuana retail facility.

STAFF RECOMMENDATION: Approval

KEY CONSIDERATIONS FOR REVIEW:

- Notice of Decision was issued on the original Special Use Permit USE2016 0006 on May 10, 2016.
- Rainforest Farms closed and State Marijuana License #10500 and CBJ Marijuana License MJL-003 expired.
- One major modification was made to the Special Use Permit through USE2020 0016 to allow on-site consumption.
- The retail facility passed inspections from FY2017 through FY2021.
- A new owner is seeking to open a marijuana retail business with new licensing from CBJ and state, and use the existing Special Use Permit.

GENERAL INFORMATION	
Property Owner	Goldstein Improvement Company
Applicant	Blissful Awakenings LLC
Property Address	201 Seward Street
Legal Description	Juneau Townsite Block 4, Lot 1, 2, & 7 FR
Parcel Number	1C070A040010
Zoning	Mixed use (MU)
Land Use Designation	Traditional Town Center (TTC)
Lot Size	12,282 square feet
Water/Sewer	CBJ
Access	Second Street
Existing Land Use	Commercial miscellaneous
Associated Applications	USE2016 0006; USE2020 0016
Type of Facility	Retail; on-site consumption

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

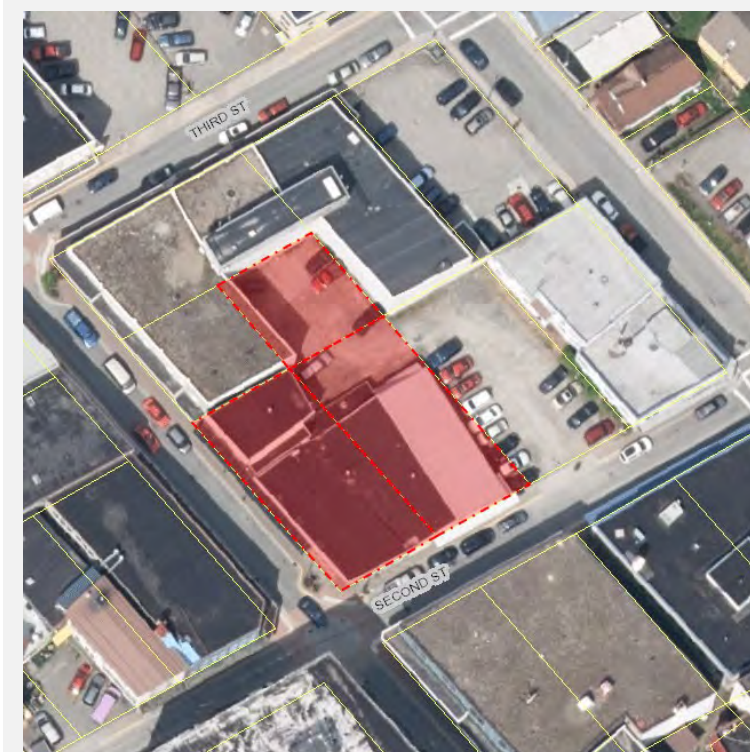
Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - o 49.65.1245
 - o 49.15.330
 - o 49.80

The Commission shall hear and decide the case per 49.65.1200 Marijuana Establishment Permit. It is the purpose of this article to establish reasonable regulations that allow for the operation of marijuana establishments within the City and Borough in a manner that promotes public health, safety, and general welfare. It is not the intent of this chapter to authorize anything specifically prohibited by state law.

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES

Northwest (MU)	Commercial office
Northeast (MU)	Commercial office
Southwest (ROW)	Seward Street
Southeast (ROW)	Second Street

SITE FEATURES

Anadromous	None
Flood Zone	Zone X
Hazard	No known
Hillside	None
Wetlands	None
Parking District	PD-1; Fee-in-Lieu
Historic District	None
Overlay Districts	ADOD

BACKGROUND INFORMATION

Project Description – The application is for a five-year renewal of the Special Use Permit for the former Rainforest Farms retail facility at 201 Seward Street. The new retail facility is owned by Blissful Awakenings, LLC and doing business as Rainforest Farms Juneau.

On September 8, 2020, a modification was approved to this facility through USE2020 0016 by the Commission. This modification allows the facility to operate with on-site consumption.

Background – The Planning Commission approved a Special Use Permit (USE2016 0006), effective May 10, 2016, to allow the marijuana retail facility in the MU zoning district with the following conditions:

1. The two lower eastern facing windows and all southeast facing doors and windows shall be shielded with an opaque glass or material that will prevent product from being viewed from outside the premises.
2. Lines waiting for entrance into the retail marijuana establishment may not obstruct the public right-of-way.
3. All windows and doors to the retail establishment shall be armed with an alarm.
4. Each door shall have either a grade 2 lock with deadbolt or grade 1 lock.
5. Charcoal filters shall be replaced no less than once annually or according to manufacturer specifications, whichever is sooner.
6. Security cameras shall have an unobstructed view of each doorway and loading zone.
7. Security cameras shall have an unobstructed view of the regular activity without sight blockage from fixtures or other displays in the retail area of the establishment.
8. Security cameras shall have a battery back-up system installed capable of recording for 24 hours; all batteries shall be replaced once annually.
9. Prior to the issuance of a Certificate of Occupancy, all security devices shall be inspected to ensure they

are fully operational.

10. This Conditional Use Permit expires if the applicant does not receive a state marijuana license approval within 18 months.
11. The applicant has notice of pending legislation (Ordinance 2015-38) that may affect this approval. The applicant will comply with all requirements that Ordinance 2015-38 imposes when it is passed even if more restrictive than the approved conditions of USE2016 0006. If the Director determines that Ordinance 2015-38 imposes more substantial submittal requirements and/or more restrictive approval requirements than what was analyzed or imposed by this permit the Director may schedule USE2016 0006 for further review by the Planning Commission within three months of the adoption of Ordinance 2015-38.

A modification was approved for on-site consumption through USE2020 0016 with the following additional conditions:

1. All waste containing marijuana product shall be stored in a locked enclosure until transported to the CBJ landfill.
2. Prior to operation the applicant must receive the required State endorsement; by approval of this modification of this Special Use Permit, the Planning Commission does not take a position as to whether the application to the State satisfies the requirements of the endorsement, including if the facility is housed in a freestanding building.

ANALYSIS

CBJ 49.65.1220 establishes the requirements for this renewal.

1. Licenses shall automatically renew on January 1, conditional upon the timely remittance of the annual license fee.
2. No outstanding corrective orders or enforcement actions.
3. Proof of inspection.
4. In compliance with the applicable Conditional Use Permit.

Requirement: Has the applicant applied for and remitted the fee for renewal of a Special Use Permit timely?

Analysis: The application contains the information necessary to conduct full review of the proposed permit renewal. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

Requirement: At least ten days prior to the hearing, notice of the renewal request must be mailed to adjacent property owners. At least two days prior to the hearing, a general notice shall be printed in the newspaper of general circulation in the municipality.

Analysis: Yes. The Public Notice requirements of Title 49 have been met for this renewal.

Requirement: Conditions contained in the Special Use Permit cannot be changed unless the commission amends or adds conditions to ensure compliance with this title. Have the conditions been changed to ensure compliance with Title 49?

Analysis: Conditions placed on the Special Use Permit have not been changed.

PUBLIC COMMENTS

CDD conducted a public comment period between November 24, 2021 and December 14, 2021. Public notice was mailed to property owners within 500 feet of the proposed development. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. Public comments submitted at time of writing this staff report can be found in Attachment B.

FINDINGS

Special Use Permit Renewal Criteria – Per CBJ 49.15.250, Development Permit Extension, the Director makes the following findings on the criteria for granting the requested Special Use Permit extension:

1. *Was the application for the requested Special Use permit renewal complete and received timely?*

Analysis: No Further analysis required.

Finding: Yes. The application contains the information necessary to conduct full review of the proposed permit renewal. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. *Have there been any corrective or enforcement issues for this facility in the past five years?*

Analysis: No further analysis required.

Finding: No. There have been no enforcement of corrective issues for this facility in the last five years.

3. *Have all inspections been passed?*

Analysis: No further analysis required.

Finding: Yes. All conducted inspections have been passed.

4. *Are State and CBJ marijuana licenses being maintained current?*

Analysis: The State license is expired. The CBJ license is current until December 31, 2021.

Finding: No. The facilities are not currently operating. Ownership of the facility was transferred in 2021, and the new owner is seeking new State and CBJ licenses through this Special Use Permit.

5. *Have any modifications been made to the Special Use Permit?*

Analysis: A modification to the Special Use Permit, USE2020 0016, was approved by Planning Commission to allow on-site consumption of cannabis products.

Finding: Yes. One major modification was made to the existing approval in 2020.

6. *Have the conditions of the Special Use Permit been met and maintained?*

Analysis: No further analysis needed.

Finding: Yes. Prior to the ownership change, conditions of the Special Use Permit were met and maintained. The current ownership is meeting and maintaining the required conditions of the Special Use Permit.

RECOMMENDATION

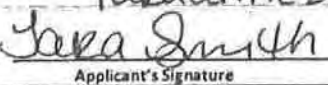
Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit five-year Renewal. The permit would allow the renewal of a five-year marijuana retail Special Use Permit without amended conditions.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Supporting Documents
Attachment C	Public Comments
Attachment D	Public Notice

JUNEAU DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

To be completed by Applicant	PROPERTY LOCATION	
	Physical Address 201 Seward Street Juneau AK 99801	
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) Juneau Townsite BL 4 LT 1, 2 & 7 FR	
	Parcel Number(s) 1C070A040010	
	This property located in the downtown historic district	
	This property located in a mapped hazard area, if so, which _____	
	LANDOWNER/ LESSEE	
	Property Owner Goldstein Improvement Company	Contact Person Daniel Glidmann
	Mailing Address 130 SEWARD ST STE 001 JUNEAU AK 99801	Phone Number(s) 907 321 0790
	E-mail Address glidmann@gmail.com	
LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits		
I am (we are) the owner(s) for lessee(s) of the property subject to this application and I (we) consent as follows: This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.		
X	 Landowner/Lessee Signature	11/5/2021 Date
X	 Landowner/Lessee Signature	 Date
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.		
APPLICANT If the same as OWNER, write "SAME"		
Applicant Blissful Awakenings LLC	Contact Person Tara Smith	
Mailing Address PO Box 33115 Juneau AK 99803	Phone Number(s) 907 209 2787	
E-mail Address taraanne2888@gmail.com		
X	 Applicant's Signature	11/05/2021 Date of Application

DEPARTMENT USE ONLY BELOW THIS LINE

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number

USE 21-22

Intake Initials

JPM

Date Received

11/5/2021



ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant

PROJECT SUMMARY	
Five-year renewal of a Marijuana Special Use Permit	
TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED	
☐ Accessory Apartment – Accessory Apartment Application (AAP) ☒ Use Listed in 49.25.300 – Table of Permissible Uses (USE) Table of Permissible Uses Category: <u>2.300</u>	
IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL? ☒ YES – Case # <u>2016 0006</u> ☐ NO	
UTILITIES PROPOSED	
WATER: ☒ Public ☐ On Site	SEWER: ☒ Public ☐ On Site
SITE AND BUILDING SPECIFICS	
Total Area of Lot <u>12.282</u> square feet	Total Area of Existing Structure(s) _____ square feet
Total Area of Proposed Structure(s) <u>N/A</u> square feet	
EXTERNAL LIGHTING	
Existing to remain ☐ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures	Proposed ☐ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures
ALL REQUIRED DOCUMENTS ATTACHED	
☐ Narrative including: ☒ Current use of land or building(s) ☒ Description of project, project site, circulation, traffic etc. ☒ Proposed use of land or building(s) ☒ How the proposed use complies with the Comprehensive Plan	
☐ Plans including: ☒ Site plan ☒ Floor plan(s) ☒ Elevation view of existing and proposed buildings ☐ Proposed vegetative cover ☒ Existing and proposed parking areas and proposed traffic circulation ☒ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas)	
<i>If this is a modification or extension include:</i> ☒ Notice of Decision and case number ☒ Justification for the modification or extension ☒ Application submitted at least 30 days before expiration date	

DEPARTMENT USE ONLY BELOW THIS LINE

ALLOWABLE/CONDITIONAL USE FEES		Check No.	Receipt	Date
	Fees			
Application Fees	\$ 250.00			
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ 50.00			
Pub. Not. Sign Deposit	\$ 100.00			
Total Fee	\$ 400.00			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A - Application Packet

Case Number	Date Received
USE-21-22	11/5/21

**Project Description and Plan Narrative
Blissfull Awakenings, LLC
Marijuana Retail Store with Onsite Consumption
216 2nd Street
Juneau, AK**

GENERAL INFORMATION

Applicant:	Blissfull Awakenings, LLC
Property Owner:	Goldstein Improvement Co.
Property Address:	216 2nd Street
Legal Description:	Juneau Townsite BL 4 LT 1, 2 & 7 FR
Parcel Code Number:	1-C07-0-A04-001-0
Site Size:	12,282 Square feet
Comprehensive Plan Future Land Use Designation:	Traditional Town Center (TTC)
Zoning:	Mixed Use (MU)
Utilities:	CBJ Water & Sewer
Access:	Second Street
Existing Land Use:	

Request: I am the new owner of the retail store front, Rainforest Farms Juneau. In accordance with State and local laws, I would like to apply for a conditional use permit for the purposes of a retail marijuana store with onsite consumption. *renewal*

Uses of Premises: Marijuana Retail Store with onsite consumption
Lease Holder: Blissfull Awakenings, LLC
DBA: Rainforest Farms Juneau

Site/Project Information:

- Area 1232 Sq Ft
- Accessibility A2 occupancy
- Separations Adjacent (a 2) Subway Restaurant, Adjacent "B" Business.
- Zoning District Mixed Use
- Building Height 18ft
- Occupancy 50 People
- Previous Known Permits BLD 2005 00051

Scope:

I am proposing and planning to use this space for both retail and onsite consumption. A non load bearing wall will be added to separate the onsite-consumption area from the retail area. Mostly aesthetics changes will be made to the retail and onsite consumption area aspect of the operation. There will be security cameras added to premises to cover areas needed.

An additional wall and a door will create the separate onsite consumption area. Security doors will separate both retail and consumption areas. Smoking or vaping will not be allowed.

We have identified the neighborhood and found that this location meets all state regulations and current zoning ordinances. We have identified all school, churches, and daycare facilities and have found that this location is out of site and is outside of the buffer required by the State of Alaska.

Construction : A simple wall will be added near the entrance of the facility to separate the consumption area from retail. Security Doors will be added to appropriate access points to separate licensed areas as well as restricted access areas.

Hours of operation : This operation will be open for business from 8am-10pm, 7 days per week. Most of the businesses will be done during the daytime during regular business hours.

Odor management : To ensure total odor air filtration, there are several important factors to consider. We will be using a carbon grade RC-48

filter for odor filtration. The RC-48 carbon is effective for the filtration of organic particles and other airborne materials. We will be using the pre-existing 3 (Phresh® Filter 10" x 39") of these filters, one in each room. This set-up overly satisfies the CFM units needed to effectively pass air through the filters and remove odors. (see attached diagram)

Waste management : Excess waste will be disposed of in the landfill. Our garbage will be in a locked room until pick-up. Cannabis related products will be disposed of according to State regulations.

Unsalable products and unconsumed products will be disposed of according to state regulations

Once unsalable product is recorded in a waste log, it can then be moved out of the restricted access and stored in the locked garbage area until disposed of properly.

We will give the board at 3 days notice in the marijuana inventory tracking system required under AS 3 AAC 306.730 before making the waste unusable and disposing of it.

Trash will be located in a locked area outside of premises and disposed of on a bi-weekly basis.

Security : (see attached security diagram). Video surveillance will cover all restricted access areas. Cameras will be operating 24 hours per day, 7 days per week, both inside and outside of the premises as required by State regulations.

Surveillance recording equipment and video surveillance records will be housed in the designated, locked, and secured safe room area.

Exterior cameras will face at least 25' out past the exterior wall. Security footage will be stored on site for 40 days in a locked and secure area where video surveillance recording equipment and records will be housed and stored. This area will only be accessible only to authorized personnel, law enforcement, or an agent of the board.

The video will be archived in a format that does not permit alteration of the recorded image, so that the images can readily be authenticated. All video surveillance will clearly and accurately display the time and date of recording.

A copy of video footage will be saved off-site on backed-up on a monthly basis. Footage will be available upon request.

A camera will be placed in the security room where the point of sale of product will take place.

There will be 1 primary access security door that will allow entrance to the retail restricted access areas. In the event that a break in occurs, both landowner, tenants, and JPD will be notified accordingly. Cash deposits will be held in a safe along with product in a secured room. This safe room will also hold business records.

Exterior motion lighting will be installed to facilitate surveillance in addition to the exterior lighting that is already in place. Exterior motion lights are placed at each corner of the premises and facing outward to detect motion within 25' of the building exterior.

A cellular phone will be kept on site for emergency calls and panic situations. In the event that there is an emergency, a phone will be available to employees and guests to make emergency phone calls.

Employees will be required to be trained on site specific security protocols and procedures prior to employment.

Employees will be required to be trained to administer specific consumption protocols and procedures prior to employment.

An identification badge will be displayed and worn by each licensee, employee, or agent while on the premises.

Diversion of Product : Policies and procedures for preventing diversion of marijuana or marijuana product will include:

- RFID tags on all products and plants.
- A marijuana inventory tracking system designed by tracking systems, capable of sharing information with the system the board implements to ensure tracking for the reasons listed above, will be used.
- Products will be stored in a safe for the entire duration while awaiting sale.
- Signed manifest by the buyer of the goods will be kept for on-

site record.

- Sound alarms will be installed.
- Security Systems signs will alert intruders of security measures.
- Lighting both and indoor exterior will allow for product to be monitored sufficiently via video surveillance.

- Products will be locked in a fire resistant safe.
- Access to safe will be limited only to owners and limited staff.
- Signed inventory declarations of products being stored will be accounted for an updated on a daily basis.

- A camera will be placed in the security room where the point of sale of product will take place.

- All marijuana packaged will be weighed on a scale certified in compliance with AS 3 AAC 306.745.

- Marijuana product will be prepared, packaged, and secured for pick-up in child resistant, opaque bags. Bags will have a manifest with tracking and testing information attached at all times.

- Locked containers from purchaser will be required prior to product leaving facility.

- No product will be sold or given possession to anyone without a marijuana handlers card and manifest of transportation, and receipt of product paid.

- Commercial grade locks placed on all doors.

Guest and Visitors : Unescorted members of the public will be prohibited from entering restricted access areas. Guest must be 21 years of age to enter retail store but not the Marijuana product manufacturing facility . Guests will be need to verify ID at the door to ensure they are 21 years of age. Guest will also need to show Identification for each purchase made in addition to being checked at the entrance.

The processes for admitting visitors into and escorting them through restricted access areas will require guests to sign in with name, age,

date and time of entrance and time of exit, name of person escorting visitor and guests' driver's license information. Employee or owner who has Marijuana handlers card will escort visitor at all times. Information will be stored in a locked file cabinet in the safe room for record keeping.

Guests will be required to wear a "visitor pass" connected to a lanyard for the entire duration of the visit.

Employees : We will start with just the owners and 3 employees. Eventually we plan to hire 4-6 full-time employees.

Each employee, or agent who sells, cultivates, manufactures, tests, or transports marijuana or a marijuana product, or who checks the identification of a consumer or visitor, shall obtain a marijuana handler permit from the Marijuana Control Board before being beginning employment.

Two uni-sex bathrooms, and sanitation area will be available for employees and guests.

Employees will be required to be trained on on-site specific security protocols and procedures prior to employment. Employee will be informed on how to handle each specific situation and how to stay safe when it occurs.

A detailed report will be made and saved on-site each time an action has been taken when security has been breached.

Parking : We have 1 parking spaces available to use. Guest and customers may use street parking.

Parking spaces are 8.5' wide by 16' long.

Delivery : Delivery Services will not be made available. Purchaser will be liable for the product after sale is finalised. All product will be tracked and taxed according to State Regulations. Once sale is final, records of the sale for both tax and tracking will be available on premises for inspection when needed.

Neighborhood Harmony : We have identified the neighborhood and found that this location meets all state regulations and current zoning

ordinances. We have identified all school, churches, and daycare facilities and have found that this location is out of site and is outside of the buffer required by the State of Alaska. We have determined that our operations will not negatively affect the operations of surrounding homes or business. Of the immediate areas for consideration are a bank, Subway/Good Vibes, a neighboring restaurants and a few gift shops. Of these businesses, none will be negatively affected by our operation.

Signage : A sign will be placed above the entrance of the building. The sign will be no larger than 24"X24" and will be placed next to the main entrance.

Security signs will be placed on exterior of building to prevent loitering and theft.

Signage required by CBJ ordinances as well as the State of Alaska will be appropriately placed in areas visible to public.

Hand washing signs for employees will be placed in bathroom.

Health and Sanitation : Cleaning of entire retail space will take place daily. We will be using food grade and non-toxic cleaning supplies. After each day, the room will be swept, and mopped. All walls will be wiped down and surface areas will be dusted and washed as well. Documents pertaining to cleaning schedules will be retained and saved for record keeping.

The use of small dehumidifiers will keep the air free of humidity and reduce the amount of mold and bacteria in the room. Properly cleaned carbon filtered ventilation will also allow for further sanitation to take place. Laborers are required to wash hands regularly. Before and after using bathroom as well as before and after leaving work.

Signs encouraging employees to wash hands will be placed in the bathroom and above wash areas.

Utensils and tools will be cleaned as needed to prevent cross contamination.

All food preparation and consumption will follow State DEC regulated guidelines and laws.

On-Site Record Keeping : In addition to standard operating procedures, several items will be stored on-site in a locked file cabinet. These files will be located in the safe room and will be restricted only to certain personnel and authority. Items to be stored on-site include:

- All books and records necessary to fully account for each business transaction conducted for the current year and three preceding calendar years (when applicable); records for the last six months are maintained on the marijuana establishment's licensed premises.
- A current employee list setting out the full name and marijuana handler permit number of each licensee, employee, and agent.
- The business contact information for vendors that maintain video surveillance systems and security alarm.
- Systems for the licensed premises.
- Records related to advertising and marketing.
- A current diagram of the licensed premises including each restricted access area.
- A log recording the name, and date and time of entry of each visitor permitted into a restricted access area.
- All records normally retained for tax purposes.
- Accurate and comprehensive inventory tracking records that account for all marijuana inventory activity from seed or immature plant stage until the retail marijuana or retail marijuana product is sold to a consumer, to another marijuana establishment, or destroyed.
- Transportation records for marijuana and marijuana product as required under 3 AAC 306.750(f).
- Expiration dates of Marijuana Handler Cards for employees.

To prevent these records from being lost or destroyed, a copy of all records will be made and stored off-site after the period of required record retention expires. Copies of records and files will be constantly updated and made in duplicate for the purposes of having back-up copies available when needed.

Other Notes:

- Employees will monitor consumption at all times and limit the number of customers in the onsite consumption area to ensure staff can adequately monitor consumption areas at all times.
- Smoking and Vaping will not be allowed.

- Customers are allowed a maximum of 25 mg of THC per day.
- Customers displaying signs of alcohol use will not be allowed to consume. -Consumption of alcohol will not be allowed on the premises.
- All cannabis products that are consumed must be purchased from this establishment and can only be consumed during the same visit that purchase is made.
- It is not required that products have to be consumed during visit. Unconsumed or unfinished products may be taken to-go as long as they meet state packaging requirements.

Area Features:

North	-	Mixed Use – retail/Canvas Arts/REACH
South	-	Mixed Use – retail/office space/Wells Fargo
East	-	Mixed Use – commercial/retail/residential
West	-	Mixed Use – retail/office space/Subway

Vicinity Map





Community Development

City & Borough of Juneau • Community Development
155 S. Seward Street • Juneau, AK 99801
(907) 586-0715 Phone • (907) 586-4529 Fax

PLANNING COMMISSION

NOTICE OF DECISION

Date: May 11, 2016

File No.: USE2016 0006

Rainforest Farms, LLC
PO Box 21714
Juneau, AK 99802

Application For: Conditional Use Permit for a marijuana retail establishment in the Mixed Use zoning district.
Legal Description: Juneau Townsite Block 4 Lot 1, 2 & 7 Fraction
Property Address: 216 2nd Street
Parcel Code No.: 1-C07-O-A04-001-0
Hearing Date: May 10, 2016

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated April 28, 2016 and approved the development of a marijuana retail establishment in the Mixed Use zoning district to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. The two lower eastern facing windows and all southeast facing doors and windows shall be shielded with an opaque glass or material that will prevent product from being viewed from outside the premises.
2. Lines waiting for entrance into the retail marijuana establishment may not obstruct the public right-of-way.
3. All windows and doors to the retail establishment shall be armed with an alarm.
4. Each door shall have either a grade 2 lock with deadbolt or grade 1 lock.
5. Charcoal filters shall be replaced no less than once annually or according to manufacturer specifications, whichever is sooner.
6. Security cameras shall have an unobstructed view of each doorway and loading zone.
7. Security cameras shall have an unobstructed view of the regular activity without sight blockage from fixtures or other displays in the retail area of the establishment.
8. Security cameras shall have a battery back-up system installed capable of recording for 24 hours; all batteries shall be replaced once annually.
9. Prior to the issuance of a Certificate of Occupancy, all security devices shall be inspected to ensure they are fully operational.
10. This CUP expires if the applicant does not receive a state marijuana license approval within 18 months.
11. The applicant has notice of Attachment A - Application Packet that may affect this approval. The

Rainforest Farms, LLC.
File No.: USE2016 0006
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applicant will comply with all requirements that Ordinance 2015-38 imposes when it is passed even if more restrictive than the approved conditions of USE2016 0006. If the Director determines that Ordinance 2015-38 imposes more substantial submittal requirements and/or more restrictive approval requirements than what was analyzed or imposed by this permit the Director may schedule USE2016 0006 for further review by the Planning Commission within three months of the adoption of Ordinance 2015-38.

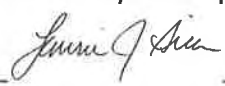
Attachments: April 28, 2016 memorandum from Chrissy Steadman, Community Development, to the CBJ Planning Commission regarding USE2016 0006.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ §01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ §01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ §49.20.120).

Effective Date: The permit is effective upon approval by the Commission, May 10, 2016.

Expiration Date: The permit will expire 18 months after the effective date, or November 10, 2017 if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.

Project Planner:	 _____ Chrissy Steadman, Planner Community Development Department	_____ Ben Haight, Chair Planning Commission
	 _____ Filed With City Clerk	_____ May 17, 2016 Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.



Community Development

City & Borough of Juneau • Community Development
155 S. Seward Street • Juneau, AK 99801
(907) 586-0715 Phone • (907) 586-4529 Fax

DATE: April 28, 2016

TO: Planning Commission

FROM: Chrissy Steadman, Planner *Chrissy Steadman*
Community Development Department

FILE NO.: USE2016 0006

PROPOSAL: Conditional Use Permit for a marijuana retail establishment
in the Mixed Use zoning district.

GENERAL INFORMATION

Applicant: Rainforest Farms, LLC

Property Owner: Goldstein Improvement Co.

Property Address: 216 2nd Street

Legal Description: JUNEAU TOWNSITE BL 4 LT 1, 2 & 7 FR

Parcel Code Number: 1-C07-0-A04-001-0

Site Size: 12,282 square feet

**Comprehensive Plan Future
Land Use Designation:** Traditional Town Center (TTC)

Zoning: Mixed Use (MU)

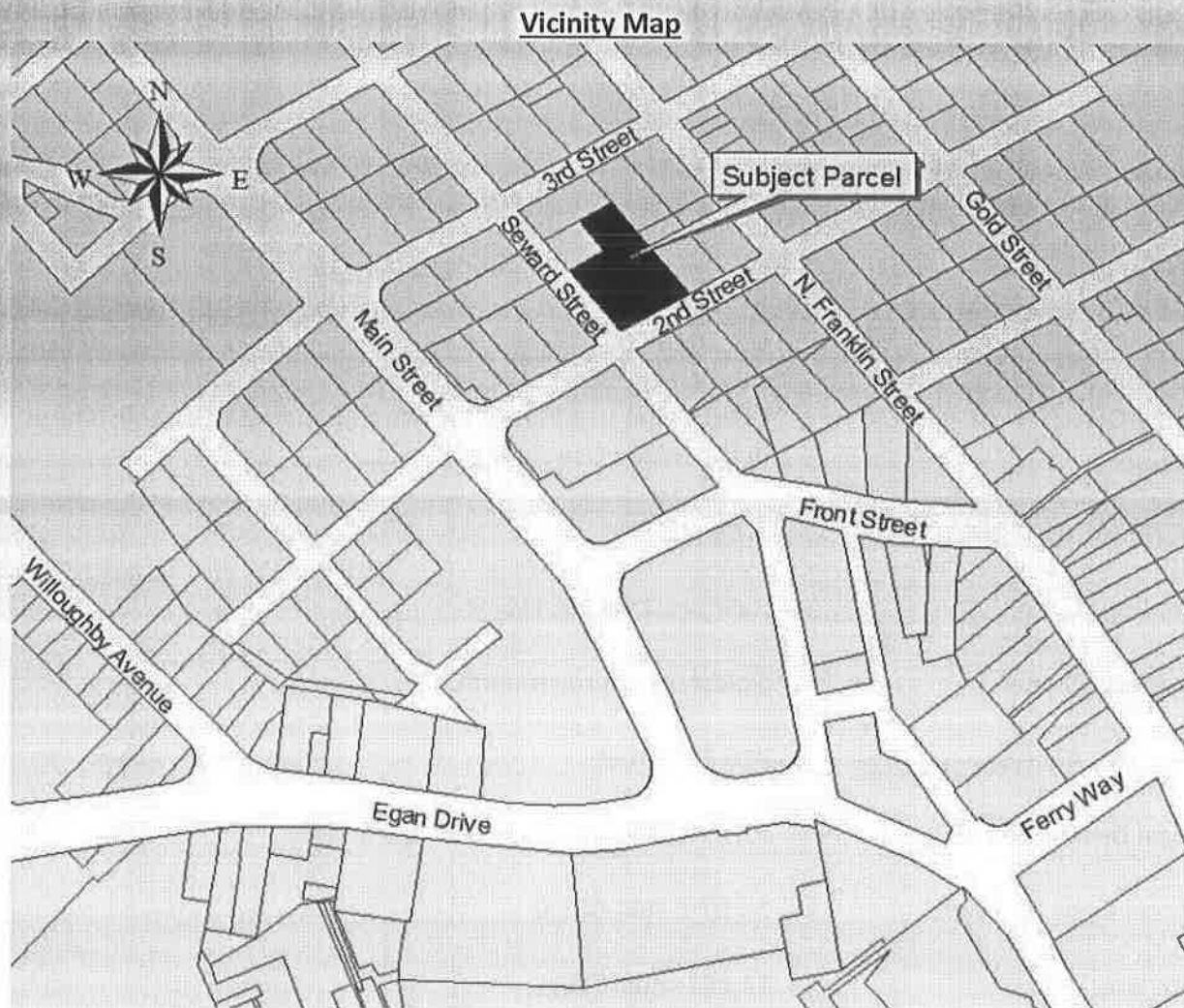
Utilities: CBJ water & sewer

Access: Second Street

Existing Land Use: Commercial building

Surrounding Land Use:

North - Mixed Use – Retail/Canvas Arts/REACH
South - Mixed Use – Retail/Office Space/Wells Fargo
East - Mixed Use – Commercial/Retail/Residential
West - Mixed Use – Retail/Office Space/Subway



ATTACHMENTS

- Attachment A: Conditional Use Permit Application
- Attachment B: Narrative
- Attachment C: Floor Plan
- Attachment D: As-Built Survey
- Attachment E: Public Notice

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PROJECT DESCRIPTION

The applicants request a Conditional Use permit for the development a marijuana retail store in the Mixed Use zoning district. The applicants are also proposing to conduct marijuana product manufacturing on site. That Use will require a separate conditional use permit application. The applicants have an approved conditional use permit for cultivation with USE2016 0005 and intend to stock the retail store with marijuana they produce at their Lemon Creek cultivation facility. Eventually the applicants intend to sell products from other cultivators and product manufacturers.

BACKGROUND

In November 2015, the Assembly passed Ordinance 2015-39, amending CBJ 49.25.300, Table of Permissible Uses (TPU), to include marijuana uses. Marijuana uses allowed by the TPU include marijuana cultivation, marijuana product manufacturing, marijuana testing, and marijuana retail. Marijuana retail is allowed in the Rural Reserve, Light Commercial, General Commercial, Mixed Use, Mixed Use 2, Waterfront Commercial, Waterfront Industrial and the Industrial zoning districts with an approved Conditional Use permit. Of the four marijuana uses allowed in the CBJ, marijuana retail is the only one allowed with an approved Conditional Use permit in all non-residential zoning districts.

Ordinance 2015-38, establishing special use provisions for marijuana establishments, has not yet been passed Assembly. It was considered by the Assembly Committee of the Whole at their April 4, 2016 meeting and is scheduled for a public hearing before the Assembly on May 2, 2016. Ordinance 2015-38 contains Conditional Use Permit application requirements specific to marijuana uses, odor management standards, and a local license requirement for marijuana uses.

This staff report was due prior to the May 2nd public hearing. Should there be amendments made to the ordinance that would affect this proposal, staff will provide a blue folder memo. In the meantime, CDD staff recommended the applicants address the additional materials consistent with the Planning Commission's recommendation to the Assembly. Additional information required germane to this proposal includes:

- Security plan which indicates compliance with State law
- Waste disposal plan
- Screening plan

The applicants have addressed each of these topics in the application narrative.

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ANALYSIS

Project Site - The subject parcel is comprised of two lots and a fraction of a lot. The structure is a single story commercial building with six associated addresses. The proposed commercial space to be occupied by the marijuana retail store was formerly occupied by Heritage Coffee. The space has been vacant for over a year. The site is accessed by Second Street, bordered by the Subway sandwich shop and a parking lot.

Project Design – The applicants' floor plan can be seen in attachment C. No exterior changes to the building are proposed. Two non-load bearing walls will be constructed around the kitchen area to separate it entirely from the retail space. A secure door will lead from the retail space to the kitchen. The site currently has two bathrooms. The applicants plan to convert one bathroom into a secure office and have a single unisex bathroom. The office space will contain surveillance system hardware and a safe for money and product. Restricted access areas include both kitchens and the office and will be identified as such with state regulated signage.

State and proposed local regulations require that no marijuana products be visible from a public right-of-way. The front of the building facing Second Street has two large windows, the main entry door, and a set of French doors bordered by two floor length windows entering off of the patio. Both doors have floor length windows. The French doors and windows are in front of the proposed marijuana product retail area. Two windows look into the proposed merchandise area of the establishment. The applicants have stated they intend to replace the existing glass with tempered glass.

In addition to the front facing doors and windows there are seven windows on the eastern side of the building. Five of the eastern facing windows are above head height. It is not possible to see in the windows from the right of way. It is possible to view into the building from the Second Street ROW through the two lower of the eastern facing windows. Staff recommends as a condition of approval that the two lower eastern facing windows and the doors and windows facing Second Street be shielded with an opaque material.

Additionally, state regulations require commercial grade door locks on all entry points. Staff recommends, as a condition of approval, that either grade 2 locks with deadbolts or grade 1 locks be installed on both exterior entry doors to the marijuana retail establishment.

Customers will have their identification checked immediately upon entering the premises. State regulations require a sign to be posted at the entry stating, "no one under the 21 years of age is allowed". After showing identification, customers will either enter the merchandise section of the store or enter the line to purchase marijuana products. Customers will not be able to access products without a handler present. All products will be displayed in cases or on shelving behind permitted marijuana handlers. Customers will be served directly by a handler at the

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counter. The two owners anticipate three initial full time employees besides themselves. Over time they estimate the number of full time employees will increase to six.

All products will be secured either in the kitchen or the office when the establishment is closed. The proposed operating hours are 10 a.m. to 10 p.m. These hours are consistent with state and local regulations.

Allowable signage is governed by CBJ 49.45 Signs. The proposal includes a single exterior façade mounted business sign of four square feet. This proposed signage is consistent with state and local regulations.

The loading zone for the site is directly in front of the main entrance. A security camera will be positioned at the entrance to the establishment. Staff recommends as a condition of approval that the single proposed camera be positioned so as to capture the loading zone or an additional camera be installed to capture the loading zone.

Traffic – The marijuana retail store will receive foot traffic from tourists and locals. Customers will have their identification checked just inside the entrance door (see Attachment C). Depending on the demand for marijuana products and given the limit amount of retail space in the store, lines may form outside the building. Staff recommends a condition that no crowds may form on the right-of-way.

Product manufacturing and packaging will take place at the subject site. No extraction of oil will take place at this site. The applicants will purchase extracts from a licensed extractor and produce baked edibles on site. That use requires a separate Conditional Use permit application. Deliveries from the Lemon Creek cultivation facility are expected on a weekly basis.

Odor - Proposed Ordinance 2015-38 requires all marijuana establishment licensees to prevent odor from being detectable outside of the licensed premise. As described under project design, the building will have carbon filters to absorb odor. Carbon filters are the primary method for odor elimination in marijuana facilities. Staff recommends a condition that the filters be replaced no less than once annually or according manufacturer specifications to ensure their proper functioning.

Parking and Circulation - The subject parcel is located in the PD-1 parking district. According to CBJ 49.40.210(d)(1) there is no parking requirement in the PD-1 parking district except when a building is expanded or new construction is proposed. No expansion or new construction is associated with this proposal. The existing loading zone is appropriate for the use and ensures no on street parking is encumbered by the use.

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Noise – Noise is not expected to be of concern with the development of the additional retail on the subject site. The site was occupied by a popular coffee shop for several years. Noise is expected to be similar to other uses that may be permitted outright in the Mixed Use zone.

Lighting – Recessed lighting exists above the entrance to the site and above the covered outdoor patio. The applicants propose to install a motion activated light at the entrance to the establishment. The exterior light plan ensures off-site glare will not be a concern.

Public Health or Safety – Public health issues related to marijuana retail include quality control of the salable product. Samples of all products are required to be tested prior to sale to ensure the absence of harmful microbial and residual solvents and provide potency information. State regulated potency limits, package labeling and sign postage requirements are meant to ensure consumers are educated about the products potency, time elapsed effect and dosage recommendations.

The site is located in a densely developed area of downtown. The site will be more secure than many other businesses in the area. The site will be equipped with twenty four hour surveillance including motion activated lighting, alarm system and high resolution security cameras.

Security is a primary concern in the legal marijuana industry and the state regulations provide for processes and standards to ensure legal marijuana does not end up in the illegal market, is sold only to those 21 and over and that licensed marijuana establishments are secure from theft. Proposed Ordinance 2015-38 requires that CUP applications include a security plan indicating how the applicants will comply with the requirements imposed by State law. Those requirements include;

- Exterior lighting
- Security alarm system on exterior doors
- Continuous video monitoring
- Commercial grade door locks on exterior points of entry

Each of the state security requirements are addressed in the security plan found on pages 2 and 3 of attachment B. Staff recommends as a condition that prior to issuance of a Certificate of Occupancy that staff ensure that each security element is operational.

The applicants' waste plan is found on page 2 of attachment B. Any unsalable products will be disposed of according to the state waste disposal regulations found in 3 AAC 306.740. The site is equipped with an enclosed, locked garbage storage room. It is not possible to determine at this time the amount of marijuana waste that would be produced by the marijuana retail establishment since that may be based on demand, shelf life of products, or if there is a recall on a product.

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3 AAC 306.010 requires 500 feet between the public entrance of the marijuana establishment and the outer boundary of schools, recreation or youth centers. There must be 500 feet between the public entrance of the marijuana establishment and the main public entrance of correctional facilities and buildings in which religious services are regularly held. This distance is measured by the shortest pedestrian route. The closest establishment that qualifies for this buffer is Holy Trinity Episcopal Church on the corner of Fourth and Gold Streets. The shortest pedestrian route between the subject site and the church is just over 900 feet.

Habitat - No habitat regulated by Title 49 will be affected by the proposal.

Property Value or Neighborhood Harmony – The CBJ Assessor's office has commented that no matter the use certain nuisances such as traffic, noise, crime, odor and litter can affect property values. If a particular proposal has the potential to produce any of these off site impacts appropriate conditions can be applied to the Conditional Use permit to either mitigate the impact or eliminate it altogether.

The location for the proposal has been vacant for over a year. There is no evidence to suggest that the addition of a marijuana retail store operated in accordance with all state and local regulations in the downtown core will affect property value. At the time this staff report was due, staff had not received any public comment about the proposal. Through the application of appropriate conditions, the neighborhood harmony of the MU zoning district will be maintained.

Conformity with Adopted Plans – The subject site has a 2013 Comprehensive Plan land use designation of Traditional Town Center (TTC). According to the 2013 Comprehensive Plan the TTC land use designation are land characterized by;

High density residential and non-residential land uses in downtown areas and around shopping centers, the University, major employment centers and public transit corridors, as well as other areas suitable for a mixture of retail, office, general commercial, and high density residential uses at densities at 18 or more residential units per acre. Residential and non-residential uses could be combined within a single structure, including off-street parking. Ground floor retail space facing roads with parking behind the retail and housing above would be an appropriate and efficient use of the land.

The addition of a marijuana retail establishment in the downtown core is consistent with the TTC land use designation. Additional policies of the 2013 Comprehensive Plan relevant to the proposal include:

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POLICY 5.1. TO DEVELOP AND SUSTAIN A DIVERSE ECONOMY, PROVIDING OPPORTUNITIES FOR EMPLOYMENT FOR ALL RESIDENTS.

POLICY 5.18. TO ENCOURAGE AND SUPPORT ENTREPRENEURSHIP AND INNOVATION IN THE ECONOMY OF JUNEAU AND SOUTHEAST ALASKA.

POLICY 5.10 TO ENCOURAGE RESIDENTS AND BUSINESSES TO "LOOK LOCAL FIRST" FOR PURCHASES OF GOODS AND SERVICES.

FINDINGS

CBJ §49.15.330 (e)(1), Review of Director's Determinations, states that the Planning Commission shall review the Director's report to consider:

1. Whether the application is complete;
2. Whether the proposed use is appropriate according to the Table of Permissible Uses; and,
3. Whether the development as proposed will comply with the other requirements of this chapter.

The Commission shall adopt the Director's determination on the three items above unless it finds, by a preponderance of the evidence, that the Director's determination was in error, and states its reasoning for each finding with particularity.

CBJ §49.15.330 (f), Commission Determinations, states that even if the Commission adopts the Director's determination, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the public hearing, that the development will more probably than not:

1. Materially endanger the public health or safety;
2. Substantially decrease the value of or be out of harmony with property in the neighboring area; or,
3. Not be in general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.

Per CBJ §49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested conditional use permit complete?

Yes. Staff finds the application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate

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fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. Is the proposed use appropriate according to the Table of Permissible Uses?

Yes. The requested permit is appropriate according to the Table of Permissible Uses. The permit is listed at CBJ §49.25.300, Section 2.300 for the Mixed Use zoning district.

3. Will the proposed development comply with the other requirements of this chapter?

Yes. The proposed development complies with the other requirements of this chapter. Public notice of this project was provided in the May 1, 2016 and May 9, 2016 issues of the Juneau Empire's "Your Municipality" section, and a Notice of Public Hearing was mailed to all property owners within 500 feet of the subject parcel. Moreover, a Public Notice Sign was posted on the subject parcel, visible from the public Right of Way.

4. Will the proposed development materially endanger the public health or safety?

No. There is no evidence to suggest that the proposed marijuana retail establishment in the Mixed Use zoning district will materially endanger the public health or safety.

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

No. Based on the preceding analysis staff finds that the proposed marijuana retail establishment will not substantially decrease the value of or be out of harmony with property in the neighboring area.

6. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Yes. Based on the preceding analysis staff finds that the proposed marijuana retail establishment is in general conformity with the land use plan and Comprehensive Plan.

Per CBJ §49.70.900 (b)(3), General Provisions, the Director makes the following Juneau Coastal Management Program consistency determination:

7. Will the proposed development comply with the Juneau Coastal Management Program?

N/A.

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RECOMMENDATION

It is recommended that the Planning Commission adopt the Director's analysis and findings and grant the requested Conditional Use permit. The permit would allow the development of a marijuana retail establishment in the Mixed Use zoning district. The approval is subject to the following conditions:

1. The two lower eastern facing windows and all southeast facing doors and windows shall be shielded with an opaque glass or material that will prevent product from being viewed from outside the premises.
2. Lines waiting for entrance into the retail marijuana establishment may not obstruct the public right-of-way.
3. All windows and doors to the retail establishment shall be armed with an alarm.
4. Each door shall have either a grade 2 lock with deadbolt or grade 1 lock.
5. Charcoal filters shall be replaced no less than once annually or according to manufacturer specifications, whichever is sooner.
6. Security cameras shall have an unobstructed view of each doorway and loading zone.
7. Security cameras shall have an unobstructed view of the regular activity without sight blockage from fixtures or other displays in the retail area of the establishment.
8. Security cameras shall have a battery back-up system installed capable of recording for 24 hours; all batteries shall be replaced once annually.
9. Prior to the issuance of a Certificate of Occupancy, all security devices shall be inspected to ensure they are fully operational.
10. This CUP expires if the applicant does not receive a state marijuana license approval within 18 months.
11. The applicant has notice of pending legislation (Ordinance 2015-38) that may affect this approval. The applicant will comply with all requirements that Ordinance 2015-38 imposes when it is passed even if more restrictive than the approved conditions of USE2016 0006. If the Director determines that Ordinance 2015-38 imposes more substantial submittal requirements and/or more restrictive approval requirements than what was analyzed or imposed by this permit the Director may schedule USE2016 0006 for further review by the Planning Commission within three months of the adoption of Ordinance 2015-38.

DEVELOPMENT PERMIT APPLICATION

Project Number	CITY and BOROUGH of JUNEAU	Date Received: 2/22/16
Project Name (City Staff to Assign Name)		

PROJECT / APPLICANT INFORMATION	Project Description <u>MARIJUANA RETAIL</u>		
	PROPERTY LOCATION		
	Street Address <u>216 2nd St</u>	City/Zip <u>Juneau 99801</u>	
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot) <u>TOWNSITE 4 LT 1, 2 & 7 FR</u>		
	Assessor's Parcel Number(s) <u>1C070A040010</u>		
	LANDOWNER/ LESSEE		
	Property Owner's Name <u>GOLDSTEIN IMPROVEMENT CO.</u>	Contact Person: <u>DANIEL GOLDMAN</u>	Work Phone: <u>907 321 0790</u>
	Mailing Address <u>130 SEWARD ST. Suite 001</u>	Home Phone:	Fax Number: <u>907 586-0101</u>
	E-mail Address <u>GOLDMAN2@GMAIL.COM</u>	Other Contact Phone Number(s):	
	LANDOWNER/ LESSEE CONSENT ****Required for Planning Permits, not needed on Building/ Engineering Permits****		
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows: A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application. X <u>Daniel Goldman</u> for GOLDSTEIN IMPROVEMENT <u>2/22/2016</u> Landowner/Lessee Signature Date X _____ Landowner/Lessee Signature Date NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME" and sign and date at X below			
Applicant's Name <u>RAIN FOREST FARMS, LLC</u>	Contact Person: <u>JAMES BARRATT</u>	Work Phone: <u>907 957 4751</u>	
Mailing Address <u>PO Box 21714, Juneau 99802</u>	Home Phone: <u>SAME</u>	Fax Number:	
E-mail Address <u>RAINFORESTJAMES@GMAIL.COM</u>	Other Contact Phone Number(s):		
X _____ Applicant's Signature	<u>2/22/16</u> Date of Application		

STAFF APPROVALS	OFFICE USE ONLY BELOW THIS LINE			
	Permit Type	***SIGN	Date Received	Application Number(s)
	Building/Grading Permit			
	City/State Project Review and City Land Action			
	Inquiry Case (Fee In Lieu, Letter of ZC, Use Not Listed)			
	Mining Case (Small, Large, Rural, Extraction, Exploration)			
	Sign Approval (If more than one, fill in all applicable permit #'s)			
	Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)			
	X Use Approval (Allowable, Conditional, Cottage Housing, Mobile Home Parks, Accessory Apartment)		2/22/16	USE20160006
	Variance Case (De Minimis and all other Variance case types)			
Wetlands Permits				
Zone Change Application				
Other (Describe)				
Comments:				
***Public Notice Sign Form filled out and in the file.				
			Permit Intake Initials <u>ANE</u>	

Site Plan and Location Narrative
216 2nd Street, Juneau
Juneau, AK

Where: 216 2nd Street.

Request: In accordance with State and local laws, we would like to apply for a conditional use permit for the purposes of Marijuana Retail.

Uses of Premises: Marijuana Retail. The site will be used for cannabis retail.

Lease Holder: Rainforest Farms, LLC

DBA: Rainforest Farms Cafe

Property Owner: Golstein Improvement, LLC

Site/Project Information:

- Area 1232 Sq Ft
- Accessibility A2 occupancy
- Separations Adjacent (a2) Subway Restaurant, Adjacent "B" Business.
- Zoning District Mixed Use
- Building Height 18ft
- Occupancy 50 People
- Previous Known Permits BLD 200500051

Scope:

We are proposing and planning to use this space for both retail and processing. We will be using the back area as a kitchen. A non load bearing wall may be added to increase kitchen size. Mostly aesthetics changes will be made to the retail aspect of the operation. There will be security cameras added to premises. Other products will be sold as well, including t-shirts, gifts, artwork and prepackaged food.

This space is to be worked on until a permitted to operate by obtaining a license to do so. In the meantime, we would like to obtain the CUP in effort to get the premises up to date in a condition in which regulations for such businesses require. We have one parking space available to use. We will be replacing the glass on the windows with tempered glass for security. Tint or curtains will also be used to prevent plain view from outside pedestrians. Security doors will separate both retail and processing areas.

We have identified the neighborhood and found that this location meets all state regulations and current zoning ordinances. We have identified all school, churches, and daycare facilities and have found that this location is out of site and is outside of the buffer required by the State of

Alaska.

Construction: Non-load bearing walls will be added to the primary room located at the entrance of the facility to separate processing licence from retail. Windows will be replace with security glass. Security Doors will be added to appropriate access points to separate licensed areas as well as restricted access areas.

Hours of operation: This retail operation will be open for business from 10am-10pm, 7 days per week. Most of the work will be done during the daytime during regular business hours.

Odor management: To ensure total odor air filtration, there are several important factors to consider. We will be using a carbon grade RC-48 filter for odor filtration. The RC-48 carbon is effective for the filtration of organic particles and other airborne materials. We will be using 3 (Phresh® Filter 10" x 39") of these filters, one in each room. This set-up overly satisfies the CFM units needed to effectively pass air through the filters and remove odors. (see attached diagram)

Waste management: Excess waste will be disposed of in the landfill. Our garbage will be in a locked room until pick-up. Cannabis related products will be disposed of according to State regulations.

Unsalable product will be disposed of according to state regulations.

Once unsalable product is recorded, it can then be moved out of the restricted access and stored in the locked garbage area until disposed of properly.

We will give the board at 3 days notice in the marijuana inventory tracking system required under AS 3 AAC 306.730 before making the waste unusable and disposing of it.

Trash will be located in a locked area outside of premises and disposed of on a weekly basis.

Security: (see attached security diagram). Video surveillance will cover all restricted access areas. Cameras will be operating 24 hours per day, 7 days per week, both inside and outside of the premises as required by State regulations.

Surveillance recording equipment and video surveillance records will be housed in the designated, locked, and secured safe room area.

Exterior cameras will face at least 25' out past the exterior wall. Security footage will be stored on site for 40 days in a locked and secure area where video surveillance recording equipment and records will be housed and stored. This area will only be accessible only to authorized personnel, law enforcement, or an agent of the board.

The video will be archived in a format that does not permit alteration of the recorded image, so that the images can readily be authenticated. All video surveillance will clearly and accurately display the time and date of recording.

A copy of video footage will be saved off-site on backed-up on a monthly basis. Footage will be available upon request.

A camera will be placed in the security room where the point of sale of product will take place.

There will be 1 primary access security door that will allow entrance to the retail restricted access areas. Doak's will provided perimeter entrance security as well as window security. In the event that a break in occurs, both landowner, tenants, and JPD will be notified accordingly. Cash deposits will be held in a safe along with product in a secured room. This safe room will also hold business records.

Exterior motion lighting will be installed to facilitate surveillance in addition to the exterior lighting that is already in place. Exterior motion lights are placed at each corner of the premises and facing outward to detect motion within 25' of the building exterior.

A cellular phone will be kept on site for emergency calls and panic situations. In the event that there is an emergency, a phone will be available to employees and guests to make emergency phone calls.

A panic button is placed on the wall security panel to sound alarms if needed.

Employees will be required to be trained on site specific security protocols and procedures prior to employment.

An identification badge will be displayed and worn by each licensee, employee, or agent while on the premises.

Diversion of Product: Policies and procedures for preventing diversion of marijuana or marijuana product will include:

- RFID tags on all products and plants.
- A marijuana inventory tracking system designed by TraceWeed tracking systems, capable of sharing information with the system the board implements to ensure tracking for the reasons listed above, will be used.
- Products will be stored in a safe for the entire duration while awaiting sale.
- Signed manifest by the buyer of the goods will be kept for on-site record.
- Sound alarms will be installed
- Security Systems signs will alert intruders of security measures.

- Lighting both and indoor exterior will allow for product to be monitored sufficiently via video surveillance.
- Products will be locked in a fire resistant safe.
- Access to safe will be limited only to owners and limited staff.
- Signed inventory declarations of products being stored will be accounted for an updated on a daily basis.
- A camera will be placed in the security room where the point of sale of product will take place.
- All marijuana packaged will be weighed on a scale certified in compliance with AS 3 AAC 306.745.
- Marijuana product will be prepared, packaged, and secured for pick-up in child resistant, opaque bags. Bags will have a manifest with tracking and testing information attached at all times.
- Locked containers from purchaser will be required prior to product leaving facility.
- No product will be sold or given possession to anyone without a marijuana handlers card and manifest of transportation, and receipt of product paid.
- Commercial grade locks placed on all doors.

Guest and Visitors: Unescorted members of the public will be prohibited from entering restricted access areas. Guest must be 21 years of age to enter retail store. Guests will be need to verify ID at the door to ensure they are 21 years of age. Guest will also need to show Identification for each purchase made in addition to being checked at the entrance.

The processes for admitting visitors into and escorting them through restricted access areas will require guests to sign in with name, age, date and time of entrance and time of exit, name of person escorting visitor and guests' driver's license information. Employee or owner who has Marijuana handlers card will escort visitor at all times. Information will be stored in a locked file cabinet in the safe room for record keeping.

Guests will be required to wear a "visitor pass" connected to a lanyard for the entire duration of the visit.

Employees: We will start with just the owners and 3 employees. Eventually we plan to hire 4-6 full-time employees.

Each employee, or agent who sells, cultivates, manufactures, tests, or transports marijuana or a marijuana product, or who checks the identification of a consumer or visitor, shall obtain a marijuana handler permit from the Marijuana Control Board before being beginning employment.

One hand washing sink, bathroom, and sanitation area will be available for employees.

Employees will be required to be trained on on-site specific security protocols and procedures prior to employment. Employee will be informed on how to handle each specific situation and how to stay safe when it occurs.

A detailed report will be made and saved on-site each time an action has been taken when security has been breached.

Parking: We have 1 parking spaces available to use. Guest and customers may use street parking.

Parking spaces are 8.5' wide by 16' long.

Delivery: Delivery Services will not be made available. Purchaser will be liable for the product after sale is finalised. All product will be tracked and taxed according to State Regulations. Once sale is final, records of the sale for both tax and tracking will be available on premises for inspection when needed.

Neighborhood Harmony: We have identified the neighborhood and found that this location meets all state regulations and current zoning ordinances. We have identified all school, churches, and daycare facilities and have found that this location is out of site and is outside of the buffer required by the State of Alaska. We have determined that our operations will not negatively affect the operations of surrounding homes or business. Of the immediate areas for consideration are a bank, Subway, a neighboring restaurants and a few gift shops. Of these businesses, none will be negatively affected by our operation.

Signage: A sign will be placed above the entrance of the building. The sign will be no larger than 24"X24" and will be placed next to the main entrance.

Security signs will be placed on exterior of building to prevent loitering and theft.

Signage required by CBJ ordinances as well as the State of Alaska will be appropriately placed in areas visible to public.

Hand washing signs for employees will be placed in bathroom.

Health and Sanitation: Cleaning of entire retail space will take place daily. We will be using food grade and non-toxic cleaning supplies. After each day, the room will be swept, and mopped. All walls will be wiped down and surface areas will be dusted and washed as well. Documents pertaining to cleaning schedules will be retained and saved for record keeping.

~~The use of small dehumidifiers will keep the air free of humidity and reduce the amount of mold~~ and bacteria in the room. Properly cleaned carbon filtered ventilation will also allow for further

sanitation to take place. Laborers are required to wash hands regularly. Before and after using bathroom as well as before and after leaving work.

Signs encouraging employees to wash hands will be placed in the bathroom and above wash areas.

Utensils and tools will be cleaned as needed to prevent cross contamination.

Extractions: Extractions and concentrates will not be produced at this site. We will use small screens during trimming time to catch material for sale, however, this will not be considered an extraction technique.

License to Display: A copy of the State license will be displayed inside of the main entrance to the building, outside of the restricted access areas and will be directly in sight of the main entrance.

A copy of the local license will be displayed inside of the main entrance to the building, outside of the restricted access areas and will be directly in sight of the main entrance.

On-Site Record Keeping: In addition to standard operating procedures, several items will be stored on-site in a locked file cabinet. These files will be located in the safe room and will be restricted only to certain personnel and authority. Items to be stored on-site include:

- All books and records necessary to fully account for each business transaction conducted for the current year and three preceding calendar years (when applicable); records for the last six months are maintained on the marijuana establishment's licensed premises.
 - A current employee list setting out the full name and marijuana handler permit number of each licensee, employee, and agent.
 - The business contact information for vendors that maintain video surveillance systems and security alarm.
 - Systems for the licensed premises.
 - Records related to advertising and marketing.
 - A current diagram of the licensed premises including each restricted access area.
 - A log recording the name, and date and time of entry of each visitor permitted into a restricted access area.
 - All records normally retained for tax purposes.
 - Accurate and comprehensive inventory tracking records that account for all marijuana inventory activity from seed or immature plant stage until the retail marijuana or retail marijuana product is sold to a consumer, to another marijuana establishment, or destroyed.
-
- Transportation records for marijuana and marijuana product as required under 3 AAC 306.750(f).

- Expiration dates of Marijuana Handler Cards for employees.

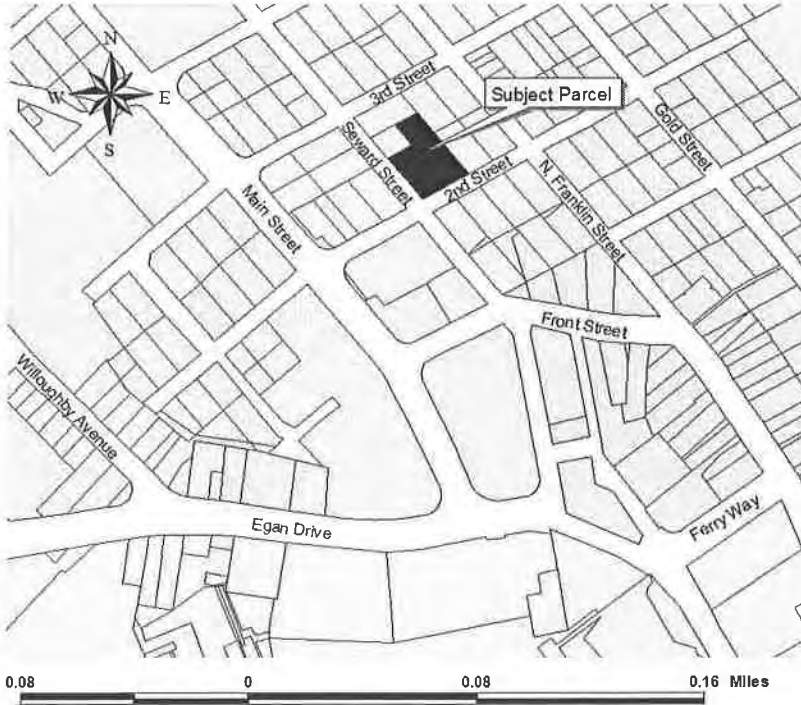
To prevent these records from being lost or destroyed, a copy of all records will be made and stored off-site after the period of required record retention expires. Copies of records and files will be constantly updated and made in duplicate for the purposes of having back-up copies available when needed.

Other Notes:

- All marijuana products will be removed from display and placed in a safe each night for holding.
- Curtains will hang from front and side windows to divert attention away from minors. This also keeps cannabis items out of site and displayed properly to satisfy state regulations. By doing so, people passing by cannot see cannabis items from outside of the retail establishment.
- Retail CUP will share processing CUP office area for security and storage.
- Motion Light will be added above entrance door.

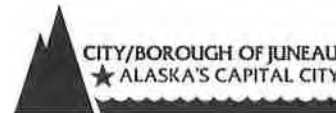


NOTICE OF PUBLIC HEARING



City & Borough of Juneau
Community Development Department
155 S Seward Street • Juneau, Alaska 99801

SHIP TO:



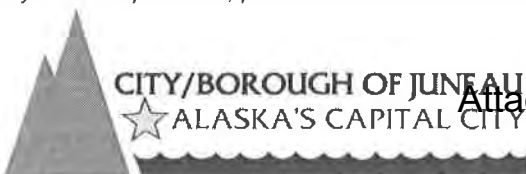
PROPOSAL: Conditional Use Permit for a marijuana retail establishment in the Mixed Use zoning district.

File No:	USE2016 0006	Applicant:	Rainforest Farms, LLC.
To:	Adjacent Property Owners	Property PCN:	1-C07-0-A04-001-0
Hearing Date:	May 10, 2016	Owner:	Goldstein Improvement Co.
Hearing Time:	7:00 PM	Size:	12,282 square feet (0.282 acres)
Place:	Assembly Chambers Municipal Building 155 South Seward Street Juneau, Alaska 99801	Zoned:	MU - Mixed Use
		Site Address:	216 2nd Street
		Accessed Via:	2nd Street

PROPERTY OWNERS PLEASE NOTE:

You are invited to attend this Public Hearing and present oral testimony. The Planning Commission will also consider written testimony. You are encouraged to submit written material to the Community Development Department 14 days prior to the Public Hearing. Materials received by this deadline are included in the information packet given to the Planning Commission a week before the Public Hearing. Written material received after the deadline will be provided to the Planning Commission at the Public Hearing.

If you have questions, please contact Christine Steadman at Christine.Steadman@juneau.org or at 586-0761.

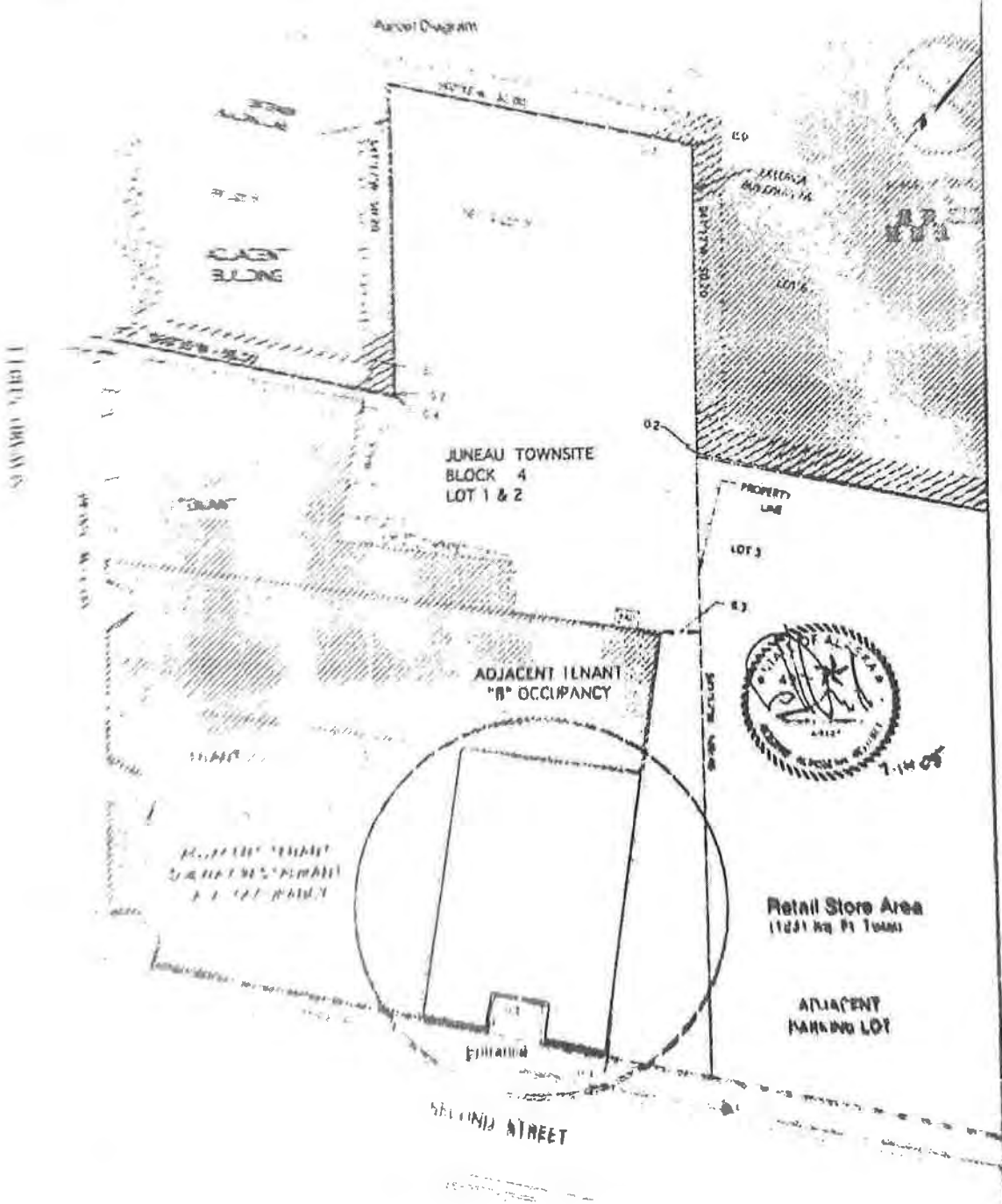


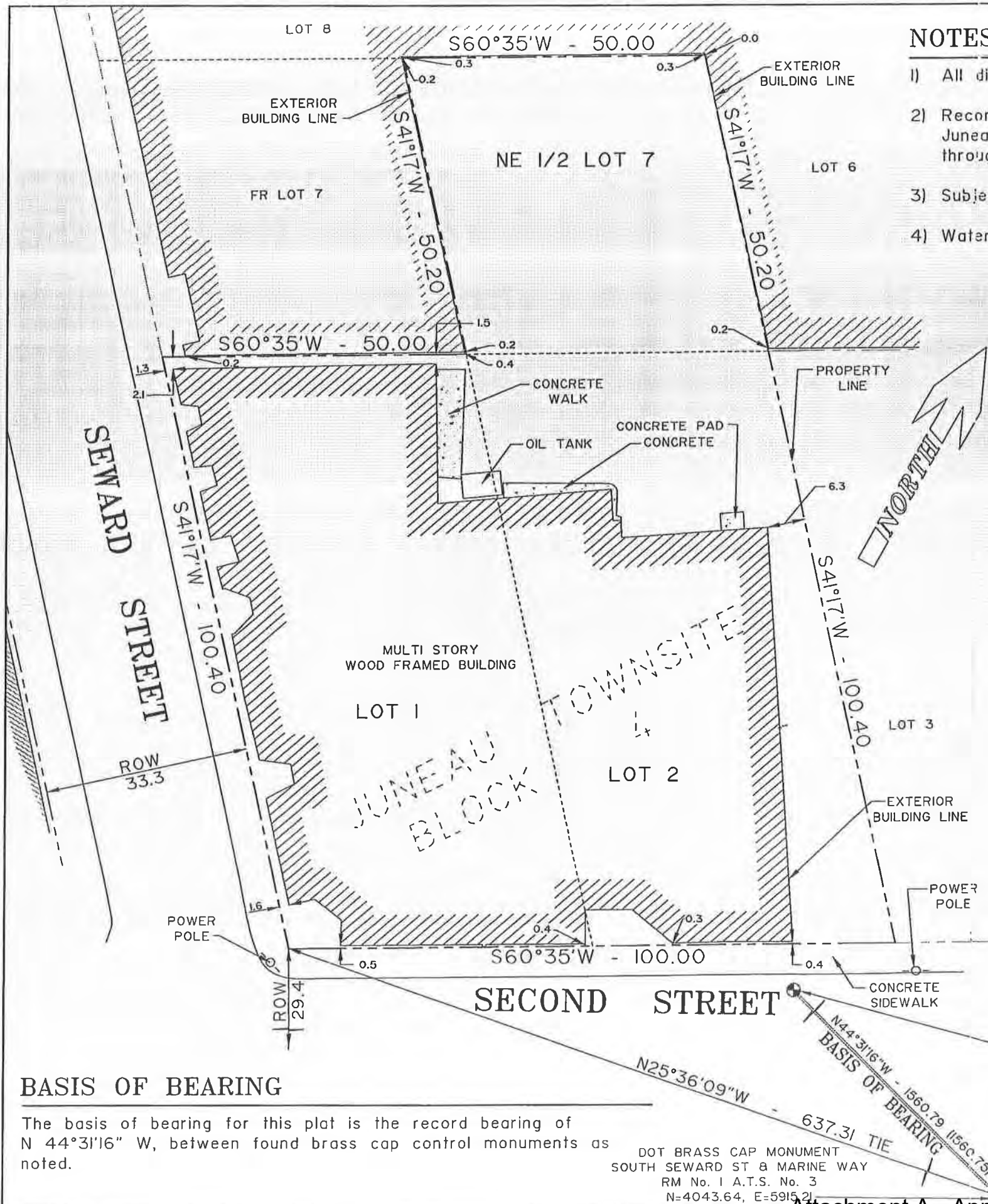
Planning Commission Agendas, Staff Reports and Meeting Results can be viewed at <http://www.juneau.org/assembly/nowus.php>

Attachment A - Application Packet

Attachment E

~~Final Diagram~~

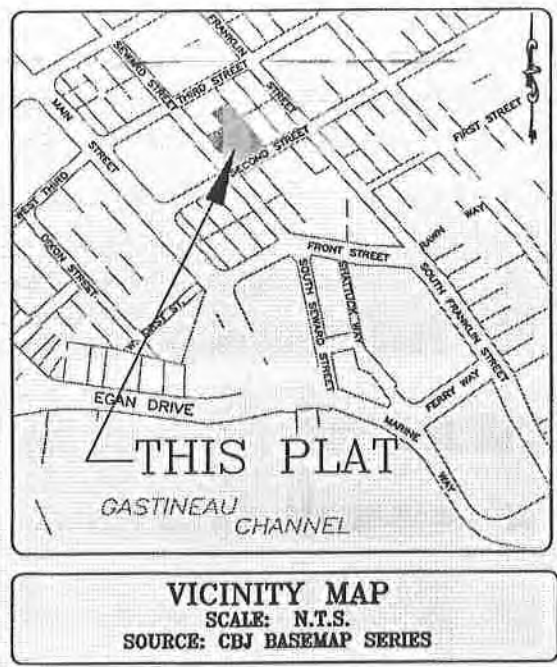




NOTES:

- 1) All distances are measured in U.S. Survey feet.
- 2) Record information derived from U.S. Survey No. 7 (Townsite of Juneau) and Statutory Warranty Deed Book 196, Pages 581 through 583.
- 3) Subject to easements and restrictions of record.
- 4) Water and sewer service provided by CBJ public utilities.

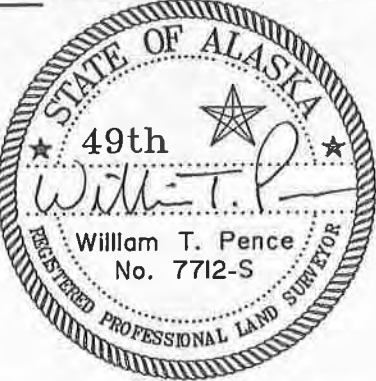
BLD 2005-51
OK as noted
RECEIVED
FEB 14 2005
PERMIT CENTER / CDD



SURVEYOR'S CERTIFICATE

I hereby certify that I am a Registered Land Surveyor licensed to practice surveying in the State of Alaska and that this plat represents a survey made by me or under my direct supervision of the following described property:
Lots 1, 2 and a Fr of Lot 7, Juneau Townsite Block 4
Juneau Recording District, Juneau, Alaska
and that all walks, roads, improvements, encroachments and overlaps are shown correctly to the best of my knowledge.

Date: February, 2005



AS-BUILT
LOTS 1, 2 and Fr of LOT 7
BLOCK 4 U.S. SURVEY No. 7
JUNEAU TOWNSITE
JUNEAU RECORDING DISTRICT - JUNEAU, ALASKA

TONER-NORDLING & ASSOCIATES INC
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION ADMINISTRATION
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

SCALE: 1" = 20'	DATE: FEB. 2005	PROJECT NO. 05-4040	FILE NO.	SHEET NO. 1 OF 1
--------------------	--------------------	------------------------	----------	---------------------

BASIS OF BEARING

The basis of bearing for this plat is the record bearing of N 44°31'16" W, between found brass cap control monuments as noted.

DOT BRASS CAP MONUMENT
SOUTH SEWARD ST & MARINE WAY
RM No. 1 A.T.S. No. 3
N=4043.64, E=5915.21



CBJ Marijuana License Inspection – Planning & Zoning

The purpose of this inspection is to ensure that the conditions of the approved CUP and the requirements of CBJ 49.65.1200 are met prior to operation. Take the CUP folder with you on the inspection so you have all the approved plans and a copy of the NOD. Take pictures for file if you think that is useful.

For all marijuana establishments:

- ☒ Limited access areas are marked
- ☒ Verify visitor log is properly maintained
- ☒ Floor plan matches what was approved under the CUP
- ☒ Check out alarm system – make sure all windows and doors have an alarm
- ☒ Verify that the security surveillance system is working
- ☒ Verify security surveillance system back up system (i.e. generator, batteries)
- ☒ Verify all entry and exit points to the facility are video monitored from inside and out
- ☒ Verify that there is no product visible from the public right-of-way
- ☒ Verify doors and locks meet regulatory standards
- ☒ Verify safe is installed in a secure room
- N/A ☐ Verify property waste disposal method is in use
- N/A ☐ Check out fertilizers
- N/A ☐ Verify storage of carbon dioxide (also part of Fire Dept. inspection)
- ☒ Verify carbon filters are installed
- ☒ Verify ventilation system installed and operational
- ☒ Any additional conditions imposed by CUP
- ☒ **Passed inspection**
- ☐ **Incomplete inspection**

Items not complete:

N/A

Inspected by: Chrissy Steadman, Planner MJL# 00000003

Date: 12/21/16

Nate Watts

2017 renewal

m: Dan Jager
Sent: Tuesday, December 27, 2016 10:21 AM
To: Nate Watts; Charlie Ford; Sven Pearson
Subject: RE: Rainforest - follow up

MJL00000003

They are good to go on fire side. Thanks,
Dan

From: Nate Watts
Sent: Tuesday, December 27, 2016 10:20 AM
To: Charlie Ford; Dan Jager; Sven Pearson
Subject: Rainforest - follow up

Hey guys,

I'm working on updating the CBJ business license for Rainforest. Can I get a update (pass/fail) for these guys for both locations so I can update the record and issue their 2017 business license.

Thanks,

Nate Watts

Case No: MSL 00000002

JUNEAU PERMIT CENTER

Packet Page 63 of 732

INSPECTION RESULTS

Inspect on:
Time: 11am

Issued On:

Applicant:

Parcel No:

Address: 201 Seward street

Prc Description:

Notes:

Inspection:

Result: A

Inspected by: CF

Date: 12/21/16

INSPECTION COMMENTS:

Building Department
OK for License Renewal

CONDITIONS / HOLDS:

NOTE: Prior to issuance of a Certificate of Occupancy or Temporary Certificate of Occupancy, **Zoning, Engineering and Buildings** items must be approved.

Attachment B - Supporting Documents

The Online Building Inspection Request Form is at: www.juneau.org/permits/inspect_request.php or call 686-1703.



CBJ Marijuana License Inspection – Planning & Zoning

The purpose of this inspection is to ensure that the conditions of the approved CUP and the requirements of CBJ 49.65.1200 are met prior to operation. **Take the MJL folder and CUP folder with you on the inspection so you have all the approved plans and a copy of the NOD. Review checklist from previous years. Take pictures for file if you think that is useful. Write notes on the checklist.**

✓ = pass
X = fail

For all marijuana establishments:

- ✓ Required signs are present in conspicuous place near main entrance:
 - CBJ and State Licenses (for renewal inspection only)
 - Health warning
 - Consumption and transportation warning
- ✓ Limited access areas are marked
- ✓ Verify visitor log is properly maintained and view that old sheets retained
- ✓ Floor plan matches what was approved under the CUP or building permits. Some minor changes may have been approved through building permits or past inspections.
- ✓ Check out alarm system –all exterior windows and doors have an alarm sensors
- ✓ Verify security surveillance system is working and all doors/ regular work areas are covered
- ✓ Verify security surveillance system back up system (e.g. generator or batteries)
- ✓ Verify all entry and exit points to the facility are video monitored from inside and out
- ✓ Verify that there is no product visible form the public right-of-way
- ✓ Verify doors and locks meet regulatory standards (commercial grade locks)
- ✓ Verify safe is installed in a secure room
- ✓ Verify an approved waste disposal method is in use
- ✓ Verify carbon filters are installed/no noticeable odor outside building vents
- ✓ Verify ventilation system installed and operational
- X Any additional conditions imposed by CUP #8 in USE 16-06

For cultivation or processing operations only:

NA Verify storage of carbon dioxide sources (also part of Fire Dept. inspection)

For cultivation operations only:

NA Verify fertilizers used and mold/pet control

✓ PASSED INSPECTION (demonstrated meeting condition) □ INCOMPLETE INSPECTION

Items not complete:

8 in USE 16-06
on 1/4/18, prior to 1/14/19
deadline)

- ✓ Complete inspection in 'GOVERN Inspections'
- ✓ Complete activity in 'GOVERN Activities'
- ✓ Work with business owner to address incomplete items.
- ✓ When complete go back to GOVERN. Hand MJL folder with inspection checklist back to Permit Techs

Inspected by: Amy Liv, Planner MJL# mjl-03

Date: 12/21/18



CBJ Marijuana License Inspection – Planning & Zoning

The purpose of this inspection is to ensure that the conditions of the approved CUP and the requirements of CBJ 49.65.1200 are met prior to operation. ***Take the MJL folder and CUP folder with you on the inspection so you have all the approved plans and a copy of the NOD. Review checklist from previous years. Take pictures for file if you think that is useful. Write notes on the checklist.***

For all marijuana establishments:

- ☒ Required signs are present in conspicuous place near main entrance:
 - ☐ CBJ and State Licenses (for renewal inspection only)
 - ☐ Health warning
 - ☐ Consumption and transportation warning
- ☒ Limited access areas are marked
- ☒ Verify visitor log is properly maintained and view that old sheets retained
- ☒ Floor plan matches what was approved under the CUP or building permits. Some minor changes may have been approved through building permits or past inspections.
- ☒ Check out alarm system –all exterior windows and doors have an alarm sensors
- ☒ Verify security surveillance system is working and all doors/ regular work areas are covered
- ☒ Verify security surveillance system back up system (e.g. generator or batteries)
- ☒ Verify all entry and exit points to the facility are video monitored from inside and out
- ☒ Verify that there is no product visible from the public right-of-way
- ☒ Verify doors and locks meet regulatory standards (commercial grade locks)
- ☒ Verify safe is installed in a secure room
- ☒ Verify an approved waste disposal method is in use
- ☒ Verify carbon filters are installed/no noticeable odor outside building vents
- ☒ Verify ventilation system installed and operational
- ☒ Any additional conditions imposed by CUP

For cultivation or processing operations only:

- ☐ Verify storage of carbon dioxide sources (also part of Fire Dept. inspection)

For cultivation operations only:

- ☐ Verify fertilizers used and mold/pet control

☒ **PASSED INSPECTION**

☐ **INCOMPLETE INSPECTION**

Items not complete:

- ☒ Complete inspection in 'GOVERN Inspections'
- ☒ Complete activity in 'GOVERN Activities'
- ☐ Work with business owner to address incomplete items. *Nm*
- ☒ When complete go back to GOVERN. Hand MJL folder with inspection checklist back to Permit Techs

Inspected by: NWATTS, Planner MJL# 003

Date: 12/3/19



CBJ Marijuana License Inspection – Planning & Zoning

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For cultivation or processing operations only:

- ☐ Verify storage of carbon dioxide sources (also part of Fire Dept. inspection)

For cultivation operations only:

- ☐ Verify fertilizers used and mold/pet control

☒ **PASSED INSPECTION**

☐ **INCOMPLETE INSPECTION**

Items not complete:

- ☐ Complete inspection in 'GOVERN Inspections'
- ☐ Complete activity in 'GOVERN Activities'
- ☐ Work with business owner to address incomplete items.
- ☐ When complete go back to GOVERN. Hand MJL folder with inspection checklist back to Permit Techs

Inspected by: N. White, Planner MJL# 03

Date: 12/3/2022

City and Borough of Juneau

Community Development Department

Marijuana Establishment Business License

Retail

Effective Date

January 01, 2018



Expiration Date

December 31, 2018

RAINFOREST FARMS

201 SEWARD ST

MJL00000003

This license is issued pursuant to Title 49, Chapter 65 of the City and Borough of Juneau Code of Ordinances. This license is nontransferable and must be prominently displayed in the marijuana establishment in a conspicuous location inside the licensed premises near the main entrance. (CBJ 49.65.1255)

This license is only valid through the expiration date shown above. Any questions concerning the license should be addressed to: Community Development Department, 155 S Seward Street, Juneau, AK, 99801.

City and Borough of Juneau

Community Development Department

Marijuana Establishment Business License

Retail

Effective Date

January 01, 2018



Expiration Date

December 31, 2018

RAINFOREST FARMS

214 SECOND ST

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City and Borough of Juneau

Community Development Department

Marijuana Establishment Business License

Retail

Effective Date

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Marijuana Establishment Business License

Retail

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Retail

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Expiration Date

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Retail

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City and Borough of Juneau

Community Development Department

Marijuana Establishment Business License

Retail

Effective Date

January 02, 2019



Expiration Date

December 31, 2019

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City and Borough of Juneau

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Marijuana Establishment Business License

Retail

Effective Date

January 02, 2019



Expiration Date

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City and Borough of Juneau

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Marijuana Establishment Business License

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Effective Date

January 02, 2019



Expiration Date

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Marijuana Establishment Business License

Retail

Effective Date

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Expiration Date

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January 02, 2019



Expiration Date

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City and Borough of Juneau

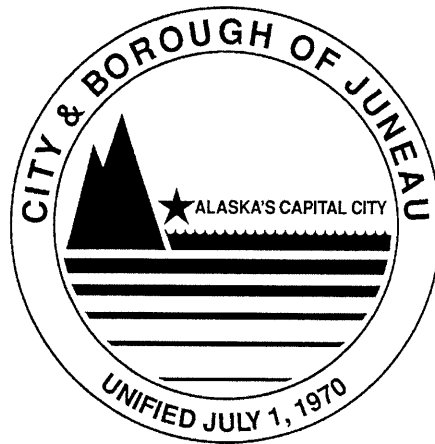
Community Development Department

Marijuana Establishment Business License

Retail

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Expiration Date

December 31, 2020

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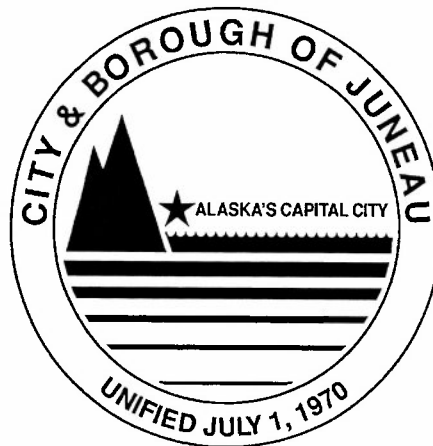
Community Development Department

Marijuana Establishment Business License

Retail

Effective Date

January 01, 2021



Expiration Date

December 31, 2021

RAINFOREST FARMS

216 SECOND ST

MJL00000003

This license is issued pursuant to Title 49, Chapter 65 of the City and Borough of Juneau Code of Ordinances. This license is nontransferable and must be prominently displayed in the marijuana establishment in a conspicuous location inside the licensed premises near the main entrance. (CBJ 49.65.1255)

This license is only valid through the expiration date shown above. Any questions concerning the license should be addressed to: Community Development Department, 155 S Seward Street, Juneau, AK, 99801.

STATE OF ALASKA - MARIJUANA CONTROL BOARD

LICENSE NUMBER **10050**

FORM CONTROL **053**

MARIJUANA ESTABLISHMENT LICENSE

2016 - 2017

COPY

TYPE OF LICENSE: Retail Marijuana Store

ISSUE DATE: 10/31/2016

EXPIRATION DATE: 06/30/2017

EFFECTIVE DATE: 11-14-2016

LOCAL GOVERNMENT: City and Borough of Juneau

D/B/A: Rainforest Farms, LLC
216 2nd Street
Juneau, AK 99801

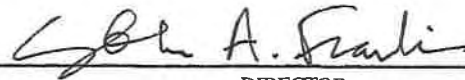
Mail Address:

Rainforest Farms, LLC
PO Box 21714
Juneau, AK 99802

This license cannot be transferred without permission
of the Marijuana Control Board

[] Special restriction - see reverse side

ISSUED BY ORDER OF THE
MARIJUANA CONTROL BOARD



DIRECTOR

Attachment B - Supporting Documents

THIS LICENSE MUST BE KEPT IN A VISIBLE PLACE ON THE PREMISES



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: September 9, 2020
File No.: USE2020 0016

Rainforest Farms, LLC
ATTN: James Barrett
5763 Glacier Highway
Juneau, AK 99801

Proposal: Modification of a Special Use Permit to include on-site consumption of Marijuana products

Property Address: 201 Seward Street

Legal Description: Juneau Townsite Block 4 Lots 1, 2 & 7 Fraction

Parcel Code No.: 1C070A040010

Hearing Date: September 8, 2020

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated August 4, 2020, and APPROVED the modification of a Special Use Permit (USE2016 0006) to include on-site consumption of edible marijuana products to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. All waste containing marijuana product shall be stored in a locked enclosure until transported to the CBJ landfill.
2. Prior to operation the applicant must receive the required State endorsement; by approval of this modification of this special use permit, the Planning Commission does not take a position as to whether the application to the State satisfies the requirements of the endorsement, including if the facility is housed in a freestanding building.

Attachments: August 4, 2020, memorandum from Laurel Christian, Community Development, to the CBJ Planning Commission regarding USE2020 0016.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Effective Date: The permit is effective upon approval by the Commission, September 8, 2020.

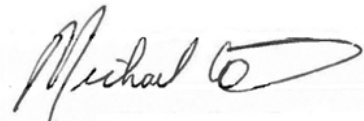
Expiration Date: The permit will expire 18 months after the effective date, or March 8, 2022, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.

Conditional use permits issued to marijuana establishments under CBJ chapter 49.65.1245(e) shall be subject to review by the commission every five years from the date of issuance. Such review shall be subject to CBJ 49.15.330 except that the commission may only amend or add conditions if necessary to ensure compliance with this title.

Project Planner:



Laurel Christian, Planner II
Community Development Department



Michael LeVine, Chair
Planning Commission



Filed With Municipal Clerk

9/14/2020

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

From: Aardvark LLC <architectureoffaith@gmail.com>
Sent: Friday, October 29, 2021 8:54 AM
To: PC_Comments
Subject: marijuana retail license

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

I am writing to manifest my approval of the proposed 5-year license for Rainforest Farms, located at:

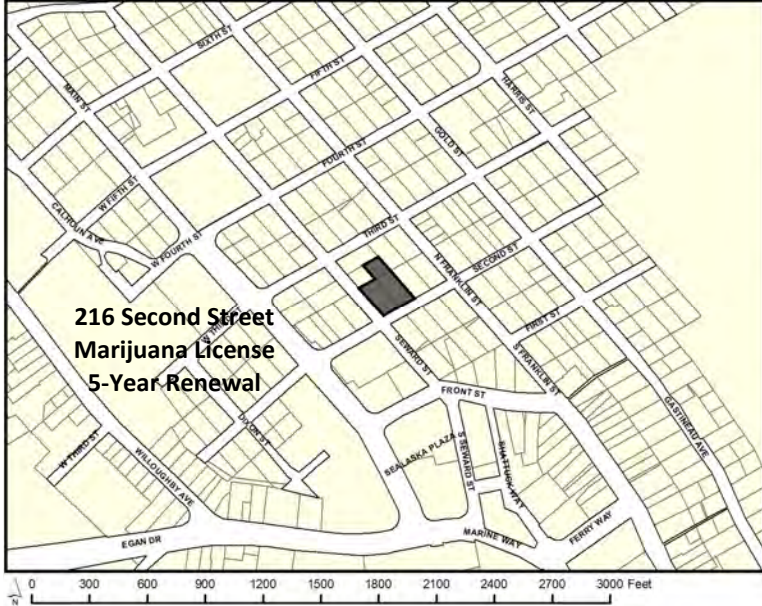
216 Seward St.
Juneau, Ak

I think that they have been a good standing member of our business community, and should continue to operate in downtown Juneau. It is good to have local, year-round businesses operating in the historic center. Such businesses give Juneau a feel of being open year-round, which is essential to our community.

Joshua Adams
329 5th St.
Juneau, Ak 99801
architectureoffaith@gmail.com

Invitation to Comment

On a proposal to be heard by the CBJ Planning Commission
Your Community, Your Voice



155 S. Seward Street Juneau, Alaska 99801

TO:

A Marijuana Retail License 5-Year Renewal is up for consideration and public hearing by the Planning Commission for **Rainforest Farms, LLC** at **216 Second Street** in a **Mixed Use Zone**.

TIMELINE

Staff Report expected to be posted **Monday, October 18, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Oct. 4

Comments received during this period will be sent to the Planner, **Joseph Meyers**, to be included as an attachment in the staff report.

Oct. 5 — noon, Oct. 25

Comments received during this period will be sent to Commissioners to read in preparation for the hearing.

HEARING DATE & TIME: 7:00 pm, October 26, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/89613819418>. The Webinar ID is: 896 1381 9418. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

October 27

The results of the hearing will be posted online.

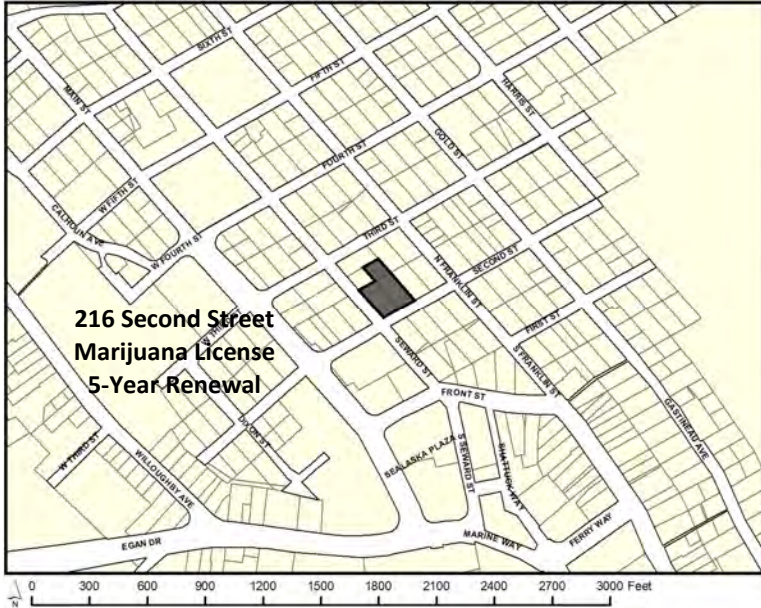
Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed September 24, 2021

Case No.: USE2016 0006
Parcel No.: 1C070A040010
CBJ Parcel Viewer: <http://epv.juneau.org>

2nd Revised Notice

Re: Marijuana Retail License 5-Year Renewal
Hearing Rescheduled



155 S. Seward Street Juneau, Alaska 99801

TO:

RESCHEDULED

You are receiving this notice regarding an application being heard by the Planning Commission for a **Marijuana Retail License 5-Year Renewal** for **Rainforest Farms, LLC** at **216 Second Street**.
The hearing has been rescheduled for December 14, 2021.

TIMELINE

Staff Report expected to be posted **Monday, December 6, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through noon, December 10

Comments received during this period will be sent to Planning Commissioners to read over the weekend in preparation for the hearing. The planner handling this case, Joseph Meyers, will also read any written comments that are received. You may also contact him via the phone number listed below.

HEARING DATE & TIME: 7:00 pm, December 14, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/82646379779>. The Webinar ID is: 826 4637 9779. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

December 15

The results of the hearing will be posted online.

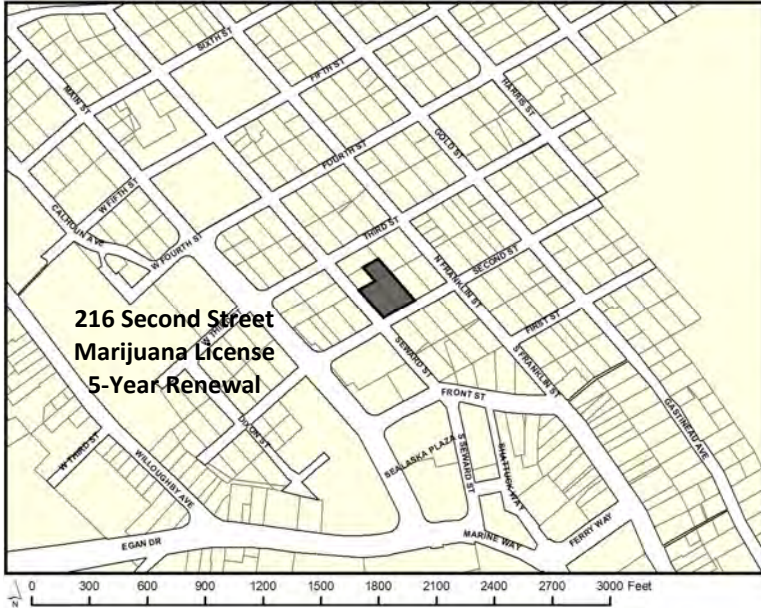
Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed November 22, 2021

Case No.: USE2016 0006/USE2021 0022
Parcel No.: 1C070A040010
CBJ Parcel Viewer: <http://epv.juneau.org>

Revised Notice

Re: Marijuana Retail License 5-Year Renewal
Hearing Rescheduled



155 S. Seward Street Juneau, Alaska 99801

TO:

POSTPONED

You are receiving this notice regarding an application being heard by the Planning Commission for a **Marijuana Retail License 5-Year Renewal** for **Rainforest Farms, LLC** at **216 Second Street**. Originally, the hearing was set for October 26, 2021.

The hearing has been rescheduled for November 9, 2021.

TIMELINE

Staff Report expected to be posted **Monday, November 1, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through noon, November 8

Comments received during this period will be sent to Planning Commissioners to read over the weekend in preparation for the hearing. The planner handling this case, Joseph Meyers, will also read any written comments that are received. You may also contact him via the phone number listed below.

HEARING DATE & TIME: 7:00 pm, November 9, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/82646379779>. The Webinar ID is: 826 4637 9779. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

November 10

The results of the hearing will be posted online.

Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed October 22, 2021

Case No.: USE2016 0006
Parcel No.: 1C070A040010
CBJ Parcel Viewer: <http://epv.juneau.org>



REGO

NO
PARKING
LOADING
ZONE

NOTICE 586-0715
MARIJUANA
RENEWAL PERMIT
USE 4021.0022: A valid permit
of marijuana special use permit
HEARING DATE:
12/14/21



**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

USE2021 0021: An extension of Conditional Use Permit USE2020 0001 for a new educational and research laboratory structure - APPROVED ON CONSENT

AGENDA ITEM:

Case No.: USE2021 0021

Applicant: University of Alaska Southeast

Location: 11305 Glacier Highway

Proposal: An extension of Conditional Use Permit USE2020 0001 for a new educational and research laboratory structure

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit Extension. The permit would allow the extension of a Conditional Use Permit to construct an education and research laboratory structure.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for USE2021 0021	12/7/2021	Staff Report
☐ Notice of Decision for USE2021 0021	12/22/2021	Notice of Decision



(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

DATE: December 7, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Joseph Meyers, Planner 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Extension of Conditional Use Permit USE2020 0001 to allow the construction of an education and research laboratory structure.

STAFF RECOMMENDATION: Approval

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - 49.15.330
 - 49.80

GENERAL INFORMATION	
Property Owner	University of Alaska Southeast
Applicant	University of Alaska Southeast
Property Address	11305 Glacier Highway
Legal Description	USS 1500 FR
Parcel Number	4B2301050040
Zoning	Waterfront Commercial
Land Use Designation	M/MU
Lot Size	75,485 square feet
Water/Sewer	CBJ
Access	Glacier Highway
Existing Land Use	University of Alaska Southeast Campus
Associated Applications	USE2020 0001

The Commission shall hear and decide the case per 49.15.330(a) Conditional Use Permit. A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (WC)	Commercial misc.
South (WC)	Commercial misc.
East (ROW)	Glacier Highway
West (WC)	Commercial misc.

SITE FEATURES	
Anadromous	None
Flood Zone	Zone X and VE
Hazard	No known
Hillside	None
Wetlands	None
Parking District	None
Historic District	None
Overlay Districts	None

BACKGROUND INFORMATION

Project Description – Extension of Conditional Use Permit USE2020 0001 to allow the construction of a two-story education and research laboratory structure.

Background – The Planning Commission approved a Conditional Use Permit (USE2020 0001), effective February 25, 2020, to allow construction of a two-story education and research laboratory structure in the Waterfront Commercial (WC) zoning district with the following conditions:

1. *Prior to issuance of a building permit for the proposed structure, a shared use parking agreement must be approved by the CBJ Community Development Department and CBJ Law Department, and must be recorded in the State Recorder's Office. The parking agreement must state that it may be nullified only when the CBJ Community Development Department Director has approved the nullification of the agreement on an instrument that is recorded with the State Recorder's Office.*
2. *Prior to issuance of a building permit, the developer shall submit to the CBJ Engineering Department a detailed drainage plan that includes provisions for managing storm water run-off during construction and details the drainage facilities to be included as part of the development. No building permit shall be issued until such plans are deemed adequate and approved by the CBJ Engineering Department.*
3. *Prior to the issuance of a building permit, the applicant shall submit a revised site plan showing snow storage location(s).*
4. *Prior to issuance of a building permit, the applicant shall submit a lighting plan illustrating the location and type of exterior lighting proposed for the development. Exterior lighting shall be designed and located to minimize offsite glare. Approval of the plan shall at the discretion of the Community Development Department, according to the requirements of CBJ 49.40.230(d).*

5. *Prior to the issuance of a temporary certificate of occupancy for the proposed structure, the applicant shall dedicate a public pedestrian access easement to the mouth of Auke Creek. When a viable alternative access is provided, the easement across the University property could be vacated. A floating easement could be used with route determined by UAS.*
6. *Prior to issuance of a temporary certificate of occupancy, CBJ-approved signage shall be posted for the accessible parking space.*
7. *Prior to issuance of a temporary certificate of occupancy, wheel stops or striping shall be placed in the parking lot to define the location of parking spaces.*
8. *Prior to the issuance of a temporary certificate of occupancy, all pavement markings, including directional arrows, parking space stripes, and other markings shown on the project site plan, shall be applied to the parking and circulation area as shown on the site plan in a medium designed for such purposes.*

ANALYSIS

CBJ 49.15.250 establishes the requirements for Development Permit Extensions, and is discussed below:

1. **Requirement:** An application to extend a development permit must be submitted at least 30-days before the initial permit's expiration date.

Analysis: Yes. The application for this permit extension, USE2021 0021 was received more than 30 days prior to the initial permit's expiration date.

2. **Requirement:** The burden of proof for justification of a development permit extension rests with the applicant.

Analysis: Yes. The applicant submitted a narrative justifying why this extension has been requested.

3. **Requirement:** A maximum of two 18-month extensions are allowed.

Analysis: Yes. This is the first extension requested for this permit. If this extension is granted, the applicant will be eligible for one more 18-month extension.

4. **Requirement:** At least ten days prior to the hearing, notice of the extension request must be mailed to adjacent property owners. At least two days prior to the hearing, a general notice shall be printed in the newspaper of general circulation in the municipality.

Analysis: Yes. A Notice of Public Hearing was mailed to all property owners within 500 feet of the subject parcel, an advertisement was placed in the Juneau Empire, Your Municipality Section on December 3, 2021 and a Public Notice Sign was posted on site for two weeks prior to this hearing.

5. **Requirement:** Conditions contained in the permit cannot be changed.

Analysis: No. The applicant is not requesting to modify the conditions of the project.

FINDINGS

Per CBJ 49.15.250, Development Permit Extension, the Director makes the following findings on the criteria for granting the requested Conditional Use Permit extension:

1. *Was the application for the requested Conditional Use Permit extension complete and received on time?*

Yes. The application contains the information necessary to complete a full review of the proposed permit extension. Further, the appropriate fees were submitted with the application. The requested Conditional Use Permit extension was received 30 days prior to the initial permit's expiration date.

2. *Has the applicant submitted justification for the permit extension?*

Yes. The applicant has submitted a narrative justifying the permit extension.

3. *Is the extension within the allowable number of permit extensions?*

Yes. CBJ 49.15.250 allows no more than two 18-month extensions. This is the first permit extension application for USE2020 0001.

4. *Have notices of the extension request been mailed to adjacent property owners at least ten days prior to the hearing and has a general notice been printed in a newspaper of general circulation at least two days prior to the hearing?*

Yes. Notices were mailed to property owners within 500 feet of the proposed development on November 19, 2021, more than fourteen days prior to the hearing, and an advertisement was placed in the Juneau Empire, Your Municipality section on December 3, 2021.

5. *Have conditions on the permit been changed?*

No. The applicant has not requested any amendments.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit Extension. The permit would allow the extension of a Conditional Use Permit to construct an education and research laboratory structure.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Abutters Notice and Public Notice Sign Photo



DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

To be completed by Applicant	PROPERTY LOCATION		
	Physical Address 11305 Glacier Highway, Juneau, AK 99801		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) USS 1500FR		
	Parcel Number(s) 4B2301050040		
	This property located in the downtown historic district This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner University of Alaska Southeast	Contact Person Ke Mell	
	Mailing Address 11066 Auke Lake Way	Phone Number(s) (907) 796-6480	
	E-mail Address kemell@alaska.edu		
	LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits		
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:			
A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.			
B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X <u><i>Nathan Leigh</i></u> <u><i>7-19-21</i></u> Landowner/Lessee Signature Date			
X _____ Landowner/Lessee Signature Date			
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME"			
Applicant Same		Contact Person	
Mailing Address		Phone Number(s)	
E-mail Address			
X <u><i>Nathan Leigh</i></u> <u><i>7-19-21</i></u> Applicant's Signature Date of Application			

DEPARTMENT USE ONLY BELOW THIS LINE

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Intake Initials JPM	Date Received 11/12/21
Case Number USE21-21.	

APPLICATION FOR EXTENSION OF USE2020 0001



ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

PROJECT SUMMARY

New construction of a two-story, 11,194 square foot educational and research laboratory structure, related and utility linked to the adjacent Anderson Marine Science Laboratory Building. Property has been remitted to UAS by NOAA.

TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED

☐ Accessory Apartment – Accessory Apartment Application (AAP)

☒ Use Listed in 49.25.300 – Table of Permissible Uses (USE)

Table of Permissible Uses Category: 5.130, note 3N requires Planning Commission Approval, with use water dependent, related, or oriented

IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL?

☒ YES – Case # USE2020 0001

☐ NO

UTILITIES PROPOSED

WATER: ☒ Public ☐ On Site

SEWER: ☒ Public ☐ On Site

SITE AND BUILDING SPECIFICS

Total Area of Lot 75,485 square feet Total Area of Existing Structure(s) 0 square feet

Total Area of Proposed Structure(s) 11,194 square feet

EXTERNAL LIGHTING

Existing to remain

☒ No

☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

Proposed

☐ No

☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

ALL REQUIRED DOCUMENTS ATTACHED☐ **Narrative including:**

- ☐ Current use of land or building(s)
- ☐ Description of project, project site, circulation, traffic etc.
- ☐ Proposed use of land or building(s)
- ☐ How the proposed use complies with the Comprehensive Plan

If this is a modification or extension include:

- ☒ Notice of Decision and case number
- ☒ Justification for the modification or extension
- ☒ Application submitted at least 30 days before expiration date

☐ **Plans including:**

- ☐ Site plan
- ☐ Floor plan(s)
- ☐ Elevation view of existing and proposed buildings
- ☐ Proposed vegetative cover
- ☐ Existing and proposed parking areas and proposed traffic circulation
- ☐ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas)

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

ALLOWABLE/CONDITIONAL USE FEES				
	Fees	Check No.	Receipt	Date
Application Fees	\$ 250.00			
Admin. of Guarantee	\$			
Adjustment	\$			
Pub. Not. Sign Fee	\$ 0			
Pub. Not. Sign Deposit	\$ 0			
Total Fee	\$ 250.00			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number

Use 21-21

Date Received

11/12/21

Allowable/Conditional Use Permit Application Instructions

Allowable Use permits are outlined in CBJ 49.15.320, Conditional Use permits are outlined in CBJ 49.15.330

Pre-Application Conference: A pre-application conference is required prior to submitting an application. There is no fee for a pre-application conference. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via e-mail at permits@juneau.org.

Application: An application for an Allowable/Conditional Use Permit will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Allowable/Conditional Use Permit Application and Development Permit Application forms.
2. **Fees:** Fees generally range from \$350 to \$1,600. Any development, work, or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** All plans are to be drawn to scale and clearly show the items listed below:
 - A. Site plan, floor plan and elevation views of existing and proposed structures
 - B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances
 - C. Proposed traffic circulation within the site including access/egress points and traffic control devices
 - D. Existing and proposed lighting (including cut sheets for each type of lighting)
 - E. Existing and proposed vegetation with location, area, height and type of plantings
 - F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

Document Format: All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf (other formats may be preapproved by the Community Development Department).
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

Application Review & Hearing Procedure: Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

Review: As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. During this review period, the Community Development Department also sends all applications out for a 15-day agency review period. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All Allowable/Conditional Use Permit Applications must be reviewed by the Planning Commission for vote. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting.

Public Notice Responsibilities: Allowable/Conditional Use requests must be given proper public notice as outlined in CBJ 49.15.230:

The Community Development Department will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, CDD will mail notices to all property owners within 500-feet of the project site.

The Applicant will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of \$50, and a \$100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing \$50 may be refunded. The Applicant may make and erect their own sign. Please contact the Community Development Department for more information.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED



University of Alaska Southeast
Juneau Ketchikan Sitka

Facilities Services
Facilities Planning & Construction

July 19, 2021

Laurel Christian, Planner II
Community Development Department
City & Borough of Juneau
230 S. Franklin Street
Juneau, AK 99801

Re: USE2020 0001, NOD_USE20-01

Dear Laurel,

The University of Alaska Southeast hereby applies for an extension to USE20-01 Conditional Use Permit for our Auke Bay Integrated Science Building at 11305 Glacier Highway, Juneau, AK 99801. The Conditional Use Permit was issued in February 2020. A combination of Covid and budgetary uncertainties has delayed the project; we hope to put those behind us, and request your assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read "Nathan Leigh".

Nathan Leigh
Director of Facilities Services



Planning Commission

(907) 586-0715

PC_Comments@juneau.org

www.juneau.org/plancomm

155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: February 21, 2020

Case No.: USE2020 0001

North Wind Architects, LLC
126 Seward St
Juneau, AK 99801

Proposal: Conditional Use Permit for a new campus building at UAS

Property Address: 11305 Glacier Hwy

Legal Description: USS 1500 FR

Parcel Code No.: 4B2301050040

Hearing Date: February 25, 2020

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated February 11, 2020, and **APPROVED** the Conditional Use Permit for a new campus building at UAS to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. Prior to issuance of a building permit for the proposed structure, a shared use parking agreement must be approved by the CBJ Community Development Department and CBJ Law Department, and must be recorded in the State Recorder's Office. The parking agreement must state that it may be nullified only when the CBJ Community Development Department Director has approved the nullification of the agreement on an instrument that is recorded with the State Recorder's Office.
2. Prior to issuance of a building permit, the developer shall submit to the CBJ Engineering Department a detailed drainage plan that includes provisions for managing storm water run-off during construction and details the drainage facilities to be included as part of the development. No building permit shall be issued until such plans are deemed adequate and approved by the CBJ Engineering Department.
3. Prior to the issuance of a building permit, the applicant shall submit a revised site plan

North Wind Architects, LLC

Case No.: USE2020 0001

February 21, 2020

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showing snow storage location(s).

4. Prior to issuance of a building permit, the applicant shall submit a lighting plan illustrating the location and type of exterior lighting proposed for the development. Exterior lighting shall be designed and located to minimize offsite glare. Approval of the plan shall at the discretion of the Community Development Department, according to the requirements of CBJ 49.40.230(d).
5. Prior to the issuance of a temporary certificate of occupancy for the proposed structure, the applicant shall dedicate a public pedestrian access easement to the mouth of Auke Creek. When a viable alternative access is provided, the easement across the University property could be vacated. A floating easement could be used with route determined by UAS.
6. Prior to issuance of a temporary certificate of occupancy, CBJ-approved signage shall be posted for the accessible parking space.
7. Prior to issuance of a temporary certificate of occupancy, wheel stops or striping shall be placed in the parking lot to define the location of parking spaces.
8. Prior to the issuance of a temporary certificate of occupancy, all pavement markings, including directional arrows, parking space stripes, and other markings shown on the project site plan, shall be applied to the parking and circulation area as shown on the site plan in a medium designed for such purposes.

Attachments: February 11, 2020, memorandum from Laurel Christian, Community Development, to the CBJ Planning Commission regarding USE2020 0001.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Effective Date: The permit is effective upon approval by the Commission, February 25, 2020

Expiration Date: The permit will expire 18 months after the effective date, or February 25, 2025, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.

North Wind Architects, LLC

Case No.: USE2020 0001

February 21, 2020

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Project Planner:



Laurel Christian, Planner
Community Development Department



Michael LeVine, Chair
Planning Commission



Filed With Municipal Clerk

3/2/2020

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA-trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

DATE: February 11, 2020

TO: Planning Commission

FROM: Laurel Christian, Planner
Community Development Department

CASE NO.: USE2020 0001

PROPOSAL: Conditional Use Permit for a new campus building at UAS

GENERAL INFORMATION

Applicant: NorthWind Architects, LLC

Property Owner: University of Alaska Southeast

Property Address: 11305 Glacier Hwy

Legal Description: USS 1500 FR

Parcel Code Number: 4B2301050040

Site Size: 161,172 square feet (3.700 acres)

Comprehensive Plan Future Land Use Designation: Marine Mixed Use (M/MU)

Zoning: Waterfront Commercial (WC)

Utilities: Public Water & Sewer

Access: Glacier Highway

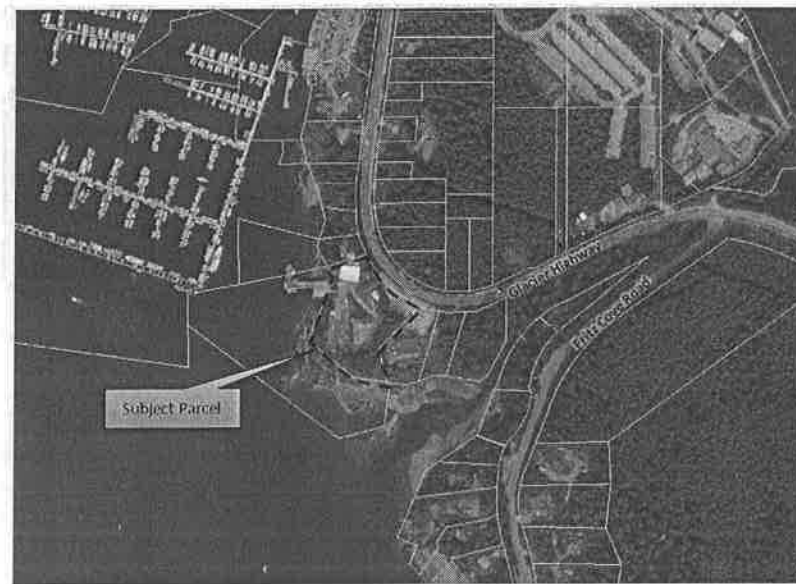
Existing Land Use: University of Alaska Southeast (UAS) Campus

Surrounding Land Use: North - Glacier Highway

Planning Commission
Case No.: USE 2020 0001
February 11, 2020
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South	- Water
East	- UAS Campus Building and Parking
West	- Water

VICINITY MAP



ATTACHMENTS

Attachment A – Application and Project Narrative
Attachment B – Site Plan and Landscaping Plan
Attachment C – Floor Plans and Building Elevations
Attachment D – Lighting
Attachment E – Agency Review Comments

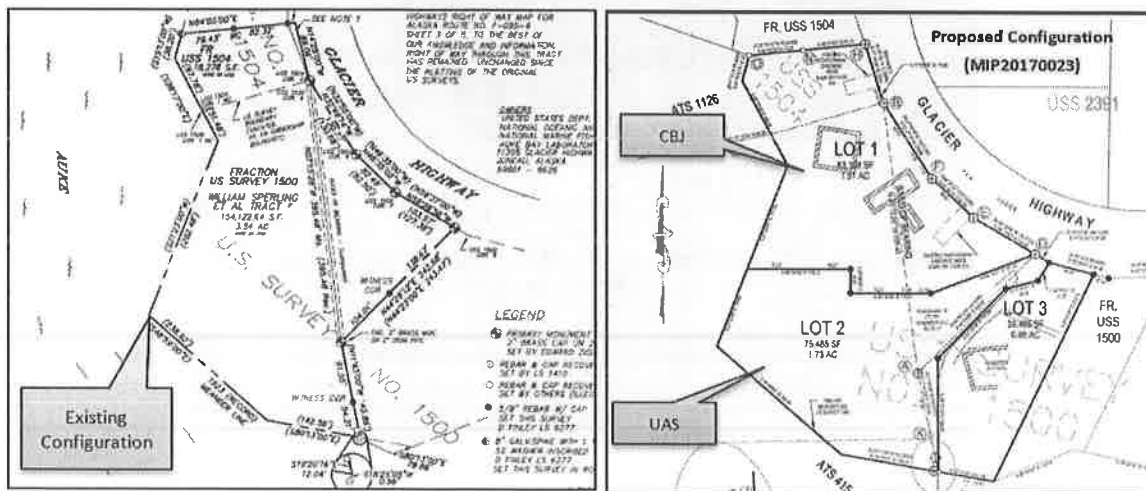
PROJECT DESCRIPTION

The applicant requests a Conditional Use permit for the development of a new campus building at the University of Alaska Southeast (UAS) campus. The new campus building will measure approximately 11,194 square feet. According to the applicant's narrative, the new building will be designed to support educational and research programs associated with the Natural Sciences Research Laboratory Program; the Environmental Sciences and Geography Program; and the Marine and Terrestrial Science Operations and Field Research Support for Faculty and undergraduate research (Attachment A).

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BACKGROUND

In 2018 the subject parcel was transferred from the Federal Government to the University of Alaska Southeast (UAS) and the City and Borough of Juneau (CBJ). A portion of the subject parcel was quitclaimed to CBJ and a portion of the parcel was quitclaimed to UAS. CBJ and UAS applied for a subdivision of the subject parcel, to split the parcel in accordance with these quitclaim deeds (MIP20170023). This subdivision has not yet been completed; the applicants have received preliminary plat approval from the Community Development Department (CDD) but have not submitted a final plat to be reviewed and recorded. The site plan submitted with this application shows the proposed building in relation to the proposed configuration, as shown below.



ANALYSIS

Project Site and Design – As discussed above, the subject parcel is currently working through a subdivision. Once the subdivision is completed, the UAS portion of subject parcel will measure approximately 75,485 square feet. The site has direct access off Glacier Highway. The rear of the site is waterfront to Auke Bay. A site plan can be found in Attachment B.

The proposed building will measure approximately 11,194 square feet and have two stories. The building will contain educational, research, and laboratory facilities, including classrooms, labs, office spaces, storage, and student study spaces. The building will be designed for efficiency and durability while maintaining a high-quality, modern, and aesthetically pleasing finish, according to the project narrative (Attachment A). Floor plans and building elevations can be found in Attachment C.

The site plan submitted with the application shows a possible future expansion of the building and parking areas (Attachment B). According to the applicants, at this time the University has no plans, budget, or timeline for a future expansion. The potential future expansion is shown on the

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site plan to hold a portion of the site free from other structures or parking areas that would make an expansion more difficult. It should be noted that if the applicant, at some time in the future, decides to expand the building, another Conditional Use Permit may be required.

Zoning – The subject parcel is located in the Waterfront Commercial (WC) zoning district. According to the Table of Permissible Uses, Universities and Colleges (USE 5.130) are allowed in the WC zoning district with an approved Conditional Use Permit. Additionally, the WC zoning district allows multiple principle uses on one lot. In the Table of Permissible Uses, Note N requires that uses in the WC zoning district be *water-dependent, water-related, or water-oriented*. The proposed structure and use is consistent with this requirement because, as stated in the project narrative, the building supports education and research in the marine studies fields and will house SCUBA support components such as a SCUBA locker room with shower facilities.

Traffic – According to the ITE Trip Generation Manual, Universities and Colleges generate 1.71 average daily trips on a weekday per student. Average daily trips (ADTs) calculated by square footage was not available for this land use category. According to the applicant, the three classrooms in the building could accommodate 31 students, generating 53 ADTs. According to the CBJ Building Official, the maximum capacity of the building is 122 people, generating 209 average daily trips. Per CBJ 49.40.300(a)(2) no traffic impact analysis is required.

In addition to the parking provided on-site, the applicant provides shuttle service between UAS buildings. The proposed building is also an approximate 15 minute walk away from the UAS Auke Lake Campus Buildings. Traffic is not anticipated to cause negative effects to the surrounding areas or be out of character with the existing neighborhood.

Parking and Circulation – According to CBJ 49.40.210(a) College main campuses require one parking space per 500 square feet. The proposed building measures 11,194 square feet so 22 spaces would be required. Two accessible parking spaces are required; one must be van accessible. The site plan shows that parking will be shared on two neighboring lots owned by the University (Attachment B). The building on the neighboring lot (Anderson Building) measures 17,000 square feet and also requires one parking space per 500 square feet; 34 spaces would be required.

For the two University buildings, 56 parking spaces would be required with a minimum of three accessible spaces, one of which would be required to be van accessible. The site plan shows 57 parking spaces, four of which are accessible. According to CBJ 49.40.200(4)(D) parking spaces may be located within 500 feet of the proposed building. The maximum distance from the proposed building to the farthest parking space is approximately 360 feet.

It should be noted that the site plan shows three individual parcels, all owned by UAS. One parcel will contain the proposed building, one parcel currently contains the UAS Anderson Building, and one parcel is vacant and only used for parking. Parking is not an allowed principal use in the

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Waterfront Commercial (WC) zoning district. The existing parking is nonconforming and is allowed to continue; however, no new parking is permitted on the vacant parcel without another primary use.

The following are recommended conditions of approval that address parking and circulation:

- CBJ-approved signage shall be posted for the accessible parking space prior to commencement of the proposed use.
- Wheel stops or striping shall be placed in the parking lot to define the location of parking spaces prior to commencement of the proposed use.
- All pavement markings, including directional arrows, parking space stripes, and other markings shown on the project site plan shall be applied to the parking and circulation area as shown on the site plan in a medium designed for such purposes prior to the issuance of a Certificate of Occupancy.
- A shared parking agreement must be approved by the CBJ Community Development Department and CBJ Law Department, and must be recorded in the State Recorder's Office prior to issuance of a building permit for the proposed structure. The parking agreement must clearly state that it may be nullified only when the CBJ Community Development Department Director has approved the nullification of the agreement on an instrument that is recorded with the State Recorder's Office.

Vegetative Cover and Landscaping – The minimum required vegetative cover for the Waterfront Commercial zoning district is 10% of total lot area. Once the subdivision is completed, the lot containing the proposed building will measure approximately 75,485 square feet; 7,549 square feet would be required. The applicant has provided a landscaping plan that describes the areas to be landscaped and the proposed materials to be used (Attachment B). This plan shows approximately 22,700 square feet, exceeding the 10% requirement.

Drainage and Snow Storage – A grading plan has not been provided with the application materials. In 2018, the applicants were issued a grading permit to perform site prep for the proposed building. Additional grading will be reviewed during building permit review. A snow storage plan was also not included in the application materials. The following are recommended conditions of approval that address drainage and snow storage:

- Prior to issuance of a building permit the developer shall submit to the CBJ Engineering Department, a detailed drainage plan which includes provisions for managing storm water run-off during construction and which details the drainage facilities to be included as part of the development. No building permit shall be issued until such plans are deemed adequate and approved by the CBJ Engineering Department.
- Prior to the issuance of a building permit, the applicant shall submit a revised site plan showing snow storage location(s).

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Lighting – The applicant has shown five light posts on the site plan (Attachment A) as well as lighting details (Attachment D). According to CBJ 49.40.230(d) parking areas shall be suitably lit and all lighting fixtures shall be “full cutoff” design. This will be verified during building permit review. The following conditions are recommended conditions of approval that address lighting:

- Prior to issuance of a building permit, the applicant shall submit a lighting plan illustrating the location and type of exterior lighting proposed for the development. Exterior lighting shall be designed and located to minimize offsite glare. Approval of the plan shall be at the discretion of the Community Development Department, according to the requirements of CBJ 49.40.230(d).

Non-motorized Transportation – As shown on the site plan, and discussed in the project narrative, there will be pathways between the proposed building and the adjacent UAS Anderson building. Off-site, there are sidewalks on both sides of Glacier Highway, which provide pedestrian access to the proposed building from other parts of the UAS campus. The applicant also labels a bike rack near the front of the proposed building to accommodate users arriving by bicycle. See attachment B.

According to the 2009 Juneau Non-Motorized Transportation Plan, *bike racks should be installed in a convenient and visible locations as close to the buildings [sic] front entrance as possible.* Additionally, the plan calls for bike racks to be designed to accommodate a “U-type lock.” The bike rack shown on the site plan is near the front entrance of the building. Staff encourages the University to also use “U-type lock” bike racks.

Habitat – Auke Creek (ADFG Catalog No. 111-50-10420) is not located on the subject parcel, but runs near the parcel to the east. The mouth of Auke Creek is a popular fishing spot during the summer months. Due to topography, access to the creek from the Alaska Department of Transportation & Public Facilities right-of-way can be challenging. A condition of approval for the subdivision of the subject parcel is that a public pedestrian access easement to the mouth of the creek be dedicated (MIP20170023). CBJ 49.35.620 requires developers to convey easements to provide access to streams or public bodies of water. CBJ 49.15.330(g)(4) also grants the Commission the ability to include conditions requiring easements. In order to ensure public access is provided to Auke Creek in the event that the subdivision is not completed, staff recommends the following condition of approval:

- Prior to the issuance of a Temporary Certificate of Occupancy for the proposed structure, the applicant shall dedicate a public pedestrian access easement to the mouth of Auke Creek. When a viable alternative access is provided, the easement across the University property could be vacated. A floating easement could be used with route determined by UAS.

Flood Hazard Areas – Portions of the subject parcel are in the VE flood zone and have a flood

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elevation of 25 feet. According to the site plan, the building will be located outside of the flood hazard area, with an approximate elevation between 50.5 feet and 65 feet (Attachment B). This will be verified during building permit review; an elevation certificate will likely be required.

Agency and Public Comments – Staff performed an agency review period from January 14th to January 31st. Additionally, postcards were mailed to property owners within 500 feet of the subject parcel.

Agency Comments – Staff requested comments from the CBJ Assessors Office; CBJ Engineering and Public Works; CBJ Streets and Fleet Maintenance; the CBJ Building Division; Capital City Fire and Rescue (CCFR); CBJ Docks and Harbors; and the Alaska Department of Transportation and Public Facilities. CCFR and CBJ Streets and Fleet Maintenance stated they had no issues with the proposed development at this time. CBJ Engineering and Public works provided comments regarding installation of utilities; this is found in Attachment E and summarized below.

CBJ Engineering and Public Works – Comments clarify that as a result of the proposed subdivision, each lot will be served with its own water service and line. The new building and the existing Anderson Building on the adjacent lot are permitted to share a sewer line. No Certificate of Occupancy, or Temporary Certificate of Occupancy will be issued until the new service has been installed. This will be reviewed through building permit review for the proposed building and through the subdivision review (MIP20170023).

Public Comments – At time of writing this staff report, no public comments have been received regarding the proposed development.

Conformity with Adopted Plans – As described below, the proposed development is consistent with the 2013 City and Borough of Juneau Comprehensive Plan, the 2015 Auke Bay Area Plan, and the 2015 Juneau Economic Development Plan. The proposed development supports educational and research objectives listed in these plans and overall supports goals of making Juneau an attractive place to live and learn.

2013 City and Borough of Juneau Comprehensive Plan – The Comprehensive Plan lists the following guiding principle consistent with the proposed development:

Quality education from Pre-school to University levels. Promote quality educational programs and experiences in the schools and lifelong learning for our residents as well as a healthy lifestyle with adequate recreational facilities, resources and programs. Support a vital arts community, celebrating our diverse cultural heritage and unique historic resources.

Additionally, the proposed development is consistent with the following policies:

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POLICY 5.8. TO SUPPORT EXPANSION AND DEVELOPMENT PLANS OF THE UNIVERSITY OF ALASKA SOUTHEAST WHILE PROTECTING THE NATURE OF ITS SETTING, WHICH IS AN INTEGRAL PART OF ITS UNIQUE ADVANTAGE.

Policy 5.8 - SOP2 Encourage UAS to provide a full range of university programs that take advantage of the local environment, both natural and governmental, to attract students from other Alaska communities as well as from outside of Alaska.

POLICY 14.1. TO PROVIDE A STRONG SYSTEM OF HIGH QUALITY PUBLIC EDUCATION TO ENABLE ALL STUDENTS TO BECOME WELL EDUCATED, INFORMED RESIDENTS WHO UNDERSTAND AND APPRECIATE DIVERSE CULTURES AND WHO ARE EQUIPPED TO PURSUE FURTHER EDUCATION AND COMPETE SUCCESSFULLY IN THE WORK FORCE.

The subject parcel has a Comprehensive Plan future land use designation of Marine Mixed Use (M/MU) and is located within *Subarea 3 Auke Bay, Mendenhall Peninsula, West Mendenhall Valley*. The M/MU designation is intended for:

*...high density residential and non-residential land uses in areas in and around harbors and other **water-dependent recreational or commercial/industrial areas**. Typically, neighborhood serving and marine-related retail, marine industrial, personal service, food and beverage services, recreational services, transit and transportation services should be allowed and encouraged, as well as medium- and high-density residential uses at densities ranging from 10 to 60 residential units per acre. (Emphasis added.)*

2015 Auke Bay Area Plan – According to the plan, the vision of the Auke Bay is:

*Auke Bay Community Offers: Gateways to many outdoor activities, including fishing, kayaking, boating, hiking, and bicycling; **study and programs at the University of Alaska Southeast**; and, history and cultural significance for the Aak'w Kwáan who have made Auke Bay their home for millennia. (Emphasis added.)*

The proposed development is consistent with the vision of Auke Bay in that it supports study and programs at UAS. The proposed development is also consistent with the following goals from the Auke Bay Area Plan, Chapter 1:

Goal 1: Develop Auke Bay into a community to live, learn, work, shop and recreate within.

Goal 3: Coordinate and support the development of an Auke Bay hub that serves the needs of the University, the harbors, businesses, and residents.

2015 Juneau Economic Development Plan – The Juneau Economic Development Plan lists the University of Alaska Southeast as an “Asset and Competitive Advantage” and recognizes education as an important factor in economic development. A core principle listed in the plan is to include *a quality education system that prepares students for rewarding jobs and meets the*

Planning Commission
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needs of local employers. The plan also recognizes research as an important economic objective. One goal of the plan is to *Recognize and Expand Juneau's position as a research center.* The following objective supports this goal and is consistent with the proposed development:

Objective 1. Recognize Juneau as a Research Center of Excellence. Raise awareness in Juneau and beyond about Juneau's research and science facilities, assets, expertise, and activities.

FINDINGS

CBJ 49.15.330 (e)(1), Review of Director's Determinations, states that the Planning Commission shall review the Director's report to consider:

1. Whether the application is complete;
2. Whether the proposed use is appropriate according to the Table of Permissible Uses; and,
3. Whether the development as proposed will comply with the other requirements of this chapter.

The Commission shall adopt the Director's determination on the three items above unless it finds, by a preponderance of the evidence, that the Director's determination was in error, and states its reasoning for each finding with particularity.

CBJ 49.15.330 (f), Commission Determinations, states that even if the Commission adopts the Director's determination, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the public hearing, that the development will more probably than not:

1. Materially endanger the public health or safety;
2. Substantially decrease the value of or be out of harmony with property in the neighboring area; or,
3. Not be in general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.

Per CBJ 49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested conditional use permit complete?

Yes. Staff finds the application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

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2. *Is the proposed use appropriate according to the Table of Permissible Uses?*

Yes. The requested permit is appropriate according to the Table of Permissible Uses. The permit is listed at CBJ 49.25.300, Section 5.130 for the Waterfront Commercial zoning district.

3. *Will the proposed development comply with the other requirements of this chapter?*

Yes. The proposed development complies with the other requirements of this chapter. Public notice of this project was provided in the February 14, 2020 and February 23, 2020 issues of the Juneau Empire's "Your Municipality" section, and a Notice of Public Hearing was mailed to all property owners within 500 feet of the subject parcel. Moreover, a Public Notice Sign was posted on the subject parcel, visible from the public Right of Way.

4. *Will the proposed development materially endanger the public health or safety?*

No. There is no evidence that the proposed development will endanger the public health or safety.

5. *Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?*

No. There is no evidence that the proposed development will decrease the value of or be out of harmony with property in the neighboring area.

6. *Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?*

Yes. Staff finds the proposed development is in general conformity with the 2013 City and Borough of Juneau Comprehensive Plan, the 2014 Auke Bay Area Plan, and the 2015 Juneau Economic Development Plan.

Per CBJ 49.70.900 (b)(3), General Provisions, the Director makes the following Juneau Coastal Management Program consistency determination:

7. *Will the proposed development comply with the Juneau Coastal Management Program?*

Yes. Staff finds the proposed developments complies with the Juneau Coastal Management Program.

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RECOMMENDATION

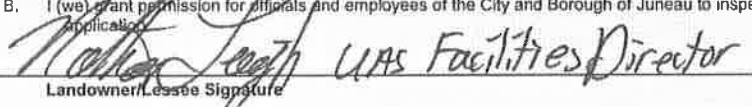
It is recommended that the Planning Commission adopt the Director's analysis and findings and grant the requested Conditional Use permit. The permit would allow the development of a new campus building at the University of Alaska Southeast campus.

The approval is subject to the following conditions:

1. CBJ-approved signage shall be posted for the accessible parking space prior to commencement of the proposed use.
2. Wheel stops or striping shall be placed in the parking lot to define the location of parking spaces prior to commencement of the proposed use.
3. All pavement markings, including directional arrows, parking space stripes, and other markings shown on the project site plan shall be applied to the parking and circulation area as shown on the site plan in a medium designed for such purposes prior to the issuance of a Certificate of Occupancy.
4. A shared parking agreement must be approved by the CBJ Community Development Department and CBJ Law Department, and must be recorded in the State Recorder's Office prior to issuance of a building permit for the proposed structure. The parking agreement must clearly state that it may be nullified only when the CBJ Community Development Department Director has approved the nullification of the agreement on an instrument that is recorded with the State Recorder's Office.
5. Prior to issuance of a building permit the developer shall submit to the CBJ Engineering Department, a detailed drainage plan which includes provisions for managing storm water run-off during construction and which details the drainage facilities to be included as part of the development. No building permit shall be issued until such plans are deemed adequate and approved by the CBJ Engineering Department.
6. Prior to the issuance of a building permit, the applicant shall submit a revised site plan showing snow storage location(s).
7. Prior to issuance of a building permit, the applicant shall submit a lighting plan illustrating the location and type of exterior lighting proposed for the development. Exterior lighting shall be designed and located to minimize offsite glare. Approval of the plan shall at the discretion of the Community Development Department, according to the requirements of CBJ 49.40.230(d).
8. Prior to the issuance of a Temporary Certificate of Occupancy for the proposed structure, the applicant shall dedicate a public pedestrian access easement to the mouth of Auke Creek. When a viable alternative access is provided, the easement across the University property could be vacated. A floating easement could be used with route determined by UAS.

DEVELOPMENT PERMIT APPLICATION

Project Number	CITY and BOROUGH of JUNEAU	Date Received:
Project Name (City Staff to Assign Name)		

PROJECT / APPLICANT INFORMATION	Project Description New construction of a two-story, 11,194 square foot, educational and research laboratory structure, related and utility linked to the adjacent UAS Anderson Marine Sciences Laboratory building. Property has been remitted to UAS by NOAA, who is still listed as Owner on the Assessors Database.		
	PROPERTY LOCATION		
	Street Address 11305 Glacier Highway		City/Zip Juneau, Alaska 99801
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot) USS 1500FR		
	Assessor's Parcel Number(s) 4B2301050040		
	LANDOWNER/ LESSEE		
	Property Owner's Name University of Alaska Southeast		Contact Person: Ke Mell
	Mailing Address 11066 Auke Lake Way		Work Phone: 907-796-6480
	E-mail Address kemell@alaska.edu		Home Phone: Fax Number:
			Other Contact Phone Number(s):
PROJECT / APPLICANT	LANDOWNER/ LESSEE CONSENT ****Required for Planning Permits, not needed on Building/ Engineering Permits****		
	I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:		
	A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.		
	B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.		
	X		UAS Facilities Director
		Landowner/Lessee Signature	Date 1-10-2020
	X		
		Landowner/Lessee Signature	Date
	NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.		
	APPLICANT If the same as OWNER, write "SAME" and sign and date at X below		
Applicant's Name NorthWind Architects, LLC		Contact Person: Sean Boily	
Mailing Address 126 Seward Street Juneau, AK 99801		Work Phone: 907-5986-6150 xt.201	
E-mail Address sean@northwindarch.com		Home Phone: Fax Number: 907-586-6181	
		Other Contact Phone Number(s): 907-321-4131 (cell)	
X			
	Applicant's Signature	Date of Application	

OFFICE USE ONLY BELOW THIS LINE					
STAFF APPROVALS	☒	Permit Type	SIGN	Date Received	Application Number(s)
		Building/Grading Permit			
		City/State Project Review and City Land Action			
		Inquiry Case (Fee In Lieu, Letter of ZC, Use Not Listed)			
		Mining Case (Small, Large, Rural, Extraction, Exploration)			
		Sign Approval (If more than one, fill in all applicable permit #'s)			
		Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)			
		Use Approval (Allowable, Conditional, Cottage Housing, Mobile Home Parks, Accessory Apartment)			
		Variance Case (De Minimis and all other Variance case types)			
		Wetlands Permits			
		Zone Change Application			
		Other (Describe)			
	***Public Notice Sign Form filled out and in the file.				
	Comments:				Permit Intake Initials

NOTE: DEVELOPMENT PERMIT APPLICATION FORMS MUST ACCOMPANY ALL OTHER COMMUNITY DEVELOPMENT DEPARTMENT APPLICATIONS

1-1 FORMS\2010 Applications

Revised November 2009



ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

PROJECT SUMMARY

New construction of a two-story, 11,194 square foot, educational and research laboratory structure with SCUBA support and seawater utility linked to the adjacent UAS Anderson Marine Sciences Laboratory building.

TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED

☐ Accessory Apartment – Accessory Apartment Application (AAP)

☐ Use Listed in 49.25.300 – Table of Permissible Uses (USE)

Table of Permissible Uses Category: 5.130, note 3N requires Planning Commission Approval, with use water dependent, related, or oriented.

IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL?

☐ YES – Case # _____

☐ NO

UTILITIES PROPOSED

WATER: ☒ Public ☐ On Site

SEWER: ☒ Public ☐ On Site

SITE AND BUILDING SPECIFICS

Total Area of Lot 75,485 square feet Total Area of Existing Structure(s) 0 square feet

Total Area of Proposed Structure(s) 11,194 square feet

EXTERNAL LIGHTING

Existing to remain

☒ No

☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

Proposed

☐ No

☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

ALL REQUIRED DOCUMENTS ATTACHED

☒ Narrative including:

- ☒ Current use of land or building(s)
- ☒ Description of project, project site, circulation, traffic etc.
- ☒ Proposed use of land or building(s)
- ☒ How the proposed use complies with the Comprehensive Plan

If this is a modification or extension include:

- ☐ Notice of Decision and case number
- ☐ Justification for the modification or extension
- ☐ Application submitted at least 30 days before expiration date

☒ Plans including:

- ☒ Site plan
- ☒ Floor plan(s)
- ☒ Elevation view of existing and proposed buildings
- ☒ Proposed vegetative cover
- ☒ Existing and proposed parking areas and proposed traffic circulation
- ☒ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas)

DEPARTMENT USE ONLY BELOW THIS LINE

ALLOWABLE/CONDITIONAL USE FEES

	Fees	Check No.	Receipt	Date
Application Fees	\$ _____			
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ _____			
Pub. Not. Sign Deposit	\$ _____			
Total Fee	\$ _____			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number

Date Received

Allowable/Conditional Use Permit Application Instructions

Allowable Use permits are outlined in CBJ 49.15.320, Conditional Use permits are outline in CBJ 49.15.330 -

Pre-Application Conference: A pre-application conference is required prior to submitting an application. There is no fee for a pre-application conference. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via e-mail at permits@juneau.org.

Application: An application for an Allowable/Conditional Use Permit will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Allowable/Conditional Use Permit Application and Development Permit Application forms.
2. **Fees:** Fees generally range from \$350 to \$1,600. Any development, work, or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** All plans are to be drawn to scale and clearly show the items listed below:
 - A. Site plan, floor plan and elevation views of existing and proposed structures
 - B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances
 - C. Proposed traffic circulation within the site including access/egress points and traffic control devices
 - D. Existing and proposed lighting (including cut sheets for each type of lighting)
 - E. Existing and proposed vegetation with location, area, height and type of plantings
 - F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

Document Format: All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf (other formats may be preapproved by the Community Development Department).
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

Application Review & Hearing Procedure: Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

Review: As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. During this review period, the Community Development Department also sends all applications out for a 15-day agency review period. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All Allowable/Conditional Use Permit Applications must be reviewed by the Planning Commission for vote. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting.

Public Notice Responsibilities: Allowable/Conditional Use requests must be given proper public notice as outlined in CBJ 49.15.230:

The Community Development Department will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, CDD will mail notices to all property owners within 500-feet of the project site.

The Applicant will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of \$50, and a \$100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing \$50 may be refunded. The Applicant may make and erect their own sign. Please contact the Community Development Department for more information.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

University of Alaska Southeast

Auke Bay Integrated Sciences Building

Design Narrative for Conditional Use Permit Application***Introduction and Project Purpose***

The Auke Bay Integrated Sciences Building (ABISB) property, adjacent to the UAS Anderson Building, will allow UAS to spatially collocate academic programs in the terrestrial and marine sciences, and promote the development of interdisciplinary program convergence on the Juneau Campus. Adjacency with CBJ dock facilities will support marine research and promote convergence with industry, other researchers, and the people of Juneau. Promoting convergence is a national priority for university programs in the natural sciences; convergence will be required of future scientists and citizens to address the complex scientific questions facing society. ***This use is consistent with requirements of WC zoning in which Conditional Use requires Water related activity. This is an education and research facility with marine study and SCUBA support components.*** Incidentally the facility is also physically tied into the adjacent marine research facility through a seawater heat pump heating system utilizing waste heat in sweater expelled from the Anderson Building to heat the new building.

The educational program for the ABISB property contains three components:

1. Natural Sciences Research Laboratory (NSRL) program
2. Environmental Science and Geography Program
3. Marine and Terrestrial Science Operations and Field Research Support for faculty and undergraduate research

Building Design and Function: The design is for a new, 2-story building, tailored to the needs of the educational and research programs listed above. Specific design and functional goals include:

- An efficient floor plate will be developed to easily accommodate future program changes and changing research support needs.
- Laboratory and field research support modules will be configured with future flexibility in mind.
- The building will be modern and aesthetically pleasing. It will respond to Auke Bay's Alaskan maritime climate and will take advantage of stunning views to the north and west.
- The facility will house field research workshop space including SCUBA support for the adjacent Andersen marine laboratory.
- Paths will provide easy access to the adjacent Anderson Building, and the building will be configured to allow for a future connection between the two buildings.
- The site is positioned to connect to trails leading to the shoreline and nearby CBJ dock facilities.
- High quality, durable finishes will be utilized on the building exterior and interior; and the building will be wrapped in an energy efficient building envelope.

ABISB Space List - Program Area:***Marine Operations and Field Research Support***

- Field Equipment Storage/Staging
- Field Equipment Maintenance Shop
- SCUBA Equipment

NSRL Faculty and Undergraduate Laboratories

- Water/Soils Ecology Laboratory
- Forest Ecology/Glaciology/Geophysics Lab

University of Alaska Southeast

Auke Bay Integrated Sciences Building

- Research Storage Room
- Clean Room (attached to Water/Soils Lab)
- Dirty Room (attached to Forest Ecology Lab)
- Chemical Storage Room
- Freezer Room
- Environmental Science Specialized Classroom
- Environmental Science Teaching Supplies
- Conference/Meeting Room
- Faculty Offices
- Open Office/Work
- Study/Breakout Space
- Shared Kitchenette

Support Spaces

- Arctic Entry and Lobby
- Restrooms & Janitor Room
- Facility Storage Room
- Mechanical/Electrical/Telecom

The current design is near completion (+95%) anticipating bidding for construction in April

Site Vegetation: The natural vegetation on the site has largely been removed, except for that below elevation 44' on the site plan. Site drainage and surface shall be addressed in compliance with stormwater protection requirements within the contract for construction. The University of Alaska engages a campus landscape design and installer to address spoils and planting for site restoration after construction contract is near completion but before the site is occupied.

Parking: To avoid unnecessary parking lot coverage, the University shall both provide on-site parking and share parking with the adjacent Anderson Building site to meet the CBJ's parking requirements of 1 space per 500 sf of campus building construction. The facility will not depend on other off-site campus parking to meet parking requirements. This is supported by correspondence with CDD in 2018. The 17,000 sf Anderson building requires 34 spaces. The parking lots serving the Anderson building provide 45 spaces (11 extra spaces). The 11,200 sf Auke Bay station building requires 22 spaces. Given the 11 spaces at the adjacent Andersen Building site, a total of 11 new spaces are required. The site development design includes 12 new parking spaces, including 2 new ADA Spaces. The two facilities and parking areas connected by an Accessible walkway. Parking spaces for each building are designated on the site plan accompanying this narrative. ABS spaces have an "S" designation with their number and are highlighted on the accompanying architectural site plan.

Sustainability: In planning for a building with a life of fifty years or more, it is important to consider capital costs, maintenance costs, and total life cycle costs of all building components. It is equally important to recognize the impact the building will have on the environment and strive to minimize that impact wherever possible. We think of 'sustainable design' as something that honors place and culture, minimizes life cycle costs, maximizes return on investment, and minimizes its environmental footprint. For the Auke Bay Marine Station, the following sustainable guidelines have been established:

- **Energy and Atmosphere:** The energy efficiency strategy will focus on an energy efficient building envelope, heat recovery ventilation, and low-energy lighting strategies. Wall assemblies will have a

University of Alaska Southeast

Auke Bay Integrated Sciences Building

minimum overall thermal resistance of R-24 and roof assemblies will have a minimum value of R-50. Assemblies will be thermally broken wherever possible. Windows will be thermally broken and glazed with high-performance low-E glazing. These windows will manage solar heat gain while allowing a maximum amount of daylight to enter the building. Heating, cooling and ventilation will be provided via ducted air distribution, which includes heat recovery from the building's exhaust air, thereby recapturing a high percentage of heat lost to the 100% outside air ventilation requirements of the labs. Heating energy is gained through extraction of waste heat from the seawater circulation system that serves the adjacent Anderson Building marine laboratories: heat gained as the seawater passes through the heated laboratory space is recaptured through a heat exchanger and heat pumps before the sea is returned to the sea. It has been calculated this latent energy is more than enough for heating the new facility. Emphasis has been given to designing systems that can be maintained by local personnel.

- **Materials and Methods:** In all areas of construction, emphasis will be placed on materials and assemblies that provide maximum durability. Durable materials that can be reused in the future will be favored over temporary, single-use materials. Wherever practical, finish materials will be avoided allowing structural materials to be expressed, thus minimizing overall material consumption. Materials with a high recycled content will be favored, when it can be shown that durability is not sacrificed.
- **Indoor Environmental Quality:** A stringent quality control be maintained during construction, and all interior finish materials will be selected from low-emitting choices. Blinds will be provided on all exterior windows, and individual lighting controls will be provided at private offices giving the users control over their own comfort. Daylight and views will be provided to all occupied areas of the building. As much as possible, classrooms and offices will be naturally ventilated. Windows and openings will be placed to encourage cross-ventilation and 'stack effect' ventilation. This will provide a strong connection to the outdoors, an abundance of fresh air, and will help reduce initial and operational costs.
- **Water Efficiency:** Water fixtures inside the facility will be carefully selected to achieve a reduction of water consumption below EPA standards. The new facility design includes the following fixtures:
 - Toilets: 3
 - Lavatories: 3
 - Shower: 1
 - Utility sink: 3
 - Drinking fountain: 1-pair (high/low)
 - Educational (classroom) sink: 1
 - Laboratory sink: 5
 - Kitchenette sink with dishwasher connection: 1
 - Eyewash/emergency shower station: 3

Water and waste piping utilities have been designed to serve the fixtures provided.

University of Alaska Southeast

Auke Bay Integrated Sciences Building

Schedule

The schedule will allow UAS to occupy the new building in the fall semester of 2021. Phase 1 site and utility preparation is complete, except for final utility tie in on the State highway easement which is presently in negotiation between the City and Borough of Juneau and the State of Alaska. The University of Alaska Southeast would like to start construction no later than April 2020 to take full advantage of the summer construction season. The project team is maintaining the following project schedule:

- | | |
|---|------------|
| • Phase 2 Construction Documents Complete | 04/22/2019 |
| • Award Bid | 03/30/2020 |
| • Begin Building Construction | 04/1/2020 |
| • Construction Completion | 06/01/2021 |
| • First Day of Class | 08/23/2021 |

Attachments:

- Architectural site plan with parking and site lighting notated – 1 sheet
- Architectural building plans and elevations – 8 sheets
- Site lighting fixture cut sheets (campus pathway lighting post) – 2 sheets
- UAS Landscaper notes and plan sheet overlay - 1 sheet



(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

Project name UAS Marine Science building

Case Number: PAC2018 0074

Applicant: UAS

Property Owner: NOAA

Property Address: 11305 Glacier Hwy

Parcel Code Number: 4B2301050040

Site Size: 161,172 Square Feet

Zoning: WC (Waterfront Commercial)

Existing Land Use: NOAA Lab

Conference Date:	October 31, 2018
Report Issued:	(November 7, 2018)

List of attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Name	Title	Email address
Kemell	Applicant	Kemell@alaska.edu
Laura A. Boyce, AICP	Planning	laura.boyce@juneau.org
Dave Hurley	Applicant	Dave@northwindarch.com
Autumn Sapp	General Engineering	Autumn.Sapp@juneau.org
John Young	Commercial Plan Review	John.young@juneau.org
Dan Jager	Fire Marshall	Dan.Jager@juneau.org

Pre-Application Conference Final Report

Conference Summary

Questions/issues/agreements identified at the conference that weren't identified in the attached reports.

The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

Planning Division:

The applicant indicates that a new university building of 12,000 square feet will be constructed on the property. The proposed use is found in the TPU at CBJ 49.25.300.5.130. *Colleges and Universities*. The proposed use requires a Conditional Use permit approval. Note N applies which states that the proposed use must be water-dependent, water-related, or water-oriented.

The site is currently being considered for a subdivision/lot line adjustment. Proposed structures must meet the setback requirements from the updated lot lines.

1. **Zone District** – Waterfront Commercial (WC), proposed use must be water-dependent, water-related, or water-oriented.
2. **Minimum Required Setbacks** – The following minimum setbacks apply: 10 feet front yard, 10 feet side yard, 10 feet rear yard.
3. **Maximum Height** – 35 feet although a Height Bonus may be allowed
4. **Access** – The access is via Glacier Highway.
5. **Parking** – The parking rate that applies is for Colleges, Main Campus: 1 space per 500 square feet of gross floor area of an enclosed area, or, where auditorium or general assembly area is available, one per four seats, whichever is greater. If the building is 12,000 square feet, then 24 parking spaces are required, with one of those spaces being an accessible space. According to CBJ 49.40.200(4) (D), off-street parking shall be provided within 500 feet of the building.

CBJ 49.40.200(5) allows the Planning Commission to approve joint use parking situations. The code section will be included at the end of this report.

Advisory comment: As mentioned during the pre-application meeting, according to the site plan submitted as part of the pre-application meeting materials, the site plan indicates proposed lot lines around two adjacent parcels with only parking shown as the principal use on those parcels. Within the WC zone district, parking lots cannot be a primary use of the property; they can only be accessory to the main use. New parking lots will not be permitted on parcels without a primary use associated with them.

6. **Maximum Lot Coverage** – There is no maximum lot coverage specified for the WC zone district
7. **Minimum Required Vegetative Coverage** – The minimum required vegetative cover is 10% of the site
8. **Lighting** – No offsite glare is allowed. Lighting will be evaluated at the building permit stage of development.
9. **Noise** – N/A, based upon proposed use.
10. **Flood** – N/A
11. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – N/A
12. **Wetlands** – N/A
13. **Habitat** – N/A

Pre-Application Conference Final Report

14. Plat or Covenant Restrictions – N/A**Building Division:****15. Building – N/A****16. Outstanding Permits – N/A****General Engineering/Public Works:**

17. Engineering – Site plan shall include all easements for drainage, utility lines including plumbing lines, access, snow storage, trash (dumpster) storage, or any other shared use that requires crossing the property line.

18. Drainage – See required easements under 17. Current drainage plan has been submitted under BLD20180553.

19. Utilities – (water, power, sewer, etc.) Existing water and sewer permits exist to provide utilities to the foundation site; the assessments were not made at the time of permit issuance as the building plans were not finalized. Two additional utility permits will be issued for the assessment of water and sewer fees. To allow for this, signed engineered mechanical plans must be submitted and must include the following:

- a. Domestic water line size, water meter size, and water meter location
- b. Count of Drainage Fixture Units (DFU) of sanitary sewer fixtures
- c. If a subtraction or sanitary sewer meter is to be installed – location and sizing. Subtraction meters capture water that is not draining to the public water system while a sanitary sewer meters captures water that is draining to the public sanitary sewer system. Both meters are a standard water meter. These are typically requested when there is a large volume of water that is not entering the public sewer system. This meter is in addition to the domestic (non-fire line) water meter which captures all water usage for the structure. There are two options and should be identified in the mechanical plan:
 - i. Sanitary Sewer Meter - If plumbing configuration will allow, it is preferred a water meter to be installed on the water line that supplies all drainage fixtures that drain to the public sanitary sewer. This meter is read only for sanitary sewer usage and will determine the sanitary sewer charges on the CBJ utility bill.
 - ii. Subtraction Meter – This meter is installed on a water line that only supplies water fixtures that do not drain to the public sewer system. The usage read on the subtraction meter is then subtracted from the sanitary sewer charges on the CBJ utility bill.

20. Fire Marshal:**21. Fire Items/Access – N/a****Other Applicable Agency Review:**

22. DOT&PF / Alcohol Beverage Control Board / Army Corps / DEC (wastewater) / DNR / USF&W / F&G / FAA / Corrections...

23. The DOT&PF should be contacted to see if a revised driveway access permit is needed.

List of required applications

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

Pre-Application Conference Final Report

1. Conditional Use permit application
2. Development Permit Application

Additional submittal requirements:

Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.
2. Include in the project narrative how parking works with the overall campus as well as how it will work on site.
3. The Project Narrative MUST include how the use is water-dependent, water-related, or water-oriented.

Exceptions to submittal requirements:

Submittal requirements staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. (Add any items required with the forms that are not applicable to the Conditional Use application)

Previous Applications:

The following permits and applications have been filed for this property:

1. CSP2017 0009, CBJ acquisition of a portion of Auke Bay Marine Station from NOAA (Approved)
2. MIP2017 0023, Subdivision of three lots into three lots (Open, Active)
3. PAC2017 0019, Pre-application Meeting Prior to Subdivision listed above (Closed)
4. CU76-24, Conditional Use permit for University Building (Approved)

Fee estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. \$750.00 for a Class III Conditional Use permit application fee
2. \$150 for public notice sign notification (\$100 may be reimbursed)
3. Water and sewer assessment fees can be determined once the mechanical plans have been reviewed.

For informational handouts with submittal requirements for development applications, please visit our website at www.juneau.org/cdd.

Submit your completed application

You must submit your application(s) in person with payment to:

City/Borough of Juneau
Permit Center
230 S. Franklin Street,
Fourth Floor Marine View Center
Juneau, AK 99801

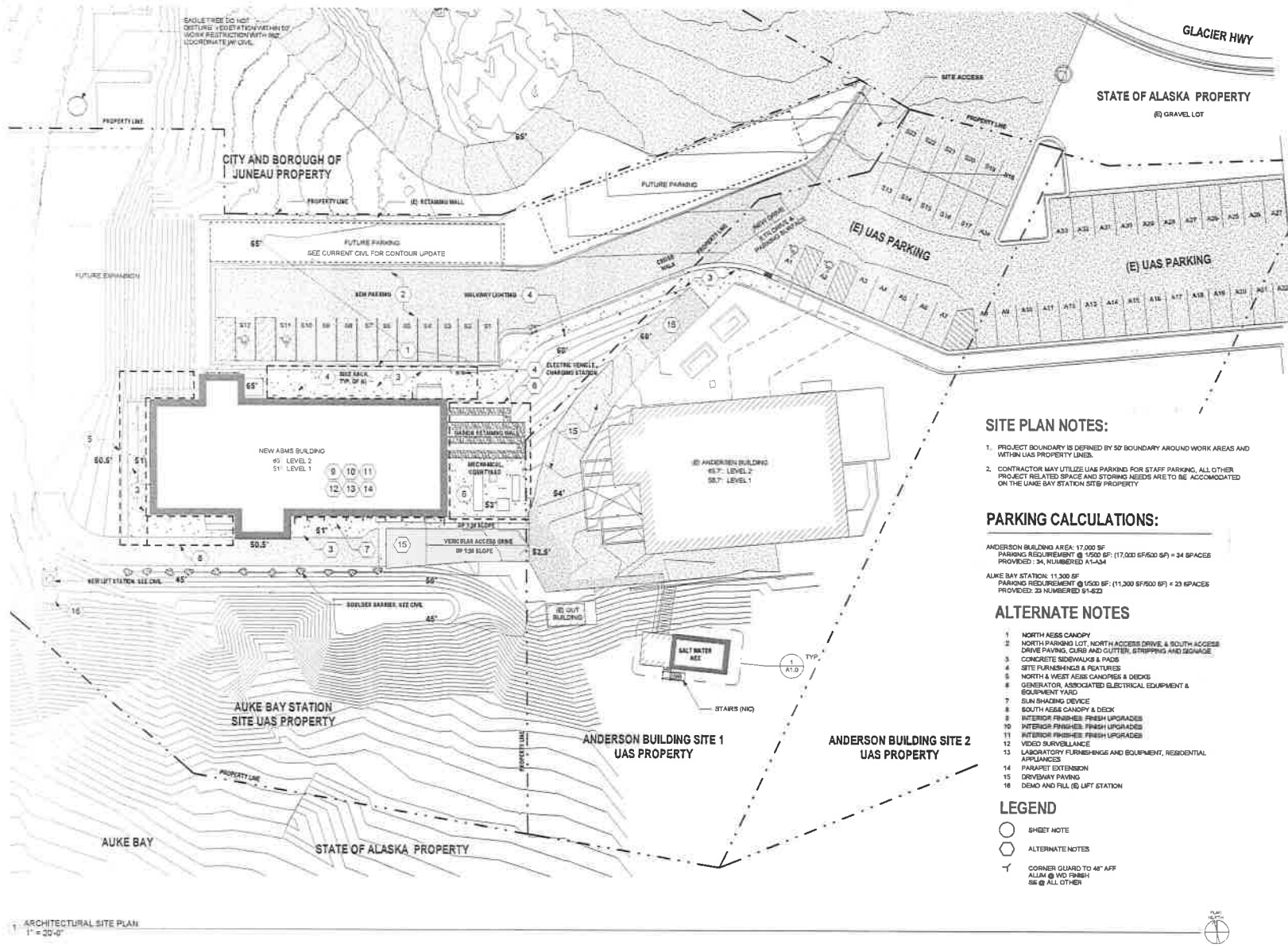
Pre-Application Conference Final Report

Phone: (907) 586-0715
Fax: (907) 586-4529
Web: www.juneau.org/cdd

CBJ 49.40.200(5) Joint Use. The commission may authorize the joint use of parking facilities for the following uses or activities under conditions specified:

- (A) Up to 50 percent of the parking facilities required by this chapter for primarily nocturnal uses including theatres, bowling alleys, bars, restaurants, and related uses may be supplied by other types of buildings or daytime uses such as banks, offices, retail, personal service shops, clothing, food, furniture, manufacturing or wholesale and related uses;*
- (B) Up to 50 percent of the parking facilities required by this chapter for primarily daytime uses may be supplied by primarily nighttime uses;*
- (C) Up to 100 percent of the parking facilities required by this section for a church or for an auditorium incidental to a public or parochial school, may be supplied by the off-street parking facilities provided for primarily diurnal uses;*
- (D) Conditions required for joint use. Any building or use sharing the off-street parking facilities or another building or use shall be located within 500 feet of such parking facilities. In addition:*
 - (i) The applicant shall show that there is no substantial conflict in the principal operating hours of the two buildings or users for which joint use of off-street parking facilities is proposed; and*
 - (ii) The applicant shall present to the director a written instrument, executed by the parties concerned, providing for joint use of off-street parking facilities, and approved as to form by the City and Borough attorney. Upon approval by the director, such instrument shall be filed with the department and the building official.*

Attachment A - Application Packet



NorthWind Architects, LLC
123 Seaward St.
Juneau, AK 99801
Ph: 907.586.8150
www.northwindarch.com
AECIL1234

ECI
3909 Arctic Blvd, Suite 103
Anchorage, AK 99501
Ph: 907.561.5543

SCALE: 1" = 30'-0" (SEE NOTE 15)
MEASURE LINE FROM CENTERLINE OF HIGHWAY TO ROAD EDGE

AUKE BAY STATION - Phase II

University of Alaska Southeast
11305 Glacier Hwy
Juneau, AK 99801

SHEET TITLE
ARCHITECTURAL SITE PLAN

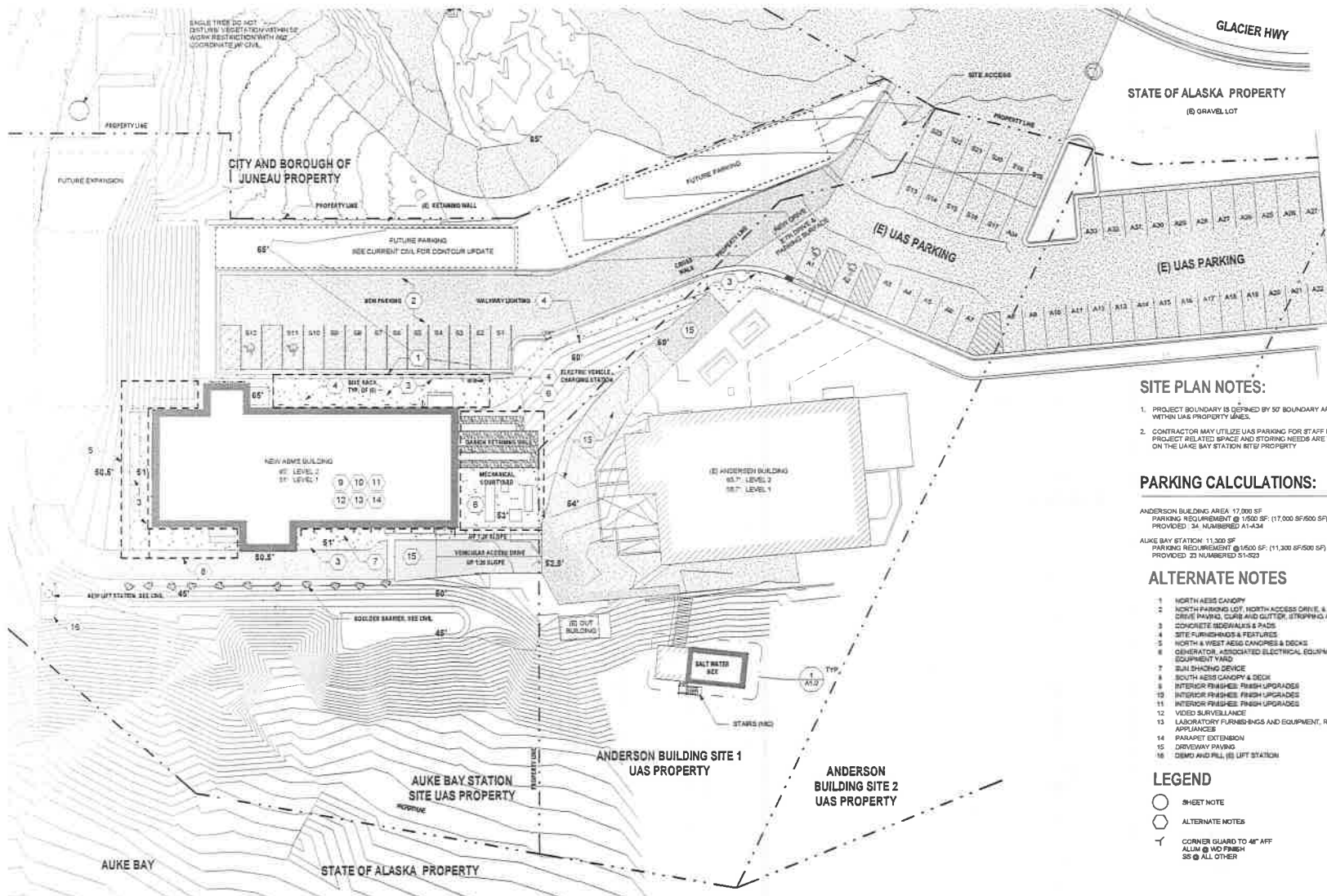
CHECKED: SB, DH, BM
DRAWN: RE, AC

DATE: 04/22/2019

SHEET # **G0.3**

PLOT DATE: 04/22/2019
ISSUE DATE: April 22, 2019

Attachment A - Application Packet



SITE PLAN NOTES:

1. PROJECT BOUNDARY IS DEFINED BY 50' BOUNDARY AROUND WORK AREAS AND WITHIN UAS PROPERTY LINES.
2. CONTRACTOR MAY UTILIZE UAS PARKING FOR STAFF PARKING. ALL OTHER PROJECT RELATED SPACE AND STORING NEEDS ARE TO BE ACCOMMODATED ON THE AUKE BAY STATION SITE/ PROPERTY.

PARKING CALCULATIONS:

ANDERSON BUILDING AREA: 17,000 SF
PARKING REQUIREMENT @ 1,000 SF: (17,000 SF/1,000 SF) = 17 SPACES
PROVIDED: 34, NUMBERED A1-A34

AUKE BAY STATION: 11,300 SF
PARKING REQUIREMENT @ 1,000 SF: (11,300 SF/1,000 SF) = 11 SPACES
PROVIDED: 23, NUMBERED S1-S23

ALTERNATE NOTES

1. NORTH AISLE CANOPY
2. NORTH PARKING LOT, NORTH ACCESS DRIVE, & SOUTH ACCESS DRIVE PAVING, CURB AND GUTTER, STROPPING AND SLOPES
3. SCHEMATIC REGULATIONS & PLANS
4. SITE FURNISHINGS & FEATURES
5. NORTH & WEST AISLE CANOPIES & DECKS
6. GENERATOR, ASSOCIATED ELECTRICAL EQUIPMENT & EQUIPMENT YARD
7. SUN SHADING DEVICE
8. SOUTH AISLE CANOPY & DECK
9. INTERIOR FINISHES: FINISH UPGRADES
10. INTERIOR FINISHES: FINISH UPGRADES
11. INTERIOR FINISHES: FINISH UPGRADES
12. VIDEO SURVEILLANCE
13. LABORATORY FURNISHINGS AND EQUIPMENT, RESIDENTIAL APPLIANCES
14. PARAPET EXTENSION
15. DRIVEWAY PAVING
16. DEMO AND FILL (SEE LIFT STATION)

LEGEND

- SHEET NOTE
- ALTERNATE NOTES
- CORNER GUARD TO 4" AFF ALUM @ NO FINISH
- 36" @ ALL OTHER



NorthWind Architects, LLC
120 Seaward St
Juneau, AK 99801
Ph: 907.586.6150
www.northwindarch.com
RAEC1332

ECI

3000 Arctic Blvd, Suite 103
Anchorage, AK 99501
Ph: 907.561.0040

AUKE BAY STATION - Phase II

University of Alaska Southeast
11305 Glacier Hwy
Juneau, AK 99801

SHEET TITLE
**ARCHITECTURAL
SITE PLAN**

Checked	SB, DH, BM
Drawn	RE, AC

Issue	Date	Description

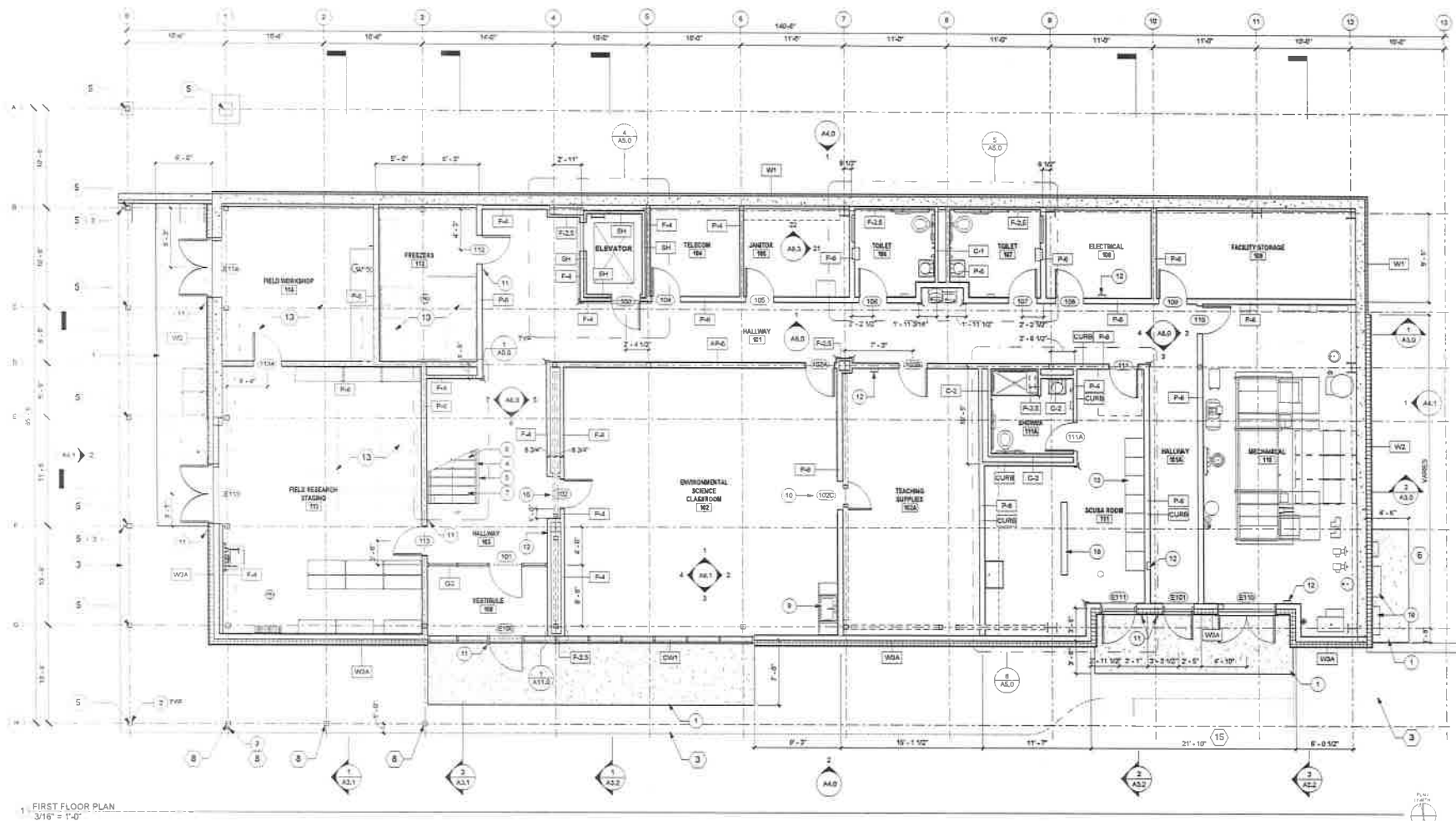
SHEET # **G0.3**

PLOT DATE 04/22/2019
ISSUE DATE April 22, 2019

1 ARCHITECTURAL SITE PLAN
1" = 20'-0"

Attachment B - Site Plan and Landscaping Plan

Attachment A - Application Packet



GENERAL NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, WHERE DISCREPANCIES OR CONFLICTS ARISE IMMEDIATELY NOTIFY ARCHITECT.
- DIMENSIONS ARE TO GRIDLINE OR TO CENTER OF FRAMING.
- DOORS ARE DIMENSIONED TO CENTERLINE OF OPENING, WHERE DOORS ARE IMMEDIATELY ADJACENT TO PARTITIONS AND ARE NOT DIMENSIONED, PROVIDE MIN. 2\"/>

SHEET NOTES - FLOOR PLAN

- 033000 CAST IN PLACE CONCRETE PAD OR SLOEWALK
- 051213 ASSE DECK CANOPY GLASS/ROOF SUPPORT ASSEMBLY, OR EXPOSED INTERIOR STEEL TO 12\"/>

SHEET NOTES - FLOOR PLAN

- 101208 PLASTER LOCKERS
- 113013 RESIDENTIAL APPLIANCES - INC
- 113313 FINE HOOK
- 120900 SITE FURNISHING - BINE RACK
- 210500 FIRE DEPARTMENT INLET CONNECTION, REFER TO MECHANICAL
- 224000 TRENCH DRAIN, REFER TO MECHANICAL
- 260000 REFER TO ELECTRICAL

ALTERNATE NOTES

- NORTH ASSE CANOPY
- NORTH PARKING LOT, NORTH ACCESS DRIVE, & SOUTH ACCESS DRIVE PAVING, CURB AND GUTTER, STRIPING AND SIGNAGE
- CONCRETE SIDEWALKS & PADS
- SITE FURNISHING & FEATURES
- NORTH & WEST ASSE CANOPIES & CECS
- GENERATOR, ASSOCIATED ELECTRICAL EQUIPMENT & EQUIPMENT YARD
- SUN SHADING DEVICE
- SOUTH ASSE CANOPY & DECK
- INTERIOR FINISHES FINISH UPGRADES
- INTERIOR FINISHES FINISH UPGRADES
- INTERIOR FINISHES FINISH UPGRADES
- VIDEO SURVEILLANCE
- LABORATORY FURNISHINGS AND EQUIPMENT, RESIDENTIAL APPLIANCES
- PERIMETER EXTENSION
- DRIVEWAY PAVING
- DEMOL AND FULL (6) LIFT STATION

LEGEND

- SHEET NOTE
- ALTERNATE NOTES
- └ CORNER GUARD TO 48\"/>



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PROJECT: AUKU BAY STATION - PHASE II
DRAWN BY: J. H. HARRIS
CHECKED BY: J. H. HARRIS
DATE: 04/22/2019

AUKU BAY STATION - Phase II

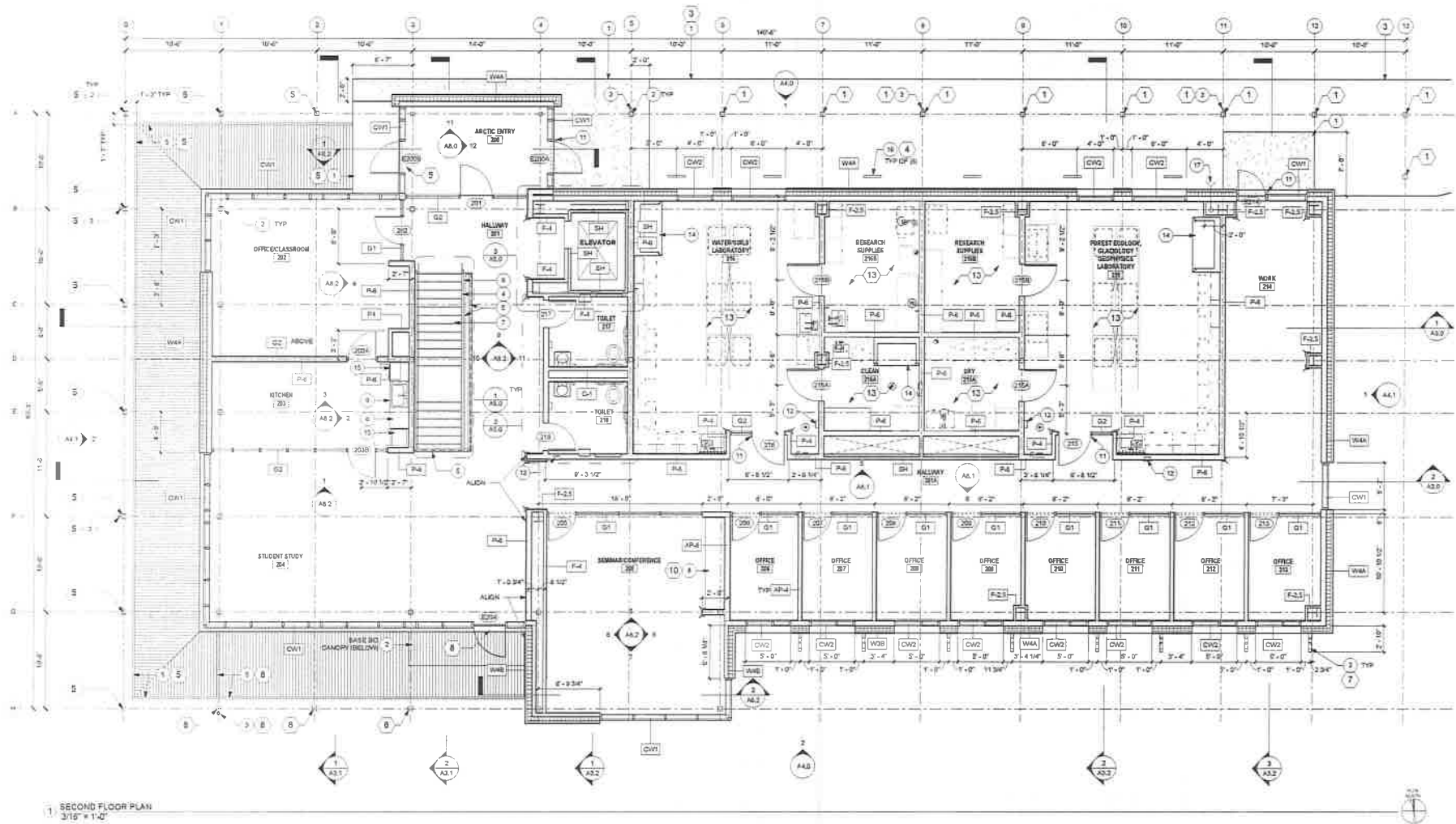
University of Alaska Southeast
11305 Glacier Hwy
Juneau, AK 99801

SHEET TITLE
FIRST FLOOR PLAN

CHECKED: SB, DH, BM
DRAWN: RE, AC, BK
DATE: 04/22/2019

SHEET # **A2.0**
PLOT DATE: 04/22/2019
ISSUE DATE: April 22, 2019

Attachment A - Application Packet



SECOND FLOOR PLAN
3/16" = 1'-0"

GENERAL NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. WHERE DISCREPANCIES OR CONFLICTS ARISE IMMEDIATELY NOTIFY ARCHITECT.
- DIMENSIONS ARE TO GRADING OR TO CENTER OR EDGE OF FRAMING.
- DOORS ARE DIMENSIONED TO CENTERLINE OF OPENING. WHERE DOORS ARE IMMEDIATELY ADJACENT TO PARTITIONS AND ARE NOT DIMENSIONED, PROVIDE MIN 3" JAMB FRAMING.
- WINDOWS ARE DIMENSIONED TO EDGES OF WINDOW JAMBS.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL @ ASES PER SECTION 051213.
- ALL INTERIOR EXPOSED STRUCTURAL STEEL ON THE FIRST FLOOR FROM GRID 3 TO GRID 4 AND ON THE SECOND FLOOR FROM GRID 1 TO GRID 4 @ ASES PER SECTION 051213.

SHEET NOTES - FLOOR PLAN

- | | | |
|----|--------|---|
| 1 | 030000 | CART IN PLACE CONCRETE PAD OR SIDEWALK |
| 2 | 051213 | ACES DOCK CANOPY, SUNSHADE SUPPORT ASSEMBLY, OR EXPOSED INTERIOR STEEL TO 12' AFF |
| 3 | 050600 | HOT STEEL PIPE DOWNSPOUTS, DAYLIGHT WITH 45 DEGREE OUTLET AWAY FROM BUILDING AT GRADE |
| 4 | 050500 | STAINLESS STEEL PIPE HAND RAILS |
| 5 | 050500 | STEEL STAIR TREAD SUPPORTS AND RISERS |
| 6 | 060203 | INTERIOR FINISH CARPENTRY - WOOD TREADS |
| 7 | 064115 | WOOD VENEER FACED ARCHITECTURAL CABINETS |
| 8 | 061000 | COORDINATE DOOR AND ADA CLEARANCE W/ STRUCTURAL FRAME FRAME |
| 9 | 061700 | CARD READER |
| 10 | 104400 | RECESSED FINE EXTINGUISHERS AND CABINETS |

SHEET NOTES - FLOOR PLAN

- | | | |
|----|--------|---|
| 13 | 105126 | PLASTIC LOCKERS |
| 14 | 113013 | RESIDENTIAL APPLIANCES - MIC |
| 15 | 115313 | FLAME HOOD |
| 16 | 120000 | SITE FURNISHING - BIKE RACK |
| 17 | 210500 | FIRE DEPARTMENT INLET CONNECTION, REFER TO MECHANICAL |
| 18 | 224000 | TRENCH DRAIN, REFER TO MECHANICAL |
| 19 | 260000 | REFER TO ELECTRICAL |

ALTERNATE NOTES

- NORTH ACES CANOPY
- NORTH PARKING LOT, NORTH ACCESS DRIVE, & SOUTH ACCESS DRIVE PAVING, CURB AND GUTTER, ATTRAPPING AND MGNAGE
- CONCRETE SIDEWALKS & PADS
- SITE FURNISHINGS & FEATURES
- NORTH & WEST ACES CANOPIES & DECKS
- GENERATOR, ASSOCIATED ELECTRICAL EQUIPMENT & EQUIPMENT YARD
- SUN SHADING DEVICE
- SOUTH ACES CANOPY & DECK
- INTERIOR FINISHERS: FINISH UPGRADES
- INTERIOR FINISHERS: FINISH UPGRADES
- INTERIOR FINISHERS: FINISH UPGRADES
- VIDEO SURVEILLANCE
- LABORATORY FURNISHINGS AND EQUIPMENT, RESIDENTIAL APPLIANCES
- PARAPET EXTENSION
- DRIVEWAY PAVING
- DEMOL AND FILL (E) LIFT STATION

LEGEND

- SHEET NOTE
- ALTERNATE NOTES
- CORNER GUARD TO 48" AFF
- ALUM @ MO FINISH
- @ ALL OTHER



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AUKE BAY STATION - Phase II

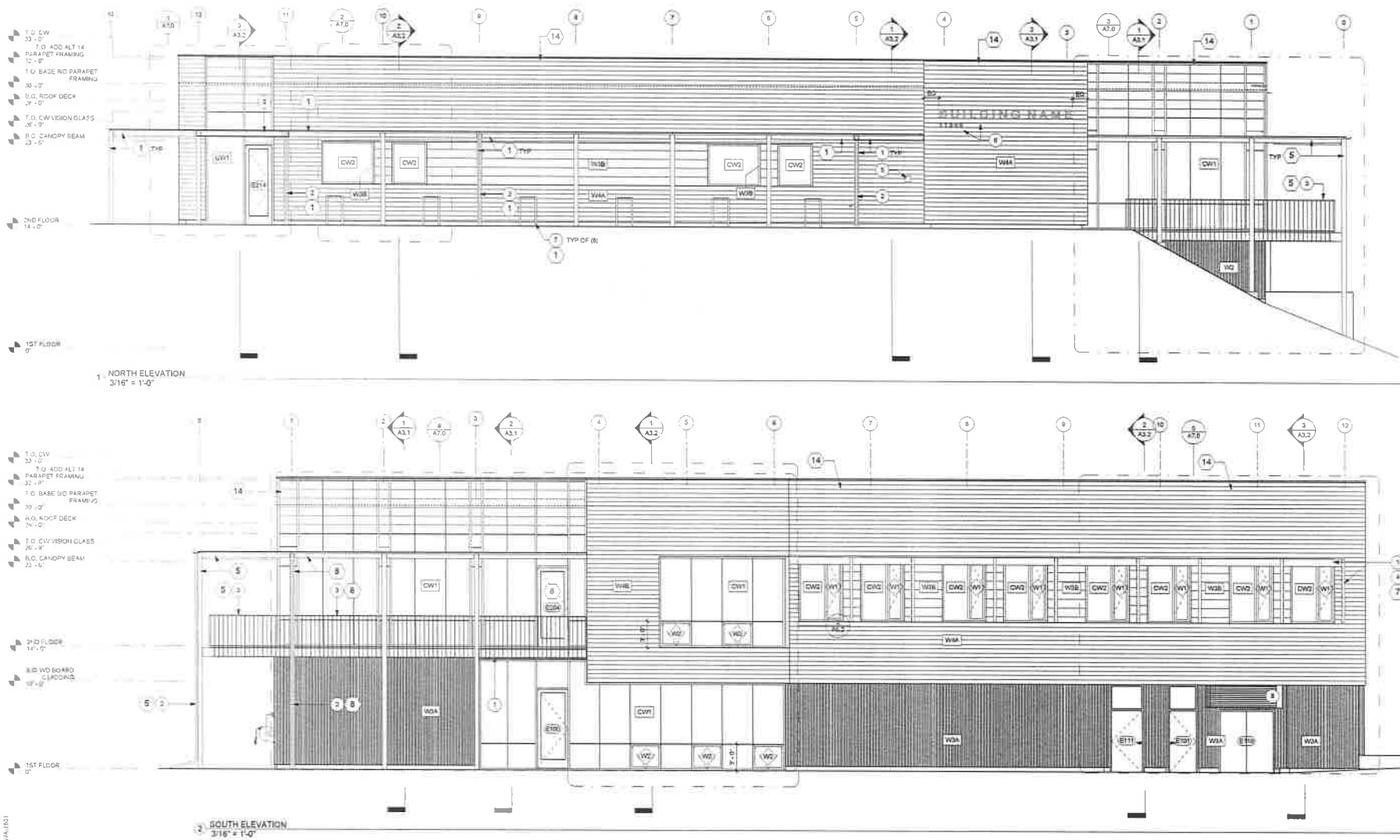
University of Alaska Southeast
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Juneau, AK 99801

SHEET TITLE
SECOND FLOOR PLAN

CHECKED SB, DH, BM
DRAWN RE, AC, BK

SHEET # **A2.1**
PLOT DATE 04/22/2019
ISSUE DATE April 22, 2019

Attachment A - Application Packet



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AUKE BAY STATION - Phase II

University of Alaska Southeast
11305 Glacier Hwy
Juneau, AK 99801

SHEET TITLE
**BUILDING
ELEVATIONS**

CHECKED 58, DH, BM
DRAWN RE, BK

DATE DESCRIPTION

DATE	DESCRIPTION

SHEET # **A4.0**

PLOT DATE 04/22/2019
ISSUE DATE April 22, 2019

EXTERIOR ELEVATIONS GENERAL NOTES

1. DRAWINGS ON THIS SHEET ARE DIAGRAMMATIC FOR GENERAL BUILDING ELEVATION DIMENSIONS AND OTHERWISE FOR REFERENCE ONLY. SEE PLANS AND DETAILS FOR DIMENSIONS AND ASSEMBLY INFORMATION.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, WHERE DISCREPANCIES OR CONFLICTS ARISE, IMMEDIATELY NOTIFY ARCHITECT.
3. DIMENSIONS ARE TO GRIDLINE OR TO CENTER OR EDGE OF FINISHING.

SHEET NOTES - ELEVATIONS

- | | | |
|---|--------|---|
| 1 | 051213 | AEBS DECK, CANOPY OR SUNSHADE SUPPORT ASSEMBLY |
| 2 | 055000 | HOD, STEEL PIPE DOWNPOUTS, DAYLIGHT WITH 45 DEGREE OUTLET AWAY FROM BUILDING AT GRADE |
| 3 | 055008 | STEEL GUARDS |
| 4 | 055009 | SUN SHADERS |
| 5 | 067100 | DOOR HARDWARE, KNOCK BOX |
| 6 | 121419 | DIMENSIONAL LETTER SIGNAGE |
| 7 | 120508 | SITE FURNISHINGS - BENCH RACK |
| 8 | 133708 | LID LENS, SEE MECHANICAL |
| 9 | 200200 | REFER TO ELECTRICAL |

ALTERNATE NOTES -

1. NORTH AEBS CANOPY
2. NORTH PARKING LOT, NORTH ACCESS DRIVE, & SOUTH ACCESS DRIVE PAVING, CURB AND GUTTER, STRIPPING AND SIGNAGE
3. CONCRETE SIDEWALKS & PADS
4. SITE FURNISHINGS & FEATURES
5. NORTH & WEST AEBS CANOPIES & DECKS
6. GENERATOR, ASSOCIATED ELECTRICAL EQUIPMENT & EQUIPMENT YARD
7. SUN SHADING DEVICE
8. SOUTH AEBS CANOPY & DECK

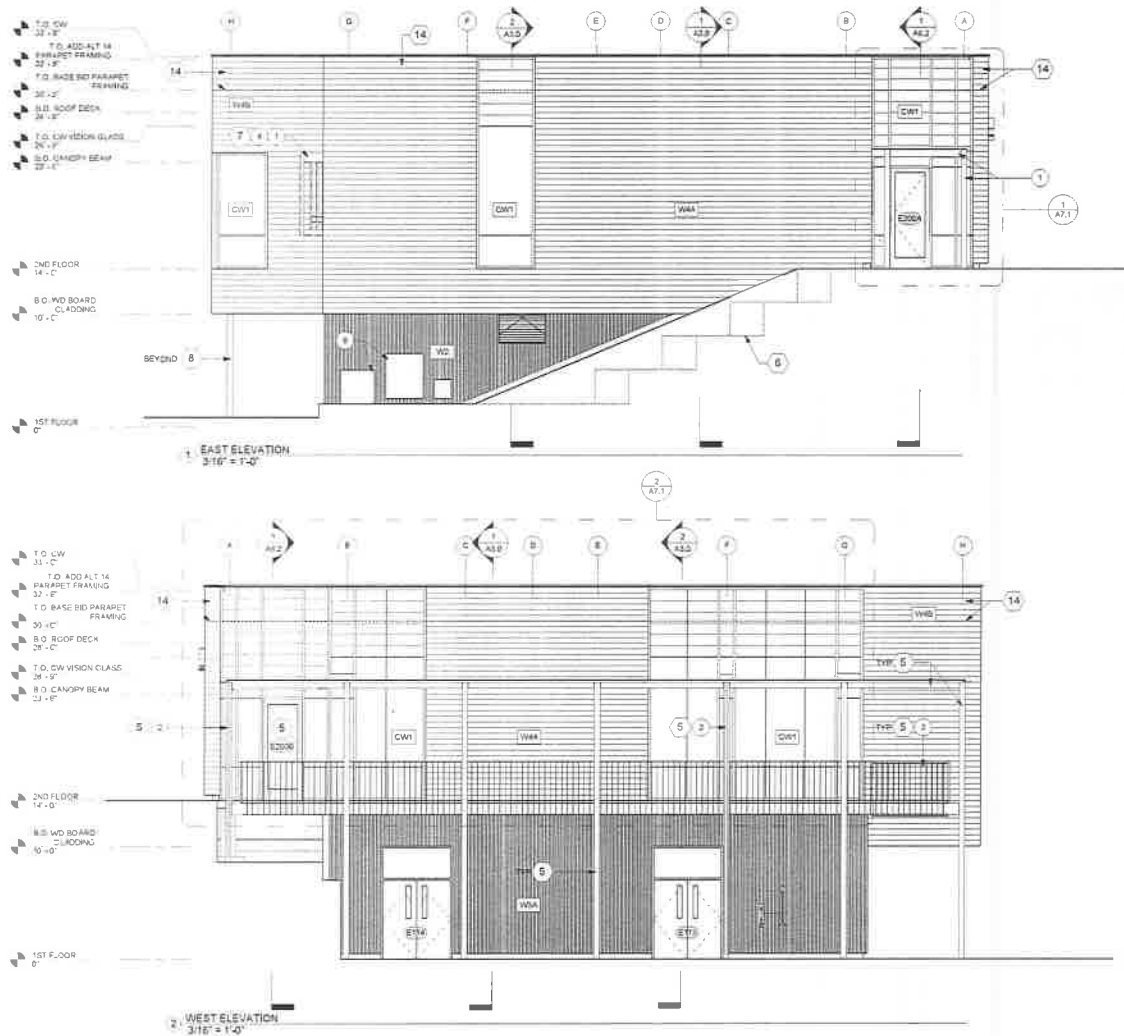
ALTERNATE NOTES -

8. INTERIOR FINISHES, FINISH UPGRADES
10. INTERIOR FINISHES, FINISH UPGRADES
11. INTERIOR FINISHES, FINISH UPGRADES
12. VIDEO SURVEILLANCE
13. LABORATORY FURNISHINGS AND EQUIPMENT, RESIDENTIAL APPLIANCES
14. PARAPET EXTENSION
15. DRIVEWAY PAVING
16. DEMO AND FILL (S) LIFT STATION

LEGEND

- SHEET NOTE
- ALTERNATE NOTES
- ⌵ CORNER GUARD TO 48" AFF ALUM @ WD FINISH
- SS @ ALL OTHER

Attachment A - Application Packet



EXTERIOR ELEVATIONS GENERAL NOTES

1. DRAWINGS ON THIS SHEET ARE DIAGRAMMATIC. FOR GENERAL BUILDING ELEVATION DIMENSIONS AND OTHERS FOR REFERENCE ONLY. SEE PLANS AND DETAILS FOR DIMENSIONS AND ASSEMBLY INFORMATION.
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3. DIMENSIONS ARE TO UNIFORM, OR TO CENTER OR EDGE OF FINISHING.

SHEET NOTES - ELEVATIONS

1. 051213 ACCESS DECK, CANOPY OR SUNSHADE SUPPORT ASSEMBLY
2. 055000 HOG STEEL PIPE DOWNPOUTS, DAYLIGHT WITH 45 DEGREE OUTLET AWAY FROM BUILDING AT GRADE
3. 010501 STEEL GUARDS
4. 010502 SUN SHADERS
5. 051305 DOOR HARDWARE, KNOCK BOX
6. 121418 DIMENSIONAL LETTER SIGNAGE
7. 121305 SITE FURNISHING - BIKE RACK
8. 221105 LOUVER, SEE MECHANICAL
9. 250000 REFER TO ELECTRICAL

ALTERNATE NOTES -

1. NORTH ACCESS CANOPY
2. NORTH PARKING LOT, NORTH ACCESS DRIVE, & SOUTH ACCESS DRIVE PAVING, CURB AND GUTTER, STRIPPING AND SIGNAGE
3. CONCRETE SIDEWALKS & PADE
4. SITE FURNISHINGS & FEATURES
5. NORTH & WEST ACCESS CANOPIES & DECKS
6. GENERATOR, ASSOCIATED ELECTRICAL EQUIPMENT & EQUIPMENT WARD
7. SUN SHADING DEVICE
8. SOUTH ACCESS CANOPY & DECK

ALTERNATE NOTES -

8. INTERIOR FINISHED FINISH UPGRADES
10. INTERIOR FINISHED FINISH UPGRADES
11. INTERIOR FINISHED FINISH UPGRADES
12. VIDEO SURVEILLANCE
13. LABORATORY FURNISHINGS AND EQUIPMENT, RESIDENTIAL APPLIANCES
14. PARAPET EXTENSION
15. DAY/DAWAY PAVING
16. DEMO AND RILL (S) UFT STATION

LEGEND

- SHEET NOTE
- ◇ ALTERNATE NOTES
- ▽ CORNER GUARD TO AIR AFF ALUM (S) WD FINISH
- ⊗ ALL OTHER



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SHEET TITLE
BUILDING ELEVATIONS

CHECKED: SB, DH, BM
DRAWN: RE, BK

issue	date	description

SHEET #
A4.1
PLOT DATE: 04/22/2019
ISSUE DATE: April 22, 2019

Submitted by Graybar Electric Company, Inc.		Catalog Number: PWY EDG 2M P1 02 E UL BZ 525 40K HL(175/350/525) Notes:	Type: C GRASB16-5595
Graybar works to your advantage	Job Name: 2013-90c Phase 3 Site Lighting		

Cree Edge™ Series

LED Pathway Luminaire

Product Description

Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance. Pole mounts to rugged die cast aluminum internal flange secured by three 3/8" - 16x6" anchor bolts with 1-1/4" hook (provided). **Note:** T45 Torx 3/8" socket required for head installation. Top mounted LEDs for superior optical performance and light control.

Applications: Landscape, walk-ways and general site lighting

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

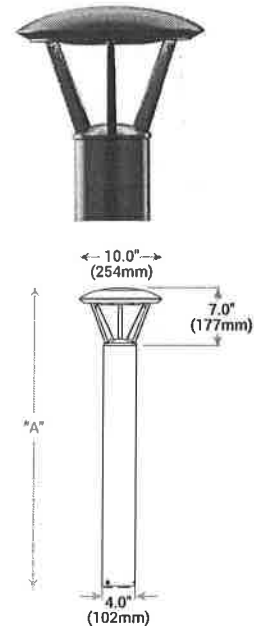
CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

*See www.cree.com/lighting/products/warranty for warranty terms

Accessories

Field-Installed
Upgrade Kit - Used for replacement of existing bollards with a bolt hole circle of 5.75" (146mm) XA-XBP6RSV XA-XBP6RWH XA-XBP6RFB XA-XBP6RBK XA-XBP6RBZ



Model	Dim. "A"	Weight*
Landscape (P0)	13" (330mm)	12.7 lbs. (5.8kg)
Landscape (P1)	18" (457mm)	13.3 lbs. (6.0kg)
Pathway (P3)	36" (914mm)	17.9 lbs. (8.1kg)
Pathway (P4)	42" (1067mm)	18.6 lbs. (8.4kg)
Pedestrian (P8)	96" (2438mm)	28.4 lbs (12.9kg)

* Add 4.5 lbs. (2.0kg) for 347-480V

Ordering Information

Example: PWY-EDG-2M-P0-02-E-UL-SV-350

Product	Optic	Mounting	LED Count (x9)	Series	Voltage	Color Options	Drive Current	Options
PWY-EDG	2M Type II Medium	P0 13" (330mm) landscape	02	E	UL Universal 120-277V	BK Black	350 350mA	40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire
	3M Type III Medium	P1 18" (457mm) landscape			UL Universal 347-480V - Available with P3, P4, and P8 mounts only	BZ Bronze	525 525mA - Available with P1, P3, P4, and P8 mounts only	F Fuse - When code dictates fusing, use time delay fuse - Refer to ML spec sheet for availability with ML options
	5M Type V Medium	P3 36" (914mm) pathway			12 120V	SV Silver		HL Hi/Low (Dual Circuit Input) - Refer to HL spec sheet for details - Sensor not included
	5S Type V Short	P4 42" (1067mm) pathway			27 277V	WH White		TL Two-Level (175/525 w/integrated sensor control) - Refer to TL spec sheet for details
		P8 96" (2438mm) pedestrian						TL2 Two-Level (0/350 w/integrated sensor control) - Refer to TL spec sheet for details
								TL3 Two-Level (0/525 w/integrated sensor control) - Refer to TL spec sheet for details
								WB Welded Base Plate - Standard on P8 mount option, available with P3 and P4 mount - Includes welded base cover

HL option requires two switched legs. Only installing the 175ma lead will result in the lower lumen output required.



US: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Rev Date: V4 07/22/2015



Submitted by Graybar Electric Company, Inc. Graybar works to your advantage	Job Name: 2013-90c Phase 3 Site Lighting	Catalog Number: PWY EDG 2M P1 02 E UL BZ 525 40K HL(175/350/525) Notes:	Type: C GRASB16-5595
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Cree Edge™ LED Pathway Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance
- Pole mounts to rugged die cast aluminum internal flange secured by three 3/8"-16x6" anchor bolts with 1-1/4" hook(provided)
- **Note:** T45 Torx 3/8" socket required for head installation
- Top mounted LEDs for superior optical performance and light control
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** See Dimension and Weight Chart on page 1

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load at 120V
- **Total Harmonic Distortion:** < 20% at full load at 120V
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA

Electrical Data*

LED Count (x9)	System Watts 120-277V	System Watts 347-480V	Total Current					
			120V	208V	240V	277V	347V	480V
350mA								
02	22	28	0.18	0.12	0.10	0.10	0.09	0.13
525mA								
02	34	40	0.29	0.19	0.17	0.15	0.12	0.13

* Electrical data at 25°C (77°F)

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF)¹

Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	0.99	0.97	0.95	0.93
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.91
20°C (68°F)	1.01	0.96	0.94	0.92	0.90
25°C (77°F)	1.00	0.95	0.93	0.91	0.89

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Submitted by Graybar Electric Company, Inc.

Graybar
works to your advantage**Job Name:**
2013-90c Phase 3 Site Lighting**Catalog Number:**PWY EDG 2M P1 02 E UL BZ 525
40K HL(175/350/525)

Notes:

Type:**C**

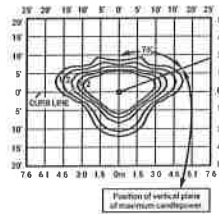
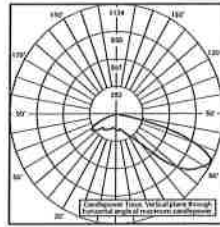
GRASB16-5595

Cree Edge™ LED Pathway Luminaire

Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

2M

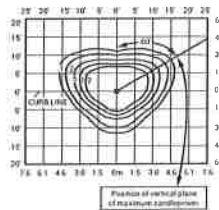
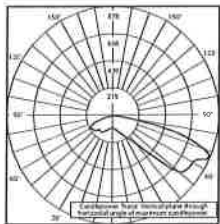


Type II Medium Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,565	B1 U0 G1	1,625	B1 U0 G1
525mA				
02	2,191	B1 U0 G1	2,276	B1 U0 G1

* Initial delivered lumens at 25°C (77°F)

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

3M

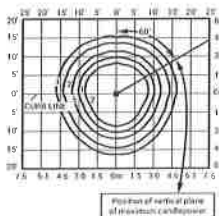
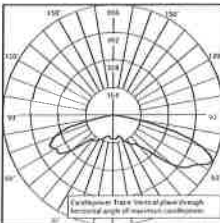


Type III Medium Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,389	B1 U0 G1	1,442	B1 U0 G1
525mA				
02	1,944	B1 U0 G1	2,019	B1 U0 G1

* Initial delivered lumens at 25°C (77°F)

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

5M



Type V Medium Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,666	B1 U2 G1	1,730	B1 U2 G1
525mA				
02	2,333	B2 U2 G2	2,422	B2 U2 G2

* Initial delivered lumens at 25°C (77°F)

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdfUS: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Submitted by Graybar Electric Company, Inc.

Graybar
works to your advantage**Job Name:**
2013-90c Phase 3 Site Lighting**Catalog Number:**PWY EDG 2M P1 02 E UL BZ 525
40K HL(175/350/525)

Notes:

Type:**C**

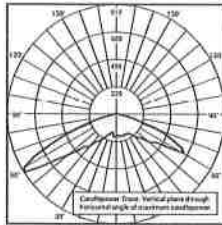
GRASB16-5595

Cree Edge™ LED Pathway Luminaire

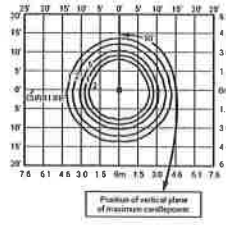
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

5S



RESTL Test Report #: PL5759-001
PWY-EDG-5S-02-E-UL-350-40K
Initial Delivered Lumens: 1,897



PWY-EDG-5S-02-E-UL-350-40K
Mounting Height: 3' (0.9m) A.F.G.
Initial Delivered Lumens: 1,868
Initial FC at grade

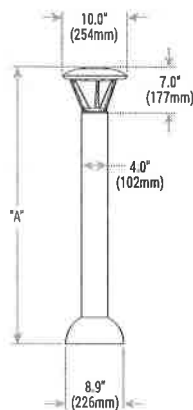
Type V Short Distribution

LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,868	B1 U2 G1	1,940	B1 U2 G1
525mA				
02	2,615	B1 U2 G1	2,716	B1 U2 G1

* Initial delivered lumens at 25°C (77°F)

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Eraas/TM-15-11BugRatingsAddendum.pdf

with Welded Base



Model	Dim. "A"	Weight*
Pathway (P3)	36" (914mm)	17.9 lbs. (8.1kg)
Pathway (P4)	42" (1068mm)	18.6 lbs. (8.4kg)
Pedestrian (P8)	96" (2438mm)	28.4 lbs (12.9kg)

* Add 4.5 lbs. (2.0kg) for 347-480V

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US: www.cree.com/lighting

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CREE

Submitted by Graybar Electric Company, Inc.		Catalog Number: PWY EDG 2M P1 02 E UL BZ 525 40K HL(175/350/525) Notes:	Type: C GRASB16-5595
Graybar works to your advantage	Job Name: 2013-90c Phase 3 Site Lighting		

LED High-Low Option

For use with Cree Edge™ Series and LEDway® Series Luminaires

Product Description

The high-low option allows multiple operating drive currents for high and low modes. These drive currents are conveniently selected to balance LED life, lumen output and energy savings. The high-low option is designed to have remotely located sensors (by others). High-low function is designed with all LEDs operating at the same current for maximum and uniform LED life.

The high-low option will be wired such that five power leads will exit the fixture, two hots (line 1 and line 2), two common (N1 and N2) and one ground. The two hot leads will be labeled identifying the drive current, 175mA or 350mA per High-Low Option Drive Current Configurations table below. Fixtures are factory set for phase to neutral systems and can be field adjusted to accommodate phase to phase systems.

Product Availability

Cree Edge™ Series Luminaires													
Option	Drive Current Specified (mA)	Drive Current Configurations (mA)	Voltage	Area & Flood			Area, Flood & Interior Round	Canopy	High Output	Parking	Security	Transportation	Pathway
				AA, DA, DL Mounts	R3, R4 Mounts	SA Mount	All Mounts	All Mounts	All Mounts	All Mounts	Wall Mount	All Mounts	P1, P3, P4, P8 Mounts
HL (G)	350	175/350	120-277	120-240 LEDs	120-240 LEDs	N/A	40-120 LEDs	40-240 LEDs	N/A	20-100 LEDs	N/A	120-160 LEDs	N/A
			347-480	120-240 LEDs	120-240 LEDs	N/A	N/A	40-240 LEDs	N/A	N/A	N/A	120-160 LEDs	N/A
	525	175/350/525	120-277	20-120 LEDs	40-120 LEDs	N/A	40-120 LEDs	40-120 LEDs	N/A	40-100 LEDs	N/A	40-120 LEDs	18 LEDs
			347-480	40-120 LEDs	40-120 LEDs	N/A	N/A	40-120 LEDs	N/A	N/A	N/A	40-120 LEDs	N/A
	700	350/700	120-277	20-60 LEDs	40-60 LEDs	N/A	40-60 LEDs	40-60 LEDs	N/A	20-60 LEDs	N/A	40-60 LEDs	N/A
			347-480	20-60 LEDs	40-60 LEDs	N/A	N/A	40-60 LEDs	N/A	N/A	N/A	40-60 LEDs	N/A

LEDway® Series Luminaires					
Option	Drive Current Specified (mA)	Drive Current Configurations (mA)	Voltage	LEDway® Streetlight	LEDway® High Output Streetlight
				All Mounts	All Mounts
HL (G)	350	175/350	120-277	20-120 LEDs	N/A
			347-480	N/A	N/A
	525	175/350/525	120-277	20-120 LEDs	N/A
			347-480	N/A	N/A
	700	350/700	120-277	20-120 LEDs	N/A
			347-480	N/A	N/A

Rev. Date: V2 02/12/2016

US: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507



Submitted by Graybar Electric Company, Inc.		Catalog Number: PWY EDG 2M P1 02 E UL BZ 525 40K HL(175/350/525) Notes:		Type: C GRASB16-5595
Graybar works to your advantage		Job Name: 2013-90c Phase 3 Site Lighting		

LED High-Low Options

Additional Options Available with High-Low Option

Cree Edge™ Series Luminaires													
Option	Drive Current Specified (mA)	Drive Current Configurations (mA)	Voltage	Area & Flood			Area, Flood & Interior Round	Canopy	High Output	Parking	Security	Transportation	Pathway
				AA, DA, DL Mounts	R3, R4 Mounts	SA Mount							
HL (G)	350	175/350	120-277	F	F	N/A	F ¹	F ¹	N/A	F ¹	N/A	F ¹	N/A
			347-480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	525	175/350/525	120-277	F	F	N/A	F ¹	F ¹	N/A	F ¹	N/A	F ¹	F
			347-480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	700	350/700	120-277	F	F	N/A	F ¹	F ¹	N/A	F ¹	N/A	F ¹	N/A
			347-480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹ Fusing not available with Pendant Mounts

LEDway® Series Luminaires					
Option	Drive Current Specified (mA)	Drive Current Configurations (mA)	Voltage	LEDway® Streetlight	LEDway® High Output Streetlight
				All Mounts	All Mounts
HL (G)	350	175/350	120-277	F	N/A
			347-480	N/A	N/A
	525	175/350/525	120-277	F	N/A
			347-480	N/A	N/A
	700	350/700	120-277	F	N/A
			347-480	N/A	N/A

High-Low Option Drive Current Configurations								
350mA Drive Current Specified			525mA Drive Current Specified			700mA Drive Current Specified		
Leads		Drive Current Output (mA)	Leads		Drive Current Output (mA)	Leads		Drive Current Output (mA)
175mA	175mA		175mA	350mA		350mA	350mA	
ON	OFF	175	ON	OFF	175	ON	OFF	350
OFF	ON	175	OFF	ON	350	OFF	ON	350
ON	ON	350	ON	ON	525	ON	ON	700

Output Multipliers		
Drive Current Specified (mA)	Lumen Multipliers	Power Multipliers
175	0.66	0.48
350	1.00	1.00
525	1.40	1.51
700	1.71	2.03

Note: Multipliers are for estimating purposes only. Check actual spec sheet data where available



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Engineering and Public Works

STAFF PERSON/TITLE: Autumn Sapp / Engineering & Public Works Business Manager

DATE: 1/27/2020

APPLICANT: University of Alaska Southeast

TYPE OF APPLICATION: Conditional Use Permit Application

PROJECT DESCRIPTION:
USE2020 0001 A Conditional Use Permit for a new campus building at UAS. The new building will be approximately 12,000 square feet and contain educational, research, and laboratory facilities.

LEGAL DESCRIPTION: USS 1500 FR

PARCEL NUMBER(S): 4B2301050040

PHYSICAL ADDRESS: 11305 Glacier Highway

SPECIFIC QUESTIONS FROM PLANNER:

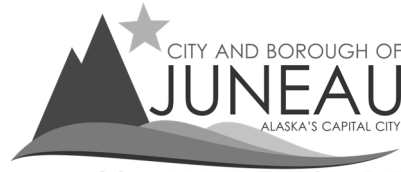
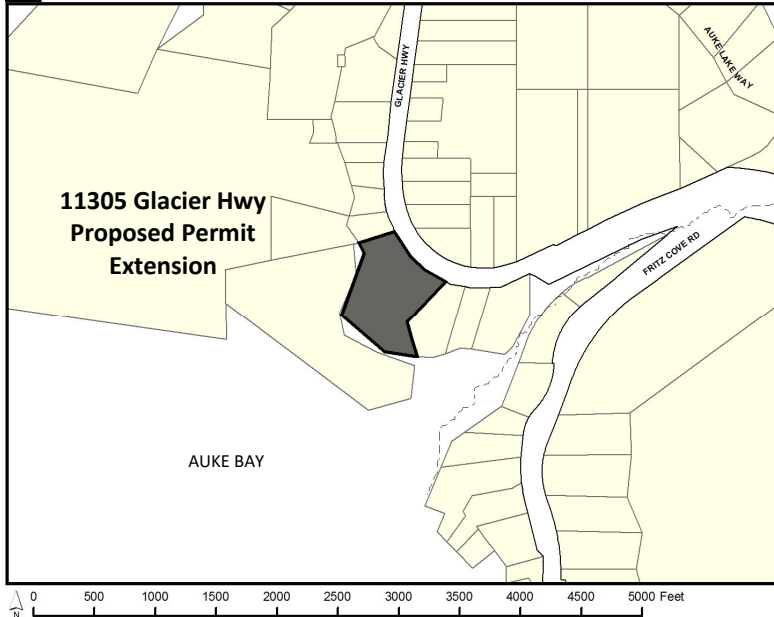
AGENCY COMMENTS:

The project description mentions "...utility linked to the adjacent UAS Anderson...". Although we have been working with UAS to get the utilities installed over the past 1-1/2 years I wanted to clarify that this property will need to have it's own separate water service and line. They are permitted to share a sewer with the Anderson building.

There is a known issue with the utility service installation permitting through ADOT. This may result in continued delays. Additionally there will be no occupancy, temporary or otherwise, until the new utility service has been installed.

Invitation to Comment

On a proposal to be heard by the CBJ Planning Commission
Your Community, Your Voice



COMMUNITY DEVELOPMENT

155 S. Seward Street Juneau, Alaska 99801

TO:

An application has been submitted for consideration and public hearing by the Planning Commission for an **extension of Conditional Use Permit USE2020 0001** for a new educational and research laboratory structure at **11305 Glacier Highway** in a **Waterfront Commercial Zone**.

TIMELINE

Staff Report expected to be posted **Monday, December 6, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through noon, December 10

Comments received during this period will be sent to Planning Commissioners to read over the weekend in preparation for the hearing. The planner handling this case, **Joseph Meyers**, will also read any written comments that are received. You may also contact him via the phone number listed below.

HEARING DATE & TIME: 7:00 pm, December 14, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/83598204446>. The Webinar ID is: 835 9820 4446. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

December 15

The results of the hearing will be posted online.

Phone: **(907)586-0715** ♦ Email: pc_comments@juneau.org
Mail: **Community Development, 155 S. Seward St, Juneau AK 99801**

Printed November 19, 2021

Case No.: USE2021 0021 (USE2020 0001)
Parcel No.: 4B2301050040
CBJ Parcel Viewer: <http://epv.juneau.org>



Packet Page 138 of 732



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: December 15, 2021
Case No.: USE2021 0021

University of Alaska Southeast
Attn: Ke Mell
11066 Auke Lake Way
Juneau, AK 99801

Proposal: Extension of Conditional Use Permit USE2020 0001 for a new educational and research laboratory structure

Property Address: 11305 Glacier Highway

Legal Description: USS 1500 FR

Parcel Code No.: 4B2301050040

Hearing Date: December 14, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 7, 2021, and approved the Conditional Use Permit extension to be conducted as described in the project description and project drawings submitted with the application

Attachments: December 7, 2021, memorandum from Joseph Meyers, Community Development, to the CBJ Planning Commission regarding USE2021 0021.

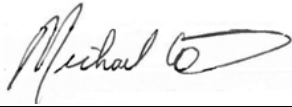
This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

University of Alaska Southeast
Case No.: USE2021 0021
December 15, 2021
Page 2 of 2

Effective Date: The permit is effective upon approval by the Commission, December 14, 2021.

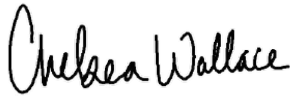
Expiration Date: The permit will expire 18 months after the effective date, or June 14, 2023, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael LeVine, Chair
Planning Commission

December 22, 2021

Date



Filed With City Clerk

December 22, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

USE2021 0017: A Conditional Use Permit for an addition of a second story to a nonconforming structure -
REMOVED FROM CONSENT & APPROVED ON REGULAR AGENDA

AGENDA ITEM:

Case No.: USE2021 0017

Applicant: Janell Liles

Location: 923 Glacier Avenue

Proposal: A Conditional Use Permit for an addition of an second story to a nonconforming structure

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit. The permit would allow the construction of a second story atop a nonconforming structure in the Light Commercial zoning district.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for USE2021 0017	12/8/2021	Staff Report
☐ Notice of Decision for USE2021 0017	12/22/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
CONDITIONAL USE PERMIT USE2021 0017
HEARING DATE: DECEMBER 14, 2021

(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

DATE: December 8, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Allison Eddins, Planner II *A. Eddins*
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a Conditional Use Permit to construct a second story atop an existing nonconforming structure.

STAFF RECOMMENDATION: Approval with no conditions.

KEY CONSIDERATIONS FOR REVIEW:

- The structure was constructed in 1924 and received a Nonconforming Certificate for setbacks (NCC 2021 0075).
- The applicant has applied for a Conditional Use Permit (USE2021 0016) for the construction of an accessory apartment on an undersized lot.
- The accessory apartment would be located in the second story addition.

GENERAL INFORMATION	
Property Owner	Janell Liles
Applicant	Janell Liles
Property Address	923 Glacier Avenue
Legal Description	Casey Shattuck Block 225 Lot 5 FR
Parcel Number	1C060C250060
Zoning	Light Commercial (LC)
Land Use Designation	Commercial (C)
Lot Size	1,800 square feet
Water/Sewer	City water and sewer
Access	Glacier Avenue
Existing Land Use	Vacant structure
Associated Applications	USE2021 0016

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - 49.15.330
 - 49.80

The Commission shall hear and decide the case per 49.15.330(a) Conditional Use Permit. A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (LC)	Residential
South (LC)	Office
East (LC)	Commercial
West (LC)	Commercial

SITE FEATURES	
Anadromous	No
Flood Zone	Zone X; Area of Minimal Hazard
Hazard	None known
Hillside	No
Wetlands	No
Parking District	No
Historic District	Casey-Shattuck
Overlay Districts	ADOD for Downtown Juneau

BACKGROUND INFORMATION

Project Description – The applicant would like to construct a second story atop a nonconforming one-story, single-family structure. If approved, the second story would be an accessory apartment (USE2021 0016), if the associated permit were approved.

The structure was constructed in 1924 and received a Nonconforming Certificate for setbacks (NCC2021 0075). Additional stories may be permissible on nonconforming structures through the Conditional Use Permit process.

CBJ 49.25.430 Yard setbacks.

(4) Projections into required yards.

(M) Additional stories. The commission, through the conditional use permit process, may allow the addition of a second or third story atop or below an existing enclosed structure which projects into a required yard setback if the structure is either nonconforming or if a variance was previously granted for the structure. The commission may deny such request if it finds that the structure, with the addition, would result in excessive blockage of views, excessive restriction of light and air, or other deleterious impacts.

Background – The table below summarizes relevant history for the lot and proposed development.

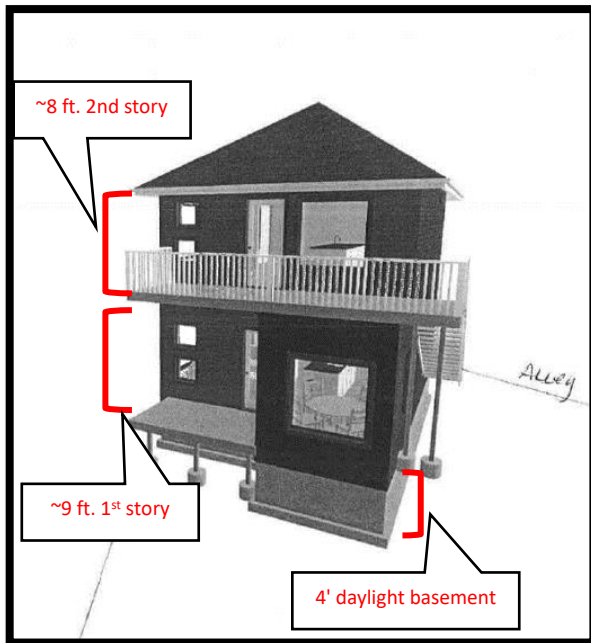
Item	Summary
1913-6 Plat	The lot was platted in 1913 with the Casey-Shattuck Addition.
1929 Sanborn Map	According to the Assessor's Office, the structure was constructed in 1924. Staff confirmed that the structure was documented on the 1929 Sanborn Maps.
2021 Nonconforming Certificate	The lot and structure are certified as nonconforming for lot size and setbacks (NCC2021 0075).
2021 Conditional Use Permit application	Applications to allow the construction of an accessory apartment on an undersized lot (USE2021 0016) and second story atop a nonconforming structure (USE2021 0017).

ZONING REQUIREMENTS

Standard		Requirement	Proposed	Existing	Code Reference
Lot	Size	2,000 sq. ft.	1,800 sq. ft.	1,800 sq. ft.	49.25.400
	Width	20 feet	45 feet	45 feet	49.25.400
Setbacks	Front (Glacier Ave.)	25 feet	18 feet	18 feet	49.25.400
	Rear (NE)	10 feet	3 feet	3 feet	49.25.400
	Side (NW)	10 feet	12 feet	12 feet	49.25.400
	Street Side (Alley)	17 feet	2.5 feet	2.5 feet	49.25.400
Lot Coverage Maximum		50%	40%	40%	49.25.400
Vegetative Cover Minimum		15%	24%	20%	49.50.300
Height	Permissible	45 feet	Two-story	One-story	49.25.400
	Accessory	35 feet	N/A	N/A	49.25.400
Maximum Dwelling Units*		1	1	1	49.25.500
Parking		3 spaces	3 spaces	2 spaces	49.40.210
Use		Residential or Commercial	Residential	Residential	49.25.300

* Accessory apartments are considered an accessory unit to a single-family residence and do not count towards density.

BUILDING PLAN & SITE PLAN



ANALYSIS

Project Site and Design – The project site is located downtown on the corner of Glacier Avenue and the unnamed alley next to Coppa in the Casey-Shattuck neighborhood. The lot and surrounding area is zoned Light Commercial. The height limit in Light Commercial is 45 feet. The proposed two-story structure will meet the height requirement and be the same height or shorter than the surrounding structures.

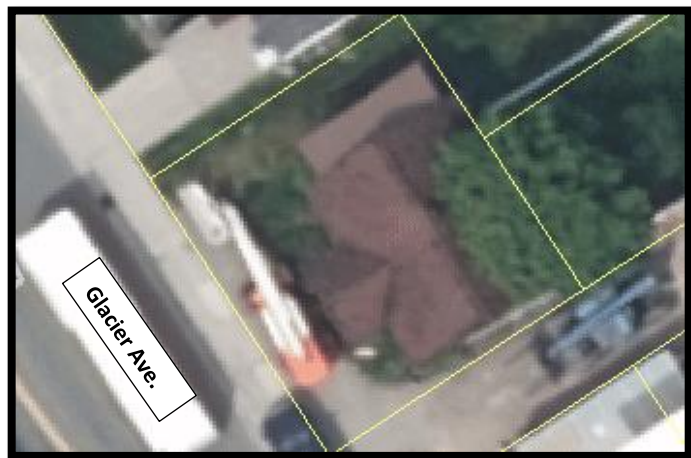
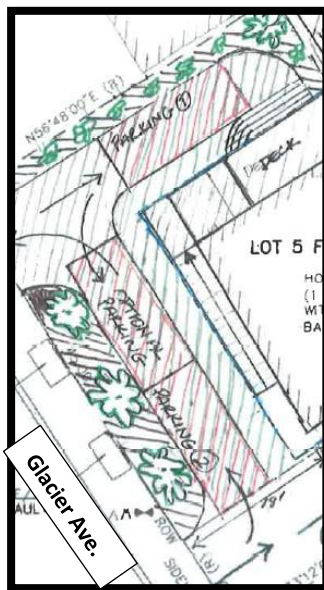


Condition: No conditions recommended.

Traffic – According to CBJ 49.40.300(2), a traffic impact analysis is not required. Based on the ITE Trip Generation Manual, the two-story structure with a single-family residence and accessory apartment will generate an estimated 16.17 average daily trips (ADT). The threshold for requiring a traffic impact analysis (TIA) is 250 ADT. The traffic generated is not expected to be out of character with the existing neighborhood.

Condition: No condition recommended.

Vehicle Parking & Circulation – According to CBJ 49.40, three off-street parking spaces are required – two for the single-family dwelling and one for the accessory apartment. The site plan submitted shows three on-site parking spaces can be provided. Stacked parking is allowed per CBJ 49.40.230(b)(6).



Condition: No condition recommended.

Public Health, Safety, and Welfare – No information has been submitted that suggests the proposed two-story development will materially endanger the public health, safety, or welfare.

Condition: No condition recommended.

Property Value or Neighborhood Harmony – No information has been submitted that suggests the proposed two-story development will be out of character with the Casey-Shattuck neighborhood or reduce property values.

Condition: No condition recommended.

AGENCY REVIEW

CDD conducted an agency review comment period between November 15, 2021 and November 29, 2021. Agency review comments can be found in Attachment C.

Agency	Summary
CBJ Building Department	No concerns
CBJ Assessor's Office	No concerns

PUBLIC COMMENTS

CDD conducted a public comment period between November 16, 2021 and December 14, 2021. Public notice was mailed to property owners within 500 feet of the proposed development. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. At the time this staff report was completed, no written comments had been submitted. A phone call was received from a neighbor concerned about parking for the development. Staff informed the caller that the on-site parking requirement would be met. The caller did not submit written comments.

CONFORMITY WITH ADOPTED PLANS

The proposed development is in general conformity with the 2013 Comprehensive Plan, 2016 Housing Action Plan, and the 2015 Juneau Economic Development Plan.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	3	20	Policy 3.2	Promotes compact urban development within the designated urban service area to ensure efficient utilization of land resources and to facilitate cost effective provision of community services and facilities while balancing protection of natural resources, fish and wildlife habitat, and scenic corridors.
	4	37	Policy 4.2	Facilitates the provision of an adequate supply of various housing types and sizes to accommodate present and future housing needs for all economic groups.
2016 Housing Action Plan	2	35	Production Targets	Creates housing, which advances the City's goal of increasing housing stock.

FINDINGS

Conditional Use Permit Criteria – Per CBJ 49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested conditional use permit complete?

Analysis: No further analysis needed.

Finding: Yes. The application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. Is the proposal appropriate according to the Table of Permissible Uses?

Analysis: The application is for the addition of a second-story atop a nonconforming one-story residence in the Light Commercial zoning district. The second-story will be developed as an accessory apartment. The use is listed at CBJ 49.25.300, 1.130 and is an allowed use in the zoning district.

Finding: Yes. The requested permit is appropriate according to the Table of Permissible Uses.

3. Will the proposed development comply with the other requirements of this chapter?

Analysis: The proposed development will comply with Title 49 including the 45-foot height restriction in the Light Commercial zoning district.

Finding: Yes. The proposed development will comply with Title 49.

4. Will the proposed development materially endanger the public health, safety, or welfare?

Analysis: No further analysis is required.

Finding: No. There is no evidence to suggest that the requested second story will materially endanger the public health, safety, or welfare.

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

Analysis: No further analysis needed.

Finding: No. There is no evidence to suggest that the requested second story will substantially decrease the value or be out of harmony with the property in the neighboring area.

6. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Analysis: No further analysis needed.

Finding: Yes. The proposed accessory apartment will be in general conformity with the 2013 Comprehensive Plan and the 2016 Housing Action Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit. The permit would allow the construction of a second story atop a nonconforming structure in the Light Commercial zoning district.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Abutters Notice and Public Notice Sign Photo
Attachment C	Agency Comments
Attachment D	NCC2021 0075 Staff Report and Notice of Decision



DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications.

To be completed by Applicant	PROPERTY LOCATION		
	Physical Address <u>923 Glacier Ave, Juneau, AK 99801</u>		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) <u>Block 225, LOT 5 FR, CASEY-SHATTUCK SUBDIVISION</u>		
	Parcel Number(s) <u>100400250060</u>		
	☒ This property located in the downtown historic district		
	☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner <u>Janell Liles</u>	Contact Person <u>Janell Liles</u>	
	Mailing Address <u>P.O. Box 20845 Juneau, AK 99801</u>	Phone Number(s) <u>253.820.9264</u>	
	E-mail Address <u>lilesjanell423@gmail.com</u>		
LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits			
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:			
A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.			
B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X	<u>J Liles</u> Landowner/Lessee Signature	<u>9-11-21</u> Date	
X	_____ Landowner/Lessee Signature	_____ Date	
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME"			
Applicant <u>SAME</u>	Contact Person		
Mailing Address	Phone Number(s)		
E-mail Address			
X	<u>J Liles</u> Applicant's Signature	<u>9-11-58</u> Date of Application	

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

Attachment A - Application Packet

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number <u>USE21-17</u>	Intake Initial <u>AS</u>
	Date Received <u>10/21/21</u>



ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant

PROJECT SUMMARY

Addition of second story onto a non-conforming structure.

TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED

- ☐ Accessory Apartment – Accessory Apartment Application (AAP)
☐ Use Listed in 49.25.300 – Table of Permissible Uses (USE)
 Table of Permissible Uses Category: _____

IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL?

☐ YES – Case # _____ ☐ NO

UTILITIES PROPOSED

WATER: ☒ Public ☐ On Site

SEWER: ☒ Public ☐ On Site

SITE AND BUILDING SPECIFICS

Total Area of Lot 1,800 square feet Total Area of Existing Structure(s) 492 square feet
 Total Area of Proposed Structure(s) _____ square feet

EXTERNAL LIGHTING

** not needed for this permitting process per CBS*
 Existing to remain ☒ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures
 Proposed ☒ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

ALL REQUIRED DOCUMENTS ATTACHED

☒ Narrative including:

- ☒ Current use of land or building(s)
☒ Description of project, project site, circulation, traffic etc.
☒ Proposed use of land or building(s)
☒ How the proposed use complies with the Comprehensive Plan

If this is a modification or extension include:

- ☐ Notice of Decision and case number
☐ Justification for the modification or extension
☐ Application submitted at least 30 days before expiration date

☒ Plans including:

- ☒ Site plan
☒ Floor plan(s)
☒ Elevation view of existing and proposed buildings *pictures of existing building*
☒ Proposed vegetative cover *on site plan*
☒ Existing and proposed parking areas and proposed traffic circulation *on site plan*
☒ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas) *unchanged*

DEPARTMENT USE ONLY BELOW THIS LINE

ALLOWABLE/CONDITIONAL USE FEES		Check No.	Receipt	Date
	Fees			
Application Fees	\$ <u>350</u>			
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ <u>-</u>			
Pub. Not. Sign Deposit	\$ _____			
Total Fee	\$ <u>350</u>			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A - Application Packet

Case Number <u>USE 21-17</u>	Date Received <u>AS 10/21/21</u>
---------------------------------	-------------------------------------

Allowable/Conditional Use Permit Application Instructions

Allowable Use permits are outlined in CBJ 49.15.320, Conditional Use permits are outline in CBJ 49.15.330

Pre-Application Conference: A pre-application conference is required prior to submitting an application. There is no fee for a pre-application conference. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via e-mail at permits@juneau.org.

Application: An application for an Allowable/Conditional Use Permit will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Allowable/Conditional Use Permit Application and Development Permit Application forms.
2. **Fees:** Fees generally range from \$350 to \$1,600. Any development, work, or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** All plans are to be drawn to scale and clearly show the items listed below:
 - A. Site plan, floor plan and elevation views of existing and proposed structures
 - B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances
 - C. Proposed traffic circulation within the site including access/egress points and traffic control devices
 - D. Existing and proposed lighting (including cut sheets for each type of lighting)
 - E. Existing and proposed vegetation with location, area, height and type of plantings
 - F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

Document Format: All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf (other formats may be preapproved by the Community Development Department).
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

Application Review & Hearing Procedure: Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

Review: As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. During this review period, the Community Development Department also sends all applications out for a 15-day agency review period. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All Allowable/Conditional Use Permit Applications must be reviewed by the Planning Commission for vote. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting.

Public Notice Responsibilities: Allowable/Conditional Use requests must be given proper public notice as outlined in CBJ 49.15.230:

The Community Development Department will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, CDD will mail notices to all property owners within 500-feet of the project site.

The Applicant will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of \$50, and a \$100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing \$50 may be refunded. The Applicant may make and erect their own sign. Please contact the Community Development Department for more information.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

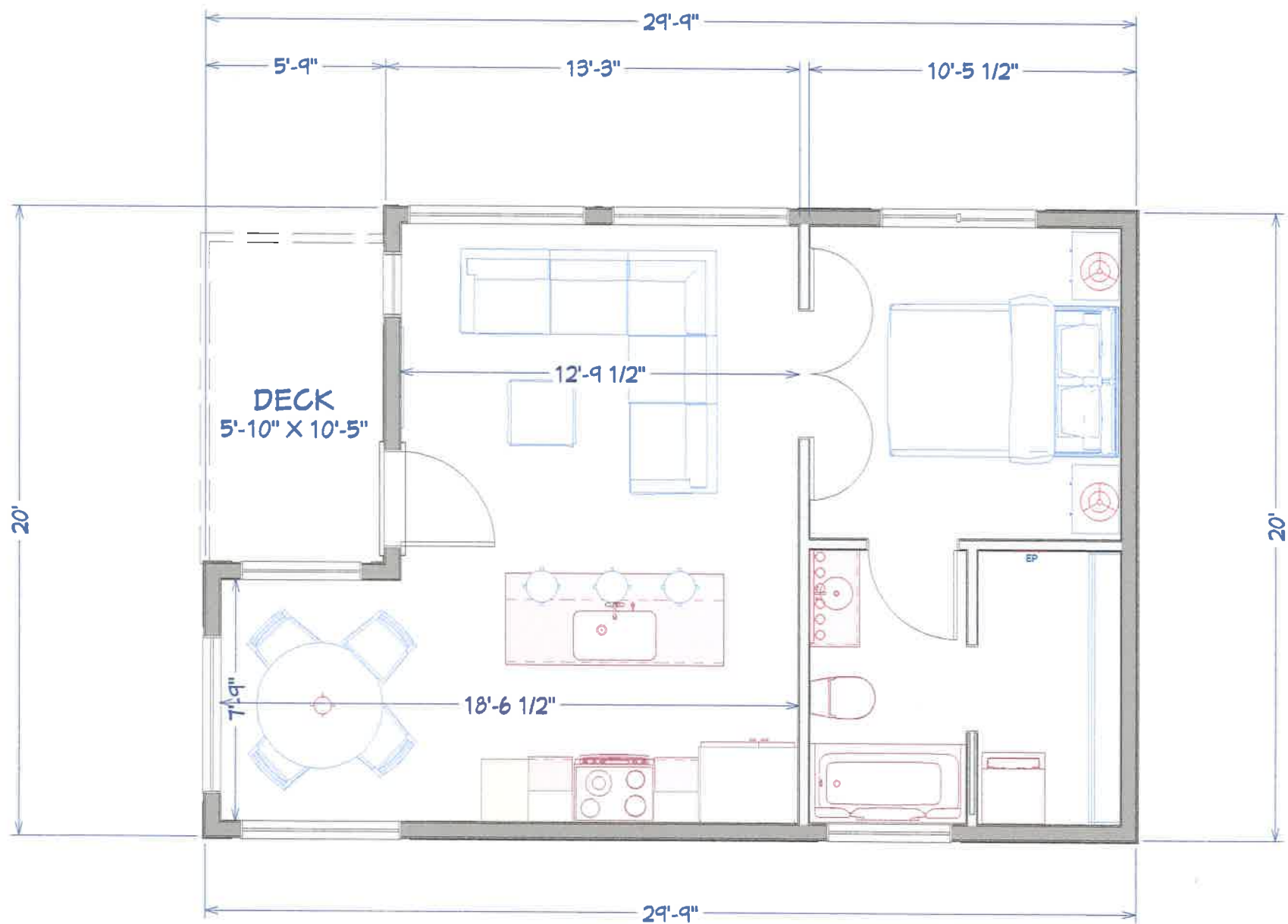
Conditional Use Narrative

The existing house (1 story with basement) sits on a 40' x 45' lot is non conforming for lot size set backs. I am not increasing the foot print of the structure.

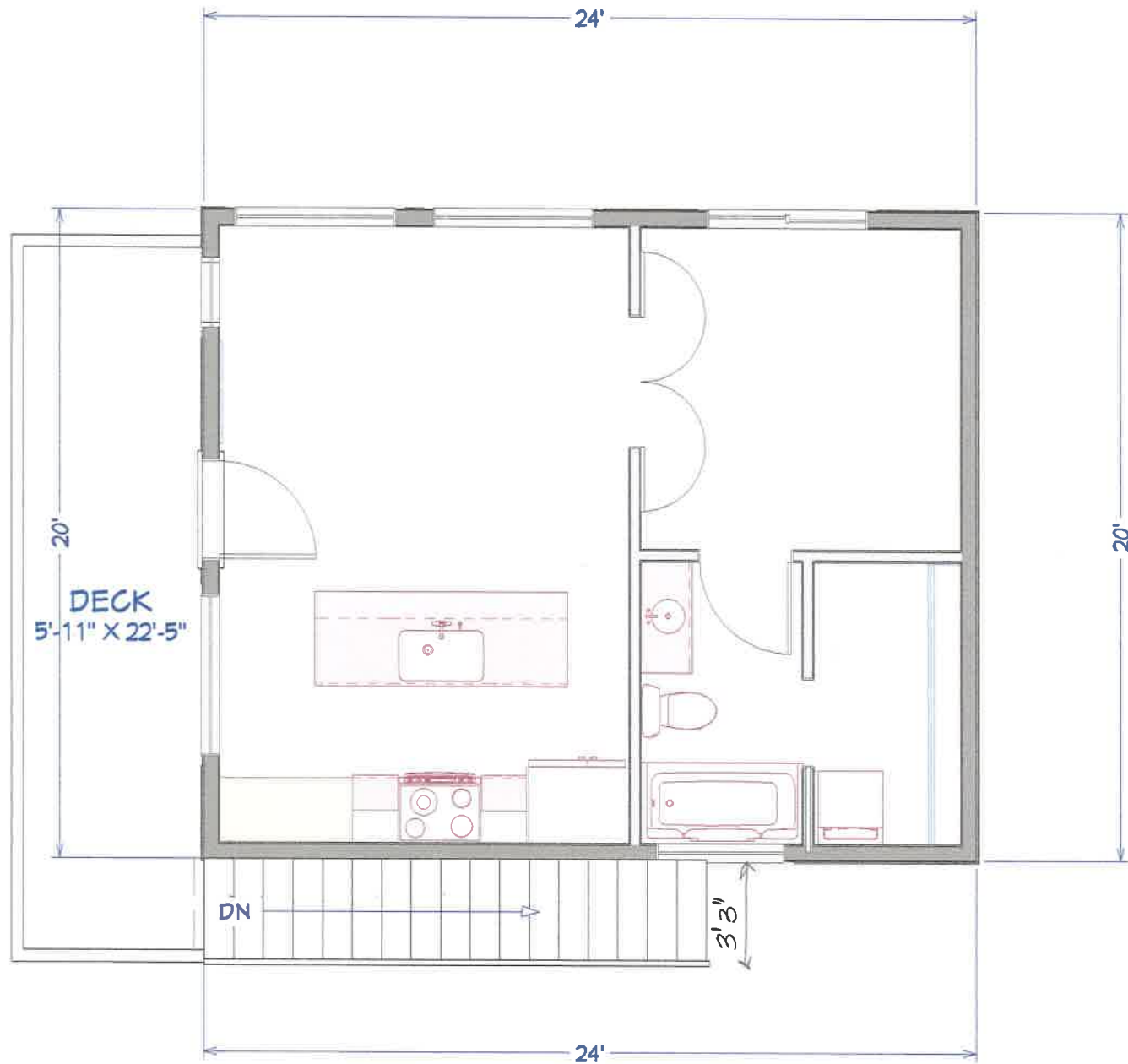
The plan would be to demo the current walls & roof without damaging the basement walls and floor. A two story house would be built to include an accessory apartment. A structural engineer would be utilized to determine foundation and load bearing walls.

The height of the the roof would stay under the 45' elevation requirement. There are two parking spaces with the option of one of the spaces being tandem, for a total of three spaces.

The use of the lot will be residential and provide additional housing in the area.



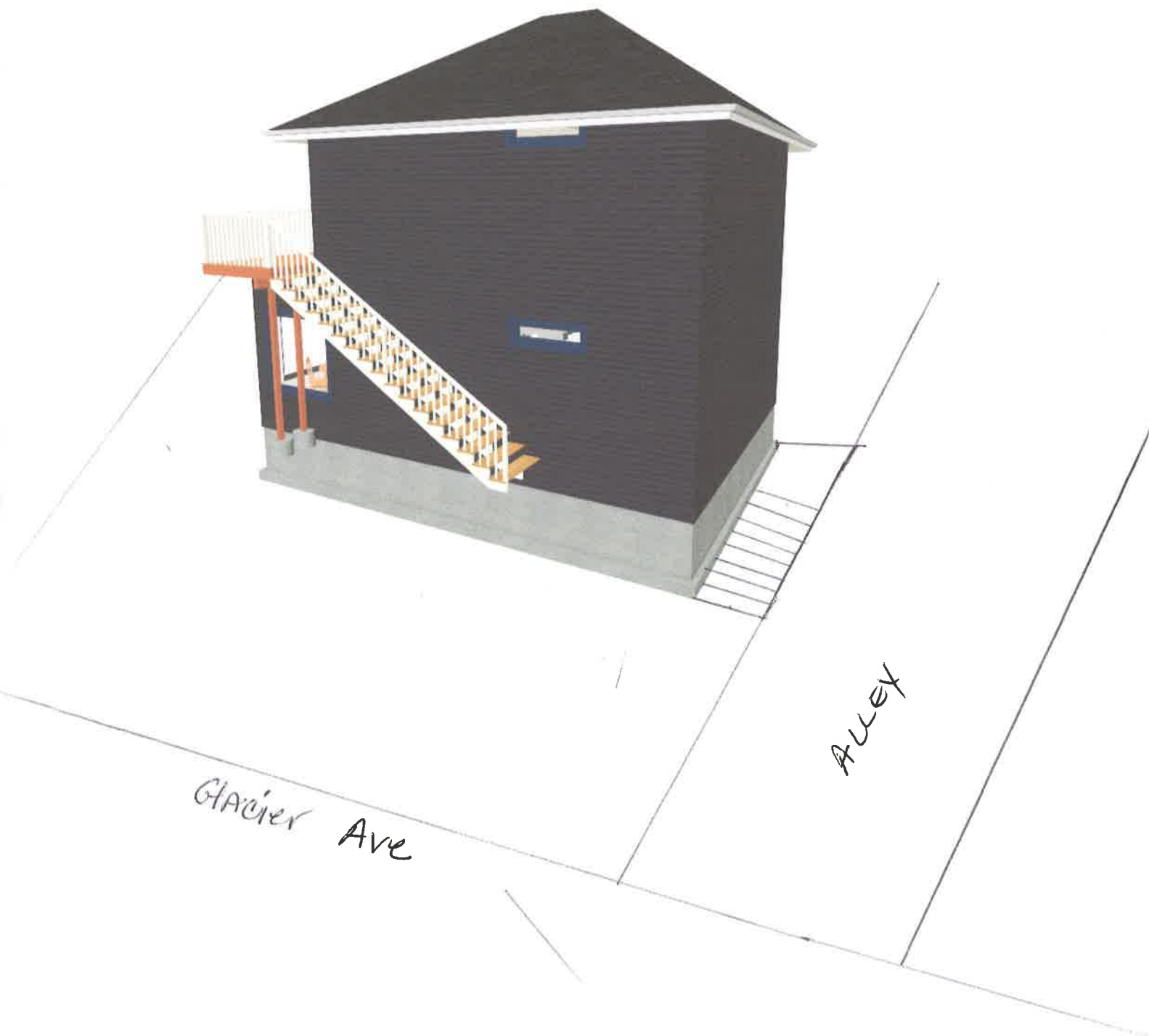
Main House
LIVING AREA
530 SQ FT
1ST FLOOR



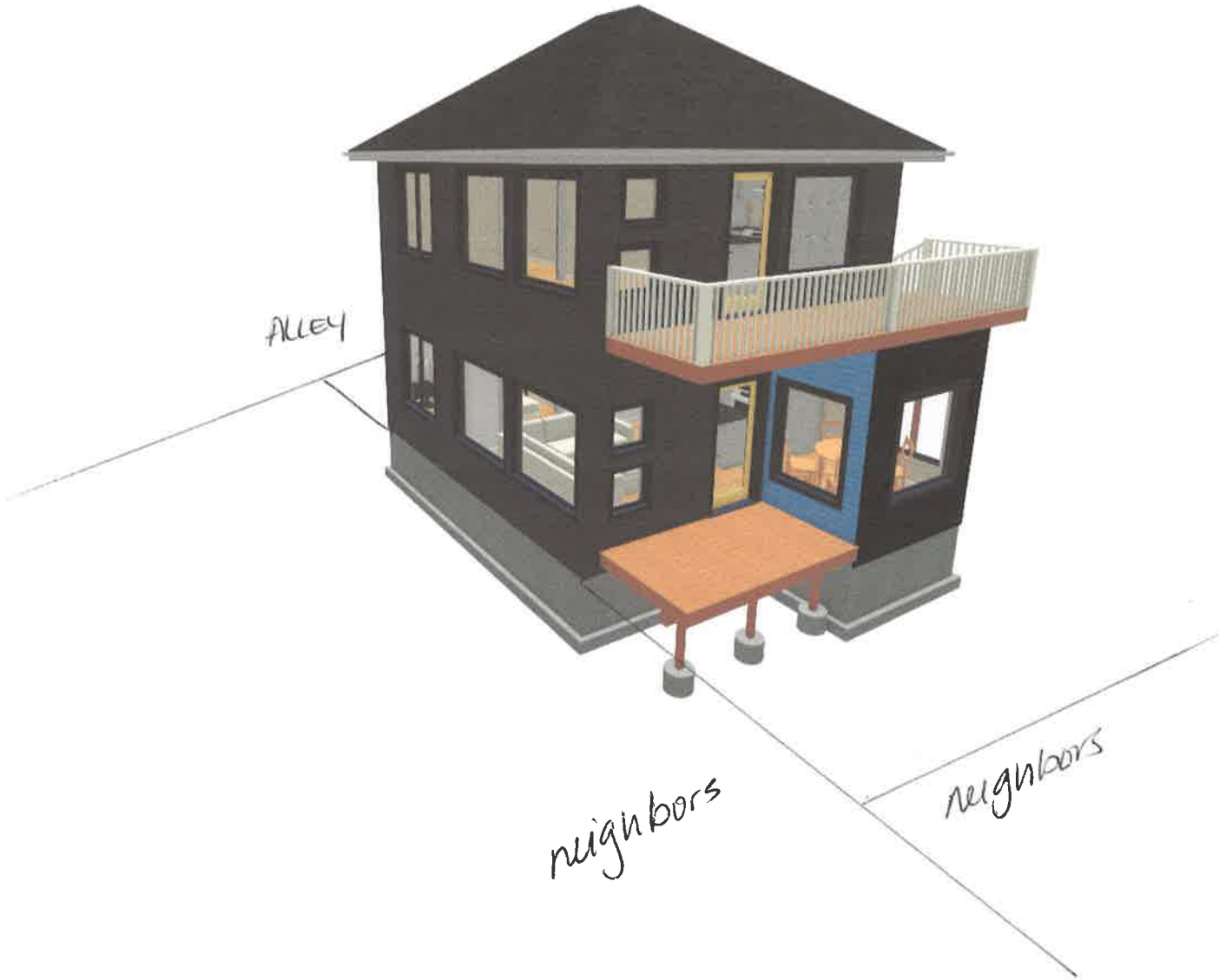
Accessory Apartment
LIVING AREA
480 SQ FT
2nd floor



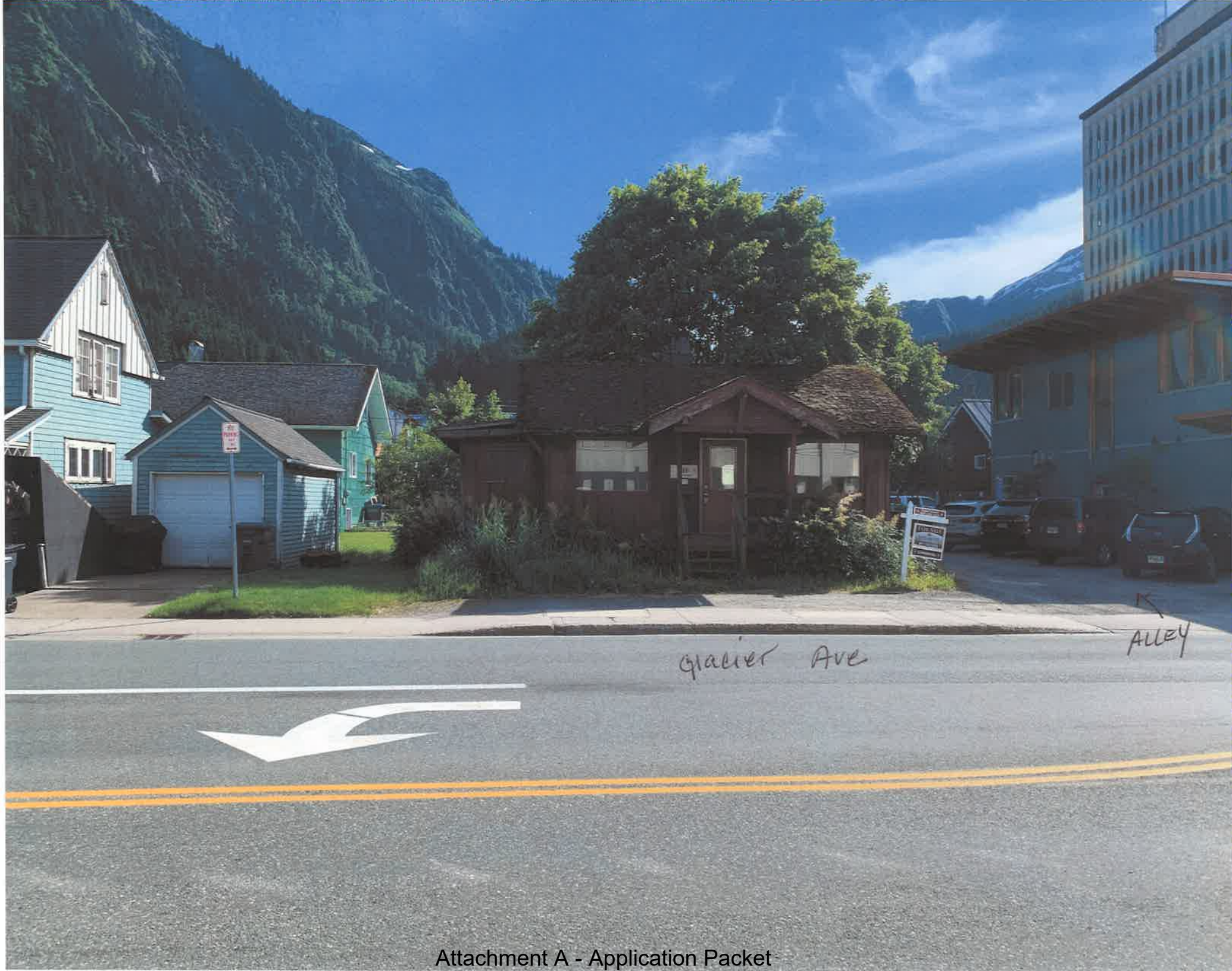
ELEVATION

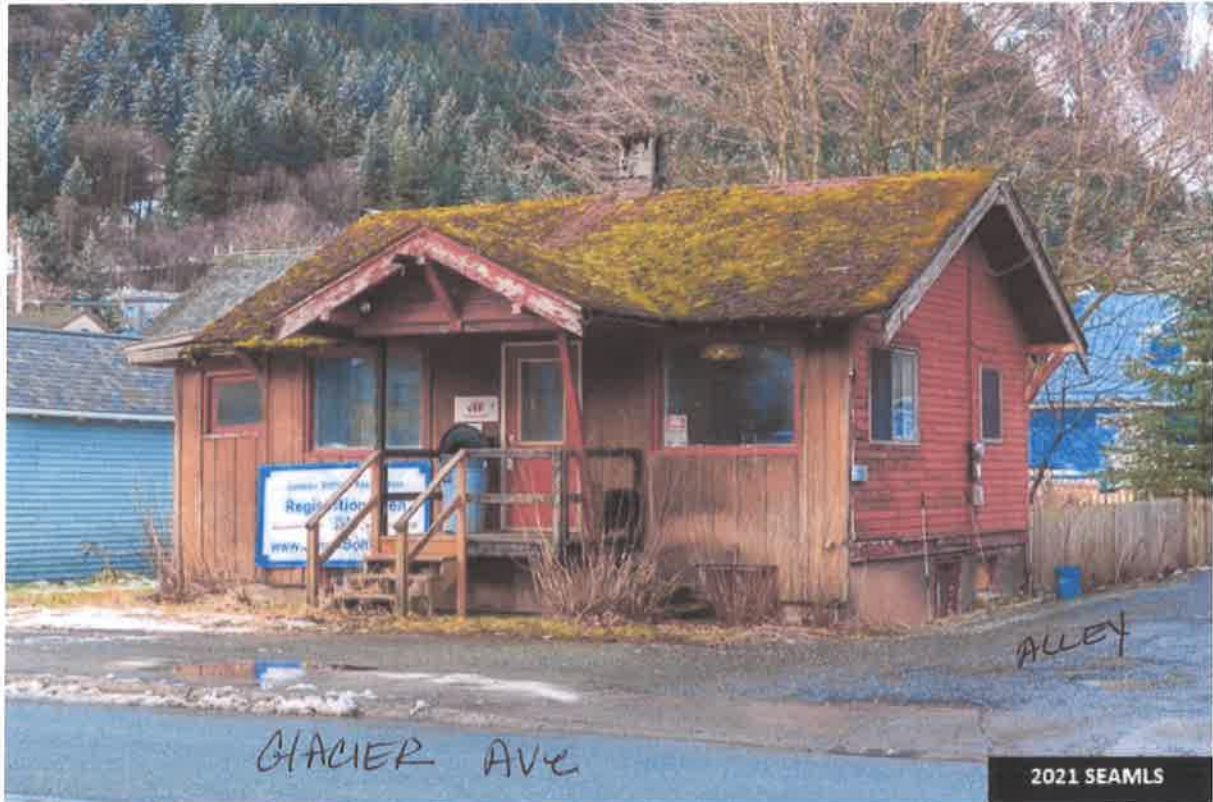


ELEVATION



ELEVATION





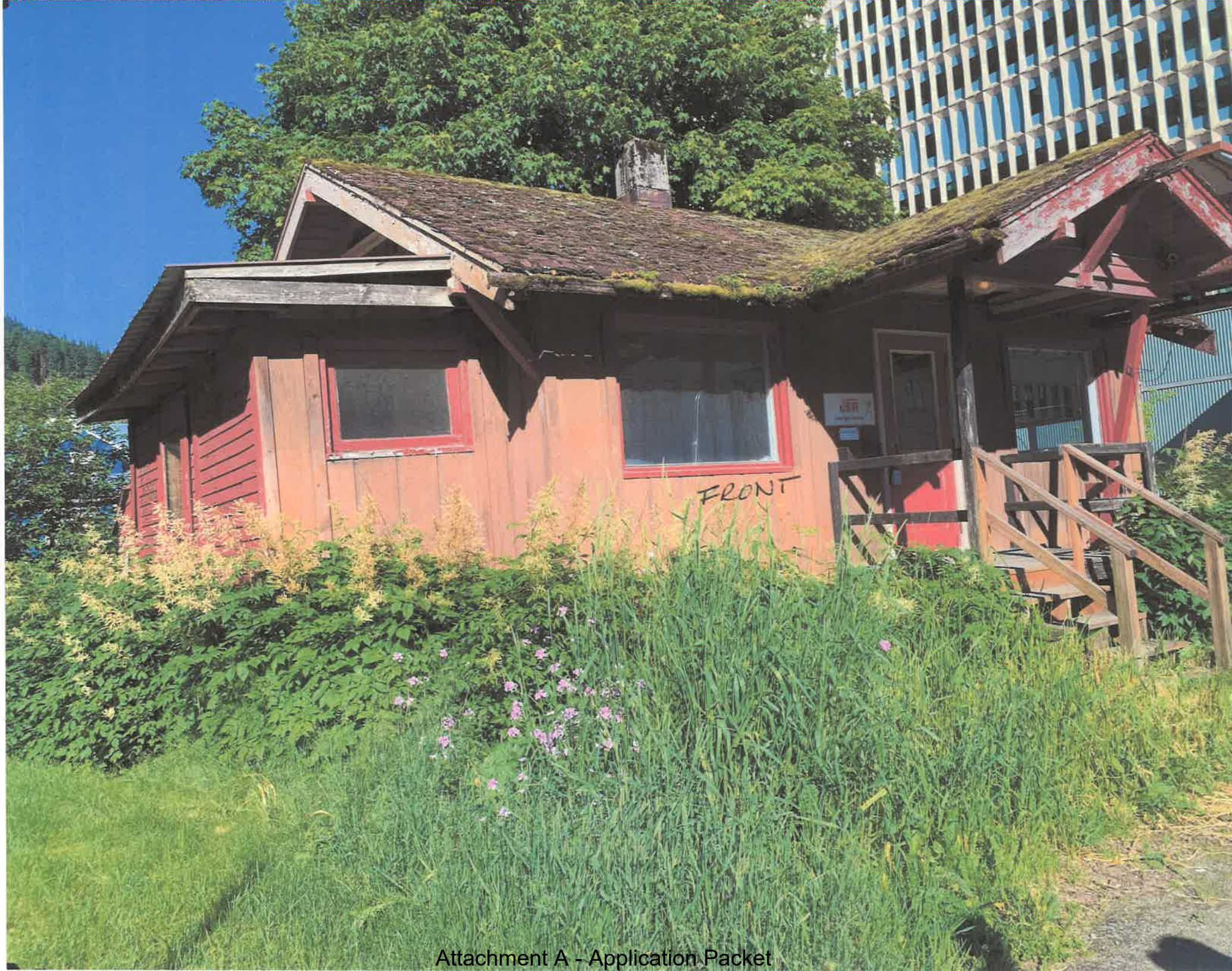
**923 Glacier Avenue, Juneau,
AK 99801**

Listing ID: 21365

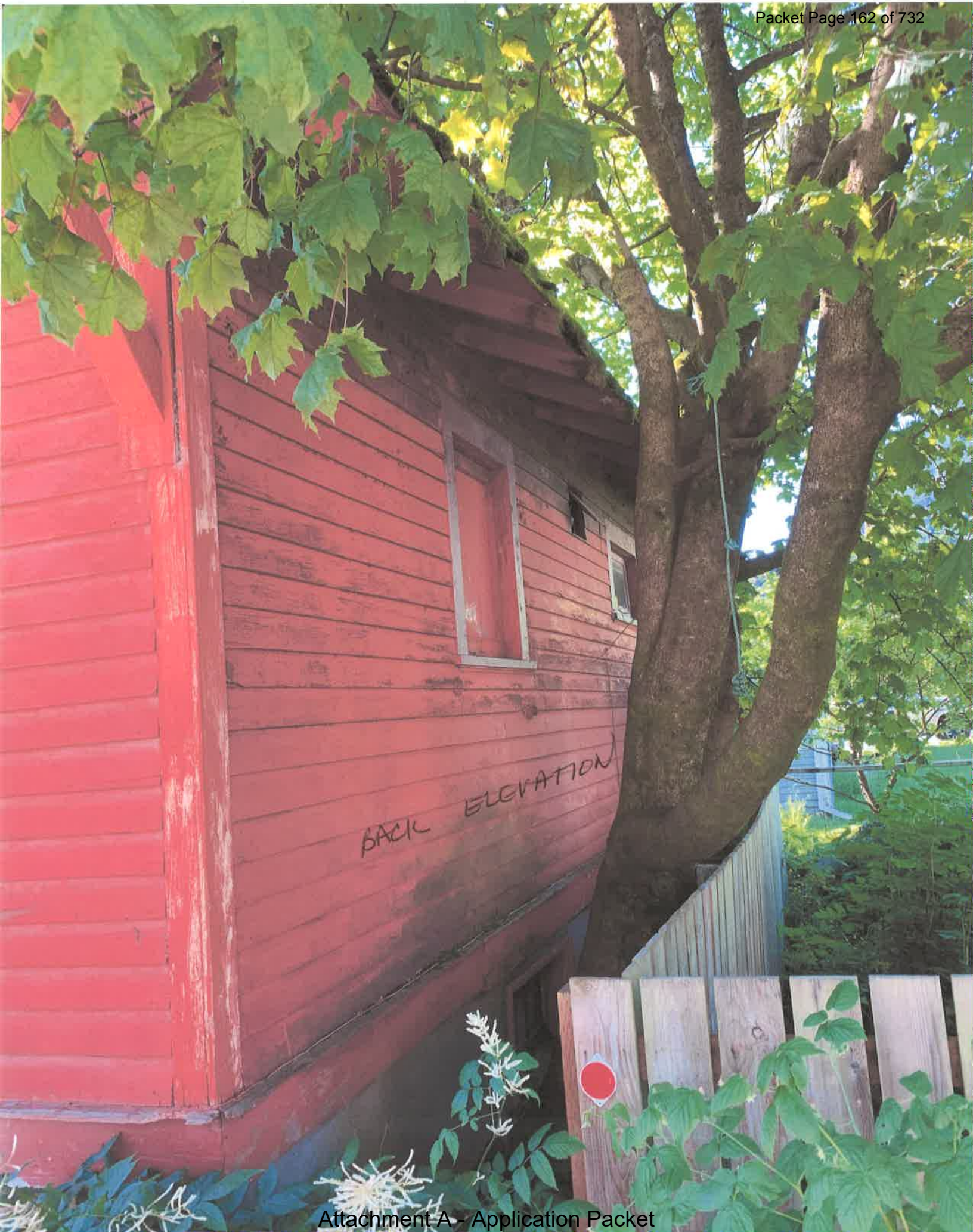
SEAMLS

Unique, high traffic downtown location.

Attachment A - Application Packet









BASEMENT ACCESS

ALLEY



(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

Lot Line Adjustment and Accessory Apartment on Substandard Lot

Case Number: PAC20210051

Applicant: Janell Liles

Property Owner: Janell Liles

Property Address: 923 Glacier Ave

Parcel Code Number: 1C060C250060

Site Size: 1,800 Square Feet

Zoning: LC (Light Commercial)

Existing Land Use: Commercial Miscellaneous

Conference Date: 8/11/21

Report Issued: 8/18/21

DISCLAIMER: Pre-application conferences are conducted for purposes of providing applicants with a preliminary review of a project and timeline. Pre-application conferences are not based on a complete application, and are not a guarantee of final project approval.

List of Attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Name	Title	Email address
Janell Liles	Applicant	Lilesjanell423@gmail.com
Teri Camery	Planning	Teri.camery@juneau.org
Guy Gleason	Building	Guy.gleason@juneau.org
Adrienne Scott	Permit Tech	Adrienne.scott@juneau.org

Pre-Application Conference Final Report

Conference Summary

Questions/issues/agreements identified at the conference that weren't identified in the attached reports.

The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

Project Overview

The property owner would like to demolish the existing single-family dwelling structure but keep the foundation and full basement, and rebuild a 2-story residential house. The second story would be an accessory apartment. The basement would stay as is with the egress unchanged. The roof height would stay under the 45' restriction. The owner would also like to purchase 15' feet of the adjacent property at 924 D Street, which is zoned D-5.

The purchase of 15' of the adjacent property cannot be allowed, because this lot is 5,600 square feet and does not meet the D-6 zoning district minimum lot size requirement of 7,000 square feet. Purchasing the property would make this non-conforming lot less conforming, which is not allowed.

Zoning application. If the adjacent lot was rezoned to Light Commercial, Light Commercial has a minimum lot size of 2,000 square feet. Therefore the 15' purchase could be allowed because it would meet the minimum lot size before and after the purchase of the property. Zoning applications are accepted in January and July each year, and typically have a 4 month approval process followed by an additional 30 days to become in effect. This is because zoning applications are first heard by the CBJ Planning Commission and then decided by the CBJ Assembly after an introduction meeting and then a full hearing. Zoning requests must either be two acres or more, or an expansion of an existing zoning district. The zone change must also "substantially comply" with the 2013 Juneau Comprehensive Plan. This zone change is an expansion of the existing Light Commercial zoning district, so it meets that requirement. However the Comprehensive Plan future land use designation for the proposed property at 924 D Street as "medium density residential-single family." The definition of "medium density residential-single family" in the Comprehensive Plan is:

These lands are characterized by single-family detached homes at densities ranging from 10-20 units. Only single-family detached homes, single-family detached homes with an accessory apartment, cottage houses and bungalow houses are permitted within this zone. Any commercial development should be of a scale consistent with a single-family residential neighborhood, as regulated in the Table of Permissible Uses.

Though the current property owner's intent is to build a 2-story residential house, which is consistent with Comprehensive Plan long-term designation for 924 D Street, the zone change review process is not exclusively for the proposed use. In the zone change review CDD must evaluate all possible uses for the LC zoning district, because the property can change ownership in the future and anything allowed in LC could be possible. Given this, a zone change to Light Commercial is unlikely to meet the requirement of substantial conformance with the Comprehensive Plan designation with its emphasis in the definition on single family dwellings, and the zone change is unlikely to be approved. However the property owner has the option to apply.

Non-conforming certificate. The property is 1,800 square feet in the Light Commercial zoning district, which has a 2,000 square foot minimum lot size. In addition, the property does not meet current setback requirements for the LC zoning district, which are 25' front, and 10' feet in the rear and sides. To reconstruct the building in its current footprint with the non-conforming lot size and setbacks, the property owner must file a Non-Conforming Certification Application and receive a final Non-conforming Certificate if CDD determines, from the documentation provided and other departmental research, that the lot and building met all applicable requirements when first developed. A Nonconforming certificate is required prior to the issuance of a building

Pre-Application Conference Final Report

permit or land use permit. Types of documentation that are helpful to include in a nonconforming application include old plats, deeds, and surveys.

Accessory Apartment. CBJ Code 49.25.510(k) establishes accessory apartment regulations. CBJ Code 49.25.510(k)(2)(G)(ii)(a) states that an accessory apartment in a commercial zoning district may be allowed on an undersized lot with a Conditional Use Permit from the Planning Commission if the application is for an efficiency apartment or a one-bedroom unit that does not exceed 600 square feet in net floor area and the primary use of the lot is for a single-family dwelling. The property owner states that access to the apartment would be from stairs as shown on the project drawing, however these stairs appear to be dependent on purchase of 15' of property from the adjacent landowner, which would not be allowed without an approved zone change from D-5 to Light Commercial. One off-street parking space would be required for the apartment, while two spaces would be required for the main dwelling, for a total of three off-street parking spaces.

Planning Division

1. **Zoning** – Light Commercial
2. **Setbacks** – 25' front; 10' rear; 10' side
3. **Height** – 45'
4. **Access** – Glacier Highway
5. **Parking & Circulation**– CBJ Code requires two parking spaces for the single family dwelling and one parking space for the apartment.
6. **Lot Coverage** – no maximum lot coverage
7. **Vegetative Coverage** – 15 percent of the lot
8. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – The property is not in a hazard zone.
9. **Nonconforming situations** – The lot is non-conforming for lot size and setbacks. A Nonconforming certificate is required prior to the issuance of a building permit or land use permit.

Building Division

10. **Building** –
 - a. Engineer's analysis will be required in order to use existing foundation
 - b. Fire and sound separation will be required between dwelling units
 - c. No bedrooms in basement will be permitted due to lack of egress
11. **Outstanding Permits** - None

General Engineering/Public Works

12. **Engineering** – No comments at this time
13. **Drainage** – No comments at this time
14. **Utilities** – (water, power, sewer, etc.) No comments at this time

Fire Marshal

15. **Fire Items/Access** – No comments at this time

Other Applicable Agency Review

Pre-Application Conference Final Report

16. DOT&PF / Alcohol Beverage Control Board / Army Corps / DEC (wastewater) / DNR / USF&W / F&G / FAA / Corrections...

List of required applications

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

1. Nonconforming Certification Application
2. Conditional Use Permit
3. Zone Change if applicable
4. Minor Subdivision Lot Line adjustment if applicable

Additional Submittal Requirements

Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.

Exceptions to Submittal Requirements

Submittal requirements staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. N/A

Fee Estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. Nonconforming Certificate. \$150.00 or no cost with a building permit.
2. Conditional Use Permit. Class I use, \$350.00
3. Zone Change if applicable. \$600.00
4. Minor Subdivision Lot Line adjustment if applicable. \$160.00

For informational handouts with submittal requirements for development applications, please visit our website at www.juneau.org/cdd.

Submit your Completed Application

You must submit your application(s) in person with payment made to:

City & Borough of Juneau, Permit Center
 230 South Franklin Street
 Fourth Floor Marine View Center
 Juneau, AK 99801

Pre-Application Conference Final Report

Phone: (907) 586-0715

Web: www.juneau.org/cdd

Attachments:

49.15.330 – Conditional Use Permit

49.15.330 Conditional use permit.

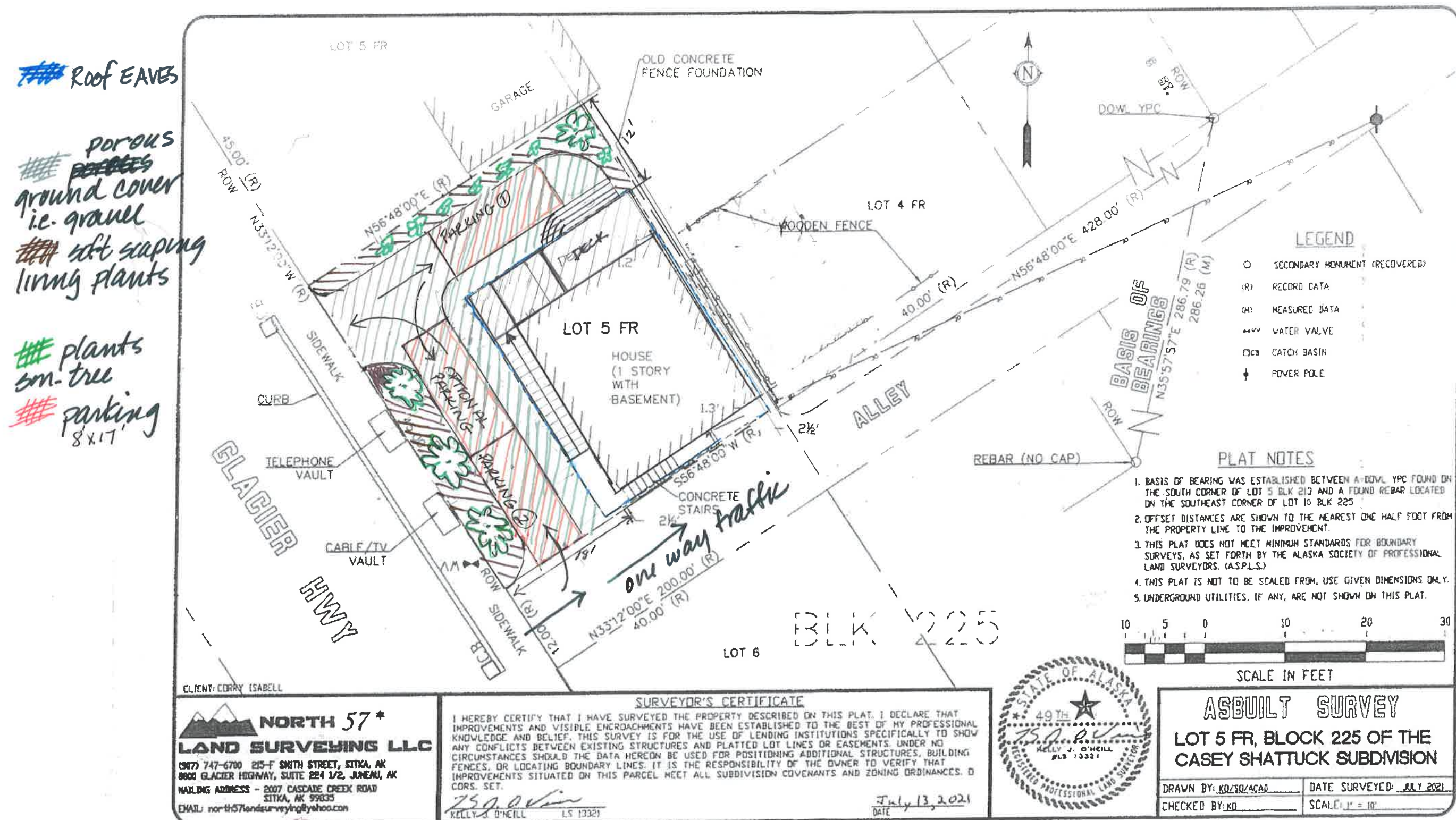
- (a) *Purpose.* A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.
- (b) *Preapplication conference.* Prior to submission of an application, the developer shall meet with the director for the purpose of discussing the site, the proposed development activity, and the conditional use permit procedure. The director shall discuss with the developer, regulation which may limit the proposed development as well as standards or bonus regulations which may create opportunities for the developer. It is the intent of this section to provide for an exchange of general and preliminary information only and no statement by either the developer or the director shall be regarded as binding or authoritative for purposes of this code. A copy of this subsection shall be provided to the developer at the conference.
- (c) *Submission.* The developer shall submit to the director one copy of the completed permit application together with all supporting materials and the permit fee.
- (d) *Director's review procedure.*
 - (1) The director shall endeavor to determine whether the application accurately reflects the developer intentions, shall advise the applicant whether or not the application is acceptable and, if it is not, what corrective action may be taken.
 - (2) After accepting the application, the director shall schedule it for a hearing before the commission and shall give notice to the developer and the public in accordance with section 49.15.230.
 - (3) The director shall forward the application to the planning commission together with a report setting forth the director's recommendation for approval or denial, with or without conditions together with the reasons therefor. The director shall make those determinations specified in subsections (1)(A)—(1)(C) of subsection (e) of this section.
 - (4) Copies of the application or the relevant portions thereof shall be transmitted to interested agencies as specified on a list maintained by the director for that purpose. Referral agencies shall be invited to respond within 15 days unless an extension is requested and granted in writing for good cause by the director.
 - (5) Even if the proposed development complies with all the requirements of this title and all recommended conditions of approval, the director may nonetheless recommend denial of the application if it is found that the development:
 - (A) Will materially endanger the public health or safety;
 - (B) Will substantially decrease the value of or be out of harmony with property in the neighboring area; or
 - (C) Will not be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans.
- (e) *Review of director's determinations.*
 - (1) At the hearing on the conditional use permit, the planning commission shall review the director's report to consider:
 - (A) Whether the proposed use is appropriate according to the table of permissible uses;

-
- (B) Whether the application is complete; and
 - (C) Whether the development as proposed will comply with the other requirements of this title.
 - (2) The commission shall adopt the director's determination on each item set forth in paragraph (1) of this subsection (e) unless it finds, by a preponderance of the evidence, that the director's determination was in error, and states its reasoning for each finding with particularity.
 - (f) *Commission determinations; standards.* Even if the commission adopts the director's determinations pursuant to subsection (e) of this section, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the hearing, that the development will more probably than not:
 - (1) Materially endanger the public health or safety;
 - (2) Substantially decrease the value of or be out of harmony with property in the neighboring area; or
 - (3) Lack general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.
 - (g) *Specific conditions.* The commission may alter the director's proposed permit conditions, impose its own, or both. Conditions may include one or more of the following:
 - (1) *Development schedule.* A reasonable time limit may be imposed on construction activity associated with the development, or any portion thereof, to minimize construction-related disruption to traffic and neighborhood, to ensure that development is not used or occupied prior to substantial completion of required public or quasi-public improvements, or to implement other requirements.
 - (2) *Use.* Use of the development may be restricted to that indicated in the application.
 - (3) *Owners' association.* The formation of an association or other agreement among developers, homeowners or merchants, or the creation of a special district may be required for the purpose of holding or maintaining common property.
 - (4) *Dedications.* Conveyance of title, easements, licenses, or other property interests to government entities, private or public utilities, owners' associations, or other common entities may be required.
 - (5) *Performance bonds.* The commission may require the posting of a bond or other surety or collateral approved as to form by the city attorney to guarantee the satisfactory completion of all improvements required by the commission. The instrument posted may provide for partial releases.
 - (6) *Commitment letter.* The commission may require a letter from a public utility or public agency legally committing it to serve the development if such service is required by the commission.
 - (7) *Covenants.* The commission may require the execution and recording of covenants, servitudes, or other instruments satisfactory in form to the city attorney as necessary to ensure permit compliance by future owners or occupants.
 - (8) *Revocation of permits.* The permit may be automatically revoked upon the occurrence of specified events. In such case, it shall be the sole responsibility of the owner to apply for a new permit. In other cases, any order revoking a permit shall state with particularity the grounds therefor and the requirements for reissuance. Compliance with such requirements shall be the sole criterion for reissuance.
 - (9) *Landslide and avalanche areas.* Development in landslide and avalanche areas, designated on the landslide and avalanche area maps dated September 9, 1987, consisting of sheets 1—8, as the same may be amended from time to time by assembly ordinance, shall minimize the risk to life and property.
 - (10) *Habitat.* Development in the following areas may be required to minimize environmental impact:

(A) Developments in wetlands and intertidal areas.

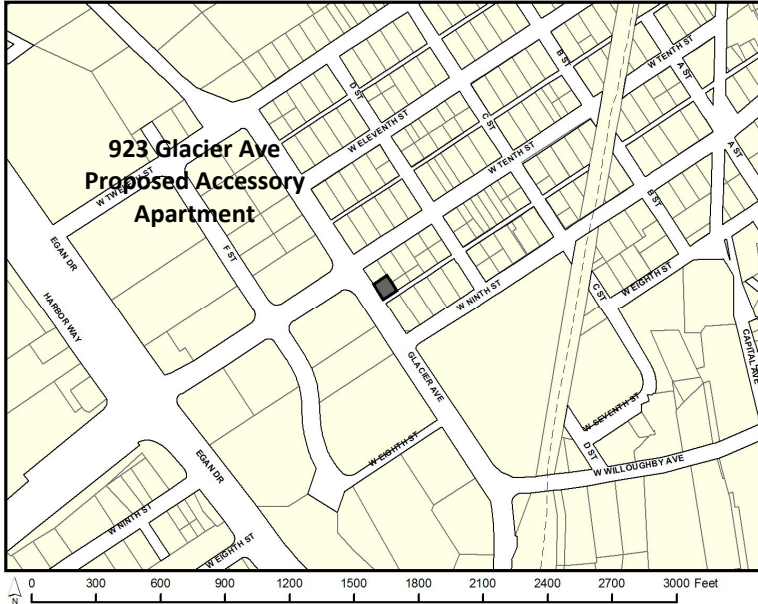
- (11) *Sound.* Conditions may be imposed to discourage production of more than 65 dBa at the property line during the day or 55 dBa at night.
- (12) *Traffic mitigation.* Conditions may be imposed on development to mitigate existing or potential traffic problems on arterial or collector streets.
- (13) *Water access.* Conditions may be imposed to require dedication of public access easements to streams, lake shores and tidewater.
- (14) *Screening.* The commission may require construction of fencing or plantings to screen the development or portions thereof from public view.
- (15) *Lot size or development size.* Conditions may be imposed to limit lot size, the acreage to be developed or the total size of the development.
- (16) *Drainage.* Conditions may be imposed to improve on and off-site drainage over and above the minimum requirements of this title.
- (17) *Lighting.* Conditions may be imposed to control the type and extent of illumination.
- (18) *Other conditions.* Such other conditions as may be reasonably necessary pursuant to the standards listed in subsection (f) of this section.

(Serial No. 87-49, § 2, 1987; Serial No. 2006-15, § 2, 6-5-2006; Serial No. 2015-03(c)(am), § 9, 8-31-2015 ; Serial No. 2017-29, § 3, 1-8-2018, eff. 2-8-2018)



Invitation to Comment

On a proposal to be heard by the CBJ Planning Commission
Your Community, Your Voice



COMMUNITY DEVELOPMENT

155 S. Seward Street Juneau, Alaska 99801

TO:

An application has been submitted for consideration and public hearing by the Planning Commission for **two Conditional Use Permits for an accessory apartment on an undersized lot and an addition of a second story to a nonconforming structure at 923 Glacier Avenue in a Light Commercial Zone.**

TIMELINE

Staff Report expected to be posted **Monday, December 6, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Nov. 22

Comments received during this period will be sent to the Planner, **Allison Eddins**, to be included as an attachment in the staff report.

Nov. 23 — noon, Dec. 10

Comments received during this period will be sent to Commissioners to read in preparation for the hearing.

HEARING DATE & TIME: 7:00 pm, December 14, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/83598204446>. The Webinar ID is: 835 9820 4446. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

December 15

The results of the hearing will be posted online.

Phone: **(907)586-0715** ♦ Email: pc_comments@juneau.org
Mail: **Community Development, 155 S. Seward St, Juneau AK 99801**

Printed November 16, 2021

Case No.: USE2021 0016; USE2021 0017
Parcel No.: 1C060C250060
CBJ Parcel Viewer: <http://epv.juneau.org>



From: [Charlie Ford](#)
To: [Allison Eddins](#)
Subject: RE: 923 Glacier Ave - USE case
Date: Tuesday, November 30, 2021 8:18:08 AM
Attachments: [image003.png](#)

Hi Allison,

After looking at everything involved with this property I feel confident that the existing living area, 492 square feet, can be rebuilt for less than 75% of the assessed value.

The existing foundation is going to be utilized which is a major portion of the construction costs.

My estimate for replacement is \$29,500.

Let me know if you need more information.

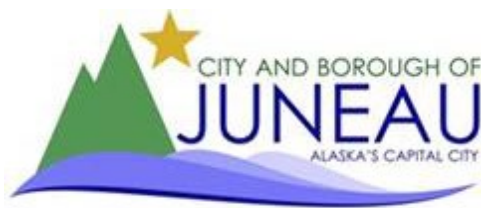
Thanks,

Charlie Ford | Building Official

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0767



From: Allison Eddins <Allison.Eddins@juneau.org>
Sent: Monday, November 29, 2021 10:47 AM
To: Charlie Ford <Charlie.Ford@juneau.org>
Subject: 923 Glacier Ave - USE case

Hi Charlie,

I'm working on a land use case for this property. The structure was built in the 1920's and is nonconforming for setbacks. The new owner would like to demo the roof and walls but keep the foundation and daylight basement. T49 allows for nonconforming structures to be rebuilt if the cost to rebuild is equal to or less than 75% of the building value. Can you give me an estimate for the cost to rebuild roughly 492 sq. ft. of the main living space?

Thanks,
Allison

Allison Eddins | Planner II

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 ext. 4131

Our telephone system is changing. Beginning May 3, 2021, I may be reached at 907-586-0753 ext. 4131.



From: Mary Hammond
Sent: Monday, November 29, 2021 1:18 PM
To: Allison Eddins
Subject: RE: Request for Comment

Thanks Allison. No questions or comments from an assessment standpoint.

Mary Hammond she/ her

Assessor

City & Borough of Juneau

(907) 586-5215 ext. 4033

Please notice that our phone number has changed. All finance department calls must go to (907)586-5215. My new phone number is 586-5215 ext. 4033

From: Allison Eddins
Sent: Monday, November 29, 2021 12:49 PM
To: Mary Hammond
Subject: Request for Comment

Hi Mary,

There is a pending application to reconstruct the existing home at 923 Glacier Ave and add a second story. The second story would have an accessory apartment. If you have any comments or concerns regarding the proposal please let me know.

Thank you,
Allison

Allison Eddins | Planner II

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 ext. 4131

Our telephone system is changing. Beginning May 3, 2021, I may be reached at 907-586-0753 ext. 4131.





(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD

155 S. Seward Street • Juneau, AK 99801

DATE: October 20, 2021

TO: Jill Maclean, Director, AICP

BY: Adrienne Scott, Planner I

PROPOSAL: A Nonconforming Situation Review for lots, structures, and parking.

KEY CONSIDERATIONS FOR REVIEW:

- The structure was constructed in 1920, according to the Casey-Shattuck Historic Building Survey.
- The lot was created in 1934, with Plat 1934-1.
- The lot and the structure were created prior to the establishment of zoning.
- The shed is noncompliant for setbacks, and encroaches into the adjacent property. The property owner must bring the shed into compliance with the Land Use Code.

STAFF RECOMMENDATION:

Staff recommends the following situations receive

Nonconforming Certification:

- Nonconforming Structures (49.30.250)
- Nonconforming Lots (49.30.260)
- Nonconforming Parking (49.30.270)

ABANDONMENT:

If a nonconforming situation is deemed to be abandoned by the Director, the decision may be reconsidered in accordance with CBJ 49.30.220. After reconsideration is reviewed, an appeal may be filed in accordance with CBJ 49.20.110.

NONCOMPLIANCE:

If a situation fails to be certified as nonconforming, an appeal of this decision may be filed in accordance with CBJ 49.20.110.

- There is a noncompliant shed built within the minimum rear yard setback that encroaches into the adjacent property.

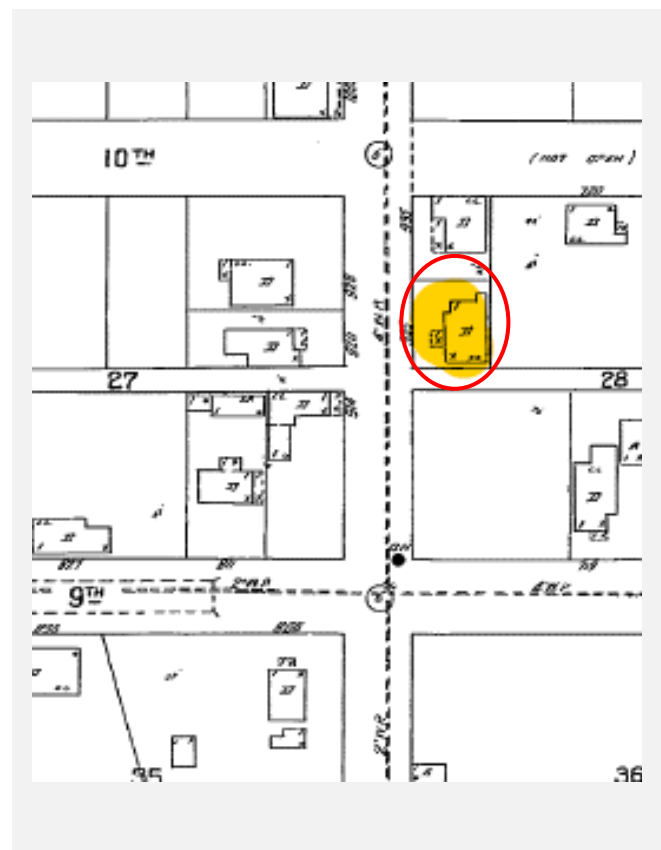
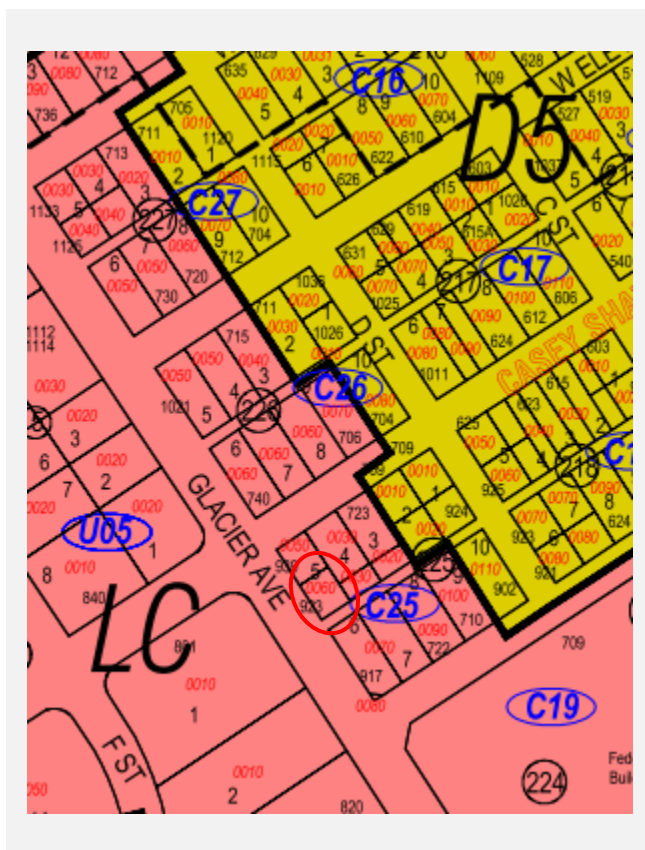
GENERAL INFORMATION	
Property Owner	Janell Liles
Applicant	Janell Liles
Property Address	923 Glacier Avenue
Legal Description	Casey Shattuck Block 225 Lot 5 FR
Parcel Number	1C060C250060
Zoning	Light Commercial
Lot Size	1,800 square feet
Water/Sewer	Public
Access	Glacier Highway
Existing Land Use	Commercial Miscellaneous
Associated Applications	None

CBJ 49.30.215: Accidental damage or destruction. Structures receiving a nonconforming certification may have the right to reconstruct a nonconforming structure per CBJ Chapter 49.30.

SURROUNDING ZONING AND LAND USES	
North (LC)	Residential
South (LC)	Commercial with apartments
East (D5)	Residential
West (ROW)	Glacier Avenue

SITE FEATURES	
Anadromous	None
Flood Zone	Zone X
Hazard	None
Hillside	None
Wetlands	None
Parking District	None
Historic District	None
Overlay Districts	Downtown Juneau ADOD

1927 Sanborn Map



ZONING HISTORY

Year	Zoning District	Summary
1920	None	According to the Casey-Shattuck Historic Building Survey, the structure was constructed in 1920, prior to establishment of zoning in Juneau.
1934	None	The lot was platted in 1934, prior to zoning.
1956	B1	In 1956, the lot and surrounding area was zoned B1. The B1 zoning district required a 5,000 square foot minimum lot size and a 50-foot minimum lot width. Required setbacks were 20 feet front yard and 10 feet rear yard, with no minimum side yard setbacks. One off-street parking space was required for a single-family dwelling. The structure became nonconforming for front and rear setbacks and the lot became nonconforming for lot size and width.
1969	C1	In 1969, the lot and surrounding area was rezoned C1. The C1 zoning district required a 3,500 square foot minimum lot size, a 40-foot minimum lot width, and a 60-foot minimum lot depth. Required setbacks were 20 feet front, with no required side yard or rear yard setback. One off-street parking space was required for a single-family dwelling and two off-street parking spaces were required for a barbershop. The lot remained nonconforming for lot size. The structure remained nonconforming for front setback. The use became nonconforming for off-street parking when the structure was converted to a barbershop.
1987	LC	In 1987, the lot and surrounding area was rezoned Light Commercial (LC). The LC zoning district required a 2,000 square foot minimum lot size, a 20-foot lot width, and an 80-foot lot depth. Required setbacks were 25 feet front, 10 feet rear, 10 feet side, and 17 feet side yard. Two off-street parking spaces were required. The lot remained nonconforming for lot size. The structure remained nonconforming for front setback and became nonconforming for rear and side yard setbacks. The use remained nonconforming for off-street parking.

BACKGROUND INFORMATION

The applicant requests a Nonconforming Situation Review for lots, structures, and parking. The lot was platted in 1934. The structure on the lot was constructed in 1924 according to the Casey Shattuck Historic Building Survey, while the Assessor's Database has the year built as 1977. The structure is shown on the 1926 Sanborn map and a 1941 Tax map, so the construction date of 1920 will be used for this report.

In 1974, a building permit (BLD-10005) was obtained to convert the residence to a barbershop. A Conditional Use Permit was obtained in 1993 for a 10-seat restaurant; however, a building permit was never issued to remodel the structure into a restaurant. Most recently, the structure has been in use as an office space by the Juneau Sports Association.

A 2021 as-built indicates that the eaves of the structure, as well as a lean-to shed at the rear of the house, encroach into the adjacent lot 4.

INFORMATION REVIEWED

Year	Type	Summary
1927	Sanborn Map	Shows structure on lot
1934	Plat	Plat 1934-1 shows creation of lot 5
1941	Tax Map	Shows structure on lot fraction
1974	Building Permit	Building Permit 10005 shows change of use from residential to barbershop
1993	Conditional Use Permit	CU-40-93 gives approval for a 10-seat restaurant
2004	Historic Info	Casey-Shattuck Historic Building Survey shows year built as 1920
2013	Aerial Photography	Used to estimate vegetative cover
2021	Assessor's Records	Shows square footage
2021	As-Built	Shows location of structure on lot

ANALYSIS

Zoning District Comparison Table – The table below lists the required standards for the LC zoning district compared to the lot. A description of these situations is provided in the following sections. Items bolded do not meet current requirements.

Standard		Requirement	Existing	Code Reference
Lot	Size	2,000 square feet	1,800 square feet	49.25.400
	Width	20 feet	45 feet	49.25.400
Setbacks	Front (SW)	25 feet	18 feet	49.25.400
	Rear (NE)	10 feet	1.2 feet residential structure (0 feet structure eaves)* 0 feet shed*	49.25.400
	Side (NW)	10 feet	12 feet	49.25.400
	Street Side (SE)	17 feet	2.5 feet	49.25.400
Lot Coverage		50%	40%	49.25.400
Height	Permissible	45 feet	<45 feet	49.25.400
	Accessory	35 feet	N/A	49.25.400
Maximum Dwelling Units		1 unit	1 unit	49.25.500
Use		Residential	Residential	49.25.300
Vegetative Cover		15%	20%	49.50.300
Parking		2 spaces	1 space	49.40.210(a)

**The structure eaves and shed encroach onto the neighboring lot.*

Minimum Lot Requirements – The lot was platted in 1934, prior to the establishment of zoning in Juneau. The lot is nonconforming for size.

Finding: Staff finds the lot conforming for lot size.

Minimum Setback Requirements – The structure was built in 1920, prior to the establishment of zoning in Juneau. The table and information above demonstrate that the residential structure is nonconforming for front, rear, and street side yard setbacks. The eaves of the structure encroach onto the neighboring lot. If the structure is reconstructed, this situation will not be permitted to continue.

The shed on the rear of the house is shown on the 2021 as-built to encroach onto the adjacent lot. It is unknown when the shed was constructed. The shed is noncompliant for setbacks.

Finding: Staff finds the structure nonconforming for setbacks. The structure may become conforming for setbacks through the Alternative Development Overlay District permit process (CBJ 49.70.1200).

Finding: Staff finds the shed noncompliant for setbacks.

Lot Coverage – The as-built shows lot coverage of approximately 40%.

Finding: Staff finds the lot conforming for lot coverage.

Structure Height – Assessor's photo shows a single-story structure.

Finding: Staff finds the structure conforming for height.

Residential Density – There is one single-family structure on the lot.

Finding: Staff finds the lot conforming for residential density.

Use – The use of the lot is residential.

Finding: Staff finds the lot conforming for use.

Vegetative Cover – Aerial GIS photography and a site visit showed vegetative cover to be approximately 20%.

Finding: Staff finds the lot conforming for vegetative cover.

Parking – CBJ 49.40.210 requires 2 off-street parking spaces for a single family residence. Back-out parking may be allowed for single-family dwellings in residential zoning districts per 49.40.230(b)(7)(A).

Finding: Staff finds the use nonconforming for number of off-street parking spaces.

NONCOMPLIANT SITUATIONS

49.30.310(j) Failure of a situation to qualify for nonconforming certification. If a situation does not qualify for or is denied nonconforming certification, it is noncompliant and the property is subject to enforcement actions consistent with this title.

The lot contains a lean-to shed at the rear of the house. The shed encroaches onto the adjacent lot and is noncompliant for the rear setback.

Finding: Staff finds the shed noncompliant for setbacks. The property owner must bring the shed into compliance with the Land Use Code.

ABANDONMENT

49.30.220(b) Abandonment of a nonconforming situation. A nonconforming situation is abandoned if any of the following events occur:

- (1) The owner indicates in writing that the nonconforming situation is being permanently discontinued;*
- (2) The nonconforming situation is damaged, destroyed, removed or demolished intentionally by the owner or intentionally by an authorized agent of the owner;*
- (3) The nonconforming structure is moved;*
- (4) The owner takes action consistent with an intent to abandon the nonconforming situation;*
- (5) The structure(s) associated with the nonconforming situation has been vacant for 365 consecutive days;*
- (6) Except for a structure with a nonconforming residential density, the nonconforming use has ceased and not substantially resumed for 365 consecutive days; or*
- (7) A structure with a nonconforming residential density has been unoccupied for 1095 consecutive days.*

No information has been submitted to suggest the nonconforming situations on the lot have been abandoned.

Finding: Staff finds none of the above events have taken place and the nonconforming situations are not deemed abandoned.

FINDINGS

1. Was the nonconforming situation allowed, or not prohibited by law, when it was established?

Analysis: The residential structure was constructed and the lot was created prior to the establishment of zoning in Juneau.

Finding: Yes. The nonconforming situation was allowed when established.

Analysis: The shed along the rear of the house encroaches into the adjacent lot. This encroachment was not approved.

Finding: Staff finds the shed noncompliant for setbacks. The property owner must bring the shed into compliance with the Land Use Code.

2. Has the nonconforming situation been abandoned?

Analysis: No information has been submitted that suggests the nonconforming situations have been abandoned.

Finding: No. The nonconforming situations have not been abandoned.

RECOMMENDATION

Staff recommends that the Director adopt the analysis and findings, and find the following situations on the lot to be NONCONFORMING to the Title 49 Land Use Code and issue a Nonconforming Certification for the following situations:

- Nonconforming Structures (49.30.250):
 - Front yard setback of 18 feet
 - Rear yard setback of 1.2 feet
 - Street side yard setback of 2.5 feet
- Nonconforming Lots (49.30.260):
 - Lot size of 1,800 square feet
- Nonconforming Parking (49.30.270):
 - One off-street parking space

Staff recommends that the Director adopt the analysis and findings, and find the following situations on the lot NONCOMPLIANT to the Title 49 Land Use Code:

- Noncompliant Structures:
 - The shed is noncompliant for setbacks and encroaches into the adjacent lot. The property owner must bring the shed into compliance with the Land Use Code.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Information Reviewed



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

NONCONFORMING CERTIFICATE

Date: October 20, 2021
File No.: NCC2021 0075

Janell Liles
P.O. Box 20845
Juneau, AK 99802

Proposal: A Nonconforming Situation Review for lots, structures, and parking

Property Address: 923 Glacier Avenue
Property Legal Description: Casey Shattuck Block 225 Lot 5 FR
Property Parcel Code No.: 1C060C250060

The Director of Community Development adopted the analysis and findings listed in the attached memorandum dated October 20, 2021, and has found the following situations on the lot to be certified nonconforming to the Title 49 Land Use Code of the City and Borough of Juneau:

- Nonconforming Structures (49.30.250):
 - Front yard setback of 18 feet
 - Rear yard setback of 1.2 feet
 - Street side yard setback of 2.5 feet
- Nonconforming Lots (49.30.260):
 - Lot size of 1,800 square feet
- Nonconforming Parking (49.30.270):
 - One off-street parking space

This Nonconforming Certificate applies to the nonconforming situations stated above. The nonconforming rights provided herein may be relinquished under certain circumstances provided under the CBJ Title 49 Land Use Code. It is the responsibility of the owner or agent of the owner to ensure that all development on the lot is in compliance with this certification and the CBJ Title 49 Land Use Code.

CBJ 49.30.215: Accidental damage or destruction. Structures receiving a nonconforming certification may have the right to reconstruct a nonconforming structure per CBJ Chapter 49.30.

File No.: NCC2021 0075

October 20, 2021

Page 2 of 2

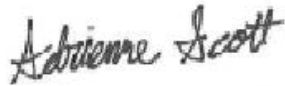
The Director of Community Development adopted the analysis and findings lists in the attached memorandum dated October 20, 2021, and has found the following situations on the lot to be NONCOMPLIANT to the Title 49 Land Use Code:

- Noncompliant Structures:
 - The shed is noncompliant for setbacks and encroaches into the adjacent lot. The property owner must bring the shed into compliance with the Land Use Code.

This Nonconforming Certificate constitutes a final decision of the Director of Community Development. Appeals must be brought to the CBJ Planning Commission in accordance with CBJ 49.20.110. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed.

If you have any questions regarding your project or anticipate any changes to your plans, please call the Community Development Department at (907) 586-0715.

Project Planner:



Adrienne Scott, Planner I
Community Development Department



Alexandra Pierce for Jill Maclean, Director, AICP
Community Development Department

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: December 15, 2021
Case No.: USE2021 0017

Janell Liles
P.O. Box 20845
Juneau, AK 99802

Proposal: Conditional Use Permit for an addition of a second story to a nonconforming structure

Property Address: 923 Glacier Avenue

Legal Description: Casey Shattuck Block 225 Lot 5 FR

Parcel Code No.: 1C060C250060

Hearing Date: December 14, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 8, 2021, and approved the Conditional Use Permit to be conducted as described in the project description and project drawings submitted with the application.

Attachments: December 8, 2021, memorandum from Allison Eddins, Community Development, to the CBJ Planning Commission regarding USE2021 0017.

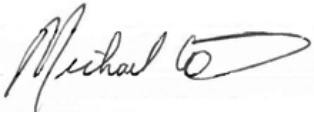
This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Janell Liles
Case No.: USE2021 0017
December 15, 2021
Page 2 of 2

Effective Date: The permit is effective upon approval by the Commission, December 14, 2021.

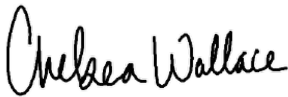
Expiration Date: The permit will expire 18 months after the effective date, or June 14, 2023, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael LeVine, Chair
Planning Commission

December 22, 2021

Date



Filed With City Clerk

December 22, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

USE2021 0016: A Conditional Use Permit for an accessory apartment on an undersized lot - REMOVED
FROM CONSENT & APPROVED AS AMENDED ON REGULAR AGENDA

AGENDA ITEM:

Case No.: USE2021 0016

Applicant: Janell Liles

Location: 923 Glacier Avenue

Proposal: A Conditional Use Permit for an accessory apartment on an undersized lot

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit. The permit would allow the development of an accessory apartment on an undersized lot.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for USE2021 0016	12/8/2021	Staff Report
☐ Notice of Decision for USE2021 0016	12/22/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
CONDITIONAL USE PERMIT USE2021 0016
HEARING DATE: DECEMBER 14, 2021

(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

DATE: December 8, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Allison Eddins, Planner II *A. Eddins*
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a Conditional Use Permit for an accessory apartment on an undersized lot.

STAFF RECOMMENDATION: Approval with no conditions.

KEY CONSIDERATIONS FOR REVIEW:

- The lot and structure received a Nonconforming Certification for lot size and setbacks (NCC2021 0075).
- The applicant has applied for a Conditional Use Permit (USE2021 0017) for the addition of a second story atop a nonconforming structure.
- If approved, the accessory apartment would be contained within the second story.

GENERAL INFORMATION	
Property Owner	Janell Liles
Applicant	Janell Liles
Property Address	923 Glacier Avenue
Legal Description	Casey Shattuck Block 225 Lot 5 FR
Parcel Number	1C060C250060
Zoning	Light Commercial (LC)
Land Use Designation	Commercial (C)
Lot Size	1,800 square feet
Water/Sewer	City water and sewer
Access	Glacier Avenue
Existing Land Use	Vacant structure
Associated Applications	USE2021 0017

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - 49.15.330
 - 49.80

The Commission shall hear and decide the case per 49.15.330(a) Conditional Use Permit. A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (LC)	Residential
South (LC)	Office
East (LC)	Commercial
West (LC)	Commercial

SITE FEATURES	
Anadromous	No
Flood Zone	Zone X; Area of Minimal Hazard
Hazard	None known
Hillside	No
Wetlands	No
Parking District	No
Historic District	Casey-Shattuck
Overlay Districts	ADOD for Downtown Juneau

BACKGROUND INFORMATION

Project Description – This application is for a Conditional Use Permit for a second-story accessory apartment. Concurrently, the applicant has applied for a Conditional Use Permit (USE2021 0017) to add a second story atop a nonconforming structure [CBJ 49.25.430 (4)(M)]. A Conditional Use Permit is required for an accessory apartment on an undersized lot [CBJ 49.25.510 (k)(2)(E)(ii)].

The site received a Nonconforming Certificate for lot size and setbacks (NCC2021 0075). The existing structure was constructed in 1924. The applicant plans to rebuild the structure's roof and walls while maintaining the foundation and daylight basement. CBJ 49.30.215 (b) allows for the reconstruction of a nonconforming structure if the cost to reconstruct is less than or equal to 75 percent of the assessed building value, as determined by the CBJ Building Official. The CBJ Assessor estimates the building value at \$40,900. The CBJ Building Official estimates the cost to reconstruct at roughly \$29,500, or 72 percent of the assessed value.

Background – The table below summarizes relevant history for the lot and existing structure.

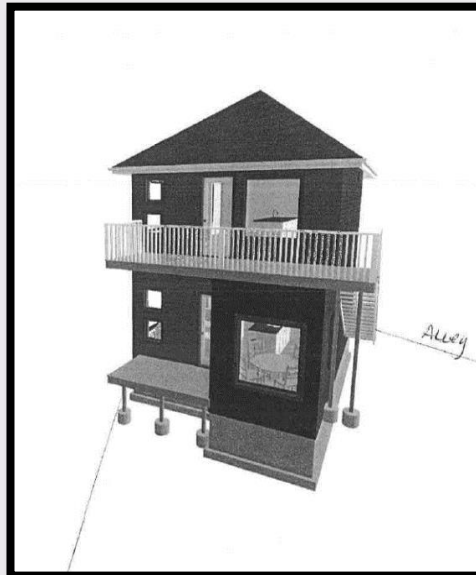
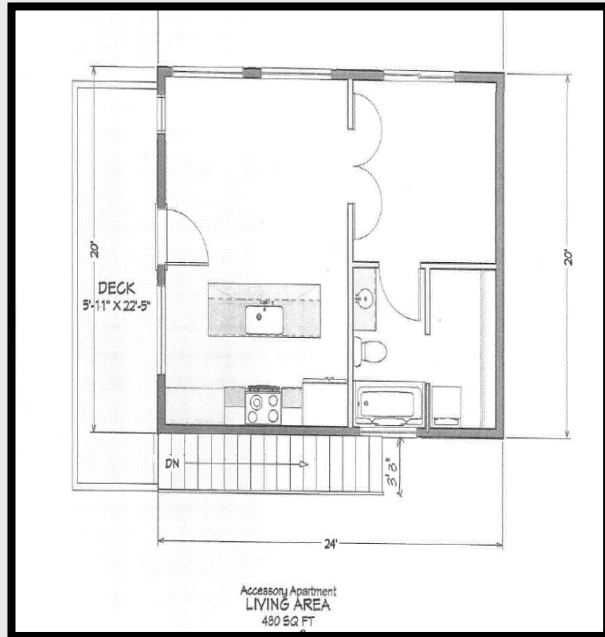
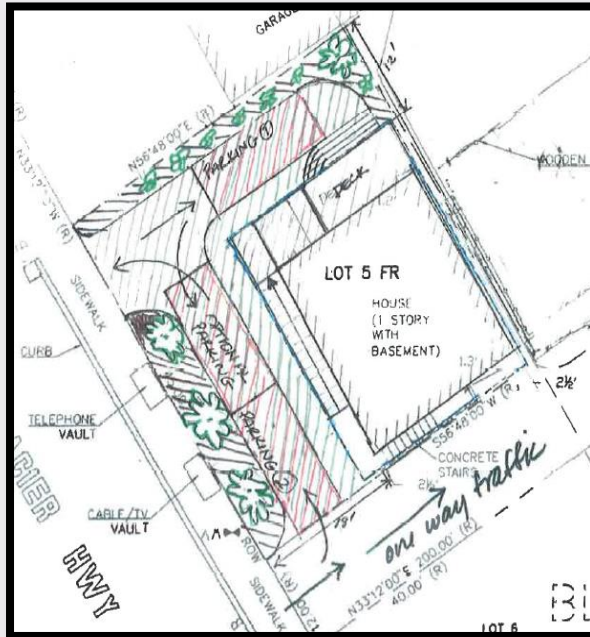
Item	Summary
1913-6 Plat	The lot was platted in 1913 with the Casey-Shattuck Addition.
1929 Sanborn Map	According to the Assessor's Office, the structure was constructed in 1924. Staff confirmed that the structure was documented on the 1929 Sanborn Maps.
2021 Nonconforming Certificate	The lot and structure are certified nonconforming for lot size and setbacks (NCC2021 0075).
2021 Conditional Use Permit application	Application to allow the construction of an accessory apartment on an undersized lot (USE2021 0016) and a second story atop a nonconforming structure (USE2021 0017).

ZONING REQUIREMENTS

Standard		Requirement	Proposed	Existing	Code Reference
Lot	Size	2,000 sq. ft.	1,800 sq. ft.	1,800 sq. ft.	49.25.400
	Width	20 feet	45 feet	45 feet	49.25.400
Setbacks	Front (Glacier Ave.)	25 feet	18 feet	18 feet	49.25.400
	Rear (NE)	10 feet	3 feet	3 feet	49.25.400
	Side (NW)	10 feet	12 feet	12 feet	49.25.400
	Street Side (Alley)	17 feet	2.5 feet	2.5 feet	49.25.400
Lot Coverage Maximum		50%	40%	40%	49.25.400
Vegetative Cover Minimum		15%	24%	20%	49.50.300
Height	Permissible	45 feet	Two-story	One-story	49.25.400
	Accessory	35 feet	N/A	N/A	49.25.400
Maximum Dwelling Units*		1	1	1	49.25.500
Parking		3 spaces	3 spaces	2 spaces	49.40.210
Use		Residential or Commercial	Residential	Residential	49.25.300

* Accessory apartments are considered an accessory unit to a single-family residence and do not count towards density.

SITE PLAN – Proposed site plan, second story/apartment floor plan and house elevation.



ANALYSIS

Project Site and Design – The site is located downtown Juneau on the corner of Glacier Avenue and the unnamed alley next to Coppa in the Casey-Shattuck neighborhood. The lot is 1,800 square feet and is certified nonconforming to the Light Commercial minimum lot standards (NCC2021 0075). The proposed single-family structure, including the living space and laundry facilities in the daylight basement, will be approximately 1,000 square feet and the accessory apartment will be 480 square feet.

Condition: No condition recommended.

Traffic – According to CBJ 49.40.300(2), a traffic impact analysis is not required. Based on the ITE Trip Generation Manual, the single-family structure and accessory apartment will generate an estimated 16.17 average daily trips (ADT). The threshold for requiring a traffic impact analysis (TIA) is 250 ADT. The traffic generated is not expected to be out of character with this mixed-use neighborhood.

Condition: No condition recommended.

Vehicle Parking & Circulation – According to CBJ 49.40, three off-street parking spaces are required – two for the single-family dwelling and one for the accessory apartment. The site plan submitted shows three on-site parking spaces can be provided. Stacked parking is allowed per CBJ 49.40.230(b)(6).



Condition: No condition recommended.

Public Health, Safety, and Welfare – No information has been submitted that suggests the development of an accessory apartment on an undersized lot will materially endanger the public health, safety, or welfare.

Condition: No condition recommended.

Property Value or Neighborhood Harmony – No information has been submitted that suggests the proposed accessory apartment will be out of character with the existing neighborhood or reduce property values.

Condition: No condition recommended.

AGENCY REVIEW

CDD conducted an agency review comment period between November 15, 2021 and November 29, 2021. Agency review comments can be found in Attachment C.

Agency	Summary
CBJ Building Department	No concerns
CBJ Assessor's Office	No concerns

PUBLIC COMMENTS

CDD conducted a public comment period between November 16, 2021 and December 14, 2021. Public notice was mailed to property owners within 500 feet of the proposed development. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. At the time this staff report was completed no written comments had been submitted. A phone call was received from a neighbor concerned about parking for the development. Staff informed the caller that the off-street parking requirement would be met. The caller did not submit written comments.

CONFORMITY WITH ADOPTED PLANS

The proposed development is in general conformity with the 2013 Comprehensive Plan, 2016 Housing Action Plan, and the 2015 Juneau Economic Development Plan.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	3	20	Policy 3.2	Promotes compact urban development within the designated urban service area to ensure efficient utilization of land resources and to facilitate cost effective provision of community services and facilities while balancing protection of natural resources, fish and wildlife habitat, and scenic corridors.
	4	37	Policy 4.2	Facilitates the provision of an adequate supply of various housing types and sizes to accommodate present and future housing needs for all economic groups.
2016 Housing Action Plan	2	35	Production Targets	Creates housing, which advances the City's goal of increasing housing stock.

FINDINGS

Conditional Use Permit Criteria – Per CBJ 49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested Conditional Use Permit complete?

Analysis: No further analysis needed.

Finding: Yes. The application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. Is the proposed use appropriate according to the Table of Permissible Uses?

Analysis: The application is for an accessory apartment on an undersized lot. The use is listed at CBJ 49.25.300, 1.130 and is an allowed use in the zoning district.

Finding: Yes. The requested permit is appropriate according to the Table of Permissible Uses.

3. Will the proposed development comply with the other requirements of this chapter?

Analysis: The proposed development will comply with Title 49 including parking, lot coverage, and building height limits.

Finding: Yes. The proposed development will comply with Title 49.

4. Will the proposed development materially endanger the public health, safety, or welfare?

Analysis: No further analysis is required.

Finding: No. There is no evidence to suggest that the requested accessory apartment on an undersized lot will materially endanger the public health, safety, or welfare.

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

Analysis: No further analysis needed.

Finding: No. There is no evidence to suggest that the requested accessory apartment in the Casey-Shattuck neighborhood will substantially decrease the value of or be out of harmony with the property in the area.

6. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Analysis: No further analysis needed.

Finding: Yes. The proposed accessory apartment will be in general conformity with the 2013 Comprehensive Plan and the 2016 Housing Action Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit. The permit would allow the development of an accessory apartment on an undersized lot.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Abutters Notice and Public Notice Sign Photo
Attachment C	Agency Comments
Attachment D	NCC2021 0075 Staff Report and Notice of Decision

CITY AND BOROUGH OF
JUNEAU**DEVELOPMENT PERMIT APPLICATION**NOTE: Development Permit Application forms must accompany all other
Community Development Department land use applications.

To be completed by Applicant	PROPERTY LOCATION	
	Physical Address <u>923 Glacier Ave, Juneau, AK 99801</u>	
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) <u>Block 225, LOT 5 FR, CASEY-SHATTUCK SUBDIVISION</u>	
	Parcel Number(s) <u>120400250060</u>	
	☒ This property located in the downtown historic district: ☐ This property located in a mapped hazard area, if so, which _____	
	LANDOWNER/ LESSEE	
	Property Owner <u>Janell Liles</u>	Contact Person <u>Janell Liles</u>
	Mailing Address <u>P.O. Box 20845 Juneau, AK 99801</u>	Phone Number(s) <u>253-820-9264</u>
	E-mail Address <u>lilesjanell423@gmail.com</u>	
	LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits	
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows: A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.		
X <u>J Liles</u> <u>9-11-21</u> Landowner/Lessee Signature Date		
X _____ Landowner/Lessee Signature Date		
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.		
APPLICANT If the same as OWNER, write "SAME"		
Applicant <u>SAME</u>	Contact Person	
Mailing Address	Phone Number(s)	
E-mail Address		
X <u>J Liles</u> <u>9-11-58</u> Applicant's Signature Date of Application		

DEPARTMENT USE ONLY BELOW THIS LINE

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

Attachment A - Application Packet

Case Number
05F21-110Intake Initial
ASDate Received
12/31/21



ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant

PROJECT SUMMARY

Accessory Apartment on an under sized lot.

TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED

- ☒ Accessory Apartment – Accessory Apartment Application (AAP)
☐ Use Listed in 49.25.300 – Table of Permissible Uses (USE)
 Table of Permissible Uses Category: _____

IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL?

☐ YES – Case # _____ ☒ NO

UTILITIES PROPOSED

WATER: ☒ Public ☒ On Site

SEWER: ☒ Public ☐ On Site

SITE AND BUILDING SPECIFICS

Total Area of Lot 1,800 square feet Total Area of Existing Structure(s) _____ square feet
 Total Area of Proposed Structure(s) _____ square feet

EXTERNAL LIGHTING

** not needed for this process permitting per CBS*
 Existing to remain ☒ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures
 Proposed ☒ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

ALL REQUIRED DOCUMENTS ATTACHED

☒ Narrative including:

- ☒ Current use of land or building(s)
☒ Description of project, project site, circulation, traffic etc.
☒ Proposed use of land or building(s)
☒ How the proposed use complies with the Comprehensive Plan

If this is a modification or extension include:

- ☐ Notice of Decision and case number
☐ Justification for the modification or extension
☐ Application submitted at least 30 days before expiration date

☒ Plans including:

- ☒ Site plan
☒ Floor plan(s)
☒ Elevation view of existing and proposed buildings - *pictures of existing Building*
☒ Proposed vegetative cover - *on site plan*
☒ Existing and proposed parking areas and proposed traffic circulation *on site plan*
☒ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas) *unchanged.*

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

ALLOWABLE/CONDITIONAL USE FEES		Check No.	Receipt	Date
	Fees			
Application Fees	\$ <u>350</u>			
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ <u>50</u>			
Pub. Not. Sign Deposit	\$ <u>100</u>			
Total Fee	\$ <u>500</u>			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A - Application Packet

Case Number

USE 21-16

Date Received

*AS
10/21/21*

Allowable/Conditional Use Permit Application Instructions

Allowable Use permits are outlined in CBJ 49.15.320, Conditional Use permits are outline in CBJ 49.15.330

Pre-Application Conference: A pre-application conference is required prior to submitting an application. There is no fee for a pre-application conference. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via e-mail at permits@juneau.org.

Application: An application for an Allowable/Conditional Use Permit will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Allowable/Conditional Use Permit Application and Development Permit Application forms.
2. **Fees:** Fees generally range from \$350 to \$1,600. Any development, work, or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** All plans are to be drawn to scale and clearly show the items listed below:
 - A. Site plan, floor plan and elevation views of existing and proposed structures
 - B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances
 - C. Proposed traffic circulation within the site including access/egress points and traffic control devices
 - D. Existing and proposed lighting (including cut sheets for each type of lighting)
 - E. Existing and proposed vegetation with location, area, height and type of plantings
 - F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

Document Format: All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf (other formats may be preapproved by the Community Development Department).
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

Application Review & Hearing Procedure: Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

Review: As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. During this review period, the Community Development Department also sends all applications out for a 15-day agency review period. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All Allowable/Conditional Use Permit Applications must be reviewed by the Planning Commission for vote. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting.

Public Notice Responsibilities: Allowable/Conditional Use requests must be given proper public notice as outlined in CBJ 49.15.230:

The Community Development Department will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, CDD will mail notices to all property owners within 500-feet of the project site.

The Applicant will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of \$50, and a \$100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing \$50 may be refunded. The Applicant may make and erect their own sign. Please contact the Community Development Department for more information.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

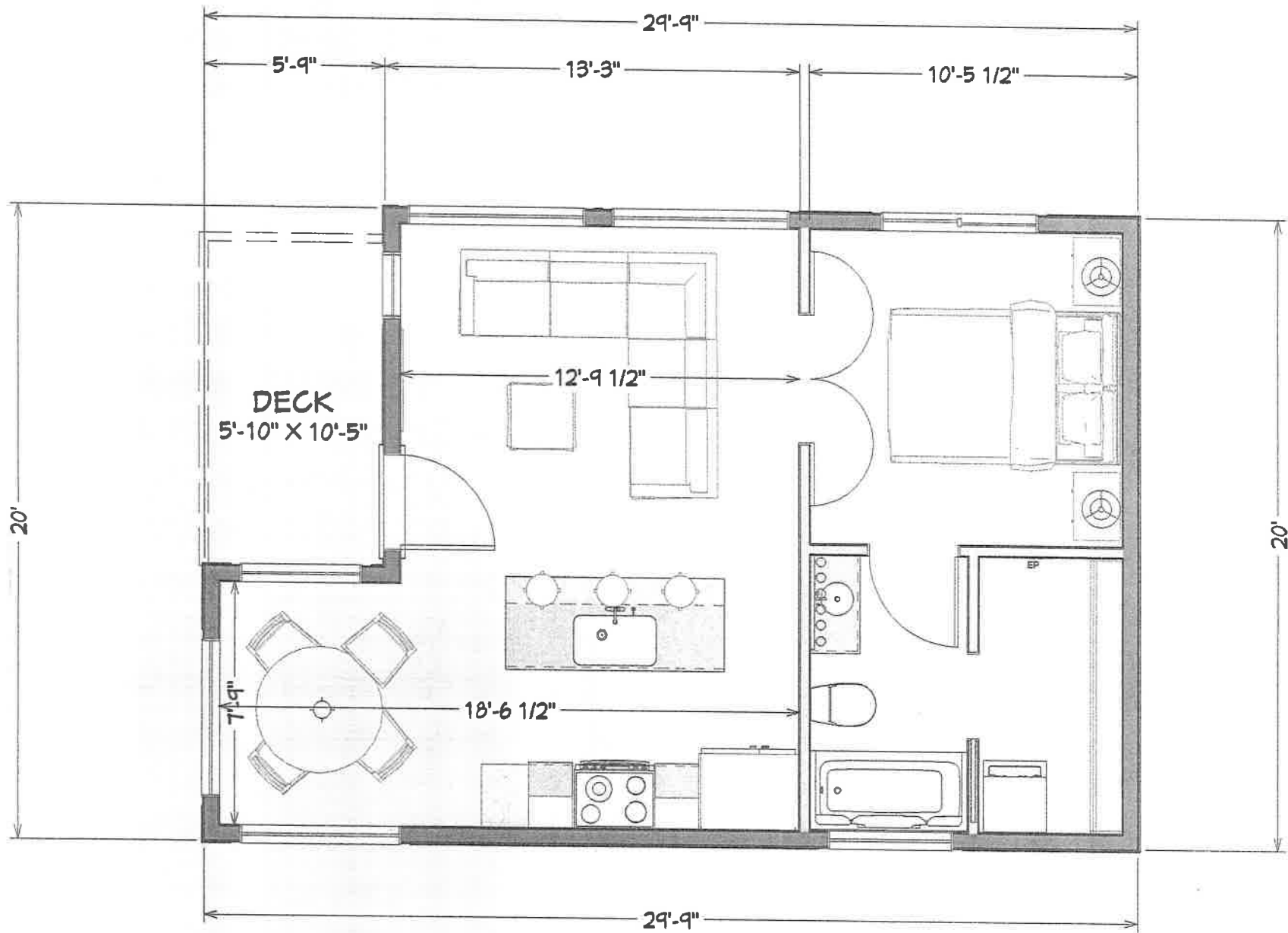
Conditional Use Narrative

The existing house (1 story with basement) sits on a 40' x 45' lot is non conforming for lot size set backs. I am not increasing the foot print of the structure.

The plan would be to demo the current walls & roof without damaging the basement walls and floor. A two story house would be built to include an accessory apartment. A structural engineer would be utilized to determine foundation and load bearing walls.

The height of the the roof would stay under the 45' elevation requirement. There are two parking spaces with the option of one of the spaces being tandem, for a total of three spaces.

The use of the lot will be residential and provide additional housing in the area.



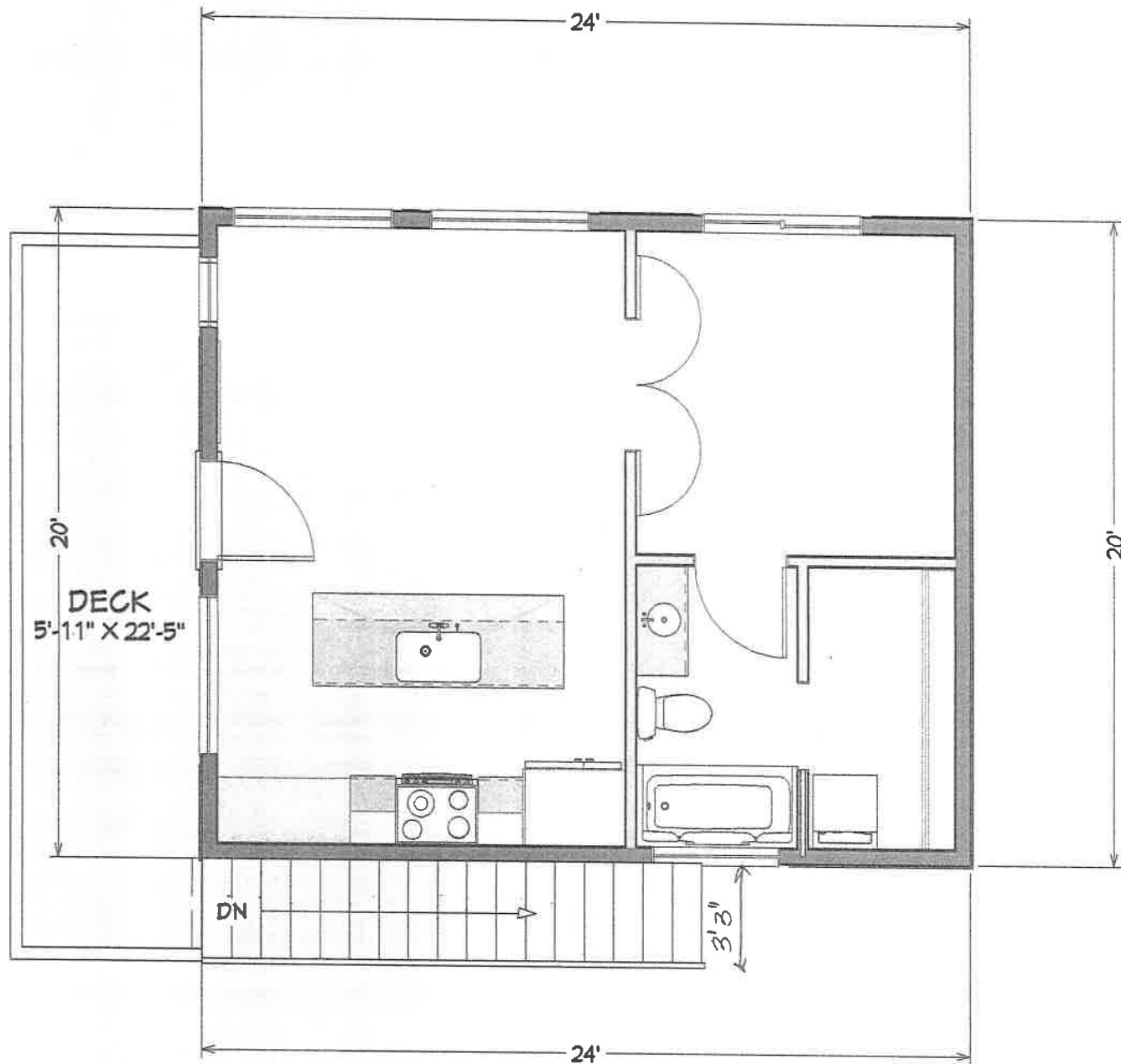
Main House

LIVING AREA

530 SQ FT

1ST FLOOR

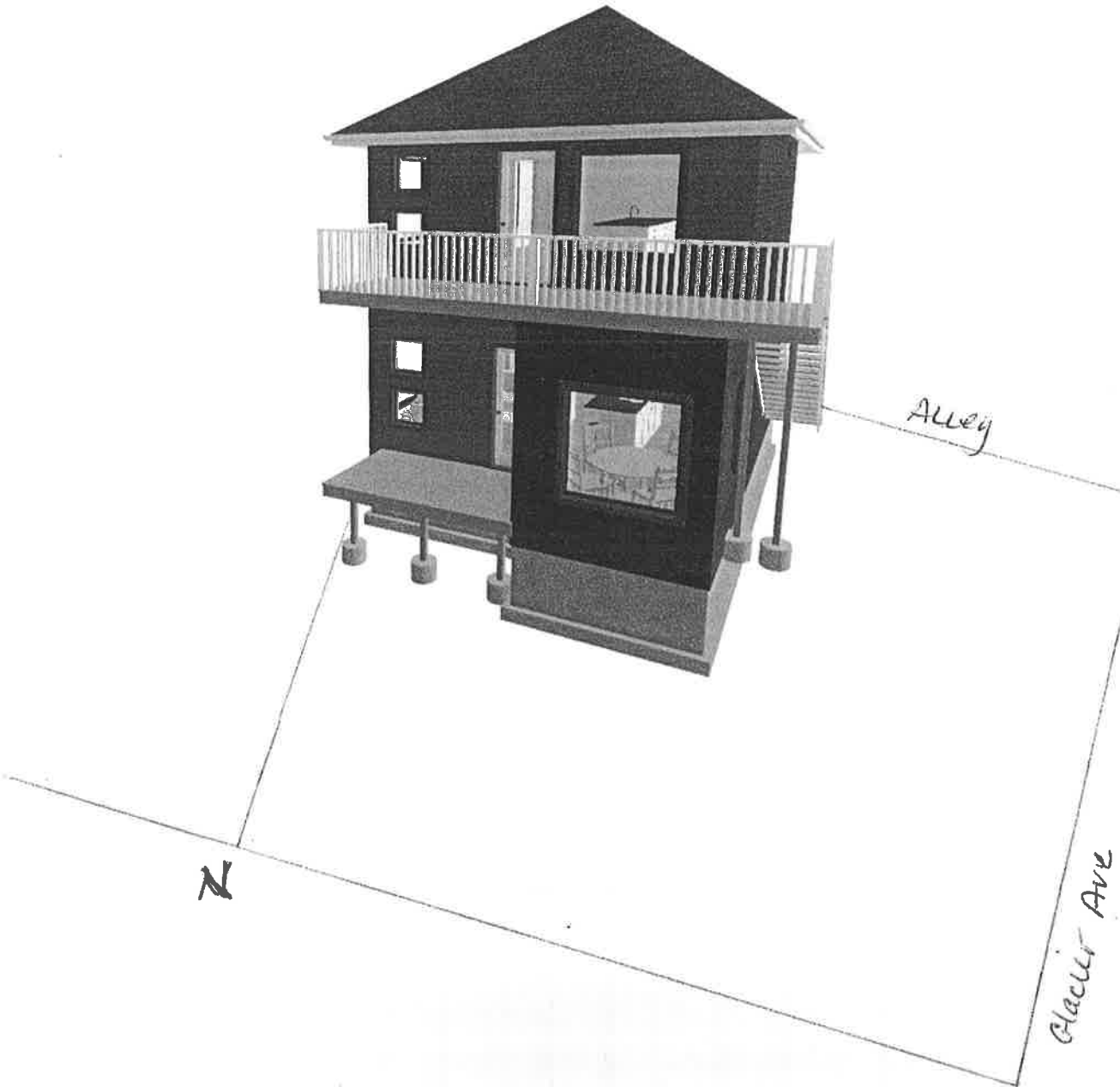
Attachment A - Application Packet



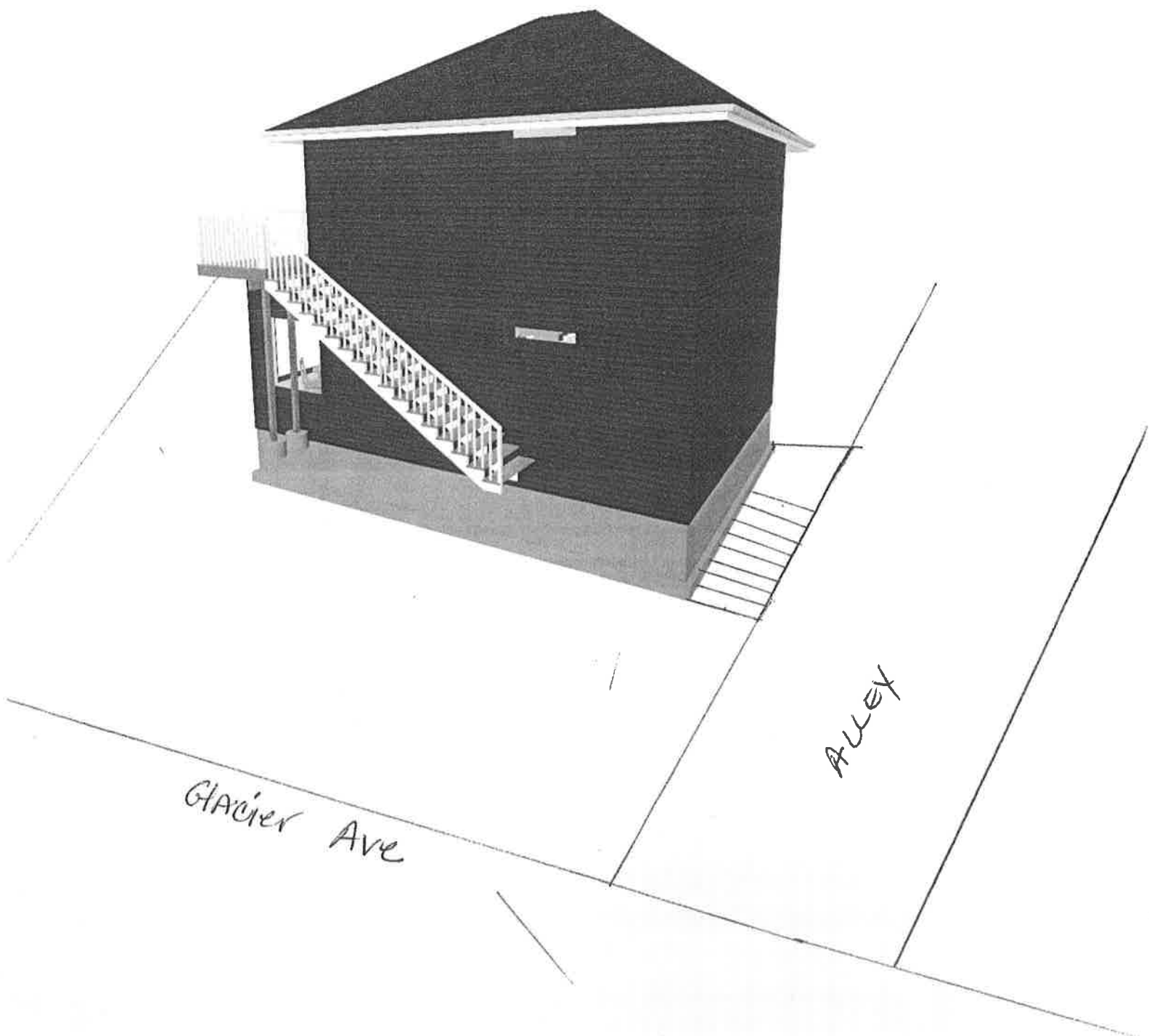
Accessory Apartment
LIVING AREA
480 SQ FT

2nd floor

Attachment A - Application Packet

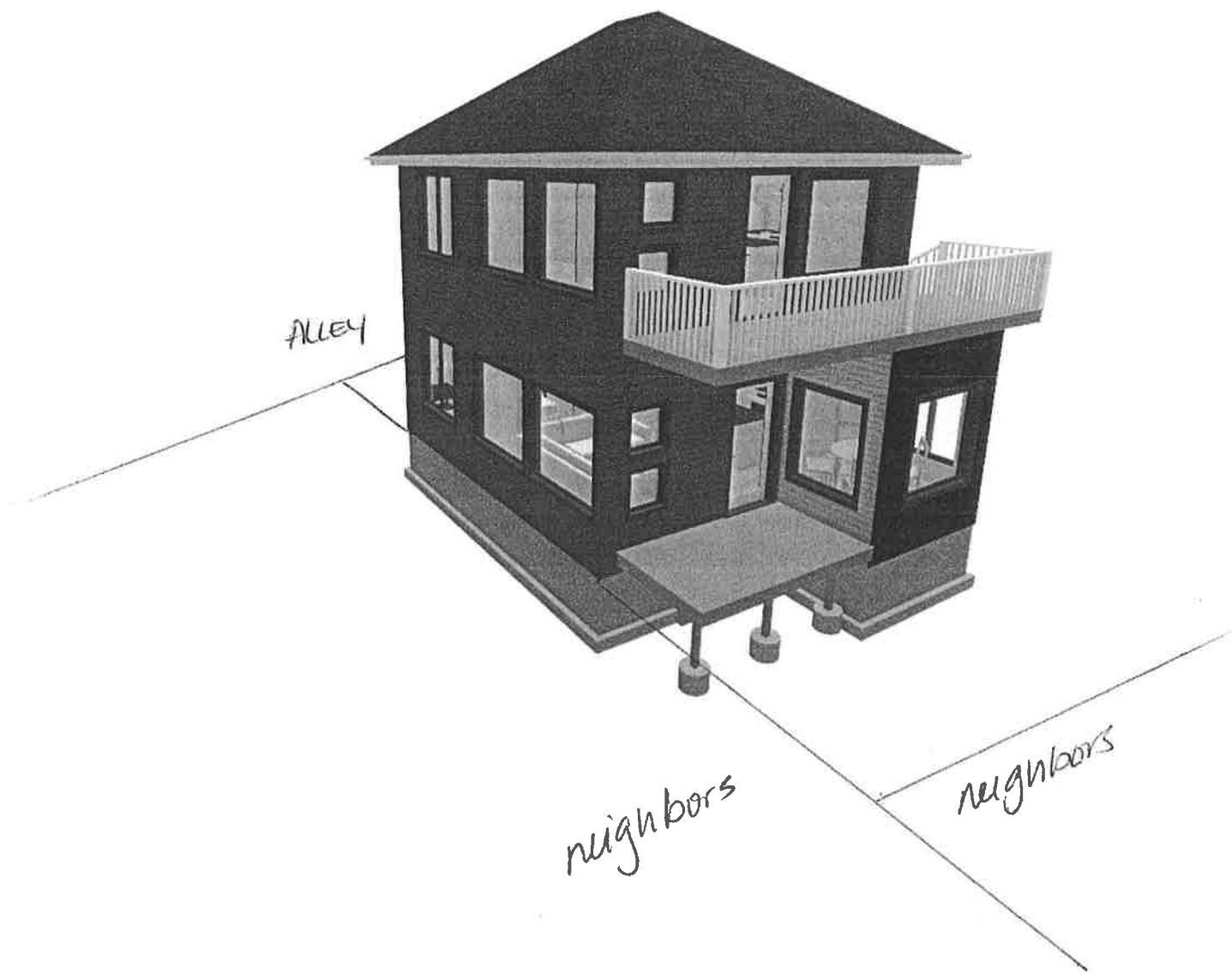


ELEVATION

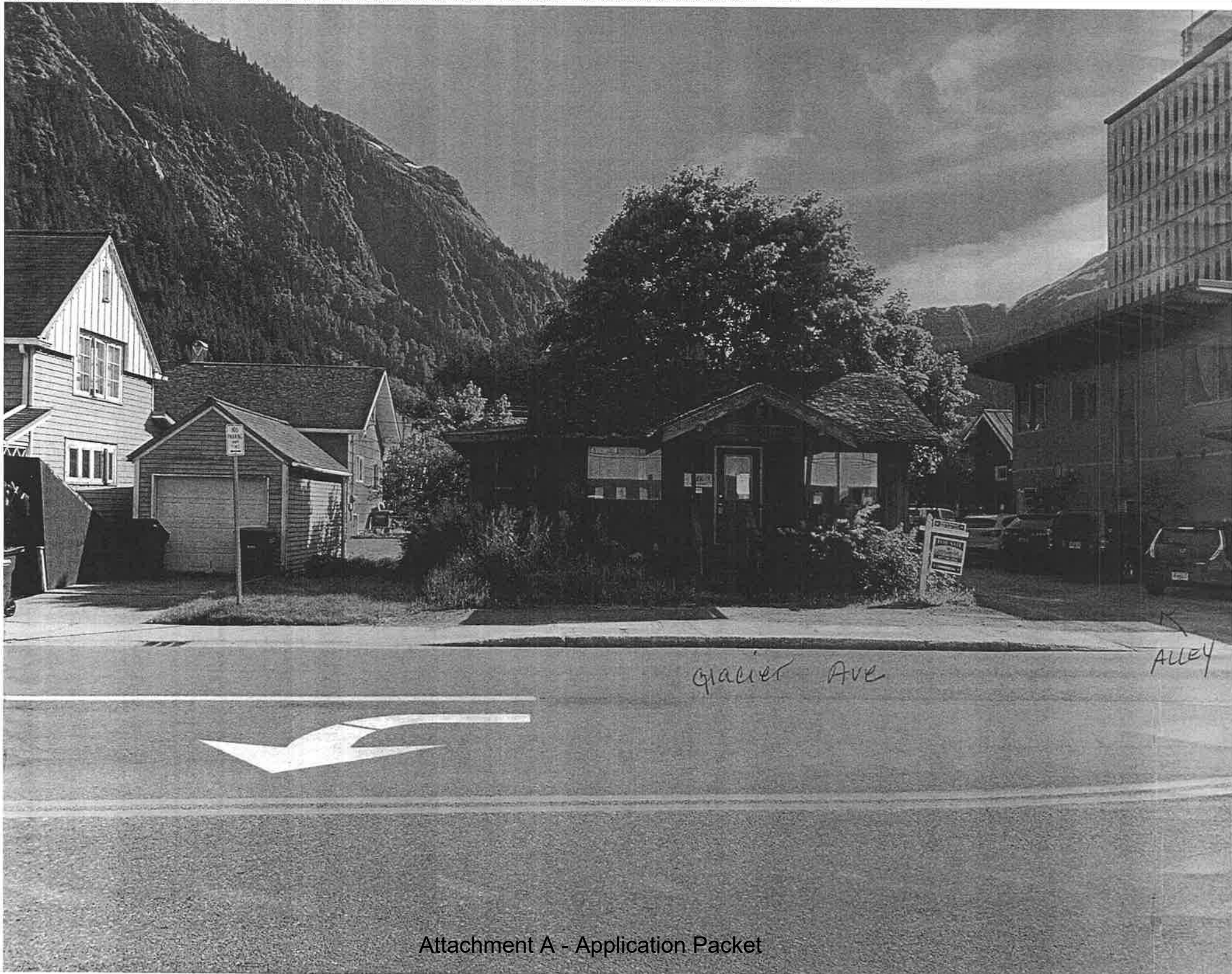


ELEVATION

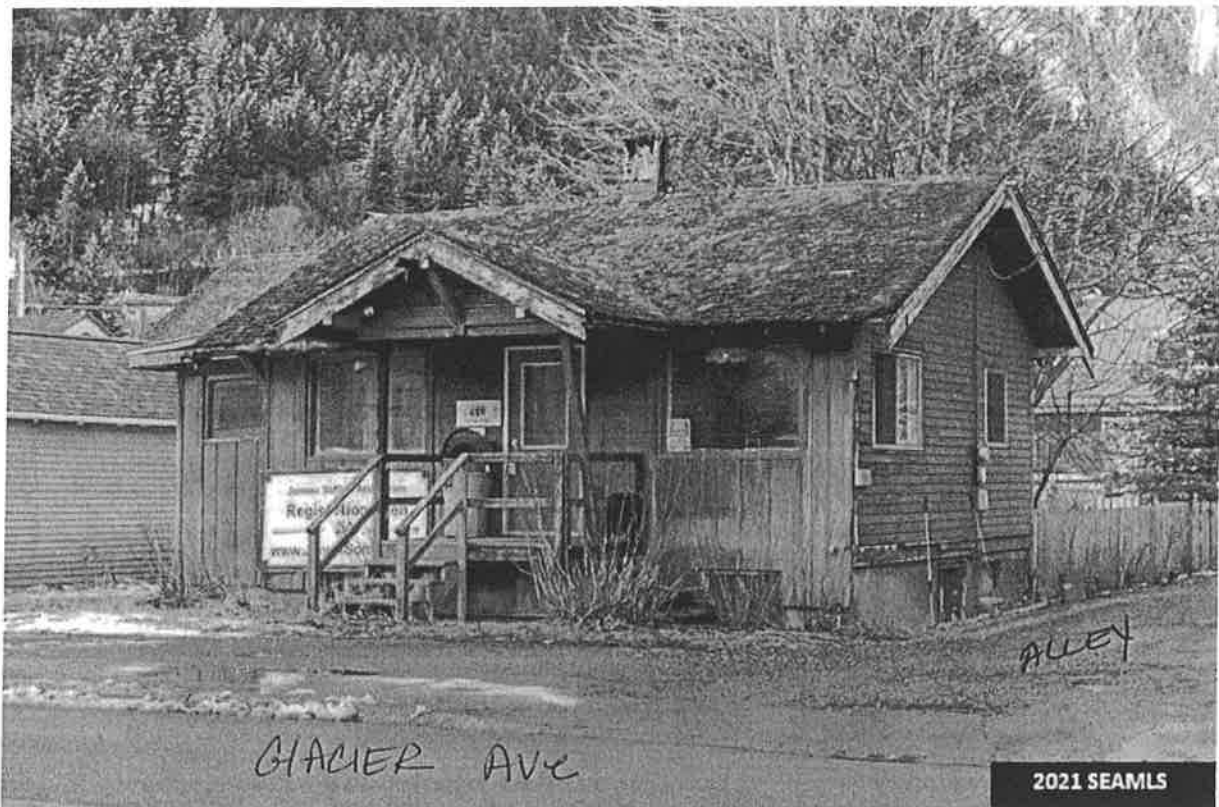
Attachment A - Application Packet



ELEVATION



Attachment A - Application Packet

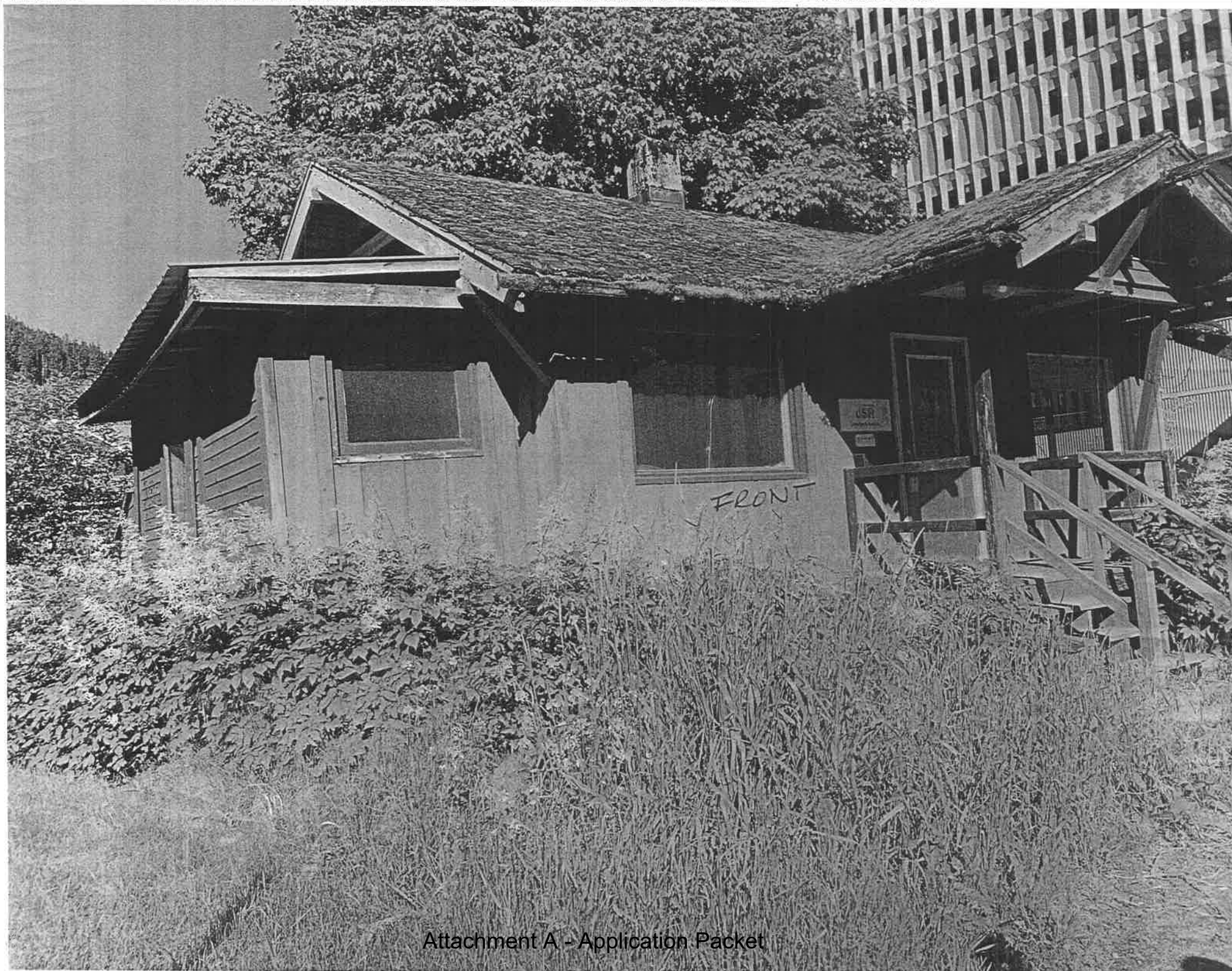


**923 Glacier Avenue, Juneau,
AK 99801**

Listing ID: 21365

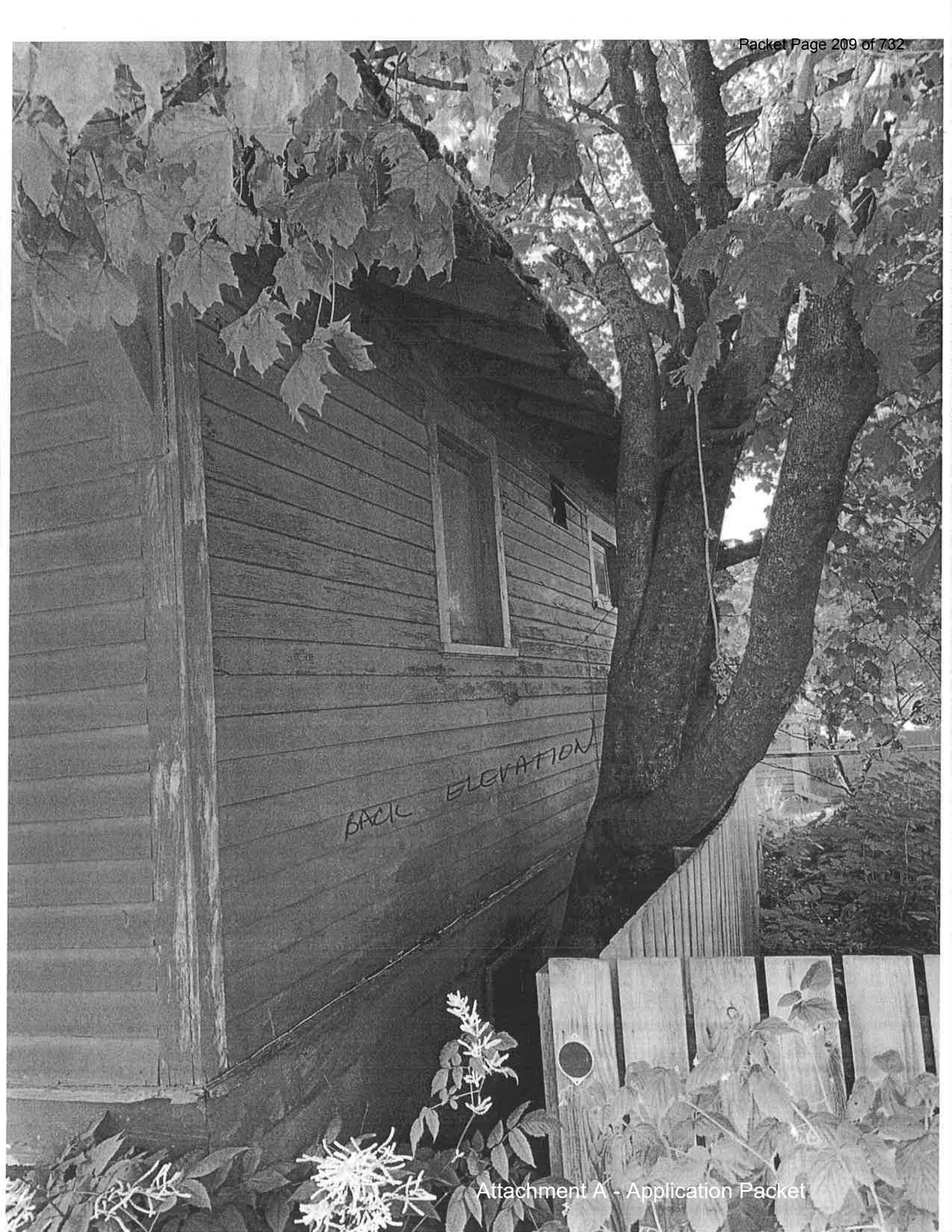
SEAMLS

Attachment A - Application Packet
Unique, high traffic downtown location.



Attachment A - Application Packet









(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

Lot Line Adjustment and Accessory Apartment on Substandard Lot

Case Number: PAC20210051

Applicant: Janell Liles

Property Owner: Janell Liles

Property Address: 923 Glacier Ave

Parcel Code Number: 1C060C250060

Site Size: 1,800 Square Feet

Zoning: LC (Light Commercial)

Existing Land Use: Commercial Miscellaneous

Conference Date: 8/11/21

Report Issued: 8/18/21

DISCLAIMER: Pre-application conferences are conducted for purposes of providing applicants with a preliminary review of a project and timeline. Pre-application conferences are not based on a complete application, and are not a guarantee of final project approval.

List of Attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Name	Title	Email address
Janell Liles	Applicant	Lilesjanell423@gmail.com
Teri Camery	Planning	Teri.camery@juneau.org
Guy Gleason	Building	Guy.gleason@juneau.org
Adrienne Scott	Permit Tech	Adrienne.scott@juneau.org

Attachment A - Application Packet

Revised 5/07/2021

Pre-Application Conference Final Report

Conference Summary

Questions/issues/agreements identified at the conference that weren't identified in the attached reports. The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

Project Overview

The property owner would like to demolish the existing single-family dwelling structure but keep the foundation and full basement, and rebuild a 2-story residential house. The second story would be an accessory apartment. The basement would stay as is with the egress unchanged. The roof height would stay under the 45' restriction. The owner would also like to purchase 15' feet of the adjacent property at 924 D Street, which is zoned D-5.

The purchase of 15' of the adjacent property cannot be allowed, because this lot is 5,600 square feet and does not meet the D-6 zoning district minimum lot size requirement of 7,000 square feet. Purchasing the property would make this non-conforming lot less conforming, which is not allowed.

Zoning application. If the adjacent lot was rezoned to Light Commercial, Light Commercial has a minimum lot size of 2,000 square feet. Therefore the 15' purchase could be allowed because it would meet the minimum lot size before and after the purchase of the property. Zoning applications are accepted in January and July each year, and typically have a 4 month approval process followed by an additional 30 days to become in effect. This is because zoning applications are first heard by the CBJ Planning Commission and then decided by the CBJ Assembly after an introduction meeting and then a full hearing. Zoning requests must either be two acres or more, or an expansion of an existing zoning district. The zone change must also "substantially comply" with the 2013 Juneau Comprehensive Plan. This zone change is an expansion of the existing Light Commercial zoning district, so it meets that requirement. However the Comprehensive Plan future land use designation for the proposed property at 924 D Street as "medium density residential-single family." The definition of "medium density residential-single family" in the Comprehensive Plan is:

These lands are characterized by single-family detached homes at densities ranging from 10-20 units.

Only single-family detached homes, single-family detached homes with an accessory apartment, cottage houses and bungalow houses are permitted within this zone. Any commercial development should be of a scale consistent with a single-family residential neighborhood, as regulated in the Table of Permissible Uses.

Though the current property owner's intent is to build a 2-story residential house, which is consistent with Comprehensive Plan long-term designation for 924 D Street, the zone change review process is not exclusively for the proposed use. In the zone change review CDD must evaluate all possible uses for the LC zoning district, because the property can change ownership in the future and anything allowed in LC could be possible. Given this, a zone change to Light Commercial is unlikely to meet the requirement of substantial conformance with the Comprehensive Plan designation with its emphasis in the definition on single family dwellings, and the zone change is unlikely to be approved. However the property owner has the option to apply.

Non-conforming certificate. The property is 1,800 square feet in the Light Commercial zoning district, which has a 2,000 square foot minimum lot size. In addition, the property does not meet current setback requirements for the LC zoning district, which are 25' front, and 10' feet in the rear and sides. To reconstruct the building in its current footprint with the non-conforming lot size and setbacks, the property owner must file a Non-Conforming Certification Application and receive a final Non-conforming Certificate if CDD determines, from the documentation provided and other departmental research, that the lot and building met all applicable requirements when first developed. A Nonconforming certificate is required prior to the issuance of a building

Pre-Application Conference Final Report

permit or land use permit. Types of documentation that are helpful to include in a nonconforming application include old plats, deeds, and surveys.

Accessory Apartment. CBJ Code 49.25.510(k) establishes accessory apartment regulations. CBJ Code 49.25.510(k)(2)(G)(ii)(a) states that an accessory apartment in a commercial zoning district may be allowed on an undersized lot with a Conditional Use Permit from the Planning Commission if the application is for an efficiency apartment or a one-bedroom unit that does not exceed 600 square feet in net floor area and the primary use of the lot is for a single-family dwelling. The property owner states that access to the apartment would be from stairs as shown on the project drawing, however these stairs appear to be dependent on purchase of 15' of property from the adjacent landowner, which would not be allowed without an approved zone change from D-5 to Light Commercial. One off-street parking space would be required for the apartment, while two spaces would be required for the main dwelling, for a total of three off-street parking spaces.

Planning Division

1. **Zoning** – Light Commercial
2. **Setbacks** – 25' front; 10' rear; 10' side
3. **Height** – 45'
4. **Access** – Glacier Highway
5. **Parking & Circulation**– CBJ Code requires two parking spaces for the single family dwelling and one parking space for the apartment.
6. **Lot Coverage** – no maximum lot coverage
7. **Vegetative Coverage** – 15 percent of the lot
8. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – The property is not in a hazard zone.
9. **Nonconforming situations** – The lot is non-conforming for lot size and setbacks. A Nonconforming certificate is required prior to the issuance of a building permit or land use permit.

Building Division

10. **Building** –
 - a. Engineer's analysis will be required in order to use existing foundation
 - b. Fire and sound separation will be required between dwelling units
 - c. No bedrooms in basement will be permitted due to lack of egress
11. **Outstanding Permits** - None

General Engineering/Public Works

12. **Engineering** – No comments at this time
13. **Drainage** – No comments at this time
14. **Utilities** – (water, power, sewer, etc.) No comments at this time

Fire Marshal

15. **Fire Items/Access** – No comments at this time

Other Applicable Agency Review

Pre-Application Conference Final Report

16. DOT&PF / Alcohol Beverage Control Board / Army Corps / DEC (wastewater) / DNR / USF&W / F&G / FAA / Corrections...

List of required applications

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

1. Nonconforming Certification Application
2. Conditional Use Permit
3. Zone Change if applicable
4. Minor Subdivision Lot Line adjustment if applicable

Additional Submittal Requirements

Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.

Exceptions to Submittal Requirements

Submittal requirements staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. N/A

Fee Estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. Nonconforming Certificate. \$150.00 or no cost with a building permit.
2. Conditional Use Permit. Class I use, \$350.00
3. Zone Change if applicable. \$600.00
4. Minor Subdivision Lot Line adjustment if applicable. \$160.00

For informational handouts with submittal requirements for development applications, please visit our website at www.juneau.org/cdd.

Submit your Completed Application

You must submit your application(s) in person with payment made to:

City & Borough of Juneau, Permit Center
 230 South Franklin Street
 Fourth Floor Marine View Center
 Juneau, AK 99801

Pre-Application Conference Final Report

Phone: (907) 586-0715

Web: www.juneau.org/cdd

Attachments:

49.15.330 – Conditional Use Permit

49.15.330 Conditional use permit.

- (a) *Purpose.* A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.
- (b) *Preapplication conference.* Prior to submission of an application, the developer shall meet with the director for the purpose of discussing the site, the proposed development activity, and the conditional use permit procedure. The director shall discuss with the developer, regulation which may limit the proposed development as well as standards or bonus regulations which may create opportunities for the developer. It is the intent of this section to provide for an exchange of general and preliminary information only and no statement by either the developer or the director shall be regarded as binding or authoritative for purposes of this code. A copy of this subsection shall be provided to the developer at the conference.
- (c) *Submission.* The developer shall submit to the director one copy of the completed permit application together with all supporting materials and the permit fee.
- (d) *Director's review procedure.*
 - (1) The director shall endeavor to determine whether the application accurately reflects the developer intentions, shall advise the applicant whether or not the application is acceptable and, if it is not, what corrective action may be taken.
 - (2) After accepting the application, the director shall schedule it for a hearing before the commission and shall give notice to the developer and the public in accordance with section 49.15.230.
 - (3) The director shall forward the application to the planning commission together with a report setting forth the director's recommendation for approval or denial, with or without conditions together with the reasons therefor. The director shall make those determinations specified in subsections (1)(A)—(1)(C) of subsection (e) of this section.
 - (4) Copies of the application or the relevant portions thereof shall be transmitted to interested agencies as specified on a list maintained by the director for that purpose. Referral agencies shall be invited to respond within 15 days unless an extension is requested and granted in writing for good cause by the director.
 - (5) Even if the proposed development complies with all the requirements of this title and all recommended conditions of approval, the director may nonetheless recommend denial of the application if it is found that the development:
 - (A) Will materially endanger the public health or safety;
 - (B) Will substantially decrease the value of or be out of harmony with property in the neighboring area; or
 - (C) Will not be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans.
- (e) *Review of director's determinations.*
 - (1) At the hearing on the conditional use permit, the planning commission shall review the director's report to consider:
 - (A) Whether the proposed use is appropriate according to the table of permissible uses;

-
- (B) Whether the application is complete; and
 - (C) Whether the development as proposed will comply with the other requirements of this title.
 - (2) The commission shall adopt the director's determination on each item set forth in paragraph (1) of this subsection (e) unless it finds, by a preponderance of the evidence, that the director's determination was in error, and states its reasoning for each finding with particularity.
 - (f) *Commission determinations; standards.* Even if the commission adopts the director's determinations pursuant to subsection (e) of this section, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the hearing, that the development will more probably than not:
 - (1) Materially endanger the public health or safety;
 - (2) Substantially decrease the value of or be out of harmony with property in the neighboring area; or
 - (3) Lack general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.
 - (g) *Specific conditions.* The commission may alter the director's proposed permit conditions, impose its own, or both. Conditions may include one or more of the following:
 - (1) *Development schedule.* A reasonable time limit may be imposed on construction activity associated with the development, or any portion thereof, to minimize construction-related disruption to traffic and neighborhood, to ensure that development is not used or occupied prior to substantial completion of required public or quasi-public improvements, or to implement other requirements.
 - (2) *Use.* Use of the development may be restricted to that indicated in the application.
 - (3) *Owners' association.* The formation of an association or other agreement among developers, homeowners or merchants, or the creation of a special district may be required for the purpose of holding or maintaining common property.
 - (4) *Dedications.* Conveyance of title, easements, licenses, or other property interests to government entities, private or public utilities, owners' associations, or other common entities may be required.
 - (5) *Performance bonds.* The commission may require the posting of a bond or other surety or collateral approved as to form by the city attorney to guarantee the satisfactory completion of all improvements required by the commission. The instrument posted may provide for partial releases.
 - (6) *Commitment letter.* The commission may require a letter from a public utility or public agency legally committing it to serve the development if such service is required by the commission.
 - (7) *Covenants.* The commission may require the execution and recording of covenants, servitudes, or other instruments satisfactory in form to the city attorney as necessary to ensure permit compliance by future owners or occupants.
 - (8) *Revocation of permits.* The permit may be automatically revoked upon the occurrence of specified events. In such case, it shall be the sole responsibility of the owner to apply for a new permit. In other cases, any order revoking a permit shall state with particularity the grounds therefor and the requirements for reissuance. Compliance with such requirements shall be the sole criterion for reissuance.
 - (9) *Landslide and avalanche areas.* Development in landslide and avalanche areas, designated on the landslide and avalanche area maps dated September 9, 1987, consisting of sheets 1—8, as the same may be amended from time to time by assembly ordinance, shall minimize the risk to life and property.
 - (10) *Habitat.* Development in the following areas may be required to minimize environmental impact:

(A) Developments in wetlands and intertidal areas.

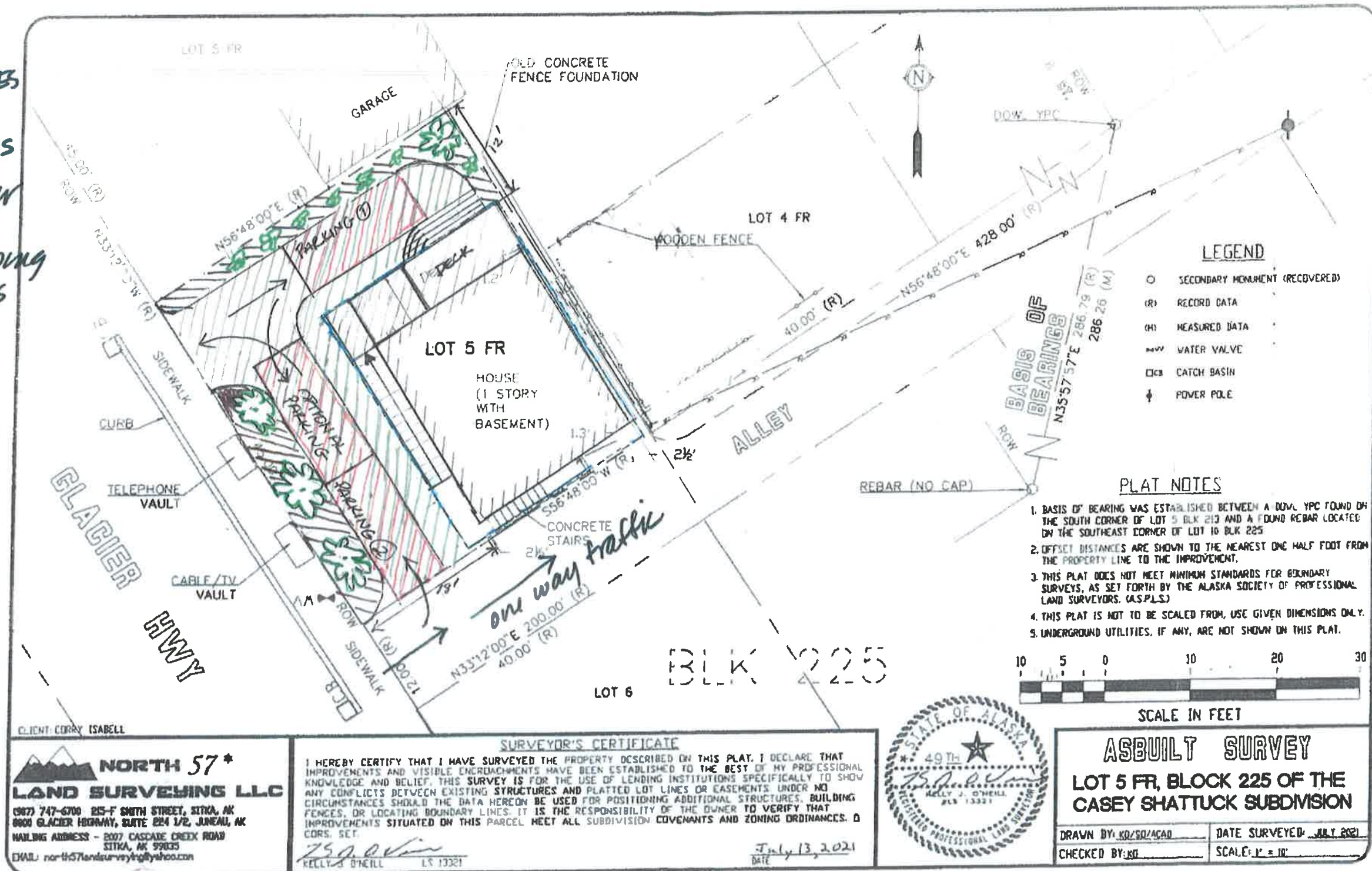
- (11) *Sound*. Conditions may be imposed to discourage production of more than 65 dBa at the property line during the day or 55 dBa at night.
- (12) *Traffic mitigation*. Conditions may be imposed on development to mitigate existing or potential traffic problems on arterial or collector streets.
- (13) *Water access*. Conditions may be imposed to require dedication of public access easements to streams, lake shores and tidewater.
- (14) *Screening*. The commission may require construction of fencing or plantings to screen the development or portions thereof from public view.
- (15) *Lot size or development size*. Conditions may be imposed to limit lot size, the acreage to be developed or the total size of the development.
- (16) *Drainage*. Conditions may be imposed to improve on and off-site drainage over and above the minimum requirements of this title.
- (17) *Lighting*. Conditions may be imposed to control the type and extent of illumination.
- (18) *Other conditions*. Such other conditions as may be reasonably necessary pursuant to the standards listed in subsection (f) of this section.

(Serial No. 87-49, § 2, 1987; Serial No. 2006-15, § 2, 6-5-2006; Serial No. 2015-03(c)(am), § 9, 8-31-2015 ; Serial No. 2017-29, § 3, 1-8-2018, eff. 2-8-2018)

Roof EAVES

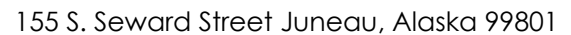
porous ground cover
i.e. gravel
soil scraping
living plants

plants
sm. tree
parking
8x17



923 Glacier Ave
Proposed Accessory
Apartment

Map showing the location of the proposed accessory apartment at 923 Glacier Ave. The map includes a scale bar from 0 to 3000 feet and labels for various streets: W Eleventh St, W Tenth St, W Ninth St, W Eighth St, W Seventh St, W Sixth St, W Fifth St, W Fourth St, W Third St, W Second St, W First St, W Eleventh St, W Tenth St, W Ninth St, W Eighth St, W Seventh St, W Sixth St, W Fifth St, W Fourth St, W Third St, W Second St, W First St, and a scale bar from 0 to 3000 feet.

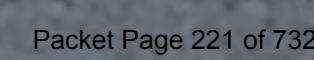


An application has been submitted for consideration and public hearing by the Planning Commission for **two Conditional Use Permits for an accessory apartment on an undersized lot and an addition of a second story to a nonconforming structure at 923 Glacier Avenue in a Light Commercial Zone.**

Staff Report expected to be posted **Monday, December 6, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

The results of the hearing will be posted online.

Case No.: USE2021 0016; USE2021 0017
Parcel No.: 1C060C250060
CBJ Parcel Viewer: <http://epv.juneau.org>



From: [Charlie Ford](#)
To: [Allison Eddins](#)
Subject: RE: 923 Glacier Ave - USE case
Date: Tuesday, November 30, 2021 8:18:08 AM
Attachments: [image003.png](#)

Hi Allison,

After looking at everything involved with this property I feel confident that the existing living area, 492 square feet, can be rebuilt for less than 75% of the assessed value.

The existing foundation is going to be utilized which is a major portion of the construction costs.

My estimate for replacement is \$29,500.

Let me know if you need more information.

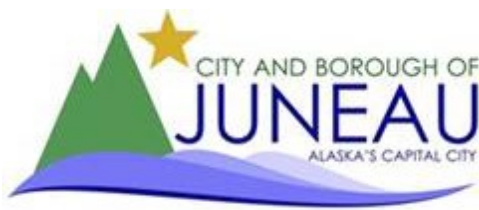
Thanks,

Charlie Ford | Building Official

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0767



From: Allison Eddins <Allison.Eddins@juneau.org>
Sent: Monday, November 29, 2021 10:47 AM
To: Charlie Ford <Charlie.Ford@juneau.org>
Subject: 923 Glacier Ave - USE case

Hi Charlie,

I'm working on a land use case for this property. The structure was built in the 1920's and is nonconforming for setbacks. The new owner would like to demo the roof and walls but keep the foundation and daylight basement. T49 allows for nonconforming structures to be rebuilt if the cost to rebuild is equal to or less than 75% of the building value. Can you give me an estimate for the cost to rebuild roughly 492 sq. ft. of the main living space?

Thanks,
Allison

Allison Eddins | Planner II

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 ext. 4131

Our telephone system is changing. Beginning May 3, 2021, I may be reached at 907-586-0753 ext. 4131.



From: Mary Hammond
Sent: Monday, November 29, 2021 1:18 PM
To: Allison Eddins
Subject: RE: Request for Comment

Thanks Allison. No questions or comments from an assessment standpoint.

Mary Hammond she/ her

Assessor

City & Borough of Juneau

(907) 586-5215 ext. 4033

Please notice that our phone number has changed. All finance department calls must go to (907)586-5215. My new phone number is 586-5215 ext. 4033

From: Allison Eddins
Sent: Monday, November 29, 2021 12:49 PM
To: Mary Hammond
Subject: Request for Comment

Hi Mary,

There is a pending application to reconstruct the existing home at 923 Glacier Ave and add a second story. The second story would have an accessory apartment. If you have any comments or concerns regarding the proposal please let me know.

Thank you,
Allison

Allison Eddins | Planner II

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 ext. 4131

Our telephone system is changing. Beginning May 3, 2021, I may be reached at 907-586-0753 ext. 4131.





(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD

155 S. Seward Street • Juneau, AK 99801

DATE: October 20, 2021

TO: Jill Maclean, Director, AICP

BY: Adrienne Scott, Planner I

PROPOSAL: A Nonconforming Situation Review for lots, structures, and parking.

KEY CONSIDERATIONS FOR REVIEW:

- The structure was constructed in 1920, according to the Casey-Shattuck Historic Building Survey.
- The lot was created in 1934, with Plat 1934-1.
- The lot and the structure were created prior to the establishment of zoning.
- The shed is noncompliant for setbacks, and encroaches into the adjacent property. The property owner must bring the shed into compliance with the Land Use Code.

STAFF RECOMMENDATION:

Staff recommends the following situations receive

Nonconforming Certification:

- Nonconforming Structures (49.30.250)
- Nonconforming Lots (49.30.260)
- Nonconforming Parking (49.30.270)

ABANDONMENT:

If a nonconforming situation is deemed to be abandoned by the Director, the decision may be reconsidered in accordance with CBJ 49.30.220. After reconsideration is reviewed, an appeal may be filed in accordance with CBJ 49.20.110.

NONCOMPLIANCE:

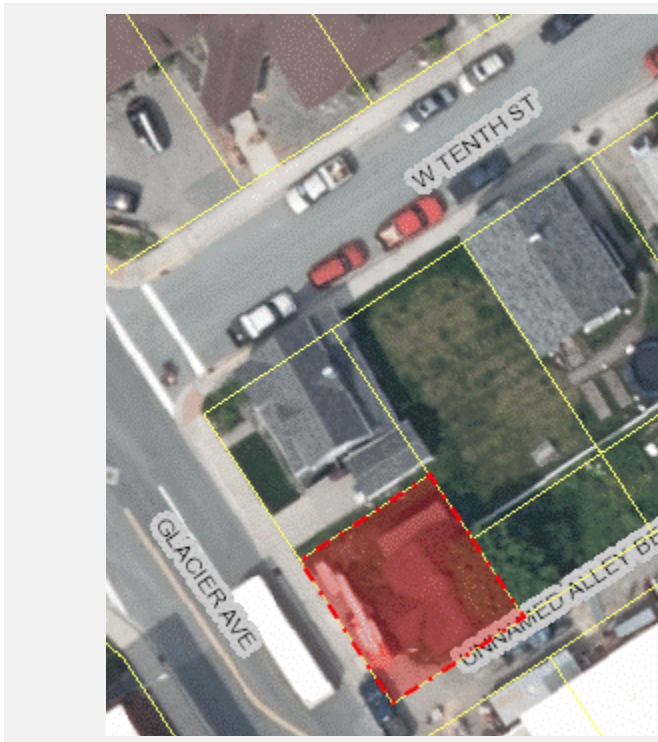
If a situation fails to be certified as nonconforming, an appeal of this decision may be filed in accordance with CBJ 49.20.110.

- There is a noncompliant shed built within the minimum rear yard setback that encroaches into the adjacent property.

GENERAL INFORMATION	
Property Owner	Janell Liles
Applicant	Janell Liles
Property Address	923 Glacier Avenue
Legal Description	Casey Shattuck Block 225 Lot 5 FR
Parcel Number	1C060C250060
Zoning	Light Commercial
Lot Size	1,800 square feet
Water/Sewer	Public
Access	Glacier Highway
Existing Land Use	Commercial Miscellaneous
Associated Applications	None

CBJ 49.30.215: Accidental damage or destruction. Structures receiving a nonconforming certification may have the right to reconstruct a nonconforming structure per CBJ Chapter 49.30.

SITE FEATURES AND ZONING



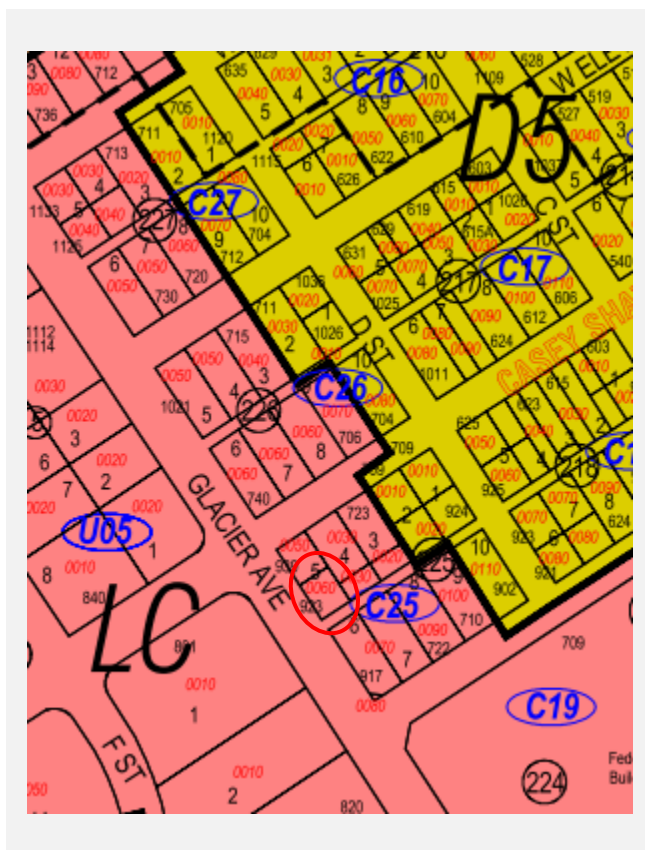
SURROUNDING ZONING AND LAND USES

North (LC)	Residential
South (LC)	Commercial with apartments
East (D5)	Residential
West (ROW)	Glacier Avenue

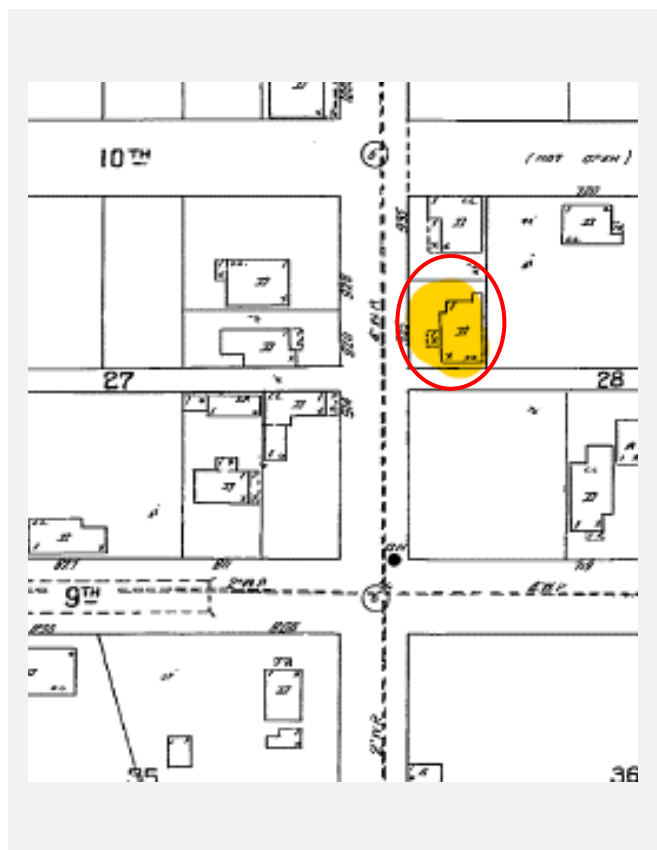
SITE FEATURES

Anadromous	None
Flood Zone	Zone X
Hazard	None
Hillside	None
Wetlands	None
Parking District	None
Historic District	None
Overlay Districts	Downtown Juneau ADOD

CURRENT ZONING MAP



1927 Sanborn Map



ZONING HISTORY

Year	Zoning District	Summary
1920	None	According to the Casey-Shattuck Historic Building Survey, the structure was constructed in 1920, prior to establishment of zoning in Juneau.
1934	None	The lot was platted in 1934, prior to zoning.
1956	B1	In 1956, the lot and surrounding area was zoned B1. The B1 zoning district required a 5,000 square foot minimum lot size and a 50-foot minimum lot width. Required setbacks were 20 feet front yard and 10 feet rear yard, with no minimum side yard setbacks. One off-street parking space was required for a single-family dwelling. The structure became nonconforming for front and rear setbacks and the lot became nonconforming for lot size and width.
1969	C1	In 1969, the lot and surrounding area was rezoned C1. The C1 zoning district required a 3,500 square foot minimum lot size, a 40-foot minimum lot width, and a 60-foot minimum lot depth. Required setbacks were 20 feet front, with no required side yard or rear yard setback. One off-street parking space was required for a single-family dwelling and two off-street parking spaces were required for a barbershop. The lot remained nonconforming for lot size. The structure remained nonconforming for front setback. The use became nonconforming for off-street parking when the structure was converted to a barbershop.
1987	LC	In 1987, the lot and surrounding area was rezoned Light Commercial (LC). The LC zoning district required a 2,000 square foot minimum lot size, a 20-foot lot width, and an 80-foot lot depth. Required setbacks were 25 feet front, 10 feet rear, 10 feet side, and 17 feet side yard. Two off-street parking spaces were required. The lot remained nonconforming for lot size. The structure remained nonconforming for front setback and became nonconforming for rear and side yard setbacks. The use remained nonconforming for off-street parking.

BACKGROUND INFORMATION

The applicant requests a Nonconforming Situation Review for lots, structures, and parking. The lot was platted in 1934. The structure on the lot was constructed in 1924 according to the Casey Shattuck Historic Building Survey, while the Assessor's Database has the year built as 1977. The structure is shown on the 1926 Sanborn map and a 1941 Tax map, so the construction date of 1920 will be used for this report.

In 1974, a building permit (BLD-10005) was obtained to convert the residence to a barbershop. A Conditional Use Permit was obtained in 1993 for a 10-seat restaurant; however, a building permit was never issued to remodel the structure into a restaurant. Most recently, the structure has been in use as an office space by the Juneau Sports Association.

A 2021 as-built indicates that the eaves of the structure, as well as a lean-to shed at the rear of the house, encroach into the adjacent lot 4.

INFORMATION REVIEWED

Year	Type	Summary
1927	Sanborn Map	Shows structure on lot
1934	Plat	Plat 1934-1 shows creation of lot 5
1941	Tax Map	Shows structure on lot fraction
1974	Building Permit	Building Permit 10005 shows change of use from residential to barbershop
1993	Conditional Use Permit	CU-40-93 gives approval for a 10-seat restaurant
2004	Historic Info	Casey-Shattuck Historic Building Survey shows year built as 1920
2013	Aerial Photography	Used to estimate vegetative cover
2021	Assessor's Records	Shows square footage
2021	As-Built	Shows location of structure on lot

ANALYSIS

Zoning District Comparison Table – The table below lists the required standards for the LC zoning district compared to the lot. A description of these situations is provided in the following sections. Items bolded do not meet current requirements.

Standard		Requirement	Existing	Code Reference
Lot	Size	2,000 square feet	1,800 square feet	49.25.400
	Width	20 feet	45 feet	49.25.400
Setbacks	Front (SW)	25 feet	18 feet	49.25.400
	Rear (NE)	10 feet	1.2 feet residential structure (0 feet structure eaves)* 0 feet shed*	49.25.400
	Side (NW)	10 feet	12 feet	49.25.400
	Street Side (SE)	17 feet	2.5 feet	49.25.400
Lot Coverage		50%	40%	49.25.400
Height	Permissible	45 feet	<45 feet	49.25.400
	Accessory	35 feet	N/A	49.25.400
Maximum Dwelling Units		1 unit	1 unit	49.25.500
Use		Residential	Residential	49.25.300
Vegetative Cover		15%	20%	49.50.300
Parking		2 spaces	1 space	49.40.210(a)

**The structure eaves and shed encroach onto the neighboring lot.*

Minimum Lot Requirements – The lot was platted in 1934, prior to the establishment of zoning in Juneau. The lot is nonconforming for size.

Finding: Staff finds the lot conforming for lot size.

Minimum Setback Requirements – The structure was built in 1920, prior to the establishment of zoning in Juneau. The table and information above demonstrate that the residential structure is nonconforming for front, rear, and street side yard setbacks. The eaves of the structure encroach onto the neighboring lot. If the structure is reconstructed, this situation will not be permitted to continue.

The shed on the rear of the house is shown on the 2021 as-built to encroach onto the adjacent lot. It is unknown when the shed was constructed. The shed is noncompliant for setbacks.

Finding: Staff finds the structure nonconforming for setbacks. The structure may become conforming for setbacks through the Alternative Development Overlay District permit process (CBJ 49.70.1200).

Finding: Staff finds the shed noncompliant for setbacks.

Lot Coverage – The as-built shows lot coverage of approximately 40%.

Finding: Staff finds the lot conforming for lot coverage.

Structure Height – Assessor's photo shows a single-story structure.

Finding: Staff finds the structure conforming for height.

Residential Density – There is one single-family structure on the lot.

Finding: Staff finds the lot conforming for residential density.

Use – The use of the lot is residential.

Finding: Staff finds the lot conforming for use.

Vegetative Cover – Aerial GIS photography and a site visit showed vegetative cover to be approximately 20%.

Finding: Staff finds the lot conforming for vegetative cover.

Parking – CBJ 49.40.210 requires 2 off-street parking spaces for a single family residence. Back-out parking may be allowed for single-family dwellings in residential zoning districts per 49.40.230(b)(7)(A).

Finding: Staff finds the use nonconforming for number of off-street parking spaces.

NONCOMPLIANT SITUATIONS

49.30.310(j) Failure of a situation to qualify for nonconforming certification. If a situation does not qualify for or is denied nonconforming certification, it is noncompliant and the property is subject to enforcement actions consistent with this title.

The lot contains a lean-to shed at the rear of the house. The shed encroaches onto the adjacent lot and is noncompliant for the rear setback.

Finding: Staff finds the shed noncompliant for setbacks. The property owner must bring the shed into compliance with the Land Use Code.

ABANDONMENT

49.30.220(b) Abandonment of a nonconforming situation. A nonconforming situation is abandoned if any of the following events occur:

- (1) The owner indicates in writing that the nonconforming situation is being permanently discontinued;*
- (2) The nonconforming situation is damaged, destroyed, removed or demolished intentionally by the owner or intentionally by an authorized agent of the owner;*
- (3) The nonconforming structure is moved;*
- (4) The owner takes action consistent with an intent to abandon the nonconforming situation;*
- (5) The structure(s) associated with the nonconforming situation has been vacant for 365 consecutive days;*
- (6) Except for a structure with a nonconforming residential density, the nonconforming use has ceased and not substantially resumed for 365 consecutive days; or*
- (7) A structure with a nonconforming residential density has been unoccupied for 1095 consecutive days.*

No information has been submitted to suggest the nonconforming situations on the lot have been abandoned.

Finding: Staff finds none of the above events have taken place and the nonconforming situations are not deemed abandoned.

FINDINGS

1. Was the nonconforming situation allowed, or not prohibited by law, when it was established?

Analysis: The residential structure was constructed and the lot was created prior to the establishment of zoning in Juneau.

Finding: Yes. The nonconforming situation was allowed when established.

Analysis: The shed along the rear of the house encroaches into the adjacent lot. This encroachment was not approved.

Finding: Staff finds the shed noncompliant for setbacks. The property owner must bring the shed into compliance with the Land Use Code.

2. Has the nonconforming situation been abandoned?

Analysis: No information has been submitted that suggests the nonconforming situations have been abandoned.

Finding: No. The nonconforming situations have not been abandoned.

RECOMMENDATION

Staff recommends that the Director adopt the analysis and findings, and find the following situations on the lot to be NONCONFORMING to the Title 49 Land Use Code and issue a Nonconforming Certification for the following situations:

- Nonconforming Structures (49.30.250):
 - Front yard setback of 18 feet
 - Rear yard setback of 1.2 feet
 - Street side yard setback of 2.5 feet
- Nonconforming Lots (49.30.260):
 - Lot size of 1,800 square feet
- Nonconforming Parking (49.30.270):
 - One off-street parking space

Staff recommends that the Director adopt the analysis and findings, and find the following situations on the lot NONCOMPLIANT to the Title 49 Land Use Code:

- Noncompliant Structures:
 - The shed is noncompliant for setbacks and encroaches into the adjacent lot. The property owner must bring the shed into compliance with the Land Use Code.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Information Reviewed



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

NONCONFORMING CERTIFICATE

Date: October 20, 2021
File No.: NCC2021 0075

Janell Liles
P.O. Box 20845
Juneau, AK 99802

Proposal: A Nonconforming Situation Review for lots, structures, and parking

Property Address: 923 Glacier Avenue
Property Legal Description: Casey Shattuck Block 225 Lot 5 FR
Property Parcel Code No.: 1C060C250060

The Director of Community Development adopted the analysis and findings listed in the attached memorandum dated October 20, 2021, and has found the following situations on the lot to be certified nonconforming to the Title 49 Land Use Code of the City and Borough of Juneau:

- Nonconforming Structures (49.30.250):
 - Front yard setback of 18 feet
 - Rear yard setback of 1.2 feet
 - Street side yard setback of 2.5 feet
- Nonconforming Lots (49.30.260):
 - Lot size of 1,800 square feet
- Nonconforming Parking (49.30.270):
 - One off-street parking space

This Nonconforming Certificate applies to the nonconforming situations stated above. The nonconforming rights provided herein may be relinquished under certain circumstances provided under the CBJ Title 49 Land Use Code. It is the responsibility of the owner or agent of the owner to ensure that all development on the lot is in compliance with this certification and the CBJ Title 49 Land Use Code.

CBJ 49.30.215: Accidental damage or destruction. Structures receiving a nonconforming certification may have the right to reconstruct a nonconforming structure per CBJ Chapter 49.30.

File No.: NCC2021 0075

October 20, 2021

Page 2 of 2

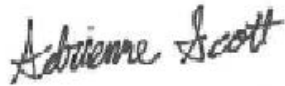
The Director of Community Development adopted the analysis and findings lists in the attached memorandum dated October 20, 2021, and has found the following situations on the lot to be NONCOMPLIANT to the Title 49 Land Use Code:

- Noncompliant Structures:
 - The shed is noncompliant for setbacks and encroaches into the adjacent lot. The property owner must bring the shed into compliance with the Land Use Code.

This Nonconforming Certificate constitutes a final decision of the Director of Community Development. Appeals must be brought to the CBJ Planning Commission in accordance with CBJ 49.20.110. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed.

If you have any questions regarding your project or anticipate any changes to your plans, please call the Community Development Department at (907) 586-0715.

Project Planner:



Adrienne Scott, Planner I
Community Development Department



Alexandra Pierce for Jill Maclean, Director, AICP
Community Development Department

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: December 15, 2021
Case No.: USE2021 0016

Janell Liles
P.O. Box 20845
Juneau, AK 99802

Proposal: Conditional Use Permit for an accessory apartment on an undersized lot.
Property Address: 923 Glacier Avenue
Legal Description: Casey Shattuck Block 225 Lot 5 FR
Parcel Code No.: 1C060C250060
Hearing Date: December 14, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 8, 2021, and approved the Conditional Use Permit for an accessory apartment on an undersized to be conducted as described in the project description and project drawings submitted with the application and with the following condition added:

1. Prior to the issuance of a building permit, a site plan with dimensions must be submitted that demonstrates all parking and maneuverability requirements in Title 49 are met. Alternatively, the applicant may apply for a parking waiver.

Attachments: December 8, 2021, memorandum from Allison Eddins, Community Development, to the CBJ Planning Commission regarding USE2021 0016.

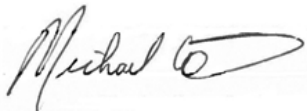
This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

Janell Liles
Case No.: USE2021 0016
December 15, 2021
Page 2 of 2

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Effective Date: The permit is effective upon approval by the Commission, December 14, 2021.

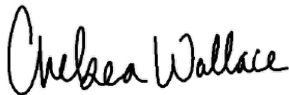
Expiration Date: The permit will expire 18 months after the effective date, or June 14, 2023 if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael Levine, Chair
Planning Commission

December 22, 2021

Date



Filed With City Clerk

December 22, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

USE2021 0008: A Conditional Use Permit renewal for explosives storage in lower Hidden Valley -
APPROVED ON CONSENT

AGENDA ITEM:

Case No.: USE2021 0008

Applicant: Orica USA Inc.

Location: Lower Hidden Valley

Proposal: A Conditional Use Permit renewal for explosives storage in lower Hidden Valley

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit with conditions. The permit would allow the development of explosives storage in lower Hidden Valley. The approval is subject to the following conditions:

1. The permit shall be effective for ten years.
2. The applicant shall maintain approved ATF kingpins, locks, and steel hoods on all storage containers/magazines regardless of ownership, mobility, and type of container.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for USE2021 0008	12/3/2021	Staff Report
☐ Notice of Decision for USE2021 0008	12/22/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
CONDITIONAL USE PERMIT USE2021 0008
HEARING DATE: DECEMBER 13, 2021

(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

DATE: December 3, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Teri Camery, Senior Planner, CFM 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a Conditional Use Permit renewal for explosives storage in lower Hidden Valley

STAFF RECOMMENDATION: Approval with conditions

KEY CONSIDERATIONS FOR REVIEW:

- No changes to the development since the last Conditional Use Permit, USE2009-00018, which expired on July 14, 2019.
- Development meets the requirements of the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF).
- Juneau Police Department and ATF have no public safety concerns.

GENERAL INFORMATION	
Property Owner	Orica USA Inc.
Applicant	Orica USA Inc.
Property Address	Hidden Valley
Legal Description	Hidden Valley Tract A
Parcel Number	3M000LEMCRK2
Zoning	Rural Reserve
Land Use Designation	Resource Development
Lot Size	113.29 acres; project site is 17,000 sq. feet
Water/Sewer	none
Access	Lemon Creek Haul Road
Existing Land Use	Quarry and two explosives storage sites
Associated Applications	USE2009-00018

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

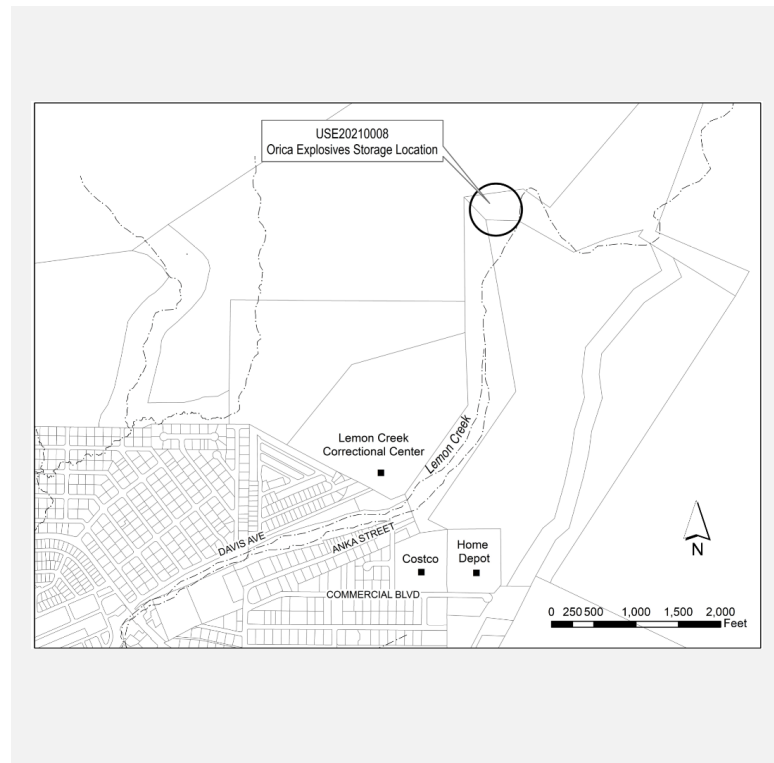
Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - 49.15.330

The Commission shall hear and decide the case per 49.15.330(a) Conditional Use Permit. A conditional use is a use that may or may not be appropriate in a particular zoning district according to the character, intensity, or size of that or surrounding uses. The conditional use permit procedure is intended to afford the commission the flexibility necessary to make determinations appropriate to individual sites. The commission may attach to the permit those conditions listed in subsection (g) of this section as well as any further conditions necessary to mitigate external adverse impacts. If the commission determines that these impacts cannot be satisfactorily overcome, the permit shall be denied.

SITE FEATURES AND ZONING



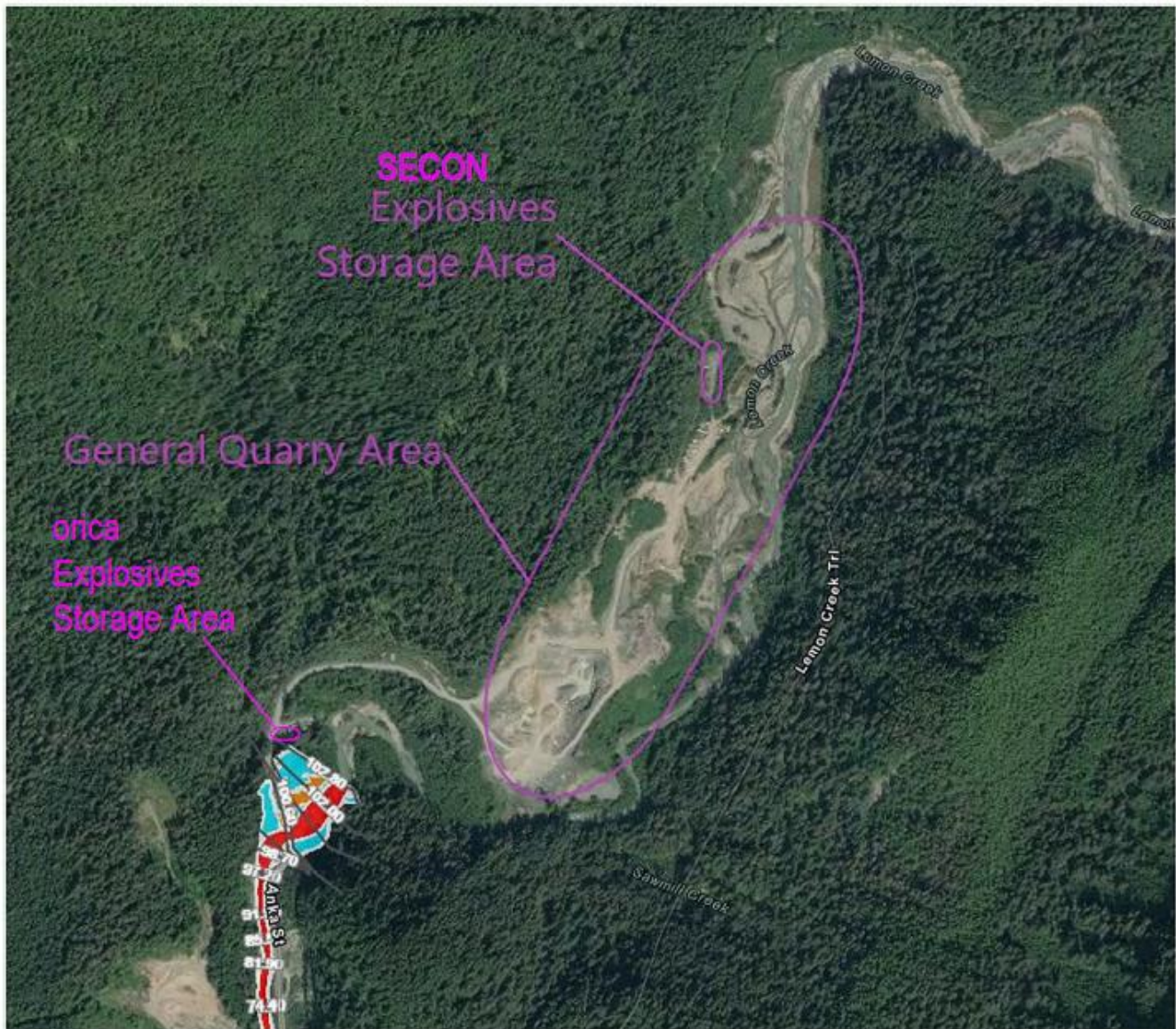
SURROUNDING ZONING AND LAND USES	
North (Zone)	Rural Reserve; quarry
South (Zone)	Rural Reserve; Haul Road
East (Zone)	Rural Reserve; vacant
West (Zone)	Rural Reserve; vacant

SITE FEATURES	
Anadromous	Lemon Creek
Flood Zone	n/a
Hazard	n/a
Hillside	n/a
Wetlands	n/a

BACKGROUND INFORMATION

Project Description – The applicant requests a Conditional Use Permit renewal for explosives storage in lower Hidden Valley. The previous permit, USE2009-00018, expired on July 14, 2019. USE2009-00018 was issued for Alaska Pacific Powder, which dissolved and merged into the parent company, Orica USA. Orica USA is the current owner and applicant. The development complies with all Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) requirements. SECON Inc. has an approved explosives storage site in Upper Hidden Valley, USE2020 0006, valid for 10 years. Notices of Decision are included in Attachments D and E. The map below shows SECON's approved explosives storage area and SECON's approved quarry.

The blue, orange, and red areas indicate the mapped flood zone and demonstrate that the applicant's proposed explosives storage area is not within a Special Flood Hazard Area:



Orica USA Inc. Juneau CUP 2021 Attachment D

ZONING REQUIREMENTS

The development is in the Rural Reserve Zoning District, distant from any property lines on the 113.29 acre parcel. The application includes documentation that shows that the development is approximately 50 feet from the flood zone, and 185 feet from Lemon Creek, therefore flood zone and stream buffer regulations do not apply to the development. CBJ Code does not have any specific regulations regarding explosives storage other than the requirement for a Conditional Use Permit, as listed in CBJ 49.25.300, Section 4.200 for the Rural Reserve zoning district.

SITE PLAN



ANALYSIS

Project Site and Design – The total site area is 17,000 square feet, while the total area of temporary structures, consisting of portable magazines, is 1,440 square feet. The proposed development is 2,350 feet (.445 miles) from inhabited buildings. The application materials demonstrate that the development is 50 feet from AE Special Flood Hazard Area and 185 feet from Lemon Creek.

The explosive storage area consists of three portable magazines approved for storage of high explosives and detonators. The applicant occasionally allows local contractors, barge lines, fire department, or law enforcement agencies to use the site as a safe haven when needed, not to exceed the ATF allowable maximum storage.

Parking – CBJ Code does have parking requirements for explosives storage. The applicant notes that parking is limited to authorized employees working at the site at a given time, and will be outside of the gate or away from existing storage.

Traffic – According to CBJ 49.40.300, a traffic impact analysis is not required.

Noise – Explosives storage by itself does not create any noise. Noise impacts from using the explosives in blasting activities were addressed in the review and approval of USE2019 0002 for SECON quarry operations, and are not part of the current Conditional Use Permit review.

Lighting – There is no electricity or lighting on site. Employees will use approved handheld lights when needed.

Public Health, Safety, and Welfare – As noted in the Agency Review section of this report, ATF and the Juneau Police Department reviewed the development and checked all public records to determine if there was any history

of theft on the site. Both entities commented that safety measures appear to be adequate and requirements have been met.

In addition, the applicant notes that the development is approximately one half mile from any inhabited buildings. The storage area also has two gates. The first one is .41 miles from the storage area, while the second one is at the site. The site is completely fenced with razor wire. The applicant also employs a security guard who completes weekly security inspections per ATF regulations. Lastly, warning signs are posted at the entrance to the storage site as required by the Uniform Fire Code.

Staff recommends a condition regarding a 10-year expiration date for the permit, and a condition regarding security measure for storage. These conditions are consistent with the previous renewal, USE2009-00018, and USE2020 0006 (explosives storage in upper Hidden Valley) and allow periodic review of safety records and requirements. Notices of Decision from those two cases are included in Attachments D and E.

Condition: The permit shall be effective for ten years.

Condition: The applicant shall maintain approved ATF kingpins, locks, and steel hoods on all storage containers/magazines regardless of ownership, mobility status, and the type of container.

Property Value or Neighborhood Harmony – No evidence indicates that the proposed explosive storage would adversely impact property value or neighborhood harmony. This area has an established history of Industrial use and is surrounded by vacant Rural Reserve and Industrial properties. No comments were received from the CBJ Assessor’s Office or from adjacent property owners.

AGENCY REVIEW

CDD conducted an agency review comment period between August 30, 2021 and September 15, 2021. The comment period was extended to allow comments from the Juneau Police Department and ATF. The final hearing date was established per the applicant’s request. Agency review comments can be found in Attachment C.

Agency	Summary
Juneau Police Department	Security measures appear adequate
Bureau of Alcohol, Tobacco, Firearms, and Explosives	No issues with the site or any theft/loss.

PUBLIC COMMENTS

CDD conducted a public comment period between November 12, 2021 and December 14, 2021. Public notice was mailed to property owners within 500 feet of the proposed development. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. No public comments have been received to date.

CONFORMITY WITH ADOPTED PLANS

The proposed development is in general conformity with the 2013 Comprehensive Plan, the 2015 Juneau Economic Development Plan, and the 2018 Lemon Creek Area Plan.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	11	158	Map H	Complies with the Resource Development Designation for the lot
	5	58	Policy 5.11	Complies with policy regarding encouragement of basic sector industries
		59	Policy 5.13	Complies with policy regarding support of extraction and processing of mineral resources
2015 Juneau Economic Development Plan	2	15-17		Supports economic framework policies
2018 Lemon Creek Area Plan	6	pp. 58-60		Policies generally apply to gravel extraction, not explosives storage. Development supports responsible resource extraction while minimizing negative impacts

FINDINGS

Conditional Use Permit Criteria – Per CBJ 49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested Conditional Use Permit complete?

Analysis: No further analysis needed.

Finding: Yes. The application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. Is the proposed use appropriate according to the Table of Permissible Uses?

Analysis: The application is for explosives storage. The use is listed at CBJ 49.25.300, Section 4.200 for the Rural Reserve zoning district.

Finding: Yes. The requested permit is appropriate according to the Table of Permissible Uses.

3. Will the proposed development comply with the other requirements of this chapter?

Analysis: The proposed site design complies with other requirements of the chapter including parking, hazard regulations, vegetative cover, and other applicable sections.

Finding: Yes / No. With the recommended conditions, the proposed development will comply with Title 49.

4. Will the proposed development materially endanger the public health, safety, or welfare?

Analysis: The development has been reviewed by the Juneau Police Department and ATF and meets safety standards.

Finding: No. There is no evidence to suggest that with appropriate conditions, the requested Conditional Use Permit for explosives storage in a Rural Reserve zoning district will materially endanger the public health or safety.

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

Analysis: This area has an established history of Industrial use and is surrounded by vacant Rural Reserve and Industrial properties.

Finding: No. There is no evidence to suggest that with appropriate conditions, the requested Conditional Use Permit in a Rural Reserve zoning district will substantially decrease the value or be out of harmony with the property in the neighboring area.

6. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Analysis: The proposed development serves basic-sector industries while minimizing impacts.

Finding: Yes. The proposed development, with the recommended conditions, will be in general conformity with the 2013 Juneau Comprehensive Plan, 2015 Juneau Economic Development Plan, and 2018 Lemon Creek Area Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Conditional Use Permit with conditions. The permit would allow the development of explosives storage in lower Hidden Valley. The approval is subject to the following conditions:

1. The permit shall be effective for ten years.
2. The applicant shall maintain approved ATF kingpins, locks, and steel hoods on all storage containers/magazines regardless of ownership, mobility, and type of container.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Abutters Notice and Public Notice Sign Photo
Attachment C	Agency Comments
Attachment D	USE2009-00018 Notice of Decision
Attachment E	USE2020 0006 Notice of Decision



DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications.

To be completed by Applicant	PROPERTY LOCATION		
	Physical Address Hidden Valley		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) Hidden Valley Tract A		
	Parcel Number(s) 3-M00-0-LEM-CRK-2		
	☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner Orica USA Inc., Lessee	Contact Person Melody McAllister	Phone Number(s) 907.225.9388
	Mailing Address 7160 N. Tongass Hwy., Ketchikan, AK 99901		
	E-mail Address melody.mcallister@orica.com		
	LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits		
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows: A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X Landowner/Lessee Signature		08.16.2021 Date	
X _____ Landowner/Lessee Signature		_____ Date	
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME"			
Applicant Orica USA Inc.	Contact Person Melody McAllister	Phone Number(s) 907.225.9388	
Mailing Address 7160 N. Tongass Hwy., Ketchikan, AK 99901			
E-mail Address melody.mcallister@orica.com			
X Applicant's Signature		08.16.2021 Date of Application	

DEPARTMENT USE ONLY BELOW THIS LINE

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A - Application Packet

Intake Initials IMG	Case Number USE21-08
Date Received 8/19/2021	



ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant

PROJECT SUMMARY

Continuation of explosive storage at the lower powder magazine in Hidden Valley

TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED

- ☐ Accessory Apartment – Accessory Apartment Application (AAP)
- ☒ Use Listed in 49.25.300 – Table of Permissible Uses (USE)
- Table of Permissible Uses Category: 4.200 Storage of Explosives and ammunition

IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL?

☒ YES – Case # USE2009-00018 ☐ NO

UTILITIES PROPOSED

WATER: ☐ Public ☐ On Site

SEWER: ☐ Public ☐ On Site

SITE AND BUILDING SPECIFICS

Total Area of Lot 17,000 square feet Total Area of Existing Structure(s) 1440 square feet

Total Area of Proposed Structure(s) N/A square feet

EXTERNAL LIGHTING

Existing to remain ☒ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

Proposed ☒ No ☐ Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

ALL REQUIRED DOCUMENTS ATTACHED

☒ Narrative including:

- ☒ Current use of land or building(s)
- ☒ Description of project, project site, circulation, traffic etc.
- ☒ Proposed use of land or building(s)
- ☒ How the proposed use complies with the Comprehensive Plan

If this is a modification or extension include:

- ☒ Notice of Decision and case number
- ☒ Justification for the modification or extension
- ☐ Application submitted at least 30 days before expiration date

☒ Plans including:

- ☒ Site plan
- ☒ Floor plan(s)
- ☒ Elevation view of existing and proposed buildings
- ☒ Proposed vegetative cover
- ☒ Existing and proposed parking areas and proposed traffic circulation
- ☒ Existing physical features of the site (e.g.: drainage, habitat, and hazard areas)

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

ALLOWABLE/CONDITIONAL USE FEES

	Fees	Check No.	Receipt	Date
Application Fees	\$ 500			
Admin. of Guarantee	\$			
Adjustment	\$			
Pub. Not. Sign Fee	\$ 50			
Pub. Not. Sign Deposit	\$ 100			
Total Fee	\$			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Attachment A - Application Packet

Case Number

USE 21-08

Date Received

8/19/21



PROJECT NARRATIVE, CITY AND BOROUGH OF JUNEAU
CONDITIONAL USE PERMIT APPLICATION, ORICA USA, INC.

Orica USA Inc. (OUSA) is applying for a conditional use permit for the purpose of storing explosive products. The property for which OUSA is applying, has our existing explosive storage magazines in place as referenced in CUP FILE NUMBER USE2009-00018, on Tract A.M.S. 526 U.S.S. 5504 and is located in the Hidden Valley Subdivision.

The property is currently in use per the expired Alaska Pacific Powder Co. (APPCO) CUP FILE NUMBER USE2009-00018. On Feb 1, 2021, Alaska Pacific Powder was dissolved and merged into the parent company, and Orica USA Inc. is the remaining legal entity. (Merger documents attached. Attachment E)

ORICA USA INC. complies with all Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF) There have been no major changes to Orica's operation procedures since the last permit was issued and the transition from APPCO.

There is no floor plan. No changes or reclamation needs to take place at the storage area. There are no new proposed uses for this area.

The City and Borough of Juneau has no specific regulations for the storage of explosives.

The storage area is 2350 ft (0.445 miles) from any inhabited buildings.

The storage area has two gates, the first one is 2183 feet (0.41 miles) from the storage area. The second one is at the site, which is completely fenced with razor wire installed.

The storage area is roughly 50 feet from the existing flood zone, and roughly 185 feet from Lemon Creek (**OUSA attachment B**).

Orica also has a security guard that completes weekly security inspections per BATF regulations.

Orica requires that any carriers obtain the necessary permits prior to transporting explosives within the City/Borough of Juneau for OUSA.

The total site area is 17,000 square feet. No permanent structures exist on site. Three portable magazines are of the type that store High Explosives (currently only one in use for High Explosives), one magazine used to store detonators, and various mobile sea containers on chassis, rated as type 5 mobile blasting agent magazines (see **OUSA attachment A** BA Parking area) are used to store blasting agent for the duration of the permit, not to exceed the BATF allowable maximum storage per the table of distances. Along with the type 2 and type 5 magazines, OUSA would allow local contractors, barge lines, fire department or law enforcement agencies to use the site as a Safe Haven when needed, as already established, not to exceed the ATF allowable maximum storage.

We are aware that explosive products do, at times, get stranded at a barge facility or get recovered from abandoned construction projects or mining operations. It is our objective to always keep explosives in a safe location.

Parking is limited to authorized employees working at the site at a given time, and will be outside the gate or away from existing storage. There is no electricity or lighting on site. Employees will use approved safety hand held lights when needed.

Vegetation is kept cut back. There are no plantings on site.

The appropriate warning signs are posted at the entrance to the storage site as required in ARTICLE 77-EXPLOSIVE MATERIALS of the Uniform Fire Code 1997. All products are stored in compliance with Federal, State, and local laws.

OUSA Attachment A, aerial view of the site depicts the current status of the storage area and clearly shows that there are no security concerns on site. With only one road access, the gate on site, and the second gate at the initial and only road access of Hidden Valley that prevents the general public from entering Hidden Valley with a vehicle.

Melody McAllister, Site Supervisor, Ketchikan, Juneau, Craig



(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

Hidden Valley Explosives Storage

Case Number: PAC2021 0021

Applicant: Melody McAllister

Property Owner: SECON Inc.

Property Address: No address; legal description is Hidden Valley Tract A

Parcel Code Number: 3M000LEMCRK2

Site Size: 113.29 acres

Zoning: Rural Reserve

Existing Land Use: gravel extraction

Conference Date: March 31, 2021

List of Attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Melody McAllister	Applicant	Melody.mcallister@orica.com
Teri Camery	Planning	teri.camery@juneau.org
Dan Jager	Fire Marshal	dan.jager@juneau.org

Conference Summary

Questions/issues/agreements identified at the conference that weren't identified in the attached reports.

The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

Proposal

The applicant requests a new Conditional Use Permit for explosives storage in Hidden Valley, to follow USE2009-00018 which expired on July 14, 2019. There are two explosives storage areas on the parcel. USE2020-0006 approved explosives storage in Upper Lemon Creek, following the previous Conditional Use Permit for that area, USE2009-00019.

Planners, if this is a CUP, attach 49.15.330

Planning Division

1. **Zoning** – Rural Reserve
2. **Setbacks** – 25' front and rear; 15' side (The project site is located far from property lines.)
3. **Maximum Height** – 45'
4. **Access** – Lemon Creek Haul Road
5. **Lot Coverage** – 10 percent permissible uses; 20 percent conditional uses
6. **Vegetative Coverage** – n/a
7. **Lighting** – n/a
8. **Noise** – n/a. Use of explosives has been addressed in CBJ and SECON gravel extraction Conditional Use permits.
9. **Flood** – The parcel includes mapped flood zones, however the project area is not within a flood zone.
10. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – n/a
11. **Wetlands** – n/a
12. **Habitat** – n/a. The project area is more than 50 feet from Lemon Creek.
13. **Plat or Covenant Restrictions** – n/a
14. **Traffic** – n/a
15. **Nonconforming situations** – The current Conditional Use Permit for explosives storage has expired. If explosive storage is in this area is considered an unauthorized, unpermitted use. There are no other known non-conforming situations on the parcel.

The project requires a new Conditional Use Permit. The Conditional Use Permit application should include a detailed site plan that clearly shows the project area with the access to the site, the distance from Lemon Creek, and the distance from the mapped floodway. Please provide multiple maps if needed to show these features. The application should also include detailed drawings of explosive storage structure that show safety/security features, with an accompanying narrative. The primary point of review will be the public safety and security features, and the review will include comment requests to the Juneau Police Department and related public safety agencies such as ATF. Please provide as much detail on security as possible. The staff report and Notice of Decision for explosives storage in Upper Lemon Creek, USE2020-0006, provides an example of the review process

Pre-Application Conference Final Report

and necessary information. These documents have been provided your reference. CBJ Code 49.15.330, which explains the Conditional Use Permit process and specific points of review, has also been provided for your reference.

Fire Marshal

- 16. Fire Items/Access** – Notes will be made during Conditional use application

List of required applications

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

1. Development Permit Application
2. Conditional Use Permit Application

Additional Submittal Requirements

Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.

Exceptions to Submittal Requirements

Submittal requirements staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. n/a

Fee Estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. Conditional Use Permit Class II Use, \$500
2. Public Notice Sign, \$150 with \$100 refundable sign deposit
- 3.

For informational handouts with submittal requirements for development applications, please visit our website at www.juneau.org/cdd.

Submit your Completed Application

You must submit your application(s) in person with payment made to:

City & Borough of Juneau, Permit Center
 230 South Franklin Street
 Fourth Floor Marine View Center
 Juneau, AK 99801

Pre-Application Conference Final Report

Phone: (907) 586-0715
Fax: (907) 586-4529
Web: www.juneau.org/cdd

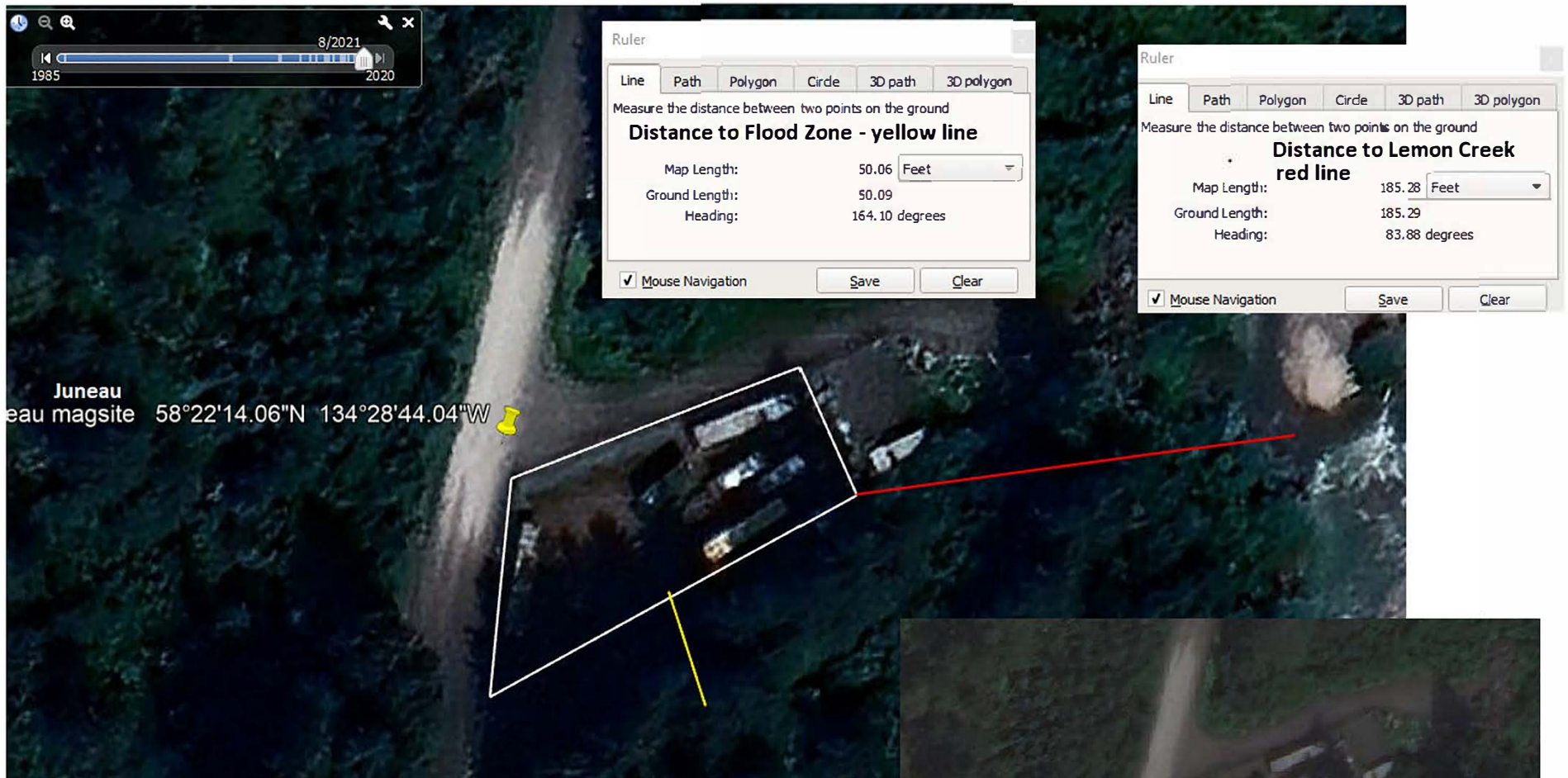
Attachments:

49.70 Article IV – if in a flood zone

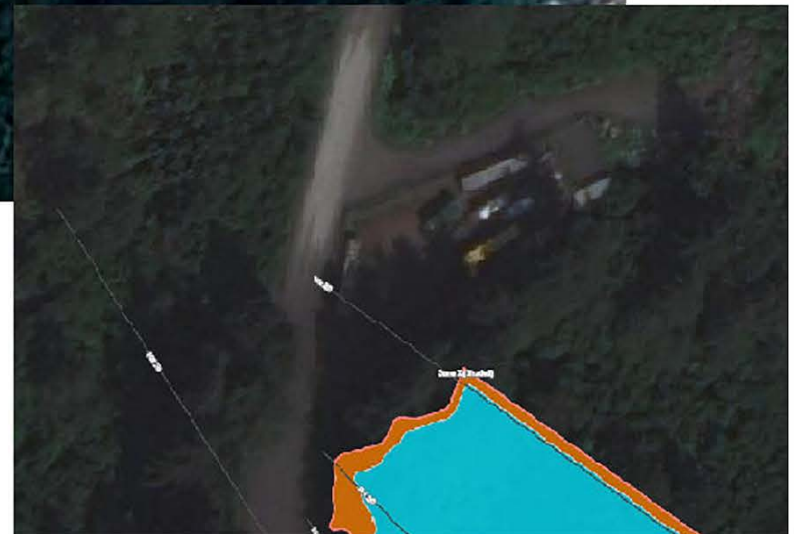
49.15.330 – if a Conditional Use Permit



Orica USA Inc. Juneau CUP 2021
Attachment A



Orica USA Inc. Juneau CUP
2021 Attachment B





Orica USA Inc. Juneau CUP 2021
Attachment C



BARBARA K. CEGAVSKE
Secretary of State

KIMBERLEY PERONDI
Deputy Secretary for
Commercial Recordings

STATE OF NEVADA



OFFICE OF THE
SECRETARY OF STATE

Commercial Recordings Division
202 N. Carson Street
Carson City, NV 89701
Telephone (775) 684-5708
Fax (775) 684-7138
North Las Vegas City Hall
2250 Las Vegas Blvd North, Suite 400
North Las Vegas, NV 89030
Telephone (702) 486-2880
Fax (702) 486-2888

Business Entity - Filing Acknowledgement

01/26/2021

Work Order Item Number: W2021012501224-1079197
Filing Number: 20211188113
Filing Type: Articles of Merger
Filing Date/Time: 1/25/2021 9:43:00 AM
Filing Page(s): 8

Indexed Entity Information:

Entity ID: C17161-1996

Entity Name: ORICA USA INC.

Entity Status: Active

Expiration Date: None

Commercial Registered Agent

CORPORATION SERVICE COMPANY

112 NORTH CURRY STREET, Carson City, NV 89703, USA

The attached document(s) were filed with the Nevada Secretary of State, Commercial Recording Division. The filing date and time have been affixed to each document, indicating the date and time of filing. A filing number is also affixed and can be used to reference this document in the future.

Respectfully,

BARBARA K. CEGAVSKE
Secretary of State



BARBARA K. CEGAUSKE
 Secretary of State
 202 North Carson Street
 Carson City, Nevada 89701-4201
 (775) 684-5708
 Website: www.nvsos.gov
www.nvsilverflume.gov

Filed in the Office of <i>Barbara K. Cegauske</i>	Business Number C17161-1996
Secretary of State State Of Nevada	Filing Number 20211188113
	Filed On 1/25/2021 9:43:00 AM
	Number of Pages 8

ABOVE SPACE IS FOR OFFICE USE ONLY

Articles of Conversion/Exchange/Merger

NRS 92A.200 and 92A.205

This filing completes the following: ☐ Conversion ☐ Exchange ☒ Merger

TYPE OR PRINT - USE DARK INK ONLY - DO NOT HIGHLIGHT

1. Entity Information: (Constituent, Acquired or Merging)	Entity Name: Alaska Pacific Powder Company Jurisdiction: Nevada Entity Type*: Corporation <i>If more than one entity being acquired or merging please attach additional page.</i>
2. Entity Information: (Resulting, Acquiring or Surviving)	Entity Name: Orica USA Inc. Jurisdiction: Delaware Entity Type*: Corporation
3. Plan of Conversion, Exchange or Merger: (select one box)	☒ The entire plan of conversion, exchange or merger is attached to these articles. ☐ The complete executed plan of conversion is on file at the registered office or principal place of business of the resulting entity. The entire plan of exchange or merger is on file at the registered office of the acquiring corporation, limited-liability company or business trust, or at the records office address if a limited partnership, or other place of business of the acquiring entity (NRS 92A.200). ☐ The complete executed plan of conversion for the resulting domestic limited partnership is on file at the records office required by NRS 88.330. (Conversion only)
4. Approval: (If more than one entity being acquired or merging please attach additional approval page.)	Exchange/Merger: Owner's approval (NRS 92A.200) (options a, b or c must be used for each entity) ☐ A. Owner's approval was not required from the: ☐ Acquired/merging ☐ Acquiring/surviving ☒ B. The plan was approved by the required consent of the owners of: ☒ Acquired/merging ☐ Acquiring/surviving ☐ C. Approval of plan of exchange/merger for Nevada non-profit corporation (NRS 92A.160): Non-profit Corporations only: The plan of exchange/merger has been approved by the directors of the corporation and by each public officer or other person whose approval of the plan of merger is required by the articles of incorporation of the domestic corporation. ☐ Acquired/merging ☐ Acquiring/surviving Alaska Pacific Powder Company Name of acquired/merging entity Orica USA Inc. Name of acquiring/surviving entity
5. Effective Date and Time: (Optional)	Date: 01/31/2021 Time: 11:59 p.m. (must not be later than 90 days after the certificate is filed)

* corporation, limited partnership, limited-liability limited partnership, limited-liability company or business trust.

Page 1 of 4
 Revised: 1/1/2019



BARBARA K. CEGAVSKE
 Secretary of State
 202 North Carson Street
 Carson City, Nevada 89701-4201
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ABOVE SPACE IS FOR OFFICE USE ONLY

Articles of Conversion/Exchange/Merger

NRS 92A.200 and 92A.205

This filing completes the following: ☐ Conversion ☐ Exchange ☐ Merger

TYPE OR PRINT - USE DARK INK ONLY - DO NOT HIGHLIGHT

4. Approval

Continued:

(If more than one entity being acquired or merging please attach additional approval page.)

Exchange/Merger:

Owner's approval (NRS 92A.200) (options a, b or c must be used for each entity)

☐ A. Owner's approval was not required from the:

☐ Acquired/merging

☐ Acquiring/surviving

☒ B. The plan was approved by the required consent of the owners of:

☐ Acquired/merging

☒ Acquiring/surviving

☐ C. Approval of plan of exchange for Nevada non-profit corporation (NRS 92A.160):

Non-profit Corporations only: The plan of exchange/merger has been approved by the directors of the corporation and by each public officer or other person whose approval of the plan of merger is required by the articles of incorporation of the domestic corporation.

☐ Acquired/merging

☐ Acquiring/surviving

Alaska Pacific Powder Company

Name of acquired/merging entity

Orica USA Inc.

Name of acquiring/surviving entity

4. Approval

Continued:

(If more than one entity being acquired or merging please attach additional approval page.)

Exchange/Merger:

Owner's approval (NRS 92A.200) (options a, b or c must be used for each entity)

☐ A. Owner's approval was not required from the:

☐ Acquired/merging

☐ Acquiring/surviving

☐ B. The plan was approved by the required consent of the owners of:

☐ Acquired/merging

☐ Acquiring/surviving

☐ C. Approval of plan of exchange for Nevada non-profit corporation (NRS 92A.160):

Non-profit Corporations only: The plan of exchange/merger has been approved by the directors of the corporation and by each public officer or other person whose approval of the plan of merger is required by the articles of incorporation of the domestic corporation.

☐ Acquired/merging

☐ Acquiring/surviving

Name of acquired/merging entity

Name of acquiring/surviving entity

* corporation, limited partnership, limited-liability limited partnership, limited-liability company or business trust.

Page 2 of 4
 Revised: 1/1/2019



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www.nvsilverflume.gov

Articles of Conversion/Exchange/Merger

NRS 92A.200 and 91A.205

6. Forwarding Address for Service of Process: (Conversion and Mergers only, if resulting/surviving entity is foreign)	Orica USA Inc. USA Name Country Care of: T. Harsh, Legal Dept. 33101 E. Quincy Avenue Watkins CO 80137 Address City State Zip/Postal Code
7. Amendment, if any, to the articles or certificate of the surviving entity. (NRS 92A.200): (Merger only) **	** Amended and restated articles may be attached as an exhibit or integrated into the articles of merger. Please entitle them "Restated" or "Amended and Restated," accordingly. The form to accompany restated articles prescribed by the secretary of state must accompany the amended and/or restated articles. Pursuant to NRS 92A.180 (merger of subsidiary into parent - Nevada parent owning 90% or more of subsidiary), the articles of merger may not contain amendments to the constituent documents of the surviving entity except that the name of the surviving entity may be changed.
8. Declaration: (Exchange and Merger only)	Exchange: ☐ The undersigned declares that a plan of exchange has been adopted by each constituent entity (NRS 92A.200). Merger: (Select one box) ☒ The undersigned declares that a plan of merger has been adopted by each constituent entity (NRS 92A.200). ☐ The undersigned declares that a plan of merger has been adopted by the parent domestic entity (NRS 92A.180).
9. Signature Statement: (Required)	☐ Conversion: A plan of conversion has been adopted by the constituent entity in compliance with the law of the jurisdiction governing the constituent entity. Signatures - must be signed by: 1. If constituent entity is a Nevada entity: an officer of each Nevada corporation; all general partners of each Nevada limited partnership or limited-liability limited partnership; a manager of each Nevada limited-liability company with managers or one member if there are no managers; a trustee of each Nevada business trust; a managing partner of a Nevada limited-liability partnership (a.k.a. general partnership governed by NRS chapter 87). 2. If constituent entity is a foreign entity: must be signed by the constituent entity in the manner provided by the law governing it. _____ Name of constituent entity

Form will be returned if unsigned.
 This form must be accompanied by appropriate fees.

Page 3 of 4
 Revised: 1/1/2019



BARBARA K. CEGAVSKE
 Secretary of State
 202 North Carson Street
 Carson City, Nevada 89701-4201
 (775) 684-5708
 Website: www.nvsos.gov
www.nvsilverflume.gov

Articles of Conversion/Exchange/Merger

NRS 92A.200 and 91A.205

**9. Signature
 Statement**
Continued: (Required)

☐ **Exchange:**

Signatures - Must be signed by: An officer of each Nevada corporation; All general partners of each Nevada limited partnership; All general partners of each Nevada limited-liability limited partnership; A manager of each Nevada limited-liability company with managers or a member if there are no Managers; A trustee of each Nevada business trust (NRS 92A.230). Unless otherwise provided in the certificate of trust or governing instrument of a business trust, an exchange must be approved by all the trustees and beneficial owners of each business trust that is a constituent entity in the exchange.

The articles of exchange must be signed by each foreign constituent entity in the manner provided by the law governing it (NRS 92A.230). Additional signature blocks may be added to this page or as an attachment, as needed.

☒ **Merger:**

Signatures - Must be signed by: An officer of each Nevada corporation; All general partners of each Nevada limited partnership; All general partners of each Nevada limited-liability limited partnership; A manager of each Nevada limited-liability company with managers or one member if there are no managers; A trustee of each Nevada business trust (NRS 92A.230).

The articles of merger must be signed by each foreign constituent entity in the manner provided by the law governing it (NRS 92A.230). Additional signature blocks may be added to this page or as an attachment, as needed.

**10. Signature(s):
 (Required)**

Alaska Pacific Powder Company

Name of acquired/merging entity

X *Veronica Huth*
 Signature (Exchange/Merger)

Secretary

01/19/2021

Title

Date

If more than one entity being acquired or merging please attach additional page of information and signatures.

Orica USA Inc.

Name of acquiring/surviving entity

X *Veronica Huth*
 Signature (Exchange/Merger)

Secretary

01/19/2021

Title

Date

X

Signature of Constituent Entity (Conversion)

Title

Date

Please include any required or optional information in space below:
 (attach additional page(s) if necessary)

**AGREEMENT AND PLAN OF MERGER
OF
ALASKA PACIFIC POWDER COMPANY
(a Nevada corporation)
AND
ORICA USA INC.
(a Delaware corporation)**

This AGREEMENT AND PLAN OF MERGER (this "Agreement and Plan of Merger"), is entered into as of January 8,, 2021, by and between Alaska Pacific Powder Company, a Nevada corporation ("APPCo") and Orica USA Inc., a Delaware corporation ("Orica USA") and collectively with APPCo, the "Constituent Corporations").

RECITALS

A. APPCo is a corporation duly organized, validly existing and in good standing under the laws of the State of Nevada having its principal executive offices at 7160 North Tongass Highway; Ketchikan, AK 99901. Orica USA owns all of the outstanding shares of stock of APPCo.

B. Orica USA is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware having its principal executive offices at 33101 East Quincy Avenue; Watkins, CO 80137.

C. The Board of Directors and the sole shareholder of each Constituent Corporation deem it advisable and in the best interests of such Constituent Corporation that APPCo be acquired by Orica USA through a merger of APPCo with and into Orica USA (the "Merger").

NOW, THEREFORE, the Constituent Corporations, in consideration of the mutual covenants herein contained and intending to be legally bound, hereby agree as follows:

1. Merger. Effective as of the Effective Time, APPCo shall be merged with and into Orica USA and the separate existence of APPCo shall cease, except insofar as it may be continued by law in order to carry out the purposes of this Agreement and Plan of Merger. Orica USA shall be the surviving corporation (the "Surviving Corporation") and shall continue to be governed by the laws of the State of Delaware.

2. Filing and Effective Time. Promptly following the execution hereof, Articles of Merger shall be filed with the Secretary of State of Nevada in accordance with Section 92A.200 of the Nevada Revised Statutes and a Certificate of Ownership and Merger shall be filed with the Secretary of State of Delaware in accordance with Section 253 of the General Corporation Law of the State of Delaware. The Merger shall become effective upon the filing of the Articles of Merger and the Certificate of Ownership and Merger with the applicable Secretary of State or as soon after such filings have been

made as is legally permissible, which date and time is herein referred to as the "Effective Time."

3. Name of Surviving Corporation; Certificate of Incorporation; Bylaws; Management.

3.1 Name of Surviving Corporation. The name of the Surviving Corporation from and after the Effective Time shall continue to be ORICA USA INC.

3.2 Certificate of Incorporation. The Certificate of Incorporation of Orica USA, as in effect immediately prior to the Effective Time, shall from and after the Effective Time continue to be the Certificate of Incorporation of the Surviving Corporation until amended in accordance with applicable law.

3.3 Bylaws. The Bylaws of Orica USA, as in effect immediately prior to the Effective Time, shall from and after the Effective Time continue to be the Bylaws of the Surviving Corporation until altered, amended or repealed in the manner therein provided.

3.4 Management. The directors and the officers of Orica USA immediately prior to the Effective Time shall be the directors and officers of the Surviving Corporation until their resignation, removal or until their successors are duly elected and qualified.

4. Rights and Liabilities of Surviving Corporation. At and after the Effective Time, the Surviving Corporation shall possess all of the rights, privileges, powers and franchises of a public as well as of a private nature, and shall be subject to all of the restrictions, disabilities and duties of each of the Constituent Corporations. All and singular rights, privileges, powers and franchises of each of the Constituent Corporations, and all property, whether real, personal or mixed, and all debts due to any of the Constituent Corporations on whatever account, as well as all causes of action belonging to each of the Constituent Corporations, shall be vested in the Surviving Corporation.

All property rights, privileges, powers and franchises, and all other interests shall be thereafter vested as the property of the Surviving Corporation, and the title to any real or personal property, whether by deed or otherwise, vested in either of the Constituent Corporations, shall not revert or be in any way impaired by reason hereof provided:

- (a) That all rights of creditors and all liens upon any property of any of the Constituent Corporations shall be preserved unimpaired, and all debts, liabilities and duties of the respective Constituent Corporations shall thenceforth attach to the Surviving Corporation and may be enforced against it to the same extent as if the debts, liabilities and duties had been incurred or contracted by it;
- (b) That the directors of either or both of the Constituent Corporations may, in their discretion, abandon such merger, subject to the right of the parties

under any contracts relating thereto, without further action or approval by the stockholders of their respective corporations, at any time prior to the Effective Time; and

- (c) That any proceeding pending against either of the Constituent Corporations may be continued as if the merger had not taken place or Orica USA may be substituted in the proceeding for APPCo.

5. Further Assurances. If at any time the Surviving Corporation shall deem or be advised that any further grants, assignments, confirmations or assurances are necessary or desirable to vest or to perfect or confirm of record or otherwise in the Surviving Corporation the title to any property of either Constituent Corporation, the officers or any of them and the directors of each Constituent Corporation, may execute and deliver any and all such deeds, assignments, confirmations and assurances and do all things necessary or proper so as to best prove, confirm and ratify title to such property in the Surviving Corporation or to otherwise carry out the purposes of the merger and the terms of this Agreement and Plan of Merger. The Surviving Corporation shall have the same power and authority to act with respect to any debts, liabilities and duties of the Constituent Corporations as the Constituent Corporations would have had, had they continued in existence.

6. Capital Stock. At the Effective Time, each share of APPCo capital stock issued and outstanding immediately prior to the Effective Time, by virtue of the Merger and without any action on the part of the holder thereof, shall be cancelled and shall cease to exist. At the Effective Time, each issued and outstanding share of Orica USA capital stock shall continue to be issued and outstanding and shall represent shares of stock of the Surviving Corporation.

7. Miscellaneous.

7.1 Counterparts. This Agreement and Plan of Merger may be executed in counterparts each of which shall be deemed an original and all of which together shall be considered one and the same agreement. PDF and electronically transmitted signatures shall be binding.

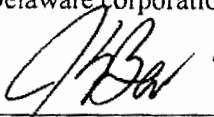
7.2 Successors and Assigns. This Agreement and Plan of Merger shall be binding on, and shall inure to the benefit of, the parties hereto and their respective legal representatives, successors and assigns.

7.3 Governing Law. This Agreement and Plan of Merger shall be governed by, and construed in accordance with, the laws of the State of Delaware.

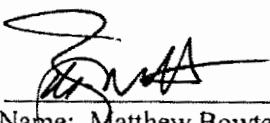
[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement and Plan of Merger as of the day and year first written above.

ORICA USA INC.,
a Delaware corporation

By: 
Name: James K. Bonnor
Title: President

ALASKA PACIFIC POWDER COMPANY,
a Nevada corporation

By: 
Name: Matthew Bowtell
Title: Vice President

Standard Operating Procedure

Scope of Application: Orica USA Inc. Juneau, AK Site

Revision: 001

Issued: 03.12.2021

Emergency Action Plan for: Juneau site, Mile 3.14 Anka St, Juneau, AK 99801

FIRE

- **Vocally sound the alarm in a manner to be heard by those in the vicinity of the fire (29 CFR 1910.165(b)(5)).**
- **Get out of the immediate area of the fire.**
- **Call Fire Department at 911 - DO NOT DELAY.**
- **Notify all personnel of the fire.**

INDOORS

- If fire is small and in a storage container that does **NOT** contain explosives, e.g., in a garbage can, and you do not have to be gone for more than 10 seconds, attempt to extinguish it with a certified extinguisher. Continue with evacuation and notification of fire department even if fire is extinguished.
- Contain the fire if possible. Close all doors as you exit.
- DO NOT FIGHT EXPLOSIVES FIRES, evacuate to muster point and call the fire department.

OUTDOORS

- If the fire is small, attempt to extinguish it with a certified extinguisher or water hoses. Continue watering area of fire and notify fire department even if fire is extinguished.
- Control the fire if possible. Attempt to keep the fire from spreading to the explosives magazines. If it becomes apparent that the fire is out of control, evacuate immediately.

Fires Involving ORICA USA INC. Trucks

- In cases where the Orica USA Inc. delivery trucks are in a building that is on fire, and there are no explosives and it is safe to do so, the truck may be moved, provided access to the truck and exits from the building are not barred by flames or smoke. Fight fire with available fire extinguishers, if the fire is small and not in the storage compartment, then the truck may be moved.

- Fires on re-pump or other bulk explosive delivery vehicles shall not be fought if the fire involves the explosives compartment. Firefighting measures should be taken immediately to prevent any fire such as a tire, electrical or cab fire from reaching the explosives compartment.
- Fires on other transport vehicles may be fought with caution. Fires that cannot be controlled sufficiently to avoid involvement of the vehicle's fuel compartment shall be left and personnel evacuated to a safe distance.

EVACUATION PROCEDURE

- Get everyone out of the building and away from the fire. The muster point for Juneau magazines is at the entrance of the **Costco parking lot**. Check facility or magazine site for personnel on the way out - DO NOT GO INTO THE FIRE to check an area.
 - o Close the doors behind you as you exit.
 - o Evacuate to muster point
 - o Once you are out, STAY out.
- Evacuate to the nearest safe area by means of a normally traveled road or path. If a normally traveled road or path is not available, evacuate to the nearest safe area while taking precautions to not get lost.

MUSTER POINT

- Assemble in the safe area.
- Report any persons unaccounted for.
- Notify police/fire rescue officials of anyone missing.
- Render first aid as necessary.
- If magazine site is on fire, alert neighbors via a phone call.
- As soon as possible, notify the Site Supervisor and Territory Manager

TRAINING

- This plan is reviewed with all new employees.
- Review evacuation procedures.

DRILLS

- Fire drills held annually.

EARTHQUAKE

- Move away from outside walls/glass.
- Position yourself under sturdy furniture or stand in doorways and brace yourself against doorframe.

After earthquake stops:

- Conduct Safety Assessment for any obvious cracks in walls, shifts in walls or foundation, any water line breaks or electrical wiring breaks. Report findings to Site Supervisor
- Evacuate the building if unsafe conditions identified.
- If someone is trapped, call 911 for rescue.
- Render first aid as necessary.
- Prepare for aftershocks.
- Use only battery-operated flashlights.
- If building is safe to remain in, contact Site Supervisor to assess whether or not to continue conducting business that was scheduled for that day.

TRAINING

- This plan is reviewed with all new employees.
- Review evacuation procedures.

DRILLS

- Annual review with Fire drills.

BOMB THREAT

Regardless of how the threat is received, it should be taken seriously.

Threats may be received by phone, suspicious packages, a written note received in the mail or placed in a room or restroom.

Notify Site Supervisor immediately. Call Police 911

Do not hang up on phone threats; try to keep caller talking. Get another's attention in the office to contact the Police Department.

If the threat is received by telephone, Attempt to gain the following information:

- Where is the bomb? What building and where in that building.
- When is the bomb set to go off?
- What is the explosive?
- What does it look like?
- Why was it set?
- Where are you calling from?
- What is your name?
- What does the voice sound like? (man, woman, child, accent?)
- Where is, or are there any identifiable sounds in the background?
- Write down the exact wording of the threat.

If bomb is found:

- Do not handle the device.
- Evacuate everyone out of the building or magazine site.

Training:

- This plan is reviewed with all new employees
- Review evacuation procedures

Drills:

- Review procedure during annual fire drills.

ALL HAZARDS EVACUATION or SHELTER IN PLACE

(Examples: weather emergencies, flood, volcano, biological incident, chemical incident, radiological incident, terrorist attack)

Evacuation

- Damage to the physical structure of the building may necessitate evacuation for the safety of personnel.
- An announcement may come from the Police/Fire/Emergency Services/APPCO Management to evacuate.
- Immediately evacuate the area.
- Close the door(s) to the area(s) affected.
- In the case of Chemical, Biological or Radiological contamination, DO NOT attempt to clean up the material(s).

Shelter in Place

- Weather emergencies may make leaving the building unsafe or impossible.
- An announcement may come from the Police/Fire/Emergency Services/APPCO Management to shelter in place.
- Close and lock all doors and windows.
- Seal doors and windows against penetration by cold or chemical agents.
 - o For weather emergencies and air quality hazards, close and lock doors. Attempt to contain drafts with blankets or duct tape.
 - o For Chemical or Radiological Incidents, take all personnel to interior rooms with no windows, if possible. Seal doors with duct tape. Seal windows with plastic sheeting and duct tape.
- Remain indoors until notified by police/fire/Orica USA Inc. Management or cold weather no longer presents a threat.
- Render first aid as necessary.

Chemical, Biological, or Terrorist Attack

- In cases of announced biological events, detected chemical events, or radiological events, call Police/Fire/911.
- Personnel should recognize the basic symptoms of a chemical attack which includes difficulty breathing, rapid heart rate, burning of the eyes or excessive tearing, salivating, sweating, diarrhea or vomiting, burning of the skin.
- Notify police and fire officials of suspected terrorism.
- Make the decision to cooperate with the terrorists or run away based on the situation at hand.

Evacuation Procedure

- Evacuate everyone out of the building. Check facility for personnel on the way out.
 - o Close the doors behind you as you exit.
 - o Move quickly and quietly to Muster Point.
 - o Once you are out, STAY out.

Assembly Area

- Assemble at the Muster Point. For Juneau magazines it is near the entrance of the Costco parking lot.
- NOTE: Most chemicals used in chemical attacks are heavier than air and will concentrate on the floor, so stay off the floor or ground.
- For chemical incidents the assembly area needs to be on high ground, as chemical agents will "seek" low-lying ground.
- Assembly area need to be "upwind" of the contaminated area.
- Report any persons unaccounted for.
- Notify police & fire rescue officials of anyone missions.
- Render first aid as necessary.
- As soon as possible, notify the branch and operations manager.

Training:

- This plan is reviewed with all new employees
- Review evacuation procedures

Drills:

- Review procedure during annual fire drills.

ENVIRONMENTAL RELEASES

According to 40 CFR 112.1(b), a spill plan that meets EPA expectations and certified by an engineer is only required if Orica USA Inc.'s Juneau Magazine site "could reasonably be expected to discharge oil in quantities that may be harmful into or upon the navigable waters of the United States or adjoining shorelines." While Lemon Creek is in the vicinity of the magazine site, oil will not be stored on site. The products that will be stored on the site do not possess the viscosity required to travel the distance to the creek. For these reasons, Orica USA Inc. does not have an EPA designed, environmentally engineered program for the Juneau magazine site. Orica USA Inc. does, however, recognize the strong need to be prepared to handle an environmental release and the following guideline exists as a tool to assist employees in mitigation through rapid intervention and efficient clean-up. Because 40 CFR 112 does not apply to Orica USA Inc.'s operation does not mean that the severity of an environmental release will be overlooked at any time.

Procedure for AN or AN materials Spill:

- Identify the material involved, assess the magnitude of the spill or leak and assist the driver to take appropriate action to stop the leak, taking care to prevent run off and/or entry into any water course or drainage system near the spill site.
- For AN spills or other bulk AN materials, shovel spilled material into drums, label for reuse or disposal, and store.
- In the case of leaking bags of ANFO, sweep or shovel the spilled material into a clean drum or other suitable container, label for reuse or disposal, and stored.
- Remove contaminated soil for disposal.

Procedure For Emulsion Tank, Bulker, or Pump Truck Failure:

- Assess the magnitude of the leak
- If the leak is slow and the source can be determined, take the appropriate action to prevent further leakage.
- For spilled emulsion, contain by diking with earth. Collect spilled emulsion with absorbent pads or solid inert absorbent, transfer into drums, label and store for disposal.
- If the leak is large and further leakage cannot be prevented, dike as necessary to minimize environmental damage. Transfer to drums, label for reuse or disposal, and store.
- Collect spilled material using double diaphragm pump(s) and store in labeled drums for reuse or proper disposal.
- Inspect empty tank to identify failure/cause of leak and repair or replace the tank.
- Have any process equipment (pumps, process lines, parts, gauges, etc.) involved in a leak or spill inspected and repaired or replaced. Re-inspect and test if necessary after repair is affected.
- Remove contaminated soil for disposal.

Training:

- This plan is reviewed with all new employees
- Review evacuation procedures

Drills:

- Review procedure during annual fire drills.

Important phone numbers for Juneau site:

Ketchikan Office 907.225.9388

1 st	Emergency Responders	911
2 nd	ORICA Emergency Resp. Number	877-561-3636
3 rd	Site Supervisor, Ketchikan	Melody McAllister 907-821-3355 (C)
4 th	Sr Sales Rep, Ketchikan	Tony Barajas 907-617-3410 (C)
5 th	Territory Manager	Porter Rempel 907-251-9021 (C)
6 th	Area Business Manager	Cory Redwood 403-465-0527 (C)
7 th	SHES Specialist	David Beriault 587-998-6374 (C)

Juneau Fire Department	907-586-5322
Juneau Property Owners, Colaska, DBA SECON	907-780-5145
CHEMTREC	800-424-9300
Insurance company, Zurich American Ins Co	303-758-7688

PLAT PLAN

KEY: HE = class 1.1D / 1.5D Dets = class 1.4B, 1.4S, and 1.1B BA= Class 1.5D Blasting agent



Tier 2 Online Submission Report

E-Plan - University of Texas at Dallas

Reporting period : From January 1, 2020 to December 31, 2020

Facility Name	Orica USA INC - Juneau	Facility ID	6807751
Company Name	Orica USA INC - Juneau	Facility Email	
Department Name		Mailing Address	, , -
Physical Address	1.34 Miles Anka Street , Juneau, Juneau City and Borough county , AK - 99801 , USA	Latitude / Longitude	58.3704 / -134.4786
Max. No. of Occupants	0 [] Manned [x] Unmanned	Emergency 24-Hour Phone Number	
NAICS	424690 - Other Chemical and Allied Products Merchant Wholesalers	Dun & Bradstreet	616752085 -
TRI Facility ID		RMP Facility ID	
Alaska Facility ID:	988 - Alaska SERC Number		
Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)?			[] Yes [x] No
Subject to Chemical Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Management Program)?			[] Yes [x] No
Facility Note			

Contact Information	Name (Title)	Phone	Email	Mail address
Chemical Carrier	Tony Barajas (Alaska Manager)	907-617-3410 (24-hour) 907-617-3410 (Work)	tony.barajas@orica.com	9737 Mud Bay RD #107, Ketchikan, , AK - 99901, USA
Emergency Contact	Cory Redwood (Area Business Manager)	403-465-0527 (24-hour) 403-212-6216 (Work)	Cory.Redwood@orica.com	, , , AK - , USA
Emergency Contact	Melody McAllister (Site Team Lead, Ketchikan Southeast AK)	907-225-9388 (Work) 907-821-3355 (24-hour)	melody.mcallister@orica.com	, , , - ,
Emergency Contact	Tony Barajas (Alaska Manager)	907-617-3410 (24-hour) 907-617-3410 (Work)	tony.barajas@orica.com	9737 Mud Bay RD #107, Ketchikan, , AK - 99901, USA
Emergency Contact	Porter Rempel (Territory Manager)	907-488-0327 (Work) 907-251-9021 (24-hour)	porter.Rempel@orica.com	, , , AK - , USA
Owner / Operator	Orica USA, INC (Owner)	303-268-5170 (Work)	troy.kinch@orica.com	33101 E Quincy Ave., Watkins, , CO - 80137, USA
Tier II Information Contact	Melody McAllister (Site Team Lead, Ketchikan Southeast AK)	907-225-9388 (Work) 907-821-3355 (24-hour)	melody.mcallister@orica.com	, , , - ,

Chemical Inventory Information

Orica USA Inc. Juneau CUP 2021 Attachment G

Attachment A - Application Packet

Tier 2 Online Submission Report
E-Plan - University of Texas at Dallas
Reporting period : From January 1, 2020 to December 31, 2020

Chemical Description	Physical Hazards	Health Hazards	Inventory	Mixture components	Storage locations and codes
CAS Trade Secret ☐ Chem. Name <u>AMEX WR Blasting Agent 1.5d</u> Pure ☐ Mixture ☒ Solid ☒ Liquid ☐ Gas ☐ EHS ☐ Below Reporting Thresholds ☐ State Specific Information Ships via Trucks ☒ Ships via Tank Trucks ☐ Ships via Rail Car ☐ Ships via Tank Car ☐ Ships via Pipeline ☐ Ships via Barge ☒ Ships via Other shipment mode ☒ Other shipment mode <u>Air</u> Frequency of Shipment <u>1</u> Shipment Frequency Period <u>Month</u> Maximum capacity per single vessel <u>20000</u> Max Shipment Qty (lbs) <u>20000</u> Ave Qty (lbs) <u>14800</u> Physical State in Transit <u>Solid</u> Carrier Comments (please provide both the preplanned and usual routes of travel)	Explosive ☒ Flammable (gases, aerosols, liquids, or solids) ☒ Oxidizer (liquid, solid or gas) ☒ Self-reactive ☐ Pyrophoric (liquid or solid) ☐ Pyrophoric Gas ☐ Self-heating ☐ Organic peroxide ☐ Corrosive to metal ☐ Gas under pressure (compressed gas) ☐ In contact with water emits flammable gas ☐ Combustible Dust ☐ Hazard Not Otherwise Classified ☐	Acute toxicity (any route of exposure) ☐ Skin corrosion or irritation ☐ Serious eye damage or eye irritation ☒ Respiratory or skin sensitization ☒ Germ cell mutagenicity ☐ Carcinogenicity ☒ Reproductive toxicity ☐ Specific target organ toxicity (single or repeated exposure) ☒ Aspiration hazard ☒ Simple Asphyxiant ☐ Hazard Not Otherwise Classified ☐	<u>20,000</u> Max. Daily Amount <u>14,800</u> Avg. Daily Amount <u>20,000</u> Max. Amount in largest Container <u>365</u> No. of Days On-site		1) Various Mobile Blasting Agent Magazines: Type Bag, Pressure <u>Ambient pressure</u> , Temperature <u>Ambient temperature</u>
CAS Trade Secret ☐ Chem. Name <u>Cordex Explosives 1.1D</u> Pure ☐ Mixture ☒ Solid ☒ Liquid ☐ Gas ☐ EHS ☐ Below Reporting Thresholds ☒ State Specific Information Ships via Trucks ☒	Explosive ☒ Flammable (gases, aerosols, liquids, or solids) ☐ Oxidizer (liquid, solid or gas) ☐ Self-reactive ☐ Pyrophoric (liquid or solid) ☐ Pyrophoric Gas ☐ Self-heating ☐	Acute toxicity (any route of exposure) ☐ Skin corrosion or irritation ☒ Serious eye damage or eye irritation ☒ Respiratory or skin sensitization ☒ Germ cell mutagenicity ☐	<u>11</u> Max. Daily Amount <u>11</u> Avg. Daily Amount <u>11</u> Max. Amount in largest Container <u>180</u> No. of Days On-site		1) Magazine 3: Type <u>Box</u> , Pressure <u>Ambient pressure</u> , Temperature <u>Ambient temperature</u>

Attachment A - Application Packet

Tier 2 Online Submission Report
E-Plan - University of Texas at Dallas
Reporting period : From January 1, 2020 to December 31, 2020

Chemical Description	Physical Hazards	Health Hazards	Inventory	Mixture components	Storage locations and codes
Ships via Tank Trucks ☐ Ships via Rail Car ☐ Ships via Tank Car ☐ Ships via Pipeline ☐ Ships via Barge ☒ Ships via Other shipment mode ☒ Other shipment mode <u>Air</u> Frequency of Shipment <u>1</u> Shipment Frequency Period <u>Month</u> Maximum capacity per single vessel <u>11</u> Max Shipment Qty (lbs) <u>11</u> Ave Qty (lbs) <u>11</u> Physical State in Transit <u>Solid</u> Carrier Comments (please provide both the preplanned and usual routes of travel)	Organic peroxide ☐ Corrosive to metal ☐ Gas under pressure (compressed gas) ☐ In contact with water emits flammable gas ☐ Combustible Dust ☐ Hazard Not Otherwise Classified ☐	Carcinogenicity ☐ Reproductive toxicity ☐ Specific target organ toxicity (single or repeated exposure) ☐ Aspiration hazard ☐ Simple Asphyxiant ☐ Hazard Not Otherwise Classified ☐			(Non- Confidential)
CAS Trade Secret ☐ Chem. Name <u>Fortel Tempus</u> Pure ☐ Mixture ☒ Solid ☒ Liquid ☐ Gas ☐ EHS ☐ Below Reporting Thresholds ☐ State Specific Information Ships via Trucks ☒ Ships via Tank Trucks ☐ Ships via Rail Car ☐ Ships via Tank Car ☐ Ships via Pipeline ☐ Ships via Barge ☒ Ships via Other shipment mode ☒ Other shipment mode <u>Air</u> Frequency of Shipment <u>1</u>	Explosive ☒ Flammable (gases, aerosols, liquids, or solids) ☒ Oxidizer (liquid, solid or gas) ☒ Self-reactive ☐ Pyrophoric (liquid or solid) ☐ Pyrophoric Gas ☐ Self-heating ☐ Organic peroxide ☐ Corrosive to metal ☐ Gas under pressure (compressed gas) ☐ In contact with water emits flammable gas ☐ Combustible Dust ☐	Acute toxicity (any route of exposure) ☐ Skin corrosion or irritation ☒ Serious eye damage or eye irritation ☒ Respiratory or skin sensitization ☐ Germ cell mutagenicity ☐ Carcinogenicity ☒ Reproductive toxicity ☐ Specific target organ toxicity (single or repeated exposure) ☐ Aspiration hazard ☐ Simple Asphyxiant ☐	<u>80,900</u> Max. Daily Amount <u>29,723</u> Avg. Daily Amount <u>50,000</u> Max. Amount in largest Container <u>365</u> No. of Days On-site		1) Various Mobile Blasting Agent Magazines: Type <u>Box</u> , Pressure <u>Ambient pressure</u> , Temperature <u>Ambient temperature</u>

Attachment A - Application Packet

Tier 2 Online Submission Report
E-Plan - University of Texas at Dallas
Reporting period : From January 1, 2020 to December 31, 2020

Chemical Description	Physical Hazards	Health Hazards	Inventory	Mixture components	Storage locations and codes
Shipment Frequency Period Month Maximum capacity per single vessel 80900 Max Shipment Qty (lbs) 89000 Ave Qty (lbs) 29723 Physical State in Transit Solid Carrier Comments (please provide both the preplanned and usual routes of travel)	Hazard Not Otherwise Classified []	Hazard Not Otherwise Classified []			(Non- Confidential)
CAS Trade Secret [] Chem. Name Pentex Boosters Explosive 1.1d Pure [] Mixture [X] Solid [X] Liquid [] Gas [] EHS [] Below Reporting Thresholds [X] State Specific Information Ships via Trucks [X] Ships via Tank Trucks [] Ships via Rail Car [] Ships via Tank Car [] Ships via Pipeline [] Ships via Barge [X] Ships via Other shipment mode [X] Other shipment mode Air Frequency of Shipment 1 Shipment Frequency Period Month Maximum capacity per single vessel 2781 Max Shipment Qty (lbs) 2781 Ave Qty (lbs) 1161 Physical State in Transit Solid Carrier Comments (please provide both the preplanned and usual routes of travel)	Explosive [X] Flammable (gases, aerosols, liquids, or solids) [X] Oxidizer (liquid, solid or gas) [] Self-reactive [] Pyrophoric (liquid or solid) [] Pyrophoric Gas [] Self-heating [] Organic peroxide [] Corrosive to metal [] Gas under pressure (compressed gas) [] In contact with water emits flammable gas [] Combustible Dust [] Hazard Not Otherwise Classified []	Acute toxicity (any route of exposure) [X] Skin corrosion or irritation [] Serious eye damage or eye irritation [X] Respiratory or skin sensitization [] Germ cell mutagenicity [] Carcinogenicity [] Reproductive toxicity [] Specific target organ toxicity (single or repeated exposure) [X] Aspiration hazard [X] Simple Asphyxiant [] Hazard Not Otherwise Classified []	2,781 Max. Daily Amount 1,161 Avg. Daily Amount 2,781 Max. Amount in largest Container 365 No. of Days On-site		1) Magazine 3: Type <u>Box</u> , Pressure <u>Ambient pressure</u> , Temperature <u>Ambient temperature</u>

Attachment A - Application Packet

Tier 2 Online Submission Report

E-Plan - University of Texas at Dallas

Reporting period : From January 1, 2020 to December 31, 2020

Chemical Description	Physical Hazards	Health Hazards	Inventory	Mixture components	Storage locations and codes
CAS Trade Secret ☐ Chem. Name <u>Powerpro / Xactex Explosives 1.1D</u> Pure ☐ Mixture ☒ Solid ☒ Liquid ☐ Gas ☐ EHS ☐ Below Reporting Thresholds ☒ State Specific Information Ships via Trucks ☒ Ships via Tank Trucks ☐ Ships via Rail Car ☐ Ships via Tank Car ☐ Ships via Pipeline ☐ Ships via Barge ☒ Ships via Other shipment mode ☒ Other shipment mode <u>Air</u> Frequency of Shipment <u>1</u> Shipment Frequency Period <u>Month</u> Maximum capacity per single vessel <u>133</u> Max Shipment Qty (lbs) <u>133</u> Ave Qty (lbs) <u>97</u> Physical State in Transit <u>Solid</u> Carrier Comments (please provide both the preplanned and usual routes of travel)	Explosive ☒ Flammable (gases, aerosols, liquids, or solids) ☐ Oxidizer (liquid, solid or gas) ☐ Self-reactive ☐ Pyrophoric (liquid or solid) ☐ Pyrophoric Gas ☐ Self-heating ☐ Organic peroxide ☐ Corrosive to metal ☐ Gas under pressure (compressed gas) ☐ In contact with water emits flammable gas ☐ Combustible Dust ☐ Hazard Not Otherwise Classified ☐	Acute toxicity (any route of exposure) ☒ Skin corrosion or irritation ☐ Serious eye damage or eye irritation ☒ Respiratory or skin sensitization ☐ Germ cell mutagenicity ☐ Carcinogenicity ☐ Reproductive toxicity ☐ Specific target organ toxicity (single or repeated exposure) ☒ Aspiration hazard ☒ Simple Asphyxiant ☐ Hazard Not Otherwise Classified ☐	<u>133</u> Max. Daily Amount <u>97</u> Avg. Daily Amount <u>133</u> Max. Amount in largest Container <u>150</u> No. of Days On-site		<u>1</u> Magazine 2-Ton Box, Pressure <u>Ambient pressure</u> , Temperature <u>Ambient temperature</u>

State Specific Information

No State specific information

Additional Information

☒ I have attached a document. ☐ I have attached two or more documents.

Attachment A - Application Packet

Tier 2 Online Submission Report
E-Plan - University of Texas at Dallas
Reporting period : From January 1, 2020 to December 31, 2020

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages 1 through 6 , and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

<u>Troy Kinch, Environmental Specialist, North America</u>	<u></u>	<u>2021-01-25 23:10:22 UTC</u>
Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date signed



CERTIFICATE OF LIABILITY INSURANCE

 DATE(MM/DD/YYYY)
03/16/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Insurance Services West, Inc. Denver CO Office 1900 16th Street, suite 1000 Denver CO 80202 USA		CONTACT NAME: PHONE (A/C. No. Ext): (303) 758-7688 FAX (A/C. No.): (303) 758-9458 E-MAIL ADDRESS:																									
INSURED Orica USA Inc 33101 E Quincy Avenue Watkins CO 80137 USA		INSURER(S) AFFORDING COVERAGE <table border="1"> <tr> <td>INSURER A:</td> <td>Zurich American Ins Co</td> <td>NAIC #</td> <td>16535</td> </tr> <tr> <td>INSURER B:</td> <td>Starr Indemnity & Liability Company</td> <td>NAIC #</td> <td>38318</td> </tr> <tr> <td>INSURER C:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> <td></td> <td></td> </tr> </table>		INSURER A:	Zurich American Ins Co	NAIC #	16535	INSURER B:	Starr Indemnity & Liability Company	NAIC #	38318	INSURER C:				INSURER D:				INSURER E:				INSURER F:			
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INSURER C:																											
INSURER D:																											
INSURER E:																											
INSURER F:																											

COVERAGES **CERTIFICATE NUMBER:** 570086374363 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS.

INSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	Limits shown as requested	
A	X	COMMERCIAL GENERAL LIABILITY			GLC379285313	09/30/2020	09/30/2021	EACH OCCURRENCE	\$10,000,000
	X	CLAIMS-MADE		OCCUR				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$100,000
				MED EXP (Any one person)				\$5,000	
				PERSONAL & ADV INJURY				\$10,000,000	
		GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$10,000,000
X	POLICY		PRO-JECT		LOC			PRODUCTS - COMP/OP AGG	\$10,000,000
		OTHER:							
A		AUTOMOBILE LIABILITY			BAP3792838-13	09/30/2020	09/30/2021	COMBINED SINGLE LIMIT (Ea accident)	\$10,000,000
	X	ANY AUTO						BODILY INJURY (Per person)	
		OWNED AUTOS ONLY		SCHEDULED AUTOS				BODILY INJURY (Per accident)	
		HIRED AUTOS ONLY		NON-OWNED AUTOS ONLY				PROPERTY DAMAGE (Per accident)	
X	MCS-90								
		UMBRELLA LIAB						EACH OCCURRENCE	
		EXCESS LIAB						AGGREGATE	
		DED		RETENTION					
B		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			1000003379	09/30/2020	09/30/2021	X PER STATUTE	OTH-ER
		ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH)	Y / N	N / A				E.L. EACH ACCIDENT	\$5,000,000
		If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	\$5,000,000
								E.L. DISEASE-POLICY LIMIT	\$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER
CANCELLATION

City & Borough of Juneau, AK 155 S. Seward St. Juneau AK 99801 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

Holder Identifier :

570086374363

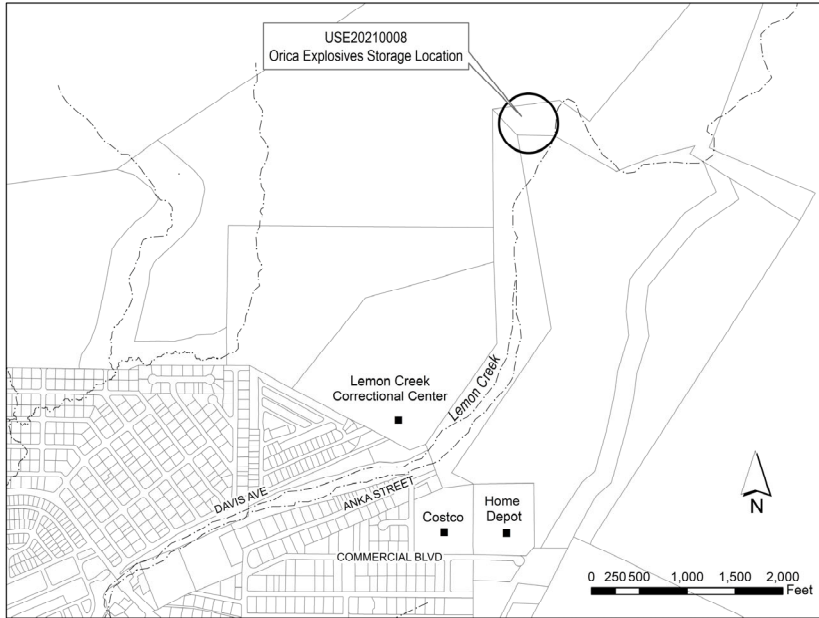
Certificate No :





Invitation to Comment

On a proposal to be heard by the CBJ Planning Commission
Your Community, Your Voice



COMMUNITY DEVELOPMENT

155 S. Seward Street Juneau, Alaska 99801

TO:

An application has been submitted for consideration and public hearing by the Planning Commission for a **Conditional Use Permit renewal for explosives storage in lower Hidden Valley in a Rural Reserve Zone.**

TIMELINE

Staff Report expected to be posted **Monday, December 6, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Nov. 22

Comments received during this period will be sent to the Planner, **Teri Camery**, to be included as an attachment in the staff report.

Nov. 23 — noon, Dec. 10

Comments received during this period will be sent to Commissioners to read in preparation for the hearing.

HEARING DATE & TIME: 7:00 pm, December 14, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/83598204446>. The Webinar ID is: 835 9820 4446. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

December 15

The results of the hearing will be posted online.

Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed November 12, 2021

Case No.: USE2021 0008
Parcel No.: 3M000LEMCRK2
CBJ Parcel Viewer: <http://epv.juneau.org>



Attachemtn B - Abutters Notice & Public
Notice & Public Notice Sign Photo

From: [Kalpakoff, Stacy M.](#)
To: [Teri Camery](#)
Subject: RE: Orica Inc. Hidden Valley Explosives Storage public safety review
Date: Wednesday, September 8, 2021 3:00:22 PM
Attachments: [image002.png](#)
[ATF Federal Explosives Law and Regulations.pdf](#)

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Hi Teri,

Orica USA Inc is actively licensed with ATF as a manufacturer of blasting agents.

There have not been any on site inspections due to this being a fairly new license issued in August 2020. The new license application was conducted via phone due to Covid 19, it is normally done on site. The license will require an on-site inspection when it comes up for renewal on 09/01/2023 for all magazine locations affiliated with this license.

ATF is not aware of any issues with the magazine site or been notified of any theft/loss issues for this license. Orica USA Inc. is aware of its regulatory responsibility for magazine construction, which includes locking requirements for each type of explosive magazine.

I have attached a copy of our regulations for your information.

Feel free to call me if you have any additional questions. I will be on leave through the 21st starting on Saturday. If you have questions during that time feel free to call 206-204-9907 and leave a message, the duty agent will get back to you as soon as possible.

Stacy Kalpakoff
 Bureau of Alcohol, Tobacco, Firearms and Explosives
 Industry Operations Investigator
 Seattle Field Division
 Anchorage Satellite Office
 Cell: 907-297-8210



From: Teri Camery <Teri.Camery@juneau.org>
Sent: Wednesday, September 8, 2021 1:29 PM
To: Kalpakoff, Stacy M. <Stacy.Kalpakoff@atf.gov>
Subject: FW: Orica Inc. Hidden Valley Explosives Storage public safety review

Hello Ms. Kalpakoff,

I understand that Mr. Gleaton is unavailable until September 27. Can you assist with my review request below?

Thank you,
Teri Camery

Teri Camery | Senior Planner, CFM
[Community Development Department](#) | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0753 extension 4129



From: Teri Camery
Sent: Wednesday, September 8, 2021 1:09 PM
To: 'wilton.c.gleaton@usdoj.gov' <wilton.c.gleaton@usdoj.gov>
Subject: FW: Orica Inc. Hidden Valley Explosives Storage public safety review

Hello Mr. Gleaton, it looks like I messed up you email address so I am re-sending this.

Thank you,
Teri Camery

Teri Camery | Senior Planner, CFM

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 extension 4129



From: Teri Camery

Sent: Wednesday, September 8, 2021 12:56 PM

To: David Campbell <DSCampbell@juneaupolice.com>; 'wilton.c.gleaton@usdog.gov' <wilton.c.gleaton@usdog.gov>

Subject: Orica Inc. Hidden Valley Explosives Storage public safety review

Hello Chief Campbell and Mr. Gleaton,

In April 2020 you both kindly assisted me with a review of an explosives storage site at the SECON Hidden Valley quarry site. I am now reviewing a second explosives storage site in Hidden Valley owned by Orica Inc. and again request your comments. This explosives storage site was first approved in July 2009 for a 10 year period and is now expired. I have attached the Conditional Use application and also the Notice of Decision for the previously issued Conditional Use Permit.

I have two questions:

1. Do either JPD or ATF have any record of security violations on the site since the last Conditional Use Permit was approved on July 14,

2009?

2. Are the current security measures at the site adequate, and if not, what are your recommendations?

Please provide comments by Friday September 24 if possible. If you need more time just let me know.

Thanks very much for your assistance and please let me know if you have questions.

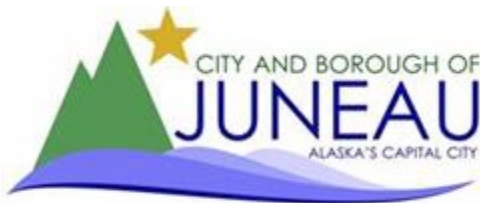
Kind regards,
Teri Camery

Teri Camery | Senior Planner, CFM

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 extension 4129



From: [David Campbell](#)
To: [Teri Camery](#)
Subject: RE: Orica Inc. Hidden Valley Explosives Storage public safety review
Date: Thursday, September 23, 2021 4:10:04 PM

Hi Teri,

The reports were run and we didn't have any cases in the area that were in relation to the conditional use permit. We had a few cases of suspicious activity and trespass, but those don't appear to be related to the permit.

I also had Lt Weske review the security requirements as outlined in the document. Lt Weske is part of our EOD Team. He said the security measures as outline appear adequate.

Hope this helps,

David

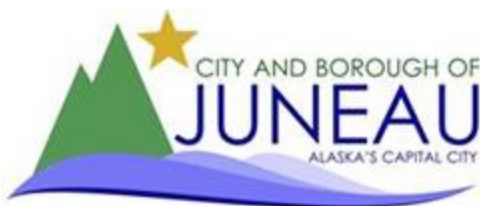
From: Teri Camery
Sent: Thursday, September 16, 2021 12:11 PM
To: David Campbell <DSCampbell@juneaupolice.com>
Subject: RE: Orica Inc. Hidden Valley Explosives Storage public safety review

Great, thank you very much and I'm sorry you've been sick. I've attached your comments from SECON's explosive review last year.

Thanks again for your time and I hope you're feeling better.

Teri

Teri Camery | Senior Planner, CFM
[Community Development Department](#) | City & Borough of Juneau, AK
Location: 230 S. Franklin Street, 4th Floor Marine View Building
Office: 907.586.0753 extension 4129



From: David Campbell <DESCampbell@juneaupolice.com>
Sent: Thursday, September 16, 2021 12:03 PM
To: Teri Camery <Teri.Camery@juneau.org>
Subject: RE: Orica Inc. Hidden Valley Explosives Storage public safety review

Hi Teri,

Sorry for the late response, I was out sick most of last week. I'll check on our calls for service and get input from our bomb team and get back to you.

Thanks,

David

From: Teri Camery
Sent: Wednesday, September 8, 2021 12:56 PM
To: David Campbell <DESCampbell@juneaupolice.com>; 'wilton.c.gleaton@usdog.gov' <wilton.c.gleaton@usdog.gov>
Subject: Orica Inc. Hidden Valley Explosives Storage public safety review

Hello Chief Campbell and Mr. Gleaton,

In April 2020 you both kindly assisted me with a review of an explosives storage site at the SECON Hidden Valley quarry site. I am now reviewing a second explosives storage site in Hidden Valley owned by Orica Inc. and again request your comments. This explosives storage site was first approved in July 2009 for a 10 year period and is now expired. I have attached the Conditional Use application and also the Notice of Decision for the previously issued Conditional Use Permit.

I have two questions:

- 1) Do either JPD or ATF have any record of security violations on the site since the last Conditional Use Permit was approved on July 14, 2009?
- 2) Are the current security measures at the site adequate, and if not,

what are your recommendations?

Please provide comments by Friday September 24 if possible. If you need more time just let me know.

Thanks very much for your assistance and please let me know if you have questions.

Kind regards,
Teri Camery

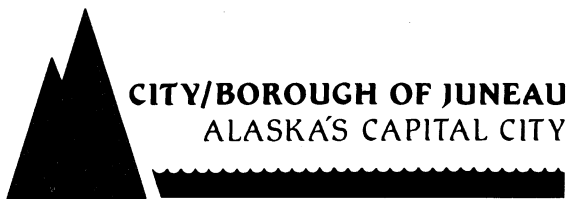
Teri Camery | Senior Planner, CFM

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 extension 4129





**PLANNING COMMISSION
NOTICE OF DECISION**

Date: July 15, 2009

File No.: USE2009-00018

Alaska Pacific Powder Company
8241 Diamond Hook, #4
Anchorage, AK 99507

Application For: A Conditional Use permit for the continuation of explosive storage at the lower powder magazine in Hidden Valley.

Legal Description: Hidden Valley Tract A

Parcel Code No.: 3-M00-0-LEM-CRK-2

Hearing Date: July 14, 2009

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum, dated June 2, 2009 and as modified by the attached memorandum dated July 2, 2009, and approved the Conditional Use permit for the continuation of explosive storage at the lower powder magazine in Hidden Valley to be conducted as described in the project description and drawings submitted with the application and with the following conditions:

1. The permit shall be effective for ten years.
2. Within 30-days of the Alaska Department of Labor's annual review, the applicant shall submit to the Community Development Department copies of this information for review to verify that aspects of the proposed operation have not changed.
3. The applicant shall use Best Management Practices to minimize sedimentation into Lemon Creek.
4. The applicant shall install approved ATF kingpins, locks and steel hoods on all storage containers/magazines regardless of ownership, mobility status, and the type of container.
5. **ADVISORY:** The applicant shall comply and operate in accordance with all applicable state and federal laws for the transportation, handling, security and storage of explosive material.

Attachments: June 2, 2009 and July 2, 2009, memorandum from Daniel J. Sexton, Community Development, to the CBJ Planning Commission regarding USE2009-00018.

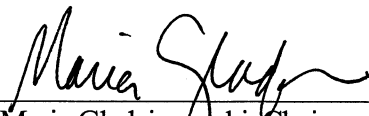
This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ §01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ §01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ §49.20.120).

Effective Date: The permit is effective upon approval by the Commission, July 14, 2009

Expiration Date: The permit will expire ten-years from the effective date, July 14, 2019

Alaska Pacific Powder Company
 File No.: USE2009-00018
 July 15, 2009
 Page 2 of 2

Project Planner:  Daniel J. Sexton, Planner Community Development Department	 Maria Gladziszewski, Chair Planning Commission
 Filed With City Clerk	7/15/09 Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: May 13, 2020
Case No.: USE2020 0006

SECON
PO Box 32159
Juneau, AK 99801

Proposal: A Conditional Use Permit to continue explosives storage in Hidden Valley, upper Lemon Creek, in association with an approved quarry

Property Address: N/A

Legal Description: Hidden Valley Tract A

Parcel Code No.: 3M000LEMCRK2

Hearing Date: May 12, 2020

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated May 4, 2020 and approved the Conditional Use Permit to continue explosives storage in Hidden Valley, upper Lemon Creek, in association with an approved quarry, to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. The permit shall be effective for ten years.
2. The applicant shall maintain approved ATF kingpins, locks and steel hoods on all storage containers/magazines regardless of ownership, mobility status, and the type of container.

Attachments: May 4, 2020 memorandum from Teri Camery, Community Development, to the CBJ Planning Commission regarding USE2020 0006.

SECON

Case No.: USE2020 0006

May 13, 2020

Page 2 of 2

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

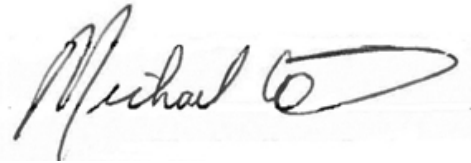
Effective Date: The permit is effective upon approval by the Commission, May 12, 2020

Expiration Date: The permit will expire 18 months after the effective date, or November 12, 2021 if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.

Project Planner:



Teri Camery, Senior Planner
Community Development Department



Michael LeVine, Chair
Planning Commission



Filed With Municipal Clerk

5/14/2020

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: December 17, 2021
Case No.: USE2021 0008

Orica USA Inc.
Attn: Melody McAllister
7160 N. Tongass Highway
Ketchikan, AK 99901

Proposal: A Conditional Use Permit renewal for explosives storage in lower Hidden Valley

Property Address: Hidden Valley

Legal Description: Hidden Valley Tract A

Parcel Code No.: 3M000LEMCRK2

Hearing Date: December 14, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 3, 2021, and approved the Conditional Use Permit renewal for explosives storage in lower Hidden Valley to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. The permit shall be effective for ten years.
2. The applicant shall maintain approved ATF kingpins, locks, and steel hoods on all storage containers/magazines regardless of ownership, mobility, and type of container.

Attachments: December 3, 2021, memorandum from Teri Camery, Community Development, to the CBJ Planning Commission regarding USE2021 0008.

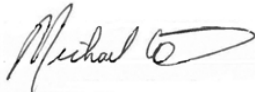
This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

Orica USA Inc.
Case No.: USE2021 0008
December 17, 2021
Page 2 of 2

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Effective Date: The permit is effective upon approval by the Commission, December 14, 2021.

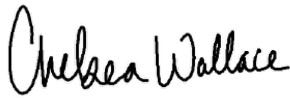
Expiration Date: The permit shall expire in 10 years, or December 14, 2031. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael LeVine, Chair
Planning Commission

December 22, 2021

Date



Filed With City Clerk

December 22, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

WCF2021 0010: Modification to an approved facility - APPROVED

AGENDA ITEM:

Case No.: WCF2021 0010

Applicant: Vertical Bridge, LLC

Location: 10020 Crazy Horse Drive

Proposal: A New Wireless Communications Tower

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Wireless Communication Facility Special Use Permit. The permit would allow the development of a self-supporting Wireless Communications Facility Tower.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for WCF2021 0010 - Part 1	12/7/2021	Staff Report
☐ Staff Report for WCF2021 0010 - Part 2	12/7/2021	Staff Report
☐ Staff Report for WCF2021 0010 - Part 3	12/7/2021	Staff Report
☐ Staff Report for WCF2021 0010 - Part 4	12/7/2021	Staff Report
☐ Presentation for WCF2021 0010	12/14/2021	Presentation
☐ Notice of Decision for WCF2021 0010	12/22/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
SPECIAL USE PERMIT WCF2021 0010
HEARING DATE: OCTOBER 12, 2021

(907) 586-0715
 CDD_Admin@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

DATE: December 7, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Joseph Meyers, Planner 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a modification to an approved Wireless Communication Facility Special Use Permit from a 150-foot monopole tower to a 150-foot self-supporting tower.

STAFF RECOMMENDATION: Approval

KEY CONSIDERATIONS FOR REVIEW:

- This facility was previously approved through WCF2019 0010
- This is a request for change of tower type only
- The facility will otherwise remain as approved

GENERAL INFORMATION	
Property Owner	City & Borough of Juneau
Applicant	Vertical Bridge, LLC
Property Address	10020 Crazy Horse Drive
Legal Description	USS 1041
Parcel Number	4B1701100120
Zoning	Industrial
Land Use Designation	Institutional Public Use
Lot Size	31.97 acres (1,392,613 square feet)
Water/Sewer	CBJ
Access	Crazy Horse Drive
Existing Land Use	Commercial Misc. (SE Alaska Food Bank)
Associated Applications	WCF2019 0010

ALTERNATIVE ACTIONS:

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-6 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - o 49.65 Article IX
 - o 49.80

The Commission shall hear and decide the case per 49.65.970(a) *As of the effective date of this article, 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, 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.*

49.65.900 – Wireless Communication Facilities Special Use Permit 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 Spectrum Act (P.L. 112-96).*

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (I)	Commercial Misc.
South (ROW)	Crazy Horse Drive (Not fully constructed)
East (I)	Industrial
West (ROW)	Unnamed Right-of-Way

SITE FEATURES	
Anadromous	Pederson Hill Creek
Flood Zone	Zone AE
Hazard	None
Hillside	None
Wetlands	MW4 (Grade B wetland)
Parking District	None
Historic District	None
Overlay Districts	N/A

BACKGROUND INFORMATION

Project Description – The applicant is seeking to modify WCF2019 0010, a Special Use Permit for a 150 foot unlit monopole tower, to a 150-foot self-supporting tower with a lightning rod. The tower will occupy 5,625 square feet of land leased from CBJ. The tower will be unlit and will support multiple wireless carriers.

Background – After the initial approval of the Special Use Permit, the applicant discovered that the soil composition on site would be better suited to a three-legged, self-supporting tower in terms of structural integrity and cost.

The table below summarizes relevant history for the subject parcel and proposed development.

Item	Summary
WCF2019 0010	Approved construction of a 150-foot monopole tower

SITE PLAN



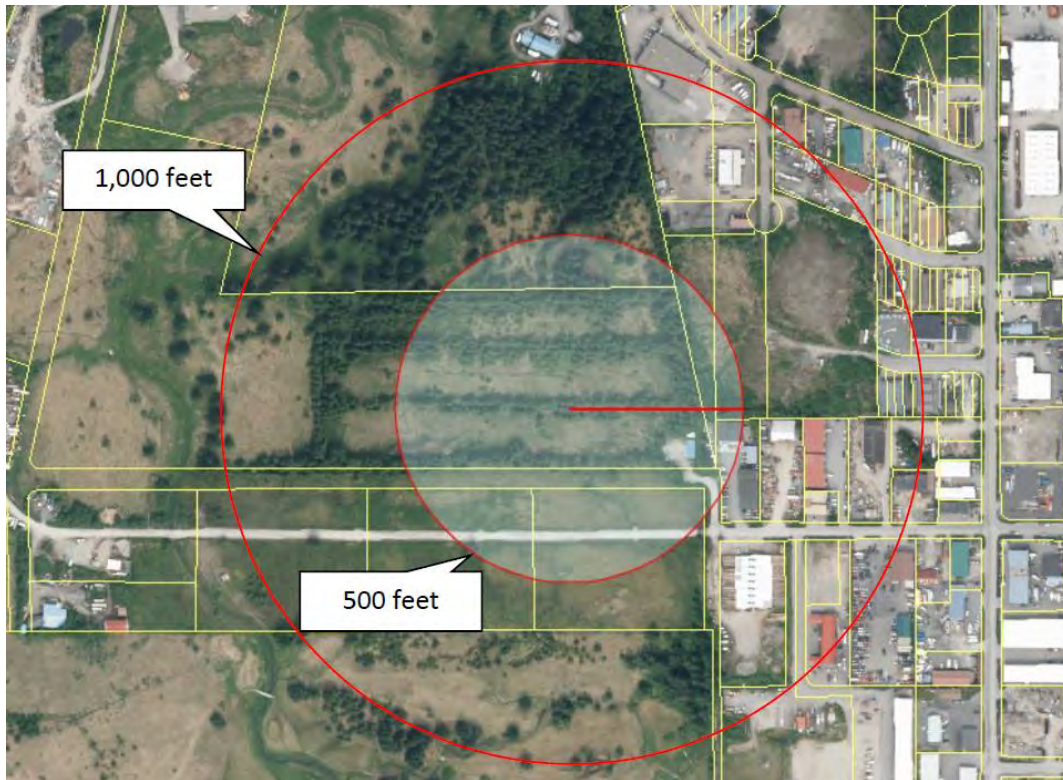
ANALYSIS

Project Site – The applicant proposes the tower to be on a 31.97-acre parcel located in an Industrial zoning district. The parcel currently accommodates the Southeast Alaska Food Bank. The tower location is approximately 28 feet north and 190 feet west of the food bank. The applicant anticipates additional grading and fill to prepare the building site and access to the site.

December 7, 2021
WCF2021 0010
Page 4 of 14

The Juneau Wetlands Management Plan identifies Class B wetlands at the project location. Per CBJ 49.70.1060(1), a CBJ wetlands permit is not required for this category of wetlands. However, the Army Corps of Engineers requires a wetlands permit for construction. The applicant sought and received this permit (Attachment A).

There are three towers within a 1,000-foot vicinity of the proposed tower's location. Site 16 and Site 17 are located along Bentwood Plaza, and owned by Alascom and AT&T respectively. The former is a 158-foot lattice tower, and the latter is a 60-foot monopole. Site 18 hosts a 120-foot Federal Aviation Administration (FAA) tower west of the applicant's proposed site along Crazy Horse Drive. The applicant reasons that collocation onto private towers will not be cost effective or support desired performance. (Attachment A)



Condition: None.

Project Design –

- **Setbacks:** The modified tower will have a breakpoint at 100 feet of elevation. CBJ 49.65.930(f)(2) requires a tower with breakpoints to have a minimum setback distance of 110 percent of the distance from the top of the structure to the breakpoint level of the structure or minimum yard setback requirements, whichever is greater. The height of the tower is 150 feet, with a breakpoint of 100 feet. The minimum setback is 55 feet from the nearest property line. The tower location is more than 300 feet from the north, the east, and the west lot lines. The distance from the south property line is 165 feet.
- **Structural assessment:** The structural assessment meets CBJ 49.65.930(j). An Alaska-licensed engineer conducted the structural assessment of both the approved tower and foundation and the proposed tower and foundation. The previous tower was engineered and approved, however, the applicant discovered that the geology of the site is unsuitable for a monopole and now a self-supporting tower is proposed.

- Visual Impact Assessment:
 - Zone of Visibility Map: The application includes a zone of visibility map that meets the requirements of CBJ 49.65.970(c)(2)(B)(i). The proposed site for the tower does not obstruct viewsheds identified in the 2013 Comprehensive Plan (Attachment A).
 - Siting for Least Adverse Impact: The development meets the requirements of CBJ 49.65.930(2)(B)(i) and minimizes adverse effects on the surrounding landscape, as it is located more than a quarter mile from residences. The tower consists of a galvanized steel, which appears grey. This is consistent with the local industrial streetscape (Attachment A). Staff recommends as a condition of approval that the monopole is matte grey in color.
 - Simulated Renderings of Wireless Communication Facility (WCF): The applicant has included photo-simulations of the tower viewed from multiple vantage points used in the zone of visibility study (Attachment A).
 - Screening of Base: Existing trees and other vegetation provide screening at the base of the tower. While grading and backfill will be performed at the tower location, the surrounding dense vegetation will remain largely intact (Attachment A).
 - Balloon Test: The balloon test meets the requirements of CBJ 49.65.930(2)(D). The study shows six vantage points: Brandy Lane and Crazy Horse Drive, Industrial Boulevard and Bentwood Plaza, Glacier Highway and Jensine Street, 2331 Engineers Cutoff Road, and the Mendenhall Golf Course Parking Lot. Photos of the balloon from these positions show that the tower will have minimal visual impact (Attachment A).
- Propagation Study/Radio Frequency Emissions Compliance Report: The submitted statement confirming that radio frequency emissions will comply with FCC standards is consistent with the requirements of CBJ 49.65.960(d) (Attachment A). The propagation study shows increased service coverage (Attachment A).

Condition: None.

Traffic – Staff does not anticipate the proposed use to add traffic to the existing site, excluding the limited traffic during construction and periodic maintenance.

Condition: None.

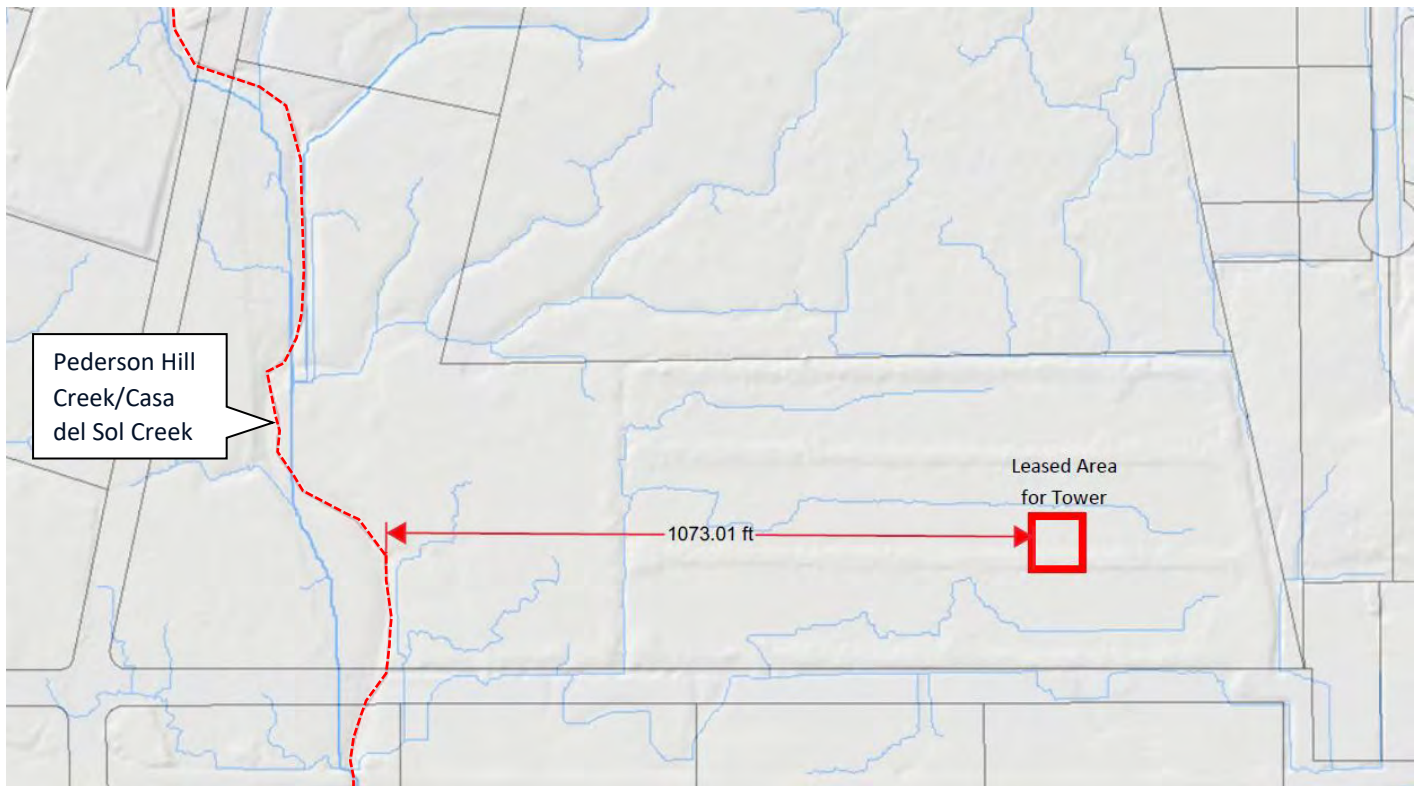
Parking and Circulation – The site has space for parking and is accessed from Crazy Horse Drive. Title 49 does not set parking requirements for Wireless Communications Facilities.

Condition: None.

Vegetative Cover and Landscaping – Industrial zoning requires five percent vegetative cover, or 69,631 square feet. The fenced area is proposed to be 75 feet by 75 feet, or 5,625 square feet.

Condition: None.

Habitat – Pederson Hill Creek/Casa del Sol Creek passes through the same lot as the proposed facility. The creek is more than 1,073 feet from the proposed facility at the nearest point and exceeds all setback requirements for anadromous waterbodies.



Condition: None.

Drainage – Drainage will be considered in the building permit review process.

Condition: None.

Hazard Zones – The proposed tower is not within a mapped hazard zone.

Condition: None.

Public Health or Safety – No information indicates that there are any public health or safety impacts from the proposed project. The applicant provided a Radio Frequency Emissions Compliance Report signed by a qualified professional, whose credentials are included in Attachment A.

Radio Frequency Safety: This wireless facility complies with the Telecommunications Act of 1996, and enforcement is the purview of the FCC. In 2019, the FCC reviewed exposure standards in response to 5G technology. The FCC determined no changes to standards were warranted (FCC press release, “Chairman Pai Proposes to Maintain Current Radiofrequency Exposure Safety Standards,” August 8, 2019).

Condition: None.

Property Value or Neighborhood Harmony – The proposed tower will not generate noise, traffic, or visual impact that is inconsistent with existing towers or neighboring residential uses.

Condition: None.

SPECIFIED USE REVIEW - CBJ 49.65 ARTICLE IX – WIRELESS COMMUNICATION FACILITIES

Tower Location –

Topic and Code Reference	Summary	Complies	Recommended Condition
49.65.920 and 49.65.960(b) Location preference for new WCFs	The location was picked because it is in an Industrial zoned area, has good road access, existing power and copper/fiber cable connections, is heavily wooded to provide a natural visual barrier for the tower, and has a more affordable lease rate than other properties that were analyzed, making the site economically viable.	☒ Yes ☐ No ☐ N/A	
49.65.920(b) Collocation on existing WCF	There are three additional towers within 1,000 feet of the proposed tower. However, one belongs to the FAA, which prohibits private carrier collocation, and the applicant reasons that collocation on private towers in the area is not cost effective and does not support the desired performance. Some factors include lack of necessary height, and lack of existing ground space for new equipment.	☒ Yes ☐ No ☐ N/A	
49.65.930(g) and 49.65.970(f)(3)(C) Natural Areas & View sheds	No natural areas or viewsheds, as defined in the 2013 Comprehensive plan, are impacted.	☒ Yes ☐ No ☐ N/A	
49.65.970(f)(3)(A) State or local wildlife refuges	The tower is not proposed in a wildlife refuge.	☒ Yes ☐ No ☐ N/A	
49.65.970(f)(3)(B) Public parks	The WCF is not in a public park, but it is on CBJ-owned land. Much of the lot is forested and will provide a natural visual buffer to surrounding properties.	☒ Yes ☐ No ☐ N/A	
49.65.970(f)(3)(D) Mendenhall Glacier	The proposed tower will not impact the view of the Mendenhall Glacier.	☒ Yes ☐ No	

Topic and Code Reference	Summary	Complies	Recommended Condition
		☐ N/A	

Wireless Communication Facility Design Criteria –

Topic and Code Reference	Summary	Complies	Recommended Condition
49.65.930(a) Concealed and non-concealed antenna	Applicant will not have concealed antennas due to the existing visual screening and industrial nature of the project site.	☒ Yes ☐ No ☐ N/A	
49.65.930(b) Site security	The facility will be enclosed by a 60 foot by 60 foot security fence with a locked security gate.	☒ Yes ☐ No ☐ N/A	
49.65.930(c) Signage	Appropriate and required signage will be installed.	☒ Yes ☐ No ☐ N/A	
49.65.930(d) and 49.65.970(c)(2)(B)(vi) Lighting	An FAA Determination has specified that no tower lighting is required.	☒ Yes ☐ No ☐ N/A	
49.65.930(e)(1) and 49.65.960(n) Antenna arrays required	The tower is 150 feet in height and will accommodate five (5) antenna arrays.	☒ Yes ☐ No ☐ N/A	
49.65.930(e)(2) Utilities	Utilities are provided to the site.	☒ Yes ☐ No ☐ N/A	
49.65.930(e)(3) WCF designed to blend with surrounding features	The WCF is in the Industrial zoning district and will have natural vegetative screening obscuring the facility.	☒ Yes ☐ No ☐ N/A	
49.65.930(e)(4) Guy Wires Prohibited	Guy wires are not proposed.	☒ Yes ☐ No ☐ N/A	
49.65.930(f) Setbacks	The tower has a breakpoint at 100 feet, on a 150 foot tower. The required setback is 55 feet.	☒ Yes ☐ No ☐ N/A	
49.65.930(h) Compliance with the Master Plan	As discussed below, with recommended conditions, the proposed WCF is in general conformity with the Wireless Telecommunications Master Plan.	☒ Yes ☐ No ☐ N/A	

Topic and Code Reference	Summary	Complies	Recommended Condition
49.65.930(i) Visibility	The WCF will have minimal visual impact; a balloon test was completed from six vantage points: Brandy Lane and Crazy Horse Drive, Industrial Boulevard and Bentwood Plaza, Glacier Highway and Jensine Street, 2331 Engineers Cutoff Road, and the Mendenhall Golf Course Parking lot.	☒ Yes ☐ No ☐ N/A	
49.65.930(j) and 49.65.960(r) Structural Assessment	John W. Kelly, III, P.E. conducted the structural review of the self-supporting tower. Sandor Manyoky, P.E. conducted the foundation review and geotechnical report.	☒ Yes ☐ No ☐ N/A	

Special Use Permit Submittal Requirements –

Topic and Code Reference	Summary	Complies	Recommended Condition
49.65.960(c) and 49.65.970(c)(2)(A) Design Criteria Narrative	Application packet, page 52.	☒ Yes ☐ No ☐ N/A	
49.65.960(d) Statement of Compliance with FCC Standards	Application packet, pages 13 and 14.	☒ Yes ☐ No ☐ N/A	
49.65.960(p) Certification of Compliance with all Applicable Laws	Application packet, page 27 & 301.	☒ Yes ☐ No ☐ N/A	
49.65.960(q) Statement of limits on collocation	Application packet, page 276.	☒ Yes ☐ No ☐ N/A	
49.65.960(s) Certification of construction standards	Application packet, page 301 & 302.	☒ Yes ☐ No ☐ N/A	

49.65.960(t) Compliance with FAA Regulations	Application documents, pages 76 and 77.	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(C) Minimum Height Required	Application packet, page 300	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(E) Propagation Study	Application packet, Pages 138- 154.	☒ Yes ☐ No ☐ N/A	

Visual Impact Assessment –

Topic and Code Reference	Summary	Complies	Recommended Condition
49.65.970(c)(2)(B)(i) Zone of Visibility Map	Application packet, page 97.	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(B)(ii) Siting for Least Adverse Impact	Application packet, pages 96- 105	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(B)(iii) Before and after depiction of site	The site has effective view screening as demonstrated by the balloon test analysis.	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(B)(iv) Visual Impact of Base	Application packet, pages 96 to 105.	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(B)(v) Screening of Base	Natural vegetative screening	☒ Yes ☐ No ☐ N/A	
49.65.970(c)(2)(D) Balloon Test	Application packet, pages 96- 105.	☒ Yes ☐ No ☐ N/A	

AGENCY REVIEW

CDD conducted an agency review comment period. Agency review comments can be found in Attachment C.

Agency	Summary
Assessor	The proposed communications tower is not likely to have a negative impact on neighboring property values.
Juneau International Airport	JIA noted that the applicant will need to file FAA 7460. This form must be filed at least 45 days prior to the start date of proposed construction.
Building Department	No concerns.
CCFR	No concerns.

Agency	Summary
Lands & Resources	No concerns.

PUBLIC COMMENTS

CDD conducted a public comment period between September 15, 2021 and December 14, 2021. Public notice was mailed to property owners within 1,500 feet of the subject parcel. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. Public comments submitted at time of writing this staff report can be found in Attachment D.

Name	Summary
Tom Dawson	Health and safety concerns

CONFORMITY WITH ADOPTED PLANS

The proposed development is in general conformity with the 2013 Comprehensive Plan and the 2014 Wireless Telecommunications Master Plan.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	11		Land Use Designation	Complies with the Institutional and Public Use Designation of the Comprehensive Plan Land Use Maps
	12		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.
2014 Wireless Telecommunications Master Plan	1	6	Policy 1	To ensure the protection of the health and safety of the public with the development of WCFs.
	1	6	Policy 2	To protect aviation safety by coordinating with federal aviation administration (FAA) with the development of WCFs.
	1	7	Policy 3	To protect the natural environment with the development of WCFs.
	1	8	Policy 5	Promote land use efficiency with the collocation of wireless communication facilities to existing structures.
	1	8	Policy 6	To preserve the scenic viewsheds and corridors listed in the 2013 comprehensive plan with the development of WCFs.

FINDINGS

Wireless Communication Facility Special Use Permit Approval Criteria – CBJ 49.65.970(f), Planning Commission Determination, states that the Planning Commission is authorized to review, analyze, evaluate and make decisions with respect to reviewing Special Use Permits for WCFs. Per CBJ 49.65.970(d) and (f), Review of Director's and Commission's Determinations, the Director makes the following findings on the proposed development:

1. *Is the application for the requested Special Use Permit complete?*

Analysis: No additional analysis required.

Finding: Yes. The application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.65.900.

2. *Was Public Notice of the Planning Commission consideration in compliance with CBJ 49.65.970(e)?*

Analysis: Notice of the proposed WCF was provided in the Juneau Empire 10 days prior to the scheduled hearing; three (3) public notice signs were posted two (2) weeks prior to the scheduled hearing; and postcards were mailed to property owners within 1500 feet of the proposed WCF and to neighborhood associations listed with the Municipal Clerk.

Finding: Yes. Public notice of the proposed WCF was provided in accordance with CBJ 49.65.970(e).

3. *Is the proposed project consistent with safety and safety-related codes and requirements?*

Analysis: No additional analysis required.

Finding: Yes. The proposed WCF does comply with safety and safety-related codes and requirements and meets FCC regulations for facilities of this type.

4. *Is the proposed use appropriate according to the purpose of the zoning district, and other specific zoning, overlay, or land use designation?*

Analysis: No additional analysis required.

Finding: Yes. The proposed development is appropriate according to the Table of Permissible Uses and the Comprehensive Plan Land Use Designation.

5. *Is another approved WCF or WCF application that is available to the applicant present within the geographic search area?*

Analysis: No additional analysis required.

Finding: No. The applicant has demonstrated that another WCF is not available in the geographic area.

6. Is the proposed site on, or eligible to be on, the National Register of Historic Places?

Analysis: No additional analysis required.

Findings: No. The proposed site is not on, or eligible to be on, the National Register of Historic Places.

7. Is the proposed site in an area commonly valued by the community as a whole for its natural or scenic properties?

Analysis: No additional analysis required.

Findings: No. The area is not valued by the community for natural or scenic properties. Additionally, the proposed site is not listed in the 2013 Comprehensive Plan as a scenic corridor.

8. For a proposed freestanding tower, did the applicant 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 is technically infeasible or commercially impracticable?

Analysis: No additional analysis required.

Findings: Yes. The applicant has demonstrated that no existing tower can accommodate the applicants proposed use.

9. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Analysis: No additional analysis required.

Findings: Yes. The proposed WCF, with recommended conditions, will be sited and constructed in general conformity with the 2013 Comprehensive Plan and the 2014 Wireless Telecommunications Master Plan.

10. Is the proposed development located on State or local wildlife refuges?

Analysis: No additional analysis required.

Findings: No. The proposed WCF is not located on State or local wildlife refuges.

11. Is the proposed development 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?

Analysis: No additional analysis required.

Findings: No. The proposed WCF is not located in an area designated as a public park.

12. Is the development in any area designated as a scenic corridor/viewshed identified in the Comprehensive Plan of the City and Borough of Juneau?

Analysis: No additional analysis required.

Findings: No. The proposed WCF is not in any area designated as a scenic corridor or viewshed identified in the Comprehensive Plan of the City and Borough of Juneau

13. Is the development in any area that fully or partially obstructs the view of the Mendenhall Glacier from the waterfront roadway from the North Douglas boat launch facility to False Outer Point?

Analysis: No additional analysis required.

Findings: No. The proposed WCF will not obstruct views of the Mendenhall Glacier.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Wireless Communication Facility Special Use Permit. The permit would allow the development of a self-supporting Wireless Communications Facility Tower.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Abutters Notice and Public Notice Sign Photo
Attachment C	Agency Comments
Attachment D	Public Comments

BUILDING PERMIT APPLICATION

Page 1 of 2

(Including Water, Sewer, Driveway, Grading, Mechanical, Plumbing, Electrical, and Building Safety Inspections)

(APPLICANT PLEASE FILL IN TOP PORTION OF PAGE AFTER FIRST LINE)

Project No:	Project Name: (City Staff to assign name)	Case No:	Date Received:
CONTRACTOR/OWNER-BUILDER Vertical Bridge, LLC Mailing Address: 750 Park of Commerce Dr, Boca Raton, FL		☐ Contact by E-Mail Contact Person: Gary R. Brekke FAX No.:	Phone No.: 907 331-8311 License Number:
ARCHITECT/ENGINEER Mike de Boer - Vertical Bridge Mailing Address: 750 Park of Commerce Dr, Boca Raton, FL		☒ Contact by E-Mail <u>mike@verticalbridge.com</u> Contact Person: Mike FAX No.:	Phone No.: License Number:
PERMIT CLASS ☒ NEW ☐ ADDITION ☐ REPAIR/REMOD		☐ ELECTRICAL ☐ PLUMBING ☐ MECHANICAL ☐ WOODSTOVE ☐ WATER ☐ SEWER ☐ DEMOLITION ☐ GRADING ☐ DRIVEWAY ☐ BUILDING SAFETY ☒ OTHER <u>cell site tower</u>	
BUILDING TYPE ☐ Residential ☒ Commercial ☐ Other			
EXISTING DWELLING UNITS ON PROPERTY <u>N</u> NEW DWELLING UNITS THIS PROJECT <u>N</u> TOTAL EXISTING BUILDINGS ON PROPERTY			
DESCRIPTION OF WORK: Construct new cell tower and site space for cellular carrier equipment with access driveway. Entails clearing, excavating and backfill activities. This proposed project is on CBJ owned property where the Food Bank is located in Juncos. There is an existing FAA owned tower on the same property.		VALUE: <u>TYPE</u> (ie: house, garage, deck, unfinished) New: _____ Sq. Ft. New: _____ Sq. Ft. New: _____ Sq. Ft. New: _____ Sq. Ft. Cost of Remodeling: \$ _____ (if any)	
I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any other federal, state or local law regulating construction or the performance of construction.			
Signature of Owner, Contractor or Authorized Agent: <u>X [Signature]</u>		Date: <u>X 7/23/21</u>	

STAFF AREA

(OFFICE USE ONLY BELOW THIS LINE)

BUILDINGS

Occupancy Class _____

Type of Construction _____

FCC Code _____

Permit Classification _____

Occupancy	Square Feet	@ Rate	= Valuation

Bedrooms _____

Shower _____

LAND USE

PARKING _____

FLOOD ELEV. _____

FIRM ZONE _____

FIRM MAP _____

LAND USE PERMITS:

Case Number _____

Case Number _____

Case Number _____

Case Number _____

ENGINEERING/PUBLIC WORKS

CITY WATER Units: _____

Case No: _____

Service - Size _____

Fire Line - Size _____

Metered _____

Extended Pay # _____

CITY SEWER Units: _____

Case No: _____

BOND Case No: _____

OTHER Case No: _____

ADEC On-site Water
No _____ Date _____

ADEC On-site Sewer
No _____ Date _____

PLAN REVIEW APPROVALS

Initials Date

Fire _____

Zoning _____

Engineering _____

Water _____

Sewer _____

Architectural _____

Structural _____

Plumbing _____

Mechanical _____

Electrical _____

Access _____

Special Inspection Form _____

APPROVED FOR ISSUANCE

Signature _____

Date _____

BUILDING PERMIT FEES

PLAN REVIEW FEES

Building Plan Review \$ _____

Grading Plan Review \$ _____

Total Review Fees \$ _____

PLAN REVIEW PAYMENT

Date _____ Receipt No. _____ CK _____

PERMIT ISSUANCE FEES

Adjusted Plan Review Fee \$ _____

Fast Track Fee \$ _____

Early Start Fee \$ _____

Building Permit Fee \$ _____

Water Assessment Fee \$ _____

Water Inspection Fee \$ _____

Sewer Assessment Fee \$ _____

Sewer Inspection Fee \$ _____

Grading Permit Fee \$ _____

Driveway Permit Fee \$ _____

Bond for \$ _____

Other \$ _____

Total Issuance Fees \$ _____

PERMIT ISSUANCE PAYMENTS

Date _____ Rcpt _____ Ck _____ \$ _____

Date _____ Rcpt _____ Ck _____ \$ _____

Date _____ Rcpt _____ Ck _____ \$ _____

Date _____ Rcpt _____ Ck _____ \$ _____

Water Connection Permits

I hereby acknowledge receipt of a _____ inch meter yoke.

X _____

Date: _____

CONDITIONS AND HOLDS ON PERMIT:

Revised 01/01/01

Continued on Reverse Side

NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM

Continued on Reverse Side



WIRELESS COMMUNICATION FACILITY APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant	PROJECT SUMMARY: Vertical Bridge proposes to construct a 150' free-standing lattice tower on Industrially zoned property owned by the CBJ. This tower will be utilized primarily for cellular communications. The tower location is on the same parcel as the Juneau Food Bank. There is also an existing 140' steel monopole tower owned by the FAA nearby on the same parcel. Construction will require development of an access driveway beyond the Food Bank to the site location and then a gravel pad to be installed per Wetlands Review specifications for the new tower and cellular ground equipment, power and telco utilities.
	ZONING DISTRICT: Industrial
	PROPOSED WCF TYPE ☐ Colocation ☒ New Tower ☐ Attached WCF ☐ Eligible Facility Request
	LIGHTING Proposed ☐ YES (this application requires all items under 49.65.950 and 49.65.970, it will go through the Special Use Permit process) ☒ NO Existing ☐ YES ☒ NO
	STRUCTURE HEIGHT (in feet) 150'
	Does the requested facility meet the criteria listed in Table 1 (CBJ 49.65.950(a))? ☒ Yes Does the facility qualify as a substantial Change per 49.65.950(b)(1-6)? ☐ Yes – Submit items under 49.65.960 with your application ☒ No – this application meets Table 1 (49.65.950(a)) with no substantial changes ☐ No – Submit items under 49.65.950 and 49.65.970. Proceed with the Special Use Permit process.
ALL REQUIRED MATERIALS ATTACHED ☒ Complete submittal checklist	

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

REQUIRED PERMIT				
Building Permit		Project falls under Table 1 (49.65.950)		
Special Use Permit		Project <i>does not</i> fall under Table 1		
REVIEW APPROVALS				
		Initials	Date	
	Building _____			
	Engineering _____			
	Planning _____			
Fees	Fees	Check No.	Receipt No.	Date
Application Fee	\$ 850.00 - \$350 Application + \$500 SUP			
Public Notice Sign Fee	\$ 150			
Public Notice Sign Deposit	\$			
Total	\$			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number	Date Received
WCF21-10	8/16/21

Attachment A - Application Packet



WIRELESS COMMUNICATION FACILITY CHECKLIST

Juneau Permit Center • 230 S. Franklin Street • (907) 586-0770

This checklist is required to complete an application for a Wireless Communication Facility (WCF) permit. There are two types of WCF permits. See below.

- A. WCF qualifies as Eligible Facility Request (**Streamlined Review**)
 - a. Submit items 1-12
- B. WCF requires Special Use permit
 - a. Submit items 2-21

Required Items (please label each item with the corresponding number on plans)

- ☒ 1) Completed Building Permit Application Item 10
- ☒ 2) Completed WCF Application Item 14
- ☒ 3) Completed Development Permit Application Item 12
- ☐ 4) Fees (contact the Permit Center at (907) 586-0770 to determine amount)
- ☒ 5) A statement certifying that radio frequency emissions from the antenna array(s), both individually and cumulatively, will comply with FCC standards (considering any other WCF located on or immediately adjacent to the proposed WCF). This statement must be signed by a qualified person and accompanied with a statement of that person's professional qualifications Item 2
- ☒ 6) Site address and CBJ Parcel Identification Number (tax ID number) Item 30
- ☒ 7) Site size and dimensions Item 21
- ☒ 8) Site plan showing all existing and proposed structures, buildings, fences (their height) and landscaping Items 28, 29 and possibly Items 22-27
- ☒ 9) Proposed WCF type and design, lighting, height above grade, material, number of, color, any accessory structures, and number of collocations it can accommodate, if applicable Item 7
- ☒ 10) Certification that proposal complies with applicable laws pertaining to service offered Items 19, 8, 2, 3, 31
- ☒ 11) The following documents from a licensed Alaska Professional Engineer:
 - ☒ Signed and stamped letter indicating the proposed WCF will be constructed, repaired, modified or restored in compliance with all current applicable technical, safety, and safety-related laws of the CBJ, State of Alaska, and Federal government Items 2, 5, 6, 7, 20, 28
 - ☒ Signed and stamped letter indicating the proposed WCF is in compliance with industry practices of the National Association of Tower Erectors 6&7
- ☒ 11) Letter indicating compliance with FAA regulations in 14 CFR Part 77 (if applicable) 31
- ☒ 12) Location of any dwelling(s) within distance of tower equal to the height of tower (if applicable), disclosure of any agreements which limit and/or preclude the proposed WCF from being shared with new WCFs Items 6, 28, 29

WIRELESS COMMUNICATION FACILITY CHECKLIST

- ☒ 13) Signed and stamped letter from a licensed Alaska Professional Engineer indicating the foundation and attachments meet EIA/TIA 222 G and local building code Item 5 structure requirements for loads, including wind, snow, and ice (this shall also address the total number of required accommodated collocations, when applicable)
- ☒ 14) A narrative describing compliance with subsections under 49.65.930: Item 33
- | | |
|---|---|
| ☒ Concealed & Non-concealed antenna | ☒ Affects to mapped |
| ☒ Security | ☒ Viewsheds |
| ☒ Signage Items 28 & 29 and 33 | ☒ WCF Master Plan |
| ☒ Lighting | ☒ Structural Assessment |
| ☒ Design Criteria | |
| ☒ Setbacks | |
- ☒ 15) Visual Impact Study consisting of: Items 9 & 32
- Zone of Visibility Map
- Analysis demonstrating how the proposed WCF will be sited to be of least adverse impact on environment and its character while meeting applicant's network objectives
- Illustration showing before and after views of proposed WCF from roadways, parks, public lands, historic districts and any other location where the site is visible to many people
- Description of visual impact
- Narrative or drawing describing how the base of the tower and accessory structures will be screened from view
- ☐ 16) For lighted towers:
- Description of type of light and how it complies with 49.65.930(d)
(if required by FAA, the minimum intensity allowed by FAA)
- How it will not project directly onto adjacent surrounding property
(use of buffers, louvers, etc.)
- ☒ 17) Narrative indicating that the design height is the minimum necessary for effective functioning of provider's network Items 3 & 33, possibly 19
- ☒ 18) Visual impact assessment according to 49.65.970(c)(2)(B) Item 9
- ☒ 19) Balloon Test according to 49.65.970(c)(2)(D) Item 9
- ☒ 20) Propagation study Item 3



JUNEAU

DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications.

To be completed by Applicant	PROPERTY LOCATION		
	Physical Address 10020 Crazy Horse Drive, Juneau, AK		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) US Survey 1041		
	Parcel Number(s) 4B1701100120		
	☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner City and Borough of Juneau	Contact Person Kyle Paw	Phone Number(s) 907 586-5240
	Mailing Address 155 S Seward St, Juneau, AK 99801		
	E-mail Address kyle.paw@juneau.org		
	LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits		
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows: A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X _____ Landowner/Lessee Signature Date			
X _____ Landowner/Lessee Signature Date			
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME"			
Applicant Vertical Bridge, LLC	Contact Person Matt Grugan / Gary R. Brekke: representing Vertical Bridge in AK	Phone Number(s) 907 331-8311	
Mailing Address 750 Park of Commerce Drive, Boca Raton, FL			
E-mail Address mgrugan@verticalbridge.com / aaslic15@gmail.com			
X _____ Applicant's Signature		7/23/21 Date of Application	

DEPARTMENT USE ONLY BELOW THIS LINE:

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586 0770.

Case Number

WCF21-10

Intake Initials

IMG

Date Received

8/16/2021



2550 Denali Street, Suite 1000, Anchorage Alaska 99503

Proposed 11 Mile FCC RF Exposure Limits & Issues

According to the Federal Communications Commission OET Bulletin 65, Edition 97-01:

"...out of an abundance of caution, the FCC requires that tower-mounted installations be evaluated if antennas are mounted lower than 10 meters above ground and the total power of all channels being used is over 1000 Watts effective radiated power..."

"For antennas mounted higher than 10 meters, measurement data for cellular facilities have indicated that ground-level power densities are typically hundreds to thousands of times below the new MPE (Maximum Permissible Exposure) limits."

<http://www.naic.edu/~phil/hardware/rfmonitor/fccGuidelines.pdf>

The following paragraphs are excerpts from the most recent FCC guidelines publication that explain the FCC's rationale in determining the MPE limits for general public exposure and for occupational/controlled exposure:

"In reaching its decision on adopting new guidelines, the Commission carefully considered the large number of comments submitted in its rule-making proceeding, and particularly those submitted by the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and other federal health and safety agencies. The new guidelines are based substantially on the recommendations of those agencies, and it is the Commission's belief that they represent a consensus view of the federal agencies responsible for matters relating to public safety and health."

"The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based are derived from criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 Watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The new MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk."

6/5/19

"The new FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. As indicated by Table 1 {shown on page 3}, the most restrictive limits occur in the frequency range of 30-300 MHz where whole body absorption of RF energy by human beings is most efficient. At other frequencies whole-body absorption is less efficient, and, consequently, the MPE limits are less restrictive.

Note that if both of the criteria in the first paragraph are not met (i.e. antenna height less than 10 meters **and** the total power of all channels used is over 1000 Watts), a detailed engineering evaluation of the RF field strengths at or near the site is not required unless specifically requested. A detailed MPE study has been conducted of this proposed structure and equipment at the request of interested parties. A copy of the MPE report which includes a summary as well as calculation methodology for the cumulative emissions of all equipment to be installed and operated by GCI is included with this statement.

All wireless facilities to be installed by GCI will be in compliance with the above criteria as well as the MPE limits for the general public in areas for which the general population has access (i.e. behind site fences or gates). In addition, GCI will comply with all FCC requirements for signage which serves to both identify the site (FCC licensing) and the presence of RF radiation at the site.

Mark Schott

A handwritten signature in black ink, followed by the date "6/5/19" written vertically.

Staff Engineer, GCI Wireless RF Engineering
GCI Wireless



2550 Denali Street, Suite 1000, Anchorage Alaska 99503

Professional Qualifications – Mark Schott

My name is Mark Schott and I am a registered professional electrical engineer (P.E.) in the states of Alaska and California with over twenty years of experience in RF communication system design, testing, and implementation - most of which has been in the state of Alaska. I have developed and reviewed link budget analyses, desktop RF exposure studies, interpreted field measurements, and FCC submittals for wireless, fixed microwave, and satellite earth station systems deployed throughout the state of Alaska during my career. As such, I have performed both theoretical and empirical studies of RF emissions from a variety of intentional radiators and technologies over the course of my career. My formal education includes a B.S.E.E from the University of Alaska, Fairbanks (UAF) with a communications emphasis and a M.S. Engineering with a focus on communications systems from the University of California, Los Angeles (UCLA).

A handwritten signature, likely "MS", is written in dark ink. To the right of the signature, the date "6/5/19" is written in a similar handwritten style.



DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 22270
JUNEAU, AK 99802-2270

November 13, 2019

Regulatory Division
POA-2019-00625

Vertical Bridge Development, LLC
Attention: Matt Grugan
750 Park of Commerce
Drive Boca Raton, FL 33487

Dear Mr. Grugan:

This is in response to your October 16, 2019, application for a Department of the Army (DA) permit, to discharge 286 cubic yards of gravel fill into 0.08-acres of wetlands in order to construct a telecommunications tower. It has been assigned file number POA-2019-00625, Mendenhall River, which should be referred to in all future correspondence with this office. The project site is located within Section 25, T. 40 S., R. 65 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.36698° N., Longitude -134.6108° W.; Juneau Borough, in Juneau, Alaska.

Based on our review of the information you furnished and available to us, we have preliminarily determined the above project area contains waters of the United States (U.S.), including wetlands, under the Corps of Engineers regulatory jurisdiction. See the attached Preliminary Jurisdictional Determination (PJD) Form. Please sign and return the form to our office. A PJD is not appealable. At any time you have the right to request and obtain an Approved Jurisdictional Determination (JD), which can be appealed. If it is your intent to request an Approved JD, do not begin work until one is obtained.

DA permit authorization is necessary because your project will involve dredged and/or fill material into waters of the U.S. under our regulatory jurisdiction.

Based upon the information and plans you provided, we hereby verify that the work described above, which would be performed in accordance with the enclosed plan (sheets 1-4), October 3, 2019, is authorized by Nationwide Permit (NWP) No. 12, Utility Line Activities. NWP No. 12 and its associated Regional and General Conditions can be accessed at our website at: www.poa.usace.army.mil/Missions/Regulatory/Permits. You must comply with all terms and conditions associated with NWP No. 12.

Attachment A - Application Packet

-2-

Further, please note General Condition 30 requires that you submit a signed certification to us once any work and required mitigation are completed. Enclosed is the form for you to complete and return to us.

Unless this NWP is modified or revoked, it expires on March 18, 2022. It is incumbent upon you to remain informed of the changes to the NWPs. Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact me via email at: Delana.P.Wilks@usace.army.mil, by mail at the address above, or by phone at (907) 790-4494, if you have questions or to request paper copies of the regional and/or general conditions. For more information about the Regulatory Program, please visit our website at: www.poa.usace.army.mil/Missions/Regulatory.

Sincerely,

SOISETH.BEN
JAMIN.NELS.
1262186691

Digitally signed by
SOISETH.BENJAMIN.
NELS.1262186691
Date: 2019.11.12
11:35:44 -09'00'

Benjamin N. Soiseth
Chief, Southeast
Section

Enclosures

ENCLOSURE



**US Army Corps of
Engineers Alaska District**

Permit Number: POA-2019-00265

Name of Permittee: Vertical Bridge Development, LLC

Date of Issuance: November 13, 2019

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to Ms. Delana Wilks at the following address:

U.S. Army Corps of Engineers
Alaska District
Regulatory Division
Post Office Box 22270
Juneau, Alaska 99802-2270

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Preliminary Jurisdictional Determination Form

Packet Page 320 of 322

This preliminary JD find that there "*maybe*" waters of the United States on the subject project site that could be affected by the proposed activity based on the following information:

District Office	Juneau Field Office	File/ORM #	POA-2019-00625	PJD Date	Oct 21, 2019
State	AK	City/County	CBJ		
Nearest Waterbody	Mendenhall River			Name and Address of Person Requesting PJD	
Project Location	Section(s)	25	Township	40	S
Meridian	Copper River	Range	65	E	
USGS Quad Map	Juneau B-2	Latitude	58.36698	N	Longitude
					134.6108
					W
Subdivision Name, Block, Lot, Directions to Project Site					

Identify (Estimate) Amount of Waters in the Review Area			Stream Flow		Name of Any Water Bodies on the Site Identified as Section 10 Waters:	
<u>Non-Wetland Waters:</u>					Tidal:	
	Linear ft	Width	Acres		Non-Tidal:	
<u>Wetlands</u>					☐ Office (Desk) Determination ☐ Field Determination	
0.08	Acres	Cowardin Class: Palustrine, emergent		Date of Site Visit:		

SUPPORTING DATA: Data Review for Preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below)

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Supplied by Applicant on 21 Oct 2019

☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data Sheet prepared by the Corps

☐ Corps navigable waters' study:

☐ USGS NHD Data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s) Cite quad name: Juneau B-2

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☒ National Wetlands Inventory map(s): NWI

☐ State/Local Wetland Inventory map(s):

☐ FEMA/FIRM map(s):

☐ 100-year Floodplain Elevation:

☒ Photographs:

☒ Aerial (Name & Date) Google Earth Imagery 7/27/2013

☐ Other (Name & Date)

☐ Previous determination(s). File # and date of response letter:

☐ Other Information:

Attachment A - Application Packet

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.



22 Oct 2019

Signature and Date of Regulatory Project Manager
(REQUIRED)

Signature and Date of Person Requesting Preliminary JD
(REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS: 1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time. 2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.



Juneau



Vertical Bridge GCI/AWN Cellular Communications Tower

Applicant: Vertical Bridge

POA-2019-

Agent: Solstice Alaska Consulting

Vicinity Map

Date: October 3, 2019



Sheet 1

**Wetland Delineation Report
for
Telecommunications Tower Site
Mile 11
Juneau, Alaska**

June 2019

Prepared by:

Deborah D. Rudis
Alaska Wildlife & Environmental
4638 River Rd
Juneau, Alaska
99801
PH: 907.723.9981

Prepared for:

Centerline Solutions
Jay Rasmussen
2305 46th Ave, NE
Olympia, WA 98506

PH: 360.438.8002

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Table 2. Wetland Indicator Codes Definitions 2

Appendix A- Plot Photos

- 1. Plot 1 in marsh wetland.
- 2. Tower center stake on roadbed.
- 3. Plot 2 with wet areas of *Sphagnum* between *Calamagrostis* hummocks.
- 4. Plot 3 Upland vegetation and roadbed.
- 5. Plot 4 upland vegetation and roadbed.
- 6. Roadbed edge and wetland edge.
- 7. Upland vegetation and roadbed edge.

Introduction

This document is a wetland report for Vertical Bridge and Centerline Solutions to aid in development analysis for construction of a telecommunications tower site at mile 11, in Juneau, Alaska. The facility will consist of a new 150' monopole carrier equipment and a utility backboard inside a new 60' x 60' fenced compound with a 75' x 75' leased area. This is City and Borough of Juneau (CBJ) property, parcel: 4B1701100120.

Wetland Delineation Methodology

The project area was visited in May 2019 and the wetland delineation was done on June 6, 2019. The data gathering was done using the US Army Corps of Engineers (US ACOE) methodology. A general reconnaissance of the site was done in May to determine the layout of the project. The area was walked to assess site access and wetland extent.

For the wetland delineation, five representative sample plots were selected within the project impact area. At each of the sampling plots, the wetland status of that plot was determined by observing hydrophytic vegetation, hydric soil, and wetland hydrology. Each of these plots had a 12' radius except where habitat type changed within the plot. Plots were placed to avoid overlap between wetland and upland habitats. Where the roadbed width was narrow, plot size was reduced to fit the upland habitat without overlapping wetland habitat.

Vegetation was divided into three strata: tree, shrub, and forb and rated as obligate wetland species, facultative wet species, or facultative species. Plant species ratings were determined using the US ACOE Alaska 2016 Regional Wetland Plant List. Percent cover estimates were visually made for all plant species in each plot. Hydrology was determined visually if the water table was at or above the surface and with a soil pit if standing water was not present. Wetland hydrology indicators serve as evidence that the site has a continuing wetland hydrologic regime. The depth to free water in the soil pit was recorded. Soil colors were determined from a moist soil sample with the Munsell Soil Color Chart.

Wetland Area Description

The tower site is accessed from Crazy Horse Drive and a 12' wide gravel access road. The surrounding CBJ property is either developed or is in its natural state of wetland and wooded areas. The project area wetlands are marsh with emergent vegetation and standing water throughout the area during normal rainfall years. Standing water is present but currently does not reach the surface everywhere in the marsh. This is only due to a very dry 2019 spring season. The vegetation is dominated by *Sphagnum*

moss, horsetail (*Equisetum arvense*) and blue joint grass (*Calamagrostis canadensis*).

The only upland section of the project area is the gravel roadbed. Roadbed construction created deeper water areas along the sides of the road, some of which are open water and others that are covered with *Sphagnum* moss. Some of these water holes are over 4' deep. Trees are present along the roadbed and roadbed sides and are primarily Sitka spruce (*Picea sitchensis*) and Balsam poplar (*Populus balsamifera*).

Table 1. Plant Species List and their Indicator Status

Scientific name	Common name	Indicator status
<i>Picea sitchensis</i>	Sitka spruce	FAC UP
<i>Salix sitchensis</i>	Sitka willow	FAC
<i>Tsuga heterophylla</i>	Western hemlock	FAC
<i>Populus balsamifera</i>	Balsam poplar	FAC UP
<i>Vaccinium oxycoccus</i>	Small cranberry	OBL
<i>Sphagnum</i> spp.	Sphagnum moss	OBL
<i>Trientalis europaea</i>	Star flower	FAC UP
<i>Comarum palustre</i>	Purple marsh-locks	OBL
<i>Iris setosa</i>	Wild-flag	FAC
<i>Carex pluriflora</i>	Several-flower sedge	OBL
<i>Eriophorum chamissonis</i>	Cotton-grass	OBL
<i>Chamaenerion angustifolium</i>	Narrow-leaved fireweed	FAC UP
<i>Rubus arcticus</i>	Nagoon berry	FAC
<i>Equisetum arvense</i>	Field horsetail	FAC UP
<i>Lupinus nootkatensis</i>	Nootka lupine	FAC UP
<i>Calamagrostis canadensis</i>	Blue joint	FAC

Table 2. Wetland Indicator Codes Definitions

Indicator Code	Wetland Type	Comment
OBL	Obligate	Occurs almost always (probability estimate at 99%) under natural conditions in wetlands.
FACW	Facultative Wetland	Usually occurs in wetlands (probability estimate at 67-99%), but occasionally found in non-wetlands.
FAC	Facultative	Equally likely to occur in wetlands or non-wetlands.
FAC UP	Facultative Upland	Usually occurs in non-wetlands but occasionally found in wetlands.
UPL	Upland	Occurs almost always (probability estimate at 99%) under natural conditions in non-wetlands in the region specified.

Results

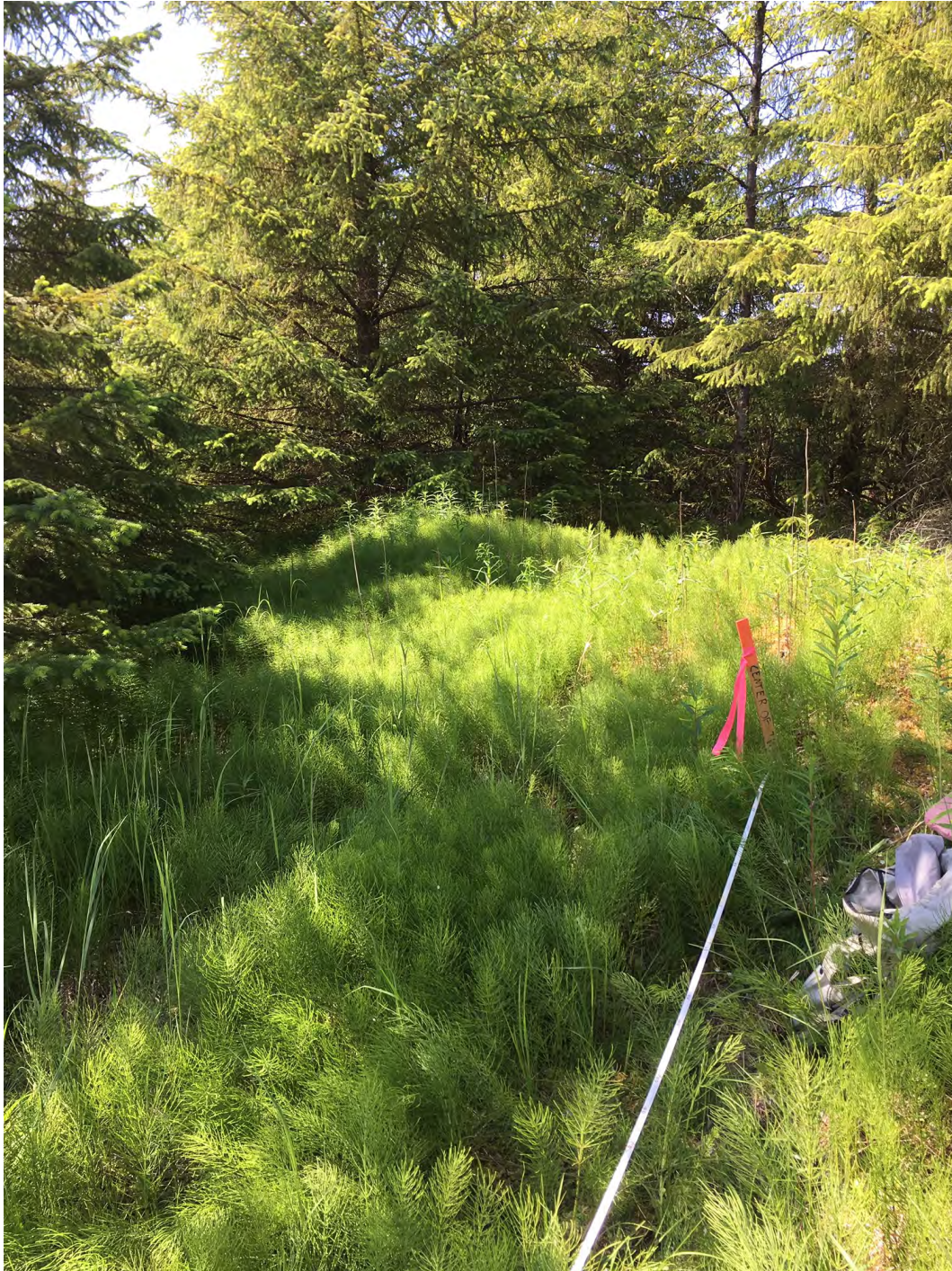
Based on site observations and sampling data, the area surrounding the roadbed is marsh wetland. This would be classified as a palustrine emergent wetland. The plant community is dominated by hydrophytic vegetation which can tolerate prolonged inundation or soil saturation during the growing season. Soil is saturated and in many places the water table is at the ground surface. Roadbed construction appears to have increased water depth along the roadbed length as fill material altered water flow through the wetland.

The only upland section of the telecommunications tower project area is the gravel roadbed. The roadbed is partially forested and upland vegetation species are dominant. Soil consists of sand and gravel fill with no indication of hydric soil.

Appendix A. Project Area Photos



1. Plot 1 in marsh wetland.



2. Tower center stake on roadbed.



3. Plot 2 with wet areas of *Sphagnum* between *Calamagrostis* hummocks.



4. Plot 3 Upland vegetation and roadbed.



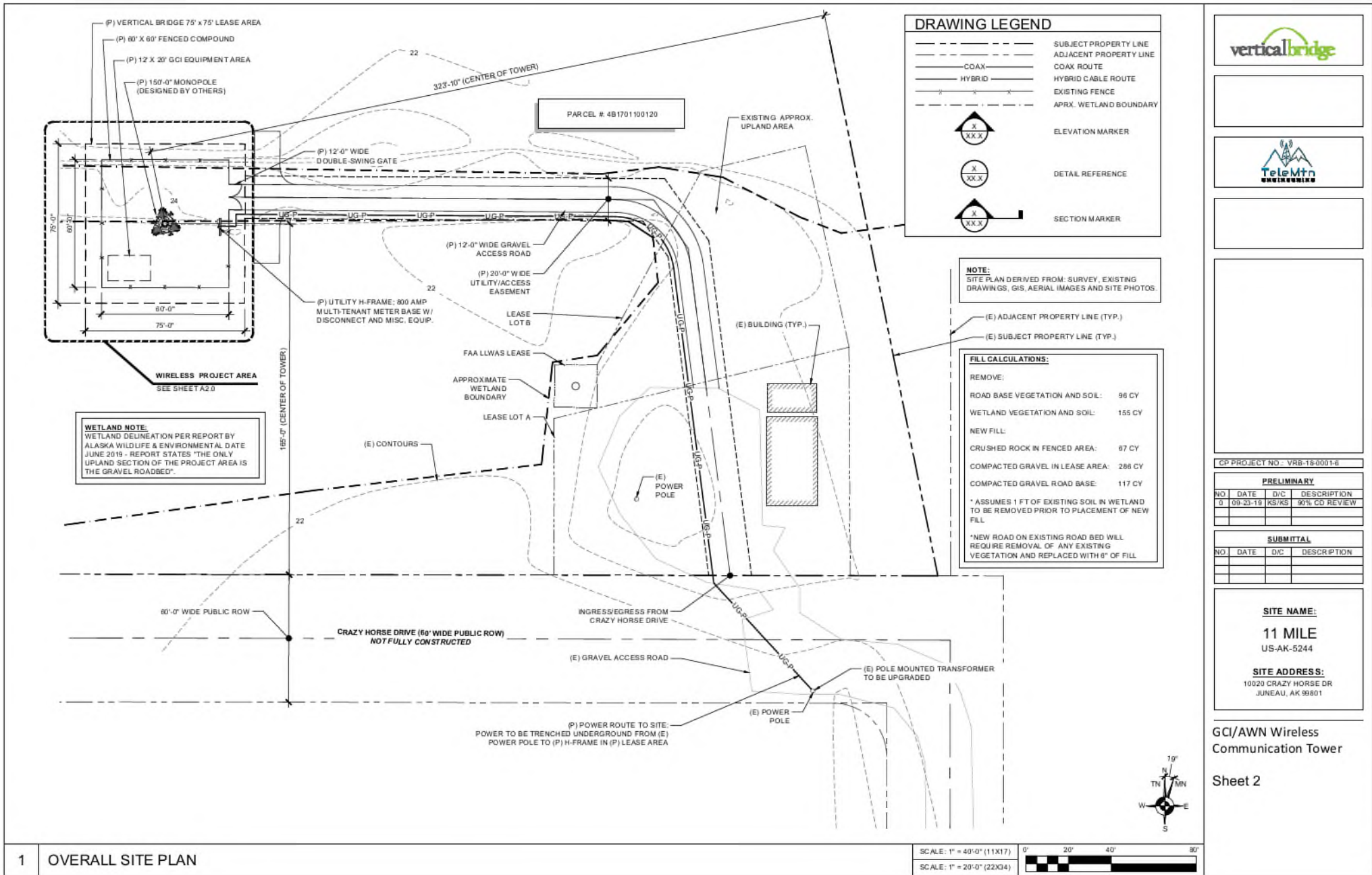
5. Plot 4 upland vegetation and roadbed.



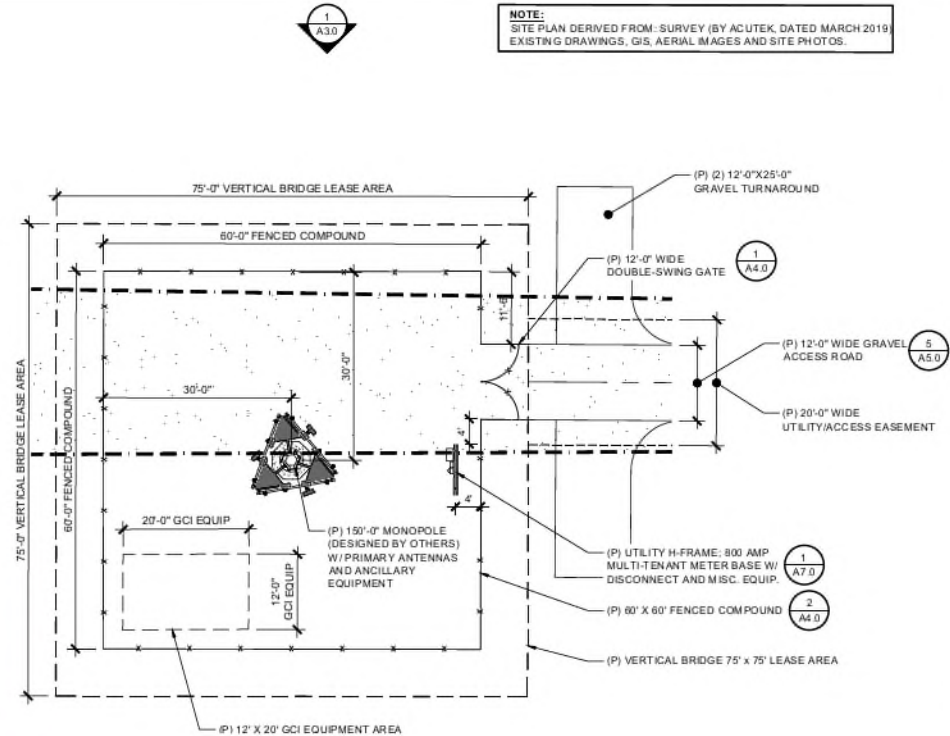
6. Roadbed edge and wetland edge.



7. Upland vegetation and roadbed edge.



- GENERAL NOTES:**
1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
 2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
 3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
 4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
 5. CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
 6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
 7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.



NOTE:
SITE PLAN DERIVED FROM: SURVEY (BY ACUTEK, DATED MARCH 2019)
EXISTING DRAWINGS, GIS, AERIAL IMAGES AND SITE PHOTOS.



CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY				
NO.	DATE	D/C	DESCRIPTION	
3	09-23-19	KS/KS	90% CD REVIEW	

SUBMITTAL				
NO.	DATE	D/C	DESCRIPTION	

SITE NAME:

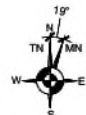
11 MILE
US-AK-5244

SITE ADDRESS:

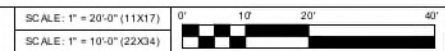
10020 CRAZY HORSE DR
JUNEAU, AK 99801

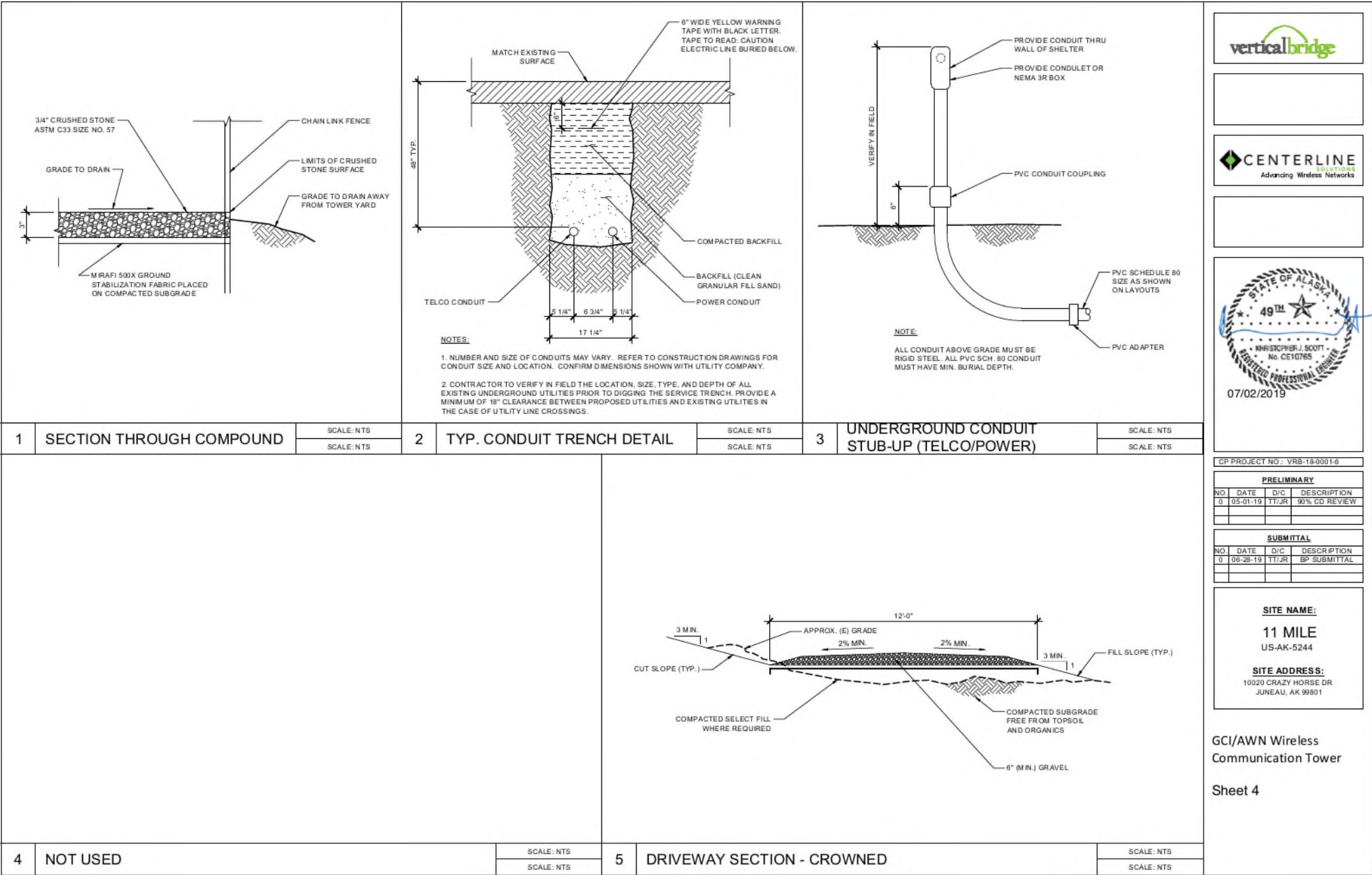
GCI/AWN Wireless
Communication Tower

Sheet 3



1 ENLARGED SITE PLAN AND AERIAL OVERLAY (N.T.S.)







Data Source: ESRI – World Imagery



Legend

- Study Area
- PEMA Wetland
- Wetland Sample Point
- Upland Sample Point

Vertical Bridge
Wetland Delineation
T. 40 S., R. 65 E., Sec. 25,
Copper River Meridian.
Juneau, Alaska

Table 1. LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

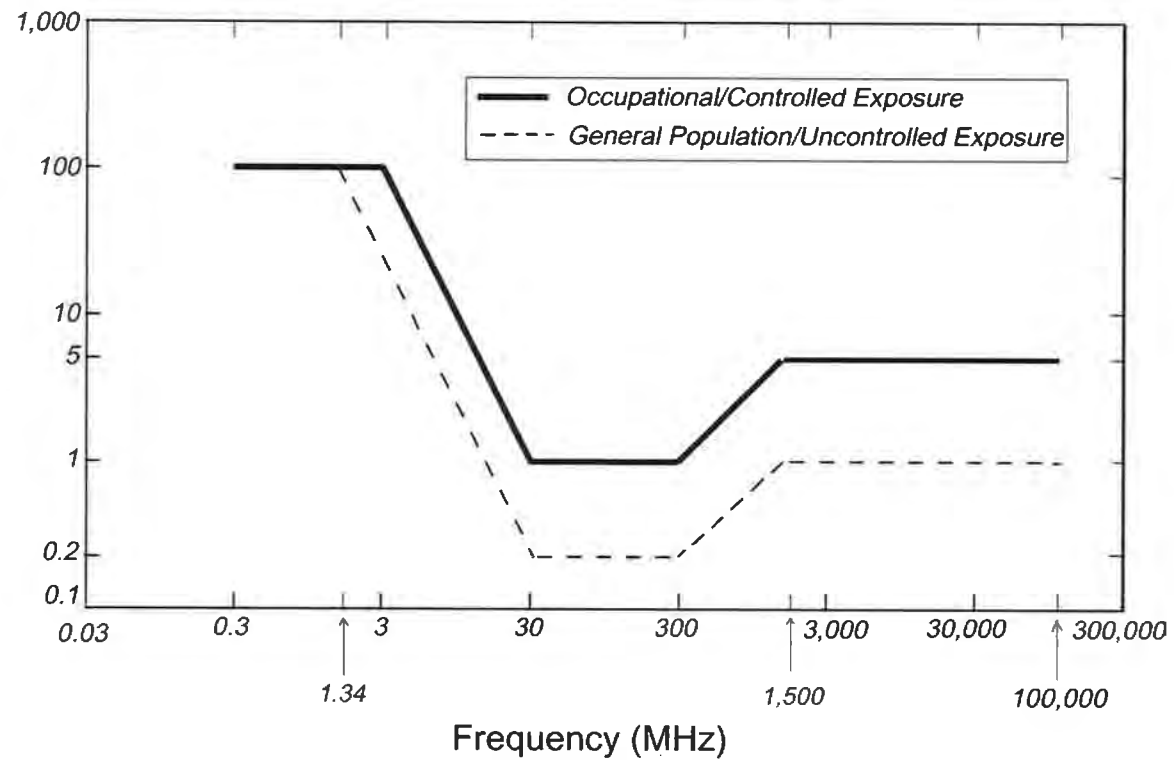
*Plane-wave equivalent power density

NOTE 1: **Occupational/controlled** limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: **General population/uncontrolled** exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

 4/5/19

Figure 1. *FCC Limits for Maximum Permissible Exposure (MPE)*
Plane-wave Equivalent Power Density



NS 6/5/19

11 Mile New Tower (578)

Radio Frequency (RF) Site Compliance Report



Mendenhall Valley, Juneau, AK, USA



Radio Frequency Exposure Report

FCC Compliance Assessment

Site Specific Information			
Site Name	11 Mile New Tower (578)	Categorically Excluded?	No
Street Address	Mendenhall Valley		
City, State, Zip	Juneau, AK, USA	5% Contributor to Areas Requiring Mitigation?	No
Multi-Licensee Facility	N/A	GCI's Max % MPE (Predictive - Occupational)	0.00%
Structure Type	Tower	GCI's Max % MPE (Measured - Occupational)	N/A
Broadcast Equipment	No	Assessment Date	05/23/2019
# of Access Points		N/A	

Compliance Status	COMPLIANT AS DESIGNED
-------------------	-----------------------

☒	Worst-case RF power density levels are BELOW the MPE for General Population/Uncontrolled Environments in accessible areas.
☐	Worst-case RF power density levels are ABOVE the MPE for General Population/Uncontrolled Environments but BELOW the MPE for Occupational/Controlled environments.
☐	Worst-case RF power density levels are ABOVE the MPE for Occupational/Controlled Environments but BELOW 10x the MPE for Occupational/Controlled environments.
☐	Worst-case RF power density levels are ABOVE 10x the MPE for Occupational/Controlled environments.

Compliance Requirements	Guidelines	Notice	Caution	Warning	NOC Information	Barrier/Marker
Access Point	☒ [1]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

Additional Compliance Requirements(s):			
Consultant Legal Name	GCB Services	Phone/Fax	(703) 564-2297
Address	8201 Greensboro Drive, Suite 300, McLean, VA 22102		

2 Confidential & proprietary material for authorized GCI personnel only. Use, disclosure or distribution of this material is not permitted to any unauthorized persons or third parties except by written agreement. | GCB

Attachment A - Application Packet

Handwritten signature and date 6/5/19

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6/5/19

1. Summary

GCI has contracted with GCB Services, an independent consulting firm, to conduct a Radio Frequency Exposure Compliance Assessment of the **11 Mile New Tower (578)** cell site. This report contains a detailed summary of the Radio Frequency environment as it relates to Federal Communications Commission (FCC) and Occupational Safety & Health Administration (OSHA) Rules and Regulations for all individuals.

This compliance assessment and report has been **prepared** by:

Preparer	
Name	Bipin Kumar
Title	RF Associate
Date	05/23/2019

This report utilizes the following **for predictive modeling of the ambient RF environment**:

MPE Modeling Program: ROOFMASTER 10.0.3.20.15

Required Modeling Assumptions: 100% Duty Cycle and Maximum Total Power Output.

Additional Modeling Assumptions:

For this report, in the simulation we have shown the maximum RF energy density considering worst-case analysis by assuming that all antennas are operating at full power all times.

In OET-65, the Cylindrical Model is presented as an approach to determine the spatially averaged power density in the near field directly in front of an antenna. In order to implement this model in all directions, RoofMaster™ utilizes the antenna manufacturer horizontal pattern data. Additionally, RoofMaster™ incorporates factors that reduce the power density by the inverse square of horizontal and vertical distance beyond the near field region.

For areas on the rooftop where MPE levels are more than 20% occupational, reports shows location of signage and barriers around restricted areas. These restricted areas should not be entered without taking proper steps towards reducing carrier power or tuning the site down. Personal accessing these restricted areas should carry a personal RF monitor.

For unknown antennas on the rooftop, GCB will use generic antennas listed as "Unknown". We will use max output power to model the site. Operating frequency information for unknown antenna will be selected such as to get per max antenna gain.

2. Site Characteristics

a. Access information

No site visit was done. This report is for desktop study only.		
All access points locked at time of assessment?		N/A

b. Structure

Description	GCI antennas are installed at the height of 140' from ground level. This site has three sectors (ALPHA, BETA and GAMMA) are mounted on Azimuth 50°, 160 °and 315° respectively.
Site Latitude (NAD 83)	58.369692°
Site Longitude (NAD 83)	-134.610558°
Overall Structure Height	N/A

 6/5/19

C. Antenna Inventory

Ant#	Carrier Name	Freq.(MHz)	ERP(Watts)	Manufacturer	Model	(ft) X	(ft) Y	(ft) Z	Gain(dbd)	Azimuth	HBW	Down tilt	Length(m)
1	GCI	CDMA 1967.5	784	Kathrein	80010891	14.3	14.2	140	15.35	50	63	0	1.99
1	GCI	UMTS 1952.5	567	Kathrein	80010891	14.3	14.2	140	15.35	50	63	0	1.99
1	GCI	LTE 2127.5	2100	Kathrein	80010891	14.3	14.2	140	15.35	50	62	0	1.99
1	GCI	LTE 885	1120	Kathrein	80010891	14.3	14.2	140	14.35	50	64	0	1.99
2	GCI	CDMA 1967.5	784	Kathrein	80010891	14.6	1	140	15.35	160	63	0	1.99
2	GCI	UMTS 1952.5	567	Kathrein	80010891	14.6	1	140	15.35	160	63	0	1.99
2	GCI	LTE 2127.5	2100	Kathrein	80010891	14.6	1	140	15.35	160	62	0	1.99
2	GCI	LTE 885	1120	Kathrein	80010891	14.6	1	140	14.35	160	64	0	1.99
3	GCI	CDMA 1967.5	784	Kathrein	80010891	0.1	8.2	140	15.35	315	63	0	1.99
3	GCI	UMTS 1952.5	567	Kathrein	80010891	0.1	8.2	140	15.35	315	63	0	1.99
3	GCI	LTE 2127.5	2100	Kathrein	80010891	0.1	8.2	140	15.35	315	62	0	1.99
3	GCI	LTE 885	1120	Kathrein	80010891	0.1	8.2	140	14.35	315	64	0	1.99

Ground level

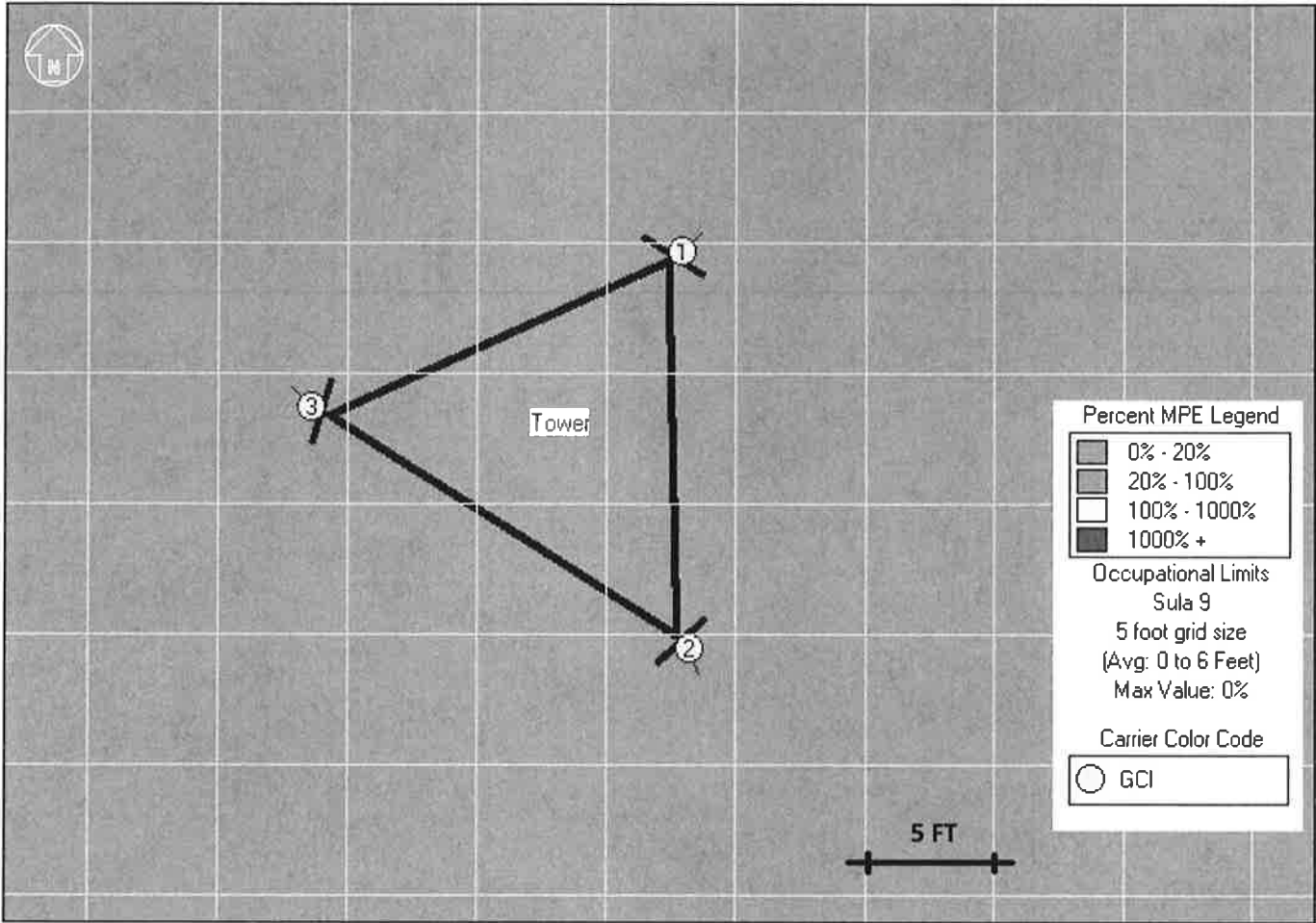
Z height = 140'

- a. The Centerline of the GCI antennas from ground level are 140'.

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6/5/19

3. Theoretical Study

a. Predictive Model: All Transmitters at Ground Level



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6/5/19

4. Conclusion from theoretical analysis and field visit

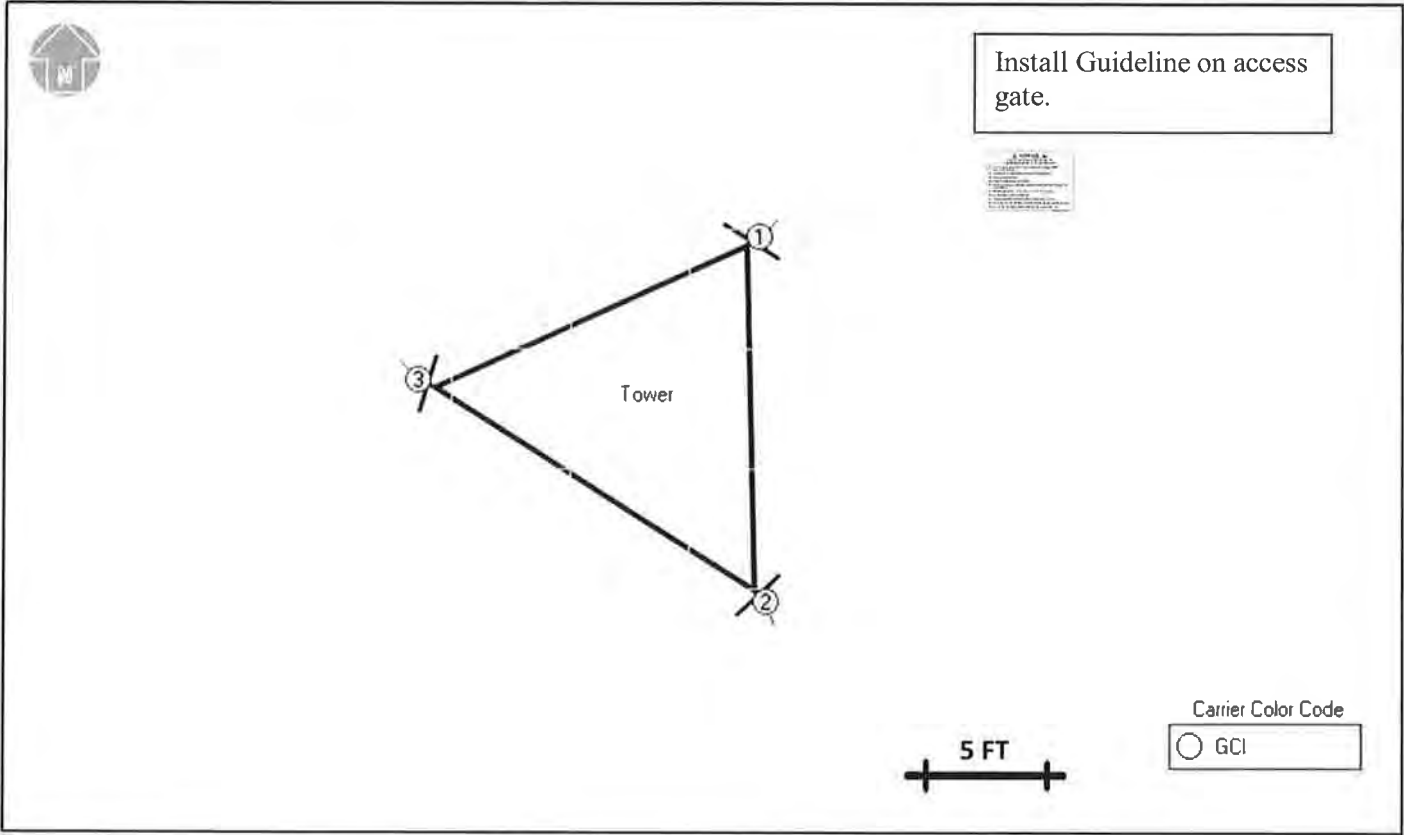
a. Narrative

Description of MPE-Limit Exceeding Areas:

Ground Level

Simulation result based on the worst-case conditions for all existing antennas at this level show MPE 0.00% of the Occupational limits. No mitigation required.

b. GCI Signage/Barrier Diagram



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6/5/19

GCI Signage Details						
	Guidelines	Notice	Caution	Warning	NOC Information	Barrier/Marker
Access Point	☒ [1]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

c. Signage/Barrier Installation Detail

Access

Install Guidelines signs on the access gate.

Sector Antennas

No Action required.

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6/5/19

5. Appendix A: RF Consultant Certifications**a. Preparer Certification**

I, Bipin Kumar, the preparer of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the GCI Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

Bipin Kumar**b. Reviewer Certification**

I, Gyan Pandey, the reviewer and approved of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the GCI Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

Gyan Pandey

6. Appendix B: Reference Information

a. FCC Rules & Regulations

The Federal Communications Commission (FCC) has established safety guidelines relating to RF exposure from cell sites. The FCC developed those standards, known as Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. The standards were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The FCC explains that its standards “incorporate prudent margins of safety.” The following represents explanations of the most applicable information:

Two Classifications for Exposure Limits

Occupational Applies to situations in which persons are “exposed as a consequence of their <i>employment</i> ” and are “ <i>fully aware</i> of the potential for exposure and can <i>exercise control</i> over their exposure”.	General Population Applies to situations in which persons are “exposed as a consequence of their employment <i>may not be made fully aware</i> of the potential for exposure or <i>cannot exercise control</i> over their exposure”. Generally speaking, those without significant and documented RF Safety & Awareness training would be in the General Population classification.
--	--

Environment Classification

Controlled – Applies to environments that are restricted or “controlled” in order to prevent access from members of the General Population classification.	Uncontrolled – Applies to environments that are unrestricted or “uncontrolled” that allow access from members of the General Population classification.
---	--

Limits for Occupational/Controlled Exposure		
Frequency	Power Density	Averaging Time
Range	(S)	 E ², H ², or S
(MHz)	(mW/cm²)	(minutes)
300-1500	f/300	6
1500-100,000	5	6
Limits for General Population/Uncontrolled Exposure		
Frequency	Power Density	Averaging Time
Range	(S)	 E ², H ², or S
(MHz)	(mW/cm²)	(minutes)
300-1500	f/1500	30
1500-100,000	1	30
<i>f = frequency in MHz</i>		

Significant Contribution to the RF Environment

Any carrier contributing an aggregate MPE percentage of 5 or more (to the applicable RF Environment Classification) is defined as a significant contributor. This means that if any area is determined to be out of compliance with FCC rules, all significant contributors are jointly responsible for correcting any deficiencies.

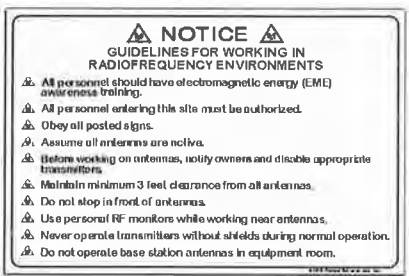
b. Occupational Safety and Health Administration (OSHA) Requirements

A formal adopter of FCC Standards, OSHA stipulates that those in the Occupational classification must complete training in the following: RF Safety, RF Awareness, and Utilization of Personal Protective Equipment. OSHA also provides options for Hazard Prevention and Control:

Hazard Prevention	Control
- Utilization of good equipment - Enact control of hazard areas - Limit exposures - Employ medical surveillance and accident response	- Employ Lockout/Tag out - Utilize personal alarms & protective clothing - Prevent access to hazardous locations - Develop or operate an administrative control program

c. RF Signage

Areas or portions of any transmitter site may be susceptible to high power densities that could cause personnel exposures in excess of the FCC guidelines. These areas must be demarcated by conspicuously posted signage that identifies the potential exposure. Signage **MUST** be viewable regardless of the viewer's position.

GUIDELINES	NOTICE	CAUTION	WARNING
This sign will inform anyone of the basic precautions to follow when entering an area with transmitting radiofrequency equipment.	This sign indicates that RF emissions may exceed the FCC General Population MPE limit.	This sign indicates that RF emissions may exceed the FCC Occupational MPE limit.	This sign indicates that RF emissions may exceed at least 10x the FCC Occupational MPE limit.
 NOTICE GUIDELINES FOR WORKING IN RADIOFREQUENCY ENVIRONMENTS - All personnel should have electromagnetic energy (EME) awareness training. - All personnel entering this site must be authorized. - Obey all posted signs. - Assume all antennas are active. - Before working on antennas, notify owners and disable appropriate transmitters. - Maintain minimum 3 feet clearance from all antennas. - Do not stop in front of antennas. - Use personal RF monitors while working near antennas. - Never operate transmitters without shields during normal operation. - Do not operate base station antennas in equipment room.	 NOTICE Radio frequency fields beyond this point may exceed the FCC general public exposure limit. Obey all posted signs and site guidelines for working in radio frequency environments.	 CAUTION Beyond this point: Radio frequency fields at this site may exceed FCC rules for human exposure. For your safety, obey all posted signs and site guidelines for working in radio frequency environments.	 WARNING Beyond this point: Radio frequency fields at this site exceed the FCC rules for human exposure. Failure to obey all posted signs and site guidelines for working in radio frequency environments could result in serious injury.

INFORMATION SIGN
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the GCI Wireless Network Operations Center phone number.
 OWNED BY GCI TOLL FREE: 1-888-611-0736 (TOLL FREE) 960-5555 (IN ANCHORAGE) NO TRESSPASSING

d. Physical Barriers

Physical barriers are control measures that require awareness and participation of personnel. Physical barriers are employed as an additional administration control to complement RF signage and physically demarcate an area in which RF exposure levels may exceed the FCC General Population limit.

e. Indicative Markers

Indicative markers are visible control measures that require awareness and participation of personnel, as they cannot physically prevent someone from entering an area of potential concern. Indicative markers are employed as an additional administration control to complement RF signage and visually demarcate an area in which RF exposure levels may exceed the FCC General Population limit. Example:

[Handwritten signature]
6/5/19

Parcel #	Street Address	Legal Description 1
4B1701100120	CRAZY HORSE DR 10020	USS 1041

Owner's Name and Address

CITY AND BOROUGH OF JUNEAU & LANDS AND RESOURCES
 155 S SEWARD ST
 JUNEAU AK
 99801

Previous Owner	Site Value	Building PV	Total PV
	N/A	N/A	N/A
Use Code	Exempt	Zoning	Tax Year
Commercial Misc	BORO	Industrial	2019
Number of Units	Year Built	Gross Living Area	
N/A	N/A	002597 sq.ft.	
Garage	Garage Area	Lot Size	Last Trans
No	N/A	31.00 acres	0000
City Water Available	City Sewer Available		
Yes	No		
Exempt Land	Exempt Building	Exempt Total	Road/No Road
N/A	N/A	N/A	Roaded



GEOTECHNICAL REPORT FOR THE 11 MILE SITE 150' TOWER FOUNDATION JUNEAU, ALASKA

MAY 24, 2021

Prepared for:

Southcentral Communications
Mr. Adam Kiffmeyer
461 Lily Drive
Soldotna, AK 99669

Prepared by:
Haas & Associates, Inc.
Sandor Manyoky, P.E.
PO box 110776
Anchorage, AK 99511



5-24-21

INTRODUCTION

The purpose of this geotechnical report is to evaluate the subsurface soil conditions for a 150-foot 3 leg tower foundation, located by the food bank in Juneau, Alaska. The proposed tower will be manufactured by MAGNUM TOWERS. Our foundation recommendations are based on the reaction report provided by MAGNUM and the results of Denali Drilling subsurface investigation, performed on March 13, 2021. There was ground water encountered at 3' during drilling. The ground elevation is approximately 5 ft. above sea level.

FIELD INVESTIGATION

On March 13, 2021, Denali Drilling subsurface exploration consisted of drilling a test-hole to 51.5 feet below existing grade. The test-hole is located within the proposed lease area. The drilling was performed by a truck mounted B-61 mobil drilling rig, which has a 6-inch diameter hollow stem auger. Samples were obtained from the auger cuttings, and from the split-spoon sampler at every 5ft.

The Standard Penetration Test method (S.P.T.) was used, with a 140- pound hammer free falling 30 inches onto the split-spoon sampling device. Blow counts were recorded and samples taken at 5-foot intervals. The recovered soil samples were classified in accordance with the Unified Soils Classification System (USCS) ASTM D 2487 and D 4318, current edition. Gradation and moisture content tests were performed by Mark Hansen PE, and the test results are included in this report.

SUBSURFACE SOILS CONDITIONS

At the proposed tower site we encountered from 0 -2.5 feet of loose poorly graded sand (SP)

The next layer of material was from 2.5 to 4 feet below existing grade; here we found organic peat (OL).

From 4 to 9.5 feet below grade, we found loose sandy silt (ML).

From 9.5 to 30 feet below existing grade we encountered medium dense to loose poorly graded gravel with silt and sand (GP-GM)

From 30 to 51.5ft we found soft sandy silt (ML).

FOUNDATION RECOMMENDATIONS

These soils could support the following types of foundations:

1. Helical pier foundation.
2. Driven pile. The soils we found from 9.5-30 feet below existing grade could support either of these foundations. The combination of skin friction and end bearing of the helical pier and the skin friction developed between these soils and the steel piles would provide sufficient resistance to the tower leg loads.

Please notify us if the tower load configuration changes, so we can revise our calculations and foundation recommendations.

Sincerely:
Sandor Manyoky P.E
Civil engineer

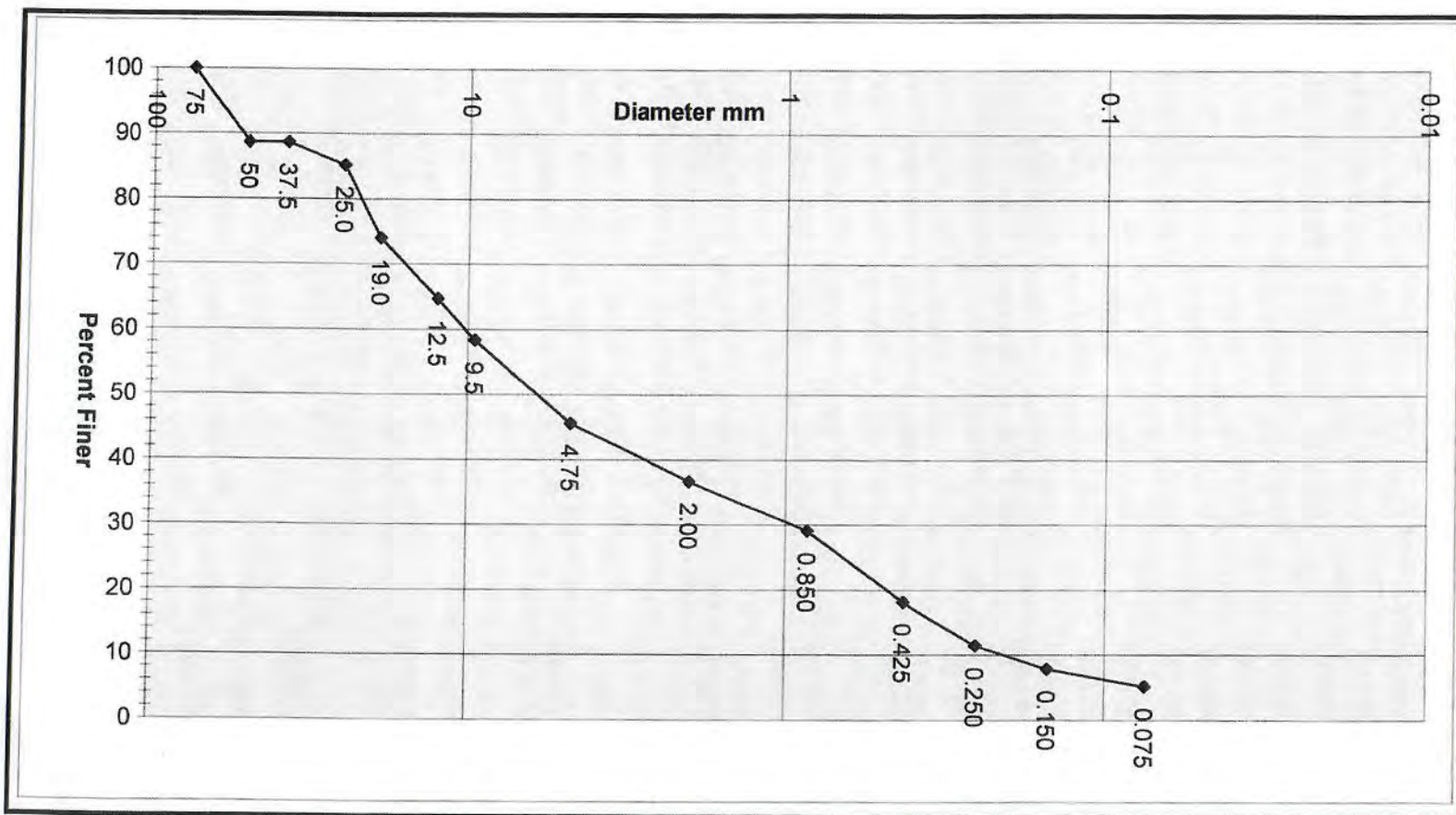
Drilling Equipment: B-61 MOBIL

3900 E. 112TH AVENUE • ANCHORAGE, ALASKA 99516 • TEL: (907) 349-8799 • FAX (907) 349-8791



MARK HANSEN P.E.

CONSULTING ENGINEERS TESTING LABORATORY
2605 N. Old Glenn Hwy, Palmer, AK 99645 Phone: (907) 745-4721
e-mail: mhpe@mtaonline.net



Sieve	Diameter mm	Percent Finer
3"	75	100
2"	50	89
1.5"	37.5	89
1"	25.0	85
3/4"	19.0	74
1/2"	12.5	65
3/8"	9.5	58
#4	4.75	46
#10	2.00	37
#20	0.850	29
#40	0.425	18
#60	0.250	11
#100	0.150	8
#200	0.075	5.2

Client: **Haas & Associates**

Soil Description: Poorly Graded Gravel with Silt and Sand

Project: **Food Bank**

Unified Classification: GP-GM

Sample Location: TH #1 @ 9' - 10'

Date: 4/5/2021

$C_u = 49$

Sample Date: 3/13/2021

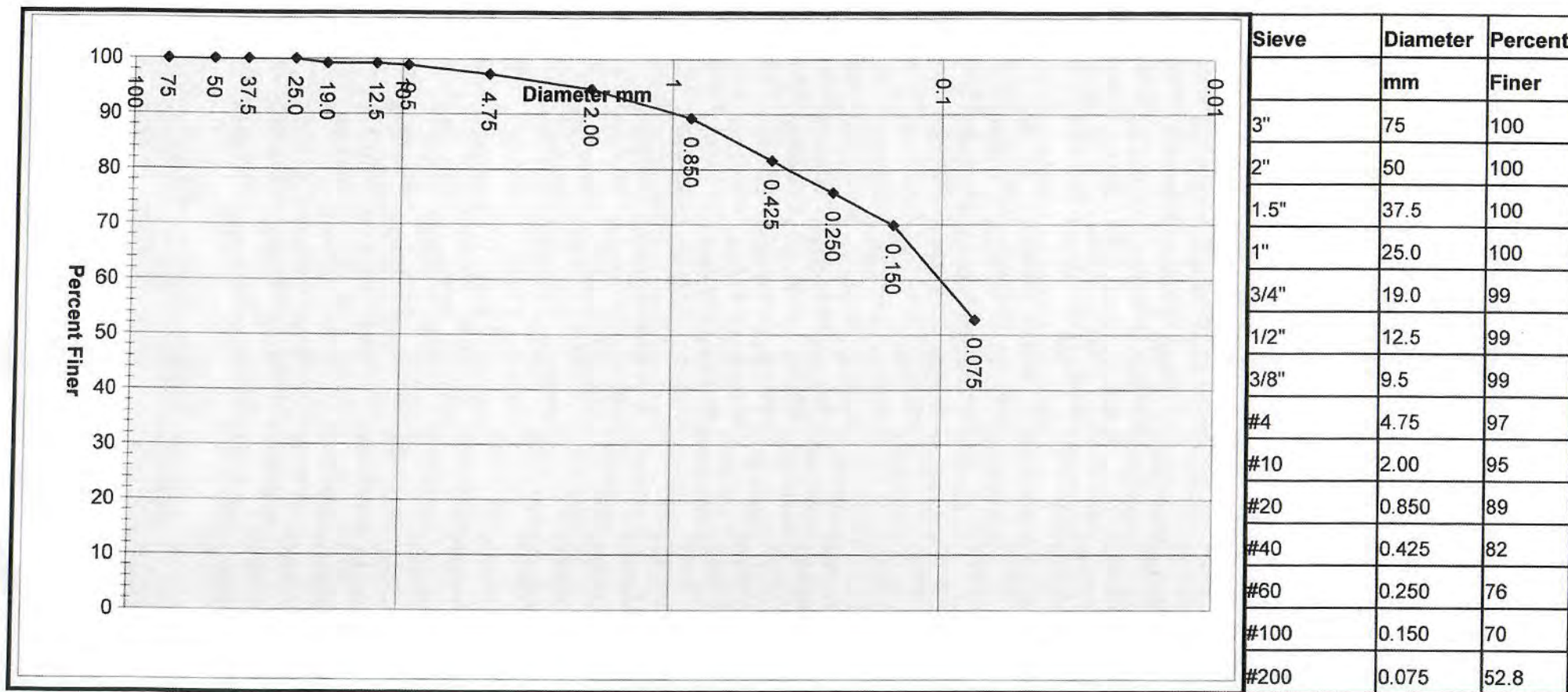
$C_c = 0.4$

Proj. no: 21007



MARK HANSEN P.E.

CONSULTING ENGINEERS TESTING LABORATORY
2605 N. Old Glenn Hwy, Palmer, AK 99645 Phone: (907) 745-4721
e-mail: mhpe@mtaonline.net



Client: **Haas & Associates**

Soil Description: Sandy Silt

Project: Food Bank

Unified Classification: ML

Sample Location: TH #1 @ 14' - 14.5'

Date: 4/5/2021

Sample Date: 3/13/2021

Proj. no: 21007



SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

LEGAL DESCRIPTION: (LEASED AREA)

A FIVE THOUSAND SIX HUNDRED TWENTY-FIVE (5625) SQUARE FOOT LEASED AREA, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID LEASE AREA IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 64°30'45" W A DISTANCE OF 368.07 FEET TO A POINT, THE TRUE POINT OF BEGINNING;

THENCE N 89°54'01" W A DISTANCE OF 75.00 FEET TO A POINT, THENCE N 00°05'59" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 89°54'01" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 00°05'59" W A DISTANCE OF 75.00 FEET TO A POINT, THE TRUE POINT OF BEGINNING.

CONTAINING 5625 SQUARE FEET, MORE OR LESS. (0.13 ACRES)

LEGAL DESCRIPTION: (NON-EXCLUSIVE ACCESS & UTILITY EASEMENT)

A SEVEN THOUSAND FIVE HUNDRED FOURTEEN (7514) SQUARE FOOT NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT, TWENTY (20) FEET WIDE, TEN (10) FEET EACH SIDE OF THE CENTERLINE, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID CENTERLINE IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 73°37'48" W A DISTANCE OF 108.03 FEET TO A POINT ON THE NORTH BOUNDARY OF THE CRAZY HORSE RIGHT-OF-WAY, THE TRUE POINT OF BEGINNING;

THENCE N 07°16'40" W A DISTANCE OF 154.99 FEET TO A POINT, THENCE N 35°28'31" W A DISTANCE OF 28.22 FEET TO A POINT, THENCE N 89°37'43" W A DISTANCE OF 192.50 FEET TO A POINT ON THE EAST BOUNDARY OF THE LEASED AREA, THE POINT OF TERMINUS.

CONTAINING 7514 SQUARE FEET, MORE OR LESS. (0.17 ACRES)

LEGAL DESCRIPTION: (PARENT PARCEL)

REMAINDER OF US SURVEY NO. 1041 AS DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA.

CENTERLINE SOLUTIONS

SITE NAME: AK 11 MILE
ADDRESS:10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU

SURVEY WORK PERFORMED BY:



5099 E. BLUE LUPINE DR #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM

DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08.02

SHEET 2 OF 2

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

SURVEY DETAILS

SHEET NO.

SV2.0



SITE DETAIL:
(1"=60')

EDGE OF BURM

LEASE LOT B

FAA LLWAS
LEASE

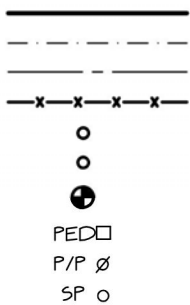
LEASE LOT A

POINT OF BEGINNING
20' WIDE ACCESS/UTILITY ESMT.

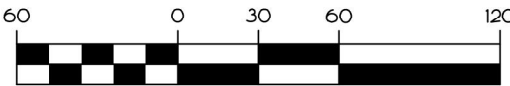
LEGEND:

MEASURED DATA
RECORD DATA
PROPERTY BOUNDARY LINES
ADJACENT PROPERTY LINES
CENTERLINE
FENCE AS NOTED
RECOVERED 5/8" REBAR
SET 5/8" REBAR (LS 9106)
RECOVERED MONUMENT
UTILITY PEDESTAL
POWER POLE
SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)



GRAPHIC SCALE



1 INCH = 60 FEET

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'



US-AK-5244 - 11 MILE

10020 CRAZY HORSE DR
JUNEAU, AK 99801

CONSTRUCTION DRAWINGS



PRELIMINARY

NO.	DATE	D/C	DESCRIPTION

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

TITLE
SHEET

SHEET NO.

T1.0

PROJECT SUMMARY

THIS PROJECT INCLUDES THE FOLLOWING SCOPE OF WORK:

CONSTRUCTION OF A NEW TELECOMMUNICATION AND PUBLIC UTILITY FACILITY CONSISTING OF A NEW 150'-0" SELF-SUPPORT TOWER, CARRIER EQUIPMENT AND A UTILITY BACKBOARD INSIDE A NEW 60'x60' FENCED COMPOUND WITHIN A 75'x75' LEASE AREA. (NO WATER OR SEWER IS REQUIRED.)

GOVERNING CODES

GOVERNING CODES

IBC-2012, INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS

NEC-2011, NATIONAL ELECTRICAL CODE

A.D.A. COMPLIANCE

INSTALLATION IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED PER A.D.A.

PROJECT VICINITY MAP



DRIVING DIRECTIONS

FROM JUNEAU INTERNATIONAL AIRPORT:

1. HEAD SOUTH ON SHELL SIMMONS DR TOWARD YANDUKIN DR (0.2 MI)
2. TURN LEFT ONTO YANDUKIN DR (0.2 MI)
3. TURN RIGHT ONTO SHELL SIMMONS DR (0.2 MI)
4. TURN LEFT ONTO GLACIER HWY (0.3 MI)
5. TURN LEFT TO STAY ON GLACIER HWY (0.7 MI)
6. TURN LEFT ONTO INDUSTRIAL BLVD (0.3 MI)
7. TURN RIGHT ONTO CRAZY HORSE DR; PARTIAL RESTRICTED ACCESS ROAD, DESTINATION ON THE RIGHT (0.2 MI)

ESTIMATED DISTANCE: 2.1 MILES

ESTIMATED TIME: 9 MIN

SITE INFORMATION

SITE NAME: 11 MILE
SITE ADDRESS: 10020 CRAZY HORSE DR
JUNEAU, AK 99801
LATITUDE: 58° 22' 01.135" N
LONGITUDE: 134° 36' 38.975" W
SOURCE: 1A CERTIFICATION
PARCEL NUMBER: 4B1701100120
ZONING CLASSIFICATION: I (INDUSTRIAL)
FLOOD ZONE: ZONE X
JURISDICTION: CITY AND BOROUGH OF JUNEAU
TOP OF (N) TOWER: 150'
OVERALL HEIGHT: 155'
OCCUPANCY GROUP: U
CONSTRUCTION TYPE: II-B

PROJECT LOCATION MAP



UTILITY COMPANIES

POWER: ALASKA ELECTRIC LIGHT & POWER
5601 TONSGARD CT, JUNEAU, AK 99801
TELCO/FIBER: TBD

PROJECT CONTACTS

APPLICANT
VERTICAL BRIDGE
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
ROBERT EVANS
PH: 425.652.5727
REVANS@VERTICALBRIDGE.COM

PROPERTY OWNER
CITY AND BOROUGH OF JUNEAU
155 S. SEWARD ST
JUNEAU, AK 99801

SURVEYOR
ACUTEK GEOMATICS LLC.
5099 E. BLUE LUPINE DR #104
WASILLA, AK 99654
PH: 907.376.8800

CONSTRUCTION MANAGEMENT
VERTICAL BRIDGE
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
MATT GRUGAN
678.488.1866

ZONING AND PERMITTING CONSULTANT
ALASKA AERIAL SURVEY. LLC
6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
PH: 907.331.8311

SITE ACQUISITION CONSULTANT
ALASKA AERIAL SURVEY. LLC
6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
907.331.8311

ENGINEER OF RECORD
TELEMTN ENGINEERING LLC
104 N BROADWAY, SUITE 600
DENVER, CO 80203
KHRISTOPHER SCOTT, PE
303.596.6804

ELECTRICAL ENGINEER
FRONT RANGE TECHNICAL SOLUTIONS
PO BOX 20364
BOULDER, CO 80308
PATRICK KEARNS, PE

DRAWING INDEX

SHEET	DESCRIPTION
T1.0	TITLE SHEET
SV-1	SURVEY
SV-2	SURVEY
A1.0	OVERALL SITE PLAN
A2.0	ENLARGED SITE PLAN
A3.0	ELEVATIONS
A4.0	FENCE DETAILS
A4.1	FENCE DETAILS
A5.0	CONSTRUCTION DETAILS
A6.0	UTILITY H-FRAME DETAILS
C1.0	GRADING PLAN
C2.0	GRADING DETAILS
E1.0	ONE-LINE/FAULT CALCULATIONS
G1.0	GROUNDING DETAILS
G2.0	GROUNDING DETAILS
GN1	GENERAL NOTES

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERTICAL BRIDGE SERVICES IS STRICTLY PROHIBITED.

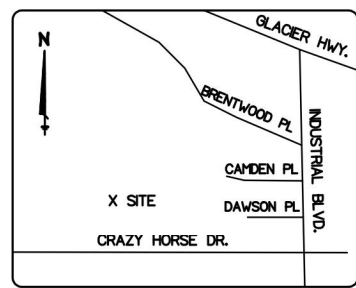
SIGN OFF OF FINAL CONSTRUCTION DRAWINGS

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

CONSULTANT	SIGNATURE	DATE
SITE ACQUISITION		
PERMITTING CONSULTANT		
RF ENGINEER:		
CONST. MNGR.		
OPS MNGR.		
PROJECT MNGR.		
REGULATORY REV.		
DEV. MNGR.		



Know what's below.
Call before you dig.



VICINITY MAP NOT TO SCALE



LEGEND:

- MEASURED DATA
- RECORD DATA
- PROPERTY BOUNDARY LINES
- ADJACENT PROPERTY LINES
- CENTERLINE
- FENCE AS NOTED
- RECOVERED 5/8" REBAR
- SET 5/8" REBAR (LS 9106)
- RECOVERED MONUMENT
- UTILITY PEDESTAL
- POWER POLE
- SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)
— — — — —
— x — x — x —
○
●
⊕
PED □
P/P ∅
SP ○

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'

FAA 1-A TOWER LOCATION INFORMATION:
PROPOSED 150± SELF SUPPORT TOWER

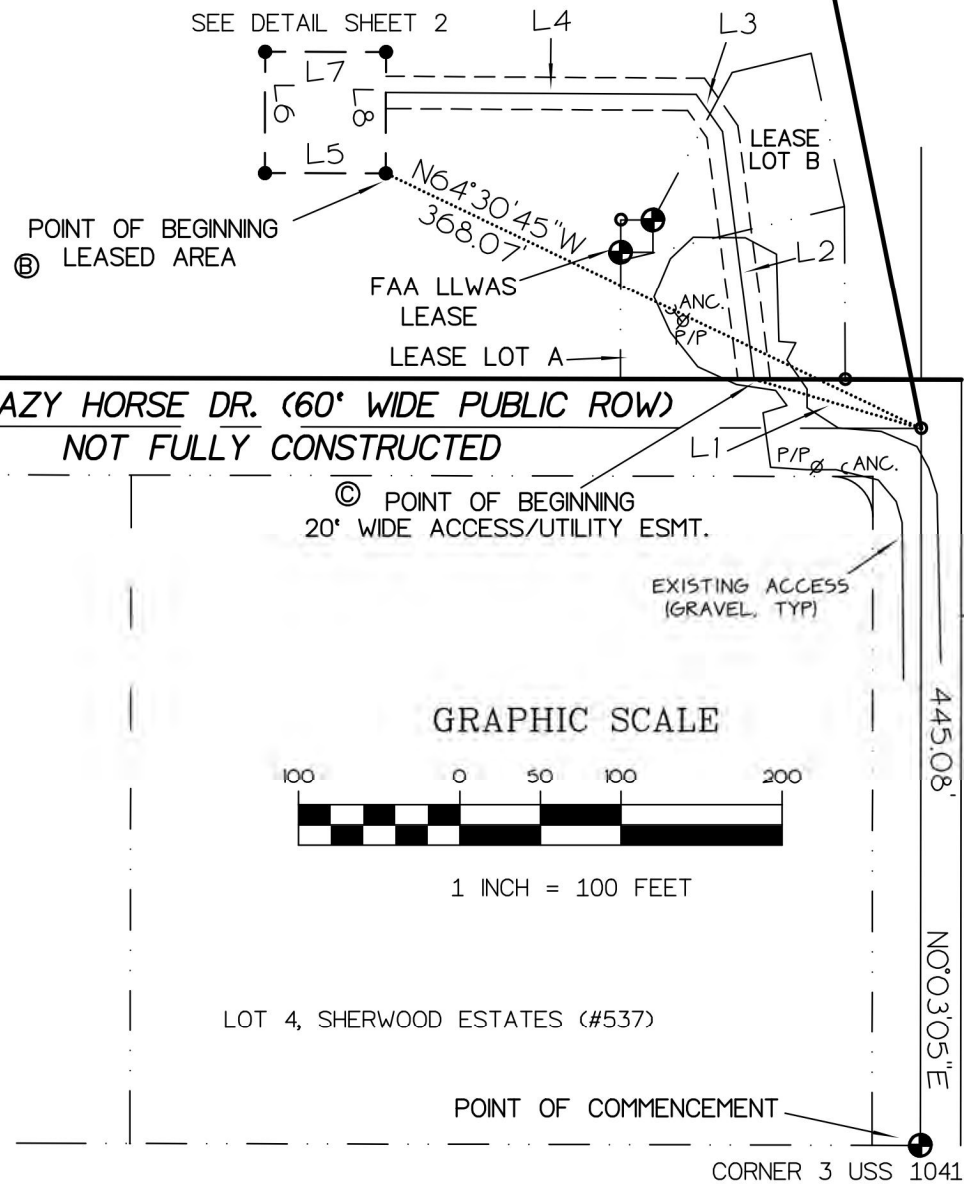
NAD 83
LATITUDE = 58°22'01.135" N ± 20'
LONGITUDE = 134°36'38.975" W ± 20'

GROUND ELEVATION AT BASE OF TOWER = 24' ± 3" NAVD88
HEIGHT OF TOP OF TOWER ABOVE GROUND = 174±3'

	AREA TABLE	SQUARE FEET	ACREAGE
Ⓐ	PARENT PARCEL	1,350,360 ±	31 ±
Ⓑ	LEASED AREA	5,625 ±	0.13 ±
Ⓒ	NON-EXCLUSIVE ACCESS & UTILITY ESMT.	7,514 ±	0.17 ±

SITE OVERVIEW:
(1"=100')

Ⓐ OWNER: CITY AND BOROUGH OF JUNEAU
PROPERTY: US SURVEY 1041
DEED: BOOK 66 PAGE 147
PARCEL ID: 4B1701100120



SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

SURVEYOR'S NOTES

1. BASIS OF BEARING IS PER RECORD PLAT OF US SURVEY NO. 1041.
2. NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED EVIDENCE ONLY.
3. ALL VISIBLE TOWER EQUIPMENT AND IMPROVEMENTS ARE CONTAINED WITHIN THE DESCRIBED AREA.
4. SURVEY COMPLETED IN FEBRUARY 2019.
5. THIS SURVEY DOES NOT REPRESENT A SURVEY OF THE PARENT PARCEL. REAL PROPERTY SHOWN HEREON ARE APPLICABLE TO THE TELECOMMUNICATIONS SITE, THERE MAY BE OTHER IMPROVEMENTS NOT SHOWN.
6. NO TITLE REPORT PROVIDED FOR THIS PROJECT.

ZONING: PER CITY AND BOROUGH OF JUNEAU ASSESSOR'S DATA, PROPERTY IS ZONED AS INDUSTRIAL.

FLOOD NOTE: THIS PARCEL LIES WITHIN FLOOD ZONE X, PER FEMA MAP NUMBER 02110C1526D, WITH AN EFFECTIVE DATE OF AUGUST 19, 2013.



ACUTEK GEOMATICS, LLC
TERRY L. NICODEMUS, PLS
LAND SURVEYOR, ALASKA #9106-S
Date: 3/4/2019

CENTERLINE SOLUTIONS		
SITE NAME: AK 11 MILE		
ADDRESS: 10020 CRAZY HORSE DR.		
JUNEAU, ALASKA 99801		
CITY AND BOROUGH OF JUNEAU		
SURVEY WORK PERFORMED BY:		
5099 E. BLUE LUPINE DR #104, WASILLA AK 99654 (907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM		
DRAWN BY: TENDRA	CHECKED BY: TERRY	JOB #: 19-08.02
SHEET 1 OF 2		



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

SURVEY
DETAILS

SHEET NO.

SV1.0



SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

LEGAL DESCRIPTION: (LEASED AREA)

A FIVE THOUSAND SIX HUNDRED TWENTY-FIVE (5625) SQUARE FOOT LEASED AREA, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID LEASE AREA IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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THENCE N 89°54'01" W A DISTANCE OF 75.00 FEET TO A POINT, THENCE N 00°05'59" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 89°54'01" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 00°05'59" W A DISTANCE OF 75.00 FEET TO A POINT, THE TRUE POINT OF BEGINNING.

CONTAINING 5625 SQUARE FEET, MORE OR LESS. (0.13 ACRES)

LEGAL DESCRIPTION: (NON-EXCLUSIVE ACCESS & UTILITY EASEMENT)

A SEVEN THOUSAND FIVE HUNDRED FOURTEEN (7514) SQUARE FOOT NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT, TWENTY (20) FEET WIDE, TEN (10) FEET EACH SIDE OF THE CENTERLINE, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID CENTERLINE IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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THENCE N 07°16'40" W A DISTANCE OF 154.99 FEET TO A POINT, THENCE N 35°28'31" W A DISTANCE OF 28.22 FEET TO A POINT, THENCE N 89°37'43" W A DISTANCE OF 192.50 FEET TO A POINT ON THE EAST BOUNDARY OF THE LEASED AREA, THE POINT OF TERMINUS.

CONTAINING 7514 SQUARE FEET, MORE OR LESS. (0.17 ACRES)

LEGAL DESCRIPTION: (PARENT PARCEL)

REMAINDER OF US SURVEY NO. 1041 AS DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA.

CENTERLINE SOLUTIONS

SITE NAME: AK 11 MILE
ADDRESS:10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU

SURVEY WORK PERFORMED BY:



5099 E. BLUE LUPINE DR #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM

DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08.02

SHEET 2 OF 2

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

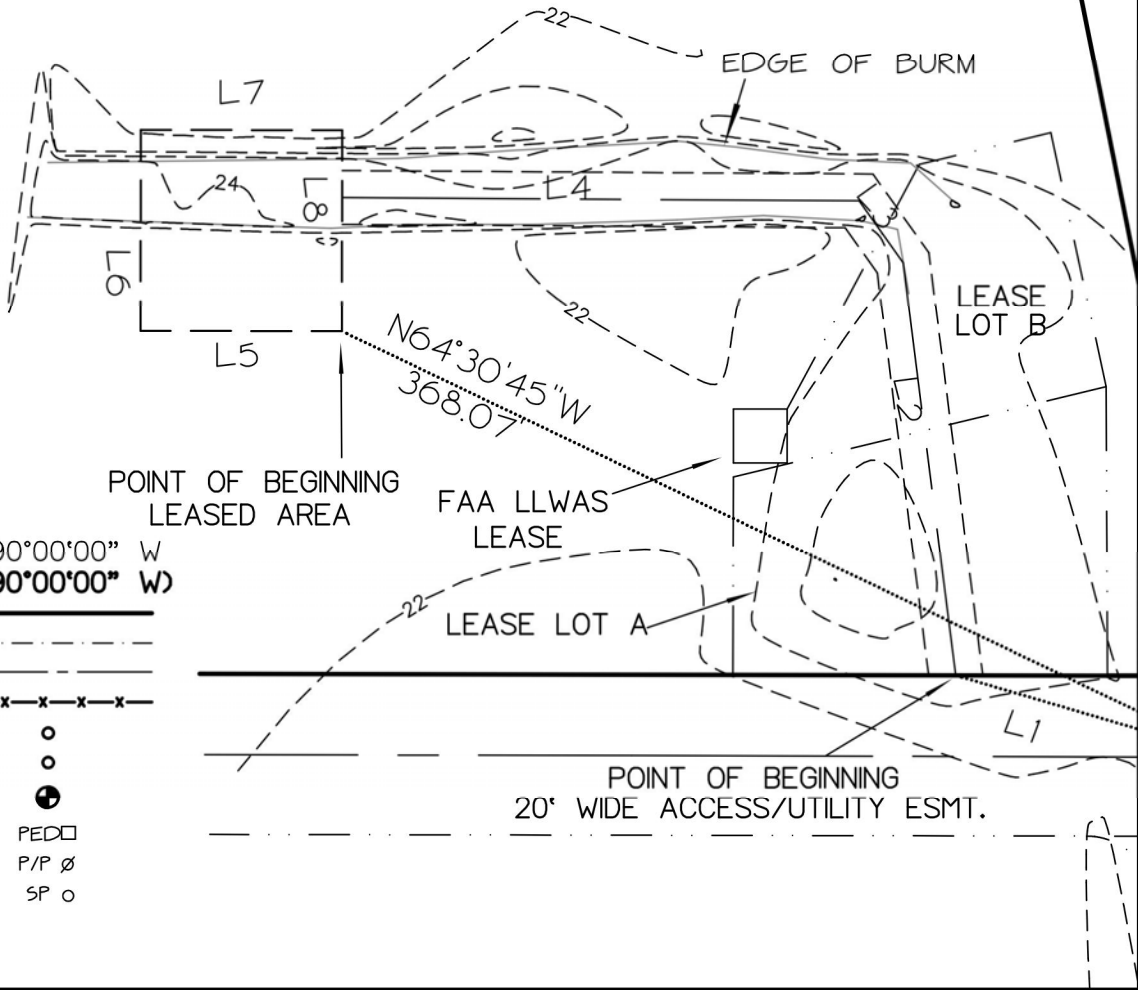
SURVEY DETAILS

SHEET NO.

SV2.0



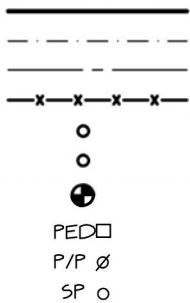
SITE DETAIL:
(1"=60')



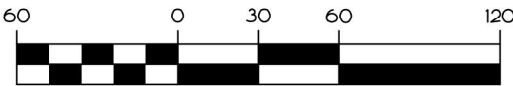
LEGEND:

MEASURED DATA
RECORD DATA
PROPERTY BOUNDARY LINES
ADJACENT PROPERTY LINES
CENTERLINE
FENCE AS NOTED
RECOVERED 5/8" REBAR
SET 5/8" REBAR (LS 9106)
RECOVERED MONUMENT
UTILITY PEDESTAL
POWER POLE
SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)

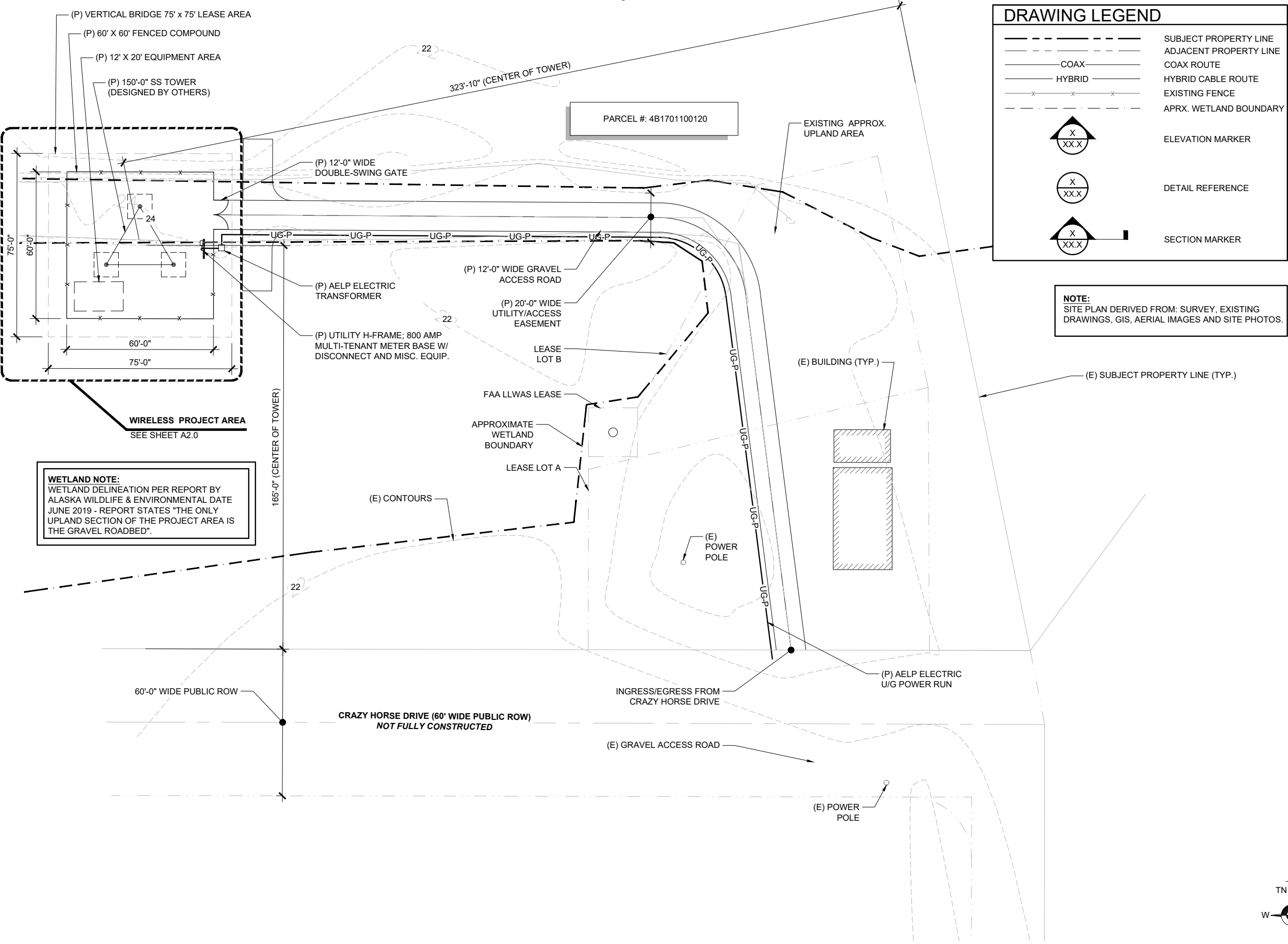


GRAPHIC SCALE



1 INCH = 60 FEET

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
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PRELIMINARY			
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NO.	DATE	D/C	DESCRIPTION
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1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

**OVERALL
SITE PLAN**

SHEET NO.

A1.0

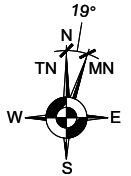
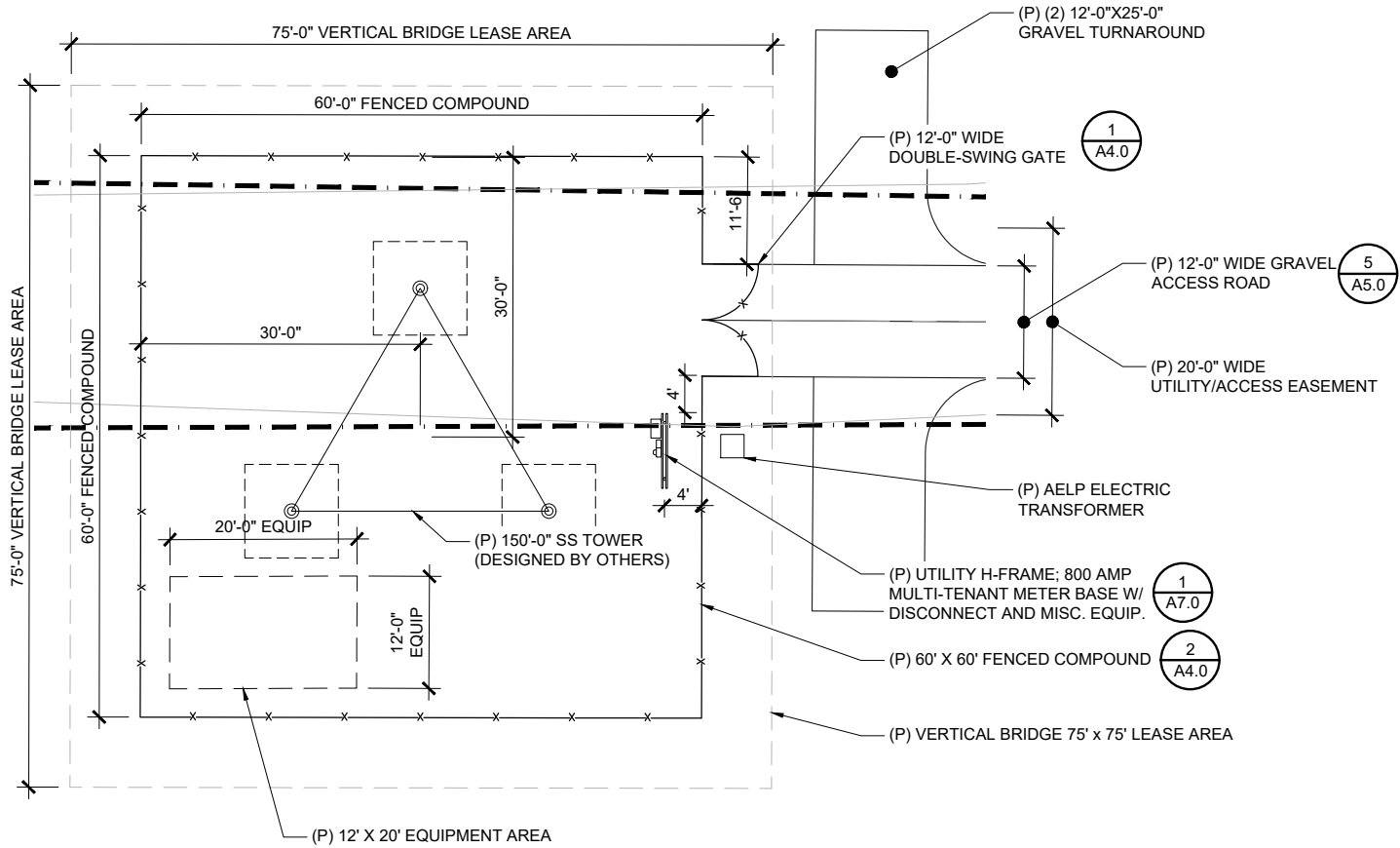


GENERAL NOTES:

1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5. CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.



NOTE:
SITE PLAN DERIVED FROM: SURVEY (BY ACUTEK, DATED MARCH 2019)
EXISTING DRAWINGS, GIS, AERIAL IMAGES AND SITE PHOTOS.



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
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SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

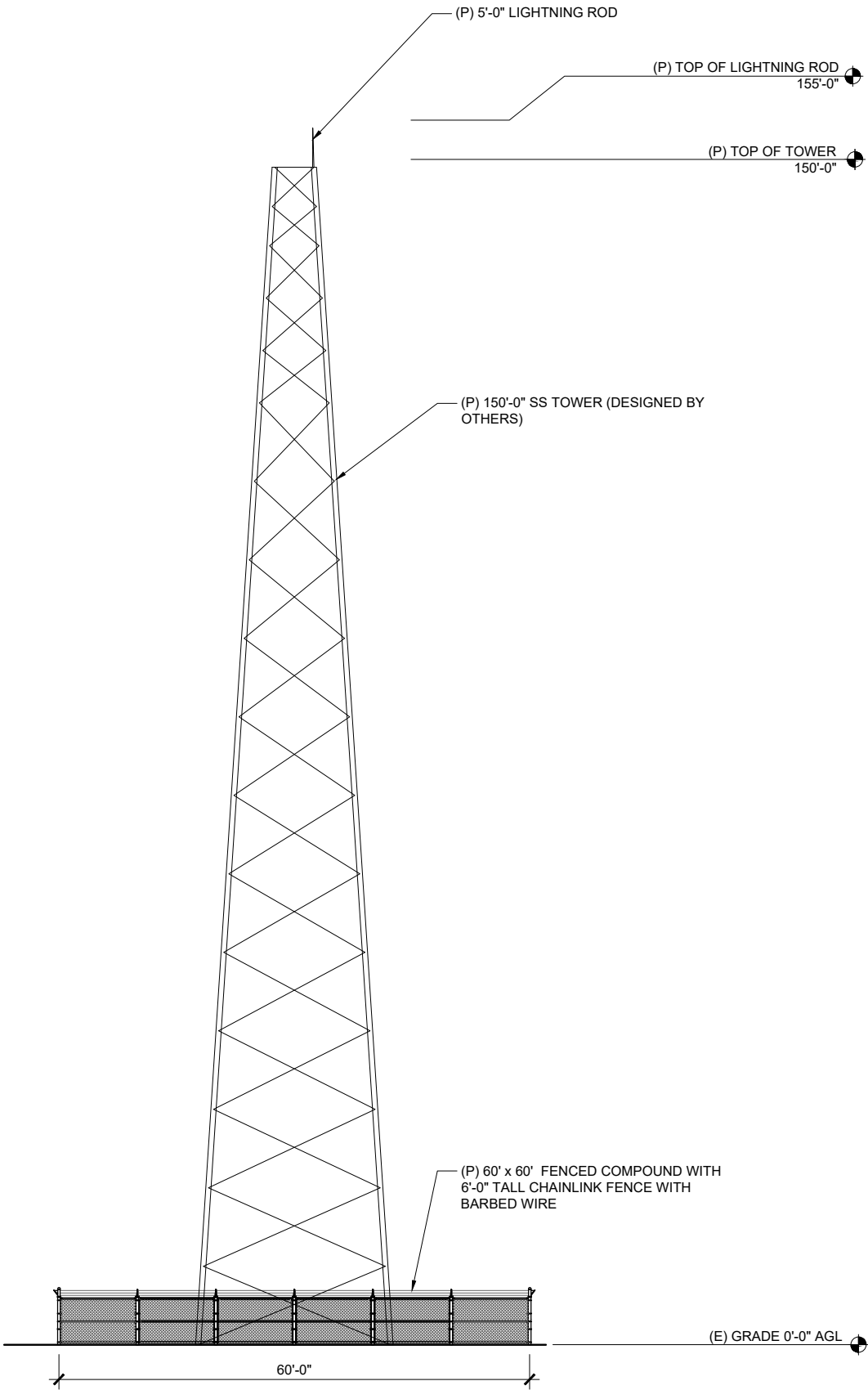
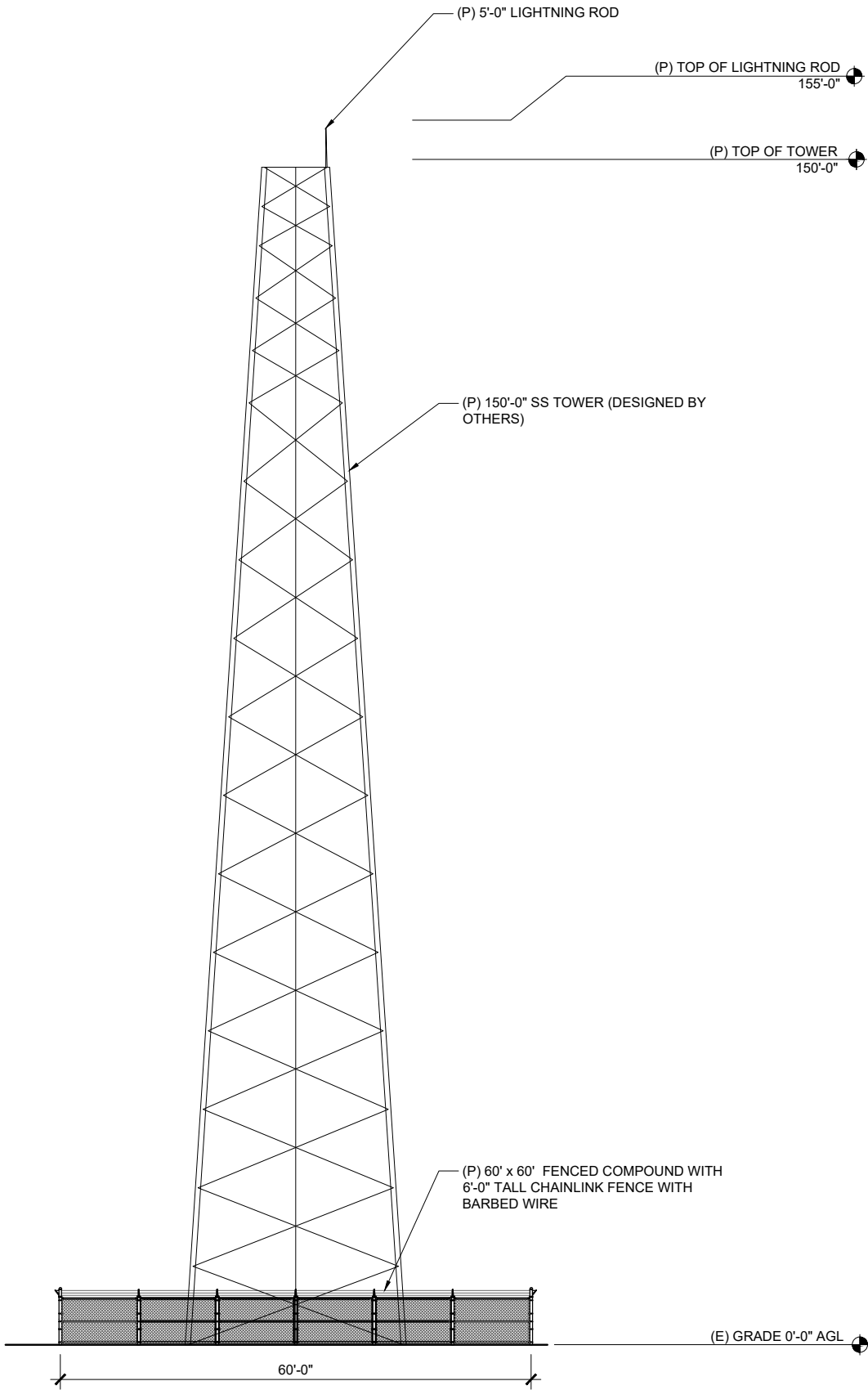
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

ENLARGED
SITE PLAN

SHEET NO.

A2.0



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
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JUNEAU, AK 99801

SHEET TITLE

ELEVATIONS

SHEET NO.

A3.0

1 NORTH ELEVATION

SCALE: 1" = 20'-0" (11X17)

SCALE: 1" = 10'-0" (22X34)



2 WEST ELEVATION

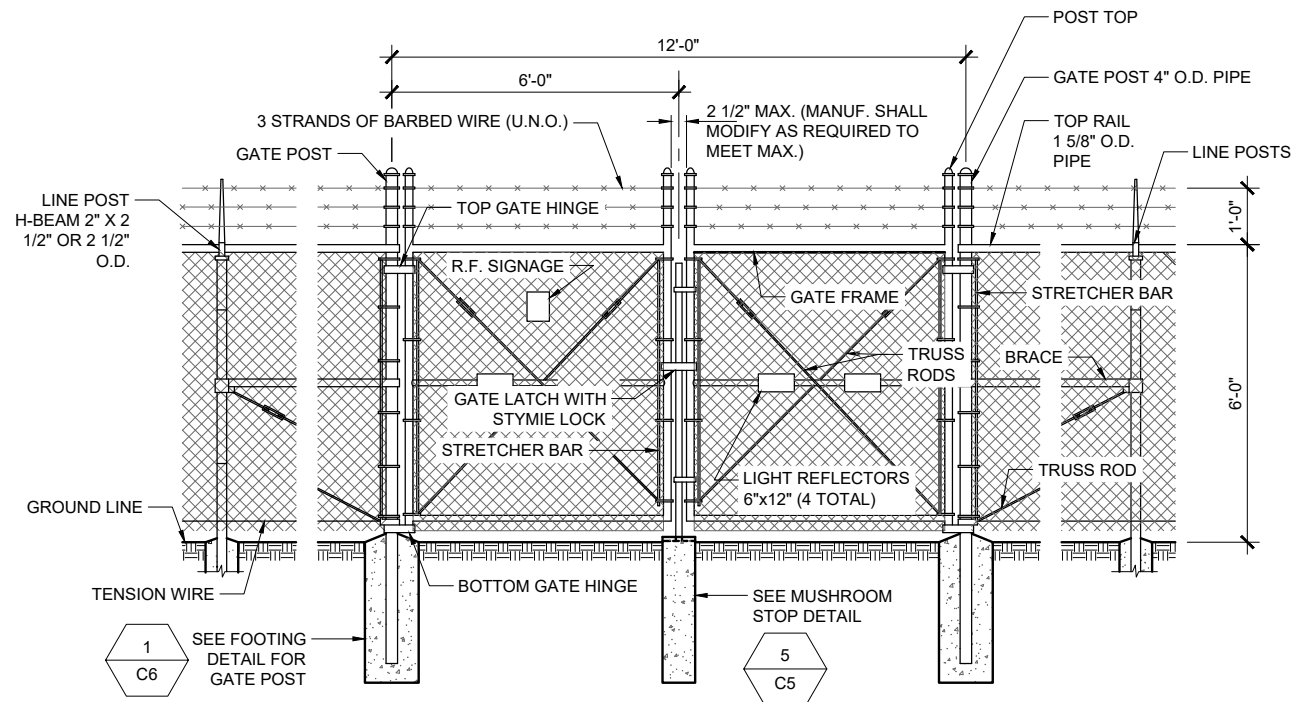
SCALE: 1" = 20'-0" (11X17)

SCALE: 1" = 10'-0" (22X34)



NOTES:

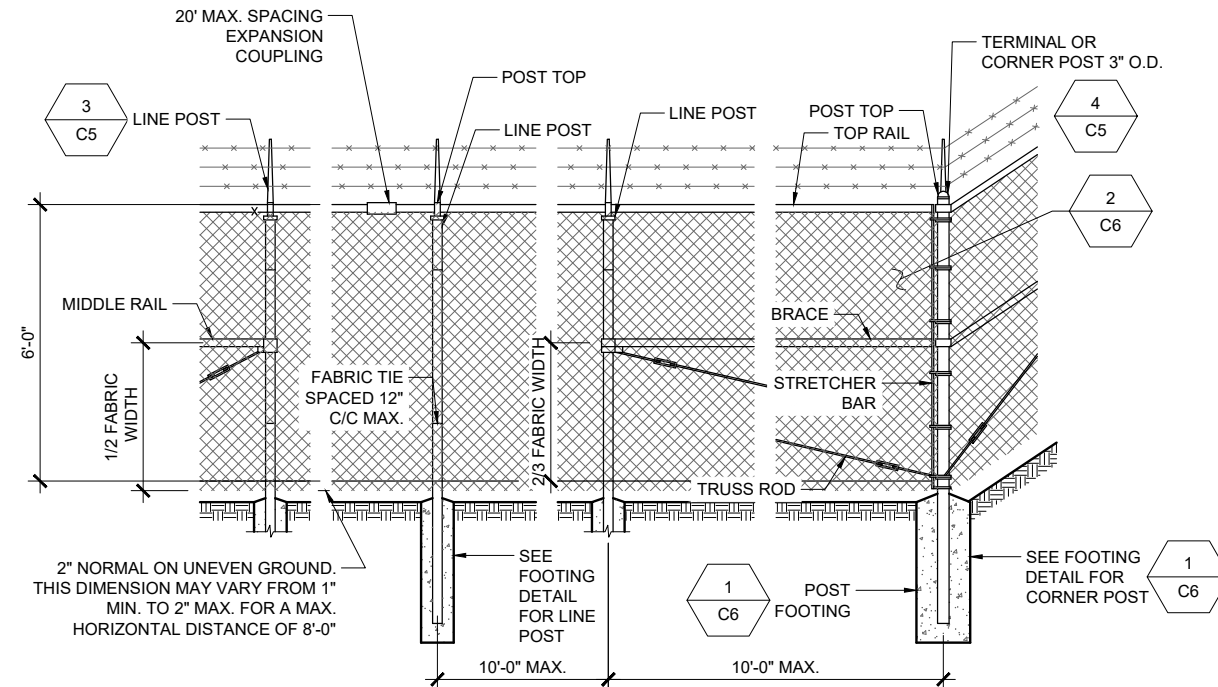
1. THIS SECURITY FENCE TO HAVE ALL NUTS
INSTALLED TOWARD INSIDE FACE OF
COMPOUND.



1 | VEHICLE GATE ARRANGEMENT

SCALE: NTS

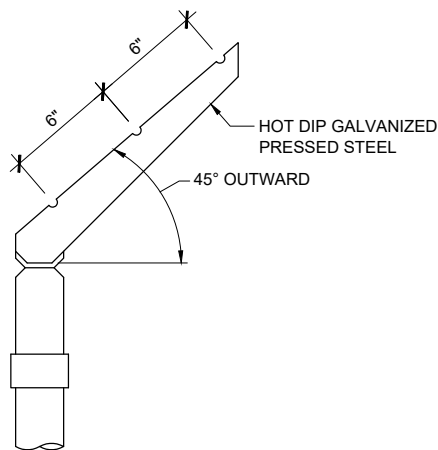
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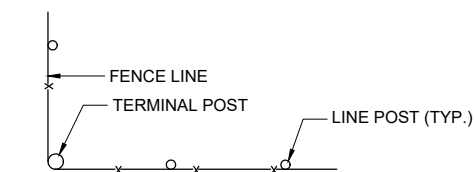
2 | POST/CORNER POST ARRANGEMENT

SCALE: NTS

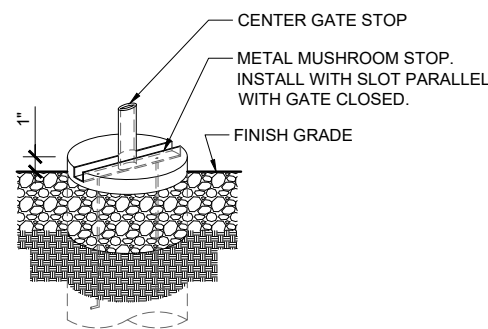
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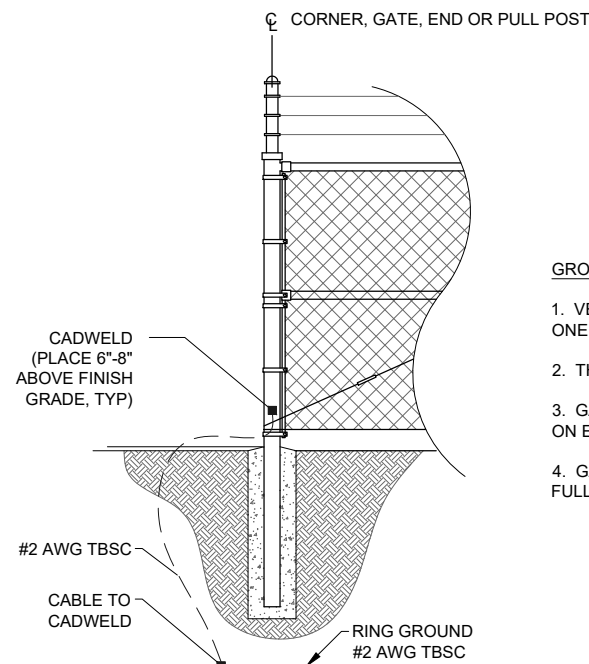
3	BARBED WIRE ARM OF LINE POST
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4 | INSTALLATION AT CORNERS



5 | MUSHROOM STOP DETAIL



GROUNDING NOTES

1. VERTICAL POSTS SHALL BE BONDED TO THE RING AT EACH CORNER AND AT EACH GATE POST. AT MINIMUM, ONE VERTICAL POST SHALL BE BONDED TO THE GROUND RING IN EVERY 100-FOOT STRAIGHT RUN OF FENCE.
2. THE #2 AWG, TBSC, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST, ABOVE GROUND.
3. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAIDED FLAT STRAP WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
4. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULL OPEN IN EITHER DIRECTIONS

6 | FENCE GROUNDING DETAILS

SCALE: NTS

SCALE: NTS



PRELIMINARY

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SITE NAME:

11 MILE
US-AK-5244

ITE ADDRESS:

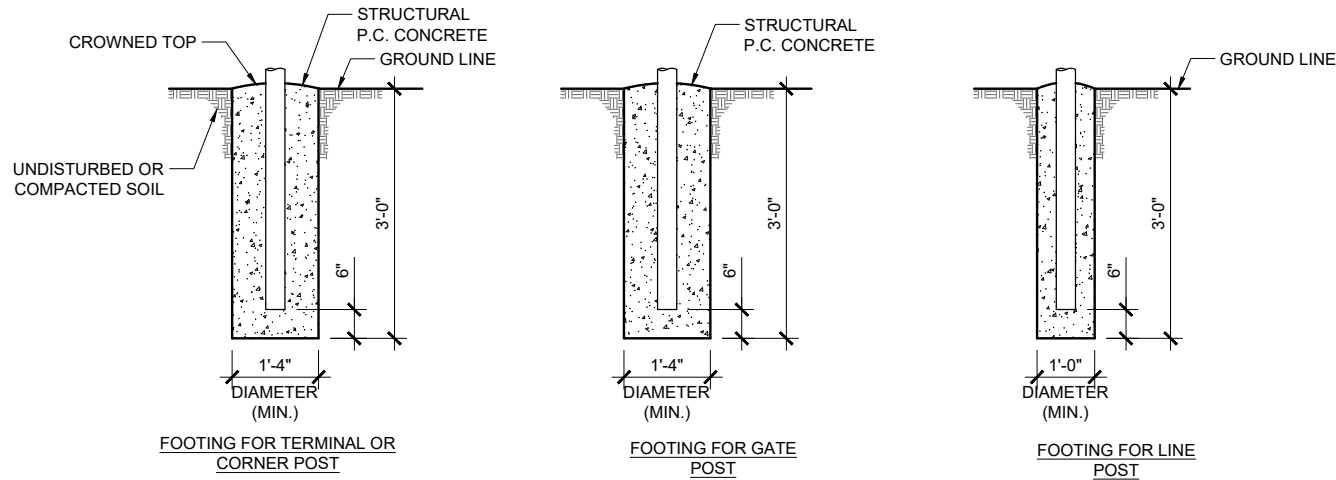
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

FENCE DETAILS

SHEET NO.

A4.0



FENCE NOTES

ZINC COATING - THE WEIGHT OF THE COATING SHALL NOT BE LESS THAN 1.2 OUNCES PER SQUARE FOOT OF ACTUAL SURFACE COVERED. ALL FERROUS METALS USED AS PART OF THE FENCE INSTALLATION SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL. ALL SCREWS, BOLTS, LOCK WASHERS, NUTS, ETC. SHALL BE HOT DIP GALVANIZED OR MADE OF STAINLESS STEEL.

FABRIC - STANDARD INDUSTRIAL GRADE #9 GAUGE WITH 2 INCH MESH ZINC COATED CHAIN LINK WITH A BREAKING STRENGTH OF NOT LESS THAN 1290 POUNDS SHALL BE USED. THE FABRIC SHALL BE ZINC COATED BY THE HOT DIP PROCESS AFTER FABRICATION.

METAL POSTS - METAL POSTS (LINE, CORNER, TERMINAL, GATE POSTS, MIDDLE RAILS, BRACES AND TOP RAIL) SHALL BE HOT DIP GALVANIZED SCHEDULE 40 TUBULAR STEEL WITH AN OUTSIDE DIAMETER AS INDICATED ON THIS DRAWING. A POST TOP FITTING OF GALVANIZED STEEL WILL BE INSTALLED TO EXCLUDE MOISTURE.

POST CAPS - ALL POST CAPS TO USE THE BARBED WIRE OUTRIGGER BRACKET AND SHALL BE ATTACHED TO THE POST WITH TAMPER RESISTANT SCREWS, BRADS, OR BOLTS.

TOP RAIL - A MINIMUM OF ONE COUPLING IN EACH STRAIGHT RUN OF TOP RAIL, SHALL HAVE A HEAVY SPRING INSERTED WITHIN THE COUPLING TO TAKE UP EXPANSION AND CONTRACTION OF THE TOP RAIL. THE TOP RAIL SHALL BE FASTENED TO TERMINAL POSTS WITH PRESSED STEEL CONNECTIONS.

MIDDLE RAIL - THE MIDDLE RAIL SHALL BE OF THE SAME MATERIAL AS THE TOP RAIL AND INSTALLED WITH HOT DIP GALVANIZED FITTINGS ATTACHED TO THE POSTS.

BRACE RAIL - BRACE RAIL MATERIAL SHALL BE OF THE MATERIAL AS THE TOP RAIL AND LOCATED 2/3 OF THE DISTANCE UP FROM THE BOTTOM OF THE FABRIC. BRACE RAILS SHALL BE SECURELY FASTENED TO POSTS BY SUITABLE PRESSED STEEL CONNECTIONS.

TRUSS RODS - SHALL BE 3/8" ROUND GALVANIZED STEEL RODS WITH GALVANIZED TURNBUCKLES. THE ZINC COATING SHALL BE NOT LESS THAN 1.2 OUNCES PER SQUARE FOOT OF SURFACE.

TENSION WIRE - THE TENSION WIRE SHALL BE OF #7 GAUGE HOT DIP GALVANIZED SPRING TENSION WIRE WITH A BREAKING STRENGTH OF NOT LESS THAN 1900 POUNDS. THIS WIRE SHALL BE KEPT TAUT WITH GALVANIZED TURNBUCKLES AND ATTACHED TO POSTS WITH GALVANIZED HARDWARE OR CABLE CLAMPS.

FABRIC TIES - THE FABRIC TIES SHALL BE ALUMINUM WIRE. NOT LESS THAN #9 GAGE.

STRETCHER BARS - THE STRETCHER BARS SHALL BE FLAT GALVANIZED STEEL BARS NOT LESS THAN 5/16" X 3/4" AND NOT LESS THAN 2" SHORTER THAN THE FABRIC. STRETCHER BAR BANDS SHALL BE FLAT GALVANIZED STEEL BARS NOT LESS THAN 5/16" X 1 1/2" WITH 5/16" DIAMETER GALVANIZED CARRIAGE BOLT.

BARBED WIRE - BARBED WIRE OF GALVANIZED STEEL (OR ALUMINUM) CONSISTING OF 12 1/2 GAUGE WIRE WITH 4-POINT BARBS OF 14 GAUGE WIRE SPACED 5 INCHES APART.

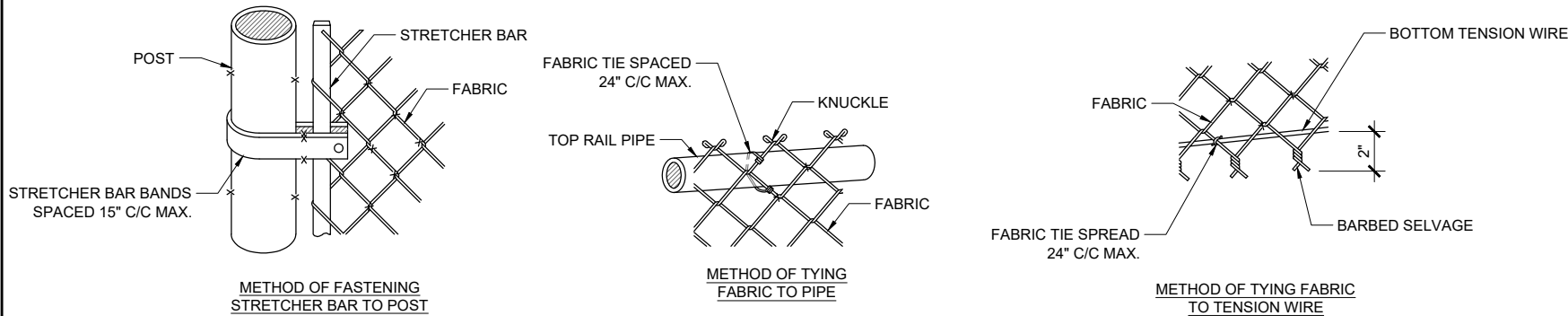
GATE FRAMES SHALL BE CONSTRUCTED OF 2 1/2 INCH OUTSIDE DIAMETER HEAVY DUTY GALVANIZED STEEL PIPE. THE GATES SHALL BE ASSEMBLED USING CORNER FITTINGS OF HEAVY PRESSED STEEL OR MALLEABLE CASTINGS OR MAY BE WELDED IF THE ENTIRE GATE FRAME IS HOT DIP GALVANIZED AFTER THE WELDING. ALL GATES SHALL BE EQUIPPED WITH HEAVY DUTY GALVANIZED STEEL TYPE HINGES WITH LARGE BEARING SURFACES OF ADEQUATE STRENGTH TO SUPPORT THE GATE. THE HINGES SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. GATES WILL PROVIDE A FULL RANGE OF MOTION AND BE EASILY OPENED AND CLOSED BY ONE PERSON. GATE LATCH SHALL BE CARGO PROTECTORS, INC. MODEL FL-100. LATCH SHALL BE EQUIPPED TO RECEIVE A PADLOCK.

PROVIDE R.F. WARNING SIGNAGE ON ALL GATES.

1 POST FOOTINGS

SCALE: NTS

SCALE: NTS



2 FABRIC / BAR CONNECTIONS

SCALE: NTS

SCALE: NTS

3 NOTES

SCALE: NTS

SCALE: NTS



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SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

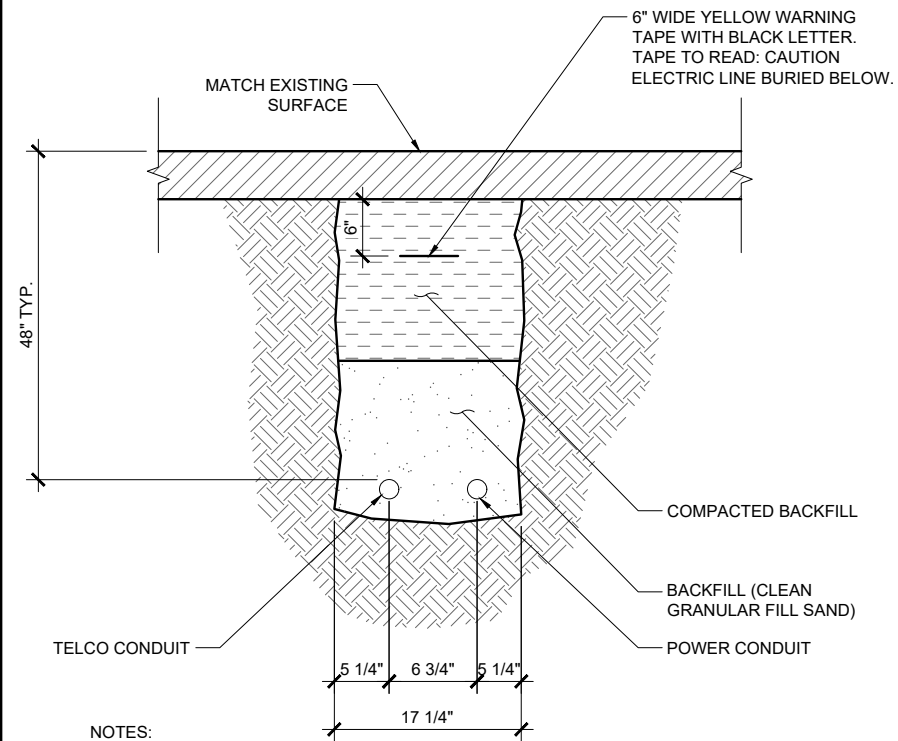
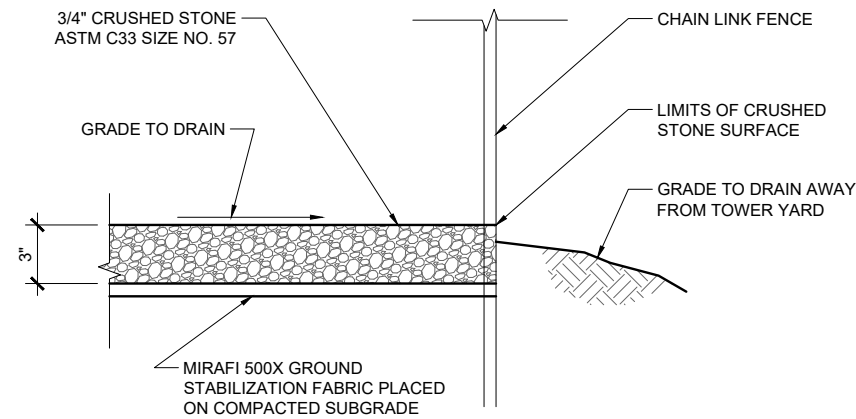
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

FENCE DETAILS

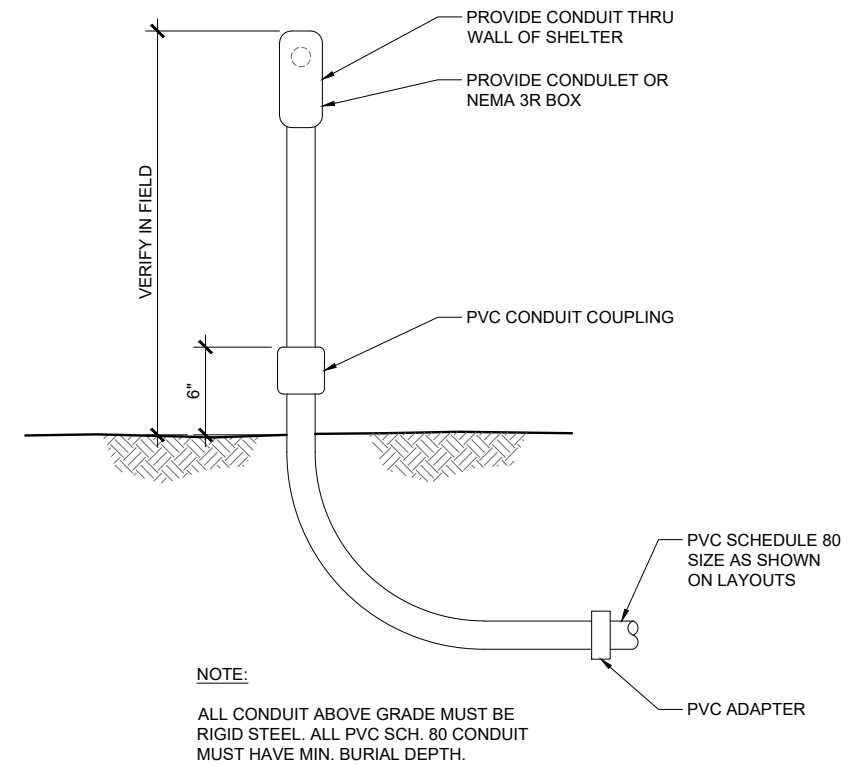
SHEET NO.

A4.1



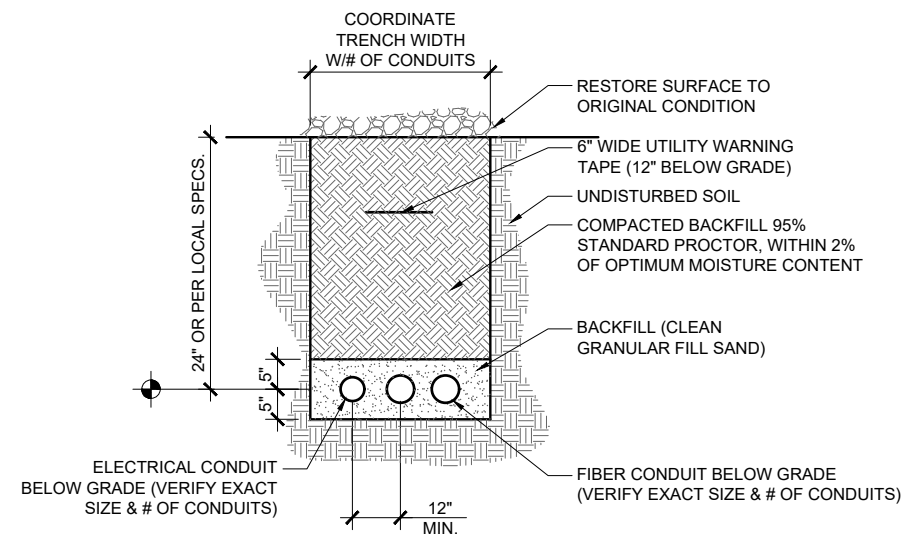
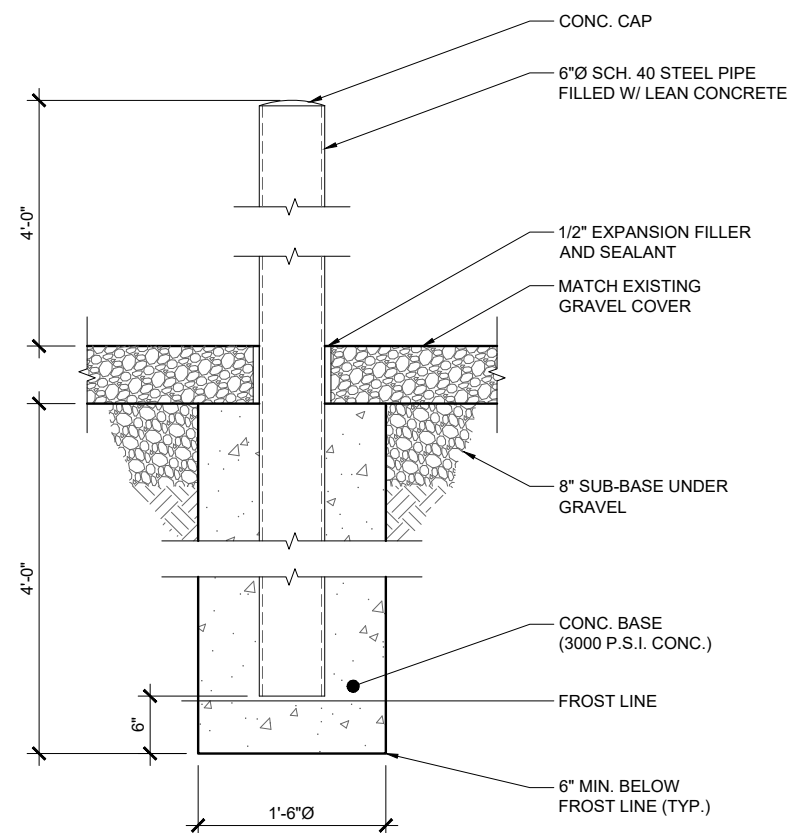
NOTES:

1. NUMBER AND SIZE OF CONDUITS MAY VARY. REFER TO CONSTRUCTION DRAWINGS FOR CONDUIT SIZE AND LOCATION. CONFIRM DIMENSIONS SHOWN WITH UTILITY COMPANY.
2. CONTRACTOR TO VERIFY IN FIELD THE LOCATION, SIZE, TYPE, AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DIGGING THE SERVICE TRENCH. PROVIDE A MINIMUM OF 18" CLEARANCE BETWEEN PROPOSED UTILITIES AND EXISTING UTILITIES IN THE CASE OF UTILITY LINE CROSSINGS.



NOTE:

ALL CONDUIT ABOVE GRADE MUST BE RIGID STEEL. ALL PVC SCH. 80 CONDUIT MUST HAVE MIN. BURIAL DEPTH.



1. INSTALL ALL UNDERGROUND UTILITIES PER LOCAL UTILITY REQUIREMENTS.
2. LOCATE ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING / EXCAVATION.
3. COORDINATE SIZE AND TYPE WITH LOCAL UTILITY COMPANIES REQUIREMENTS.
4. REFER TO ELECT PLAN FOR EXACT SIZE AND LOCATION.
5. COMPACT BACKFILL TO 95% PROCTOR DENSITY AT ALL DRIVEWAY OR HARD SURFACED AREAS. COMPACT TO 90% PROCTOR DENSITY ALL OTHER AREAS UNLESS NOTED OTHERWISE, REFER TO GEOTECHNICAL REPORT.



07/01/2021

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11 MILE
US-AK-5244

SITE ADDRESS:
0020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
CONSTRUCTION
DETAILS

SHEET NO.

A5.0

1 | SECTION THROUGH COMPOUND

SCALE: NTS

SCALE: NTS

2 | TYP. CONDUIT TRENCH DETAIL

SCALE: NTS

SCALE: NTS

3 UNDERGROUND CONDUIT
STUB-UP (TELCO/POWER)

SCALE: NTS

SCALE: NTS

4 | BOLLARD DETAIL

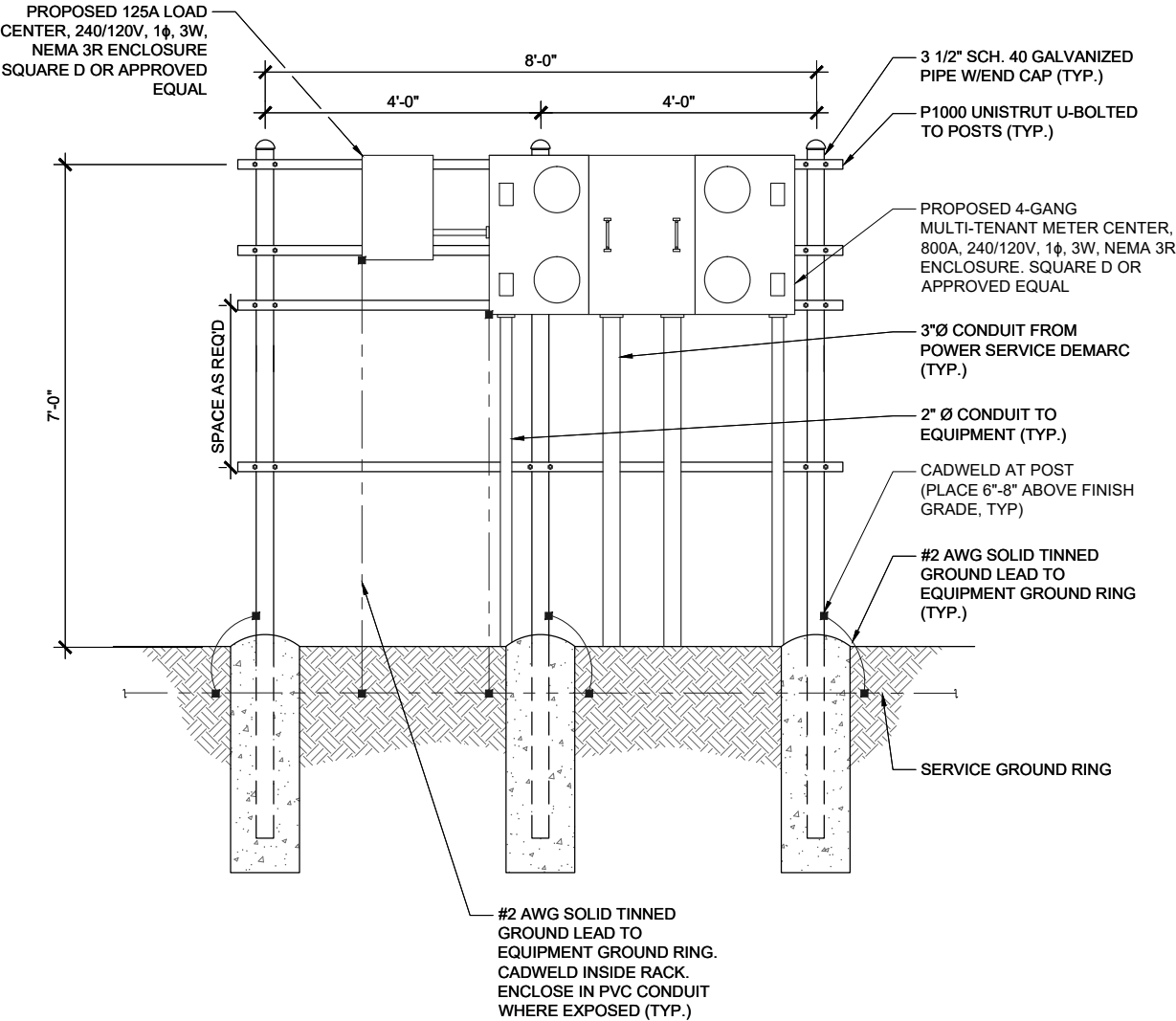
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SCALE: NTA

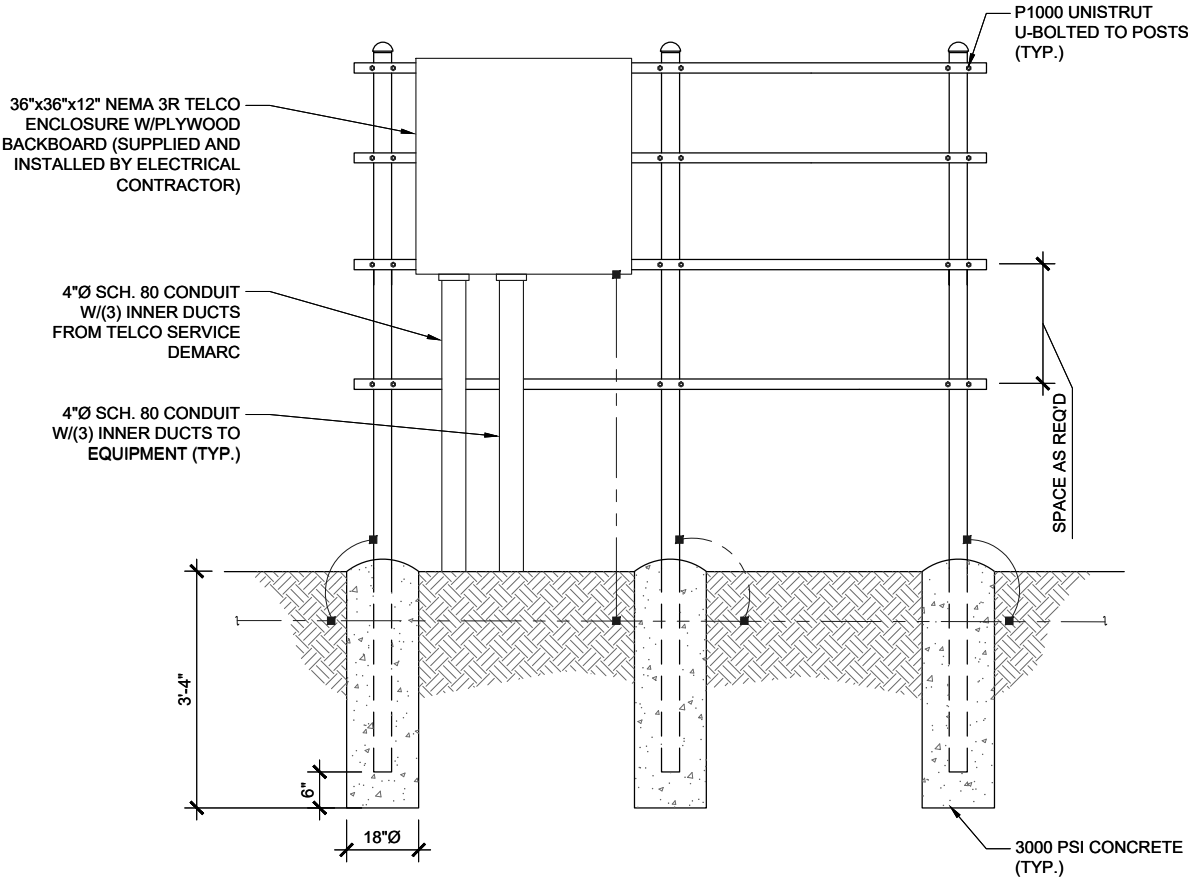
5 | TYPICAL TRENCH DETAIL

SCALE: NTS

SCALE: NTS



FRONT



BACK

- NOTES:
1. CONTRACTOR TO VERIFY EQUIPMENT SPECIFICATIONS PRIOR TO H-FRAME MATERIALS PROCUREMENT. ALL H-FRAME MOUNTED EQUIPMENT TO BE MOUNTED PER MANUFACTURER SPECIFICATIONS.
 2. UNLESS OTHERWISE NOTED, ALL UNDERGROUND PVC TO BE SCH 40.
 3. ALL ABOVE GRADE PVC TO BE SCH 40. ALL CONNECTIONS TO BE SCH 40 PVC OR SEALTIGHT. VERIFY WITH CONSTRUCTION MANAGER PRIOR TO BID.
 4. ALL WIRE CONNECTIONS & CONDUITS TO BE SUPPLIED BY CONTRACTOR UNLESS OTHERWISE NOTED OR SPECIFIED BY CONSTRUCTION MANAGER.
 5. ADDITIONAL ANGLE ADAPTERS (NOT SHOWN) ARE USED TO MOUNT SERVICE BOXES TO THE VERTICAL MEMBERS.



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SITE NAME:

11 MILE

US-AK-5244

SITE ADDRESS:

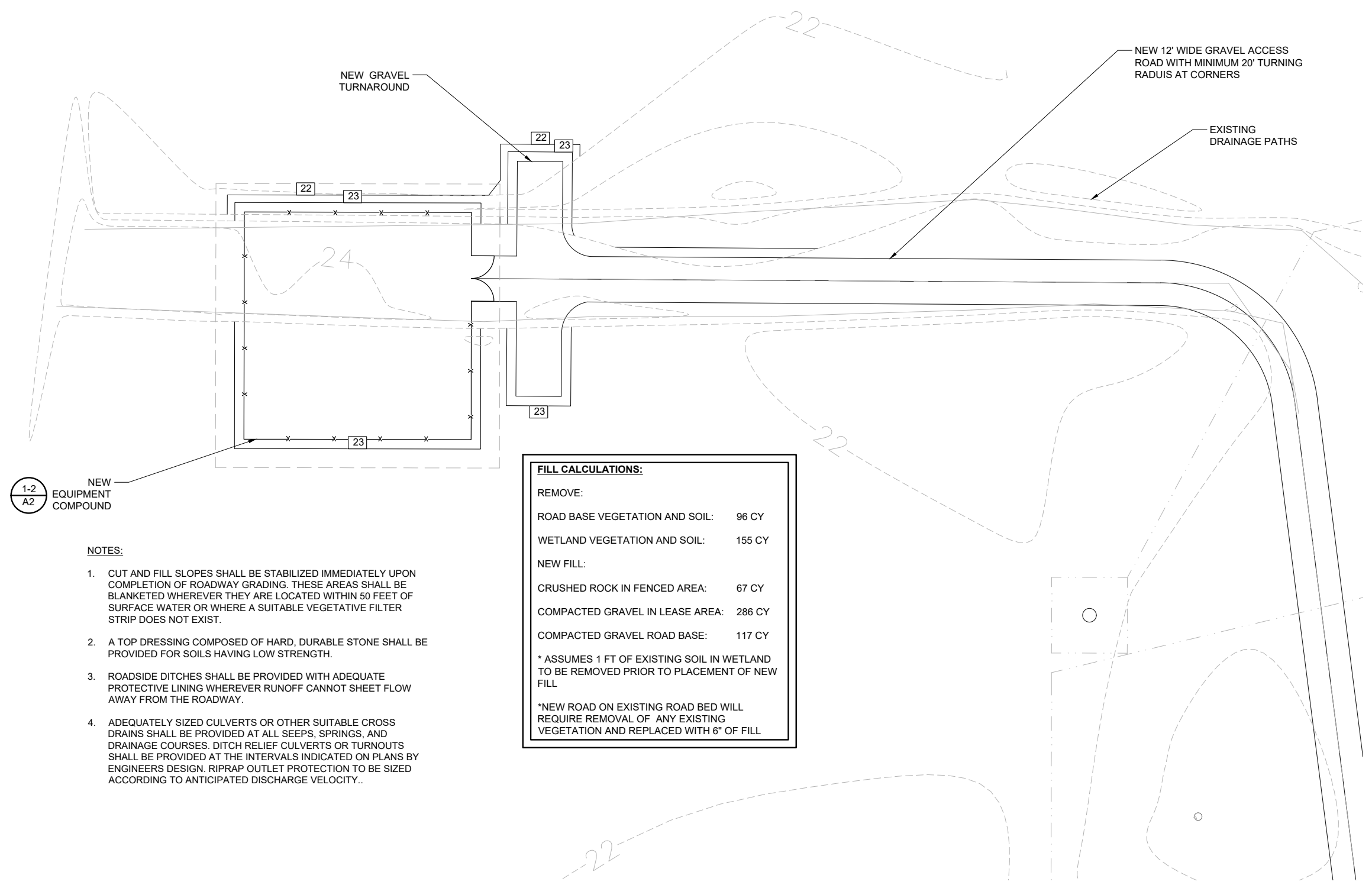
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

UTILITY H-FRAME
DETAILS

SHEET NO.

A6.0



- NOTES:
1. CUT AND FILL SLOPES SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF ROADWAY GRADING. THESE AREAS SHALL BE BLANKETED WHEREVER THEY ARE LOCATED WITHIN 50 FEET OF SURFACE WATER OR WHERE A SUITABLE VEGETATIVE FILTER STRIP DOES NOT EXIST.
 2. A TOP DRESSING COMPOSED OF HARD, DURABLE STONE SHALL BE PROVIDED FOR SOILS HAVING LOW STRENGTH.
 3. ROADSIDE DITCHES SHALL BE PROVIDED WITH ADEQUATE PROTECTIVE LINING WHEREVER RUNOFF CANNOT SHEET FLOW AWAY FROM THE ROADWAY.
 4. ADEQUATELY SIZED CULVERTS OR OTHER SUITABLE CROSS DRAINS SHALL BE PROVIDED AT ALL SEEPS, SPRINGS, AND DRAINAGE COURSES. DITCH RELIEF CULVERTS OR TURNOUTS SHALL BE PROVIDED AT THE INTERVALS INDICATED ON PLANS BY ENGINEERS DESIGN. RIPRAP OUTLET PROTECTION TO BE SIZED ACCORDING TO ANTICIPATED DISCHARGE VELOCITY..

FILL CALCULATIONS:	
REMOVE:	
ROAD BASE VEGETATION AND SOIL:	96 CY
WETLAND VEGETATION AND SOIL:	155 CY
NEW FILL:	
CRUSHED ROCK IN FENCED AREA:	67 CY
COMPACTED GRAVEL IN LEASE AREA:	286 CY
COMPACTED GRAVEL ROAD BASE:	117 CY
* ASSUMES 1 FT OF EXISTING SOIL IN WETLAND TO BE REMOVED PRIOR TO PLACEMENT OF NEW FILL	
*NEW ROAD ON EXISTING ROAD BED WILL REQUIRE REMOVAL OF ANY EXISTING VEGETATION AND REPLACED WITH 6" OF FILL	



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US-AK-5244

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JUNEAU, AK 99801

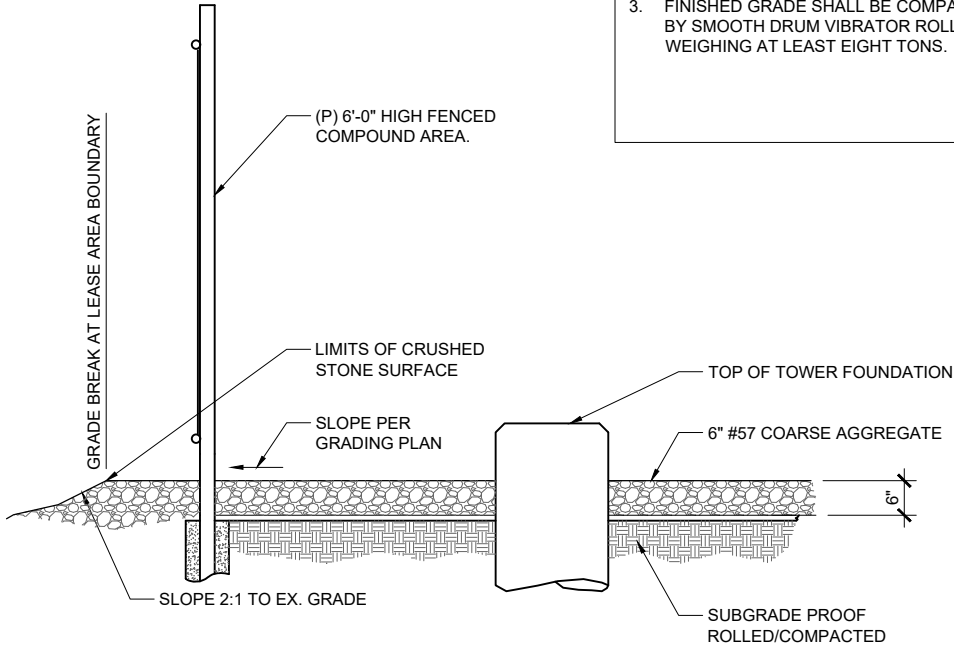
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GRADING PLAN

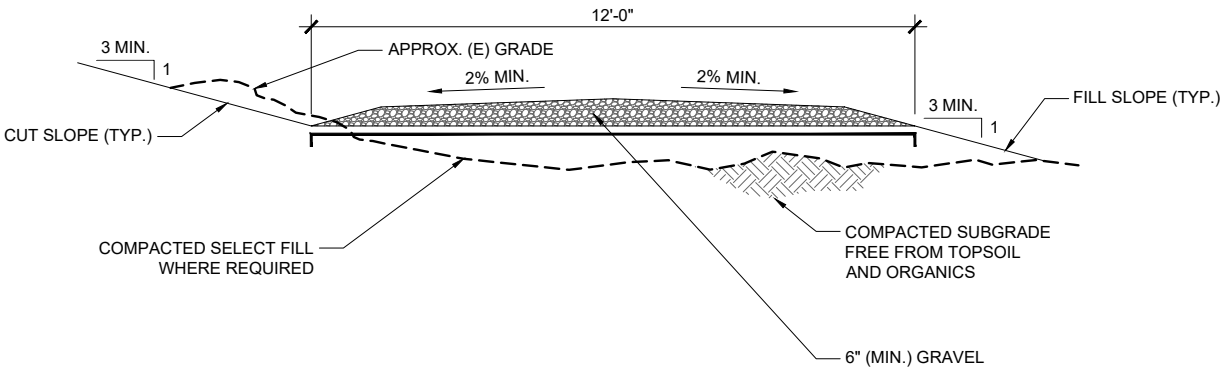
SHEET NO.

C1.0

- NOTES:
- 1. COMPOUND SLOPE NOT TO EXCEED 5%.
 - 2. SUB-GRADE SHALL BE COMPACTED BY SHEEPS FOOT VIBRATOR OR RUBBER TIRED ROLLERS WEIGHING AT LEAST EIGHT TONS.
 - 3. FINISHED GRADE SHALL BE COMPACTED BY SMOOTH DRUM VIBRATOR ROLLERS WEIGHING AT LEAST EIGHT TONS.



- NOTES:
- 1. USE OF SWALES AND/OR DRAINAGE DITCHES FOR PROPER WATER RUNOFF AS NEEDED.
 - 2. AGGREGATE IS BASED ON STANDARD AASHTO.
 - 3. 2" CROWN IN CENTER OF ACCESS, UNLESS IN CURVES, THEN ACCESS SHOULD BE SLOPED TO INSIDE OF TURN / CURVE
 - 4. PIPE SHALL BE AT A MINIMUM OF 4' LONGER THEN ACCESS ROAD WIDTH ON EACH SIDE FOR PROPER SHOULDERING.
 - 5. ALL CROSS DRAINS SHALL BE INSTALLED ON A 45° ANGLE WITH THE FALL OF THE GRADE.



1 SITE COMPOUND SURFACING

SCALE: NTS
SCALE: NTS

2 DRIVEWAY SECTION - CROWNED

SCALE: NTS
SCALE: NTS

3 NOT USED

SCALE: NTS
SCALE: NTS



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10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

UTILITY DETAILS

SHEET NO.

A9.0

1-PHASE, LINE-TO-LINE SHORT CIRCUIT CALCULATIONS BASED ON THE "POINT-BY-POINT" METHOD

$I_{sca} = I_{sc} \times M$ $M = 1/(1 + f)$ $Cable: f = 2 \times L \times I / C \times E$ $Xfmr: f = I_p \times V_p \times \%Z / 100000 \times KVA$ $I_s (sca) = V_p / V_s \times M \times I_s$

where:

I_{sc} = the available short-circuit current, in amperes, at the beginning of the circuit.

L = the length of circuit to the fault, in feet.

C = the constant from Table C for the type of conductors and circuit arrangement.

E = Line-to-line voltage or Line-to-ground voltage, where applicable.

For parallel runs, multiply "C" value by the number of conductors per phase.

I_p = primary current, in amperes.

V_p = primary line-to-line voltage of transformer, in volts.

V_s = secondary line-to-line voltage of transformer, in volts.

$\%Z$ = impedance of transformer.

* Use row 'ca' for feeder cables; and row 'xf' for transformers.

Fault Point	*	Description	Source I _{sc} (amps)	Wire / Cable Size	No. of cond. per phase	Type of conduit	"C" value	E (volts)	L (length) in feet	XFMR. KVA	f	M	I _{sca} (amps)
PT1	ca xf	AT TRANSFORMER SECONDARY FROM UTILITY						240		167			49,400
PT2	ca xf	AT METER BANK	49,400	#350KCMIL	2	PVC	22,737	240	25		0.2263	0.8155	40,286

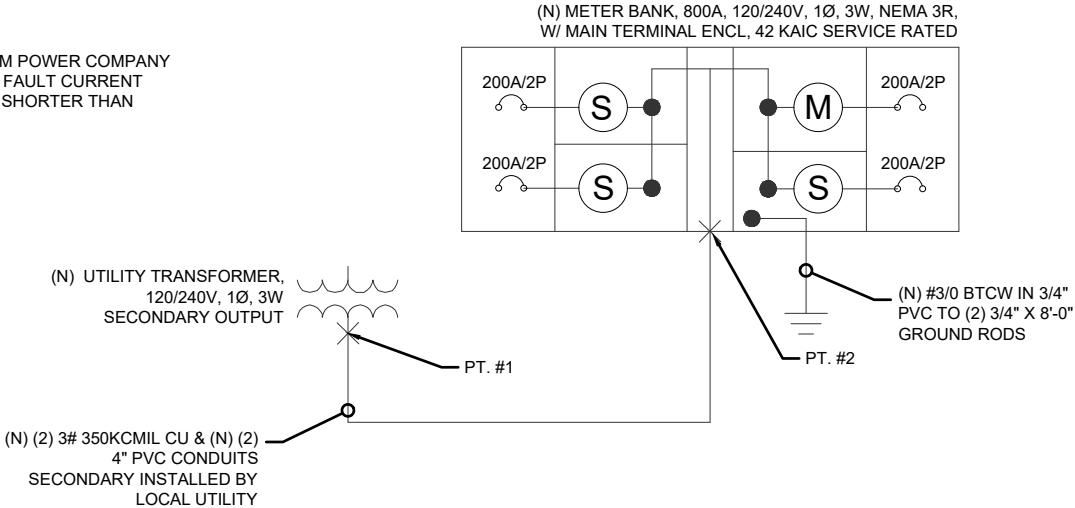
Note: The above calculations neglected motor short-circuit contributions. If significant, motor short-circuit contribution may be added to the transformer secondary short-circuit current value. A practical estimate of motor contribution is to multiply the total motor load in amperes by 4. Lengths are for calculations only. DO NOT USE for cost estimating or take-off purposes.

2 FAULT CALCULATION

SCALE: NTS
SCALE: NTS

GENERAL NOTES:

1. CONTRACTOR VERIFY AVAILABLE FAULT CURRENT FROM POWER COMPANY PRIOR TO ORDERING EQUIPMENT, NOTIFY ENGINEER IF FAULT CURRENT VALUE DIFFERS FROM AS SHOWN OR IF POWER RUN IS SHORTER THAN SHOWN.



1 ONE-LINE DIAGRAM

SCALE: NTS
SCALE: NTS



FRONT RANGE TECHNICAL SOLUTIONS
P.O. BOX 20364
BOULDER, CO 80308
PATRICK KEARNS, PE



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION
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11 MILE
US-AK-5244

SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
ONE-LINE/FAULT
CALCULATIONS

SHEET NO.

E1.0

DESCRIPTION

SYSTEM GROUND RESISTANCE SHALL NOT EXCEED 10 OHMS. A THREE POINT SYSTEM RESISTANCE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH VERTICAL BRIDGE SPECIFICATIONS.

A. PERFORM THREE TESTS AT EACH SITE.

B. CONTRACTOR SHALL PROVIDE A WRITTEN REPORT CONSISTING OF THE FOLLOWING: SITE NAME, ADDRESS AND IDENTIFICATION NUMBER, DESCRIPTION OF SITE SOIL AND MOISTURE CONDITION, DESCRIPTION OF WEATHER, MODEL NUMBER OF TESTING EQUIPMENT, DATE OF LAST CALIBRATION, SITE SKETCH SHOWING LOCATION OF TEST PROBES AND ALL FIELD DATA COLLECTED (READINGS, RANGE, TEST, MILLIAMPS, ETC.)

C. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES PERFORMING SYSTEM RESISTANCE TESTS OR IF MEASUREMENTS ARE ABOVE 10 OHMS. THE CONSTRUCTION MANAGER SHALL PROVIDE INSTRUCTION TO THE CONTRACTOR TO INSTALL ADDITIONAL GROUNDING MEASURES TO MEET THE 10 OHMS REQUIREMENT.

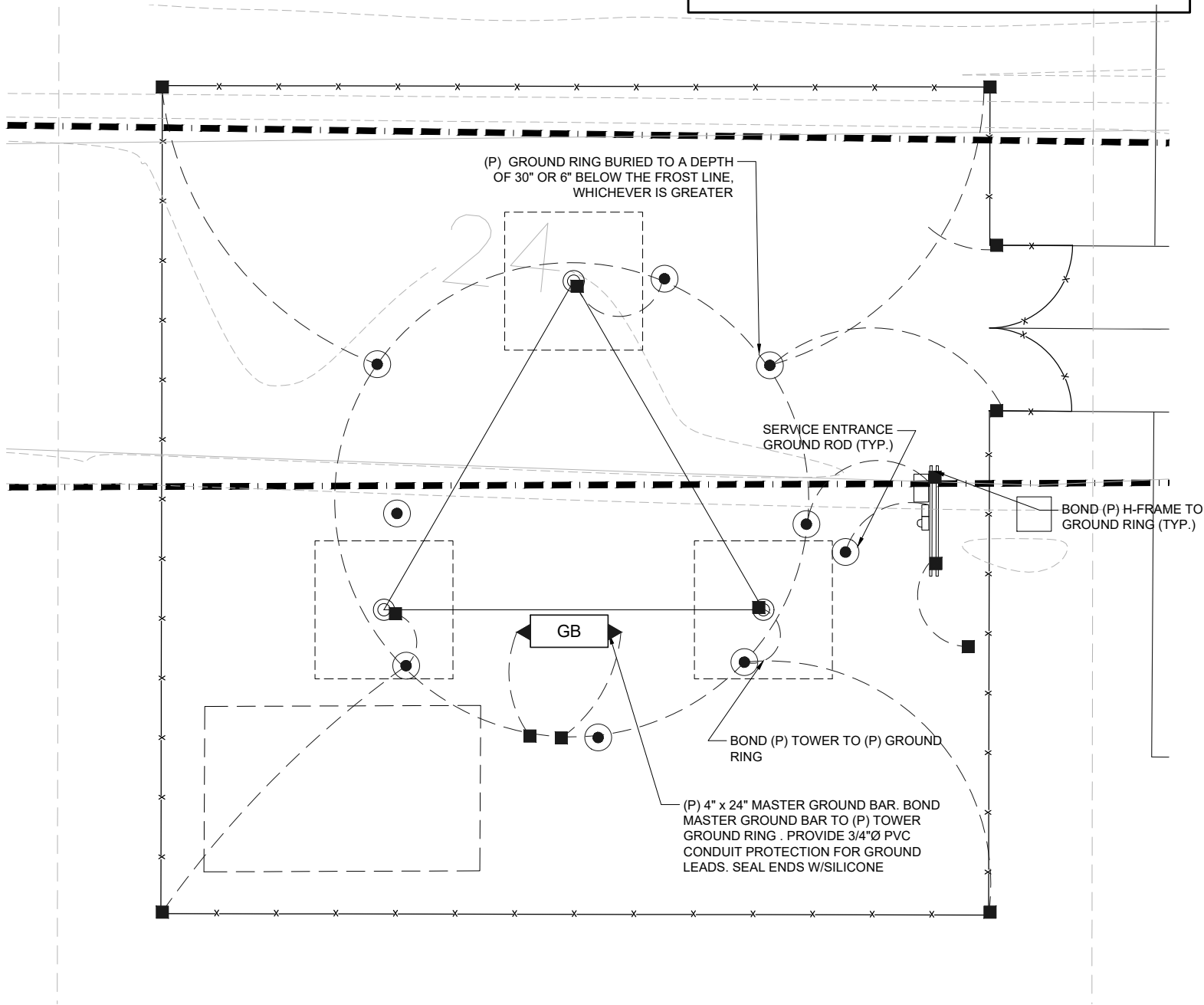
GROUNDING LEGEND

- ⊗ GROUND TEST WELL
- ⊙ GROUND ROD
- ▲ MECHANICAL CONNECTION (DOUBLE HOLE LUG)
- CAD WELD CONNECTION
- CONNECT PER MANUFACTURER SPECIFICATIONS
- GB GROUND BAR
- ⊥ EARTH GROUND

NOTES:

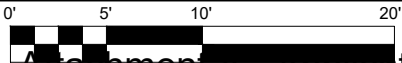
1. ALL ABOVE GRADE GROUND LEADS TO BE SHEATHED IN CARFLEX-X-FLEX™ FLEXIBLE CONDUIT OR EQUIV.

2. DEPICTION OF GROUNDING ROUTING IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO DETERMINE PER EXISTING SITE CONDITIONS.



SCALE: 1" = 10'-0" (11X17)

SCALE: 1" = 5'-0" (22X34)



- GROUNDING SHALL CONFORM TO VERTICAL BRIDGE STANDARDS AND BE PER FEDERAL, STATE AND LOCAL CODES. IN THE EVENT OF A CONFLICT, MEET THE MOST STRINGENT REQUIREMENT.
- GROUND RODS PAST METER SHALL BE COPPER-CLAD STEEL, 5/8" DIAMETER x 10 FEET IN LENGTH (MIN)
- ALL GROUND CONDUCTORS PAST METER SHALL BE # 2 AWG SOLID BARE TINNED COPPER. MINIMUM BEND RADIUS FOR CONDUCTOR SHALL BE 8 INCHES.
- GROUND RODS SHALL BE SPACED NOT MORE THAN 20'-0" AND NOT LESS THAN 10'-0" APART EXCEPT FOR THE MONOPOLE GROUND RING WHICH SHALL COMPLY WITH TIA/EIA 222 (REV G)
- CONTRACTOR SHALL ADD ADDITIONAL RODS AND CONDUCTORS OR APPROVED GROUND ENHANCING MATERIAL TO ACHIVE LESS THAN 10 OHMS RESISTANT TO GROUND.
- MAINTAIN 2'-0" (TOWER) AND 3'-0" (SHELTER/EQUIPMENT) BETWEEN GROUND RINGS AND FOUNDATIONS.
- ALL GROUNDING INSTALLATIONS SHALL BE INSPECTED AND APPROVED BY VERTICAL BRIDGE AND ANY JURISDICTION HAVING INSPECTION AND APPROVAL AUTHORITY (IF REQUIRED) BEFORE PLACING ANY BACKFILL.
- ALL GROUNDING SPLICES AND CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS (CADWELD OR EQUIVALENT). COAT ALL WELDS WITH ZINC RICH PAINT.

2 EXTERIOR GROUNDING NOTES

- ALL GROUND CABLE IN CONCRETE OR THROUGH WALL SHALL BE IN 3/4" PVC CONDUIT. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTOR SLEEVES.
- GROUND ALL EXPOSED METALLIC OBJECTS USING A TWO-HOLE NEMA DRILLED CONNECTOR SUCH AS THOMAS & BETTS #32207 OR APPROVED EQUAL.
- ALL EXTERIOR GROUND CONDUCTORS INCLUDING GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE INCLUSIVE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARDS TOWARD THE BURIED GROUND RING.
- ALL BELOW GROUND EXTERNAL CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO BURIED GROUND RING SHALL BE THE PARALLEL, EXCEPT FOR THE GROUND RODS WHICH ARE TEE-TYPE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZED SUCH AS HOLUB LECTROSOL #15-501.
- WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF A CONDUCTIVE ANTI-OXIDE COMPOUND ON ALL CONNECTORS. PROVIDE LOCK WASHERS ON ALL MECHANICAL CONNECTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTORS, REPAINT TO MATCH EXISTING AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE TYPES OF METALS BEING ATTACHED TO.
- THE CONTRACTOR SHALL COORDINATE AS REQUIRED TO HAVE UTILITY COMPANY REPRESENTATIVE AT THE SITE TO DISCONNECT THE UTILITY NEUTRAL FROM GROUNDING SYSTEM DURING FINAL INSPECTION SO THAT REQUIRED TESTING ON THE GROUND SYSTEM CAN BE PERFORMED. THE CONTRACTOR SHALL PROVIDE NOTICE TO THE VERTICAL BRIDGE REPRESENTATIVE 2 (TWO) DAYS PRIOR TO FINAL TESTING. IF THE CONTRACTOR FAILS TO MAKE UTILITY COMPANY REPRESENTATIVE AVAILABLE DURING THE FINAL TESTING, THE CONTRACTOR SHALL PAY THE COST FOR AN INDEPENDENT GROUNDING CONSULTANT TO PERFORM THE GROUND RESISTANCE TEST. GROUNDING CONSULTANT SHALL BE SELECTED BY THE VERTICAL BRIDGE REPRESENTATIVE. IF THE UTILITY COMPANY REPRESENTATIVE FAILS TO APPEAR DUE TO NO FAULT THE CONTRACTOR, NO PENALTY SHALL APPLY.
- ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
- THE GROUND CONDUCTORS SHALL BE RUN STRAIGHT FOR MINIMUM INDUCTANCE AND VOLTAGE DROP. SINCE CABLE BENDS INCREASE INDUCTANCE, THE MINIMUM REQUIRED BENDING RADIUS IS 8 INCHES WHEN BEND ARE UNAVOIDABLE. ALL METAL WORK WITHIN 10 FEET OF THE GROUND RING SHALL BE DIRECTLY BONDED TO THE GROUND SYSTEM, WITHOUT USING SERIES OR DAISY CHAIN CONNECTION ARRANGEMENTS.
- PAINT, ENAMEL, LACQUER AND OTHER ELECTRICALLY NON-CONDUCTIVE COATINGS SHALL BE REMOVED FRO THREADS AND SURFACE AREAS WHERE CONNECTIONS ARE MADE TO ENSURE GOOD ELECTRICAL CONTINUITY.
- CONNECTIONS BETWEEN DISSIMILAR METALS SHALL NOT BE MADE UNLESS THE CONDUCTORS ARE SEPARATED BY A SUITABLE MATERIAL THAT IS A PART OF THE ATTACHMENT DEVICE LISTED AND APPROVED FOR USE WITH THE SPECIFIC DISSIMILAR METALS MAY BE USED FOR THE PURPOSE.
- ALL BELLOW GRADE GROUND SYSTEM CONDUCTORS SHALL BE A MINIMUM DEPTH OF 30" (OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER).
- CONTRACTOR TO COORDINATE WITH TOWER CONTRACTOR TO PROVIDE, RUN AND TERMINATE POWER & CONTROL WIRES WITHIN CONDUITS FROM LIGHTING CONTROLLER TO ELECTRICAL AND CONTROL PANELS.
- INTERMEDIATE COAX GROUNDING TO BE INSTALLED ON VERTICAL RUNS THAT EXCEED 200 FEET IN LENGTH. CONTRACTOR SHALL COORDINATE WITH VERTICAL BRIDGE CONSTRUCTION MANAGER ON LOCATION OF INTERMEDIATE GROUNDING LOCATION.

3 GENERAL GROUNDING NOTES



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

GROUNDING
PLAN

SHEET NO.

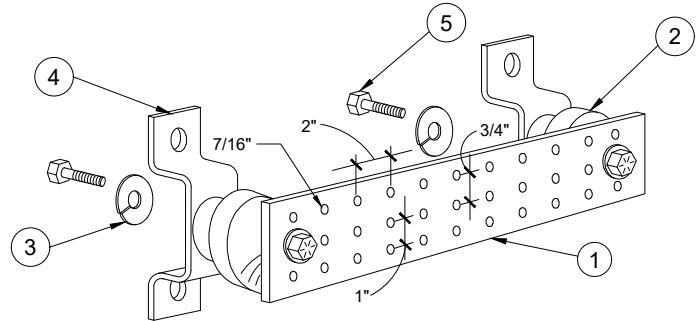
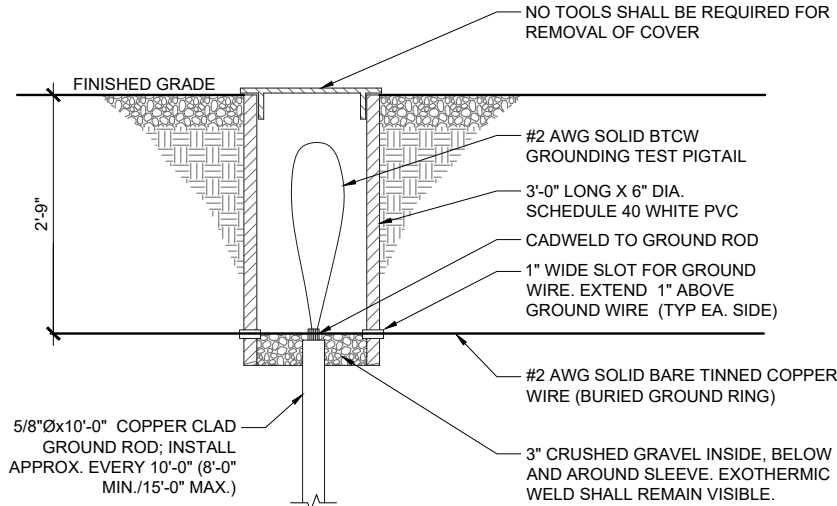
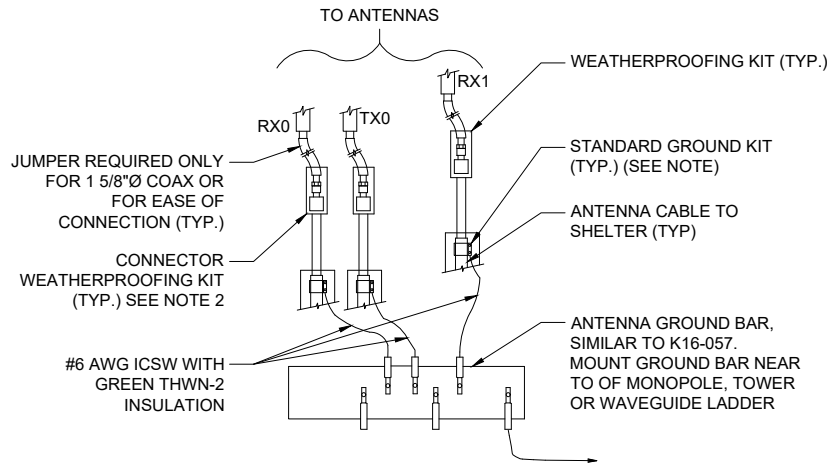
G1.0

1 OVERALL GROUNDING PLAN

3 GENERAL GROUNDING NOTES

NOTES:

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
- WEATHER PROOFING SHALL BE ANDREWS. (TYPE & PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)



- KEY / NOTES:
- TINNED COPPER GROUND BUSBAR, 1/4" X 4" X 12" OR APPROVED EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
 - SPACERS AS REQUIRED.
 - 5/8" LOCKWASHERS.
 - WALL MOUNTING BRACKET.
 - 5/8-11 X 1" HHCS BOLTS.
- GROUND BAR TO BE PURCHASED FROM ROHN.

1 SECTOR GROUNDING

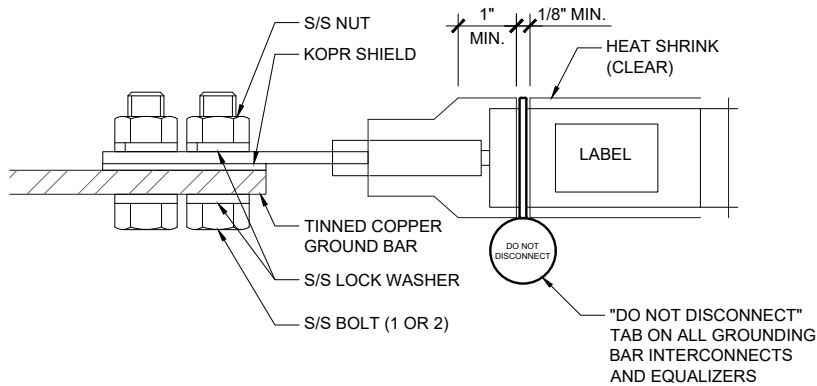
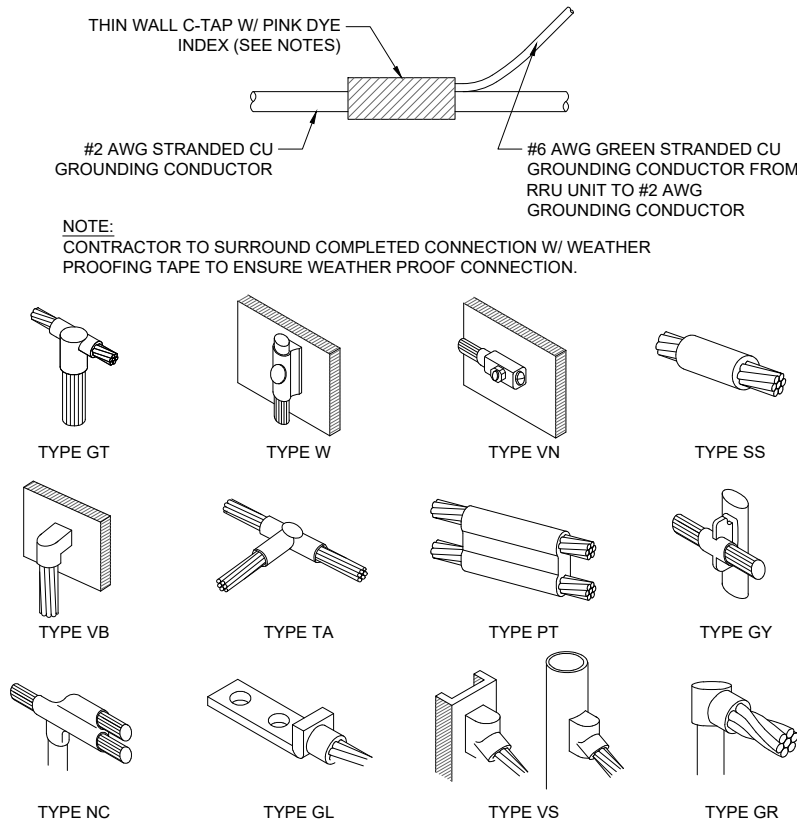
SCALE: NTS
SCALE: NTS

2 GROUND TEST WELL DETAIL

SCALE: NTS
SCALE: NTS

3 GROUND BAR DETAIL

SCALE: NTS
SCALE: NTS



- NOTES:
- ALL HARDWARE 18/8 STAINLESS STEEL INCLUDING LOCK WASHER. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATCHING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.
 - PROVIDE 'DO NOT DISCONNECT' TAG.

3 C-TAP AND EXOTHERMIC WELDS

SCALE: NTS
SCALE: NTS

NOT TO SCALE

4 TWO-HOLE LUG CONNECTION

SCALE: NTS
SCALE: NTS

NOT TO SCALE

verticalbridge



PRELIMINARY

NO.	DATE	D/C	DESCRIPTION

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

GROUNDING
DETAILS

SHEET NO.

G2.0

GENERAL CONSTRUCTION NOTES

1. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
2. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
3. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
5. BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
6. DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
7. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
8. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL FOREIGN SUBSTANCES. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
11. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL 1-800-962-7962.
12. THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
13. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
14. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
15. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INCLUDING, BUT NOT LIMITED TO, THE BUILDING PERMIT, INSPECTIONS, CERTIFICATES, ETC.
17. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.
18. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE OSHA REGULATIONS FOR CONSTRUCTION.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
20. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER. NOTIFY THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
21. MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
22. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS AS DEFINED BY THE OWNER OR OWNER'S REPRESENTATIVE ON THE DRAWINGS.
23. CONTRACTOR SHALL GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE EQUIPMENT PAD AND THE TOWER.
24. ALL IMPROVEMENTS TO CONFORM WITH LOCAL JURISDICTION CONSTRUCTION STANDARDS AND SPECIFICATIONS, LATEST EDITION.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
2. ALL INTERIOR STRUCTURAL STEEL USED SHALL BE, WHEN DELIVERED, FINISHED WITH ONE COAT FABRICATOR'S NON-LEAD, RED OXIDE PRIMER. PRIMING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE PRIMED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
3. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A36 UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
4. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
5. CONNECTIONS:

A. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION ", 9TH EDITION. AT THE COMPLETION OF WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.

B. BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

C. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM 307 BOLTS UNLESS NOTED OTHERWISE.

D. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER.

DESIGN DATA

1. WIND LOADS: PER EIA/TIA F-222
- ICE LOADS: 1/2" RADIAL ON ALL COMPONENTS & CABLE
- SNOW LOAD: PER NY STATE BLDG. CODE.
- SEISMIC LOADS: PER NY STATE BLDG. CODE.

CONCRETE NOTES

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE";
2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%) WITH A MAXIMUM 4" SLUMP, AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE NOTED.
4. MAXIMUM AGGREGATE SIZE SHALL BE 1".
5. THE FOLLOWING MATERIALS SHALL BE USED: ASTM C 150, TYPE I
- PORTLAND CEMENT: ASTM C 150, TYPE I
- REINFORCEMENT: ASTM A 185
- NORMAL WEIGHT AGGREGATE: ASTM C 33
- WATER: DRINKABLE
- ADMIXTURES: NON-CHLORIDE CONTAINING
6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
8. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH: 3 IN.

CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER: 2 IN.

#5 AND SMALLER & WWF: 1 1/2 IN.

CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

SLAB AND WALL: 3/4 IN.

BEAMS AND COLUMNS: 1 1/2 IN.
9. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURES WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
11. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.

15. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
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0	05-15-20	KS/KS	BP SUBMITTAL
1	06-24-20	KS/KS	REV CD
2	06-30-21	KS/KS	REV CD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

GENERAL
NOTES

SHEET NO.

GN1

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 1"x10"	150	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	125
Sector1(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	145	Sector1(CaAa=5000 Sq.in)No Ice (Carrier 4)	115
Sector2(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	145	Sector2(CaAa=5000 Sq.in)No Ice (Carrier 4)	115
Sector3(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	145	Sector3(CaAa=5000 Sq.in)No Ice (Carrier 4)	115
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	135	Sector1(CaAa=5000 Sq.in)No Ice (Carrier 5)	105
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	135	Sector2(CaAa=5000 Sq.in)No Ice (Carrier 5)	105
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	135	Sector3(CaAa=5000 Sq.in)No Ice (Carrier 5)	105
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	125		
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	125		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A529-50	50 ksi	65 ksi	A36M-50	50 ksi	65 ksi

TOWER DESIGN NOTES

1. Tower is located in Juneau County, Alaska.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 130 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity.

ALL REACTIONS
ARE FACTORED

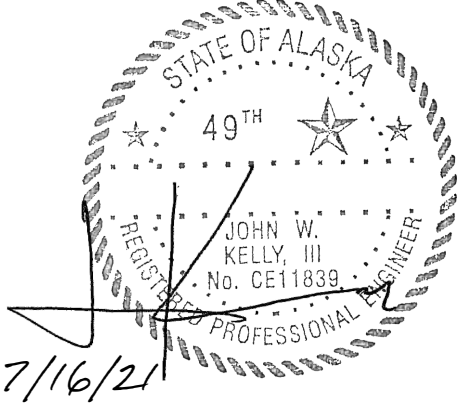
MAX. CORNER REACTIONS AT BASE:

DOWN: 299 K
SHEAR: 37 K

UPLIFT: -251 K
SHEAR: 35 K

AXIAL
127 K
MOMENT
1465 kip-ft
TORQUE 6 kip-ft
50 mph WIND - 1.000 in ICE

AXIAL
56 K
MOMENT
6673 kip-ft
TORQUE 40 kip-ft
REACTIONS - 130 mph WIND



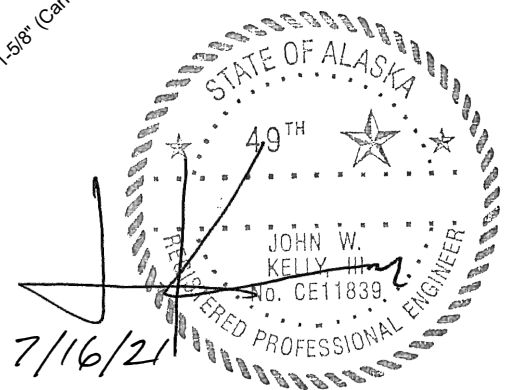
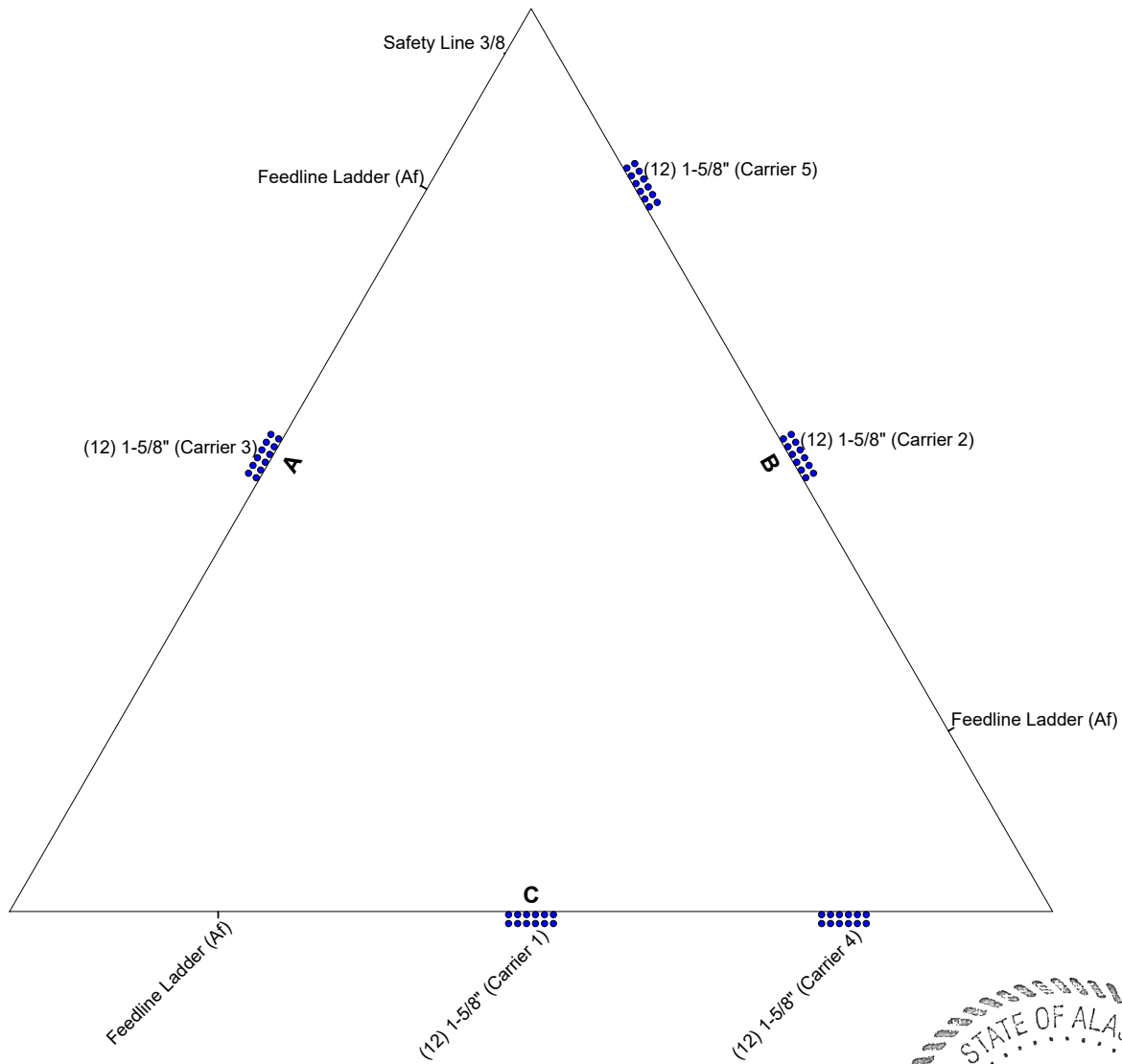
Section	T1	T2	T3	T4	T5	T6	T7	T8
Legs	SR 1 3/4	SR 2 1/4	SR 2 1/4	SR 2 1/2	SR 2 3/4	SR 3	SR 3 1/4	SR 3 1/2
Leg Grade	L2x2x3/16	L3x3x3/16	L3x3x1/4	A529-50	A36M-50	N.A.	2L2x2x3/16x3/8	2L3x3x1/4x3/8
Diagonals								
Diagonal Grade								
Top Girts	L3x3x3/16							
Horizontals								
Inner Bracing								
Face Width (ft)	12.5	13.5	15.5	17.5	19.5	21.5	23.5	25.5
# Panels @ (ft)	2 @ 4.5				28 @ 4.75			
Weight (K)	0.8	1.9	2.8	3.1	3.5	4.3	4.9	6.2



B+T Group
1717 S Boulder Ave, Suite 300
Tulsa, OK 74119
FAX: (918) 295-0265

Attachment A - Application Packet

Job:	ATS: 9035-E - 11 Mile (Site# US-AK-5244)
Project:	150' SST/ 58.36698194, -134.610826
Client:	Vertical Bridge
Code:	TIA-222-H
Path:	6:\Project\Arcosa Telecom Structures\153105_11 Mile\Engineering\B+T Tower\0011020-014_150SST_11 Mile.dwg
Drawn by:	aashwood
Date:	07/14/21
App'd:	
Scale:	NTS
Dwg No.	E-1



ARCOSA
TELECOM STRUCTURES

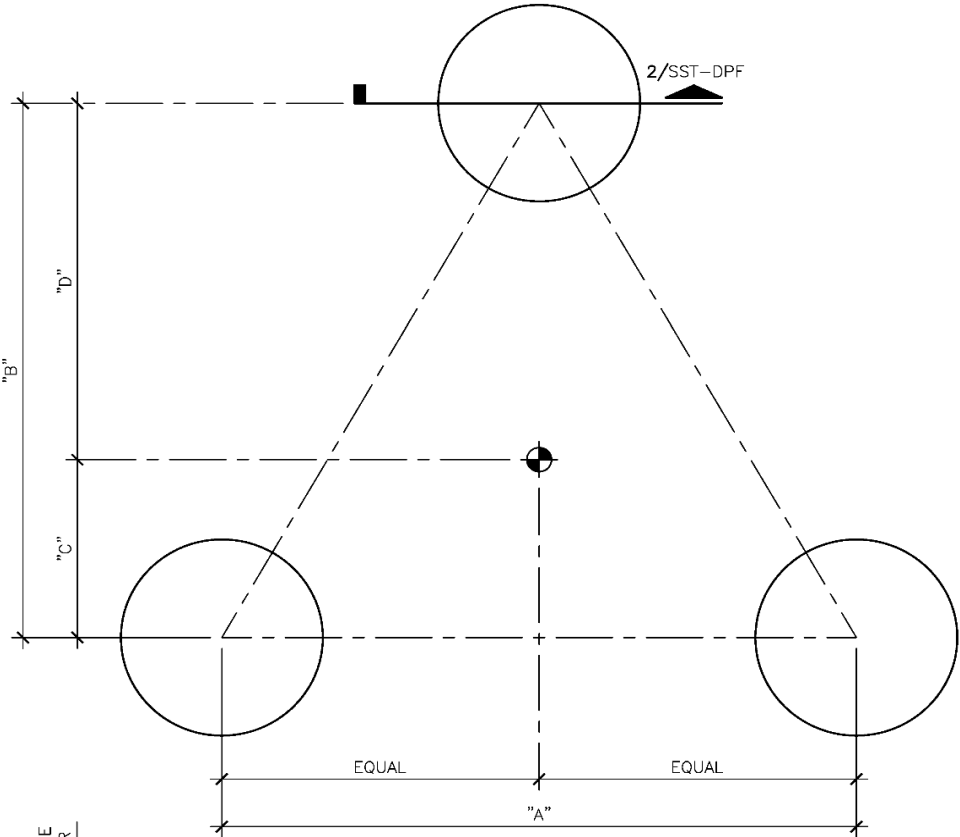


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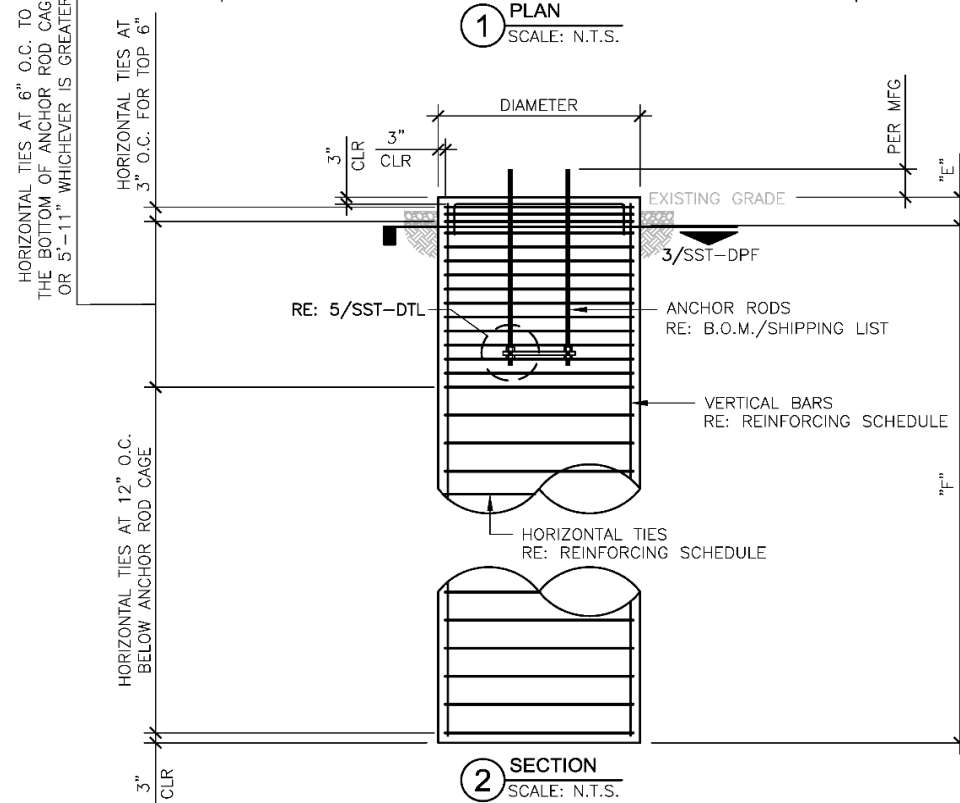
Attachment A - Application Packet

Job: ATS: 9035-E - 11 Mile (Site# US-AK-5244)		
Project: 150' SST/ 58.36698194, -134.610826		
Client: Vertical Bridge	Drawn by: aashwood	App'd:
Code: TIA-222-H	Date: 07/14/21	Scale: NTS
Path:	Dwg No. E-7	

S:\Project\Arcosa Telecom Structures\153109_11 Mile\Engineering\SiteTower\0011020-014_150SST_11 Mile.dwg



1 PLAN
SCALE: N.T.S.



2 SECTION
SCALE: N.T.S.

- NOTES:**
1. REINFORCEMENT STEEL SHALL CONFIRM TO THE REQUIREMENT OF ASTM A-615 (GRADE 60) EXCEPT THAT TIES MAY BE ASTM-615 (GRADE 40) WITH 3" MINIMUM CLEAR COVER.
 2. REINFORCEMENT STEEL SHALL BE DETAILED, FABRICATED, BENT, AND PLACED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE AND THE ACI 315 (LATEST EDITION).
 3. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE GEOTECH REPORT FOR THIS PROJECT AND FOLLOW THE RECOMMENDATIONS IN THAT REPORT WHEN CONSTRUCTING THE FOUNDATION.
GEOTECHNICAL PROPERTIES BY: TOWER ENGINEERING PROFESSIONALS, INC.
PROJECT NUMBER: 152226.242955
DATE: 03/26/2019
 4. THIS FOUNDATION HAS BEEN DESIGNED, IN ACCORDANCE WITH THE TIA 222-H STANDARD, SPECIFICALLY FOR THE TOWER AND SOIL CONDITION REFERENCED ABOVE. IF ANYTHING DIFFERS THIS DESIGN SHALL BE CONSIDERED INVALID AND MUST BE REDESIGNED PRIOR TO CONSTRUCTION.
 5. TOTAL CONCRETE VOLUME FOR ALL (3) PIERS IN CUBIC YARDS: 62.18
 6. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
 7. CONCRETE MIXTURES SHALL MEET DURABILITY REQUIREMENTS OF CHAPTER 19 OF THE ACI 318-14
 8. ALL CONCRETE TESTING SHALL BE IN ACCORDANCE WITH ASTM C494 STANDARD TYPES A, B, C, D OR E. THE ENGINEER SHALL PRE-APPROVE SUPER PLASTICIZER USE. DO NOT USE CHLORIDE-CONTAINING ADMIXTURES. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260.
 9. SLUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C143. THE ALLOWABLE CONCRETE SLUMP SHALL BE 4 INCHES (±1") UNLESS ADMIXTURES ARE USED. ADMIXTURE SHALL BE IN ACCORDANCE WITH ASTM C494 STANDARD TYPES A, B, C, D OR E. THE ENGINEER SHALL PRE-APPROVE SUPER PLASTICIZER USE. DO NOT USE CHLORIDE-CONTAINING ADMIXTURES. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260.
 10. BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM UNIT WEIGHT SPECIFIED IN GEOTECH REPORT. THE SOIL SHALL BE INSTALLED IN 6" TO 8" LIFTS AND COMPACTED THOROUGHLY TO ACHIEVE APPROPRIATE UNIT WEIGHT UNLESS GEOTECH SPECIFIES OTHER COMPACTION REQUIREMENTS.
 11. VERIFY ALL DIMENSIONS AGAINST MANUFACTURER'S DRAWINGS.

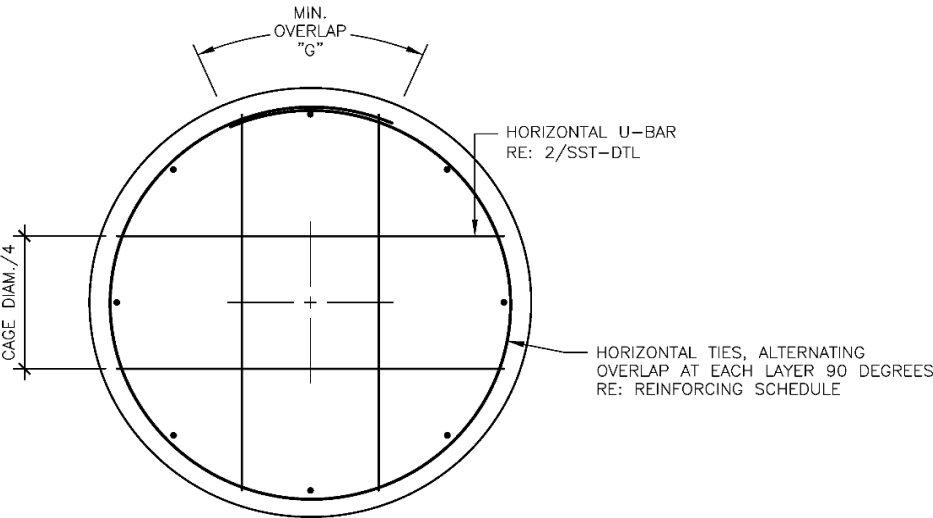
STIPULATION FOR REUSE:

1. THIS DRAWING WAS SPECIFICALLY DESIGNED FOR USE BY THE CUSTOMER ON THIS DRAWING AT THE SPECIFIED LOCATION. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF A PROPERLY LICENSED ENGINEER.

DIMENSIONING SCHEDULE	
A	27' 6"
B	23' 9-13/16"
C	7' 11-1/4"
D	15' 10-1/2"
E	0' 6"
F	28' 0"
MIN. OVERLAP "G"	2' 3"
DIAMETER	5' 0"

REINFORCING SCHEDULE		SIZE	TOTAL QTY
VERTICAL BARS		# 8	54
HORIZONTAL TIES		# 4	108
U-BAR HORIZONTAL		# 4	12

BASE REACTIONS: (FACTORED LOADS)		
GLOBAL REACTIONS		
MOMENT	6673	KIP-FT
AXIAL	56	KIPS
SHEAR	70	KIPS
REACTIONS PER LEG		
COMPRESSION AXIAL	299	KIPS
COMPRESSION SHEAR	37	KIPS
UPLIFT AXIAL	251	KIPS
UPLIFT SHEAR	35	KIPS



3 SECTION
SCALE: N.T.S.



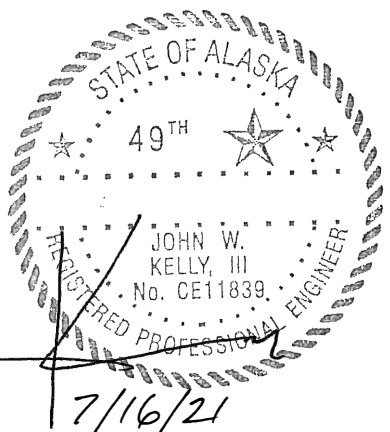
1717 S BOULDER AVE #300, TULSA, OK 74119
(918) 587-4630



4020 TULL AVE. MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	07/14/21	ISSUED FOR CONSTRUCTION



IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTIONS OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PROJECT INFORMATION:

PROJECT NO: 153105.001.01
SITE NAME: 11 MILE
SITE NO: 9035-E
CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: AA
CHECKED BY:

SHEET TITLE:

DRILLED PIER FOUNDATION

SHEET NUMBER:

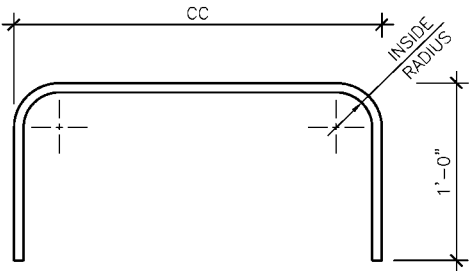
SST-DPF

REVISION:

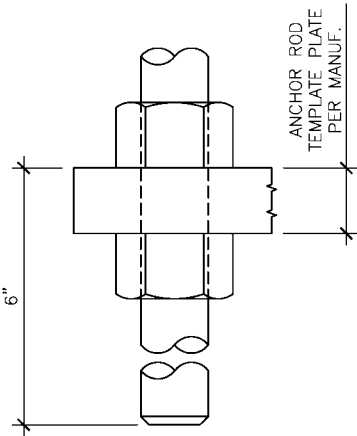
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DIMENSIONING SCHEDULE	
CC*	4' 2-15/16"

*NOTE: CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO FABRICATION



2 HORIZONTAL U-BAR
SCALE: N.T.S.



5 ANCHOR ROD DETAIL
SCALE: N.T.S.



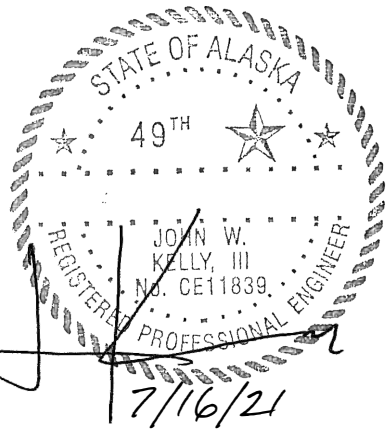
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TELECOM STRUCTURES

4020 TULL AVE. MUSKOGEE, OK 74403

ISSUED FOR:		
REV	DATE	DESCRIPTION
0	07/14/21	ISSUED FOR CONSTRUCTION



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CHECKED BY:

SHEET TITLE:

DIMENSIONING DETAIL

SHEET NUMBER:	REVISION:
SST-DTL	0

Drilled Pier Foundation

Packet Page 383 of 732

Project # :	
Site Name:	
Site Number:	
TIA-222 Revision:	
Tower Type:	

	Comp.	Uplift
Moment (kip-ft)		
Axial Force (kips)		
Shear Force (kips)		

Material Properties		
Concrete Strength, f'c:	4	ksi
Rebar Strength, Fy:	60	ksi
Tie Yield Strength, Fyt:	40	ksi

Pier Design Data		
Depth	28	ft
Ext. Above Grade	0.5	ft
Pier Section 1		
From 0.5' above grade to 28' below grade		
Pier Diameter	5	ft
Rebar Quantity	18	
Rebar Size	8	
Clear Cover to Ties	3	in
Tie Size	4	
Tie Spacing	12	in

[Rebar & Pier Options](#)

[Embedded Pole Inputs](#)

[Belled Pier Inputs](#)

Analysis Results		
Soil Lateral Check	Compression	Uplift
D _{v=0} (ft from TOC)	14.79	14.79
Soil Safety Factor	7.08	7.48
Max Moment (kip-ft)	371.53	351.45
Rating	18.8%	17.8%

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	218.77	218.77
End Bearing (kips)	733.37	-
Weight of Concrete (kips)	64.69	48.52
Total Capacity (kips)	952.13	267.29
Axial (kips)	363.69	251.00
Rating	38.2%	93.9%

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	14.89	14.05
Critical Moment (kip-ft)	371.50	350.11
Critical Moment Capacity	2126.43	1310.86
Rating	17.5%	26.7%

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	22.86	22.86
Critical Shear (kip)	55.15	52.17
Critical Shear Capacity	489.48	264.63
Rating	11.3%	19.7%

Structural Foundation Rating	26.7%
Soil Interaction Rating	93.9%

Check Limitation	
Apply TIA-222-H Section 15.5:	☐
N/A	☐
Additional Longitudinal Rebar	
Input Effective Depths (else Actual):	☐
Shear Design Options	
Check Shear along Depth of Pier:	☒
Utilize Shear-Friction Methodology:	☐
Override Critical Depth:	☐

[Go to Soil Calculations](#)

Soil Profile													
Groundwater Depth	3.5	# of Layers	9										

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	Y _{soil} (pcf)	Y _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	2.67	2.67	100	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	2.67	3.5	0.83	100	150	0	28	0.000	0.000	0.12	0.12			Cohesionless
3	3.5	4	0.5	37	87.6	0	28	0.000	0.000	0.26	0.26			Cohesionless
4	4	6	2	37	87.6	0	28	0.000	0.000	0.30	0.30			Cohesionless
5	6	9	3	32	87.6	0	25	0.000	0.000	0.32	0.32			Cohesionless
6	9	14	5	42	87.6	0	30	0.000	0.000	0.52	0.52			Cohesionless
7	14	19	5	47	87.6	0	33	0.00	0.00	0.78	0.78			Cohesionless
8	19	24	5	47	87.6	0	33	0.00	0.00	1.00	1.00			Cohesionless
9	24	28	4	50	87.6	0	35	0.00	0.00	1.32	1.32	49.8		Cohesionless

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 1 of 26
	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 150.000 ft above the ground line.

The base of the tower is set at an elevation of 0.000 ft above the ground line.

The face width of the tower is 12.500 ft at the top and 27.500 ft at the base.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower is located in Juneau County, Alaska.

Tower base elevation above sea level: 24.000 ft.

Basic wind speed of 130 mph.

Risk Category II.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.000 ft.

Nominal ice thickness of 1.000 in.

Ice thickness is considered to increase with height.

Ice density of 56.000 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50.000 °F.

Deflections calculated using a wind speed of 60 mph.

Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity..

Design is preliminary and subject to change..

A non-linear (P-delta) analysis was used.

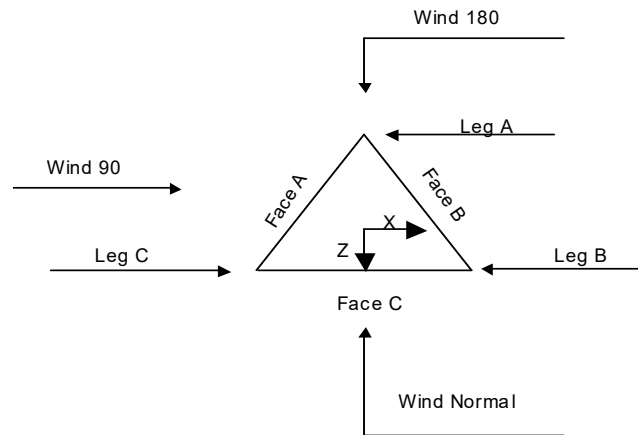
Pressures are calculated at each section.

Stress ratio used in tower member design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	√ SR Leg Bolts Resist Compression
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	√ Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
√ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
√ Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are
		Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	150.000-140.000			12.500	1	10.000
T2	140.000-120.000			13.500	1	20.000
T3	120.000-100.000			15.500	1	20.000
T4	100.000-80.000			17.500	1	20.000
T5	80.000-60.000			19.500	1	20.000
T6	60.000-40.000			21.500	1	20.000
T7	40.000-20.000			23.500	1	20.000
T8	20.000-0.000			25.500	1	20.000

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	150.000-140.000	4.500	X Brace	No	No	6.000	6.000
T2	140.000-120.000	4.750	X Brace	No	No	6.000	6.000
T3	120.000-100.000	4.750	X Brace	No	No	6.000	6.000
T4	100.000-80.000	4.750	Double K	No	Yes	6.000	6.000
T5	80.000-60.000	4.750	Double K	No	Yes	6.000	6.000
T6	60.000-40.000	4.750	Double K	No	Yes	6.000	6.000
T7	40.000-20.000	4.750	Double K	No	Yes	6.000	6.000

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 386 of 732 3 of 26
	Project	150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client	Vertical Bridge	Designed by aashwood

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T8	20.000-0.000	4.750	Double K	No	Yes	6.000	6.000

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 150.000-140.000	Solid Round	1 3/4	A529-50 (50 ksi)	Equal Angle	L2x2x3/16	A36M-50 (50 ksi)
T2 140.000-120.000	Solid Round	1 3/4	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
T3 120.000-100.000	Solid Round	2 1/4	A529-50 (50 ksi)	Equal Angle	L3x3x1/4	A36M-50 (50 ksi)
T4 100.000-80.000	Solid Round	2 1/2	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
T5 80.000-60.000	Solid Round	2 3/4	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
T6 60.000-40.000	Solid Round	3	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
T7 40.000-20.000	Solid Round	3 1/4	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
T8 20.000-0.000	Solid Round	3 1/2	A529-50 (50 ksi)	Double Angle	2L3x3x1/4x3/8	A36M-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 150.000-140.000	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)	Solid Round		A529-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T4 100.000-80.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L1 3/4x1 3/4x3/16x3/8	A36M-50 (50 ksi)
T5 80.000-60.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L1 3/4x1 3/4x3/16x3/8	A36M-50 (50 ksi)
T6 60.000-40.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L1 3/4x1 3/4x3/16x3/8	A36M-50 (50 ksi)
T7 40.000-20.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2x2x3/16x3/8	A36M-50 (50 ksi)
T8 20.000-0.000	None	Flat Bar		A36	Double Angle	2L2x2x3/16x3/8	A36M-50

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Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
				(36 ksi)			(50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T4 100.000-80.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T5 80.000-60.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T6 60.000-40.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T7 40.000-20.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T8 20.000-0.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 150.000-140.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T2 140.000-120.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T3 120.000-100.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T4 100.000-80.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T5 80.000-60.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T6 60.000-40.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T7 40.000-20.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T8 20.000-0.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000

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	Client Vertical Bridge	Designed by aashwood

Tower Section Geometry (cont'd)

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors ¹						
				X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace
				X Y	X Y	X Y	X Y	X Y	X Y	X Y
T1 150.000-140.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 140.000-120.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 120.000-100.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 100.000-80.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 80.000-60.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T6 60.000-40.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T7 40.000-20.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T8 20.000-0.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 150.000-140.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 140.000-120.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 120.000-100.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 100.000-80.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 80.000-60.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 60.000-40.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 40.000-20.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

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	Client		Vertical Bridge	Designed by aashwood

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T8 20.000-0.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 150.000-140.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 140.000-120.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 120.000-100.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 100.000-80.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 80.000-60.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 60.000-40.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 40.000-20.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 20.000-0.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 150.000-140.000	Flange	0.000 A325N	0	0.625 A325X	1	0.625 A325X	1	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T2 140.000-120.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T3 120.000-100.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T4 100.000-80.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 7 of 26
	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T5 80.000-60.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
T6 60.000-40.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
T7 40.000-20.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
T8 20.000-0.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
1-5/8" (Carrier 1) **	C	No	No	Ar (CaAa)	145.000 - 10.000	0.000	0	12	6	0.750	1.980		0.001
1-5/8" (Carrier 2) **	B	No	No	Ar (CaAa)	135.000 - 10.000	0.000	0	12	6	0.750	1.980		0.001
1-5/8" (Carrier 3) **	A	No	No	Ar (CaAa)	125.000 - 10.000	0.000	0	12	6	0.750	1.980		0.001
1-5/8" (Carrier 4) **	C	No	No	Ar (CaAa)	115.000 - 10.000	0.000	-0.3	12	6	0.750	1.980		0.001
1-5/8" (Carrier 5) **	B	No	No	Ar (CaAa)	105.000 - 10.000	0.000	-0.3	12	6	0.750	1.980		0.001
Safety Line 3/8 **	A	No	No	Ar (CaAa)	150.000 - 10.000	0.000	0.45	1	1	0.375	0.375		0.000
Feedline Ladder (Af)	C	No	No	Af (CaAa)	145.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008
Feedline Ladder (Af)	B	No	No	Af (CaAa)	135.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008
Feedline Ladder (Af)	A	No	No	Af (CaAa)	125.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T1	150.000-140.000	A	0.000	0.000	0.375	0.000	0.002
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	12.088	0.000	0.085
T2	140.000-120.000	A	0.000	0.000	12.838	0.000	0.090
		B	0.000	0.000	36.265	0.000	0.256

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T3	120.000-100.000	C	0.000	0.000	48.353	0.000	0.341
		A	0.000	0.000	49.103	0.000	0.345
		B	0.000	0.000	60.233	0.000	0.384
T4	100.000-80.000	C	0.000	0.000	83.993	0.000	0.470
		A	0.000	0.000	49.103	0.000	0.345
		B	0.000	0.000	95.873	0.000	0.514
T5	80.000-60.000	C	0.000	0.000	95.873	0.000	0.514
		A	0.000	0.000	49.103	0.000	0.345
		B	0.000	0.000	95.873	0.000	0.514
T6	60.000-40.000	C	0.000	0.000	95.873	0.000	0.514
		A	0.000	0.000	49.103	0.000	0.345
		B	0.000	0.000	95.873	0.000	0.514
T7	40.000-20.000	C	0.000	0.000	95.873	0.000	0.514
		A	0.000	0.000	49.103	0.000	0.345
		B	0.000	0.000	95.873	0.000	0.514
T8	20.000-0.000	C	0.000	0.000	95.873	0.000	0.514
		A	0.000	0.000	24.552	0.000	0.173
		B	0.000	0.000	47.937	0.000	0.257
		C	0.000	0.000	47.937	0.000	0.257

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T1	150.000-140.000	A	1.160	0.000	0.000	2.694	0.000	0.024
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	13.416	0.000	0.271
T2	140.000-120.000	A	1.147	0.000	0.000	18.720	0.000	0.317
		B		0.000	0.000	40.148	0.000	0.809
		C		0.000	0.000	53.530	0.000	1.078
T3	120.000-100.000	A	1.128	0.000	0.000	58.593	0.000	1.115
		B		0.000	0.000	65.328	0.000	1.276
		C		0.000	0.000	89.321	0.000	1.688
T4	100.000-80.000	A	1.106	0.000	0.000	58.269	0.000	1.104
		B		0.000	0.000	100.938	0.000	1.876
		C		0.000	0.000	100.938	0.000	1.876
T5	80.000-60.000	A	1.078	0.000	0.000	57.872	0.000	1.089
		B		0.000	0.000	100.473	0.000	1.853
		C		0.000	0.000	100.473	0.000	1.853
T6	60.000-40.000	A	1.042	0.000	0.000	57.356	0.000	1.071
		B		0.000	0.000	99.870	0.000	1.825
		C		0.000	0.000	99.870	0.000	1.825
T7	40.000-20.000	A	0.991	0.000	0.000	56.606	0.000	1.045
		B		0.000	0.000	98.992	0.000	1.783
		C		0.000	0.000	98.992	0.000	1.783
T8	20.000-0.000	A	0.887	0.000	0.000	27.559	0.000	0.497
		B		0.000	0.000	48.626	0.000	0.851
		C		0.000	0.000	48.626	0.000	0.851

Feed Line Center of Pressure

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 9 of 26
	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Section	Elevation	CP _x	CP _z	CP _x	CP _z
	ft	in	in	Ice in	Ice in
T1	150.000-140.000	-0.116	1.957	-0.676	0.523
T2	140.000-120.000	1.944	-1.511	1.704	-1.273
T3	120.000-100.000	6.358	-5.688	5.386	-5.008
T4	100.000-80.000	11.156	-14.746	9.212	-12.039
T5	80.000-60.000	11.789	-15.584	9.773	-12.782
T6	60.000-40.000	11.655	-15.452	9.918	-13.022
T7	40.000-20.000	11.962	-15.872	10.296	-13.540
T8	20.000-0.000	7.534	-10.048	6.545	-8.635

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T1	1	1-5/8"	140.00 - 145.00	0.6000	0.6000
T1	11	Safety Line 3/8	140.00 - 150.00	0.6000	0.6000
T1	13	Feedline Ladder (Af)	140.00 - 145.00	0.6000	0.6000
T2	1	1-5/8"	120.00 - 140.00	0.6000	0.6000
T2	3	1-5/8"	120.00 - 135.00	0.6000	0.6000
T2	5	1-5/8"	120.00 - 125.00	0.6000	0.6000
T2	11	Safety Line 3/8	120.00 - 140.00	0.6000	0.6000
T2	13	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T2	14	Feedline Ladder (Af)	120.00 - 135.00	0.6000	0.6000
T2	15	Feedline Ladder (Af)	120.00 - 125.00	0.6000	0.6000
T3	1	1-5/8"	100.00 - 120.00	0.6000	0.6000
T3	3	1-5/8"	100.00 - 120.00	0.6000	0.6000
T3	5	1-5/8"	100.00 - 120.00	0.6000	0.6000
T3	7	1-5/8"	100.00 - 115.00	0.6000	0.6000
T3	9	1-5/8"	100.00 - 105.00	0.6000	0.6000
T3	11	Safety Line 3/8	100.00 - 120.00	0.6000	0.6000
T3	13	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T3	14	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T3	15	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T4	1	1-5/8"	80.00 - 100.00	0.6000	0.6000
T4	3	1-5/8"	80.00 - 100.00	0.6000	0.6000
T4	5	1-5/8"	80.00 - 100.00	0.6000	0.6000
T4	7	1-5/8"	80.00 - 100.00	0.6000	0.6000

tnxTower

B+T Group
 1717 S Boulder Ave, Suite 300
 Tulsa, OK 74119
 Phone: (918) 587-4630
 FAX: (918) 295-0265

Job

ATS: 9035-E - 11 Mile (Site# US-AK-5244)

Project

150' SST/ 58.36698194, -134.610826

Client

Vertical Bridge

Packet Page 393 of 732

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12:13:27 07/14/21

Designed by

aashwood

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _o No Ice	K _o Ice
T4	9	1-5/8"	80.00 - 100.00	0.6000	0.6000
T4	11	Safety Line 3/8	80.00 - 100.00	0.6000	0.6000
T4	13	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T4	14	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T4	15	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T5	1	1-5/8"	60.00 - 80.00	0.6000	0.6000
T5	3	1-5/8"	60.00 - 80.00	0.6000	0.6000
T5	5	1-5/8"	60.00 - 80.00	0.6000	0.6000
T5	7	1-5/8"	60.00 - 80.00	0.6000	0.6000
T5	9	1-5/8"	60.00 - 80.00	0.6000	0.6000
T5	11	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T5	13	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T5	14	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T5	15	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T6	1	1-5/8"	40.00 - 60.00	0.6000	0.6000
T6	3	1-5/8"	40.00 - 60.00	0.6000	0.6000
T6	5	1-5/8"	40.00 - 60.00	0.6000	0.6000
T6	7	1-5/8"	40.00 - 60.00	0.6000	0.6000
T6	9	1-5/8"	40.00 - 60.00	0.6000	0.6000
T6	11	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T6	13	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T6	14	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T6	15	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T7	1	1-5/8"	20.00 - 40.00	0.6000	0.6000
T7	3	1-5/8"	20.00 - 40.00	0.6000	0.6000
T7	5	1-5/8"	20.00 - 40.00	0.6000	0.6000
T7	7	1-5/8"	20.00 - 40.00	0.6000	0.6000
T7	9	1-5/8"	20.00 - 40.00	0.6000	0.6000
T7	11	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T7	13	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	14	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	15	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T8	1	1-5/8"	10.00 - 20.00	0.6000	0.6000
T8	3	1-5/8"	10.00 - 20.00	0.6000	0.6000
T8	5	1-5/8"	10.00 - 20.00	0.6000	0.6000
T8	7	1-5/8"	10.00 - 20.00	0.6000	0.6000
T8	9	1-5/8"	10.00 - 20.00	0.6000	0.6000
T8	11	Safety Line 3/8	10.00 - 20.00	0.6000	0.6000
T8	13	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T8	14	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T8	15	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
Lightning Rod 1"x10'	C	From Leg	0.000	0.000	150.000	No Ice	1.000	1.000	0.040
			0.000			1/2" Ice	2.017	2.017	0.049
			5.000			1" Ice	3.050	3.050	0.065

**

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 11 of 26
	Project	150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client	Vertical Bridge	Designed by aashwood

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		CAAA Front ft ²	CAAA Side ft ²	Weight K
Sector1(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	A	From Leg	4.000 0.000 0.000	0.000	145.000	No Ice 1/2" Ice 1" Ice	92.593 115.741 138.889	62.037 77.546 93.055	0.700 1.400 2.100
Sector2(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	B	From Leg	4.000 0.000 0.000	0.000	145.000	No Ice 1/2" Ice 1" Ice	92.593 115.741 138.889	62.037 77.546 93.055	0.700 1.400 2.100
Sector3(CaAa=13333.33 Sq.in)No Ice (Carrier 1) **	C	From Leg	4.000 0.000 0.000	0.000	145.000	No Ice 1/2" Ice 1" Ice	92.593 115.741 138.889	62.037 77.546 93.055	0.700 1.400 2.100
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	A	From Leg	4.000 0.000 0.000	0.000	135.000	No Ice 1/2" Ice 1" Ice	69.440 86.800 104.160	46.525 58.156 69.787	0.700 1.400 2.100
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	B	From Leg	4.000 0.000 0.000	0.000	135.000	No Ice 1/2" Ice 1" Ice	69.440 86.800 104.160	46.525 58.156 69.787	0.700 1.400 2.100
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2) **	C	From Leg	4.000 0.000 0.000	0.000	135.000	No Ice 1/2" Ice 1" Ice	69.440 86.800 104.160	46.525 58.156 69.787	0.700 1.400 2.100
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	A	From Leg	4.000 0.000 0.000	0.000	125.000	No Ice 1/2" Ice 1" Ice	69.440 86.800 104.160	46.525 58.156 69.787	0.700 1.400 2.100
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	B	From Leg	4.000 0.000 0.000	0.000	125.000	No Ice 1/2" Ice 1" Ice	69.440 86.800 104.160	46.525 58.156 69.787	0.700 1.400 2.100
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3) **	C	From Leg	4.000 0.000 0.000	0.000	125.000	No Ice 1/2" Ice 1" Ice	69.440 86.800 104.160	46.525 58.156 69.787	0.700 1.400 2.100
Sector1(CaAa=5000 Sq.in)No Ice (Carrier 4)	A	From Leg	4.000 0.000 0.000	0.000	115.000	No Ice 1/2" Ice 1" Ice	34.722 43.403 52.084	23.264 29.080 34.896	0.700 1.400 2.100
Sector2(CaAa=5000 Sq.in)No Ice (Carrier 4)	B	From Leg	4.000 0.000 0.000	0.000	115.000	No Ice 1/2" Ice 1" Ice	34.722 43.403 52.084	23.264 29.080 34.896	0.700 1.400 2.100
Sector3(CaAa=5000 Sq.in)No Ice (Carrier 4) **	C	From Leg	4.000 0.000 0.000	0.000	115.000	No Ice 1/2" Ice 1" Ice	34.722 43.403 52.084	23.264 29.080 34.896	0.700 1.400 2.100
Sector1(CaAa=5000 Sq.in)No Ice (Carrier 5)	A	From Leg	4.000 0.000 0.000	0.000	105.000	No Ice 1/2" Ice 1" Ice	34.722 43.403 52.084	23.264 29.080 34.896	0.700 1.400 2.100
Sector2(CaAa=5000 Sq.in)No Ice (Carrier 5)	B	From Leg	4.000 0.000 0.000	0.000	105.000	No Ice 1/2" Ice 1" Ice	34.722 43.403 52.084	23.264 29.080 34.896	0.700 1.400 2.100
Sector3(CaAa=5000 Sq.in)No Ice (Carrier 5) **	C	From Leg	4.000 0.000 0.000	0.000	105.000	No Ice 1/2" Ice 1" Ice	34.722 43.403 52.084	23.264 29.080 34.896	0.700 1.400 2.100

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	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	150 - 140	Leg	Max Tension	15	3.590	1.683	0.007
			Max. Compression	18	-5.566	-0.101	0.002
			Max. Mx	14	3.305	1.686	0.007
			Max. My	24	-1.159	0.050	-1.250
			Max. Vy	14	3.295	0.036	0.001
			Max. Vx	24	-3.136	-0.027	0.319
		Diagonal	Max Tension	2	4.428	0.000	0.000
			Max. Compression	14	-4.130	0.000	0.000
			Max. Mx	2	-1.879	0.061	-0.006
			Max. My	4	-3.426	0.014	0.031
			Max. Vy	27	0.037	0.058	-0.007
			Max. Vx	4	-0.005	0.000	0.000
		Top Girt	Max Tension	14	3.782	0.000	0.000
			Max. Compression	2	-3.597	0.000	0.000
			Max. Mx	26	0.134	-0.238	0.000
			Max. My	28	0.141	0.000	0.007
			Max. Vy	26	0.076	0.000	0.000
			Max. Vx	28	-0.002	0.000	0.000
T2	140 - 120	Leg	Max Tension	15	28.383	2.911	-0.001
			Max. Compression	2	-34.761	2.251	-0.007
			Max. Mx	2	-34.758	-3.630	0.005
			Max. My	24	-1.176	-0.104	1.890
			Max. Vy	2	-11.744	2.251	-0.007
			Max. Vx	4	5.705	-0.097	-1.702
		Diagonal	Max Tension	4	9.328	0.000	0.000
			Max. Compression	4	-8.051	0.000	0.000
			Max. Mx	14	-2.415	0.307	-0.003
			Max. My	4	-7.956	-0.033	0.155
			Max. Vy	33	0.066	0.169	0.011
			Max. Vx	4	-0.020	0.000	0.000
T3	120 - 100	Leg	Max Tension	15	65.389	5.352	-0.040
			Max. Compression	2	-79.287	1.314	-0.022
			Max. Mx	2	-34.825	8.048	-0.020
			Max. My	4	-3.812	-0.159	-4.554
			Max. Vy	2	-16.323	1.314	-0.022
			Max. Vx	4	8.073	-0.100	-1.235
		Diagonal	Max Tension	2	13.276	0.000	0.000
			Max. Compression	2	-11.414	0.000	0.000
			Max. Mx	14	-3.048	0.211	0.007
			Max. My	24	-10.908	-0.004	-0.100
			Max. Vy	33	0.078	0.187	0.016
			Max. Vx	16	0.012	0.000	0.000
T4	100 - 80	Leg	Max Tension	15	105.638	5.803	-0.096
			Max. Compression	2	-125.239	1.393	-0.040
			Max. Mx	2	-79.318	9.443	-0.105
			Max. My	4	-7.147	-0.156	-5.275
			Max. Vy	2	-18.030	1.393	-0.040
			Max. Vx	4	8.753	-0.040	-0.809
		Diagonal	Max Tension	2	15.599	0.000	0.000
			Max. Compression	2	-16.053	0.000	0.000
			Max. Mx	28	3.189	0.212	0.000
			Max. My	27	-0.659	0.000	-0.007
			Max. Vy	28	-0.078	0.000	0.000
			Max. Vx	27	-0.003	0.000	0.000
		Horizontal	Max Tension	2	2.060	0.000	0.000
			Max. Compression	4	-2.218	0.000	0.000
			Max. Mx	33	0.159	-0.127	0.005
			Max. My	14	0.611	-0.053	0.007
			Max. Vy	35	0.069	-0.126	0.004
			Max. Vx	33	0.002	-0.127	0.005
		Inner Bracing	Max Tension	1	0.000	0.000	0.000

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 397 of 732 14 of 26
	Project	150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client	Vertical Bridge	Designed by aashwood

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft			
T5	80 - 60	Leg	Max. Compression	14	-0.013	0.000	0.000			
			Max. Mx	26	-0.009	-0.083	0.000			
			Max. My	14	-0.013	0.000	0.000			
			Max. Vy	26	0.035	0.000	0.000			
			Max. Vx	2	0.000	0.000	0.000			
			Max Tension	15	144.279	6.331	-0.148			
			Max. Compression	2	-169.973	1.400	-0.051			
			Max. Mx	2	-125.269	10.369	-0.227			
			Max. My	16	-9.053	-0.068	5.193			
			Max. Vy	2	-19.477	1.400	-0.051			
			Max. Vx	16	-9.320	-0.022	0.768			
			Max Tension	3	16.392	0.000	0.000			
		Diagonal	Max. Compression	2	-16.756	0.000	0.000			
			Max. Mx	28	3.262	0.249	0.000			
			Max. My	27	-0.639	0.000	-0.008			
			Max. Vy	28	-0.085	0.000	0.000			
			Max. Vx	27	0.003	0.000	0.000			
			Max Tension	2	1.999	0.000	0.000			
			Max. Compression	4	-2.310	0.000	0.000			
			Max. Mx	31	-0.116	-0.155	0.004			
			Max. My	14	0.518	-0.057	0.006			
			Max. Vy	35	-0.075	-0.151	0.005			
			Max. Vx	31	-0.002	-0.151	0.005			
		Horizontal	Max Tension	1	0.000	0.000	0.000			
			Max. Compression	2	-0.011	0.000	0.000			
			Max. Mx	26	-0.010	-0.099	0.000			
			Max. My	2	-0.011	0.000	-0.000			
			Max. Vy	26	-0.038	0.000	0.000			
			Max. Vx	2	0.000	0.000	0.000			
			Max Tension	15	181.618	6.993	-0.199			
			Max. Compression	2	-214.094	1.369	-0.056			
			Max. Mx	2	-170.001	11.103	-0.324			
			Max. My	16	-11.093	-0.056	5.436			
			Max. Vy	2	-21.008	1.369	-0.056			
			Max. Vx	16	-9.850	-0.008	0.673			
T6	60 - 40	Leg	Max Tension	3	17.235	0.000	0.000			
			Max. Compression	2	-17.540	0.000	0.000			
			Max. Mx	28	3.386	0.340	0.000			
			Max. My	27	-0.566	0.000	-0.011			
			Max. Vy	28	0.108	0.000	0.000			
			Max. Vx	27	0.003	0.000	0.000			
		Diagonal	Max Tension	2	2.099	0.000	0.000			
			Max. Compression	4	-2.430	0.000	0.000			
			Max. Mx	27	-0.135	-0.182	0.005			
			Max. My	33	0.107	-0.179	0.006			
			Max. Vy	30	-0.080	-0.177	0.004			
			Max. Vx	33	0.002	-0.179	0.006			
			Max Tension	1	0.000	0.000	0.000			
			Max. Compression	2	-0.013	0.000	0.000			
			Max. Mx	26	-0.012	-0.116	0.000			
			Max. My	14	-0.013	0.000	0.000			
			Max. Vy	26	-0.040	0.000	0.000			
			Max. Vx	14	-0.000	0.000	0.000			
		Horizontal	Max Tension	15	217.851	7.582	-0.240			
			Max. Compression	2	-257.638	1.342	-0.062			
			Max. Mx	2	-214.121	11.846	-0.397			
			Max. My	16	-13.443	-0.068	5.608			
			Max. Vy	2	-22.334	1.342	-0.062			
			Max. Vx	16	-10.286	-0.011	0.768			
			Inner Bracing	Max Tension	3	17.922	0.000	0.000		
				Max. Compression	3	-18.275	0.000	0.000		
				Max. Mx	3	-18.275	0.000	0.000		
				Max. My	3	-18.275	0.000	0.000		
				Max. Vy	3	-18.275	0.000	0.000		
				Max. Vx	3	-18.275	0.000	0.000		
		T7		40 - 20	Leg	Max. Compression	3	-18.275	0.000	0.000
						Max. Mx	3	-18.275	0.000	0.000
						Max. My	3	-18.275	0.000	0.000
						Max. Vy	3	-18.275	0.000	0.000
						Max. Vx	3	-18.275	0.000	0.000
Max Tension	3					-18.275	0.000	0.000		
Diagonal	Max. Compression		3		-18.275	0.000	0.000			
	Max. Mx		3		-18.275	0.000	0.000			
	Max. My		3		-18.275	0.000	0.000			
	Max. Vy		3		-18.275	0.000	0.000			
	Max. Vx		3		-18.275	0.000	0.000			
	Max Tension		3		-18.275	0.000	0.000			

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	Project	150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client	Vertical Bridge	Designed by aashwood

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T8	20 - 0	Horizontal	Max. Mx	28	3.548	0.385	0.000
			Max. My	27	-0.419	0.000	-0.012
			Max. Vy	28	-0.113	0.000	0.000
			Max. Vx	27	0.004	0.000	0.000
			Max Tension	2	2.167	0.000	0.000
			Max. Compression	24	-2.545	0.000	0.000
			Max. Mx	27	-0.139	-0.239	0.006
			Max. My	33	0.087	-0.235	0.008
			Max. Vy	29	-0.095	-0.224	0.005
			Max. Vx	33	0.003	-0.235	0.008
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	2	-0.014	0.000	0.000
		Inner Bracing	Max. Mx	31	-0.012	-0.131	0.000
			Max. My	14	-0.013	0.000	0.000
			Max. Vy	31	-0.042	0.000	0.000
			Max. Vx	14	-0.000	0.000	0.000
			Max Tension	15	252.431	8.813	-0.298
			Max. Compression	2	-300.032	0.000	0.000
			Max. Mx	2	-257.666	12.489	-0.454
			Max. My	16	-16.019	-0.096	5.920
			Max. Vy	2	-23.203	0.000	0.000
			Max. Vx	16	-10.310	0.000	0.000
		Diagonal	Max Tension	3	18.441	0.000	0.000
			Max. Compression	3	-18.866	0.000	0.000
			Max. Mx	34	2.789	0.489	0.000
			Max. My	27	-0.132	0.000	-0.015
		Horizontal	Max. Vy	34	-0.135	0.000	0.000
			Max. Vx	27	0.004	0.000	0.000
			Max Tension	24	2.458	-0.132	0.004
			Max. Compression	24	-2.652	0.000	0.000
		Inner Bracing	Max. Mx	27	-0.160	-0.262	0.007
			Max. My	33	0.066	-0.260	0.009
			Max. Vy	29	-0.096	-0.244	0.006
			Max. Vx	33	0.003	-0.260	0.009
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	33	-0.014	0.000	0.000
			Max. Mx	32	-0.014	-0.141	0.000
			Max. My	27	-0.014	0.000	-0.000
			Max. Vy	32	0.042	0.000	0.000
			Max. Vx	27	0.000	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	295.690	31.490	-18.330
	Max. H _x	18	295.690	31.490	-18.330
	Max. H _z	5	-220.023	-24.437	18.940
	Min. Vert	7	-248.287	-29.629	17.275
	Min. H _x	7	-248.287	-29.629	17.275
	Min. H _z	16	251.982	24.954	-18.431
Leg B	Max. Vert	10	289.834	-30.514	-17.875
	Max. H _x	23	-241.279	28.512	16.735
	Max. H _z	25	-213.874	23.200	18.981
	Min. Vert	23	-241.279	28.512	16.735
	Min. H _x	10	289.834	-30.514	-17.875

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	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg A	Min. H _z	12	246.988	-23.796	-18.518
	Max. Vert	2	298.683	0.646	36.685
	Max. H _x	20	18.521	9.670	0.915
	Max. H _z	2	298.683	0.646	36.685
	Min. Vert	15	-250.654	-0.696	-34.586
	Min. H _x	8	18.521	-9.656	0.912
	Min. H _z	15	-250.654	-0.696	-34.586

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	46.264	-0.000	0.000	-0.355	-7.561	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	55.516	0.000	-69.859	-6672.633	-9.146	31.972
0.9 Dead+1.0 Wind 0 deg - No Ice	41.637	0.000	-69.859	-6667.740	-6.871	31.965
1.2 Dead+1.0 Wind 30 deg - No Ice	55.516	33.466	-57.964	-5568.915	-3224.002	39.678
0.9 Dead+1.0 Wind 30 deg - No Ice	41.637	33.466	-57.964	-5564.821	-3219.467	39.673
1.2 Dead+1.0 Wind 60 deg - No Ice	55.516	55.969	-32.314	-3121.372	-5414.719	-6.569
0.9 Dead+1.0 Wind 60 deg - No Ice	41.637	55.970	-32.315	-3119.123	-5408.731	-6.573
1.2 Dead+1.0 Wind 90 deg - No Ice	55.516	64.158	-0.000	-0.366	-6220.308	-35.166
0.9 Dead+1.0 Wind 90 deg - No Ice	41.637	64.158	-0.000	-0.295	-6213.592	-35.169
1.2 Dead+1.0 Wind 120 deg - No Ice	55.516	58.103	33.546	3226.674	-5598.611	-10.957
0.9 Dead+1.0 Wind 120 deg - No Ice	41.637	58.103	33.546	3224.458	-5592.314	-10.954
1.2 Dead+1.0 Wind 150 deg - No Ice	55.516	32.332	56.002	5433.285	-3146.359	0.277
0.9 Dead+1.0 Wind 150 deg - No Ice	41.637	32.332	56.002	5429.520	-3141.810	0.284
1.2 Dead+1.0 Wind 180 deg - No Ice	55.516	-0.000	65.133	6304.281	-9.114	-31.944
0.9 Dead+1.0 Wind 180 deg - No Ice	41.637	-0.000	65.134	6300.035	-6.857	-31.938
1.2 Dead+1.0 Wind 210 deg - No Ice	55.516	-33.465	57.964	5568.021	3205.909	-39.677
0.9 Dead+1.0 Wind 210 deg - No Ice	41.637	-33.465	57.964	5564.174	3205.860	-39.673
1.2 Dead+1.0 Wind 240 deg - No Ice	55.516	-60.063	34.677	3304.282	5714.846	6.573
0.9 Dead+1.0 Wind 240 deg - No Ice	41.637	-60.063	34.677	3302.019	5713.016	6.578
1.2 Dead+1.0 Wind 270 deg - No Ice	55.516	-64.158	-0.000	-0.372	6202.135	35.166
0.9 Dead+1.0 Wind 270 deg - No Ice	41.637	-64.158	-0.000	-0.300	6199.968	35.169
1.2 Dead+1.0 Wind 300 deg - No Ice	55.516	-54.010	-31.182	-3043.757	5262.102	10.962
0.9 Dead+1.0 Wind 300 deg - No Ice	41.637	-54.011	-31.183	-3041.578	5260.777	10.945

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	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
No Ice						
1.2 Dead+1.0 Wind 330 deg - No Ice	55.516	-32.333	-56.002	-5434.238	3128.008	-0.278
0.9 Dead+1.0 Wind 330 deg - No Ice	41.637	-32.333	-56.002	-5430.227	3128.068	-0.285
1.2 Dead+1.0 Ice+1.0 Temp	126.763	-0.000	0.000	-6.027	-37.686	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	126.763	-0.000	-14.823	-1464.871	-37.703	5.309
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	126.763	7.219	-12.504	-1241.911	-751.220	5.976
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	126.763	12.228	-7.060	-706.498	-1250.951	-1.434
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	126.763	14.028	-0.000	-6.012	-1432.292	-6.148
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	126.763	12.482	7.206	707.157	-1272.977	-2.739
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	126.763	7.052	12.214	1209.839	-739.706	-0.908
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	126.763	-0.000	14.194	1404.294	-37.706	-5.310
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	126.763	-7.219	12.504	1229.836	675.841	-5.976
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	126.763	-12.772	7.374	718.698	1217.576	1.434
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	126.763	-14.028	-0.000	-6.017	1356.887	6.148
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	126.763	-11.937	-6.892	-694.958	1155.553	2.739
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	126.763	-7.052	-12.214	-1221.916	664.269	0.908
Dead+Wind 0 deg - Service	46.264	-0.000	-14.881	-1420.960	-7.572	6.806
Dead+Wind 30 deg - Service	46.264	7.129	-12.347	-1185.978	-692.092	8.506
Dead+Wind 60 deg - Service	46.264	11.922	-6.883	-664.867	-1158.539	-1.401
Dead+Wind 90 deg - Service	46.264	13.667	-0.000	-0.352	-1330.044	-7.539
Dead+Wind 120 deg - Service	46.264	12.377	7.146	686.741	-1197.653	-2.334
Dead+Wind 150 deg - Service	46.264	6.887	11.929	1156.588	-675.531	0.110
Dead+Wind 180 deg - Service	46.264	-0.000	13.874	1342.040	-7.572	-6.807
Dead+Wind 210 deg - Service	46.264	-7.129	12.347	1185.271	676.949	-8.506
Dead+Wind 240 deg - Service	46.264	-12.794	7.387	703.264	1211.134	1.400
Dead+Wind 270 deg - Service	46.264	-13.667	-0.000	-0.354	1314.905	7.539
Dead+Wind 300 deg - Service	46.264	-11.505	-6.642	-648.343	1114.779	2.335
Dead+Wind 330 deg - Service	46.264	-6.887	-11.929	-1157.297	660.391	-0.110

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.000	-46.264	0.000	0.000	46.264	-0.000	0.000%
2	0.000	-55.516	-69.860	-0.000	55.516	69.859	0.001%
3	0.000	-41.637	-69.860	-0.000	41.637	69.859	0.001%
4	33.466	-55.516	-57.964	-33.466	55.516	57.964	0.001%
5	33.466	-41.637	-57.964	-33.466	41.637	57.964	0.001%
6	55.969	-55.516	-32.314	-55.969	55.516	32.314	0.000%
7	55.969	-41.637	-32.314	-55.970	41.637	32.315	0.002%
8	64.158	-55.516	0.000	-64.158	55.516	0.000	0.001%
9	64.158	-41.637	0.000	-64.158	41.637	0.000	0.001%
10	58.104	-55.516	33.546	-58.103	55.516	-33.546	0.001%

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Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
11	58.104	-41.637	33.546	-58.103	41.637	-33.546	0.001%
12	32.333	-55.516	56.002	-32.332	55.516	-56.002	0.001%
13	32.333	-41.637	56.002	-32.332	41.637	-56.002	0.001%
14	0.000	-55.516	65.132	0.000	55.516	-65.133	0.001%
15	0.000	-41.637	65.132	0.000	41.637	-65.134	0.002%
16	-33.466	-55.516	57.964	33.465	55.516	-57.964	0.001%
17	-33.466	-41.637	57.964	33.465	41.637	-57.964	0.001%
18	-60.064	-55.516	34.678	60.063	55.516	-34.677	0.001%
19	-60.064	-41.637	34.678	60.063	41.637	-34.677	0.001%
20	-64.158	-55.516	0.000	64.158	55.516	0.000	0.001%
21	-64.158	-41.637	0.000	64.158	41.637	0.000	0.001%
22	-54.010	-55.516	-31.182	54.010	55.516	31.182	0.000%
23	-54.010	-41.637	-31.182	54.011	41.637	31.183	0.002%
24	-32.333	-55.516	-56.002	32.333	55.516	56.002	0.001%
25	-32.333	-41.637	-56.002	32.333	41.637	56.002	0.001%
26	0.000	-126.763	0.000	0.000	126.763	-0.000	0.000%
27	0.000	-126.763	-14.823	0.000	126.763	14.823	0.000%
28	7.219	-126.763	-12.504	-7.219	126.763	12.504	0.000%
29	12.228	-126.763	-7.060	-12.228	126.763	7.060	0.000%
30	14.028	-126.763	0.000	-14.028	126.763	0.000	0.000%
31	12.482	-126.763	7.207	-12.482	126.763	-7.206	0.000%
32	7.052	-126.763	12.214	-7.052	126.763	-12.214	0.000%
33	0.000	-126.763	14.195	0.000	126.763	-14.194	0.000%
34	-7.219	-126.763	12.504	7.219	126.763	-12.504	0.000%
35	-12.772	-126.763	7.374	12.772	126.763	-7.374	0.000%
36	-14.028	-126.763	0.000	14.028	126.763	0.000	0.000%
37	-11.938	-126.763	-6.892	11.937	126.763	6.892	0.000%
38	-7.052	-126.763	-12.214	7.052	126.763	12.214	0.000%
39	0.000	-46.264	-14.881	0.000	46.264	14.881	0.001%
40	7.129	-46.264	-12.347	-7.129	46.264	12.347	0.000%
41	11.922	-46.264	-6.883	-11.922	46.264	6.883	0.000%
42	13.667	-46.264	0.000	-13.667	46.264	0.000	0.000%
43	12.377	-46.264	7.146	-12.377	46.264	-7.146	0.001%
44	6.887	-46.264	11.929	-6.887	46.264	-11.929	0.000%
45	0.000	-46.264	13.874	0.000	46.264	-13.874	0.000%
46	-7.129	-46.264	12.347	7.129	46.264	-12.347	0.000%
47	-12.795	-46.264	7.387	12.794	46.264	-7.387	0.001%
48	-13.667	-46.264	0.000	13.667	46.264	0.000	0.000%
49	-11.505	-46.264	-6.642	11.505	46.264	6.642	0.000%
50	-6.887	-46.264	-11.929	6.887	46.264	11.929	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	9	0.00000001	0.00005771
3	Yes	9	0.00000001	0.00005172
4	Yes	9	0.00000001	0.00003888
5	Yes	9	0.00000001	0.00003485
6	Yes	6	0.00000001	0.00002698
7	Yes	7	0.00000001	0.00008997
8	Yes	9	0.00000001	0.00003805
9	Yes	9	0.00000001	0.00003401
10	Yes	9	0.00000001	0.00005638
11	Yes	9	0.00000001	0.00005043

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12	Yes	9	0.00000001	0.00003852
13	Yes	9	0.00000001	0.00003447
14	Yes	6	0.00000001	0.00003354
15	Yes	7	0.00000001	0.00009267
16	Yes	9	0.00000001	0.00003896
17	Yes	9	0.00000001	0.00003490
18	Yes	9	0.00000001	0.00005728
19	Yes	9	0.00000001	0.00005128
20	Yes	9	0.00000001	0.00003812
21	Yes	9	0.00000001	0.00003406
22	Yes	6	0.00000001	0.00001840
23	Yes	7	0.00000001	0.00008429
24	Yes	9	0.00000001	0.00003853
25	Yes	9	0.00000001	0.00003447
26	Yes	6	0.00000001	0.00003017
27	Yes	9	0.00000001	0.00004024
28	Yes	9	0.00000001	0.00003500
29	Yes	8	0.00000001	0.00014356
30	Yes	9	0.00000001	0.00003472
31	Yes	9	0.00000001	0.00003973
32	Yes	9	0.00000001	0.00003496
33	Yes	8	0.00000001	0.00014375
34	Yes	9	0.00000001	0.00003504
35	Yes	9	0.00000001	0.00004017
36	Yes	9	0.00000001	0.00003482
37	Yes	8	0.00000001	0.00014317
38	Yes	9	0.00000001	0.00003498
39	Yes	8	0.00000001	0.00010245
40	Yes	8	0.00000001	0.00007917
41	Yes	8	0.00000001	0.00004944
42	Yes	8	0.00000001	0.00007870
43	Yes	8	0.00000001	0.00010116
44	Yes	8	0.00000001	0.00007904
45	Yes	8	0.00000001	0.00004924
46	Yes	8	0.00000001	0.00007937
47	Yes	8	0.00000001	0.00010230
48	Yes	8	0.00000001	0.00007914
49	Yes	8	0.00000001	0.00005001
50	Yes	8	0.00000001	0.00007929

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	150 - 140	2.275	39	0.078	0.012
T2	140 - 120	2.062	39	0.079	0.012
T3	120 - 100	1.604	39	0.077	0.011
T4	100 - 80	1.150	39	0.070	0.009
T5	80 - 60	0.777	39	0.058	0.007
T6	60 - 40	0.475	39	0.043	0.005
T7	40 - 20	0.249	39	0.028	0.003
T8	20 - 0	0.089	39	0.014	0.002

Critical Deflections and Radius of Curvature - Service Wind

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	Client	Vertical Bridge	Designed by aashwood

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.000	Lightning Rod 1"x10'	39	2.275	0.078	0.012	160599
145.000	Sector1(CaAa=13333.33 Sq.in)No Ice	39	2.169	0.079	0.012	160599
135.000	Sector1(CaAa=10000 Sq.in)No Ice	39	1.951	0.079	0.012	102562
125.000	Sector1(CaAa=10000 Sq.in)No Ice	39	1.721	0.078	0.011	230217
115.000	Sector1(CaAa=5000 Sq.in)No Ice	39	1.487	0.076	0.011	207615
105.000	Sector1(CaAa=5000 Sq.in)No Ice	39	1.258	0.072	0.010	59319

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	150 - 140	10.793	2	0.370	0.055
T2	140 - 120	9.781	2	0.376	0.056
T3	120 - 100	7.605	2	0.364	0.052
T4	100 - 80	5.449	2	0.330	0.044
T5	80 - 60	3.682	2	0.271	0.035
T6	60 - 40	2.250	2	0.204	0.025
T7	40 - 20	1.180	2	0.133	0.016
T8	20 - 0	0.420	2	0.065	0.007

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.000	Lightning Rod 1"x10'	2	10.793	0.370	0.055	32250
145.000	Sector1(CaAa=13333.33 Sq.in)No Ice	2	10.292	0.374	0.055	32250
135.000	Sector1(CaAa=10000 Sq.in)No Ice	2	9.255	0.376	0.055	20843
125.000	Sector1(CaAa=10000 Sq.in)No Ice	2	8.163	0.370	0.053	50252
115.000	Sector1(CaAa=5000 Sq.in)No Ice	2	7.047	0.358	0.050	42724
105.000	Sector1(CaAa=5000 Sq.in)No Ice	2	5.960	0.341	0.046	12406

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	150	Diagonal	A325X	0.625	1	4.428	10.740	0.412	1	Member Block Shear
		Top Girt	A325X	0.625	1	3.782	14.168	0.267	1	Member Block Shear
T2	140	Leg	A325N	0.750	6	0.598	30.101	0.020	1	Bolt Tension
		Diagonal	A325X	0.625	1	9.328	14.168	0.658	1	Member Block Shear

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	Client	Vertical Bridge	Designed by aashwood

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T3	120	Leg	A325N	0.750	6	4.723	30.101	0.157 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	13.276	17.257	0.769 ✓	1	Bolt Shear
T4	100	Leg	A325N	0.750	6	10.895	30.101	0.362 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	15.599	26.051	0.599 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	2.929	19.195	0.153 ✓	1	Member Block Shear
T5	80	Leg	A325N	0.750	6	17.603	30.101	0.585 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	16.392	26.051	0.629 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	3.703	19.195	0.193 ✓	1	Member Block Shear
T6	60	Leg	A325N	1.000	6	24.044	54.517	0.441 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	17.235	28.336	0.608 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	4.378	19.195	0.228 ✓	1	Member Block Shear
T7	40	Leg	A325N	1.000	6	30.267	54.517	0.555 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	17.922	28.336	0.632 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	4.978	21.480	0.232 ✓	1	Member Block Shear
T8	20	Leg	A325N	1.000	6	36.306	54.517	0.666 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	18.866	29.250	0.645 ✓	1	Gusset Bearing
		Horizontal	A325X	0.625	1	5.507	21.480	0.256 ✓	1	Member Block Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 140	1 3/4	10.017	4.507	123.6 K=1.00	2.405	-4.118	35.549	0.116 ¹ ✓
T2	140 - 120	1 3/4	20.033	4.758	130.5 K=1.00	2.405	-30.839	31.906	0.967 ¹ ✓
T3	120 - 100	2 1/4	20.033	4.758	101.5 K=1.00	3.976	-74.174	84.239	0.881 ¹ ✓
T4	100 - 80	2 1/2	20.033	4.758	91.4 K=1.00	4.909	-115.432	120.001	0.962 ¹ ✓
T5	80 - 60	2 3/4	20.033	4.758	83.0 K=1.00	5.940	-159.993	161.422	0.991 ¹ ✓
T6	60 - 40	3	20.033	4.758	76.1 K=1.00	7.069	-203.823	208.219	0.979 ¹ ✓

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	Client	Vertical Bridge	Designed by aashwood

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T7	40 - 20	3 1/4	20.033	4.758	70.3 K=1.00	8.296	-247.154	260.176	0.950 ¹ ✓
T8	20 - 0	3 1/2	20.033	4.758	65.3 K=1.00	9.621	-289.594	317.129	0.913 ¹ ✓

¹ P_u / φP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 140	L2x2x3/16	13.970	7.027	214.0 K=1.00	0.715	-3.954	4.468	0.885 ¹ ✓
T2	140 - 120	KL/R > 200 (C) - 12 L3x3x3/16	15.937	8.017	161.4 K=1.00	1.090	-8.051	11.975	0.672 ¹ ✓
T3	120 - 100	L3x3x1/4	17.856	8.954	181.5 K=1.00	1.440	-11.305	12.511	0.904 ¹ ✓
T4	100 - 80	2L2 1/2x2 1/2x3/16x3/8	9.979	9.863	156.1 K=1.00	1.800	-16.053	20.369	0.788 ¹ ✓
T5	80 - 60	2L 'a' > 56.479 in - 108 2L2 1/2x2 1/2x3/16x3/8	10.869	10.743	170.0 K=1.00	1.800	-16.756	17.285	0.969 ¹ ✓
T6	60 - 40	2L 'a' > 61.520 in - 147 2L3x3x3/16x3/8	11.776	11.641	154.9 K=1.00	2.180	-17.540	24.477	0.717 ¹ ✓
T7	40 - 20	2L 'a' > 66.501 in - 186 2L3x3x3/16x3/8	12.698	12.553	167.0 K=1.00	2.180	-18.275	21.270	0.859 ¹ ✓
T8	20 - 0	2L 'a' > 71.709 in - 225 2L3x3x1/4x3/8	13.630	13.476	179.4 K=1.00	2.880	-18.866	25.057	0.753 ¹ ✓
		2L 'a' > 77.204 in - 264							

¹ P_u / φP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T4	100 - 80	2L1 3/4x1 3/4x3/16x3/8	18.975	9.383	209.7 K=1.00	1.242	-2.929	8.085	0.362 ¹ ✓
T5	80 - 60	2L 'a' > 54.017 in - 79 2L1 3/4x1 3/4x3/16x3/8	20.975	10.373	231.8 K=1.00	1.242	-3.703	6.616	0.560 ¹ ✓

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T6	60 - 40	2L 'a' > 59.714 in - 118 2L1 3/4x1 3/4x3/16x3/8	22.975	11.363	253.9 K=1.00	1.242	-4.378	5.514	0.794 ¹ ✓
T7	40 - 20	2L 'a' > 65.411 in - 157 2L2x2x3/16x3/8	24.975	12.352	241.7 K=1.00	1.430	-4.978	6.947	0.717 ¹ ✓
T8	20 - 0	2L 'a' > 70.989 in - 196 2L2x2x3/16x3/8 2L 'a' > 76.677 in - 235	26.975	13.342	261.0 K=1.00	1.430	-5.507	5.962	0.924 ¹ ✓

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 140	L3x3x3/16 KL/R > 200 (C) - 4	12.550	12.404	249.7 K=1.00	1.090	-3.597	5.002	0.719 ¹ ✓

¹ P_u / φP_n controls

Inner Bracing Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T4	100 - 80	L1 3/4x1 3/4x3/16	9.487	9.487	331.5 K=1.00	0.621	-0.013	1.618	0.008 ¹ ✓
T5	80 - 60	KL/R > 250 (C) - 86 L1 3/4x1 3/4x3/16	10.487	10.487	366.4 K=1.00	0.621	-0.011	1.324	0.008 ¹ ✓
T6	60 - 40	KL/R > 250 (C) - 125 L1 3/4x1 3/4x3/16	11.488	11.488	401.4 K=1.00	0.621	-0.012	1.103	0.011 ¹ ✓
T7	40 - 20	KL/R > 250 (C) - 164 L1 3/4x1 3/4x3/16	12.488	12.488	436.3 K=1.00	0.621	-0.013	0.934	0.014 ¹ ✓
T8	20 - 0	KL/R > 250 (C) - 203 L1 3/4x1 3/4x3/16 KL/R > 250 (C) - 242	13.488	13.488	471.2 K=1.00	0.621	-0.014	0.800	0.018 ¹ ✓

¹ P_u / φP_n controls

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 24 of 26
	Project 150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client Vertical Bridge	Designed by aashwood

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 140	1 3/4	10.017	0.501	13.7	2.405	3.590	108.238	0.033 ¹
T2	140 - 120	1 3/4	20.033	0.501	13.7	2.405	28.383	108.238	0.262 ¹
T3	120 - 100	2 1/4	20.033	0.501	10.7	3.976	65.389	178.924	0.365 ¹
T4	100 - 80	2 1/2	20.033	0.501	9.6	4.909	105.638	220.893	0.478 ¹
T5	80 - 60	2 3/4	20.033	0.501	8.7	5.940	144.279	267.281	0.540 ¹
T6	60 - 40	3	20.033	0.501	8.0	7.069	181.618	318.086	0.571 ¹
T7	40 - 20	3 1/4	20.033	0.501	7.4	8.296	217.851	373.310	0.584 ¹
T8	20 - 0	3 1/2	20.033	0.501	6.9	9.621	252.431	432.951	0.583 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 140	L2x2x3/16	13.970	7.027	136.7	0.431	4.428	21.001	0.211 ¹
T2	140 - 120	L3x3x3/16	15.937	8.017	102.4	0.712	9.328	34.712	0.269 ¹
T3	120 - 100	L3x3x1/4	17.856	8.954	115.5	0.939	13.276	45.794	0.290 ¹
T4	100 - 80	2L2 1/2x2 1/2x3/16x3/8	10.824	10.708	165.2	1.139	15.599	55.529	0.281 ¹
T5	80 - 60	2L 'a' > 61.316 in - 80 2L2 1/2x2 1/2x3/16x3/8	11.731	11.605	179.0	1.139	16.392	55.529	0.295 ¹
T6	60 - 40	2L 'a' > 66.454 in - 119 2L3x3x3/16x3/8	12.651	12.516	160.0	1.424	17.235	69.423	0.248 ¹
T7	40 - 20	2L 'a' > 71.500 in - 158 2L3x3x3/16x3/8	13.583	13.439	171.7	1.424	17.922	69.423	0.258 ¹
		2L 'a' > 76.769 in - 197							

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 408 of 732 25 of 26
	Project	150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client	Vertical Bridge	Designed by aashwood

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T8	20 - 0	2L3x3x1/4x3/8	14.524	14.370	185.4	1.879	18.441	91.589	0.201 ¹
2L 'a' > 82.326 in - 236									

¹ P_u / φP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T4	100 - 80	2L1 3/4x1 3/4x3/16x3/8	18.025	8.908	199.1	0.721	2.929	35.134	0.083 ¹
T5	80 - 60	2L 'a' > 51.283 in - 97 2L1 3/4x1 3/4x3/16x3/8	20.025	9.898	221.2	0.721	3.703	35.134	0.105 ¹
T6	60 - 40	2L 'a' > 56.980 in - 136 2L1 3/4x1 3/4x3/16x3/8	22.025	10.887	243.3	0.721	4.378	35.134	0.125 ¹
T7	40 - 20	2L 'a' > 62.676 in - 175 2L2x2x3/16x3/8	24.975	12.352	240.2	0.862	4.978	42.001	0.119 ¹
T8	20 - 0	2L 'a' > 70.989 in - 196 2L2x2x3/16x3/8	26.025	12.867	250.2	0.862	5.507	42.001	0.131 ¹
2L 'a' > 73.947 in - 253									

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	150 - 140	L3x3x3/16	12.550	12.404	158.5	0.712	3.782	34.712	0.109 ¹

¹ P_u / φP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	φP _{allow} K	% Capacity	Pass Fail
T1	150 - 140	Leg	1 3/4	1	-4.118	35.549	11.6	Pass

tnxTower B+T Group 1717 S Boulder Ave, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS: 9035-E - 11 Mile (Site# US-AK-5244)	Page 409 of 732 26 of 26
	Project	150' SST/ 58.36698194, -134.610826	Date 12:13:27 07/14/21
	Client	Vertical Bridge	Designed by aashwood

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\emptyset P_{allow}$ K	% Capacity	Pass Fail
T2	140 - 120	Leg	1 3/4	21	-30.839	31.906	96.7	Pass
T3	120 - 100	Leg	2 1/4	48	-74.174	84.239	88.1	Pass
T4	100 - 80	Leg	2 1/2	75	-115.432	120.001	96.2	Pass
T5	80 - 60	Leg	2 3/4	114	-159.993	161.422	99.1	Pass
T6	60 - 40	Leg	3	153	-203.823	208.219	97.9	Pass
T7	40 - 20	Leg	3 1/4	192	-247.154	260.176	95.0	Pass
T8	20 - 0	Leg	3 1/2	231	-289.594	317.129	91.3	Pass
T1	150 - 140	Diagonal	L2x2x3/16	12	-3.954	4.468	88.5	Pass
T2	140 - 120	Diagonal	L3x3x3/16	26	-8.051	11.975	67.2	Pass
T3	120 - 100	Diagonal	L3x3x1/4	51	-11.305	12.511	90.4	Pass
T4	100 - 80	Diagonal	2L2 1/2x2 1/2x3/16x3/8	108	-16.053	20.369	78.8	Pass
T5	80 - 60	Diagonal	2L2 1/2x2 1/2x3/16x3/8	147	-16.756	17.285	96.9	Pass
T6	60 - 40	Diagonal	2L3x3x3/16x3/8	186	-17.540	24.477	71.7	Pass
T7	40 - 20	Diagonal	2L3x3x3/16x3/8	225	-18.275	21.270	85.9	Pass
T8	20 - 0	Diagonal	2L3x3x1/4x3/8	264	-18.866	25.057	75.3	Pass
T4	100 - 80	Horizontal	2L1 3/4x1 3/4x3/16x3/8	79	-2.929	8.085	36.2	Pass
T5	80 - 60	Horizontal	2L1 3/4x1 3/4x3/16x3/8	118	-3.703	6.616	56.0	Pass
T6	60 - 40	Horizontal	2L1 3/4x1 3/4x3/16x3/8	157	-4.378	5.514	79.4	Pass
T7	40 - 20	Horizontal	2L2x2x3/16x3/8	196	-4.978	6.947	71.7	Pass
T8	20 - 0	Horizontal	2L2x2x3/16x3/8	235	-5.507	5.962	92.4	Pass
T1	150 - 140	Top Girt	L3x3x3/16	4	-3.597	5.002	71.9	Pass
T4	100 - 80	Inner Bracing	L1 3/4x1 3/4x3/16	86	-0.013	1.618	0.8	Pass
T5	80 - 60	Inner Bracing	L1 3/4x1 3/4x3/16	125	-0.011	1.324	0.8	Pass
T6	60 - 40	Inner Bracing	L1 3/4x1 3/4x3/16	164	-0.012	1.103	1.1	Pass
T7	40 - 20	Inner Bracing	L1 3/4x1 3/4x3/16	203	-0.013	0.934	1.4	Pass
T8	20 - 0	Inner Bracing	L1 3/4x1 3/4x3/16	242	-0.014	0.800	1.8	Pass
							Summary	
							Leg (T5)	99.1 Pass
							Diagonal (T5)	96.9 Pass
							Horizontal (T8)	92.4 Pass
							Top Girt (T1)	71.9 Pass
							Inner Bracing (T8)	1.8 Pass
							Bolt Checks	76.9 Pass
							RATING =	99.1 Pass

Proposed Vertical Bridge Towers Justification

WCF20190009 Lena Point and WCF20190010 11 Mile

September 30th, 2019

In the spring of 2018, Vertical Bridge began a search for a couple of new tower site locations in the Industrial zoned area south of the Glacier Hwy and west of the Mendenhall River and in the area of the Glacier Hwy out by Lena Point in the D3 zoned area. The purpose of these searches was to find suitable locations for their primary client to locate new cellular equipment and expand the cellular coverage beyond what was capable on existing infrastructure.

Vertical Bridge's primary client for both of these locations is currently located on existing AT&T Alaska (Alascom) towers in these areas.

There are several reasons why the client's existing colocations on these AT&T Alaska facilities do not perform as the client's RF Engineering Network parameters require them to:

1. Lack of necessary height for the antennas to generate the desired coverage
2. Lack of the existing structures to be modified to achieve the desired height for the coverage parameters and additional tower cellular equipment
3. Lack of existing ground space to accommodate the addition of desired additional, new equipment to be placed in order to provide new 5G technology
4. Lack of any other colocatable structures within these search areas that can accommodate any cellular equipment

5. Unreasonable increase of lease fees for ground and tower space by current landlord

An extensive search was conducted for the new, proposed tower locations in the above mentioned areas. In the case of the WCF20190009 Lena Pt. location, there was really only one practical location that would provide the coverage required by the client's RF Engineering group. That is the proposed location adjacent to the CBJ Water Tank and across the access road from the FAA tower off of Merganser Rd on CBJ owned property. This location has good road access as well as existing power and telephone copper/fiber available nearby for use at the proposed site. Critical elements for economically feasible telecommunications site operations. The proposed site is also heavily wooded and provides a natural visual barrier to minimize viewshed intrusion.

Both proposed locations have had visual impact studies performed and there has been determined to be no significant visual impact to the surrounding area. Neither tower is required by the FAA or FCC to be lit or painted. Because of these determinations, both towers have been designed to be manufactured in galvanized steel and non-concealed. Both towers have been load designed to accommodate a total of 4 carriers.

In the Industrial zoned area of the proposed WCF20190010 11 Mile site, six prospective landlords were approached about leasing space on their property to Vertical Bridge for the purposes of developing a telecommunications site with tower. Several of these potential landlords rejected the proposal outright and several others considered it, but either requested unreasonable lease amounts way out of line with market norms or decided that they didn't want the requested size of the proposed site to occupy that much of their property.

After exhausting all prospective private property site locations, it was suggested by the CBJ to examine the CBJ property where the Food Bank and an FAA tower is currently located off of Crazy Horse Drive. This location was not ideal from a Wetlands standpoint, but it was workable and still within the Industrial zoned area. Vertical Bridge's primary client's RF Engineering group reviewed the location, determined the necessary tower height required to meet the network performance criteria and OK'd the site. Vertical Bridge is currently pursuing a Wetlands construction permit with the Army Corps of Engineers for this location.

In both the Lena Point and 11 Mile locations there are FAA towers. The FAA, and for that matter any Federal Government telecommunications facility, have never allowed any private carriers (cellular or otherwise) to collocate on their tower facilities. To my knowledge, neither has the State of Alaska. This is to prevent any hint of favoritism or endorsement by a government entity toward any particular carrier or commercial entity.

In conclusion, both proposed site locations meet Vertical Bridge's primary client's RF engineering network performance criteria. There are already existing FAA towers in close proximity and one of the locations is in the highly preferred Industrial area for telecommunications development. In the case of the Lena Point location, the proposed site is also in close proximity to the rather large CBJ owned water tank. Both locations seem ideal to locate commercial, multiple carrier telecommunications facilities as the immediate areas surrounding each location already accommodate a more industrial oriented development.

Gary R. Brekke

Representing Vertical Bridge



DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 22270
JUNEAU, AK 99802-2270

November 13, 2019

Regulatory Division
POA-2019-00625

Vertical Bridge Development, LLC
Attention: Matt Grugan
750 Park of Commerce
Drive Boca Raton, FL 33487

Dear Mr. Grugan:

This is in response to your October 16, 2019, application for a Department of the Army (DA) permit, to discharge 286 cubic yards of gravel fill into 0.08-acres of wetlands in order to construct a telecommunications tower. It has been assigned file number POA-2019-00625, Mendenhall River, which should be referred to in all future correspondence with this office. The project site is located within Section 25, T. 40 S., R. 65 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.36698° N., Longitude -134.6108° W.; Juneau Borough, in Juneau, Alaska.

Based on our review of the information you furnished and available to us, we have preliminarily determined the above project area contains waters of the United States (U.S.), including wetlands, under the Corps of Engineers regulatory jurisdiction. See the attached Preliminary Jurisdictional Determination (PJD) Form. Please sign and return the form to our office. A PJD is not appealable. At any time you have the right to request and obtain an Approved Jurisdictional Determination (JD), which can be appealed. If it is your intent to request an Approved JD, do not begin work until one is obtained.

DA permit authorization is necessary because your project will involve dredged and/or fill material into waters of the U.S. under our regulatory jurisdiction.

Based upon the information and plans you provided, we hereby verify that the work described above, which would be performed in accordance with the enclosed plan (sheets 1-4), October 3, 2019, is authorized by Nationwide Permit (NWP) No. 12, Utility Line Activities. NWP No. 12 and its associated Regional and General Conditions can be accessed at our website at: www.poa.usace.army.mil/Missions/Regulatory/Permits. You must comply with all terms and conditions associated with NWP No. 12.

Attachment A - Application Packet

-2-

Further, please note General Condition 30 requires that you submit a signed certification to us once any work and required mitigation are completed. Enclosed is the form for you to complete and return to us.

Unless this NWP is modified or revoked, it expires on March 18, 2022. It is incumbent upon you to remain informed of the changes to the NWPs. Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact me via email at: Delana.P.Wilks@usace.army.mil, by mail at the address above, or by phone at (907) 790-4494, if you have questions or to request paper copies of the regional and/or general conditions. For more information about the Regulatory Program, please visit our website at: www.poa.usace.army.mil/Missions/Regulatory.

Sincerely,

SOISETH.BEN
JAMIN.NELS.
1262186691

Digitally signed by
SOISETH.BENJAMIN.
NELS.1262186691
Date: 2019.11.12
11:35:44 -09'00'

Benjamin N. Soiseth
Chief, Southeast
Section

Enclosures

ENCLOSURE



**US Army Corps of
Engineers Alaska District**

Permit Number: POA-2019-00265

Name of Permittee: Vertical Bridge Development, LLC

Date of Issuance: November 13, 2019

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to Ms. Delana Wilks at the following address:

U.S. Army Corps of Engineers
Alaska District
Regulatory Division
Post Office Box 22270
Juneau, Alaska 99802-2270

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Preliminary Jurisdictional Determination Form

Packet Page 417 of 432 Page 1 of 2

This preliminary JD find that there "*maybe*" waters of the United States on the subject project site that could be affected by the proposed activity based on the following information:

District Office	Juneau Field Office	File/ORM #	POA-2019-00625	PJD Date	Oct 21, 2019		
State	AK	City/County	CBJ	Name and Address of Person Requesting PJD Vertical Bridge Development, LLC ATTN: Matt Grugan 750 Park of Commerce Drive Boca Raton, FL 33487			
Nearest Waterbody	Mendenhall River						
Project Location	Section(s)	25	Township			40	S
Meridian	Copper River	Range	65			E	
USGS Quad Map	Juneau B-2	Latitude	58.36698	N	Longitude	-134.6108	W
Subdivision Name, Block, Lot, Directions to Project Site							

Identify (Estimate) Amount of Waters in the Review Area	Stream Flow	Name of Any Water Bodies on the Site Identified as Section 10 Waters:	Tidal:
<u>Non-Wetland Waters:</u> Linear ft Width Acres			
<u>Wetlands</u> Acres Cowardin Class: Palustrine, emergent		☐ Office (Desk) Determination ☐ Field Determination	Non-Tidal: Date of Site Visit:

SUPPORTING DATA: Data Review for Preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below)

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Supplied by Applicant on 21 Oct 2019
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data Sheet prepared by the Corps
☐ Corps navigable waters' study:
☐ USGS NHD Data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s) Cite quad name: Juneau B-2
☐ USDA Natural Resources Conservation Service Soil Survey. Citation:
☒ National Wetlands Inventory map(s): NWI
☐ State/Local Wetland Inventory map(s):
☐ FEMA/FIRM map(s):
☐ 100-year Floodplain Elevation:
☒ Photographs:
☒ Aerial (Name & Date) Google Earth Imagery 7/27/2013
☐ Other (Name & Date)
☐ Previous determination(s). File # and date of response letter:
☐ Other Information:

Attachment A - Application Packet

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.



22 Oct 2019

Signature and Date of Regulatory Project Manager
(REQUIRED)

Signature and Date of Person Requesting Preliminary JD
(REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS: 1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time. 2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.



Juneau



Vertical Bridge GCI/AWN Cellular Communications Tower

Applicant: Vertical Bridge

POA-2019-

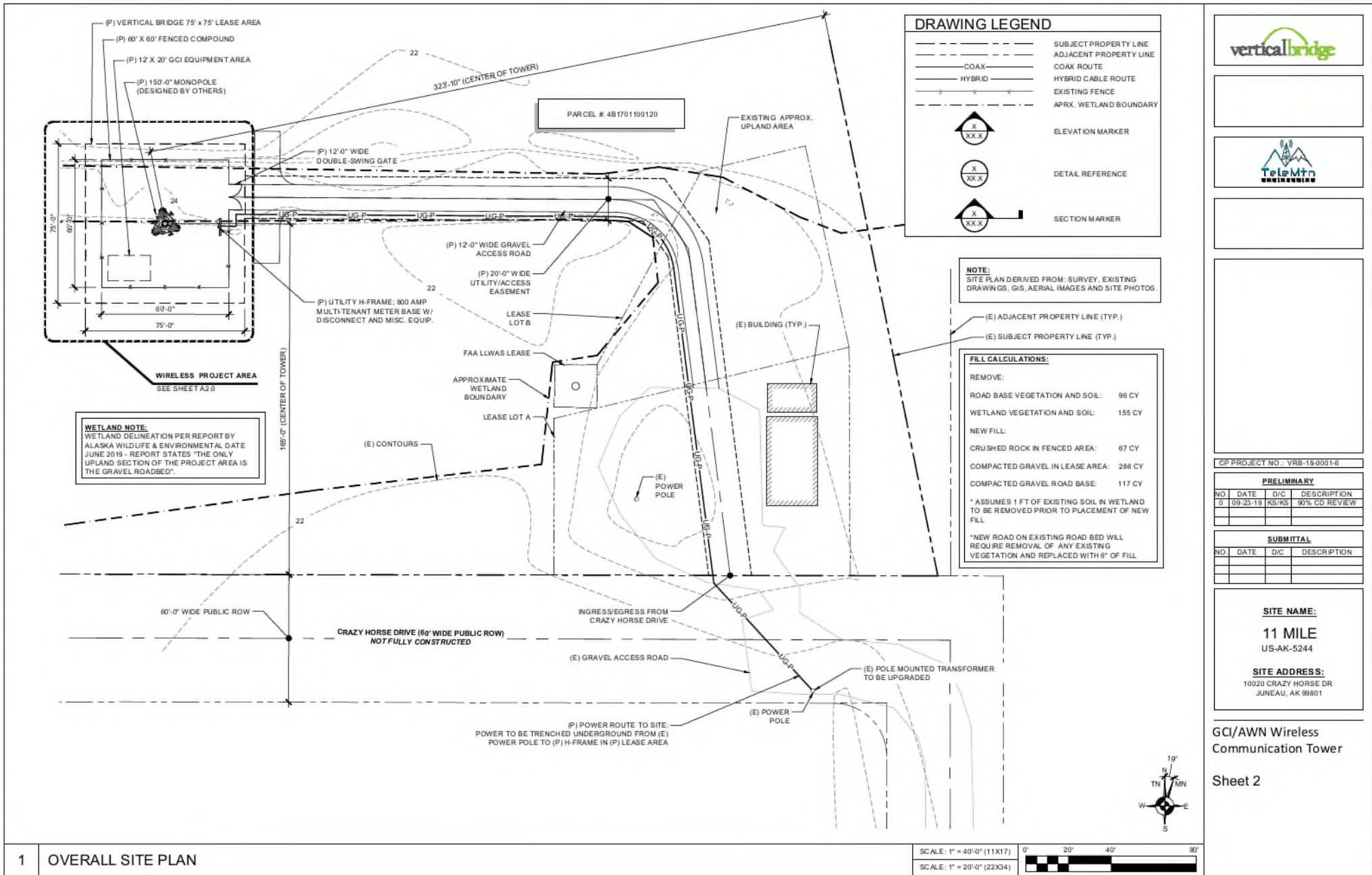
Agent: Solstice Alaska Consulting

Vicinity Map

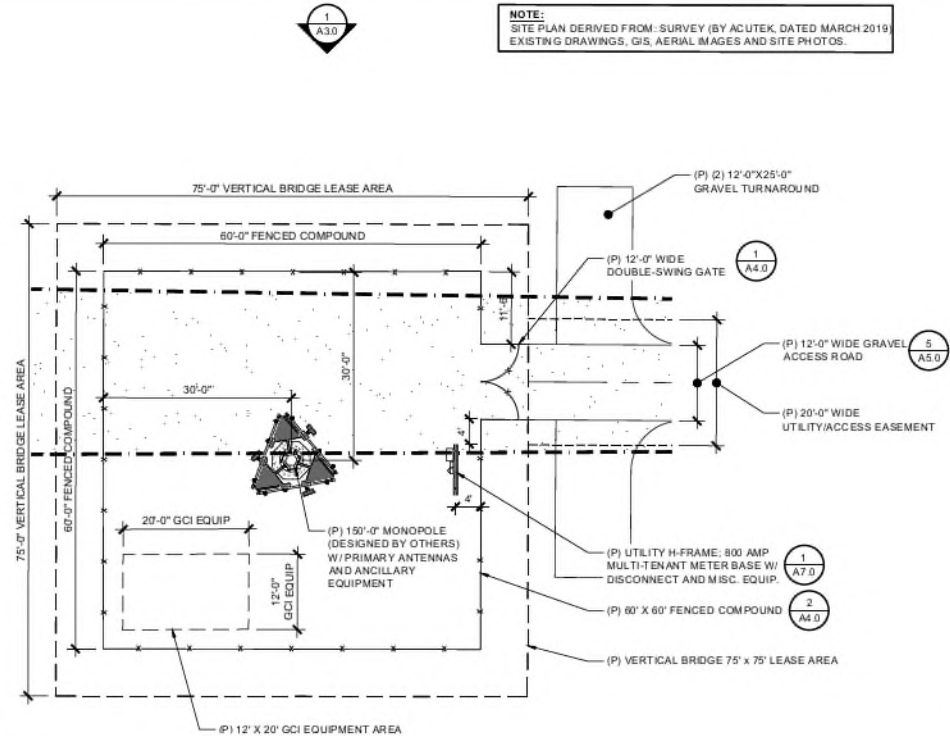
Date: October 3, 2019



Sheet 1



- GENERAL NOTES:**
1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
 2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
 3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
 4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
 5. CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
 6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
 7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.



NOTE:
SITE PLAN DERIVED FROM: SURVEY (BY ACUTEK, DATED MARCH 2019)
EXISTING DRAWINGS, GIS, AERIAL IMAGES AND SITE PHOTOS.



CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION
3	09-23-19	KS/KS	90% CD REVIEW

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION

SITE NAME:

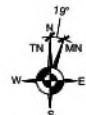
11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

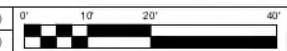
GCI/AWN Wireless
Communication Tower

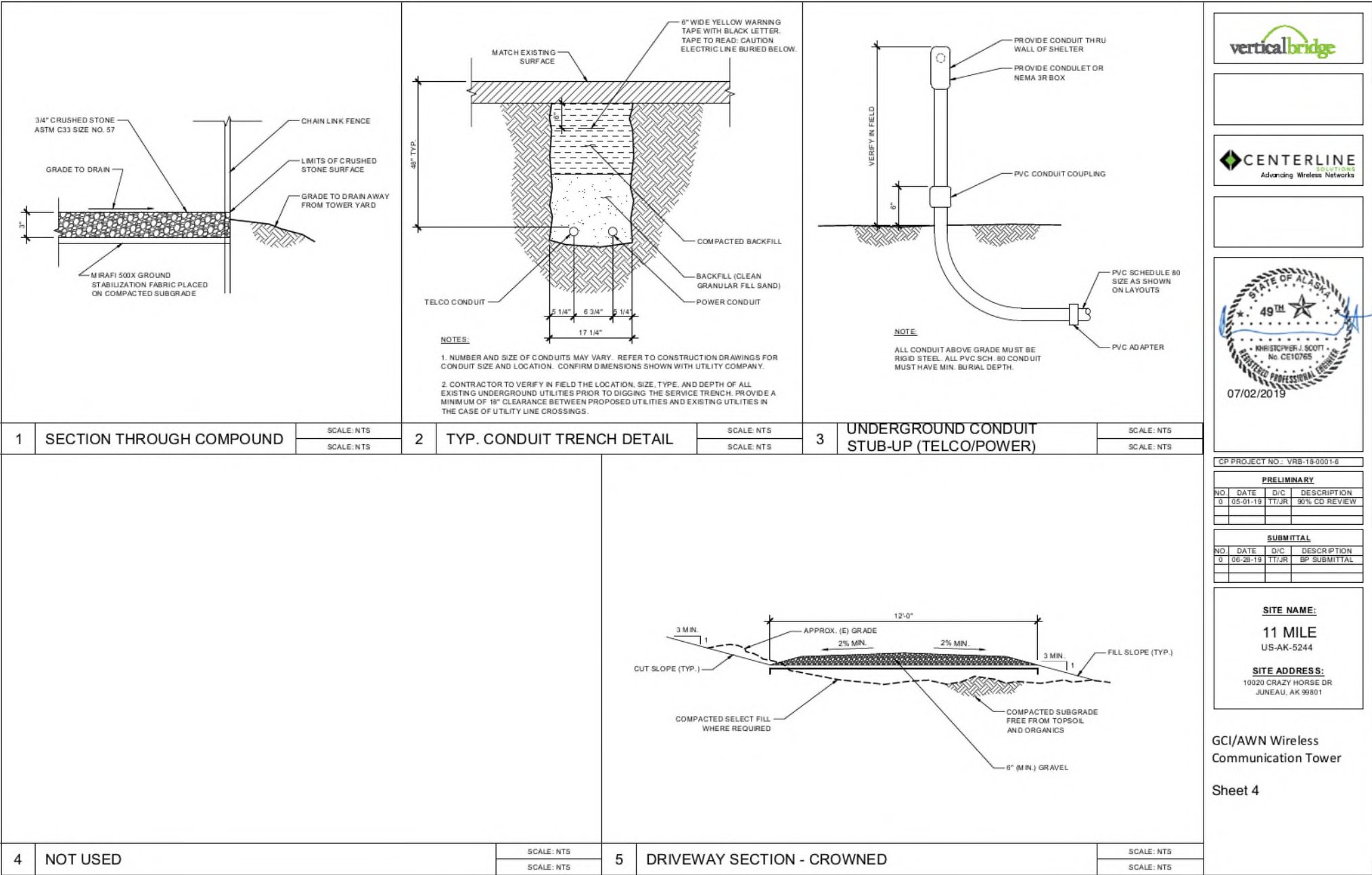
Sheet 3



1 ENLARGED SITE PLAN AND AERIAL OVERLAY (N.T.S.)

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)







Data Source: ESRI – World Imagery



Legend

- Study Area
- PEMA Wetland
- Wetland Sample Point
- Upland Sample Point

Vertical Bridge
Wetland Delineation
T. 40 S., R. 65 E., Sec. 25,
Copper River Meridian.
Juneau, Alaska

AT&T 11 Mile Proposed Replacement Site SAM

Site Name:	AT&T 11 Mile
Existing Site Latitude:	58.370065
Existing Site Longitude:	-134.611508
Existing Site Elevation:	27' AMSL
Proposed Rad Center:	140' AGL
Prepared Date:	7/31/2017
Prepared By:	Mark Schott

Comments:

This site will cover the SW portion of the Juneau/Douglas area.

SAM View 1



SAM View 2





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No. 27 of 732
2019-AAL-104-OE

Issued Date: 04/25/2019

FCC Contact
BRT Group, LLC
PO. Box 812530
Boca Raton, FL 33481

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower US-AK-5244 11 Mile
Location:	Juneau, AK
Latitude:	58-22-01.14N NAD 83
Longitude:	134-36-38.98W
Heights:	24 feet site elevation (SE) 150 feet above ground level (AGL) 174 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 10/25/2020 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (907) 271-5863, or robert.van.haastert@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-AAL-104-OE.

Signature Control No: 402328681-403823495

(DNE)

Robert van Haastert
Specialist

Attachment(s)
Frequency Data
Map(s)

cc: FCC

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

FAA 1-A Accuracy Certification

Date of Survey: February 2019
 Market: Alaska
 Site Address:
 10020 Crazy Horse Dr.
 Juneau, Alaska 99801

Site Name: AK 11 Mile
 Project #: 19-08.02

Proposed Structure Type: Self Support Tower

Surveyed Latitude (NAD 83)	N 58°22'01.135"
Surveyed Longitude (NAD 83)	W 134°36'38.975"
Ground Elevation: (NAVD 1988)	24'
Proposed Tower Height:	150'
Overall Tower Height (NAVD 1988)	174.0

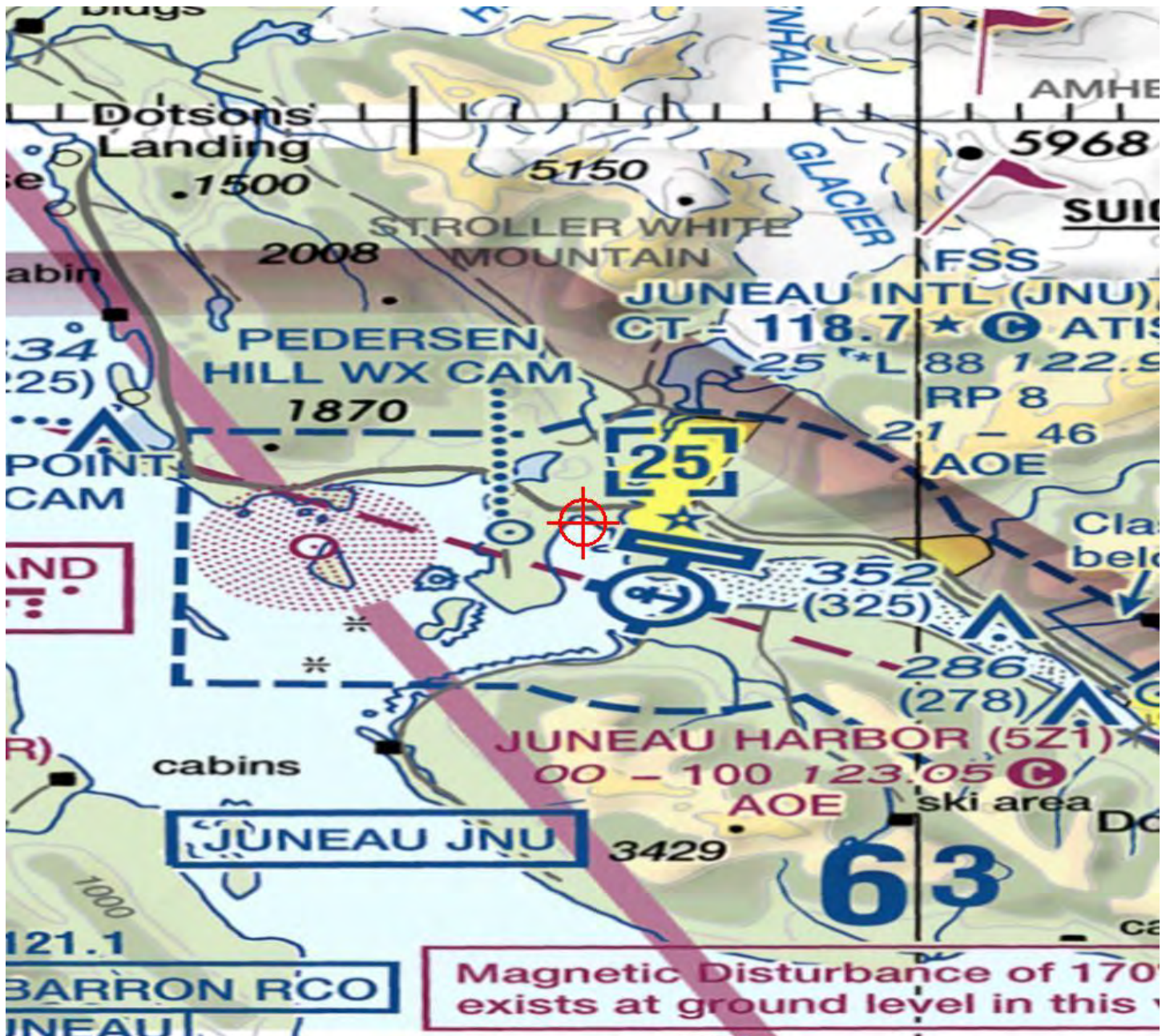
Certification: I certify that the latitude and longitude are accurate to within +/- 20 feet horizontally, and that the ground elevation is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are expressed in degrees, minutes, and seconds to the nearest hundredth of a second. The vertical datum (height) is expressed in terms of feet.

Company: Acutek Geomatics
 5099 E. Blue Lupine Dr., Ste. 104
 Wasilla, Alaska 99654
 907-376-8800

3/4/2019







COMMUNICATION TOWER

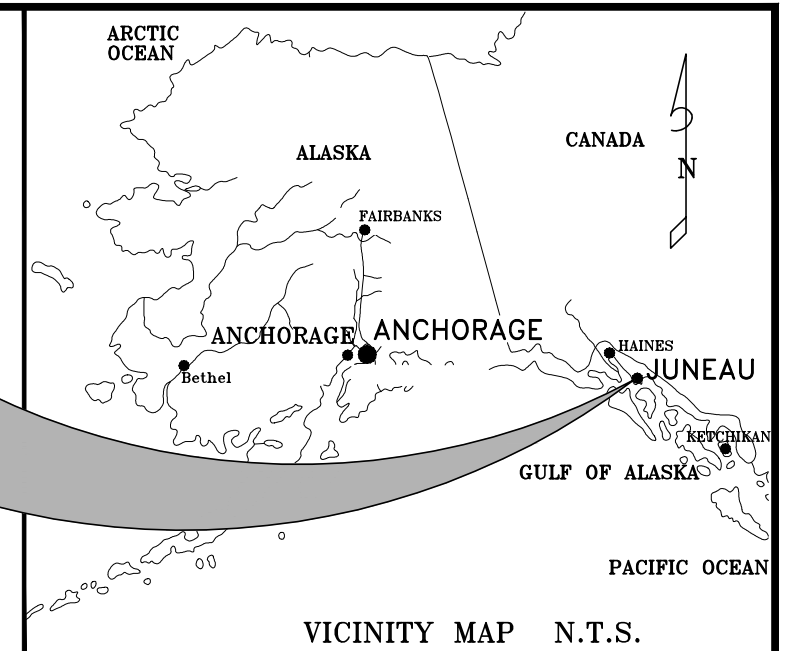
150 FT. THREE LEGGED FOUNDATION

11 MILE SITE

JUNEAU, ALASKA

APRIL 25, 2021

THIS
PROJECT



GENERAL NOTES:

THE FOLLOWING NOTES APPLY UNLESS SHOWN OTHERWISE:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES REQUIRED TO PERFORM THE FOUNDATION WORK.
- GENERAL CONTRACTOR TO VERIFY ANCHOR BOLT SIZES, BASE PLATE AND BOLT PATTERN AS PER TOWER MANUFACTURES DRAWINGS.
- CODE AND STANDARDS:
2009 INTERNATIONAL BUILDING CODE (IBC)
2003 ANSI/TIA/EIA-222-G STRUCTURAL STANDARDS
A.C.I. 301, 318 CURRENT EDITION.
- FOUNDATION DESIGN IS BASED ON SOILS REPORT BY HAAS AND ASSOCIATES INC. DATED 3-13-2021 AND MAGNUM TOWERS PROJECT NUMBER PJF-65021.
- SPECIAL INSPECTION REQUIREMENTS:
PERIODIC – EXCAVATION, BACKFILLING, FORMWORK AND CONCRETE/REBAR PLACEMENT SHALL BE MONITORED BY AN ON-SITE REPRESENTATIVE OF HAAS & ASSOCIATES INC.

CONTINUOUS –
HELICAL PILE INSTALLATION ANCHOR LOAD TESTING
(1 UPLIFT TEST PER LEG, ASTM D3689) TO 200% OF DESIGN LOADS.
- HELICAL PILES:
ASTM A572 GRADE 50
- STEEL ANCHOR RODS:
ASTM F1554, GRADE 105 THREADED
FURNISHED WITH ASTM A563 HEAVY HEX NUTS EACH END
- REINFORCEMENT –
DEFORMED BAR ---- ASTM A615, GR 60
WELDED REINF ---- WELDING PROHIBITED
LAP ALL REINF 60 BAR DIAMETERS MIN.
- REINFORCED CONCRETE:
SPECIAL INSPECTION REQUIRED. ALL CONCRETE SHALL CONFORM TO:
AGGREGATES----- ASTM C33, 3/4"MAX
CEMENT ----- ASTM C150, TYPE I OR II
CEMENT CONTENT ----- 6.0 SACKS/CY MIN.
WATER ----- CLEAR, POTABLE
AIR ENTRAINMENT ----- ASTM C260; 4-7%
STRENGTH (28 days)----- $f'_c = 4,000$ PSI MIN
- CONCRETE COVER:
MINIMUM CONCRETE COVER TO REINF:
CAST AGAINST OR EXPOSED TO EARTH ----- 3"
FORMED EXPOSED TO WEATHER ----- 2"

TOWER LEG REACTIONS (FACTORED)

TOWER HEIGHT: 150 FT
OVERTURNING M: ----- FT-KIPS
BASE SHEAR: 84.3 KIPS
BASE WEIGHT: ----- KIPS
MAX. LEG SHEAR: ----- KIPS
MAX. LEG UPLIFT: 301 KIPS
MAX. LEG DOWN: ----- KIPS

SHEET INDEX

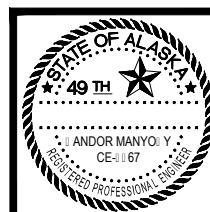
T1 TITLE SHEET
S1 PILE FOUNDATION PLAN AND DETAILS
S2 SECTIONS AND DETAILS

**NOTIFY ENGINEER 24
HOURS PRIOR TO
INSPECTIONS**

**CALL UTILITY LOCATE
BEFORE YOU DIG**

APPROVED FOR CONSTRUCTION
BY: DATE:

DRAWING STATUS / REVISIONS			
REV.	DATE	DESCRIPTION	BY



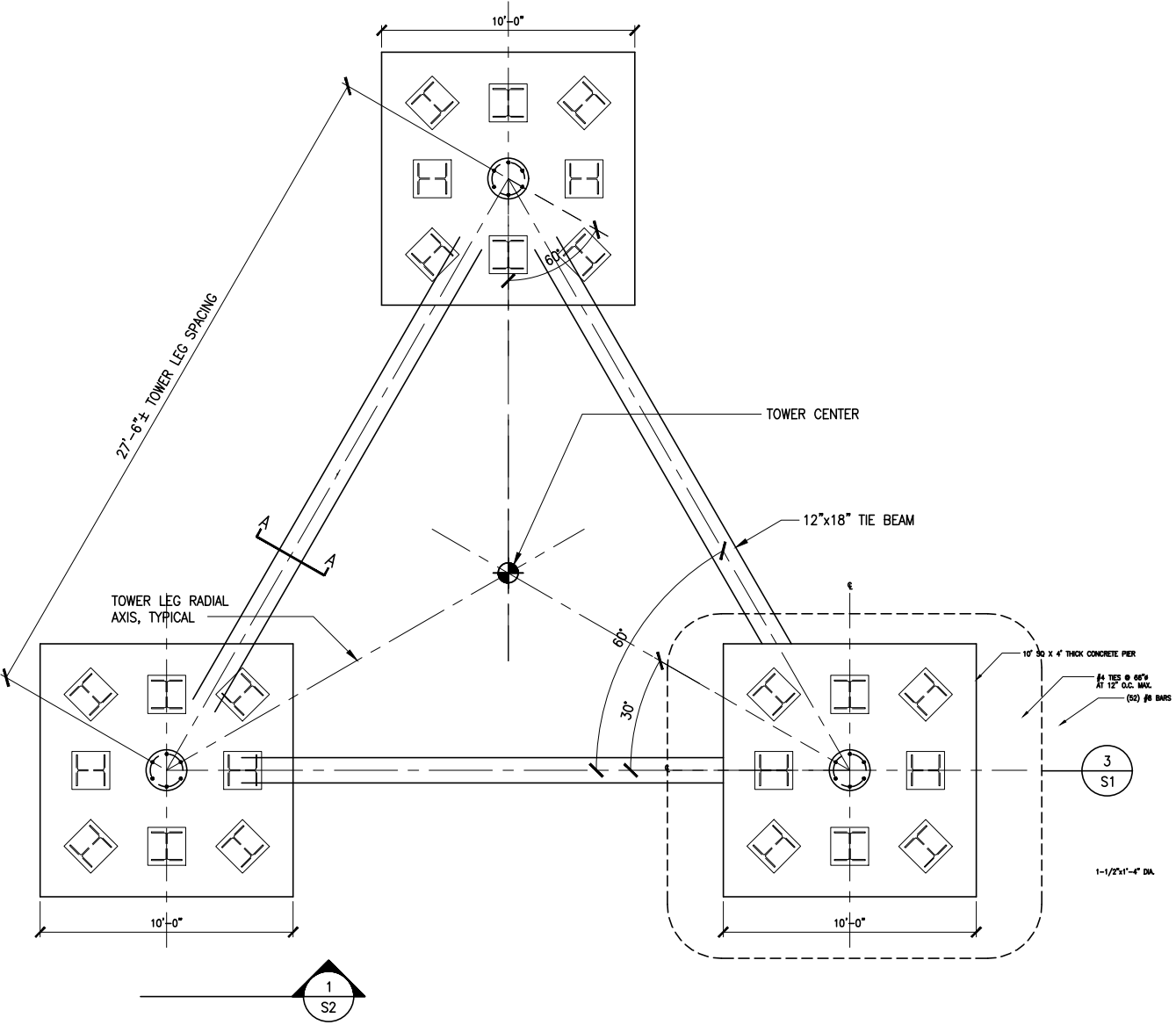
HAAS & ASSOCIATES INC.
CIVIL ENGINEERING
CONSULTANTS
PO BOX 110776
Anchorage, Alaska, 99511
tel: (907) 349-8799
fax: (907) 349-8791
e-mail: haas@gci.net

11 MILE SITE
150-FOOT THREE LEGGED TOWER FOUNDATION
JUNEAU, ALASKA

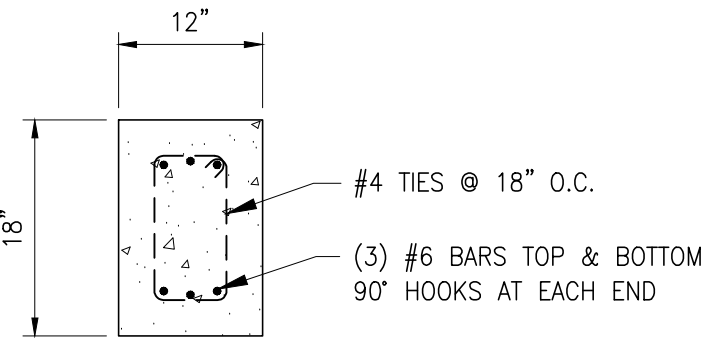
TITLE SHEET

SCALE: AS SHOWN
DATE: 4/25/2021
DRAWN BY: CS
CHECKED BY: SM
JOB NUMBER: ----
FILE NAME: 11MILE-4-25-2021

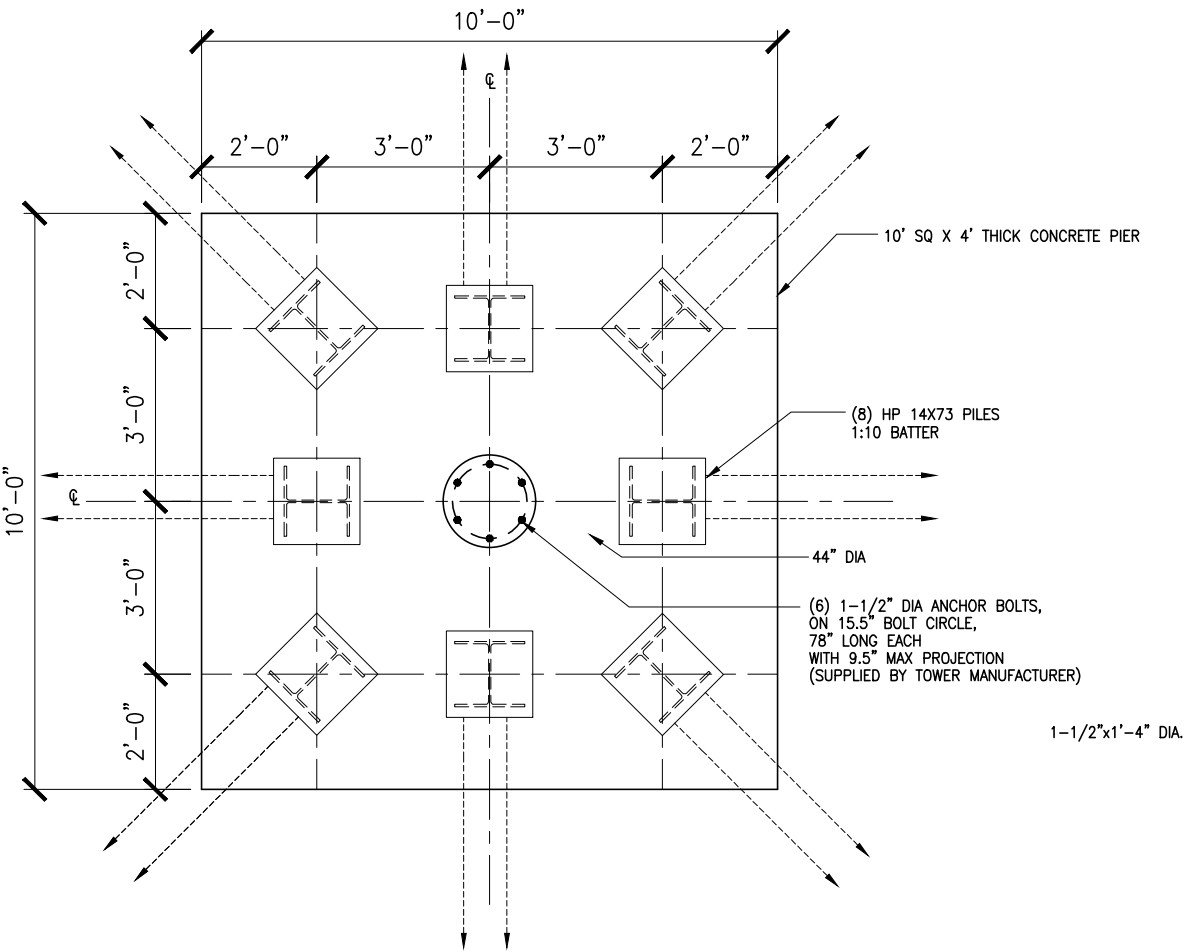
SHEET NUMBER
T1
1 Of 4 Sheets



1 FOUNDATION PLAN
SCALE: NTS



2 SECTION A - A
SCALE: 3/4"=1'-0"



3 PIER DETAIL
SCALE: 1/2"=1'-0"

DRAWING STATUS / REVISIONS			
REV.	DATE	DESCRIPTION	BY



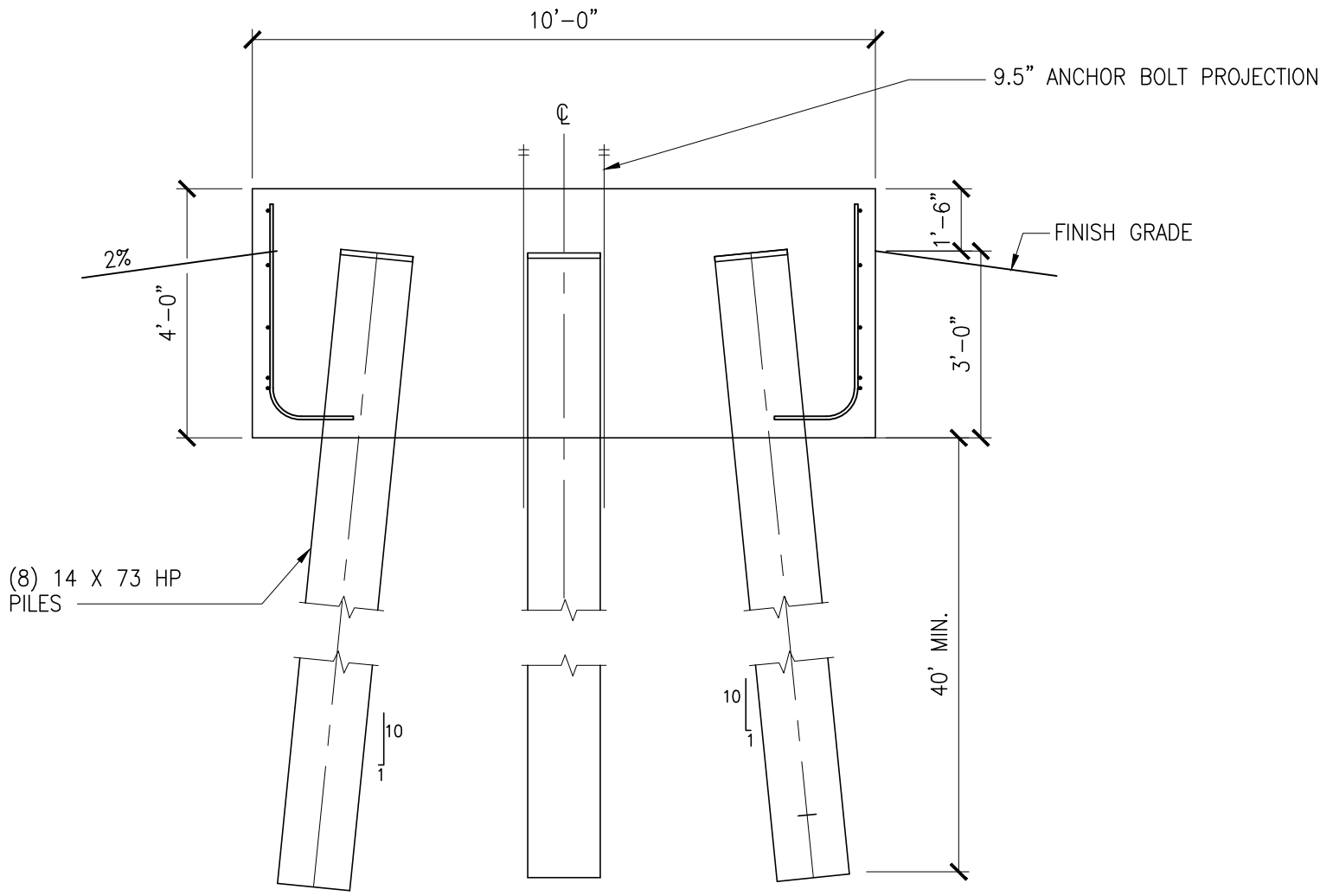
HA

HAAS & ASSOCIATES INC.
CIVIL ENGINEERING
CONSULTANTS
PO BOX 110776
Anchorage, Alaska, 99511
tel: (907) 349-8799
fax: (907) 349-8791
e-mail: haas@gci.net

11 MILE SITE
150-FOOT THREE LEGGED TOWER FOUNDATION
JUNEAU, ALASKA
HP PILE FOUNDATION PLAN AND DETAILS

SCALE:	AS SHOWN
DATE:	4/25/2021
DRAWN BY:	CS
CHECKED BY:	SM
JOB NUMBER:	----
FILE NAME:	11MILE-4-25-2021

SHEET NUMBER
S1
2 Of 4 Sheets



1 CONCRETE PIER DETAIL
SCALE: 3/8"=1'-0"

DRAWING STATUS / REVISIONS			
REV.	DATE	DESCRIPTION	BY



HA

HAAS & ASSOCIATES INC.
CIVIL ENGINEERING
CONSULTANTS
PO BOX 110776
Anchorage, Alaska, 99511
tel: (907) 349-8799
fax: (907) 349-8791
e-mail: haas@gci.net

11 MILE SITE
150-FOOT THREE LEGGED TOWER FOUNDATION
JUNEAU, ALASKA
SECTIONS AND DETAILS

SCALE:	AS SHOWN
DATE:	4/19/2021
DRAWN BY:	CS
CHECKED BY:	SM
JOB NUMBER:	----
FILE NAME:	11MILE-4-25-2021

SHEET NUMBER
S2
3 Of 4 Sheets



January 25, 2021

Mr. Matt Grugan
Vertical Bridge Development, LLC
750 Park Of Commerce Drive, Suite 200
Boca Raton, Florida 33487

B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630
btwo@btgrp.com

Subject:	Breakpoint Letter	
Arcosa Designation:	Arcosa Project Number:	8602
	Arcosa Site Name:	US-AK-5244 11 Mile
Engineering Firm Designation:	B+T Group Project Number:	146222.001.01a
Site Data:	US-AK-5244 11 Mile 150'– Self Support Tower	

To Whom it May Concern:

As requested by Arcosa Telecom Structures on behalf of Vertical Bridge Development, LLC, B+T Group is pleased to submit this "Breakpoint Letter" for the 150'– Self Support Tower to be constructed at the US-AK-5244 11 Mile site.

This tower will be designed in accordance with the TIA 222-H standard for Juneau Borough, AK. The tower will be designed to support antennas and transmission lines for five wireless carriers. The design criteria are more particularly described as follows:

Design Wind Speed: 130mph 3-sec gust (no ice), 50mph 3-sec gust (1" ice)
Structure Class: II
Exposure Category: C
Topographic Category: 1

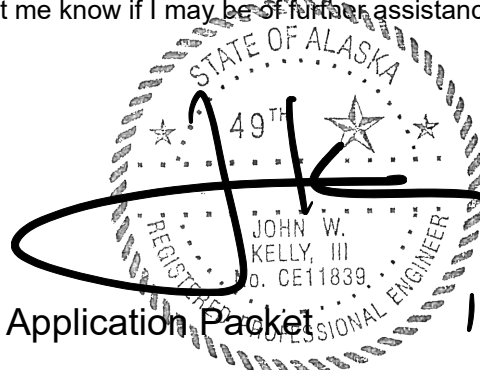
145' _ Wireless Carrier 1 (CaAa=40000 sq in) w/ (12) 1 5/8" lines
135' _ Wireless Carrier 2 (CaAa=30000 sq in) w/ (12) 1 5/8" lines
125' _ Wireless Carrier 3 (CaAa=30000 sq in) w/ (12) 1 5/8" lines
115' _ Wireless Carrier 4 (CaAa=15000 sq in) w/ (12) 1 5/8" lines
105' _ Wireless Carrier 5 (CaAa=15000 sq in) w/ (12) 1 5/8" lines

This letter is to provide information on the breakpoint being designed for this tower. The breakpoint failure will occur at a specific elevation point on the tower. The criteria that needs to be met is a breakpoint at a minimum height of 65'. It should be understood, communications structures are designed in accordance with strict structural standards and it is extremely rare that well maintained towers fail under normal operational conditions. However, in the highly unlikely event that this tower should experience operational failure, the failure mode will be bolt rupture. The breakpoint for this tower is at the 100' elevation. It should be understood, that this break point design does not consider unpredictable extreme catastrophic events for which the structure is not designed. However, any damage to surrounding property caused by the tower failing during such an event would be relatively insignificant when compared to the damage caused to the surrounding property by the event itself.

I hope this letter satisfies your concerns. Please let me know if I may be of further assistance.

Letter prepared by: Brandon Sevier, P.E.
Respectfully submitted by: B+T Engineering, Inc.

John W. Kelly, P.E., S.E.



Attachment A - Application Packet

7/27/2021

Gary R. Brekke
Alaska Aerial Survey, LLC
6510 Beechcraft Rd
Wasilla, AK 99654

RE: WCF Narrative

Vertical Bridge, LLC Proposed 11 Mile Cell Tower

Vertical Bridge, LLC proposes to construct a new communication facility site at 10020 Crazy Horse Dr. The site location is adjacent to the Food Bank and an existing FAA tower in a delineated wetlands area.

The proposed site is to be a 75' X 75' leased area with a 60' X 60' security fenced enclosure. There will be an access drive constructed from the parking area for the Food Bank along a preconstructed and overgrown dike. The space will require substantial clearing, excavation and appropriate fill material in order to make the location suitable for tower, shelter and equipment construction. This site will not be a storage area for any ancillary or other equipment.

There will be a chain-link security fence installed on the perimeter of the leased space with a locked security gate installed as well. This gate will also have installed on it the appropriate and required signage that details ownership, site id and contact information in case of emergency.

The site location was selected based on Network RF Engineering requirements as determined by the primary client of Vertical Bridge. The tower height of 150' and load design capability has been engineered to be sufficient to accommodate not only the primary client, but to also accommodate additional clients loads and future growth.

An FAA Determination has specified that no tower lighting of any kind is required.

The design of the tower, tower foundation and general facility meets all standard engineering requirements and is typical of communications facilities currently being constructed in Alaska and nationwide.

The tower was not designed with stealth technology because the location in an Industrial zoned district and the natural vegetation adequately provides sufficient concealment as demonstrated in the Visual Impact and Balloon Test documentation. The tower height was selected for minimal visual impact while providing a structure for multiple other communications carriers to utilize.

All setbacks were determined during the surveying of the property and the site laid out to meet or exceed the setback requirements.

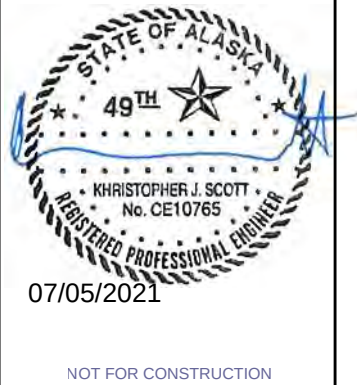
A Wetlands Construction permit has been obtained. A copy of it is contained in the WCF permitting package.



US-AK-5244 - 11 MILE

10020 CRAZY HORSE DR
JUNEAU, AK 99801

ZONING DRAWINGS



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
1	07.02.21	KS/KS	REVISED ZD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

TITLE SHEET

SHEET NO.

T1.0

PROJECT SUMMARY

THIS PROJECT INCLUDES THE FOLLOWING SCOPE OF WORK:

A NEW TELECOMMUNICATION AND PUBLIC UTILITY FACILITY CONSISTING OF A NEW 150'-0" SELF-SUPPORT TOWER, CARRIER EQUIPMENT AND A UTILITY BACKBOARD INSIDE A NEW 60'x60' FENCED COMPOUND WITHIN A 75'x75' LEASE AREA. (NO WATER OR SEWER IS REQUIRED.)

GOVERNING CODES

GOVERNING CODES

IBC-2012, INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS

NEC-2011, NATIONAL ELECTRICAL CODE

A.D.A. COMPLIANCE

INSTALLATION IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED PER A.D.A.

PROJECT VICINITY MAP



DRIVING DIRECTIONS

FROM JUNEAU INTERNATIONAL AIRPORT:

1. HEAD SOUTH ON SHELL SIMMONS DR TOWARD YANDUKIN DR (0.2 MI)
2. TURN LEFT ONTO YANDUKIN DR (0.2 MI)
3. TURN RIGHT ONTO SHELL SIMMONS DR (0.2 MI)
4. TURN LEFT ONTO GLACIER HWY (0.3 MI)
5. TURN LEFT TO STAY ON GLACIER HWY (0.7 MI)
6. TURN LEFT ONTO INDUSTRIAL BLVD (0.3 MI)
7. TURN RIGHT ONTO CRAZY HORSE DR; PARTIAL RESTRICTED ACCESS ROAD, DESTINATION ON THE RIGHT (0.2 MI)

ESTIMATED DISTANCE: 2.1 MILES

ESTIMATED TIME: 9 MIN

SITE INFORMATION

SITE NAME: 11 MILE
SITE ADDRESS: 10020 CRAZY HORSE DR
JUNEAU, AK 99801
LATITUDE: 58° 22' 01.135" N
LONGITUDE: 134° 36' 38.975" W
SOURCE: 1A CERTIFICATION

PARCEL NUMBER: 4B1701100120
ZONING CLASSIFICATION: I (INDUSTRIAL)
FLOOD ZONE: ZONE X
JURISDICTION: CITY AND BOROUGH OF JUNEAU
TOP OF (N) TOWER: 150'
OVERALL HEIGHT: 155'

OCCUPANCY GROUP: U
CONSTRUCTION TYPE: II-B

PROJECT LOCATION MAP



UTILITY COMPANIES

POWER: ALASKA ELECTRIC LIGHT & POWER
5601 TONSGARD CT, JUNEAU, AK 99801

TELCO/FIBER: TBD

PROJECT CONTACTS

APPLICANT
VERTICAL BRIDGE
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
ROBERT EVANS
PH: 425.652.5727
REVANS@VERTICALBRIDGE.COM

PROPERTY OWNER
CITY AND BOROUGH OF JUNEAU
155 S. SEWARD ST
JUNEAU, AK 99801

SURVEYOR
ACUTEK GEOMATICS LLC.
5099 E. BLUE LUPINE DR #104
WASILLA, AK 99654
PH: 907.376.8800

CONSTRUCTION MANAGEMENT
VERTICAL BRIDGE
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
MATT GRUGAN
678.488.1866

ZONING AND PERMITTING CONSULTANT
ALASKA AERIAL SURVEY. LLC
6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
PH: 907.331.8311

SITE ACQUISITION CONSULTANT
ALASKA AERIAL SURVEY. LLC
6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
907.331.8311

ENGINEER OF RECORD
TELEMTN ENGINEERING LLC
104 N BROADWAY, SUITE 600
DENVER, CO 80203
KHRISTOPHER SCOTT, PE
303.596.6804

DRAWING INDEX

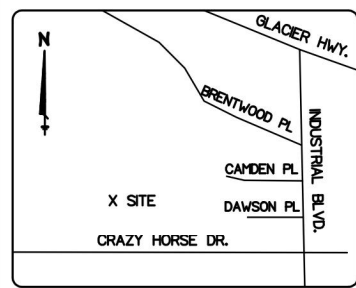
SHEET	DESCRIPTION
T1.0	TITLE SHEET
SV-1	SURVEY
SV-2	SURVEY
A1.0	OVERALL SITE PLAN
A2.0	ENLARGED SITE PLAN
A3.0	ELEVATIONS

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERTICAL BRIDGE SERVICES IS STRICTLY PROHIBITED.

SIGN OFF OF DRAWINGS		
REVIEWERS SHALL CLEARLY PLACE INITIALS ADJACENT TO EACH REDLINE NOTE AS DRAWINGS ARE BEING REVIEWED		
CONSULTANT	SIGNATURE	DATE
SITE ACQUISITION		
PERMITTING CONSULTANT		
RF ENGINEER:		
CONST. MNGR.		
OPS MNGR.		
PROJECT MNGR.		
REGULATORY REV.		
DEV. MNGR.		



Know what's below.
Call before you dig.



VICINITY MAP NOT TO SCALE



LEGEND:

- MEASURED DATA
- RECORD DATA
- PROPERTY BOUNDARY LINES
- ADJACENT PROPERTY LINES
- CENTERLINE
- FENCE AS NOTED
- RECOVERED 5/8" REBAR
- SET 5/8" REBAR (LS 9106)
- RECOVERED MONUMENT
- UTILITY PEDESTAL
- POWER POLE
- SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)
— — — — —
— x — x — x —
○
●
⊕
PED □
P/P ∅
SP ○

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'

FAA 1-A TOWER LOCATION INFORMATION:
PROPOSED 150± SELF SUPPORT TOWER

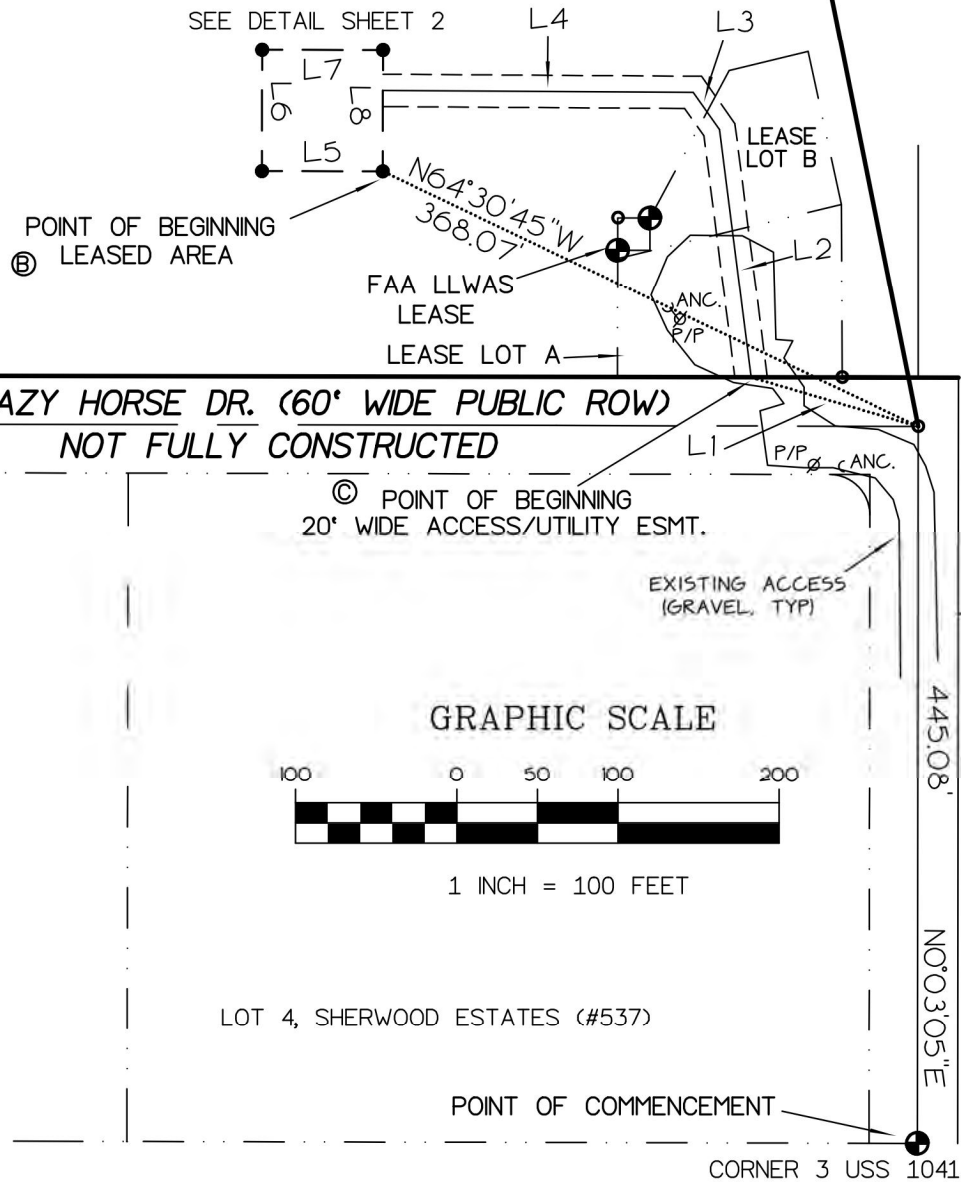
NAD 83
LATITUDE = 58°22'01.135" N ± 20'
LONGITUDE = 134°36'38.975" W ± 20'

GROUND ELEVATION AT BASE OF TOWER = 24' ± 3" NAVD88
HEIGHT OF TOP OF TOWER ABOVE GROUND = 174±3'

	AREA TABLE	SQUARE FEET	ACREAGE
Ⓐ	PARENT PARCEL	1,350,360 ±	31 ±
Ⓑ	LEASED AREA	5,625 ±	0.13 ±
Ⓒ	NON-EXCLUSIVE ACCESS & UTILITY ESMT.	7,514 ±	0.17 ±

SITE OVERVIEW:
(1"=100')

Ⓐ OWNER: CITY AND BOROUGH OF JUNEAU
PROPERTY: US SURVEY 1041
DEED: BOOK 66 PAGE 147
PARCEL ID: 4B1701100120



SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

SURVEYOR'S NOTES

1. BASIS OF BEARING IS PER RECORD PLAT OF US SURVEY NO. 1041.
2. NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED EVIDENCE ONLY.
3. ALL VISIBLE TOWER EQUIPMENT AND IMPROVEMENTS ARE CONTAINED WITHIN THE DESCRIBED AREA.
4. SURVEY COMPLETED IN FEBRUARY 2019.
5. THIS SURVEY DOES NOT REPRESENT A SURVEY OF THE PARENT PARCEL. REAL PROPERTY SHOWN HEREON ARE APPLICABLE TO THE TELECOMMUNICATIONS SITE, THERE MAY BE OTHER IMPROVEMENTS NOT SHOWN.
6. NO TITLE REPORT PROVIDED FOR THIS PROJECT.

ZONING: PER CITY AND BOROUGH OF JUNEAU ASSESSOR'S DATA, PROPERTY IS ZONED AS INDUSTRIAL.

FLOOD NOTE: THIS PARCEL LIES WITHIN FLOOD ZONE X, PER FEMA MAP NUMBER 02110C1526D, WITH AN EFFECTIVE DATE OF AUGUST 19, 2013.



ACUTEK GEOMATICS, LLC
TERRY L. NICODEMUS, PLS
LAND SURVEYOR, ALASKA #9106-S
Date: 3/4/2019

CENTERLINE SOLUTIONS
SITE NAME: AK 11 MILE
ADDRESS: 10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU
SURVEY WORK PERFORMED BY:
ACUTEK GEOMATICS LLC
5099 E. BLUE LUPINE DR #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM
DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08.02
SHEET 1 OF 2



PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
1	07.02.21	KS/KS	REVISED ZD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

SURVEY
DETAILS

SHEET NO.

SV1.0



SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

LEGAL DESCRIPTION: (LEASED AREA)

A FIVE THOUSAND SIX HUNDRED TWENTY-FIVE (5625) SQUARE FOOT LEASED AREA, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID LEASE AREA IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 64°30'45" W A DISTANCE OF 368.07 FEET TO A POINT, THE TRUE POINT OF BEGINNING;

THENCE N 89°54'01" W A DISTANCE OF 75.00 FEET TO A POINT, THENCE N 00°05'59" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 89°54'01" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 00°05'59" W A DISTANCE OF 75.00 FEET TO A POINT, THE TRUE POINT OF BEGINNING.

CONTAINING 5625 SQUARE FEET, MORE OR LESS. (0.13 ACRES)

LEGAL DESCRIPTION: (NON-EXCLUSIVE ACCESS & UTILITY EASEMENT)

A SEVEN THOUSAND FIVE HUNDRED FOURTEEN (7514) SQUARE FOOT NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT, TWENTY (20) FEET WIDE, TEN (10) FEET EACH SIDE OF THE CENTERLINE, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID CENTERLINE IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 73°37'48" W A DISTANCE OF 108.03 FEET TO A POINT ON THE NORTH BOUNDARY OF THE CRAZY HORSE RIGHT-OF-WAY, THE TRUE POINT OF BEGINNING;

THENCE N 07°16'40" W A DISTANCE OF 154.99 FEET TO A POINT, THENCE N 35°28'31" W A DISTANCE OF 28.22 FEET TO A POINT, THENCE N 89°37'43" W A DISTANCE OF 192.50 FEET TO A POINT ON THE EAST BOUNDARY OF THE LEASED AREA, THE POINT OF TERMINUS.

CONTAINING 7514 SQUARE FEET, MORE OR LESS. (0.17 ACRES)

LEGAL DESCRIPTION: (PARENT PARCEL)

REMAINDER OF US SURVEY NO. 1041 AS DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA.

CENTERLINE SOLUTIONS

SITE NAME: AK 11 MILE
ADDRESS:10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU

SURVEY WORK PERFORMED BY:



5099 E. BLUE LUPINE DR #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM

DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08.02

SHEET 2 OF 2

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
1	07.02.21	KS/KS	REVISED ZD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

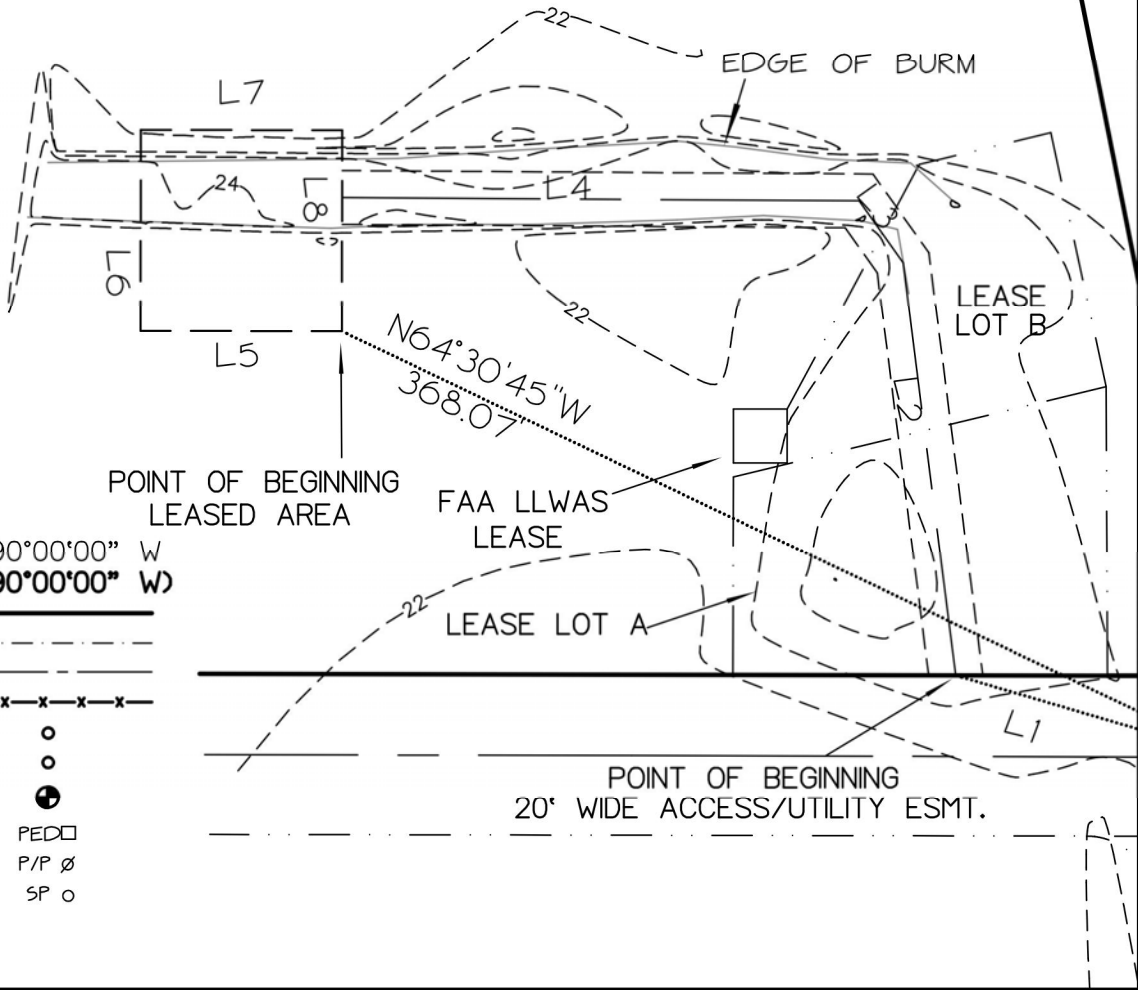
SURVEY DETAILS

SHEET NO.

SV2.0



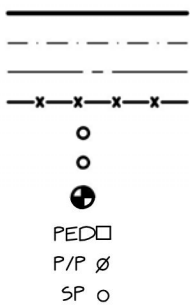
SITE DETAIL:
(1"=60')



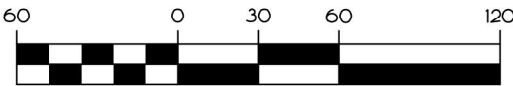
LEGEND:

MEASURED DATA
RECORD DATA
PROPERTY BOUNDARY LINES
ADJACENT PROPERTY LINES
CENTERLINE
FENCE AS NOTED
RECOVERED 5/8" REBAR
SET 5/8" REBAR (LS 9106)
RECOVERED MONUMENT
UTILITY PEDESTAL
POWER POLE
SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)

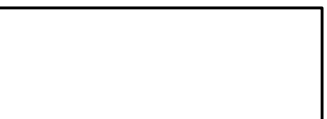
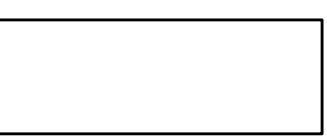
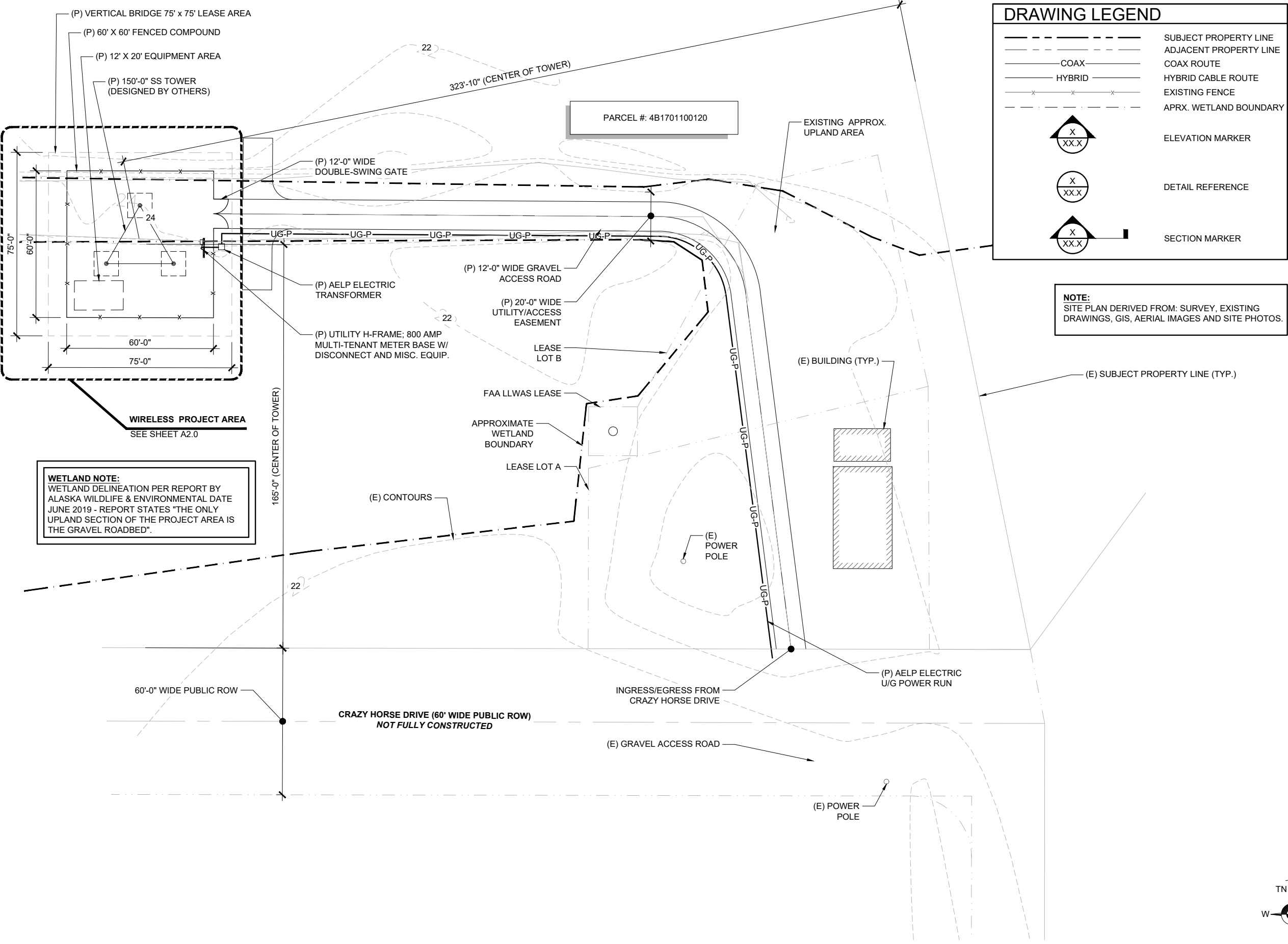


GRAPHIC SCALE



1 INCH = 60 FEET

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'



PRELIMINARY

NO.	DATE	D/C	DESCRIPTION

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
1	07.02.21	KS/KS	REVISED ZD

SITE NAME:
11 MILE
US-AK-5244

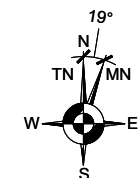
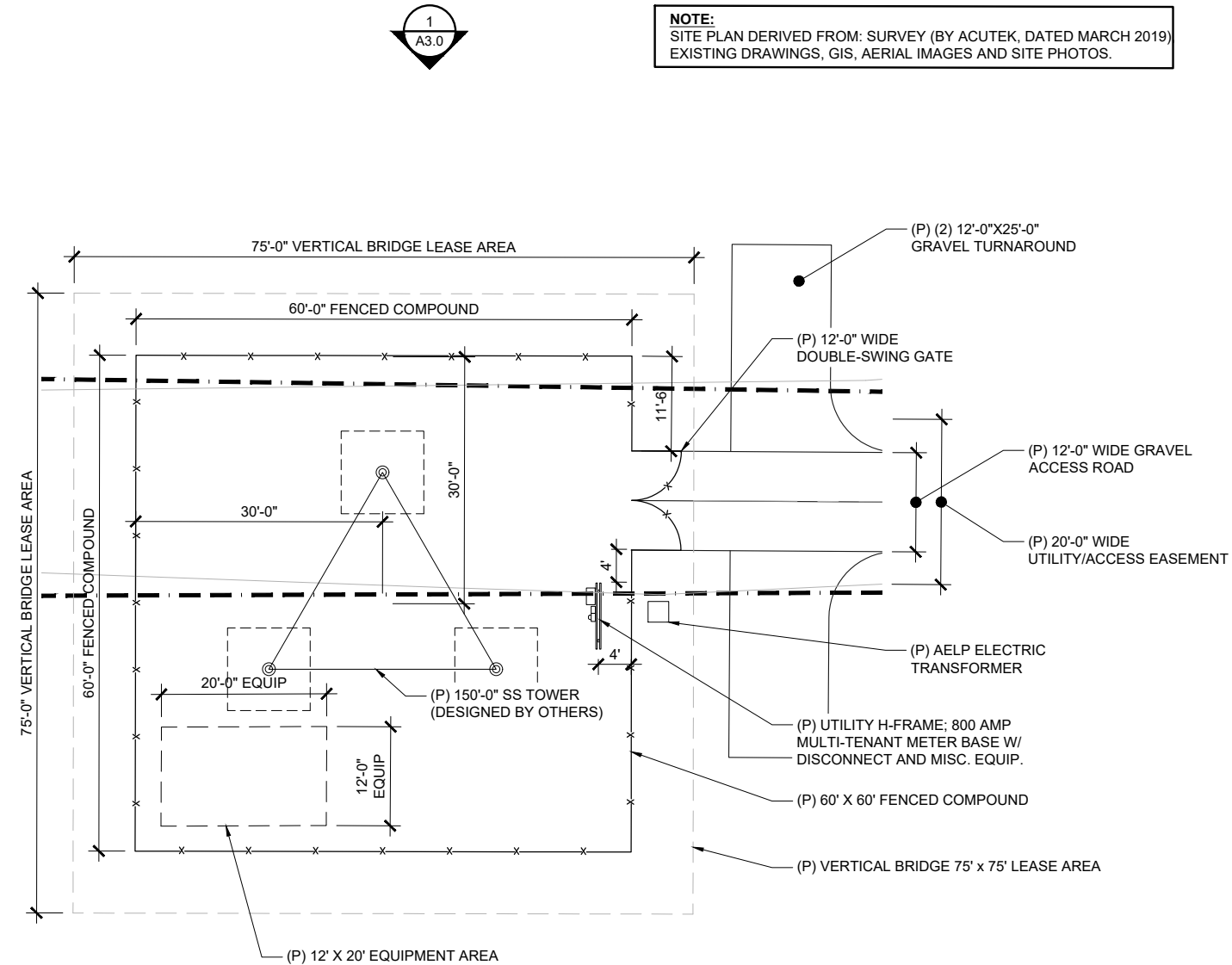
SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
OVERALL SITE PLAN

SHEET NO.
A1.0

GENERAL NOTES:

1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5. CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.



NOTE:
SITE PLAN DERIVED FROM: SURVEY (BY ACUTEK, DATED MARCH 2019)
EXISTING DRAWINGS, GIS, AERIAL IMAGES AND SITE PHOTOS.



NOT FOR CONSTRUCTION

PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
1	07.02.21	KS/KS	REVISED ZD

SITE NAME:

11 MILE
US-AK-5244

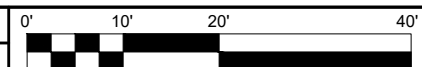
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0020 CRAZY HORSE DR
JUNEAU, AK 99801

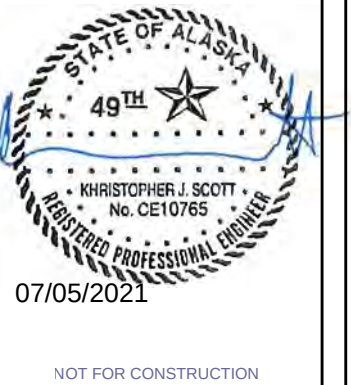
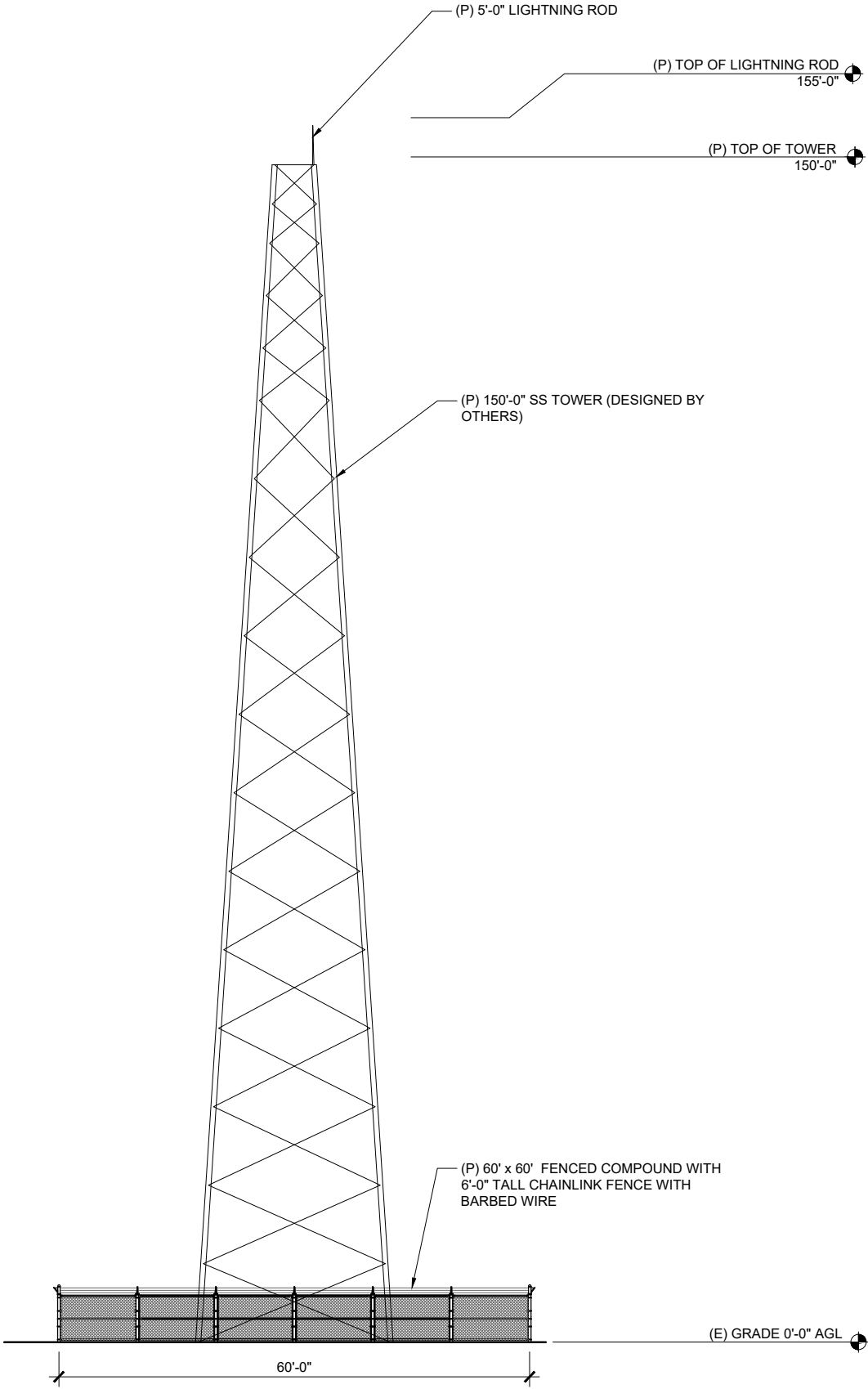
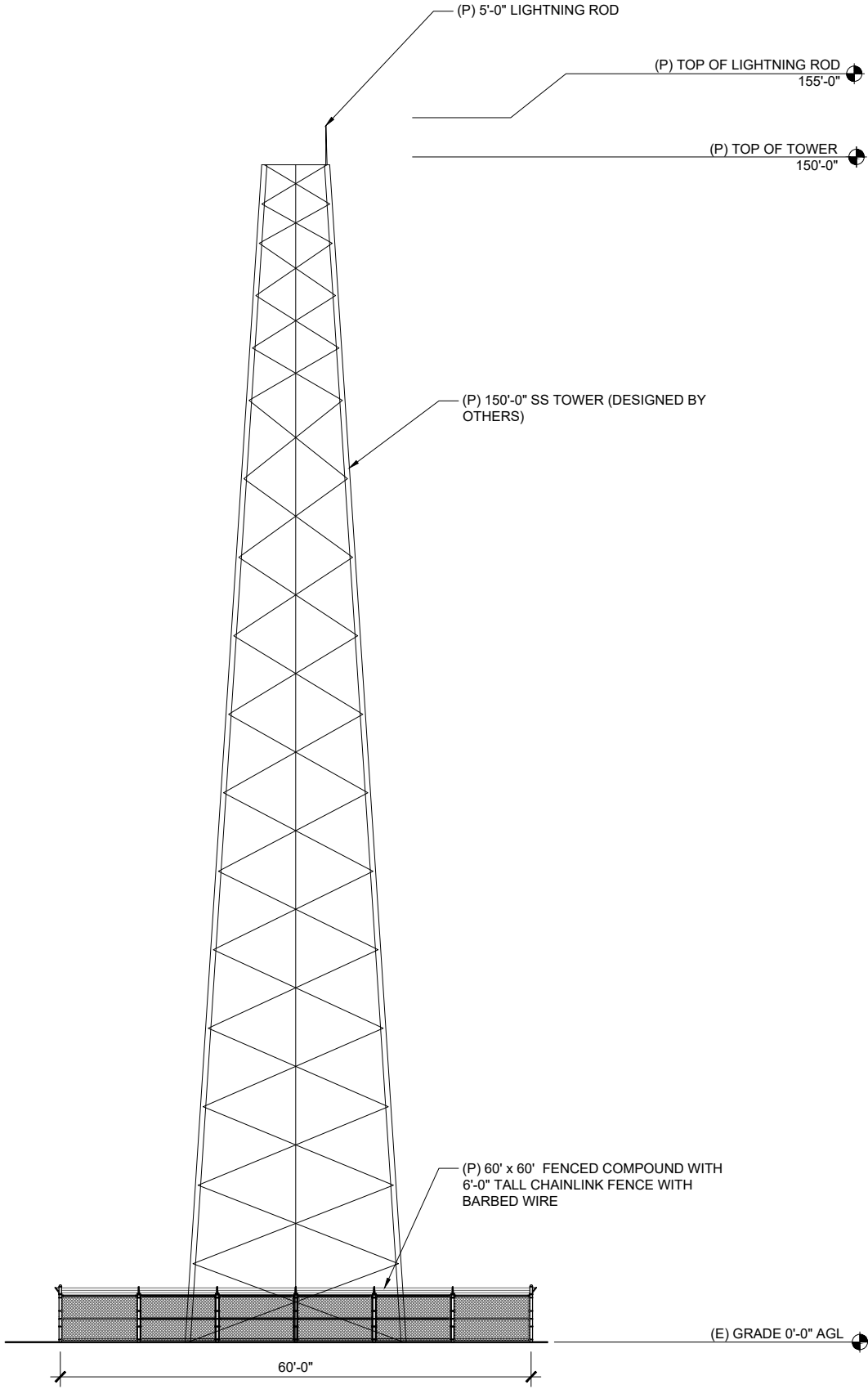
SHEET TITLE

ENLARGED
SITE PLAN

SHEET NO.

A2.0





PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
1	07.02.21	KS/KS	REVISED ZD

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

ELEVATIONS

SHEET NO.

A3.0

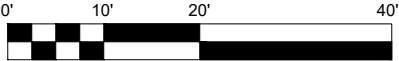
1 NORTH ELEVATION

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)



2 WEST ELEVATION

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)





AK 11MILE

Visualization Report

CONTACT

Centerline Solutions
Jay Rasmusson
Construction Manager
360-250-4265

Address:
2305 46th Ave NE,
Olympia, WA 98506

Email:
jrasmusson@centerlinesolutions.com

Balloon Test – Proposed 150' Self Support Telecommunications Tower

AK 11-Mile
10020 Crazy Horse Dr
Juneau, AK 99801

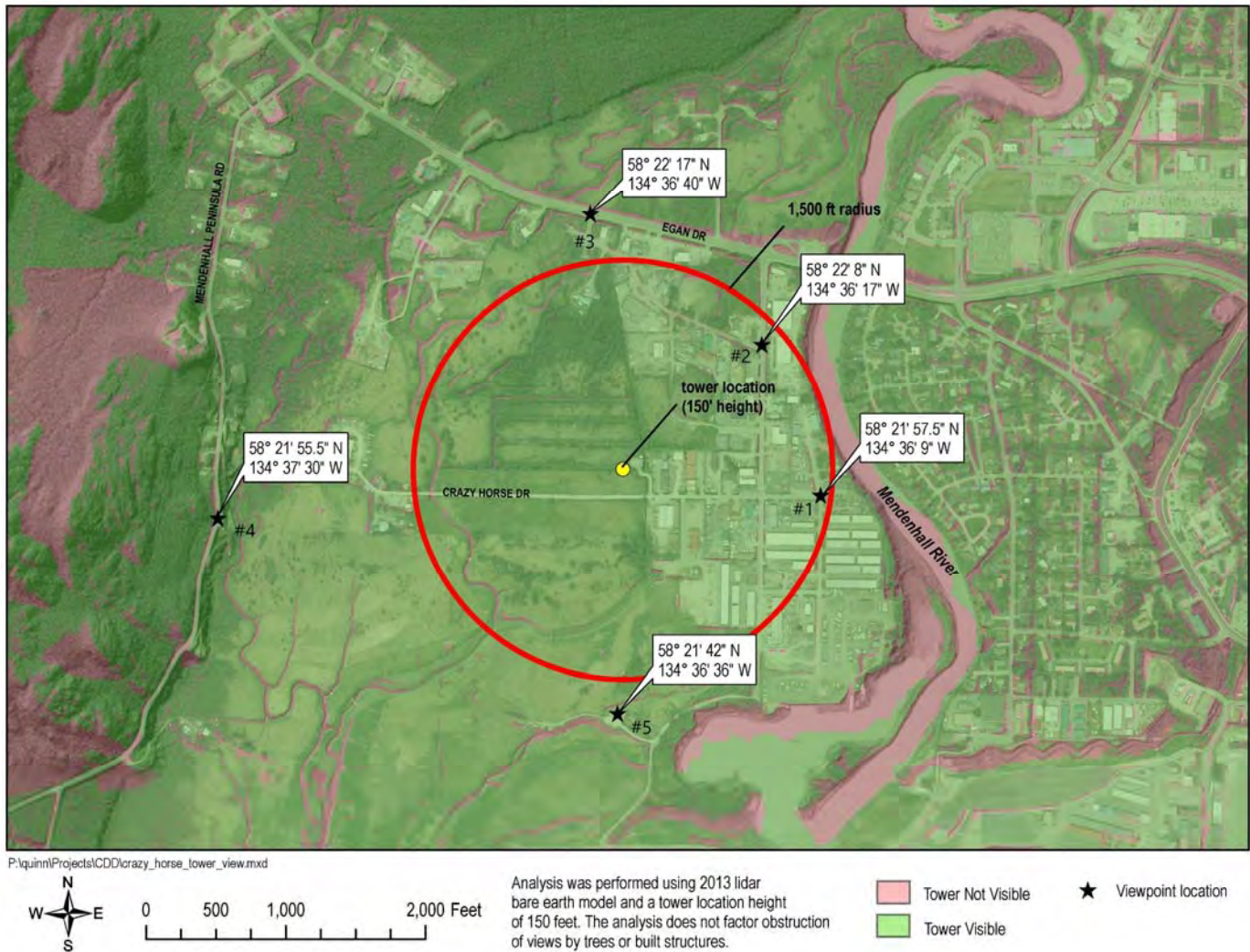
The CBJ was notified of the scheduled balloon test on Friday March 21st, 2019. A reminder email was sent on April 8th. The test was scheduled Saturday April 13th, and continue through the following Tuesday, April 16th to meet the 72 hr. requirement of one (1) full day of the 72 hours being on a Saturday or Sunday. The test was completed during this time.

Balloon Test Overview:

- Balloon #1 & #2 were made of latex. They were both 36" diameter and filled with helium and were bright orange in color.
- Both balloons were anchored to the ground with nylon twine at the survey staked, tower location.
- The line used, was measured out to 160' (although the tower is a proposed 150') – due to potential line sag an extra 10' was added to the overall required length.
- Balloon #1 was sent aloft at 9:30am Saturday, April 13th with cloudy skies and 8 mph winds.
- Balloon #1 stayed aloft until Sunday evening at, 8 pm (almost dark) when heavy rain and hail appeared, and it popped. The local businesses were closed, and a replacement Balloon #2 was sent aloft at 8am Monday Morning as soon as helium was available.
- Balloon #2 stayed aloft the duration of the test with light winds through Tuesday, April 16th at 5pm, when the balloon was pulled down.
- The CJB provided documentation to provide photos from five (5) locations within 1,500' of the test site. These photos were obtained, and documented the morning of Saturday, April 13th with winds gusting 4-8mph. Winds continued through the test period and were never less than this.

VIEWPOINTS

Location Map provided by the CBJ and photographs were obtained from each of the locations provided.



BALLOON AND ANCHOR LOCATION

A 36" diameter, helium filled, latex balloon was utilized for the testing. The survey stake is the proposed tower location at the site.



AK 11-Mile – Visualization Report 4.18.19

BALLOON ALOFT AT ANCHOR POINT

View of the balloon from ground level.



AK 11-Mile – Visualization Report 4.18.19

VIEWPOINT #1 – INTERSECTION OF BRANDY LN & CRAZY HORSE DR

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

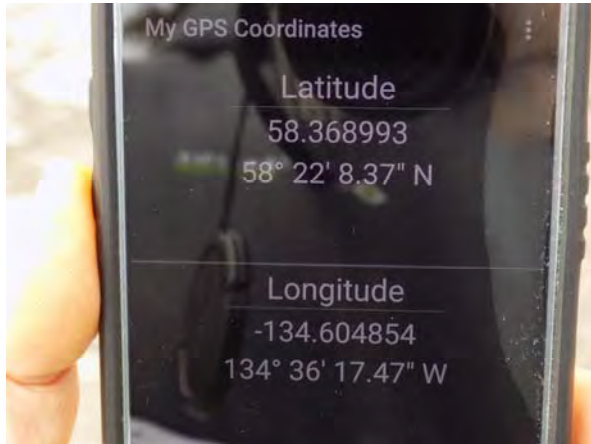
In this photo, you can see the balloon to the right of the adjacent, existing FAA tower.



VIEWPOINT #2 – INTERSECTION OF INDUSTRIAL BLVD & BENTWOOD PL

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

In this photo, you can see the balloon just above roof line of the buildings in the foreground.



AK 11-Mile – Visualization Report 4.18.19

VIEWPOINT #3 – INTERSECTION OF GLACIER HWY & JENSINE ST.

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

You cannot see the balloon from this location due to the dense tree cover.

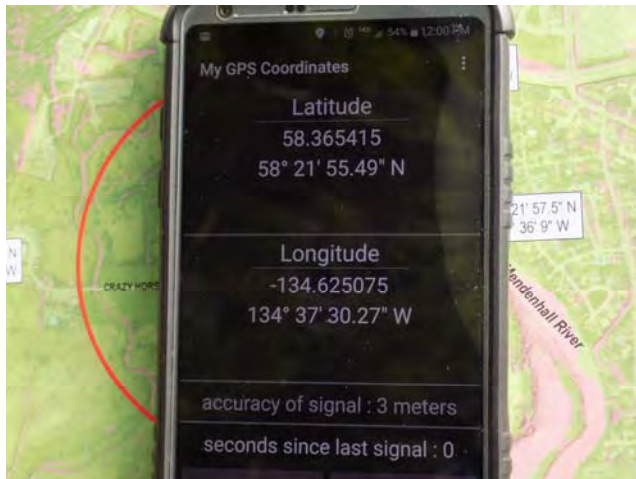


AK 11-Mile – Visualization Report 4.18.19

VIEWPOINT #4 – 2331 ENGINEERS CUTOFF RD

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

In this photo, you can see the balloon you can see the balloon just to the left of the existing FAA tower.

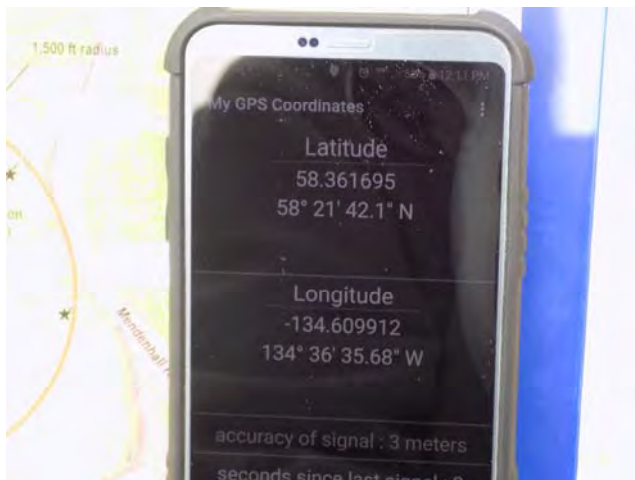


AK 11-Mile – Visualization Report 4.18.19

VIEWPOINT #5 – MENDENHALL GOLF COURSE PARKING LOT

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

You cannot see the balloon from this location due to the dense tree cover.



AK 11-Mile – Visualization Report 4.18.19

VIEWPOINT #6 – DOUGLAS ISLAND LAUNCH

Although outside the required 1500' radius the CBJ suggested a photo of a location found outside the 1,500' radius that the balloon was visible. This location is located approximately 3 miles away on Douglas Island at the boat launch directly across the water from the proposed site. From this location you can see the balloon, and several existing communication towers.



AK 11-Mile – Visualization Report 4.18.19



150ft. Balloon Test



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. SELF SUPPORT
TOWER SIMULATION**

View from Brandy Lane
approximately 1,350ft east of site



150ft. Balloon Test



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. SELF SUPPORT
TOWER SIMULATION**

View from Industrial Boulevard
approximately 1,280ft northeast of site



Attachment A - Application Packet

The logo for verticalbridge, featuring the word "vertical" in a dark grey sans-serif font and "bridge" in a green sans-serif font, with a thin green arch over the "i" in "bridge".

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. SELF SUPPORT
NOT VISIBLE**

View from Jensine Street
approximately 1,860ft north of site



150ft. Balloon Test



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. SELF SUPPORT
TOWER SIMULATION**

View from Engineers Cutoff Road
approximately 2,970ft west of site



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

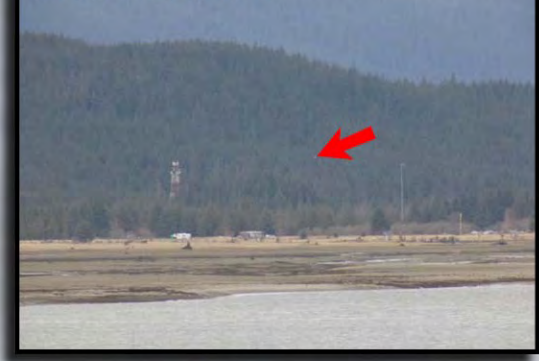
10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. SELF SUPPORT
NOT VISIBLE**

View from Mendenhall Golf Course
approximately 1,800ft south of site



150ft. Balloon Test



verticalbridge

US-AK-5244 11 MILE
10020 Crazy Horse Dr, Juneau, AK 99801
**150ft. SELF SUPPORT
TOWER SIMULATION**
View from Douglas Island Launch
approximately 3 miles south of site



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

DATE: March 17, 2020

TO: Planning Commission

FROM: Amy Liu, Planner *Amy Liu*
Community Development Department

FILE NO.: WCF2019 0010

PROPOSAL: A Wireless Communication Facility Permit to install a new, unlit 150-foot communication tower

GENERAL INFORMATION

Applicant: Vertical Bridge, LLC

Property Owner: CBJ Lands & Resources

Property Address: 10020 Crazy Horse Drive

Legal Description: USS 1041

Parcel Code Number: 4B1701100120

Site Size: 31.97 acres

Comprehensive Plan Future Land Use Designation: Institutional Public Use

Zoning: Industrial

Utilities: Public water, no public sewer or onsite septic

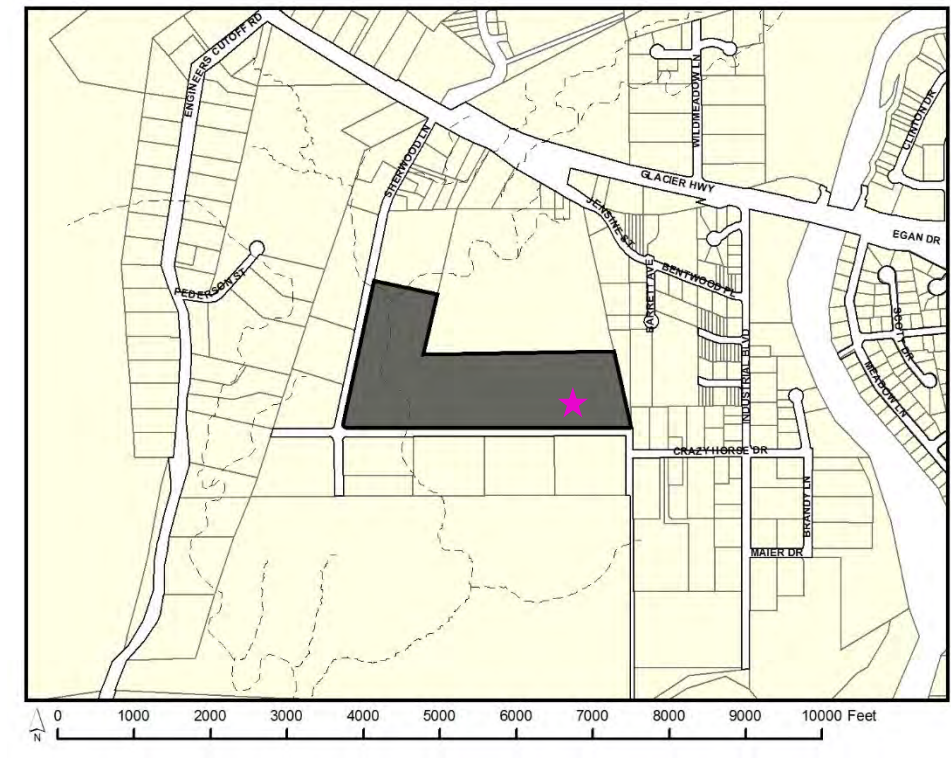
Access: Crazy Horse Drive

Existing Land Use: Southeast Alaska Food Bank

Surrounding Land Use: North – Communications tower

South – Commercial shop with storage
 East – Equestrian center
 West – Auto salvage yard

VICINITY MAP



ATTACHMENTS

Attachment A Application
 Attachment B Agency Comments
 Attachment C Public Comments

PROJECT DESCRIPTION

The applicant requests a Special Use Permit (SUP) for the development of a Wireless Communication Facility (WCF) to construct a 155-foot tall, freestanding monopole tower with lightning rod. The tower is 150 feet tall, and the rod adds 5 feet. There will be no antenna adding to the height of the tower. The tower will be unlit, and will occupy 5,625 square feet of land leased from CBJ to the applicant. The purpose of the tower is support multiple wireless carriers. CBJ 49.65.930(e)(1) requires WCFs between 121 feet and 150 to accommodate no fewer than five antenna arrays.

An SUP is required for WCF that do not fall under the categories of *CBJ 49.65.950, Table 1*. This application requires an SUP for a new non-concealed tower greater than 60 feet in height in the Industrial zoning district

AGENCY REVIEW

Staff requested review from the CBJ Assessor's Office, Building Division, Capital City Fire and Rescue, Engineering and Public Works Department, Lands and Resources Division, and the Juneau International Airport (JIA).

Building Division, and Engineering and Public Works expressed that they had no concerns. JIA noted that the applicant will need to file FAA 7460. This form must be filed at least 45 days prior to the start date of proposed construction. Staff did not receive any other comments. (Attachment B)

PUBLIC COMMENT

Several public comments expressed concerns about 5G service being detrimental to health. Staff's review takes into account whether the applicant meets regulatory standards set by the Federal Communication Commission (FCC). (Attachment C)

ANALYSIS

The purpose of Specified Use Provisions Article IX. Wireless Communication Facilities (*CBJ 49.65.900*), is 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 to:

- (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 Spectrum Act (P.L. 112-96).

Project Site – The applicant proposes the tower to be on a 31.97-acre parcel located in an Industrial zoning district. The parcel currently accommodates the Southeast Alaska Food Bank. The tower location is approximately 28 feet north and 190 feet west of the food bank. The applicant anticipates additional grading and fill to prepare the building site and access to the site.

The Juneau Wetlands Management Plan identifies Class B wetlands at the project location. Per *CBJ 49.70.1060(1)*, a CBJ wetlands permit is not required for this category of wetlands. However, the Army Corps of Engineers requires a wetlands permit for construction. The applicant is currently in the process of acquiring that permit.

There are three towers within a 1,000-foot vicinity of the proposed tower's location. Site 16 and Site 17 are located along Bentwood Plaza, and owned by Alascom and AT&T respectively. The former is a 158-foot lattice tower, and the latter is a 60-foot monopole. Site 18 hosts a 120-foot Federal Aviation Administration (FAA) tower west of the applicant's proposed site along Crazy Horse Drive. The applicant reasons that collocation onto private towers will not be cost effective or support desired performance. The applicant has not provided documentation to demonstrate the cost effectiveness, nor if cost effectiveness should be considered in allowing a new tower, rather than requiring collocation. The FAA prohibits private carriers from collocating onto its facilities. (Attachment A, pg. 117-119)

Project Design –

- Security and signage: There will be a chain link fence with barbed wire and a locking gate. The chain link is six feet in height, and the barbed wire above the fence adds one foot in height. The fence will form a 60-foot by 60-foot square around the tower. (Attachment A, pg. 56) Signage cautioning entry on premises and posting contact information will be affixed onto the fence. (Attachment A, pg. 54)
- Lighting: The FAA does not require lighting for the tower. (Attachment A, pg. 33-37)
- Design criteria: The tower without the lightning rod is 150 feet tall. *CBJ 49.65.930(e)(1)* requires WCFs between 121 feet and 150 to accommodate no fewer than five antenna arrays. The proposed tower will accommodate five antenna arrays (Attachment A, pg. 78-93). Staff recommends that the tower accommodate more than five antenna arrays.
- Setbacks: The tower will not have a breakpoint. *CBJ 49.65.930(f)(1)* requires a tower without breakpoints to have a minimum setback distance from the nearest property line at least equal

to the height of the tower. The tower height is 150 feet. The tower location is more than 300 feet from the north, the east, and the west lot lines. The distance from the south property line is 165 feet. (Attachment A, pg. 79)

- Structural assessment: The structural assessment meets *CBJ 49.65.930(j)*. An Alaska-licensed engineer conducted the structural assessment of the tower and foundation. (Attachment A, pg. 20-28, 18-19)
- Visual Impact Assessment:
 - Zone of Visibility Map: The application includes a zone of visibility map that meets the requirements of *CBJ 49.65.970(c)(2)(B)(i)*. The proposed site for the tower does not obstruct view sheds identified in the 2013 Comprehensive Plan. (Attachment A, pg. 58)
 - Siting for Least Adverse Impact: The development meets the requirements of *CBJ 49.65.930(2)(B)(i)* and minimizes adverse effects on the surrounding landscape, as it is located more than a quarter mile from residences. The tower consists of a galvanized steel, which appears mottled grey that is consistent with the local industrial streetscape. (Attachment A, pg. 13, 57-66) Staff recommends as a condition of approval that the monopole is matte grey in color.
 - Simulated Renderings of WCF: The applicant has included photo-simulations of the tower viewed from multiple vantage points used in the zone of visibility study. (Attachment A, pg. 95-98)
 - Screening of Base: Existing trees and other vegetation provide screening at the base of the tower. While grading and backfill will be performed at the tower location, the surrounding dense vegetation will remain largely intact. (Attachment A, pg. 60)
 - Balloon Test: The balloon test meets the requirements of *CBJ 49.65.930(2)(D)*. The study shows six vantage points: Brandy Lane and Crazy Horse Drive, Industrial Boulevard and Bentwood Plaza, Glacier Highway and Jensine Street, 2331 Engineers Cutoff Road, and the Mendenhall Golf Course Parking Lot. Photos of the balloon from these positions show that the tower will have minimal visual impact. (Attachment A, pg. 59-66)
- Propagation Study/Radio Frequency Emissions Compliance Report: The submitted statement confirming that radio frequency emissions will comply with FCC standards is consistent with the requirements of *CBJ 49.65.960(d)*. (Attachment A, pg. 38-54) The propagation study shows increased service coverage. (Attachment A, pg. 100-115)

Traffic – Staff does not anticipate the proposed use to add traffic to the existing site, excluding the limited traffic during construction and periodic maintenance.

Parking and Circulation – The site has area for parking and is accessed from Crazy Horse Drive.

Noise – Staff does not anticipate that the tower will generate noise. The site is separated from residential homes by more than quarter mile of industrial uses and vegetation.

Public Health or Safety – No evidence indicates that there are any public health or safety impacts from the proposed project. The applicant provided a Radio Frequency Emissions Compliance Report signed by a qualified professional, whose credentials are included.

Habitat – The proposal does not affect habitat protected by Title 49.

Property Value or Neighborhood Harmony – The proposed tower will not generate noise, traffic, or visual impact that is inconsistent with existing towers or neighboring residential uses.

CONFORMITY WITH ADOPTED PLANS

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.

The subject property is zoned Industrial, and has a Comprehensive Land Use designation of Institutional and Public Use (IPU). WCFs are deemed appropriate to the zoning because their use will not have external impacts that exceed those of industrial uses. IPU lands can vary widely, so the Plan recommends that these lands are regulated in accordance with the zoning district.

Lands that are in public ownership and dedicated for a variety of public uses, such as the University of Alaska Southeast; local, state and federal government uses; and for such public facilities as community gardens, schools, libraries, fire stations, treatment plants, and public sanitary landfills. Included are potential sites for future boat harbors, schools, parks, farmers markets, publicly-supported arts events, permitted arts or food-service kiosks or sales activities, parking facilities and road and public transit system easements. Also included are public aircraft facilities.

The public use of these lands will vary widely, so IPU-designated lands can be under any zoning district, with the uses thereon appropriate for that zone as regulated in the Table of Permissible Uses (CBI 49.25.300); the zone of any particular public use should be the same district as the surrounding or abutting lands.

Wireless Telecommunications Master Plan (WMP):

The WMP is a document that guides future development of wireless telecommunication facilities. The project generally complies with the Wireless Telecommunications Master Plan.

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.

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

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

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

FINDINGS

CBJ 49.65.970(d) and (e), Director's Review, states that the director shall review the application for completeness.

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 (e).

CBJ 49.65.970(f), Planning Commission Determination, states that 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 the surrounding area. 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 the historic district; 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 the purpose of a specific zoning, overlay, or land use designation;
 - c. Presence of another approved WCF or WCF application within the geographic search area that is available to the applicant;
 - d. The proposed site is on, or eligible to be on, the National Register of Historic Places;
 - e. The proposed site is in an area commonly valued by the community as a whole for its natural or scenic properties.
 - f. For a proposed freestanding 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 is technically infeasible or commercially impracticable; and
 - g. 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; and
 - c. In any area designated as a scenic corridor/viewshed identified in the Comprehensive Plan of the City and Borough of Juneau.
 - d. In any area that fully or partially obstructs the view of the Mendenhall Glacier from the waterfront roadway from the North Douglas boat launch facility to False Outer Point.
4. The Planning Commission shall condition a permit on a requirement to construct the WCF within a reasonable period of time, which may not exceed 18 months.

Per CBJ 49.65.970(d) and (f), Review of Director's and Commission's Determinations, the Director makes the following findings on the proposed development:

1. *Is the application for the requested special use permit complete?*

Yes. The application contains the information necessary to conduct a full review of the proposed wireless communications facility. The proposal consists of a narrative, visual impact assessment, confirmation that the facility will serve a necessary function for the provider's network, and confirmation that emitted electromagnetic radiation will meet FCC requirements. The proposal was preceded by a pre-application meeting, summarized in PAC2019 0035. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.65.900.

2. *Is the proposed project consistent with safety and safety-related codes and requirements?*

Yes. The permit does not conflict with safety and safety-related codes and requirements.

3. *Is the proposed use appropriate according to the Table of Permissible Uses and other specific zoning, overlay, or land use designation?*

Yes. The requested permit is appropriate according to the Table of Permissible Uses and ARTICLE IX - Wireless Communication Facilities.

4. *Is the presence of another approved WCF or WCF application within the geographic search area that is available to the applicant?*

Yes. There are three towers within a 1,000-foot vicinity of the proposed tower's location. Site 16 and Site 17 are located along Bentwood Plaza, and owned by Alascom and AT&T respectively. The former is a 158-foot lattice tower, and the latter is a 60-foot monopole. Site 18 hosts a 120-foot Federal Aviation Administration (FAA) tower west of the applicant's proposed site along Crazy Horse Drive.

5. *Was Public Notice of the Planning Commission consideration in compliance with CBJ 49.65.970(e)?*

Yes. Public notice of this project was provided in the March 13, 2020 and March 22, 2020 issues of the Juneau Empire's "Your Municipality" section, and a Notice of Public Hearing was mailed to all property owners within 1500 feet of the subject parcel as well as all neighborhood associations. Three public notice signs were posted on March 10, 2020, one at Crazy Horse Drive, one at the intersection of Sherwood Lane and Glacier Highway, and one at Industrial Boulevard and Glacier Highway. The signs were posted to be visible from the public right-of-way.

6. *Is the proposed site on, or eligible to be on, the National Register of Historic Places?*

No. The development site does not meet the National Register of Historic Places criteria for

evaluation.

7. *Is the proposed site in an area commonly valued by the community as a whole for its natural or scenic properties?*

No. The development site is located in a developed industrial area on a vacant industrial zoned lot.

8. *For a proposed freestanding tower, did the applicant 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 is technically infeasible or commercially impracticable?*

Yes. The applicant has demonstrated that the existing structure cannot accommodate the proposed use, and that the tower's appearance will mitigate visual impact while meeting the FAA's minimum requirements.

9. *Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?*

Yes. The development is in general conformity with Title 49, the 2013 Comprehensive Plan, and the Wireless Telecommunications Master Plan.

10. *Is the proposed development located on State or local wildlife refuges?*

No. The proposed development is located in an industrial zoning district.

11. *Is the proposed development 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?*

No. The proposed development is located in an industrial zoning district.

12. *Is the development in any area designated as a scenic corridor/viewshed identified in the Comprehensive Plan of the City and Borough of Juneau?*

No. The proposed development is not located any area designated as a scenic corridor or viewshed.

13. *Is the development in any area that fully or partially obstructs the view of the Mendenhall Glacier from the waterfront roadway from the North Douglas boat launch facility to False Outer Point?*

No. The proposed development would not visually impact views of the Mendenhall Glacier.

The Planning Commission may deny a Special Use Permit according to the process pursuant to 49.65.970(f)(2). The Planning Commission shall deny a Special Use Permit for a project listed in

areas of the borough that are indicated in 49.65.970(f)(3). The Commission cannot deny the permit outside of those listed items.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and approve the requested Special Use Permit for a 150-foot tall communication tower with a 5-foot lightning rod with the following conditions:

1. The WCF must be constructed as a monopole;
2. The WCF must be matte grey in color;
3. The WCF cannot have lighting, and if in the future the FAA requires lighting, a modification to the Special Use permit must be approved by the Planning Commission;
4. The site security and required signage must be installed and maintained according to the plan;
5. The WCF must accommodate more than five (5) antenna arrays.

DEVELOPMENT PERMIT APPLICATION

Project Number	CITY and BOROUGH of JUNEAU	Date Received:
Project Name (City Staff to Assign Name)		

PROJECT / APPLICANT INFORMATION

Project Description
New WCF Tower

PROPERTY LOCATION

Street Address: 10020 Crazy Horse Drive City/Zip: _____

Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot): USS 1041

Assessor's Parcel Number(s): 4B1701100120

LANDOWNER/ LESSEE

Property Owner's Name: CBS Land	Contact Person:	Work Phone:
Mailing Address: 155 S. Seward St	Home Phone:	Fax Number:
E-mail Address: Dan.Hedden@jun.org	Other Contact Phone Number(s):	

LANDOWNER/ LESSEE CONSENT ***Required for Planning Permits, not needed on Building/ Engineering Permits***

I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:

A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.

B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.

X Dan Bladen - CBS Land 7/23/19
Landowner/Lessee Signature Date

X _____
Landowner/Lessee Signature Date

NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.

APPLICANT If the same as OWNER, write "SAME" and sign and date at X below

Applicant's Name: Vertical Bridge, LLC	Contact Person: Gary Bekke	Work Phone:
Mailing Address: 6510 Beechcraft Rd. Wasilla, AK 99654	Home Phone: 561-406-4094	Fax Number:
E-mail Address: aasllc15@gmail.com	Other Contact Phone Number(s):	

X _____
Applicant's Signature Date of Application

OFFICE USE ONLY BELOW THIS LINE					
STAFF APPROVALS	☒	Permit Type	***SIGN	Date Received	Application Number(s)
		Building/Grading Permit			
		City/State Project Review and City Land Action			
		Inquiry Case (Fee In Lieu, Letter of ZC, Use Not Listed)			
		Mining Case (Small, Large, Rural, Extraction, Exploration)			
		Sign Approval (If more than one, fill in all applicable permit #'s)			
		Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)			
		Use Approval (Allowable, Conditional, Cottage Housing, Mobile Home Parks, Accessory Apartment)			
		Variance Case (De Minimis and all other Variance case types)			
		Wetlands Permits			
		Zone Change Application			
		Other (Describe)			
	***Public Notice Sign Form filled out and in the file.				
	Comments:				Permit Intake Initials
					AL



WIRELESS COMMUNICATION FACILITY APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant	PROJECT SUMMARY: Vertical Bridge, LLC proposes to construct a new WCF at 10020 Crazy Horse Dr adjacent to the Juneau Food Bank on property owned by the CBJ. There is an existing FAA tower at this location, but is not available for commercial access. The tower is proposed to be a 155' overall height monopole and reside in a 75' X 75' security fenced lease space. The location is in a designated Wetlands and the ACOE Wetlands permit process has begun. There will be clearing, excavation and backfill required to make the location suitable for tower construction. The tower and location have been designed to accommodate multiple wireless carriers. There is no tower lighting required. Appropriate and required site id, ownership and emergency contact information signage will be installed on a secured, locked security access gate.
	ZONING DISTRICT: I, 4B1701100120
	PROPOSED WCF TYPE ☐ Colocation ☒ New Tower ☐ Attached WCF ☐ Eligible Facility Request
	LIGHTING Proposed ☐ YES (this application requires all items under 49.65.950 and 49.65.970, it will go through the Special Use Permit process) ☒ NO Existing ☐ YES ☒ NO
	STRUCTURE HEIGHT (in feet) 155' overall
	Does the requested facility meet the criteria listed in Table 1 (CBJ 49.65.950(a))? ☐ Yes Does the facility qualify as a substantial Change per 49.65.950(b)(1-6)? ☐ Yes – Submit items under 49.65.960 with your application ☐ No – this application meets Table 1 (49.65.950(a)) with no substantial changes ☒ No – Submit items under 49.65.950 and 49.65.970. Proceed with the Special Use Permit process.
ALL REQUIRED MATERIALS ATTACHED ☒ Complete submittal checklist	

DEPARTMENT USE ONLY BELOW THIS LINE

REQUIRED PERMIT				
Building Permit		Project falls under Table 1 (49.65.950)		
Special Use Permit		Project does not fall under Table 1		
REVIEW APPROVALS				
	Initials	Date		
Building	_____	_____		
Engineering	_____	_____		
Planning	_____	_____		
Fees	Fees	Check No.	Receipt No.	Date
Application Fee	\$ _____			
Public Notice Sign Fee	\$ _____			
Public Notice Sign Deposit	\$ _____			
Total	\$ _____			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number	Date Received



WIRELESS COMMUNICATION FACILITY CHECKLIST

Juneau Permit Center • 230 S. Franklin Street • (907) 586-0770

This checklist is required to complete an application for a Wireless Communication Facility (WCF) permit. There are two types of WCF permits. See below.

- A. WCF qualifies as Eligible Facility Request (**Streamlined Review**)
 - a. Submit items 1-12
- B. WCF requires Special Use permit
 - a. Submit items 2-21

Required Items (please label each item with the corresponding number on plans)

- ☒ 1) Completed Building Permit Application
- ☒ 2) Completed WCF Application
- ☒ 3) Completed Development Permit Application
- ☐ 4) Fees (contact the Permit Center at (907) 586-0770 to determine amount)
- ☒ 5) A statement certifying that radio frequency emissions from the antenna array(s), both individually and cumulatively, will comply with FCC standards (considering any other WCF located on or immediately adjacent to the proposed WCF). This statement must be signed by a qualified person and accompanied with a statement of that person's professional qualifications
- ☒ 6) Site address and CBJ Parcel Identification Number (tax ID number)
- ☒ 7) Site size and dimensions
- ☒ 8) Site plan showing all existing and proposed structures, buildings, fences (their height) and landscaping
- ☒ 9) Proposed WCF type and design, lighting, height above grade, material, number of, color, any accessory structures, and number of collocations it can accommodate, if applicable
- ☒ 10) Certification that proposal complies with applicable laws pertaining to service offered
- ☒ 11) The following documents from a licensed Alaska Professional Engineer:
 - ☒ Signed and stamped letter indicating the proposed WCF will be constructed, repaired, modified or restored in compliance with all current applicable technical, safety, and safety-related laws of the CBJ, State of Alaska, and Federal government
 - ☒ Signed and stamped letter indicating the proposed WCF is in compliance with industry practices of the National Association of Tower Erectors
- ☒ 11) Letter indicating compliance with FAA regulations in 14 CFR Part 77 (if applicable)
- ☒ 12) Location of any dwelling(s) within distance of tower equal to the height of tower (if applicable), disclosure of any agreements which limit and/or preclude the proposed WCF from being shared with new WCFs

WIRELESS COMMUNICATION FACILITY CHECKLIST

- ☒ 13) Signed and stamped letter from a licensed Alaska Professional Engineer indicating the foundation and attachments meet EIA/TIA 222 G and local building code structure requirements for loads, including wind, snow, and ice (this shall also address the total number of required accommodated collocations, when applicable)
- ☒ 14) A narrative describing compliance with subsections under 49.65.930:
- | | |
|---|---|
| ☒ Concealed & Non-concealed antenna | ☒ Affects to mapped |
| ☒ Security | ☒ Viewsheds |
| ☒ Signage | ☒ WCF Master Plan |
| ☒ Lighting | ☒ Structural Assessment |
| ☒ Design Criteria | |
| ☒ Setbacks | |
- ☒ 15) Visual Impact Study consisting of:
- Zone of Visibility Map
 - Analysis demonstrating how the proposed WCF will be sited to be of least adverse impact on environment and its character while meeting applicant's network objectives
 - Illustration showing before and after views of proposed WCF from roadways, parks, public lands, historic districts and any other location where the site is visible to many people
 - Description of visual impact
 - Narrative or drawing describing how the base of the tower and accessory structures will be screened from view
- ☐ 16) For lighted towers:
- Description of type of light and how it complies with 49.65.930(d) (if required by FAA, the minimum intensity allowed by FAA)
 - How it will not project directly onto adjacent surrounding property (use of buffers, louvers, etc.)
- ☒ 17) Narrative indicating that the design height is the minimum necessary for effective functioning of provider's network
- ☒ 18) Visual impact assessment according to 49.65.970(c)(2)(B)
- ☒ 19) Balloon Test according to 49.65.970(c)(2)(D)
- ☒ 20) Propagation study



CITY/STATE PROJECT AND LAND ACTION REVIEW APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.

To be completed by Applicant	PROJECT SUMMARY CONSTRUCT NEW CELLULAR SITE WITH MONOPOLE TOWER ON OBTAINED PROPERTY WHERE JUNEAU FOOD BANK IS LOCATED. THIS CONSTRUCTION ENTAILS CLEARING AN ACCESS DRIVEWAY AND LEASED SPACE, EXCAVATION AND BACKFILL.	
	TYPE OF PROJECT REVIEW:	
	☒ City Project Review	☐ City Land Acquisition /Disposal
	☐ State Project Review	
	PROJECT NUMBERS ASSOCIATED WITH PROPOSAL:	
	Is this project associated with any other Land Use Permits? ☒ YES Case No.: <u>RL 2019-01</u> ☐ NO	
	Capital Improvement Program # (CIP) _____	
	Local Improvement District # (LID) _____	
	State Project # _____	
	ESTIMATED PROJECT COST: \$ <u>235,000.00</u>	
	ALL REQUIRED MATERIALS ATTACHED	
	☒ Complete application	
	☐ Pre-Application notes (if applicable)	
	☒ Narrative including:	
	☐ Current use of land or building(s)	
	☐ Proposed use of land or building(s)	
	☐ How the proposed project complies with the Comprehensive Plan	
	☐ How the proposed project complies with the Land Use Code (Title 49)	
	☒ Site Plan (details on page 2)	

NOTE: This application is required even if the proposed project is associated with other Land Use permits.

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

CITY/STATE PROJECT FEES	Fees	Check No.	Receipt	Date
Application Fees	\$ _____			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number	Date Received



BUILDING PERMIT APPLICATION

NOTE: THIS IS NOT A BUILDING PERMIT

* NOTE: "Building Permit" is a generic term which includes Building Safety Inspections, Grading Permits, and permits for Electrical, Plumbing and Mechanical work.

Case No: **BLD20190447**

Case Description: New WCF tower.

Site Address: **10020 CRAZY HORSE DR**

Parcel No: 4B1701100120

Legal Description: USS 1041

Check No. of Existing Dwelling Units:

No. of New Dwelling Units:

No. of Removed Dwelling Units:

Applicant : VERTICAL BRIDGE
6510 BEECHCRAFT RD
WASILLA AK 99654

PH1

331-8311

Owner: CITY AND BOROUGH OF JUNEAU
LANDS AND RESOURCES
155 S SEWARD ST
JUNEAU AK 99801

Contractor: VERTICAL BRIDGE
6510 BEECHCRAFT RD
WASILLA AK 99654

PH: _____ FAX: _____

Valuation for Permit Fee Calculations:

S.F.	Type	Rate	Amount
			237,000.00
Total Valuation:			\$237,000.00

Associated Cases:

None.

Parcel Tags:

GPC August 10 2001 - This lot is in a mapped wetland area per JWMP Atlas. Wetland unit MW4 which is a category "B" wetland.

GPC August 10 2001 - This lot is in a mapped "V" wetland. The base flood elevation has not been classified but was determined to be 23 feet MLLW per Deb Purves. FIRM map 0880C.

No build easement was recorded in connection with BLD2001-00459 as an alternate method to meet building and fire code requirements on 8-30-2001 Book 572 Pages 822-826. Note by Deb Purves 9/18/2001.

Notes and Conditions:

Awaiting wcf20190010 approval and bld fee payment.

Applicant's Signature

(Owner, Contractor or Authorized Agent)

Date

Staff Acceptance

I hereby certify that I have read and examined this application and know the same to be true and correct. I further certify that all provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. I understand that the granting of a permit does not presume to give authority to violate or cancel the provisions of any other federal, state or local law regulating construction or the performance of construction.

Staff Review Sheet

Planner

Permit Intake Initials: _____

FIRE ZONE ENG WAT SEW ARCH STRUC PLUM MECH ELEC ACCESS SPEC/INSP

7/24/2019

Case No: **BLD20190447**

Site Address: 10020 CRAZY HORSE DR

Parcel No: 4B1701100120

Desc: New WCF tower.

Commercial _____ NEW _____ New Dwelling Units: _____ 0
 FCC Code: _____ 329 _____ Existing Dwelling Units: _____ 0
 Type of Construction: _____ VB _____ Occupancy Class: _____
 Sprinkler Substitute for Type A Construction: YES NO
 Sprinkler System: FULL PARTIAL NONE Required: YES NO
 Alarm System: FULL PARTIAL NONE Required: YES NO
 Code Edition: _____ Code Review by: _____ Date: _____

Valuation for Permit Fee Calculations:

S.F.	Type	Rate	Amount
			237,000.00
Total Valuation:			\$237,000.00

LAND USE ZONE/UNITS _____ I / WETLAND _____ FLOOD ELEV _____ 23.00 FIRM ZONE _____ V FIRM MAP _____ LOT SIZE _____ 1,392,613 SF _____ 32.0 ACRES SETBACKS Front _____ 10 Rear _____ 10 Side _____ 0 Other _____ PARKING _____ ANADROMOUS _____ EAGLES NEST _____ Coverage _____ Permissible/Conditional HEIGHT _____ Permissible/Accessory VEGETATION _____ HAZARD _____	ENGINEERING/PUB WORKS Dwelling Units: _____ CITY WATER: Permit #: _____ Use: _____ Assessment: _____ Service Size: _____ Line Size: _____ Meter Size: _____ CITY SEWER: Permit #: _____ Use: _____ Assessment: _____ Fixture Units: _____ LAND USE PERMITS ADR Case #: _____	PLAN REVIEW APPROVALS <table border="1"> <thead> <tr> <th></th> <th>Initials</th> <th>Date</th> </tr> </thead> <tbody> <tr><td>Fire</td><td>_____</td><td>_____</td></tr> <tr><td>Zoning</td><td>_____</td><td>_____</td></tr> <tr><td>Engineering</td><td>_____</td><td>_____</td></tr> <tr><td>Water</td><td>_____</td><td>_____</td></tr> <tr><td>Sewer</td><td>_____</td><td>_____</td></tr> <tr><td>Architectural</td><td>_____</td><td>_____</td></tr> <tr><td>Structural</td><td>_____</td><td>_____</td></tr> <tr><td>Plumbing</td><td>_____</td><td>_____</td></tr> <tr><td>Mechanical</td><td>_____</td><td>_____</td></tr> <tr><td>Electrical</td><td>_____</td><td>_____</td></tr> <tr><td>Access</td><td>_____</td><td>_____</td></tr> <tr><td>Spcl Insp Form</td><td>_____</td><td>_____</td></tr> </tbody> </table> APPROVED FOR ISSUANCE _____ Signature _____ Date		Initials	Date	Fire	_____	_____	Zoning	_____	_____	Engineering	_____	_____	Water	_____	_____	Sewer	_____	_____	Architectural	_____	_____	Structural	_____	_____	Plumbing	_____	_____	Mechanical	_____	_____	Electrical	_____	_____	Access	_____	_____	Spcl Insp Form	_____	_____	PERMIT ISSUANCE FEES _____ Grading Plan Review Fee \$ _____ _____ Adjusted Plan Review Fee \$ _____ _____ Fast Track Fee \$ _____ _____ Early Start Fee \$ _____ _____ Building Permit Fee \$ _____ _____ Water Assessment Fee \$ _____ _____ Sewer Assessment Fee \$ _____ _____ Sewer Inspection Fee \$ _____ _____ Grading Permit Fee \$ _____ _____ Driveway Permit Fee \$ _____ _____ Bond for \$ _____ _____ Other \$ _____ Total Issuance Fees \$ _____ PERMIT ISSUANCE PAYMENTS <table border="1"> <thead> <tr> <th>Date</th> <th>Receipt</th> <th>Check</th> <th>Amount</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td><td>\$ _____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>\$ _____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>\$ _____</td></tr> </tbody> </table>	Date	Receipt	Check	Amount	_____	_____	_____	\$ _____	_____	_____	_____	\$ _____	_____	_____	_____	\$ _____
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Parcel Tags:

GPC August 10 2001 - This lot is in a mapped wetland area per JWMP Atlas. Wetland unit MW4 which is a categc wetland.

GPC August 10 2001 - This lot is in a mapped "V" wetland. The base flood elevation has not been classified but w: determined to be 23 feet MLLW per Deb Purves. FIRM map 0880C.

No build easement was recorded in connection with BLD2001-00459 as an alternate method to meet building and f requirements on 8-30-2001 Book 572 Pages 822-826. Note by Deb Purves 9/18/2001.

CONDITIONS AND HOLDS ON PERMIT: (Continued on back of sheet)

BUILDING PERMIT APPLICATION (Continued)

TYPES OF INSPECTIONS

The Work Codes below contain standard inspections for the permit type. Circle additional inspections if required.

Work Codes -

B-Building Safety Inspection
B-Commercial Addition
B-Demolition
B-Grading
B-Manufactured Home Placement
B-Oil/Gas Piping
B-Porches/Decks/Carports
B-Reroof
B-Residential Electrical Service
B-Single Family Dwelling
E-ROW- Water & Sewer Service
E-ROW- Water Main
E-ROW-Driveway
E-ROW-Fire Line
E-ROW-Sewer Main
E-ROW-Sewer Main & Service
E-ROW-Sewer Service
E-ROW-Water Main & Service
E-ROW-Water Main & Sewer Main
E-ROW-Water Service
E-UTL- Sewer Main
E-UTL-Fire Line
E-UTL-Fire Line & Water Line
E-UTL-Fire Line & Water Main
E-UTL-OWTDS
E-UTL-Sewer Line
E-UTL-Pressure Sewer Line
E-UTL-Sewer Line w/ Decomm
E-UTL-Pressure Sewer Line w/Decomm
E-UTL-Water Line
E-UTL-Water Main

Building-

B-Appliance/Chimney
B-Bonding
B-Building Final
B-Building Service
B-Combustion Air
B-Commercial Hoods
B-Conduit & Raceway Systems
B-Cross Connection Control
B-Demo Electric Safed Off
B-Demo Excavation Filled
B-Demo Sewer/Water Capped
B-Demolition Final
B-Devices and Equipment
B-Electrical Final
B-Fire Dampers/Sprinklers
B-Fire Separation/Rated Assemb
B-Foundation, Forms & Reinf Steel
B-Framing
B-Grounding
B-Heat Piping
B-Insulation/Vapor Barrier
B-Masonry
B-Mechanical Final
B-Meter Yoke
B-Meter Yoke with Meter
B-MH Foundation
B-MH Utilities
B-Mobile Home Final
B-Plumbing Final
B-Oil & Gas Piping/Tanks
B-Rough Electrical
B-Rough Plumbing
B-Service/Panel
B-Setback Verification
B-Smoke/Carbon Monoxide Detec
B-Special Inspection
B-Specialty Piping
B-Temporary Power
B-Under Slab Utilities
B-Ventilation/Plenums & Ducts
B-Vents (Bath, Dryer, Kitchen, etc.)
B-Yellow Tag Electrical
B-Zoning Final

Enforcement -

ENF - Enforcement Status Check

Miscellaneous -

M-Site Visit

Fire -

F-Address and Required Signage
F-Alarm Panel/Transmitter
F-Alarm Zones
F-Blasting on Individual Lot
F-Childcare/Daycare Inspection
F-Commercial Dev Land Clearing
F-Courtesy Inspection
F-Emergency Lighting Test
F-Events in Mall Hallways
F-Explosives Shipment-Unest Loc
F-FDC Location
F-Fire Extinguishers
F-Fire Final
F-Fire Hydrant Placement
F-Fire Related Inspection
F-Fixed Welding Inspection
F-Flammable/Combustible Material
F-Hazardous Material Storage
F-Kitchen Hood Suppression Test
F-Liquor License Renewal
F-Open Burning Inspection
F-Paint Booth Inspection
F-Proper Sprinkler System Bracing
F-Roof/Tar Kettle Inspection
F-Special Event Structure
F-Sprinkler Head Placement
F-Sprinkler Hydrostatic Test
F-Subdivision Land Clearing
F-Subdivision/Road Blasting
F-System Acceptance Test
F-Temporary Welding Inspection
F-Underground Fire Line Flush

Engineering -

E-Access to Curb Stop Valve
E-ADEC on-site Sewer Final
E-ADEC on-site Water Main Final
E-Asbuilt Survey Required
E-Bacteriological Test
E-Bedding / Backfill
E-Billing Authorization
E-Blasting Verification
E-Bore Flush
E-CBJ Waste Water Department
E-CBJ Water Department
E-Chlorination Test
E-Cleanouts
E-Continuity
E-Cross Connection Control
E-Culvert
E-Curb Box
E-Curb Cut Final
E-Curb Cut Reinforcement
E-Curb Stop
E-Depth
E-Electrical Utility
E-Final
E-Fire Hydrants
E-Fire Line Final
E-General Engineering Final
E-Grade
E-Grading/Drainage
E-Headwalls
E-Installation of Access & Ports
E-Installation of Insulation
E-Location
E-Manhole Tap
E-Manholes - Sewer Main
E-Material
E-OWTDS Inspection
E-Pressure Test
E-Pump Ticket
E-Residual / Free Chlorine
E-Retaining Walls
E-ROW - Final
E-ROW Restoration
E-Septic Decommission
E-Sewer Connection
E-Sewer Disconnect
E-Sewer Final
E-Sewer Main Final
E-Sewer Service Tap
E-Sewer System
E-Sidewalk Final
E-Sidewalk Reinforcement
E-Size
E-Soil
E-State D.O.T. Approval
E-Storm Drains
E-Street Patch
E-Streets
E-Telephone Utility
E-Thaw Waiver
E-Thaw Wire
E-Thrust Blocks
E-Turn Water OFF
E-Turn Water ON
E-TV Cable
E-Utility Ribbon
E-Utility Trench
E-Water Final
E-Water Meter Required
E-Water Meter/Yoke
E-Water Service Tap
E-Water System
E-Water Tap
E-Width

ADDITIONAL CONDITIONS AND HOLDS (STAFF)

7/9/2019

Gary R. Brekke
Alaska Aerial Survey, LLC
6510 Beechcraft Rd
Wasilla, AK 99654

Vertical Bridge, LLC Proposed 11 Mile Cell Tower

Vertical Bridge, LLC proposes to construct a new communication facility site at 10020 Crazy Horse Dr. The site location is adjacent to the Food Bank and an existing FAA tower in a delineated wetlands area.

The proposed site is to be a 75' X 75' leased area with a 60' X 60' security fenced enclosure. There will be an access drive constructed from the parking area for the Food Bank along a preconstructed and overgrown dike. The space will require substantial clearing, excavation and appropriate fill material in order to make the location suitable for tower, shelter and equipment construction. This site will not be a storage area for any ancillary or other equipment.

There will be a chain-link security fence installed on the perimeter of the leased space with a locked security gate installed as well. This gate will also have installed on it the appropriate and required signage that details ownership, site id and contact information in case of emergency.

The site location was selected based on Network RF Engineering requirements as determined by the primary client of Vertical Bridge. The tower height of 150' and load design capability has been engineered to be sufficient to accommodate not only the primary client, but to also accommodate additional clients loads and future growth.

An FAA Determination has specified that no tower lighting of any kind is required.

The design of the tower, tower foundation and general facility meets all standard engineering requirements and is typical of communications facilities currently being constructed in Alaska and nationwide.

The tower was not designed with stealth technology because the location in an Industrial zoned district and the natural vegetation adequately provides sufficient concealment as demonstrated in the Visual Impact and Balloon Test documentation. The tower height was selected for minimal visual impact while providing a structure for multiple other communications carriers to utilize.

All setbacks were determined during the surveying of the property and the site laid out to meet or exceed the setback requirements.

A Wetlands Construction permit application will be submitted by the end of July this year with the ACOE in order to comply with construction standards and Federal regulation regarding wetlands development. A copy of this application and the ACOE construction permit will be provided to the CBJ.

\$ 237 K



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

Insert Project Name

52.

Case Number: PAC2019 XXXX

Applicant: Vertical Tower

Property Owner:

Property Address:

Parcel Code Number: Use Capital Letter, not Lowercase

Site Size: xx,xxx Square Feet

Zoning:

Existing Land Use:

Conference Date: (Insert Conference Date)

Report Issued: (Insert Today's Date)

List of attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Name	Title	Email address
GARY B	Applicant	
	Planning	xxx.xxx@juneau.org
	Building	xxx.xxx@juneau.org
	General Engineering	xxx.xxx@juneau.org

Pre-Application Conference Final Report

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

1. (Add application forms required)
2. (Add notes as necessary)

Additional submittal requirements:

Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.
2. (Add any necessary supporting documents required in the application forms OR that may be useful supporting information)

Exceptions to submittal requirements:

Submittal requirements staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. (Add any items required with the forms that are not applicable to the Conditional Use application)
- 2.

Fee estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. (List individual permit fees and sign fees)
2. \$1000.00 650.00 +

For informational handouts with submittal requirements for development applications, please visit our website at www.juneau.org/cdd.

Submit your completed application

You must submit your application(s) in person with payment to:

City/Borough of Juneau
Permit Center
230 S. Franklin Street,
Fourth Floor Marine View Center
Juneau, AK 99801

Phone: (907) 586-0715
Fax: (907) 586-4529
Web: www.juneau.org/cdd

Pre-Application Conference Final Report

** Sam DAK AS WCF-09*

Conference Summary

Questions/issues/agreements identified at the conference that weren't identified in the attached reports.

The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

Planning Division:

No lighting Required by FAA.

1. Zoning – (check special districts – ADOD / Historic)
2. Setbacks –
3. Height –
4. Access –
5. Parking & Circulation– (check if in Juneau / Douglas Geographic area)
6. Lot Coverage –
7. Vegetative Coverage –
8. Lighting –
9. Noise –
10. Flood – (check floodplain)
11. Hazard/Mass Wasting/Avalanche/Hillside Endorsement –
12. Wetlands –
13. Habitat – (Eagle – remind applicant to check with Feds; Riparian, etc.) –
14. Plat or Covenant Restrictions –
15. Traffic -

Building Division:

16. Building –
17. Outstanding Permits -

General Engineering/Public Works:

18. Engineering –
19. Drainage –
20. Utilities – (water, power, sewer, etc.)

Fire Marshal:

21. Fire Items/Access –

Other Applicable Agency Review:

22. DOT&PF / Alcohol Beverage Control Board / Army Corps / DEC (wastewater) / DNR / USF&W / F&G / FAA / Corrections...
- 23.

List of required applications

Attachment A - Application Packet

Amy Liu

From: Gary Brekke <aasllc15@gmail.com>
Sent: Thursday, September 12, 2019 9:28 AM
To: Amy Liu
Subject: Re: FW: WCF20190009 Follow-Up
Attachments: 25910.letter.pdf; 452079.fdndwgseal.pdf; 25910.calcs.pdf; 452078.twrdwgseal.pdf

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Hi Amy! Thanks for the call Tuesday morning! I look forward to working with you on the permitting for this 11 Mile site and the one at Lena Pt.

I've attached 4 additional documents pertaining to the 11 Mile site and the questions you had about the tower.

It will be galvanized steel in color. No antennas will exceed the height of the tower structure. There is a ground rod that does attach at the top of the tower and projects above the tower structure. I've attached a letter from the tower manufacturer attesting to it's structural integrity and statistical likeliness of failure within the 75' leased space.

Please let me know if this answers your questions satisfactorily or if you need additional information.

Thanks Amy!!

Gary R. Brekke
 Alaska Aerial Survey, LLC
 907 331-8311
www.alaskaaerialsurvey.com

On Wed, Sep 11, 2019 at 11:36 AM Amy Liu <Amy.Liu@juneau.org> wrote:

From: Amy Liu
Sent: Thursday, September 05, 2019 9:35 AM
To: 'aasllc1@gmail.com' <aasllc1@gmail.com>
Cc: Teri Camery <Teri.Camery@juneau.org>; Alexandra Pierce <Alexandra.Pierce@juneau.org>
Subject: RE: WCF20190009 Follow-Up

Gary,

Attachment A - Application Packet

Thanks for reaching out to CDD. I heard through the grapevine that you chatted with Teri. However, I'm following up because I am assigned your two WCF applications.

The application for 11 mile is not officially in our system yet. I would still like your input on the questions I listed below before we begin review and scheduling. Also, the meeting dates I initially shared may not be available anymore, so I'll let you know soon the next hearing dates.

Thanks,

Amy

From: Amy Liu

Sent: Friday, August 09, 2019 2:24 PM

To: 'aasllc1@gmail.com' <aasllc1@gmail.com>

Subject: RE: WCF20190009 Follow-Up

Gary,

I just noticed that what I thought was an antenna was just a lighting rod. Makes sense. However, could you address the other questions?

Thanks,

Amy

From: Amy Liu

Sent: Tuesday, August 06, 2019 11:38 AM

To: 'aasllc1@gmail.com' <aasllc1@gmail.com>

Subject: WCF20190009 Follow-Up

Gary,

Thanks for chatting with me the other day. I confirmed that the 11 mile application has not been paid yet, so that application has also not been assigned for review yet. As we previously discussed, WCF20190009 (Lena Pt) could be scheduled for October 8 or 22 at the earliest. Let me know if you have a preference, want to wait for the 11 mile tower application to be assigned, or are interested in later dates.

Also, I have a few of questions that I'm not sure are answered by the materials you provided for the Lena Pt tower.

- What will the color of the tower be?
- Will there be a breakpoint?
- Will there be antenna(s) that add height to the tower? I see in the design drawing that there may be a whip antenna

Amy

From: Gary Brekke <aaallc15@gmail.com>

Sent: Tuesday, July 09, 2019 9:53 AM

To: Kyle Paw <Kyle.Paw@juneau.org>; Edward Quinto <Edward.Quinto@juneau.org>; Amy Liu <Amy.Liu@juneau.org>

Subject: Fwd: Vertical bridge Lena Pt.

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Kyle, I've uploaded the WPA and BPA. I've also uploaded a narrative addendum addressing the total number of antennas and carriers the tower loading is applicable for. VB is getting the checks in process for the fees and will send directly to the CBJ.

Please note the middle paragraph in the Narrative doc that explains the tower design height criteria. If you want me to try and elaborate further I can. Thanks all!

Gary R. Brekke

Alaska Aerial Survey, LLC

907 331-8311

www.alaskaaerialsurvey.com

Attachment A - Application Packet

----- Forwarded message -----

From: **Gary Brekke** <aasllc15@gmail.com>

Date: Tue, Jul 9, 2019 at 7:48 AM

Subject: Re: Vertical bridge Lena Pt.

To: Kyle Paw <Kyle.Paw@juneau.org>

Cc: Edward Quinto <Edward.Quinto@juneau.org>, Amy Liu <Amy.Liu@juneau.org>

Hi Kyle! Thanks for the quick response on this - it is greatly appreciated!! I am working on the additional docs and will upload when completed this morning.

I have forwarded this to my VB contacts for clarification from the tower manufacturer about the "Breakpoint Technology" designed into the tower. I will upload as soon as I receive that. I've also asked VB to cut the checks for the fees and submit directly to the CBJ. Is that who the checks should be made out to and is there a reference number associated with this project that they should not on the checks? Or perhaps just VB Lena Pt project?

Gary R. Brekke

Alaska Aerial Survey, LLC

907 331-8311

www.alaskaaerialsurvey.com

On Mon, Jul 8, 2019 at 2:56 PM Kyle Paw <Kyle.Paw@juneau.org> wrote:

Good afternoon,

Thank you for your email. We were able to extract the forms and have reviewed them for intake. This project is going to require both a Wireless Facility Application as well as a Building Permit for new tower. The initial look over of your application materials it appears that we require a few things in order to move forward:

- DPA (see attached)
- Narrative indicating that the design height is the minimum necessary for effective functioning of the provider's network

- Clarification on max number of antenna arrays possible, whether there is a breakpoint, and color
- The total estimated cost of the project construction (used in the associated building permit that will be required. (build permit form attached)

The fee for the WCF application is \$1000.00. the breakdown of which is as follows:

\$850.00 for the application

\$150.00 for sign notice (\$100.00 is refundable with an on time return of sign)

The fee for the building permit can be determined when you supply the estimate cost of the project.

If you have any additional concerns or questions, please don't hesitate to contact us.

Regards,

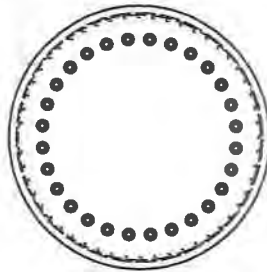
Kyle Paw | Permit Technician III

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

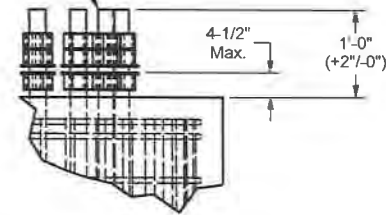
Office: 907.586.0773



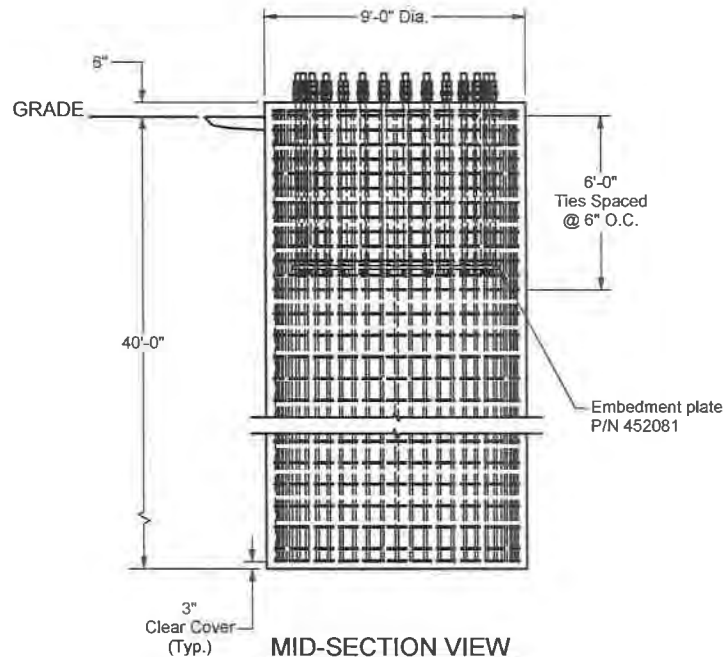


PLAN VIEW

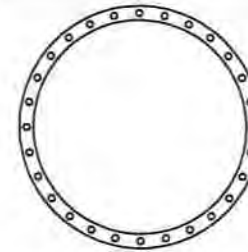
2.25" dia. x 84" ASTM A615
grade 75 anchor bolts,
P/N 108787
28 total.



ANCHOR BOLT DETAIL



MID-SECTION VIEW
DRILLED PIER FOUNDATION
(CONCRETE VOLUME: 95.4 CU. YD. TOTAL)

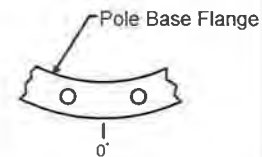


85.5 in EMBEDMENT PLATE O.D.
(28) 2-5/16" HOLES
ON A 80.5 in DIAMETER BOLT CIRCLE
75.5 in EMBEDMENT PLATE I.D.

EMBEDMENT PLATE DETAIL

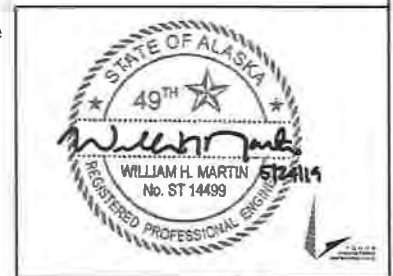
#10 Reinforcing bars,
480" long.
Equally spaced around inside of ties.
52 Total

#6 Reinforcing ties,
343 0" long before being bent into circle with
102 00" outer diameter and 6.00" overlap
and 3" seismic hooks.
Top 2 ties spaced at 2" O.C.
Next 12 ties spaced at 6" O.C.
Bottom 2 ties spaced at 5" O.C.
Remainder of ties equally spaced at 8.81" O.C.
60 Total.



Anchor Bolt Holes
Are on Either Side of
the 0 Degree Azimuth
Anchor Bolt Azimuth

Concrete Compressive Strength, $f_c = 4000$ psi



TITLE: Vertical Bridge NTP 73" X 150" US-AK5244 11 Mile Juneau Co., AK	 1201 S. Sheridan St. South Bend, IN 46619 Bus: (574)288-3632 Fax: (574)288-5860
---	---

REV	BY	DATE	DESCRIPTION

COPYRIGHT NOTICE: This drawing is the property of Nello Inc. It is not to be reproduced, copied or traced in whole or in part without our written consent.	ORIG. DATE: 5/20/2019 DWG. PROG: v1 05	DWG NO: 452079 SHEET: 1 OF 2
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Foundation Notes

1. This foundation has been designed for the following reactions.

<u>ASCE7-05</u>		<u>ASCE7-10</u>	
Shear:	86.6 kips	Shear:	83.3 kips
Moment:	10261.2 ft-kips	Moment:	9874.7 ft-kips
Weight:	73.7 kips	Weight:	73.7 kips

2. Foundation design is based on the Geotechnical Report dated 03/26/2019, by Tower Engineering Professionals, Inc.; Project No. 152226.242955.

3. A field inspection shall be performed in order to verify that the actual site soil parameters meet or exceed the assumed soil parameters and that the depth of standard foundations are adequate based on the frost penetration and groundwater depth. Local frost depth must be no deeper than the bottom of the base foundation.

4. Reinforcement shall be deformed and conform to the requirements of ASTM A615 Grade 60 unless otherwise noted. Splices in reinforcement shall not be allowed unless otherwise noted.

5. Welding is prohibited on reinforcing steel and anchorage.

6. Backfill must be compacted in 8" loose lifts to a 95% of maximum dry density at optimum moisture content in accordance with ASTM D698. Backfill must be clean and free of organic and frozen soils and foreign materials. Fill should be compacted at water content within 2 percent of optimum.

7. Foundation designs assume level ground at tower site.

8. Loose material shall be removed from bottom of excavation prior to concrete placement.

9. Concrete cover from exposed surface of concrete to surface of reinforcement shall not be less than 3".

10. Concrete and reinforcement installation must conform to ACI 318, "Building Code Requirements for Structural Concrete."

11. Concrete shall develop a minimum compressive strength of 4000 psi in 28 days.

12. Concrete shall be placed as soon as practical after excavating to avoid disturbance of bearing and side wall surfaces.

13. Concrete contractor shall be responsible for properly aligning anchor bolts and materials before and after placing concrete, regardless of whether an anchor bolt template is provided.

14. Positive drainage shall be maintained during construction and throughout the life of the facility to minimize the potential for surface water infiltration.

15. It shall be the contractor's responsibility to locate and prevent damage to any existing underground utilities, foundations or other buried objects that might be damaged or interfered with during construction of the foundation.

16. Groundwater may be encountered at 3.5 feet bgs at this site based on the geotechnical investigation. Dewatering techniques should be anticipated below this depth.

17. Temporary steel casing or drilling slurry may be required for installation of the drilled pier. A clean-out bucket should be used to remove any cuttings and loose soils in the bottom of the shaft excavation.

18. Concrete shall be placed by tremie methods if there is more than 1 inch of water or drilling fluid at the bottom of the shaft excavation or if water infiltration exceeds a rise of 1/4" per minute.



TITLE:
Vertical Bridge

NTP 73" X 150'

US-AK5244 11 Mile

Juneau Co., AK



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ORIG. DATE: 5/20/2019

DWG NO: 452079

DWG PROG: v1.05

SHEET: 2 OF 2

REV	BY	DATE	DESCRIPTION



Design Supporting Calculations

Sales Order: SO25910
Drawing Number(s)
Tower: 452078
Foundation: 452079
Order Description: NTP 73" x 150'
Site Name: US-AK5244 11 Mile
Location: JuneauBorough, AK

Prepared For:
Customer: Vertical Bridge
Contact: Bill Shearer
Date: 5/21/2019



Section	4	3	2	1
Length (ft)	52.75	53.00	20.00	42.25
Number of Sides	18	18	18	18
Thickness (in)	0.5000	0.5000	0.4375	0.3125
Socket Length (ft)		7.75	5.50	4.75
Top Dia (in)	53.0385	36.5720	31.8500	18.0000
Bot Dia (in)	73.4000	57.0300	39.5700	34.3085
Grade		A572-65		
Weight (lb)	19653.0	14577.1	3666.7	4053.5

150.0 ft

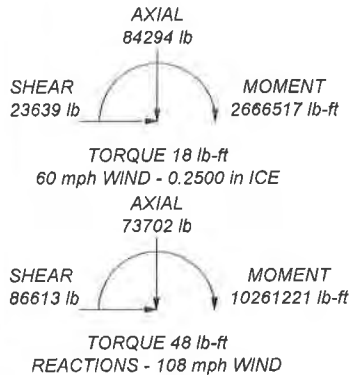
107.8 ft

92.5 ft

45.0 ft

0.0 ft

ALL REACTIONS
ARE FACTORED



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
5' Lightning Rod	150	30,000 sq in CaAa	130
30,000 sq in CaAa	150	30,000 sq in CaAa	120
30,000 sq in CaAa	140		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure D to the TIA-222-G Standard.
2. Tower designed for a 108 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 60 mph basic wind with 0.25 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 99.9%

Nello		Job: SO25910; Tower 452078; Foundation 452079	
1201 S. Sheridan		Project: NP 150' - US-AK5244 11 Mile - Juneau Co., AK	
South Bend, IN		Client: Vertical Bridge	Drawn by: ageyer
8910000000		Code: TIA-222-G	Date: 05/14/19
FAX: 574-288-5860		Path: N:\seri\4520\452078.enr	Scale: NTS
			Dwg No. E-1

tnxTower Nello 1201 S. Sheridan South Bend, IN Phone: 800-804-3556 FAX: 574-288-5860	Job	SO25910; Tower 452078; Foundation 452079	Page	1 of 37
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	Client	Vertical Bridge	Designed by	ageyer

Tower Input Data

There is a pole section.

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

Basic wind speed of 108 mph.

Structure Class II.

Exposure Category D.

Topographic Category 1.

Crest Height 0.00 ft.

Nominal ice thickness of 0.2500 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 60 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	✓ Assume Rigid Index Plate	✓ Calculate Redundant Bracing Forces
Use Moment Magnification	✓ Use Clear Spans For Wind Area	✓ Ignore Redundant Members in FEA
✓ Use Code Stress Ratios	✓ Use Clear Spans For KL/r	✓ SR Leg Bolts Resist Compression
✓ Use Code Safety Factors - Guys	✓ Retension Guys To Initial Tension	✓ All Leg Panels Have Same Allowable
Escalate Ice	✓ Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	✓ Use Azimuth Dish Coefficients	Consider Feedline Torque
Use Special Wind Profile	✓ Project Wind Area of Appurt	Include Angle Block Shear Check
Include Bolts In Member Capacity	✓ Autocalc Torque Arm Areas	Poles
✓ Leg Bolts Are At Top Of Section	✓ SR Members Have Cut Ends	✓ Include Shear-Torsion Interaction
✓ Secondary Horizontal Braces Leg	Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	✓ Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
Add IBC .6D+W Combination		

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	150.00-107.75	42.25	4.75	18	18.0000	34.3085	0.3125	1.2500	A572-65 (65 ksi)
L2	107.75-92.50	20.00	5.50	18	31.8500	39.5700	0.4375	1.7500	A572-65 (65 ksi)
L3	92.50-45.00	53.00	7.75	18	36.5720	57.0300	0.5000	2.0000	A572-65 (65 ksi)

tnxTower Nello 1201 S. Sheridan South Bend, IN Phone: 800-804-3556 FAX: 574-288-5860	Job	SO25910; Tower 452078; Foundation 452079	Page	2 of 37
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	Client	Vertical Bridge	Designed by	ageyer

Section	Elevation	Section Length	Splice Length	Number of Sides	Top Diameter	Bottom Diameter	Wall Thickness	Bend Radius	Pole Grade
	ft	ft	ft		in	in	in	in	
L4	45.00-0.00	52.75		18	53.0385	73.4000	0.5000	2.0000	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia.	Area	I	r	C	I/C	J	It/Q	w	w/t
	in	in ²	in ⁴	in	in	in ³	in ⁴	in ²	in	
L1	18.2777	17.5438	693.4158	6.2791	9.1440	75.8329	1387.7441	8.7736	2.6180	8.378
	34.8378	33.7198	4923.5444	12.0686	17.4287	282.4961	9853.5673	16.8631	5.4883	17.563
L2	34.2031	43.6202	5437.8839	11.1514	16.1798	336.0909	10882.9232	21.8142	4.8356	11.053
	40.1804	54.3404	10513.2069	13.8920	20.1016	523.0045	21040.2474	27.1753	6.1943	14.158
L3	39.2919	57.2463	9410.7675	12.8056	18.5786	506.5387	18833.9179	28.6286	5.5567	11.113
	57.9098	89.7131	36220.2408	20.0681	28.9712	1250.2137	72488.1411	44.8651	9.1573	18.315
L4	56.8944	83.3786	29076.8519	18.6512	26.9436	1079.1764	58191.9639	41.6972	8.4548	16.91
	74.5323	115.6923	77677.8080	25.8795	37.2872	2083.2298	155457.826	57.8571	12.0384	24.077

Tower Elevation	Gusset Area	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _t	Weight Mult.	Double Angle	Double Angle
	(per face)						Stitch Bolt	Stitch Bolt
	ft ²	in					Spacing	Spacing
							Diagonals	Horizontals
							in	in
L1				1	1	1.1		
150.00-107.75				1	1	1.1		
L2				1	1	1.1		
107.75-92.50				1	1	1.1		
L3				1	1	1.1		
92.50-45.00				1	1	1.1		
L4				1	1	1.1		
45.00-0.00								

Monopole Base Plate Data

Base Plate Data

Base plate is square	
Base plate is grouted	
Anchor bolt grade	A615-75
Anchor bolt size	2.2500 in
Number of bolts	28
Embedment length	72.0000 in
f _c	4 ksi
Grout space	3.3750 in
Base plate grade	A572-50
Base plate thickness	3.0000 in
Bolt circle diameter	80.5000 in
Outer diameter	86.5000 in
Inner diameter	69.5000 in
Base plate type	Plain Plate

Feed Line/Linear Appurtenances - Entered As Area

tnxTower Nello 1201 S. Sheridan South Bend, IN Phone: 800-804-3556 FAX: 574-288-5860	Job	SO25910; Tower 452078; Foundation 452079	Page	3 of 37
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	Client	Vertical Bridge	Designed by	ageyer

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		$C_A A_A$ ft ² /ft	Weight plf
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	150.00 - 0.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	140.00 - 0.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	130.00 - 0.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	120.00 - 0.00	12	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight lb
L1	150.00-107.75	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1072.56
L2	107.75-92.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	600.24
L3	92.50-45.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1869.60
L4	45.00-0.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1771.20

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight lb
L1	150.00-107.75	A	0.572	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1072.56
L2	107.75-92.50	A	0.559	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	600.24
L3	92.50-45.00	A	0.537	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1869.60
L4	45.00-0.00	A	0.481	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	1771.20

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
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Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight lb
5' Lightning Rod	C	From Leg	0.00 0.00 5.00	0.0000	150.00	No Ice 1/2" Ice	0.83 1.49	0.83 1.49	10.23 16.01
30,000 sq in CaAa	C	None		0.0000	150.00	No Ice 1/2" Ice	208.00 250.00	208.00 250.00	3536.00 4738.00
30,000 sq in CaAa	B	None		0.0000	140.00	No Ice 1/2" Ice	208.00 250.00	208.00 250.00	3536.00 4738.00
30,000 sq in CaAa	A	None		0.0000	130.00	No Ice 1/2" Ice	208.00 250.00	208.00 250.00	3536.00 4738.00
30,000 sq in CaAa	C	None		0.0000	120.00	No Ice 1/2" Ice	208.00 250.00	208.00 250.00	3536.00 4738.00

Tower Pressures - No Ice

$$G_H = 1.100$$

Section Elevation ft	z ft	K _Z	q _z psf	A _G ft ²	F a c e ft ²	A _F ft ²	A _R ft ²	A _{leg} ft ²	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
L1 150.00-107.75	126.83	1.493	42	93.505	A B C	0.000 0.000 0.000	93.505 93.505 93.505	93.505	100.00 100.00 100.00	0.000 0.000 0.000	0.000 0.000 0.000
L2 107.75-92.50	99.92	1.433	41	47.265	A B C	0.000 0.000 0.000	47.265 47.265 47.265	47.265	100.00 100.00 100.00	0.000 0.000 0.000	0.000 0.000 0.000
L3 92.50-45.00	67.59	1.339	38	192.378	A B C	0.000 0.000 0.000	192.378 192.378 192.378	192.378	100.00 100.00 100.00	0.000 0.000 0.000	0.000 0.000 0.000
L4 45.00-0.00	22.28	1.104	31	246.425	A B C	0.000 0.000 0.000	246.425 246.425 246.425	246.425	100.00 100.00 100.00	0.000 0.000 0.000	0.000 0.000 0.000

Tower Pressure - With Ice

$$G_H = 1.100$$

Section Elevation ft	z ft	K _Z	q _z psf	t _z in	A _G ft ²	F a c e ft ²	A _F ft ²	A _R ft ²	A _{leg} ft ²	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
L1 150.00-107.75	126.83	1.493	13	0.5721	97.534	A B	0.000 0.000	97.534 97.534	97.534	100.00 100.00	0.000 0.000	0.000 0.000

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Section Elevation ft	z ft	K _z	q _z psf	t _z in	A _G ft ²	F a c e	A _F ft ²	A _R ft ²	A _{leg} ft ²	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
L2 107.75-92.50	99.92	1.433	13	0.5586	48.719	C	0.000	97.534		100.00	0.000	0.000
						A	0.000	48.719	48.719	100.00	0.000	0.000
						B	0.000	48.719		100.00	0.000	0.000
						C	0.000	48.719		100.00	0.000	0.000
L3 92.50-45.00	67.59	1.339	12	0.5372	196.800	A	0.000	196.800	196.800	100.00	0.000	0.000
						B	0.000	196.800		100.00	0.000	0.000
						C	0.000	196.800		100.00	0.000	0.000
L4 45.00-0.00	22.28	1.104	10	0.4807	250.454	A	0.000	250.454	250.454	100.00	0.000	0.000
						B	0.000	250.454		100.00	0.000	0.000
						C	0.000	250.454		100.00	0.000	0.000

Tower Pressure - Service

$$G_H = 1.100$$

Section Elevation ft	z ft	K _z	q _z psf	A _G ft ²	F a c e	A _F ft ²	A _R ft ²	A _{leg} ft ²	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
L1 150.00-107.75	126.83	1.493	12	93.505	A	0.000	93.505	93.505	100.00	0.000	0.000
					B	0.000	93.505		100.00	0.000	0.000
					C	0.000	93.505		100.00	0.000	0.000
L2 107.75-92.50	99.92	1.433	11	47.265	A	0.000	47.265	47.265	100.00	0.000	0.000
					B	0.000	47.265		100.00	0.000	0.000
					C	0.000	47.265		100.00	0.000	0.000
L3 92.50-45.00	67.59	1.339	10	192.378	A	0.000	192.378	192.378	100.00	0.000	0.000
					B	0.000	192.378		100.00	0.000	0.000
					C	0.000	192.378		100.00	0.000	0.000
L4 45.00-0.00	22.28	1.104	9	246.425	A	0.000	246.425	246.425	100.00	0.000	0.000
					B	0.000	246.425		100.00	0.000	0.000
					C	0.000	246.425		100.00	0.000	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F lb	w plf	Ctrl. Face
L1 150.00-107.75	1072.56	4053.53	A	1	0.65	42	1	1	93.505	2830.30	66.99	C
			B	1	0.65		1	1	93.505			
			C	1	0.65		1	1	93.505			
L2 107.75-92.50	600.24	3666.73	A	1	0.65	41	1	1	47.265	1373.46	90.06	C
			B	1	0.65		1	1	47.265			
			C	1	0.65		1	1	47.265			
L3 92.50-45.00	1869.60	14577.10	A	1	0.65	38	1	1	192.378	5206.65	109.61	C
			B	1	0.65		1	1	192.378			
			C	1	0.65		1	1	192.378			
L4 45.00-0.00	1771.20	19652.98	A	1	0.65	31	1	1	246.425	5508.47	122.41	C
			B	1	0.65		1	1	246.425			
			C	1	0.65		1	1	246.425			
Sum Weight:	5313.60	41950.35						OTM	970832.36 lb-ft	14918.88		

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Tower Forces - No Ice - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F lb	w plf	Ctrl. Face
L1 150.00-107.75	1072.56	4053.53	A	1	0.65	42	1	1	93.505	2830.30	66.99	C
			B	1	0.65		1	1	93.505			
			C	1	0.65		1	1	93.505			
L2 107.75-92.50	600.24	3666.73	A	1	0.65	41	1	1	47.265	1373.46	90.06	C
			B	1	0.65		1	1	47.265			
			C	1	0.65		1	1	47.265			
L3 92.50-45.00	1869.60	14577.10	A	1	0.65	38	1	1	192.378	5206.65	109.61	C
			B	1	0.65		1	1	192.378			
			C	1	0.65		1	1	192.378			
L4 45.00-0.00	1771.20	19652.98	A	1	0.65	31	1	1	246.425	5508.47	122.41	C
			B	1	0.65		1	1	246.425			
			C	1	0.65		1	1	246.425			
Sum Weight:	5313.60	41950.35						OTM	970832.36 lb-ft	14918.88		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F lb	w plf	Ctrl. Face
L1 150.00-107.75	1072.56	4053.53	A	1	0.65	42	1	1	93.505	2830.30	66.99	C
			B	1	0.65		1	1	93.505			
			C	1	0.65		1	1	93.505			
L2 107.75-92.50	600.24	3666.73	A	1	0.65	41	1	1	47.265	1373.46	90.06	C
			B	1	0.65		1	1	47.265			
			C	1	0.65		1	1	47.265			
L3 92.50-45.00	1869.60	14577.10	A	1	0.65	38	1	1	192.378	5206.65	109.61	C
			B	1	0.65		1	1	192.378			
			C	1	0.65		1	1	192.378			
L4 45.00-0.00	1771.20	19652.98	A	1	0.65	31	1	1	246.425	5508.47	122.41	C
			B	1	0.65		1	1	246.425			
			C	1	0.65		1	1	246.425			
Sum Weight:	5313.60	41950.35						OTM	970832.36 lb-ft	14918.88		

Tower Forces - With Ice - Wind Normal To Face

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	Client	Vertical Bridge	Designed by	ageyer

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F lb	w plf	Ctrl. Face
L1 150.00-107.75	1072.56	4850.86	A B C	1 1 1	1.2 1.2 1.2	13	1 1 1	1 1 1	97.534 97.534 97.534	1682.18	39.81	C
L2 107.75-92.50	600.24	4057.72	A B C	1 1 1	1.2 1.2 1.2	13	1 1 1	1 1 1	48.719 48.719 48.719	806.67	52.90	C
L3 92.50-45.00	1869.60	16101.42	A B C	1 1 1	1.2 1.2 1.2	12	1 1 1	1 1 1	196.800 196.800 196.800	3034.95	63.89	C
L4 45.00-0.00	1771.20	21393.86	A B C	1 1 1	1.2 1.2 1.2	10	1 1 1	1 1 1	250.454 250.454 250.454	3190.04	70.89	C
Sum Weight:	5313.60	46403.86						OTM	570150.24 lb-ft	8713.84		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F lb	w plf	Ctrl. Face
L1 150.00-107.75	1072.56	4850.86	A B C	1 1 1	1.2 1.2 1.2	13	1 1 1	1 1 1	97.534 97.534 97.534	1682.18	39.81	C
L2 107.75-92.50	600.24	4057.72	A B C	1 1 1	1.2 1.2 1.2	13	1 1 1	1 1 1	48.719 48.719 48.719	806.67	52.90	C
L3 92.50-45.00	1869.60	16101.42	A B C	1 1 1	1.2 1.2 1.2	12	1 1 1	1 1 1	196.800 196.800 196.800	3034.95	63.89	C
L4 45.00-0.00	1771.20	21393.86	A B C	1 1 1	1.2 1.2 1.2	10	1 1 1	1 1 1	250.454 250.454 250.454	3190.04	70.89	C
Sum Weight:	5313.60	46403.86						OTM	570150.24 lb-ft	8713.84		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F lb	w plf	Ctrl. Face
L1 150.00-107.75	1072.56	4850.86	A B C	1 1 1	1.2 1.2 1.2	13	1 1 1	1 1 1	97.534 97.534 97.534	1682.18	39.81	C
L2 107.75-92.50	600.24	4057.72	A B C	1 1 1	1.2 1.2 1.2	13	1 1 1	1 1 1	48.719 48.719 48.719	806.67	52.90	C
L3	1869.60	16101.42	A	1	1.2	12	1	1	196.800	3034.95	63.89	C

```

*****
*                               Federal Airways & Airspace
*
*                               Summary Report: New Construction
*
*                               Antenna Structure
*
*****

```

```

Airspace User: Dawn Keniley

File: USAK5244

Location:  Juneau, AK

Latitude:  58°-22'-01.13"           Longitude:
134°-36'-38.97"

SITE ELEVATION AMSL.....24 ft.
STRUCTURE HEIGHT.....150 ft.
OVERALL HEIGHT AMSL.....174 ft.
SURVEY HEIGHT AMSL.....174 ft.

```

NOTICE CRITERIA

```

FAR 77.9(a): NNR (DNE 200 ft AGL)
FAR 77.9(b): NR  (Exceeds Notice Slope, Maximum: 62 ft.)
FAR 77.9(c): NNR (Not a Traverse Way)
FAR 77.9:   NR  Exceeds JNU Proposed Rwy 08P, TERPS
analysis required.
FAR 77.9(d): NNR (Off Airport Construction)

```

```

NR  = Notice Required
NNR = Notice Not Required
PNR = Possible Notice Required (depends upon actual IFR
procedure)

```

For new construction review Air Navigation
Facilities at bottom
of this report.

Notice to the FAA is required because height exceeds
Notice Slope criteria.
Notice is required. Height exceeds FAA IFR straight-in
screening criteria.
The maximum height to avoid notice is: 20 ft AMSL.

OBSTRUCTION STANDARDS

```

FAR 77.17(a)(1): DNE 499 ft AGL
FAR 77.17(a)(2): DNE - Airport Surface
FAR 77.19(a):    DNE - Horizontal Surface
FAR 77.19(b):    DNE - Conical Surface

```

FAR 77.19(c): DNE - Primary Surface
 FAR 77.19(d): DNE - Approach Surface
 FAR 77.19(e): DNE - Approach Transitional Surface
 FAR 77.19(e): DNE - Abeam Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: JNU: JUNEAU INTL

Type: A RD: 4174.986 RE: 20.6

FAR 77.17(a)(1): DNE

FAR 77.17(a)(2): DNE - Height No Greater Than 200 feet AGL.

VFR Horizontal Surface: DNE

VFR Conical Surface: DNE

VFR Primary Surface: DNE

VFR Approach Surface: DNE

VFR Transitional Surface: DNE

The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area.

Structures exceeding the greater of 350' AAE, 77.17(a)(2), or VFR horizontal and conical surfaces will receive a hazard determination from the FAA.

Maximum AMSL of Climb/Descent Area is 375 feet.

VFR TRAFFIC PATTERN AIRSPACE FOR: 5Z1: JUNEAU HARBOR

Type: S RD: 45916.54 RE: 0

FAR 77.17(a)(1): DNE

FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.

VFR Horizontal Surface: DNE

VFR Conical Surface: DNE

VFR Primary Surface: DNE

VFR Approach Surface: DNE

VFR Transitional Surface: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.17(a)(3) Departure Surface Criteria (40:1)

The Maximum Height Permitted is 124 ft AMSL

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)

FAR 77.17(a)(4): DNE - No Airway Found

PRIVATE LANDING FACILITIES

FACIL	BEARING	RANGE
DELTA ARP FAA	To FACIL	IN NM
IDENT TYP NAME		
ELEVATION IFR		
18AK HEL NORTH DOUGLAS	120.19	4.16

+149

No Impact to Private Landing Facility

Structure is beyond notice limit by 20277 feet.

5.13 AA44 HEL BARLETT REGIONAL HOSPITAL 116.78
 -122
 No Impact to Private Landing Facility
 Structure 122 ft below heliport.

+24 AK94 HEL ALASCOM/COASTAL LENA POINT 285.38 5.43
 No Impact to Private Landing Facility
 Structure is beyond notice limit by 27993 feet.

AIR NAVIGATION ELECTRONIC FACILITIES

GRND	FAC	ST	DIST	DELTA					
ANGLE	APCH	IDNT	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST LOCATION
BEAR									
	JDL	LOCALIZER	I	109.9	238.73	5699	+9	AK	RWY 08
JUNEAU	INT	.09	71						
	CGL	NDB	R	21	260.6	17248	+116	AK	COGHLAN
ISLAND		.39							
	SSR	VORTAC	R	114.0	240.71	142671	+134	AK	SISTERS
ISLAND		.05							

CFR Title 47, §1.30000-§1.30004
 AM STUDY NOT REQUIRED: Structure is not near a FCC
 licensed AM station.
 Movement Method Proof as specified in §73.151(c) is not
 required.
 Please review 'AM Station Report' for details.

Nearest AM Station: KJNO @ 9087 meters.

Airspace® Summary Version 19.3.529

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04-10-2019
 17:28:19

FAA 1-A Accuracy Certification

Date of Survey: February 2019
 Market: Alaska
 Site Address:
 10020 Crazy Horse Dr.
 Juneau, Alaska 99801

Site Name: AK 11 Mile
 Project #: 19-08.02

Proposed Structure Type: Self Support Tower

Surveyed Latitude (NAD 83)	N 58°22'01.135"
Surveyed Longitude (NAD 83)	W 134°36'38.975"
Ground Elevation: (NAVD 1988)	24'
Proposed Tower Height:	150'
Overall Tower Height (NAVD 1988)	174.0

Certification: I certify that the latitude and longitude are accurate to within +/- 20 feet horizontally, and that the ground elevation is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are expressed in degrees, minutes, and seconds to the nearest hundredth of a second. The vertical datum (height) is expressed in terms of feet.

Company: Acutek Geomatics
 5099 E. Blue Lupine Dr., Ste. 104
 Wasilla, Alaska 99654
 907-376-8800

3/4/2019





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2019-AAL-104-OE

Issued Date: 04/25/2019

FCC Contact
BRT Group, LLC
PO. Box 812530
Boca Raton, FL 33481

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower US-AK-5244 11 Mile
Location: Juneau, AK
Latitude: 58-22-01.14N NAD 83
Longitude: 134-36-38.98W
Heights: 24 feet site elevation (SE)
150 feet above ground level (AGL)
174 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 10/25/2020 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (907) 271-5863, or robert.van.haastert@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-AAL-104-OE.

Signature Control No: 402328681-403823495

(DNE)

Robert van Haastert
Specialist

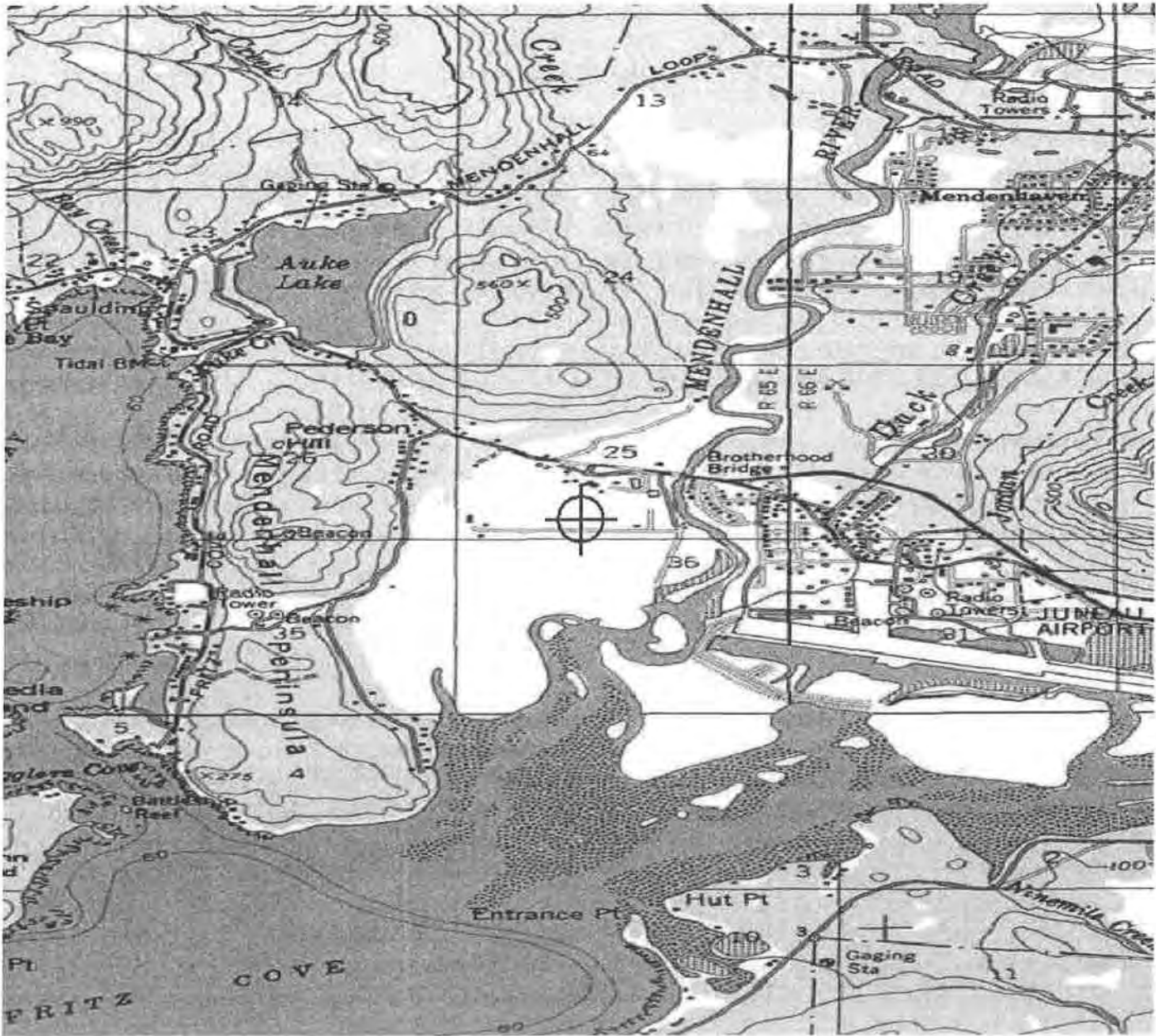
Attachment(s)
Frequency Data
Map(s)

cc: FCC

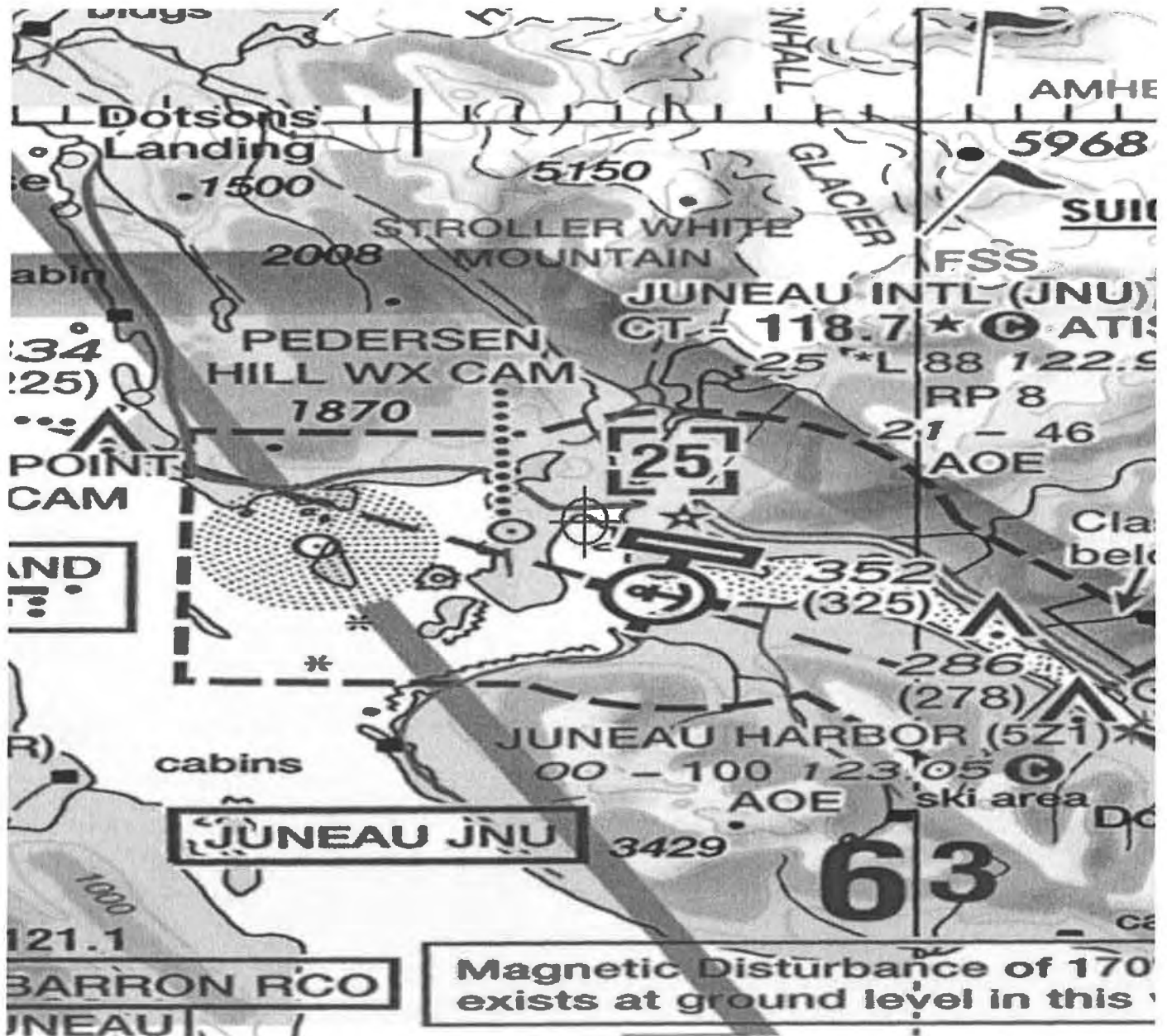
Frequency Data for ASN 2019-AAL-104-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

TOPO Map for ASN 2019-AAL-104-OE



Sectional Map for ASN 2019-AAL-104-OE





2550 Denali Street, Suite 1000, Anchorage Alaska 99503

Proposed 11 Mile FCC RF Exposure Limits & Issues

According to the Federal Communications Commission OET Bulletin 65, Edition 97-01:

"...out of an abundance of caution, the FCC requires that tower-mounted installations be evaluated if antennas are mounted lower than 10 meters above ground and the total power of all channels being used is over 1000 Watts effective radiated power..."

"For antennas mounted higher than 10 meters, measurement data for cellular facilities have indicated that ground-level power densities are typically hundreds to thousands of times below the new MPE (Maximum Permissible Exposure) limits."

<http://www.naic.edu/~phil/hardware/rfmonitor/fccGuidelines.pdf>

The following paragraphs are excerpts from the most recent FCC guidelines publication that explain the FCC's rationale in determining the MPE limits for general public exposure and for occupational/controlled exposure:

"In reaching its decision on adopting new guidelines, the Commission carefully considered the large number of comments submitted in its rule-making proceeding, and particularly those submitted by the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and other federal health and safety agencies. The new guidelines are based substantially on the recommendations of those agencies, and it is the Commission's belief that they represent a consensus view of the federal agencies responsible for matters relating to public safety and health."

"The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based are derived from criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 Watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The new MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk."

"The new FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. As indicated by Table 1 {shown on page 3}, the most restrictive limits occur in the frequency range of 30-300 MHz where whole body absorption of RF energy by human beings is most efficient. At other frequencies whole-body absorption is less efficient, and, consequently, the MPE limits are less restrictive.

Note that if both of the criteria in the first paragraph are not met (i.e. antenna height less than 10 meters **and** the total power of all channels used is over 1000 Watts), a detailed engineering evaluation of the RF field strengths at or near the site is not required unless specifically requested. A detailed MPE study has been conducted of this proposed structure and equipment at the request of interested parties. A copy of the MPE report which includes a summary as well as calculation methodology for the cumulative emissions of all equipment to be installed and operated by GCI is included with this statement.

All wireless facilities to be installed by GCI will be in compliance with the above criteria as well as the MPE limits for the general public in areas for which the general population has access (i.e. behind site fences or gates). In addition, GCI will comply with all FCC requirements for signage which serves to both identify the site (FCC licensing) and the presence of RF radiation at the site.

Mark Schott



Staff Engineer, GCI Wireless RF Engineering
GCI Wireless

Table 1. LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

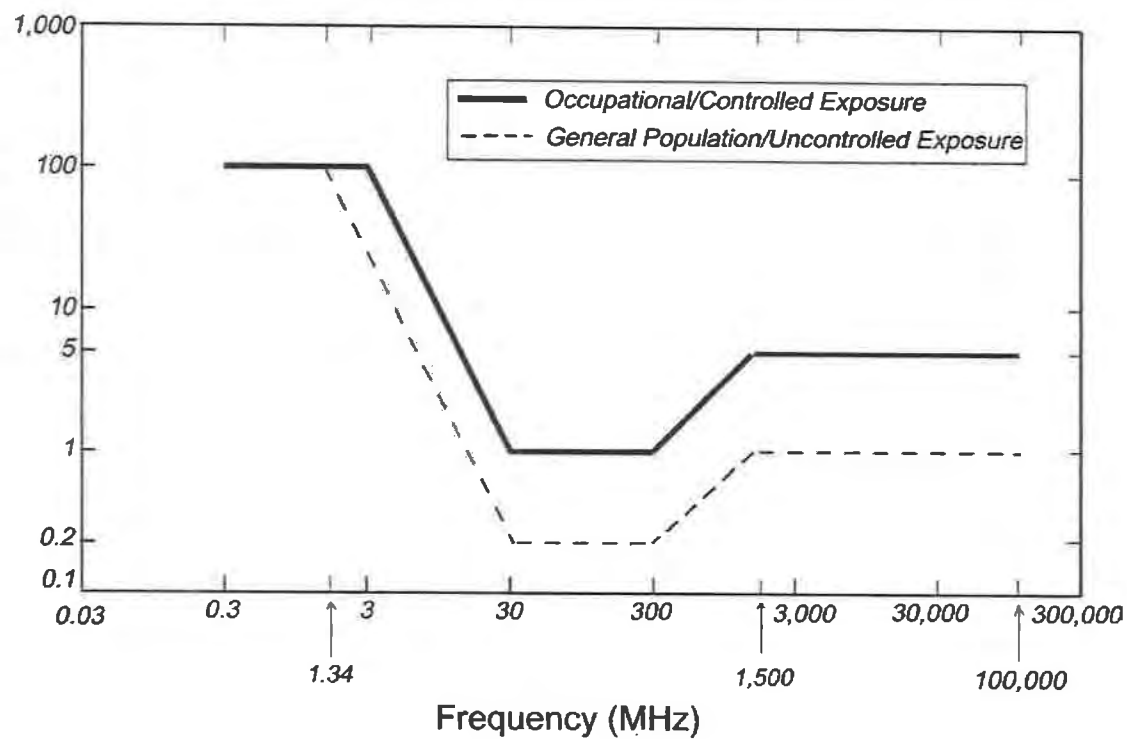
*Plane-wave equivalent power density

NOTE 1: *Occupational/controlled* limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: *General population/uncontrolled* exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

 6/5/19

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



MS 6/5/19



11 Mile New Tower (578) Radio Frequency (RF) Site Compliance Report



Mendenhall Valley, Juneau, AK, USA

Handwritten signature and date: 6/5/19



Radio Frequency Exposure Report

FCC Compliance Assessment

Site Specific Information			
Site Name	11 Mile New Tower (578)	Categorically Excluded?	No
Street Address	Mendenhall Valley		
City, State, Zip	Juneau, AK, USA	5% Contributor to Areas Requiring Mitigation?	No
Multi-Licensee Facility	N/A	GCI's Max % MPE (Predictive - Occupational)	0.00%
Structure Type	Tower	GCI's Max % MPE (Measured - Occupational)	N/A
Broadcast Equipment	No	Assessment Date	05/23/2019
# of Access Points		N/A	

Compliance Status	COMPLIANT AS DESIGNED
-------------------	-----------------------

☒	Worst-case RF power density levels are BELOW the MPE for General Population/Uncontrolled Environments in accessible areas.
☐	Worst-case RF power density levels are ABOVE the MPE for General Population/Uncontrolled Environments but BELOW the MPE for Occupational/Controlled environments.
☐	Worst-case RF power density levels are ABOVE the MPE for Occupational/Controlled Environments but BELOW 10x the MPE for Occupational/Controlled environments.
☐	Worst-case RF power density levels are ABOVE 10x the MPE for Occupational/Controlled environments.

Compliance Requirements	Guidelines	Notice	Caution	Warning	NOC Information	Barrier/Marker
Access Point	☒ [1]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

Additional Compliance Requirements(s):			
Consultant Legal Name	GCB Services	Phone/Fax	(703) 564-2297
Address	8201 Greensboro Drive, Suite 300, McLean, VA 22102		

[Handwritten signature]
6/5/19

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6/5/19

1. Summary

GCI has contracted with GCB Services, an independent consulting firm, to conduct a Radio Frequency Exposure Compliance Assessment of the **11 Mile New Tower (578)** cell site. This report contains a detailed summary of the Radio Frequency environment as it relates to Federal Communications Commission (FCC) and Occupational Safety & Health Administration (OSHA) Rules and Regulations for all individuals.

This compliance assessment and report has been **prepared** by:

Preparer	
Name	Bipin Kumar
Title	RF Associate
Date	05/23/2019

This report utilizes the following **for predictive modeling of the ambient RF environment**:

MPE Modeling Program: ROOFMASTER 10.0.3.20.15

Required Modeling Assumptions: 100% Duty Cycle and Maximum Total Power Output.

Additional Modeling Assumptions:

For this report, in the simulation we have shown the maximum RF energy density considering worst-case analysis by assuming that all antennas are operating at full power all times.

In OET-65, the Cylindrical Model is presented as an approach to determine the spatially averaged power density in the near field directly in front of an antenna. In order to implement this model in all directions, RoofMaster™ utilizes the antenna manufacturer horizontal pattern data. Additionally, RoofMaster™ incorporates factors that reduce the power density by the inverse square of horizontal and vertical distance beyond the near field region.

For areas on the rooftop where MPE levels are more than 20% occupational, reports shows location of signage and barriers around restricted areas. These restricted areas should not be entered without taking proper steps towards reducing carrier power or tuning the site down. Personal accessing these restricted areas should carry a personal RF monitor.

For unknown antennas on the rooftop, GCB will use generic antennas listed as "Unknown". We will use max output power to model the site. Operating frequency information for unknown antenna will be selected such as to get per max antenna gain.

2. Site Characteristics

a. Access information

No site visit was done. This report is for desktop study only.	
All access points locked at time of assessment?	N/A

b. Structure

Description	GCI antennas are installed at the height of 140' from ground level. This site has three sectors (ALPHA, BETA and GAMMA) are mounted on Azimuth 50°, 160 °and 315° respectively.
Site Latitude (NAD 83)	58.369692°
Site Longitude (NAD 83)	-134.610558°
Overall Structure Height	N/A


6/5/19

C. Antenna Inventory

Ant#	Carrier Name	Freq.(MHz)	ERP(Watts)	Manufacturer	Model	(ft) X	(ft) Y	(ft) Z	Gain(dbd)	Azimuth	HBW	Down tilt	Length(m)
1	GCI	CDMA 1967.5	784	Kathrein	80010891	14.3	14.2	140	15.35	50	63	0	1.99
1	GCI	UMTS 1952.5	567	Kathrein	80010891	14.3	14.2	140	15.35	50	63	0	1.99
1	GCI	LTE 2127.5	2100	Kathrein	80010891	14.3	14.2	140	15.35	50	62	0	1.99
1	GCI	LTE 885	1120	Kathrein	80010891	14.3	14.2	140	14.35	50	64	0	1.99
2	GCI	CDMA 1967.5	784	Kathrein	80010891	14.6	1	140	15.35	160	63	0	1.99
2	GCI	UMTS 1952.5	567	Kathrein	80010891	14.6	1	140	15.35	160	63	0	1.99
2	GCI	LTE 2127.5	2100	Kathrein	80010891	14.6	1	140	15.35	160	62	0	1.99
2	GCI	LTE 885	1120	Kathrein	80010891	14.6	1	140	14.35	160	64	0	1.99
3	GCI	CDMA 1967.5	784	Kathrein	80010891	0.1	8.2	140	15.35	315	63	0	1.99
3	GCI	UMTS 1952.5	567	Kathrein	80010891	0.1	8.2	140	15.35	315	63	0	1.99
3	GCI	LTE 2127.5	2100	Kathrein	80010891	0.1	8.2	140	15.35	315	62	0	1.99
3	GCI	LTE 885	1120	Kathrein	80010891	0.1	8.2	140	14.35	315	64	0	1.99

Ground level

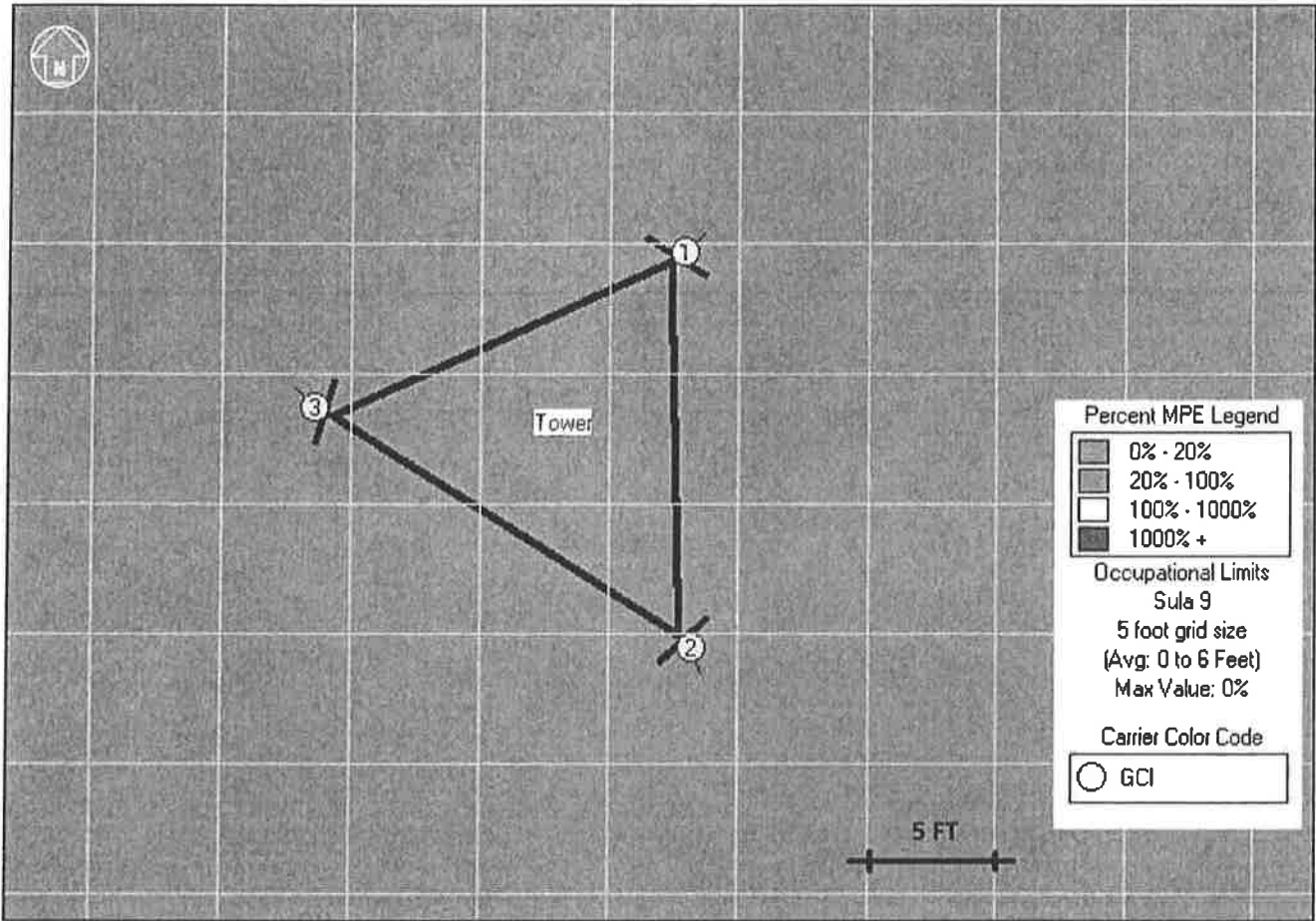
Z height = 140'

- a. The Centerline of the GCI antennas from ground level are 140'.

MS
6/5/19

3. Theoretical Study

a. Predictive Model: All Transmitters at Ground Level



[Handwritten signature]
6/6/19

4. Conclusion from theoretical analysis and field visit

a. Narrative

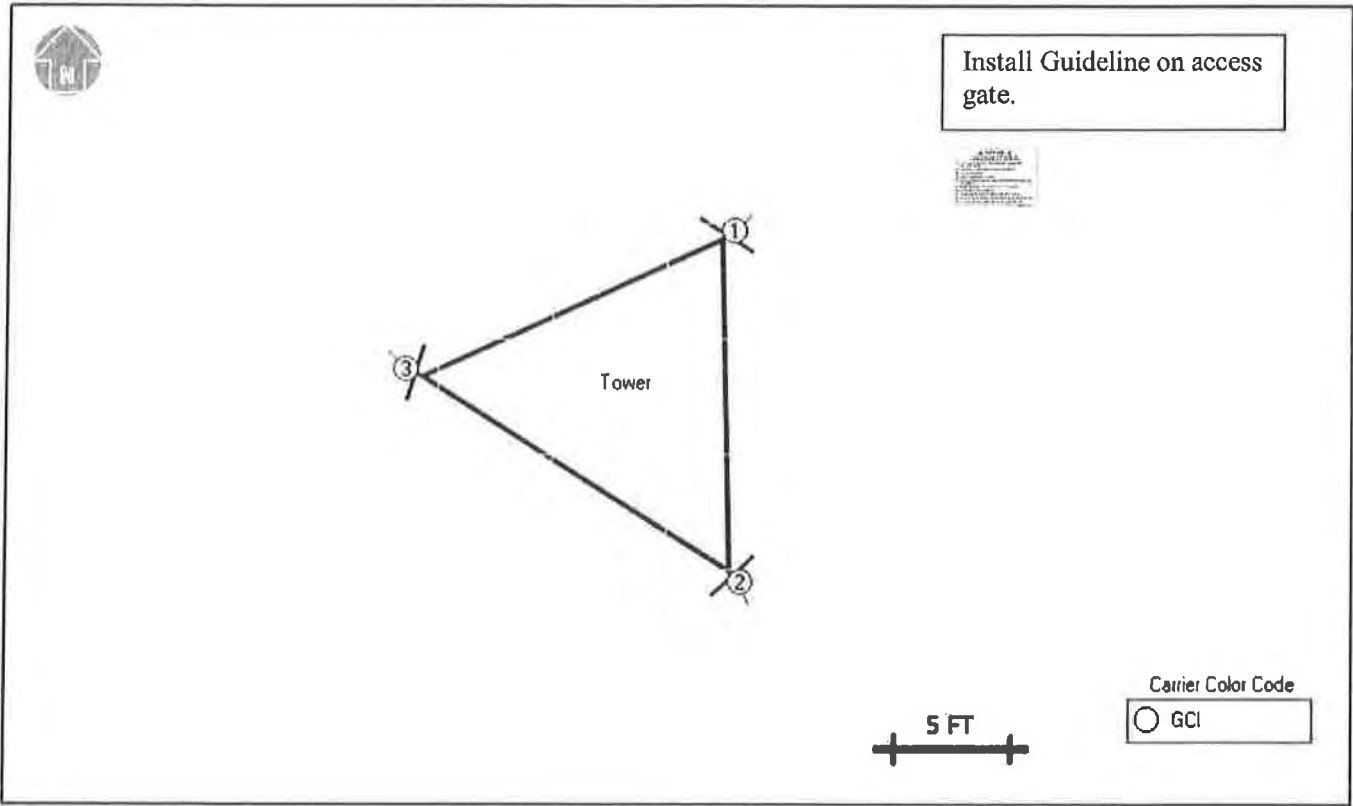
Description of MPE-Limit Exceeding Areas:

Ground Level

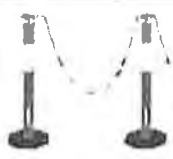
Simulation result based on the worst-case conditions for all existing antennas at this level show MPE 0.00% of the Occupational limits. No mitigation required.

 6/5/19

b. GCI Signage/Barrier Diagram



MS
6/5/19

GCI Signage Details						
	Guidelines	Notice	Caution	Warning	NOC Information	Barrier/Marker
Access Point	☒ [1]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

c. Signage/Barrier Installation Detail

Access

Install Guidelines signs on the access gate.

Sector Antennas

No Action required.

[Handwritten signature]
6/5/19

5. Appendix A: RF Consultant Certifications**a. Preparer Certification**

I, Bipin Kumar, the preparer of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the GCI Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

Bipin Kumar**b. Reviewer Certification**

I, Gyan Pandey, the reviewer and approved of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the GCI Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

Gyan Pandey

 6/5/19

6. Appendix B: Reference Information

a. FCC Rules & Regulations

The Federal Communications Commission (FCC) has established safety guidelines relating to RF exposure from cell sites. The FCC developed those standards, known as Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. The standards were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The FCC explains that its standards “incorporate prudent margins of safety.” The following represents explanations of the most applicable information:

Two Classifications for Exposure Limits

Occupational Applies to situations in which persons are “exposed as a consequence of their <i>employment</i> ” and are “ <i>fully aware</i> of the potential for exposure and can <i>exercise control</i> over their exposure”.	General Population Applies to situations in which persons are “exposed as a consequence of their employment <i>may not be made fully aware</i> of the potential for exposure or <i>cannot exercise control</i> over their exposure”. Generally speaking, those without significant and documented RF Safety & Awareness training would be in the General Population classification.
--	--

Environment Classification

Controlled – Applies to environments that are restricted or “controlled” in order to prevent access from members of the General Population classification.	Uncontrolled – Applies to environments that are unrestricted or “uncontrolled” that allow access from members of the General Population classification.
---	--

<i>Limits for Occupational/Controlled Exposure</i>		
Frequency	Power Density	Averaging Time
Range	(S)	$ E ^2$, $ H ^2$, or S
(MHz)	(mW/cm ²)	(minutes)
300-1500	$f/300$	6
1500-100,000	5	6
<i>Limits for General Population/Uncontrolled Exposure</i>		
Frequency	Power Density	Averaging Time
Range	(S)	$ E ^2$, $ H ^2$, or S
(MHz)	(mW/cm ²)	(minutes)
300-1500	$f/1500$	30
1500-100,000	1	30
<i>f = frequency in MHz</i>		

Significant Contribution to the RF Environment

Any carrier contributing an aggregate MPE percentage of 5 or more (to the applicable RF Environment Classification) is defined as a significant contributor. This means that if any area is determined to be out of compliance with FCC rules, all significant contributors are jointly responsible for correcting any deficiencies.

b. Occupational Safety and Health Administration (OSHA) Requirements

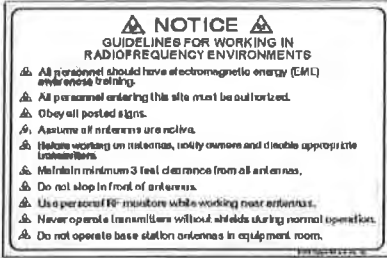
A formal adopter of FCC Standards, OSHA stipulates that those in the Occupational classification must complete training in the following: RF Safety, RF Awareness, and Utilization of Personal Protective Equipment. OSHA also provides options for Hazard Prevention and Control:

Hazard Prevention	Control
- Utilization of good equipment - Enact control of hazard areas - Limit exposures - Employ medical surveillance and accident response	- Employ Lockout/Tag out - Utilize personal alarms & protective clothing - Prevent access to hazardous locations - Develop or operate an administrative control program

Handwritten signature and date:
6/5/19

c. RF Signage

Areas or portions of any transmitter site may be susceptible to high power densities that could cause personnel exposures in excess of the FCC guidelines. These areas must be demarcated by conspicuously posted signage that identifies the potential exposure. Signage MUST be viewable regardless of the viewer's position.

GUIDELINES	NOTICE	CAUTION	WARNING
This sign will inform anyone of the basic precautions to follow when entering an area with transmitting radiofrequency equipment.	This sign indicates that RF emissions may exceed the FCC General Population MPE limit.	This sign indicates that RF emissions may exceed the FCC Occupational MPE limit.	This sign indicates that RF emissions may exceed at least 10x the FCC Occupational MPE limit.
			

INFORMATION SIGN	
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the GCI Wireless Network Operations Center phone number.	

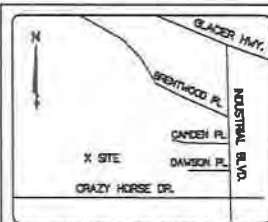
d. Physical Barriers

Physical barriers are control measures that require awareness and participation of personnel. Physical barriers are employed as an additional administration control to complement RF signage and physically demarcate an area in which RF exposure levels may exceed the FCC General Population limit.

e. Indicative Markers

Indicative markers are visible control measures that require awareness and participation of personnel, as they cannot physically prevent someone from entering an area of potential concern. Indicative markers are employed as an additional administration control to complement RF signage and visually demarcate an area in which RF exposure levels may exceed the FCC General Population limit. Example:

[Handwritten signature]
6/5/19

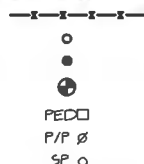


VICINITY MAP NOT TO SCALE

LEGEND:

MEASURED DATA
RECORD DATA
PROPERTY BOUNDARY LINES
ADJACENT PROPERTY LINES
CENTERLINE
FENCE AS NOTED
RECOVERED 5/8" REBAR
SET 5/8" REBAR (LS 9106)
RECOVERED MONUMENT
UTILITY PEDESTAL
POWER POLE
SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)



NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'

FAA 1-A TOWER LOCATION INFORMATION: PROPOSED 150'± SELF SUPPORT TOWER

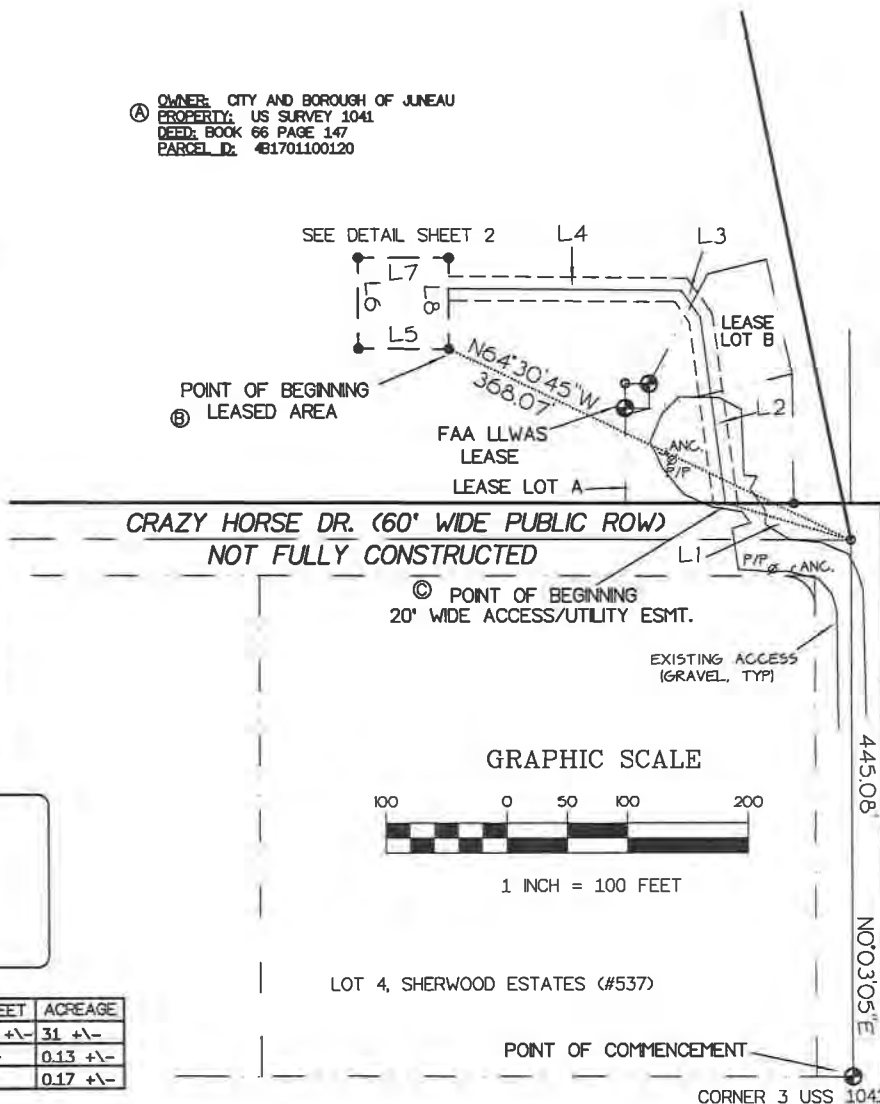
NAD 83
LATITUDE = 58°22'01.135" N ± 20"
LONGITUDE = 154°36'38.975" W ± 20"

GROUND ELEVATION AT BASE OF TOWER = 24' ± 3' NAVD83
HEIGHT OF TOP OF TOWER ABOVE GROUND = 174'±3'

	AREA TABLE	SQUARE FEET	ACREAGE
(A)	PARENT PARCEL	1,350,360 ±	31 ±
(B)	LEASED AREA	5,625 ±	0.13 ±
(C)	NON-EXCLUSIVE ACCESS & UTILITY ESMT.	7,514 ±	0.17 ±

SITE OVERVIEW: (1"=100')

(A) OWNER: CITY AND BOROUGH OF JUNEAU
PROPERTY: US SURVEY 1041
DEED: BOOK 66 PAGE 147
PARCEL ID: 481701100120



SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

SURVEYOR'S NOTES

1. BASIS OF BEARING IS PER RECORD PLAT OF US SURVEY NO. 1041.
2. NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED EVIDENCE ONLY.
3. ALL VISIBLE TOWER EQUIPMENT AND IMPROVEMENTS ARE CONTAINED WITHIN THE DESCRIBED AREA.
4. SURVEY COMPLETED IN FEBRUARY 2019.
5. THIS SURVEY DOES NOT REPRESENT A SURVEY OF THE PARENT PARCEL. REAL PROPERTY SHOWN HEREON ARE APPLICABLE TO THE TELECOMMUNICATIONS SITE, THERE MAY BE OTHER IMPROVEMENTS NOT SHOWN.
6. NO TITLE REPORT PROVIDED FOR THIS PROJECT.

ZONING: PER CITY AND BOROUGH OF JUNEAU ASSESSOR'S DATA, PROPERTY IS ZONED AS INDUSTRIAL.

FLOOD NOTE: THIS PARCEL LIES WITHIN FLOOD ZONE X, PER FEMA MAP NUMBER 0210C15260, WITH AN EFFECTIVE DATE OF AUGUST 19, 2013.

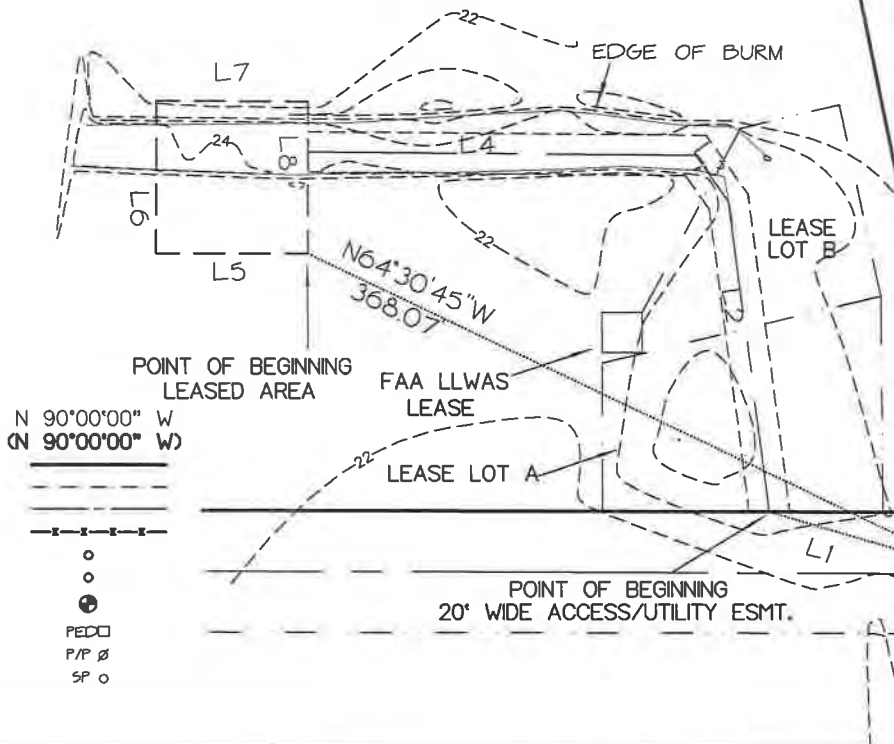


ACUTEK GEOMATICS, LLC
TERRY L. NICODEMUS, PLS
LAND SURVEYOR, ALASKA #9106-S
Date: 3/4/2019

CENTERLINE SOLUTIONS	
SITE NAME: AK 11 MILE	
ADDRESS: 10020 CRAZY HORSE DR.	
JUNEAU, ALASKA 99801	
CITY AND BOROUGH OF JUNEAU	
SURVEY WORK PERFORMED BY:	
ACUTEK	
GEOMATICS LLC	
5099 E. BLUE LUPINE DR #104, WASILLA AK 99654	
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM	
DRAWN BY: TENDRA	CHECKED BY: TERRY
JOB #: 19-08.02	
SHEET 1 OF 2	



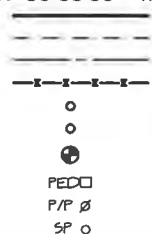
SITE DETAIL:
(1"=60')



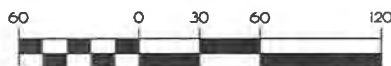
LEGEND:

MEASURED DATA
RECORD DATA
PROPERTY BOUNDARY LINES
ADJACENT PROPERTY LINES
CENTERLINE
FENCE AS NOTED
RECOVERED 5/8" REDAR
SET 5/8" REDAR (LS 9106)
RECOVERED MONUMENT
UTILITY PEDESTAL
POWER POLE
SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)



GRAPHIC SCALE



1 INCH = 60 FEET

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'

LEGAL DESCRIPTION: (PARENT PARCEL)

REMAINDER OF US SURVEY NO. 1041 AS DESCRIBED
IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU
RECORDING DISTRICT, STATE OF ALASKA.

SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

LEGAL DESCRIPTION: (LEASED AREA)

A FIVE THOUSAND SIX HUNDRED TWENTY-FIVE (5625) SQUARE FOOT LEASED AREA, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID LEASE AREA IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 64°30'45" W A DISTANCE OF 368.07 FEET TO A POINT, THE TRUE POINT OF BEGINNING;

THENCE N 89°54'01" W A DISTANCE OF 75.00 FEET TO A POINT, THENCE N 00°05'59" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 89°54'01" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 00°05'59" W A DISTANCE OF 75.00 FEET TO A POINT, THE TRUE POINT OF BEGINNING.

CONTAINING 5625 SQUARE FEET, MORE OR LESS. (0.13 ACRES)

LEGAL DESCRIPTION: (NON-EXCLUSIVE ACCESS & UTILITY EASEMENT)

A SEVEN THOUSAND FIVE HUNDRED FOURTEEN (7514) SQUARE FOOT NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT, TWENTY (20) FEET WIDE, TEN (10) FEET EACH SIDE OF THE CENTERLINE, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID CENTERLINE IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 73°37'48" W A DISTANCE OF 108.03 FEET TO A POINT ON THE NORTH BOUNDARY OF THE CRAZY HORSE RIGHT-OF-WAY, THE TRUE POINT OF BEGINNING;

THENCE N 07°16'40" W A DISTANCE OF 154.99 FEET TO A POINT, THENCE N 35°28'31" W A DISTANCE OF 28.22 FEET TO A POINT, THENCE N 89°37'43" W A DISTANCE OF 192.50 FEET TO A POINT ON THE EAST BOUNDARY OF THE LEASED AREA, THE POINT OF TERMINUS.

CONTAINING 7514 SQUARE FEET, MORE OR LESS. (0.17 ACRES)

CENTERLINE SOLUTIONS

SITE NAME: AK 11 MILE
ADDRESS: 10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU

SURVEY WORK PERFORMED BY:

ACUTEK
GEOMATICS LLC

5099 E. BLUE LUPINE DR. #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM

DRAWN BY: TENDRA **CHECKED BY:** TERRY **JOB #:** 19-08.02

SHEET 2 OF 2



AK 11 MILE

Visualization Report

CONTACT

Centerline Solutions
Jay Rasmusson
Construction Manager
360-250-4265

Address:
2305 46th Ave NE,
Olympia, WA 98506

Email:
jrasmusson@centerlinesolutions.com

Balloon Test – Proposed 150' Self Support Telecommunications Tower

AK 11-Mile
10020 Crazy Horse Dr
Juneau, AK 99801

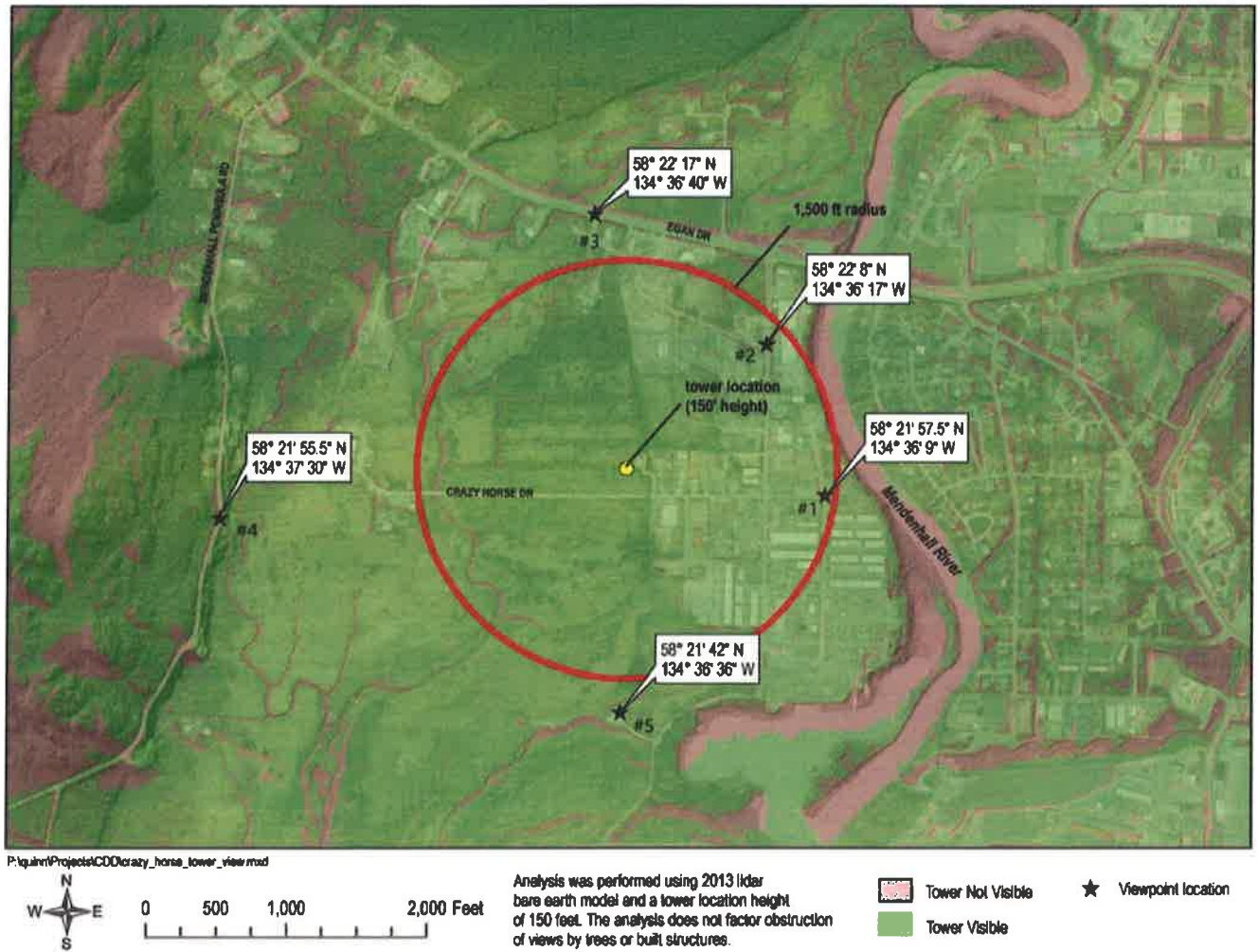
The CBJ was notified of the scheduled balloon test on Friday March 21st, 2019. A reminder email was sent on April 8th. The test was scheduled Saturday April 13th, and continue through the following Tuesday, April 16th to meet the 72 hr. requirement of one (1) full day of the 72 hours being on a Saturday or Sunday. The test was completed during this time.

Balloon Test Overview:

- Balloon #1 & #2 were made of latex. They were both 36" diameter and filled with helium and were bright orange in color.
- Both balloons were anchored to the ground with nylon twine at the survey staked, tower location.
- The line used, was measured out to 160' (although the tower is a proposed 150') – due to potential line sag an extra 10' was added to the overall required length.
- Balloon #1 was sent aloft at 9:30am Saturday, April 13th with cloudy skies and 8 mph winds.
- Balloon #1 stayed aloft until Sunday evening at, 8 pm (almost dark) when heavy rain and hail appeared, and it popped. The local businesses were closed, and a replacement Balloon #2 was sent aloft at 8am Monday Morning as soon as helium was available.
- Balloon #2 stayed aloft the duration of the test with light winds through Tuesday, April 16th at 5pm, when the balloon was pulled down.
- The CJB provided documentation to provide photos from five (5) locations within 1,500' of the test site. These photos were obtained, and documented the morning of Saturday, April 13th with winds gusting 4-8mph. Winds continued through the test period and were never less than this.

VIEWPOINTS

Location Map provided by the CBJ and photographs were obtained from each of the locations provided.



BALLOON AND ANCHOR LOCATION

A 36" diameter, helium filled, latex balloon was utilized for the testing. The survey stake is the proposed tower location at the site.



AK 11-Mile – Visualization Report 4.18.19

Attachment A - Application Packet

BALLOON ALOFT AT ANCHOR POINT

View of the balloon from ground level.



AK 11-Mile – Visualization Report 4.18.19

VIEWPOINT #1 – INTERSECTION OF BRANDY LN & CRAZY HORSE DR

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

In this photo, you can see the balloon to the right of the adjacent, existing FAA tower.



VIEWPOINT #2 – INTERSECTION OF INDUSTRIAL BLVD & BENTWOOD PL

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

In this photo, you can see the balloon just above roof line of the buildings in the foreground.



VIEWPOINT #3 – INTERSECTION OF GLACIER HWY & JENSINE ST.

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

You cannot see the balloon from this location due to the dense tree cover.



VIEWPOINT #4 – 2331 ENGINEERS CUTOFF RD

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

In this photo, you can see the balloon you can see the balloon just to the left of the existing FAA tower.



VIEWPOINT #5 – MENDENHALL GOLF COURSE PARKING LOT

Lat & Long provided by the CBJ, accuracy being +/- 30' to the exact location provided.

You cannot see the balloon from this location due to the dense tree cover.

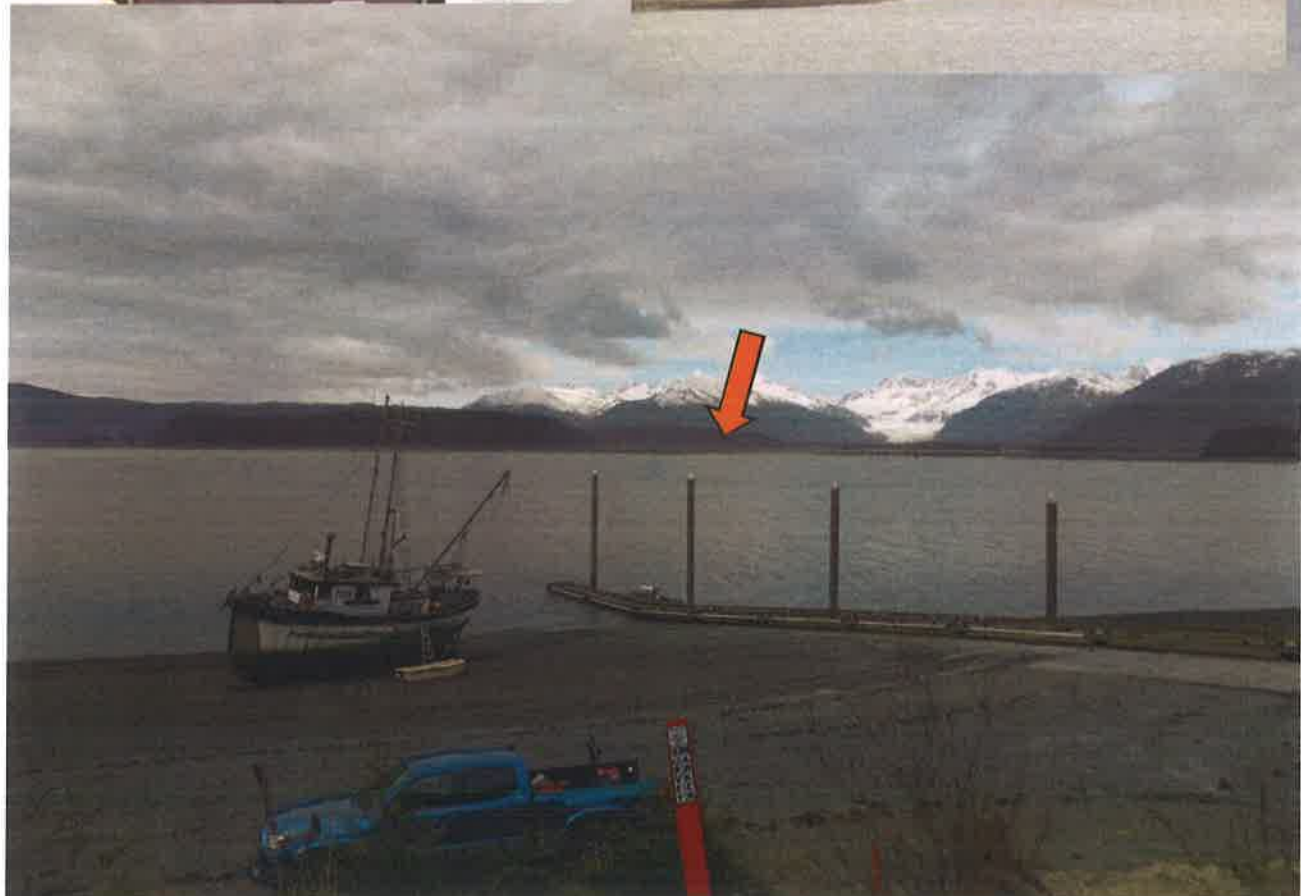


AK 11-Mile – Visualization Report 4.18.19

Attachment A - Application Packet

VIEWPOINT #6 – DOUGLAS ISLAND LAUNCH

Although outside the required 1500' radius the CBJ suggested a photo of a location found outside the 1,500' radius that the balloon was visible. This location is located approximately 3 miles away on Douglas Island at the boat launch directly across the water from the proposed site. From this location you can see the balloon, and several existing communication towers.



Certificate of AM Regulatory Compliance

Site Name US-AK-5244 11 Mile

Location N58-22-01.13 W134-36-38.97

Client BRT Group, LLC

Certification Date 4/10/2019

According to the Federal Communications Commission (FCC) Rules and Regulations,

"§1 Subpart AA. Disturbance of AM broadcast station antenna patterns
Part §1.30000 Purpose.

This rule protects the operations of AM broadcast stations from nearby tower construction that may distort the AM antenna patterns. All parties holding or applying for Commission authorizations that propose to construct or make a significant modification to an antenna tower or support structure in the immediate vicinity of an AM antenna, or propose to install an antenna on an AM tower, are responsible for completing the analysis and notice process described in this subpart, and for taking any measures necessary to correct disturbances of the AM radiation pattern, if such disturbances occur as a result of the tower construction or modification or as a result of the installation of an antenna on an AM tower. In the event these processes are not completed before an antenna structure is constructed, any holder of or applicant for a Commission authorization is responsible for completing these processes before locating or proposing to locate an antenna on the structure, as described in this subpart.

Part §1.30002 Tower construction or modification near AM stations.

(a) Construction near a nondirectional AM station. Proponents of construction or significant modification of a tower which is within one wavelength of a nondirectional AM station, and is taller than 60 electrical degrees at the AM frequency, must notify the AM station at least 30 days in advance of the commencement of construction. The proponent shall examine the potential impact of the construction or modification as described in paragraph (c). If the construction or modification would distort the radiation pattern by more than 2 dB, the proponent shall be responsible for the installation and maintenance of any detuning apparatus necessary to restore proper operation of the nondirectional antenna.

(b) Construction near a directional AM station. Proponents of construction or significant modification of a tower which is within the lesser of 10 wavelengths or 3 kilometers of a directional AM station, and is taller than 36 electrical degrees at the AM frequency, must notify the AM station at least 30 days in advance of the commencement of construction. The proponent shall examine the potential impact of the construction or modification as described in paragraph (c). If the construction or modification would result in radiation in excess of the AM station's licensed standard pattern or augmented standard pattern values, the proponent shall be responsible for the installation and maintenance of any detuning apparatus necessary to restore proper operation of the directional antenna."

This certificate verifies that the site at the above coordinates has been screened out to 3.2 km for directional antenna AM stations and 1.2 km distance for non-directional antenna AM stations and found to have no AM broadcast stations currently licensed to operate within those distances. Current FCC rules coordination distances are less as calculated in the above FCC rule §1.30002 adopted February 2014. Structure height is also considered in the current FCC rules. No further AM coordination actions are warranted at this time.



8618 Westwood Center Drive, Suite 315
Vienna, VA 22182
703-276-1100
www.sitesafe.com
©2019 Site Safe, LLC.

```

*****
*                               Federal Airways & Airspace
*
*                               Summary Report: New Construction
*
*                               Antenna Structure
*
*****

```

```

                                Airspace User: Dawn Keniley

                                File: USAK5244

                                Location: Juneau, AK

                                Latitude: 58°-22'-01.13"      Longitude:
134°-36'-38.97"

                                SITE ELEVATION AMSL.....24 ft.
                                STRUCTURE HEIGHT.....150 ft.
                                OVERALL HEIGHT AMSL.....174 ft.
                                SURVEY HEIGHT AMSL.....174 ft.

```

NOTICE CRITERIA

```

    FAR 77.9(a): NNR (DNE 200 ft AGL)
    FAR 77.9(b): NR  (Exceeds Notice Slope, Maximum: 62 ft.)
    FAR 77.9(c): NNR (Not a Traverse Way)
    FAR 77.9:   NR  Exceeds JNU Proposed Rwy 08P, TERPS
analysis required.
    FAR 77.9(d): NNR (Off Airport Construction)

```

```

    NR  = Notice Required
    NNR = Notice Not Required
    PNR = Possible Notice Required (depends upon actual IFR
procedure)

```

For new construction review Air Navigation
Facilities at bottom
of this report.

Notice to the FAA is required because height exceeds
Notice Slope criteria.
Notice is required. Height exceeds FAA IFR straight-in
screening criteria.
The maximum height to avoid notice is: 20 ft AMSL.

OBSTRUCTION STANDARDS

```

    FAR 77.17(a)(1): DNE 499 ft AGL
    FAR 77.17(a)(2): DNE - Airport Surface
    FAR 77.19(a):   DNE - Horizontal Surface
    FAR 77.19(b):   DNE - Conical Surface

```

FAR 77.19(c): DNE - Primary Surface
 FAR 77.19(d): DNE - Approach Surface
 FAR 77.19(e): DNE - Approach Transitional Surface
 FAR 77.19(e): DNE - Abeam Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: JNU: JUNEAU INTL

Type: A RD: 4174.986 RE: 20.6

FAR 77.17(a)(1): DNE

FAR 77.17(a)(2): DNE - Height No Greater Than 200 feet AGL.

VFR Horizontal Surface: DNE

VFR Conical Surface: DNE

VFR Primary Surface: DNE

VFR Approach Surface: DNE

VFR Transitional Surface: DNE

The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area.

Structures exceeding the greater of 350' AAE, 77.17(a)(2), or VFR horizontal

and conical surfaces will receive a hazard determination from the FAA.

Maximum AMSL of Climb/Descent Area is 375 feet.

VFR TRAFFIC PATTERN AIRSPACE FOR: 5Z1: JUNEAU HARBOR

Type: S RD: 45916.54 RE: 0

FAR 77.17(a)(1): DNE

FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.

VFR Horizontal Surface: DNE

VFR Conical Surface: DNE

VFR Primary Surface: DNE

VFR Approach Surface: DNE

VFR Transitional Surface: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.17(a)(3) Departure Surface Criteria (40:1)

The Maximum Height Permitted is 124 ft AMSL

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)

FAR 77.17(a)(4): DNE - No Airway Found

PRIVATE LANDING FACILITIES

FACIL	BEARING	RANGE
DELTA ARP FAA	To FACIL	IN NM
IDENT TYP NAME		
ELEVATION IFR		

+149	18AK HEL NORTH DOUGLAS	120.19 4.16
------	------------------------	-------------

No Impact to Private Landing Facility
 Structure is beyond notice limit by 20277 feet.

5.13 AA44 HEL BARLETT REGIONAL HOSPITAL 116.78
 -122
 No Impact to Private Landing Facility
 Structure 122 ft below heliport.

+24 AK94 HEL ALASCOM/COASTAL LENA POINT 285.38 5.43
 No Impact to Private Landing Facility
 Structure is beyond notice limit by 27993 feet.

AIR NAVIGATION ELECTRONIC FACILITIES

GRND	FAC	ST	DIST	DELTA	ANGLE	IDNT	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST	LOCATION
APCH					BEAR									
	JDL					LOCALIZER	I	109.9	238.73	5699	+9	AK	RWY	08
JUNEAU	INT	.09	71											
	CGL	NDB					R	21	260.6	17248	+116	AK	COGHLAN	
ISLAND		.39												
	SSR	VORTAC					R	114.0	240.71	142671	+134	AK	SISTERS	
ISLAND		.05												

CFR Title 47, §1.30000-§1.30004
 AM STUDY NOT REQUIRED: Structure is not near a FCC
 licensed AM station.
 Movement Method Proof as specified in §73.151(c) is not
 required.
 Please review 'AM Station Report' for details.

Nearest AM Station: KJNO @ 9087 meters.

Airspace® Summary Version 19.3.529

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 Airways & Airspace®
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04-10-2019
 17:28:19

FAA 1-A Accuracy Certification

Date of Survey: February 2019

Market: Alaska

Site Address:

10020 Crazy Horse Dr.
Juneau, Alaska 99801

Site Name: AK 11 Mile

Project #: 19-08.02

Proposed Structure Type: Self Support Tower

Surveyed Latitude (NAD 83)

N 58°22'01.135"

Surveyed Longitude (NAD 83)

W 134°36'38.975"

Ground Elevation: (NAVD 1988)

24'

Proposed Tower Height:

150'

Overall Tower Height (NAVD 1988)

174.0

Certification: I certify that the latitude and longitude are accurate to within +/- 20 feet horizontally, and that the ground elevation is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are expressed in degrees, minutes, and seconds to the nearest hundredth of a second. The vertical datum (height) is expressed in terms of feet.

Company: Acutek Geomatics
5099 E. Blue Lupine Dr., Ste. 104
Wasilla, Alaska 99654
907-376-8800

3/4/2019





US-AK-5244 - 11 MILE

10020 CRAZY HORSE DR
JUNEAU, AK 99801

ZONING DRAWINGS



PROJECT SUMMARY

THIS PROJECT INCLUDES THE FOLLOWING SCOPE OF WORK:

CONSTRUCTION OF A NEW TELECOMMUNICATION AND PUBLIC UTILITY FACILITY CONSISTING OF A NEW 150'-0" MONOPOLE, CARRIER EQUIPMENT AND A UTILITY BACKBOARD INSIDE A NEW 60'x60' FENCED COMPOUND WITHIN A 75'x75' LEASE AREA. (NO WATER OR SEWER IS REQUIRED.)

GOVERNING CODES

GOVERNING CODES

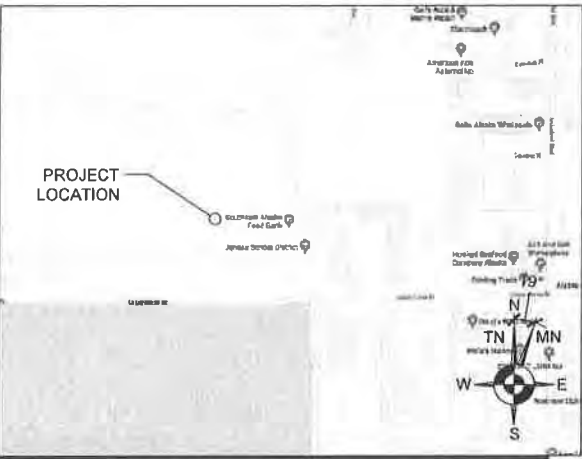
IBC-2015, INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS

NEC-2014, NATIONAL ELECTRICAL CODE

A.D.A. COMPLIANCE

INSTALLATION IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED PER A.D.A.

PROJECT VICINITY MAP



DRIVING DIRECTIONS

FROM JUNEAU INTERNATIONAL AIRPORT:

1. HEAD SOUTH ON SHELL SIMMONS DR TOWARD YANDUKIN DR (0.2 MI)
2. TURN LEFT ONTO YANDUKIN DR (0.2 MI)
3. TURN RIGHT ONTO SHELL SIMMONS DR (0.2 MI)
4. TURN LEFT ONTO GLACIER HWY (0.3 MI)
5. TURN LEFT TO STAY ON GLACIER HWY (0.7 MI)
6. TURN LEFT ONTO INDUSTRIAL BLVD (0.3 MI)
7. TURN RIGHT ONTO CRAZY HORSE DR; PARTIAL RESTRICTED ACCESS ROAD, DESTINATION ON THE RIGHT (0.2 MI)

ESTIMATED DISTANCE: 2.1 MILES
ESTIMATED TIME: 9 MIN

SITE INFORMATION

SITE NAME: 11 MILE
SITE ADDRESS: 10020 CRAZY HORSE DR
JUNEAU, AK 99801
LATITUDE: 58° 22' 01.135" N
LONGITUDE: 134° 36' 38.975" W
SOURCE: 1A CERTIFICATION
PARCEL NUMBER: 4B1701100120
ZONING CLASSIFICATION: I (INDUSTRIAL)
FLOOD ZONE: ZONE X
JURISDICTION: CITY AND BOROUGH OF JUNEAU
TOP OF (N) MONOPOLE: 150'
OVERALL HEIGHT: 155'
OCCUPANCY GROUP: U
CONSTRUCTION TYPE: II-B

PROJECT LOCATION MAP



UTILITY COMPANIES

POWER: ALASKA ELECTRIC LIGHT & POWER
5601 TONGSGARD CT, JUNEAU, AK 99801
TELCO/FIBER: TBD

PROJECT CONTACTS

APPLICANT
VERTICAL BRIDGE
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
ROBERT EVANS
PH: 425.652.5727
REVANS@VERTICALBRIDGE.COM

PROPERTY OWNER
CITY AND BOROUGH OF JUNEAU
155 S. SEWARD ST
JUNEAU, AK 99801

SURVEYOR
ACUTEK GEOMATICS LLC.
5099 E. BLUE LUPINE DR #104
WASILLA, AK 99654
PH: 907.376.8800

CONSTRUCTION MANAGEMENT
CENTERLINE SOLUTIONS
3322 SOUTH BAY RD
OLYMPIA, WA 98506
JAY RASMUSSEN
PH: 360.438.8002

ZONING AND PERMITTING CONSULTANT
ALASKA AERIAL SURVEY, LLC
6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
PH: 907.331.8311

SITE ACQUISITION CONSULTANT
ALASKA AERIAL SURVEY, LLC
6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
907.331.8311

ENGINEER OF RECORD
CENTERLINE SOLUTIONS
16360 TABLE MOUNTAIN PARKWAY
GOLDEN, CO 80403
CHRISTOPHER SCOTT, P.E., LEED AP
PH: 303.993.3293

DRAWING INDEX

SHEET	DESCRIPTION
T1.0	TITLE SHEET
SV-1	SURVEY
SV-2	SURVEY
A1.0	OVERALL SITE PLAN
A2.0	ENLARGED SITE PLAN
A3.0	ELEVATIONS

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERTICAL BRIDGE SERVICES IS STRICTLY PROHIBITED.



Know what's below.
Call before you dig.



NOT FOR CONSTRUCTION

CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION
0	03-11-19	TT/JR	90% ZD REVIEW

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	04-25-19	TT/JR	LU SUBMITTAL

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

SURVEY DETAILS

SHEET NO.

SV2.0

SITE PLAN

U.S. SURVEY NO 1041 - JUNEAU ALASKA

LEGAL DESCRIPTION: (LEASED AREA)

A FIVE THOUSAND SIX HUNDRED TWENTY-FIVE (5625) SQUARE FOOT LEASED AREA, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID LEASE AREA IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 64°30'45" W A DISTANCE OF 368.07 FEET TO A POINT, THE TRUE POINT OF BEGINNING;

THENCE N 89°54'01" W A DISTANCE OF 75.00 FEET TO A POINT,
THENCE N 00°05'59" E A DISTANCE OF 75.00 FEET TO A POINT,
THENCE S 89°54'01" E A DISTANCE OF 75.00 FEET TO A POINT,
THENCE S 00°05'59" W A DISTANCE OF 75.00 FEET TO A POINT, THE TRUE POINT OF BEGINNING.

CONTAINING 5625 SQUARE FEET, MORE OR LESS. (0.13 ACRES)

LEGAL DESCRIPTION: (NON-EXCLUSIVE ACCESS & UTILITY EASEMENT)

A SEVEN THOUSAND FIVE HUNDRED FOURTEEN (7514) SQUARE FOOT NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT, TWENTY (20) FEET WIDE, TEN (10) FEET EACH SIDE OF THE CENTERLINE, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID CENTERLINE IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 73°37'48" W A DISTANCE OF 108.03 FEET TO A POINT ON THE NORTH BOUNDARY OF THE CRAZY HORSE RIGHT-OF-WAY, THE TRUE POINT OF BEGINNING;

THENCE N 07°16'40" W A DISTANCE OF 154.99 FEET TO A POINT,
THENCE N 35°28'31" W A DISTANCE OF 28.22 FEET TO A POINT,
THENCE N 89°37'43" W A DISTANCE OF 192.50 FEET TO A POINT ON THE EAST BOUNDARY OF THE LEASED AREA, THE POINT OF TERMINUS.

CONTAINING 7514 SQUARE FEET, MORE OR LESS. (0.17 ACRES)

LEGAL DESCRIPTION: (PARENT PARCEL)

REMAINDER OF US SURVEY NO. 1041 AS DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA.

CENTERLINE SOLUTIONS

SITE NAME: AK 11 MILE
ADDRESS: 10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU

SURVEY WORK PERFORMED BY:



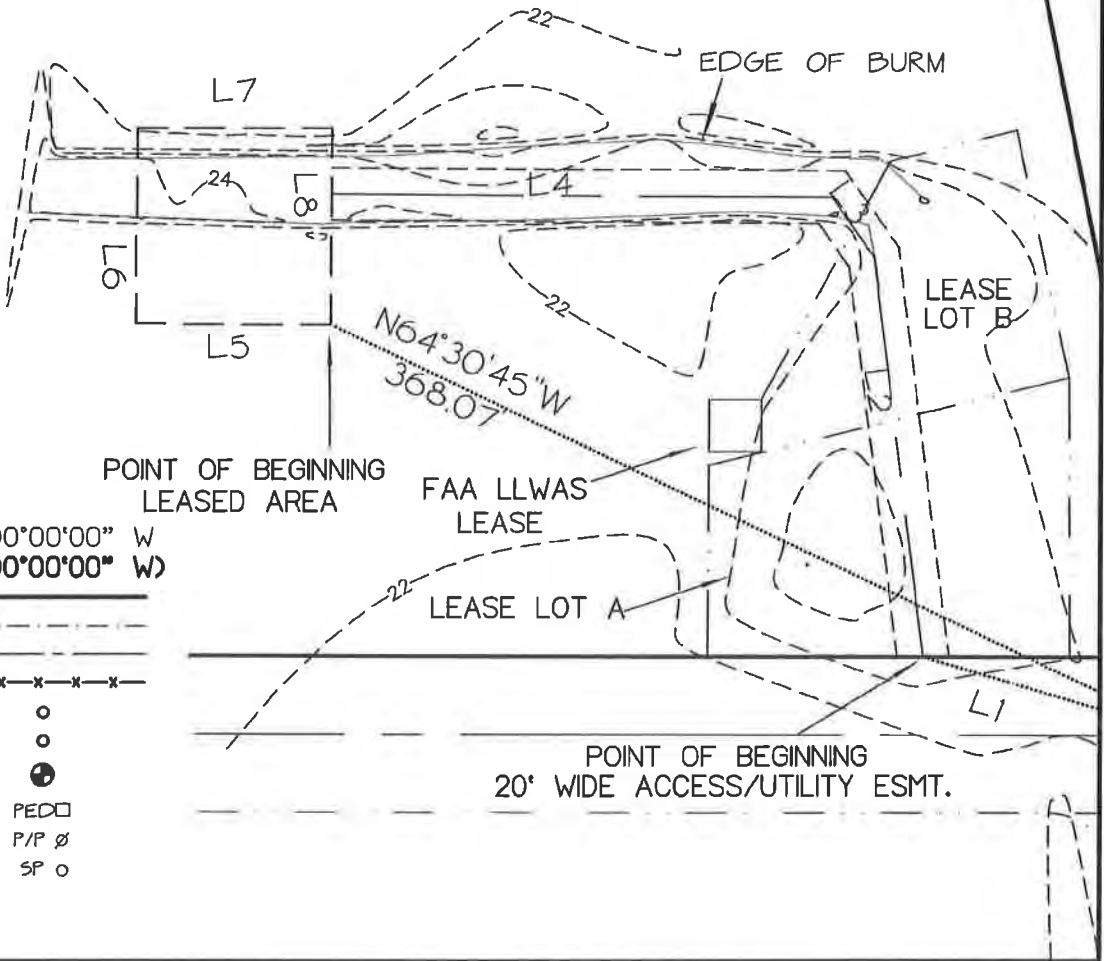
5099 E. BLUE LUPINE DR #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM

DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08.02

SHEET 2 OF 2



SITE DETAIL:
(1"=60')



LEGEND:

MEASURED DATA
RECORD DATA
PROPERTY BOUNDARY LINES
ADJACENT PROPERTY LINES
CENTERLINE
FENCE AS NOTED
RECOVERED 5/8" REBAR
SET 5/8" REBAR (LS 9106)
RECOVERED MONUMENT
UTILITY PEDESTAL
POWER POLE
SEPTIC PIPES

N 90°00'00" W
(N 90°00'00" W)

—x—x—x—x—

○

○

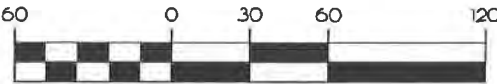
⊕

PED □

P/P ∅

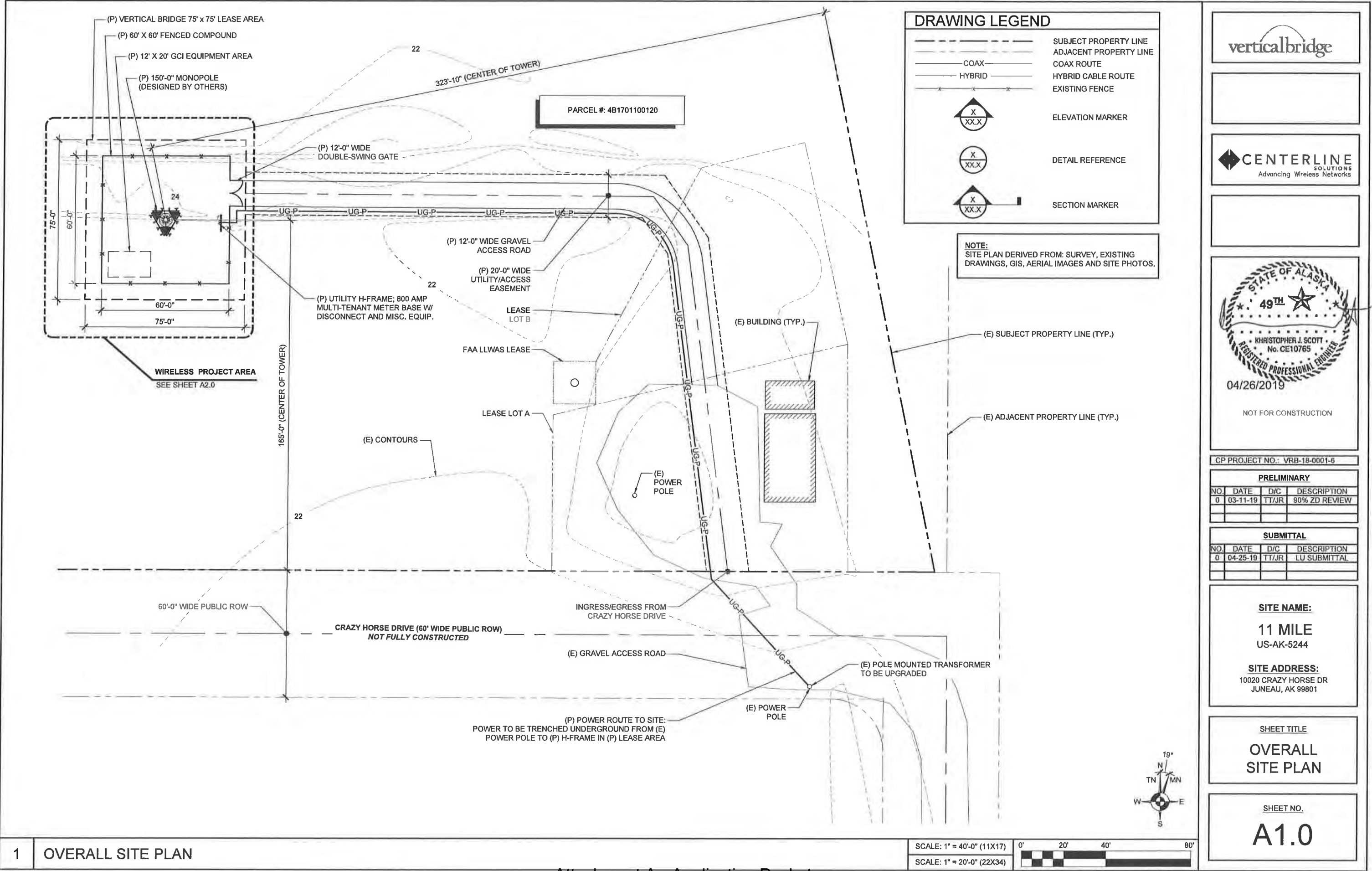
SP ○

GRAPHIC SCALE



1 INCH = 60 FEET

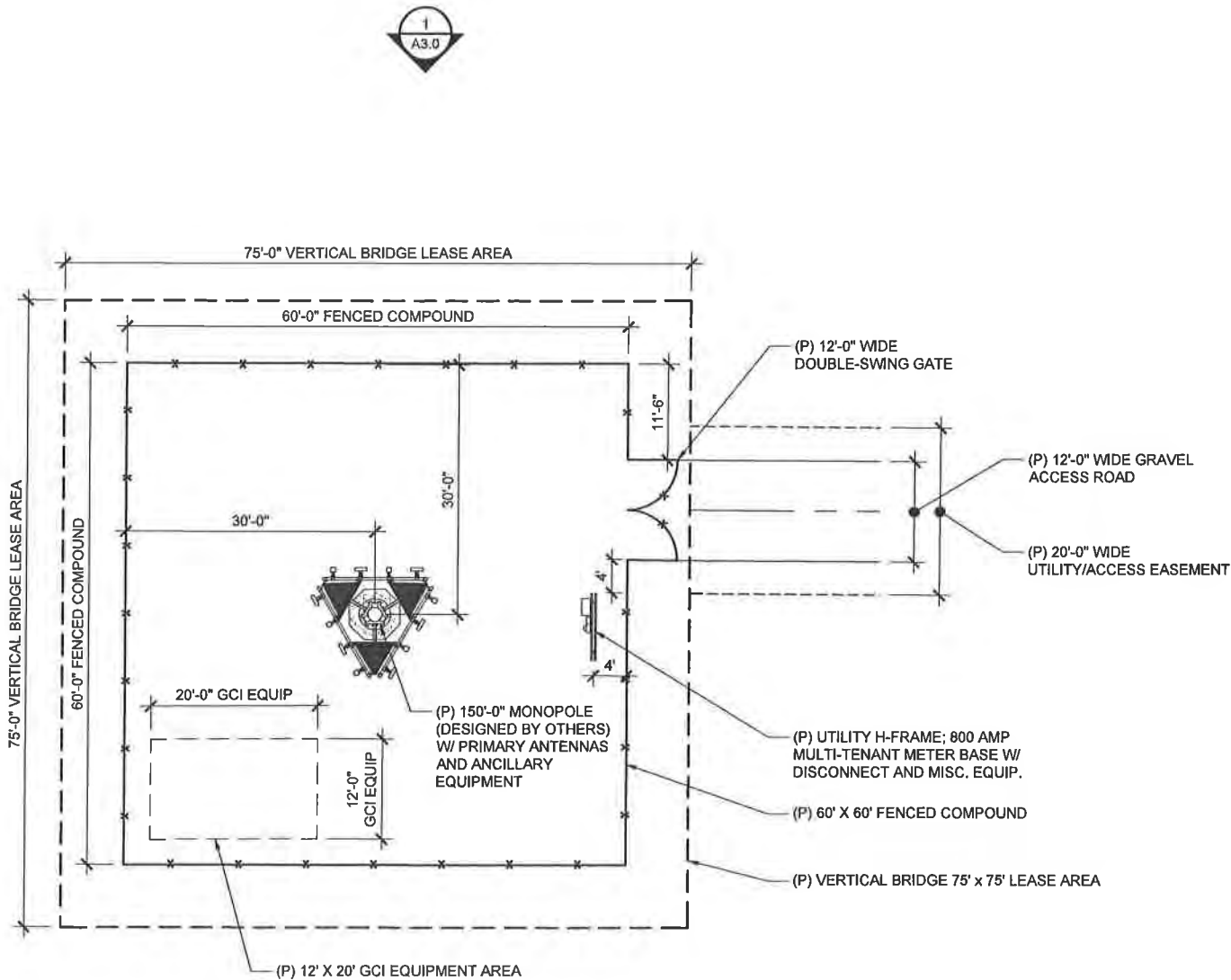
NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'



GENERAL NOTES:

1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5. CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

NOTE:
SITE PLAN DERIVED FROM: SURVEY (BY ACUTEK, DATED MARCH 2019)
EXISTING DRAWINGS, GIS, AERIAL IMAGES AND SITE PHOTOS.



NOT FOR CONSTRUCTION

CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION
0	03-11-19	TT/JR	90% ZD REVIEW

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	04-25-19	TT/JR	LU SUBMITTAL

SITE NAME:

11 MILE
US-AK-5244

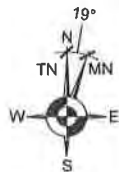
SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

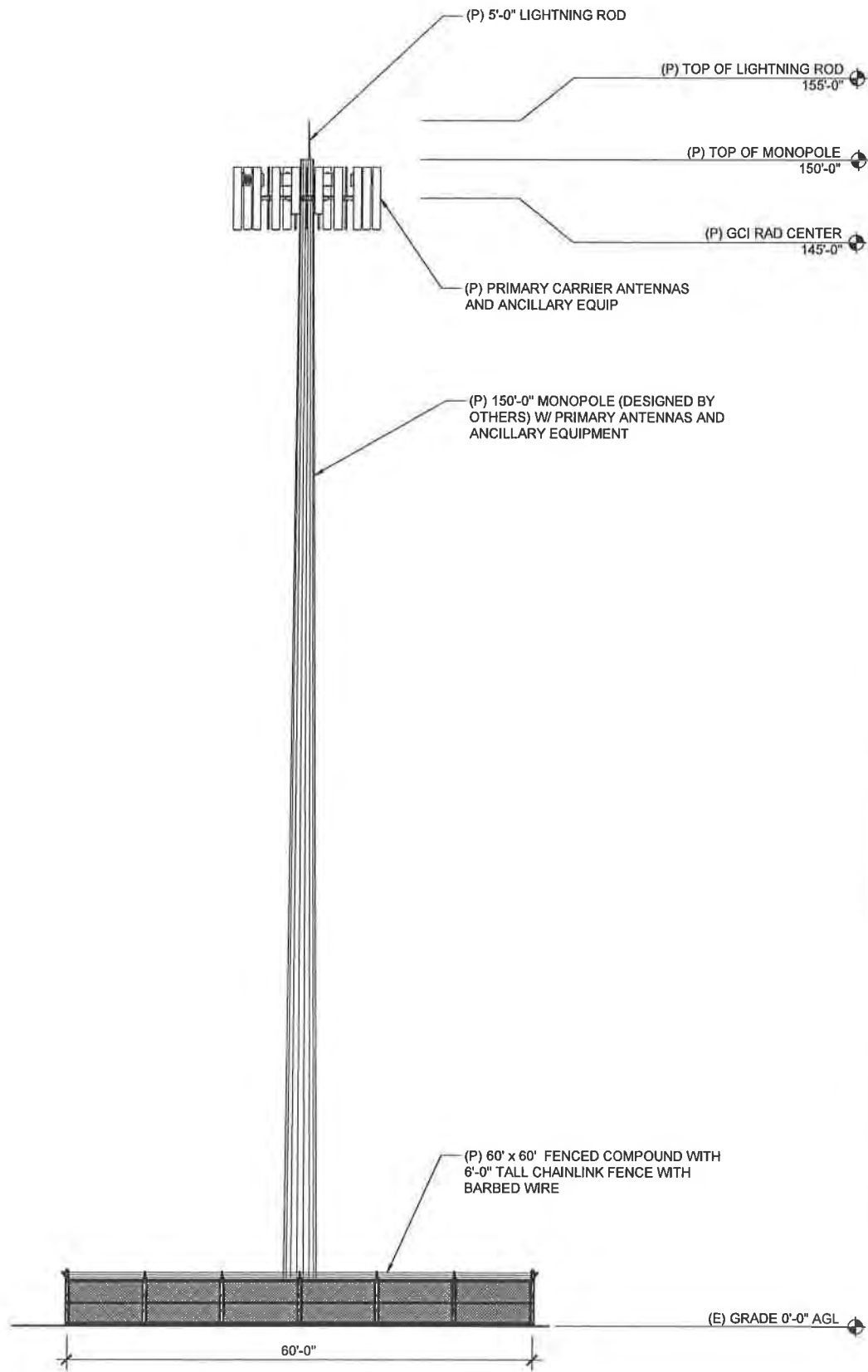
SHEET TITLE

ENLARGED
SITE PLAN

SHEET NO.

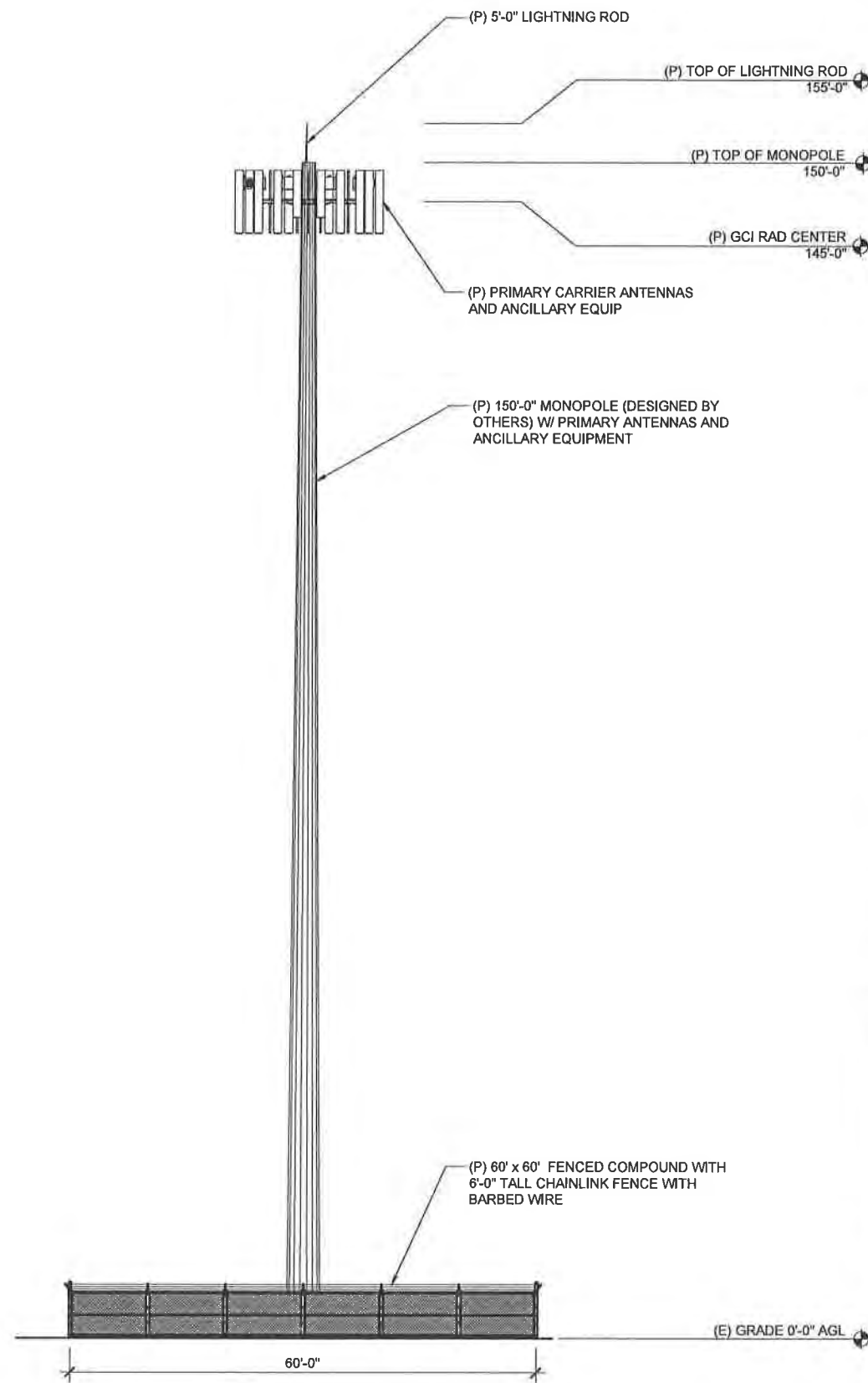
A2.0





1 NORTH ELEVATION

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)



2 WEST ELEVATION

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)



NOT FOR CONSTRUCTION

CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION
0	03-11-19	TT/JR	90% ZD REVIEW

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	04-25-19	TT/JR	LU SUBMITTAL

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

ELEVATIONS

SHEET NO.

A3.0



US-AK-5244 - 11 MILE

10020 CRAZY HORSE DR
JUNEAU, AK 99801

CONSTRUCTION DRAWINGS



PROJECT SUMMARY

THIS PROJECT INCLUDES THE FOLLOWING SCOPE OF WORK:

CONSTRUCTION OF A NEW TELECOMMUNICATION AND PUBLIC UTILITY FACILITY CONSISTING OF A NEW 150'-0" MONOPOLE, CARRIER EQUIPMENT AND A UTILITY BACKBOARD INSIDE A NEW 60'x60' FENCED COMPOUND WITHIN A 75'x75' LEASE AREA. (NO WATER OR SEWER IS REQUIRED.)

GOVERNING CODES

GOVERNING CODES

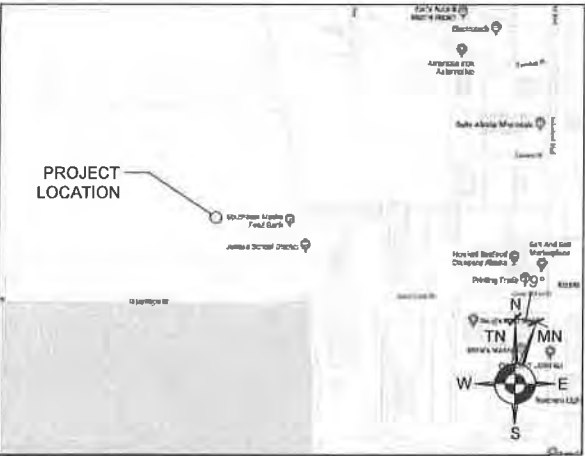
IBC-2015, INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS

NEC-2014, NATIONAL ELECTRICAL CODE

A.D.A. COMPLIANCE

INSTALLATION IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED PER A.D.A.

PROJECT VICINITY MAP



DRIVING DIRECTIONS

FROM JUNEAU INTERNATIONAL AIRPORT:

1. HEAD SOUTH ON SHELL SIMMONS DR TOWARD YANDUKIN DR (0.2 MI)
2. TURN LEFT ONTO YANDUKIN DR (0.2 MI)
3. TURN RIGHT ONTO SHELL SIMMONS DR (0.2 MI)
4. TURN LEFT ONTO GLACIER HWY (0.3 MI)
5. TURN LEFT TO STAY ON GLACIER HWY (0.7 MI)
6. TURN LEFT ONTO INDUSTRIAL BLVD (0.3 MI)
7. TURN RIGHT ONTO CRAZY HORSE DR;
PARTIAL RESTRICTED ACCESS ROAD, DESTINATION ON THE RIGHT (0.2 MI)

ESTIMATED DISTANCE: 2.1 MILES
ESTIMATED TIME: 9 MIN

SITE INFORMATION

SITE NAME: 11 MILE
SITE ADDRESS: 10020 CRAZY HORSE DR
JUNEAU, AK 99801
LATITUDE: 58° 22' 01.135" N
LONGITUDE: 134° 36' 38.975" W
SOURCE: 1A CERTIFICATION
PARCEL NUMBER: 4B1701100120
ZONING CLASSIFICATION: I (INDUSTRIAL)
FLOOD ZONE: ZONE X
JURISDICTION: CITY AND BOROUGH OF JUNEAU
TOP OF (N) MONOPOLE: 150'
OVERALL HEIGHT: 155'
OCCUPANCY GROUP: U
CONSTRUCTION TYPE: II-B

PROJECT LOCATION MAP



UTILITY COMPANIES

POWER: ALASKA ELECTRIC LIGHT & POWER
5601 TONGSARD CT, JUNEAU, AK 99801
TELCO/FIBER: TBD

PROJECT CONTACTS

APPLICANT
VERTICAL BRIDGE
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
ROBERT EVANS
PH: 425.652.5727
REVANS@VERTICALBRIDGE.COM

PROPERTY OWNER
CITY AND BOROUGH OF JUNEAU
155 S. SEWARD ST
JUNEAU, AK 99801

SURVEYOR
ACUTEK GEOMATICS LLC.
5099 E. BLUE LUPINE DR #104
WASILLA, AK 99654
PH: 907.376.8800

CONSTRUCTION MANAGEMENT
CENTERLINE SOLUTIONS
3322 SOUTH BAY RD
OLYMPIA, WA 98506
JAY RASMUSSEN
PH: 360.438.8002

ZONING AND PERMITTING CONSULTANT
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6510 BEECHCRAFT ROAD
WASILLA, AK 99658
GARY R. BREKKE
PH: 907.331.8311

SITE ACQUISITION CONSULTANT
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907.331.8311

ENGINEER OF RECORD
CENTERLINE SOLUTIONS
16360 TABLE MOUNTAIN PARKWAY
GOLDEN, CO 80403
CHRISTOPHER SCOTT, P.E., LEED AP
PH: 303.993.3293

DRAWING INDEX

SHEET	DESCRIPTION
T1.0	TITLE SHEET
SV-1	SURVEY
SV-2	SURVEY
A1.0	OVERALL SITE PLAN
A2.0	ENLARGED SITE PLAN
A3.0	ELEVATIONS
A4.0	FENCE DETAILS
A4.1	FENCE DETAILS
A5.0	CONSTRUCTION DETAILS
A6.0	CABLE BRIDGE DETAILS
A7.0	UTILITY H-FRAME DETAILS
A8.0	ANTENNA DETAIL
G1.0	GROUNDING DETAILS
G2.0	GROUNDING DETAILS
GN1	GENERAL NOTES

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERTICAL BRIDGE SERVICES IS STRICTLY PROHIBITED.

SIGN OFF OF FINAL CONSTRUCTION DRAWINGS

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

CONSULTANT	SIGNATURE	DATE
SITE ACQUISITION		
PERMITTING CONSULTANT		
RF ENGINEER:		
CONST. MNGR.		
OPS MNGR.		
PROJECT MNGR.		
REGULATORY REV.		
DEV. MNGR.		



CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION
0	05-01-19	TT/JR	90% CD REVIEW

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
0	06-28-19	TT/JR	BP SUBMITTAL

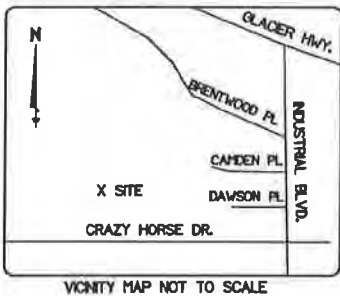
SITE NAME:
11 MILE
US-AK-5244
SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
TITLE SHEET

SHEET NO.
T1.0



Know what's below.
Call before you dig.



LEGEND:

MEASURED DATA	N 90°00'00" W
RECORD DATA	(N 90°00'00" W)
PROPERTY BOUNDARY LINES	---
ADJACENT PROPERTY LINES	---
CENTERLINE	---
FENCE AS NOTED	-x-x-x-x-
RECOVERED 5/8" REBAR	o
SET 5/8" REBAR (LS 9106)	•
RECOVERED MONUMENT	⊕
UTILITY PEDESTAL	PED □
POWER POLE	P/P ∅
SEPTIC PIPES	SP o

NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N71°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'

FAA 1-A TOWER LOCATION INFORMATION:
PROPOSED 150'± SELF SUPPORT TOWER

NAD 83
LATITUDE = 58°22'01.135" N ± 20"
LONGITUDE = 134°36'38.975" W ± 20"
GROUND ELEVATION AT BASE OF TOWER = 24' ± 3' NAVD88
HEIGHT OF TOP OF TOWER ABOVE GROUND = 174'±3'

	AREA TABLE	SQUARE FEET	ACREAGE
Ⓐ	PARENT PARCEL	1,350,360 ±	31 ±
Ⓑ	LEASED AREA	5,625 ±	0.13 ±
Ⓒ	NON-EXCLUSIVE ACCESS & UTILITY ESMT.	7,514 ±	0.17 ±

SITE OVERVIEW:
(1"=100')

Ⓐ OWNER: CITY AND BOROUGH OF JUNEAU
PROPERTY: US SURVEY 1041
DEED: BOOK 66 PAGE 147
PARCEL ID: 4B1701100120

SEE DETAIL SHEET 2

POINT OF BEGINNING
Ⓑ LEASED AREA

FAA LLWAS
LEASE
LEASE LOT A

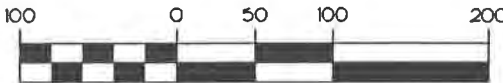
LEASE
LOT B

CRAZY HORSE DR. (60' WIDE PUBLIC ROW)
NOT FULLY CONSTRUCTED

Ⓒ POINT OF BEGINNING
20' WIDE ACCESS/UTILITY ESMT.

EXISTING ACCESS
(GRAVEL, TYP)

GRAPHIC SCALE



1 INCH = 100 FEET

LOT 4, SHERWOOD ESTATES (#537)

POINT OF COMMENCEMENT

CORNER 3 USS 1041

SITE PLAN

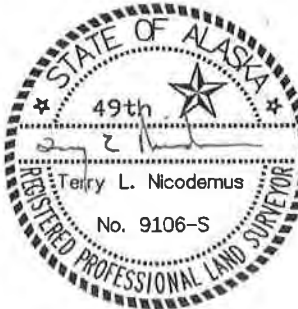
U.S. SURVEY NO 1041 - JUNEAU ALASKA

SURVEYOR'S NOTES

1. BASIS OF BEARING IS PER RECORD PLAT OF US SURVEY NO. 1041.
2. NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED EVIDENCE ONLY.
3. ALL VISIBLE TOWER EQUIPMENT AND IMPROVEMENTS ARE CONTAINED WITHIN THE DESCRIBED AREA.
4. SURVEY COMPLETED IN FEBRUARY 2019.
5. THIS SURVEY DOES NOT REPRESENT A SURVEY OF THE PARENT PARCEL. REAL PROPERTY SHOWN HEREON ARE APPLICABLE TO THE TELECOMMUNICATIONS SITE, THERE MAY BE OTHER IMPROVEMENTS NOT SHOWN.
6. NO TITLE REPORT PROVIDED FOR THIS PROJECT.

ZONING: PER CITY AND BOROUGH OF JUNEAU ASSESSOR'S DATA, PROPERTY IS ZONED AS INDUSTRIAL.

FLOOD NOTE: THIS PARCEL LIES WITHIN FLOOD ZONE X, PER FEMA MAP NUMBER 02110C1526D, WITH AN EFFECTIVE DATE OF AUGUST 19, 2013.



ACUTEK GEOMATICS, LLC
TERRY L. NICODEMUS, PLS
LAND SURVEYOR, ALASKA #9106-S
Date: 3/4/2019

CENTERLINE SOLUTIONS
SITE NAME: AK 11 MILE
ADDRESS: 10020 CRAZY HORSE DR.
JUNEAU, ALASKA 99801
CITY AND BOROUGH OF JUNEAU
SURVEY WORK PERFORMED BY:

ACUTEK
GEOMATICS LLC
5099 E. BLUE LUPINE DR #104, WASILLA AK 99654
(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM
DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08-02
SHEET 1 OF 2

verticalbridge

CENTERLINE
SOLUTIONS
Advancing Wireless Networks

CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION
0	05-01-19	TT/JR	90% CD REVIEW

SUBMITTAL

NO.	DATE	D/C	DESCRIPTION
0	06-28-19	TT/JR	BP SUBMITTAL

SITE NAME:

11 MILE
US-AK-5244

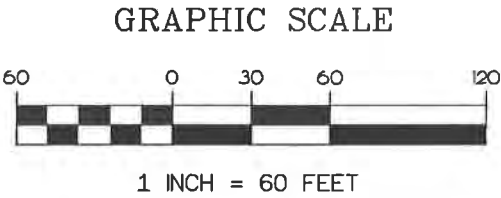
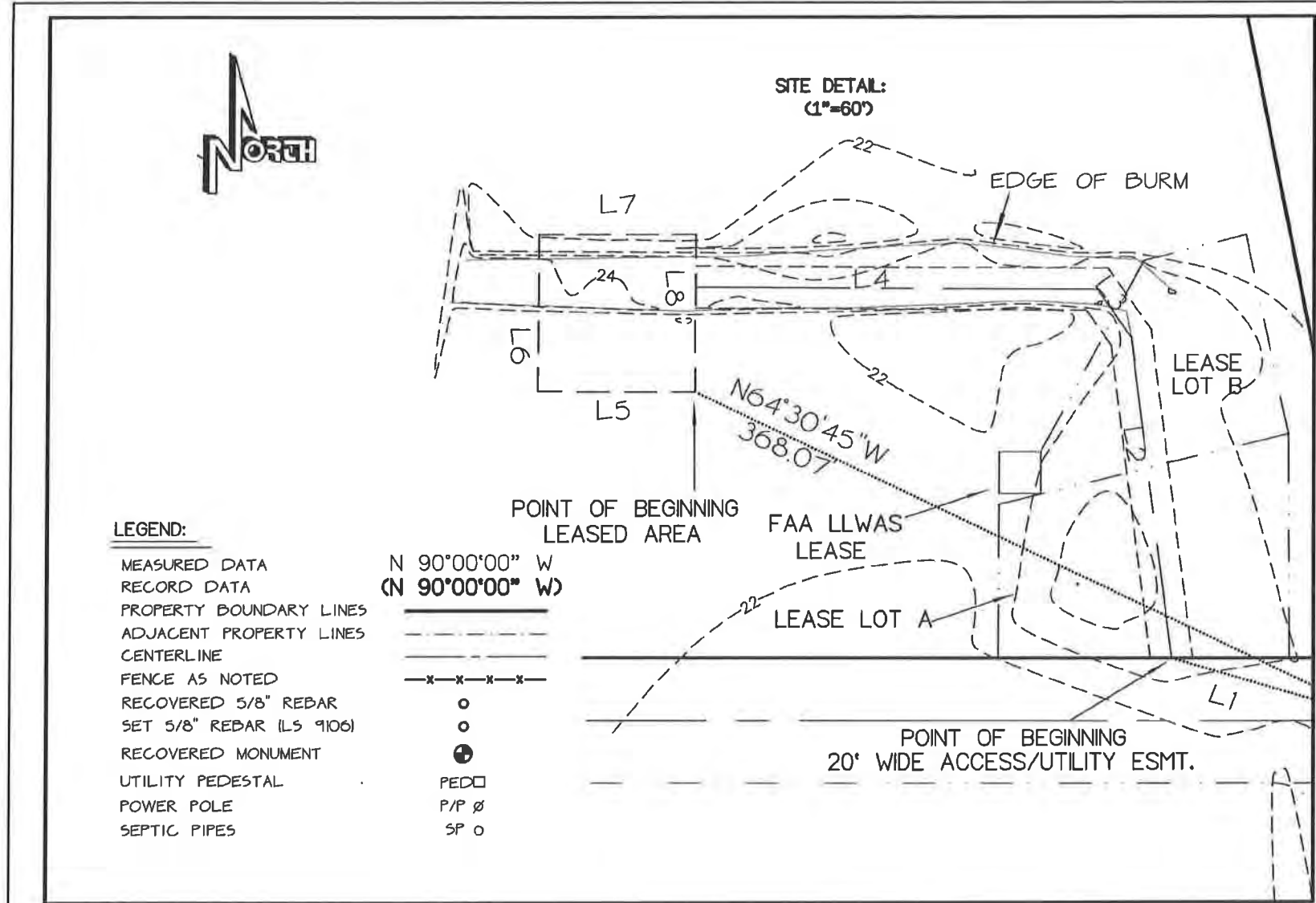
SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

SURVEY
DETAILS

SHEET NO.

SV1.0



NUM	BEARING	DISTANCE
L1	N73°37'48"W	108.03'
L2	N7°16'40"W	154.99'
L3	N35°28'31"W	28.22'
L4	N89°37'43"W	192.50'
L5	N89°54'01"W	75.00'
L6	N 0°05'59"E	75.00'
L7	S89°54'01"E	75.00'
L8	S 0°05'59"W	75.00'

LEGAL DESCRIPTION: (PARENT PARCEL)
REMAINDER OF US SURVEY NO. 1041 AS DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA.

SITE PLAN
U.S. SURVEY NO 1041 - JUNEAU ALASKA

LEGAL DESCRIPTION: (LEASED AREA)
A FIVE THOUSAND SIX HUNDRED TWENTY-FIVE (5625) SQUARE FOOT LEASED AREA, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID LEASE AREA IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 64°30'45" W A DISTANCE OF 368.07 FEET TO A POINT, THE TRUE POINT OF BEGINNING;
THENCE N 89°54'01" W A DISTANCE OF 75.00 FEET TO A POINT, THENCE N 00°05'59" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 89°54'01" E A DISTANCE OF 75.00 FEET TO A POINT, THENCE S 00°05'59" W A DISTANCE OF 75.00 FEET TO A POINT, THE TRUE POINT OF BEGINNING.
CONTAINING 5625 SQUARE FEET, MORE OR LESS. (0.13 ACRES)

LEGAL DESCRIPTION: (NON-EXCLUSIVE ACCESS & UTILITY EASEMENT)
A SEVEN THOUSAND FIVE HUNDRED FOURTEEN (7514) SQUARE FOOT NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT, TWENTY (20) FEET WIDE, TEN (10) FEET EACH SIDE OF THE CENTERLINE, ENTIRELY WITHIN THAT PROPERTY DESCRIBED AS THE REMAINDER OF US SURVEY NO. 1041, FURTHER DESCRIBED IN QUITCLAIM DEED BOOK 66 AT PAGE 147, JUNEAU RECORDING DISTRICT, STATE OF ALASKA, SAID CENTERLINE IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE MONUMENT AT CORNER 3 OF USS 1041, THENCE N 00°03'05" E A DISTANCE OF 445.08 FEET TO A POINT, THENCE N 73°37'48" W A DISTANCE OF 108.03 FEET TO A POINT ON THE NORTH BOUNDARY OF THE CRAZY HORSE RIGHT-OF-WAY, THE TRUE POINT OF BEGINNING;
THENCE N 07°16'40" W A DISTANCE OF 154.99 FEET TO A POINT, THENCE N 35°28'31" W A DISTANCE OF 28.22 FEET TO A POINT, THENCE N 89°37'43" W A DISTANCE OF 192.50 FEET TO A POINT ON THE EAST BOUNDARY OF THE LEASED AREA, THE POINT OF TERMINUS.
CONTAINING 7514 SQUARE FEET, MORE OR LESS. (0.17 ACRES)

CENTERLINE SOLUTIONS

SITE NAME: AK 11 MILE

ADDRESS:10020 CRAZY HORSE DR.

JUNEAU, ALASKA 99801

CITY AND BOROUGH OF JUNEAU

SURVEY WORK PERFORMED BY:

ACUTEK

GEOMATICS LLC

5099 E. BLUE LUPINE DR #104, WASILLA AK 99654

(907) 376-8800 FAX (907) 376-9629 ACUTEKSURVEY.COM

DRAWN BY: TENDRA CHECKED BY: TERRY JOB #: 19-08.02

SHEET 2 OF 2



CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY			
NO.	DATE	D/C	DESCRIPTION
0	05-01-19	TT/JR	90% CD REVIEW

SUBMITTAL			
NO.	DATE	D/C	DESCRIPTION
0	06-28-19	TT/JR	BP SUBMITTAL

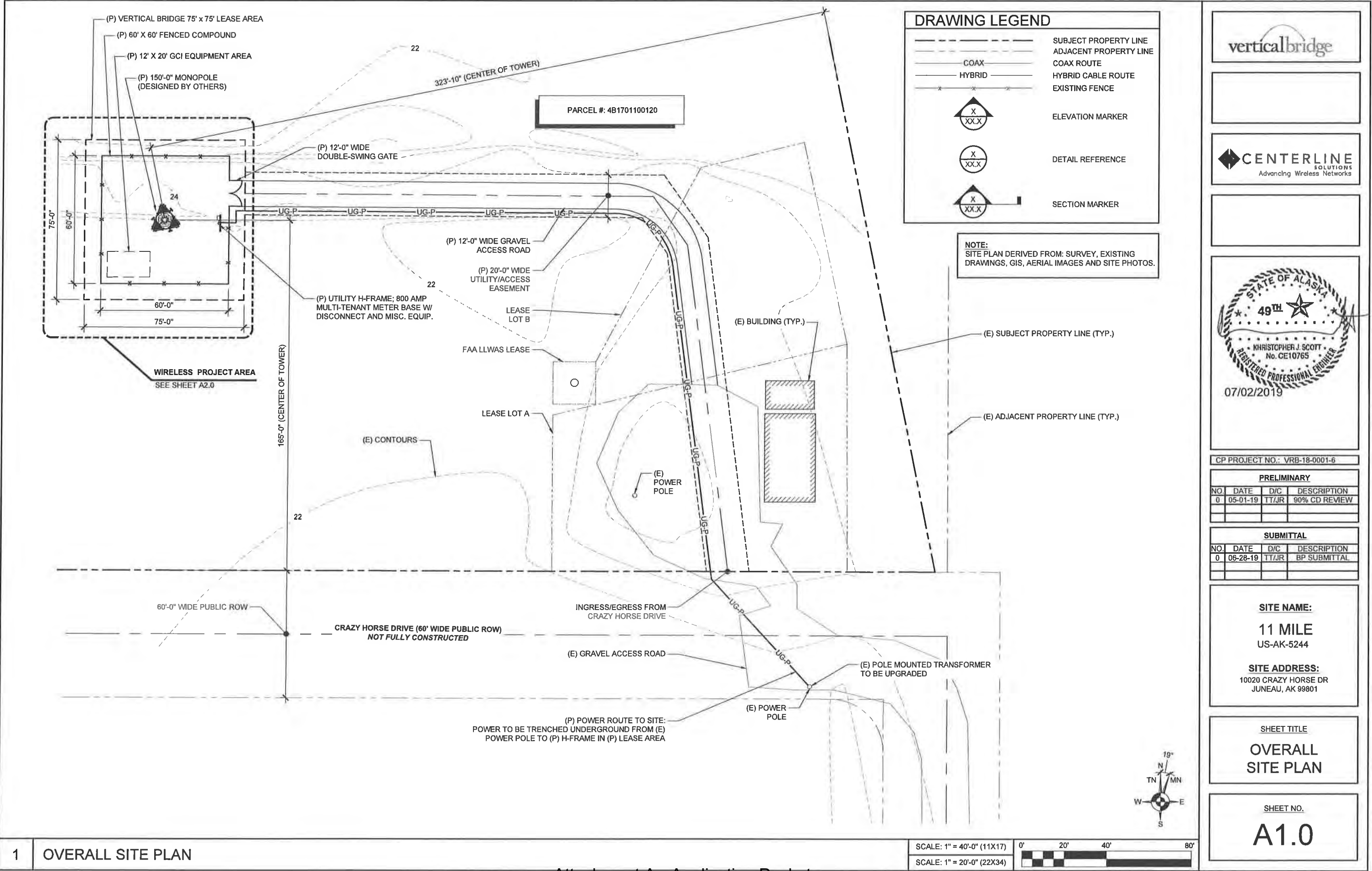
SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
SURVEY DETAILS

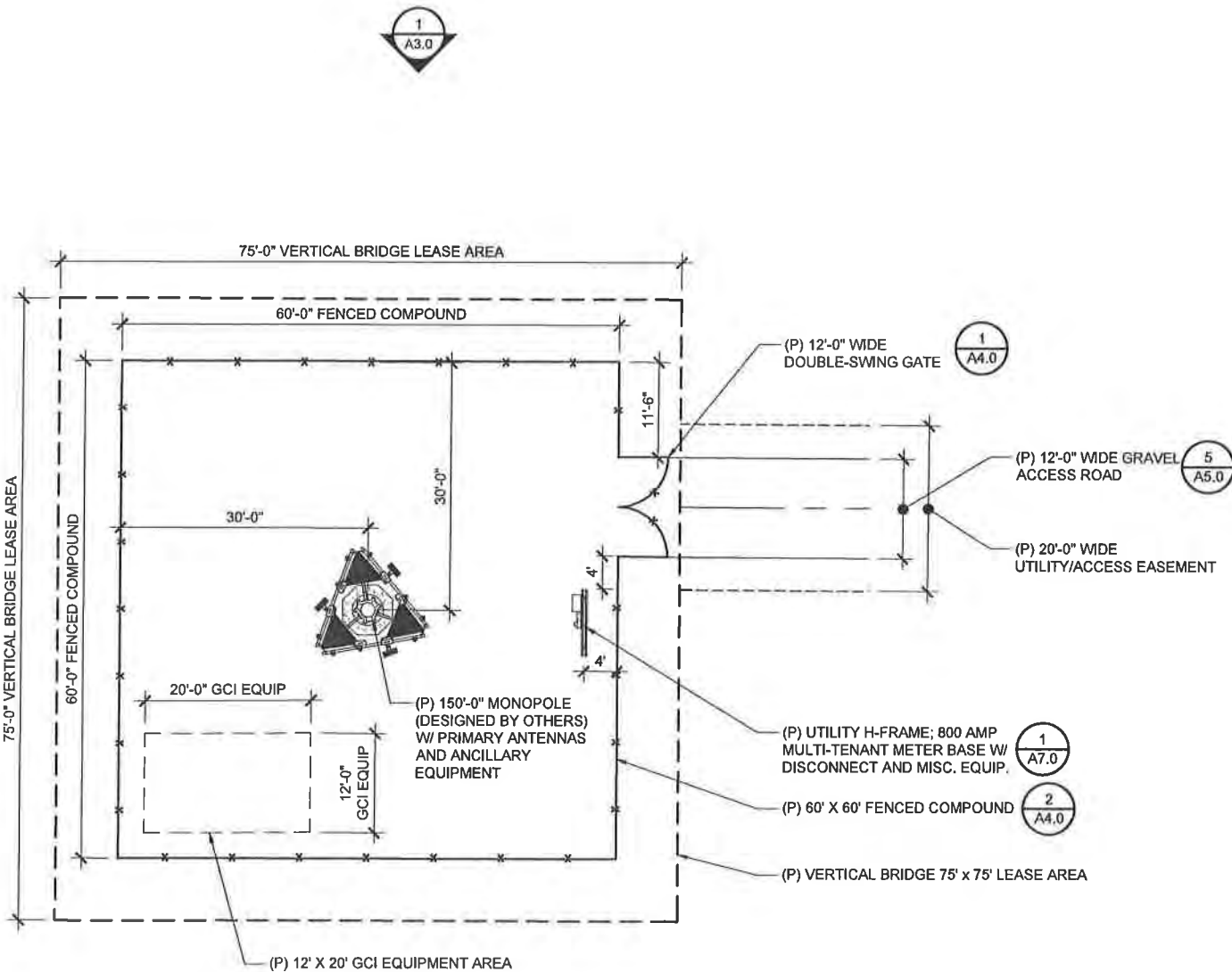
SHEET NO.
SV2.0



GENERAL NOTES:

1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5. CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

NOTE:
SITE PLAN DERIVED FROM: SURVEY (BY ACUTEK, DATED MARCH 2019)
EXISTING DRAWINGS, GIS, AERIAL IMAGES AND SITE PHOTOS.



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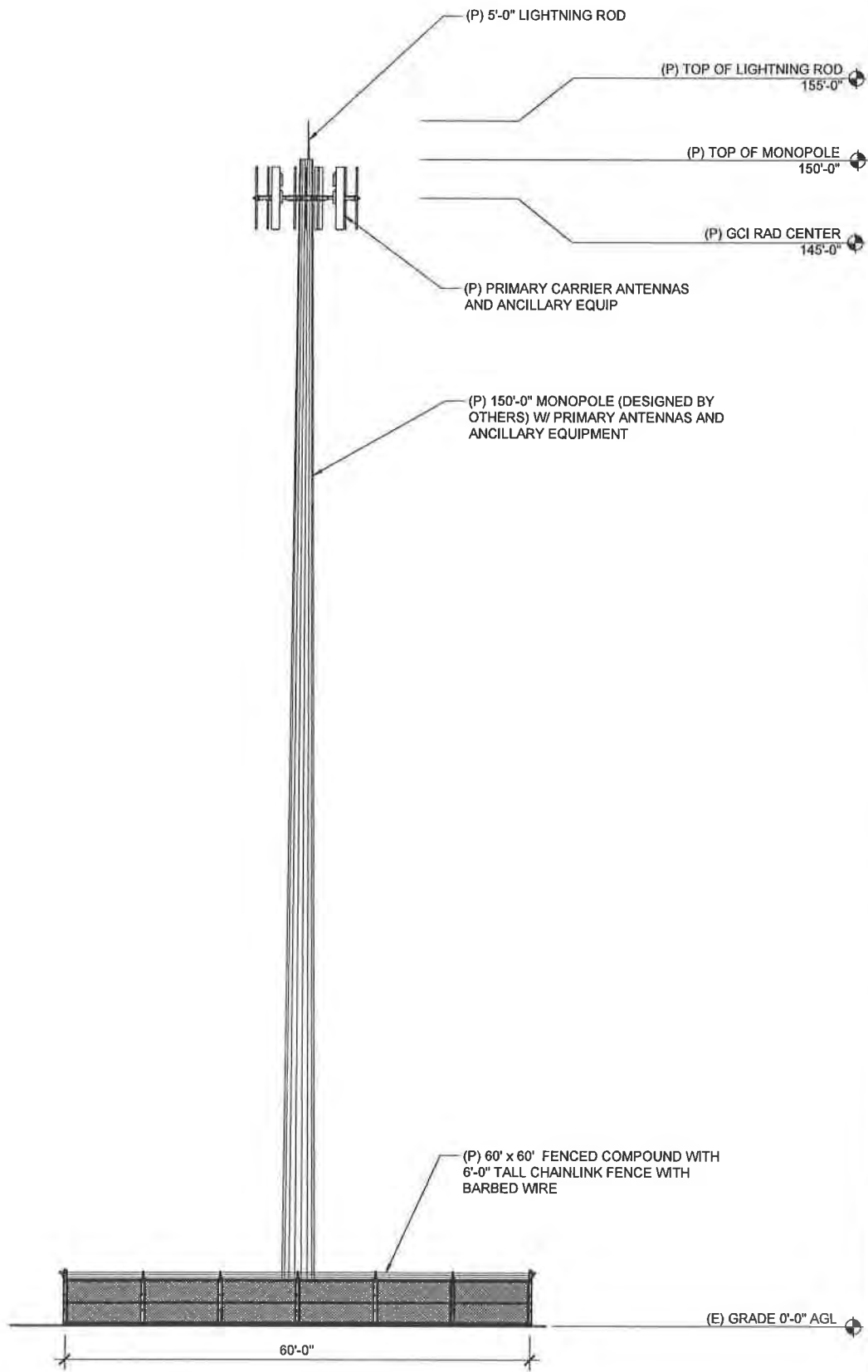
SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

ENLARGED
SITE PLAN

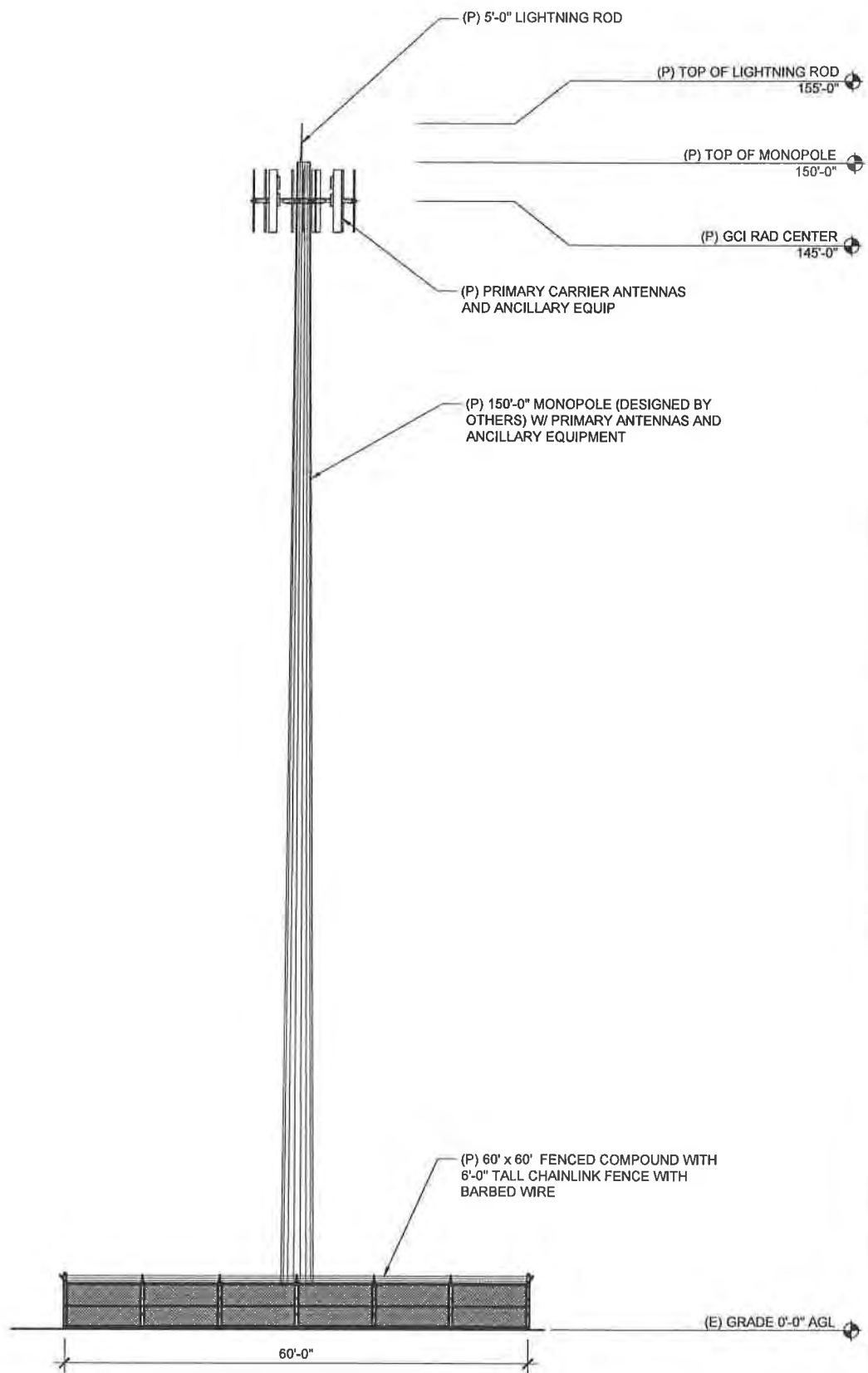
SHEET NO.

A2.0



1 NORTH ELEVATION

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)



2 WEST ELEVATION

SCALE: 1" = 20'-0" (11X17)
SCALE: 1" = 10'-0" (22X34)

verticalbridge

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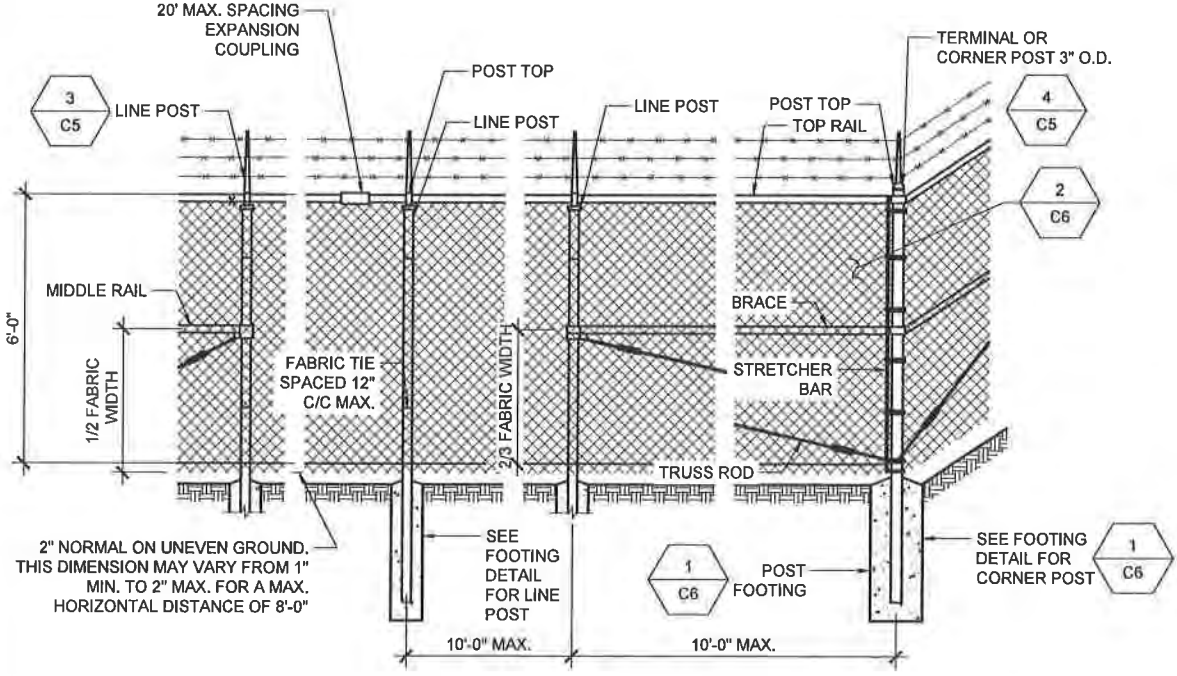
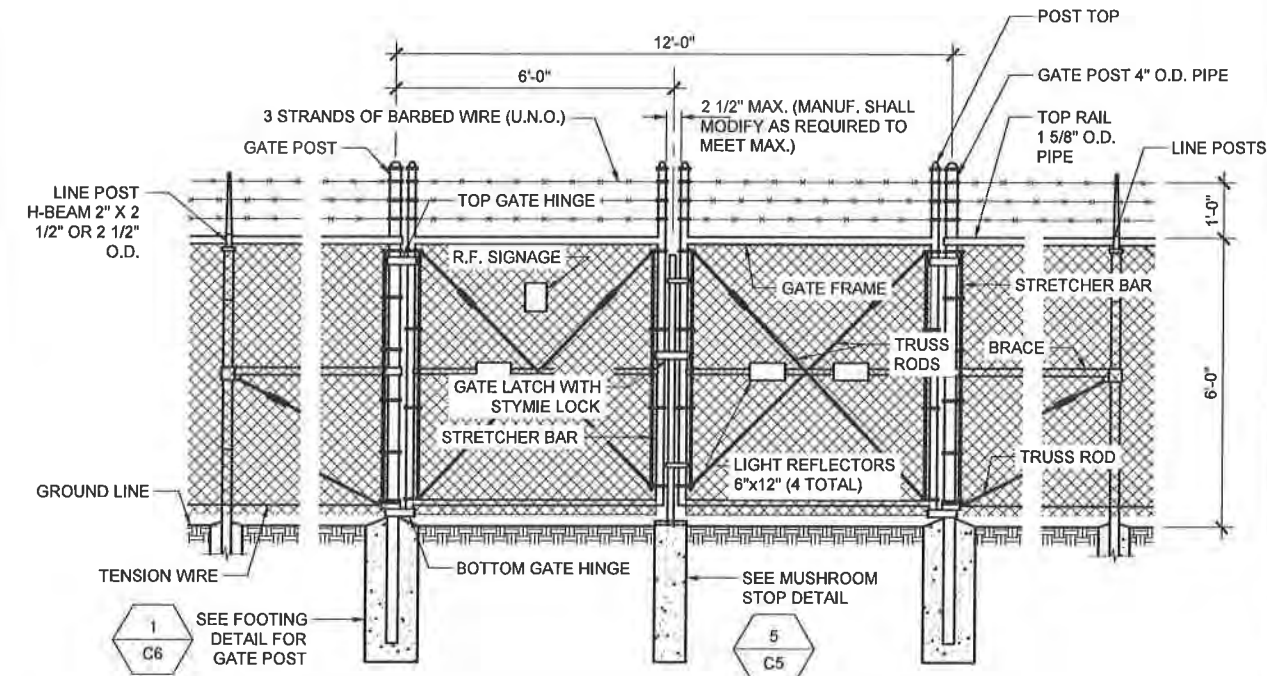
SHEET TITLE

ELEVATIONS

SHEET NO.

A3.0

NOTES:
1. THIS SECURITY FENCE TO HAVE ALL NUTS
INSTALLED TOWARD INSIDE FACE OF
COMPOUND.

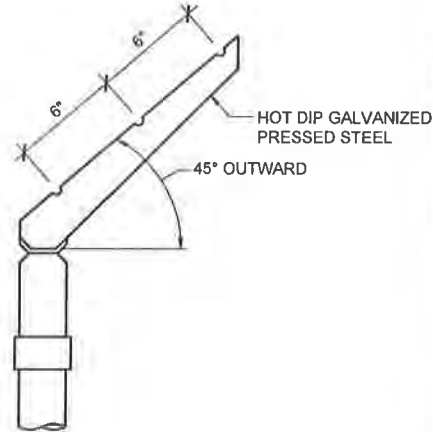


1 VEHICLE GATE ARRANGEMENT

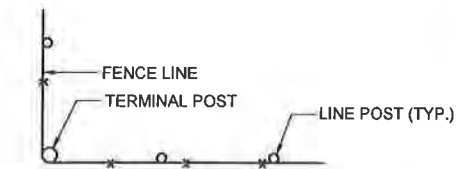
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2 POST/CORNER POST ARRANGEMENT

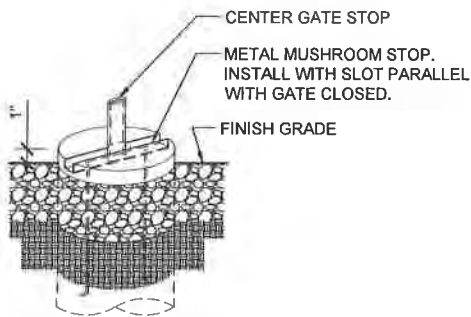
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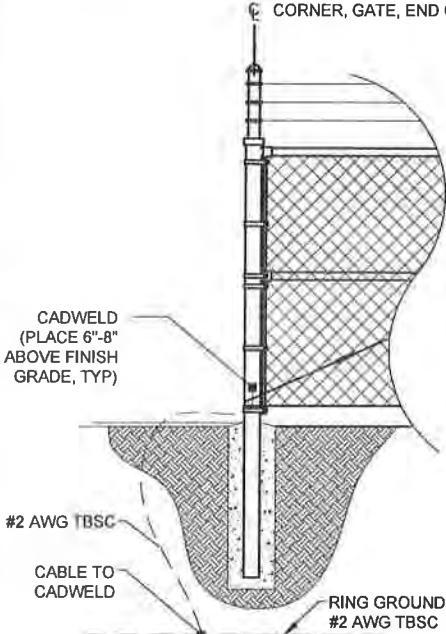
3 BARBED WIRE ARM
OF LINE POST



4 INSTALLATION AT CORNERS



5 MUSHROOM STOP DETAIL



6 FENCE GROUNDING DETAILS

GROUNDING NOTES

1. VERTICAL POSTS SHALL BE BONDED TO THE RING AT EACH CORNER AND AT EACH GATE POST. AT MINIMUM, ONE VERTICAL POST SHALL BE BONDED TO THE GROUND RING IN EVERY 100-FOOT STRAIGHT RUN OF FENCE.
2. THE #2 AWG, TBSC, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST, ABOVE GROUND.
3. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAIDED FLAT STRAP WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
4. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULL OPEN IN EITHER DIRECTIONS

SCALE: NTS
SCALE: NTS



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SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

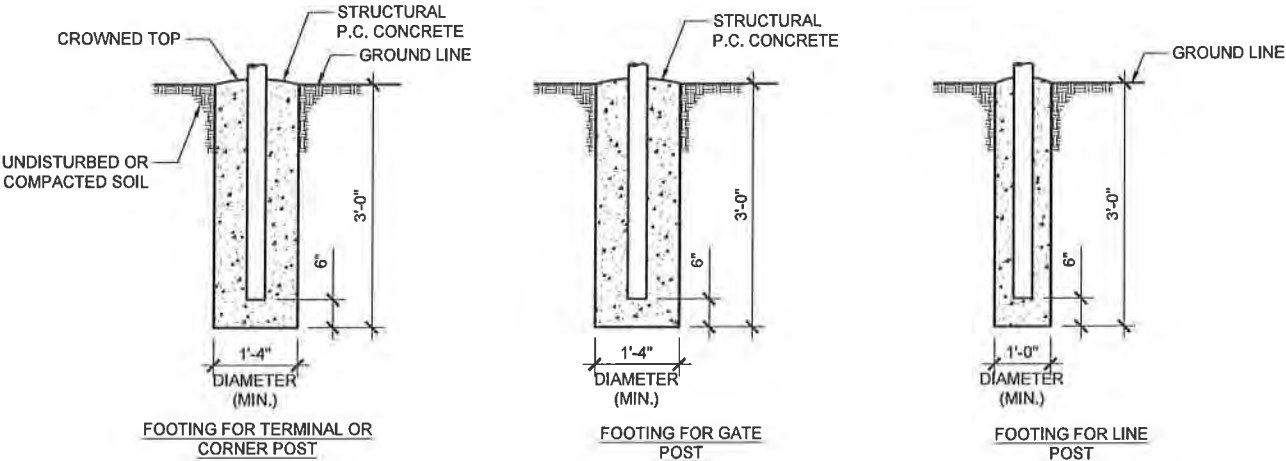
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

FENCE
DETAILS

SHEET NO.

A4.0



FENCE NOTES

ZINC COATING - THE WEIGHT OF THE COATING SHALL NOT BE LESS THAN 1.2 OUNCES PER SQUARE FOOT OF ACTUAL SURFACE COVERED. ALL FERROUS METALS USED AS PART OF THE FENCE INSTALLATION SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL. ALL SCREWS, BOLTS, LOCK WASHERS, NUTS, ETC. SHALL BE HOT DIP GALVANIZED OR MADE OF STAINLESS STEEL.

FABRIC - STANDARD INDUSTRIAL GRADE #9 GAUGE WITH 2 INCH MESH ZINC COATED CHAIN LINK WITH A BREAKING STRENGTH OF NOT LESS THAN 1290 POUNDS SHALL BE USED. THE FABRIC SHALL BE ZINC COATED BY THE HOT DIP PROCESS AFTER FABRICATION.

METAL POSTS - METAL POSTS (LINE, CORNER, TERMINAL, GATE POSTS, MIDDLE RAILS, BRACES AND TOP RAIL) SHALL BE HOT DIP GALVANIZED SCHEDULE 40 TUBULAR STEEL WITH AN OUTSIDE DIAMETER AS INDICATED ON THIS DRAWING. A POST TOP FITTING OF GALVANIZED STEEL WILL BE INSTALLED TO EXCLUDE MOISTURE.

POST CAPS - ALL POST CAPS TO USE THE BARBED WIRE OUTRIGGER BRACKET AND SHALL BE ATTACHED TO THE POST WITH TAMPER RESISTANT SCREWS, BRADS, OR BOLTS.

TOP RAIL - A MINIMUM OF ONE COUPLING IN EACH STRAIGHT RUN OF TOP RAIL, SHALL HAVE A HEAVY SPRING INSERTED WITHIN THE COUPLING TO TAKE UP EXPANSION AND CONTRACTION OF THE TOP RAIL. THE TOP RAIL SHALL BE FASTENED TO TERMINAL POSTS WITH PRESSED STEEL CONNECTIONS.

MIDDLE RAIL - THE MIDDLE RAIL SHALL BE OF THE SAME MATERIAL AS THE TOP RAIL AND INSTALLED WITH HOT DIP GALVANIZED FITTINGS ATTACHED TO THE POSTS.

BRACE RAIL - BRACE RAIL MATERIAL SHALL BE OF THE MATERIAL AS THE TOP RAIL AND LOCATED 2/3 OF THE DISTANCE UP FROM THE BOTTOM OF THE FABRIC. BRACE RAILS SHALL BE SECURELY FASTENED TO POSTS BY SUITABLE PRESSED STEEL CONNECTIONS.

TRUSS RODS - SHALL BE 3/8" ROUND GALVANIZED STEEL RODS WITH GALVANIZED TURNBUCKLES. THE ZINC COATING SHALL BE NOT LESS THAN 1.2 OUNCES PER SQUARE FOOT OF SURFACE.

TENSION WIRE - THE TENSION WIRE SHALL BE OF #7 GAUGE HOT DIP GALVANIZED SPRING TENSION WIRE WITH A BREAKING STRENGTH OF NOT LESS THAN 1900 POUNDS. THIS WIRE SHALL BE KEPT TAUT WITH GALVANIZED TURNBUCKLES AND ATTACHED TO POSTS WITH GALVANIZED HARDWARE OR CABLE CLAMPS.

FABRIC TIES - THE FABRIC TIES SHALL BE ALUMINUM WIRE. NOT LESS THAN #9 GAGE.

STRETCHER BARS - THE STRETCHER BARS SHALL BE FLAT GALVANIZED STEEL BARS NOT LESS THAN 5/16" X 3/4" AND NOT LESS THAN 2" SHORTER THAN THE FABRIC. STRETCHER BAR BANDS SHALL BE FLAT GALVANIZED STEEL BARS NOT LESS THAN 5/16" X 1 1/2" WITH 5/16" DIAMETER GALVANIZED CARRIAGE BOLT.

BARBED WIRE - BARBED WIRE OF GALVANIZED STEEL (OR ALUMINUM) CONSISTING OF 12 1/2 GAUGE WIRE WITH 4-POINT BARBS OF 14 GAUGE WIRE SPACED 5 INCHES APART.

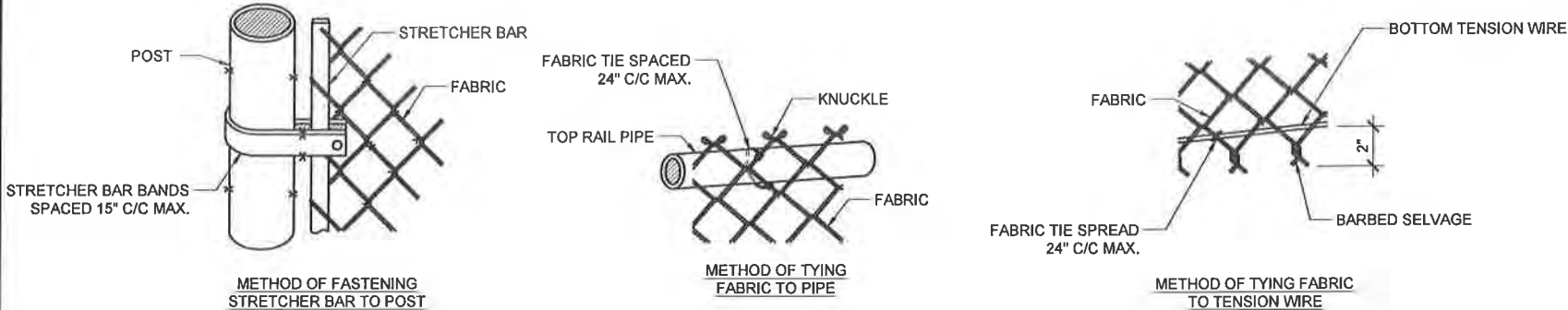
GATE FRAMES SHALL BE CONSTRUCTED OF 2 1/2 INCH OUTSIDE DIAMETER HEAVY DUTY GALVANIZED STEEL PIPE. THE GATES SHALL BE ASSEMBLED USING CORNER FITTINGS OF HEAVY PRESSED STEEL OR MALLEABLE CASTINGS OR MAY BE WELDED IF THE ENTIRE GATE FRAME IS HOT DIP GALVANIZED AFTER THE WELDING. ALL GATES SHALL BE EQUIPPED WITH HEAVY DUTY GALVANIZED STEEL TYPE HINGES WITH LARGE BEARING SURFACES OF ADEQUATE STRENGTH TO SUPPORT THE GATE. THE HINGES SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. GATES WILL PROVIDE A FULL RANGE OF MOTION AND BE EASILY OPENED AND CLOSED BY ONE PERSON. GATE LATCH SHALL BE CARGO PROTECTORS, INC. MODEL FL-100. LATCH SHALL BE EQUIPPED TO RECEIVE A PADLOCK.

PROVIDE R.F. WARNING SIGNAGE ON ALL GATES.

1 POST FOOTINGS

SCALE: NTS

SCALE: NTS



2 FABRIC / BAR CONNECTIONS

SCALE: NTS

SCALE: NTS

3 NOTES

SCALE: NTS

SCALE: NTS



CP PROJECT NO.: VRB-18-0001-6

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SITE NAME:

11 MILE
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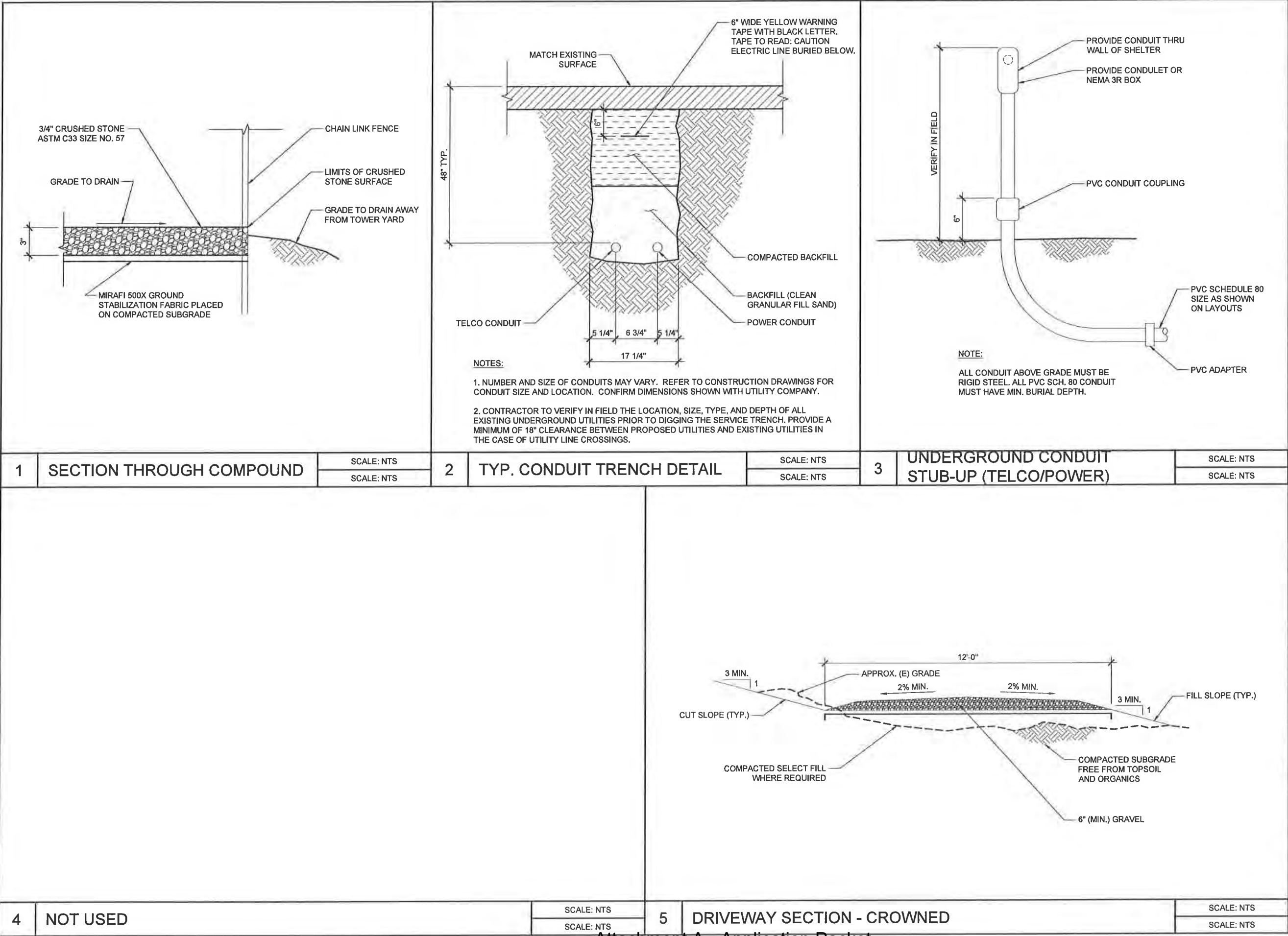
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10020 CRAZY HORSE DR
JUNEAU, AK 99801

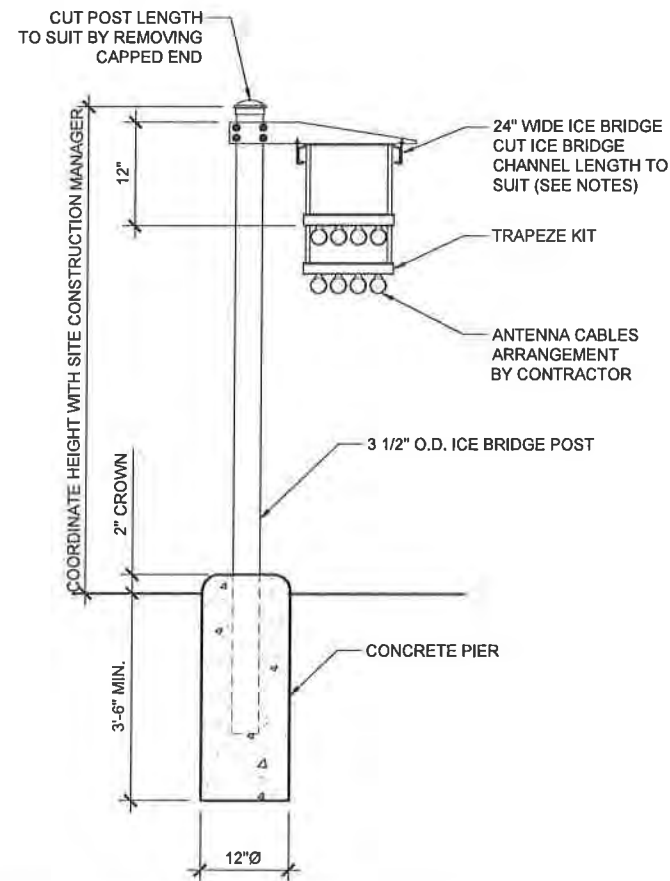
SHEET TITLE

FENCE DETAILS

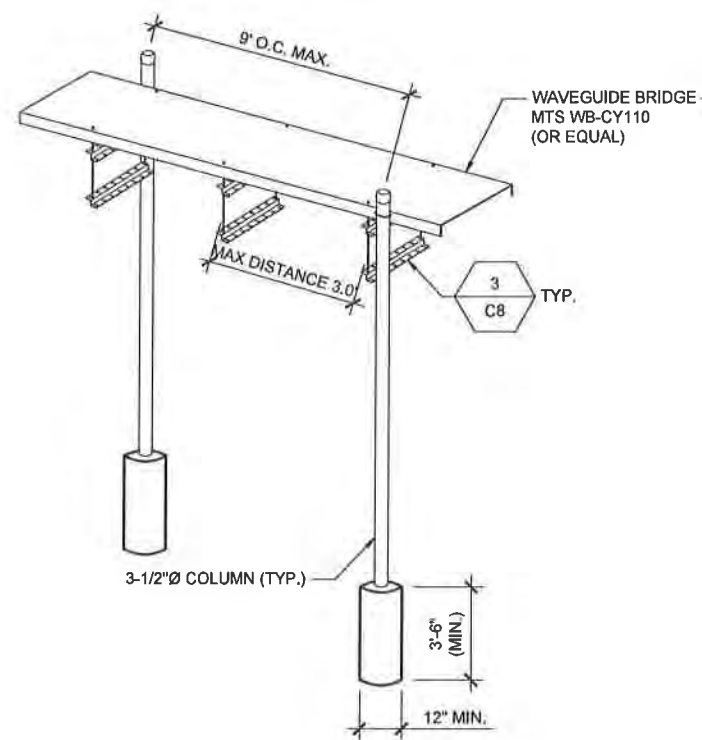
SHEET NO.

A4.1



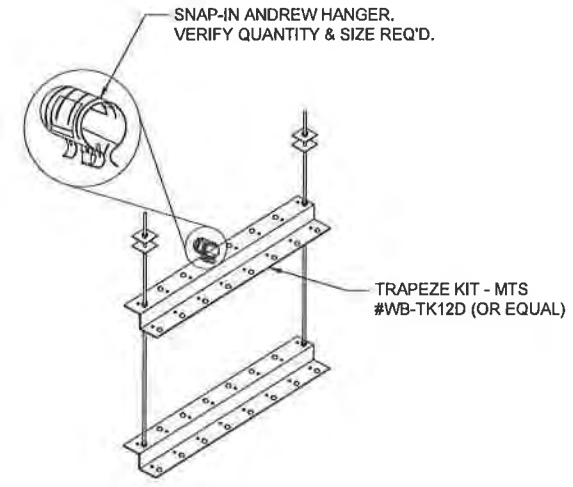


- NOTES:**
1. WHEN USING COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 9 FEET FOR 10 FEET BRIDGE CHANNEL.
 2. WHEN USING COMPONENTS FOR SPLICING BRIDGE CHANNEL SECTIONS, THE SPLICE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
 3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE ENDS OF ICE BRIDGES, WITH A MAXIMUM CANTILEVER DISTANCE OF 2 FEET FROM THE SUPPORT TO THE FREE END OF THE ICE BRIDGE.
 4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH A MATERIAL TO RESTORE THESE EDGES TO THE ORIGINAL CHANNEL, OR EQUIVALENT, FINISH.
 5. ICE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM OTHER MANUFACTURERS, PROVIDED THE MANUFACTURER'S INSTALLATION GUIDELINES ARE FOLLOWED.
 6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE MANUFACTURER'S APPROVAL.
 7. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS REQUIRE ENGINEERING APPROVAL.
 8. THE DESIGN IS BASED ON ASCE 7-98, 3 SECOND GUST WIND SPEED OF 110 MPH, EXPOSURE C, ELEVATION AT GRADE.



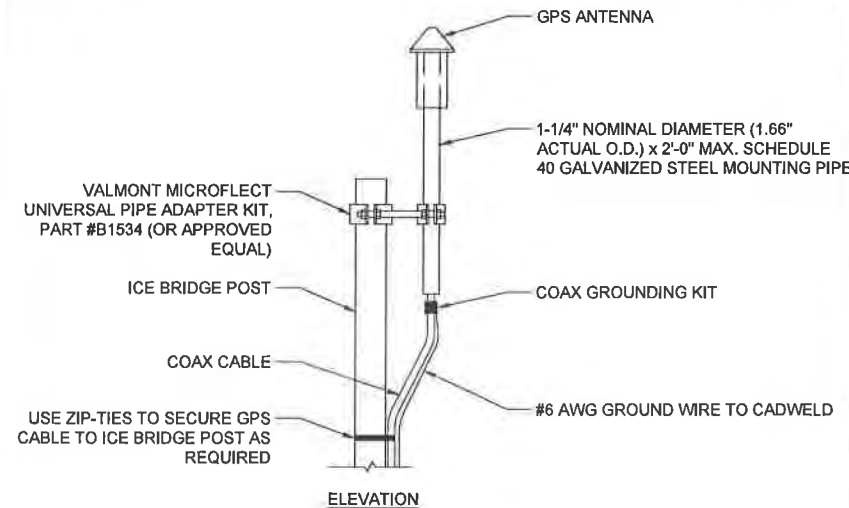
- NOTES:**
1. CONCRETE SHALL BE 3000PSI.
 2. INSTALL FOUNDATION AROUND PIPE COLUMNS SUCH THAT TOP OF FOUNDATION EXTENDS 6" ABOVE GRADE.

PARTS LIST (PER 10' SECTION)		
ITEM	PART NO.	DESCRIPTION
1	MT-357-12	TRAPEZE KIT (NOTE 3)
2	MF-130	3-1/2" OD X 160" GALV. PLAIN
3	PC-034	3-1/2" GALV PIPE CAP
4	HHD12-K	CANTILEVER W/HARDWARE
5	WB-CY110	SAFETY GRATED WAVEGUIDE BRIDGE 12" x 10'



3 TRAPEZE KIT DETAIL

SCALE: NTS
SCALE: NTS



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

4 GPS MOUNTING DETAIL

SCALE: NTS
SCALE: NTS

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US-AK-5244

SITE ADDRESS:
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JUNEAU, AK 99801

SHEET TITLE

CABLE BRIDGE DETAILS

SHEET NO.

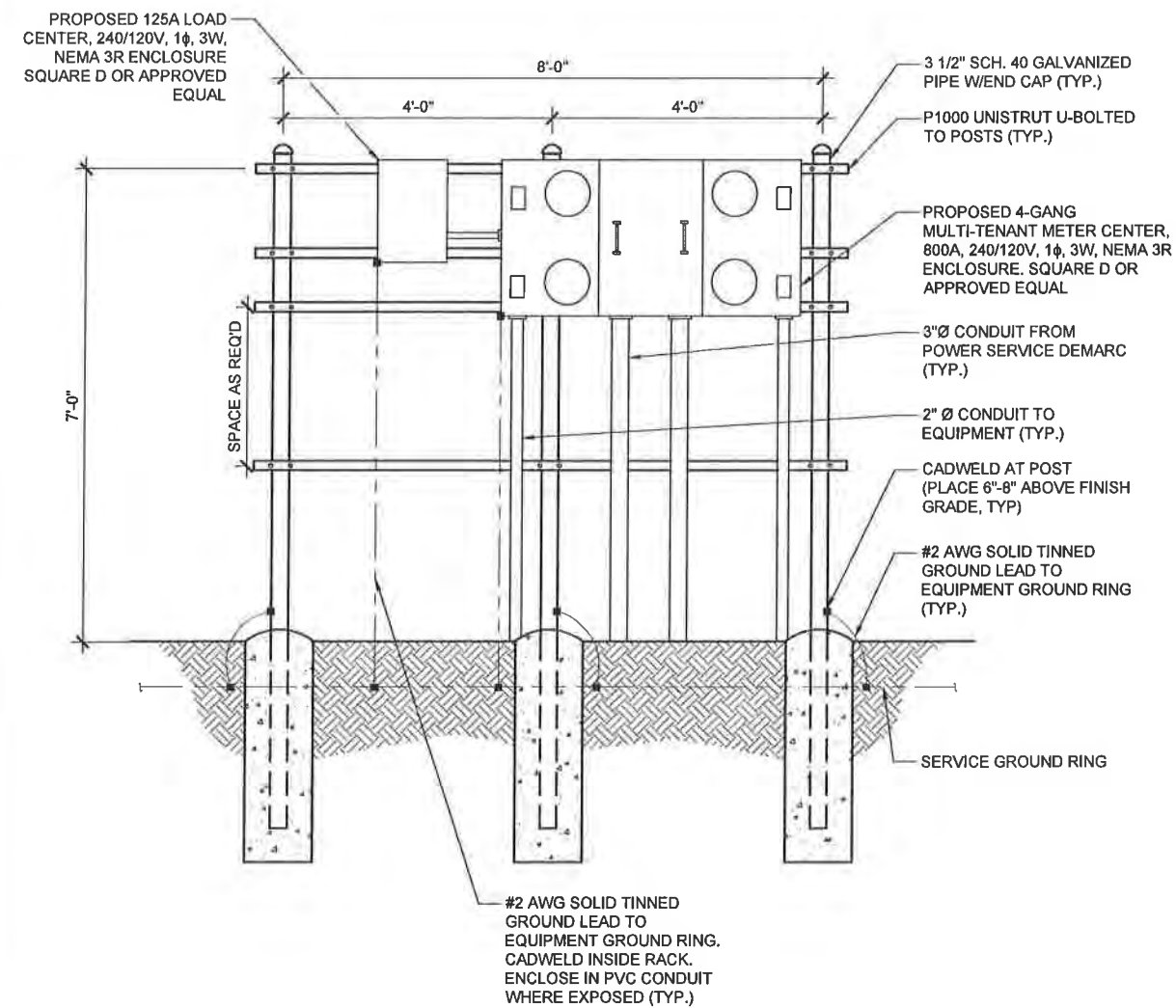
A6.0

1 ICE BRIDGE SUPPORT POST FNDN.

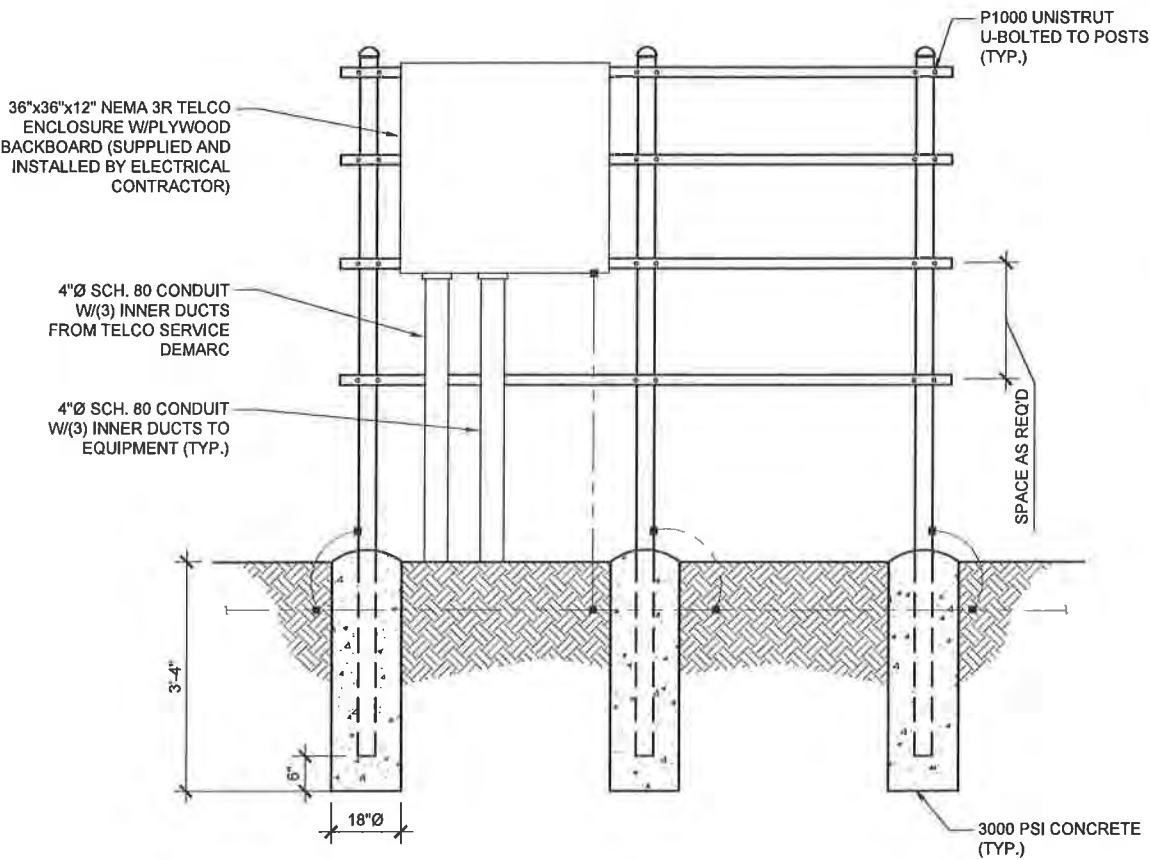
SCALE: NTS
SCALE: NTS

2 ICE BRIDGE DETAIL

SCALE: NTS
SCALE: NTS



FRONT



BACK

- NOTES:
1. CONTRACTOR TO VERIFY EQUIPMENT SPECIFICATIONS PRIOR TO H-FRAME MATERIALS PROCUREMENT. ALL H-FRAME MOUNTED EQUIPMENT TO BE MOUNTED PER MANUFACTURER SPECIFICATIONS.
 2. UNLESS OTHERWISE NOTED, ALL UNDERGROUND PVC TO BE SCH 40.
 3. ALL ABOVE GRADE PVC TO BE SCH 40. ALL CONNECTIONS TO BE SCH 40 PVC OR SEALTIGHT. VERIFY WITH CONSTRUCTION MANAGER PRIOR TO BID.
 4. ALL WIRE CONNECTIONS & CONDUITS TO BE SUPPLIED BY CONTRACTOR UNLESS OTHERWISE NOTED OR SPECIFIED BY CONSTRUCTION MANAGER.
 5. ADDITIONAL ANGLE ADAPTERS (NOT SHOWN) ARE USED TO MOUNT SERVICE BOXES TO THE VERTICAL MEMBERS.



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SHEET TITLE
UTILITY H-FRAME
DETAILS

SHEET NO.

A7.0

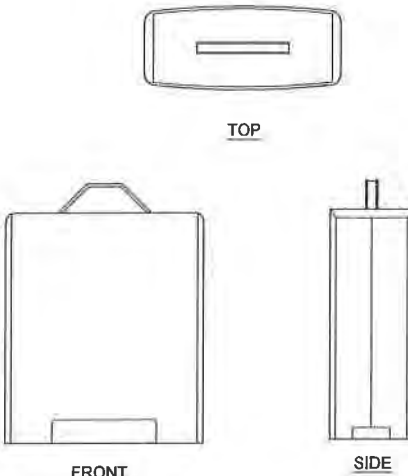


TOP

FRONT

SIDE

MANUFACTURER: KATHREIN
PART NUMBER: 80010891
LENGTH: 78.5"
WIDTH: 14.8"
DEPTH: 6.7"
WEIGHT W/O BRACKETS: 79.7 LBS

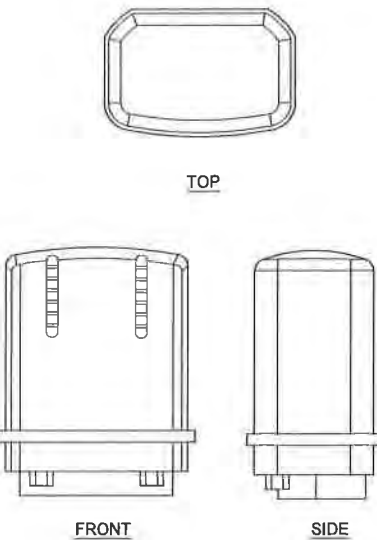


TOP

FRONT

SIDE

RRU 2217 B2 (REMOTE RADIO UNIT)
MANUFACTURE: ERICSSON
HEIGHT: 13.8"
WIDTH: 11.7"
DEPTH: 6.7"
WEIGHT: 27.6 LBS



TOP

FRONT

SIDE

SURGE: RKED3969PF48
MANUFACTURE: RAYCAP
HEIGHT: 20"
WIDTH: 9"
DEPTH: 16"
WEIGHT: 8 LBS

1

PANEL ANTENNA DETAILS

SCALE: NTS

SCALE: NTS

2

RRU DETAILS

SCALE: NTS

SCALE: NTS

3

SURGE PROTECTOR DETAILS

SCALE: NTS

SCALE: NTS







07/02/2019

CP PROJECT NO.: VRB-18-0001-6

PRELIMINARY

NO.	DATE	D/C	DESCRIPTION
0	05-01-19	TT/JR	90% CD REVIEW

SUBMITTAL

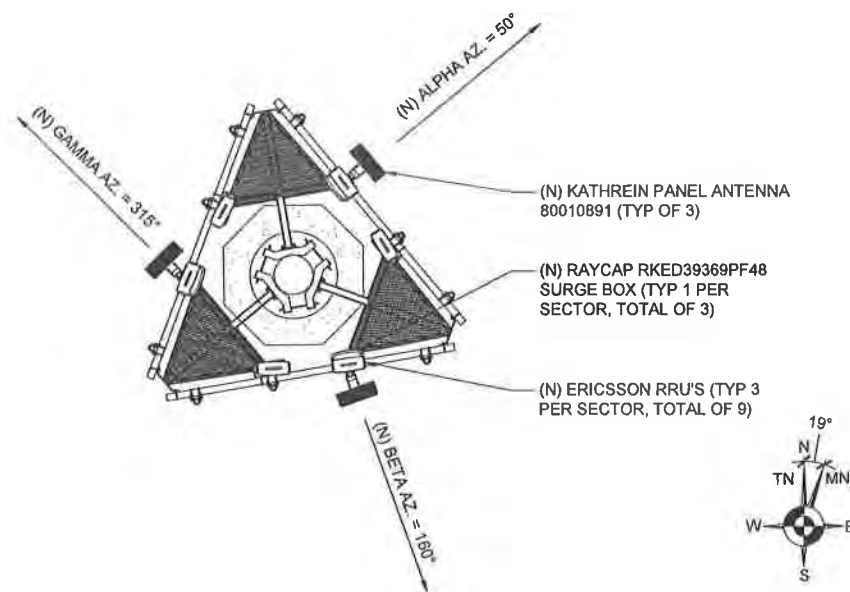
NO.	DATE	D/C	DESCRIPTION
0	06-28-19	TT/JR	BP SUBMITTAL

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

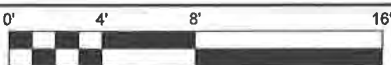


4

ANTENNA PLAN

SCALE: 1/8" = 1'-0" (11X17)

SCALE: 1/4" = 1'-0" (22X34)



5

NOT USED

SCALE: NTS

SCALE: NTS

SHEET TITLE

ANTENNA
DETAILS

SHEET NO.

A8.0

Attachment A - Application Packet

DESCRIPTION

SYSTEM GROUND RESISTANCE SHALL NOT EXCEED 10 OHMS. A THREE POINT SYSTEM RESISTANCE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH VERTICAL BRIDGE SPECIFICATIONS.

A. PERFORM THREE TESTS AT EACH SITE.

B. CONTRACTOR SHALL PROVIDE A WRITTEN REPORT CONSISTING OF THE FOLLOWING: SITE NAME, ADDRESS AND IDENTIFICATION NUMBER, DESCRIPTION OF SITE SOIL AND MOISTURE CONDITION, DESCRIPTION OF WEATHER, MODEL NUMBER OF TESTING EQUIPMENT, DATE OF LAST CALIBRATION, SITE SKETCH SHOWING LOCATION OF TEST PROBES AND ALL FIELD DATA COLLECTED (READINGS, RANGE, TEST, MILLIAMPS, ETC.)

C. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES PERFORMING SYSTEM RESISTANCE TESTS OR IF MEASUREMENTS ARE ABOVE 10 OHMS. THE CONSTRUCTION MANAGER SHALL PROVIDE INSTRUCTION TO THE CONTRACTOR TO INSTALL ADDITIONAL GROUNDING MEASURES TO MEET THE 10 OHMS REQUIREMENT.

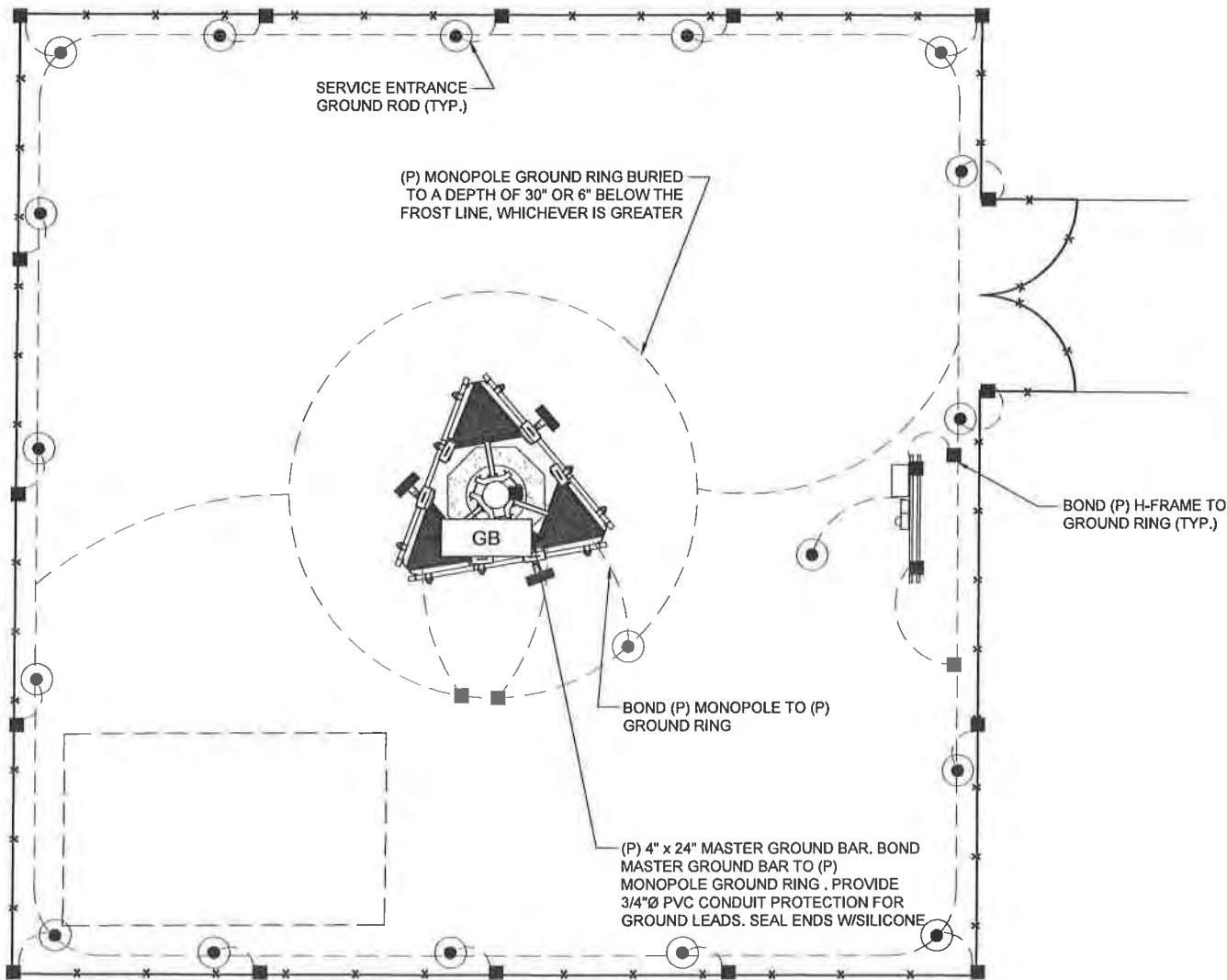
GROUNDING LEGEND

- ⊗ GROUND TEST WELL
- ⊙ GROUND ROD
- ▲ MECHANICAL CONNECTION (DOUBLE HOLE LUG)
- CAD WELD CONNECTION
- CONNECT PER MANUFACTURER SPECIFICATIONS
- GB GROUND BAR
- ⊥ EARTH GROUND

NOTES:

1. ALL ABOVE GRADE GROUND LEADS TO BE SHEATHED IN CARFLEX-X-FLEX™ FLEXIBLE CONDUIT OR EQUIV.

2. DEPICTION OF GROUNDING ROUTING IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO DETERMINE PER EXISTING SITE CONDITIONS.



1. GROUNDING SHALL CONFORM TO VERTICAL BRIDGE STANDARDS AND BE PER FEDERAL, STATE AND LOCAL CODES. IN THE EVENT OF A CONFLICT, MEET THE MOST STRINGENT REQUIREMENT.
2. GROUND RODS PAST METER SHALL BE COPPER-CLAD STEEL, 5/8" DIAMETER x 10 FEET IN LENGTH (MIN)
3. ALL GROUND CONDUCTORS PAST METER SHALL BE # 2 AWG SOLID BARE TINNED COPPER. MINIMUM BEND RADIUS FOR CONDUCTOR SHALL BE 8 INCHES.
4. GROUND RODS SHALL BE SPACED NOT MORE THAN 20'-0" AND NOT LESS THAN 10'-0" APART EXCEPT FOR THE MONOPOLE GROUND RING WHICH SHALL COMPLY WITH TIA/EIA 222 (REV G)
5. CONTRACTOR SHALL ADD ADDITIONAL RODS AND CONDUCTORS OR APPROVED GROUND ENHANCING MATERIAL TO ACHIEVE LESS THAN 10 OHMS RESISTANT TO GROUND.
6. MAINTAIN 2'-0" (TOWER) AND 3'-0" (SHELTER/EQUIPMENT) BETWEEN GROUND RINGS AND FOUNDATIONS.
7. ALL GROUNDING INSTALLATIONS SHALL BE INSPECTED AND APPROVED BY VERTICAL BRIDGE AND ANY JURISDICTION HAVING INSPECTION AND APPROVAL AUTHORITY (IF REQUIRED) BEFORE PLACING ANY BACKFILL.
8. ALL GROUNDING SPLICES AND CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS (CADWELD OR EQUIVALENT). COAT ALL WELDS WITH ZINC RICH PAINT.

2 EXTERIOR GROUNDING NOTES

1. ALL GROUND CABLE IN CONCRETE OR THROUGH WALL SHALL BE IN 3/4" PVC CONDUIT. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTOR SLEEVES.
2. GROUND ALL EXPOSED METALLIC OBJECTS USING A TWO-HOLE NEMA DRILLED CONNECTOR SUCH AS THOMAS & BETTS #32207 OR APPROVED EQUAL.
3. ALL EXTERIOR GROUND CONDUCTORS INCLUDING GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE INCLUSIVE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARDS TOWARD THE BURIED GROUND RING.
4. ALL BELOW GROUND EXTERNAL CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO BURIED GROUND RING SHALL BE THE PARALLEL, EXCEPT FOR THE GROUND RODS WHICH ARE TEE-TYPE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZED SUCH AS HOLUB LECTROSOL #15-501.
5. WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF A CONDUCTIVE ANTI-OXIDE COMPOUND ON ALL CONNECTORS. PROVIDE LOCK WASHERS ON ALL MECHANICAL CONNECTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTORS, REPAINT TO MATCH EXISTING AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE TYPES OF METALS BEING ATTACHED TO.
6. THE CONTRACTOR SHALL COORDINATE AS REQUIRED TO HAVE UTILITY COMPANY REPRESENTATIVE AT THE SITE TO DISCONNECT THE UTILITY NEUTRAL FROM GROUNDING SYSTEM DURING FINAL INSPECTION SO THAT REQUIRED TESTING ON THE GROUND SYSTEM CAN BE PERFORMED. THE CONTRACTOR SHALL PROVIDE NOTICE TO THE VERTICAL BRIDGE REPRESENTATIVE 2 (TWO) DAYS PRIOR TO FINAL TESTING. IF THE CONTRACTOR FAILS TO MAKE UTILITY COMPANY REPRESENTATIVE AVAILABLE DURING THE FINAL TESTING, THE CONTRACTOR SHALL PAY THE COST FOR AN INDEPENDENT GROUNDING CONSULTANT TO PERFORM THE GROUND RESISTANCE TEST. GROUNDING CONSULTANT SHALL BE SELECTED BY THE VERTICAL BRIDGE REPRESENTATIVE. IF THE UTILITY COMPANY REPRESENTATIVE FAILS TO APPEAR DUE TO NO FAULT THE CONTRACTOR, NO PENALTY SHALL APPLY.
7. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
8. THE GROUND CONDUCTORS SHALL BE RUN STRAIGHT FOR MINIMUM INDUCTANCE AND VOLTAGE DROP. SINCE CABLE BENDS INCREASE INDUCTANCE, THE MINIMUM REQUIRED BENDING RADIUS IS 8 INCHES WHEN BEND ARE UNAVOIDABLE. ALL METAL WORK WITHIN 10 FEET OF THE GROUND RING SHALL BE DIRECTLY BONDED TO THE GROUND SYSTEM, WITHOUT USING SERIES OR DAISY CHAIN CONNECTION ARRANGEMENTS.
9. PAINT, ENAMEL, LACQUER AND OTHER ELECTRICALLY NON-CONDUCTIVE COATINGS SHALL BE REMOVED FROM THREADS AND SURFACE AREAS WHERE CONNECTIONS ARE MADE TO ENSURE GOOD ELECTRICAL CONTINUITY.
10. CONNECTIONS BETWEEN DISSIMILAR METALS SHALL NOT BE MADE UNLESS THE CONDUCTORS ARE SEPARATED BY A SUITABLE MATERIAL THAT IS A PART OF THE ATTACHMENT DEVICE LISTED AND APPROVED FOR USE WITH THE SPECIFIC DISSIMILAR METALS MAY BE USED FOR THE PURPOSE.
11. ALL BELOW GRADE GROUND SYSTEM CONDUCTORS SHALL BE A MINIMUM DEPTH OF 30" (OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER).
12. CONTRACTOR TO COORDINATE WITH TOWER CONTRACTOR TO PROVIDE, RUN AND TERMINATE POWER & CONTROL WIRES WITHIN CONDUITS FROM LIGHTING CONTROLLER TO ELECTRICAL AND CONTROL PANELS.
13. INTERMEDIATE COAX GROUNDING TO BE INSTALLED ON VERTICAL RUNS THAT EXCEED 200 FEET IN LENGTH. CONTRACTOR SHALL COORDINATE WITH VERTICAL BRIDGE CONSTRUCTION MANAGER ON LOCATION OF INTERMEDIATE GROUNDING LOCATION.



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PRELIMINARY			
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NO.	DATE	D/C	DESCRIPTION
0	06-28-19	TT/JR	BP SUBMITTAL

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
GROUNDING
PLAN

SHEET NO.

G1.0

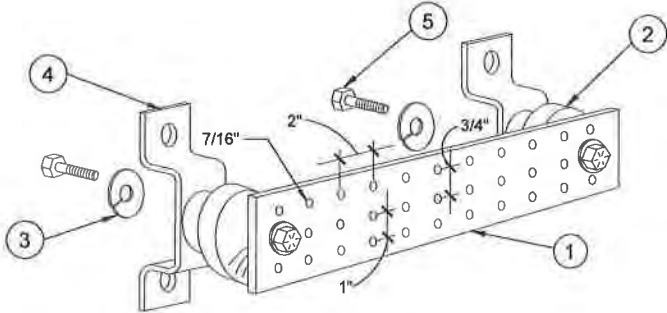
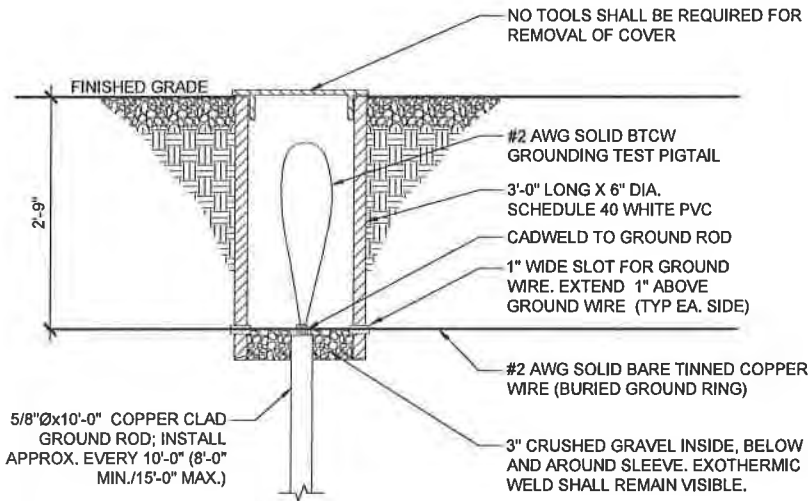
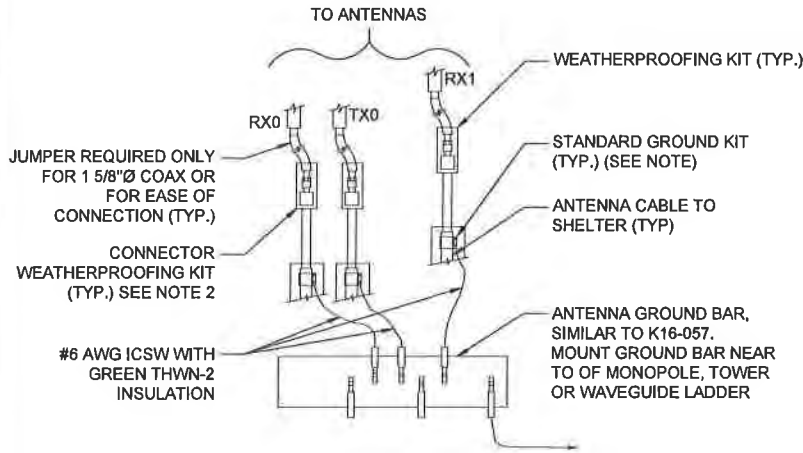
1 OVERALL GROUNDING PLAN

SCALE: 1" = 10'-0" (11X17)
SCALE: 1" = 5'-0" (22X34)



3 GENERAL GROUNDING NOTES

- NOTES:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
 - WEATHER PROOFING SHALL BE ANDREWS. (TYPE & PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)



- KEY / NOTES:
- TINNED COPPER GROUND BUSBAR, 1/4" X 4" X 12" OR APPROVED EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
 - SPACERS AS REQUIRED.
 - 5/8" LOCKWASHERS.
 - WALL MOUNTING BRACKET.
 - 5/8-11 X 1" HHCS BOLTS.
- GROUND BAR TO BE PURCHASED FROM ROHN.

1 SECTOR GROUNDING

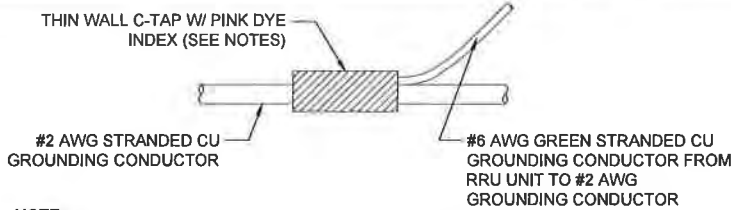
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2 GROUND TEST WELL DETAIL

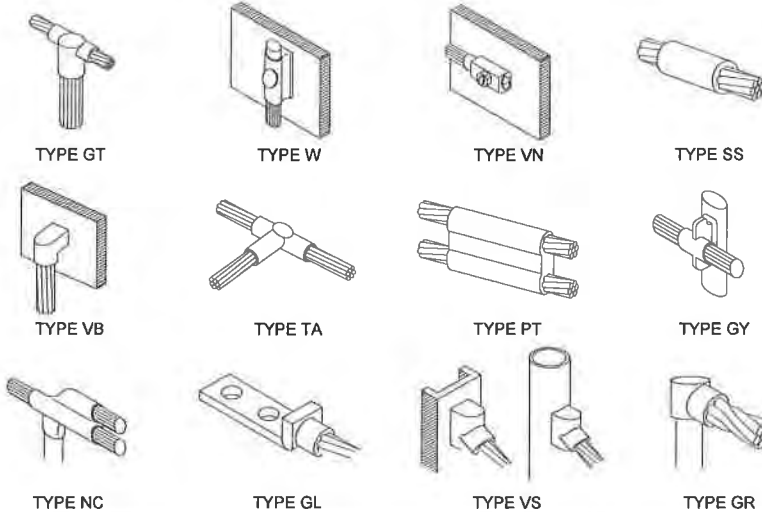
SCALE: NTS
SCALE: NTS

3 GROUND BAR DETAIL

SCALE: NTS
SCALE: NTS



NOTE:
CONTRACTOR TO SURROUND COMPLETED CONNECTION W/ WEATHER PROOFING TAPE TO ENSURE WEATHER PROOF CONNECTION.



3 C-TAP AND EXOTHERMIC WELDS

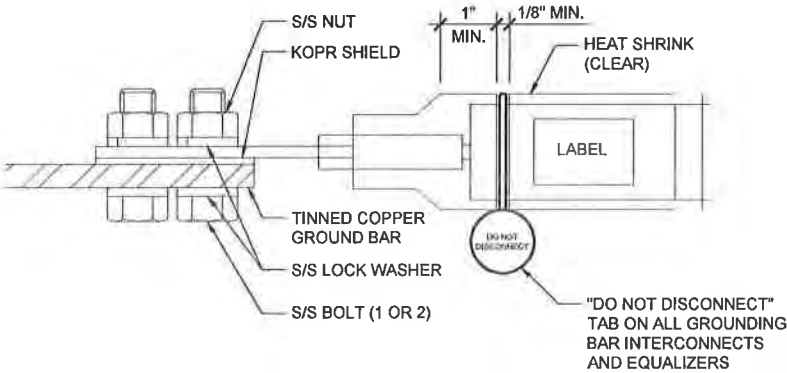
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SCALE: NTS

NOT TO SCALE

4 TWO-HOLE LUG CONNECTION

SCALE: NTS
SCALE: NTS

NOT TO SCALE



- NOTES:
- ALL HARDWARE 18/8 STAINLESS STEEL INCLUDING LOCK WASHER. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATCHING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.
 - PROVIDE 'DO NOT DISCONNECT' TAG.

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CP PROJECT NO.: VRB-18-0001-6

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SUBMITTAL				
NO.	DATE	D/C	DESCRIPTION	
0	06-28-19	TT/JR	BP SUBMITTAL	

SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:

10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE
GROUNDING
DETAILS

SHEET NO.

G2.0

GENERAL CONSTRUCTION NOTES

1. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
2. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
3. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
5. BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
6. DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
7. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
8. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL FOREIGN SUBSTANCES. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
11. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL 1-800-962-7962.
12. THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
13. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
14. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
15. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INCLUDING, BUT NOT LIMITED TO, THE BUILDING PERMIT, INSPECTIONS, CERTIFICATES, ETC.
17. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.
18. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE OSHA REGULATIONS FOR CONSTRUCTION.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
20. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER. NOTIFY THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
21. MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
22. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS AS DEFINED BY THE OWNER OR OWNER'S REPRESENTATIVE ON THE DRAWINGS.
23. CONTRACTOR SHALL GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE EQUIPMENT PAD AND THE TOWER.
24. ALL IMPROVEMENTS TO CONFORM WITH LOCAL JURISDICTION CONSTRUCTION STANDARDS AND SPECIFICATIONS, LATEST EDITION.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
2. ALL INTERIOR STRUCTURAL STEEL USED SHALL BE, WHEN DELIVERED, FINISHED WITH ONE COAT FABRICATOR'S NON-LEAD, RED OXIDE PRIMER. PRIMING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE PRIMED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
3. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A36 UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
4. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
5. CONNECTIONS:

A. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. AT THE COMPLETION OF WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.

B. BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

C. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM 307 BOLTS UNLESS NOTED OTHERWISE.

D. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER.

DESIGN DATA

1. WIND LOADS: PER EIA/TIA F-222
- ICE LOADS: 1/2" RADIAL ON ALL COMPONENTS & CABLE
- SNOW LOAD: PER NY STATE BLDG. CODE.
- SEISMIC LOADS: PER NY STATE BLDG. CODE.

CONCRETE NOTES

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE";
2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%) WITH A MAXIMUM 4" SLUMP, AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE NOTED.
4. MAXIMUM AGGREGATE SIZE SHALL BE 1".
5. THE FOLLOWING MATERIALS SHALL BE USED: ASTM C 150, TYPE I PORTLAND CEMENT: ASTM C 150, TYPE I REINFORCEMENT: ASTM A 185 NORMAL WEIGHT AGGREGATE: ASTM C 33 WATER: DRINKABLE ADMIXTURES: NON-CHLORIDE CONTAINING
6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
8. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH: 3 IN

CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER: 2 IN.

#5 AND SMALLER & WWF: 1 1/2 IN.

CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

SLAB AND WALL: 3/4 IN.

BEAMS AND COLUMNS: 1 1/2 IN.
9. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURES WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
11. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.

15. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.



CP PROJECT NO.: VRB-18-0001-6

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SITE NAME:

11 MILE
US-AK-5244

SITE ADDRESS:
10020 CRAZY HORSE DR
JUNEAU, AK 99801

SHEET TITLE

GENERAL
NOTES

SHEET NO.

GN1

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
5' Lightning Rod	150	30,000 sq in CaAa	130
30,000 sq in CaAa	150	15,000 sq in CaAa	120
30,000 sq in CaAa	140	15,000 sq in CaAa	105

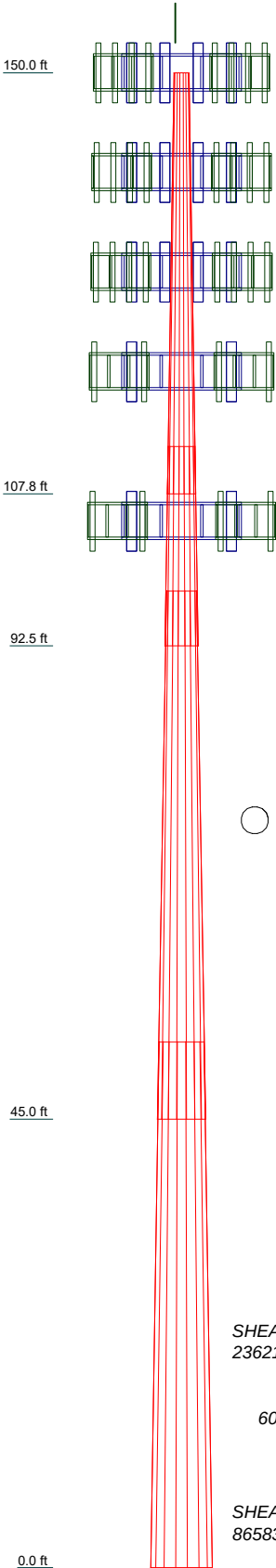
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

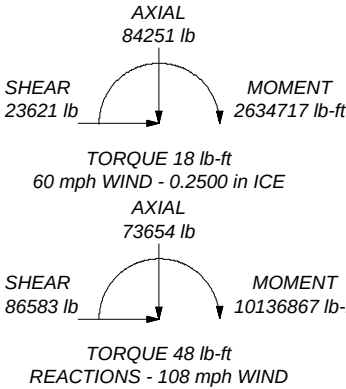
TOWER DESIGN NOTES

1. Tower designed for Exposure D to the TIA-222-G Standard.
2. Tower designed for a 108 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 60 mph basic wind with 0.25 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 96%

Section	1	2	3	4	
Length (ft)	42.25	20.00	53.00	52.75	
Number of Sides	18	18	18	18	
Thickness (in)	0.3125	0.4375	0.5000	0.5000	
Socket Length (ft)	4.75	5.50	7.75		
Top Dia (in)	18.0000	31.8500	36.5720	53.0385	
Bot Dia (in)	34.3085	39.5700	57.0300	73.4000	
Grade			A572-65		
Weight (lb)	4053.5	3666.7	14577.1	19653.0	41950.3



ALL REACTIONS
ARE FACTORED



May 22, 2019

Vertical Bridge
750 Park of Commerce Drive, Suite 200
Boca Raton, FL 33487

Re: Nello Tower Fall Radius – Nello 150' NTP Pole Tower
Project Name: US-AK5244 11 Mile
Nello Job #: SO25910
Tower Drawing #: 452078

To Whom It May Concern:

This letter is regarding your inquiry about the expected performance of your proposed tower designed by Nello Corporation based on site-specific criteria.

Our towers are designed to meet or exceed industry standards defined by TIA-222-G, "Structural Standards for Antenna Supporting Structures and Antennas" (TIA Standard). It is our opinion that the possibility of a tower collapse is very unlikely. The tower is designed using extreme wind and ice conditions. In fact, wind speeds specified by the TIA Standard are 50-year wind speeds. That is, they have only a 2% statistical chance of occurring in any given year.

This tower has been designed using the following wind conditions as a minimum: a 134 mph ultimate wind speed with no ice and a 60 mph 3-second gust wind with .25" ice. The TIA Standard specifies 127 mph as the wind speed required for Juneau Borough, AK. The "3-second gust wind speed" refers to a wind measured at 33 feet above the ground. Equations in the TIA Standard take into account that wind speed escalates with increasing height of the tower.

Although we cannot guarantee exactly how a tower would fall if it were to fail, the most likely mode of failure would be a buckling failure of one of the pole sections due to excessive wind loading. The pole section with the highest stress ratio is located at the 107.75' – 150' level. The stress ratio in that section is calculated to be 96.2% of the code-permitted design loading. Given that the pole section with the highest stress ratio will most likely fail first, the proposed tower would fail at the 107.75' level with the top 42.25' of the tower collapsing. Depending on the conditions at the time of failure and the stress levels in structural material below, the top 42.5' of the tower would likely fall within a 75' fall radius.

The fall radius statement above assumes proper foundation construction and tower installation. The foundation design should be reviewed to ensure that no foundation limit state governs the entire structural system and negates the fall radius design. The fall radius expectancy requires that the foundation be designed with a capacity greater than that of the tower capacity. If the foundation design used in association with this tower is performed by a third party then Nello must be provided the opportunity to review the design in order to confirm that the fall radius remains satisfactory. If for some reason Nello does not provide the tower design or is not given the opportunity to design or review the foundation for this specific project then the content of this letter becomes void.

If you have any other questions or concerns regarding the design of your site-specific tower, please contact our engineering or sales department.

Sincerely,

William H. Martin, P.E., S.E.





150ft. Balloon Test



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. MONOPOLE
SIMULATION**

View from Brandy Lane
approximately 1,350ft east of site



150ft. Balloon Test



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. MONOPOLE
SIMULATION**

View from Industrial Boulevard
approximately 1,280ft northeast of site



150ft. Balloon Test



verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. MONOPOLE
SIMULATION**

View from Douglas Island Launch
approximately 3 miles south of site

Attachment A - Application Packet



150ft. Balloon Test



Attachment A - Application Packet

verticalbridge

US-AK-5244 11 MILE

10020 Crazy Horse Dr, Juneau, AK 99801

**150ft. MONOPOLE
SIMULATION**

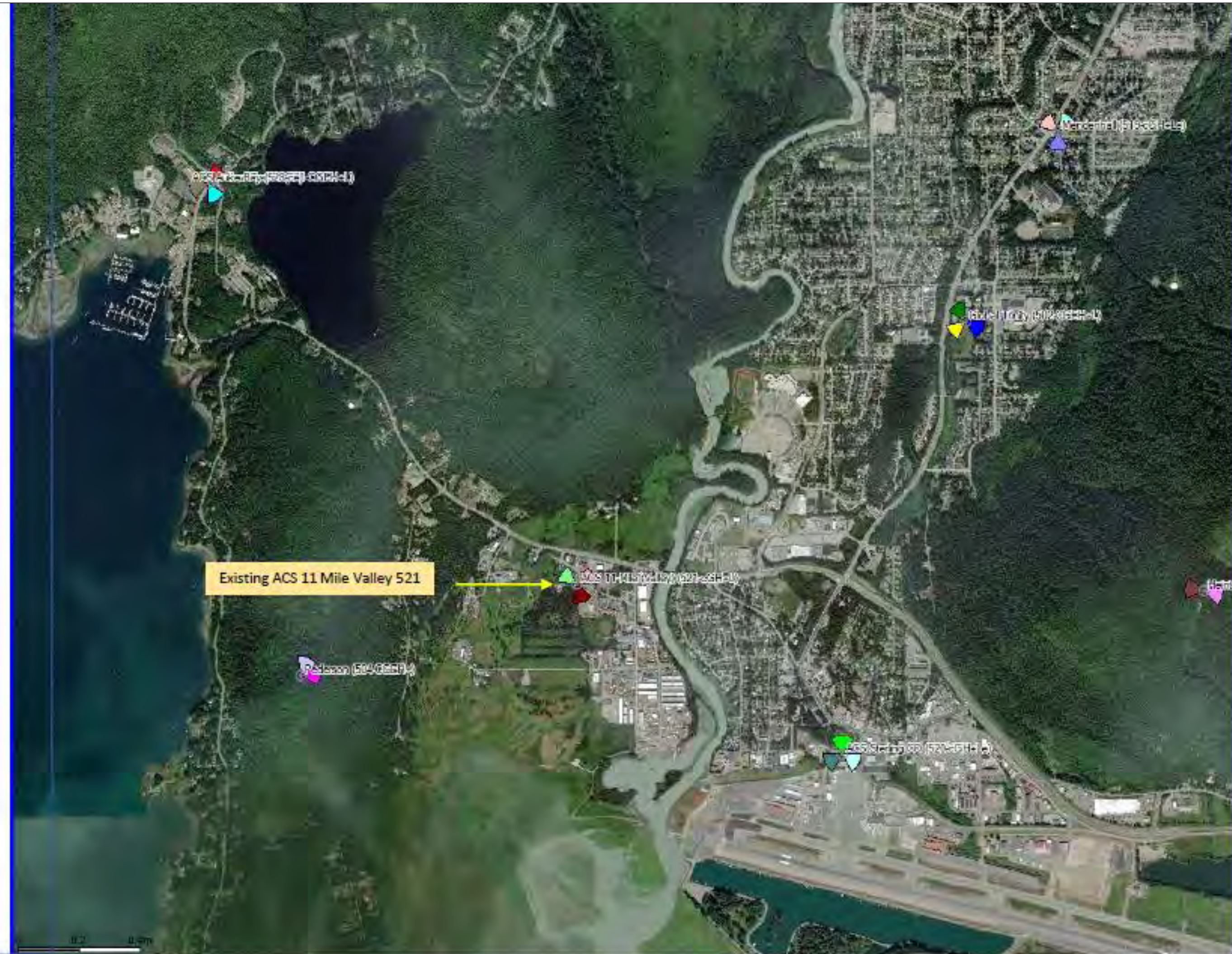
View from Engineers Cutoff Road
approximately 2,970ft west of site



Packet Page 569 of 732

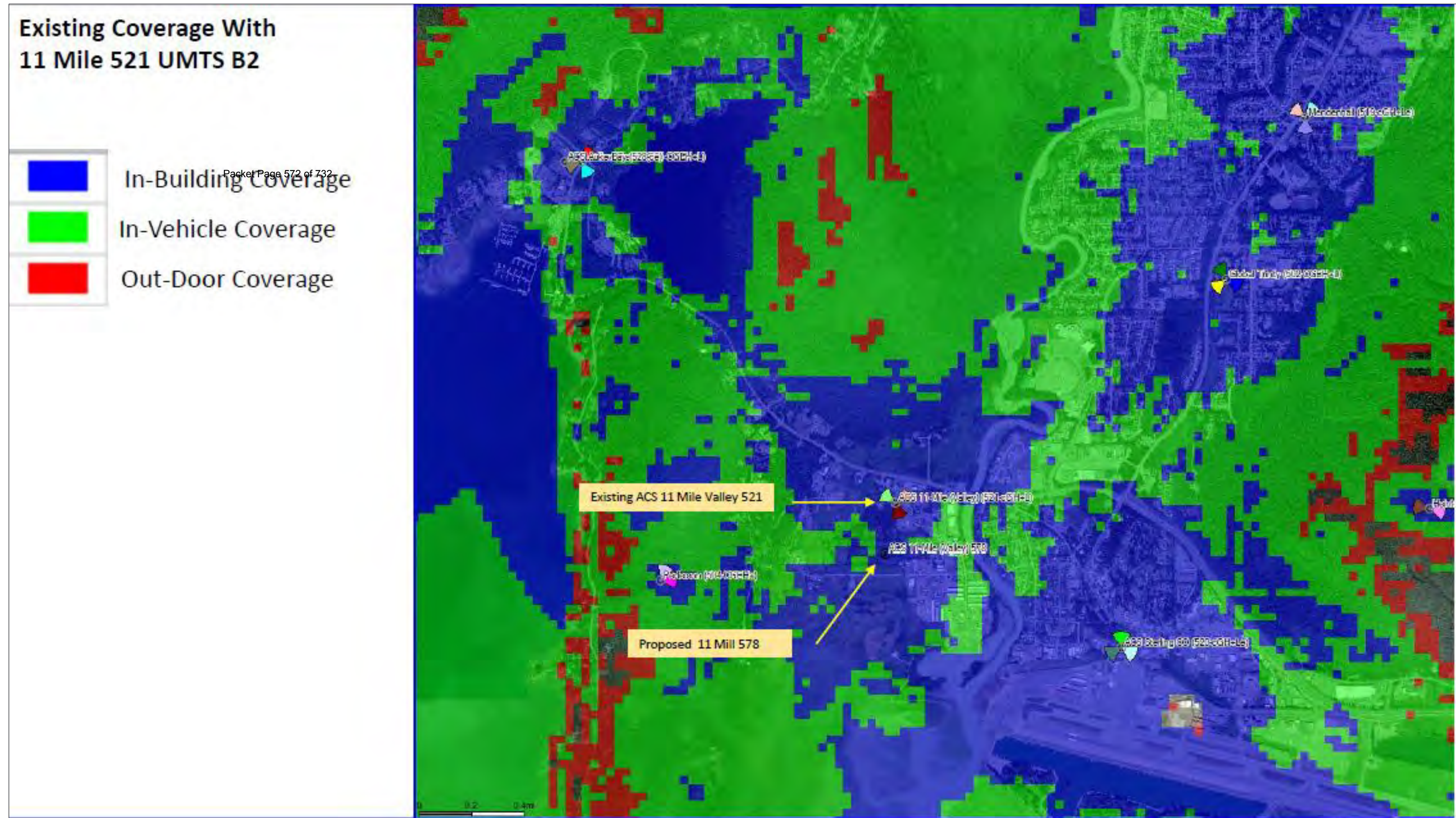
11 Mile

Packet Page 570 of 732





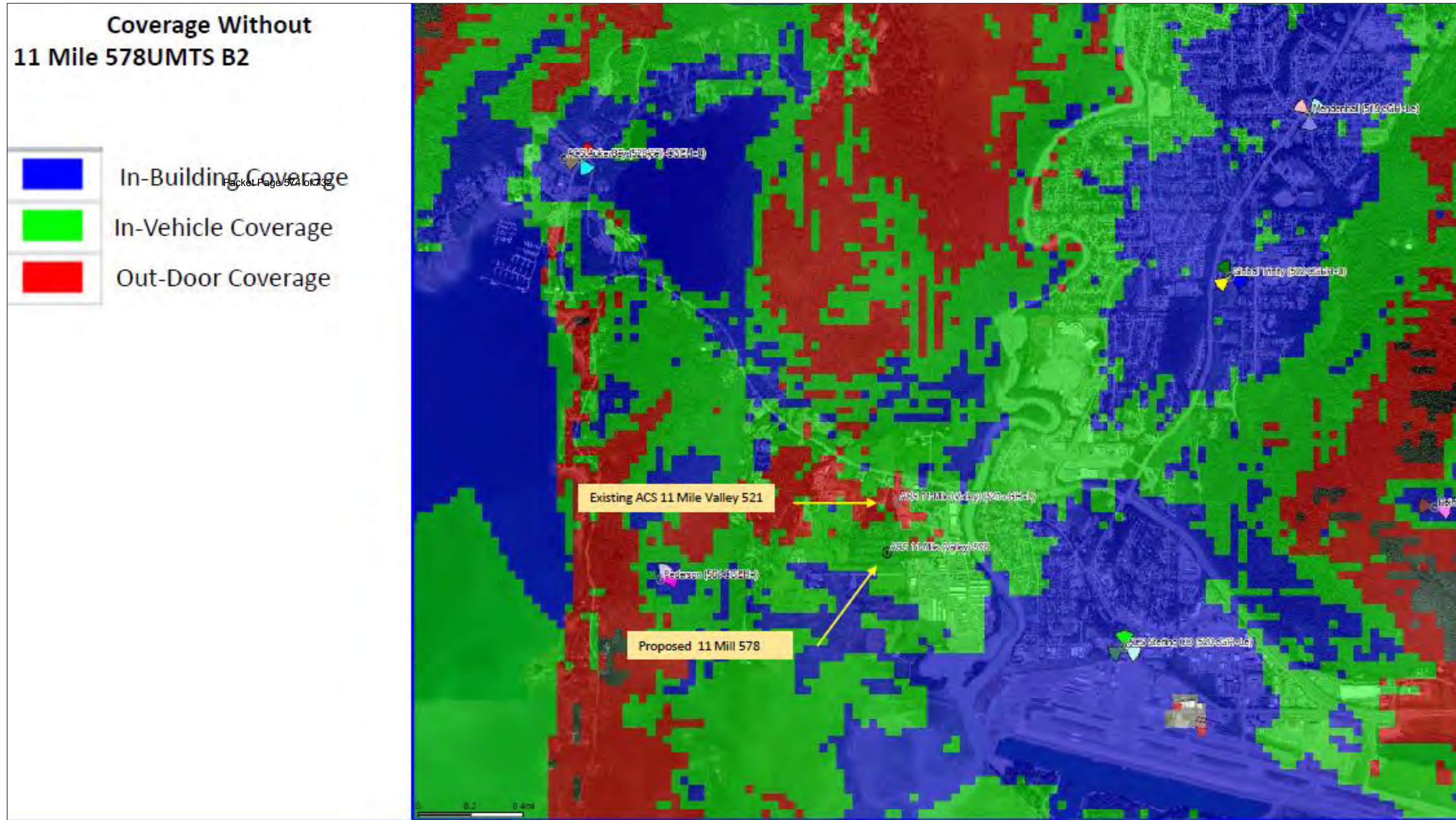
Existing Location UMTS Coverage



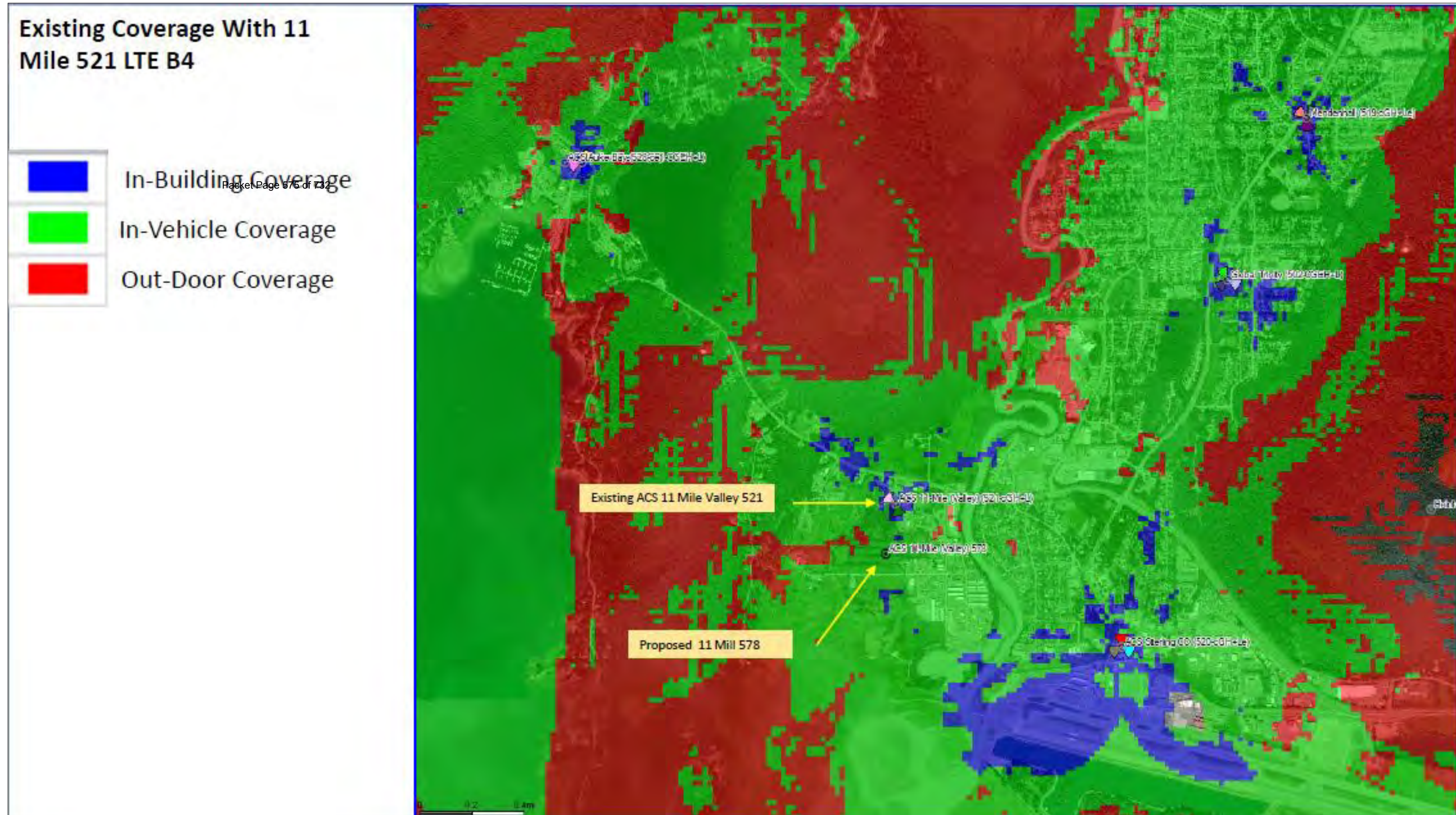




UMTS Coverage without site

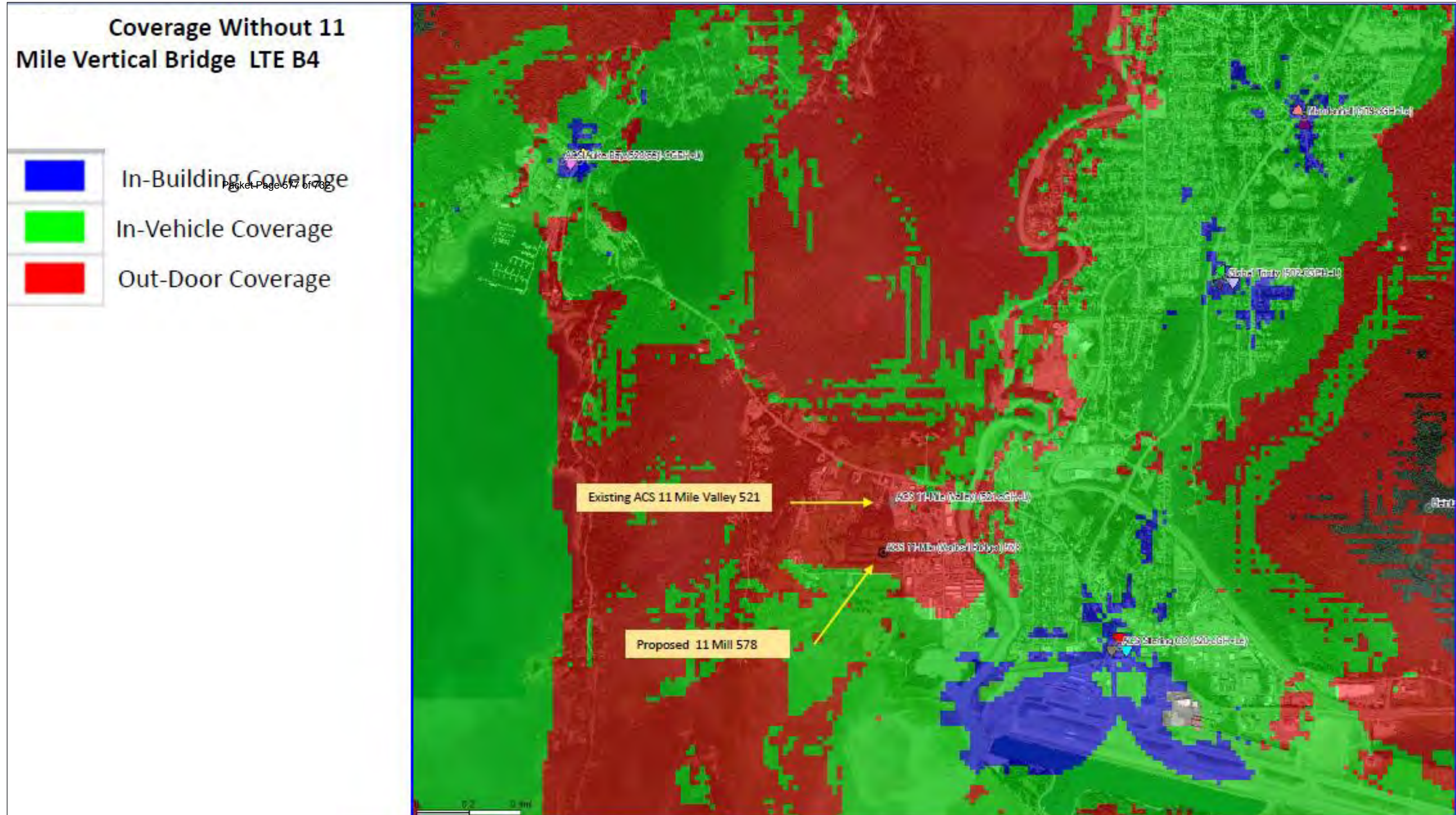


LTE coverage from Existing Location

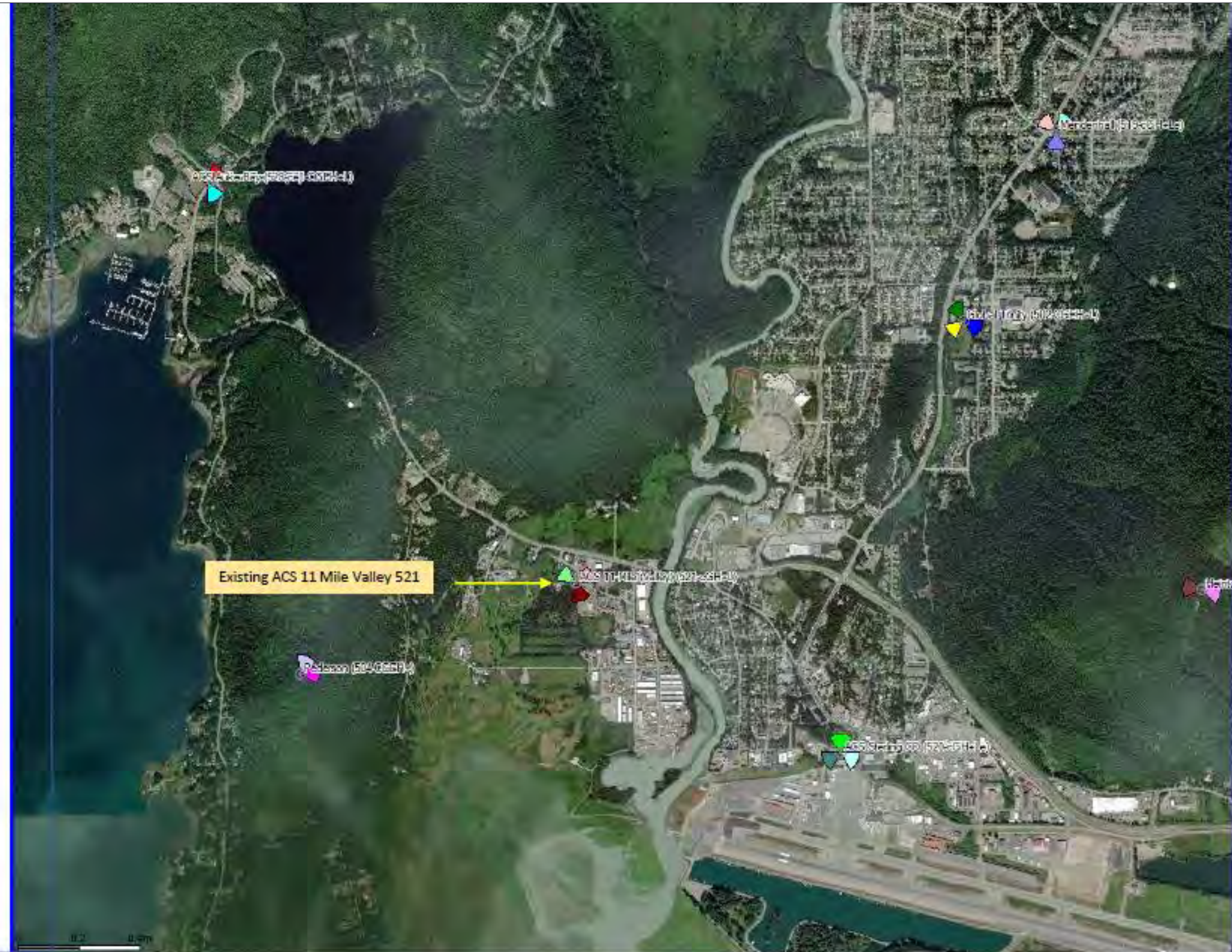




LTE coverage without Site



Packet Page 578 of 732

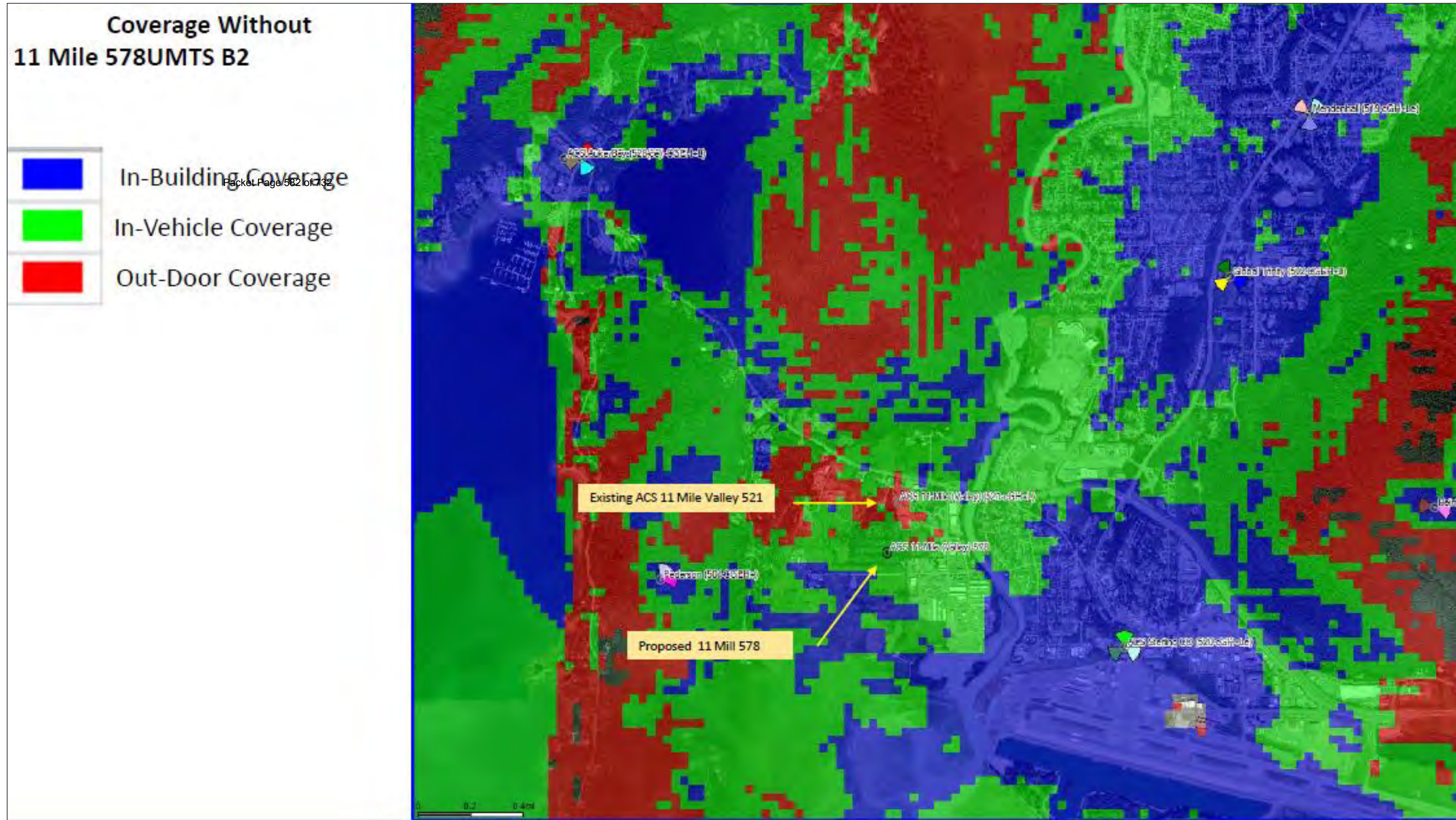


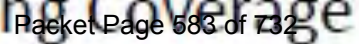






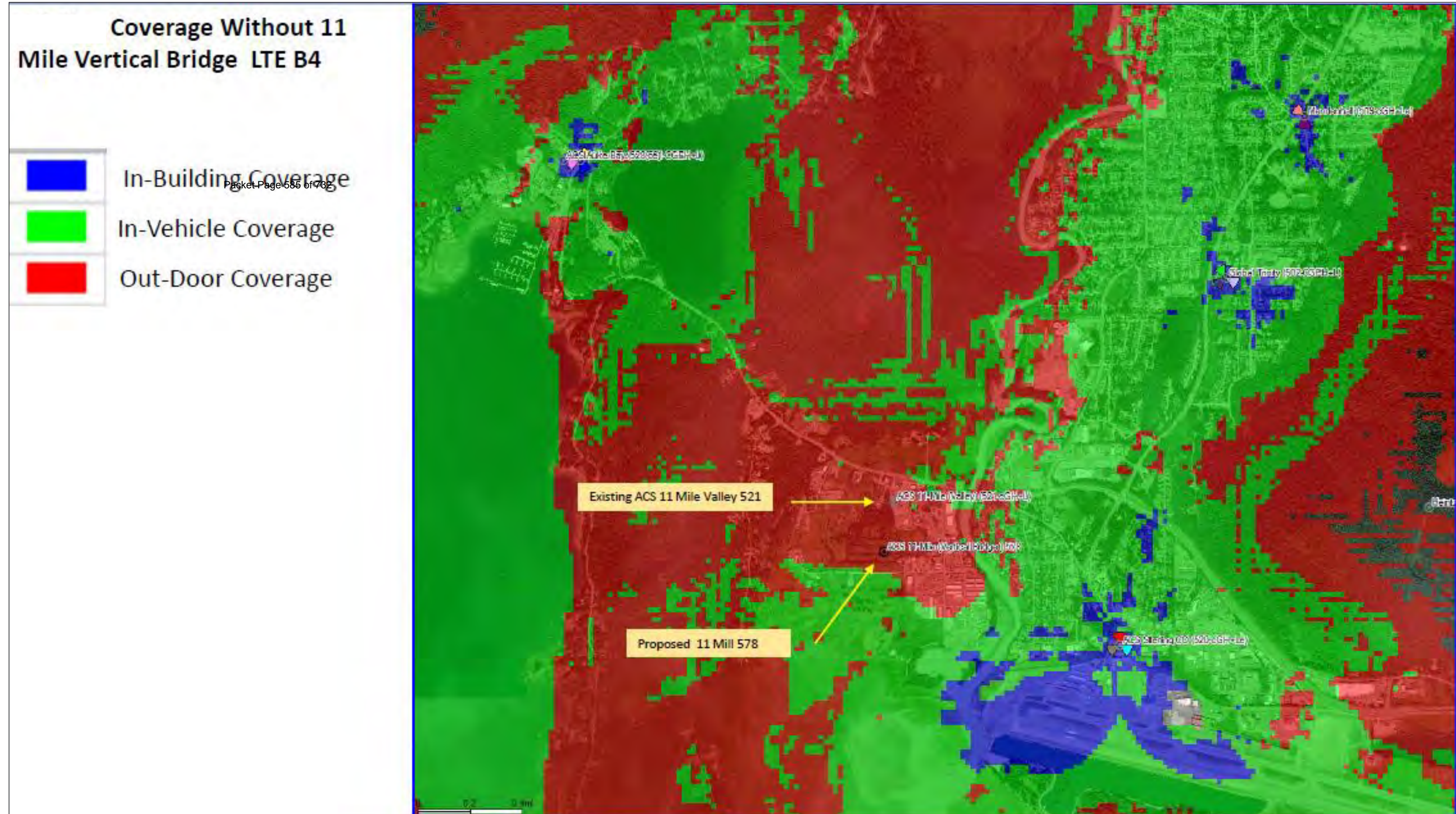
UMTS Coverage without site







LTE coverage without Site



11 Mile New Tower (578) Radio Frequency (RF) Site Compliance Report



Mendenhall Valley, Juneau, AK, USA

Proposed Vertical Bridge Towers Justification

WCF20190009 Lena Point and WCF20190010 11 Mile

September 30th, 2019

In the spring of 2018, Vertical Bridge began a search for a couple of new tower site locations in the Industrial zoned area south of the Glacier Hwy and west of the Mendenhall River and in the area of the Glacier Hwy out by Lena Point in the D3 zoned area. The purpose of these searches was to find suitable locations for their primary client to locate new cellular equipment and expand the cellular coverage beyond what was capable on existing infrastructure.

Vertical Bridge's primary client for both of these locations is currently located on existing AT&T Alaska (Alascom) towers in these areas.

There are several reasons why the client's existing colocations on these AT&T Alaska facilities do not perform as the client's RF Engineering Network parameters require them to:

1. Lack of necessary height for the antennas to generate the desired coverage
2. Lack of the existing structures to be modified to achieve the desired height for the coverage parameters and additional tower cellular equipment
3. Lack of existing ground space to accommodate the addition of desired additional, new equipment to be placed in order to provide new 5G technology
4. Lack of any other colocatable structures within these search areas that can accommodate any cellular equipment

5. Unreasonable increase of lease fees for ground and tower space by current landlord

An extensive search was conducted for the new, proposed tower locations in the above mentioned areas. In the case of the WCF20190009 Lena Pt. location, there was really only one practical location that would provide the coverage required by the client's RF Engineering group. That is the proposed location adjacent to the CBJ Water Tank and across the access road from the FAA tower off of Merganser Rd on CBJ owned property. This location has good road access as well as existing power and telephone copper/fiber available nearby for use at the proposed site. Critical elements for economically feasible telecommunications site operations. The proposed site is also heavily wooded and provides a natural visual barrier to minimize viewshed intrusion.

Both proposed locations have had visual impact studies performed and there has been determined to be no significant visual impact to the surrounding area. Neither tower is required by the FAA or FCC to be lit or painted. Because of these determinations, both towers have been designed to be manufactured in galvanized steel and non-concealed. Both towers have been load designed to accommodate a total of 4 carriers.

In the Industrial zoned area of the proposed WCF20190010 11 Mile site, six prospective landlords were approached about leasing space on their property to Vertical Bridge for the purposes of developing a telecommunications site with tower. Several of these potential landlords rejected the proposal outright and several others considered it, but either requested unreasonable lease amounts way out of line with market norms or decided that they didn't want the requested size of the proposed site to occupy that much of their property.

After exhausting all prospective private property site locations, it was suggested by the CBJ to examine the CBJ property where the Food Bank and an FAA tower is currently located off of Crazy Horse Drive. This location was not ideal from a Wetlands standpoint, but it was workable and still within the Industrial zoned area. Vertical Bridge's primary client's RF Engineering group reviewed the location, determined the necessary tower height required to meet the network performance criteria and OK'd the site. Vertical Bridge is currently pursuing a Wetlands construction permit with the Army Corps of Engineers for this location.

In both the Lena Point and 11 Mile locations there are FAA towers. The FAA, and for that matter any Federal Government telecommunications facility, have never allowed any private carriers (cellular or otherwise) to collocate on their tower facilities. To my knowledge, neither has the State of Alaska. This is to prevent any hint of favoritism or endorsement by a government entity toward any particular carrier or commercial entity.

In conclusion, both proposed site locations meet Vertical Bridge's primary client's RF engineering network performance criteria. There are already existing FAA towers in close proximity and one of the locations is in the highly preferred Industrial area for telecommunications development. In the case of the Lena Point location, the proposed site is also in close proximity to the rather large CBJ owned water tank. Both locations seem ideal to locate commercial, multiple carrier telecommunications facilities as the immediate areas surrounding each location already accommodate a more industrial oriented development.

Gary R. Brekke



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Engineering and Public Works
STAFF PERSON/TITLE: Autumn Sapp
DATE: 10/4
APPLICANT: Gary Brekke
TYPE OF APPLICATION: Wireless Communication Facility

PROJECT DESCRIPTION:

New free standing, unlit, 155' communications tower

LEGAL DESCRIPTION: USS 1041
PARCEL NUMBER(S): 4B1701100120
PHYSICAL ADDRESS: 10020 Crazy Horse Dr

SPECIFIC QUESTIONS FROM PLANNER:

Are there concerns related to your department about the proposed tower?

AGENCY COMMENTS:

Engineering has no concerns with the proposed work. Any work within the ROW will need to be permitted through General Engineering.

From: [Charlie Ford](#)
To: [Amy Liu](#)
Subject: RE: Review WCF20190009/ -10 Merganser and Crazy Horse
Date: Friday, October 4, 2019 10:55:34 AM
Attachments: [image001.jpg](#)

Hi Amy,
Buildings has no issues with these projects.
Thank you,

Charlie Ford | Building Official

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0767

CBJ_EmailLargeColorLogo



From: Amy Liu

Sent: Friday, October 4, 2019 9:58 AM

To: Charlie Ford

Subject: Review WCF20190009/ -10 Merganser and Crazy Horse

Good morning,

Please see the attached applications for your review and comment.

Thanks,

Amy Liu | Planner

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0764

CBJ_EmailLargeColorLogo





(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Juneau International Airport
STAFF PERSON/TITLE: Patty Wahto
DATE: 10/11
APPLICANT: Gary Brekke
TYPE OF APPLICATION: Wireless Communication Facility

PROJECT DESCRIPTION:

New free standing, unlit, 155' communications tower

LEGAL DESCRIPTION: USS 1041
PARCEL NUMBER(S): 4B1701100120
PHYSICAL ADDRESS: 10020 Crazy Horse Dr

SPECIFIC QUESTIONS FROM PLANNER:

Are there concerns related to your agency about the proposed tower?

AGENCY COMMENTS:

Has the applicant filed the FAA form 7460 for obstruction to air space? That is a requirement for areas around an airport and reviewed by Obstruction Evaluation Group (OEG) and others. It will determine the ability to construct as well as requirements for lighting and marking.

From: Tom Dawson <tommyjoe@alaskan.com>
Sent: Wednesday, October 16, 2019 2:44 PM
To: PC_Comments
Subject: Case no: WCF2019 0010 Parcel no: 4B1701100120

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

I strongly **oppose** this proposed wireless communication permit.

First, it does not say what type of “wireless” communication device will be installed, but I assume the tower will be for a 5G wireless phone sys.

Second, knowing all the known and unknown dangers of 5G microwaves, I do not want to see any 5G installations anywhere in Juneau, let alone within 2000 feet of my property in that area.

Third, the known dangers of 5G are bad enough that any sane person would want no part of it, but it is the unknown dangers that haven’t been studied yet that really concern me.

Please do a little research into the dangers of 5G microwave transmissions and how they affect the human body and brain. Do not let these dangers come to Juneau.

Tom Dawson

From: grieser@gci.net
Sent: Monday, October 28, 2019 1:48 PM
To: PC_Comments
Subject: Case WCF2019 0010

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Cell tower installation at 10020 Crazy Horse Drive. Please allow this submission as a request NOT TO INSTALL A 5G tower here or anywhere in Juneau. Thank you!

D. Grieser

From: Karen Dinnan <dinnans@gmail.com>
Sent: Wednesday, October 30, 2019 8:24 PM
To: PC_Comments
Subject: No 5G

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Do we NEED this?

I would say no. Just because it is the latest/greatest, doesn't mean we should especially since there are questionable major health concerns and environmental impacts.

https://themindunleashed.com/2019/10/scientific-american-warning-5g.html?fbclid=IwAR2WlChftz6AcVsU2tF_ZDuKkQeCUjwz3a_Dzlx5lzHGLtJv4TQGtGhaZKg

<http://techcrunch.com/2018/09/10/bay-area-city-blocks-5g-deployments-over-cancer-concerns/>

Karen Dinnan
PO Box 21703
Juneau, AK 99802

dinnans@gmail.com

From: Tom Dawson <tommyjoe@alaskan.com>
Sent: Wednesday, November 20, 2019 7:20 PM
To: PC_Comments
Subject: Case No: WCF2019 0010

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Amy Liu,

I am again writing and expressing my concerns regarding Case No; WCF2019 0010 Parcel No: 4B1701100120

I strongly OPPOSE this permit to install a new 155 foot communication tower on Crazy Horse Drive near my property. I strongly oppose any communication towers in the Juneau area that will include **5G microwave transmissions**. This is dangerous technology that hasn't been fully studied and understood. I hope the Planning Commission does it's due diligence regarding the 5G RF dangers and protects the citizens of Juneau from the horrific health (and privacy) issues that will arise from this radiation, and the millions in lawsuits that will arise as the damage is done and lives are ruined and the city is held accountable for blindly allowing this to happen. **Please see the article below and follow the links.** 5G microwave RF transmissions are **not** harmless. Those RF wavelength transmissions are in the same wavelength as radar transmissions. Even small radar systems on pleasure boats give a "WARNING" in the manuals not to stand anywhere near their beams while they are operating because it causes human cell damage. This damage is similar to the emissions in a microwave oven. Read the caution label on your microwave oven!

Do not grant this permit or allow 5G to come to Juneau.

Tom Dawson
 321-3474

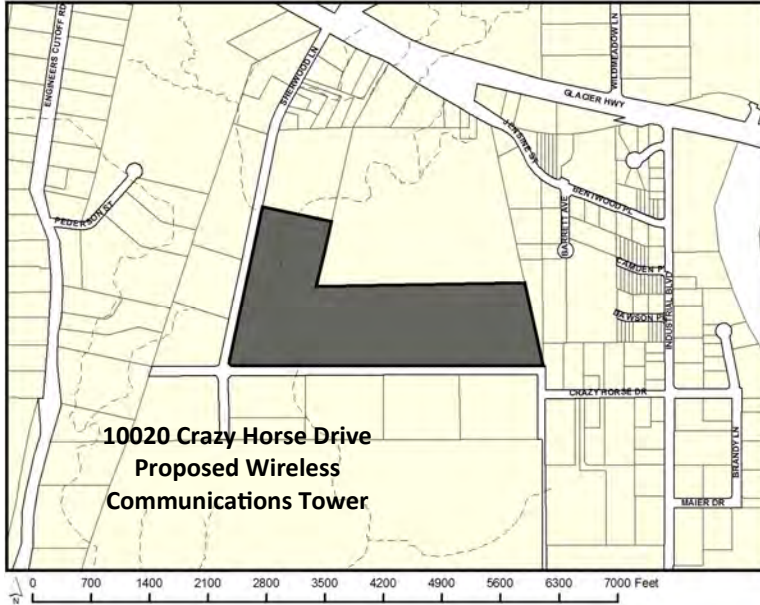
"While the [FCC continues over and over and over again to say that 5G is safe](#), the extended excerpt below which comes to us from this story over at Global Research titled "[5G Danger: 13 Reasons 5G Wireless Technology Will Be a Catastrophe for Humanity](#)" gives us many reasons to believe otherwise".

"The 5G danger can't be overstated. 5G (5th Generation) is now being actively rolled out in many cities around the world. Simultaneously, as awareness over its horrific health and privacy impacts is rising, many places are issuing moratoriums on it or banning it, such as the entire nation of Belgium, the city of Vaud (Switzerland) and San Francisco (USA). Radiofrequency radiation (RF or RFR) and electromagnetic fields (EMF) are being increasingly recognized as new types of pollution – environmental pollution".

Read more at: AllNewsPipeline.com and 5GAlert.com.

Invitation to Comment

On a proposal to be heard by the CBJ Planning Commission
Your Community, Your Voice



155 S. Seward Street Juneau, Alaska 99801

TO:

An application has been submitted for consideration and public hearing by the Planning Commission for a **new wireless communications tower at 10020 Crazy Horse Drive** in an **Industrial Zone**.

TIMELINE

Staff Report expected to be posted **Monday, October 4, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Sept. 20

Comments received during this period will be sent to the Planner, **Joseph Meyers**, to be included as an attachment in the staff report.

Sept. 21 — noon, Oct. 11

Comments received during this period will be sent to Commissioners to read in preparation for the hearing.

HEARING DATE & TIME: 7:00 pm, October 12, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/88293414912>. The Webinar ID is: 882 9341 4912. To join by telephone, call: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or +1 312 626 6799 or +1 929 436 2866 and enter the Webinar ID.

October 13

The results of the hearing will be posted online.

Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed September 15, 2021

Case No.: WCF2021 0010
Parcel No.: 4B1701100120
CBJ Parcel Viewer: <http://epv.juneau.org>



Attachment B - Abutters Notice & Public Notice Sign Photo



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Engineering and Public Works
STAFF PERSON/TITLE: Autumn Sapp
DATE: 10/4
APPLICANT: Gary Brekke
TYPE OF APPLICATION: Wireless Communication Facility

PROJECT DESCRIPTION:
New free standing, unlit, 155' communications tower

LEGAL DESCRIPTION: USS 1041
PARCEL NUMBER(S): 4B1701100120
PHYSICAL ADDRESS: 10020 Crazy Horse Dr

SPECIFIC QUESTIONS FROM PLANNER:

Are there concerns related to your department about the proposed tower?

AGENCY COMMENTS:

Engineering has no concerns with the proposed work. Any work within the ROW will need to be permitted through General Engineering.

From: [Charlie Ford](#)
To: [Joseph Meyers](#)
Subject: RE: WCF2021 0010
Date: Thursday, October 7, 2021 3:08:46 PM

Hi Joseph,

On towers we generally rely on the engineered plans.
These look good to me.
Thanks,

Charlie Ford | Building Official

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0767



From: Joseph Meyers <Joseph.Meyers@juneau.org>
Sent: Thursday, October 7, 2021 1:33 PM
To: Charlie Ford <Charlie.Ford@juneau.org>
Subject: WCF2021 0010

Hi Charlie,

I'm reviewing this project and wanted to see if you have any questions or concerns about it. It's a previously approved Special Use Permit for a WCF Tower. They changed the tower type from a monopole to a self-supporting tower. Let me know if you see any issues.

Thank you!

Joseph Meyers, MURP | Planner I

[Community Development Department](#) | City & Borough of Juneau, AK

230 S. Franklin Street, 4th Floor Marine View Building

Personal line: 907.586.0753; Ext: 4209

He/him/his



Fostering excellence in development for this generation and the next.



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Juneau International Airport
STAFF PERSON/TITLE: Patty Wahto
DATE: 10/11
APPLICANT: Gary Brekke
TYPE OF APPLICATION: Wireless Communication Facility

PROJECT DESCRIPTION:

New free standing, unlit, 155' communications tower

LEGAL DESCRIPTION: USS 1041
PARCEL NUMBER(S): 4B1701100120
PHYSICAL ADDRESS: 10020 Crazy Horse Dr

SPECIFIC QUESTIONS FROM PLANNER:

Are there concerns related to your agency about the proposed tower?

AGENCY COMMENTS:

Has the applicant filed the FAA form 7460 for obstruction to air space? That is a requirement for areas around an airport and reviewed by Obstruction Evaluation Group (OEG) and others. It will determine the ability to construct as well as requirements for lighting and marking.



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

COMMUNITY DEVELOPMENT DEPARTMENT - REQUEST FOR AGENCY COMMENT

DEPARTMENT: Assessor's Office
STAFF PERSON/TITLE: Mary Grant, Assessor
DATE: 10/4
APPLICANT: Gary Brekke
TYPE OF APPLICATION: Wireless Communication Facility

PROJECT DESCRIPTION:

New free standing, unlit, 155' communications tower

LEGAL DESCRIPTION: USS 1041
PARCEL NUMBER(S): 4B1701100120
PHYSICAL ADDRESS: 10020 Crazy Horse Dr

SPECIFIC QUESTIONS FROM PLANNER:

Will the proposed communications tower affect neighboring property values?

AGENCY COMMENTS:

The proposed communications tower is not likely to have a negative affect on neighboring property values.

From: Tom Dawson <tommyjoe@alaskan.com>
Sent: Friday, September 17, 2021 3:29 PM
To: PC_Comments
Subject: WCF2021 0010

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Planning Commission,

I responded to this proposed wireless tower the last time it came up some time ago. I do not know if those comments have been saved or discarded.

At any rate, I will comment again.

I do not support a communications tower located in this area. I own property approximately 600 yards from the proposed site, and to access that property I would have to travel within 300 yards of the tower. I currently live within 350 yards of an existing wireless tower and go out of my way to not use that intersection as I depart my home.

This current proposal does not discuss what type of wireless signal is proposed for that tower. I assume it will be 5G. That seems to be the latest technology. I have done a lot of research regarding wireless signals and the short wave 5G proposed signals are very dangerous for human cell tissue. I personally do not own a smart phone or even a phone with a 4G signal because of the research done and the damage associated with these type signals. 5G is even a much more dangerous wavelength. I won't bore you with all the research or statistics. It's available to anyone who is interested and wants to take the time.

However, folks who have an investment to see that 5G goes forward don't want to hear about the research or damage. They simply downplay the issues and give a bunch of technical double talk. To them I ask, would they override the door switch on their microwave oven then turn it on? I think not.

Tom Dawson
321-3474

WCF2021 0010

Modification of an approved
Special Use Permit for a 150-foot Wireless Communications Facility (WCF)
Self-Supporting Tower
10020 Crazy Horse Drive
Industrial

December 14, 2021
Regular Planning Commission Committee

What is being requested?

- Modification of WCF2019 0010 from a monopole to a self-supporting tower



Key considerations

- Previously approved
- Change of tower type only
- Otherwise remains as approved
- Monopole constrained by local market
 - Unavailable locally
 - Cost-prohibitive to import

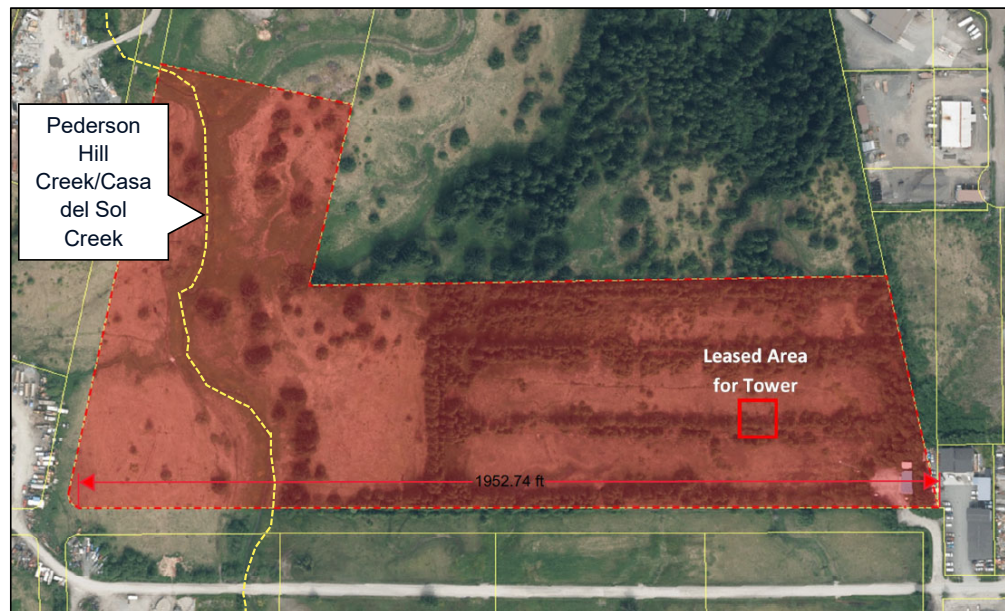
Background information

Lot size: 31.97 acres

Zoning: Industrial

Use: The SE Alaska Food Bank

Habitat: An anadromous waterbody > 1,000 feet from proposed tower



Prior approval

- Approved as a monopole
- Required a base 40 feet deep, 9 feet wide
- When bid, determined no contractors in the State of Alaska that have the necessary equipment
- Cost-prohibitive to ship from the Lower 48
- Applicant prefers using local contractors

What about 5G?

- Facility is in compliance with radio frequency FCC Regulations
- Original plans from 2019 do not include 5G and the plans have not changed
- Other tower tenants may operate in the higher frequencies of 5G
- The safety of 5G is the purview of the Federal Communications Commission (FCC)

Commission role

The commission may:

- Approve the modification
- Approve the modification with additional conditions
- Deny the approval of the modification

Thank you!

Applicant: Matt Grugan & Gary Brekke
Vertical Bridge REIT, LLC



Planning Commission

(907) 586-0715
PC_Comments@juneau.org
www.juneau.org/plancomm
155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION NOTICE OF DECISION

Date: December 15, 2021
File No.: WCF2021 0010

Vertical Bridge, LLC
Attn: Matt Grugan/Gary Brekke
750 Park of Commerce Drive
Boca Raton, FL 33487

Application For: Modification of an approved facility
Legal Description: USS 1041
Property Address: 10020 Crazy Horse Drive
Parcel Code No.: 4B1701100120
Hearing Date: December 14, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 7, 2021, and approved the modification of a wireless communication facility permit to install a new, unlit, 150-foot, self-supporting communication tower, to be conducted as described in the project description and project drawings submitted with the application.

Attachments: December 7, 2021, memorandum from Joseph Meyers, Community Development, to the CBJ Planning Commission regarding WCF2021 0010.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030(c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ 49.20.120).

Vertical Bridge, LLC
Case No.: WCF2021 0010
December 15, 2021
Page 2 of 2

Effective Date: The permit is effective upon approval by the Commission, December 14, 2021.

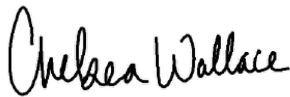
Expiration Date: The permit will expire 18 months after the effective date, or June 14, 2023, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael LeVine, Chair
Planning Commission

December 22, 2021

Date



Filed With City Clerk

December 22, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

2021 Legislative Capital Priority List - APPROVED

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

CIP Review

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

APL2021 0006: An appeal related to BLD2021 0765 - VOTED TO HEAR THE APPEAL

ATTACHMENTS:

Description	Upload Date	Type
☐ Application for APL2021 0006	12/10/2021	Application

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications.

PROPERTY LOCATION			
Physical Address 247 S. Franklin St.			
Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) Juneau Townsite Block M Lot 2 FR			
Parcel Number(s) 1C070B0M0010			
☒ This property located in the downtown historic district ☒ This property located in a mapped hazard area, if so, which <u>49.70 - Severe Avalanche</u>			
LANDOWNER/ LESSEE			
Property Owner Juneau Coop		Contact Person Mariya	
Mailing Address 8715 Teal Street		Phone Number(s) 957-2885	
E-mail Address lovishchuk.mariya@gmail.com			
LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits			
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:			
A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.			
B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X	 Landowner/Lessee Signature		12/9/21 Date
X	_____ Landowner/Lessee Signature		_____ Date
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME"			
Applicant Same		Contact Person	
Mailing Address		Phone Number(s)	
E-mail Address			
X	_____ Applicant's Signature		_____ Date of Application

-DEPARTMENT USE ONLY BELOW THIS LINE

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Intake Initials	ANE
Case Number	APL21-06
Date Received	12/9/21



NOTICE OF APPEAL OF DIRECTOR'S DETERMINATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

APPELLANT'S CONTACT INFORMATION

Juneau Cooperative Christian Ministry dba TGH
Appellant's Name (please print)

lovishchuk.mariya@gmail.com
E-mail Address

907 957-2885
Phone

8715 Teal Street
Mailing Address

Juneau
City

AK 99801
State Zip

X Mariya Lovishchuk
Appellant's Signature

12-02-2021

DECISION THAT IS BEING APPEALED*

Building permit for 247 S. Franklin Street Emergency Shelter building (sleeping 53 people in many different sleeping spaces) conversion to 7 apartments (maximum 14 people) was denied.

Date of Director's Determination 11/30/2021

Attach a copy of the Director's Decision (E-mail, Notice of Decision, Letter, etc.).

* Notice must be submitted within 20 days of the date of the decision being appealed.

APPEAL SPECIFICS (please fill in all that apply)

Parcel Number 1C07B0M0010

Zoning District Mixed Use Residential and Commercial

Case Number BLD2021-0765

Title 49 Code Section 49.70.300

Current Use of Land or Buildings Emergency Shelter, Soup Kitchen, Care Center (General Commercial)

Proposed Use of Land or Buildings Affordable Housing (2nd and 3rd floors), commercial non-profit space (1st floor)

Other

ALL REQUIRED MATERIALS ATTACHED



Complete Application



Appeal Decision



Narrative including:



Grounds for Appeal



Specific questions you would like the Planning Commission to address

To be completed by Applicant

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

APPEAL FEES	Fees	Check No.	Receipt	Date
Notice Fees	\$ <u>200.00</u>			
Refund (Yes/No)	\$ <u> </u>			
Total Fee	\$ <u> </u>			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number

Date Received/Intake Initials

12/9/21



Mariya Lovishchuk <lovishchuk.mariya@gmail.com>

BLD2021-0765

Allison Eddins <Allison.Eddins@juneau.org>

Wed, Dec 1, 2021 at 8:23 AM

To: Bruce Denton BCD Construction <brucecdenton@gmail.com>, Mariya Lovishchuk
<lovishchuk.mariya@gmail.com>

Hello Bruce and Mariya,

Please accept this email as an official denial of your request to convert the old Glory Hall shelter into 7 apartments. According to the CBJ adopted hazard maps the Glory Hall is located in a sever avalanche zone. Increasing the number of dwelling units is prohibited by code in this hazard zone. The code language is below for your reference. Please feel free to contact me via email if you have any questions about the code, this denial or your options moving forward.

49.70.300 - Landslide and avalanche areas.

(a) Generally.

(1) Development in all landslide and avalanche areas shall minimize the risk of loss of life or property due to landslides and avalanches.

(2) Boundaries of potential and severe avalanche areas will be as shown on the landslide and avalanche area maps dated September 9, 1987, consisting of sheets 1—8, as the same may be amended from time to time by the assembly by ordinance.

(3) Notwithstanding any other provision, all subdivision other than a boundary line relocation and all development greater than a single-family dwelling within landslide or avalanche areas shall require a conditional use permit.

(4) If a developer disagrees with the boundaries shown on the maps, the developer may seek departmental relocation of the boundaries by submitting site specific studies prepared by a civil engineer experienced in avalanche and landslide analysis. Such studies shall include detailed analyses of topography, vegetation, potential snow accumulation, and other factors. The results should indicate actual hazard area boundaries and potential debris flow direction, time, distance and mass. If, in the opinion of the city engineer, the studies clearly establish that the map boundaries are inaccurate and the proposed development is outside a severe avalanche area or outside any avalanche or landslide area, the department shall proceed accordingly.

(5) The commission may require mitigating measures certified as effective by a professional engineer for development in landslide and avalanche areas. Such measures may include dissipating structures or dams, special structural engineering, or other techniques designed for the site. Mitigating measures may also include reduction in the proposed density.

(b) Severe avalanche areas.

(1) Notwithstanding any other provision, no development or any part of a development, which is within a severe avalanche area shall, by the addition of bedrooms, conversions of buildings, or otherwise, increase the density of that parcel; provided, however, that a single-family house may be constructed on a vacant lot.

(2) No subdivision shall be approved which creates a lot lacking sufficient building space outside a severe avalanche area.

(c) Warning and disclaimer of liability. Avalanches and landslides may occur outside hazard areas in excess of engineering expectations. The location and severity of the event may be increased by manmade or natural causes. This article does not imply that land outside of designated hazard areas, or uses permitted within such areas, will be free from danger or damage. This article shall not create liability on the part of the City and Borough of Juneau or any officer or employee thereof for any damages that result from reliance of this article or any administrative decision lawfully made under this article.

Allison Eddins | Planner II

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 ext. 4131

Our telephone system is changing. Beginning May 3, 2021, I may be reached at 907-586-0753 ext. 4131.

THE GLORY HALL 247 S. FRANKLIN STREET APARTMENT CONVERSION BUILDING PERMIT DENIAL APPEAL TO PLANNING COMMISSION NARRATIVE

BACKGROUND

The Glory Hall is pursuing Converting two upper floors of the building to affordable downtown housing and renting out the 1st floor for commercial purposes. The former emergency shelter, which had 43 beds and other sleeping spaces, for over 53 people, will be converted to 7 apartments: 6 efficiencies, and one 1 bedroom. The maximum amount of people sleeping in the apartments will be 14, as no more than 2 people at time will be permitted in each unit.

Over 35% engineering and architectural plans for apartment conversion are complete. Contractor has been selected. We have also reached out to funders and created an operating proforma. The Glory Hall applied for a building permit and the building permit was denied.

We request that the Planning Commission instructs the Community Development Department to issue the Building Permit to our project.

FINDINGS

Per the email from Community Development Department Planner, Allison Eddins, Glory Hall's building permit was denied stating that the building is in the severe avalanche zone and the project is increasing density by converting the building from sleeping 43-53 people at night and providing day dwelling to over 100 people at a time to converting to 7 apartments for 7- 14 people. (The apartments are for singles/couples only)

CONCERNS and ISSUES

- Healthy communities have affordable housing in their Downtown Core. Juneau keeps on losing affordable housing in the Downtown core. Affordable housing downtown is a Juneau priority, as reflected in the Comprehensive Plan, Economic Development Plan, Blueprint Downtown, Juneau Affordable Housing Trust Fund emphasis/extra points given to project Downtown. Not granting a building permit to this project is in direct conflict with the goal of creating affordable housing downtown.
- Grant funding is being jeopardized by Glory Hall's inability to proceed with the project, putting in the question the ultimate success of the project. Already, Glory Hall's Affordable Housing Trust Fund application for \$350,000 has been put on hold because there is no clarity. The Glory Hall is forced to hold off on completing other funding applications until the building permit issue is resolved.
- The longer the conversion process takes, the less chance of success. The Glory Hall is a small nonprofit and the building, currently used for emergency shelter overflow is a liability. The Glory Hall with its limited resources is forced to pay for utilities and maintenance. This is not sustainable in the long or even medium term.
- Obtaining a parcel specific study rather than using the existing, already paid for study that shows that the project is not in the severe avalanche zone, is costly and unnecessary burden
- The Glory Hall attempted to engage with TetraTech for a site-specific study for the Glory Hall to provide to the Community Development Department, per 49.70.300 (4) Section of the Code. TetraTech was selected because they are already familiar with the area and have the expertise the Community Development Department requires. TetraTech was willing to engage with the Glory Hall under one condition. They required that The Glory Hall communicates with the Community Development Department and provides TetraTech with the quick email note, to assure TetraTech that

their working with the Glory Hall is OK with the City and Borough of Juneau because City and Borough of Juneau was TetraTech's client first and working with the Glory Hall without explicit approval to do so from the City and Borough of Juneau is perceived to be a conflict. The Glory Hall left three voice messages for the CBJ Planner, the main contact for the TetraTech maps, none of the voicemails were returned. The Glory Hall sent four emails to the Planning Department, Head of the Community Development Department, and the Manager's Office. The Glory Hall did not receive any response to the emails, for close to a week, at the time of this appeal submission.

GROUND'S FOR APPEAL

Community Development Department Decision to deny the permit is incorrect for two reasons:

- The Glory Hall should be able to use the completed TetraTech maps to demonstrate that the project is not in the severe avalanche zone regardless of whether the maps have been adopted by the Assembly. TetraTech study clearly demonstrates that the project is in moderate avalanche zone and therefore permissible, appropriate, and should be issued a building permit. TetraTech study is exhaustive and specific.**
- Community Development Department's Definition of Density is wrong. Reasonable definition of density should be applied. Clearly the proposed project decreases not increases density. Providing dwelling accommodations for 43-53 people and over 100 people using the building for day time lodgings is a lot more than providing lodging/dwelling for 7-14 people.**

The Glory Hall should be allowed to use the maps completed for the Community Development Department to demonstrate to the Community Development Department Engineer that the project is in a moderate NOT severe avalanche area. TetraTech, reputable avalanche experts, have conducted a detailed study of Juneau's avalanche hazards and have concluded that Franklin Street is not in a severe avalanche zone. The maps, which were paid for with public dollars, clearly show the parcel owned by the Glory Hall, to not be in the severe avalanche zone. (See Attachment 1, TetraTech maps). The maps together with the 147 page study completed by TetraTech (See Attachment 2, TetraTech Assessment) clearly demonstrate the project is in the moderate avalanche zone. As clear from the TetraTech Assessment, necessary methodology, including LIDAR assessment, topography, modeling, terrain, and vegetation analyses were used to reach the conclusion that South Franklin Street, including the proposed project location are in a moderate avalanche zone. For description of methodology please see pages 3, 19-43, 60, and 102 of the TetraTech Assessment, included as Attachment 2. The maps are very specific, identifying 52 unique avalanche paths and potential impact on specific areas. (See Attachment 2, TetraTech Assessment, pp 19-43)

There is no good reason why The Glory Hall cannot present the TetraTech maps to CDD and have the City engineer state that the project can proceed and should be issued a building permit, as it is in the moderate, not severe avalanche zone.

"49.700.300 a(4)

If a developer disagrees with the boundaries shown on the maps, the developer may seek departmental relocation of the boundaries by submitting site specific studies prepared by a civil engineer experienced in avalanche and landslide analysis. Such studies shall include detailed analyses of topography, vegetation, potential snow accumulation, and other factors. The results should indicate actual hazard area boundaries and potential debris flow direction, time, distance, and mass. If, in the opinion of the city engineer, the

studies clearly establish that the map boundaries are inaccurate and the proposed development is outside a severe avalanche area or outside any avalanche or landslide area, the department shall proceed accordingly."

Asking the Glory Hall to obtain another study is a wasteful use of public funding. The Glory Hall is a small nonprofit agency with very limited operating revenue. Every dollar spent is a dollar that could be spent on providing food and shelter to people without food and shelter. Additionally, because the Glory Hall is only able to operate because of donations and grants, asking the Glory Hall to obtain a duplicative study is not a prudent or an appropriate way to spend public funds. If the TetraTech maps are good enough for the Community Development Department to be presented to the Assembly, they should be good enough to issue the Glory Hall a building permit.

The fact that the Assembly has not adopted the new TetraTech maps in no way undermines the experience of the TetraTech engineers who completed the study. The fact that the Assembly has not adopted the new maps in no way changes TetraTech's completed analyses of topography, vegetation, potential snow accumulation, debris flow direction time and mass.

Community Development Departments Interpretation of Density is wrong. Title 49 states that:

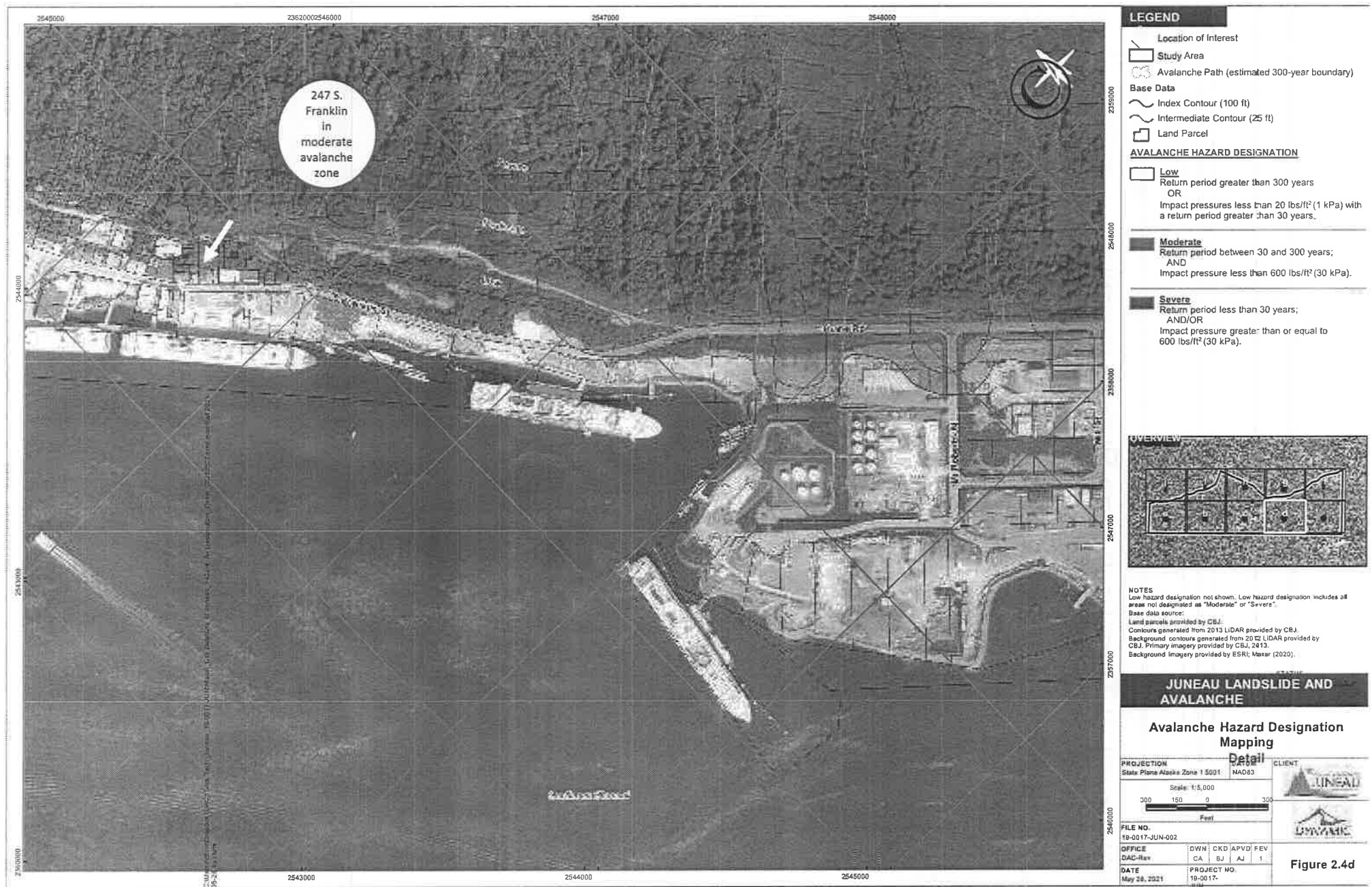
Notwithstanding any other provision, no development or any part of development, which is within a severe avalanche area shall, by the addition of bedrooms, conversion of buildings, or otherwise increase the density of that parcel; provided, however, that a single-family house may be constructed on a vacant lot.
(49.70.300.b.1)

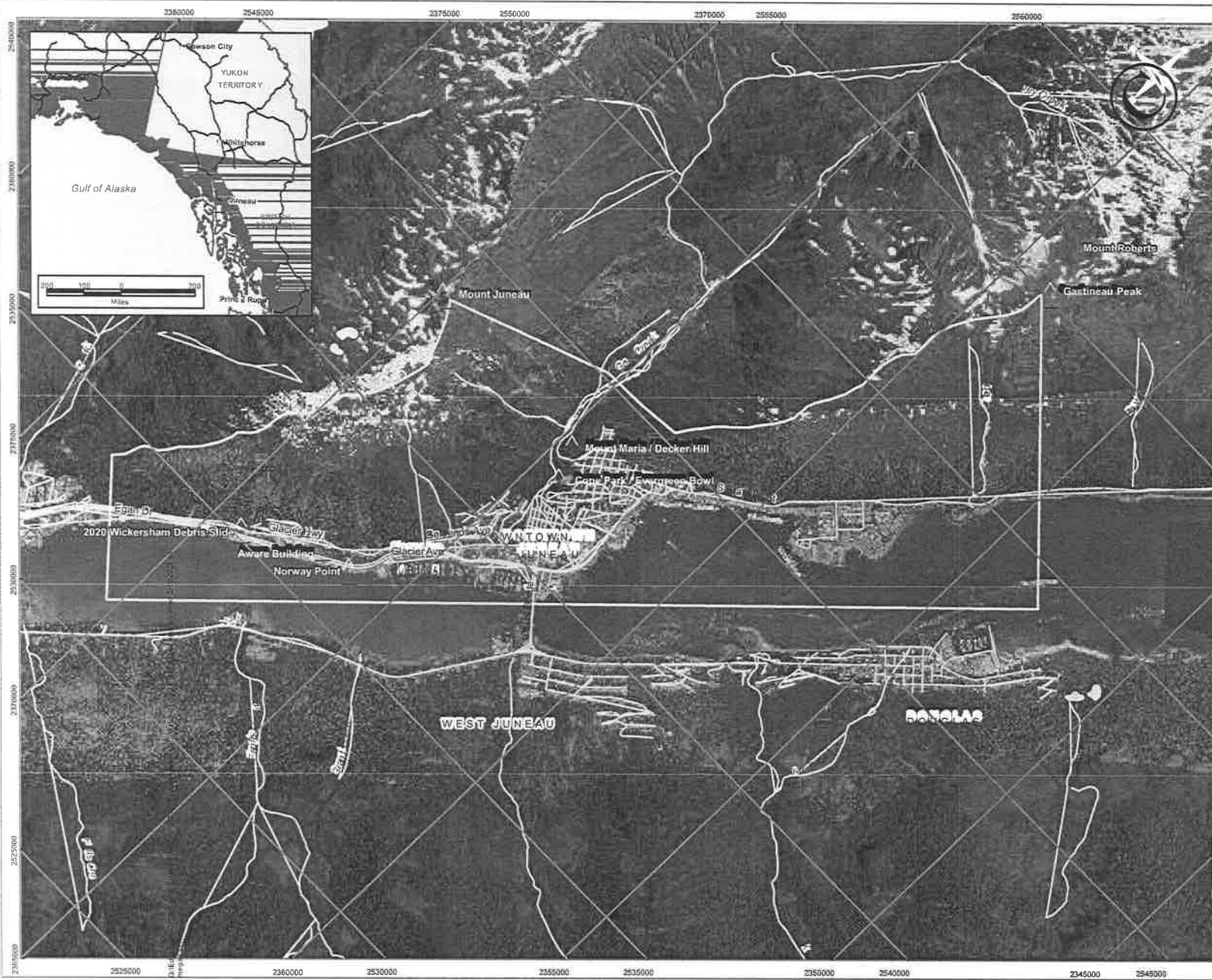
No part of this development is increasing density. The Glory Hall is clearly decreasing density by limiting the number of people who sleep in the building from 43-53 to 14. Additionally, the conversion is not adding any more spaces which are defined as dwelling units. The existing layout has more than seven specific spaces, with at least seven existing spaces currently qualifying as dwelling units, with their own entrances, bathrooms, ventilation, egress, etc. The current 3rd floor contains 4 dwelling units, 3 dorms and 1 one-bedroom apartment. 2nd floor contains 2 spaces, the mezzanine area and the space formerly known as our medical apartment, which provided a sleeping space for people with mobility issues. First floor provided overflow sleeping space and contains two separate entrances and a bathroom.

SPECIFIC QUESTIONS FOR THE PLANNING COMMISSION

What is the most effective strategy for the Glory Hall to proceed with our project of converting our building, formerly lodging 43-53 people, affordably, to lodging 7-14 people affordably.

Attachment 1: TetraTech Map Project specific





LEGEND

- Location of Interest
- Study Area
- Road
- Watercourse
- Waterbody

NOTES
 Base data source:
 Primary Imagery provided by CBJ, 2013.
 Background Imagery provided by ESRI; Maxar (2020)
 Hydrology and roads obtained from Alaska Department of Natural Resources.

STATUS JUNEAU LANDSLIDE AND AVALANCHE

Site Location

PROJECTION State Plane Alaska Zone 1 5001		DATUM NAD83	CLIENT LINEAD
Scale: 1:30,000 1,000 500 0 1,000 Feet		TETRA TECH	
FILE NO. EARC03168-01_FIG1_1_SiteLoc.mxd	OFFICE TH-EGM	CKD MRV	APV SL REV 0
DATE February 11, 2021	PROJECT NUMBER ENG.EARC03168-01		

Figure 1.1

Attachment 2: Full TetraTech Assessment
(Sent as Separate email due to document size)

Link:

https://juneau.org/wp-content/uploads/2021/07/Downtown_Juneau_Landslide_and_Avalanche_Assessment_IFR_Report_Third%20Draft_Reduced.pdf

**PLANNING COMMISSION AGENDA
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

Additional Materials for December 14, 2021 Planning Commission

ATTACHMENTS:

	Description	Upload Date	Type
▣	Additional Materials for December 14, 2021 Planning Commission	12/10/2021	Miscellaneous

Additional Materials

Regular Planning Commission Meeting

Virtual Meeting Only

7:00pm

Meeting Date: December 14, 2021

1. WCF2021 0010:

- a. Letter from the applicant, received 12.1.21

2. CIP Review:

- a. Legislative Priority List

3. APL2021 0006:

- a. Application for APL2021 0006

4. Informational Item Regarding Parking Code Revisions:

- a. Memo from Irene Gallion

December 1, 2021

Joseph Meyers
MURP | Planner I
Community Development Department
230 S. Franklin Street, 4th Floor Marine View Building
City & Borough of Juneau, AK

RE: US-AK-5244 11 Mile (10020 Crazy Horse Drive) – Tower Type Rezoning Request

Dear Mr. Meyers:

The purpose of this letter is to provide a detailed narrative why Vertical Bridge Development, LLC is requesting a change in tower type from the previously approved 150' monopole to a three-legged self-support tower of the same height.

In March of 2019, Vertical Bridge hired Tower Engineering Professionals, Inc. (TEP), a company based in Raleigh, NC, to conduct the geotechnical investigation on this site. Due to the heavy vegetation around the proposed tower location we elected to not disturb the site and drilled at an open location 250' away along our proposed access easement, assuming the soils would be mostly comprised of the same makeup throughout the area. The geotech showed that the soil composition was not suitable to install a traditional mat foundation, common for most monopole installations, and instead recommended a drilled pier foundation. In order for the monopole to adequately support the loading of five (5) wireless tenants, as required by the City and Borough of Juneau, the recommended pier foundation design was to be nine feet (9') wide and go to a depth of forty feet (40'). When we sent this site out to bid, we were informed that there wasn't equipment in the state of Alaska capable of drilling a hole 9' in diameter and equipment would need to be shipped in from the lower 48 to do the job. The cost to ship the required equipment into Juneau to install the foundation increased the budget more than two times the expected cost making the site economically unfeasible.

After several discussions with multiple Alaska based General Contractors and tower service providers, we opted to redesign the site. Every engineer we spoke to suggested we obtain a 2nd geotechnical report that was drilled at the proposed tower location. In May of 2021, Vertical Bridge enlisted the service of Hass & Associates of Anchorage, AK to provide a new geotech report which showed that the soil composition was similar to the 1st geotech done 250' away in 2019, as we expected. Hass & Associates suggested that in order to provide a cost-effective foundation design in this area, the tower type would need to change from a monopole to a three-legged self support tower design in order to distribute the weight of the tower and the five (5) carrier loading Juneau requires. A helical foundation design was provided in September of 2021. The helical foundation allows for three (3) 10'X10' concrete footers that each have nine (9) helical piles driven to a depth of forty feet (40'). This design allows for the majority of the foundation to remain close to the surface, making the foundation installation and site more economically feasible, while the twenty-seven (27) total helical piles anchor the tower to a depth of forty feet (40'), solidifying the support of the proposed tower.

In summary, the only way Vertical Bridge can build this site and provide space for five (5) collocators as required by The City and Borough of Juneau is to change the tower type to a three-legged self-support tower which allows for a cost effective foundation design option. A copy of the documents mentioned in the summary above are attached as exhibits for review.

Sincerely,

Vertical Bridge Development, LLC

By: _____

Name: Matthew Grugan

Title: Senior Project Manager

Date: 12/1/2021

TOWER ENGINEERING PROFESSIONALS
GEOTECH – MARCH 2019

Date: **March 26, 2019**

Jay Rasmusson
Centerline Solutions, LLC.
8218 154th Avenue NE, Suite 120
Redmond, WA 98052
Office: (360) 438-8002



Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Geotech@tepgroup.net

Subject: Subsurface Exploration Report

Centerline Solutions Designation:	Site Number:	US-AK-5244
	Site Name:	11 Mile
Engineering Firm Designation:	TEP Project Number:	152226.242955
Site Data:	10020 Crazy Horse Dr., Juneau, AK 99801 (Juneau Borough) Latitude N58° 22' 01.1", Longitude W134° 36' 39.0" 150 Foot - Proposed Self Supporting Tower	

Dear Jay Rasmusson,

Tower Engineering Professionals, Inc. (TEP) is pleased to submit this "**Subsurface Exploration Report**" to evaluate subsurface conditions in the tower area as they pertain to providing support for the tower foundation.

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions in this report are based on the applicable standards of TEP's practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

TEP assumes the current ground surface elevation; tower location and subsequent centerlines provided are correct and are consistent with the elevation and centerlines to be used for construction of the structure. Should the ground surface elevation be altered and/or the tower location be moved or shifted TEP should be contacted to determine if additional borings are necessary.

The analyses and recommendations submitted herein are based, in part, upon the data obtained from the subsurface exploration. The soil conditions may vary from what is represented in the boring logs. While some transitions may be gradual, subsurface conditions in other areas may be quite different. Should actual site conditions vary from those presented in this report, TEP should be provided the opportunity to amend its recommendations as necessary.

We at *Tower Engineering Professionals, Inc.* appreciate the opportunity of providing our continuing professional services to you and Centerline Solutions, LLC. If you have any questions or need further assistance on this or any other projects please give us a call.

Report Prepared/Reviewed by: Jason E. Lafollette, E.I. / John D. Longest, P.E.

Respectfully submitted by:

Andrew T. Haldane, P.E.



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- 4.2) Rock
- 4.3) Subsurface Water
- 4.4) Frost

5) TOWER FOUNDATION DESIGN

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Boring Layout

12) APPENDIX B

Boring Log

1) PROJECT DESCRIPTION

Based on the preliminary drawings, it is understood a self supporting communications tower will be constructed at the referenced site. The structure loads will be provided by the tower manufacturer.

2) SITE EXPLORATION

The field exploration included the performance of one soil test boring (B-1) to the planned depth of 50.5 feet (bgs). The boring was performed approximately 250 feet southeast of the proposed tower due to the site clearing restrictions of the local jurisdiction. The boring was performed by a truck mounted drill rig using continuous flight hollow stem augers to advance the hole. Split-spoon samples and Standard Penetration Resistance Values (N-values) were obtained in accordance with ASTM D 1586 at a frequency of four samples in the top 10 feet and two samples every 10 feet thereafter.

The Split-spoon samples were transported to the TEP laboratory where they were classified by a Geotechnical Engineer in general accordance with the Unified Soil Classification System (USCS), using visual-manual identification procedures (ASTM D 2488).

A Boring Location Plan showing the approximate boring location, a Boring Log presenting the subsurface information obtained and a brief guide to interpreting the boring log are included in the Appendix.

3) SITE CONDITIONS

The site is located at 10020 Crazy Horse Dr. in Juneau, Juneau Borough, Alaska. The proposed tower and compound are to be located in a wooded area. The ground topography is relatively level.

4) SUBSURFACE CONDITIONS

The following description of subsurface conditions is brief and general. For more detailed information, the individual Boring Log contained in Appendix B - Boring Log may be consulted.

4.1) Soil

The USCS classification of the materials encountered in the boring include SC, SM, SW, and ML. The Standard Penetration Resistance ("N" Values) recorded in the materials ranged from 0 (18 inches of sampler advancement under the weight of the hammer) to 19 blows per foot of penetration.

4.2) Rock

Rock was not encountered in the boring. Cobbles were encountered at a depth of 1 feet (bgs). Refusal of auger advancement was not encountered in the boring.

4.3) Subsurface Water

Subsurface water was encountered at a depth of 3.5 feet (bgs) in the boring at the time of drilling. It should be noted the subsurface water level will fluctuate during the year, due to seasonal variations and construction activity in the area.

4.4) Frost

The frost depth for Borough of Juneau, Alaska is 32 inches based on City and Borough of Juneau Building Division.

5) TOWER FOUNDATION DESIGN

As previously noted, the boring for the subsurface exploration was performed approximately 250 southeast from the proposed tower location, due to accessibility restrictions imposed by the jurisdiction. It is recommended an additional boring be performed at the location of the proposed tower to confirm similar soils at the site.

Based on the boring data, it is the opinion of TEP that pile caps extending from each tower leg with driven steel piles or a single drilled shaft for each leg can be used to support the new tower. If the drilled shaft foundation option is utilized, design of the foundation should be adjusted to terminate in a known material. The following presents TEP's conclusions and recommendations regarding the foundation types.

Due to the presence of submerged soils with low blow counts, the site is likely to be subject to liquefaction during a design seismic event. Liquefaction is the loss of a soil's shear strength due to the increase in pore water pressure resulting from seismic vibrations. During this loss in shear strength deep foundations at this site have the potential to experience problems such as a loss of skin friction in liquefiable layers and downdrag forces as a result of subsidence/settlement of soils overlying liquefiable layers.

Potentially liquefiable layers were identified at the site at depths ranging from 6 to 9 feet, 34 to 39 feet, and below 44 feet (bgs). A preliminary liquefaction induced settlement in excess of 8 inches was calculated based on the peak ground acceleration (PGA) of 0.255g, a maximum earthquake magnitude (M_{max}) of 7.11, as well as the results of the subsurface exploration. A more definitive assessment of liquefaction potential may be performed with additional testing.

5.1) Shallow Foundation

Due to the relatively weak subgrade soils and high liquefaction potential a shallow foundation is not recommended for this site. See Section 5.2) and 5.3) for deep foundation design parameters. Refer to section 8 for shallow foundation construction considerations, should they be necessary for auxiliary buildings or lightly loaded structures at the site.

5.2) Drilled Shaft Foundation

The following values may be used for design of drilled shaft foundations. TEP recommends the side frictional and lateral resistance values developed in the top section of the caisson for a depth equal to the half the diameter of the caisson or the frost depth, whichever is greater, be neglected in the calculations. The values are based on the current ground surface elevation.

Table 1 – Drilled Shaft Foundation Analysis Parameters

Depth		Soil	Gross Ultimate Bearing ^{1,2} (psf)	Ultimate Side Frictional Resistance ^{1,3} (psf)	Cohesion ¹ (psf)	Friction Angle ¹ (degrees)	Effective Unit Weight (pcf)
Top	Bottom						
0	3.5	SC	625	60	-	28	100
3.5	4	SC	2125	130	-	28	37
4	6	SC	2625	150	-	28	37
6	9	SC ⁴	-	160	-	25	32
9	14	SM	8425	260	-	30	42
14	19	SW	19200	390	-	33	47
19	24	SW	24225	500	-	33	47
24	29	SW	24900	660	-	35	50
29	34	SW	6225	730	-	33	50
34	39	ML ⁴	5175	550	575	-	42
39	44	SM	28525	910	-	32	50
44	49	SM	23775	910	-	29	42
49	50.5	SM ⁴	26025	960	-	29	42

Notes:

- 1) These values should be considered ultimate soil parameters.
- 2) A minimum factor of safety of 2 is recommended for allowable bearing. If the bearing depth of the foundation is less than 5 diameters below the ground surface the bearing values listed in Table 1 – Shallow Foundation Analysis Parameters should be utilized.
- 3) A minimum factor of safety of 2 is recommended for allowable side frictional resistance.
- 4) The identified layer may be subject to liquefaction. During a seismic event this layer may lose shear strength and subsidence of overlying layers may generate negative skin friction on deep foundations

5.3) Pile Foundation with Pile Cap

The following values may be used for design of a steel driven pile with pile cap foundation system. TEP recommends the side frictional and lateral resistance values developed in the top section of the piles for a depth equal to the width of the pile below the pile cap be neglected in the calculations. Where piles are spaced closer than 4 diameters (center to center) or 3 diameters (edge to edge), group effects should be considered. The values are based on the current ground surface elevation.

Table 2 – Pile Foundation Analysis Parameters

Depth		Soil	Gross Ultimate End Bearing ¹ (psf)	Downward Side Frictional Resistance ² (psf)	Upward Side Frictional Resistance ³ (psf)	Cohesion ⁴ (psf)	Friction Angle ⁴ (degrees)	Effective Unit Weight (pcf)
Top	Bottom							
0	3.5	SC	0	10	0	-	28	100
3.5	4	SC	4300	30	10	-	28	37
4	6	SC	3800	30	20	-	28	37
6	9	SC ⁴	-	30	20	-	25	32
9	14	SM	9400	50	30	-	30	42
14	19	SW	22025	80	50	-	33	47
19	24	SW	28950	100	60	-	33	47
24	29	SW	24900	140	80	-	35	50
29	34	SW	6225	150	90	-	33	50
34	39	ML ⁴	5175	560	560	575	-	42
39	44	SM	38375	190	110	-	32	50
44	49	SM ⁴	31975	190	110	-	29	42
49	50.5	SM ⁴	35050	210	120	-	29	42

Notes:

- 1) These values should be considered ultimate soil parameters.
- 2) A minimum factor of safety of 2 is recommended for allowable bearing.
- 3) A minimum factor of safety of 2 is recommended for allowable side frictional resistance.
- 4) The identified layer may be subject to liquefaction. During a seismic event this layer may lose shear strength and subsidence of overlying layers may generate negative skin friction on deep foundations

5.4) Modulus of Subgrade Reaction

A vertical modulus of subgrade reaction and a horizontal modulus of subgrade reaction may be derived using the following equations and soil parameters for analysis of foundations.

$$k_{s-v} = 12 (SF) Q_a$$
$$k_{s-h} = k_{s-v} B$$

Q_a = Allowable Bearing Capacity (ksf)

SF = Factor of Safety

B = Base width (ft), use 1 if $B < 1$ ft.

k_{s-v} = Vertical Modulus of Subgrade Reaction (kcf)

k_{s-h} = Horizontal Modulus of Subgrade Reaction (ksf)

6) SOIL RESISTIVITY

Soil resistivity was performed at the TEP laboratory in accordance with ASTM G187-05 (Standard Test Method for Measurement of Soil Resistivity Using the Two Electrode Soil Box Method). Test results indicated a result of 29,000 ohms-cm.

7) CONSTRUCTION CONSIDERATIONS - SHALLOW FOUNDATION

7.1) Excavation

The boring data indicates excavation to the expected subgrade level for the shallow foundation will extend through sand. A large tracked excavator should be able to remove the materials with minimal to moderate difficulty.

Excavations should be sloped or shored in accordance with local, state and federal regulations, including OSHA (29 CFR Part 1926) excavation trench safety standards. It is the responsibility of the contractor for site safety. This information is provided as a service and under no circumstance should TEP be assumed responsible for construction site safety.

7.2) Dewatering/Foundation Evaluation/Subgrade Preparation

Due to the loose saturated nature of the soils at the site, the installation of shallow foundations may prove to be difficult. It is likely that more advanced dewatering measures will be necessary to successfully install a foundation in these difficult conditions below 3.5 feet (bgs). Installation of well points to remove excess moisture from the soils to a workable depth will likely be necessary. Once well points are installed they should be able to operate somewhat continuously and reliably as frequent wetting and drying of the soils will reduce their overall performance in bearing, in maintaining an open excavation, and ability for soils to be properly compacted following foundation installation. It may be necessary for a contractor to perform test pits or an additional preliminary exploration at the site to determine the extent of dewatering necessary.

After dewatering and excavation to the design elevation for the footing, the materials should be evaluated by a Geotechnical Engineer or a representative of the Geotechnical Engineer prior to reinforcement and concrete placement. This evaluation should include probing, shallow hand auger borings and dynamic cone penetrometer testing (ASTM STP-399) to help verify that suitable residual material lies directly under the foundation and to determine the need for any undercut and replacement of unsuitable materials. Loose surficial material should be compacted in the excavation prior to reinforcement and concrete placement to stabilize surface soil that may have become loose during the excavation process. TEP recommends a 6-inch layer of compacted crushed stone be placed just after excavation to aid in surface stability.

7.3) Fill Placement and Compaction

Backfill materials placed above the shallow foundation to the design subgrade elevation should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. To be considered for use, backfill materials should have a maximum dry density of at least 100 pounds per cubic foot as determined by standard Proctor (ASTM D 698), a Liquid Limit no greater than 40, a Plasticity Index no greater than 20, a maximum particle size of 4 inches, and 20 percent or less of the material having a particle size between 2 and 4 inches. Because small handheld or walk-behind compaction equipment will most likely be used, backfill should be placed in thin horizontal lifts not exceeding 6 inches (loose).

Fill placement should be monitored by a qualified Materials Technician working under the direction of a Geotechnical Engineer. In addition to the visual evaluation, a sufficient amount of in-place field density tests should be conducted to confirm the required compaction is being attained.

7.4) Reuse of Excavated Soil

The sand that meets the above referenced criteria can be utilized as backfill based on dry soil and site conditions at the time of construction.

8) CONSTRUCTION CONSIDERATIONS - DRILLED SHAFTS

Based on TEP's experience a conventional drilled shaft rig (Hughes Tool LDH or equivalent) can be used to excavate to the auger refusal depth of TEP's boring. An earth auger can typically penetrate the materials encountered to the auger refusal depth of the boring with moderate to severe difficulty. Materials below the auger refusal depth may require a coring bit or roller-bit to remove the material. Special excavation equipment may be necessary for a shaft greater than 60-inches in diameter. If hole collapse is encountered during construction, the design and geotechnical engineers should be contacted immediately to make any necessary adjustments.

Due to the subsurface water and the sandy soil/gravel, the contractor should utilize the "slurry" method for shaft construction. The following are general procedure recommendations in drilled shaft construction using the "slurry" method:

- 1) Slurry drilled shafts are constructed by conventional caisson drill rigs excavating beneath a drilling mud slurry. Typically, the slurry is introduced into the excavation after the groundwater table has been penetrated and/or the soils on the sides of the excavation are observed to be caving-in. When the design shaft depth is reached, fluid concrete is placed through a tremie pipe at the bottom of the excavation.
- 2) The slurry level should be maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the subsurface water level.
- 3) Inspection during excavation should include verification of plumbness, maintenance of sufficient slurry head, monitoring the specific gravity, pH and sand content of the drilling slurry, and monitoring any changes in the depth of the excavation between initial approval and prior to concreting.
- 4) A removable steel casing may be installed in the shaft to prevent caving of the excavation sides due to soil relaxation. Loose soils in the bottom of the shaft should be removed.
- 5) The specific gravity or relative density of the drilling mud slurry should be monitored from the initial mixing to the completion of the excavation. An increase in the specific gravity or density of the drilling slurry by as much as 10 percent is indicative of soil particles settling out of the slurry onto the bottom of the excavation. This settling will result in a reduction of the allowable bearing capacity of the bottom of the drilled shaft.
- 6) After approval, the drilled shaft should be concreted as soon as practical using a tremie pipe.
- 7) For slurry drilled shafts, the concrete should have a 6 to 8 inch slump prior to discharge into the tremie. The bottom of the tremie should be set at about one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie should be used, or a sliding plug introduced into the tremie before the concrete, to reduce the potential for the concrete being contaminated by the slurry. The bottom of the tremie must be maintained in concrete during placement, which should be continuous.
- 8) The protective steel casing should be extracted as concrete is placed. A head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the casing.
- 9) Additional concrete should be placed via the tremie causing the slurry to overflow from the excavation in order to reduce the likelihood of slurry pockets remaining in the drilled shaft.

If variability in the subsurface materials is encountered, a representative of the Geotechnical Engineer should verify that the design parameters are valid during construction. Modification to the design values presented above may be required in the field.

9) CONSTRUCTION CONSIDERATIONS - PILES

A qualified geotechnical engineer (or representative) should be on site during pile driving. The pile driving data should be used to verify that the installed piles are capable of providing the design compressive capacity (uplift/overturning resistances may be correlated from this as well). The on-site engineer/representative should have adequate experience with piles and be capable of evaluating the pile driving and verifying that the necessary bearing is being developed while they are there on site, in case any changes need to be made at that time. A clear line of communication should be maintained between the on-site engineer and the structural engineer.

If variability in the subsurface materials is encountered, a representative of the Geotechnical Engineer should verify that the design parameters are valid during construction. Modification to the design values presented above may be required in the field.

10) SITE PHOTOGRAPHS



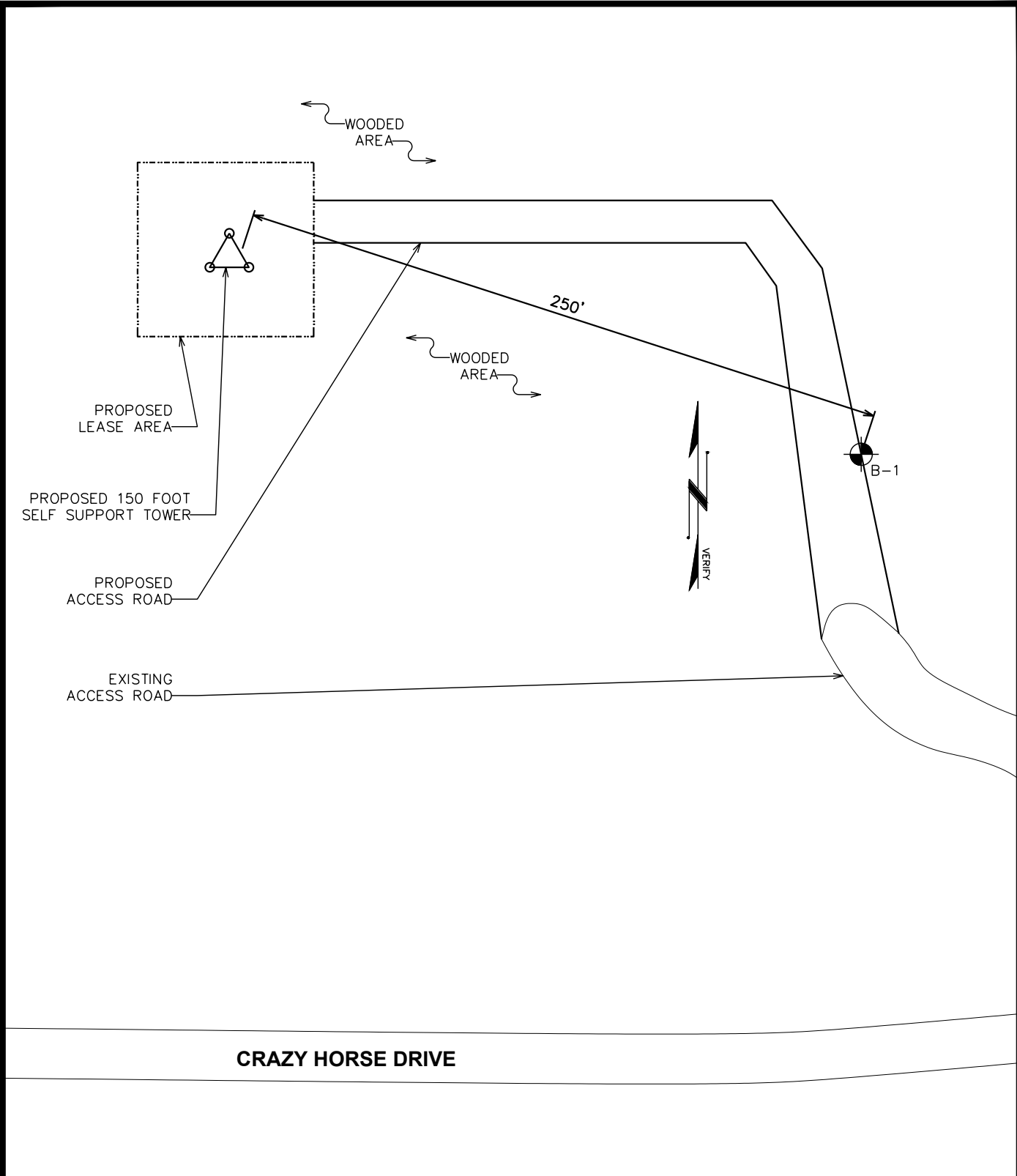
Boring Location



Boring Location

APPENDIX A

BORING LAYOUT



BORING LAYOUT
SCALE: N.T.S.

PREP-RED BY:  TOWER ENGINEERING PROFESSIONALS 326 TRYON ROAD RALEIGH, NC 27603 (919) 661-6351 www.tepgroup.net	PREP-RED FOR:  CENTERLINE™ SOLUTIONS 16035 T-BLE MOUNT-IN P-RKW-Y GOLDEN, CO 80403 OFFICE: (303) 993-3293	PROJECT INFORM - TION: 11 MILE SITE# US-AK-5244 10020 CR-ZY HORSE DR. JUNE -U, -K 99801 (JUNE -U BOROUGH)	REVISION:  TEP JOB #: 152226.242955 SHEET NUMBER: C-1
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APPENDIX B

BORING LOG



Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh, NC 27603
Telephone: 919-661-6351
Email: geotech@tepgroup.com

LOG OF BORING B-1

1 OF 1

PROJECT

11 Mile

SITE ID:

US-AK-5244

TEP NO.:

152226

DATE STARTED 3/16/2019	DRILLING METHOD Hollow Stem Auger	HOLE SIZE 10in O.D.	CITY, STATE Juneau, Alaska
DATE COMPLETE 3/16/2019	HAMMER WEIGHT/FALL 340lbs / 30in	HAMMER TYPE Auto Hammer	TOTAL DEPTH 50.5 FT
GROUND EL.	LOGGED BY JEL	CHECKED BY JDL	DEPTH/EL. GROUNDWATER 3.5/ AD
BORING LOCATION Approximately 250 feet southeast of the proposed tower			

SAMPLE NUMBER	SAMPLE LENGTH (INCHES)	BLOW COUNTS (N) REC% / RQD%	ELEVATION (FEET)	DEPTH (FEET)	SAMPLE GRAPHIC	USCS GRAPHIC	DESCRIPTION AND CLASSIFICATION	REMARKS	POCKET PEN TSF	UNCONFINED STRENGTH, PSF	UNIT WEIGHT PCF
							0.0-6.0: Very loose, brown, fine to coarse, clayey SAND (SC), trace gravel, wet	Driller Note: Split spoon samples 3in O.D. and 2.375in I.D. Driller Note: Cobbles encountered from 1 foot to 2.5 feet			
S1	18	1-1-1 (2)		5							
S2	18	1-1-1 (2)									
S3	18	0-0-0 (0)					6.0-9.0: No Recovery	WOH / 18 inches			
S4	18	2-2-3 (5)		10			9.0-14.0: Loose, brown, fine to medium, silty SAND (SM), wet	Driller Note: Cobbles encountered from 11 feet to 14 feet			
S5	18	4-6-8 (14)		15			14.0-34.0: Medium dense, gray, fine to coarse, well graded SAND (SW), with gravel, wet	Driller Note: Cobbles encountered from 14 feet to 20 feet			
S6	18	11-7-6 (13)		20							
S7	18	11-8-11 (19)		25							
S8	18	3-6-7 (13)		30							
S9	18	1-2-2 (4)		35			34.0-39.0: Soft, gray, SILT (ML), trace sand, wet	Driller Note: Shells encountered from 35 feet to 40.5 feet	1		
S10	18	3-6-6 (12)		40			39.0-44.0: Medium dense, brown, fine, silty SAND (SM), wet				
S11	18	2-2-4 (6)		45			44.0-50.5: to loose				
S12	18	2-2-4 (6)		50			50.5: Boring Terminated				
				55							



Tower Engineering Professionals, Inc.
326 Tryon Road
Raleigh, NC 27603
Telephone: 919-661-6351
Email: Geotech@tepgroup.net

Key to Soil Symbols and Terms

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE-GRAINED SOILS (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

Descriptive Terms

Very Loose

Loose

Medium Dense

Dense

Very Dense

SPT Blow Count

< 4

4 to 10

11 to 30

31 to 50

> 50

FINE-GRAINED SOILS (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms

Very Soft

Soft

Medium Stiff

Stiff

Very Stiff

Hard

SPT Blow Count

< 2

2 to 4

5 to 8

9 to 15

16 to 30

> 30

GENERAL NOTES

1. Classifications are based on the Unified Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.

2. Surface elevations are based on topographic maps and estimated locations and should be considered approximate.

3. Descriptions on these boring logs apply only at the specific boring locations and at the time the borings were made. They are not guaranteed to be representative of subsurface condition at other locations or times.

	Group Symbols	Typical Names	Sampler Symbols
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	Split Spoon
	GP	Poorly-graded gravels, little or no fines/sands	Standard Penetration Test (SPT)
	GM	Silty gravels, gravel-sand-silt mixtures	Pushed Shelby Tube
	GC	Clayey gravels, gravel-sand-silt mixtures	Auger Cuttings
	SW	Well-graded sands, gravelly sands, little or no fines	Grab Sample
	SP	Poorly-graded sands, little or no fines/sands/gravels	Dynamic Cone Penetrometer
	SM	Silty sands, sand-silt mixtures	Hand Auger
	SC	Clayey sands, sand-clay mixtures	Rock Core
	ML	Inorganic silts and very fine sands, rock floor, silty or clayey fine sands or clayey silts with slight plasticity	Log Abbreviations ATD - At Time of Drilling AD - After Drilling EOD - End of Drilling RMR - Rock Mass Rating WOH - Weight of Hammer WOR - Weight of Rod REC - Rock Core Recovery RQD - Rock Quality Designation
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
	OL	Organic silts and organic silty clays of low plasticity	
	MH	Inorganic silts, micaceous or distomaceous fine sandy or silty soils, elastic silts	
	CH	Inorganic clays of high plasticity, fat clays	
	OH	Organic clays of medium to high plasticity, organic silts	
	PT	Peat and other highly organic soils	

Information Regarding This Subsurface Exploration Report

The information contained in this report has been specifically tailored to the needs of the client at the time the report was provided, for the specific purpose of the project named in this report. The attached report may not address the needs of contractors, civil engineers, or structural engineers. Anyone other than the named client should consult with the geotechnical engineer prior to utilizing the information contained in the report.

It is always recommended that the full report be read. While certain aspects of the report may seem unnecessary or irrelevant; just as each project and site are unique, so are the subsurface investigation reports and the information contained in them. Several factors can influence the contents of these reports, and the geotechnical engineer has taken into consideration the specific project, the project location, the client's objectives, potential future improvements, etc. If there is any question about whether the attached report pertains to your specific project or if you would like to verify that certain factors were considered in the preparation of this report, it is recommended that you contact the geotechnical engineer.

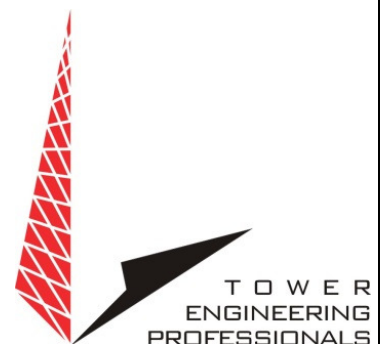
Geotechnical subsurface investigations often are prepared during the preliminary stages of a project and aspects of the project may change later on. Some changes may require a report revision or additional exploration. Some changes that often need to be brought to the attention of the geotechnical engineer include changes in location, size and/or type of structure, modifications to existing structures, grading around the project site, etc. Some naturally occurring changes can also develop that impact the information contained in this geotechnical report such as earthquakes, landslides, floods, subsurface water levels changing, etc. It is always recommended that the geotechnical be informed of known changes at the project site.

Subsurface exploration reports are generated based on the analysis and professional opinions of a geotechnical engineer based on the results of field and laboratory data. Often subsurface conditions can vary – sometimes significantly – across a site and over short distances. It often is helpful to retain the geotechnical engineer's services during the construction process. Otherwise, the geotechnical cannot assume responsibility or liability for report recommendations which may have needed to change based on changing site conditions or misinterpretation of recommendations.

Geotechnical engineers assemble testing and/or boring logs based on their interpretation of field and laboratory data. Testing and/or boring logs should always be coupled with the subsurface exploration report. The geotechnical engineer and Tower Engineering Professionals cannot be held reliable for interpretations, analyses, or recommendations based solely on the testing and/or boring log if it is independent of the prepared report.

The scope of the subsurface exploration report does not include an assessment or analysis of environmental conditions, determination of the presence or absence of wetlands or hazardous or toxic materials on or below the ground surface. Any notes regarding odors, fill, debris, or anything of that nature are offered as general information for the client, often to help identify or delineate natural soil boundaries.

For additional information, please contact the geotechnical engineer named in the attached report.



HASS & ASSOCIATES
GEOTECH – MAY 2021



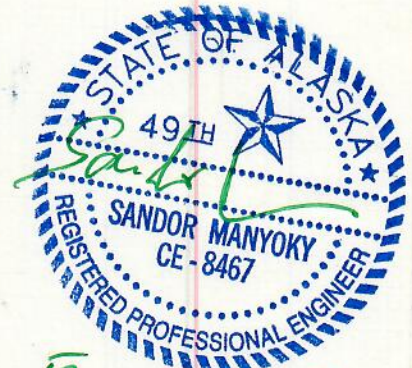
GEOTECHNICAL REPORT FOR THE 11 MILE SITE 150' TOWER FOUNDATION JUNEAU, ALASKA

MAY 24, 2021

Prepared for:

Southcentral Communications
Mr. Adam Kiffmeyer
461 Lily Drive
Soldotna, AK 99669

Prepared by:
Haas & Associates, Inc.
Sandor Manyoky, P.E.
PO box 110776
Anchorage, AK 99511



5-24-21

INTRODUCTION

The purpose of this geotechnical report is to evaluate the subsurface soil conditions for a 150-foot 3 leg tower foundation, located by the food bank in Juneau, Alaska. The proposed tower will be manufactured by MAGNUM TOWERS. Our foundation recommendations are based on the reaction report provided by MAGNUM and the results of Denali Drilling subsurface investigation, performed on March 13, 2021. There was ground water encountered at 3' during drilling. The ground elevation is approximately 5 ft. above sea level.

FIELD INVESTIGATION

On March 13, 2021, Denali Drilling subsurface exploration consisted of drilling a test-hole to 51.5 feet below existing grade. The test-hole is located within the proposed lease area. The drilling was performed by a truck mounted B-61 mobil drilling rig, which has a 6-inch diameter hollow stem auger. Samples were obtained from the auger cuttings, and from the split-spoon sampler at every 5ft.

The Standard Penetration Test method (S.P.T.) was used, with a 140- pound hammer free falling 30 inches onto the split-spoon sampling device. Blow counts were recorded and samples taken at 5-foot intervals. The recovered soil samples were classified in accordance with the Unified Soils Classification System (USCS) ASTM D 2487 and D 4318, current edition. Gradation and moisture content tests were performed by Mark Hansen PE, and the test results are included in this report.

SUBSURFACE SOILS CONDITIONS

At the proposed tower site we encountered from 0 -2.5 feet of loose poorly graded sand (SP)

The next layer of material was from 2.5 to 4 feet below existing grade; here we found organic peat (OL).

From 4 to 9.5 feet below grade, we found loose sandy silt (ML).

From 9.5 to 30 feet below existing grade we encountered medium dense to loose poorly graded gravel with silt and sand (GP-GM)

From 30 to 51.5ft we found soft sandy silt (ML).

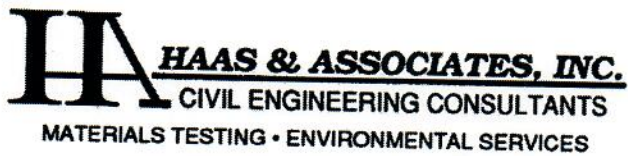
FOUNDATION RECOMMENDATIONS

These soils could support the following types of foundations:

1. Helical pier foundation.
2. Driven pile. The soils we found from 9.5-30 feet below existing grade could support either of these foundations. The combination of skin friction and end bearing of the helical pier and the skin friction developed between these soils and the steel piles would provide sufficient resistance to the tower leg loads.

Please notify us if the tower load configuration changes, so we can revise our calculations and foundation recommendations.

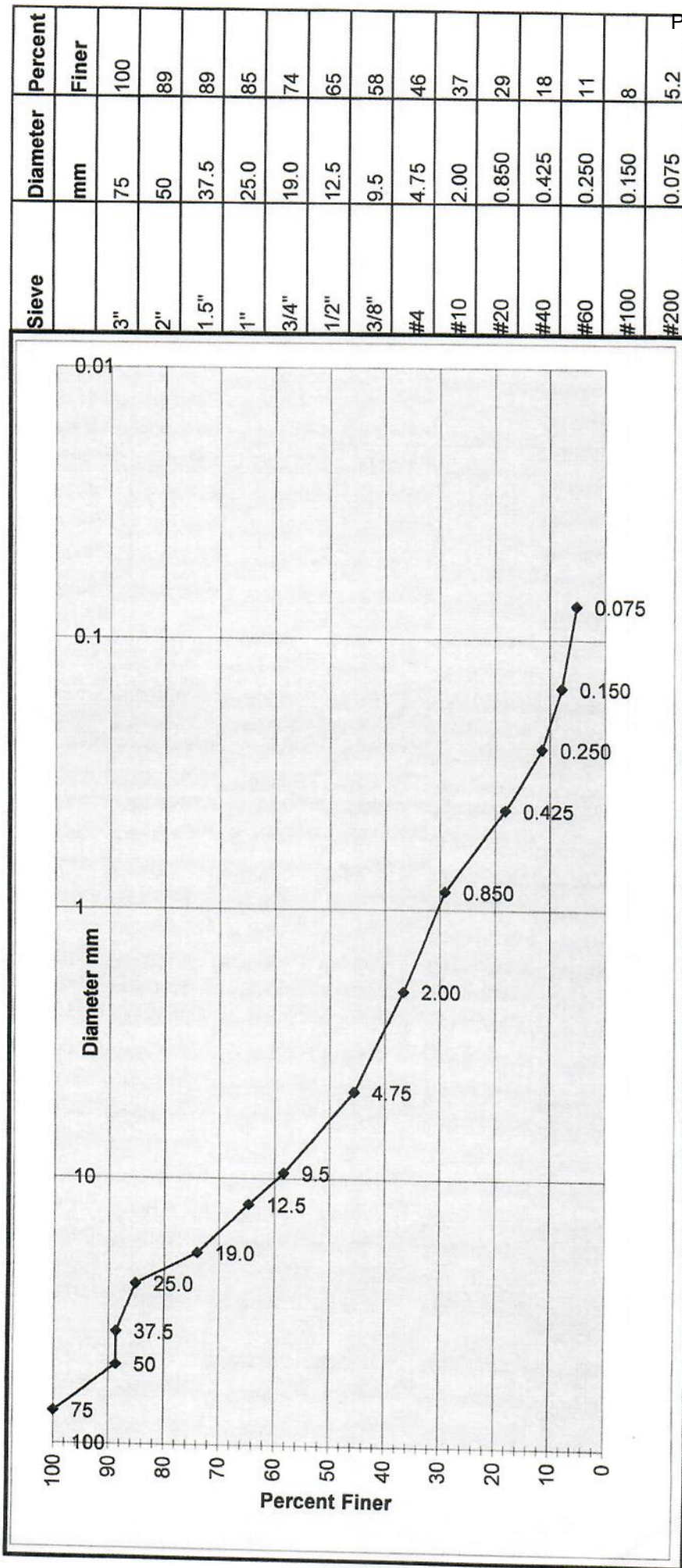
Sincerely:
Sandor Manyoky P.E
Civil engineer

**TEST HOLE LOG****Project:** JUNEAU 11 MILE SITE**Location:** TH-1**Project Number:** 2105 **Elevation:** 5'**Date:** 3-13-21**Technician:** RK**Drilling Equipment:** B-61 MOBIL

Sample ID	Moisture Content (%)	SPT N-Value	Depth (ft.)	Frozen	Soils Description
					LOOSE POORLY GRADED SAND (SP)
		2			PEAT (OL)
					LOOSE SANDY SILT (ML)
	24.4	5	10		
	7.6	13			
			20		LOOSE POORLY GRADED GRAVEL WTH SILT AND SAND (GP-GM)
	13.4	10			MEDIUM DENSE POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) 15-25'
	8.6	7			)
			30		LOOSE POORLY GRADED GRAVEL WITH SAND AND SILT (GP-GM) 25-30'
	29.3	9			
	30.9	3			
			40		SOFT SANDY SILT (ML)
	30.2	3			
	37.0	3			
			50		
	30.7	3			
			60		



MARK HANSEN P.E.
 CONSULTING ENGINEERS TESTING LABORATORY
 2605 N. Old Glenn Hwy, Palmer, AK 99645 Phone: (907) 745-4721
 e-mail: mhpe@mtaonline.net



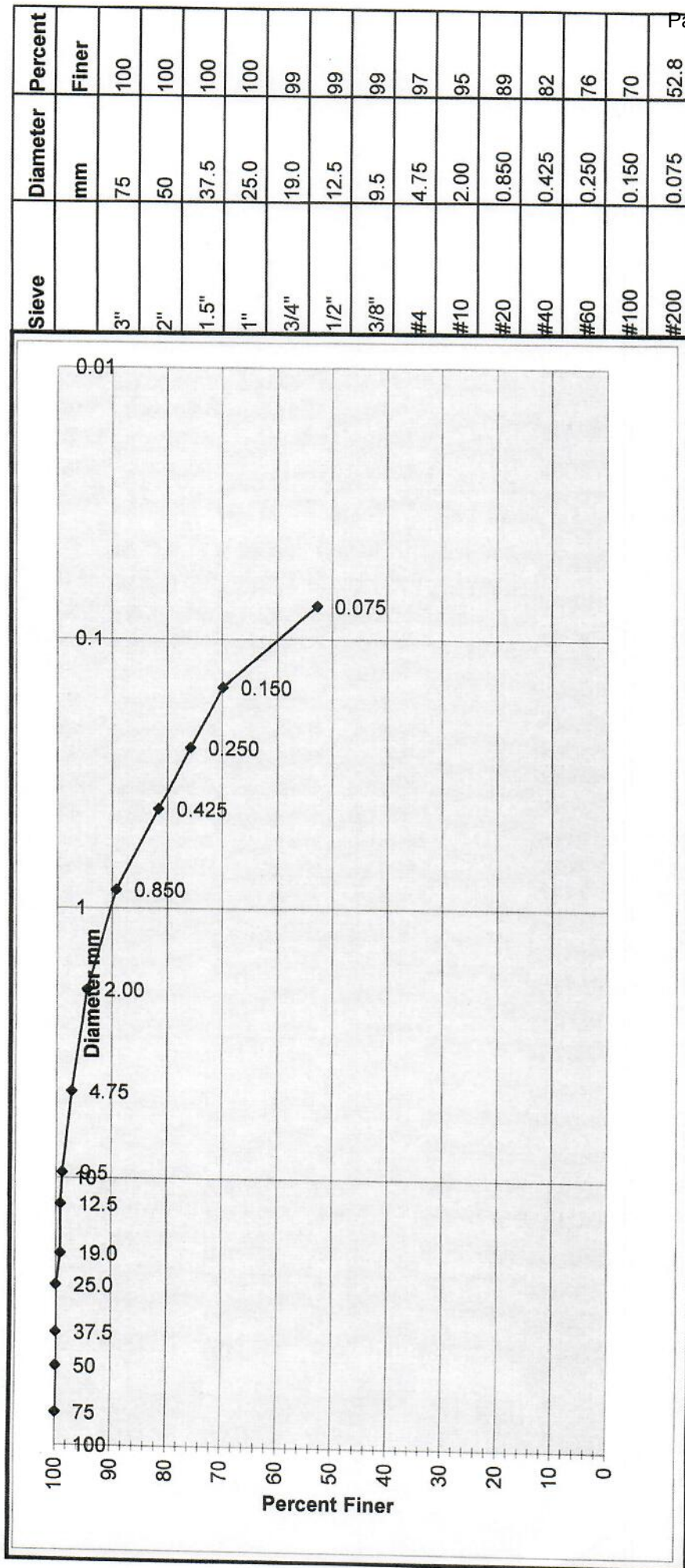
Client: **Haas & Associates**
 Project: **Food Bank**
 Sample Location: **TH #1 @ 9' - 10'**
 Soil Description: **Poorly Graded Gravel with Silt and Sand**
 Unified Classification: **GP-GM**

Date: **4/5/2021**
 Sample Date: **3/13/2021**
 Proj. no: **21007**
 $C_u = 49$
 $C_c = 0.4$



MARK HANSEN P.E.

CONSULTING ENGINEERS TESTING LABORATORY
2605 N. Old Glenn Hwy, Palmer, AK 99645 Phone: (907) 745-4721
e-mail: mhpe@mtaonline.net

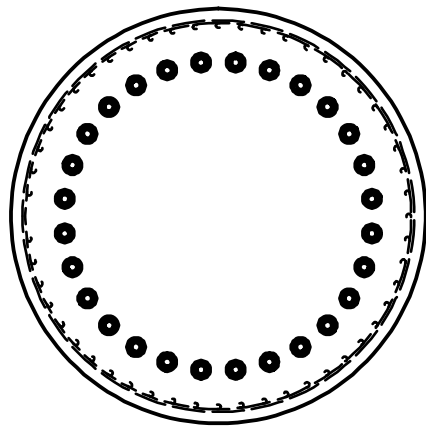


Client: Haas & Associates
Project: Food Bank
Sample Location: TH #1 @ 14' - 14.5'

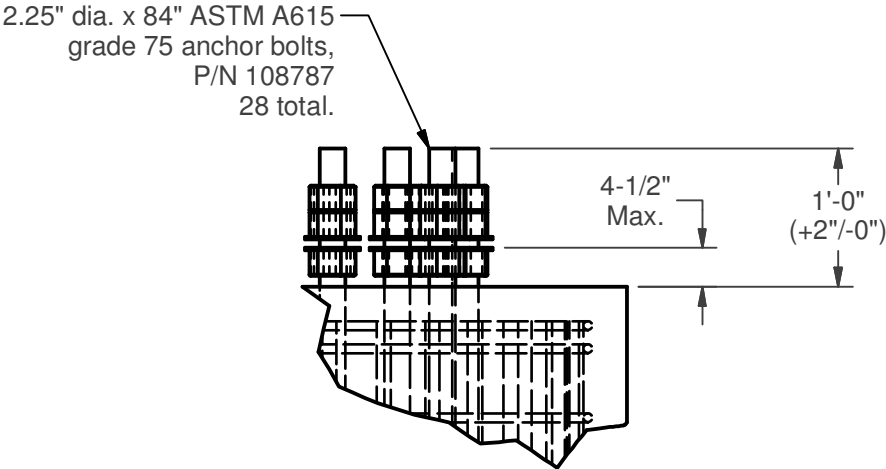
Soil Description: Sandy Silt
Unified Classification: ML

Date: 4/5/2021
Sample Date: 3/13/2021
Proj. no: 21007

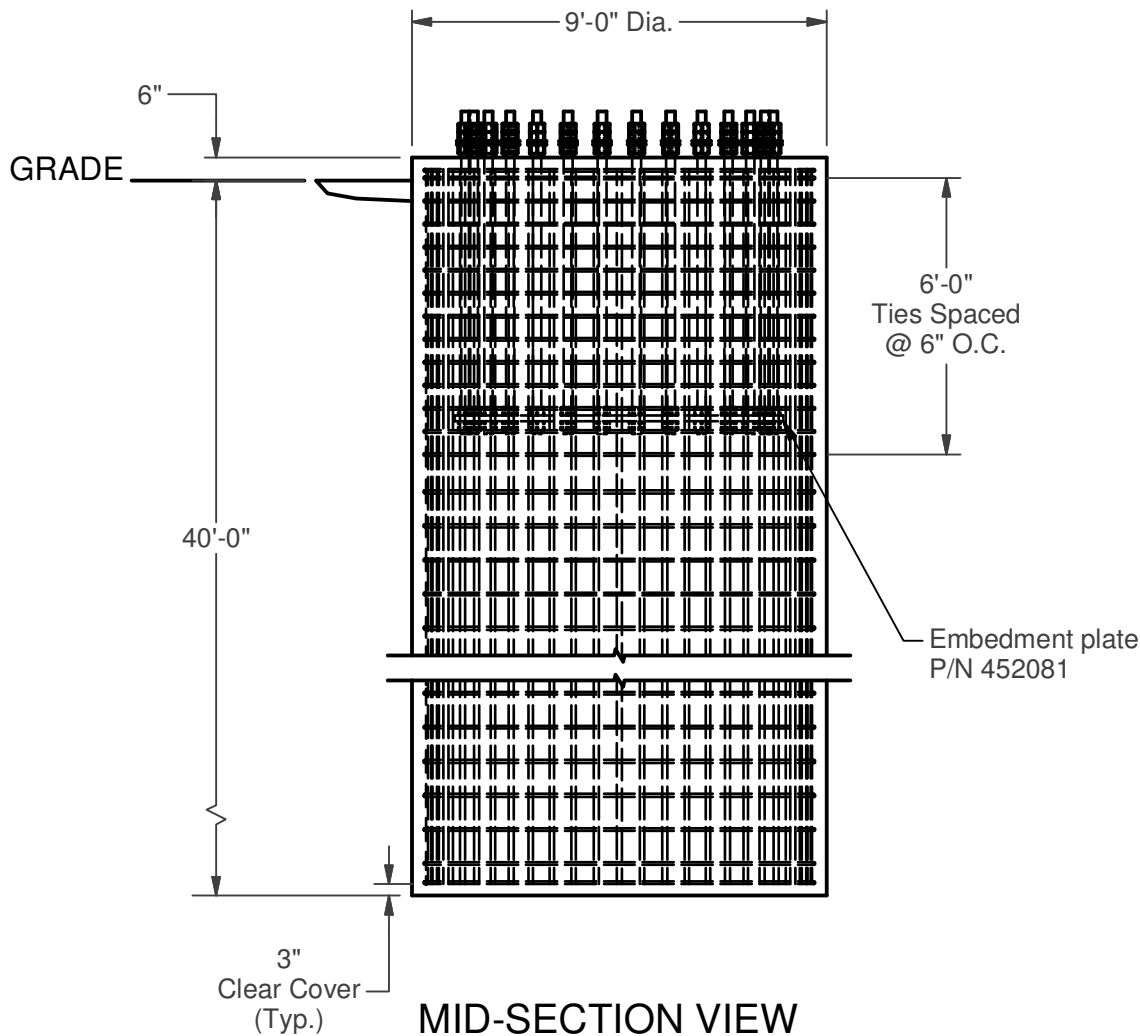
MONOPOLE FOUNDATION DESIGN
MAY 2020



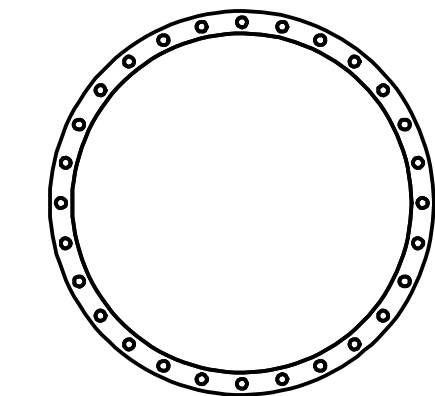
PLAN VIEW



ANCHOR BOLT DETAIL



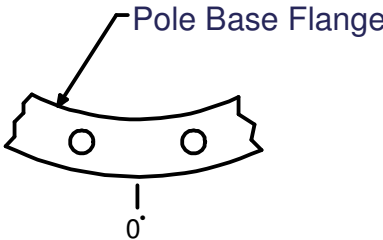
MID-SECTION VIEW
DRILLED PIER FOUNDATION
(CONCRETE VOLUME: 95.4 CU. YD. TOTAL)



EMBEDMENT PLATE DETAIL

#10 Reinforcing bars,
480" long.
Equally spaced around inside of ties.
52 Total.

#6 Reinforcing ties,
343.0" long before being bent into circle with
102.00" outer diameter and 6.00" overlap
and 3" seismic hooks.
Top 2 ties spaced at 2" O.C.
Next 12 ties spaced at 6" O.C.
Bottom 2 ties spaced at 5" O.C.
Remainder of ties equally spaced at 8.81" O.C.
60 Total.



Anchor Bolt Holes
Are on Either Side of
the 0 Degree Azimuth

Anchor Bolt Azimuth

85.5 in EMBEDMENT PLATE O.D.
(28) 2-5/16" HOLES
ON A 80.5 in DIAMETER BOLT CIRCLE
75.5 in EMBEDMENT PLATE I.D.

Concrete Compressive Strength, $f'_c = 4000$ psi



TITLE:

Vertical Bridge

NTP 73" X 150'

US-AK5244 11 Mile

Juneau Co., AK



1201 S. Sheridan St.
South Bend, IN 46619
Bus: (574)288-3632
Fax: (574)288-5860

REV	BY	DATE	DESCRIPTION
2	TH	5/21/2020	Revised reactions per ECO 7077

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without our written consent.

ORIG. DATE: 5/20/2019

DWG NO: 452079

DWG. PROG: v1.05

SHEET: 1 OF 2

Foundation Notes

1. This foundation has been designed for the following reactions.

ASCE7-05

ASCE7-10

Shear:86.4 kips

Shear:83.1 kips

Moment:10105.8 ft-kips

Moment:9725.0 ft-kips

Weight:68.4 kips

Weight:68.4 kips
2. Foundation design is based on the Geotechnical Report dated 03/26/2019, by Tower Engineering Professionals, Inc.; Project No. 152226.242955.
3. A field inspection shall be performed in order to verify that the actual site soil parameters meet or exceed the assumed soil parameters and that the depth of standard foundations are adequate based on the frost penetration and groundwater depth. Local frost depth must be no deeper than the bottom of the base foundation.
4. Reinforcement shall be deformed and conform to the requirements of ASTM A615 Grade 60 unless otherwise noted. Splices in reinforcement shall not be allowed unless otherwise noted.
5. Welding is prohibited on reinforcing steel and anchorage.
6. Backfill must be compacted in 8" loose lifts to a 95% of maximum dry density at optimum moisture content in accordance with ASTM D698. Backfill must be clean and free of organic and frozen soils and foreign materials. Fill should be compacted at water content within 2 percent of optimum.
7. Foundation designs assume level ground at tower site.
8. Loose material shall be removed from bottom of excavation prior to concrete placement.
9. Concrete cover from exposed surface of concrete to surface of reinforcement shall not be less than 3".
10. Concrete and reinforcement installation must conform to ACI 318, "Building Code Requirements for Structural Concrete."
11. Concrete shall develop a minimum compressive strength of 4000 psi in 28 days.
12. Concrete shall be placed as soon as practical after excavating to avoid disturbance of bearing and side wall surfaces.
13. Concrete contractor shall be responsible for properly aligning anchor bolts and materials before and after placing concrete, regardless of whether an anchor bolt template is provided.
14. Positive drainage shall be maintained during construction and throughout the life of the facility to minimize the potential for surface water infiltration.
15. It shall be the contractor's responsibility to locate and prevent damage to any existing underground utilities, foundations or other buried objects that might be damaged or interfered with during construction of the foundation.
16. Groundwater may be encountered at 3.5 feet bgs at this site based on the geotechnical investigation. Dewatering techniques should be anticipated below this depth.
17. Temporary steel casing or drilling slurry may be required for installation of the drilled pier. A clean-out bucket should be used to remove any cuttings and loose soils in the bottom of the shaft excavation.
18. Concrete shall be placed by tremie methods if there is more than 1 inch of water or drilling fluid at the bottom of the shaft excavation or if water infiltration exceeds a rise of 1/4" per minute.



TITLE:
Vertical Bridge
NTP 73" X 150'
US-AK5244 11 Mile
Juneau Co., AK

1201 S. Sheridan St.
South Bend, IN 46619
Bus: (574)288-3632
Fax: (574)288-5860

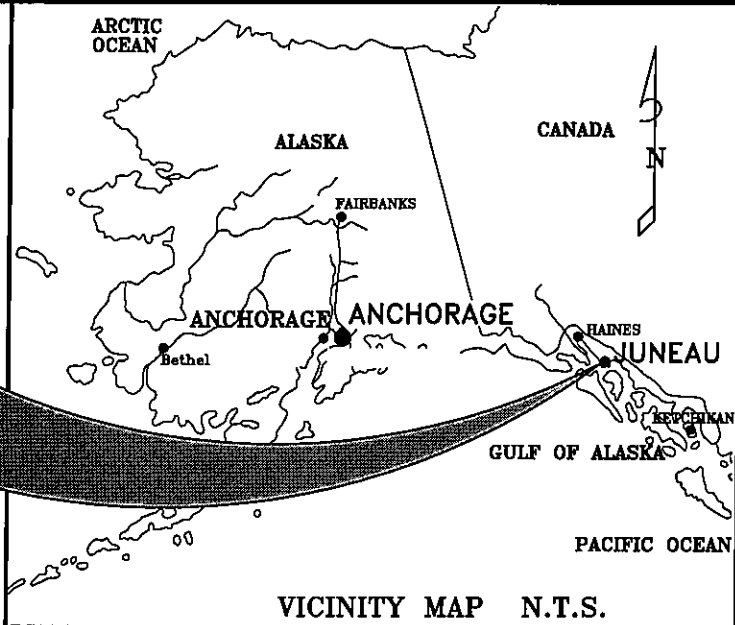
REV	BY	DATE	DESCRIPTION
2	TH	5/21/2020	Revised reactions per ECO 7077

COPYRIGHT NOTICE: This drawing is the property of Nello Inc. It is not to be reproduced, copied or traced in whole or in part without our written consent.	ORIG. DATE: 5/20/2019	DWG NO: 452079
	DWG. PROG: v1.05	SHEET: 2 OF 2

HASS & ASSOCIATES
SELF-SUPPORT FOUNDATION DESIGN
SEPTEMBER 2021

COMMUNICATION TOWER
150 FT. THREE LEGGED FOUNDATION
11 MILE SITE
JUNEAU, ALASKA
SEPTEMBER 13, 2021

THIS
PROJECT



GENERAL NOTES:

THE FOLLOWING NOTES APPLY UNLESS SHOWN OTHERWISE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES REQUIRED TO PERFORM THE FOUNDATION WORK.
2. GENERAL CONTRACTOR TO VERIFY ANCHOR BOLT SIZES, BASE PLATE AND BOLT PATTERN AS PER TOWER MANUFACTURES DRAWINGS.
3. CODE AND STANDARDS:
2009 INTERNATIONAL BUILDING CODE (IBC)
2003 ANSI/TIA/EIA-222-G STRUCTURAL STANDARDS
A.C.I. 301, 318 CURRENT EDITION.
4. FOUNDATION DESIGN IS BASED ON SOILS REPORT BY HAAS AND ASSOCIATES INC. DATED 3-13-2021 AND MAGNUM TOWERS PROJECT NUMBER PJF-65021.
5. SPECIAL INSPECTION REQUIREMENTS:
PERIODIC - EXCAVATION, BACKFILLING, FORMWORK AND CONCRETE/REBAR PLACEMENT SHALL BE MONITORED BY AN ON-SITE REPRESENTATIVE OF HAAS & ASSOCIATES INC.

CONTINUOUS -
PILE INSTALLATION ANCHOR LOAD TESTING
(1 UPLIFT TEST PER LEG, ASTM D3689) TO 200% OF DESIGN LOADS.

6. PILES:
ASTM A572 GRADE 50
7. STEEL ANCHOR RODS:
ASTM F1554, GRADE 105 THREADED
FURNISHED WITH ASTM A563 HEAVY HEX NUTS EACH END
8. REINFORCEMENT -
DEFORMED BAR --- ASTM A615, GR 60
WELDED REINF --- WELDING PROHIBITED
LAP ALL REINF 60 BAR DIAMETERS MIN.
9. REINFORCED CONCRETE:
SPECIAL INSPECTION REQUIRED. ALL CONCRETE SHALL CONFORM TO:
AGGREGATES----- ASTM C33, 3/4"MAX
CEMENT ----- ASTM C150, TYPE I OR II
CEMENT CONTENT ----- 6.0 SACKS/CY MIN.
WATER ----- CLEAR, POTABLE
AIR ENTRAINMENT ----- ASTM C260; 4-7%
STRENGTH (28 days)----- $f'_c = 4,000$ PSI MIN
10. CONCRETE COVER:
MINIMUM CONCRETE COVER TO REINF:
CAST AGAINST OR EXPOSED TO EARTH ----- 3"
FORMED EXPOSED TO WEATHER ----- 2"

TOWER LEG REACTIONS (FACTORED)

TOWER HEIGHT: 150 FT
OVERTURNING M: 7797.1 FT-KIPS
BASE SHEAR: 84.3 KIPS
BASE WEIGHT: 95.1 KIPS
MAX. LEG SHEAR: 84.3 KIPS
MAX. LEG UPLIFT: 301 KIPS
MAX. LEG DOWN: 346.5 KIPS

SHEET INDEX

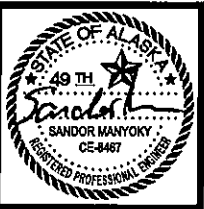
T1 TITLE SHEET
S1 PILE FOUNDATION PLAN
AND DETAILS
S2 SECTIONS AND DETAILS

**NOTIFY ENGINEER 24
HOURS PRIOR TO
INSPECTIONS**

**CALL UTILITY LOCATE
BEFORE YOU DIG**

**APPROVED FOR CONSTRUCTION
BY: DATE:**

DRAWING STATUS / REVISIONS			
REV.	DATE	DESCRIPTION	BY



HAAS & ASSOCIATES INC.
CIVIL ENGINEERING
CONSULTANTS
PO BOX 110776
Anchorage, Alaska, 99511
tel: (907) 349-8799
fax: (907) 349-8791
e-mail: haas@gci.net

11 MILE SITE
150-FOOT THREE LEGGED TOWER FOUNDATION
JUNEAU, ALASKA
TITLE SHEET

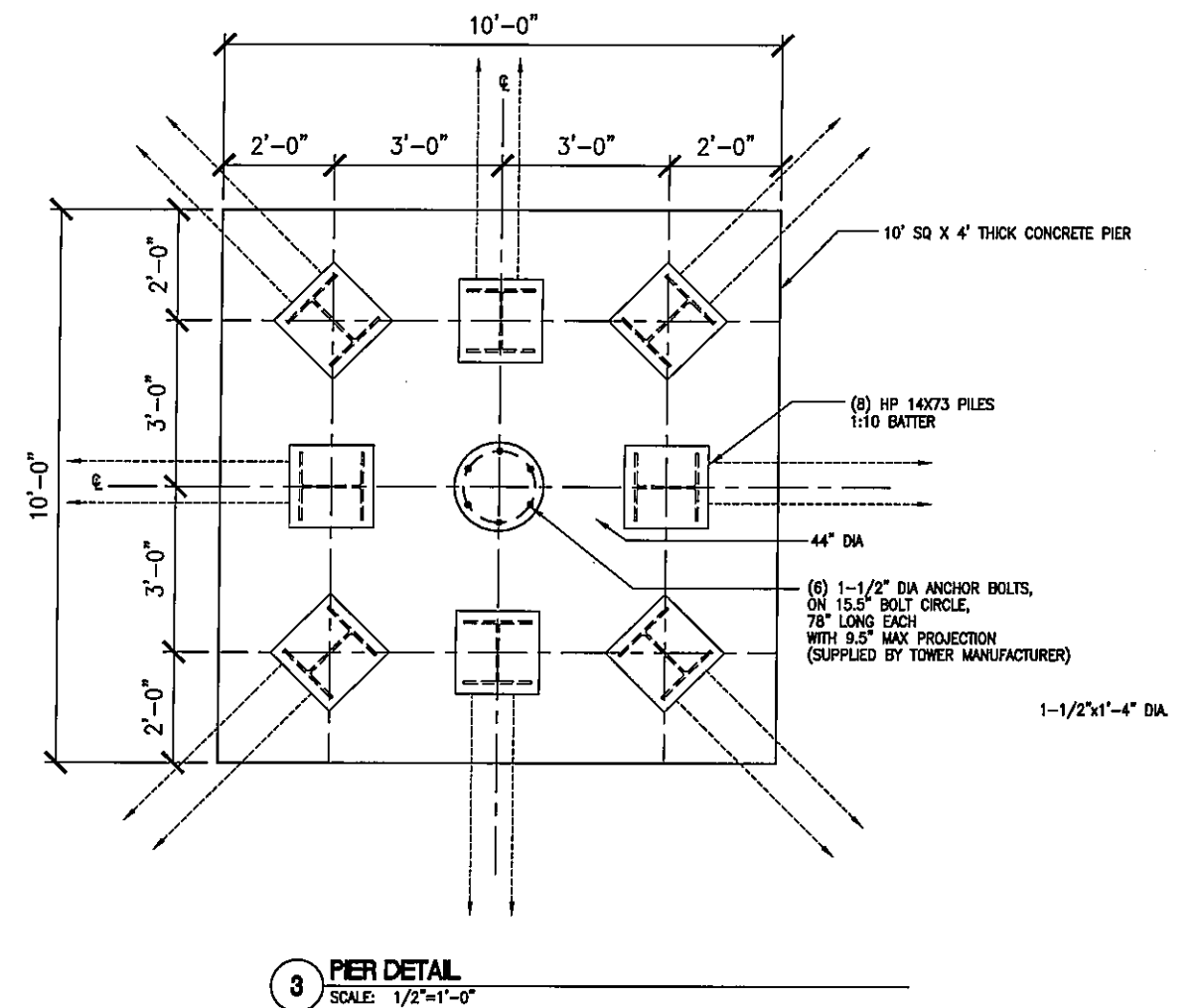
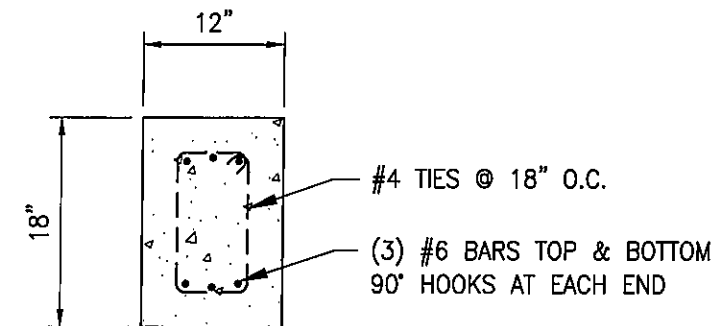
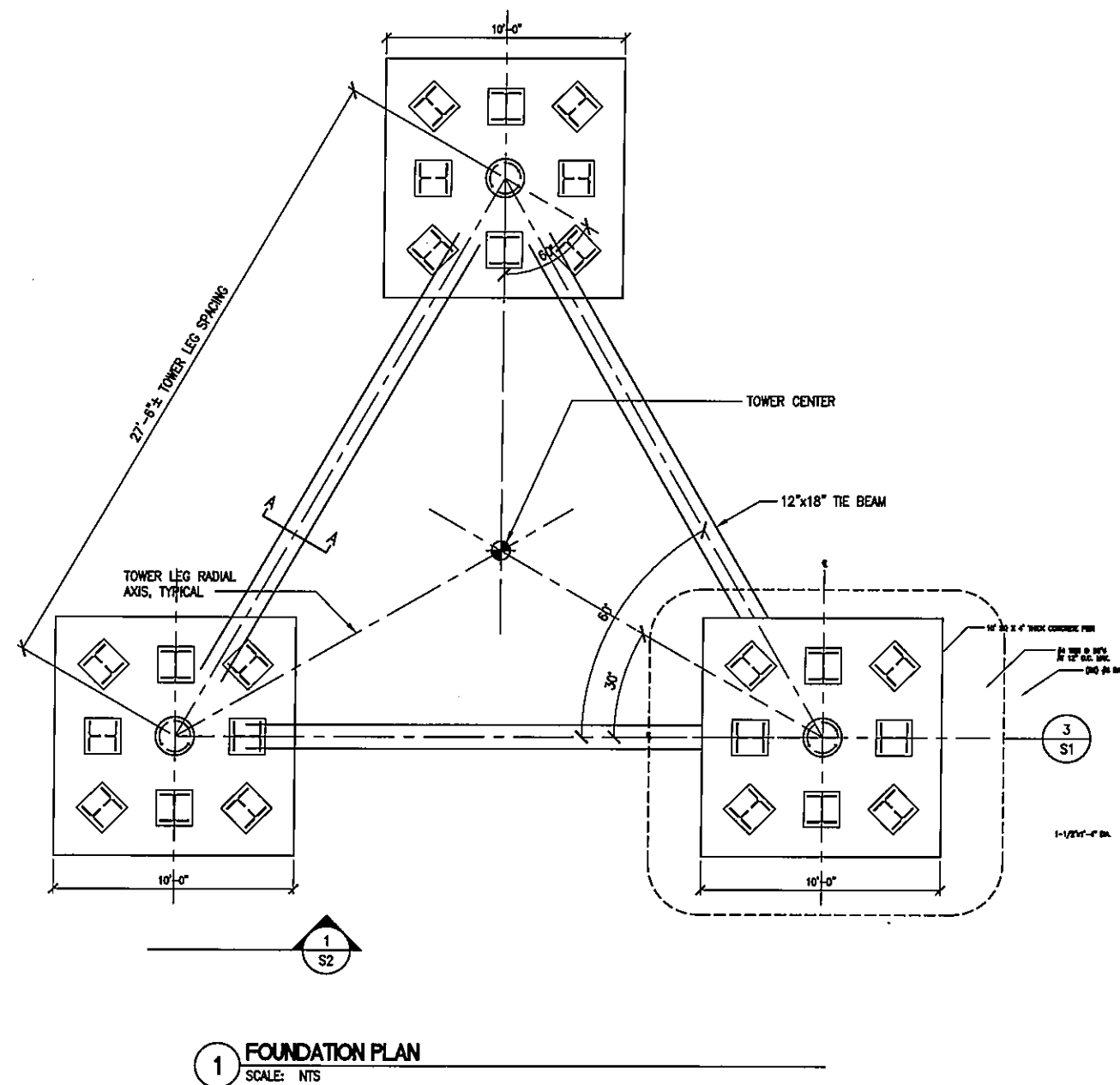
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DATE: 10/13/2021
DRAWN BY: CS
CHECKED BY: SM
JOB NUMBER: _____
FILE NAME: 11MILE-4-25-2021-1

SHEET NUMBER

T1

11-15-2021 4 Sheets

9-15-21

[illegible]

IIA

HAAS & ASSOCIATES INC.
CIVIL ENGINEERING
CONSULTANTS
PO BOX 110776
Anchorage, Alaska, 99511
tel: (907) 349-8799
fax: (907) 349-8791
e-mail: haas@gci.net

11 MILE SITE
150-FOOT THREE LEGGED TOWER FOUNDATION
JUNEAU, ALASKA
HP PILE FOUNDATION PLAN AND DETAILS

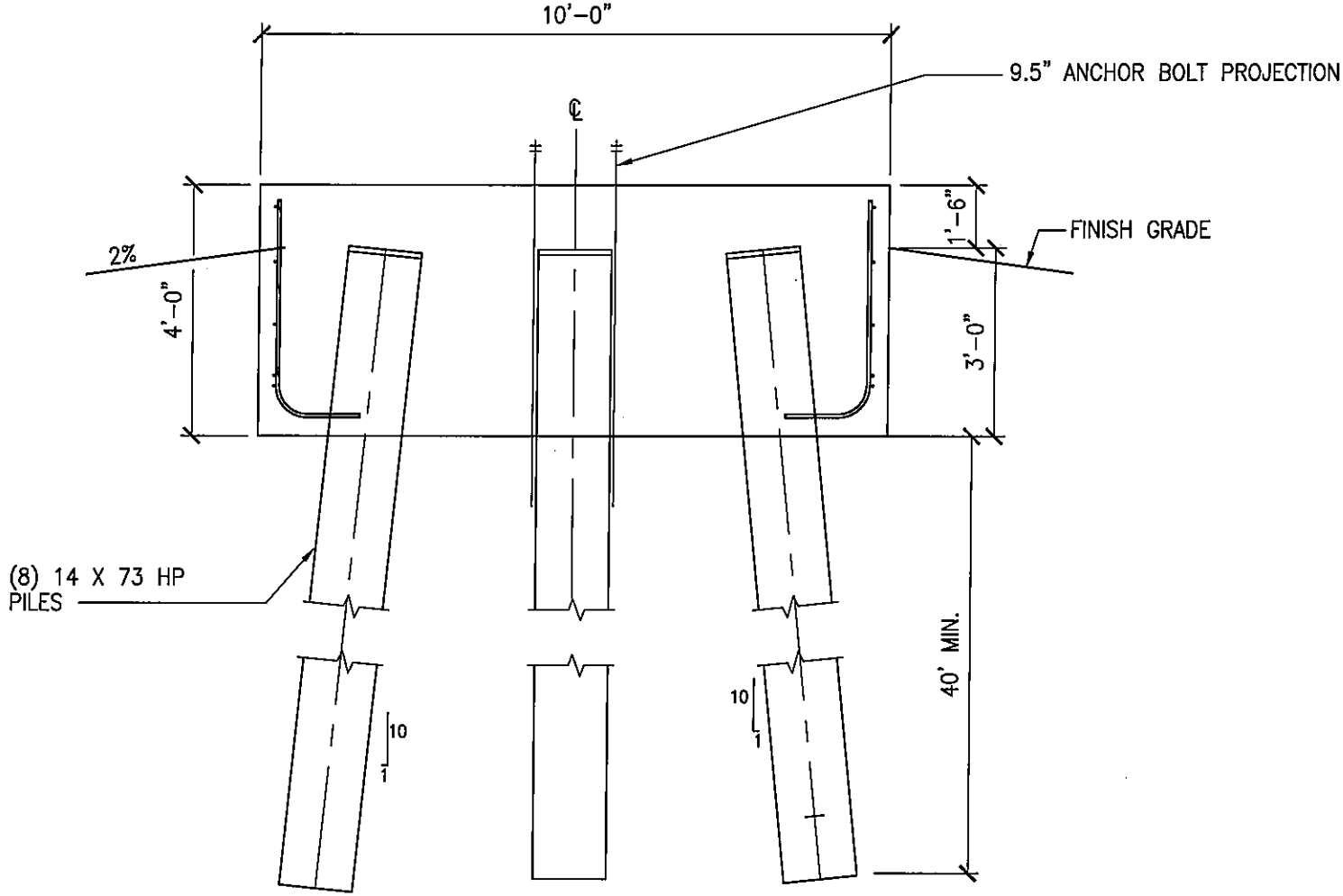
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DATE: 10/13/2021
DRAWN BY: CS
CHECKED BY: SM
JOB NUMBER: ----
FILE NAME: 11MILE-4-25-2021-

SHEET NUMBER

S1

8-2021 4 Sheets

9-15-21



1 CONCRETE PIER DETAIL
SCALE: 3/8"=1'-0"

DRAWING STATUS / REVISIONS			
REV.	DATE	DESCRIPTION	BY



HA

HAAS & ASSOCIATES INC.
CIVIL ENGINEERING
CONSULTANTS
PO BOX 110776
Anchorage, Alaska, 99511
tel: (907) 349-8799
fax: (907) 349-8791
e-mail: haas@gci.net

11 MILE SITE
150-FOOT THREE LEGGED TOWER FOUNDATION
JUNEAU, ALASKA

SECTIONS AND DETAILS

SCALE:	AS SHOWN
DATE:	10/13/2021
DRAWN BY:	CS
CHECKED BY:	SM
JOB NUMBER:	----
FILE NAME:	11MILE-4-25-2021-1

SHEET NUMBER

S2

11-13-2021 4 Sheets

9-15-21



Planning Commission

(907) 586-0715
 PC_Comments@juneau.org
 www.juneau.org/plancomm
 155 S. Seward Street • Juneau, AK 99801

December 10, 2021

From: Michael LeVine, Chair, Planning Commission

To: Katie Koester, Director, Engineering & Public Works

RE: Legislative Priority List

BACKGROUND

The Planning Commission was asked to review and nominate projects from the FY 2023 CBJ Capital Priority List. The review and nomination process was tasked to the Planning Commission's Capital Improvement Project Subcommittee. Discussion of the list presented by the Engineering and Public Works Director occurred at the December 1, 2021 meeting. Based on the provided list and one-page summaries on each project, it was agreed two projects on the list and one additional new project appeared as priorities.

NOMINATED PROJECTS

The nominated projects are:

- 1) Second Channel Crossing
- 2) Lemon Creek Multimodal Path
- 3) Deferred Maintenance Fund

PROJECT DISCUSSION

While this letter is intended to be a brief discussion of projects, it is important to understand the context of the nominations. We recognize the projects are of disparate scales and require targeted advocacy to implement. The Lemon Creek Path and Deferred Maintenance projects have the potential to be implemented quickly with state and local support. The Second Channel Crossing is a major infrastructure project that will require years of planning and construction, and will need federal support. However, we feel that this project holds the greatest potential for sustainable economic growth and safety improvements for our community, and must be continuously prioritized.

Second Channel Crossing

With the recently approved \$1 trillion infrastructure law, there could be no time like the present to realize the entire block of funding to construct the needed crossing that has been proposed and discussed for many decades. The link will provide redundancy, emergency access, development, and recreational opportunities. Each one of these items is sufficient reason to construct the crossing, let alone providing for all of them.

Lemon Creek Multimodal Path

The CBJ Assembly has provided emphasis on creating area plans. The Lemon Creek Multimodal Path is a direct result of the 2017 Lemon Creek Area Plan. The area lacks a comprehensive non-motorized route. This type of project has been completed within other areas of the Borough, yet Lemon Creek has been left as the void between them. Completing this project would demonstrate the Assembly's commitment to the area plan process and provide interconnection between areas within the Borough.

Deferred Maintenance Fund

While not as glamorous as new projects, completion of deferred maintenance of existing infrastructure is of equal importance. CBJ departments have worked with budgets completing some for the required maintenance; while being forced to defer additional needed work for lack of funds. Reaching out for a one-time additional funding would allow for CBJ to complete additional work that has been waitlisted. In turn, completing the required maintenance will extend the useful life of the infrastructure, thereby delaying the need for more costly replacement projects.



DEVELOPMENT PERMIT APPLICATION

NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications.

To be completed by Applicant	PROPERTY LOCATION		
	Physical Address <u>247 S. Franklin St.</u>		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) <u>Juneau Townsite Block M Lot 2 FR</u>		
	Parcel Number(s) <u>1C070B0M0010</u>		
	☒ This property located in the downtown historic district		
	☒ This property located in a mapped hazard area, if so, which <u>49.70- Severe Avalanche</u>		
	LANDOWNER/ LESSEE		
	Property Owner <u>Juneau Coop</u>	Contact Person <u>Mariya</u>	
	Mailing Address <u>8715 Teal street</u>	Phone Number(s) <u>957-2885</u>	
	E-mail Address <u>lovishchuk.mariya@gmail.com</u>		
LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits			
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:			
A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.			
B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X <u>[Signature]</u> Landowner/Lessee Signature		<u>12/9/21</u> Date	
X _____ Landowner/Lessee Signature		_____ Date	
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT If the same as OWNER, write "SAME"			
Applicant <u>Same</u>		Contact Person	
Mailing Address		Phone Number(s)	
E-mail Address			
X _____ Applicant's Signature		_____ Date of Application	

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number

APL 21-06

Intake Initials

ANE

Date Received

12/9/21



NOTICE OF APPEAL OF DIRECTOR'S DETERMINATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

APPELLANT'S CONTACT INFORMATION

Juneau Cooperative Christian Ministry dba TGH
Appellant's Name (please print)

lovishchuk.mariya@gmail.com
E-mail Address

907 957-2885
Phone

8715 Teal Street
Mailing Address

Juneau
City

AK 99801
State Zip

X Mariya Lovishchuk
Appellant's Signature

12-02-2021

DECISION THAT IS BEING APPEALED*

Building permit for 247 S. Franklin Street Emergency Shelter building (sleeping 53 people in many different sleeping spaces) conversion to 7 apartments (maximum 14 people) was denied.

Date of Director's Determination 11/30/2021

Attach a copy of the Director's Decision (E-mail, Notice of Decision, Letter, etc.).

* Notice must be submitted within 20 days of the date of the decision being appealed.

APPEAL SPECIFICS (please fill in all that apply)

Parcel Number 1C07B0M0010

Zoning District Mixed Use Residential and Commercial

Case Number BLD2021-0765

Title 49 Code Section 49.70.300

Current Use of Land or Buildings Emergency Shelter, Soup Kitchen, Care Center (General Commercial)

Proposed Use of Land or Buildings Affordable Housing (2nd and 3rd floors), commercial non-profit space (1st floor)

Other

ALL REQUIRED MATERIALS ATTACHED



Complete Application



Appeal Decision



Narrative including:



Grounds for Appeal



Specific questions you would like the Planning Commission to address

To be completed by Applicant

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

APPEAL FEES	Fees	Check No.	Receipt	Date
Notice Fees	\$ <u>200.00</u>			
Refund (Yes/No)	\$ <u> </u>			
Total Fee	\$ <u> </u>			

This form and all documents associated with it are public record once submitted.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number

Date Received/Intake Initials

12/9/21



Mariya Lovishchuk <lovishchuk.mariya@gmail.com>

BLD2021-0765

Allison Eddins <Allison.Eddins@juneau.org>

Wed, Dec 1, 2021 at 8:23 AM

To: Bruce Denton BCD Construction <brucecdenton@gmail.com>, Mariya Lovishchuk <lovishchuk.mariya@gmail.com>

Hello Bruce and Mariya,

Please accept this email as an official denial of your request to convert the old Glory Hall shelter into 7 apartments. According to the CBJ adopted hazard maps the Glory Hall is located in a sever avalanche zone. Increasing the number of dwelling units is prohibited by code in this hazard zone. The code language is below for your reference. Please feel free to contact me via email if you have any questions about the code, this denial or your options moving forward.

49.70.300 - Landslide and avalanche areas.

(a) Generally.

(1) Development in all landslide and avalanche areas shall minimize the risk of loss of life or property due to landslides and avalanches.

(2) Boundaries of potential and severe avalanche areas will be as shown on the landslide and avalanche area maps dated September 9, 1987, consisting of sheets 1—8, as the same may be amended from time to time by the assembly by ordinance.

(3) Notwithstanding any other provision, all subdivision other than a boundary line relocation and all development greater than a single-family dwelling within landslide or avalanche areas shall require a conditional use permit.

(4) If a developer disagrees with the boundaries shown on the maps, the developer may seek departmental relocation of the boundaries by submitting site specific studies prepared by a civil engineer experienced in avalanche and landslide analysis. Such studies shall include detailed analyses of topography, vegetation, potential snow accumulation, and other factors. The results should indicate actual hazard area boundaries and potential debris flow direction, time, distance and mass. If, in the opinion of the city engineer, the studies clearly establish that the map boundaries are inaccurate and the proposed development is outside a severe avalanche area or outside any avalanche or landslide area, the department shall proceed accordingly.

(5) The commission may require mitigating measures certified as effective by a professional engineer for development in landslide and avalanche areas. Such measures may include dissipating structures or dams, special structural engineering, or other techniques designed for the site. Mitigating measures may also include reduction in the proposed density.

(b) Severe avalanche areas.

(1) Notwithstanding any other provision, no development or any part of a development, which is within a severe avalanche area shall, by the addition of bedrooms, conversions of buildings, or otherwise, increase the density of that parcel; provided, however, that a single-family house may be constructed on a vacant lot.

(2) No subdivision shall be approved which creates a lot lacking sufficient building space outside a severe avalanche area.

(c) Warning and disclaimer of liability. Avalanches and landslides may occur outside hazard areas in excess of engineering expectations. The location and severity of the event may be increased by manmade or natural causes. This article does not imply that land outside of designated hazard areas, or uses permitted within such areas, will be free from danger or damage. This article shall not create liability on the part of the City and Borough of Juneau or any officer or employee thereof for any damages that result from reliance of this article or any administrative decision lawfully made under this article.

Allison Eddins | Planner II

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Office: 907.586.0753 ext. 4131

Our telephone system is changing. Beginning May 3, 2021, I may be reached at 907-586-0753 ext. 4131.

THE GLORY HALL 247 S. FRANKLIN STREET APARTMENT CONVERSION BUILDING PERMIT DENIAL APPEAL TO PLANNING COMMISSION NARRATIVE

BACKGROUND

The Glory Hall is pursuing Converting two upper floors of the building to affordable downtown housing and renting out the 1st floor for commercial purposes. The former emergency shelter, which had 43 beds and other sleeping spaces, for over 53 people, will be converted to 7 apartments: 6 efficiencies, and one 1 bedroom. The maximum amount of people sleeping in the apartments will be 14, as no more than 2 people at time will be permitted in each unit.

Over 35% engineering and architectural plans for apartment conversion are complete. Contractor has been selected. We have also reached out to funders and created an operating proforma. The Glory Hall applied for a building permit and the building permit was denied.

We request that the Planning Commission instructs the Community Development Department to issue the Building Permit to our project.

FINDINGS

Per the email from Community Development Department Planner, Allison Eddins, Glory Hall's building permit was denied stating that the building is in the severe avalanche zone and the project is increasing density by converting the building from sleeping 43-53 people at night and providing day dwelling to over 100 people at a time to converting to 7 apartments for 7- 14 people. (The apartments are for singles/couples only)

CONCERNS and ISSUES

- Healthy communities have affordable housing in their Downtown Core. Juneau keeps on losing affordable housing in the Downtown core. Affordable housing downtown is a Juneau priority, as reflected in the Comprehensive Plan, Economic Development Plan, Blueprint Downtown, Juneau Affordable Housing Trust Fund emphasis/extra points given to project Downtown. Not granting a building permit to this project is in direct conflict with the goal of creating affordable housing downtown.
- Grant funding is being jeopardized by Glory Hall's inability to proceed with the project, putting in the question the ultimate success of the project. Already, Glory Hall's Affordable Housing Trust Fund application for \$350,000 has been put on hold because there is no clarity. The Glory Hall is forced to hold off on completing other funding applications until the building permit issue is resolved.
- The longer the conversion process takes, the less chance of success. The Glory Hall is a small nonprofit and the building, currently used for emergency shelter overflow is a liability. The Glory Hall with its limited resources is forced to pay for utilities and maintenance. This is not sustainable in the long or even medium term.
- Obtaining a parcel specific study rather than using the existing, already paid for study that shows that the project is not in the severe avalanche zone, is costly and unnecessary burden
- The Glory Hall attempted to engage with TetraTech for a site-specific study for the Glory Hall to provide to the Community Development Department, per 49.70.300 (4) Section of the Code. TetraTech was selected because they are already familiar with the area and have the expertise the Community Development Department requires. TetraTech was willing to engage with the Glory Hall under one condition. They required that The Glory Hall communicates with the Community Development Department and provides TetraTech with the quick email note, to assure TetraTech that

their working with the Glory Hall is OK with the City and Borough of Juneau because City and Borough of Juneau was TetraTech's client first and working with the Glory Hall without explicit approval to do so from the City and Borough of Juneau is perceived to be a conflict. The Glory Hall left three voice messages for the CBJ Planner, the main contact for the TetraTech maps, none of the voicemails were returned. The Glory Hall sent four emails to the Planning Department, Head of the Community Development Department, and the Manager's Office. The Glory Hall did not receive any response to the emails, for close to a week, at the time of this appeal submission.

GROUND'S FOR APPEAL

Community Development Department Decision to deny the permit is incorrect for two reasons:

- The Glory Hall should be able to use the completed TetraTech maps to demonstrate that the project is not in the severe avalanche zone regardless of whether the maps have been adopted by the Assembly. TetraTech study clearly demonstrates that the project is in moderate avalanche zone and therefore permissible, appropriate, and should be issued a building permit. TetraTech study is exhaustive and specific.**
- Community Development Department's Definition of Density is wrong. Reasonable definition of density should be applied. Clearly the proposed project decreases not increases density. Providing dwelling accommodations for 43-53 people and over 100 people using the building for day time lodgings is a lot more than providing lodging/dwelling for 7-14 people.**

The Glory Hall should be allowed to use the maps completed for the Community Development Department to demonstrate to the Community Development Department Engineer that the project is in a moderate NOT severe avalanche area. TetraTech, reputable avalanche experts, have conducted a detailed study of Juneau's avalanche hazards and have concluded that Franklin Street is not in a severe avalanche zone. The maps, which were paid for with public dollars, clearly show the parcel owned by the Glory Hall, to not be in the severe avalanche zone. (See Attachment 1, TetraTech maps). The maps together with the 147 page study completed by TetraTech (See Attachment 2, TetraTech Assessment) clearly demonstrate the project is in the moderate avalanche zone. As clear from the TetraTech Assessment, necessary methodology, including LIDAR assessment, topography, modeling, terrain, and vegetation analyses were used to reach the conclusion that South Franklin Street, including the proposed project location are in a moderate avalanche zone. For description of methodology please see pages 3, 19-43, 60, and 102 of the TetraTech Assessment, included as Attachment 2. The maps are very specific, identifying 52 unique avalanche paths and potential impact on specific areas. (See Attachment 2, TetraTech Assessment, pp 19-43)

There is no good reason why The Glory Hall cannot present the TetraTech maps to CDD and have the City engineer state that the project can proceed and should be issued a building permit, as it is in the moderate, not severe avalanche zone.

"49.700.300 a(4)

If a developer disagrees with the boundaries shown on the maps, the developer may seek departmental relocation of the boundaries by submitting site specific studies prepared by a civil engineer experienced in avalanche and landslide analysis. Such studies shall include detailed analyses of topography, vegetation, potential snow accumulation, and other factors. The results should indicate actual hazard area boundaries and potential debris flow direction, time, distance, and mass. If, in the opinion of the city engineer, the

studies clearly establish that the map boundaries are inaccurate and the proposed development is outside a severe avalanche area or outside any avalanche or landslide area, the department shall proceed accordingly."

Asking the Glory Hall to obtain another study is a wasteful use of public funding. The Glory Hall is a small nonprofit agency with very limited operating revenue. Every dollar spent is a dollar that could be spent on providing food and shelter to people without food and shelter. Additionally, because the Glory Hall is only able to operate because of donations and grants, asking the Glory Hall to obtain a duplicative study is not a prudent or an appropriate way to spend public funds. If the TetraTech maps are good enough for the Community Development Department to be presented to the Assembly, they should be good enough to issue the Glory Hall a building permit.

The fact that the Assembly has not adopted the new TetraTech maps in no way undermines the experience of the TetraTech engineers who completed the study. The fact that the Assembly has not adopted the new maps in no way changes TetraTech's completed analyses of topography, vegetation, potential snow accumulation, debris flow direction time and mass.

Community Development Departments Interpretation of Density is wrong. Title 49 states that:

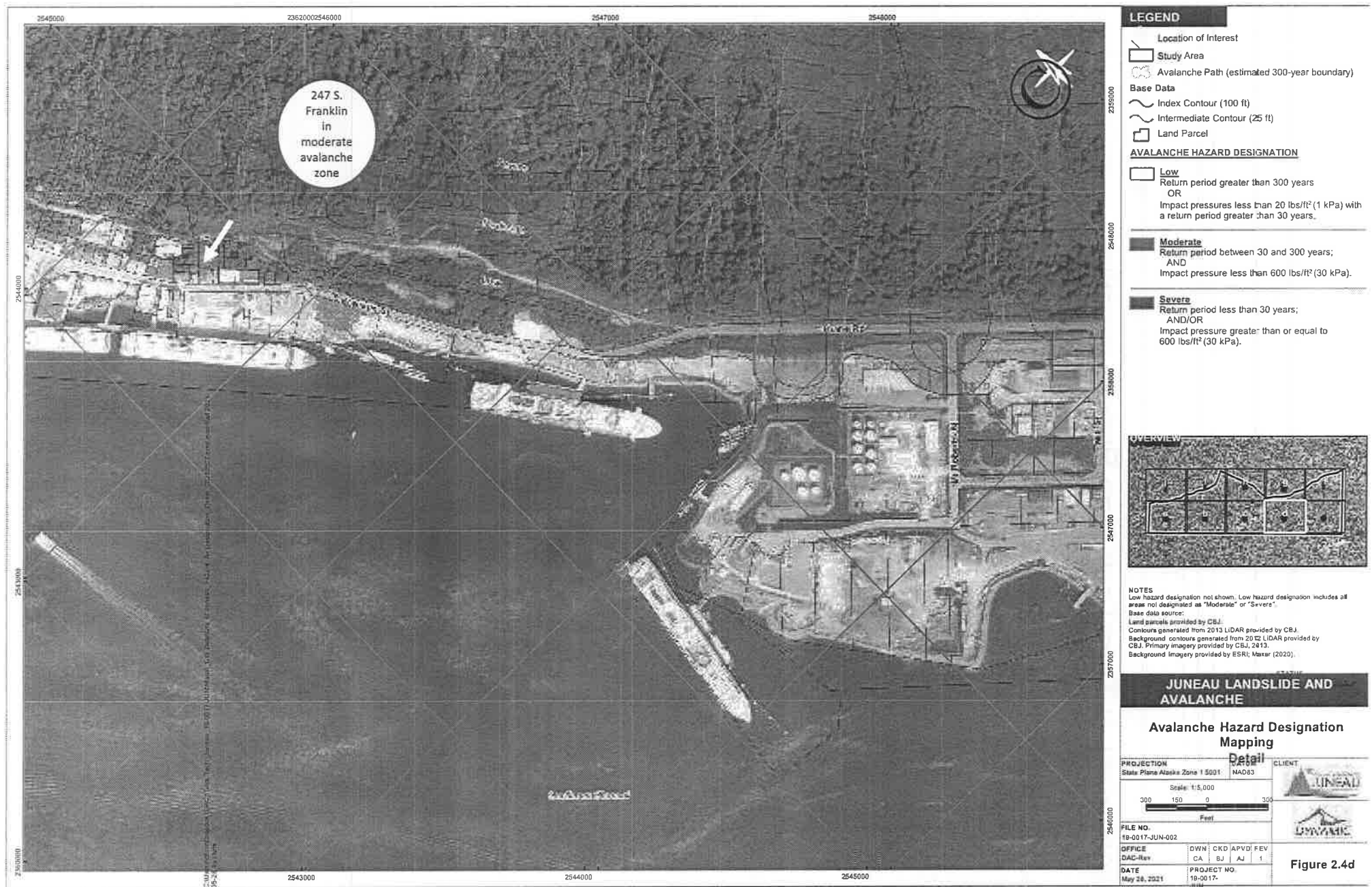
Notwithstanding any other provision, no development or any part of development, which is within a severe avalanche area shall, by the addition of bedrooms, conversion of buildings, or otherwise increase the density of that parcel; provided, however, that a single-family house may be constructed on a vacant lot.
(49.70.300.b.1)

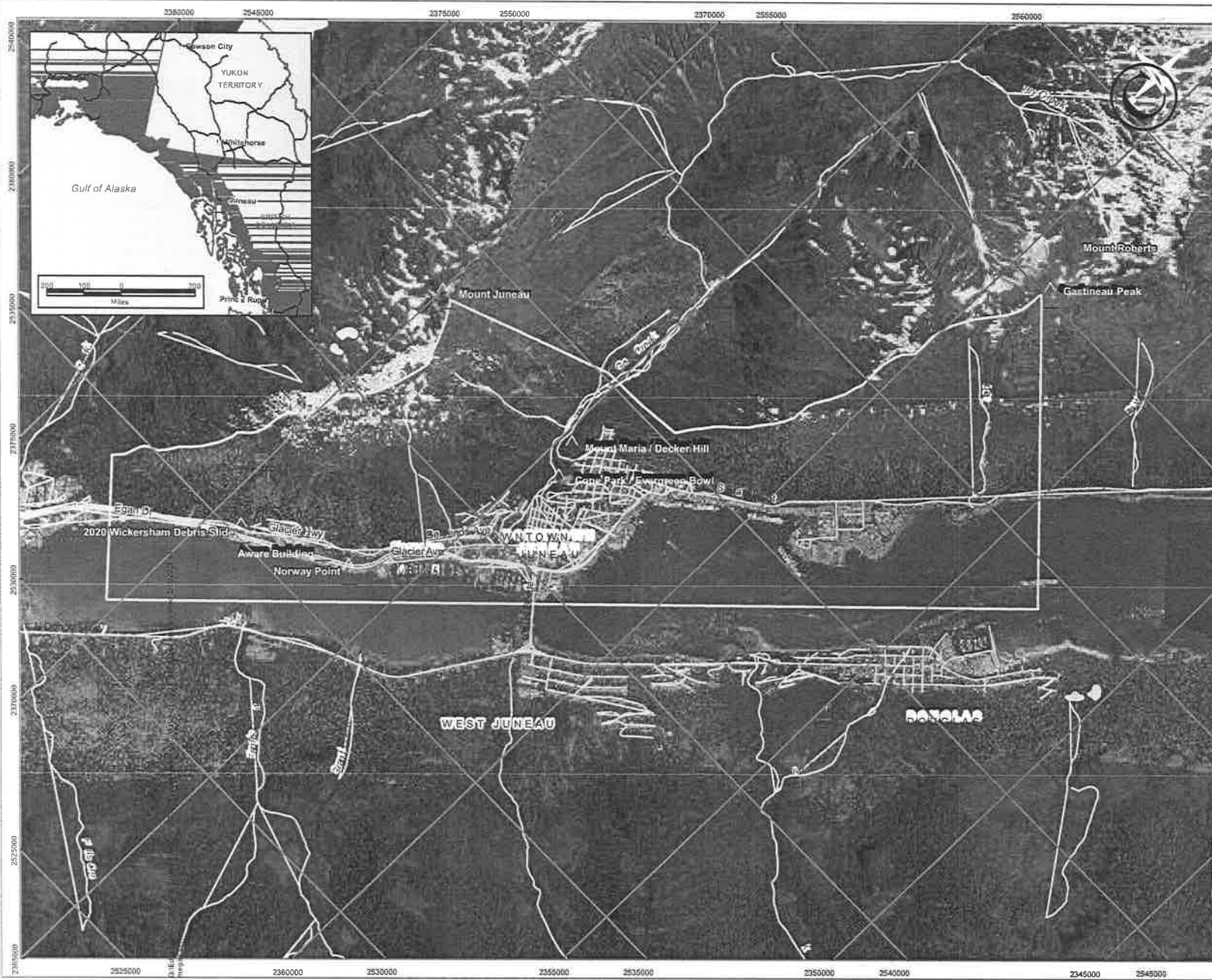
No part of this development is increasing density. The Glory Hall is clearly decreasing density by limiting the number of people who sleep in the building from 43-53 to 14. Additionally, the conversion is not adding any more spaces which are defined as dwelling units. The existing layout has more than seven specific spaces, with at least seven existing spaces currently qualifying as dwelling units, with their own entrances, bathrooms, ventilation, egress, etc. The current 3rd floor contains 4 dwelling units, 3 dorms and 1 one-bedroom apartment. 2nd floor contains 2 spaces, the mezzanine area and the space formerly known as our medical apartment, which provided a sleeping space for people with mobility issues. First floor provided overflow sleeping space and contains two separate entrances and a bathroom.

SPECIFIC QUESTIONS FOR THE PLANNING COMMISSION

What is the most effective strategy for the Glory Hall to proceed with our project of converting our building, formerly lodging 43-53 people, affordably, to lodging 7-14 people affordably.

Attachment 1: TetraTech Map Project specific





LEGEND

- Location of Interest
- Study Area
- Road
- Watercourse
- Waterbody

NOTES
 Base data source:
 Primary Imagery provided by CBJ, 2013.
 Background Imagery provided by ESRI; Maxar (2020)
 Hydrology and roads obtained from Alaska Department of Natural Resources.

STATUS JUNEAU LANDSLIDE AND AVALANCHE

Site Location

PROJECTION State Plane Alaska Zone 1 5001		DATUM NAD83	CLIENT 
Scale: 1:30,000 1,000 500 0 1,000  Feet			
FILE NO. EARC03168-01_FIG1_1_SiteLoc.mxd			
OFFICE Tl-EGM	DWN MRV	CKD SL	APV D
DATE February 11, 2021	PROJECT NUMBER ENG.EARC03168-		

 TETRA TECH

Figure 1.1

Figure 1.1

Attachment 2: Full TetraTech Assessment
(Sent as Separate email due to document size)

Link:

https://juneau.org/wp-content/uploads/2021/07/Downtown_Juneau_Landslide_and_Avalanche_Assessment_IFR_Report_Third%20Draft_Reduced.pdf

The following item is

INFORMATIONAL ONLY

AME2021 0003 is not on the agenda for the December 14, 2021 Planning Commission meeting.

If there are minor questions or comments they can be addressed under Agenda Item XII, “Staff Reports.”

AME2021 0003 will be scheduled for the Planning Commission hearing and review after a review by the Law Department.



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www.juneau.org/CDD
155 S. Seward Street • Juneau, AK 99801

December 9, 2021

MEMO

From: Irene Gallion, Senior Planner

To: Michael Levine, Chair

Through: Jill Maclean, AICP, Director

Case Number: AME2021 0003

RE: Parking Code Revisions – Latest Edits to Law Department

The purpose of this memo is to:

- Update Commissioners on how their feedback has been incorporated into the draft parking ordinance.
- Clarify to Commissioners the verbiage that went to the Law Department for review.

The proposed ordinance that is in review by CBJ's Law Department ("Working Draft 00", **Attachment A**) can be broken into three concerns:

- Maps of special parking areas
- Ordinance revision
- Other impacted code

The proposed ordinance has seen significant change, so is presented as a rewrite, without "track changes." This memo summarizes actions taken by the Title 49 Committee (T49) and the Planning Commission (Commission).

DISCUSSION – MAPS

The proposed map can be found in **Attachment B**. This map shows the boundary for the proposed Town Center Parking District (TCPD), and the boundary for a proposed No Parking Required Area (NPRA).

At their September 14, 2021 meeting, the Commission had asked staff to propose an area where there would be no additional parking required for new development. The Commission asked that this area be based on current development and practical concerns. At the meeting on November 30, 2021, T49 reviewed a map provided by staff and revised boundaries.

The inclusion of the NPRA required revision to Working Draft 00. Under 49.40.200, “General Applicability,” the first clause has been modified to say:

(a) *Excluded area.* The “No Parking Required Area map was adopted on **DATE**. No additional parking is required for development in this area.

Note that the proposed southeast boundary for the NPRA is Ferry Way. The NPRA would not extend to the Admiral Way/Manilla Square area as currently configured.

Note that the northwest boundary is proposed along Second Street. The lot at 310 Second Street (across Second Street from the Baranof, the proposed site of housing projects) is omitted from the NPRA.

DISCUSSION - ORDINANCE

The Planning Commission first saw the proposed parking ordinance on May 25, 2021. At the Committee of the Whole on September 14, 2021 the Commission recognized parking table items that may still be worthy of review.

- Single room occupancies with private facilities – are these good standards?
- Senior housing – determining a metric for employee parking that does not depend on the number of employees.
- Convenience stores – making sure the proposed regulations do not conflict with convenience store regulations elsewhere in code.
- Watercraft moorages – interested in Docks and Harbor’s opinions of the proposed parking requirements.
- Libraries and museums – are these good standards?
- Child care homes and centers – is this the proper way to present standards that are cross referencing other code?
- Open air food vendors – what standards should be used?

Staff has incorporated the changes below into the Working Draft 00. If the Commission disagrees with staff recommendations, changes will need to be proposed when the Working Draft is presented to the Commission.

“**Single room occupancies with private facilities**” and “**Libraries and museums**” simply require a second look at requirements, the Commissioners having been able to give the standards some thought.

Senior Housing

The Committee was interested in “senior housing” parking metrics that were not dependent on the number of employees.

Staff has forwarded the Working Draft 00 with 0.05 employee parking spaces required per dwelling unit for the Town Center Parking District and the community at large.

The staff parking is proposed the same across both areas because downtown and valley senior housing projects have approximately the same number of parking spaces for employees.

The existing code and workshopped TCPD code last seen by the Commission was:

		Spaces Required in Town Center
	0.6 parking spaces per dwelling unit, plus 1 guest parking space for each 10 units, plus 1 parking space per employee	1 per four dwelling units, plus 1 employees. Try to get rid of per

Incorporating staff recommendation, the Working Draft 00 says:

Use	Spaces Required in All Other Areas	Spaces Required in Town Center Parking District
Senior housing	0.6 parking spaces per dwelling unit, plus 1 guest parking space for each 10 units, plus 0.05 employee parking spaces per unit.	1 per four dwelling units, plus 1 guest parking spaces per 10 units, plus 0.05 employee parking spaces per unit.

As defined in code, “senior housing” means a dwelling unit specifically designed for occupancy by persons 55 years of age or older. Senior housing is intended for people who can live independently without assistance. This housing does not have nursing care, or medical supervision, and is not “assisted living”.

The staffing of “senior housing” is less per unit than for facilities that provide more care.

Current code requires one parking space per employee. A review of Juneau’s senior living facilities provides a gauge of how many staff are required per unit.

Facility	Location	Units	Employee spaces	Employee spaces/unit
Fireweed Place	Downtown	67	10 ^A	0.15
Mountainview	Downtown	62	3	0.05
Trillium	Valley	49	2	0.04

A: Fireweed provides 10 spaces for guest and employee parking combined.

Because Fireweed combines guest and employee parking, Mountainview and Trillium were used to develop a per unit estimate of required employee parking.

Convenience Stores

The Commission had proposed one space required for every 750 feet of gross floor area. Recognizing that other sections of code regulated convenience stores, they asked staff to review the proposed standard.

Title 49.65, "Specified Use Provisions" includes Article V, "Convenience Stores."

- CBJ 49.65.530(g) requires one space per 250 square feet of gross area.
- CBJ 49.65.540(b) provides a bonus reduction to one space per 350 square feet of gross floor area if the development includes a transit facility or provides bike racks.

Staff recommends that CBJ 49.65.530(g) be modified to say:

The minimum off-street parking requirement shall be one space per 250 square feet of gross floor area outside of the Town Center Parking District.

In keeping with the presentation of parking information regarding child care facilities (see below) staff recommends that, rather than restate the parking requirement outlined in another part of code, that the applicable code is noted in the table.

Use	Spaces Required in All Other Areas	Spaces Required in Town Center Parking District
Convenience stores	49.65 Article V	1 per 750 square feet of gross floor area

Watercraft Moorages

The Commission recommended 2 parking spaces per 15 moorage stalls, which is incorporated into the Working Draft 00. The Commission wondered if 1 parking space per six moorage stalls might be more appropriate. The Docks and Harbors Engineer has been queried.

While outside of the Town Center Parking District, the Juneau Downtown Harbors Uplands Master Plan - Bridge Park to Norway Point indicates the need for more parking. The area currently has 289 parking spaces, and is proposing adding 46 near the Marine Service Yard, and 66 near the Yacht Club. With proposed additional parking, 0.5 parking spaces are provided per vessel (capacity 753). Docks and Harbors provides 800 parking stickers annually, plus 620 temporary parking permits.

Open Air Food Vendors

The Commission had proposed no parking requirement up to 1,500 square feet, then having a per square foot requirement. What that requirement should be was not solidified. Working Draft 00 uses one space per additional 400 square feet, in keeping with requirements for the rest of the community.

DISCUSSION – OTHER IMPACTED CODE

One of the Commission’s goals with this parking rewrite was to consolidate code-related parking requirements into one area. As a result, the proposed parking space table references CBJ 49.65, “Specified Use Provisions,” in addressing:

- Childcare (Article X).
- Convenience Stores (Article V).

The Commission is unsure if this is the preferred structure for usability of the ordinance, and the Law Department may recommend changes that require revisions to these sections.

There are three pieces of code that will require modification based on Working Draft 00.

- Definitions (**Attachment C**, changes tracked)
- Fees (**Attachment D**, changes tracked)
- Convenience Stores (As discussed above, **Attachment E**, changes tracked)

Item	Description
Attachment A	Proposed parking ordinance, “Working Draft 00”
Attachment B	Proposed parking area maps
Attachment C	Proposed revisions to CBJ 49.80, “Definitions”
Attachment D	Proposed revisions to CBJ 49.85, “Fees for Land Use Actions”
Attachment E	Proposed revisions to CBJ 49.65.530(g), “Convenience Stores”

PROPOSED CODE, RENUMBERED

ARTICLE II: PARKING AND LOADING

49.40.200 General Applicability

Off-street parking spaces for automobiles shall be provided in accordance with the requirements set forth in this section at the time any building or structure is erected or expanded, or when there is a change in the principal use thereof.

(a) *Excluded area.* The “No Parking Required Area map was adopted on **DATE**. No additional parking is required for development in this area.

(b) *Developer responsibility.* Developer must submit documentation to demonstrate that applicable parking code requirements have been met, in conformance with this chapter.

(c) *Owner/occupant responsibility.* The provision and maintenance of off-street parking and loading spaces required in this chapter is a continuing obligation and joint responsibility of the owner and occupants.

(d) *Determination.* The determination of whether these requirements are met, with or without conditions, and deemed necessary for consistency with this title, shall be made by the Director in the case of minor development; the Commission in the case of major development; and the Commission if the application relates to a series of applications for minor developments that, taken together, constitute major development, as determined by the Director.

(e) *Expansion.* In cases of expansion of a building on or after the effective date of the ordinance codified in this chapter,

(1) The number of additional off-street parking spaces required shall be based only on the gross floor area added.

(2) No additional parking spaces are required if the additional spaces would amount to less than ten percent of the total required for the development and amount to two or less spaces.

(3) For phased expansion, the required off-street parking spaces is the amount required for the completed development, as determined by the Director.

(f) *Change in use.* In cases of a change in use on or after the effective date of the ordinance codified in this chapter, the number of spaces required will be based on 49.40.210.

(g) *Replacement and reconstruction of certain nonconforming structures.* Off-street parking requirements for the replacement and reconstruction of certain nonconforming structures in residential districts shall be governed by chapter 49.30.

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(h) *Mixed occupancy*. Mixed occupancy is when two or more of the parking uses in 49.40.210 share the same lot(s). For mixed occupancy, the total requirement for off-street parking facilities is the sum of the requirements for the several uses computed separately.

(i) *Uses not specified*. In the case of uses not listed, the requirements for off-street parking are based on the requirements for the most comparable use specified, as determined by the Director.

(j) *Location*. Off-street parking facilities are located as hereinafter specified; if a distance is specified, such distance is the walking distance measured from the nearest point of the parking facility to the nearest point of the building it is required to serve. Off-street parking facilities for:

- (1) Single-family dwellings and duplexes must be on the same lot as the building served;
- (2) Multifamily dwellings may not be more than 100 feet distant, unless compliant with section 49.40.215; and
- (3) Uses other than those specified above, may be not more than 500 feet distant, unless compliant with section 49.40.215.

(k) *Off-street parking requirements*. Off-street parking requirements do not apply to lots if they are accessible only by air or water. If the Director determines that public access by automobile to the property has become physically available, the owner of the property shall be given notice and within one year shall provide the required off-street parking.

(l) *Town Center Parking District*. The Town Center Parking District map was adopted DATE.

49.40.210 Number of Off-Street Parking Spaces Required

(a) *General*. The minimum number of off-street parking spaces required shall be as set forth in the following table. The number of spaces shall be calculated to the nearest whole number:

Use	Spaces Required in All Other Areas	Spaces Required in Town Center Parking District
Single-family and duplex	2 per each dwelling unit	1 per each dwelling unit
Multifamily units	1.0 per one bedroom unit	0.4 per one bedroom unit
	1.5 per two bedroom unit	0.6 per two bedroom unit
	2.0 per three or more bedroom unit	0.8 per three or more bedroom unit
Roominghouses, boardinghouses, single-room occupancies with shared facilities, bed and breakfasts, halfway houses, and group homes	1 per 2 bedrooms	1 per 5 bedrooms

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Use	Spaces Required in All Other Areas	Spaces Required in Town Center Parking District
Single-room occupancies with private facilities	1 per each single-room occupancy plus 1 additional per each increment of four single-room occupancies with private facilities	1 per 5 single-room occupancies, plus 1 per each increment of ten single-room occupancies with private facilities.
Accessory apartments	1	0 per each unit
Motels	1 per each unit in the motel	1 per each 12 units in the motel
Hotels	1 per each four units	1 per each 12 units
Hospitals and nursing homes	2 per bed OR one per 400 square feet of gross floor area	2 per bed OR one per 400 square feet of gross floor area
Senior housing	0.6 parking spaces per dwelling unit, plus 1 guest parking space for each 10 units, plus 0.05 employee parking spaces per unit.	1 per four dwelling units, plus 1 guest parking spaces per 10 units, plus 0.05 employee parking spaces per unit.
Assisted living facility	0.4 parking spaces per maximum number of residents	0.4 parking spaces per maximum number of residents
Sobering centers	1 parking space per 12 beds, plus 1 visitor parking space	1 parking space, plus 1 visitor parking space
Theaters	1 for each four seats	1 for each 10 seats
Churches, auditoriums, and similar enclosed places of assembly	1 for each four seats in the auditorium	1 for each 10 seats in the auditorium
Bowling alleys	3 per alley	1.2 per alley
Banks, offices, retail commercial, salons and spas	1 per 300 square feet of gross floor area	1 per 750 square feet of gross floor area
Medical or dental clinics	1 per 200 square feet of gross floor area	1 per 400 square feet of gross floor area
Funeral Home	1 per six seats based on maximum seating capacity in main auditorium	1 per 15 seats based on maximum seating capacity in main auditorium
Warehouses, storage, and wholesale businesses	1 per 1,000 square feet of gross floor area	1 per 2,500 square feet of gross floor area
Restaurants and alcoholic beverage dispensaries	1 per 200 square feet of gross floor area	1 per 750 square feet of gross floor area
Swimming pools serving general public	1 per four persons based on pool capacity	1 per 10 persons based on pool capacity
Shopping centers and malls	1 per 300 square feet of gross leasable floor area	1 per 750 square feet of gross floor area
Convenience stores	49.65 Article V	1 per 750 square feet of gross floor area
Watercraft moorages	1 per three moorage stalls	2 per 15 moorage stalls
Manufacturing uses; research, testing and	1 per 1,000 square feet gross floor area except that office	1 per 2,500 square feet gross floor area except that office space shall

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Use	Spaces Required in All Other Areas	Spaces Required in Town Center Parking District
processing, assembling, all industries	space shall provide parking as required for offices	provide parking as provided for offices.
Libraries and museums	1 per 600 square feet gross floor area	1 per 1,500 square feet of gross floor area
Schools, elementary	2 per classroom	2 per classroom
Middle school or junior high	1.5 per classroom	1.5 per classroom
High school	A minimum of 15 spaces per school; where auditorium or general assembly area is available, one per four seats; one additional space per classroom	A minimum of 15 spaces per school; where auditorium or general assembly area is available, one per four seats; one additional space per classroom

60

61 (b) *Accessible parking spaces.* Except for residential parking lots of fewer than ten spaces,
62 accessible parking spaces shall be required according to the following table:

Total Parking Spaces in Lot	Required Minimum Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2 percent of total spaces
1,001 and over	20 plus 1 for each 100 over

63

64 (c) *Facility loading spaces.* Space requirements shall be as set forth in the following table:

	Gross Floor Area in Square Feet		
Use	All other areas	Town Center Parking District	Spaces Required
Motels and hotels	5,000—29,999	6,000-60,000	One
	30,000—60,000		Two
	Each additional 30,000	Each additional 30,000	One
Commercial	5,000—24,999	6,000-50,000	One
	25,000—50,000		Two
	Each additional 30,000	Each additional 30,000	One
Industrial, manufacturing, warehousing, storage, and processing	5,000—24,999	6,000-50,000	One
	25,000—50,000		Two
	Each additional 30,000	Each additional 30,000	One
Hospitals	5,000—40,000	6,000-40,000	One
	Each additional 40,000	Each additional 40,000	One
Schools	For every two school buses		One
Homes for the aged, convalescent homes, correctional institutions	More than 25 beds		One

65

66 **49.40.215 Modifications**

67 Developer may apply for multiple modifications. Modifications can be combined with allowable
 68 reductions. The developer shall present to the Director a written instrument, executed by the

parties concerned, providing for joint use of off-street parking facilities, and approved as to form by the City and Borough of Juneau attorney. Upon approval by the Director, such instrument shall be recorded.

(a) *Loading spaces off-site.* The loading space required may be met by an alternative private off-site loading parking space, if the alternate space is determined by the Director to be of adequate capacity and proximity. In no case will the distance exceed standards established in 49.40.200(i).

(b) *Joint use.* Joint use is when the same off-street parking space is used to meet the parking requirement of different users. Joint use of off-street parking spaces may be authorized providing the developer demonstrates that there is no substantial conflict in the principal operating hours of the structures and uses involved.

(1) Any structure or use sharing the off-street parking facilities of another structure or use shall be located within 500 feet of such parking facilities, unless a lesser radius is identified in this chapter. A developer may apply to provide off-street parking in an area greater than 500 feet distant, if approved by the Commission.

(2) The developer demonstrates with appropriate analysis or data that there is no substantial conflict in the principal operating hours of the structures or users for which joint use of off-street parking facilities is proposed; and

(3) The developer shall present to the Director a written instrument, executed by the parties concerned, providing for joint use of off-street parking facilities, and approved as to form by the City and Borough attorney. Upon approval by the Director, such instrument shall be filed with the department.

49.40.220 Reductions

Developer may apply for multiple reductions. Accessible parking spaces shall not be reduced and must be provided in accordance with subsection 49.40.210(b). Loading spaces shall not be reduced and must be provided in accordance with subsection 49.40.210(c).

(a) *Parking waivers.* The required number of parking spaces required by this section may be reduced if the requirements of this subsection are met.

(1) *Standards.* Any waiver granted under this subsection shall be in writing and shall include the following required findings and any conditions, such as public amenities, imposed by the Director or Commission that are consistent with the purpose of this title:

(A) The granting of the waiver would result in more benefits than detriments to the neighboring area and community as a whole as identified by the comprehensive plan; and

(B) The waiver will not materially endanger public health, safety, or welfare.

(2) *Relevant information.* The following information may be relevant for the Director or Commission's review:

(A) Analysis or data relevant to the intended use and related parking.

(B) Provision for alternative transportation or transit improvements vetted through CBJ Capital Transit.

(C) Traffic mitigation measures supported by industry standards.

(D) Bicycle and pedestrian amenities.

(3) *Applications.* Applications for parking waivers shall be on a form specified by the Director and shall be accompanied by a one-time fee as cited in 49.85. If the application is filed in conjunction with a major development permit, the fee shall be reduced by 20 percent.

(4) *Public notice.* The Director shall mail notice of any complete parking waiver application to the owners of record of property located within a 250-foot radius of the site seeking the waiver. If the parking waiver application is filed in conjunction with a major development permit, notice of both applications shall be made concurrently in accordance with CBJ 49.15.230.

(5) *Expiration.* Approved parking waivers expire upon a change in use.

(b) *Town Center Parking District, Fee-In-Lieu of off-street parking spaces.* In the Town Center parking district, a developer may pay a one-time fee in lieu of off-street parking spaces in order to meet the minimum parking requirements of this chapter. Fee in lieu can be used in any combination with other parking provisions of this chapter. Fees are cited in 49.85.

(1) *Payment.*

(A) In the case of new development, any fee in lieu due must be paid in full prior to the issuance of a temporary certificate of occupancy.

(B) In the case of expansions or changes of use, 45 days after the fee in lieu of construction is granted, the fee must be paid in full, or a lien shall be placed upon real property involved and shall be paid in ten equal annual principal payments plus interest.

(i) The lien shall be recorded and shall have the same priority as a City and Borough special assessment lien.

(ii) Except as provided herein, the annual payments shall be paid in the same manner and on the same schedule as provided for special assessments, including penalties and interest on delinquent payments, as provided in CBJ 15.10.220. The annual interest rate on unpaid fees shall be one percent above the Wall Street Journal Prime Rate, or similar published rate, on January 2nd of the calendar year the agreement is entered into, rounded to the nearest full percentage point, as determined by the Finance Director.

49.40.225 Dimensions and signage for Required Off-Street Parking Spaces

(a) Standard spaces.

(1) Subject to subsections (b)(2) and (3) of this section, each standard parking space shall consist of a generally rectangular area at least 8½ feet by 17 feet. Lines demarcating parking spaces may be drawn at any angle to curbs or aisles so long as the parking spaces so created contain within them the rectangular area required by this section.

(2) Spaces parallel to the curb shall be no less than 22 feet by 6½ feet.

(b) Accessible spaces.

(1) Each accessible parking space shall consist of a generally rectangular area at least 13 feet by 17 feet, including an access aisle of at least five feet by 17 feet. Two accessible parking spaces may share a common access aisle.

(2) One in every eight accessible parking spaces, but not less than one, shall be served by an access aisle with a width of at least eight feet and shall be designated "van-accessible."

(3) Accessible parking spaces shall be designated as reserved by a sign showing the symbol of accessibility. "Van-accessible" parking spaces shall have an additional sign designating the parking space as "van-accessible" mounted below the symbol of accessibility. The signs shall be located so they cannot be obscured by a vehicle parked in the space.

(4) Access aisles for accessible parking spaces shall be located on the shortest accessible route of travel from parking to an accessible entrance.

(c) Facility loading spaces.

(1) Each off-street loading space shall be not less than 30 feet by 12 feet, shall have an unobstructed height of 14 feet 6 inches, and shall be permanently available for loading.

49.40.230 – Parking area and site circulation review procedures

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(a) *Purpose.* The purpose of these review procedures is to ensure that proposed parking and related site access areas provide for adequate vehicular and pedestrian access and circulation; that parking spaces are usable and are safely and conveniently arranged; that sufficient consideration has been given to off-street loading and unloading; that the parking area will be properly drained, lighted and landscaped; and that such areas will not be unsightly.

(b) *Plan submittal.* Development applications shall include plans for parking and loading spaces. Major development applications for commercial uses and for residential development of ten units or more must include plans prepared by a professional engineer or architect. These plans may be part of a plan submission prepared in conjunction with the required review of another aspect of the proposed development.

(1) *Contents.* The plans shall contain the following information:

(A) Parking and loading space plans drawn to scale and adequate to show clearly the circulation pattern and parking area function;

(B) Existing and proposed parking and loading spaces with dimensions, traffic patterns, access aisles, and curb radii;

(C) Improvements including roads, curbs, bumpers and sidewalks indicated with cross sections, designs, details, and dimensions;

(D) A parking schedule indicating the number of parking spaces required, the number provided, and how such calculations were determined;

(E) Topography showing existing and proposed contour intervals; and

(F) Landscaping, lighting and sign details, if not provided in conjunction with the required review of another aspect of the proposed development.

(2) *Waiver of information.* The department may waive submission of any required exhibits.

(c) *Review procedure.* Plans shall be reviewed and approved according to the procedures of this chapter and chapter 49.15.

(d) *Public improvements required.* As a condition of plan approval, the department may require a bond approved as to form by the city attorney for the purpose of ensuring the installation of off-site public improvements. As a condition of plan approval, the applicant shall be required to pay the pro rata share of the cost of providing reasonable and necessary public improvements located outside the property limits of the development but necessitated by construction or improvements within such development.

49.40.230 - Parking and circulation standards.

(a) *Purpose.* Provisions for pedestrian and vehicular traffic movement within and adjacent to the site shall address layout of parking areas, off-street loading and unloading needs, and the movement of people, goods, and vehicles from access roads, within the site, and between buildings and vehicles. Parking areas shall be landscaped and shall feature safely-arranged parking spaces.

(b) *Off-street parking and loading spaces; design standards.*

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(1) Access. There shall be adequate ingress and egress from parking spaces. The required width of access drives for driveways shall be determined as part of plan review depending on use, topography and similar considerations.

(2) Size of aisles. The width of aisles providing direct access to individual parking stalls shall be in accordance with the following table. Logical interpolation to other angles may be approved by the Director:

	Parking Angle				
Aisle width	0°	30°	45°	60°	90°
One-way traffic	13	11	13	18	24
Two-way traffic	19	20	21	23	24

(3) Location in different zones. No access drive, driveway or other means of ingress or egress shall be located in any residential zone if it provides access to uses other than those permitted in such residential zone.

(4) Sidewalks and curbing. Sidewalks shall be provided with a minimum width of four feet of passable area and shall be raised six inches or more above the parking area except when crossing streets or driveways. Guardrails and wheel stops permanently anchored to the ground shall be provided in appropriate locations. Parked vehicles shall not overhang or extend over sidewalk areas, unless an additional sidewalk width of two feet is provided to accommodate such overhang.

(5) Stacked parking. Stacked parking spaces may only be counted as required parking spaces for single-family residences, duplexes, and as otherwise specified for specific uses. In the case of single-family residences and duplexes with or without accessory uses and child care homes in a residential district, only a single parking space per dwelling unit may be a stacked parking space.

(6) Back-out parking. Parking space aisles must provide adequate space for turning and maneuvering on-site to prevent back-out parking onto a right-of-way. If the Director or the Commission, when the Commission has authority, determines back-out parking would not unreasonably interfere with the public health and safety of the parking space aisles and adjacent right-of-way traffic, back-out parking is allowed in the following circumstance:

(A) In the case of single-family dwellings and duplexes with or without accessory uses located in residential and rural reserve zoning districts;

(B) Where the right-of-way is an alley; or

(C) In the case of a child care home in a residential district.

(c) *Drainage.*

(1) Parking areas shall be suitably drained.

(2) Off-site drainage facilities and structures requiring expansion, modification, or reconstruction in part or in whole as the result of the proposed development shall be subject to off-site improvement requirements and standards as established by the city.

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240 (d) *Lighting.* Parking areas shall be suitably lighted. Lighting fixtures shall be "full cutoff" styles that
241 direct light only onto the subject parcel.

242 (e) *Markings and access.* Parking stalls, driveways, aisles and emergency access areas and routes
243 shall be clearly marked.

244 (f) *General circulation and parking design.*

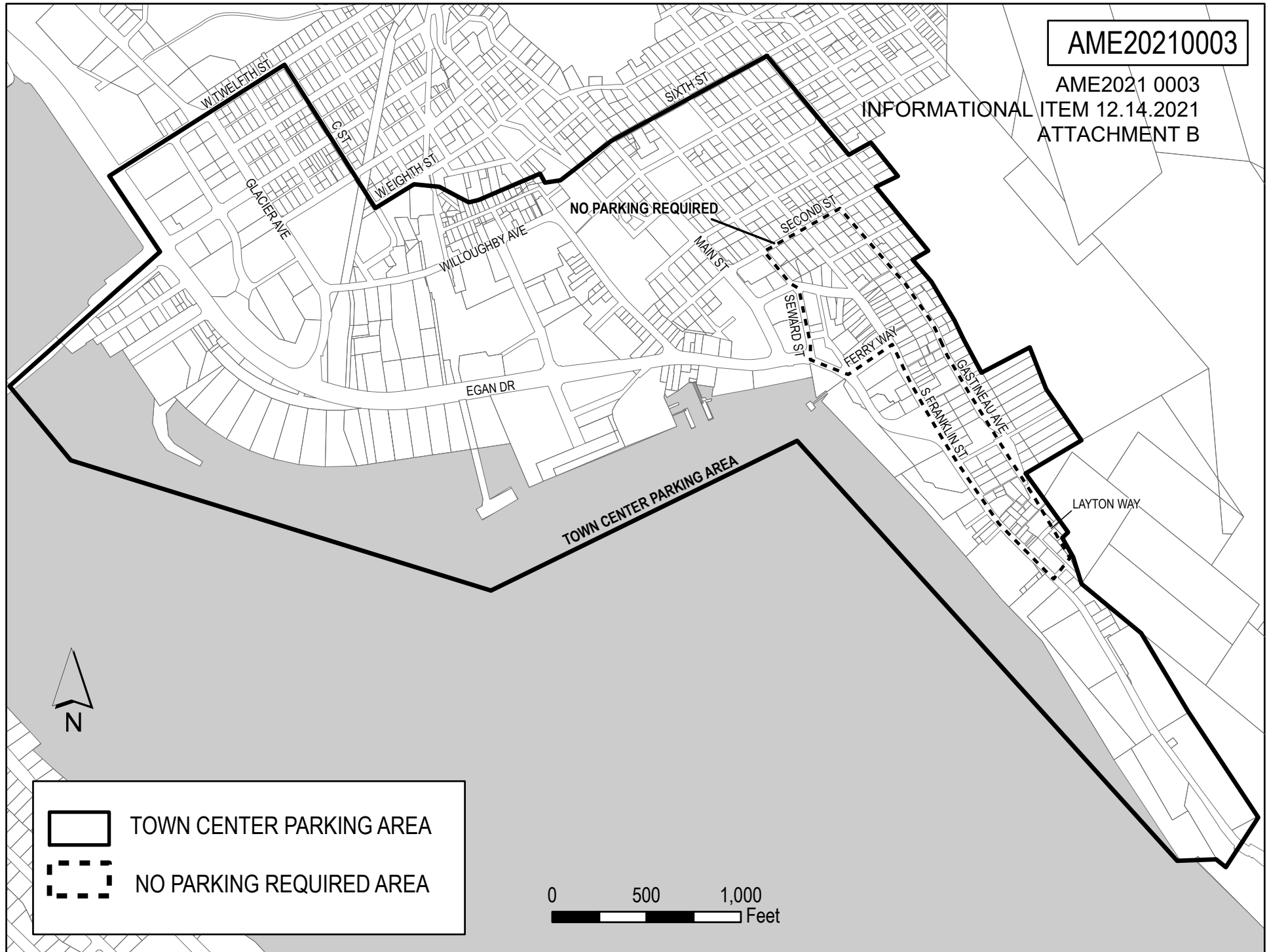
245 (1) *Parking space allocations shall be oriented to specific buildings. Parking areas shall be linked*
246 *by walkways to the buildings they serve.*

247 (2) *Where pedestrians must cross service roads or access roads to reach parking areas, crosswalks*
248 *shall be clearly designated by pavement markings or signs. Crosswalk surfaces shall be raised*
249 *slightly to designate them to drivers, unless drainage problems would result.*

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INFORMATIONAL ITEM 12.14.2021
ATTACHMENT B



49.80.120 Definitions.

The following words, terms and phrases, when used in this title, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Abut means to physically touch, border upon, or to share a common property line with.

Accent lighting means any directional lighting which emphasizes an object or draws attention to an area.

Access point means any improvement designed for a motor vehicle to travel from or onto a right-of-way including, a driveway, a parking area, or street that intersects an existing street, and any similar improvements.

Access road means a public or private road which affords the principal means of vehicular access to a property, structure, or development.

Accessory apartment means one or more rooms with private bath and kitchen facilities comprising an independent, self-contained dwelling unit within or attached to a single-family dwelling or in a detached building on the same lot as the primary dwelling unit. An accessory apartment is distinguishable from a duplex in that, unlike a duplex, it is clearly subordinate to the primary dwelling unit, both in use and appearance.

Accessory use and *accessory structure* mean a use or structure customarily subordinate or incidental to and located on the same lot as an existing principal use, building or structure. The terms "accessory use" and "accessory structure" include signs, garages, required parking areas, boathouses, smokehouses and storage sheds.

Addition means an increase in gross floor area or height of a building or structure.

ADT means average daily traffic and is determined by calculating the total volume of traffic during a given time period (in whole days), greater than one day and less than one year, divided by the number of days in that time period. The source of this definition is the publication of the American Association of State Highway and Transportation Officials entitled "A Policy on Geometric Design of Highways and Streets" (1984).

Affected surface and *surface disturbance* mean the surface area which may be disturbed by mining exploration or by a mining operation, including on-site roads, land excavations, spoil piles, evaporation ponds, settling ponds, leaching dumps, placer areas, tailings ponds or dumps, work parking, storage or waste discharge areas, and areas in the immediate vicinity of the exploration or mining operation in which structures, facilities, equipment, machines, tools or other materials or property which may be used in such operations are situated. The terms "affected surface" and "surface disturbance" do not include roads, railways, tramways, utility corridors or rights-of-way necessary to gain access to an exploration or mining operation.

Alley means a public right-of-way providing a secondary means of vehicular access to abutting lots but which is not intended for general traffic circulation.

Alteration means any change, addition or modification in construction.

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.

Application means an application form and all accompanying documents and exhibits.

Appurtenant or associated facilities means an accessory facility or structure serving or being used in conjunction with WCF, and located on the same property or lot as the WCF, including, but not limited to, utility or transmission equipment storage shelters or cabinets.

Area of shallow flooding, for the purposes of chapter 49.70.400, flood hazard areas, means a designated Zone AO, AH, AR/AO or AR/AH (or VO) on a community's flood insurance rate map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

As-grades means surface conditions after completion of grading.

Assembly means the assembly of the City and Borough of Juneau.

Assisted living means a facility providing housing and institutional care for people unable to live independently or without assistance. Assisted living includes facilities that provide nursing care services or emergency shelter. Assisted living use that occurs within a single-family dwelling is regulated as a single-family dwelling use.

Awning means an architectural projection that provides weather protection, identity, or decoration, and is wholly supported by the building to which it is attached. An awning is comprised of a lightweight, rigid skeleton structure over which a covering, typically of cloth or aluminum, is attached.

Backfill means the material used to refill a ditch or other excavation, or the process of doing so.

Barrier islands and lagoons mean depositional coastal environments formed by deposits of sediment offshore or coastal remnants which form a barrier of low-lying islands and bars protecting a saltwater lagoon with free exchange of water to the sea.

Base flood means a flood having a one percent chance of being equaled or exceeded in any given year.

Base flood elevation (BFE) means the elevation of surface water resulting from a base flood. The BFE is shown on the flood insurance rate map (FIRM) and in the flood insurance study for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE.

Base map means a map showing geographic references such as state survey or municipal boundary lines, streets, easements, parcel line, control lines and other features sufficient to allow the plotting of other data.

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. It includes a structure that currently supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a bases station. It may encompass such equipment in any technological configuration, including attached WCF.

Basement, for the purposes of chapter 49.70, article IV, flood hazard areas, means any area of a building, including any sunken room or sunken portion of a room, having its floor below ground level on all sides.

Bed and breakfast means a dwelling in which more than two bedrooms are used for commercial lodging provided by the owner or operator who lives on site. The term "bed and breakfast" includes boardinghouses and rooming houses.

Berm means a mound of earth, or the act of pushing earth into a mound.

Bikeway means a pathway intended for the use of bicycles.

Block means a parcel of land entirely surrounded by public highways, streets, shorelines, streams or other physical features.

Boarding stable means a structure designed for the feeding, housing or exercising of horses not owned by the owner of the premises.

Boardinghouse and rooming house mean a dwelling in which more than two bedrooms are used for commercial lodging provided by the owner or operator who lives on site. The term "boardinghouse and rooming house" includes houses offering bed and breakfast.

Body of water and waterway mean the sea or natural or manmade lakes, marshes, ponds, rivers, creeks and streams.

Breakpoint technology means the engineering design of a monopole wherein a specified point on the monopole is designed to be at least five percent more susceptible to failure than any other point along the monopole so that in the event of structural failure, the failure will occur at the breakpoint rather than at the base plate, anchor bolts, or any other point on the monopole.

Buffer strip means land area used to visually separate one use from another or to shield or block noise, lights, views or other impacts. Buffer strips may be required to include fences or berms, as well as shrubs and trees.

Buildable area means the area of a lot remaining after the minimum yard and open space requirements of the zoning ordinance have been met.

Building means any structure having a roof supported by columns or walls and intended for the shelter, housing or enclosure of persons, animals, processes, equipment, goods or materials. For the purposes of chapter 49.70, article IV, building means a structure with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site; or a manufactured home; or a travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

Building line means a line parallel to the street line at a distance therefrom, equal to the depth of the front yard required for the zoning district in which the lot is located.

Building permit means a permit issued pursuant to section 19.03.120.

Building space means the combined square footage of each floor in the structure.

Bulk storage means the storage of chemicals, petroleum products and other materials in containers for subsequent resale.

Campground means a lot upon which two or more campsites are maintained as noncommercial temporary living quarters, for recreation, education or vacation purposes.

Canopy means an architectural projection that provides weather protection, identity, or decoration and is supported by the building to which it is attached. A canopy is a permanently affixed, horizontal roof-like structure.

Capacity analysis means techniques used to determine the operational characteristics of a transportation facility using the Highway Capacity Manual prepared by the Transportation Research Board.

Change of use means any use which substantially differs from the previous use of a building or land.

Child care center means a building or portion thereof, used for the purpose of providing for the paid care and supervision of 13 or more children under the age of 12. Child care centers include pre-schools and nursery schools not associated or co-located with an elementary, middle, or high school.

Child care home means a building or portion thereof, used for the purpose of providing for the paid care and supervision of no more than 12 children under the age of 12 at any one time.

Child care institution means a facility operated by a government or private agency providing 24-hour housing for more than nine children under 18 years of age.

Child care residence means a home for no fewer than six, nor more than nine children under 18 years of age, together with not more than two adults who supervise such children for compensation, all of whom live together as a single housekeeping unit.

Church means a building, portion of a building or group of buildings primarily used for the conducting of organized religious services and associated accessory uses but not including a building or portion of a building used primarily for child care, a preschool or a school providing other than religious instruction.

City and Borough means the City and Borough.

Civil engineer means a professional engineer licensed as such by the state.

Clinic means a building where patients are admitted for examination and treatment by one or more physicians, dentists or psychologists and where patients are not usually lodged overnight.

Club means a noncommercial incorporated or unincorporated association of persons organized for social or fraternal purposes.

Cluster means a development design technique that concentrates buildings on portions of the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features.

Cluster wastewater system means a system with individual on-site wastewater treatment and a shared wastewater collection system under some form of common ownership, other than public ownership, that collects wastewater from two or more dwellings and conveys it for disposal to a suitable site near the dwellings.

Coastal development means any physical structure or alteration of coastal resources which is regulated by this title.

Coastal water means all water bodies in the coastal area, including wetlands and the intertidal area.

Coastal zone means the area subject to the policies of this title as depicted on JCMP Map 1.

College means an educational institution authorized by a recognized accrediting agency to award baccalaureate or higher degrees.

College, main campus means that portion of a college or university where dormitories, offices, classrooms, libraries, and related facilities are separated by no more than one-half mile.

College, satellite facilities means those portions of a college or university located more than one-half mile from the main campus.

Collocation means the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

Commercial means having profit as a chief aim.

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.

Commission means the City and Borough Planning Commission.

Common driveway means a commonly shared or used pedestrian or vehicular way that connects or serves two or more properties within a common wall development.

Common facilities means streets, sidewalks, parking areas, community buildings, refuse disposal systems, sewer systems, and water systems, held in common ownership by planned unit development homeowners.

Common open area. The common open area is the contiguous area of a cottage housing development that does not include the cottages, other buildings, driveways, parking areas, and the areas within the ghost lines that define the spacing around each cottage.

Common open space means open space held in common ownership by planned unit development homeowners. Buildings, parking areas, and similar improvements may be located in and included in the calculation of common open space if related and necessary to the function of the open space. Stormwater drainage and flood storage may be located in and included in the calculation of the common open space. Common on-site sewage disposal systems, but not individual septic systems, may be located in and included in the calculation of common open space. Streets may be located in but shall not be included in the calculation of common open space.

Community wastewater and disposal system means a system with a shared wastewater treatment and collection system under some form of common ownership, other than public ownership, that collects wastewater from two or more dwellings and conveys it to a treatment plant and disposal system located on a suitable site near the dwellings.

Comprehensive plan means the comprehensive plan and all of its additions listed at CBJ 49.05.200(b).

Conservation lot means an undeveloped or remediated parcel where building development is permanently prohibited. A conservation lot is intended to preserve open space, environmentally sensitive areas, scenic views, wetlands, and buffers.

Convenience store means an establishment, serving a neighborhood market area and engaged in the retail sale or rental, from the premises, of food, beverages, and other frequently or recurrently needed items for household use.

Correctional facility means a facility providing for the imprisonment or physical confinement of persons under guard or 24-hours physical supervision such as a prison, jail, detention center, halfway house, and similar facilities.

Cottage means a cottage is a detached dwelling, not greater than 1,200 square feet in gross floor area, that is developed at a density greater than the underlying zone pursuant to this article.

Cottage housing development means a cottage housing development is a cluster of four to fourteen cottages and common open area. A cottage housing development shall have the following characteristics:

- (1) Each cottage is of a size and function suitable for one to three people;
- (2) Each cottage has the construction characteristics of a single-family house as set forth in this article;
- (3) Cottages are developed as a detached dwelling, common interest community, and share use of common elements such as a common open area, tool shed, workshop and parking areas; and

- (4) The site is designed with a coherent concept in mind, including: shared common open area, off-street parking, access within the site and from the site, and visually consistent landscaping and architecture.

Cottage housing development lot means a cottage housing development lot is the undivided lot on which the cottage housing development takes place.

Council means the Alaska Coastal Policy Council.

Crucial habitat means limited areas that serve as a concentrated use area for fish and wildlife species during a sensitive life history stage where either alteration of the habitat or human disturbance, individually or cumulatively, could result in a permanent loss of a sustained yield of a population of a species that is of significant commercial, recreational or subsistence importance, or species that are threatened or endangered.

Cul-de-sac means a dead-end street that provides for a required vehicle turnaround.

Day care center means a building or portion thereof, used for the purpose of providing paid care for more than 12 people, 12 years of age or older at any one time.

Day care home means a building or portion thereof, which is used for the purpose of providing paid care for fewer than 13 people, 12 years of age or older at any one time.

Dedication means the setting aside of land by a property owner which is accepted by the City and Borough for public purposes.

Density bonus means an increase in allowable density above that otherwise allowed in the zoning district in which the planned unit development is located.

Department means the City and Borough community development department.

Design professional means a licensed engineer, a licensed architect or a graphic artist.

Developer means the person or persons who own or control property used for a development.

Development means any of the following:

- (1) Construction, reconstruction or enlargement of a structure involving more than 120 square feet;
- (2) A subdivision;
- (3) Conduct of a home occupation;
- (4) Change in use of a lot, including any structure thereon;
- (5) Installation or emplacement of a mobile or modular home;
- (6) Removal of substantial vegetative cover;
- (7) Excavation, dredge or fill activity;
- (8) Installation of a sign;
- (9) For the purposes of chapter 49.65, article I, the work performed in relation to a deposit, subsequent to exploration but prior to extraction of commercial quantities of a mineral commodity, aimed at, but not limited to, preparing the site for mining, defining an ore deposit, conducting pilot plant operations, and construction of roads or ancillary facilities;
- (10) Any site work in preparation or anticipation of the above;

- (11) For the purposes of chapter 49.70, article IV, flood hazard areas, means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Development permit means department approvals, subdivision permits and approvals, allowable use permits, special use permits and conditional use permits.

Direct impact for the purposes of chapter 49.65, article I, means the direct or primary effect or consequences that are caused by the activity of a mining operator whether as a mining operation or otherwise, and whether on affected surface or not. Direct impacts generally occur at the same time and place as the mining operation but may also occur at other than the time or the place of the mining operation. Direct impacts include all discharge, emission and other effects that a mining operation may have on the environment as described in subsection 49.65.135(a)(1), (2) and (3).

Director means the community development director of the City and Borough or his or her designee.

District means geographic area within the municipality, within which certain zoning or development regulations apply.

Double-wide unit means two mobile home segments, attached side-by-side to form a complete mobile home.

Drainage means:

- (1) Surface water runoff;
- (2) The removal of surface water or groundwater from land by drains, grading or other runoff controls designed to minimize erosion and sedimentation during and after development, to preserve a water supply or to prevent or alleviate flooding.

Dredged material means material that is excavated from waters of the United States, including wetlands.

Driveway means a private roadway providing vehicular access to a structure.

Duplex means a building on a single lot containing two dwelling units, each of which, except for a common stairwell exterior to both dwelling units, is separated from the other by an unpierced wall extending from floor to roof or an unpierced ceiling and floor extending from exterior wall to exterior wall.

Dwelling means a building or portion thereof, used exclusively for human habitation.

Dwelling, attached, means a one-family dwelling attached to one or more single-family dwellings by common walls.

Dwelling, common wall, means a single-family dwelling attached by a common wall to one other single-family dwelling on a separate lot.

Dwelling, detached, means a dwelling which is not attached to any other dwelling by any means.

Dwelling, multifamily, means a building designed for or occupied by three or more families.

Dwelling, single-family, means a detached dwelling which is designed for and occupied by not more than one family.

Dwelling unit means a residential use consisting of a building or portion thereof, providing independent and complete cooking, living, sleeping and toilet facilities for one family.

Eligible facilities request means any request for modification of an existing wireless tower or base station involving (a) collocation of new transmission equipment; (b) removal of transmission equipment; or (c) replacement of transmission equipment. In this context, the term "existing wireless tower or base station" only means a WCF that has been reviewed and approved per this article.

Eligible support structure means any structure that meets the definition of a wireless tower or base station.

Emergency shelter means a temporary residential facility providing accommodations and minimal supportive services for homeless persons on a short-time basis.

Enclosed industrial use means any industrial use where goods, materials, noise, odor, and glare are wholly contained within a building.

Encroachment means any structure located in a floodway, setback, right-of-way or adjacent lot.

Engineer means an engineer licensed to practice in the state.

Environmental impact statement and *EIS* mean a detailed statement on the environmental impact of, and alternatives to, major federal actions, as required under Section 102(2)(c) of the National Environmental Policy Act, 42 USC 4331, "NEPA."

Environmental review means an environmental impact statement, an environmental assessment, or other comprehensive environmental analysis by a state or federal agency.

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.

Estuary means a semiclosed coastal body of water which has a free connection with the sea and within which seawater is measurably diluted with freshwater derived from land drainage.

Excavation means the disturbance of soil.

Existing grade means the grade prior to grading.

Existing use means a structure in existence and the use or uses to which it is put on the effective date of the ordinance codified in this title.

Exploration means the process of advanced mineral commodity investigation subsequent to prospecting and prior to development.

Exposed high-energy coasts means open and unprotected sections of coastline with exposure to ocean generated wave impacts and usually characterized by coarse sand, gravel, boulder beaches, and well-mixed coastal water.

Exterior wall means any wall, one side of which, is exposed to the elements.

FAA means the Federal Aviation Administration or its duly designated and authorized successor agency.

Facade means any vertical wall face of a building, including vertical parapet walls which enclose usable space. Where separate faces are oriented in the same direction, they are to be considered as part of a single facade.

Facilities related to commercial fishing and seafood processing mean hatcheries and related facilities, seafood processing plants and support facilities, marine industrial and commercial facilities, and aquaculture facilities.

Family means one or more persons living as a single housekeeping unit.

Farm animal means horses, cows, sheep, goats, swine, ducks, chickens and other similar animals, but not including domesticated cats and dogs.

FCC means the Federal Communications Administration or its duly designated and authorized successor agency.

Feasible and prudent means consistent with sound engineering practice and not causing environmental, social, or economic costs that outweigh the public benefit to be derived from compliance with the standard which is modified by the term "feasible and prudent."

Feed lines means cables used as the interconnecting media between the transmission/receiving base station and the antenna.

Fence, sight-obscuring means a fence other than one made of chainlink, chicken wire, or similar materials.

Fill means a deposit of material placed by artificial means. Berms are classified as fill.

Fill material means material placed for the primary purpose of replacing an aquatic area, including a wetland, with dry land.

Finished elevation means the proposed elevation of the land surface of a site after completion of all site preparation work.

Finished (habitable) area means an enclosed area having more than 20 linear feet of finished interior walls (paneling, etc.) or used for any purpose other than solely for parking of vehicles, building access, or storage.

Flood (area of shallow flooding) means a designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

Flood (area of special flood hazard) means the land within a community subject to one percent or greater chance of flooding in any given year. This area is equivalent to the "100-year floodplain." Designation on maps always includes the letters A or V.

Flood (base flood) means the flood having a one percent chance of being equalled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.

Flood means:

- (1) A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is the policyholder's property) from:
 - (A) Overflow of inland or tidal waters;
 - (B) Unusual and rapid accumulation or runoff of surface waters from any source; or
 - (C) Mudflow; or
- (2) Collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood as defined above.

Flood insurance rate map (FIRM) means the official map of a community on which FEMA has delineated the special flood hazard areas (SFHAs), the base flood elevations (BFEs), and the risk premium zones applicable to the community.

Flood insurance study means the official report provided by the Federal Insurance Administration that includes flood profiles, the flood boundary-floodway map, and the water surface elevation of the base flood.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source.

Floodplain development permit means a permit issued by the department to allow development that conforms with the standards of chapter 49.70, article IV, flood hazard areas.

Floodplain means the channel and the relatively flat area adjoining the channel of a natural stream or river which has been or may be covered by floodwater.

Floodproofing means a combination of structural provisions, changes or adjustments to properties and structures subject to flooding for the reduction or elimination of flood damage to properties, water and sanitary facilities and other utilities, structures, and the contents of buildings.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Flood zones A or V means areas of special flood hazard land within a community subject to one percent or greater chance of flooding in any given year. This area is equivalent to the "100-year floodplain." Designation on maps always includes the letters A or V.

Flood zones AO or AH means areas of shallow flooding on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

Floor area ratio means the gross floor area of all buildings on a lot, divided by the lot area.

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.

Footprint means the outermost exterior perimeter of a building at the foundation where it touches the ground plane.

Frontage means that side of lot abutting a street; the front lot line.

Full cutoff lighting fixture means a lighting fixture with a flat lens that eliminates or minimizes direct glare and does not cast light upward or to the side. Full cutoff lighting fixtures are mounted with the lens in a horizontal position. The bulb is shielded on all sides and the top by an opaque housing.

Gas station means buildings and premises where automotive fuel, supplies and equipment are sold and where, in addition, routine automotive servicing and parts replacement may be done. Tire recapping and regrooving and major automotive mechanical and body work, painting, welding, storage, impounding and auto wrecking and motor overhaul are activities specifically excluded from this definition.

General maintenance and repair means activities which over a 36-month period do not change the use of more than 25 percent of the floor area of the structure; do not add more than 20 percent to the usable floor area of the structure; and do not exceed 25 percent of the value of the structure.

Geographic Area Douglas means all lots of record within that area formerly known as Service Area 2, as designated by a Parcel Number beginning with 2.

Geographic Area Juneau means all lots of record within that area formerly known as Service Area 1, as designated by a Parcel Number beginning with 1.

Geographic search area means an area designated by a wireless provider or operator for a new base station or WCF, produced in accordance with generally accepted principles of wireless engineering.

Geophysical hazard areas means those areas which present a threat to life or property from geophysical or geological hazards, including flooding, tsunami or storm surge run-ups, landslides, snowslides, faults, ice hazards, erosion and littoral beach processes.

Grade (adjacent ground elevation) means the lowest point of elevation of the finished surface of the ground, paving, or sidewalk within the area between a building and a property line or, when the property line is more than five feet from the building, between the building and a line five feet from the building.

Grading means a disruption of the natural soil surface.

Gravel pit means an open land area where sand, gravel or rock fragments are mined or excavated for sale or off-tract use.

Greenbelt means an open area which is cultivated or maintained in a natural state surrounding development or used as a buffer between land uses or to mark the edge of an urban or developed area.

Gross area means the total site area of a parcel of land, measured horizontally and excluding bodies of water.

Gross building area means the total horizontal floor areas of all floors, measured to the exterior of the walls, of a principal building, together with all accessory buildings or structures, exclusive of steps and porches. The gross area of a building without surrounding exterior walls shall be measured to the outside line of the supporting structure.

Gross floor area means the total horizontal floor area measured to the outside of surrounding exterior walls or to the centerline of common interior walls. The gross floor area of a building without surrounding exterior walls shall be measured to the outside line of the supporting structure.

Gross leasable floor area means the total gross floor area designed for exclusive tenant use or exclusive owner use in a commercial building.

Ground cover means grasses or other plants grown to keep soil from being blown or washed away.

Guy wire means any wire or cable that provides structural support between a tower and the ground.

Hillside means property which includes a slope in excess of 18 percent extending for a vertical distance of at least five feet on the effective date of the ordinance codified in this title.

Historic building means any building that is:

- (A) Listed individually in the National Register of Historic places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; or

- (B) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary of the Interior to qualify as a registered historic district; or
- (C) Individually listed in a state inventory of historic places in states with preservation programs that have been approved by the Secretary of the Interior; or
- (D) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (i) By an approved state program as determined by the Secretary of the Interior; or
 - (ii) Directly by the Secretary of the Interior in states without approved programs.

Home occupation means any activity carried out for gain by a resident, conducted as an accessory use in the resident's dwelling unit, and meeting the following criteria:

- (1) The use of a dwelling unit for the home occupation is clearly incidental and subordinate to its use for residential purposes by its occupants, involves no employees, and takes up no more than 25 percent of the net floor area or 500 square feet, whichever is less, in the dwelling;
- (2) The home occupation results in no change to the outside appearance of the building and no other visible nonilluminated evidence of the conduct of such home occupation other than one nonprojecting facade-mounted sign one square foot or less in area;
- (3) The home occupation generates no traffic and requires no parking in excess of that normally to be found in the neighborhood; and
- (4) No equipment or process is used which creates noise, vibration, glare, fumes, odors or electrical interference off the site of the home occupation.

Homeowners' association means a community association, other than a condominium association, which is organized in a development in which individual owners share common interests in, and responsibility for open space, facilities or both.

Hospital means an institution providing primary health services and medical or surgical care to persons, primarily inpatients, suffering from illness, disease, injury, deformity and other abnormal physical or mental conditions, and including, as an integral part of the institution, related facilities such as laboratories, outpatient facilities or training facilities.

Hotel means a building offering transient lodging accommodations to the general public and which may provide additional services such as restaurants, meeting rooms or recreation facilities.

Impact means, for the purposes of chapter 49.65, article I, the reasonably foreseeable effects or consequences of a mining operation. The term "impact" includes social, economic, physical and environmental consequences or effects.

Improved common open space means common open space containing common facilities, recreational equipment, parks, gardens, picnic areas, landscaping, or other outdoor improvements.

Including means including but not limited to.

Indirect impact means, for the purposes of chapter 49.65, article I, the indirect effects or consequences that are caused by a mining operation and are generally later in time or farther removed in distance, but are still reasonably foreseeable and demonstrable. Indirect impacts may include growth-inducing effects and other effects

related to induced changes in the pattern of land use, population density or growth rate, and their related effects on air and water and other natural systems, and effects caused by development induced by the mining operation, including effects on governmental services and facilities.

Indirect lighting means lighting systems which distribute 90 percent to 100 percent of the emitted light by reflection rather than by direct illumination.

Infrastructure means facilities and services needed to sustain industrial, residential and commercial activities.

Intensity of use means the degree to which a use is made, carried on or exercised.

Juneau Coastal Management Program or *JCMP* mean the coastal management program for the City and Borough.

Junk means dismantled, wrecked or unusable aircraft, boats, motor vehicles, machinery, mobile homes, trailers, appliances, furniture and similar items, not scheduled for repair; used, scrap, discarded or salvaged building materials; metals, rubber, paper, plastic, or other waste.

Junkyard means a lot or portion thereof, where junk is bought, sold, exchanged, scrapped, baled, cleaned, packed, disassembled, handled or stored. The term "junkyard" also includes auto-wrecking yards, house-wrecking yards, used-lumber yards, and any storage of junk occupying more than 200 square feet outside an enclosed building.

Kenel means a building in which six or more dogs more than four months of age are kept.

Lacustrine wetland means wetlands situated in a topographic depression or a dammed river channel, lacking persistent vegetation greater than 30 percent aerial coverage, and whose total area exceeds 20 acres.

Landscape means:

- (1) An expanse of natural scenery;
- (2) To add lawns, trees, plants, and other natural and decorative features to land.

Large mine means a mining operation involving more than 20 acres of affected surface disturbance; or having 75 or more personnel employed at the mining operation in the City and Borough, whether direct employees or employees of independent contractors, in any consecutive three-month period; or a mining operation which a federal agency has determined would involve a major federal action significantly affecting the quality of the human environment so that the preparation of an environmental impact statement in accordance with NEPA is required.

Large mine permit means a conditional use permit for a large mine, pursuant to chapter 49.15, article III, and section 49.65.130.

Lighting fixture luminaire means a complete lighting unit consisting of one or more lamps together with the components which are designed to distribute the light, to position and protect the lamps, and to connect the lamps to the electrical power supply; also called the lighting fixture.

Loading space means an off-street space or berth used for the loading or unloading of vehicles.

Local improvements means a public improvement which benefits a specific area and which is usually paid for in whole or part by special assessment of benefiting property owners.

Lot means a continuous parcel, tract or area of land undivided in ownership, established by plat, subdivision, or as otherwise permitted by law, to be used, conveyed, developed, or built upon as a unit.

Lot area means the total area within the property lines of a lot, excluding any street rights-of-way.

Lot, corner, means a lot or parcel of land abutting upon two or more streets at their intersection, or upon two parts of the same street forming an interior angle of less than 135 degrees.

Lot coverage means the percentage of horizontal lot area that is occupied by all buildings on the lot, each measured at the outside of those exterior walls of the floor having the greatest horizontal dimensions.

Lot depth means the average distance measured from the front lot line to the rear lot line.

Lot line, front, means the property line separating the lot from a street right-of-way, other than an alley.

Lot line, rear, means the property line opposite and most distant from a front lot line, except in the case of a corner lot.

Lot line, side, means any property boundary line not a front or rear lot line.

Lot line, street side, means the property line separating the lot from a street right-of-way, other than an alley or the front lot line.

Lot, minimum area of, means the smallest lot area established by the zoning ordinance on which a particular use or structure may be located in a particular district.

Lot, minimum size, means the smallest lot that may be created by subdivision in a particular zoning district.

Lot width means the horizontal distance between the side lines of a lot measured at right angles to its depth along a straight line parallel to the front lot line at the minimum required building setback line.

Lowest floor, for the purposes of chapter 49.70, article IV, flood hazard areas, means the lowest floor of the lowest enclosed area (including a basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor provided that it does not violate subsection 49.70.400(h)(1).

Lowest floor elevation, for the purposes of section 49.70.400, flood hazard areas, means the measured distance of a building's lowest floor above mean lower low water specified on the flood insurance rate map (FIRM) for the City and Borough of Juneau.

Major development means all development that is not a minor development.

Major energy facility means marine service bases and storage depots, pipelines and rights-of-way, drilling rigs and platforms, petroleum or coal separation, treatment, or storage facilities, liquid natural gas plants and terminals, oil terminals and other port development for the transfer of energy products, petrochemical plants, refineries and associated facilities, hydroelectric and other electric generating plants, transmission lines, uranium enrichment or nuclear fuel processing facilities, and geothermal facilities; "major energy facility" means a development of more than local concern carried out in, or in close proximity to, the coastal area, which meets one or more of the following criteria:

- (1) A facility required to support energy operations for exploration or production purposes;
- (2) A facility used to produce, convert, process or store energy resources or marketable products;
- (3) A facility used to transfer, transport, import or export energy resources or marketable products;
- (4) A facility used for in-state energy use; or

- (5) A facility used primarily for the manufacture, production or assembly of equipment, machinery, products or devices which are involved in any activity described in subsections (1)—(4) of this definition.

Manufactured home means, for purposes of sections 49.70.400—49.70.410, a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes, the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

Manufacturing, heavy, means the processing and/or fabrication of materials having the potential to produce noise, dust, glare, odors, or vibration beyond the owner's property line or that may be offensive or obnoxious on adjacent properties. This category includes uses that require storage of large volumes of volatile, highly flammable, toxic, noxious, or explosive substances.

Manufacturing, light, means the processing and/or fabrication of materials or products where no process involved will produce noise, vibration, air pollution, fire hazard or noxious emission that will disturb or endanger neighboring properties.

Manufacturing, medium, means the processing and/or fabrication of materials or products where the process involved will produce noises, vibration, emissions or other impacts that are perceptible to neighboring property owners but are not offensive or obnoxious. These uses do not have a measurable negative effect on other businesses or property values.

Marijuana means all parts of the plant of the genus cannabis whether growing or not, the seeds thereof, the resin extracted from any part of the plant, and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or its resin, including marijuana concentrate; "marijuana" does not include fiber produced from the stalks, oil, or cake made from the seeds of the plant, sterilized seed of the plant which is incapable of germination, or the weight of any other ingredient combined with marijuana to prepare topical or oral administrations, food, drink, or other products.

Marijuana cultivation facility means an entity that cultivates, prepares, and packages marijuana and sells marijuana to retail marijuana stores, to marijuana product manufacturing facilities, and to other marijuana cultivation facilities, but not to consumers.

Marijuana product manufacturing facility means an entity that purchases marijuana; manufactures, prepares, and packages marijuana products; and sells marijuana and marijuana products to other marijuana product manufacturing facilities and to retail marijuana stores, but not to consumers.

Marijuana retail store means an entity that purchases marijuana from marijuana cultivation facilities, purchases marijuana and marijuana products from marijuana product manufacturing facilities, and sells marijuana and marijuana products to consumers.

Marijuana testing facility means an entity that analyzes and certifies the safety and potency of marijuana.

Marquee means any hood, canopy, awning or permanent construction which projects from a wall of a building, usually above an entrance.

Material means any rock, sand, gravel, clay, organic natural soil or fill or any combination thereof.

Mean high water means the average elevation of the high tides.

Mineral commodity means an inanimate constituent of the earth which, when extracted from the earth, is usable in its natural form or is capable of conversion into a form usable as metal, a metallic compound, a chemical, quarry stone, an energy source, or a raw material for manufacturing or construction material. For the purposes of this section, the term "mineral commodity" does not include surface or subsurface water, geothermal resources, sand or gravel, common varieties of construction aggregate, or natural oil, gas, coal and peat, or associated by products recovered therewith.

Mining means the extraction of minerals including: solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gases. The term "mining" also includes quarrying; well operation; milling, such as crushing, screening, washing and flotation; and other preparation customarily done at the mine site or as part of a mining activity.

Mining development. See "Development."

Mining operation means the development, construction or reclamation of a mine, including associated infrastructure, or the exploitation or extraction of a mineral commodity from its occurrence on or in the earth, or the operation of a mine. The term "mining operation" includes open pit mining, placer mining and underground mining, and the disposal of refuse, tailings or waste rock from any such operation. The term "mining operation" also includes transporting, concentrating, milling, evaporating and other on-site processing. The term "mining operation" does not include off-site smelting, refining, cleaning, preparing, transportation or other surface operations not conducted on the affected surface.

Mitigate means:

- (1) Avoiding the impact altogether by not taking a certain action or parts of an action;
- (2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- (3) Rectifying the impact by repairing, rehabilitating or restoring the affected environment;
- (4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- (5) Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation bank means wetland enhancement, restoration, creation or acquisition undertaken to provide compensatory mitigation for wetlands losses from future development activities. The bank involves enhancing, restoring, creating or acquiring wetlands in advance of development of a wetland as part of a mitigation credit program.

Mobile food vendor means a type of food service that is located in a vehicle, trailer or cart and is capable of moving easily daily. Unless a push cart, these units must be capable of being licensed by the state as a motor vehicle, and can be moved without special conditions (such as a pilot car, flagging, or restricted hours of movement). Mobile units must completely retain their mobility at all times.

Mobile home means a detached residential dwelling unit designed for transportation, after fabrication, on streets or highways on its own wheels or on a truck or trailer, and arriving at the site where it is to be occupied as a dwelling complete and ready for occupancy except for minor and incidental unpacking and assembly operations, location on jacks or other temporary or permanent foundations, connections to utilities, and the like, and includes recreational vehicles used outside of a recreational vehicle park as living quarters, other than as temporary living quarters for recreational, camping, or travel purposes. For the purpose of chapter 49.70, article IV, flood hazard areas, a mobile home is the same as a manufactured home.

Mobile home park means a residential use consisting of a site utilized for occupancy by more than one mobile home, together with accessory uses.

Monopole WCF means a style of freestanding WCF consisting of a single shaft usually composed of two or more hollow sections that are in turn attached to a foundation. This type of WCF 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.

Motel means an establishment providing transient accommodations containing six or more rooms, at least 25 percent of which have direct access to the outside, without the necessity of passing through the main lobby of the building.

Multiple-building complex means a group of structures housing at least one retail business, office, commercial venture, or independent and separate department of a business which shares the same lot, access or parking facilities of a coordinated site plan.

Multiple-tenant building means a single structure housing more than one retail, office, or commercial business.

Natural area park means a lot owned by a government and characterized by areas of natural quality designed to serve the entire community by providing fish and wildlife habitat, open space/natural areas, access to water, and opportunities for passive and dispersed recreation activities. Development is prohibited except for structures, roads, and trails necessary for public use, education, maintenance, and protection of the resource.

Natural grade means the grade unaffected by construction techniques such as fill, landscaping, or berming.

Neighborhood means a physical area, usually residential, the physical or social characteristics of which distinguish it from other areas, or the people in which have certain life style characteristics in common, such as attendance at an elementary school, use of a central area, shared boundaries, or similar auto commutes. The commission shall consider neighborhood elements as necessary on a case-by-case basis.

Net floor area means the total horizontal floor area included within the surrounding walls of a building or portion thereof, exclusive of vent shafts. The net floor area of a building, or portion thereof, not provided with surrounding walls shall be measured to the inside of the supporting structure.

New construction, for the purposes of chapter 49.70, article IV, flood hazard areas and for flood insurance rates, means structures for which the "start of construction" commenced on or after the effective date of an initial flood insurance rate map (FIRM) or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

New land use means a use falling under a different category in the table of permissible uses than the "mining operations" use designation in 14.400.

Non-concealed means a WCF that has not been treated, camouflaged, or disguised to blend with its surroundings and is readily identifiable.

Nonconforming lot means a lot, or lot fractions, that:

- (1) Was allowed or not prohibited by law when established; and
- (2) Due to the subsequent adoption or amendment of a zoning ordinance, the lot(s) fails to conform to this title.

Nonconforming parking means dimensional standards and types of off-street parking and loading that were not in effect when the development was established, and due to the subsequent adoption or amendment of a zoning ordinance, are now required under this title.

Nonconforming residential density means:

- (1) Residential development of a density that was allowed or not prohibited by law when constructed; and
- (2) Due to the subsequent adoption or amendment of a zoning ordinance, is of a greater density than allowed under this title.

Nonconforming situation means a nonconforming use, a nonconforming residential density, a nonconforming structure, a nonconforming lot, and nonconforming parking, whether existing alone or in any combination.

Nonconforming structure means a structure that:

- (1) Was allowed or not prohibited by law when constructed; and
- (2) Due to the subsequent adoption or amendment of a zoning ordinance, fails to conform to this title.

Nonconforming use means a use that:

- (1) Was allowed or not prohibited by law when established; and
- (2) Due to the subsequent adoption or amendment of a zoning ordinance fails to conform to this title.

Nonmotorized recreation means any human-powered vehicular activity undertaken for relaxation or enjoyment.

Nonresidential use means a commercial, service, professional, industrial, or agricultural use, or a public facility.

Nursery means land used to raise flowers, shrubs and plants for sale.

Nursing care home means a facility maintained for the purpose of providing skilled nursing care and medical supervision to not more than nine persons at a lower level than that available in a hospital.

Nursing care institution means an institutional facility maintained for the purpose of providing skilled nursing care and medical supervision to more than nine persons at a lower level than that available in a hospital.

Office means a nonresidential use consisting of the space used for providing services other than vehicle repairs.

Office, professional means an office used for the practice of law, the healing arts, accountancy, architecture, engineering or other use determined similar by the planning commission.

Offshore areas means submerged lands and waters seaward of the coastline.

Off-street parking space means an automobile parking space and access thereto, located on a lot.

Open air food service means a food service located in a structure or area that does not have a permanent means of heat. (Note that woodstoves are not considered a permanent means of heat by building code officials). The food service operates for 210 days or less. A zoning official can extend the operation period for cause, such as extended tourist season, community event, or emergency provisions.

Open space means any parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment, or for the use and enjoyment of owners and occupants of land adjoining or in the same neighborhood as such open space.

Open space, usable, means open space within a proposed development site excluding areas devoted to structures, storage or recreational vehicles, and parking. At least one-half of all areas designated as usable open space must have a slope of less than 20 percent.

Opening date of a development means the date that a business or housing site is operational and open for occupancy.

Operator (mining) means any person engaged in or controlling, or applying to engage in or control, an exploration or a mining operation.

Ordinary high water mark means:

- (1) In the non-tidal portion of a river, lake, or stream: the portion of the bed(s) and banks up to which the presence and action of the non-tidal water is so common and usual, and so long continued in all ordinary years, as to leave a natural line or "mark" impressed on the bank or shore and indicated by erosion, shelving, changes in soil characteristics, destruction of terrestrial vegetation, or other distinctive physical characteristics;
- (2) In a braided river, lake, or stream; the area delimited by the natural line or "mark", as defined in part 1 above, impressed on the bank or shore of the outside margin of the most distant channels; or
- (3) In a tidally influenced portion of a river, lake, or stream, setbacks shall be taken from the mean high water elevation or from the ordinary high water mark, whichever offers greater protection to the water body.

Other agency means any branch, arm, part agency, department or other governmental entity other than the department with the authority to regulate any aspect of a mining operation, pursuant to any other regulatory program.

Other regulatory program means any governmental program other than one administered by the department which program applies to a mining operation or prospecting operation.

Palustrine wetland means a freshwater wetland dominated by trees, shrubs, persistent emergent vegetation, or emergent mosses or lichens.

Panhandle lot means a lot where the only owned access to the right-of-way is a narrow strip of land, the width of which is less than the minimum required by code.

Parent lot means the original lot and the residual area from which unit-lots are created through an alternative residential subdivision.

Park and ride means a parking and loading facility where commuters are provided space to park vehicles and to board transit vehicles. A park and ride facility may be located with a transit center or transit station.

Parking access means the area of a parking lot that allows motor vehicles ingress and egress from the street.

Parking space, stacked, means a parking space that is separated from a driving aisle or lane by one or more additional parking spaces. In a line of stacked parking spaces, the space with direct access to a driving aisle is not a stacked parking space. This parking arrangement is commonly utilized for valet parking or other situations where immediate access to a particular vehicle is not required, and is sometimes referred to as "tandem" parking.

Party wall means a common shared wall between two separate structures, buildings, or dwelling units.

Pedestrian way means any sidewalk, trail, path, or other way reserved, designed, or developed to provide public, pedestrian access whether such way is held by the municipality by way of an easement, permit, dedication, prescription, fee ownership or other form.

Person means an individual, partnership, firm, or company corporation.

Pioneer path means an access path for pedestrian, equestrian, human powered vehicles, all-terrain vehicles, snow machines, and similar off-road recreational vehicles weighing less than 1,000 pounds gross vehicle weight and having a maximum overall width of 48 inches. Except as identified above, a pioneer path shall be designed and constructed to prevent a vehicle registered or required to be registered under AS 28.10 from traveling on the pioneer path.

Planned unit development means a tract of land at least two acres in area, under single, corporation, firm, partnership, or association ownership, planned and developed as an integral unit in a single development operation or a definitely programmed series of development operations and according to approved preliminary and final development plans. Planned unit developments shall comply with all requirements of the land use code, except to the extent that such requirements are superseded by a permit issued pursuant to this article.

Planting strip means a strip of land which is landscaped and maintained with live vegetative cover.

Plat means the map prepared for the purpose of recording subdivisions of land as provided in this title.

Plat, final, means all or a portion of a plat which is presented to the proper review authority for final approval.

Plat, preliminary, means a plat indicating the proposed layout of a subdivision or site plan which is submitted to the proper review authority for consideration and preliminary approval.

Population means a collective and generally discrete reproducing group of animals of the same species.

Principal use means the primary or predominant use of any lot.

Private improvements means those improvements required as part of a subdivision or other land use permit that will not be maintained by the City and Borough or other agency of government.

Privately maintained access road means a road that the department or the commission has permitted to be constructed at less than full public street standards in an existing right-of-way. Privately maintained access roads can be used by the public and can provide access to more than one parcel, but will not be publicly maintained. A privately maintained access road is distinguished from an ordinary driveway in that an ordinary driveway provides access between a parcel of land and the public portion of the street, and is not for public access (See Figure 5).

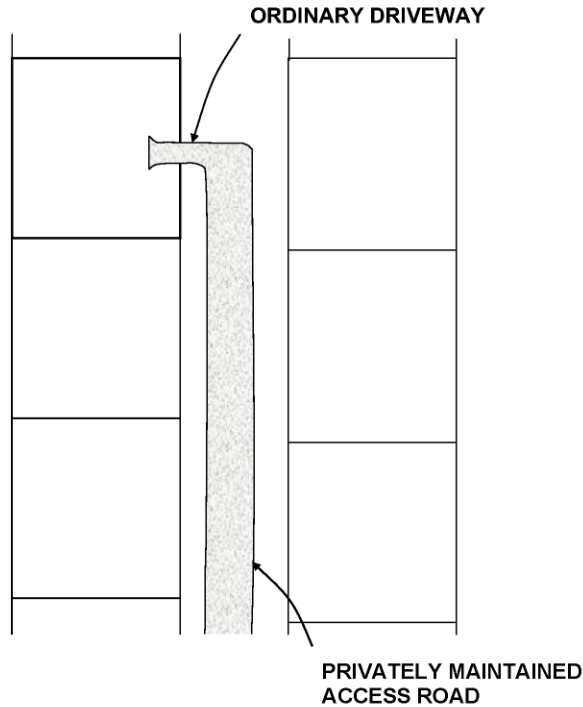


Figure 5

Prohibited use means a use not allowed in a zoning district.

Propagation study means a computer-generated study estimating the signal emanating, and prediction of coverage, from antennas or repeaters sited on a specific tower or structure.

Prospecting means the process of seeking and occasionally removing small samples of mineral commodities for claim staking or further exploration. The term "prospecting" includes only those activities which cause no or very little surface disturbance and which use no mechanized earth-moving equipment.

Public improvements means any construction incidental to servicing or furnishing facilities to a development, including but not limited to: streets; retaining walls; street signs and markings; curbs and gutters; street lights and associated power conduits; sidewalks; shared use pathways; sewer mains, pump stations, service laterals, manholes, cleanouts and all associated parts; storm sewer mains, manholes, catch basins, pump stations, service laterals, and all associated parts; water mains, fire hydrants, service laterals, valves, pump stations, reservoirs, and all associated parts.

Public sewer and water system means any system that is operated by a municipality, governmental agency, or a public utility licensed as such by the state for the collection, treatment and disposal of wastes, furnishing of potable water and fire protection.

Public square means an area dedicated for public use for temporary leisure, assembly, markets, and similar uses.

Public way means pedestrian ways, rights-of-way, and streets and any other way held for or held open by a public entity for purposes of public access.

Public works facility means a facility operated by one or more government agencies and used to maintain public works and public facilities. This is an "umbrella" land use designation that includes land uses typical to public facilities maintenance, including but not limited to outdoor or indoor storage of materials and equipment and administrative offices. This use may include the collection of hazardous waste in any zoning district where public works facilities can be permitted, or the storage of hazardous waste in the Industrial zoning district when authorized by a major development permit. This umbrella land use does not include any category 4.100-4.220, 11.000, 14.000, or 17.000 uses, or any other category 15.000 uses for which a land use permit is required.

Quasi-public means property or infrastructure that is normally owned by the public sector, but owned by the private sector serving in the public interest.

Radial distance means the shortest distance measured along a radius extending from a point of the object being measured from to a point on the object being measured to.

Radio frequency emissions means any electro-magnetic radiation or other communication signal emitted from an antenna that is regulated by the FCC.

Reclamation means procedures to minimize disruption and to rehabilitate the affected surface through grading and the protection and restoration of plant cover, soil stability, water resources, or other features relevant to the subsequent use of such lands.

Recreation facility, commercial means a place designed and equipped for the conduct of sports, leisure time activities, and other customary and usual recreational activities operated as a business and open to the public for a fee.

Recreational vehicle means a vehicle primarily designed and intended as temporary living quarters for recreation, camping, or travel uses, which either has its own motive power or is mounted on or drawn by another vehicle for moving from one location to another without a change in structure or design, and identified or required to be identified by a license number, registration number, serial number, or motor number for operation on state highways. For the purposes of chapter 49.70, article IV, flood hazard areas, recreational vehicle means a vehicle which is:

- (A) Built on a single chassis;
- (B) Four hundred square feet or less when measured at the largest horizontal projection;
- (C) Designed to be self-propelled or permanently towable by a light duty truck; and
- (D) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Recreational vehicle park means a residential use consisting of a site utilized for occupancy by more than one recreational vehicle, together with accessory uses.

Residential use means the occupation of a building as a dwelling.

Resort means a facility for transient guests where the primary attraction is recreational activities.

Resource extraction means an industrial use involving the removal of timber, native vegetation, peat, topsoil, fill, sand, gravel, rock, or any mineral and other operations having similar characteristics.

Restaurant means a retail establishment selling food, drink, or both for consumption on the premises, including lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption.

Rezone means to change the zoning classification of particular lots or parcels of land.

Right-of-way means a defined area of land, including surface, overhead and underground space, reserved or granted by deed, easement or dedication for a street, alley, utility, walkway, sidewalk, or other public ways.

Riverine wetland means wetlands contained in a freshwater channel. A channel may be either naturally or artificially created.

Roadway means that portion of a street intended for vehicular traffic, including shoulders. The sum of the traveled way and shoulder widths constitutes the roadway width.

Rocky islands and seacliffs mean islands of volcanic or tectonic origin with rocky shores and steep faces, offshore rocks, capes and steep rocky seafronts.

Rough grade means the stage at which the grade approximately conforms to the approved plat.

Rural means that part of the City and Borough which is not designated as being within the urban service area boundary in the comprehensive plan.

Sanitary landfill means a site for solid waste disposal.

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.

Screening means a method of visually shielding or obscuring one abutting or nearby structure or use from another by fencing, walls, berms or densely planted vegetation.

Seawalk means the pedestrian path and access easement described in CBJ 49.70.960(c)(6) and the Long Range Waterfront Plan.

Senior housing means a dwelling unit specifically designed for occupancy by persons 55 years of age or older.

Separate development means a facility or infrastructure located outside the land area encompassing, and not an integral part of, the mining operation for which a development permit already exists.

Setback means the minimum required yard between a building and a parallel lot line. See "Yard."

Shadow plat means the platting of property in such a way as to provide for future subdivision into smaller lots.

Sidewalk means the portion of a street or crosswalk intended for pedestrian use only.

Sight distance means the distance that a driver needs to react appropriately to a situation, including stopping sight distance, passing sight distance, and intersection sight distance.

Sign means any device for visual communication that is used for the purpose of bringing the subject thereof, to the attention of the public, excluding:

- (1) Signs not exceeding 1½ square feet in area and bearing only property numbers, post office box numbers, names of occupants or premises, or other identification of premises not having commercial connotations;
- (2) Flags and insignia of any governmental agency except when displayed in connection with commercial promotion;
- (3) Regulatory, identification, informational, or directional signs erected or required by governmental bodies;

- (4) Integral decorative or architectural features of buildings, except letters, trademarks, moving parts, or moving lights;
- (5) Artwork having no commercial connotations.

Sign, directional, means a permanent sign not exceeding six square feet in area without commercial message that directs the public to a specific place such as an entrance, exit, parking or service area.

Sign, freestanding, means a sign attached to the ground and supported by uprights placed on or in the ground.

Sign, major, means a sign which requires a permit and review by the department.

Sign, marquee, means a sign which is integrated into a marquee or canopy and does not extend beyond the limits of the marquee or canopy.

Sign, master, means a sign which is the primary building or complex sign for a multiple-tenant building or a multiple-building complex.

Sign, menu board, means a sign without commercial message which is intended to inform drive-up or pedestrian customers of the goods which can be ordered from outside the building.

Sign, minor, means a sign which does not require a permit or review by the department, but which must meet the requirements and standards set forth in chapter 49.45.

Sign, political, means a sign which advertises a candidate or candidates for public elective office, a political party, or promotes a position on a ballot issue.

Sign, real estate, means a temporary sign which advertises the real estate on which it is located for rent, lease, or sale.

Sign surface area means the entire area within the smallest regular geometrical form or combination of forms which will include all of the display area of a sign or sign elements. Frames and structural members not bearing advertising matter shall not be included in computation of surface area.

Single-Room Occupancy with private facilities means a dwelling unit composed of a private bathroom and a combined kitchen, living, and sleeping area, designed for occupancy by a single person.

Single-Room Occupancy with shared facilities means living and sleeping space for the exclusive use of one occupant, with shared sanitary and/or food preparation facilities for all occupants of the development.

Site plan means the development plan for one or more lots on which is shown the existing and proposed conditions of the site including: topography, vegetation, drainage, floodplains, marshes and waterways; open spaces, walkways, means of ingress and egress, utility services, landscaping, structures and signs, lighting, and screening devices; any other information that reasonably may be required in order that an informed decision can be made by the approving authority.

Slope means the degree of deviation of a surface from the horizontal, usually expressed in percent or degrees.

Small mine means a mining operation other than a large mine.

Small mine permit means a conditional use permit for a small mine, pursuant to of chapter 49.15, article III, and section 49.65.125.

Small temporary floating structure without amenities means a platform that is afloat at the lowest tide, is held in place by anchor or mooring, is used seasonally and removed when not in use, is no larger than 1900 square feet of decked structure and has no enclosed superstructure over four feet tall.

Snow storage basin means a designated area to store snow that comes from off site. Snow storage basins include grading and drainage improvements to treat melt water. This definition does not apply to areas that are occasionally or temporarily used for snow storage which do not have drainage improvements. This definition does not apply to areas used for storage of snow that accumulates on the same property.

Sobering center means a facility that provides temporary shelter to incapacitated and intoxicated persons taken into emergency protective custody pursuant to AS 47.37.170.

Socioeconomic impact assessment means, for the purposes of chapter 49.65, article I, the ordering, measuring and analysis of beneficial and adverse socioeconomic impacts presented in a report or study format. Specifically, a socioeconomic impact assessment shall address the beneficial and adverse impacts, including direct impacts and indirect impacts, of a mining operation on existing and future local conditions, facilities and services, including the following:

- (a) Transportation and traffic;
- (b) Sewer and water;
- (c) Solid waste;
- (d) Public safety and fire protection;
- (e) Education;
- (f) Native history and culture;
- (g) Health;
- (h) Recreation;
- (i) Housing;
- (j) Employment;
- (k) Local businesses;
- (l) The rate, distribution and demographic characteristics of any population changes induced by the mining operation;
- (m) The fiscal impacts of the mining operation on public facilities and services, including general government functions.

Soil means sediments and other unconsolidated accumulations of solid particles produced by disintegrations of rocks. Includes mixtures of these particles with organics (i.e., topsoil), sand, gravel, silt, etc.

Special flood hazard area (SFHA) means the land in the floodplain subject to a one percent or greater chance of flooding in any given year. It is shown on the flood insurance rate map (FIRM) as Zone A, AO, AH, A, AE, A99, AR (V, VO, VE). "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

Spring water means water supplied by a natural flow which rises to the surface of the earth, including water from an artesian well.

Square feet under cultivation means the area of a licensed premises of a cultivation facility that is used for growing marijuana, measured from the perimeter of the floor or growing space for marijuana. "Square feet under cultivation" does not include a processing or storage area, an equipment storage area, an office, a hallway, or another area if that area is not used for growing marijuana.

Stable means a building or land where farm animals are boarded or kept; to keep animals in or on a stable.

Start of construction, for the purposes of section 49.70.400, flood hazard areas, includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Street means a thoroughfare improved or intended to be improved for travel, permanently open to general public use that affords the principal means of access, frontage and address to individual buildings, lots and blocks. Streets include a pioneer path, road, avenue, place, drive, boulevard, highway or other similar means of public thoroughfares except an alley. Unless otherwise indicated, the term street shall refer to both public and private streets.

Street, arterial, means a street with access control, channelized intersections, restricted parking, and which collects and distributes traffic to and from minor arterials and collectors.

Street, collector, means a street which collects traffic from local streets and connects the minor and major arterials.

Street, cul-de-sac, means a street with a single common ingress and egress and with a turnaround at the end.

Street, local, means a street intended for vehicular access to abutting property and not intended for through traffic.

Street, minor arterial, means a street with signals at important intersections and stop signs on the side streets, and which collects and distributes traffic to and from collector streets.

Structural alteration means any change to the supporting members of a structure.

Structure means anything which is constructed or erected and located on or under the ground, or attached to something fixed to the ground, including the following:

- (1) A building, regardless of size, purpose, or permanence;
- (2) A tower, sign, antenna, pole or similar structure;
- (3) A basement, foundation, or mobile home pad;
- (4) A fence;
- (5) A sign;

- (6) A street, road, sidewalk, driveway, parking area, or storage area.

Subdivider means the developer or owner of a subdivision.

Subdivision means the division or redivision of a tract or parcel of land into two or more lots, sites or other divisions and the act of developing, constructing or improving property with a subdivision as required by CBJ Title 49.

Substantial damage, for the purposes of section 49.70.400, flood hazard areas, means damage of any origin whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement, for the purposes of section 49.70.400, flood hazard areas, means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. This term does not include either:

- (1) Any project or improvement of a building to correct existing violations of a state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Temporary structure means a structure established in support of and during the construction of a structure.

Tideflats means mostly unvegetated areas that are alternately exposed and inundated tides.

Tideland means land between the lowest and highest tides.

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.

Townhouse means a single-family dwelling in a row of at least three such dwellings, in which each dwelling has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from every other unit by one or more common fire-resistant walls.

Transient structures means all forms of short-term residence, including hotels, motels, boardinghouses, bed and breakfasts, roominghouses, or any other residential use where capacity is measured by rooms rather than dwelling units.

Transit center means a building or facility adjacent to an area where two or more transit vehicles stop for the purposes of layover, transfer, or route termination. A transit center will typically include one or more of the following: information kiosk, vending, snack shop, break room, police substation, bike storage lockers or racks, indoor waiting area, covered platform, private restrooms, public restrooms, and other amenities supporting transit operations.

Transit station means a building or facility within or adjacent to the right-of-way where two or more transit vehicles stop for the purposes of transfer, or route termination. A transit station will typically include one or more of the following: information kiosk, vending, bike storage lockers or racks, covered platform.

Transitional housing means a residential use for people released from a correctional facility or similar facility. Residents may be on probation and parole. Although approval by the Department of Corrections may be necessary for a resident to reside in transitional housing, unlike a correctional facility, a resident is not ordered to live in transitional housing. An owner or manager must live on site.

Transmission equipment means any equipment that facilitates transmission for any FCC licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

Transmission facilities, major means electrical power distribution lines rated at 69 kilovolts or more.

Transportation and utility routes and facilities means power transmission lines, mineral slurry lines, oil and gas pipelines, land and marine corridors, railways, highways, roadways, air terminals, water and sewer transfer, and facilities required to operate and maintain the route or facility.

Travel way means the portion of the roadway for the movement of vehicles, exclusive of shoulders.

Tower or wireless tower means any structure built for the sole or primary purpose of supporting any FCC licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

Undisturbed common open space means common open space left in its natural condition.

Unfinished area means an enclosed area that is used only for the parking of vehicles, building access, or storage purposes and that does not meet the definition of a finished (habitable) area. Drywall used for fire protection is permitted in unfinished areas.

Unit-lot means any lot, site, parcel, unit-site, and similar geographically defined property that is created through an alternative residential subdivision and that is substantially smaller than the minimum lot size required for the zoning district.

Upland means drainages, aquifers, and lands, the use of which would have a direct and significant impact on coastal water.

Urban service area means the urban service area established in the comprehensive plan.

Urban service boundary means the boundary of the urban service established in the comprehensive plan.

Uses of state concern means the same as set forth in AS 46.40.210(6).

Utilities means all structures involved in the generation, transmission or distribution of electricity, gas, steam, water or sewage.

Utilities, intermediate means utilities that produce noise, vibration, emissions, light, glare or other impacts that are perceptible to neighboring property owners but not offensive or obnoxious, and impacts to adjacent properties do not have a measurable negative effect on other businesses or property values.

Utilities, major means utilities that produce noise, dust, glare, odors, light, glare or vibration that may be offensive or obnoxious on adjacent properties.

Utilities, minor means utilities which do not produce noise, vibration, air pollution, fire hazard, glare or noxious emission which will disturb or endanger neighboring properties. This category includes most underground utilities.

Visitor component means a development or portion thereof designed to accommodate a significant number of people viewing or touring the development.

Walkway means a dedicated right-of-way, which does not include a street and is improved for pedestrian use.

Water-dependent means a use or activity which can be carried out only on, in, or adjacent to water areas because the use requires access to the water body.

Water-oriented means uses or mixtures of uses which would benefit from being near the water and are intrinsic to waterfront development, and which meet all of the following criteria:

- (1) Uses must be part of a larger fully-planned development which also incorporates water-dependent or water-related uses;
- (2) Uses which are not directly water-dependent or water-related must be necessary to the overall development of the project;
- (3) Uses must be integrated functionally by architectural and site designs which are sensitive to the waterfront site;
- (4) Uses must act as economic stimuli and anchor points to enable other forms of development, particularly public access improvements; and
- (5) Uses must contribute to a diverse and healthy downtown core.

Water-related means a use or activity which is not directly dependent upon access to a water body, but which provides goods or services that are directly associated with water dependence and which, if not located adjacent to water, would result in a public loss of quality in the goods or services offered.

Waterway. See "body of water."

WCF Site means towers other than towers in the public rights-of-way, the current boundaries of the leased or owned property surrounding the tower and any other access or utility easements currently related to the site, and, for other eligible support structures, further restricted to that area in proximity to the structures and to other transmission equipment already deployed on the ground.

West Juneau means that portion of the City and Borough from Kowee Creek to Lawson Creek.

Wetlands includes both freshwater and saltwater wetlands; freshwater wetlands means those environments characterized by rooted vegetation which is partially submerged whether continuously or periodically by surface freshwater with less than 0.5 parts per thousand salt content and not exceeding three meters in depth; "saltwater wetlands" means those coastal areas along sheltered shorelines characterized by halophytic, hydrophytes and macroalgae extending from extreme low tide to an area above extreme high tide which is influenced by sea spray or tidally induced water table changes.

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. An attached WCF includes distributed antenna system (DAS) and small cell technologies.

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), vegetation, natural features, and uses on a site. There are two types of concealed WCFs: 1) attached and 2) freestanding. Examples of concealed attached WCF include, but are not limited to, those designed to integrate or blend with the building or structure upon which the facility is attached by the use of paint, faux windows, dormers or other architectural features. 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.

Yard means an open space, unoccupied by any building.

Yard, front, means a yard extending the full width of the lot between any building and the front lot line, and measured perpendicular to the building at the closest point to the front lot line.

Yard, rear, means a yard extending across the full width of the lot between the principal building and the rear lot line, and measured perpendicular to the building to the closest point of the rear lot line.

Yard, side, means a yard extending from the front yard to the rear yard between the principal building and the side lot line measured perpendicular from the side lot line to the closest point of the principal building.

Yard, street side, means a yard extending the full width of the lot between any building and the street side lot line, and measured perpendicular from the property line to the building at the closest point to the street side lot line.

(Serial No. 87-49, § 2, 1987; Serial No. 88-21, § 2, 1988; Serial No. 88-21, § 2, 1988; Serial No. 89-01, § 3, 1989; Serial No. 89-05, § 5, 1989; Serial No. 89-47am, §§ 21, 22, 1989; Serial No. 90-41, §§ 11, 12, 1990; Serial No. 90-46, § 11, 1990; Serial No. 91-02, § 3, 1991; Serial No. 92-42, § 3, 1992; Serial No. 93-46, § 5, 1993; Serial No. 95-09, § 4,

1995; Serial No. 97-49, § 7, 1998; Serial No. 99-22, § 15, 1999; Serial No. 2002-29, § 3, 11-4-2002; Serial No. 2003-06, § 3, 2-10-2003; Serial No. 2003-26(am), § 3, 6-9-2003; Serial No. 2003-40, § 3, 9-8-03; Serial No. 2004-09, § 4, 4-12-2004; Serial No. 2004-13, § 4, 9-27-2004; Serial No. 2005-52(b), § 4, 1-30-2006; Serial No. 2006-07, § 3, 4-3-2006; Serial No. 2006-14(b), § 6, 5-15-2006; Serial No. 2007-11, § 3, 4-23-2007; Serial No. 2008-01, § 2, 1-28-2008; Serial No. 2009-22(b), § 5, 10-12-2009; Serial No. 2010-22, § 6, 7-19-2010; Serial No. 2013-19(b), § 3, 7-15-2013 ; Serial No. 2013-26(am), § 6, 11-4-2013, eff. 12-5-2013 ; Serial No. 2014-32(e)am, § 3, 9-29-2014, eff. 10-29-2014 ; Serial No. 2015-07(b)(am), § 7, 2-23-2015, eff. 3-26-2015 ; Serial No. 2015-12 , § 3, 3-16-2015, eff. 4-16-2015; Serial No. 2015-34(am), §§ 3—5, 7-20-2015, eff. 8-20-2015 ; Serial No. 2015-03(c)(am), §§ 58—60, 8-31-2015 ; Serial No. 2015-32, § 4, 8-10-2015 ; Serial No. 2015-39(am), § 8, 11-9-2015 ; Serial No. 2015-38(b)(am), § 2, 5-2-2016, eff. 6-2-2016 ; Serial No. 2016-14, § 3, 5-2-2016, eff. 6-2-2016 ; Serial No. 2016-26(b) , §§ 12—14, 4-3-2017, eff. 5-3-2017; Serial No. 2018-31, §§ 4, 5, 6-4-2018, eff. 7-5-2018 ; Serial No. 2018-41(c), § 3, 12-17-2018, eff. 1-17-2019 ; Serial No. 2019-08, § 2, 4-22-2019, eff. 5-23-2019 ; Serial No. 2019-37, § 7, 3-16-2020, eff. 4-16-2020 ; Serial No. 2021-06, §§ 4—6, 4-26-2021, eff. 5-26-2021; Serial No. 2021-19, § 9, 8-2-2021, eff. 9-1-2021)

Cross reference(s)—Definitions generally, CBJ Code § 01.15.010.

PART II - CODE OF ORDINANCES
TITLE 49 - LAND USE
Chapter 49.85 FEES FOR LAND USE ACTIONS

Chapter 49.85 FEES FOR LAND USE ACTIONS

49.85.100 Generally.

Processing fees are established for each development, platting and other land use action in accordance with the following schedule. If a public notice sign is required by the Director, the fee is \$150 for the first sign, and \$25 for each additional sign. \$100 of the sign fee can be refunded if the sign is returned within two (2) weeks of the decision being issued.

- (1) Minor development.
 - (A) Reserved;
 - (B) Staff review, no charge if a building permit is required;
 - (C) Commercial sign permit, \$50.00 for the first two signs, and \$20.00 for each additional sign.
- (2) Minor subdivision or consolidation.
 - (A) Subdivision creating additional lots, \$400.00 plus \$25.00 for each resulting lot;
 - (B) Subdivision creating no additional lots, \$110.00 plus \$25.00 for each lot changed.

(3) Major development, conditional use permits or modifications, allowable use permits, and wetlands permits. The fees for these land use actions are based on classes of uses, and shall be paid upon application for permit issuance or modification as set forth in subsections (3)(A)—(E) of this section. The fee for an extension of a permit shall be \$250.00 for any class of use.

- (A) Class I uses, \$350.00. Class I uses are:
 - (i) Mobile homes on single lots;
 - (ii) Agricultural uses of under 50,000 square feet;
 - (iii) Residential structures, four or fewer units;
 - (iv) Transient structures, 12 or fewer rooms for rent;
 - (v) Day care and child care homes;
 - (vi) Accessory or incidental recycling activities under section 49.25.300, category 11.120 uses;
- (B) Class II uses, \$500.00. Class II uses are:
 - (i) Commercial, mixed use or enclosed industrial uses with less than 10,000 square feet of building space and using less than one acre of land;
 - (ii) Agricultural uses of 50,000 or more square feet;
 - (iii) Residential structures, five to ten dwelling units;

- (iv) Transient structures, 13 to 30 rooms for rent;
- (v) Day care and child care centers;
- (vi) Floating residences and floating structures under 2,500 square feet;
- (vii) Churches, schools, and additions thereto;
- (C) Class III uses, \$750.00. Class III uses are:
 - (i) Commercial, mixed use or enclosed industrial uses with 10,000 to 20,000 square feet of building space or using one to three acres of land;
 - (ii) Residential structures, 11 to 30 dwelling units;
 - (iii) Transient structures, 31 to 90 rooms for rent;
 - (iv) Floating structures, 2,500 to 10,000 square feet;
- (D) Class IV uses, \$1,000.00. Class IV uses are:
 - (i) Commercial, mixed use or enclosed industrial uses with 20,001 to 40,000 square feet of building space or using more than three but less than six acres of land;
 - (ii) Residential structures, 31 to 60 dwelling units;
 - (iii) Transient structures, 91 to 180 rooms for rent;
 - (iv) Unenclosed industrial uses using less than three acres of land (e.g., batch plants, quarries, sand and gravel operations, junkyards, heliports, and outside storage);
 - (v) Floating structures over 10,000 square feet.
- (E) Class V uses, \$1,600.00. Class V uses are:
 - (i) Commercial, mixed use or enclosed industrial uses with more than 40,000 square feet of building space or using six or more acres of land;
 - (ii) Unenclosed industrial uses using three or more acres of land;
 - (iii) Residential structures, over 60 dwelling units;
 - (iv) Transient structures, over 180 rooms for rent;
 - (v) City and state projects with estimated project cost over \$2,500,000.00.
- (4) Major subdivisions, including mobile home subdivisions.
 - (A) Preliminary plat, \$110.00 per lot;
 - (B) Final plat, \$70.00 per lot;
 - (C) Reserved;
 - (D) Plat amendment, \$110.00 plus \$25.00 per lot.
- (5) Street vacation, \$500.00.
- (6) Administration of developer's subdivision improvement guaranty.

- (A) Performance bond, \$50.00;
- (B) Deposit in escrow, \$140.00;
- (C) Deed of trust, reconveyance, agreement or substitution of trust and reconveyance lots, \$140.00 for first lot, plus \$25.00 for each additional lot.
- (7) Access driveways in rights-of-way, \$400.00.
- (8) Special use or area.
 - (A) Mining.
 - (i) Exploration approval, \$200.00;
 - (ii) Small mine permit and amendment, \$1,200.00;
 - (iii) Large mine permit and amendment, \$3,600.00, plus any special fee established pursuant to section 49.65.130;
 - (iv) Technical revision \$500.00;
 - (v) Ownership transfer requests \$500.00;
 - (vi) Summary approval. The fees for a summary approval action shall be based on the classes of uses as established in 49.85.100(3).
 - (B) Mobile home parks.
 - (i) Preliminary review, \$90.00 per lot or \$250.00, whichever is greater;
 - (ii) Final review, \$60.00 per lot or \$250.00, whichever is greater.
 - (C) Recreational vehicle parks, conditional use permit, \$400.00.
 - (D) Hillside development endorsement. Gross hourly rate for professional review and inspection, \$60.00.
 - (E) Planned Unit Development (PUD) and Cottage Housing.
 - (i) Preliminary plan application approval, \$400.00 plus \$80.00 per residential unit;
 - (ii) Final plan approval, \$300.00 plus \$60.00 per residential unit.
 - (F) Development in landslide or avalanche hazard area conditional use, \$400.00.
 - (G) Alternative residential subdivisions.
 - (i) Preliminary plan application review, \$400.00 plus \$80.00 per residential unit;
 - (ii) Final plan review, \$300.00 plus \$60.00 per residential unit.
 - (H) Floodplain development permit.
 - (i) Minor development, no building permit required, \$45.00.
 - (ii) Major development, building permit required, \$100.00.
 - (iii) Exception, \$400.00.

- (9) Zone changes and comprehensive plan amendments, \$600.00.
- (10) *Variances and alternative development permits.*
 - (A) Administrative variance, \$120.00;
 - (B) Non-administrative variance, \$400.00;
 - (C) Alternative development permit, \$400.00.
- (11) Street name change, \$400.00.
- (12) Preparation of deed restrictions, certificates of common ownership, and similar documents, \$100.00.
- (13) Sidewalk obstruction permit under CBJ 62.10.010: \$100.00.
- (14) Certification of zoning compliance letters, \$150.00.
- (15) Appeal of director's decision, refundable if applicant prevails, \$200.00.
- (16) Fee not listed. The processing fee for any development, platting, or other land use action not specifically listed in this section shall be the fee established for the most similar action listed, as determined by the community development director.
- (17) Fee cancellation. The director may authorize the refunding of a portion of the fee paid for a land use action when the permit application is cancelled before completion of the land use review process. The director may estimate the amount of work not completed and set the amount of the refund at that amount, less ten percent of the fee.
- (18) Wireless communication facility application fees.
 - (A) Application fees required by subsection 49.65.940(b): \$350.00.
 - (B) Additional fee required for special use permit applications required by subsection 49.65.970(b)(1): \$500.00.
 - (C) Any actual costs incurred for technical expert review, publication and mailings.
- (19) Marijuana license fee, \$250.00.
- (20) Certification of nonconforming status, \$150.00; fee is waived if applied for in conjunction with a development permit.
- (21) Parking waiver, \$400. If the application is filed in conjunction with a major development permit the fee shall be reduced by 20 percent.
- (22) Fee in lieu, \$10,000 per off-street parking space required.

(Serial No. 87-49, § 2, 1987; Serial No. 91-02, § 2, 1991; Serial No. 91-42, § 2, 1991; Serial No. 92-42, § 4, 1992; Serial No. 94-24, § 2, 1994; Serial No. 95-33, § 10, 1995; Serial No. 95-40, § 5, 1996; Serial No. 96-30, § 8, 1996; Serial No. 97-04, § 2, 1997; Serial No. 97-12, § 3, 1997; Serial No. 2000-38, § 2, 10-16-2000; Serial No. 2003-07(am), § 7, 5-12-2003; Serial No. 2010-15(c), § 3, 5-19-2010; Serial No. 2014-32(e)am, § 4, 9-29-2014, eff. 10-29-2014 ; Serial No. 2015-03(c)(am), § 61, 8-31-2015 ; Serial No. 2015-38(b)(am), § 2 5-2-2016, eff. 6-2-2016 ; Serial No. 2017-16, § 3, 6-26-2017, eff. 7-27-2017 ; Serial No. 2018-04(b), § 3, 5-14-2018, eff. 6-14-2018 ; Serial No. 2018-41(c), § 4, 12-17-2018, eff. 1-17-2019 ; Serial No. 2019-37, § 8, 3-16-2020, eff. 4-16-2020 ; Serial No. 2021-06, § 7, 4-26-2021, eff. 5-26-2021; Serial No. 2021-19, § 10, 8-2-2021, eff. 9-1-2021)

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(Supp. No. 134)

49.85.110 Amendment of rates.

The manager may adjust the rates in this chapter from time to time to reflect changes in the cost of providing municipal services generally.

(Serial No. 87-49, § 2, 1987)

49.85.130 Payment of fees.

No application, petition, request or appeal for which a fee is established under this title shall be complete unless accompanied by the required fee and shall be returned unless accompanied by such fee. All fees shall be nonrefundable except, if the appellant prevails in an appeal to the assembly or if the appeal is withdrawn prior to commencement of the hearing, the appeal fee shall be refunded less \$25.00 and hearing officer expenses incurred to withdrawal.

(Serial No. 87-49, § 2, 1987)

49.85.140 Development, work, or use commencing before permit application or issuance.

- (a) Any development, work, or use for which a permit is required under this title, but for which no permit is applied for and issued prior to the commencement of the development, work, or use requiring the permit, shall be subject to processing fees in an amount double that specified in 49.85.100 for the permit.
- (b) The director may waive processing fees in excess of those listed in 49.85.100 upon a finding that processing the permit application will not require staff time and/or materials in excess of what would have been required to process the permit application if it had been applied for prior to commencing the development, work, or use.

(Serial No. 2009-04, § 2, 6-8-2009)

49.65.530 Standards.

- (a) Stores may be approved in each of the areas shown on the convenience store use area maps A—B.
- (b) Video rentals, a laundromat, and an automatic teller machine may be permitted as accessory uses. Automobile fuel sales may be permitted as an accessory use in locations with adequate space for queuing. The retail area for liquor sales may occupy no more than 50 percent of the gross floor area. Automotive service and exterior merchandising shall not be permitted. Drive-up window service may be permitted only if vehicle queues will not extend into adjacent streets.
- (c) Except as authorized by the bonus provisions of this article, gross floor area shall be limited to 3,000 square feet.
- (d) Vehicle access must be directly from an arterial or collector, and not from a local street.
- (e) Height shall be limited to one story except that a second story may be allowed for residential use and for accessory office and storage uses, provided that any storage use must relate directly to the primary permitted use.
- (f) The site perimeter and parking area shall be landscaped and screened with live material installed within ten months of the date of final construction permit approval or issuance of a certificate of occupancy, whichever is the later. The Commission may authorize on any bond or other security or collateral required pursuant to CBJ 49.15.330(g)(5) a provision specifying that the bond shall be forfeit if landscaping is not complete by the time required or if any plants dying within one year of installation are not replaced. Development abutting a lot zoned for residential use shall include landscaped strips or landscape boxes at least five feet wide unless the applicant demonstrates that a narrower landscape strip meets the intent of this section. The strips shall be covered with ground cover and shall be maintained throughout the year such that:
 - (1) On a property line shared with the residential lot the strip shall include a continuous shrub screen, fence, or both, six feet high and 95% opaque. The screen shall include one tree at least six feet high at installation per 30 lineal feet;
 - (2) On a property line adjacent to a street the strip shall include a continuous low shrub screen on a berm or other raised facility which is at least five feet wide, landscaped at a slope not greater than the natural angle of repose, and consistent with sight distance requirements for vehicle egress. The strip width may be reduced to not less than 18 inches to accommodate planter boxes and sight obscuring fences. The screen shall include one tree per 30 lineal feet;
 - (3) On all other property lines except those along driveways the strip shall include a continuous low shrub screen with one tree per 30 lineal feet at least six feet high at installation,
- (g) The minimum off-street parking requirement shall be one space per 250 square feet of gross floor area outside of the Town Center Parking District.
- (h) Exterior bear-resistant public litter cans shall be provided.
- (i) The exterior building appearance, including siding, roof line, windows, paint colors and building massing shall be compatible on all sides with surrounding uses.
- (j) Exterior lighting may not shed light or glare above the roofline of the building or beyond the property line of the site.

- (k) The building shall be set back from any property line shared with a residentially zoned parcel by a distance of 20 feet or the distance required by the underlying zoning district, whichever is greater.
- (l) No more than 80 percent of the lot shall be covered by an impervious surface.
- (m) The layout of the store shall provide for views from the cash register of bicycle racks, telephones, seating areas, and other exterior public amenities.
- (n) The parking lot shall be paved and striped with spaces and a circulation pattern.
- (o) Headlight glare shall not be permitted onto residentially-zoned lots adjacent to the site.
- (p) Liquor sales shall not be permitted from drive-in window(s).

(Serial No. 87-49, § 2, 1987; Serial No. 99-22, § 10, 1999; Serial No. 2004-09, § 3, 4-12-2004; Serial No. 2006-15, § 21, 6-5-2006)