

Agenda

Planning Commission - Regular Meeting City and Borough of Juneau

January 12, 2021
Virtual Meeting Only
7:00 PM

To join the webinar: <https://juneau.zoom.us/j/93626358724> Or Telephone: +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 929 436 2866 or +1 301 715 8592 or +1 312 626 6799 Webinar ID: 936 2635 8724

I. ROLL CALL

- A. Swearing In of Planning Commission Members

II. REQUEST FOR AGENDA CHANGES AND APPROVAL OF AGENDA

III. APPROVAL OF MINUTES

- A. December 8, 2020 Draft Minutes, Regular Planning Commission - APPROVED

IV. BRIEF REVIEW OF THE RULES FOR PUBLIC PARTICIPATION

V. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

VI. ITEMS FOR RECONSIDERATION

VII. CONSENT AGENDA

- A. USE2020 0024: Conditional Use Permit for a marijuana retail store - APPROVED ON CONSENT
- B. ARP2020 0001: Preliminary Plan Approval for an Alternative Residential Subdivision creating 15 lots - APPROVED WITH MODIFICATIONS
- C. SMP2020 0004: Preliminary Plat Approval for an Alternative Residential Subdivision creating 15 lots. - APPROVED WITH MODIFICATIONS
- D. SMF2020 0003: Modification of plat of Pederson Hill subdivision to eliminate restrictions on driveways on to Karl Reishus Blvd - NOT APPROVED
- E. CSP2020 0009: Complete street and underground utility maintenance (and replacements as necessary) on 4th Street, Delta Drive, and Tongass Boulevard - RECOMMENDED FOR APPROVAL TO THE CBJ ASSEMBLY
- F. CSP2020 0010: Resurface Vanderbilt Hill Rd from Glacier Hwy/Lemon Rd to Egan Dr - RECOMMENDED FOR APPROVAL TO THE CBJ ASSEMBLY

VIII. UNFINISHED BUSINESS

IX. REGULAR AGENDA

- A. CSP2020 0011: Complete street and underground utility maintenance (and replacements as necessary) on Calhoun Avenue - PLANNING COMMISSION VOTED TO BIFURCATE THE STREET CONSTRUCTION WAIVERS REQUEST FROM CSP2020 0011, AND SUBSEQUENTLY VOTED TO RECOMMEND DENIAL OF THE CALHOUN AVENUE RECONSTRUCTION PROJECT AND RECOMMEND FURTHER STUDY OF THE AREA. THE PLANNING COMMISSION DID NOT TAKE ACTION ON THE STREET CONSTRUCTION WAIVERS REQUEST.

X. BOARD OF ADJUSTMENT

XI. OTHER BUSINESS

- A. Planning Commission Committee Assignments

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 January 12, 2021 Planning Commission Meeting

XIX. ADJOURNMENT

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

Swearing In of Planning Commission Members

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

December 8, 2020 Draft Minutes, Regular Planning Commission - APPROVED

ATTACHMENTS:

	Description	Upload Date	Type
▣	December 8, 2020 Draft Minutes, Regular Planning Commission	12/30/2020	Minutes

Minutes
Planning Commission
Regular Meeting
 CITY AND BOROUGH OF JUNEAU
Michael LeVine, Chairman
 December 8, 2020

I. 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 7:07 p.m.

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

Commissioners absent: None

Staff present: Jill Maclean, CDD Director; Irene Gallion, CDD; Sherri Layne, LAW; Teresa Bowen, LAW

Assembly members: Loren Jones

II. REQUEST FOR AGENDA CHANGES AND APPROVAL OF AGENDA – No changes. Agenda approved.

III. APPROVAL OF MINUTES

- A. October 27, 2020 Draft Minutes – Planning Commission Regular Meeting
- B. November 10, 2020 Draft Minutes – Planning Commission Regular Meeting

MOTION: *by Mr. Voelckers to approve the Planning Commission Regular Meeting October 27, 2020 and November 10, 2020 minutes.*

The motion passed with no objection

IV. BRIEF REVIEW OF THE RULES FOR PUBLIC PARTICIPATION – Chairman LeVine explained the process and rules for public participation.

V. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS - None**VI. ITEMS FOR RECONSIDERATION – None****VII. CONSENT AGENDA**

USE2020 0022: Special Use Permit for a new marijuana retail store
Applicant: Alaskan Coffee Pot
Location: 2221 Dunn St.

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit. The permit would allow the development of a new marijuana retail store in the Light Commercial zoning district.

The approval is subject to the following conditions:

1. Condition: Prior to issuance of a building permit for the proposed retail facility, a shared use parking agreement must be approved by the Community Development Department, and recorded with the State Recorder's Office. The parking agreement must state that it may be nullified only when the Community Development Director has approved the nullification of the agreement on an instrument that is recorded with the State Recorder's Office. Alternatively, the applicant may submit a revised parking plan demonstrating compliance with CBJ 49.40.
2. Condition: Prior to the issuance of a temporary certificate of occupancy, the applicant shall install screening to ensure no marijuana product is visible to the general public from the right-of-way.
3. Prior to operation the applicant must receive the required State License; by approval 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 State License, including if the facility is within 500 feet of a school.
4. All waste containing marijuana product shall be stored in a locked enclosure until transported to the CBJ landfill.
5. On-site consumption of marijuana products is not allowed. The applicant shall post signage within the coffee shop area stating that marijuana products shall not be consumed on-site.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2020 0022.*

The motion passed with no objection.

USE2020 0023: Conditional Use Permit for an accessory apartment on an undersized lot
Applicant: Jay Hubbard
Location: 753 St. Ann's Ave.

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 an accessory apartment on an undersized lot at 753 St. Ann's Avenue in a D5 zone.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and approve USE2020 0023.*

The motion passed with no objection.

VIII. UNFINISHED BUSINESS – None

IX. REGULAR AGENDA

CSP2020 0008: Rehabilitation of Goodwin Road from Blueberry Hill Road to the end, including full water replacement, and partial sewer replacement
Applicant: City and Borough of Juneau
Location: Goodwin Road from Blueberry Hill Road to the end

Staff Recommendation

Staff recommends the Planning Commission adopt the Director's analysis and findings and forward a recommendation of APPROVAL to the CBJ Assembly for the Goodwin Road Reconstruction (Blueberry Hills subdivision).

Ms. Gallion presented CSP2020 00008.

Questions for Staff

Mr. Voelckers noted the photos show an area used for parking in the summer months and asked if there was any signage or what happens in the winter and if plowing encroaches on the ability to park.

Ms. Gallion did not see any signage when she was out there and said basically the snow is pushed to the side of the road but not quite over the curb.

Mr. Pedersen asked if there is an Engineer's estimated cost for the project.

Mr. Dye answered it is \$550,000 according to the packet documentation.

APPLICANT PRESENTATION

Mr. Bohan, CBJ Engineering, spoke to the project and said the total project costs will be closer to just under \$1,000,000. The sloughing and structural issues described in the Staff report are essentially long-term settlement issues that come from the development of the initial subdivision. Those will be reduced as time goes on. As CBJ rebuilds the road base, the settlement will be reduced. The goal was to narrow the roadway and provide a buffer along the slope. He added they can build the road full width or narrowed as in their original plan. They had no concerns either way.

Questions for Applicant

Mr. Hickok asked what concerns were brought up by the neighbors and if the Applicant had addressed the concerns. Mr. Bohan answered the only issue brought up by the public was solely regarding the narrowing of the road.

Mr. Voelckers stated the drawings show the road narrower than what will be voted on. Ms. Gallion noted the revised drawings are available on the agenda website.

Public Testimony – None

Additional Applicant Comments –

Mr. Alper asked for clarification as to what increased the project cost from \$550,000 to nearly a \$1 Million and whether that related to the widening/narrowing of the roadway. Mr. Bohan answered that the original estimate was just a guesstimate and when they acquired more information, they were able to make more accurate final estimations.

Mr. Alper noted the lack of public testimony and asked if that indicated they were in agreement with the project. Mr. Bohan answered in the affirmative saying that his staff had reached out to the neighborhood and they had no objection to the project.

Mr. Dye asked for an update about the difference between the \$1.2 million budget request compared to the nearly a million Mr. Bohan had described. Mr. Bohan explained the \$1.2M leaves room for contingencies, planning, design, and the other estimate was limited to construction.

MOTION: *by Mr. Dye to accept staff's findings, analysis and recommendations and APPROVE CSP2020 0008.*

The motion passed with no objection.

X. BOARD OF ADJUSTMENT – None

XI. OTHER BUSINESS –

Mr. LeVine explained there are three appeals before the Commission and asked Ms. Bowen, Department of Law, to present them and explain to the members the process.

1. APL2020 0004 (1510 Second Street) NCC2020-0067
2. APL2020 0005 (1508 Third Street) NCC2020-0065
3. APL2020 0006 (1506 Second Street) NCC2020-0066

Mr. Alper asked why these were appealed. Mr. LeVine answered the issue is with the number of units in each of the structures. The number of units was not deemed non-conforming and that is the substance of the appeal.

Mr. Alper asked for confirmation that the origin of the application was a non-conforming application and attempt to use a relatively new ordinance to declare something that existed a non-conforming legitimate use. Mr. LeVine agreed.

MOTION: *by Mr. Dye to accept APL2020 0004 and hear it on the record and appoint Mr. Hickok Hearing Officer.*

Mr. Dye explained he did not think it needed to go to a trial setting because the appeal is about how the decision was made, and specifically the questions raised in the appeal about records. He felt that reviewing that and compiling the record would best. He added the application appeared to be complete.

The motion passed unanimously on a Roll Call Vote.

MOTION: *by Mr. Dye to accept APL2020 0004 and hear it on the record and appoint Mr. Hickok Hearing Officer for the same reasons as given in previous motion.*

The motion passed with no objection.

MOTION: *by Mr. Dye to accept APL2020 0006 and hear it on the record and appoint Mr. Hickok Hearing Officer for the same reasons as given in previous motion.*

The motion passed with no objection.

XII. STAFF REPORTS

Ms. Maclean reported

- Douglas Area Plan Meeting Thursday 5 o'clock via Zoom
- December 22 meeting is cancelled

- January meetings will be busy
- Working with LAW to schedule a Commissioner training for January or February
- Flood plain Ordinance will come forward early in the new year
- First Alternative Residential Subdivision will be coming before the Commission January 12. This is a new process.

Mr. Voelckers asked for the status of a meeting for Auke Bay. Ms. Maclean answered there is a meeting scheduled for December 15.

Mr. Eiler asked the status of the Urban Agriculture (Chicken) initiative. Ms. Maclean answered that it had fallen behind with other priorities and then with COVID and all that's happening, it is something that could be discussed and determine its priority after the new year.

Mr. Voelckers asked if there was a reason why there seemed to be a spate of appeals lately. Ms. Maclean said some reasons for appeals could be because there may be a misunderstanding of the appeal process. She sees a misperception that people think the Commission can overturn a Director decision. In actuality, the Commission can only overturn a decision if they determine the Director misinterpreted Code in some way. Additionally, appeals are relatively inexpensive. If an applicant's permit is denied, they can appeal for \$150. Mr. LeVine added that it seems the number of appeals tracks with the number of permits they see.

Mr. Dye requested Staff provide to Commissioners a supplemental package that included the ordinance language prior to the Auke Bay meeting next week so they can have it easily accessible.

XIII. COMMITTEE REPORTS

Mr. Voelckers reported Public Works & Facilities met yesterday. During the meeting, they discussed consolidating JAHG and Centennial Hall into a shared facility. Will meet in January to set priorities for the coming year.

Mr. Hickok reported Lands Committee met yesterday. Discussion included changing the committee to "Lands and Economic Development Committee".

Mr. Pedersen reported JCOS met and main topics discussed included Public communication regarding Waste Management and CBJ energy costs. South Douglas/West Juneau area plan will meet Thursday to discuss zoning and Land use. Mr. Voelckers asked if there has been discussion regarding thermal requirements for construction. Mr. Pedersen said there has not.

Mr. Dye reported Parking will be discussed at the Title 49 meeting next week.

Mr. Dye reported Blueprint met on November 19

XIV. LIAISON REPORTS

Assembly Liaison Loren Jones reported at the Assembly retreat last month, the assembly discussed their goals going forward. The goals were not changed but the strategies for addressing them were updated.

Mr. Voelckers asked if Mr. Jones felt that the Planning Commission had effectively communicated their information to the Assembly. Mr. Jones said he was not sure. He stated it is a challenge to read people via Zoom format. He mentioned that he does encourage other Assembly members to attend Planning Commission meetings so they can develop an understanding of the Commission's work.

XV. CONTINUATION OF PUBLIC PARTICIPATION ON NON-AGENDA ITEMS – None**XVI. PLANNING COMMISSION COMMENTS AND QUESTIONS**

Mr. Pedersen commented that he has observed that the way CBJ Code is written, the CBJ is taking on a lot of liability for infrastructure. The application heard today is \$1 Million directly servicing only five homes and that seems very expensive.

Mr. Alper noted that the project taken up at this meeting was a repair on a not very old road and he wondered if this was substandard workmanship. If so, is there any recourse to the original contractor?

Mr. LeVine noted that while these are good questions to get on the record, they are not necessarily within the purview of the Planning Commission.

XVII. EXECUTIVE SESSION – None**XVIII. ADJOURNMENT – 8:18pm**

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

USE2020 0024: Conditional Use Permit for a marijuana retail store - APPROVED ON CONSENT

AGENDA ITEM:

Case No.: USE2020 0024

Applicant: The Mason Jar LLC

Location: 613 & 619 W. Willoughby Ave.

Proposal: Conditional Use Permit for a marijuana retail store

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit. The permit would allow the development of a marijuana retail facility.

The approval is subject to 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 the issuance of a temporary certificate of occupancy, the applicant shall install screening to ensure no marijuana product is visible to the general public from the right-of-way.
3. Prior to operation, the applicant must receive the required State License; by approval 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 State License, including if the facility is within 500 feet of a school.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for USE2020 0024	1/6/2021	Staff Report
☐ Notice of Decision for USE2020 0024	1/21/2021	Notice of Decision



(907) 586-0715
CDD_Admin@juneau.org
www.juneau.org/CDD

155 S. Seward Street • Juneau, AK 99801

DATE: January 6, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Joseph Meyers, Planner I 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a Special Use Permit for a marijuana retail facility.

STAFF RECOMMENDATION: Approval with conditions.

KEY CONSIDERATIONS FOR REVIEW:

- On-site consumption of marijuana is not proposed.
- Proposed marijuana facility is within an existing building.
- Marijuana retail is a permissible use in the Mixed Use 2 (MU2) zoning district.
- Proposed marijuana retail facility is not within 500 feet of a school, church, or daycare facility.

GENERAL INFORMATION	
Property Owner	Juneau Foodland LLC
Applicant	The Mason Jar LLC
Property Address	613 & 619 W. Willoughby Ave.
Legal Description	Tidelands Addition, Block 66, Lots 11, 12 Fraction, 14 – 20, 22 – 25 Fraction
Parcel Number	1C060K660090
Zoning	Mixed-Use 2 (MU2)
Land Use Designation	Commercial
Lot Size	238,137 sq. ft.
Water/Sewer	CBJ
Access	West Willoughby Avenue
Existing Land Use	Shopping Center
Associated Applications	N/A

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:

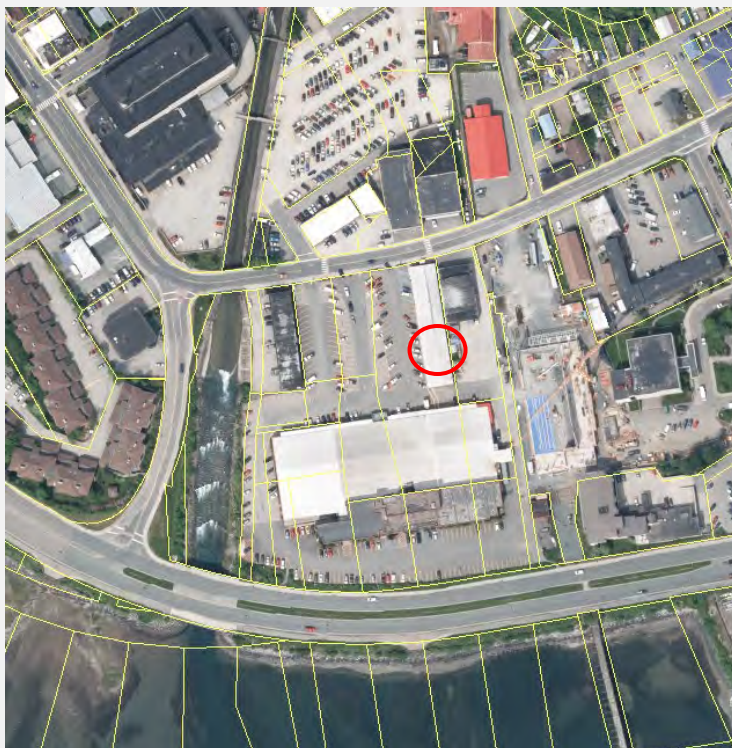
Assembly action is not required for this permit.

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	
North (MU2)	Commercial
South (MU2)	Commercial
East (MU2)	Commercial
West (MU2)	Commercial

SITE FEATURES	
Anadromous	None
Flood Zone	None
Hazard	None
Hillside	None
Wetlands	None
Parking District	PD1
Historic District	None
Overlay Districts	Fee-in-Lieu Parking District

BACKGROUND INFORMATION

Project Description – The applicant requests special use permit for a marijuana retail facility in an MU2 zoning district. The proposed marijuana retail facility is within an existing building and measures approximately 1,711 square feet.

A floor plan, project narrative, and site plan can be found in Attachment A.

Background – Prior to 1943 the Tidelands Addition, Lot 66 was a tidal flat east of Auke Village (Lingít Aaní) where West Willoughby Avenue passes the Foodland shopping center. An original map of the area from 1932 shows the Juneau Townsite prior to the Tidelands Addition being infilled. In 1943, the section of the tidal flat where this lot is located, east of West Willoughby Avenue, was filled with waste material from the Alaska Juneau Gold Mine – creating the current geographic configuration. The lot was platted in 1962 as Tidelands Addition to Juneau Townsite, Block 66 (Attachment B).

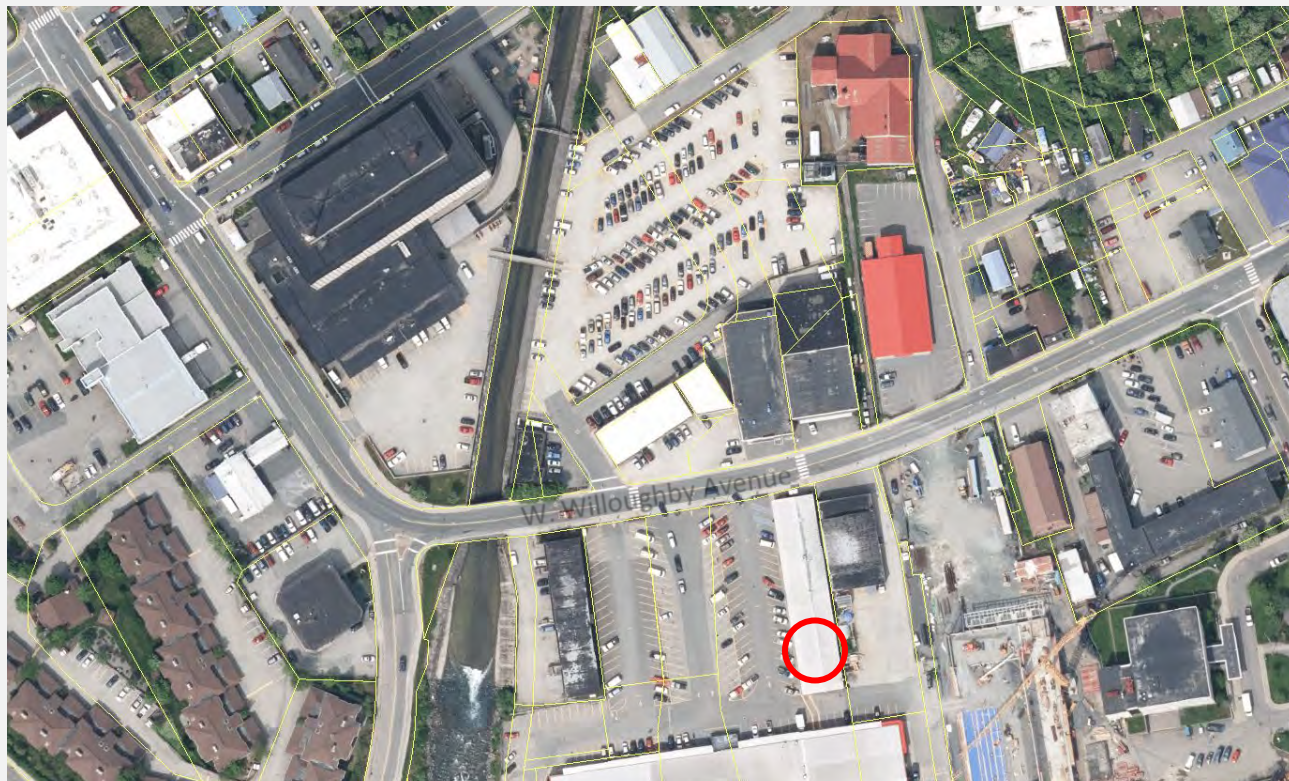
The table below summarizes relevant history for the lot and proposed development.

Item	Summary
Map (1932)	Demonstrate area prior to fill in 1943
Plat (1962)	Shows plat of Tidelands Addition, Block 66 prior to construction of current complex

ZONING REQUIREMENTS

Standard		Requirement (MU2)	Existing (No Change)	Code Reference
Lot	Size	4,000 sq. ft.	238,137 sq. ft.	49.25.400
	Width	50 ft.	559 ft.	49.25.400
	Depth	80 ft.	567 ft.	49.25.400
Setbacks	Front	5 ft.	5 ft.	49.25.400
	Rear	5 ft.	5 ft.	49.25.400
	Side	5 ft.	5 ft.	49.25.400
	Side	5 ft.	5 ft.	49.25.400
	Street Side	5 ft.	N/A	49.25.400
Lot Coverage Maximum		80%	80%	49.25.400
Vegetative Cover Minimum		5%	5%	49.50.300
Height	Permissible	45 ft.	Single-story building	49.25.400
	Accessory	35 ft.	N/A	49.25.400
Maximum Dwelling Units (80/acre)		437	None	49.25.500

SITE PLAN



ANALYSIS

Project Site – The proposed marijuana retail facility will be located in the Foodland shopping center with access via W. Willoughby Avenue. The existing building is currently developed as a single-story, multi-unit retail structure in a strip-mall style setting; renovations will be within the existing building.

Note that the Gold Creek Child Development Center is over 1,500 feet from the proposed marijuana retail facility location, and the Salvation Army has a Church 500 feet away. Both of these facilities meet the State of Alaska's required minimum distance from a marijuana facility.

The State of Alaska requires marijuana establishments be located more than 500 feet from a *"school ground, a recreation or youth center, a building in which religious services are regularly conducted, or a correctional facility"* [3 AAC 306.010(a)]. The State of Alaska does not have a definition of "school ground," nor does Title 49. As this is a State Regulation, CBJ is not taking a position on whether or not this regulation is met and recommends the following condition of approval:

Condition: Prior to operation, the applicant must receive the required State License; by approval 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 State License, including if the facility is within 500 feet of a school.

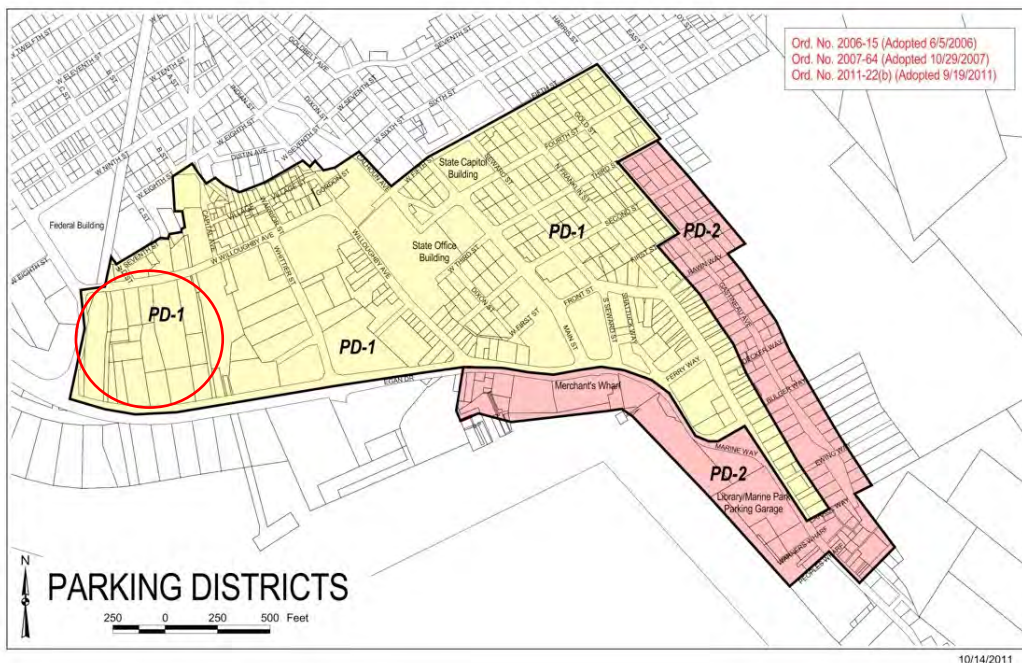
Project Design – Floor plans for retail facility may be found in Attachment A. The applicant proposes approximately 1,000 square feet of retail area with additional square footage dedicated to packaging and storage of products, and restrooms.

At this time, on-site consumption of edible marijuana products is not proposed. Under this application, the facility is not permitted to serve edible marijuana products. An endorsement for on-site consumption has not been applied for from CBJ, nor the State Alcohol and Marijuana Control Board.

Traffic – According to CBJ 49.40.300(2) a traffic impact analysis IS NOT required.

Use	Total Sq. Ft.	Trips Generated	Total Trips
Specialty Retail	1,711	44.32 per 1000 sq. ft.	75.83
Total ADTs:			75.83

Vehicle Parking & Circulation – According to CBJ 49.40.210, six (6) off-street parking spaces are required, including one (1) ADA accessible space. Parking was established for the Foodland shopping center during development, and includes spaces serving this proposed use. The parcel is located in the PD1 Parking District [CBJ 49.40.210(d)(1)]. Parking requirements to not apply to existing buildings in the PD1 zoning district, unless the building is expanded.



Non-motorized Transportation – Willoughby Avenue has sidewalks on both sides of the street. There is a sidewalk along the front side of the proposed marijuana retail facility connecting with the sidewalk on the southern edge of W. Willoughby Avenue.

Proximity to Transit – The site has two (2) bus stops the north edge along Willoughby Avenue. These are approximately two-hundred feet from the proposed retail facility.

Noise – Noise is not expected to be out of character with the existing neighborhood. The surrounding area contains a mixture of residential and commercial uses.

Lighting – No new lighting is proposed. The site currently meets all lighting requirements under current zoning. This will be verified during building permit review.

Vegetative Cover & Landscaping – Vegetative cover area was calculated using aerial imagery of the site and meets minimum requirements under current zoning.

Habitat – No known habitats regulated by the land use code exist on the site. The Gold Creek Protection Zone is across Egan Drive from the site and is an anadromous waterbody.

Drainage and Snow Storage – No changes to drainage or snow storage are requested. Renovations will be within the existing building. This will be verified during building permit review.

Hazard Zones – There are no known hazard zones on the site.

Public Health, Safety, and Welfare – No information has been submitted that suggests the proposed marijuana retail facility will materially endanger the public health, safety, or welfare.

Property Value or Neighborhood Harmony – The marijuana retail facility is comparable to previous and other uses along this section of Willoughby Avenue and the shopping center complex. The marijuana retail facility is

not expected to generate more noise than other retail uses in the area, and traffic is not anticipated to cause significant impacts. The marijuana retail facility does not include manufacturing, cultivation, or on-site consumption.

SPECIFIED USE REVIEW - CBJ 49.65 ARTICLE XI – MARIJUANA ESTABLISHMENTS

Topic and Code Reference	Summary	Complies	Recommended Condition
49.65.1245(a)(1) Site Plan and Floor Plans	The applicant has submitted a site plan and floor plan, found in Attachment A. Floor plans include areas that are restricted and areas that will be open to the public.	☒ Yes ☐ No ☐ N/A	
49.65.1245(a)(2) Security Plan	The applicant has submitted a security plan showing the location of the fifteen security cameras (Attachment A). There are cameras located on each exterior door and within the interior of the building.	☒ Yes ☐ No ☐ N/A	
49.65.1245(a)(3) Waste Disposal	The applicant has submitted a waste disposal plan describing how they will dispose of marijuana waste.	☒ Yes ☐ No ☐ N/A	Condition: All waste containing marijuana product shall be stored in a locked enclosure until transported to the CBJ landfill.
49.65.1245(a)(4) Screening	Applicant has submitted a plan for screening marijuana product from the right-of-way. Applicant intends to line the windows with decorative vinyl.	☒ Yes ☐ No ☐ N/A	Condition: Prior to the issuance of a temporary certificate of occupancy, the applicant shall install screening to ensure no marijuana product is visible to the general public from the right-of-way.
49.65.1245(a)(5) Septic System	Public utilities are provided.	☐ Yes ☐ No ☒ N/A	
49.65.1245(a)(6) and 49.65.1260 Ventilation and Odor Control	All marijuana establishments shall utilize a system which prohibits the detection of noxious odors from outside the licensed premises. This requires the level of odor to be below a threshold <i>‘that a reasonable person of ordinary sensibilities would find negatively affects the person’s enjoyment of life, health or property.’</i>	☐ Yes ☐ No ☒ N/A	

Topic and Code Reference	Summary	Complies	Recommended Condition
	Odor is primarily a concern with marijuana cultivation. Retail operations are not required to submit a ventilation and filtration plan with the special use application. Most marijuana products sold at retail are packaged. Marijuana retail establishments typically have small amounts of marijuana enclosed in containers for customers to smell. It is expected that there will be no odor discernable from outside the building.		
49.65.1245(a)(7) Manufacturing Method or Cultivation Method	No manufacturing or cultivation is proposed.	☐ Yes ☐ No ☒ N/A	
49.65.1245(a)(8) Fungicides, pesticides, fertilizers, and harmful molds	No manufacturing or cultivation is proposed.	☐ Yes ☐ No ☒ N/A	
49.65.1245(a)(9) Other	Not applicable.	☐ Yes ☐ No ☒ N/A	
49.65.1265(a) Owner/manager must live on site (D1 zoning district)	Not applicable. The lot is in the MU2 zoning district.	☐ Yes ☐ No ☒ N/A	
49.65.1265(b) Setback required (D1 zoning district)	Not applicable. The lot is in the MU2 zoning district.	☐ Yes ☐ No ☒ N/A	
42.20.230(b)(4) and 36.60.030(a)(2) On-site consumption	Not applicable. Applicant did apply for a permit for onsite consumption.	☐ Yes ☐ No ☒ N/A	

Requirements Applicable to All Marijuana Establishments – The code requirements listed in the table below apply to all marijuana establishments.

Code Reference	Requirement
49.65.1245(d) State license required	Prior to operation, the applicant shall submit a complete copy of the applicant's approved state license application to the department for review. If the director determines there are substantive inconsistencies between the state license application and the special use permit application, the commission shall review the development for consistency with Title 49.
49.65.1245(e) Commission review required	The requested special use permit 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. If an appeal challenging the amendments to a special use permit is filed, the new conditions shall be stayed and the existing permit shall govern the operations of the marijuana establishment until the conclusion of the appeal. The scope of review on appeal is restricted solely to the amended conditions.
49.65.1250 Hours of operation - retail	Unless otherwise specified by a special use permit, licensed premises may not be open between the hours of 1:00 a.m. and 8:00 a.m., Monday through Sunday. No marijuana may be distributed, sold or dispensed at a licensed premises when the licensed premises is required to be closed.
49.65.1255 Documents displayed	Prior to operating, the applicant shall display the original CBJ license and required health warnings in accordance with CBJ 49.65.1255. The signs must be displayed in conspicuous locations inside the licensed premises near the main entrance.

AGENCY REVIEW

CDD conducted an agency review comment period between December 7, 2020 and December 22, 2020. Agency review comments can be found in Attachment C.

Agency	Summary
CBJ General Engineering	No comments on plan as proposed.
CCFR	No comments on plan as proposed.
CBJ Assessor	No comments on plan as proposed.

PUBLIC COMMENTS

CDD conducted a public comment period between December 10, 2020 and December 21, 2020. 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 D.

Name	Summary
Dr. Emily Kane, ND	Submitted comments in support of this development.
William Bauer	Submitted comments in support of this development.

CONFORMITY WITH ADOPTED PLANS

The proposed development is in general conformity with the 2013 Comprehensive Plan.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	11	163	Land Use Designation	Complies with the Traditional Town Center land use designation.
	5	47	Policy 5.1	Proposed development promotes a diverse economy.
	5	58	Policy 5.11	Proposed development will provide year round employment and provide tax revenue to support public services.

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 special 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 a marijuana retail facility. The use is listed at CBJ 49.25.300, Section 2.300 for the MU2.

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 Title 49.

Finding: Yes. With the recommended conditions, the proposed development will comply with Title 49, Including: parking, lighting, vegetative cover, and provisions for marijuana establishments listed in CBJ 49.65.

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

Analysis: No additional analysis needed.

Finding: No. There is no evidence to suggest that with appropriate conditions, the requested marijuana retail facility, in an MU2 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: The CBJ Assessor did not make comment on the proposed development.

Finding: No. There is no evidence to suggest that with appropriate conditions, the requested marijuana retail facility, in an MU2 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: Policies in the Comprehensive Plan support diverse economic development. Additionally, the proposed use complies with the Commercial land use designation.

Finding: Yes. The proposed marijuana retail facility with the recommended conditions will be in general conformity with the 2013 Comprehensive Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and APPROVE the requested Special Use Permit. The permit would allow the development of a marijuana retail facility.

The approval is subject to 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 the issuance of a temporary certificate of occupancy, the applicant shall install screening to ensure no marijuana product is visible to the general public from the right-of-way.
3. Prior to operation, the applicant must receive the required State License; by approval 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 State License, including if the facility is within 500 feet of a school.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Reviewed Materials
Attachment C	Agency Comments
Attachment D	Public Comments
Attachment E	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.

Physical Address 613 & 619 W. Willoughby Ave.		
Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) Tidelands Addition 66 LT 11, 12 FR, 14-20, 22-25 FR		
Parcel Number(s) 1C060K680090		
☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
Property Owner Juneau Foodland, LLC	Contact Person Tyler Myers	Phone Number(s) 206-335-2287
Mailing Address P.O. Box 229 Clinton, WA 98236		
E-mail Address tyler@myersgroupinc.com		
LANDOWNER/ LESSEE CONSENT Required for Planning Permits, not needed on Building/ Engineering Permits		
I am (we are) the owner(s) (or agent(s)) of the property subject to this application and I (we) consent as follows:		
A. This application for 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>11-17-2020</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 The Mason Jar, LLC	Contact Person Dennis Lavigne	Phone Number(s) 907-723-6508
Mailing Address P.O. Box 35264, Juneau, AK 99803		
E-mail Address denny@akmasonjar.com		
X		<u>11-17-20</u> 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
USE20200024

Intake Initials
11/25/2020
Date Received 11/25/20



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	
Application for a 1,711 square foot marijuana retail store at the Foodland Shopping Center.	
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 Marijuana Retail Store</u>	
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 <u>238,137</u> square feet	Total Area of Existing Structure(s) <u>8,165</u> square feet
Total Area of Proposed Structure(s) <u>1,711</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)	
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	

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

ALLOWABLE/CONDITIONAL USE FEES		Check No.	Receipt	Date
	Fees			
Application Fees	\$ <u>500.00</u>			
Admin. of Guarantee	\$ _____			
Adjustment	\$ <u>50</u>			
Pub. Not. Sign Fee	\$ <u>100</u>			
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
USE20200024	11/25/20

The Mason Jar, LLC
P.O. Box 35264
Juneau, AK 99803

Project Narrative

The proposed project is a 1,711 square foot marijuana retail store at the Foodland Shopping Center. The proposed site is an existing strip mall-style building. The unit addresses are 613 & 619 W. Willoughby Avenue. These two neighboring units will be combined to make one retail space. Other tenants of the shopping center are as listed in **Attachment A**.

Utilities

All utilities for the proposed site of the retail store will be city provided.

Hours of Operation

Proposed hours of operation are Sunday-Thursday 9 am to 9 pm and Friday-Saturday 9 am to 10 pm.

Signage

Exterior signage will include one sign placed above the main entrance. It will be illuminated, but not in such a way to negatively impact neighboring businesses. It will not exceed the size limits as required by CBJ.

Employees

The store will be operated by two employees at a time. Employees will have marijuana handling and food worker certifications as required by the State of Alaska.

Waste Disposal

Our marijuana packaging process creates small amounts of waste in the form of leaf, trim, and stems. Expired marijuana product is also considered waste. All waste will be recorded in a log book as well as the marijuana inventory tracking system (METRC) and stored in a designated bin in a secure packaging room. Before any waste is processed for disposal, AMCO will be notified via form MJ-25 Waste Disposal Notice no later than three days prior to making the waste unusable and disposing of it. Processing the waste for disposal involves grinding and mixing the waste with an equal ratio of compostable or non-compostable materials per Alaska Administrative Code: 3 AAC 306.740, and placed in a garbage container for pickup and transport to the CBJ landfill.

Screening Plan

To be in compliance with AS 17.38.070, which makes it unlawful to display marijuana or marijuana products in a manner that is visible to the general public from a public right-of-way, all doors and windows will be lined with a non-transparent adhesive material to completely obscure the view into the retail store from the outside.

CO2/Smoke Detectors

The proposed unit for the retail store will have the required CO2 and smoke alarms to be in compliance with local and state regulations.

Security

The unit's security system will include commercial door hardware, surveillance cameras, and an alarm system to be installed by Doak's Lock & Key and monitored by LJ Alarm Monitoring. The alarm system will include motion sensors in the store during non-business hours. There will be alarm sensors on the door and window. A keypad will be installed to activate/deactivate the alarm system. A security gate will be installed in front of the main entrance if allowed by the property manager.

Cameras will be placed at the interior and exterior of the entrance of the retail unit with an unobstructed view of the entrance. Camera placement is specified on **Attachment B**. Cameras will be placed throughout the retail space (in the main retail area and the safe/package room). Cameras will be placed so that there is a clear view of the primary entrance to each area. Cameras will monitor all regular activity with unobstructed views. This will allow for the clear identification of any person and activity in the areas where marijuana is present. Video recording equipment will be housed in a locked area on site. Surveillance cameras will operate 24/7 and have the capability to hold 40 days' worth of footage. The video footage will be archived in a format that does not permit alteration of the recording images. All video surveillance will clearly and accurately display the time and date of recording. It will be surge- and power outage-protected as to not interrupt the recording.

CBJ Comprehensive Plan

The proposed use complies with the CBJ Comprehensive Plan by supporting economic development. This marijuana retail store location will create approximately ten new jobs. Also, by providing an in-demand retail option to the people of Juneau, the business expects to collect a sizeable amount of sales tax for CBJ.

Plans

- A. Floor Plan – **Attachment B**
 Site Plan – **Attachment C**
 Elevation View – **Attachment C**
- B. The retail space is located in a shopping center with a large parking lot. There is no assigned parking for each business, but there are more than enough spaces available to accommodate all the businesses in the area. ADA accessible parking spaces are available.
- C. Traffic to and from the shopping center is via one street (Willoughby Avenue) with clearly marked entrances and exits.
- D. No new exterior lighting is proposed.

- E. No new vegetation is proposed.
- F. There are no applicable existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.).

Attachment A

Unit	Tenant
302	Admiralty Environmental
207	Athletic Club Partners LLC
603	Capital Hair and Nails LLC
607	Dominos Pizza
605	First Bank
601	Hesson & Deakins Inc.
204	John Laskey DDS
609	Juneau Montessori
621	Kenny's Liquor
617	Mar y Sol
611	Vacant (former Juno Fro Yo)
201-202	SE Medical Clinic

Floor, security, and lighting plans are on file with CDD.

Floor, security, and lighting plans are on file with CDD.

Floor, security, and lighting plans are on file with CDD.

Elevation View of Existing Buildings





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

Mason Jar – Foodland Location

Case Number: PAC20200045

Applicant: The Mason Jar: Dennis Lavigne

Property Owner: Juneau Foodland LLC

Property Address: 611 W Willoughby Avenue

Parcel Code Number: 1C060K660090

Site Size: Multiple lots, 238,137 square feet (5.47 acres)

Zoning: Mixed Use 2

Existing Land Use: Restaurant (vacant)

Conference Date: July 15, 2020

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.

Dennis Lavigne	Applicant	denny@akmasonjar.com
Irene Gallion	Planning	irene.gallion@juneau.org
Charlie Ford	Building	charlie.ford@juneau.org
Adrienne Scott	Permit Tech	adrienne.scott@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.

NOTE: This proposal is for an established building. Dimensional standards are established, but listed below for situational awareness.

Project Summary: Application for 919 square foot marijuana retail store at the Foodland Shopping Center. The entrance door will be moved 8-10 feet to the right as you are facing the building in order to meet 500 foot door-to-door distance required under state regulations.

CBJ defers to the state on standards for meeting their regulatory requirements.

ATTACHED are CBJ regulations regarding Marijuana Establishments. To operate, the applicant must have:

- o A conditional use permit from CBJ
- o A valid license from CBJ
- o A valid license from the State of Alaska

Planning Division

1. **Zoning** – The site is zoned Mixed Use 2 (MU2). It is in the PD1 parking district.
2. **Setbacks** –
 - a. Front: 5'
 - b. Side: 5'
 - c. Rear: 5'
 - d. This proposal is for an established building. Setbacks are already established.
3. **Height** – 45' for primary use, 35' for accessory use. This proposal is for an established building. Height is already established.
4. **Access** – Via Willoughby Avenue to the Foodland parking lot.
5. **Parking & Circulation**–The building is located in the PD1 downtown parking district. Regulations for PD1 only require that on-site parking be provided when a new building is constructed or for an addition to an existing building. The proposed on-site marijuana use will be located within an existing building. There is no parking requirement associated with this proposed use.
6. **Lot Coverage** – 80%
7. **Vegetative Coverage** – 5%
8. **Lighting** – No new exterior lighting is being proposed with this project.
9. **Noise** – This project is not expected to increase the noise level currently associated with the marijuana retail shop.
10. **Flood** – Area of Minimal Flood Hazard (Zone X)
11. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – Not applicable.
12. **Wetlands** – None.

Pre-Application Conference Final Report

13. **Habitat** – Not applicable.
14. **Plat or Covenant Restrictions** – None found.
15. **Traffic** – The addition of marijuana retail is not expected to significantly increase the amount of foot or vehicular traffic.
16. **Nonconforming situations** – There are no nonconforming situations known.

Building Division

17. **Building** – Building issues will be addressed at time of building permit application. A floor plain detailing ADA requirements for public areas will be required.
18. **Outstanding Permits** – N/A

General Engineering/Public Works

19. **Engineering** – N/A
20. **Drainage** – N/A
21. **Utilities** – (water, power, sewer, etc.) N/A

Fire Marshal

22. **Fire Items/Access** – No comments at this time. Fire will review plans when building permit application is submitted.

Other Applicable Agency Review

23. 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. Development Permit Application, <https://beta.juneau.org/index.php?gf-download=2019%2F12%2FDPA.pdf&form-id=22&field-id=11&hash=81202ef96484e0b859d1c4855a6b7ae4b18cb229e8824059dbb0d96082e74d6d>
2. Conditional Use Permit Application, <https://beta.juneau.org/index.php?gf-download=2019%2F07%2FUSE-Allowable-Conditional-Use.pdf&form-id=22&field-id=11&hash=1f4082f939f72daa29a17b66188d1bf0f634352cc2ca2397485edbab5a3d366d>
3. After the Conditional Use Permit and State license are in hand, you'll apply for a CBJ Marijuana Establishment License, https://beta.juneau.org/index.php?gf-download=2019%2F12%2FApplication_Marijuana-Establishment-License.pdf&form-id=22&field-id=11&hash=de577d55d5cc6cc74ef9a656055dd7c0400659de1fc6b877f085265b6a162905
4. Building permit application <https://beta.juneau.org/community-development/permit-application>

Additional Submittal Requirements

Pre-Application Conference Final Report

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. A site plan, including lot layout and floor plan.
3. Security plan.
4. Waste disposal plan.
5. Screening plan.

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)

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. Commercial use less than 10,000 square feet: \$500
2. Marijuana license: \$250
3. Building permit fees will be determined at time of application

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

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

ATTACHMENTS:

CBJ 49.65 Article XI: Marijuana Establishments
 CBJ 49.15.330: Conditional Use Permit

ARTICLE XI. - MARIJUANA ESTABLISHMENTS^[4]

Footnotes:

--- (4) ---

Editor's note— Sec. 2 of Serial No. 2015-38(b)(am), adopted May 2, 2016, enacted provisions to be designated as Art. X, §§ 49.65.1100—49.65.1170. Inasmuch as there already exists an Art. X, §§ 49.65.1100, 49.65.1120, said new provisions have redesignated as Art. XI, §§ 49.65.1200—49.65.1270, per City's instructions. Original section designations have been maintained in the history notes following each section.

49.65.1200 - Purpose.

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.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1100\), 5-2-2016, eff. 6-2-2016](#))

49.65.1205 - License required.

- (a) No person may operate a marijuana establishment within the City and Borough without a conditional use permit, a valid license issued by the City and Borough, and a valid license issued by the State of Alaska. The following types of licenses may be issued under this article:
 - (1) Marijuana retail store license;
 - (2) Marijuana cultivation facility license;
 - (3) Marijuana product manufacturing facility license; and
 - (4) Marijuana testing facility license.
- (b) A separate license shall be required for each specific business or business entity or for each specific location identified on the license as the licensed premise.
- (c) Upon denial or revocation of a marijuana establishment license issued by the State of Alaska, any license issued by the City and Borough under this article shall be null and void. If a court of competent jurisdiction determines that the issuance of local licenses violates State or federal law, all licenses issued under this article shall be deemed immediately revoked by operation of law, with no grounds for appeal or redress on behalf of the licensee.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1105\), 5-2-2016, eff. 6-2-2016](#))

49.65.1210 - Prohibited acts.

- (a) It is unlawful for any licensee to engage in business contrary to any term or condition of any City and Borough of Juneau marijuana establishment license or any provision of this article.
- (b) It is unlawful for any person to obtain or attempt to obtain a license by making a false statement in any application for a license, or by any other fraudulent or deceptive means.

- (c) It is unlawful for any person to forge, counterfeit, or fraudulently alter a license issued under this chapter.
- (d) It is unlawful for any person to obstruct, impede or otherwise refuse to allow an administrative inspection authorized under CBJ 49.65.1240.
- (e) It is unlawful for any person licensed or regulated under this article to knowingly or willfully authorize, order, instruct, or permit an employee, agent or person under the licensee's control to act in connection with the licensed activity which violates any provision of this article or any license issued under this article.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1110\), 5-2-2016, eff. 6-2-2016](#))

49.65.1215 - Application for license.

- (a) An applicant for a marijuana establishment license shall submit an application on a form provided by the director accompanied by the appropriate fee. Applications must include the following documentation:
 - (1) If the applicant is not a natural person, the organizational documents for all entities identified in the application;
 - (2) A copy of the lease or deed for the property upon which the marijuana establishment will be located;
 - (3) A list of all other uses on the property;
 - (4) A statement verifying compliance with any buffer requirements imposed by 3 AAC Chapter 306 of the Alaska Administrative Code;
 - (5) A copy of the Notice of Decision approving the conditional use permit by the City and Borough of Juneau Planning Commission; and
 - (6) Any additional documentation determined by the director to be necessary to make a decision whether to approve or deny the license application, or approve with conditions.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1110\), 5-2-2016, eff. 6-2-2016](#))

49.65.1220 - Term of license; renewal.

- (a) No license granted or issued under any of the provisions of this title shall be in any manner assignable or transferable.
- (b) Licenses are valid only as long as the applicant holds a current license from the state and is in compliance with the applicable conditional use permit.
- (c) Licenses issued under this chapter are effective from the date of issuance through December 31 of the same year.
- (d) In order to be eligible for renewal, a licensee must submit proof of inspection by the department or the department's designees for compliance with this chapter and any applicable permit. The licensee shall schedule the inspection no later than 60 days prior to the annual expiration of the license.
- (e) Licenses shall automatically renew on January 1, conditional upon the timely remittance of the annual license fee and proof of inspection. Failure to timely remit proof of inspection or the annual license fee shall result in the license expiring and will require a new license application.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1115\), 5-2-2016, eff. 6-2-2016](#))

49.65.1225 - Corrective orders.

- (a) The director may issue a corrective order whenever a licensee:
 - (1) Has violated any provision of this chapter;
 - (2) Has relinquished legal control of the licensed establishment to any other person;
 - (3) Has failed, refused or neglected to comply with any provision of the license issued under this chapter, any conditional use permit issued for the marijuana establishment, or any provision of Alaska Statute Chapter 17.38 or regulations adopted pursuant to that chapter;
- (b) A corrective order shall be served on the licensee by hand-delivery or certified mail and shall specify:
 - (1) The provision of the license, state law, or CBJ code that has been violated;
 - (2) The corrective action, if any, the licensee may take to prevent suspension or revocation of the license, and the time limited for such corrective action, which shall be no earlier than seven days following date of issuance of the corrective order;
 - (3) Notification of the penalties provided by this title; and
 - (4) That the licensee may request an informal meeting before the director prior to suspension or revocation of the license in order to allow the licensee to contest the grounds for issuance of the corrective order and to provide the licensee the opportunity to provide information to the director relevant to the grounds for the corrective order.
- (c) Based on information timely received from the licensee, or from any other source, the director may amend the terms or conditions of the corrective order, or after consideration of the information provided by the licensee, affirm the corrective order as issued.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1125\), 5-2-2016, eff. 6-2-2016](#))

49.65.1230 - License suspension or revocation.

- (a) Upon the expiration of the time allowed in a corrective order issued in CBJ 49.65.1225, if the licensee has not complied with the corrective order, the marijuana establishment license may be suspended or revoked, as determined by the director. Upon suspension or revocation of any license, the director shall notify the person whose license has been suspended or revoked by certified mail or by hand-delivery. Following such suspension or revocation and after notification, it is unlawful for the licensee to continue to operate the marijuana establishment.
- (b) In deciding whether a license should be suspended or revoked, and in deciding what conditions to impose in the event of a suspension, if any, the director shall consider:
 - (i) The nature and seriousness of the violation;
 - (ii) Corrective action, if any, taken by the licensee;
 - (iii) Prior violation(s), if any, at the licensed premises by the licensee and the effectiveness of any prior corrective action;
 - (iv) The likelihood of recurrence;
 - (v) All circumstances surrounding the violation;
 - (vi) Whether the violation was willful;
 - (vii) The length of time the license has been held by the licensee;
 - (viii) The number of violations by the licensee within the applicable 12-month period;
 - (ix) Previous sanctions imposed, if any, against the licensee; and

- (x) Any other factor making the situation with respect to the licensee or the licensed premises unique or the violation of greater concern.
- (c) Any person whose marijuana establishment license has been revoked shall be prohibited from applying for a license under this chapter for a period of one year.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1130\), 5-2-2016, eff. 6-2-2016](#))

49.65.1235 - Appeal.

The denial, revocation, or suspension of a marijuana establishment license is appealable to the assembly in accordance with CBJ 01.50.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1135\), 5-2-2016, eff. 6-2-2016](#))

49.65.1240 - Inspection of premises.

- (a) A marijuana establishment or an applicant for a marijuana establishment license under this chapter shall, upon request, make the licensed premises or the proposed licensed premises, including any place for storage, available for inspection by the director for the purpose of ensuring compliance with this chapter and any applicable marijuana establishment license. Inspection shall include access to any marijuana or marijuana product on the premises, equipment used in cultivating, processing, manufacturing, testing or storing marijuana, the inventory tracking system and business records of the licensee or applicant.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1140\), 5-2-2016, eff. 6-2-2016](#))

49.65.1245 - Marijuana establishment conditional use permits.

- (a) In addition to the permit application and supporting materials required by CBJ 49.15.330(c), an applicant for a conditional use permit for a marijuana establishment must submit the following additional materials:
 - (1) A site plan of all buildings on the property where the marijuana use will be located, including, but not limited to: A floor plan showing how the floor space is or will be used to include, but not limited to, restricted access areas and the total floor area of the building(s);
 - (2) A security plan indicating how the applicant will comply with the requirements imposed by state law;
 - (3) A waste disposal plan indicating how the applicant will comply with the requirements imposed by state law;
 - (4) A screening plan illustrating the applicants compliance with AS 17.38.070 making it unlawful to display marijuana or marijuana products in a manner that is visible to the general public from a public right-of-way;
 - (5) If the establishment is to be served by a private septic system, certification from a registered, qualified engineer licensed by the State of Alaska that the system has adequate capacity for the proposed use, or will with improvements;
 - (6) Marijuana cultivation facility license applicants must provide a ventilation and filtration plan describing the systems that will be used to ensure compliance with CBJ 49.65.1260 and whether the applicant intends on using carbon dioxide. The applicant shall specify if carbon dioxide enrichment will be used in cultivation and by what means the carbon dioxide will be produced. Plans should indicate the storage area for fuels used to produce carbon dioxide;

- (7) Marijuana product manufacturing facility license applicants, marijuana cultivation facility license applicants, and marijuana testing facility license applicants must specify all means to be used for cultivating, growing, extracting, heating, washing or otherwise changing the form of the marijuana plant, along with proposed ventilation and safety measures to be implemented for each process;
- (8) Marijuana cultivation facility license applicants and marijuana product manufacturing facility license applicants must specify the methods to be used to prevent the growth of harmful mold and compliance with limitations on discharge into the wastewater system; and
- (9) Any additional documentation determined by the director to be necessary for the commission to make a decision whether to approve or deny the permit, or approve with conditions, to ensure compliance with this chapter or CBJ 49.15.330(f).
- (b) If a licensee desires to modify the licensed premises by changes to equipment, increased use, such as in accordance with an approved state license endorsement, or any approved plan, an amendment to the original application and required fee shall be submitted for review and approval.
- (c) In addition to any conditions imposed under CBJ 49.15.330(g), the commission may impose any conditions necessary to ensure compliance with this chapter or state law or designed to mitigate impacts of the development on surrounding residences.
- (d) The commission shall impose as a condition of any permit issued by the commission under this title a requirement that the applicant submit a complete copy of the applicant's approved state license application to the department for review prior to operating. If the director determines there are substantive inconsistencies between the state license application and the conditional use permit application, the commission shall review the development for consistency with this title.
- (e) Conditional use permits issued to marijuana establishments under this chapter 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. If an appeal challenging the amendments to a conditional use permit is filed, the new conditions shall be stayed and the existing permit shall govern the operations of the marijuana establishment until the conclusion of the appeal. The scope of review on appeal is restricted solely to the amended conditions.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1145\), 5-2-2016, eff. 6-2-2016](#))

49.65.1250 - Hours of operation—Marijuana retail stores.

Unless otherwise specified by a conditional use permit, licensed premises may not be open between the hours of 1:00 a.m. and 8:00 a.m., Monday through Sunday. No marijuana may be distributed, sold or dispensed at a licensed premises when the licensed premises is required to be closed pursuant to this section.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1150\), 5-2-2016, eff. 6-2-2016](#))

49.65.1255 - Documents to be displayed.

- (a) A licensee shall prominently display the marijuana establishment license, in the same size and font as the original license issued by the director, in a conspicuous location inside the licensed premises near the main entrance.
- (b) A licensee shall display two separate warning signs as follows:
 - (1) A sign containing the following health warnings:
 - (A) "Marijuana has intoxicating effects and may be habit forming.";

- (B) "Marijuana can impair concentration, coordination, and judgment. Do not operate a vehicle or machinery under its influence.";
 - (C) "There may be health risks associated with consumption of marijuana.";
 - (D) "For use only by adults twenty-one and older. Keep out of the reach of children."; and
 - (E) "Marijuana should not be used by women who are pregnant or breastfeeding."
- (2) A sign containing the following warnings:
- (A) "Consumption of marijuana in public is prohibited by law. AS 17.38.040; CBJ 42.20.230."; and
 - (B) "The transportation or shipment of marijuana and marijuana products outside of the City and Borough of Juneau by U.S. mail, air travel or in the waters of the United States is prohibited by federal law. AS 17.38.010(d)."
- (c) The warning signs required by subsection (b) of this section must be at least 11 inches by 14 inches in size, and the lettering must be at least one-half inch high and in contrasting colors. The warning signs must be displayed in conspicuous locations inside the licensed premises near the main entrance.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1155\), 5-2-2016, eff. 6-2-2016](#))

49.65.1260 - Odor.

All marijuana establishments shall utilize a ventilation and odor system that prohibits the detection of noxious odors from outside the licensed premises. For purposes of this section, noxious odors are those odors detectable outside of the licensed premises that a reasonable person of ordinary sensibilities would find negatively affects the person's enjoyment of life, health or property.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1160\), 5-2-2016, eff. 6-2-2016](#))

49.65.1265 - Marijuana cultivation in the D-1 zoning district.

- (a) Marijuana cultivation facilities located in the D-1 zoning district shall be an accessory use. An owner or manager must live on the same lot as the licensed premises.
- (b) In the D-1 zoning district, the minimum setback for marijuana facilities shall be at least 25 feet from the facility to any property line.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1165\), 5-2-2016, eff. 6-2-2016](#))

49.65.1270 - Penalty.

- (a) A person who violates or causes or permits to be violated a provision of this chapter is guilty of a civil violation. Each and every day during which a violation of this chapter is committed, permitted, or continued shall be treated as a separate offense and subject the offender to separate charges and fines, in accordance with CBJ 03.30.075. Civil fines and penalties for violations of this chapter may be imposed in addition to any other remedies provided by law, including the imposition of corrective orders or license actions authorized by this chapter.
- (b) In addition to any other remedies provided by law, the City and Borough may seek a court order enjoining the continued operation, within the municipality, of any business whose owner or operator fails to comply with correction orders issued under CBJ 49.65.1225, terms of any decision on appeal under CBJ 49.65.1235, or who fails to cease operation following suspension or revocation of a license under CBJ 49.65.1230.

([Serial No. 2015-38\(b\)\(am\), § 2\(49.65.1170\), 5-2-2016, eff. 6-2-2016](#))

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

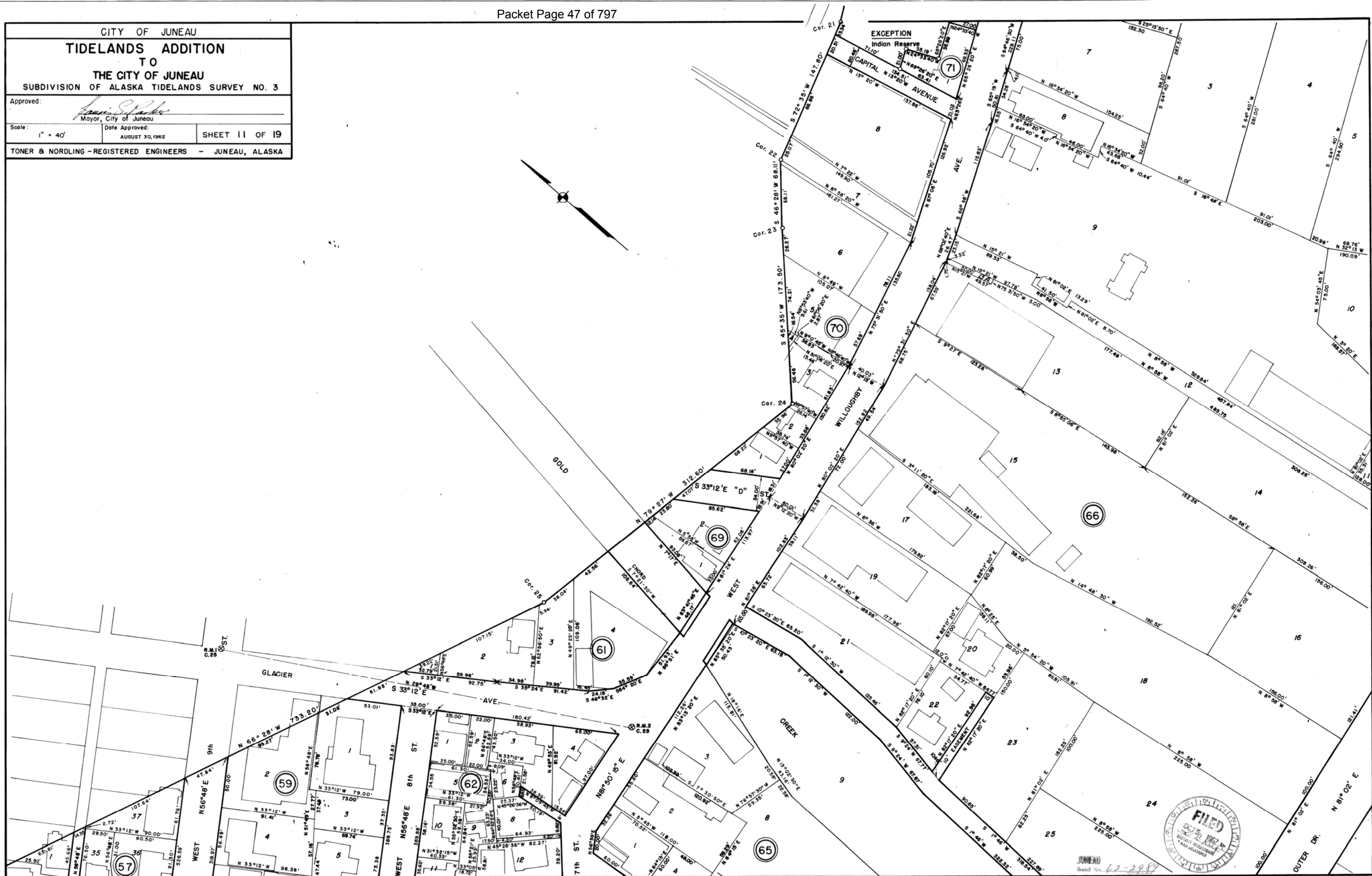
- (C) Whether the development as proposed will comply with the other requirements of this title.
- (2) The commission shall adopt the director's determination on each item set forth in paragraph (1) of this subsection (e) unless it finds, by a preponderance of the evidence, that the director's determination 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](#).)

CITY OF JUNEAU		
TIDELANDS ADDITION		
TO		
THE CITY OF JUNEAU		
SUBDIVISION OF ALASKA TIDELANDS SURVEY NO. 3		
Approved: <i>[Signature]</i> Mayor, City of Juneau		
Scale: 1" = 40'	Date Approved: AUGUST 30, 1962	SHEET 11 OF 19
TONER & NORDLING - REGISTERED ENGINEERS - JUNEAU, ALASKA		



Plot # 340



Packet Page 48 of 797

MAP OF JUNEAU, ALASKA

Showing City Limits

Showing City Limits:

1934.

1934-1

Scale 1 inch = 200 ft.

Frank A. Metcalf,
City Engineer.





(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: Community Development

STAFF PERSON/TITLE: Joseph Meyers, Planner I

DATE: 12/07/2020

APPLICANT: The Mason Jar, LLC (Dennis Lavigne)

TYPE OF APPLICATION: Conditional Use Permit

PROJECT DESCRIPTION:

Applicant has applied for a conditional use permit for a retail marijuana facility.

LEGAL DESCRIPTION: Tidelands Addition 66 LT 11, 12 FR, 14-20, 22-25 FR

PARCEL NUMBER(S): 1C060K660090

PHYSICAL ADDRESS: 613 & 619 W. Willoughby Avenue, Juneau

SPECIFIC QUESTIONS FROM PLANNER:

Planning: No comments on plan as described.

AGENCY COMMENTS:

General Engineering: No comments on plan as described.

AGENCY COMMENTS (CONTINUED):

From: [Autumn Sapp](#)
To: [Joseph Meyers](#)
Subject: RE: USE 2020-0024
Date: Monday, December 7, 2020 9:45:06 AM

Good morning,

There are no comments or issues from GE regarding the plan as proposed.

Thank you,

Autumn Sapp
City and Borough of Juneau
Engineering & Public Works
Business Manager
907-586-0917

From: Joseph Meyers <Joseph.Meyers@juneau.org>
Sent: Monday, December 7, 2020 9:02 AM
To: Dan Jager <Dan.Jager@juneau.org>; Charlie Ford <Charlie.Ford@juneau.org>; Autumn Sapp <Autumn.Sapp@juneau.org>; Mary Hammond <mary.hammond@juneau.org>
Subject: USE 2020-0024

Good morning,

I hope you all had a nice weekend. Please review this application for a Conditional Use Permit for a marijuana retail business and have comments back to me by **12/21/2020** so I may incorporate them into my report.

I:\DOCUMENTS\CASES\2020\USE\USE20-24 613 & 619 W. Willoughby Ave\APP_USE20-24.pdf

Please record your comments in the Agency Comment form [here](#).

Thank you,

Joseph Meyers | Planner I

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Main Line: 907.586.0715

Personal Line: 907.586.0466



From: [Emily Kane](#)
To: [PC_Comments](#)
Subject: conditional use permit for a marijuana retail store
Date: Monday, December 14, 2020 2:47:30 PM

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

Hi Joseph

My first thought was, wait, will that reduce the profit margins of already established local pot purveyors who have worked so hard to create clean products and strictly adhere to all the legal compliance requirements?

But then I thought, "would I have this same concern with a liquor store?" And my answer would be no -- so, this is a convoluted way of saying I see no problem turning the old Armory into a fun retail hub that includes a pot store.

Cheers

Emily Kane ND

Lots of natural food and herbal and anti-viral tips specific to COVID-19 on my website, first link below, under "news."

www.DrEmilyKane.com

www.lifewavex39.com/dremilykane

www.NaturopathicMedicineInstitute.org

www.primarydoctor.org

www.naturopathic.org

From: [Adam Bauer](#)
To: [PC_Comments](#)
Subject: comment on conditional use permit for Marijuana retail store
Date: Monday, December 14, 2020 3:22:28 PM

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

To home it may concern,

I received a notice in the mail relating to a Conditional use permit for a marijuana retail store at 613 & 619 W. Willoughby Ave in a Mixed use 2 zone

Case. No; USE2020 0024

Although it was not entirely clear where to submit comments from the notice, I believe this is the correct email address - if this is not the correct comment method, please advise.

I live in the Parkshore condos at 800F st., Although my personal religious belief forbids me from using recreational drugs, I fully support a legal marijuana retail establishment in the proposed location. I strongly believe the only way to take the illegal and criminal element out of the recreational drug use is to provide easily accessible legal retail sources of this commodity.

In no shape or form will restricting legal stores, reduce or eliminate drug use in our community, it will only drive this use into the criminal element where there is little or no opportunity to tax and enforce legal standards

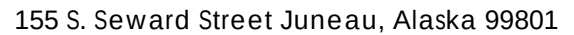
William Bauer

800 F ST Unit N4

Juneau Ak, 998802

Marijuana retail store

0 400 800 1200 1600 2000 2400 2800 3200 3600 4000 Feet



An application has been submitted for consideration and public hearing by the Planning Commission for a **Conditional use permit for a marijuana retail store** at **613 & 619 W. Willoughby Avenue** in a **Mixed Use 2 zone**.

Printed December 10, 2020





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: January 15, 2021
File No.: USE2020 0024

The Mason Jar, LLC
Attn: Dennis Lavigne
P.O. Box 35264
Juneau, AK 99803

Proposal: A Special Use Permit for a marijuana retail facility

Property Address: 613 & 619 W. Willoughby Avenue

Legal Description: Tidelands Addition Block 66, Lots 11, 12 Fraction, 14 – 20, 22 – 25 Fraction

Parcel Code No.: 1C060K660090

Hearing Date: January 12, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated January 6, 2021, and approved the Special Use Permit for a marijuana retail facility 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 the issuance of a temporary certificate of occupancy, the applicant shall install screening to ensure no marijuana product is visible to the general public from the right-of-way.
3. Prior to operation, the applicant must receive the required State License; by approval 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 State License, including if the facility is within 500 feet of a school.

The Mason Jar LLC
 File No.: USE2020 0024
 January 15, 2021
 Page 2 of 2

Attachments: January 6, 2021 memorandum from Joseph Meyers Community Development, to the CBJ Planning Commission regarding USE2020 0024.

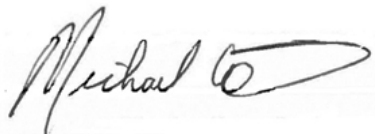
This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

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, January 12, 2021.

Expiration Date: The permit will expire 18 months after the effective date, or July 21, 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.

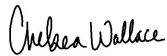
Conditional use permits issued to marijuana establishments under CBJ chapter 49.65.1245(e) shall be subject to review by the commission every five years from the date of issuance. Such review shall be subject to CBJ 49.15.330 except that the commission may only amend or add conditions if necessary to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



Michael LeVine, Chair
 Planning Commission

January 20, 2021

Date



Filed With City Clerk

January 21, 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**

ARP2020 0001: Preliminary Plan Approval for an Alternative Residential Subdivision creating 15 lots -
APROVED WITH MODIFICATIONS

AGENDA ITEM:

Case No.: ARP2020 0001

Applicant: Bicknell, Inc.

Location 4090 Delta Drive

Proposal: Preliminary Plan Approval for an Alternative Residential Subdivision creating 15 lots.

RECOMMENDATION:

Staff recommends the Planning Commission adopt the director's analysis and findings and **APPROVE** the preliminary plan for the Delta Drive Subdivision, an Alternative Residential Subdivision creating 14 unit-lots and one (1) parent lot. This permit would allow the applicant to submit for the final plan.

This approval is subject to the following conditions:

1. Prior to approval of the Final Alternative Residential Subdivision Plan, the applicant shall submit homeowners association, or similar, documents that comply with the requirements of 49.15.950(b);
2. Prior to the issuance of the first temporary certificate of occupancy for the development, access to and within the development shall be paved;
3. Prior to the issuance of the first temporary certificate of occupancy, each dwelling unit shall be connected to public sewer and water, and a master meter for water shall be installed by the developer; and
4. Per CBJ 49.15.920(o), the final mailbox location shall be reviewed and approved by the CDD Director, and installed prior to the issuance of the first temporary certificate of occupancy.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for ARP2020 0001, Part 1	12/29/2020	Staff Report
☐ Staff Report for ARP2020 0001, Part 2	12/29/2020	Staff Report
☐ Notice of Decision for ARP2020 0001	1/26/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
ALTERNATIVE RESIDENTIAL SUBDIVISION PLAN
ARP2020 0001
HEARING DATE: JANUARY 12, 2020

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

DATE: December 29, 2020
TO: Michael LeVine, Chair, Planning Commission
BY: Laurel Christian, Planner II *Laurel Christian*
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Preliminary Plan approval for the Delta Drive Subdivision, an Alternative Residential Subdivision creating 14 unit-lots and 1 parent lot

STAFF RECOMMENDATION: Approval with conditions

KEY CONSIDERATIONS FOR REVIEW:

- 14 lots will be for single-family dwellings.
- The remaining parent lot will contain the perimeter buffer, privately maintained access road, and other common amenities.
- A density bonus is not requested.
- The proposed perimeter buffer is equal to the setbacks for the zoning district.
- This approval is subject to SMP20200004.

GENERAL INFORMATION	
Property Owner	Bicknell Inc.
Applicant	Bicknell Inc.
Property Address	4090 Delta Drive
Legal Description	Thunder Mountain Park Tract 1A
Parcel Number	5B2401620011
Zoning	D18 Multi-family Residential
Lot Size	79,189 sq. ft.
Water/Sewer	Public
Access	Delta Drive
Existing Land Use	Vacant
Associated Applications	SMP20200004

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 1-14 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:

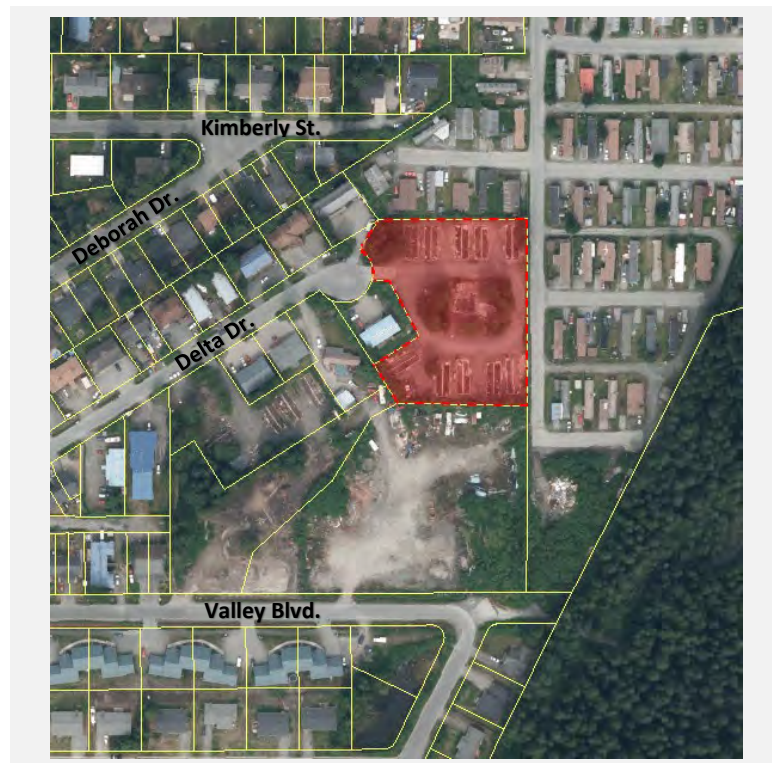
Assembly action is not required for this permit.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - o 49.15.920
 - o 49.15.930
 - o 49.15.940

The Commission shall hear and decide the case per 49.15.900 - Purpose. *The general purpose of this article is to provide reasonable minimum standards and procedures for unit-lot residential communities in which all or some of the lots do not substantially conform to the minimum requirements for a traditional subdivided lot. This article provides a housing option to allow dwellings on unit-lots to be conveyed by long-term leases, less than fee-simple ownership, or fee-simple ownership, including condominium and other common-interest communities*

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (D18)	Thunder Mountain Mobile Home Park
South (D18)	Vacant
East (D18)	Thunder Mountain Mobile Home Park
West (D18)	Multi-family four-plex

SITE FEATURES	
Anadromous	None
Flood Zone	None
Hazard	None
Hillside	None
Wetlands	None
Parking District	None
Historic District	None
Overlay Districts	None

BACKGROUND INFORMATION

Project Description – The applicant requests a preliminary plan approval for the Delta Drive Subdivision, an Alternative Residential Subdivision (ARS) creating 15 lots. The proposal would create 14 unit-lots for single-family dwellings and one (1) parent-lot containing the perimeter buffer, privately maintained access road, and other common amenities (15 lots total).

A project narrative can be found in Attachment A and the preliminary plan can be found in Attachment B.

Background – Background information includes a discussion of the basics of the ARS, the process for approval, and relevant development history for the lot.

ARS Design Basics

The ARS provides flexibility in land use regulations in order to promote its most appropriate use for unit-lot residential communities: to encourage residential developments that are planned, designed and developed to function as integral units with common facilities.

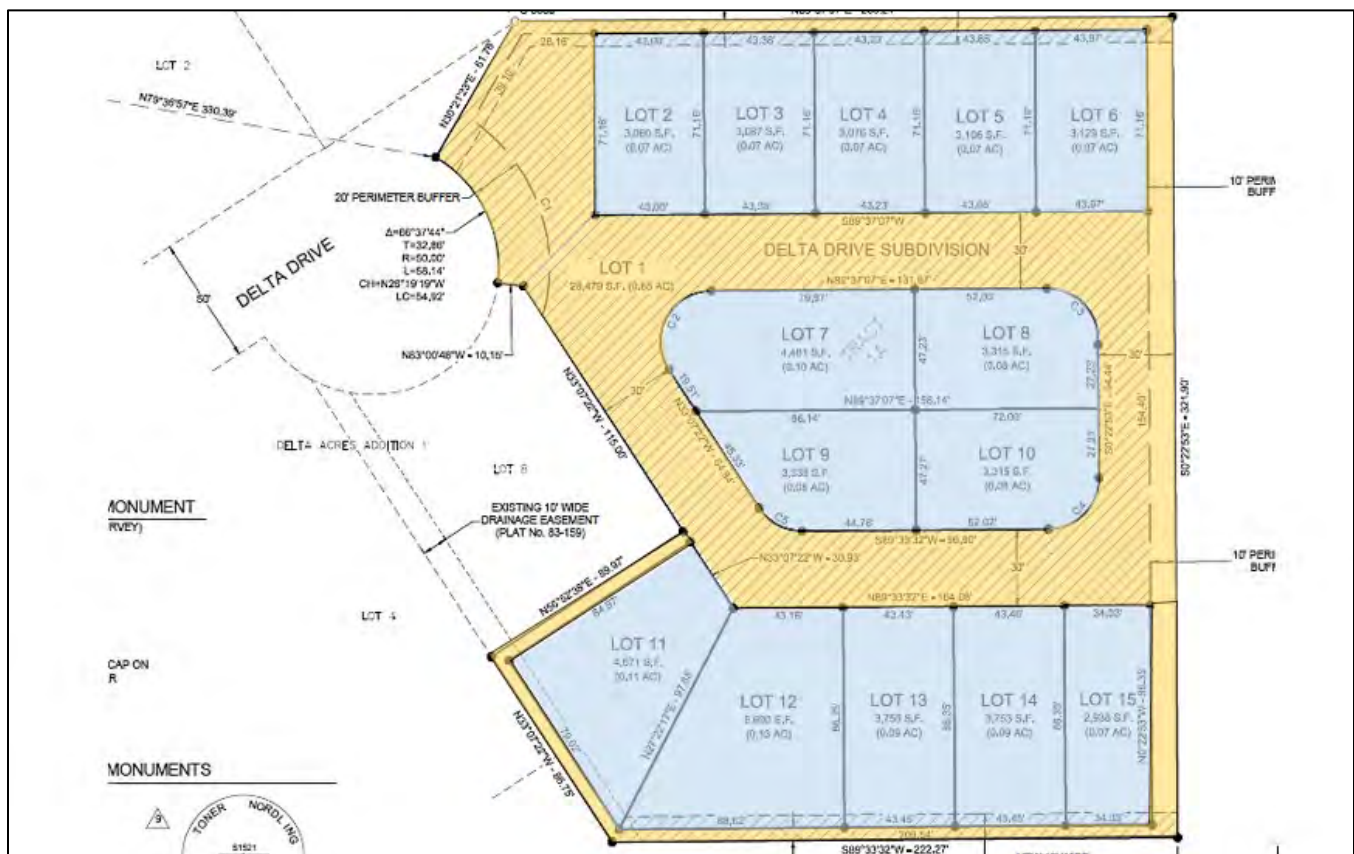
The ARS facilitates the construction of housing in a flexible design through:

- Allowing smaller-than-required lot sizes;
- Providing density bonuses for certain amenities if desired; and
- Allowing private streets and utilities to serve the community.

There are two types of lots in an ARS:

- *Parent lot means the original lot and the residual area from which unit-lots are created through an alternative residential subdivision.*
 - o The parent lot has the original lot boundaries; provides a buffer between unit lots and surrounding development, and access to unit lots; and may be developed with common amenities [CBJ 49.15.920(m)].
 - o The perimeter buffer on the parent lot provides at least the minimum required yard setbacks of the zoning district. The Commission may enlarge or reduce a buffer in certain circumstances [CBJ 49.15.920(j)].
- *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.*
 - o The unit lots are the small lots within an ARS that are platted for residential uses. Unit lots have no dimensional requirements.
 - o Unit lots may only be developed with single-family dwellings, or single-family dwellings with accessory apartments, home occupations, or childcare homes in certain circumstances [CBJ 49.15.920(m)].

In the image below, the parent lot is highlighted in yellow and the unit lots are highlighted in blue. The preliminary plan can be found in Attachment B.



ARS Process

The ARS process requires two preliminary applications, both of which are being presented at the same Planning Commission meeting.

- This application (ARP20200001) is for review of the preliminary plan for the ARS. This application must be acted upon first. The plan is reviewed for compliance with applicable ARS code and design guidelines [CBJ 49.15.900].
- A separate application (SMP20200004) is for approval of the preliminary plat for the ARS. The plat is reviewed for compliance with subdivision code [CBJ 49.15.402].

If the preliminary plan and preliminary plat are approved, the developer may apply for review of the ARS final plan and ARS final plat. These two applications may be presented at the same public meeting, or separately. The purpose of a second review by the Commission is to ensure the final plan conforms with the approved preliminary plan and that any conditions of approval have been met.

Development History

The table below summarizes relevant history for the lot and proposed development.

Item	Summary
Plat History	In 1992, the lot was platted as an expansion of the Thunder Mountain Park (plat no. 92-18). No restrictive plat notes exist for the lot.
Land Use Cases	In 1992, a conditional use permit (CUP) was issued to expand the Thunder Mountain Mobile Home park onto the lot (USE-CU92-01). In 2013, another CUP was issued for a 12-unit apartment building on the lot; this permit expired (USE20130017). The lot is currently vacant.
Building Permits	In 1992, a building permit was issued to place 10 modular homes on permanent concrete foundations (BLD-0747301). In 2013, a demolition permit was issued to remove the modular homes (DMO20130007). The lot currently contains the 10 concrete foundations with no modular structures. The applicant intends to repurpose the foundations.

ANALYSIS

Phasing – The proposed ARS will not be phased.

Zoning District and Dimensional Standards – The parent lot meets or exceeds dimensional requirements for an ARS in the D18 zoning district.

Topic and Code Reference	Summary	Complies
49.15.920(b) Zoning Districts	The lot is within the D18 multi-family zoning district. ARS is allowed in this zoning district.	☒ Yes ☐ No ☐ N/A
49.15.920(c) Lot Size	The parent lot measures 79,189 square feet and exceeds the required 150 percent times the minimum lot size for the D18 zoning district (5,000 square feet).	☒ Yes ☐ No ☐ N/A

Topic and Code Reference	Summary	Complies
49.15.920(d) Other Dimensional Standards	The minimum lot dimensions, lot coverage, and vegetative coverage shall be applied to the parent lot and not the unit-lots. Preliminary construction drawings show these requirements can reasonably be met.	☒ Yes ☐ No ☐ N/A

Density – Per 49.15.920(e)(1), *The number of dwelling units permitted in the development shall be calculated by multiplying the maximum number of dwelling units per gross acre permitted in the underlying zoning district by the number of acres in the alternative residential subdivision and rounding to the nearest whole number.*

Maximum Dwelling Units Per Acre	Parent Lot Size	Maximum Density	Number of Dwelling Units Proposed
18	79,189 sq. ft. (1.8179 acres)	33 dwelling units	14

The proposed ARS creates 14 unit-lots for single-family dwellings and one (1) parent-lot for common elements. As demonstrated in the table above, the applicant is not exceeding the maximum allowed density for the zoning district.

Density Bonus – The applicant has not requested a density bonus.

Frontage and Access – Per 49.15.920(f), *The parent lot shall front on and be accessed by a publically maintained right-of-way. Access within the development may be exempted from 49.35 and be privately owned and maintained if it complies with the following requirements (listed in the table below).*

The parent lot has frontage and access onto Delta Drive, a CBJ right-of-way. The applicant proposes a privately maintained access within the ARS. The privately maintained access will be 20 feet in width and paved. The proposed access complies with CBJ 49.15.920(f), as discussed in the table below.

Topic and Code Reference	Summary	Complies	Recommended Condition
49.15.920(f)(1) Location	As shown on the preliminary construction drawings, the access road will be located completely on the parent lot.	☒ Yes ☐ No ☐ N/A	
49.15.920(f)(2) Safety	There is no information that suggests the proposed access will endanger public safety.	☒ Yes ☐ No ☐ N/A	
49.15.920(f)(3) Emergency Services	CCFR has reviewed the preliminary construction drawings and finds the proposed access is sufficient for emergency service response.	☒ Yes ☐ No ☐ N/A	
49.15.920(f)(4) Pavement	As shown on the preliminary construction drawings, the applicants propose a 20-foot wide asphalt surface.	☒ Yes ☐ No ☐ N/A	Condition: Prior to the issuance of the first temporary certificate of occupancy, access to and within the development shall be paved.

49.15.920(f)(5) Homeowners Association (HOA)	The ARS requires an HOA, or similar entity be created for the development. The HOA documents should be submitted with the final ARS plan. It is recommended that the applicant submit HOA, or similar, documents prior to approval of the final plan. The HOA documents shall establish that maintenance of the private access is the responsibility of the HOA.	☒ Yes ☐ No ☐ N/A	Condition: Prior to approval of the Final Alternative Residential Subdivision Plan, the applicant shall submit homeowners association, or similar, documents that comply with the requirements of 49.15.950(b).
49.15.920(f)(6) Abutting Parcels	All abutting parcels have direct and practical access onto an existing publically maintained right-of-way, so no new public rights-of-way are required.	☒ Yes ☐ No ☐ N/A	

Utilities, Drainage, and Stormwater Management – The applicant has submitted preliminary construction drawings, a preliminary water-line memo, and a preliminary drainage report (Attachment C, D, and E). There are 10 existing water and sewer services. The applicant will be required to connect each unit-lot to public water and sewer; the parent-lot is currently connected to water and sewer. After approval of the preliminary plan and preliminary plat, the applicant will submit final construction drawings for review and approval by CBJ Engineering & Public Works. Utilities, drainage, and stormwater management are further discussed in the staff report for SMP20200004.

Topic and Code Reference	Summary	Complies	Recommended Condition
49.15.920(g) Public Utilities	Preliminary construction drawings show each lot will be connected to public water and sewer and a master meter will be installed.	☒ Yes ☐ No ☐ N/A	Prior to the issuance of the first temporary certificate of occupancy, each dwelling unit shall be connected to public sewer and water, and a master meter for water shall be installed by the developer.
49.15.920(l) Stormwater Management	Preliminary construction drawings demonstrate water will be collected into drainage swales and underground storm drains, which connect to the existing drainage systems in Delta Drive.	☒ Yes ☐ No ☐ N/A	

Design Requirements – The table below discusses design requirements applied to an ARS. The proposed ARS meets these requirements.

Topic and Code Reference	Summary	Complies	Recommended Condition
49.15.920(i) Open Space	The applicant does not propose common open space for the development. Open space is not required for an ARS in the D18 zoning district.	☐ Yes ☐ No ☒ N/A	
49.15.920(j) Perimeter Buffer	The preliminary plan shows a perimeter buffer surrounding the development that matches the setback requirements for the D18 zoning district. Staff does not recommend an increase in the required perimeter buffer. The proposed ARS is bordered by multi-family development and matches the character of the neighborhood. No density bonus has been requested, and the proposed ARS creates fewer units than the maximum density for the lot.	☒ Yes ☐ No ☐ N/A	
49.15.920(m) Permitted Uses	The applicant proposes single-family residential use. There is one unit-lot within the ARS that meets the minimum lot size for the D18 zoning district (Lot 12). This lot could accommodate a single-family dwelling with an accessory apartment. All other unit-lots would be restricted to one single-family dwelling.	☒ Yes ☐ No ☐ N/A	
49.15.920(n) Street Sign	The CBJ GIS Analyst does not recommend assigning the private access within the ARS a new street name, since it functions as an extension of Delta Drive. Each unit-lot will be assigned a Delta Drive address.	☐ Yes ☐ No ☒ N/A	
49.15.920(o) Mailboxes	Staff met on-site with the applicant and USPS on November 10, 2020. The USPS requested one centralized mailbox for all units that is located outside of the gate to the development, with adequate space for USPS vehicles to turn	☒ Yes ☐ No ☐ N/A	Condition: Per CBJ 49.15.920(o) the final mailbox location shall be reviewed and approved by the CDD Director, and installed prior to the issuance of the first temporary certificate of occupancy.

Topic and Code Reference	Summary	Complies	Recommended Condition
	around. Per CBJ 49.15.920(o) the final mailbox location shall be reviewed and approved by the CDD Director. This should be shown on final construction drawings.		

Parking— According to 49.15.920(h), *Parking may be located on the parent lot or unit lots.* Two parking spaces are required for each single-family dwelling [49.40.210(a)]. Preliminary construction drawings show two parking spaces on each unit-lot, some provided in a stacked configuration. Stacked parking is allowed for single-family residential uses [49.40.230(b)(6)].

Traffic – According to CBJ 49.40.300(a)(2) a traffic impact analysis is not required; the development is not anticipated to generate more than 250 Average Daily Trips.

Use	Units	Trips Generated	Total Trips
Single-family	14	9.52 per dwelling	133.28

Habitat – There are no known anadromous streams or wetlands on the lot.

Hazard Zones – There are no hazard zones on the lot.

Public Health, Safety, and Welfare – There is no information that suggests the proposed ARS will harm the public health, safety, or welfare.

Property Value and Neighborhood Harmony – The CBJ Assessor stated no objections to the proposed development. There is no information that suggests the proposed development will have a negative effect on property values in the neighboring area.

The lot is located in the D18 zoning district and surrounded primarily by multi-family residential uses. A zoning map can be found in Attachment F. To the north and east is the Thunder Mountain Mobile Home park, to the south is a vacant lot which appears to be used to store construction materials, and to the west is Delta Drive, which is developed primarily with multi-family residential development. To the northwest, Deborah Drive and Kimberly Street are developed primarily with single-family dwellings within the D5 zoning district; these streets do not directly abut the proposed development.

The proposed ARS would create 14 unit-lots for single-family dwellings. The maximum density of the lot, unsubdivided, would be 33 dwelling units. The proposal is not out of character with the existing neighborhood.

AGENCY REVIEW

CDD conducted an agency review comment period between October 15 and October 31, 2020. Comments from Engineering and Public Works, the CBJ Cartographer, and Capital City Fire and Rescue are incorporated into this report. No additional comments were received.

PUBLIC COMMENTS

CDD conducted a public comment period between December 7 and December 21, 2020. Public notice was mailed to property owners within 500 feet of the subject parcel. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. At time of writing this staff report, no public comments were received.

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. Plans call for the development of housing, especially in a flexible format that fits the character of existing neighborhoods and provides housing for a variety of CBJ residents and economic groups.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	4	36-37	Policy 4.1/4.2	Policies promote providing an adequate supply of various types of housing for all CBJ residents and economic groups.
	10	130	Policy 10.2	Policy promotes flexibility and creativity in residential development within the urban service boundary.
	11	157	Land Use Designation	Complies with the <i>Medium Density Residential</i> land use designation which allows for residential development between 5-20 units per acre (Attachment F).
2016 Housing Action Plan	Part 2	35	Production Target	The Housing action plan sets an annual goal of 66 new dwelling units. Proposal creates 14 new housing units.
2015 Juneau Economic Development Plan	5	103	Initiative	Plan calls for promoting housing affordability and availability.

FINDINGS

Alternative Residential Subdivision Preliminary Plan Approval – Per CBJ 49.15.940(d), the director makes the following findings on the proposed Alternative Residential Subdivision Preliminary Plan:

1. Does the proposed development protect natural features and avoid natural hazards by reserving them as open space?

Analysis: There are no natural features of the lot or natural hazards that should be preserved as open space.

Finding: Not applicable.

2. Is the proposed development consistent with Title 49, the Land Use Code?

Analysis: No further analysis needed.

Finding: Yes. With recommended conditions, the proposed development is consistent with Title 49.

3. Does the development incorporate perimeter buffers sufficient to minimize off-site impacts of the subdivision and to maximize harmony with the neighborhood?

Analysis: The proposed development incorporates a perimeter buffer equal to the setbacks required for the D18 zoning district. The lot is surrounded by multi-family development and is not being developed to the maximum density allowed. Staff finds the perimeter buffer is adequate to ensure neighborhood harmony.

Finding: Yes. The proposed development incorporates perimeter buffers sufficient to minimize off-site impacts and maximize neighborhood harmony.

4. Do utilities proposed for connection to the City and Borough system meet City and Borough standards, and all others are consistent with sound engineering practices, as determined by the City and Borough Engineering and Public Works Department?

Analysis: No additional analysis required.

Finding: Yes. The CBJ Engineering & Public Works Department has reviewed preliminary construction plans and has determined that the development can reasonably connect to CBJ services and meet CBJ standards.

5. Does the configuration of the development provide for economy and efficiency in utilities, housing construction, access, parking and circulation?

Analysis: The proposal will develop a lot that has been vacant since 2013. The development will repurpose existing foundations and utilities provided to the lot. The proposal provides in-fill housing development that meets the standards of Title 49 and provides small lots for small homes, creating an opportunity for efficient and affordable construction of housing units.

Finding: Yes. The proposed development maximizes economy and efficiency in utilities, housing construction, access, parking and circulation.

6. If the approval is for a phased development, is each phase consistent with the preliminary development plan and design of the entire alternative residential subdivision?

Analysis: The proposed ARS is not phased.

Finding: Not applicable.

7. Does the proposed development adequately address the cumulative impacts of the phased development on the neighborhood and the natural environment?

Analysis: The proposed ARS is not phased.

Finding: Not applicable.

8. If the approval includes an allotment of a density bonus, the density bonus complies with section 49.15.920(e)(4).

Analysis: A density bonus has not been requested.

Finding: Not applicable.

Additionally, in accordance with CBJ 49.15.930 and CBJ 49.15.330 (e) & (f), the director makes the following findings on the proposed Alternative Residential Subdivision Preliminary Plan:

9. Is the application for the requested Alternative Residential Subdivision Preliminary Plan 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.

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

Analysis: The application is for single-family dwellings. The use is listed at CBJ 49.25.300, Section 1.100 for the D18 zoning district.

Finding: Yes. The requested permit is appropriate according to the Table of Permissible Uses.

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

Analysis: The proposed site design complies with parking, vegetative cover, buffer, utility, and other requirements of Title 49.

Finding: Yes. With the recommended conditions, the proposed development will comply with Title 49, including parking, lighting, vegetative cover, and ARS design requirements.

12. Will the proposed development materially endanger the public health, safety, or welfare?

Analysis: No additional analysis required.

Finding: No. There is no evidence to suggest that with appropriate conditions, the requested ARS in a D18 zoning district, will materially endanger the public health or safety.

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

Analysis: No additional analysis required.

Finding: No. There is no evidence to suggest that with appropriate conditions, the requested ARS, in a D18 zoning district will substantially decrease the value or be out of harmony with the property in the neighboring area.

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

Analysis: The proposed ARS creates additional housing, plans and policies generally support housing development.

Finding: Yes. The proposed ARS, with the recommended conditions, will be in general conformity with the 2013 Comprehensive Plan, 2016 Housing Action Plan, and the 2015 Juneau Economic Development Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the director's analysis and findings and **APPROVE** the preliminary plan for the Delta Drive Subdivision, an Alternative Residential Subdivision creating 14 unit-lots and one (1) parent lot. This permit would allow the applicant to submit for the final plan.

This approval is subject to the following conditions:

1. Prior to approval of the Final Alternative Residential Subdivision Plan, the applicant shall submit homeowners association, or similar, documents that comply with the requirements of 49.15.950(b);
2. Prior to the issuance of the first temporary certificate of occupancy for the development, access to and within the development shall be paved;
3. Prior to the issuance of the first temporary certificate of occupancy, each dwelling unit shall be connected to public sewer and water, and a master meter for water shall be installed by the developer; and
4. Per CBJ 49.15.920(o), the final mailbox location shall be reviewed and approved by the CDD Director, and installed prior to the issuance of the first temporary certificate of occupancy.

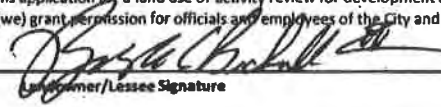
STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Preliminary Plan
Attachment C	Preliminary Construction Drawings
Attachment D	Water Memorandum
Attachment E	Preliminary Drainage Report
Attachment F	Zoning Map and Comprehensive Plan Land Use Designation Map
Attachment G	Abutters Notice and Public Notice Sign



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 4090 Delta Drive, Juneau, AK 99801		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) Thunder Mountain Park TR 1A		
	Parcel Number(s) 5B2401620011		
	☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner Bicknell, Inc.	Contact Person David Blommer	
	Mailing Address P.O. Box 33517	Phone Number(s) 907-789-5727	
	E-mail Address dblommer@bicknellinc.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		10/8/20 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 name is different, enter			
Applicant SAME	Contact Person SAME		
Mailing Address SAME	Phone Number(s)		
E-mail Address SAME			
X _____ Applicant's Signature		_____ Date of Application	

DEPARTMENT USE ONLY BELOW THIS LINE

RECEIVED

OCT 12 2020

PERMIT CENTER/CDD

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.

Intake Initials 
Case Number Smp20200004
Date Received 10/12/20



SUBDIVISION AND DEVELOPMENT PLAN APPLICATION

See subdivision hand-outs 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

An alternative residential subdivision (ARS) of Thunder Mountain Park TR 1A into Delta Drive Subdivision comprised of 15 unit lots and 1 parent lot.

Number of Existing Parcels 1 Total Land Area 1.82 acres Number of Resulting Parcels 16

HAS THE PARCEL BEEN CREATED BY A MINOR SUBDIVISION IN THE PRECEDING 24 MONTHS

☐ NO

☐ YES Case Number _____

TYPE OF SUBDIVISION OR PLATTING APPROVAL REQUESTED

MINOR DEVELOPMENT

(changing or creating 13 or fewer lots)

- ☐ Preliminary Plat (MIP)
☐ Final Plat (MIF)
☐ Panhandle Subdivision
☐ Accretion Survey
☐ Boundary Adjustment
☐ Lot Consolidation (SLC)
☐ Bungalow Lot Subdivision
☐ Common Wall/Zero Lot Subdivision
☐ Other _____

MAJOR DEVELOPMENT

(changing or creating 14 or more lots)

- ☒ Preliminary Plat (SMP)
☐ Final Plat (SMF)
☐ Preliminary Development Plan – PUD (PDP)
☐ Final Development Plan – PUD (PDF)
☐ Development Plan – ARS (ARP)
☐ Development Plan – ARS (ARF)
☐ Bungalow Lot Subdivision
☐ Common Wall/Zero Lot Subdivision
☐ Other _____

ALL REQUIRED DOCUMENTS ATTACHED

- ☒ Pre-application conference notes
☒ Narrative including:
☒ Legal description(s) of property to be subdivided
☒ Existing structures on the land
☒ Zoning district
☒ Density
☒ Access
☒ Current and proposed use of any structures
☒ Utilities available
☒ Unique characteristics of the land or structure(s)

☒ Preliminary Plat checklist

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

SUBDIVISION/PLATTING FEES	Fees	Check No.	Receipt	Date
Application Fees	\$ <u>1760.00</u>			
Admin. of Guarantees <i>Public Notice Sign</i>	\$ <u>150.00</u>			
Adjustment	\$ _____			
Total Fee	\$ <u>1910.00</u>			

*major sub:
\$110 per lot
x 16 lots*

RECEIVED

OCT 12 2020

PERMIT CENTER/CDD

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

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

Case Number

Smp20200004

Date Received

10/12/20



October 9, 2020

Laurel Christian, Planner II
City and Borough of Juneau
Community Development Department
155 S. Seward St.
Juneau, AK 99801

SUBJECT: Delta Drive Subdivision - Alternative Residential Subdivision
Project Narrative – PDC Project No. 20098JN

Dear Laurel;

On behalf of our client Bicknell Inc., PDC Engineers (PDC) is submitting this project narrative as part of the Delta Drive Subdivision Alternative Residential Subdivision (ARS) application. The property to be subdivided under the CBJ ARS code has a legal description of Thunder Mountain Park TR 1A with a land area of 79,189 square feet. Currently there are no dwelling structures on the property. Ten (10) existing concrete foundations exist on the property from where previous modular homes were located that have since been removed.

CBJ Zoning - The property is zoned D-18 Multifamily with an allowable density of 18 units per acre. The proposed use of the structures to be developed within the ARS will be residential and will meet the permissible uses as outlined for their zoning district and in the ARS code. The surrounding neighborhood is similarly zoned D-18 and is made up of single family and multi-family residences. The proposed development will be in harmony with the surrounding neighborhood.

Access - The existing parcel is accessed from the cul-de-sac at the end of Delta Drive, a CBJ owned and maintained paved roadway.

Utilities – CBJ public water and sanitary sewer utilities currently service the property. An existing 2-inch water line coming from the end of the existing 6-inch water line in Delta Drive supplies water to this property. Individual $\frac{3}{4}$ " water services are located from the 2-inch line within the property serving the original 10 modular homes. A 6-inch PVC sanitary sewer line exists within the property acting as the sewer collector. This 6-inch sewer pipe connects to the CBJ sewer main located in the Delta Drive cul-de-sac. Individual 4-inch PVC sewer services coming from the building foundations connect to the 6-inch sewer. Under the CBJ Delta Drive Reconstruction project scheduled for construction in the Spring/Summer of 2021, new water and sanitary sewer utilities will be provided to the lot line of this property. An 8-inch PVC sewer service will be provided and an 8-inch HDPE water line. The Delta Drive Subdivision project will connect to these new services and extend into the subdivision. The existing sewer system has been found to be in good condition and will continue to be reused. Lots which previously did not have a 4-inch

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9109 Mendenhall Mall Road, Suite 4, Juneau, Alaska 99801
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Delta Drive Subdivision - ARS
October 9, 2020
Page 2

sewer service will have a new ones installed. The subdivision has an existing 2" Poly water main serving the existing lots. PDC water system analysis (attached) indicates that the existing 2" water service can supply adequate flow and pressure to 7 dwelling units. There are two 2" Poly water line branches that will connect to the new 8" HDPE line. The existing 2" poly water line will be flushed, disinfected and pressure testing in compliance with CBJ Standards for domestic water supply. Existing 3/4" water services will be used or new 1-inch Poly water services will be installed. A master water meter with vault structure will be installed prior to service lines.

Drainage – Surface storm water will be collected in drainage swales on the perimeter and interior lots of the property. The drainage system will involve construction of drainage swales, underground storm drain pipe and underdrain system to safely route the drainage to the existing Delta Drive drainage system which is planned for reconstruction in Spring/Summer 2021 by CBJ. As the designers for CBJ on the Delta Drive Reconstruction project, the storm drain improvements have been designed to accommodate the Delta Drive Subdivision storm drainage. There are two locations where storm drainage will discharge to Delta Drive, both of these locations have pipe sized at 12" diameter. Lots 11-15 will have a drainage swale near the rear of the property and then transition to an 8" underdrain in an existing 10' drainage easement that goes to a new culvert inlet being installed under the Delta Drive Reconstruction project. Lots 7-10 (new foundations) will be graded to drain to a drainage swale in the front of the lots where storm drainage will be collected and routed underground through a 12" drain pipe to the discharge location at the new culvert on Delta Drive. Lots 1-6 will have a perimeter drainage swale at the rear of the property that is graded to drain to the new culvert being installed under the CBJ Delta Drive Reconstruction project.

Parking and Circulation– Each lot will have two parking spaces as shown in the site plan. The existing gravel roadway will be reconstructed to accommodate a 20' wide paved access road through the property. This paved roadway will allow for safe and convenient emergency fire vehicle access throughout the subdivision.

Buffer/Setback – A perimeter buffer has been shown on the site plan with a new wooden fence located at the property line for screening and privacy. Buffers match the required setbacks for this zoning district.

Vegetative Cover – The parent lot has roughly 46% vegetative cover.

Lighting – Lighting will be installed on the individual structures.

Mailbox, Garbage and Snow Storage – CBJ Standard Mailboxes have been shown on Lot 1 to allow for each lot to have US Postal mail delivery. Two garbage dumpsters have been shown on Lot 1 to allow for refuse to be placed from each lot. Snow storage has been shown on Lot 1.

Delta Drive Subdivision - ARS
October 9, 2020
Page 3

Should you have any questions or require any additional information, please do not hesitate to contact me at your convenience.

Sincerely,

A handwritten signature in black ink that reads "J. Mark Pusich". The signature is fluid and cursive, with the first name "J." and last name "Pusich" clearly legible.

J. Mark Pusich, PE
Principal | Civil/Structural Engineer
PDC Engineers

Attachments: ARS Application: CBJ Development Application, ARS Subdivision Preliminary Plat, Lot Closure Comps, Subdivision Application, Preliminary Plat Checklist, Pre-App meeting minutes, Construction Improvement Drawings



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

Delta Drive Alternative Residential Subdivision

Case Number: PAC20200026

Applicant: Spike Bicknell & David Blommer

Property Owner: Delta Park LLC

Property Address: 4090 Delta Drive

Parcel Code Number: 5B2401620011

Site Size: 79,189 Square Feet

Zoning: D-18

Existing Land Use: Manufactured Homes

Conference Date:	4/29/20
Report Issued:	05/06/20
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
David Blommer	Applicant	dblommer@bicknellinc.com
Laurel Christian	Planning	Laurel.christian@juneau.org
Kyle Paw	Permit staff	Kyle.paw@juneau.org
Autumn Sapp	General Engineering	Autumn.Sapp@juneau.org
Mark Pusich	PDC	MarkPusich@pdceng.com

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.

The Alternative Residential Subdivision (ARS) requires a two-step approval process. The ARS preliminary plan is reviewed the and then then ARS final plan is reviewed. A major subdivision application is also required. The applicant may apply for the preliminary ARS plan and preliminary major subdivision plat at the same time.

The preliminary ARS plan is reviewed through the conditional use permit process with additional requirements found in the ARS section of code. The major subdivision plat is reviewed for platting requirements. The ARS section of code is attached to this report, approval criteria are highlighted.

Planning Division

1. **Zoning** – D18 Zoning District. There is no minimum lot size for the unit lots, however; you should demonstrate on the plan their size, and show how large the parent parcel is. CBJ 49.80 Definitions for Parent Lot and Unit Lot:

Parent lot means the original lot and the residual area from which unit-lots are created through an alternative residential subdivision.

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

2. **Setback/buffer** – There are no setbacks for the unit lots. A perimeter buffer is required in lieu of the setback requirements of this title on the parent lot. The buffer shall not be less than the setbacks required for the zoning district. Setbacks for the D18 zoning district are: Front: 20'; Rear: 10'; Side: 5'; Street side:13'
 - a. The commission may enlarge the required buffer to up to 25 feet.
 - b. The buffer shall be vegetated unless the commission requires non-vegetated screening. A buffer may include fencing, natural berm, or other similar features.
 - c. No parking areas, dwelling units, unit-lots, or permissible uses may be located within the perimeter buffer. Access to the development may cross a portion of the buffer.
3. **Height** – 35' primary uses; 25' accessory uses
4. **Parking & Circulation** – Each single-family dwelling requires 2 parking spaces. Residential parking lots with more than 10 parking spaces but fewer than 25 parking spaces require 1 ADA van accessible parking space.
 - a. Parking can be either on the unit lots or on the parent lot. On the ARS plan, parking areas should be shown.
5. **Access** – Access to the ARS must be publically maintained (Delta Drive is a publically maintained right-of-way). Access within the ARS must be located completely on the parent lot, be paved, and meet emergency service access requirements.

Pre-Application Conference Final Report

6. **Lot Coverage** – There is no maximum lot coverage for the unit lots, maximum lot coverage applies to the parent lot. The maximum lot coverage is 50%.
7. **Vegetative Coverage** – There is a minimum vegetative cover requirement for the parent lot. In the D18 zoning district, 30% vegetative cover is required.
 - a. Shared open space is not required for an ARS in the D18 zoning district.
8. **Density** – Site measures 79,189 square feet (1.8 acres). At 18 units per acre, the site could accommodate up to 32 dwelling units.
 - a. **Density bonuses** – The commission may award a density bonus to an ARS for enhancements to the development. For the D18 zoning district, the total bonus shall not exceed 25%. Applicant should state in the project narrative if they are requesting density bonuses and how they meet the enhancement criteria.
9. **Lighting** – In the project narrative, the applicant should discuss if lighting will be installed.
10. **Noise** – Noise is not expected to be out of character with the D18 residential zoning district.
11. **Flood** – NA
12. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – No Known
13. **Wetlands** – No Known
14. **Habitat** – (Eagle – remind applicant to check with Feds; Riparian, etc.) – No Known
15. **Plat or Covenant Restrictions** – No known
16. **Traffic** – Per CBJ 49.40.300 a traffic impact analysis is required for projects that are anticipated to generate more than 500 average daily trips (ADTs). A single-family dwelling generates 9.52 ADTs. The proposal of 14 lots for single-family dwellings would generate 133.28 ADTs. A TIA will not likely be required for this project.
17. **Homeowners Association** – The ARS requires that a HOA be formed. The HOA documents must be recorded with the final plat.

Building Division

18. **Building** - plans will be addressed in plan review
19. **Outstanding Permits** -

	Permit Application	Pstatus	Permit Type	Location	Permit Id	Purpose
1	BLD20130336	Issued	BMH	4090 DELTA DR	2000993	Place 10 manufactured homes on existing foundations

General Engineering/Public Works

20. **Engineering** –
 - a. **Easements:** 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.
 - b. **Agreements:** A maintenance and hold harmless (of CBJ) agreement will need to be drafted, signed, and recorded for all shared infrastructure for the development, e.g. driveway, water, sewer, etc.

Pre-Application Conference Final Report

21. **Drainage** – Submit a drainage plan indicating how drainage from the proposed subdivision will join an established drainage channel or channels. Easements must be provided on the plat for all established drainage ways or any proposed drainage ways that cross any current or future abutting property lines.

22. **Utilities** – (water, power, sewer, etc.) A master water meter shall be installed by the developer prior to any branches or services. The meter must be in an above ground heated space. Water and sewer sizing shall be determined by an Alaskan licensed civil or mechanical engineer.

Beyond the shared private main and master water meter, a minimum of 1" water service and 4" sewer service will need to be installed to the front property line of each newly created lot prior to the recording of the final plat. At the time of preliminary plat submittal, please submit a construction plan with for the new utilities. The plan needs to include pipe locations, sizing, and grades for sewer to indicate appropriate fall will be achieved. Existing water services not being utilized shall be decommissioned and removed back to the mainline. If utilizing existing services or branches please show their location, size, and material type on the plan.

If a new private water and/or sewer mains are to be installed within the ROW, the following permits will need to be obtained to provide utilities to the newly created lot:

- a. **CBJ right-of-way (ROW) permit**- Once the construction plan for the utilities is approved, CBJ will create the ROW permit. The permit will allow the tapping of the water and sewer mains, water and sewer service installation, and road restoration within the right-of-way. Inspection fees, refundable bond amount, and conditions will be determined after review of the proposed construction plan. The extension of the utilities within the property will require further permitting and fee assessments. This process is done separately from the subdivision and typically in conjunction with the building permit application.
- b. **CBJ Water and Sewer Utility permits** – The installation of the private water and sewer main lines, services, and the water meter within the private property will be covered by these utility permits.

Fire Marshal

23. **Fire Items/Access** –

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. ARS Preliminary Plan Approval Application
2. Major Subdivision Application (Required when the subdivision plat is submitted)
3. 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.

Pre-Application Conference Final Report

2. Preliminary Plat Checklist (Required when the subdivision plat is submitted)
3. Please see 49.15.940(b) for a description of the Required submissions with an ARS Preliminary Plan Approval:
 - a. Ownership
 - b. Preliminary Development Plan
 - c. Design
 - d. Open space, common facilities, and general landscaping
 - e. Request for density bonuses (if applicable)
 - f. Description of phased development (if applicable)
4. As built survey of existing foundations if you plan to utilize them.

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. ARS Review Fee
 - a. Preliminary Plan – \$400.00 plus \$80.00 per residential unit
 - b. Final Plan - \$300.00 plus \$60.00 per residential unit
 - c. Public notice sign fee \$50 plus \$100 refundable deposit
2. Major Subdivision Review Fee
 - a. Preliminary Plat - \$110 per lot
 - b. Final Plat - \$70 per lot
 - c. Public notice sign fee \$50 plus \$100 refundable deposit
3. ROW Permit (work within the ROW):
 - a. \$10 permit fee
 - b. Inspection fees - \$60 per inspection trip or hour, will be determined at time of construction plan review
 - c. Refundable bond – will be determined at time of construction plan review. Can be paid in the form of cash, check, surety, or conveyance.
 - d. Bond fee – dependent on type of bond payment.
1. Water Utility Permit (work within private property):
 - a. Water Connection charge – based on the line size at the location of the water meter as determined by an Alaskan licensed civil engineer.
2. Sewer Utility Permit (work within private property):
 - a. Sewer Connection charge – based on the number of drainage fixture units and shall be supplied in the civil construction plans as determined by an Alaskan licensed civil engineer.

Pre-Application Conference Final Report

- b. \$60.00 per inspection or trip, will be determined at time of construction plan review.

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

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



PRELIMINARY PLAT CHECK LIST

Name of Proposed Subdivision: Delta Drive Subdivision

The following items must be included with the initial submittal of a Preliminary Plat:

- | | |
|--|---|
| ☒ Application, filled out completely | ☐ Application fee (see fee schedule) |
| ☒ Project Narrative | ☐ Five (5) – 24" by 36" Copies |
| ☒ Pre-application Conference Report | ☒ Lot Closure Report |
| ☒ Disclosure of all known environmental hazards and any proposed mitigation measures recommended in the applicable environmental document. | |
| ☐ Preliminary Plat Checklist: I have reviewed the checklist and all submittals for completeness and accuracy. | |

Applicant or Surveyor - Signature

Date

Applicant or Surveyor - Print Name

GENERAL REQUIREMENTS

- ☐ The preliminary plat shall be prepared by a professional land surveyor, registered in the State of Alaska
- ☐ The preliminary plat shall be submitted on 22 by 34 inch sheets. The director of engineering and public works may approve alternate sheet sizes
- ☐ The preliminary plat shall be drawn with black ink to a scale of one-inch to 100 feet or less, or other suitable scale approved by the director of engineering and public works
- ☐ The preliminary plat shall be oriented with north toward the top of the sheet.
- ☐ A vicinity map shall be located in the upper right-hand corner of the sheet
- ☐ The vicinity map shall be oriented in the same direction as the plat
- ☐ A suitable north arrow shall be shown for the plat and vicinity map
- ☐ All line work and lettering must be of professional quality, and all line widths and lettering sizes must be of such size that all information can be clearly shown without overlap or confusion

GRAPHIC REQUIREMENTS - A preliminary plat shall contain the following information:

Title block - An enclosed title block in the lower right-hand corner containing the following information:

- ☐ The proposed name of the subdivision
- ☐ The legal description of the parcel to be subdivided including U.S. Survey, U.S. Mineral Survey, A.T.S. number or section, township, and range number, as applicable
- ☐ "City and Borough of Juneau, Alaska"
- ☐ "State Recorder's Office at Juneau"
- ☐ The date the preliminary plat was prepared and revised
- ☐ The horizontal scale
- ☐ The name and address of the owner of record
- ☐ The name, address, and telephone number of the surveyor preparing the preliminary plat

Preliminary Plat Checklist

Updated 1/2018

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Lot, block, and street information:

- ☒ The area of each lot
- ☒ The dimensions in feet and hundredths of a foot
- ☒ An identifying number and letter for lots and blocks
- ☒ Lots numbered consecutively, commencing with the number "1," with no omissions or duplications
- ☒ If the remainder of an original parcel being subdivided is relatively large, it shall be designated as a "tract" with an identifying number
- ☒ All parcels of land intended to be dedicated for public use or reserved for the use of all of the property owners in the proposed subdivision shall be shown as lots, and consecutively numbered. The purpose and any conditions or limitations on the use of the parcel shall be noted on the plat
- ☒ Abutting properties shall be shown with dashed lines, numbers, and/or letters
- ☒ For resubdivisions or public way vacations, the lines and legal description of the previous lots shall be shown with light dashed lines, numbers, and/or letters, or by a separate plat on the same sheet showing the previous lot lines
- ☒ The minimum data shown for each curve shall be as follows:
 - ☐ Length
 - ☐ Central angle
 - ☐ Radius
 - ☐ Bearing and distance of long chord
- ☐ Setbacks shall be shown on all corner lots and any lots with multiple frontage. Setbacks shall be shown on typical lots

Boundary lines:

- ☒ All boundary lines of the subdivision with bearings and distances described
- ☒ All retraced boundary lines shall show record and measured bearings and distances where they differ. Record dimension information shall be shown within parentheses and include a record source identification
- ☒ The exterior boundary lines of the subdivision shall be a solid black opaque line that is of a width that distinguishes it from all other property lines shown on the plat
- ☐ If phasing is proposed, then the boundaries and number of each phase, sequential lot numbering, and a subdivision name consistent with previous phases shall be shown

Monumentation:

- ☒ The monuments used to establish the basis of bearing
- ☒ Each monument found or set shall be identified on the plat by a symbol
- ☒ A complete description of the monument, including type and all information printed on the cap. A typical drawing shall be shown for each type of monument cap set
- ☒ A legend showing the symbols for all the types of monuments
- ☒ The identification, description location, elevation, and datum of the benchmark used to establish vertical control

Site access, circulation, and utilities:

- ☒ The widths and names of existing rights-of-way within the subdivision and within 100 feet of the subdivision boundary
- ☐ Proposed rights-of-way, including their widths and proposed names
- ☐ The grades of existing and proposed streets within these rights-of-way
- ☐ The width, ownership, use, and record reference of all proposed and existing easements within the subdivision and within 100 feet of the subdivision boundary
- ☐ The width, ownership, and use of all proposed easements

Preliminary Plat Checklist

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- ☒ All proposed and existing easements shall have sufficient dimensions shown to determine their location on the ground
- ☐ Existing trails or pathways within the subdivision and within 100 feet of the subdivision boundary, including the width of any associated rights-of way or easements
- ☐ Proposed trails or pathways and widths of their rights-of-way
- ☐ If the plat submitted covers only a part of the tract under the control of the applicant, a sketch plat of the prospective street system of the unplatted part shall be submitted
- ☒ The location of any existing or proposed driveways/curb cuts that access or are proposed to access any existing or proposed street

Topographic information:

- ☒ For slopes of less than five percent, show one foot contour lines and include spot elevations at all breaks in grade, along all drainage channels or swales, and at selected points not more than 100 feet apart in all directions
- ☐ For slopes between five percent and ten percent, show two foot contour lines
- ☐ For slopes greater than ten percent, show five foot contour lines
- ☒ Every fifth elevation contour shall be distinctive and clearly labeled
- ☒ Dashed lines shall represent existing contours
- ☒ Mapping shall include any significant features which can materially affect the design of the subdivision, including, but not limited to, structures, fences, walls, and utility poles
- ☒ If irregular slopes or special features are present, additional contour information may be required by the director of engineering and public works for planning or construction purposes. Additional required information may include projecting the topography of the site after grading has taken place, showing such items as:
 - ☐ Pad elevations and drainage patterns for each lot
 - ☐ Tops and toes of all manufactured slopes, including daylight lines
 - ☐ Existing and proposed retaining wall locations and heights
- ☐ For subdivisions located in hillside areas with slopes greater than eighteen percent, additional requirements apply in accordance with CBJ 49.70, Article II

Sewer and water:

- ☒ Existing sewer and water mains within the tract with pipe sizes and grades
- ☒ A draft plan for proposed water and sewer lines showing the size, approximate slope, and connection points with elevations for the purpose of determining the feasibility of construction

Multisheet plats:

- ☐ When a plat requires more than one sheet, exclusive of a certificate sheet, an index sheet shall be included. When a plat requires more than three sheets, a cover sheet shall also be included, showing the subdivision title, a key map, and all certificates. Each additional sheet shall include the following data:
 - ☐ North arrow
 - ☐ Legend
 - ☐ Surveyor's seal and signature
 - ☐ Title block
 - ☐ Sheet _____ of _____
 - ☐ Scale
 - ☐ All plat notes
 - ☐ Vicinity map

N/A

Preliminary Plat Checklist

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ADDITIONAL MAPPING OR REPORTS- At the pre-application meeting, it will be determined if any of the following additional mapping or reports are required to be submitted with the preliminary plat. If required, the following additional mapping or reports shall be submitted:

Hazard and Special Habitat Areas:

- ☐ Any portion of a special flood hazard area, landslide or avalanche area, habitat area as defined by CBJ 49.70.310, or watersheds, either existing at the proposed subdivision site or shown on the overlay maps, adopted pursuant to this title, to exist at the proposed subdivision site, must be depicted on the preliminary plat
- ☐ The boundaries of any wetland areas must be depicted on the preliminary plat. Boundaries must be determined by a person qualified to perform wetland delineations *N/A*

Soils report:

- ☐ A soils report prepared by an engineer licensed by the State of Alaska shall be required if the proposed subdivision is located farther from the existing public sewer system than specified in CBJ 49.35, and the applicant chooses to provide on-lot waste disposal rather than to connect to the public system. A soils report shall include the following:
 - ☐ Certification that the proposed lots are large enough and have soil of sufficient permeability to permit the construction of approved waste treatment systems for on-lot waste disposal
 - ☐ The location and size of drain fields for each lot
 - ☐ The locations and logs of test borings, percolation test results, and a hydrological evaluation of on-site sewage disposal
 - ☐ If the soils report indicates that the soils found on the site are not of sufficient permeability or the lots are not large enough to permit the construction of systems for on-lot waste disposal, the size of the proposed lots must be increased or alternate methods for waste disposal proposed
 - ☐ The soils report shall describe the nature of the subsurface soils and any soil conditions that would affect the design of the proposed development. The soils report shall state whether the proposed subdivision plan is feasible and provide general solutions for all known geotechnical conditions or problems

Drainage report:

- ☐ A preliminary report specifying the method by which the applicant proposes to manage surface and subsurface drainage for the subdivision and the effect of such method on adjacent areas. Unlike the drainage plan required by CBJ 49.35.510, the preliminary drainage report does not need to be prepared by a licensed engineer. The report must address the following:
 - ☐ A calculation of the increase in stormwater runoff resulting from the proposed development as well as the runoff from all drainage areas associated with the site. Runoff calculations shall be based on a fully-developed subdivision and a 25-year storm event
 - ☐ How drainage from the proposed subdivision will join an established drainage channel or channels, unless the director of engineering and public works approves use of an alternative drainage way
 - ☐ An evaluation of existing drainage ways and structures located between the subdivision and the receiving water body, and verification that the existing drainage ways can accommodate the increased runoff. If the increased runoff cannot be handled, the plan must propose solutions to the problem
 - ☐ All required improvements, on or off site, that are shown on the construction plans in accordance with CBJ 49.35, Article V, and that will be constructed as part of the subdivision

Water:

- ☐ For subdivisions of five or more lots, including major subdivisions, the following shall be included, where applicable, in accordance with CBJ 49.15.412:
 - ☐ If a proposed subdivision is located at greater distance from the existing public water system than specified in CBJ 49.35, Article III, and the applicant chooses not to connect to the public system, a statement that the applicant will provide a community water system or that individual wells will be used

Preliminary Plat Checklist

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- ☐ A report by a registered engineer or geologist that clearly supports the legal and physical availability of adequate water. Methods for proof of water availability and the standards for quantity are listed in CBJ 49.35, Article III
- ☐ A copy of the State application for a permit to appropriate water in the quantity required to meet the subdivisions demands
- ☐ This does not apply to remote subdivisions unless: the subdivider of the remote subdivision chooses to provide potable water, a public water system is available and the subdivision falls within the criteria outlined in CBJ 49.35.310(a), or the subdivision has four or fewer lots.
- ☐ The director for minor subdivisions, and the planning commission for major subdivisions, may, for good cause, temporarily waive the requirement to provide a water report and proof of water, and condition the approval of the preliminary plat upon the provision of both documents as part of the final plat application and approval process.

Erosion control:

- ☐ A report explaining the method by which the applicant proposes to control erosion and manage runoff, and potential impacts to adjacent properties or water bodies. The report shall include a plan for preservation of ground cover in areas where runoff and resulting erosion need to be minimized.

Traffic study:

- ☐ A traffic impact analysis may be required with the preliminary plat in accordance with CBJ 49.40.300.

Shadow plats:

- ☒ For subdivisions of five or more lots in transition areas, a shadow plat shall be submitted according to CBJ 49.70.710. The shadow plat shall consist of a sketch superimposed on the proposed subdivision layout. This sketch shall reflect any future resubdivision of the parcels into smaller lots consistent with the higher density and the lot size allowed under the transition zoning.

GENERAL NOTES

- ALL BEARINGS SHOWN ARE TRUE BEARINGS AS ORIENTED TO THE BASIS OF BEARING AND DISTANCES SHOWN ARE REDUCED TO HORIZONTAL FIELD DISTANCES.
- THE ERROR OF CLOSURE OF THIS SURVEY DOES NOT EXCEED 1:10,000.
- BASIS OF BEARING**
THE BASIS OF BEARING FOR THIS PLAT IS THE BEARING OF S 0° 01' 00" W, AS SHOWN ON PLAT No. 73-17, DATED OCTOBER 29, 1973, BETWEEN THE RECOVERED MONUMENTS, AS SHOWN ON THIS PLAT.
- WHERE RECORD SURVEY COURSES (BEARINGS AND/OR DISTANCES) DIFFER FROM THAT OF ACTUAL FIELD MEASURED AND/OR COMPUTED SURVEY COURSES, THE RECORD BEARING AND/OR DISTANCES IS SHOWN WITHIN PARENTHESIS AND REFERENCED TO A RECORDED PLAT (R#).
- THE PRELIMINARY FIELD SURVEYING WAS PERFORMED ON MAY 26-27, 2020, UTILIZING A TRIMBLE S7 ROBOTICS TOTAL STATION WITH STANDARD LASER RANGING MEASUREMENTS.
- RECORD INFORMATION**
THE RECORD INFORMATION USED FOR THIS SUBDIVISION IS DERIVED FROM THE OFFICIAL PLATS: PLAT No. 73-17, JUNEAU RECORDING DISTRICT, DATED OCTOBER 29, 1973 (R1), PLAT No. 92-18, JUNEAU RECORDING DISTRICT, DATED APRIL 28, 1992 (R2);
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET, AND HAVE BEEN REDUCED TO THEIR HORIZONTAL EQUIVALENTS.
- DOMESTIC WATER AND SANITARY SEWER DISPOSAL PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC UTILITIES.
- THE LOTS CREATED THROUGH THIS SUBDIVISION ARE AN ALTERNATIVE RESIDENTIAL SUBDIVISION. AT TIME OF PLAT RECORDING DEVELOPMENT OF LOTS, INCLUDING FURTHER SUBDIVISION OR USE, IS SUBJECT TO CBJ 49.15 ARTICLE IX. SEE CITY AND BOROUGH OF JUNEAU LAND USE CODE FOR CURRENT REGULATIONS.
- THERE SHALL BE NO DISTURBANCE OR DEVELOPMENT WITHIN THE PERIMETER BUFFER SHOWN ON THIS PLAT, AS REQUIRED BY CBJ 49.15.920(j).
- AT TIME OF RECORDING, LOTS 2 THROUGH 11 AND 13 THROUGH 15 ARE LIMITED TO ONE SINGLE FAMILY DWELLING. LOT 12 MAY BE PERMITTED ONE SINGLE FAMILY DWELLING AND ONE ACCESSORY APARTMENT. SEE CBJ 49.15 ARTICLE IX FOR CURRENT REGULATIONS.

OWNERSHIP CERTIFICATE

BICKNELL, INC. HEREBY CERTIFIES THAT BICKNELL, INC. IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT IT HEREBY ADOPTS THIS PLAT OF SUBDIVISION WITH ITS FREE CONSENT, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED:

OWNER: ROSCOE V. BICKNELL, IV
BICKNELL, INC.
DATE: 2020
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NOTARY ACKNOWLEDGMENT

UNITED STATES OF AMERICA) SS
STATE OF ALASKA)

THIS IS TO CERTIFY THAT ON THIS DAY OF 2020, BEFORE ME, THE UNDERSIGNED A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, PERSONALLY APPEARED TO ME KNOWN TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY SIGNED AND SEALED THE SAME FREELY AND VOLUNTARILY FOR THE USES AND PURPOSES THEREIN MENTIONED. WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA

MY COMMISSION EXPIRES:

PLANNING COMMISSION PLAT APPROVAL

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS OF THE CITY AND BOROUGH OF JUNEAU, ALASKA AND THAT SAID PLAT HAS BEEN APPROVED BY THE PLANNING COMMISSION BY PLAT RESOLUTION NO. , DATED , 2020, AND THAT THE PLAT SHOWN HEREON HAS BEEN APPROVED FOR RECORDING IN THE JUNEAU RECORDING DISTRICT, STATE RECORDERS OFFICE AT ANCHORAGE.

CHAIRMAN OF THE PLANNING COMMISSION
CITY AND BOROUGH OF JUNEAU

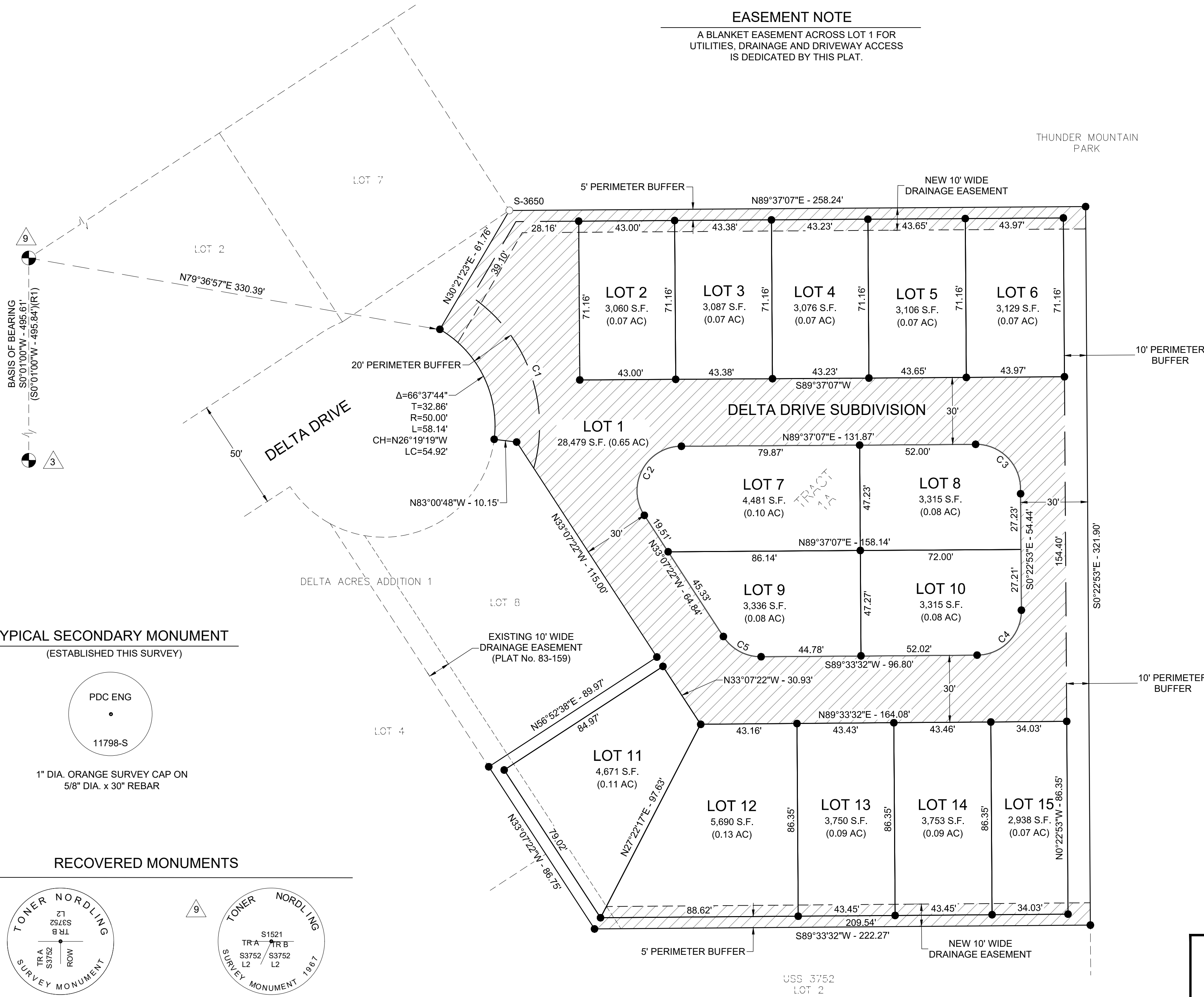
DATED , 2020

ATTEST:

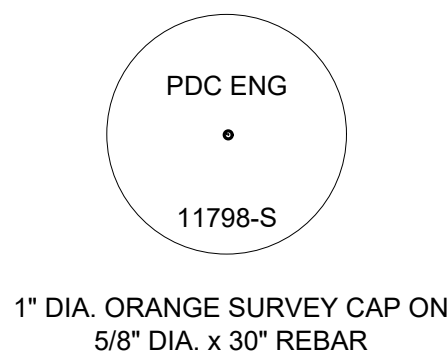
MUNICIPAL CLERK
CITY AND BOROUGH OF JUNEAU

EASEMENT NOTE

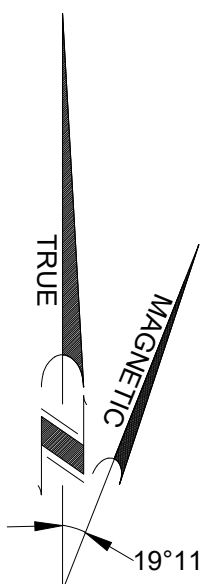
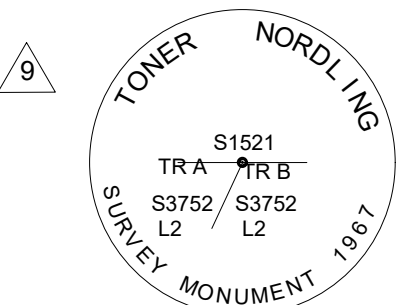
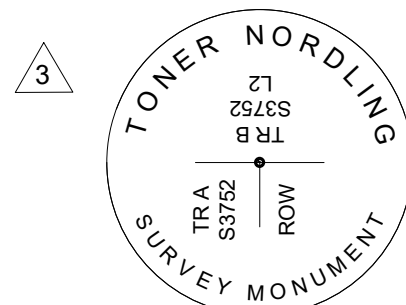
A BLANKET EASEMENT ACROSS LOT 1 FOR UTILITIES, DRAINAGE AND DRIVEWAY ACCESS IS DEDICATED BY THIS PLAT.



TYPICAL SECONDARY MONUMENT
(ESTABLISHED THIS SURVEY)

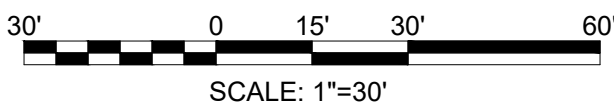


RECOVERED MONUMENTS



SOURCE: N.O.A.A.
MAGNETIC DECLINATION 19°11'E
NOVEMBER 14, 2017 CHANGING BY
0°17' W/YEAR

CURVE TABLE					
CURVE #	LENGTH	DELTA	RADIUS	CHORD BEARING	CORD DISTANCE
C1	87.15'	71° 20' 01"	70.00'	N19° 52' 32"W	81.63'
C2	42.84'	122° 44' 29"	20.00'	S28° 14' 53"W	35.11'
C3	31.42'	90° 00' 00"	20.00'	N45° 22' 53"W	28.28'
C4	31.40'	89° 56' 25"	20.00'	N44° 35' 20"E	28.27'
C5	20.01'	57° 19' 06"	20.00'	S61° 46' 55"E	19.18'



VICINITY MAP

SOURCE: CBJ PROPERTY ATLAS
SCALE: 1"= 500'

LEGEND

- PRIMARY MONUMENT (RECOVERED)
- SECONDARY MONUMENT (RECOVERED)
- SECONDARY MONUMENT (ESTABLISHED)
- SURVEYED LINE
- UNSURVEYED LINE
- EASEMENT LINE
- NEW EASEMENT LINE
- PLAT No. 73-17, JRD
- PLAT No. 92-18, JRD
- ACCESS, UTILITY & DRAINAGE EASEMENT
- PERIMETER BUFFER

SURVEYOR'S CERTIFICATE

I, CRAIG O. RANSON, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATE: 12/04/20



PLAN • DESIGN • CONSTRUCT
A RESPEC COMPANY
9109 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801
907.780.6060 | A E C C 6 0 5

A PLAT OF
DELTA DRIVE SUBDIVISION
A SUBDIVISION OF
THUNDER MOUNTAIN PARK
TRACT 1A

WITHIN U.S. SURVEY NO. 3752
WITHIN CITY AND BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT

STATE RECORDER'S OFFICE AT ANCHORAGE

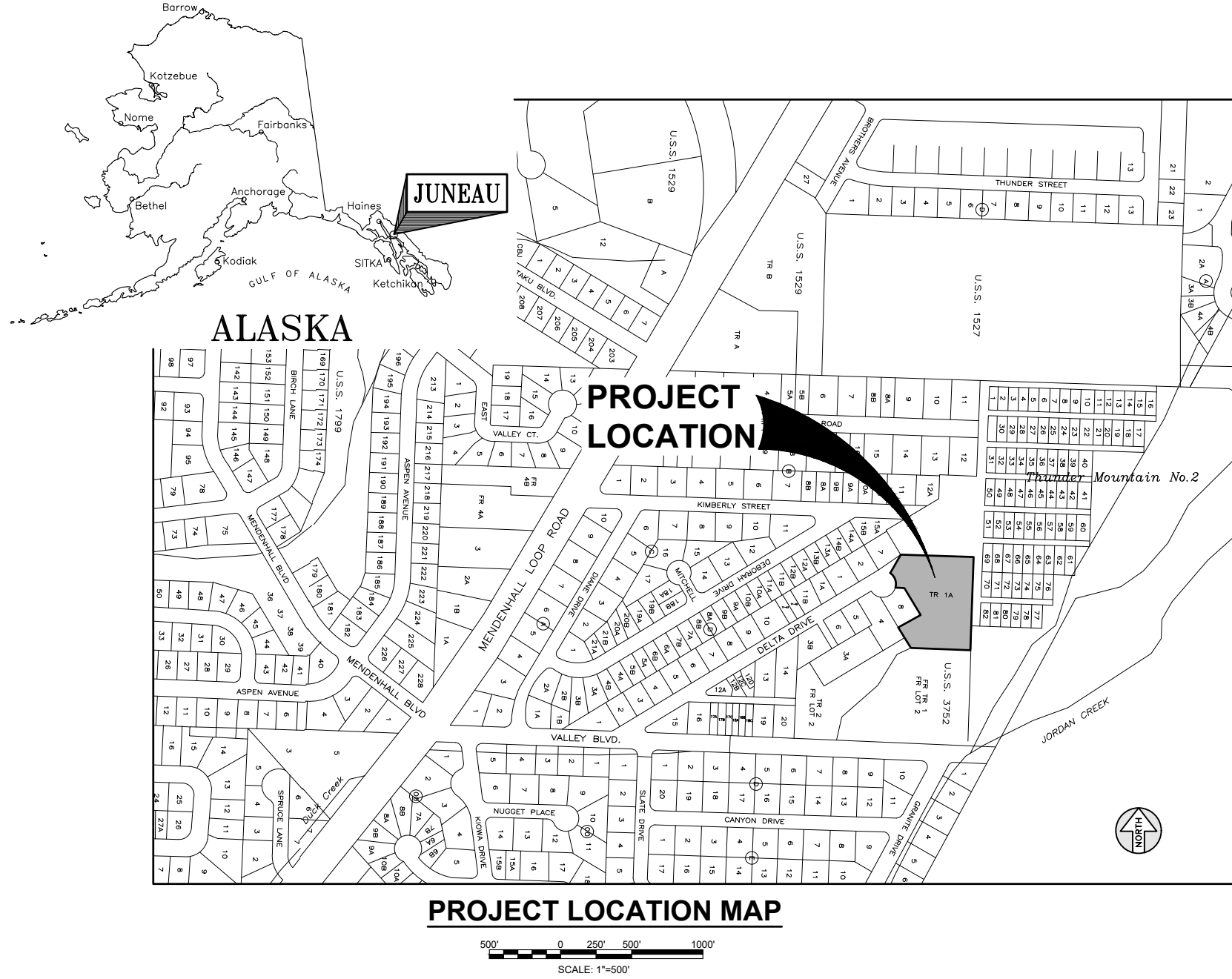
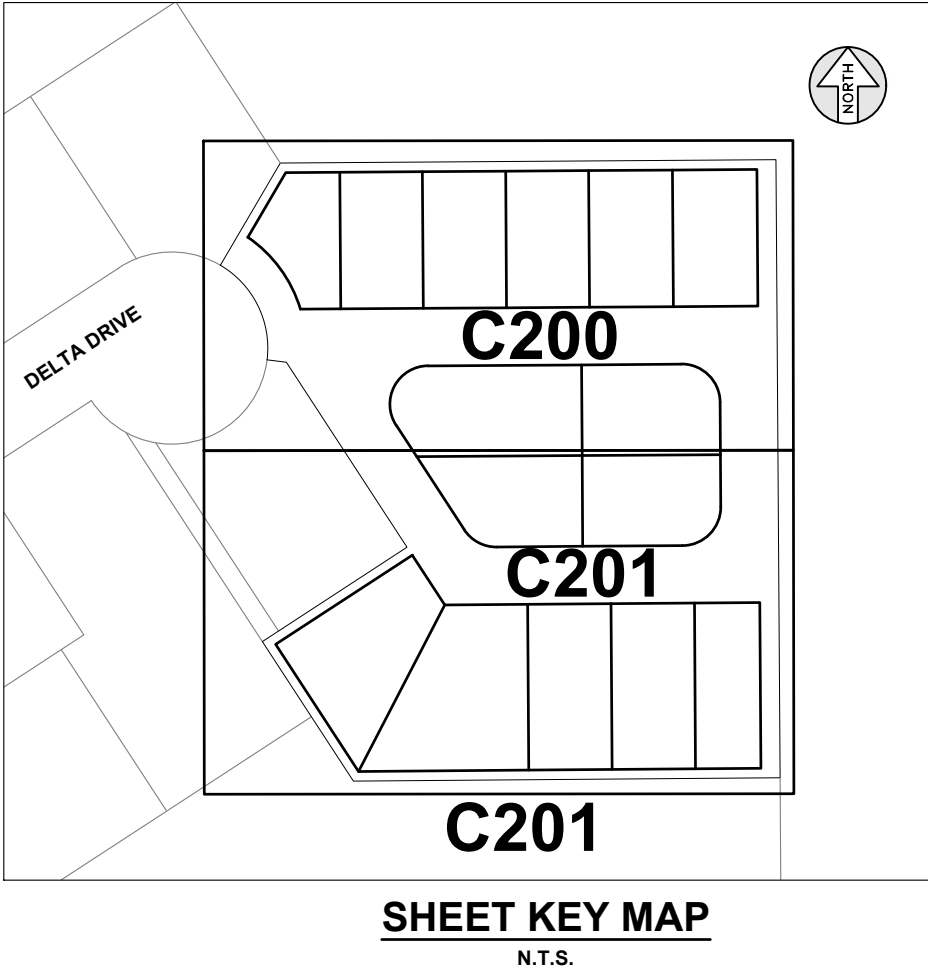
OWNER: BICKNELL, INC.
P.O. BOX 33517
JUNEAU, AK 99803
SURVEYOR: PDC ENGINEERS
9109 MENDENHALL MALL ROAD SUITE 4
JUNEAU, ALASKA 99801
(907) 780-6060
DATE: December 04, 2020 SCALE: 1"=30' SHEET 1 OF 1 PDC PROJ. No. 20098JUN

Attachment C1 - Preliminary Construction Drawings

DELTA DRIVE SUBDIVISION CONSTRUCTION IMPROVEMENT PLAN

JUNEAU, ALASKA

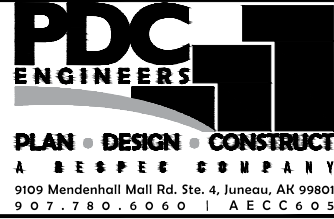
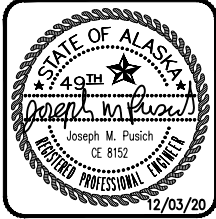
SHEET INDEX	
SHEET No.	DESCRIPTION
C001	COVER SHEET
C002	GENERAL NOTES, ABBREVIATIONS AND SYMBOLS
C003	SUMMARY TABLES
C004	EXISTING SITE CONDITIONS
C100	TYPICAL SECTIONS
C101	CONSTRUCTION DETAILS
C102	CONSTRUCTION DETAILS
C200	OVERALL SITE PLAN
C201	SITE & UTILITY PLAN
C202	SITE & UTILITY PLAN
C203	GRADING PLAN
C204	WATER METER ENCLOSURE DETAILS
C205	WATER METER ENCLOSURE DETAILS
C206	WATER METER ENCLOSURE DETAILS
C207	WATER METER ENCLOSURE DETAILS
C300	EROSION & SEDIMENT CONTROL PLAN
C301	EROSION & SEDIMENT CONTROL DETAILS



DESIGN <u>MSM</u>	<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																											
DRAWN <u>MSM</u>																												
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FILE:	No.	DATE	REVISION	BY	APPRD.																							

DELTA DRIVE
SUBDIVISION

JUNEAU, AK



COVER SHEET

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C001

P:\2020\20098JN-Bicknell-Delta\CD\0001.cdw 20098JN.dwg PLOT: December 03, 2020 at: 3:59pm Moki Minneh

GENERAL CONSTRUCTION NOTES

1. CBJ ENGINEERING STANDARD DETAILS BOOK FOR CIVIL ENGINEERING PROJECTS AND SUBDIVISION IMPROVEMENTS DATED AUGUST, 2011 AND CBJ ENGINEERING STANDARD SPECIFICATIONS DATED DECEMBER, 2003 ARE MADE A PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
2. LARGE BOULDERS, HARDPAN, STUMPS, LOGS, ORGANICS AND GROUND WATER MAY BE ENCOUNTERED AT VARIOUS DEPTHS DURING EXCAVATION OPERATIONS. THESE MATERIALS SHALL BE DISPOSED OF AS REQUIRED BY THE ENGINEER.
3. GRADES AND ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
4. LOCATION OF WATER SYSTEM IMPROVEMENTS, SANITARY SEWER MANHOLES, STORM DRAIN STRUCTURES, PIPING AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
5. LOCATIONS OF EXISTING UNDERGROUND SEWER, WATER, TELEPHONE, CABLE TELEVISION, AND POWER UTILITIES SHOWN ON THESE PLANS WERE DERIVED FROM CBJ AS-BUILTS OR FIELD LOCATES. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING THE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE RESULTING TO THESE UNDERGROUND UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. CALL "DIAL BEFORE YOU DIG" @ 586-1333 FOR UNDERGROUND UTILITY LOCATES AND 811 ALASKA DIG LINE FOR ACS AND GCI PRIOR TO ANY EXCAVATION ACTIVITIES.
6. CONTRACTOR SHALL ASSURE GARBAGE PICKUP, DAILY MAIL SERVICE, FUEL AND SERVICE DELIVERIES WILL BE UNINTERRUPTED TO ALL RESIDENTS AFFECTED BY THIS PROJECT.
7. PROPERTY LINE LOCATIONS USED IN THESE PLANS WERE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A SUBDIVISION BOUNDARY SURVEY.
8. ALL SIGN INSTALLATIONS OR RELOCATIONS SHALL BE PERFORMED ACCORDING TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.) WITH THE ALASKA SUPPLEMENT.
9. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
10. PROVIDE KNOCKOUTS IN PRECAST STORM DRAIN STRUCTURES FOR ALL PIPES SHOWN ON THE PLANS.
10. ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN ON THE PLANS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTION TO EXISTING PIPES, AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
11. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY WITHOUT THE WRITTEN APPROVAL OF THE PROPERTY OWNER.
11. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES OPERATOR LONI VANKIRK (723-4975) OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (COSIGNED BY THE ENGINEER) AT LEAST 48-HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. NO WATER SERVICE INTERRUPTION MAY PROCEED UNTIL THIS APPROVAL IS OBTAINED.
12. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. BRASS CAP MONUMENTS, REBARS OR CHISELED X'S) PRIOR TO CONSTRUCTION THAT WILL BE DISTURBED DURING HIS WORK, AND REMONUMENT AFTER CONSTRUCTION OPERATIONS. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR. ALL EXISTING PROPERTY CORNERS ARE NOT NECESSARILY SHOWN ON THE PLANS.
13. THE PLAN DRAWINGS DO NOT NECESSARILY SHOW ALL TREES AND SHRUBS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO TREES, SHRUBS OR LANDSCAPING ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
14. "JUMPING JACK", OR SIMILAR TYPE COMPACTORS SHALL BE USED FOR COMPACTION WITHIN 18-INCHES OF THE OUTSIDE SURFACE OF ALL WATER VALVE BOXES, CATCH BASINS AND MANHOLES.
15. THE USE OF GROUT AND QUICKSET CEMENT PRODUCTS WITH ADJUSTING RINGS, BRICKS, WOOD, STONES AND OTHER SIMILAR GRADE ADJUSTMENT DEVICES TO SUPPORT CATCH BASIN FRAMES OVER CATCH BASINS AND MANHOLES WILL NOT BE PERMITTED ON THIS PROJECT. SEE CBJ STANDARD SPECIFICATIONS, SECTION 02502 - STORM SEWER MANHOLES, INLETS AND CATCH BASINS AND THE DRAWINGS FOR CATCH BASIN FRAME SUPPORT REQUIREMENTS. SANITARY SEWER MANHOLES SHALL BE ADJUSTED PER CBJ STANDARD SPECIFICATIONS 02402 - SANITARY SEWER MANHOLES AND CLEANOUTS.
16. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ENGINEER APPROVED EROSION CONTROL DEVICES DURING CONSTRUCTION PER CBJ STANDARD SPECIFICATIONS SECTION 01570 REQUIREMENTS.
17. ALL WORK FOR THESE PLANS SHALL BE CONDUCTED IN STRICT ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND STANDARDS.

Attachment C- Preliminary Construction Drawings

AC	ASBESTOS CEMENT
ACS	ALASKA COMMUNICATIONS SYSTEMS
AEL&P	ALASKA ELECTRIC LIGHT & POWER
APPROX	APPROXIMATE
AST	ABOVEGROUND STORAGE TANK
BC	BACK OF CURB
BLVD	BOULEVARD
BOP	BEGINNING OF PROJECT
CB	CATCH BASIN
CBJ	CITY & BOROUGH OF JUNEAU
CHB	CHORD BEARING
CHL	CHORD LENGTH
C/L	CENTERLINE
CI	CAST IRON
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CONT	CONTINUOUS
CPP	CORRUGATED POLYETHYLENE PIPE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
E	EASTING
EG	EXISTING GRADE
EL	ELEVATION
EOP	END OF PROJECT
EP	EDGE OF PAVEMENT
EXIST	EXISTING
EXP	EXPANSION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GCI	GENERAL COMMUNICATION INC.
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH PRESSURE
IE	INVERT ELEVATION
L	LENGTH
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTE	MATCH TO EXISTING
N	NORTHING
N/A	NOT APPLICABLE
NFS	NON-FROST SUSCEPTIBLE
NTS	NOT TO SCALE
NVC	NO VERTICAL CURVE
OC	ON CENTER
PC	POINT OF CURVATURE
PERF	PERFORATED
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POC	POINT ON CURVE
POL	POINT ON LINE
PP	POWER POLE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
ROW	RIGHT-OF-WAY
RP	RADIUS POINT
RT	RIGHT
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TANGENT
TBG	TOP BACK OF GUTTER
TBM	TEMPORARY BENCH MARK
TC	TOP OF CONCRETE
TOB	TOP OF BANK
TOP	TOP OF PIPE
TYP	TYPICAL
UD	UNDERDRAIN
UON	UNLESS OTHERWISE NOTED
UST	UNDERGROUND STORAGE TANK
VC	VERTICAL CURVE
VERT	VERTICAL
VPI	VERTICAL POINT OF INTERSECTION
W/	WITH

SYMBOLS

EXISTING	PROPOSED	
		PRIMARY MONUMENT
		SECONDARY MONUMENT
		SURVEY SPIKE / MAG NAIL
		TEMPORARY BENCHMARK
		PROPERTY / BOUNDARY LINE
		PROPERTY / BOUNDARY LINE UNSURVEYED
		PROJECT BASELINE
		TOP OF BANK
		TOE OF SLOPE
		WATER GATE VALVE/CURB STOP
		WATER LINE/SERVICE
		SEWER LINE/SERVICE
		WOODEN FENCE
		CHAIN-LINK FENCE
		OVERHEAD ELECTRIC LINE
		ASPHALT PAVEMENT
		TREE LINE
		FIRE HYDRANT
		SANITARY SEWER MANHOLE
		SANITARY SEWER CLEANOUT
		CONCRETE HEADWALL W/ TRASH RACK
		STORM SEWER PIPE
		CATCH BASIN W/ AREA DRAIN
		TELEPHONE PEDESTAL
		CABLE PEDESTAL
		ELECTRICAL PEDESTAL
		POWER POLE WITH LIGHT
		GUY WIRE
		GANG STYLE MAILBOX
		STREET SIGN
		CONIFEROUS TREE
		DECIDUOUS TREE
		BUILDING FOUNDATION

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION
JUNEAU, AK



GENERAL NOTES,
ABBREVIATIONS AND
SYMBOLS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C002

Attachment C - Preliminary Construction Drawings

WATER SERVICE SUMMARY			
LOT No.	STATION & OFFSET	SIZE/TYPE	REMARKS
2	10+95.1, 13.5' LT	1" POLY	SEE NOTE 1
3	11+28.9, 13.5' LT	1" POLY	SEE NOTE 1
4	11+81.8, 13.5' LT	1" POLY	SEE NOTE 1
5	12+15.3, 13.5' LT	1" POLY	SEE NOTE 1
6	12+58.8, 21.4' LT	1" POLY	SEE NOTE 1
7	11+68.0, 13.4' RT	1" POLY	NEW SERVICE
8	12+28.0, 13.5' RT	1" POLY	NEW SERVICE
9	14+71.4, 13.4' RT	1" POLY	NEW SERVICE
10	14+11.4, 13.3' RT	1" POLY	NEW SERVICE
11	15+22.0, 18.1' LT	1" POLY	SEE NOTE 1
12	14+96.0, 13.5' LT	1" POLY	SEE NOTE 1
13	14+62.5, 13.5' LT	1" POLY	SEE NOTE 1
14	14+09.2, 13.5' LT	1" POLY	SEE NOTE 1
15	13+85.5, 21.6' LT	1" POLY	SEE NOTE 1
NOTES: 1. EXISTING FOUNDATION PADS REPORTED TO HAVE 3/4" POLY WATER SERVICES TO EACH UNIT. EXISTING WATER SERVICES MAY BE REUSED IF FOUND TO BE IN SATISFACTORY CONDITION. FLUSHING, DISINFECTION AND PRESSURE TESTING SHALL BE PERFORMED ON THE EXISTING 3/4" POLY WATER SERVICES.			

STORM DRAIN STRUCTURE FRAME & GRATE SUMMARY	
STRUCTURE No.	EAST JORDAN, OLYMPIC FOUNDRY Co., CBJ STANDARD No., OR APPROVED EQUAL
S-1	OLYMPIC FOUNDRY MH34SC

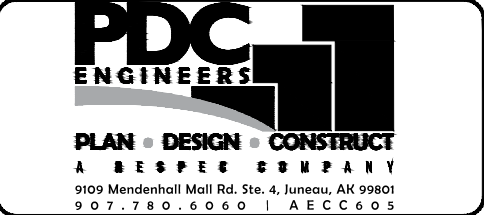
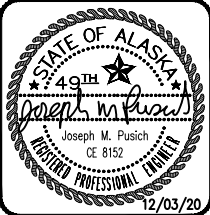
SEWER SERVICE SUMMARY			
LOT No.	STATION & OFFSET	SIZE/TYPE	REMARKS
2	10+82.7, 14.0' LT	4" PVC	SEE NOTE 1
3	11+16.6, 14.0' LT	4" PVC	SEE NOTE 1
4	11+71.4, 14.0' LT	4" PVC	SEE NOTE 1
5	12+02.3, 14.0' LT	4" PVC	SEE NOTE 1
6	12+52.1, 14.0' LT	4" PVC	SEE NOTE 1
7	11+38.0, 14.5' RT	4" PVC	NEW SERVICE
8	11+98.0, 14.5' RT	4" PVC	NEW SERVICE
9	15+01.5, 14.5' RT	4" PVC	NEW SERVICE
10	14+41.4, 14.5' RT	4" PVC	NEW SERVICE
11	15+27.7, 14.0' LT	4" PVC	SEE NOTE 1
12	15+07.9, 14.0' LT	4" PVC	SEE NOTE 1
13	14+77.6, 14.0' LT	4" PVC	SEE NOTE 1
14	14+22.8, 14.0' LT	4" PVC	SEE NOTE 1
15	13+92.1, 14.0' LT	4" PVC	SEE NOTE 1
NOTES: 1. SEWER SERVICE LOCATIONS SHOWN ARE FROM LIMITED AS-BUILT INFORMATION AND WERE NOT FIELD LOCATED. EXISITNG 4" PVC SEWER SERVICES EXIST FOR LOTS 2-6 AND LOTS 11-15. CONTRACTOR SHALL FIELD LOCATE ALL SEWER SERVICES TO CONFIRM FINAL LOCATION FOR NEW SEWER SERVICE CLEANOUT INSTALLATION. STATION & OFFSET ARE GIVEN TO THE CENTER OF THE NEW CLEANOUT LID. IF EXISTING SANITARY SEWER SERVICES FOUND TO BE IN GOOD CONDITION CONTRACTOR MAY KEEP THEM IN SERVICE. 2. CONSTRUCT NEW 4" PVC SEWER SERVICE AND INSTALL NEW CLEANOUT NEAR PROPERTY LINE PER CBJ STANDARD DETAIL 213 AND CONNECT TO EXISTING SEWER SERVICE. 3. ADJUST SEWER SERVICE SLOPE TO PROVIDE MAXIMUM SEPARATION BETWEEN UTILITY CROSSINGS. INSTALL SWEEPS AS REQUIRED UPON APPROVAL OF THE ENGINEER.			

DESIGN	MSM
DRAWN	MSM
CHECK	JMP
APPROVED	JMP
FILE:	

No.	DATE	REVISION	BY	APRVD.	

DELTA DRIVE
SUBDIVISION

JUNEAU, AK



SUMMARY TABLES

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C003

Attachment C- Preliminary Construction Drawings

SURVEY NOTES

1. THE PURPOSE OF THIS SURVEY IS TO PROVIDE A TOPOGRAPHIC DESIGN SURVEY OF THE DELTA DRIVE DEVELOPMENT.
2. THE FIELD SURVEYS WERE PERFORMED ON MAY 26-27, 2020.
3. THE SURVEY EQUIPMENT UTILIZED DURING THIS SURVEY WAS TRIMBLE R8-2 GNSS ROVER AND BASE AND A TRIMBLE S-7 ROBOTIC TOTAL STATION UTILIZING STANDARD LASER MEASURING TECHNIQUES.
4. ALL DISTANCES AND DIMENSIONS ARE IN U.S. SURVEY FEET AND REDUCED TO THEIR HORIZONTAL VALUES.
5. CONTROL AND MONUMENT COORDINATES ARE IN AN ASSUMED LOCAL COORDINATE SYSTEM.
6. ELEVATIONS ARE IN AN ASSUMED LOCAL VERTICAL DATUM.
7. CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
8. ALL UTILITIES WERE LOCATED BY PDC AND ARE BASED ON OBSERVABLE EVIDENCE AND ABOVE GROUND APPURTENANCES AND FIELD RETRACEMENT PERFORMED BY PDC.
9. THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS PER ALASKA STATUTE 40.15.900(5)(a).

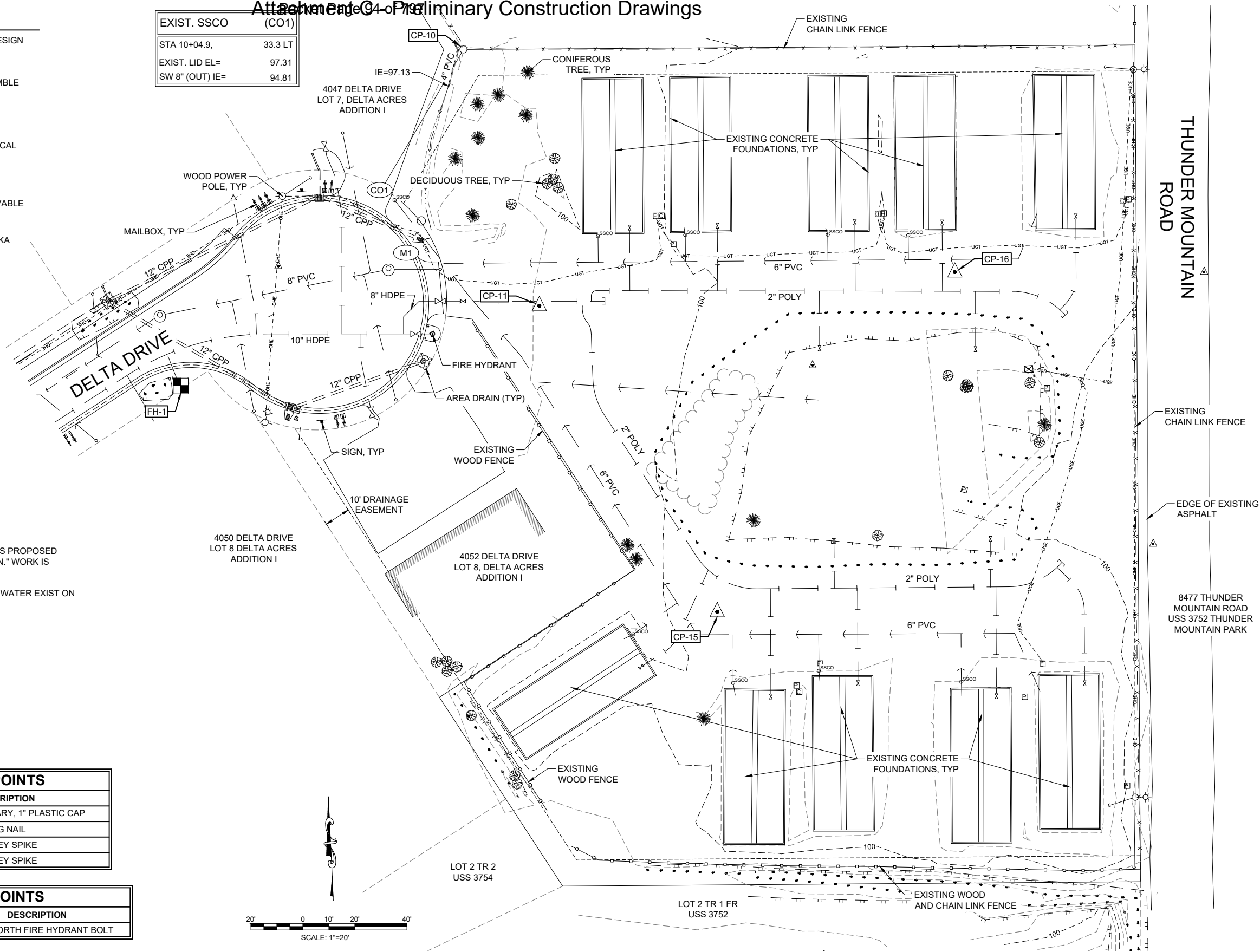
EXIST. SSCO	(CO1)
STA 10+04.9,	33.3 LT
EXIST. LID EL=	97.31
SW 8" (OUT) IE=	94.81

EXIST. SSMH	(M1)
STA 08+90.8,	25.9 RT
EXIST. LID EL=	98.50
E 6" (IN) IE=	92.94
NW 8" (OUT) IE=	92.84

- NOTES:
1. ROADWAY AND UTILITY INFORMATION SHOWN ON DELTA DRIVE IS PROPOSED FROM CBJ CONTRACT BE21-028 "DELTA DRIVE RECONSTRUCTION." WORK IS SCHEDULED FOR SPRING/SUMMER 2021.
 2. EXISTING 6" PVC SEWER MAIN AND 2" POLY PIPE FOR DOMESTIC WATER EXIST ON SITE.

TABLE OF HORIZONTAL CONTROL POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
CP 10	10112.63	10356.34	S-3650, SECONDARY, 1" PLASTIC CAP
CP 11	10014.23	10385.34	MAG NAIL
CP 15	9896.49	10453.74	SURVEY SPIKE
CP 16	10027.18	10545.16	SURVEY SPIKE

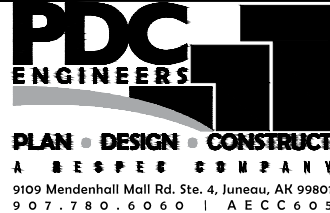
TABLE OF VERTICAL CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
FH-1	9983.52	10247.42	100.44'	"X" ON NORTH FIRE HYDRANT BOLT



DESIGN	MSM				
DRAWN	MSM				
CHECK	JMP				
APPROVED	JMP				
FILE:					
No.	DATE	REVISION	BY	APPRVD.	

DELTA DRIVE
SUBDIVISION

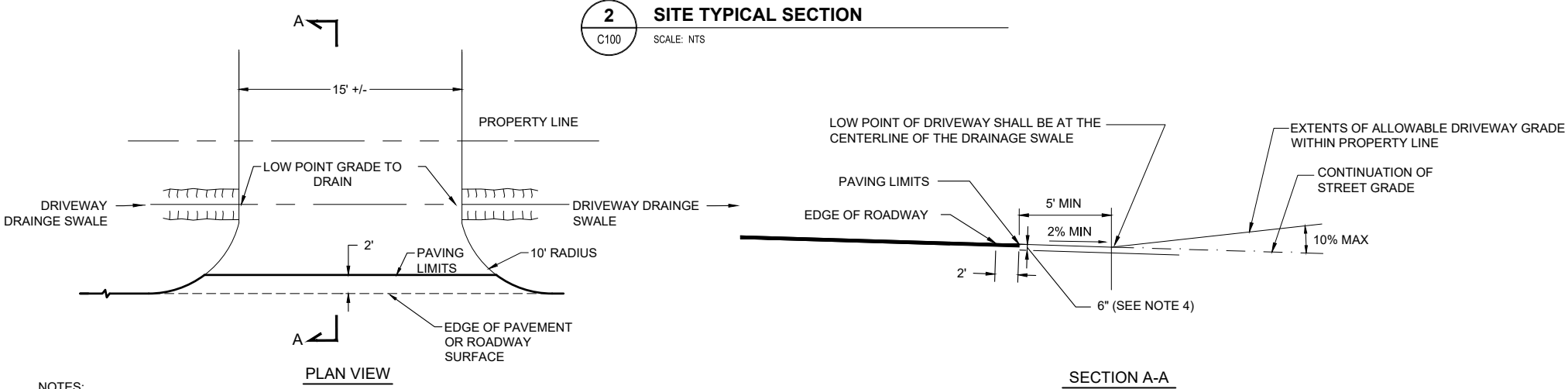
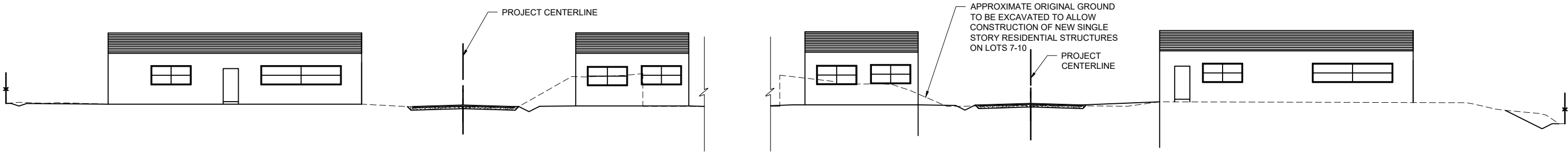
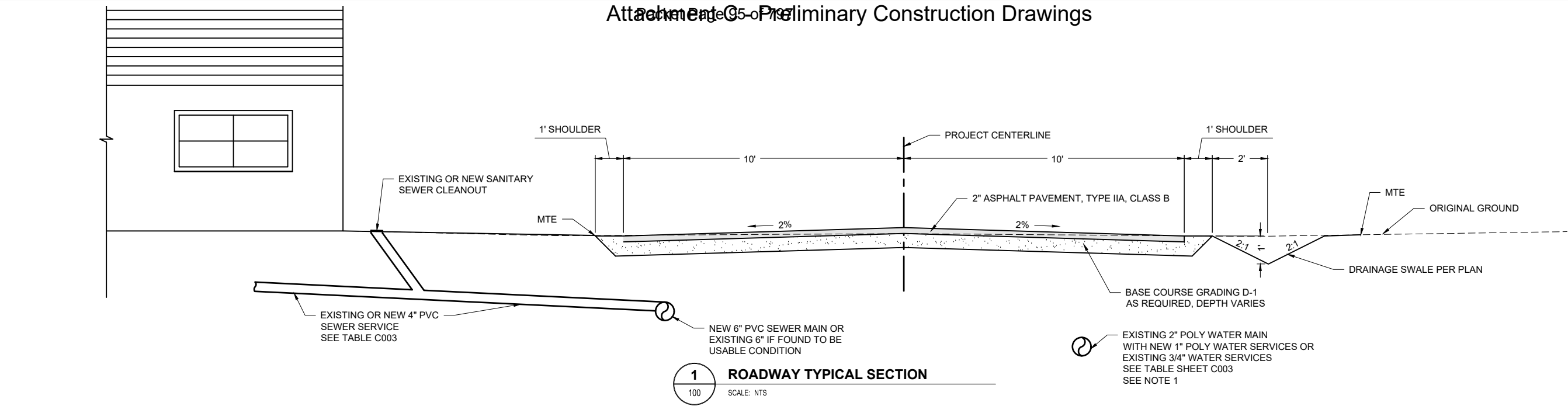
JUNEAU, AK



EXISTING SITE CONDITIONS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C004

Attachment C-5 of Preliminary Construction Drawings



- NOTES:
- PAVING LIMIT FOR DRIVEWAYS SHALL BE 2' FROM THE EDGE OF ROADWAY OR AS APPROVED BY THE ENGINEER.
 - DRIVEWAY SWALE SHALL BE GRADED TO DRAIN INTO DRAINAGE SWALE

3 TYPICAL DRIVEWAY SWALE DETAIL

C100 SCALE: NTS

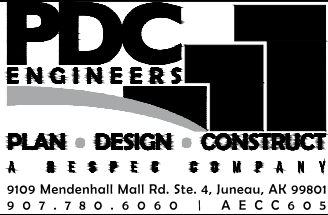
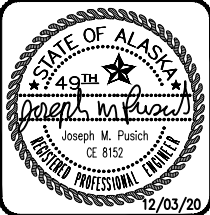
SHEET C100 NOTES:

- EXISTING 2" POLY WATER LINE WILL BE FLUSHED, DISINFECTED AND PRESSURE TESTED IN ACCORDANCE WITH CBJ STANDARD SPECIFICATIONS TO ENSURE COMPLIANCE WITH PUBLIC DRINKING WATER REGULATIONS.

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.

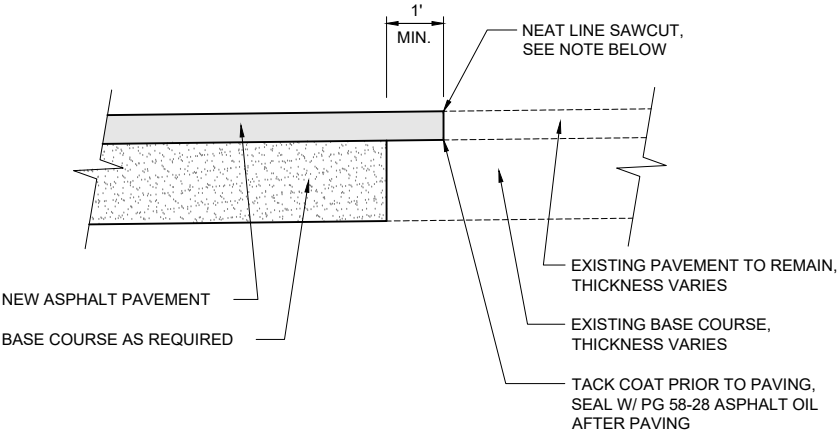
DELTA DRIVE
SUBDIVISION
JUNEAU, AK



TYPICAL SECTIONS

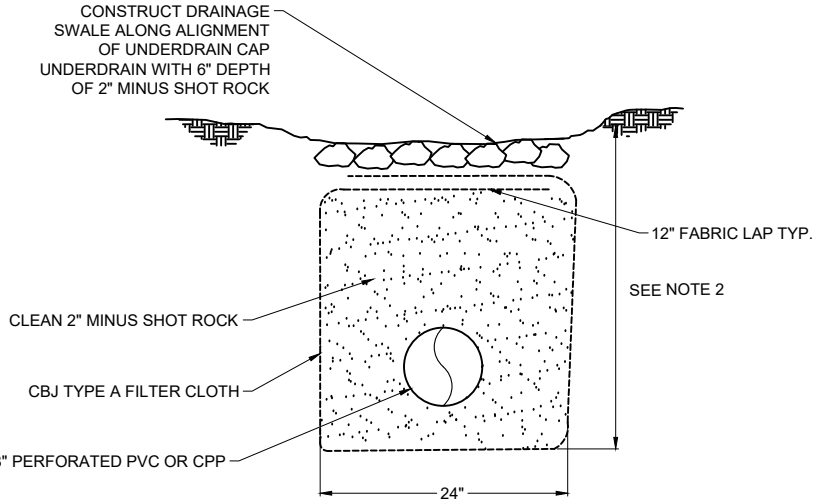
DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C100

Attachment C- Preliminary Construction Drawings



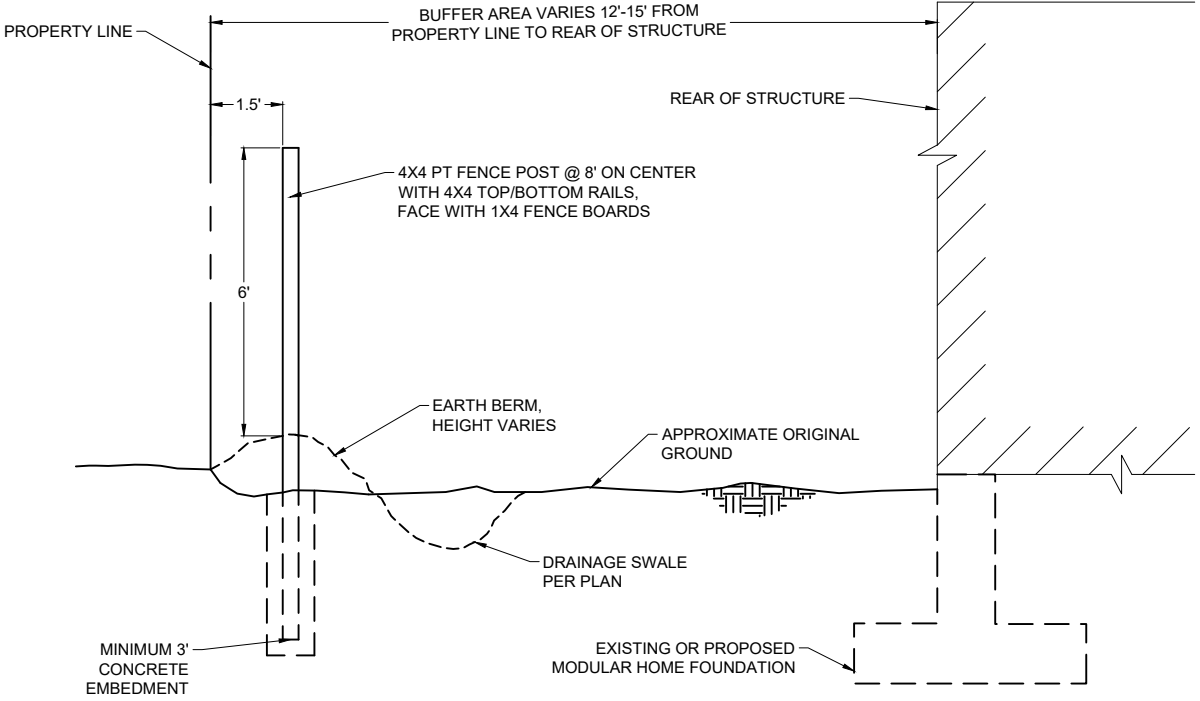
NOTE:
SAWCUT OF EXISTING PAVEMENT SHALL NOT BE
MADE UNTIL 24 HOURS PRIOR TO FINAL PAVING.

1 PAVEMENT MATCH DETAIL
C101 SCALE: NTS

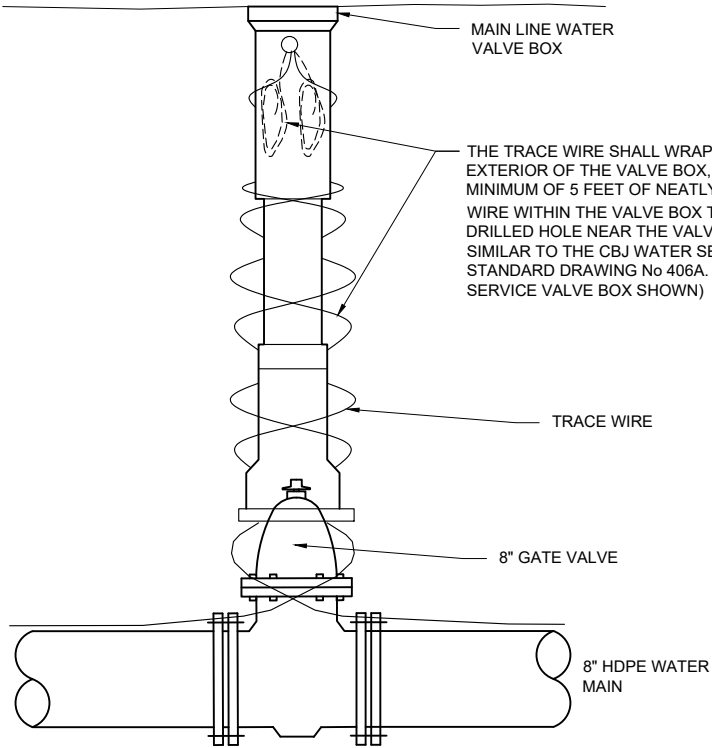


NOTES:
1. OUTFALL CONNECTIONS TO DAYLIGHT NEAR CULVERT INLETS PER PLAN.
2. DEPTH OF UNDERDRAIN VARIES, MIN SLOPE=0.50%

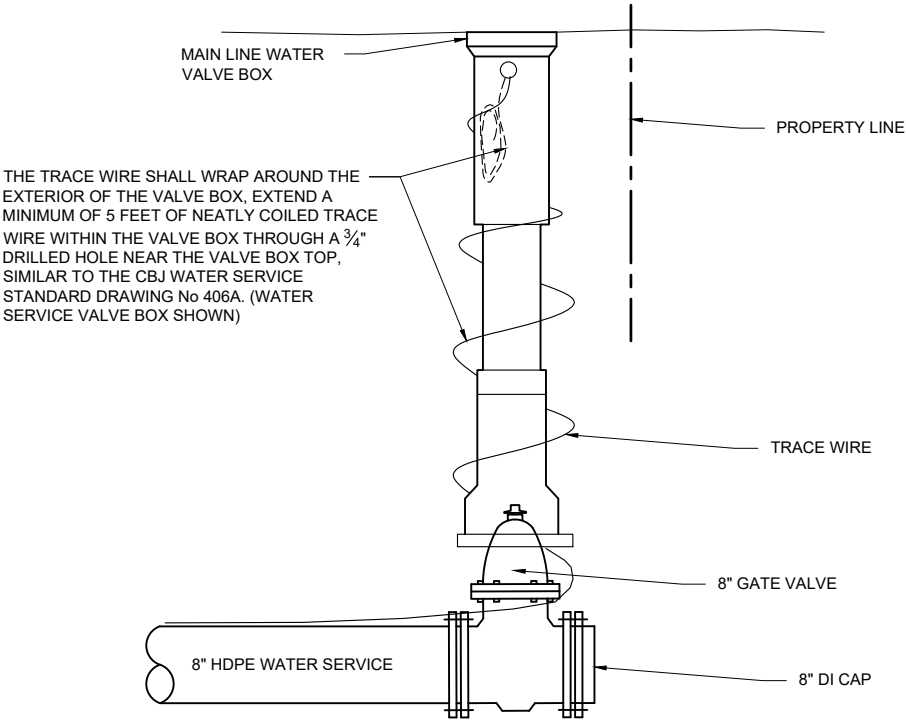
2 8\"/>



3 TYPICAL FENCE AT REAR OF DWELLING
C101 SCALE: 1"=2'



4 MAIN LINE VALVE TRACE WIRE TERMINATION DETAIL
C101 SCALE: NTS

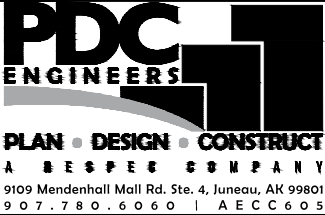
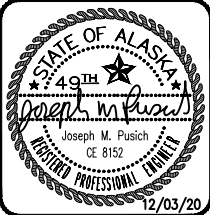


5 WATER SERVICE VALVE TRACE WIRE TERMINATION DETAIL
C101 SCALE: NTS

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APPRVD.

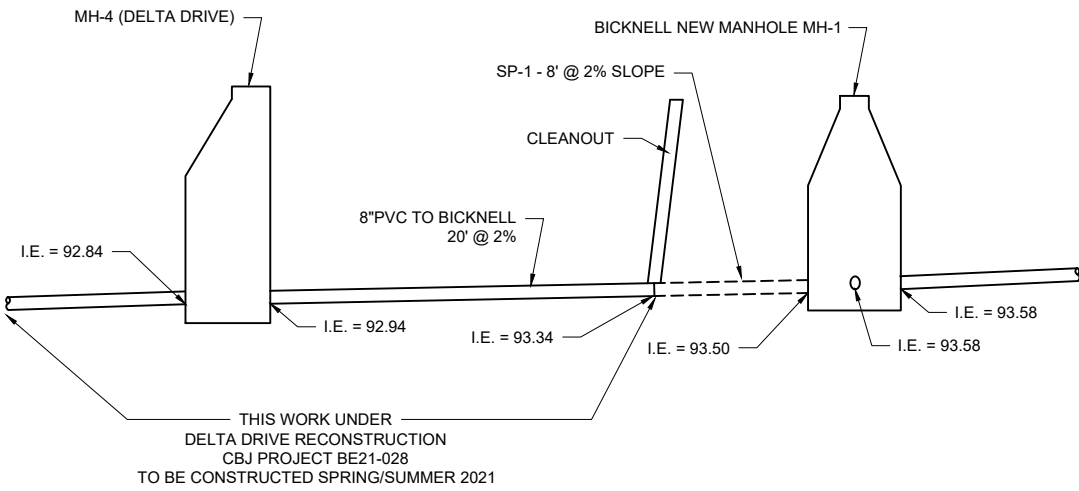
DELTA DRIVE
SUBDIVISION
JUNEAU, AK



CONSTRUCTION DETAILS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C101

P:\2020\20098JN-Bicknell-Delta\CC3001.dwg, 12/03/2020 03:59pm, Mick Minich



1 SEWER PROFILE CONNECTION
C102 SCALE: NTS

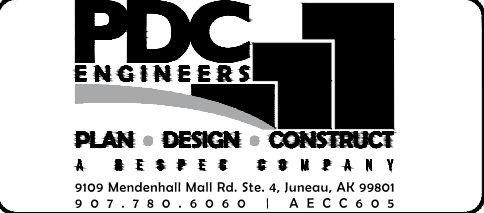
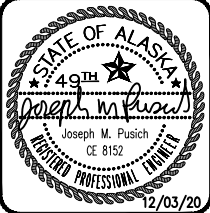
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DESIGN	MSM
DRAWN	MSM
CHECK	JMP
APPROVED	JMP
FILE:	

No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK



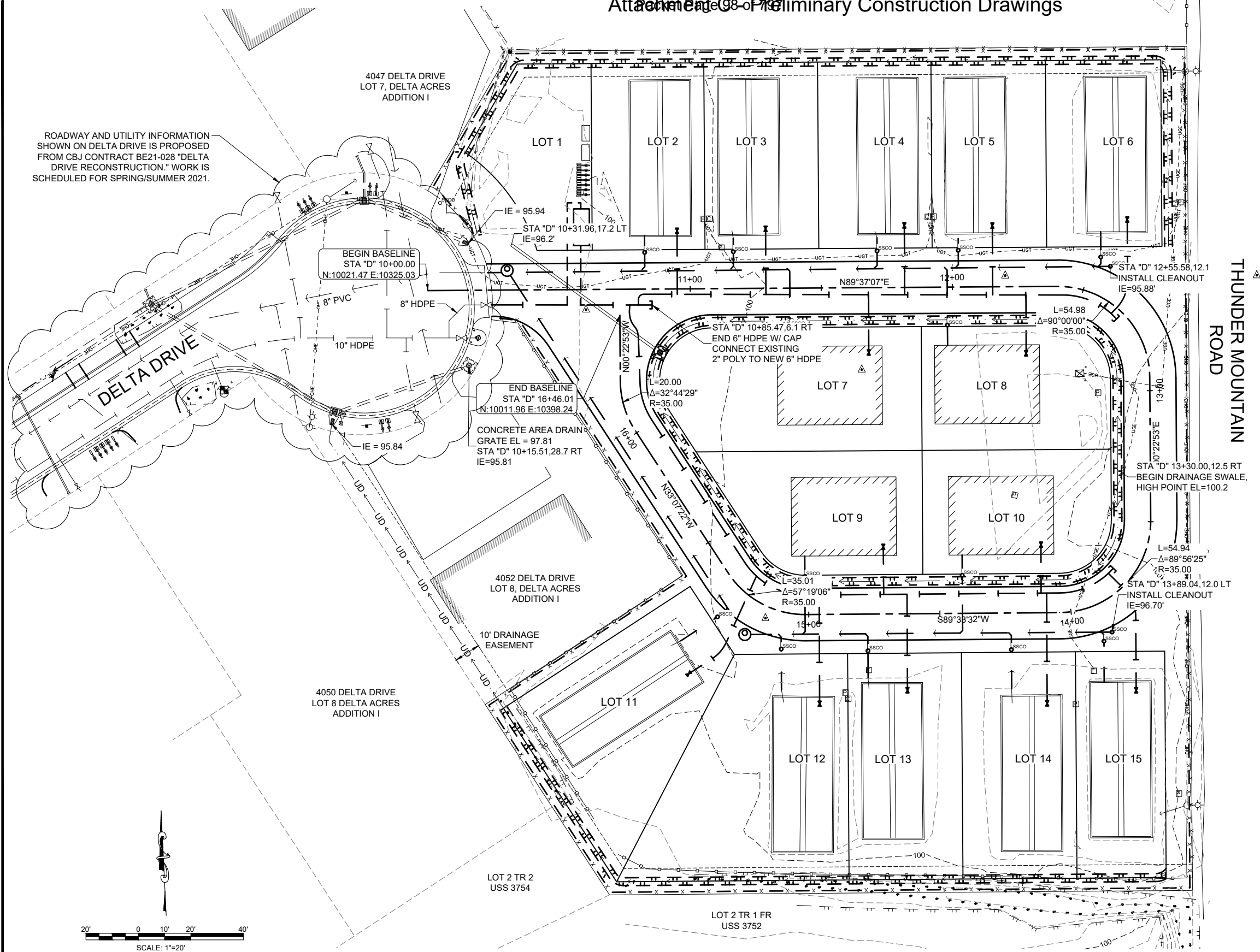
CONSTRUCTION DETAILS

DATE:	Dec 03, 2020
PDC No.	20098JN
SHEET	C102

Attachment C- Preliminary Construction Drawings

DIAL BEFORE YOU DIG!
586-1333
U/G POWER, TELEPHONE & T.V.
SHOWN ON THIS DRAWING INDICATE
EXISTENCE ONLY AND DO NOT
SUBSTITUTE FOR FIELD LOCATES
FOR ACS AND GCI LOCATES
DIAL THE 811 ALASKA DIGLINE

ROADWAY AND UTILITY INFORMATION
SHOWN ON DELTA DRIVE IS PROPOSED
FROM CBJ CONTRACT BE21-028 "DELTA
DRIVE RECONSTRUCTION." WORK IS
SCHEDULED FOR SPRING/SUMMER 2021.



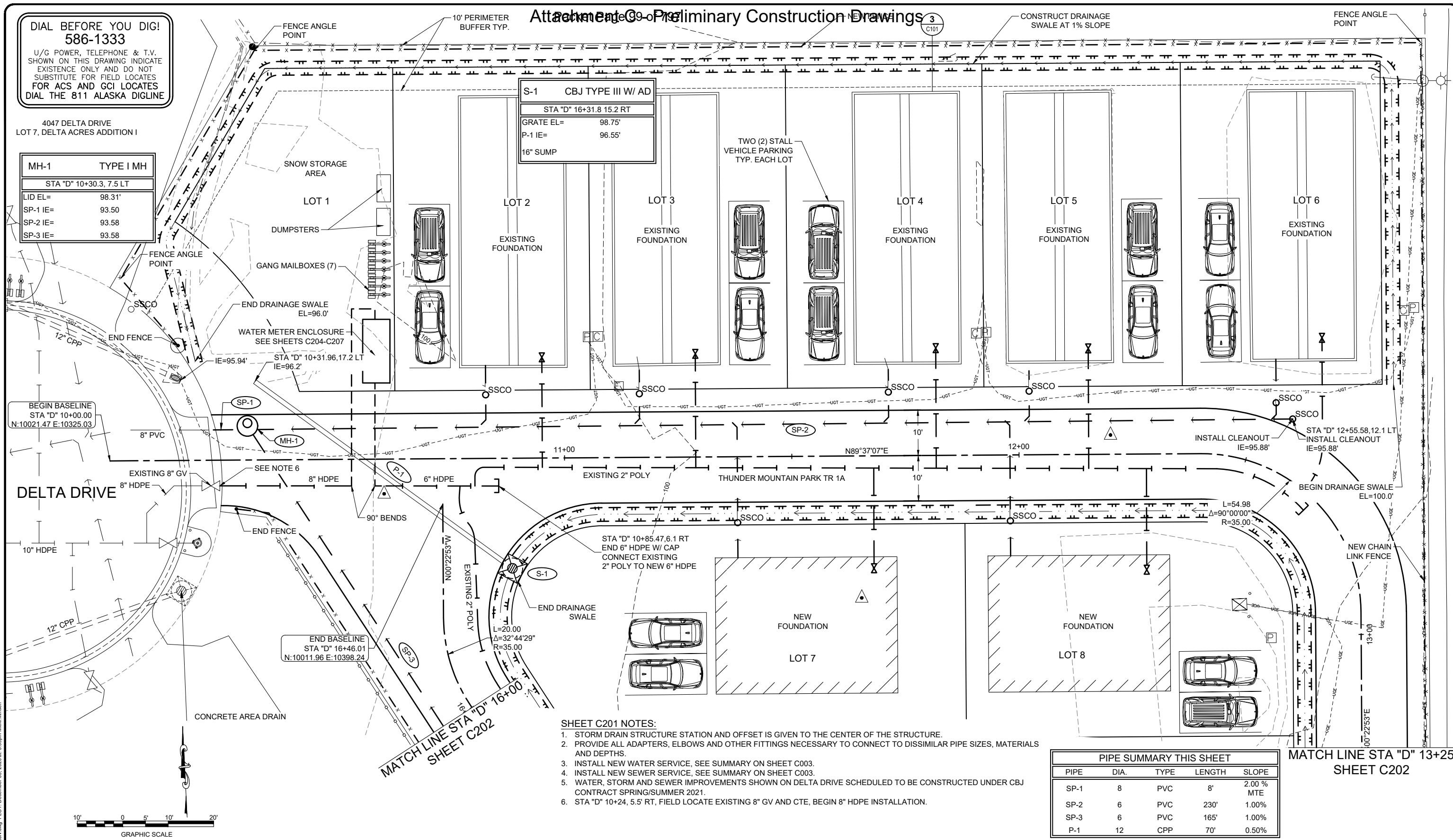
8477 THUNDER MOUNTAIN ROAD
USS 3752 THUNDER MOUNTAIN PARK

DESIGN: MSM	DELTA DRIVE SUBDIVISION JUNEAU, AK				OVERALL SITE PLAN	DATE: Dec 03, 2020
DRAWN: MSM						PDC No. 20098JN
CHECK: JMP						
APPROVED: JMP						
FILE:	No. DATE	REVISION	BY	APPRVD.	SHEET	C200

DIAL BEFORE YOU DIG!
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FOR ACS AND GCI LOCATES
DIAL THE 811 ALASKA DIGLINE

4047 DELTA DRIVE
LOT 7, DELTA ACRES ADDITION I

MH-1	TYPE I MH
STA "D" 10+30.3, 7.5 LT	
LID EL=	98.31'
SP-1 IE=	93.50
SP-2 IE=	93.58
SP-3 IE=	93.58



- SHEET C201 NOTES:
1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE.
 2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
 3. INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C003.
 4. INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C003.
 5. WATER, STORM AND SEWER IMPROVEMENTS SHOWN ON DELTA DRIVE SCHEDULED TO BE CONSTRUCTED UNDER CBJ CONTRACT SPRING/SUMMER 2021.
 6. STA "D" 10+24, 5.5' RT, FIELD LOCATE EXISTING 8" GV AND CTE, BEGIN 8" HDPE INSTALLATION.

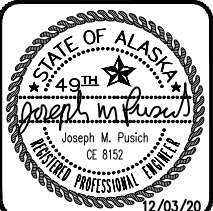
PIPE SUMMARY THIS SHEET				
PIPE	DIA.	TYPE	LENGTH	SLOPE
SP-1	8	PVC	8'	2.00 % MTE
SP-2	6	PVC	230'	1.00%
SP-3	6	PVC	165'	1.00%
P-1	12	CPP	70'	0.50%

DESIGN	MSM
DRAWN	MSM
CHECK	JMP
APPROVED	JMP
FILE:	

No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK



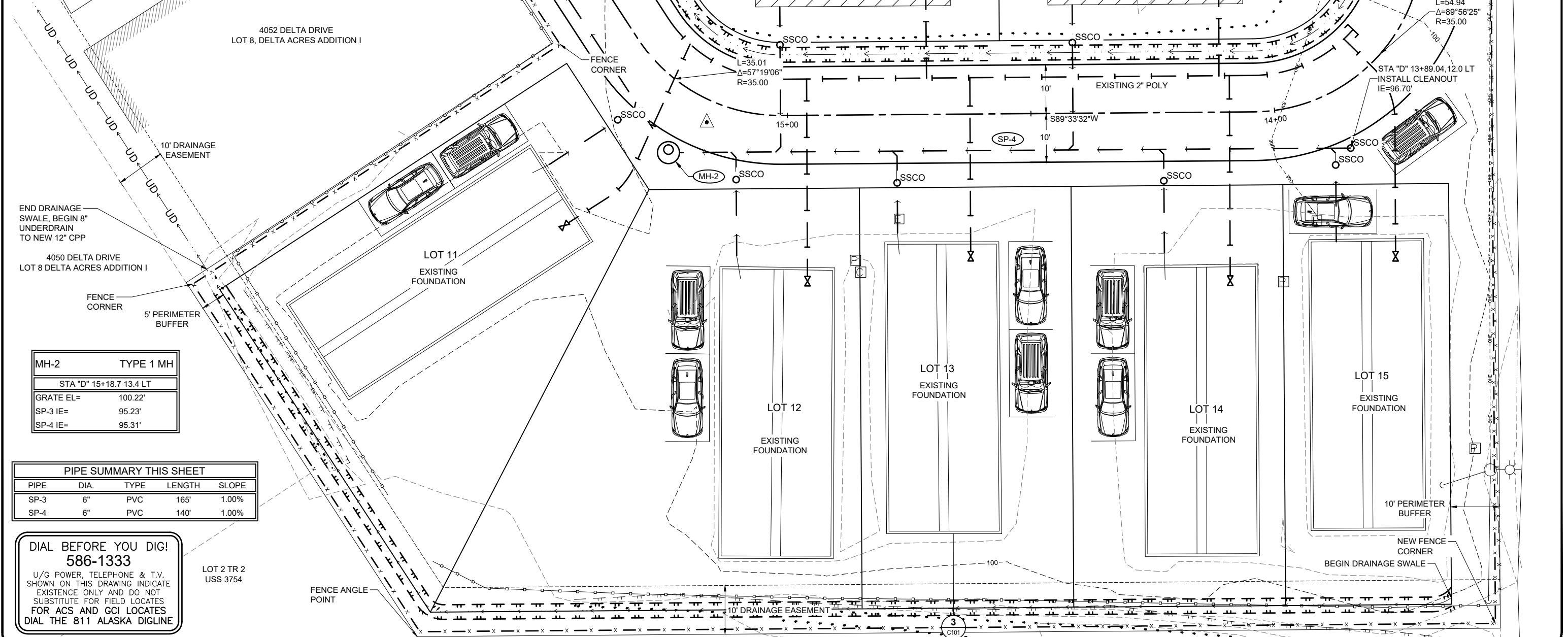
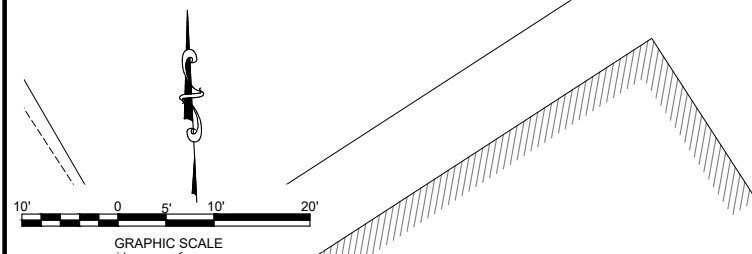
SITE & UTILITY PLAN

DATE: Dec 03, 2020
PLOT No. 20098JN

SHEET
C201

P:\2020\20098JN-Bicknell-Delta\CC201.dwg PLOT: December 03, 2020 at: 9:59pm Mick Minich

1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE. FRAME ELEVATION IS GIVEN TO THE TOP, FRONT OF FRAME.
2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
3. INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C003.
4. INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C003.



MH-2	TYPE 1 MH
STA "D" 15+18.7 13.4 LT	
GRATE EL=	100.22'
SP-3 IE=	95.23'
SP-4 IE=	95.31'

PIPE SUMMARY THIS SHEET				
PIPE	DIA.	TYPE	LENGTH	SLOPE
SP-3	6"	PVC	165'	1.00%
SP-4	6"	PVC	140'	1.00%

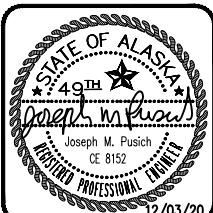
DIAL BEFORE YOU DIG!
586-1333
U/G POWER, TELEPHONE & T.V.
SHOWN ON THIS DRAWING INDICATE
EXISTENCE ONLY AND DO NOT
SUBSTITUTE FOR FIELD LOCATES
FOR ACS AND GCI LOCATES
DIAL THE 811 ALASKA DIGLINE

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.
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DELTA DRIVE
SUBDIVISION

JUNEAU, AK



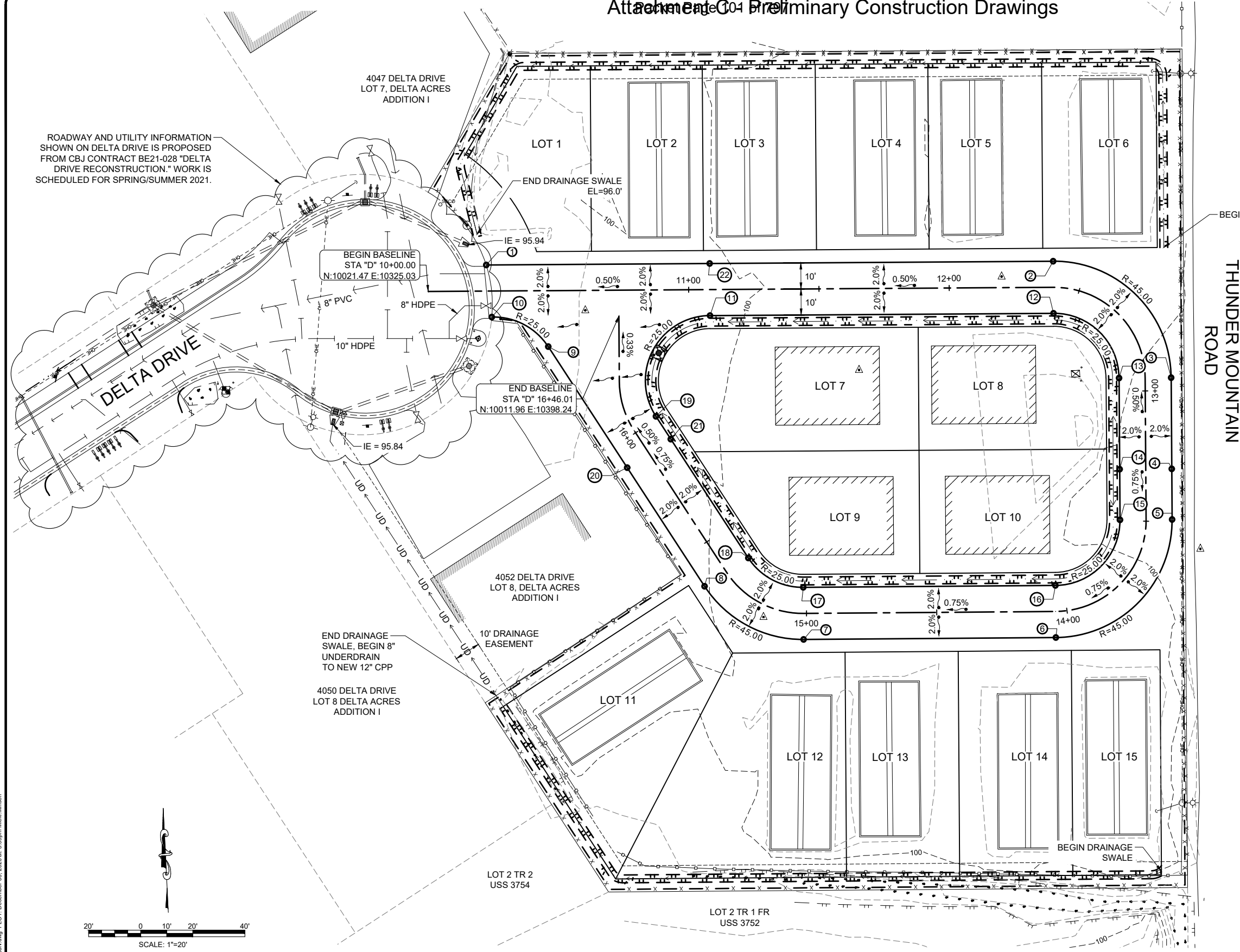
SITE & UTILITY PLAN

DATE: Dec 03, 2020
PDC No. 20098JN

SHEET
C202

Attachment C-04 Preliminary Construction Drawings

DIAL BEFORE YOU DIG!
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SUBSTITUTE FOR FIELD LOCATES
FOR ACS AND GCI LOCATES
DIAL THE 811 ALASKA DIGLINE



GRADE POINT SUMMARY TABLE THIS SHEET				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	10031.62	10347.33	98.29 *	EDGE OF PAVEMENT/MTE
2	10033.07	10564.96	100.32	EDGE OF PAVEMENT/PC
3	9988.37	10610.26	100.88	EDGE OF PAVEMENT/PT
4	9953.35	10610.49	101.24	EDGE OF PAVEMENT/HIGH POINT
5	9933.92	10610.62	101.09	EDGE OF PAVEMENT/PC
6	9888.64	10565.97	100.68	EDGE OF PAVEMENT/PT
7	9887.89	10469.17	99.97	EDGE OF PAVEMENT/PC
8	9908.30	10431.14	99.67	EDGE OF PAVEMENT/PT
9	10000.30	10371.11	98.59	EDGE OF PAVEMENT/PC
10	10011.64	10349.47	98.34 *	EDGE OF PAVEMENT/PT/MTE
11	10012.19	10433.23	99.66	EDGE OF PAVEMENT/PT
12	10013.07	10565.10	100.32	EDGE OF PAVEMENT/PC
13	9988.24	10590.26	100.88	EDGE OF PAVEMENT/PT
14	9953.22	10590.50	101.24	EDGE OF PAVEMENT/HIGH POINT
15	9933.79	10590.62	101.09	EDGE OF PAVEMENT/PC
16	9908.64	10565.82	100.68	EDGE OF PAVEMENT/PT
17	9907.89	10469.02	99.97	EDGE OF PAVEMENT/PC
18	9919.17	10447.92	99.67	EDGE OF PAVEMENT/PT
19	9973.53	10412.46	99.19	EDGE OF PAVEMENT/PC
20	9953.85	10401.42	99.29	EDGE OF PAVEMENT
21	9964.78	10418.17	99.29	EDGE OF PAVEMENT
22	10032.19	10433.09	99.66	EDGE OF PAVEMENT

*CBJ DELTA DRIVE RECONSTRUCTION TOP OF ASPHALT PAVEMENT ELEVATION

DESIGN MSM

DRAWN MSM

CHECK JMP

APPROVED JMP

FILE:

No.

DATE

REVISION

BY

APPRVD.

DELTA DRIVE SUBDIVISION

JUNEAU, AK

BICKNELL INC.

QUALITY CONSTRUCTION

STATE OF ALASKA

Professional Engineer

Joseph M. Pusich

CE 8152

12/03/20

PDC ENGINEERS

PLAN • DESIGN • CONSTRUCT

A BESPEC COMPANY

9109 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801

907.780.6060 | AECC605

GRADING PLAN

DATE: Dec 03, 2020

PDC No. 20098JN

SHEET

C203

1. CBJ SPECIFICATION 02601 - WATER SYSTEM AND 02602 - VALVES, AND OTHER CBJ STANDARD SPECIFICATIONS APPLY EXCEPT AS MODIFIED BELOW.
2. ALL JOINTS BETWEEN THE CONNECTIONS TO THE MAINLINES ON BOTH SIDES OF THE METER ENCLOSURE SHALL BE RESTRAINED.
3. ALL BOLTS, NUTS AND WASHERS SHALL BE SERIES 300 STAINLESS STEEL.
4. ALL METALLIC VALVES AND FITTINGS SHALL BE FACTORY EPOXY COATED INSIDE AND OUT, 8 MILS MINIMUM.
5. BURIED FITTINGS SHALL BE THRUST BLOCKED PER CBJ STANDARD DETAILS.
6. DIP, HDPE PIPE AND PIPE STANDS ARE PER CBJ SECTION 02602.
7. ALL PIPE AND SPOOL PIECES ABOVE GRADE ARE TO BE FLANGED, WITH 125# FLANGES. USE A FLANGE ADAPTOR WITH THE CONNECTION TO HDPE.
8. GATE VALVES SHALL HAVE HAND WHEELS.
9. PRESSURE GAUGE IS TO BE STAINLESS STEEL, GLYCERIN FILLED, WITH A 3/4 OR 4-INCH FACE AND 150 TO 160 PSI PRESSURE RANGE.
10. THE GATE VALVE AHEAD OF THE METER IS TO BE FLXFL, WHILE THE VALVES ON EITHER SIDE OF THE DOUBLE CHECK MAY BE FLXVIC. VALVES SHALL COMPLY WITH AWWA C509 OR C515.
11. THE METER SHALL BE A 4-INCH NEPTUNE TRUFLO COMPOUND METER WITH A STRAINER.
12. THE DOUBLE CHECK VALVE SHALL BE A 6-INCH ZURN 350A WITH THE GATE VALVES, OR APPROVED EQUAL. THE DOUBLE CHECK SHALL MEET THE REQUIREMENTS OF AWWA C510 AND BE ASSE AND NSF LISTED.
13. TWO DUPLEX 120-V ELECTRICAL OUTLETS SHALL BE INSTALLED INSIDE THE ENCLOSURE. CONDUIT SHALL RUN FROM THE EXTERIOR MOUNTED DISCONNECT BOX NEAR THE ELECTRICAL METER, UNDERGROUND, AND COME UP THROUGH THE CONCRETE SLAB. THE OUTLETS SHALL BE MOUNTED ABOVE THE FLOOR AND LOCATED FOR EASY ACCESS THROUGH THE PANELS.
14. ALL ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN AND COMPLY WITH ALL APPROPRIATE ELECTRICAL CODES. ANY REQUIRED ELECTRICAL PERMITS SHALL BE OBTAINED. COORDINATE WITH THE LOCAL ELECTRICAL UTILITY AS NECESSARY AND PROVIDE ANY EQUIPMENT THEY REQUIRE TO COMPLETE THEIR SERVICE TO THIS LOCATION.

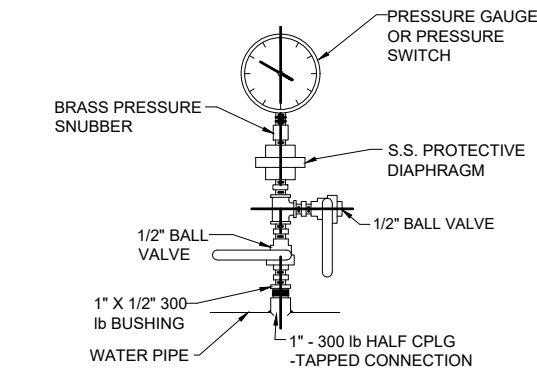
Diagram illustrating the installation of a backflow prevention assembly (BPA) on a water pipe. The assembly includes a combination valve and a ball valve with screwed ends. The installation is shown with a water pipe and a minimum 18" clearance above the floor. The assembly is supported by a minimum 24 SS screen.

Labels and components shown in the diagram:

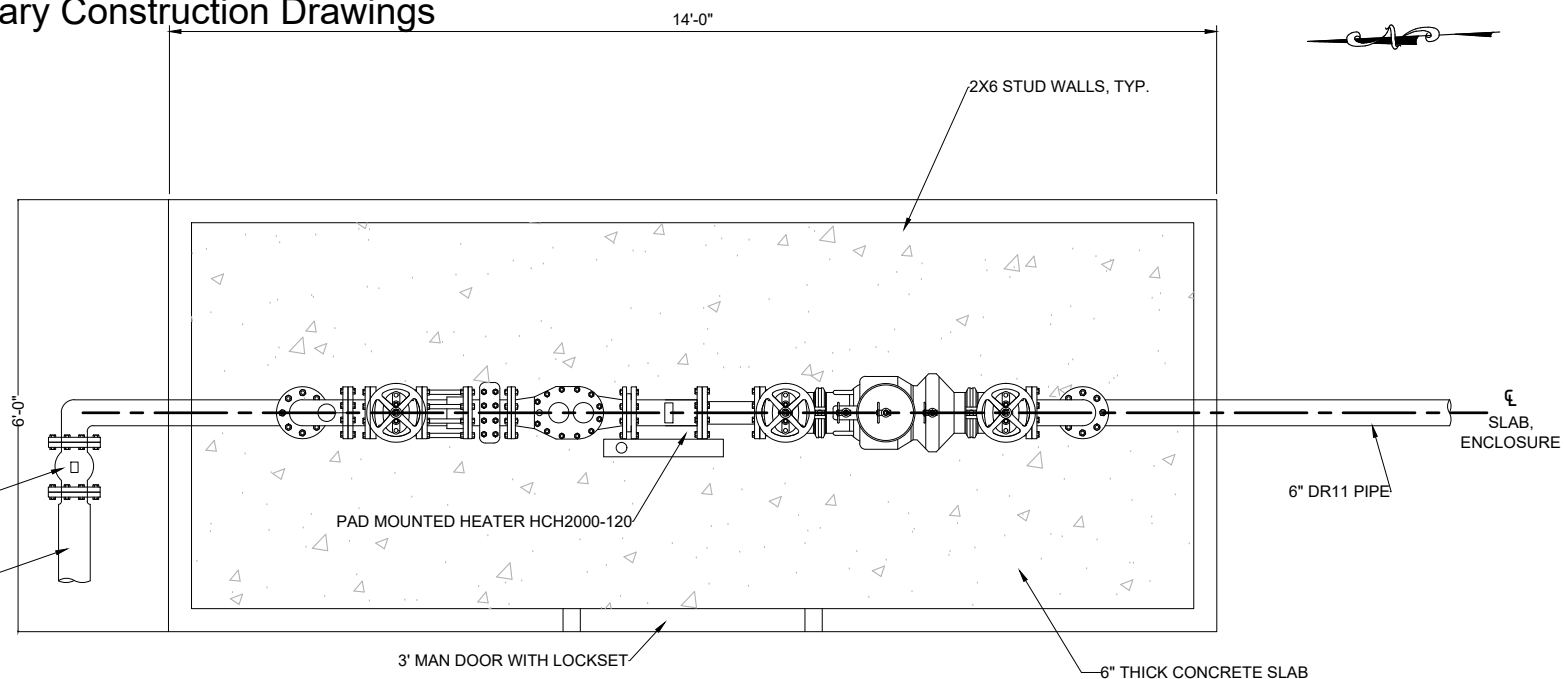
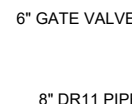
- COMBINED AIR VACUUM AND AIR RELEASE VALVE
- BALL VALVE WITH SCREWED ENDS.
- WATER PIPE
- SCH. 40 GALV. STEEL
- SCH. 80 GALVANIZED STEEL NIPPLES
- 4"-150 LB. BLIND FLANGE. DRILL AND TAP TO MATCH VALVE INLET. SEE NOTE
- 4"-150 LB. FLANGED OUTLET SEE NOTE. 2" SIZE AND SMALLER MAY HAVE HALF COUPLING INSTEAD OF FLANGED OUTLET.
- MINIMUM 18" ABOVE FLOOR. PROVIDE #24 SS SCREEN.

NOTE: OUTLET, BALL VALVE, COMBINATION VALVE AND PIPING SHALL BE NOMINAL SIZE OF VALVE.

Attachment C02 Preliminary Construction Drawings

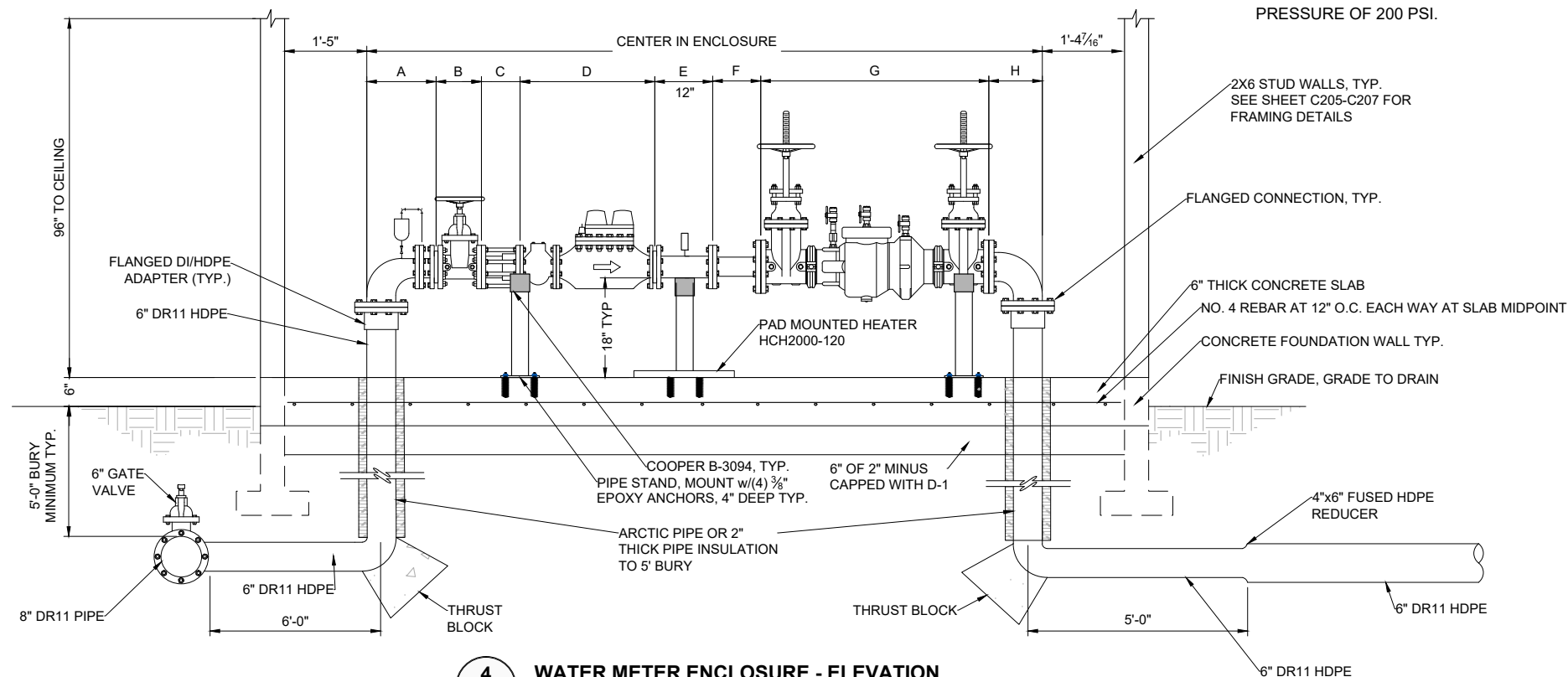


1 PRESSURE GAUGE OR SWITCH
C204 SCALE: NTS



2 WATER METER ENCLOSURE - PLAN
C204 SCALE: NTS

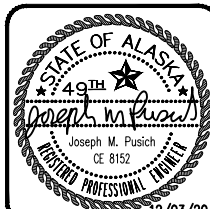
1. ALL JOINTS TO BE FUSED, FLANGED, OR RESTRAINED TO WITHSTAND A MINIMUM PRESSURE OF 200 PSI.



4 WATER METER ENCLOSURE - ELEVATION

No.	DATE	REVISION	BY	APRVD.
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DELTA DRIVE
SUBDIVISION

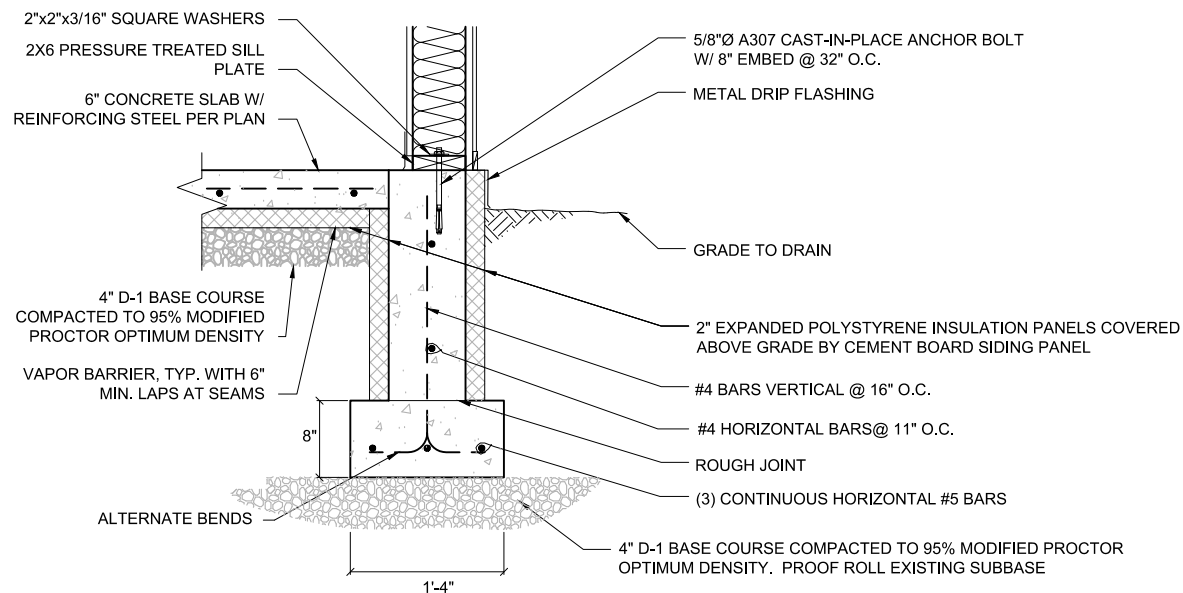


WATER METER ENCLOSURE DETAILS

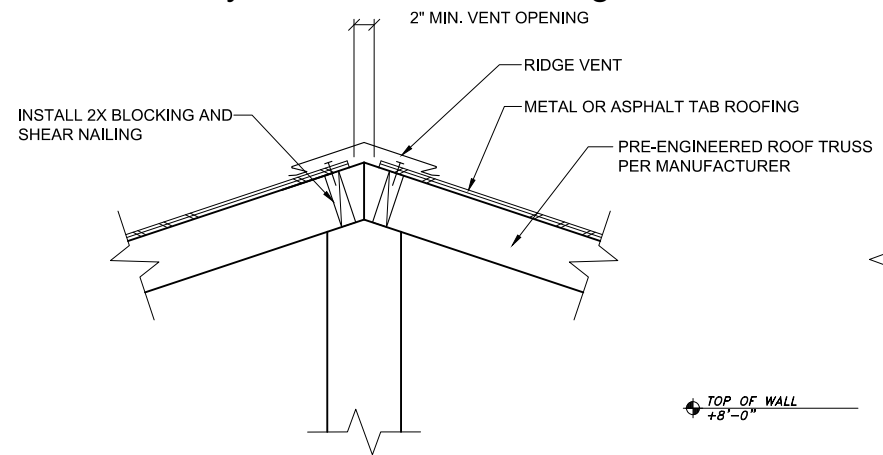
DATE: Dec 03, 2020
PDC No. 20098JN

SHEET
C204

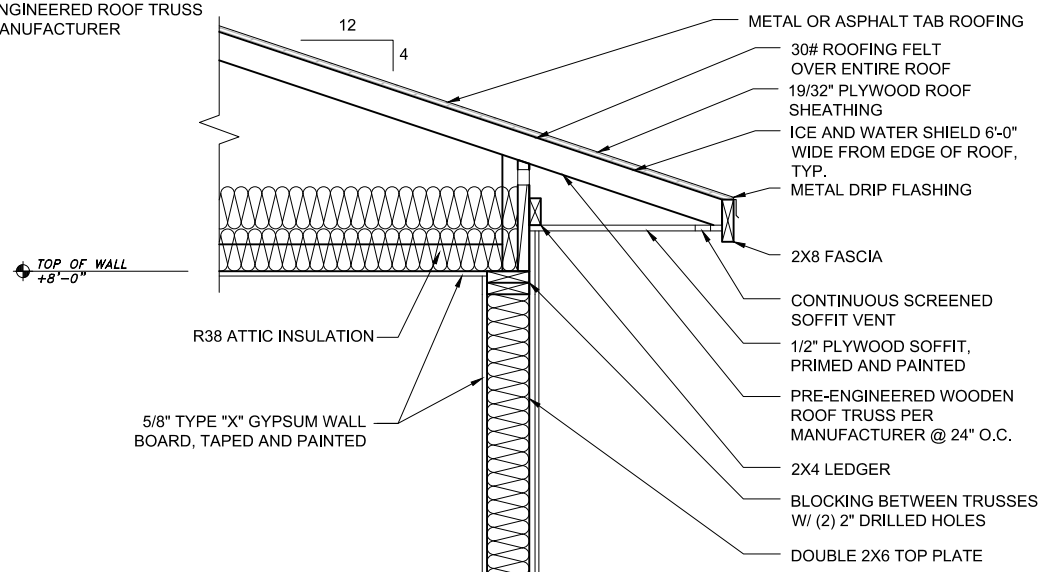
Attachment C-03 Preliminary Construction Drawings



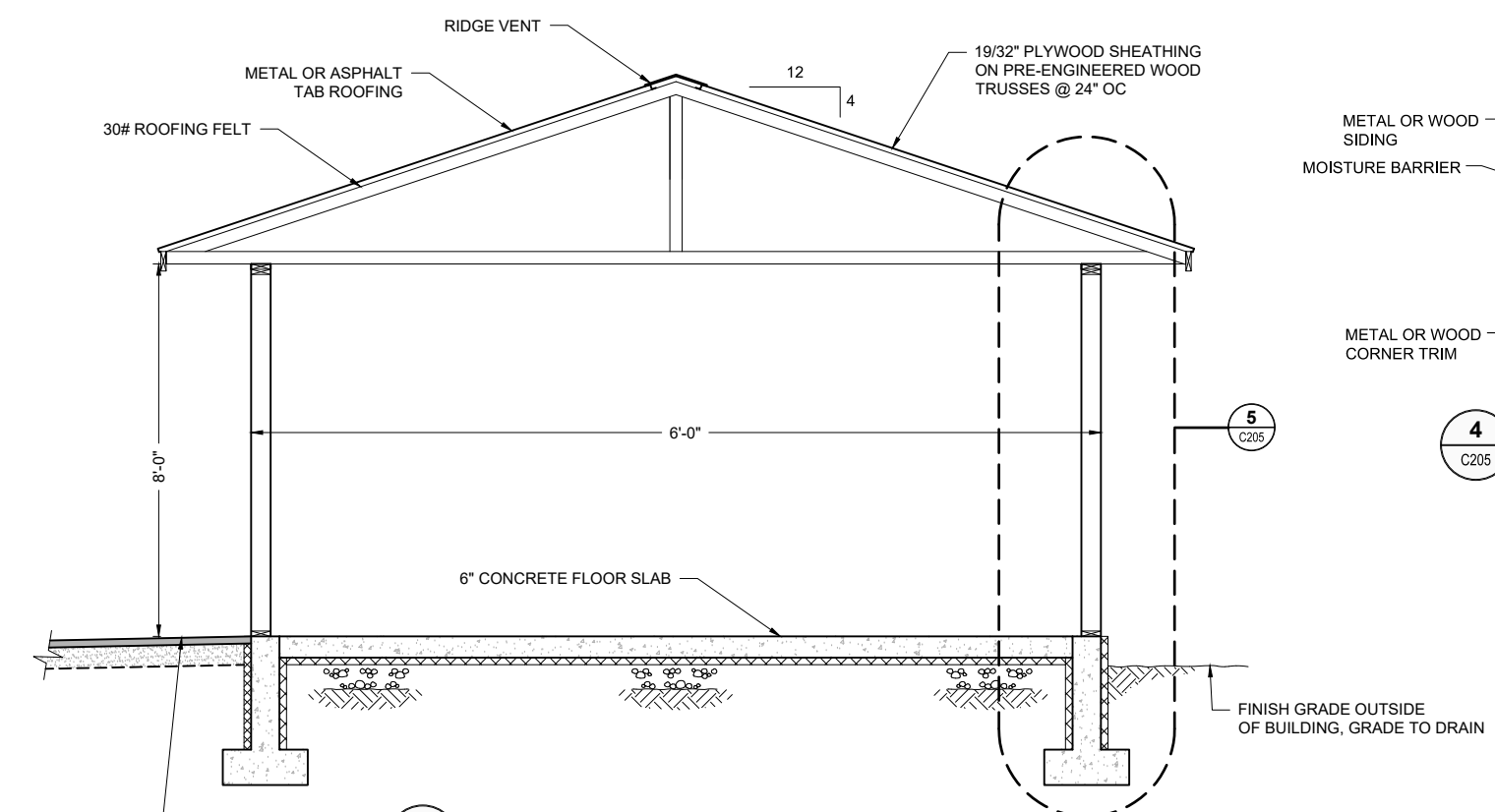
1 FOUNDATION AND STEM WALL DETAIL
C205 SCALE: NTS



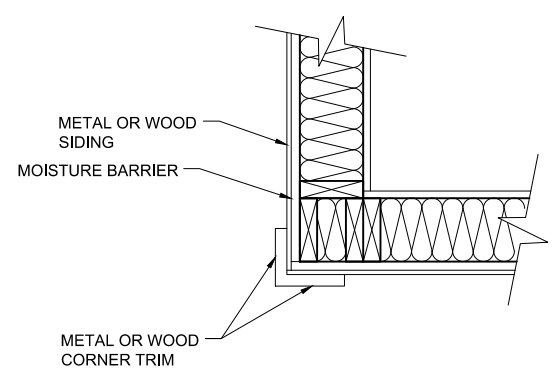
2 ROOF RIDGE VENT DETAIL
C205 SCALE: NTS



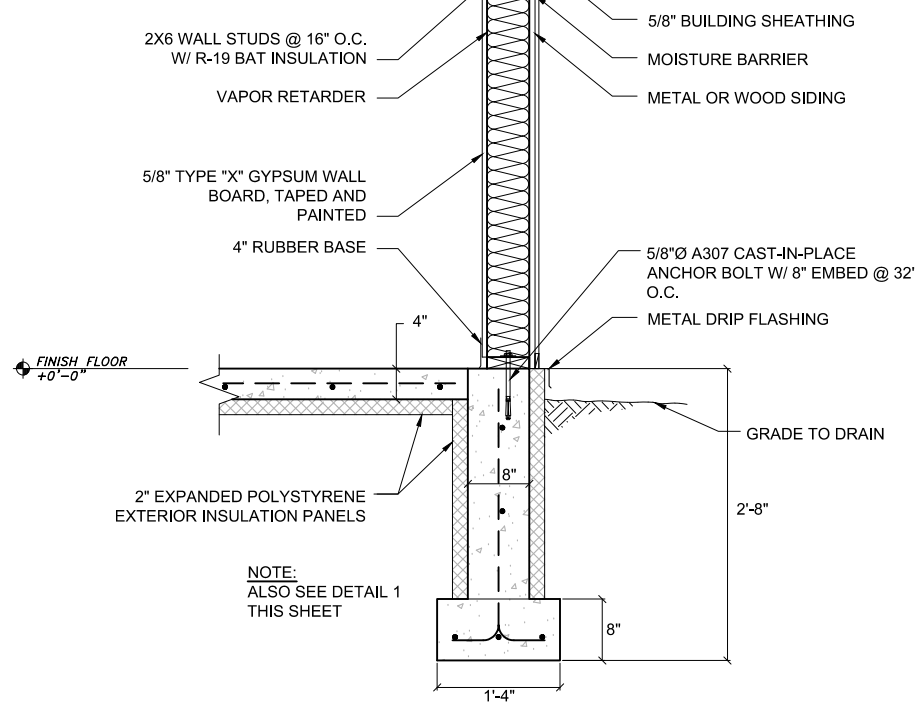
5 WALL SECTION
C205 SCALE: NTS



3 BUILDING SECTION
C205 SCALE: NTS



4 OUTSIDE CORNER DETAIL
C205 SCALE: NTS



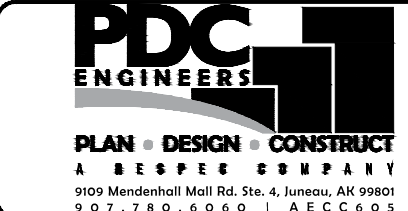
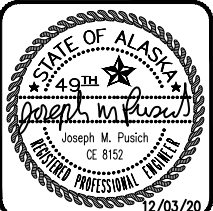
P:\2020\20098JN-Bicknell-Delta\CC2001.dwg PLOT: December 03, 2020 at: 9:59pm Mick Minich

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No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK

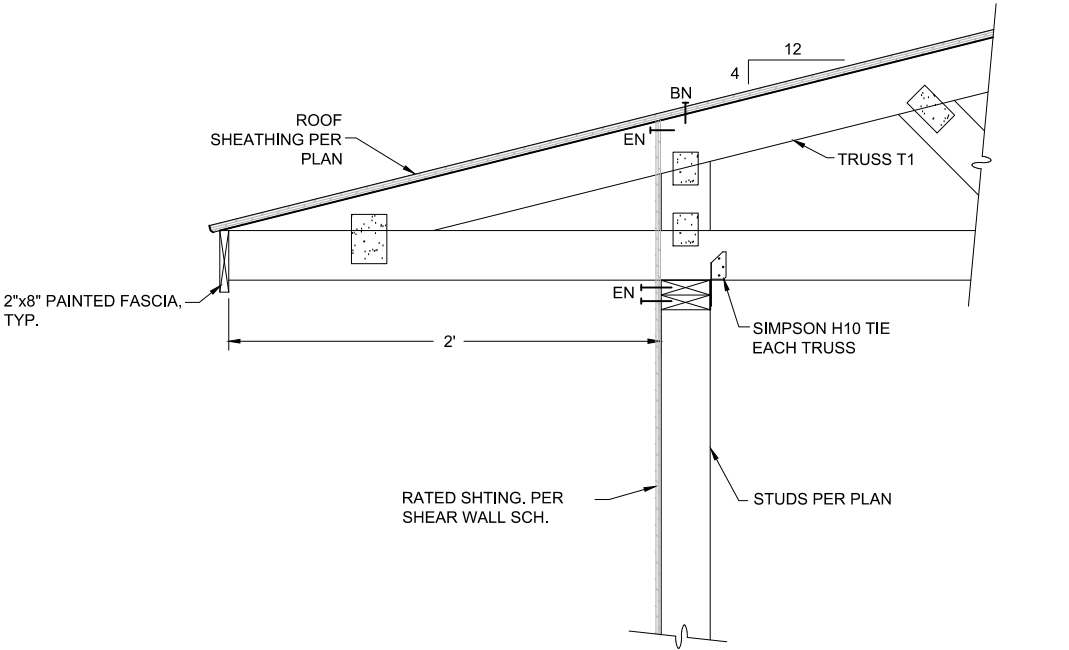


WATER METER
ENCLOSURE DETAILS

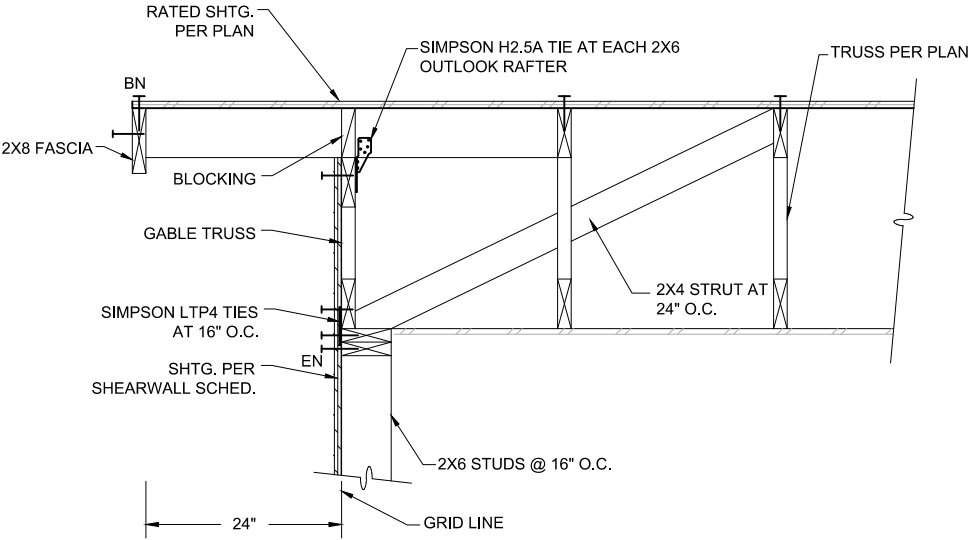
DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C205

Attachment C-04 Preliminary Construction Drawings

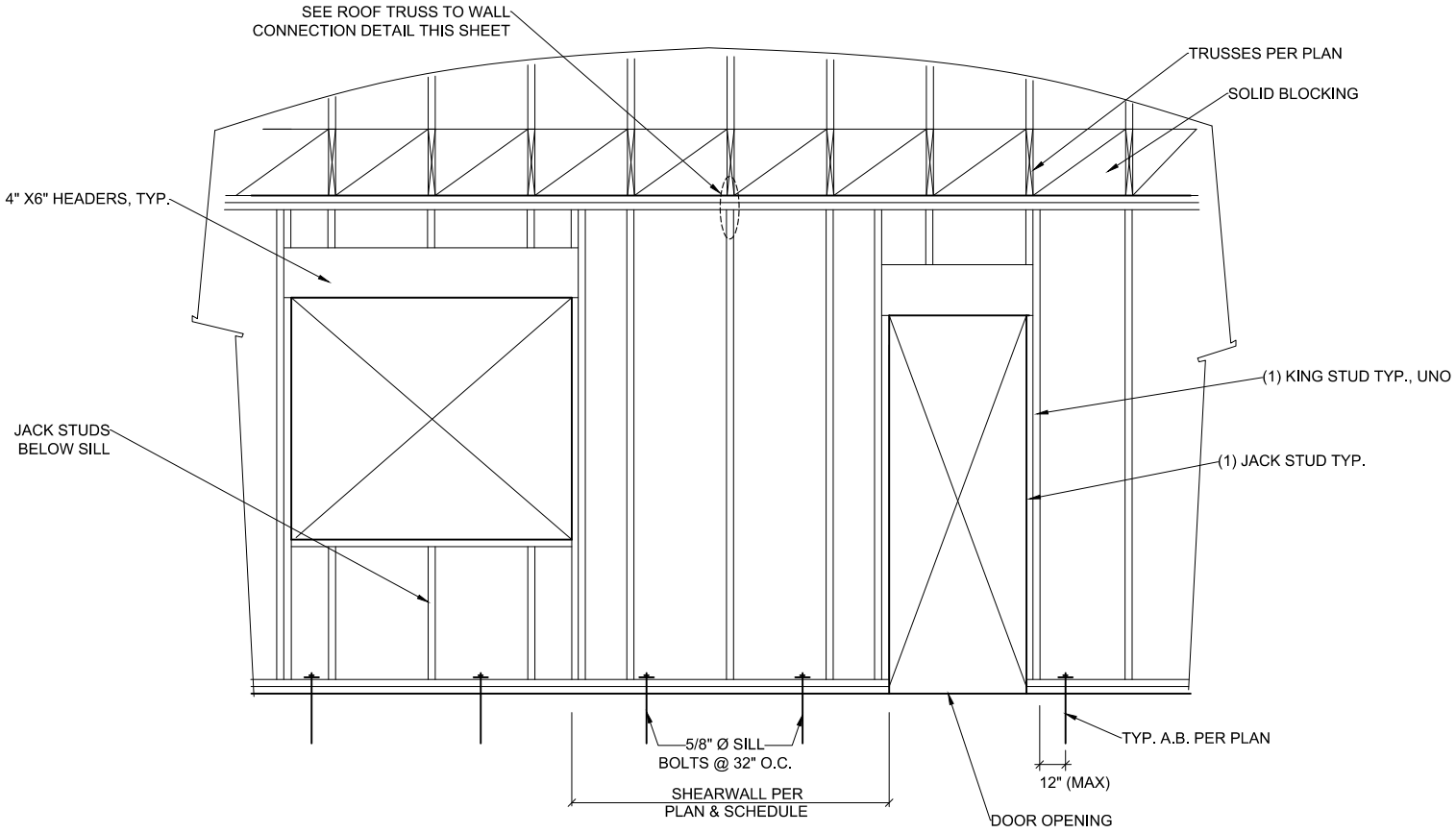
1. WHERE NO STUD TO STUD NAILING IS INDICATED, NAIL STUDS TOGETHER w/ 16d @ 12"o.c., TYP.
2. REF. PLANS FOR STUD SIZE & SPACING



1 ROOF TRUSS TO WALL CONNECTION
C206 SCALE: NTS



2 GABLE END DETAIL
C206 SCALE: NTS



3 TYPICAL STUD FRAMING
C206 SCALE: NTS

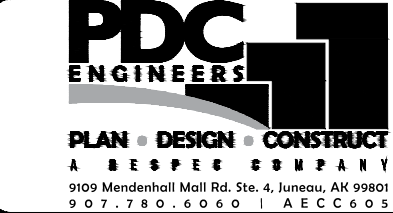
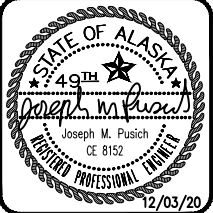
FRAMING NAILING SCHEDULE			
CONNECTION	NAILING	CONNECTION	NAILING
TOP PLATE TO STUD, END NAIL	2x4 (2)- 16d 2x6 (3)- 16d 1 3/4"x5 1/2" LVL (3)-16d 1 3/4"x7 1/4" LVL (4)-16d 1 3/4"x9 1/4" LVL (5)-16d 1 3/4"x11 1/4" LVL (6)-16d	TOP PLATE LAPS (4'-0" MINIMUM)	16d AT 6" O.C.
		BUILT-UP HEADERS AND BEAMS	16d AT 16" O.C. ALONG TOP AND BOTTOM EDGE
		BUILT-UP COLUMNS BELOW BEAMS, FACE NAIL	16d AT 16" O.C. - EACH FACE
STUD TO SILL PLATE, END NAIL	2x4 (2)- 16d 2x6 (3)- 16d 1 3/4"x5 1/2" LVL (3)-16d 1 3/4"x7 1/4" LVL (4)-16d 1 3/4"x9 1/4" LVL (5)-16d 1 3/4"x11 1/4" LVL (6)-16d	BUILT-UP CORNER STUDS (3 STUDS MINIMUM)	16d AT 24" O.C.
		BACKING AND BLOCKING AT TRUSSES AND 2x FRAMING, END NAIL OR TOE NAIL	(2)- 16d EACH END
DOUBLE SILL PLATES, FACE NAIL (STAGGER)	10d AT 12" O.C.	BACKING AND BLOCKING AT I-JOIST FRAMING	SIMPSON Z2 OR EQUAL AT EACH END [W/(4)-10dx1 1/2" NAILS]
DOUBLE STUDS, FACE NAIL (STAGGER)	10d AT 12" O.C. - EACH FACE		
DOUBLE TOP PLATES, FACE NAIL	16d AT 24" O.C.		
TOP PLATES AT WALL INTERSECTIONS, FACE NAIL	(2)- 16d		

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DESIGN MSM
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APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.

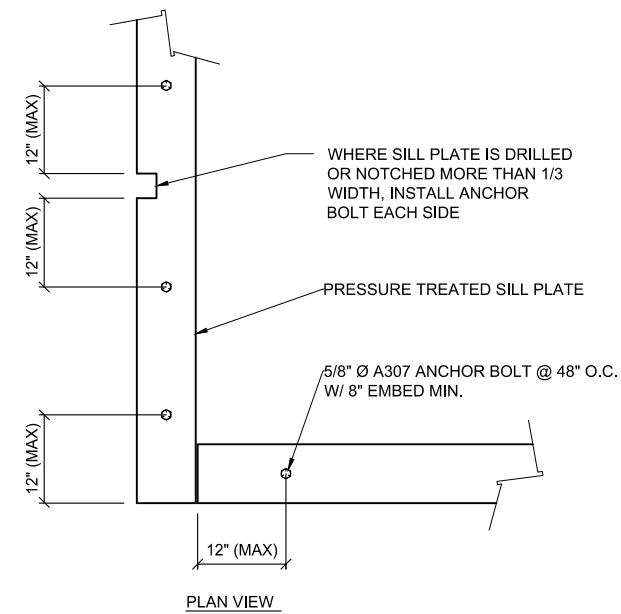
DELTA DRIVE
SUBDIVISION
JUNEAU, AK



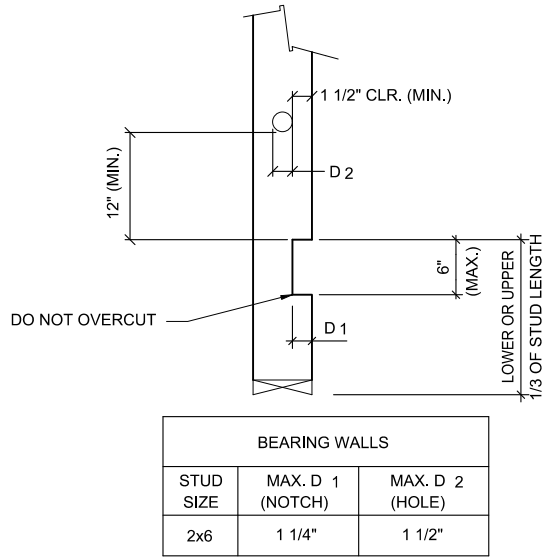
WATER METER
ENCLOSURE DETAILS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C206

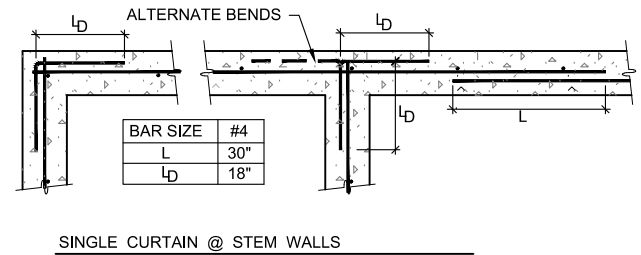
Attachment C-05 Preliminary Construction Drawings



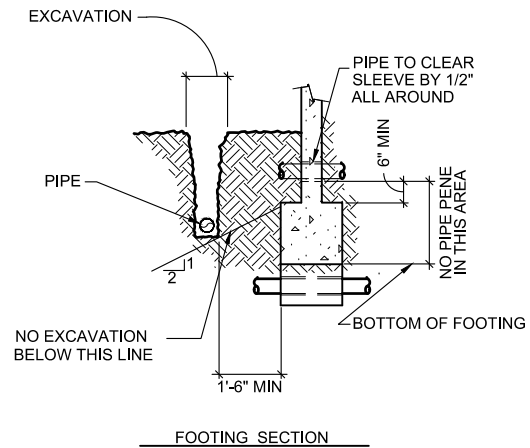
1 SILL PLATE BOLTING TO CONCRETE
C207 SCALE: NTS



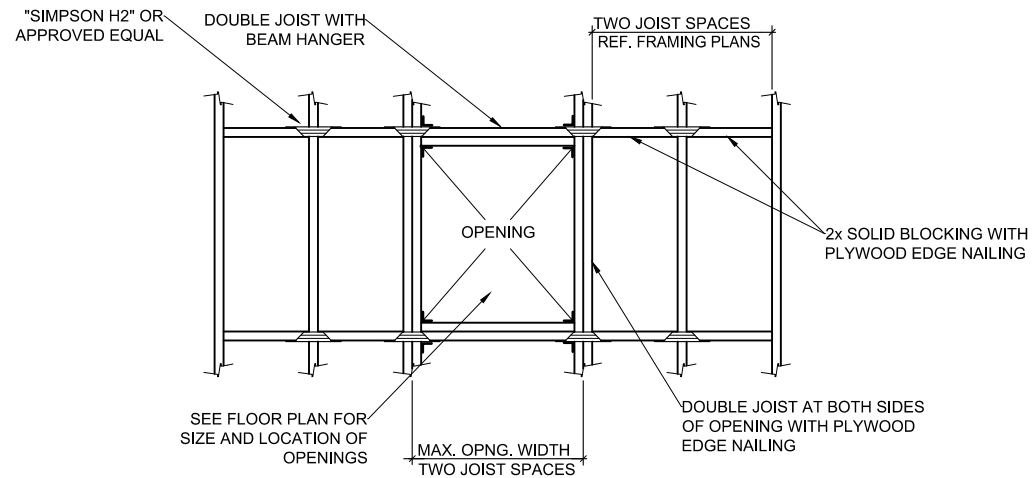
2 ALLOWABLE HOLES AND NOTCHES IN STUDS
C207 SCALE: NTS



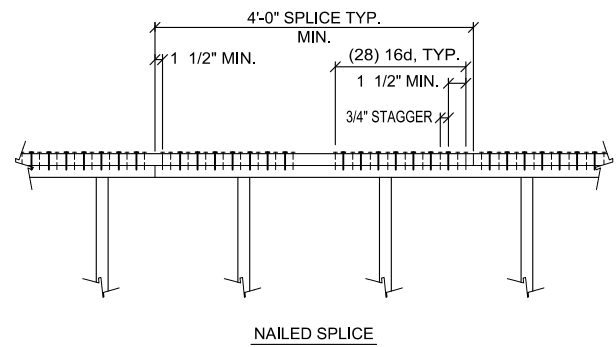
3 WALL & FOOTING REINFORCING AT CORNERS & INTERSECTIONS
C207 SCALE: NTS



4 PIPES & TRENCHES AT FOUNDATIONS
C207 SCALE: NTS

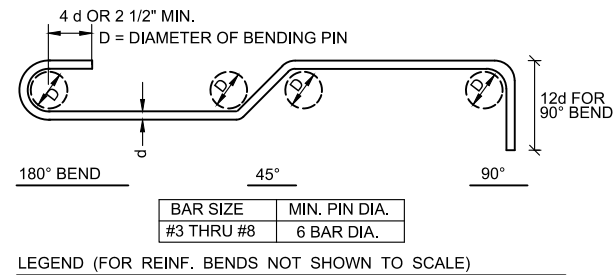


5 TYP. OPENINGS IN FLOORS AND ROOF
C207 SCALE: NTS



- NOTES:
1. MINIMUM PLATE SPLICE IS (28) 16d EA. SIDE OF EA. PLATE JOINT. MSTC78 IS ALTERNATE.
 2. STAGGER NAILS IN 2 ROWS.
 3. OCCURS AT TOP PLATES UNDER ROOF.

6 TYPICAL PLATE SPICE
C207 SCALE: NTS



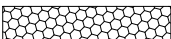
7 STANDARD HOOKS AND BENDS
C207 SCALE: NTS

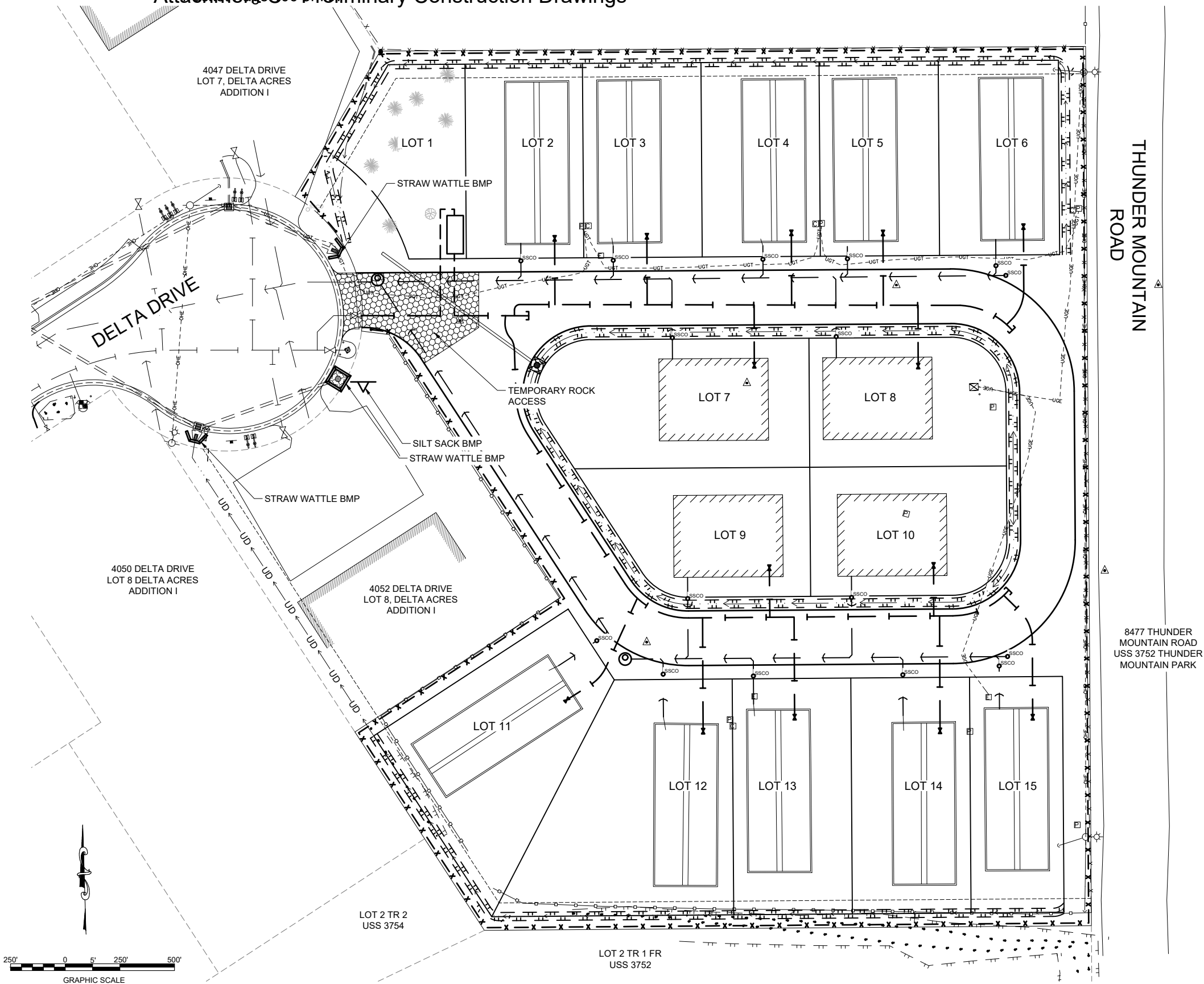
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DESIGN MSM	DELTA DRIVE SUBDIVISION JUNEAU, AK	BICKNELL INC. QUALITY CONSTRUCTION	STATE OF ALASKA 49th Joseph M. Pusich CE 8152 12/03/20	PDC ENGINEERS PLAN • DESIGN • CONSTRUCT A BESPEX COMPANY 9109 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801 907.780.6060 AECC605	WATER METER ENCLOSURE DETAILS	DATE: Dec 03, 2020
DRAWN MSM						PDC No. 20098JN
CHECK JMP						
APPROVED JMP						
FILE:						
No. DATE	REVISION	BY	APRVD.		SHEET	C207

Attachment C-06 Preliminary Construction Drawings

ESCP LEGEND

- 
- STRAW WATTLE
- 
- SILT SACK BMP
- 
- TEMPORARY ROCK ACCESS

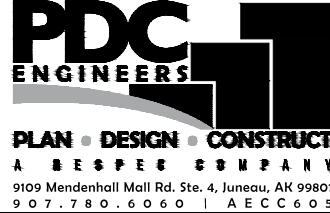
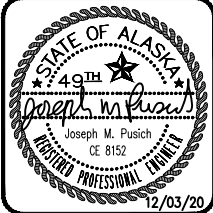


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No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK

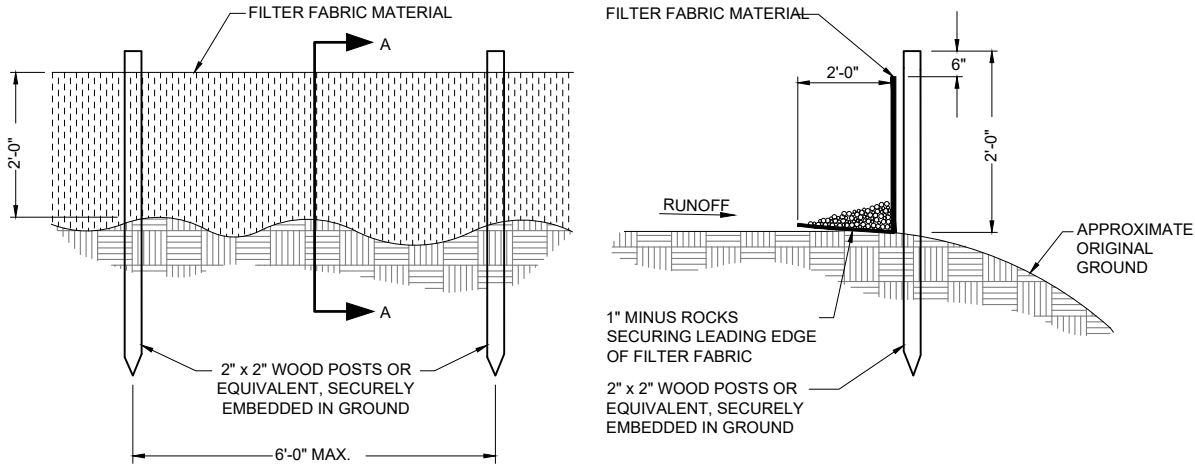


EROSION & SEDIMENT
CONTROL PLAN

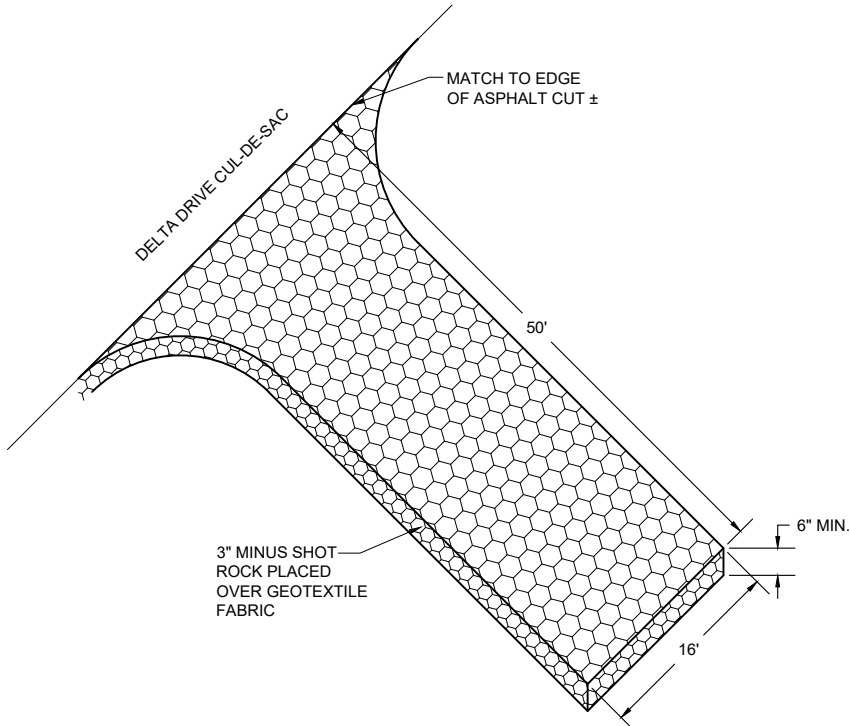
DATE: Dec 03, 2020
PDC No. 20098JN

SHEET
C300

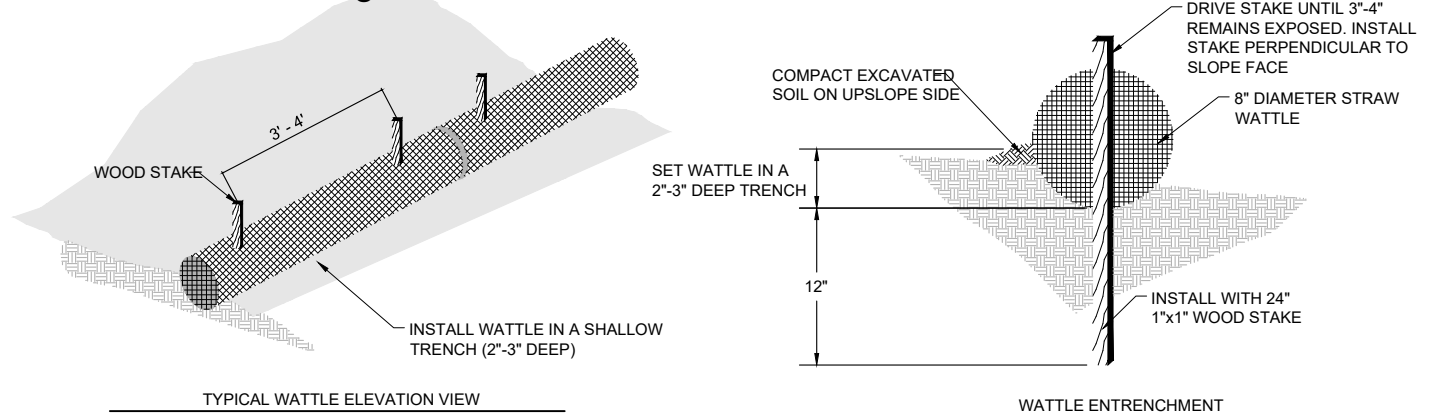
Attachment 107 Brief



1 SILT FENCE DETAIL



3 TEMPORARY ROCK ACCESS



2 STRAW WATTLE IN GROUND DETAIL
C301 SCALE: NTS

- WATTLE NOTES:**
1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2"-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
 2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT EACH OTHER.
 3. SECURE THE WATTLE WITH 24" STAKES EVERY 3'-4" AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 3'-4" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.

EROSION AND SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL PLANS (E.S.C.P.) SHOWN ARE INTENDED AS A MINIMUM LEVEL OF EROSION CONTROL ONLY. THE E.S.C.P. IS TO BE USED BY THE CONTRACTOR TO DEVELOP A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP). ALL SEDIMENTATION FROM ON SITE DRAINAGE AND GRADING SHALL BE CONTAINED ON SITE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGE TO ADJACENT PROPERTIES AND STREAMS FROM CONSTRUCTION RELATED EROSION AND SILTATION DURING THE COURSE OF WORK. ANY DAMAGE RESULTING FROM SUCH EROSION AND SILTATION SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
2. ALL EROSION CONTROL/SEDIMENTATION CONTROL BARRIERS SHALL BE IN PLACE PRIOR TO COMMENCING EXCAVATION OR FILLING OPERATIONS.
3. TEMPORARY EROSION CONTROL SYSTEM WILL NOT BE REMOVED UNTIL GERMINATION OF SEEDING AND NO EROSION/SEDIMENT PROBLEMS EXIST.
4. COLLECTED SEDIMENT WILL BE DISPOSED OF OFF SITE AT AN EXISTING APPROVED DUMPSITE. COLLECTED SEDIMENT MAY NOT BE USED AS EMBANKMENT.
5. DEWATERING OF WORK AREAS BY PUMPING SHALL BE IMPLEMENTED TO REDUCE THE PROJECTS WATER QUALITY IMPACTS. THE PUMP DISCHARGE NEEDS TO BE FILTERED THROUGH SEDIMENT CONTROL DEVICES SUCH AS "DIRTBAG" OR SEDIMENT CONTROL STRUCTURES BEFORE IT CAN ENTER FISH HABITATS AT ANY POINT.
6. CONTRACTOR SHALL KEEP CLEAN AND DISPOSE OF ALL EARTHEN MATERIAL TRACKED ONTO DELTA DRIVE. THIS SHALL INCLUDE SWEEPING WITH POWER BROOM, VACUUMING AND WATERING ON A DAILY BASIS DURING HAULING ACTIVITY OR MORE FREQUENTLY AS DIRECTED BY THE ENGINEER.



TECHNICAL MEMORANDUM

Client #	Bicknell Inc.	Date	10/2/2020
PDC #	20098JN	Prepared by	Sean Kelly, EIT
Project Name	Delta Drive Subdivision	Reviewed by	Mark Pusich, PE
Subject	Delta Drive Subdivision – Water Main Branch Sizing Memo		

Topic	Discussion
Introduction	Bicknell Inc. is the owner of Delta Drive subdivision and is proposing the replacement of a water main servicing the subdivisions lots. The subdivision includes 15 lots, 14 of which will have single family structures installed on the lots. The proposed water main installation will involve connecting a water submain off of the new 8" HDPE water line.
Existing Conditions	The existing subdivision includes 10 modular homes on concrete foundations with buildings previously removed. The inner island of the subdivision has four lots that have been recently cleared. The existing homes were served with ¾" water lines from the 2" main.
Peak Design Flow	The Delta Drive Subdivision is not a new development and is residential, so the flow design is straight forward. Testing data from the CBJ fire hydrant located at the cul-de-sac entrance of the subdivision was provided by the CBJ Water Department. Fixture count and pipe sizes were determined with the 2012 Uniform Plumbing Code, IAPMO/ANSI UPC1-2012.
Assumptions	For the design of the water main servicing the Delta Drive Subdivision several assumptions were made. The following are the assumptions made for this design: • Each home has two bathrooms which include shower with tub, sink and toilet. • Each home has a washing machine. • Each home has one hose bib. • Each home has a kitchen sink.
Fixture Count & Pipe Sizing	From the 2012 Uniform Plumbing Code, the following fixture counts (FC) were obtained from table 610.3 (attached) for private units:

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Technical Memo
October 1, 2020
Page 2

Topic	Discussion
	• Lavatory (x2) – 2.0 FC • Water Closet, 1.6 GPF Gravity Tank (x2) – 5.0 FC • Bathtub or Combination Bath/Shower (x2) – 8.0 FC • Clothes Washer – 4.0 FC • Kitchen, domestic with or without dishwasher – 1.5 FC • Hose Bibb – 2.5 These fixtures bring the total fixture count per residential unit to 23 FC. The available static pressure is 64 psi, provided by CBJ, at Delta Drive fire hydrant. The longest line necessary from the tee off of the 8" line is 250'. Due to the configuration of the water main having two branches off of the 8" water main, the total fixture count is determined with seven units instead of the total 14. Total fixture count (TFC) for seven units is as follows, $TFC = \left(\frac{23 \text{ FC}}{\text{UNIT}} \right) * 7 \text{ UNITS} = 161 \text{ FC}$
Design Recommendation	Using Table 610.4 from the 2012 Uniform Plumbing Code (attached), the minimum pipe size for the water branches is two-inch pipe. It is recommended that two-inch pipe be used for the water main servicing the Delta Drive Subdivision.

TABLE 610.3
WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES³

APPLIANCES, APPURTENANCES OR FIXTURES ²	MINIMUM FIXTURE BRANCH PIPE SIZE ^{1,4} (Inches)	PRIVATE	PUBLIC	ASSEMBLY ⁵
Bathtub or Combination Bath/Shower (fill)	½	4.0	4.0	—
¾ inch Bathtub Fill Valve	¾	10.0	10.0	—
Bidet	½	1.0	—	—
Clothes Washer	½	4.0	4.0	—
Dental Unit, cuspidor	½	—	1.0	—
Dishwasher, domestic	½	1.5	1.5	—
Drinking Fountain or Water Cooler	½	0.5	0.5	0.75
Hose Bibb	½	2.5	2.5	—
Hose Bibb, each additional ⁸	½	1.0	1.0	—
Lavatory	½	1.0	1.0	1.0
Lawn Sprinkler, each head ⁵	—	1.0	1.0	—
Mobile Home, each (minimum)	—	12.0	—	—
Sinks	—	—	—	—
Bar	½	1.0	2.0	—
Clinic Faucet	½	—	3.0	—
Clinic Flushometer Valve with or without faucet	1	—	8.0	—
Kitchen, domestic with or without dishwasher	½	1.5	1.5	—
Laundry	½	1.5	1.5	—
Service or Mop Basin	½	1.5	3.0	—
Washup, each set of faucets	½	—	2.0	—
Shower, per head	½	2.0	2.0	—
Urinal, 1.0 GPF Flushometer Valve	¾	See Footnote ⁷		—
Urinal, greater than 1.0 GPF Flushometer Valve	¾	See Footnote ⁷		—
Urinal, flush tank	½	2.0	2.0	3.0
Wash Fountain, circular spray	¾	—	4.0	—
Water Closet, 1.6 GPF Gravity Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve	1	See Footnote ⁷		—
Water Closet, greater than 1.6 GPF Gravity Tank	½	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve	1	See Footnote ⁷		—

For SI units: 1 inch = 25 mm

Notes:

¹ Size of the cold branch pipe, or both the hot and cold branch pipes.

² Appliances, appurtenances, or fixtures not referenced in this table shall be permitted to be sized by reference to fixtures having a similar flow rate and frequency of use.

³ The listed fixture unit values represent their load on the cold water building supply. The separate cold water and hot water fixture unit value for fixtures having both hot and cold water connections shall be permitted to be each taken as three-quarter of the listed total value of the fixture.

⁴ The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.

⁵ For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (gpm) (L/s), and add it separately to the demand in gpm (L/s) for the distribution system or portions thereof.

⁶ Assembly [Public Use (See Table 422.1)].

⁷ Where sizing flushometer systems, see Section 610.10.

⁸ Reduced fixture unit loading for additional hose bibbs is to be used where sizing total building demand and for pipe sizing where more than one hose bibb is supplied by a segment of water distribution pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.

TABLE 610.4
FIXTURE UNIT TABLE FOR DETERMINING WATER PIPE AND METER SIZES

METER AND STREET SERVICE (Inches)	BUILDING SUPPLY AND BRANCHES (Inches)	MAXIMUM ALLOWABLE LENGTH (feet)														
		40	60	80	100'	150	200	250	300	400	500	600	700	800	900	1000
PRESSURE RANGE - 30 to 45 psi ¹																
¾	½ ²	6	5	4	3	2	1	1	1	0	0	0	0	0	0	0
¾	¾	16	16	14	12	9	6	5	5	4	4	3	2	2	2	1
¾	1	29	25	23	21	17	15	13	12	10	8	6	6	6	6	6
1	1	36	31	27	25	20	17	15	13	12	10	8	6	6	6	6
¾	1¼	36	33	31	28	24	23	21	19	17	16	13	12	12	11	11
1	1¼	54	47	42	38	32	28	25	23	19	17	14	12	12	11	11
1½	1¼	78	68	57	48	38	32	28	25	21	18	15	12	12	11	11
1	1½	85	84	79	65	56	48	43	38	32	28	26	22	21	20	20
1½	1½	150	124	105	91	70	57	49	45	36	31	26	23	21	20	20
2	1½	151	129	129	110	80	64	53	46	38	32	27	23	21	20	20
1	2	85	85	85	85	85	85	82	80	66	61	57	52	49	46	43
1½	2	220	205	190	176	155	138	127	120	104	85	70	61	57	54	51
2	2	370	327	292	265	217	185	164	147	124	96	70	61	57	54	51
2	2½	445	418	390	370	330	300	280	265	240	220	198	175	158	143	133
PRESSURE RANGE - 46 to 60 psi ¹																
¾	½ ²	7	7	6	5	4	3	2	2	1	1	1	0	0	0	0
¾	¾	20	20	19	17	14	11	9	8	6	5	4	4	3	3	3
¾	1	39	39	36	33	28	23	21	19	17	14	12	10	9	8	8
1	1	39	39	39	36	30	25	23	20	18	15	12	10	9	8	8
¾	1¼	39	39	39	39	39	39	34	32	27	25	22	19	19	17	16
1	1¼	78	78	76	67	52	44	39	36	30	27	24	20	19	17	16
1½	1¼	78	78	78	78	66	52	44	39	33	29	24	20	19	17	16
1	1½	85	85	85	85	85	85	80	67	55	49	41	37	34	32	30
1½	1½	151	151	151	151	128	105	90	78	62	52	42	38	35	32	30
2	1½	151	151	151	151	150	117	98	84	67	55	42	38	35	32	30
1	2	85	85	85	85	85	85	85	85	85	85	85	85	85	83	80
1½	2	370	370	340	318	272	240	220	198	170	150	135	123	110	102	94
2	2	370	370	370	370	368	318	280	250	205	165	142	123	110	102	94
2	2½	654	640	610	580	535	500	470	440	400	365	335	315	285	267	250
PRESSURE RANGE - Over 60 psi ¹																
¾	½ ²	7	7	7	6	5	4	3	3	2	1	1	1	1	1	0
¾	¾	20	20	20	20	17	13	11	10	8	7	6	6	5	4	4
¾	1	39	39	39	39	35	30	27	24	21	17	14	13	12	12	11
1	1	39	39	39	39	38	32	29	26	22	18	14	13	12	12	11
¾	1¼	39	39	39	39	39	39	39	39	34	28	26	25	23	22	21
1	1¼	78	78	78	78	74	62	53	47	39	31	26	25	23	22	21
1½	1¼	78	78	78	78	78	74	65	54	43	34	26	25	23	22	21
1	1½	85	85	85	85	85	85	85	85	81	64	51	48	46	43	40
1½	1½	151	151	151	151	151	151	130	113	88	73	51	51	46	43	40
2	1½	151	151	151	151	151	151	142	122	98	82	64	51	46	43	40
1	2	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
1½	2	370	370	370	370	360	335	305	282	244	212	187	172	153	141	129
2	2	370	370	370	370	370	370	370	340	288	245	204	172	153	141	129
2	2½	654	654	654	654	654	650	610	570	510	460	430	404	380	356	329

For SI units: 1 inch = 25 mm, 1 foot = 304.8 mm, 1 pound-force per square inch = 6.8947 kPa

Notes:

¹ Available static pressure after head loss.

² Building supply, not less than 3/4 of an inch (20 mm) nominal size.

From: Loni VanKirk <Loni.VanKirk@juneau.org>
Sent: Monday, September 28, 2020 8:18 AM
To: Kevin Puustinen <KevinPuustinen@pdceng.com>
Subject: RE: Hydrant Test Data - Delta Drive

CAUTION: This email originated from outside of the organization. Exercise caution when viewing attachments, clicking links, or responding to requests.

ACROSS FROM 4045 DELTA DR.	MUELLER	WET	64	1110/48	8/13/2019
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Kevin,

Here is the Data you requested.

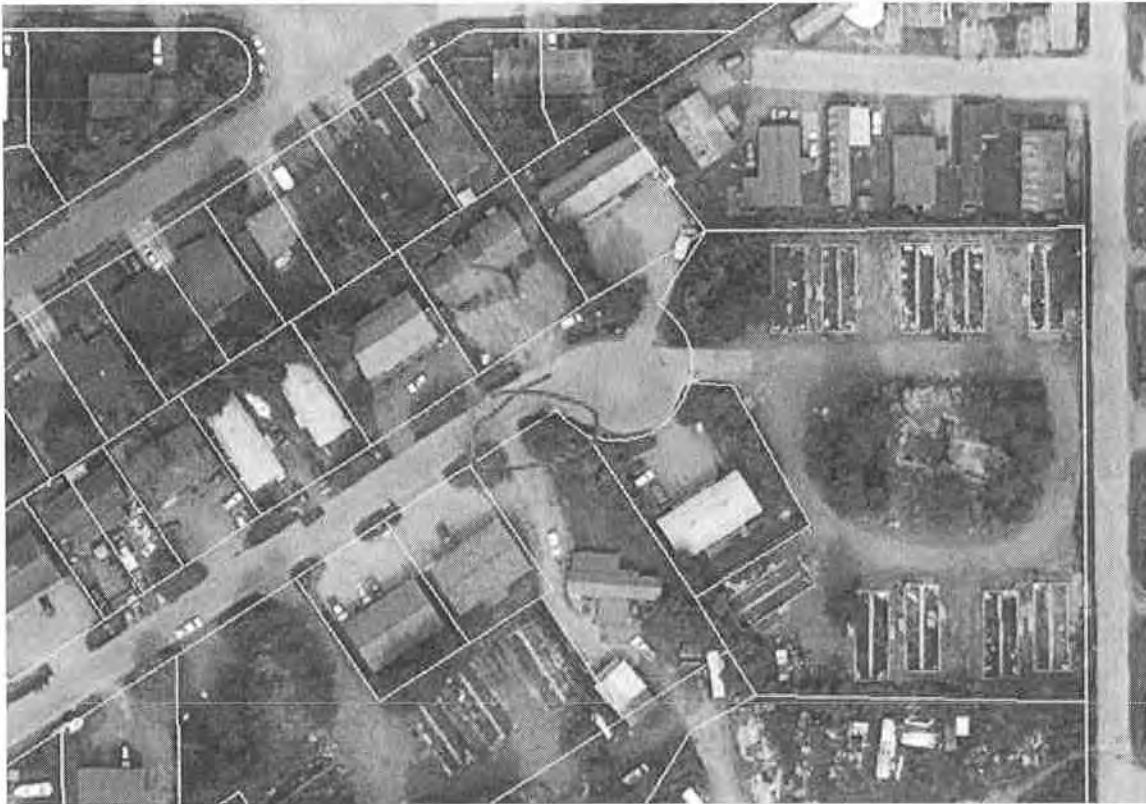
*Loni Van Kirk
 Distribution Senior Operator
 CBJ Water Utility
 907-723-4975*

Static PSI Flow/residual PSI

From: Kevin Puustinen <KevinPuustinen@pdceng.com>
Sent: Wednesday, September 23, 2020 10:06 AM
To: Loni VanKirk <Loni.VanKirk@juneau.org>
Subject: Hydrant Test Data - Delta Drive

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

Hi Loni – Can you please send me your most recent test data for the hydrant in the cul-de-sac on Delta Drive?



Thanks,

Kevin Puustinen, PE

Civil Engineer

PDC ENGINEERS

A RESPEC COMPANY

9109 Mendenhall Mall Rd. Ste 4, Juneau, Alaska 99801 | 907.780.6060

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DRAINAGE REPORT FOR DELTA DRIVE SUBDIVISION JUNEAU, ALASKA

Prepared For:

Bicknell Development

2275 Brandy Lane, Suite 1
Juneau, AK 99801

Prepared By:

PDC Engineers

9109 Mendenhall Mall Road Suite 4
Juneau, AK 99801

Date: November 20, 2020
PDC Project No. 20098JN

1.0 PROJECT OVERVIEW

1.1 Project Description

Bicknell Inc., is proposing to redevelop an existing residential property. The project is located off the cul-de-sac at the end of Delta Drive. The property previously had 10 double wide mobile homes and a structure in the center of the property. The mobile homes and the center structure have been removed and the mobile home concrete foundations remain. The property has been divided into 15 lots. Lot 1 is the parent lot, lots 2 through 6 make up the northern lots. The center of the property has been divided into four lots to create lots 7 through 10. Lots 11 through 15 make up the southern lots.

1.2 Project Duration

The developer (Bicknell) will begin construction in the spring of 2021. The subdivision development is anticipated to occur over a period of approximately 3 months.

2.0 SOIL INFORMATION

Soil conditions present in the project area consists of a vegetated surface layer underlain by a soil matrix of sand, gravels and silt material. The ground water is located approximately 3 feet below the surface as confirmed by excavated test pits. The project area is fairly flat.

3.0 STORM WATER SYSTEM

Currently drainage leaves the site through a 12" CMP culvert located at the end of Delta Drive on the northeast side of the cul-de-sac.

The storm water system along Delta Drive has been proposed to be upgraded per CBJ Contract BE21-028 "Delta Drive Reconstruction." Work is scheduled for spring/summer 2021. For the purpose of this report, the proposed culverts for Delta Drive Reconstruction were used for the analysis of the Delta Drive Subdivision project site.

Drainage from the proposed Delta Drive Subdivision project site will be discharged into the Delta Drive storm water system at three locations, the 12" CPP ditch culvert (Pipe P-1) on the northeast side of the Delta Drive cul-de-sac, the 12" CPP culvert (Pipe P-3) at the area drain on the southeast side of the cul-de-sac, and a 12" CPP ditch culvert (Pipe P-4) located on the southwestern side of the cul-de-sac where it meets the 10' drainage easement.

A drainage swale along the northern perimeter of the proposed project area will be

graded at 1.0% from the east to the west to then discharge in to Pipe P-1 at the northeast side of the Delta Drive cul-de-sac. Drainage from the swale around lots 7 through 10 will drain into a Type III catch basin where it will then flow through a 12" CPP pipe (Pipe P-2) to a ditch where it will leave the site through Pipe P-1 at the northeast side of the Delta Drive cul-de-sac.

A drainage swale along the southern perimeter of the proposed project area will be graded at 1.0% from east to west to an underdrain that runs along a 10' drainage easement to Pipe P-4 at the southwestern side of the Delta Drive cul-de-sac.

All of the discharge from the site would then meet at a catch basin on Delta Drive where it will be discharge through an 18" CPP culvert (Pipe P-5) to continue through the storm system.

Storm drain structures and piping would follow CBJ Standard Specifications and Standard Drawings for the development.

3.0 SITE RUNOFF CALCULATION METHOD:

A total of four catchment areas were analyzed representing the existing and proposed drainage conveyance systems relevant to the project. The catchment areas include: The existing 12" CPP culvert (Pipe P-1) that is located at the northeastern side of the Delta Drive cul-de-sac, the proposed 12" CPP culvert (Pipe P-2) that is located on the project site near the entrance to the subdivision, the existing 12" CPP culvert (Pipe P-3) that is located on the southeastern edge of the cul-de-sac, and the existing 12" CPP culvert (Pipe P-4) at the southwestern end of the cul-de-sac.

The catchment areas were determined using the proposed design model. A delineation of the areas can be found in Appendix A.

To calculate the site runoff we have elected to use the Rational Method. The Rational Method is most appropriate for evaluating drainage basins less than 10 acres. Appendix D of the "2010 CBJ Manual of Storm Water Best Management Practices" was utilized as a guide. The calculations and supporting documentation can be found in Appendix B, C, D & E of this report.

3.1 Anticipated Site Runoff (Q):

Using the Rational Method, the amount of stormwater runoff during the 25-year storm event per catchment area was determined. See Table 1.1 for results, the calculations can be found in Appendix B.

Table 1.1 Anticipated Site Runoff (Q):	
Catchment Area	Q (cfs)
Pipe P-1	1.03
Pipe P-2	0.94
Pipe P-3	0.42
Pipe P-4	0.74

3.2 Conveyance/Discharge Structure Capacities:

The capacity of the existing and proposed drainage systems was calculated using the Manning's Equation to determine if proposed 25-year storm even flows could be conveyed. See Table 1.2 below for results, calculations can be found in Appendix B.

Table 1.2 Conveyance/Discharge Structure Capacities:	
Catchment Area	Q (cfs)
Pipe P-1	2.57
Pipe P-2	2.34
Pipe P-3	2.59
Pipe P-4	14.51
Pipe P-5	6.16

Summary

Table 1.3 below compares anticipated 25-year runoff in the proposed and existing conveyance systems to their available hydraulic capacity.

Table 1.3 Comparison			
Drainage Basin	Anticipated Runoff Q (cfs)	Capacity Check	Available Capacity Q (cfs)
Pipe P-1	1.12	<	2.57
Pipe P-2	0.94	<	2.34
Pipe P-3	0.42	<	2.59
Pipe P-4	0.74	<	14.51
Pipe P-5	3.13	<	6.16

In summary our analysis shows that there is enough capacity in the existing and proposed drainage structures to handle flows from the altered drainage patterns as a result of the proposed Delta Drive Subdivision improvements.

Delta Drive Subdivision
Juneau, Alaska



11/20/2020

J. Mark Pusich, P.E.
Principal Civil Engineer
PDC Engineers

Appendices:

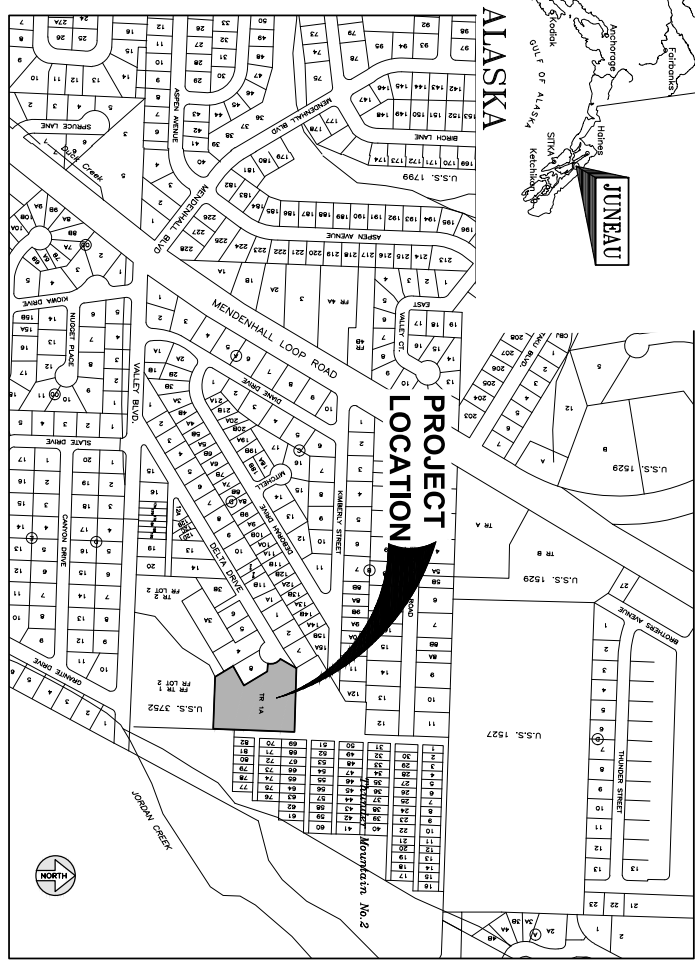
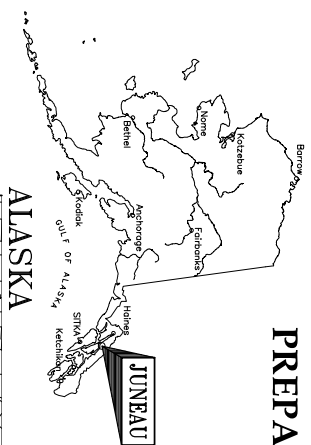
- A – Catchment Areas
- B – Rational Method
- C – Runoff Coefficient
- D – Time of Concentration
- E – Rainfall Intensity
- F – Existing & Proposed

Appendix A

Catchment Areas

DELTA DRIVE SUBDIVISION CONSTRUCTION IMPROVEMENT PLAN DRAINAGE MAP

JUNEAU, ALASKA
PREPARED FOR BICKNELL, INC.



PROJECT LOCATION MAP

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	P-1 EXISTING 12" CPP CULVERT
3	P-2 PROPOSED 12" CPP CULVERT
4	P-3 EXISTING 12" CPP CULVERT
5	P-4 EXISTING 12" CPP CULVERT

DESIGN XXX	DATE MAY 20, 2020
DRAWN XXX	PROJECT NO. 200984-N
CHECK JLP	
APPROVED JLP	
TITLE	
NO. DATE	REVISION
	BY: PMS/O
DELTA DRIVE SUBDIVISION	
JUNEAU, AK	
COVER SHEET	
SHEET 1	

DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
FILE	

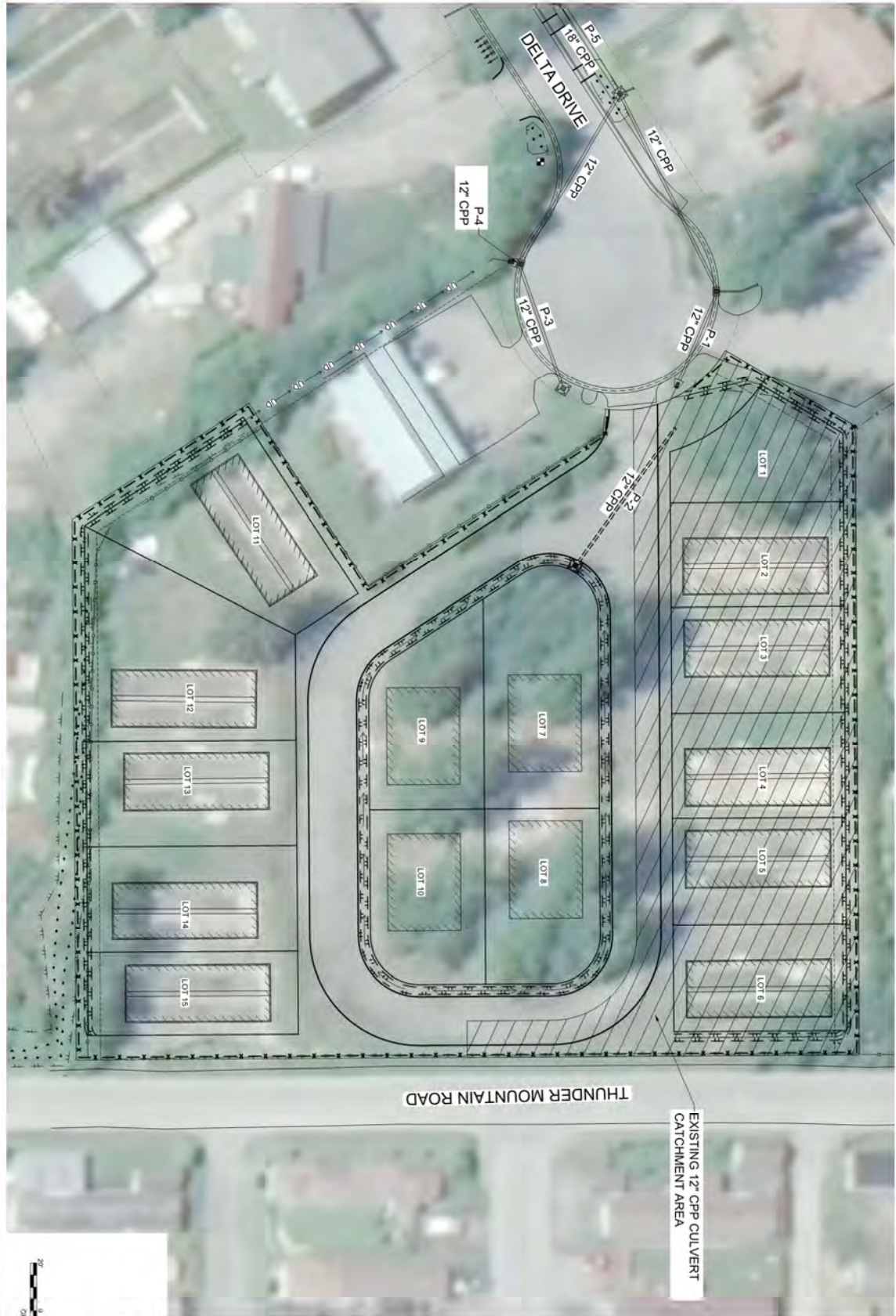
NO. DATE	REVISION	BY	DATE

**DELTA DRIVE
SUBDIVISION**
JUNEAU, AK

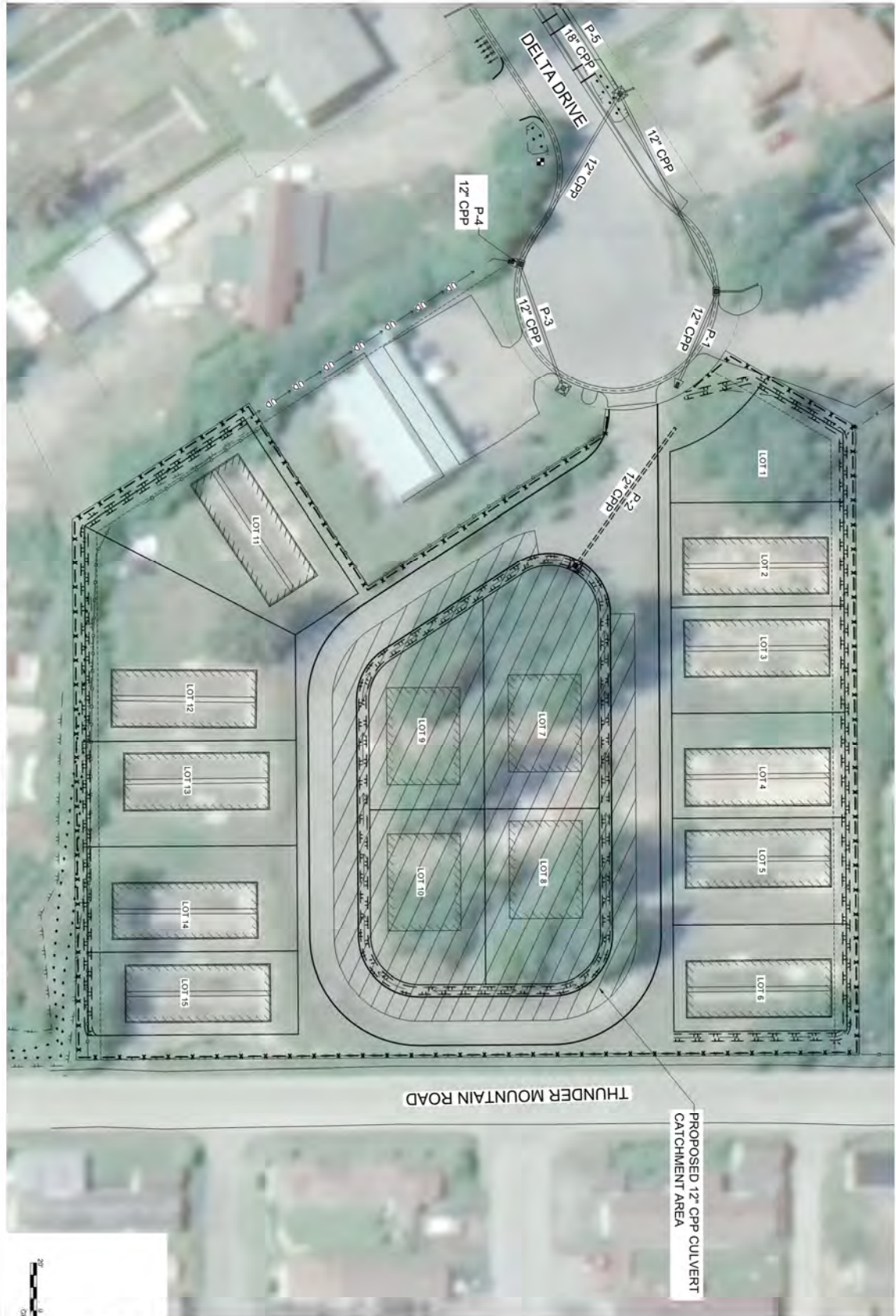
PDC
ENGINEERS
PLAN • DESIGN • CONSTRUCT
A I E E C O R P O R A T I O N
909 Mendocino Blvd. Ste. 4, Juneau, AK 99801
907.586.6000 | A I E E C O R P

**P-1: EXISTING 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020
PROJECT: 2020SLN
SHEET: 2



DESIGN XXX	DATE XX/XX/XX	APPROVED JAP	DATE XX/XX/XX	REVISION BY JAP/010	BR JAP/010	DELTA DRIVE SUBDIVISION JUNEAU, AK	PDC ENGINEERS PLAN - DESIGN - CONSTRUCT A I E F E C O R P A R Y 909 Mendocino Blvd Ste. 4, Juneau, AK 99901 907.586.6000 A E C C 6 0 5	P-2: PROPOSED 12" CPP CULVERT CATCHMENT AREA	DATE: May 20, 2020 REV: No. 20200520	SHEET 3
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DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
FILE	

NO. DATE	REVISION	BY	DATE

**DELTA DRIVE
SUBDIVISION**
JUNEAU, AK

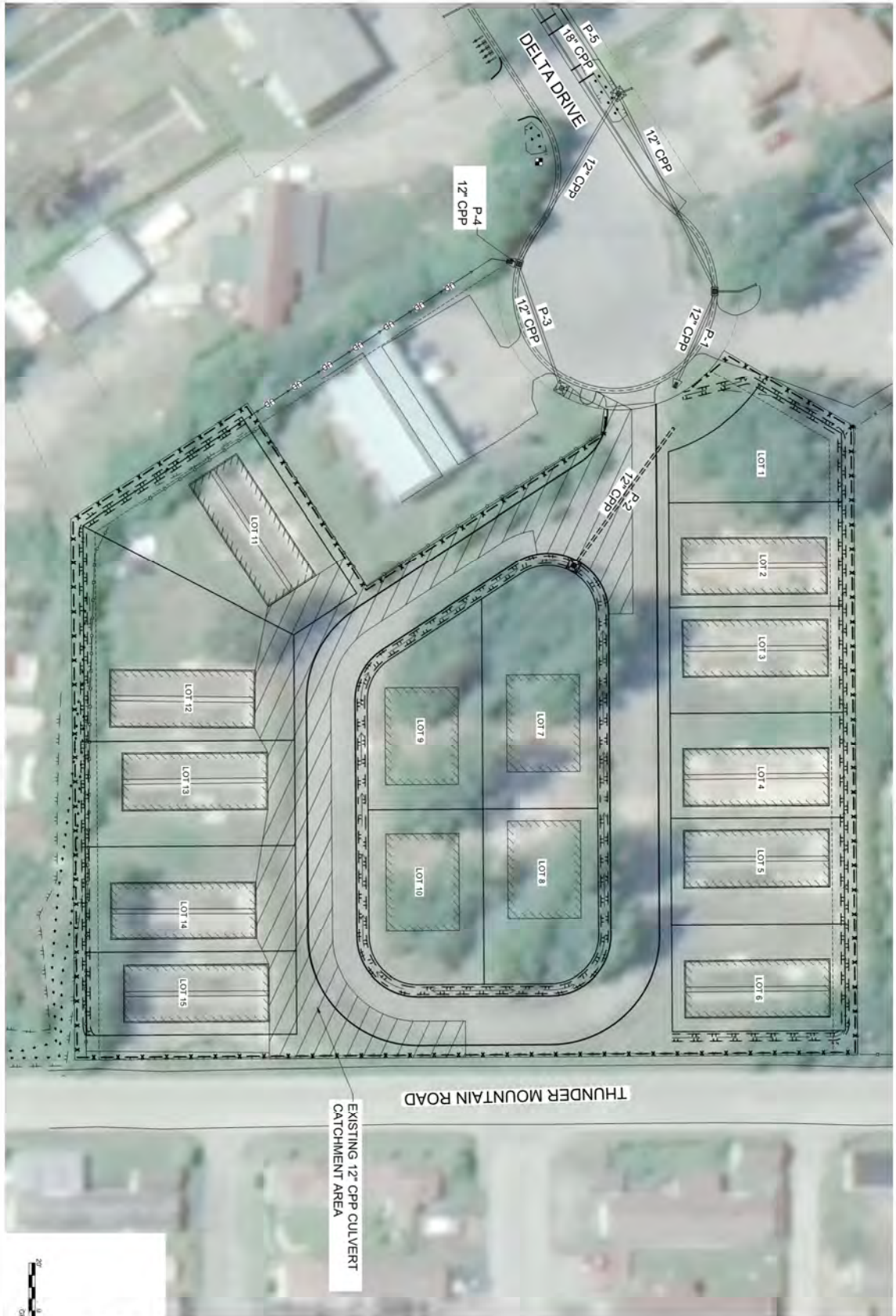
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907.730.6000 | A E C C 6 0 5

**P-3: EXISTING 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020
PROJECT: 20190601
SHEET: 4



DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
DATE	

NO. DATE	REVISION	BY	DATE

**DELTA DRIVE
SUBDIVISION**
JUNEAU, AK

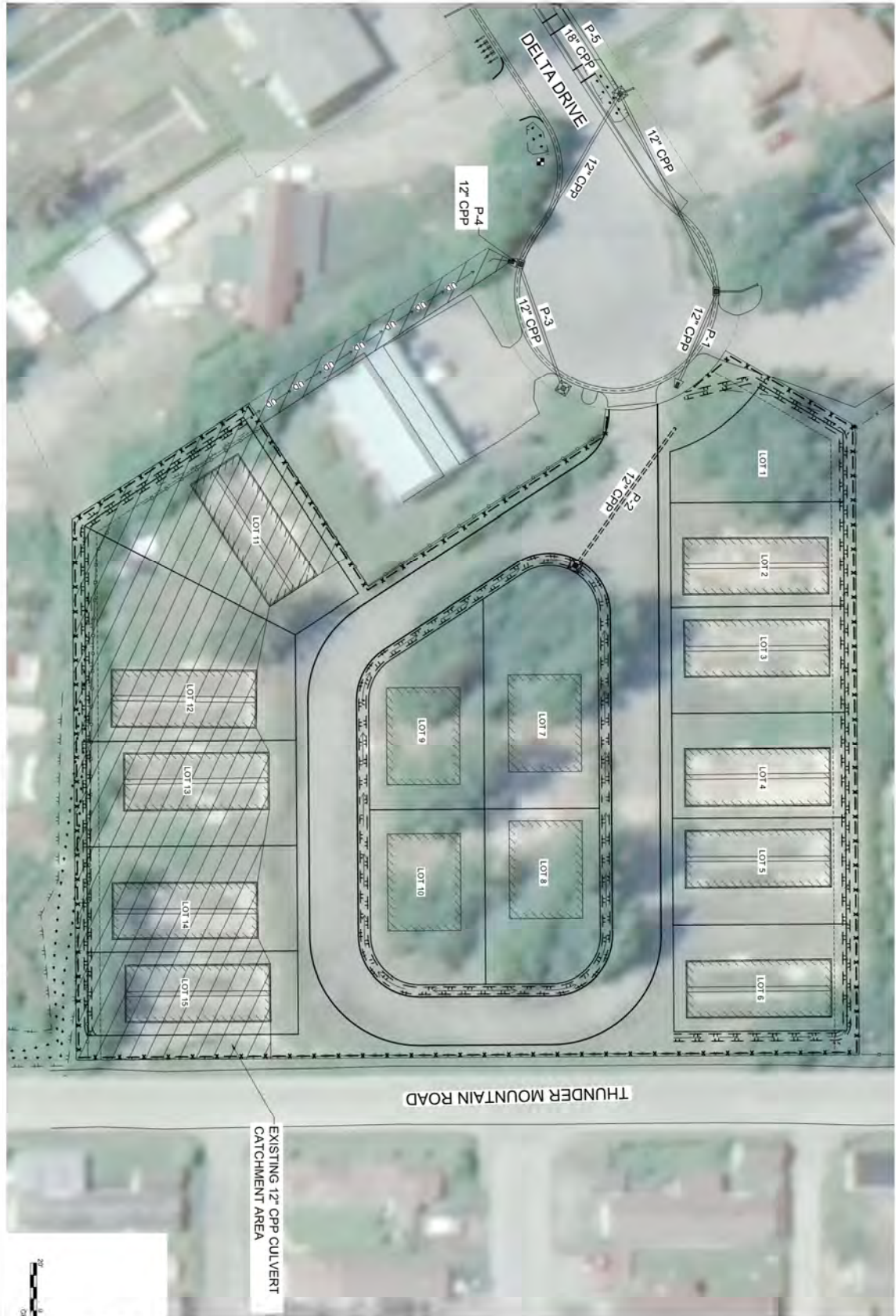
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909 Mendocino Hill Rd. Ste. 4, Juneau, AK 99801
907.730.6000 | A E C C 6 0 5

**P-4: EXISTING 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020
PROJECT: 20190601
SHEET: 5



Appendix B

Rational Method

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-1: Existing 12" CPP		
Project:	Delta Drive Subdivision	
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)
C = runoff coefficient
I = rainfall intensity (inches per hour)
A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient
 $C_{1,2}$ = runoff coefficient for each area land cover type
 A_t = total area (acres)
 $A_{1,2}$ = areas of land cover (acres)
 $C_c = 0.84$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)
 $T_{1,2}$ = travel time across separate flow path segments (min)
 $T_c = 13.10$ min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)
 L = the distance of flow across a given segment (feet)
 $V = k_r\sqrt{S_0}$ = average velocity $\left(\frac{\text{feet}}{\text{sec}}\right)$ across land cover
 k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)
 S_0 = slope of flow path $\left(\frac{\text{feet}}{\text{feet}}\right)$

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 13.10 (min)	25-year
Interpolated Intensity (in/hr)=	2.03

Pipe P-1 is an existing 12" CPP culvert on the northeast side of the Delta Drive cul-de-sac that drains into the Delta Drive storm system at the location where the new subdivision access will tie into the shoulder of the cul-de-sac. The area that is proposed to contribute runoff to this culvert was delineated in AutoCAD.

$$A = 26270 \text{ sqft} / 43,560 = 0.60 \text{ acres}$$

	C_c	I	A		
Q (cfs)=	0.84	2.03	0.60	=	1.03

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-2: Proposed 12" CPP		
Project:	Delta Drive Subdivision	 PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mendota Hill Mall Rd. Ste. 4, Juneau, AK 99801 907.780.6060 A E C C 6 0 5
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)
C = runoff coefficient
I = rainfall intensity (inches per hour)
A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient
 $C_{1,2}$ = runoff coefficient for each area land cover type
 A_t = total area (acres)
 $A_{1,2}$ = areas of land cover (acres)
 $C_c = 0.84$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)
 $T_{1,2}$ = travel time across separate flow path segments (min)
 $T_c = 11.27$ min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)
 L = the distance of flow across a given segment (feet)
 $V = k_r\sqrt{S_0}$ = average velocity $\left(\frac{\text{feet}}{\text{sec}}\right)$ across land cover
 k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)
 S_0 = slope of flow path $\left(\frac{\text{feet}}{\text{feet}}\right)$

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 11.27 (min)	25-year
Interpolated Intensity (in/hr)=	2.22

P-2 is a proposed 12" CPP pipe is being installed to maintain the runoff from part of the subdivision access road and from proposed lots 7 through 10. Runoff will be carried down to a ditch where it will then flow into pipe P-1 and discharge into the Delta Drive storm system. The area that is proposed to contribute runoff to this culvert was delineated in AutoCAD.

$$A = 21,736 \text{ sqft} / 43,560 = 0.50 \text{ acres}$$

	C_c	I	A		
Q (cfs)=	0.84	2.22	0.50	=	0.94

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-3: Existing 12" CPP		
Project:	Delta Drive Subdivision	
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)

C = runoff coefficient

I = rainfall intensity (inches per hour)

A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient

$C_{1,2}$ = runoff coefficient for each area land cover type

A_t = total area (acres)

$A_{1,2}$ = areas of land cover (acres)

$C_c = 0.85$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)

$T_{1,2}$ = travel time across separate flow path segments (min)

$T_c = 12.93$ min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)

L = the distance of flow across a given segment (feet)

$V = k_r\sqrt{S_0}$ = average velocity $\left(\frac{\text{feet}}{\text{sec}}\right)$ across land cover

k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)

S_0 = slope of flow path $\left(\frac{\text{feet}}{\text{feet}}\right)$

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 12.93 (min)	25-year
Interpolated Intensity (in/hr)=	2.05

Pipe P-3 is an existing 12" CPP culvert on the southeast side of the Delta Drive cul-de-sac that drains into the Delta Drive ditch system that is near the location where the new subdivision access will tie into the shoulder of the cul-de-sac. Runoff will flow into the area drain and catch basin before flowing through the culvert. The area that is proposed to contribute runoff to this culvert was delineated in AutoCAD.

$$A = 10,626 \text{ sqft} / 43,560 = 0.24 \text{ acres}$$

	C_c	I	A	
Q (cfs)=	0.85	2.05	0.24	= 0.42

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-4: Existing 12" CPP		
Project:	Delta Drive Subdivision	
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)

C = runoff coefficient

I = rainfall intensity (inches per hour)

A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

 C_c = composite runoff coefficient $C_{1,2}$ = runoff coefficient for each area land cover type A_t = total area (acres) $A_{1,2}$ = areas of land cover (acres) $C_c = 0.83$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

 T_c = time of concentration (min) $T_{1,2}$ = travel time across separate flow path segments (min) $T_c = 16.60$ min, see Appendix D for calculation

$$T_t = L/60V$$

 T_t = travel time (min)

L = the distance of flow across a given segment (feet)

 $V = k_r\sqrt{S_0}$ = average velocity ($\frac{\text{feet}}{\text{sec}}$) across land cover k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10) S_0 = slope of flow path ($\frac{\text{feet}}{\text{feet}}$)

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 16.60 (min)	25-year
Interpolated Intensity (in/hr)=	1.77

There is an existing 12" CMP culvert that drains into the existing Delta Drive drainage system at the location where the new subdivision access will tie into the end of the Delta Drive cul-de-sac. The 12" CMP culvert is proposed to be replaced with a 12" CPP culvert along with the rest of the Delta Drive storm system under CBJ Contract BE21-028 "Delta Drive Reconstruction." Work is scheduled for spring/summer 2021. The 12" CPP culvert is being installed to maintain the existing flow around the Delta Drive cul-de-sac.

$$A = 21,786 \text{ sqft} / 43,560 = 0.50 \text{ acres}$$

	C_c	I	A		
Q (cfs)=	0.83	1.77	0.50	=	0.74

Appendix C

Runoff Coefficient

Runoff Coefficient Calculations		
Project:	Delta Drive Subdivision	PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mandershall Mall Rd. Ste. A, Jonesboro, AK 99601 907.780.9000 AEC60601
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

Surface Type	Location	Area (SQFT)	Total (SQFT)	Total (Acre)	% Overall Basin	Surface Runoff Coefficient	Runoff Coefficient for Each Area
Pavement	Road	3143					
			3143	0.07215335	11.96%	0.9	0.1
Building Roofs	Mobile homes	7084					
			7084	0.16262626	26.97%	0.9	0.1
Gravel Area	Everywhere else	16043					
			16043	0.3682966	61.07%	0.8	0.3
		Total=	26270	0.60	100.00%		0.5
					Composite Runoff Coefficient		0.84

Surface Type	Location	Area (SQFT)	Total (SQFT)	Total (Acre)	% Overall Basin	Surface Runoff Coefficient	Runoff Coefficient for Each Area
Pavement	Road	4842					
			4842	0.11115702	22.28%	0.9	0.1
Building Roofs	Mobile homes	4800					
			4800	0.11019284	22.08%	0.9	0.1
Gravel Area	Everywhere else	12094					
			12094	0.27764004	55.64%	0.8	0.2
		Total=	21736	0.50	100.00%		0.4
					Composite Runoff Coefficient		0.84

Runoff Coefficient Calculations	
Project:	Delta Drive Subdivision
Owner:	Bicknell Inc.
Date:	11/19/2020
Prepared By:	M. Minsch
Checked By:	M. Pusich

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 A RESPEC COMPANY
 9109 Meridian Hall Mall Rd. Ste. 4, Juntura, OR 97858
 503.788.0060 | AEC605

Pipe P-3: Existing 12" CPP	
Total Basin Area (SQFT)=	10626
Total Basin Area (ACRE)=	0.24

Surface Type	Location	Area (SQFT)	Total (SQFT)	Total (Acre)	% Overall Basin	Surface Runoff Coefficient	Runoff Coefficient for Each Area
Pavement	Road	5115					
			5115	0.11742424	48.14%	0.9	0.1
Gravel Area	Everywhere else	5511					
			5511	0.12651951	51.87%	0.8	0.1
		Total=	10626	0.24	100.00%		0.2
					Composite Runoff Coefficient		0.84

Pipe P-4: Existing 12" CPP Culvert	
Total Basin Area (SQFT)=	21786
Total Basin Area (ACRE)=	0.50

Surface Type	Location	Area (SQFT)	Total (SQFT)	Total (Acre)	% Overall Basin	Runoff Coefficient	Runoff Coefficient for Each Area
Pavement	Road	7037					
			7037	0.16154729	32.30%	0.9	0.1
Gravel Area	Everywhere else	14750					
			14750	0.33861341	67.70%	0.8	0.3
		Total=	21786	0.50	100.00%		0.4
					Composite Runoff Coefficient		0.83

Appendix D

Time of Concentration

Delta Drive Subdivision
Juneau, Alaska

Time of Concentration Calculations

Project:	Delta Drive Subdivision
Owner:	Bicknell Inc.
Date:	11/19/2020
Prepared By:	M. Minsch
Checked By:	M. Pusich



Pipe P-1: Existing 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	393
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	13.10

Pipe P-2: Proposed 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	338
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	11.27

Pipe P-3: Existing 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	388
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	12.93

Pipe P-4: Existing 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	498
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	16.60

Appendix E

Rainfall Intensity

Delta Drive Subdivision
Juneau, Alaska

NOAA Atlas 14, Volume 7, Version 2
Location name: Juneau, Alaska, USA*
Latitude: 58.3922°, Longitude: -134.5604°
Elevation: 50.42 ft**
* source: ESRI Maps
** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Penca, Douglas Kane, Sarah Dietz, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishari Roy, Svetlana Stuefer, Amy Tidwell, Carl Trypanuk, Dale Uhrh, Michael Yokta, Erica Bettis, Geoffrey Bonnin, Sarah Heim, Lillian Hiner, Elizabeth Lilly, Jayashree Narayanan, Fenglin Yan, Tan Zhao

NOAA, National Weather Service, Silver Spring, Maryland
and
University of Alaska Fairbanks, Water and Environmental Research Center

[PF tabular](#) | [PF graphical](#) | [Maps & aerials](#)

PF tabular

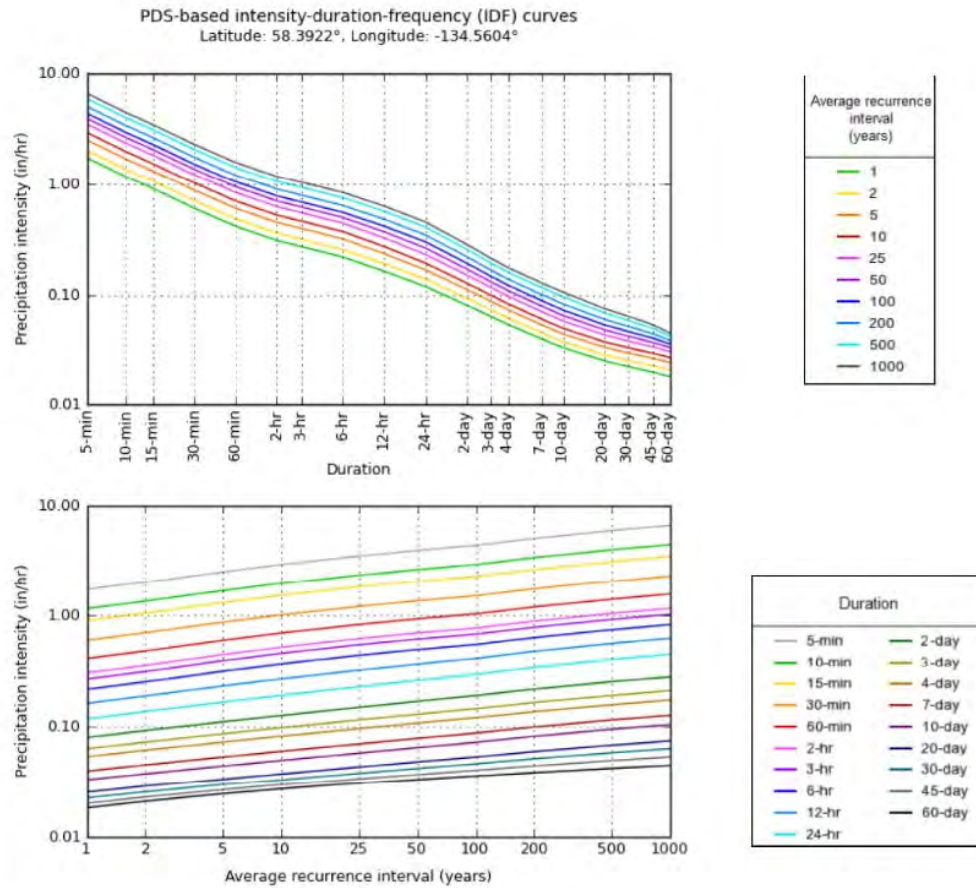
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.74 (0.936-2.21)	2.03 (1.61-2.62)	2.52 (1.94-3.34)	2.94 (2.22-3.97)	3.50 (2.58-4.86)	3.95 (2.84-5.59)	4.38 (3.10-6.34)	5.05 (3.49-7.45)	5.95 (4.01-9.01)	6.62 (4.38-10.2)
10-min	1.16 (0.936-1.48)	1.36 (1.08-1.76)	1.69 (1.31-2.24)	1.97 (1.49-2.68)	2.35 (1.73-3.26)	2.65 (1.91-3.75)	2.94 (2.08-4.25)	3.40 (2.35-5.01)	4.00 (2.69-6.05)	4.45 (2.94-6.86)
15-min	0.908 (0.728-1.16)	1.06 (0.840-1.37)	1.32 (1.02-1.75)	1.54 (1.16-2.08)	1.84 (1.35-2.55)	2.06 (1.49-2.92)	2.30 (1.62-3.32)	2.65 (1.83-3.90)	3.12 (2.10-4.72)	3.47 (2.30-5.35)
30-min	0.602 (0.484-0.766)	0.704 (0.556-0.908)	0.876 (0.676-1.16)	1.02 (0.770-1.38)	1.22 (0.896-1.89)	1.37 (0.986-1.94)	1.52 (1.07-2.20)	1.76 (1.22-2.59)	2.07 (1.39-3.13)	2.30 (1.52-3.55)
60-min	0.413 (0.332-0.525)	0.482 (0.381-0.622)	0.600 (0.463-0.794)	0.699 (0.528-0.944)	0.834 (0.613-1.16)	0.939 (0.676-1.33)	1.04 (0.736-1.51)	1.20 (0.833-1.78)	1.42 (0.955-2.14)	1.58 (1.04-2.43)
2-hr	0.306 (0.246-0.390)	0.358 (0.283-0.462)	0.447 (0.345-0.592)	0.520 (0.394-0.703)	0.622 (0.457-0.862)	0.698 (0.503-0.990)	0.775 (0.547-1.12)	0.894 (0.619-1.32)	1.05 (0.710-1.59)	1.17 (0.776-1.81)
3-hr	0.270 (0.217-0.343)	0.315 (0.249-0.407)	0.394 (0.304-0.521)	0.459 (0.347-0.620)	0.548 (0.403-0.761)	0.616 (0.444-0.872)	0.683 (0.482-0.987)	0.788 (0.545-1.16)	0.927 (0.625-1.40)	1.03 (0.683-1.59)
6-hr	0.218 (0.175-0.277)	0.255 (0.201-0.328)	0.317 (0.245-0.420)	0.369 (0.279-0.498)	0.441 (0.324-0.612)	0.496 (0.357-0.703)	0.551 (0.389-0.796)	0.636 (0.440-0.938)	0.748 (0.505-1.13)	0.834 (0.552-1.29)
12-hr	0.163 (0.131-0.207)	0.190 (0.150-0.245)	0.234 (0.181-0.310)	0.271 (0.205-0.366)	0.324 (0.238-0.450)	0.368 (0.265-0.521)	0.414 (0.292-0.598)	0.478 (0.331-0.705)	0.563 (0.380-0.852)	0.627 (0.415-0.968)
24-hr	0.118 (0.107-0.131)	0.138 (0.124-0.155)	0.167 (0.147-0.192)	0.192 (0.166-0.225)	0.230 (0.194-0.275)	0.262 (0.218-0.319)	0.298 (0.243-0.369)	0.344 (0.276-0.434)	0.405 (0.317-0.522)	0.451 (0.348-0.591)
2-day	0.080 (0.073-0.089)	0.093 (0.083-0.104)	0.111 (0.098-0.128)	0.127 (0.110-0.148)	0.150 (0.127-0.180)	0.170 (0.141-0.207)	0.192 (0.156-0.237)	0.219 (0.176-0.276)	0.255 (0.200-0.329)	0.283 (0.218-0.370)
3-day	0.063 (0.058-0.070)	0.073 (0.065-0.082)	0.087 (0.076-0.100)	0.098 (0.086-0.115)	0.116 (0.098-0.138)	0.130 (0.108-0.159)	0.146 (0.119-0.181)	0.166 (0.133-0.209)	0.192 (0.151-0.248)	0.212 (0.163-0.278)
4-day	0.054 (0.049-0.060)	0.062 (0.055-0.069)	0.073 (0.064-0.084)	0.082 (0.071-0.096)	0.096 (0.081-0.115)	0.108 (0.090-0.132)	0.121 (0.099-0.150)	0.137 (0.110-0.173)	0.158 (0.124-0.204)	0.174 (0.134-0.228)
7-day	0.040 (0.036-0.044)	0.045 (0.041-0.051)	0.053 (0.047-0.061)	0.060 (0.052-0.070)	0.070 (0.059-0.084)	0.079 (0.065-0.096)	0.088 (0.072-0.109)	0.100 (0.080-0.126)	0.116 (0.091-0.149)	0.127 (0.098-0.167)
10-day	0.033 (0.030-0.037)	0.038 (0.034-0.042)	0.044 (0.039-0.051)	0.050 (0.043-0.058)	0.058 (0.049-0.069)	0.065 (0.054-0.079)	0.073 (0.059-0.090)	0.082 (0.066-0.104)	0.095 (0.075-0.123)	0.105 (0.081-0.138)
20-day	0.025 (0.023-0.028)	0.029 (0.026-0.032)	0.034 (0.030-0.039)	0.038 (0.032-0.044)	0.043 (0.037-0.052)	0.048 (0.040-0.059)	0.053 (0.044-0.066)	0.060 (0.048-0.076)	0.068 (0.054-0.088)	0.075 (0.058-0.098)
30-day	0.022 (0.020-0.025)	0.025 (0.023-0.029)	0.030 (0.026-0.034)	0.033 (0.029-0.039)	0.038 (0.032-0.046)	0.042 (0.035-0.051)	0.046 (0.038-0.058)	0.052 (0.041-0.065)	0.058 (0.046-0.075)	0.064 (0.049-0.083)
45-day	0.020 (0.018-0.022)	0.023 (0.021-0.026)	0.027 (0.023-0.031)	0.030 (0.026-0.035)	0.034 (0.029-0.040)	0.037 (0.031-0.045)	0.041 (0.033-0.050)	0.044 (0.036-0.056)	0.050 (0.039-0.064)	0.054 (0.041-0.070)
60-day	0.018 (0.017-0.020)	0.021 (0.019-0.024)	0.024 (0.022-0.028)	0.027 (0.023-0.032)	0.031 (0.026-0.037)	0.033 (0.028-0.041)	0.036 (0.029-0.045)	0.039 (0.031-0.049)	0.042 (0.033-0.054)	0.045 (0.035-0.058)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_printpage.html?lat=58.3922&lon=-134.5604&data=intensity&units=english&series=pds

PF graphical



NOAA Atlas 14, Volume 7, Version 2

Created (GMT): Thu Nov 19 20:30:02 2020

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_printpage.html?lat=58.3922&lon=-134.5604&data=intensity&units=english&series=pds

Maps & aerals**Small scale terrain****Large scale terrain****Large scale map****Large scale aerial**

Appendix F

Existing & Proposed Capacity Calcs

Delta Drive Subdivision
Juneau, Alaska

Discharge Capacity Calculations		
Project:	Delta Drive Subdivision	 PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mendonhall Mall Rd, Ste. 4, Juneau, AK 99801 907.780.0000 A E C C O S
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

The following equation was used to calculate the capacity of pipes P-1, P-2, P-3 and P-4 that drain into the existing Delta Drive ditch system. Capacity was also calculated for the 18" CPP culvert that will transport all of the water discharged from the proposed site into the Delta Drive storm system. The equation is from "Urban Drainage Design Manual: Hydraulic Engineering Circular No. 22, Third Edition."

$$Q = (K/n) \times A \times R^{0.67} \times S^{0.5}$$

Q= Discharge in cubic feet per second (cfs)

K = Coefficient for English units (1.486)

n = Manning's coefficient of roughness, obtained from Table 5-3, Page 5-5, of the CBJ Stormwater Manual

A = Cross sectional area in square feet

R = Hydraulic radius

S= Slope

Pipe P-1: Existing 12" CPP Culvert

Inlet Invert=95.19, Outlet Invert=94.98, Length=43', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	.25	0.006	=	2.57

Pipe P-2: Proposed 12" CPP Culvert

Inlet Invert=96.55, Outlet Invert=96.20, Length=70', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	0.25	0.005	=	2.34

Pipe P-3: Existing 12" CPP Culvert

Inlet Invert=95.21, Outlet Invert=94.88, Length=54', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	0.25	0.0061	=	2.59

Pipe P-4: Existing 12" CPP Culvert

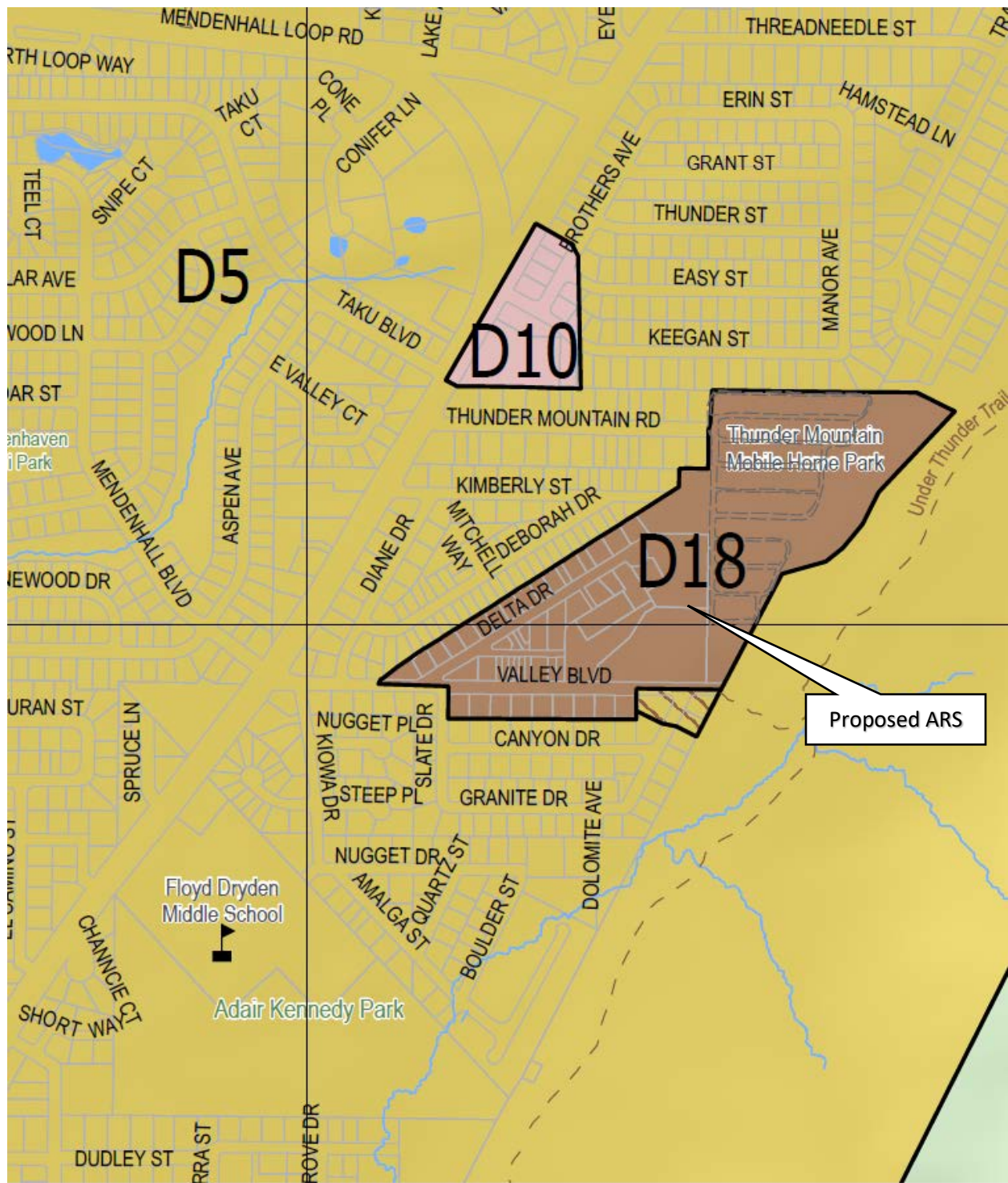
Inlet Invert=95.84, Outlet Invert=94.88, Length=5', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

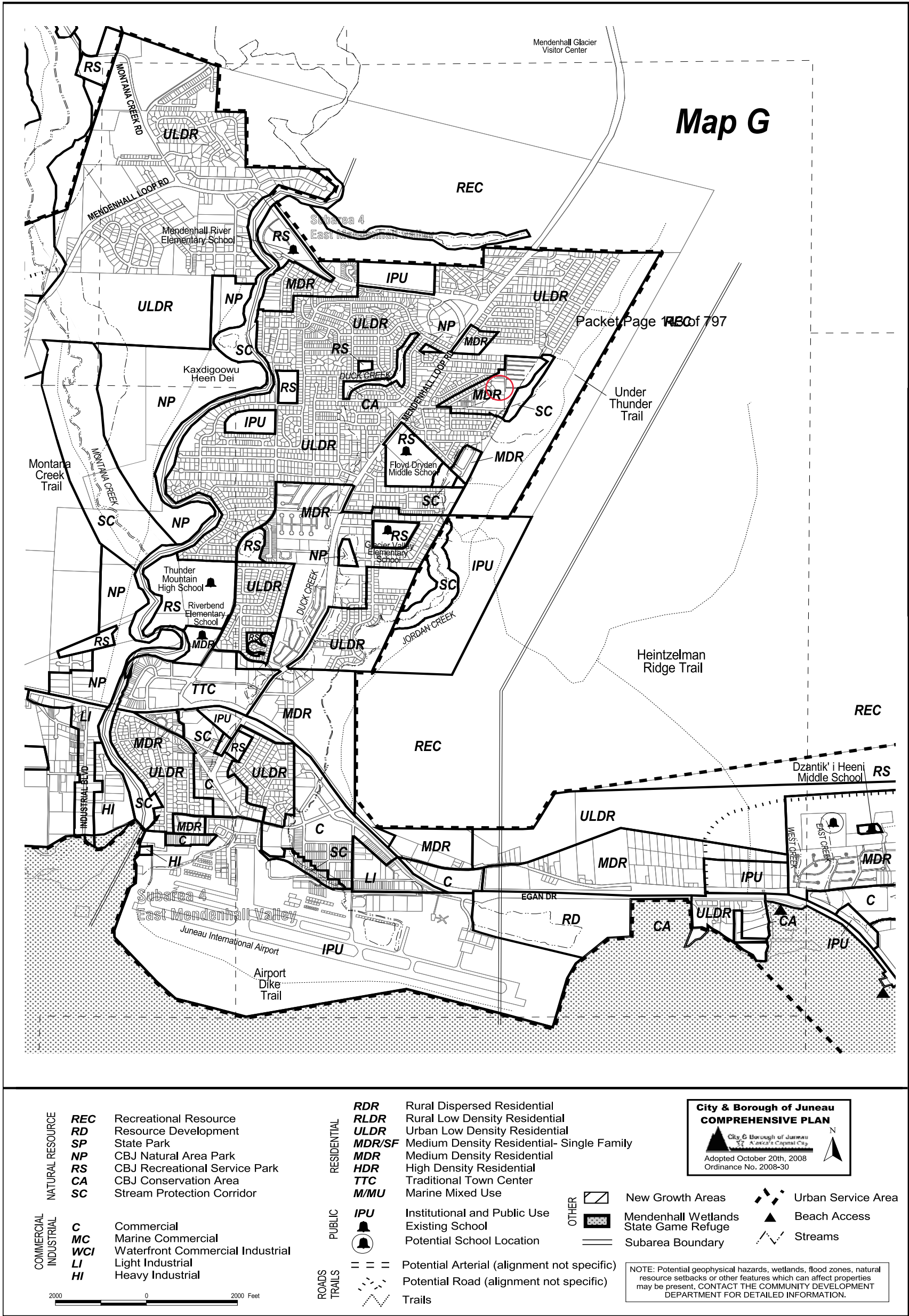
	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	0.25	.1920	=	14.51

Pipe P-5: Existing 18" CPP Culvert

Inlet Invert=95.21, Outlet Invert=94.88, Length=5', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

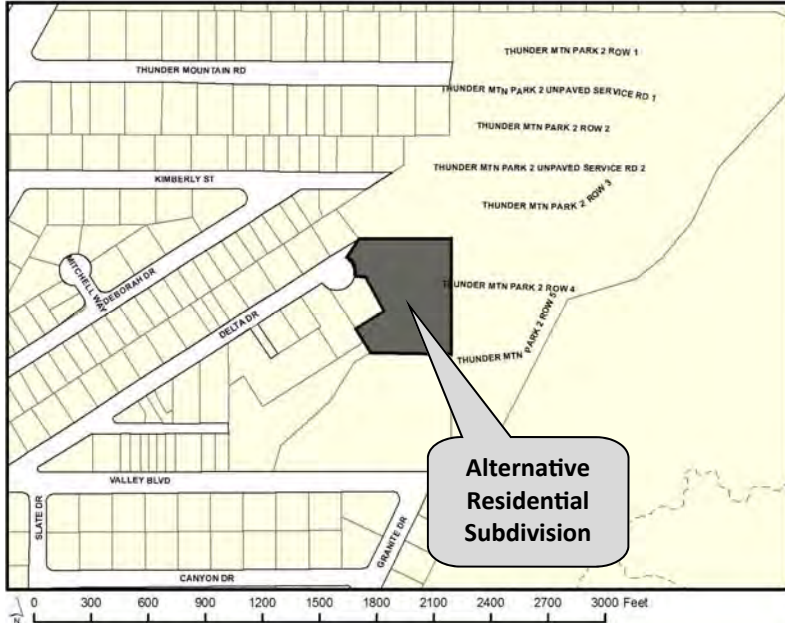
	k	n	A	R	S	
Q (cfs)	1.486	0.014	1.77	0.375	.004	= 14





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 an **Alternative Residential Subdivision** creating **15 lots** at **4090 Delta Drive** in a **D18 zone**.

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2020** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 21

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

Dec. 22 — noon, Jan. 11

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

HEARING DATE & TIME: 7:00 pm, Jan. 12, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/93626358724>. The Webinar ID is: 936 2635 8724. 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.

Jan. 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 December 7, 2020

Case No.: SMP2020 0004/ARP2020 0001
 Parcel No.: 5B2401620011
 CBJ Parcel Viewer: <http://epv.juneau.org>

Laurel Christian

From: dblommer@bicknellinc.com
Sent: Monday, December 28, 2020 10:23 AM
To: Laurel Christian
Subject: Delta Dr Sign Posted
Attachments: Resized_20201228_092437.jpeg

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

Hi Laurel,

Here is the picture of the sign at Delta Dr. Let me know if we need to do anything else.

Thanks,
David





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: January 25, 2021
File No.: ARP2020 0001

Bicknell, Inc.
Attn: David Blommer
P.O. Box 33517
Juneau, AK 99803

Proposal: Applicant proposes an Alternative Residential Subdivision creating 15 lots

Property Address: 4090 Delta Drive

Legal Description: Thunder Mountain Park Tract 1A

Parcel Code No.: 5B2401620011

Hearing Date: January 12, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 29, 2020, and late file memorandum (provided January 12, 2021) with amendments and approved the Alternative Residential Subdivision Preliminary Plan for a 15-lot subdivision to be conducted as described in the project description and project drawings submitted with the application (and with the following conditions :)

1. Prior to approval of the Final Alternative Residential Subdivision Plan, the applicant shall submit homeowners association, or similar, documents that comply with the requirements of 49.15.950(b);
2. Prior to the issuance of the eleventh (11) temporary certificate of occupancy for the development, access to and within the development shall be paved;
3. Prior to the issuance of the first temporary certificate of occupancy, the master water meter for the development shall be installed by the developer; and
4. Per CBJ 49.15.920(o), the final mailbox location shall be reviewed and approved by the CDD Director, and installed prior to the issuance of the first temporary certificate of occupancy.

Bicknell, Inc.
 File No.: ARP020 0001
 January 25, 2021
 Page 2 of 2

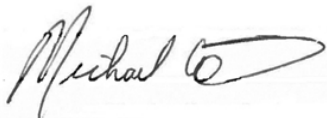
Attachments: December 29, 2020, memorandum from Laurel Christian, Community Development, to the CBJ Planning Commission regarding ARP2020 0001; and memorandum from Jill Maclean, Director, AICP, Community Development regarding ARP2020 0001 and SMP2020 0004 provided January 12, 2021.

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, January 12, 2021.

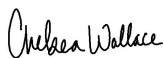
Expiration Date: The permit will expire 18 months after the effective date, or July 12, 2022, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael Levine, Chair
 Planning Commission

January 26, 2021

Date



Filed With City Clerk

January 26, 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**

SMP2020 0004: Preliminary Plat Approval for an Alternative Residential Subdivision creating 15 lots. -
 APPROVED WITH MODIFICATIONS

AGENDA ITEM:

Case No.: SMP2020 0004

Applicant: Bicknell, Inc.

Location: 4090 Delta Drive

Proposal: Preliminary Plat Approval for an Alternative Residential Subdivision creating 15 lots.

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and **APPROVE** the preliminary plat for the Delta Drive Subdivision, an Alternative Residential Subdivision creating 14 unit-lots and one (1) parent lot. This permit would allow the applicant to submit for the final plat.

This approval is subject to the following conditions:

1. Prior to approval of the final plat, Certification from the CBJ Treasurer is required 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 for review by the director of E&PW for compliance with CBJ 49.35.140.
3. Prior to approval of the final plat, the developer shall submit a final drainage plan to be approved by CBJ Engineering & Public Works. This drainage plan must be prepared by an Alaskan licensed engineer in accordance with CBJ 49.35.510.
4. Prior to approval of the final plat, the applicant shall submit a revised preliminary plat with the following revisions:
 - a. Add the following plat note:
 - i. ACCESS TO LOTS SHALL BE VIA ACCESS EASEMENTS SHOWN ON THIS PLAT AND IS SUBJECT TO THE REQUIREMENTS IN THE “[private common driveway access, utility, and maintenance agreement – edit title as appropriate]” RECORDED WITH THIS SUBDIVISION.
 - b. Show a five-foot perimeter buffer along the southwest lot line bordering Delta Acres Addition 1 Lot 8.
 - c. Include bearing labels for:
 - i. The eastern lot line of Lot 6
 - ii. The lot lines between lots 7 and 8 and 9 and 10
 - d. Per sheet C203, Grading Plan, a drainage easement should be added to the following locations:
 - i. Eastern side of the development in the 10-foot perimeter buffer
 - ii. Rear of Lot 11
5. Prior to the issuance of the first temporary certificate of occupancy, each dwelling unit shall be connected to public sewer and water, and a master meter for water shall be installed by the developer. Prior to the issuance of the first temporary certificate of occupancy for the development, access to and

within the development shall be paved.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for SMP2020 0004	12/29/2020	Staff Report
☐ Notice of Decision for SMP2020 0004	1/26/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
MAJOR SUBDIVISION SMP2020-0004
HEARING DATE: JANUARY 12, 2020

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

DATE: December 29, 2020
TO: Michael LeVine, Chair, Planning Commission
BY: Laurel Christian, Planner II *Laurel Christian*
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Preliminary Plat Approval for the Delta Drive Subdivision, an Alternative Residential Subdivision creating 14 unit-lots and 1 parent lot

STAFF RECOMMENDATION: Approval with conditions

KEY CONSIDERATIONS FOR REVIEW:

- 14 lots will be for single-family dwellings.
- The remaining parent lot will contain the perimeter buffer, privately maintained access road, and other common amenities.
- This approval is subject to ARP20200001.

GENERAL INFORMATION	
Property Owner	Bicknell, Inc.
Applicant	Bicknell, Inc.
Property Address	4090 Delta Drive
Legal Description	Thunder Mountain Park Tract 1A
Parcel Number	5B2401620011
Zoning	D18 Multi-family Residential
Lot Size	79,189 sq. ft.
Water/Sewer	Public
Access	Delta Drive
Existing Land Use	Vacant
Associated Applications	ARP20200001

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 1-5 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.

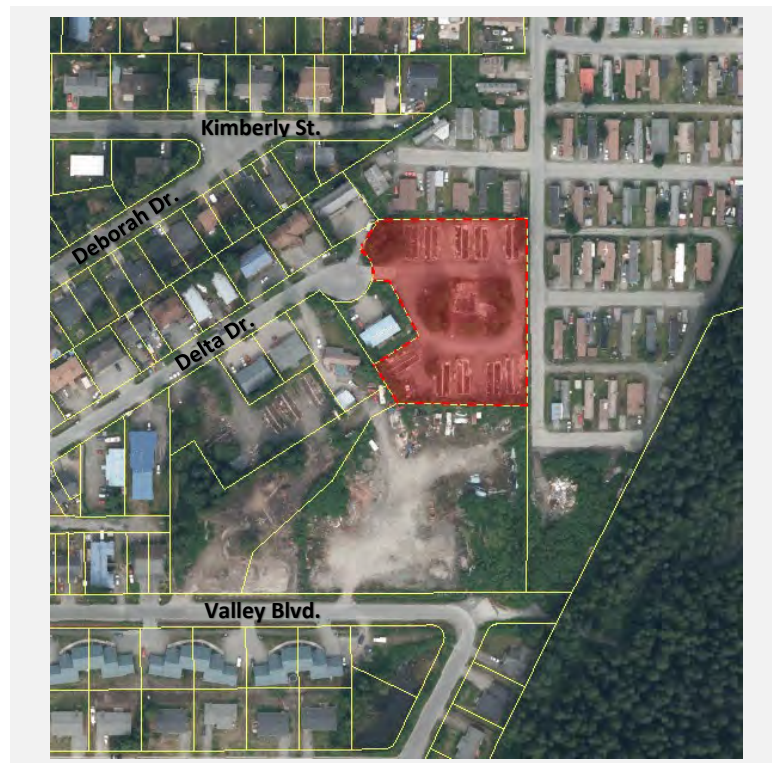
STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - o 49.15.402
 - o 49.15.411
 - o 49.35
 - o 49.80

The Commission shall hear and decide the case per 49.15.400(a) - Purpose and applicability. *The purpose of this article is to facilitate the subdivision of land to promote the public health, safety, and general welfare of the citizens of the CBJ in accordance with the Comprehensive Plan of the City and Borough of Juneau, Alaska.*

And per 49.15.402(a) *A major subdivision permit is required for subdivisions resulting in 14 or more lots.*

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (D18)	Thunder Mountain Mobile Home Park
South (D18)	Vacant
East (D18)	Thunder Mountain Mobile Home Park
West (D18)	Multi-family four-plex

SITE FEATURES	
Anadromous	None
Flood Zone	None
Hazard	None
Hillside	None
Wetlands	None
Parking District	None
Historic District	None
Overlay Districts	None

BACKGROUND INFORMATION

Project Description – The applicant requests a preliminary plat approval for the Delta Drive Subdivision, an Alternative Residential Subdivision (ARS) creating 15 lots. The proposal would create 14 unit-lots for single-family dwellings and one (1) parent-lot containing the perimeter buffer, privately maintained access road, and other common amenities (15 lots total).

A project narrative can be found in Attachment A and the preliminary plat can be found in Attachment B.

Background – Background information includes the process for approval, and relevant development history for the lot. Information on the ARS design may be found in the staff report for ARP20200001.

ARS Process

The ARS process requires two preliminary applications, both of which are being presented at the same Planning Commission meeting.

- This application (SMP20200004) is for approval of the preliminary plat for the ARS. The plat is reviewed for compliance with subdivision code [CBJ 49.15.402].
- Another separate (ARP20200001) is for review of the preliminary plan for the ARS. This application must be acted on first. The plan is reviewed for compliance with applicable ARS code and design guidelines [CBJ 49.15.900].

If the preliminary plan and preliminary plat are approved, the developer may for apply for review of the ARS final plan and ARS final plat. These two applications may be presented at the same public meeting, or separately. The

purpose of a second review by the Commission is to ensure the final plan conforms with the approved preliminary plan and that any conditions of approval have been met.

Development History

The table below summarizes relevant history for the lot and proposed development.

Item	Summary
Plat History	In 1992, the lot was platted as an expansion of the Thunder Mountain Park (plat no. 92-18). No restrictive plat notes exist for the lot.
Land Use Cases	In 1992, a conditional use permit (CUP) was issued to expand the Thunder Mountain Mobile Home park onto the lot (USE-CU92-01). In 2013, another CUP was issued for a 12-unit apartment building on the lot; this permit expired (USE20130017). The lot is currently vacant.
Building Permits	In 1992, a building permit was issued to place 10 modular homes on permanent concrete foundations (BLD-0747301). In 2013, a demolition permit was issued to remove the modular homes (DMO20130007). The lot currently contains the 10 concrete foundations with no modular structures. The applicant intends to repurpose the foundations.

ANALYSIS

Phasing – The proposed ARS will not be phased.

Minimum Lot Dimensions – Typically, the D18 zoning district requires a 5,000 square foot minimum lot size for a standard lot. Minimum lot dimensional requirements for the unit-lots created through this ARS are waived [49.15.920(c)]. The ARS allows for *unit-lot residential communities in which all or some of the lots do not substantially conform to the minimum requirements for a traditional subdivided lot [49.15.900]*.

The unit-lots created through this subdivision range from approximately 2,000 square feet to 5,000 square feet. The parent-lot measures approximately 28,000 square feet.

Density – Per 49.15.920(e)(1) *The number of dwelling units permitted in the development shall be calculated by multiplying the maximum number of dwelling units per gross acre permitted in the underlying zoning district by the number of acres in the alternative residential subdivision and rounding to the nearest whole number.*

Maximum Dwelling Units Per Acre	Parent Lot Size	Maximum Density	Number of Dwelling Units Proposed
18	79,189 sq. ft. (1.8179 acres)	33 dwelling units	14

Maximum density is not exceeded, as demonstrated in the table above. The applicant has not requested a density bonus. Each unit-lot could accommodate one single-family dwelling. Lot 12 exceeds the minimum lot size for the zoning district and could accommodate a single-family dwelling and accessory apartment [49.15.920(m)]. The following plat note has been added:

Plat Note: AT TIME OF RECORDING, LOTS 2 THROUGH 11 AND 13 THROUGH 15 ARE LIMITED TO ONE SINGLE FAMILY DWELLING. LOT 12 MAY BE PERMITTED ONE SINGLE FAMILY DWELLING AND ONE ACCESSORY APARTMENT. SEE CBJ 49.15 ARTICLE IX FOR CURRENT REGULATIONS.

Habitat – There are no known anadromous streams or wetlands on the lot.

Hazard Zones - There are no hazard zones on the lot.

LOT DESIGN

Alternative Residential Subdivision Plat Notes – The lots created through this subdivision are part of an ARS. To ensure compliance with CBJ 49.15 Article 9, the following plat notes have been added:

Plat Note: THE LOTS CREATED THROUGH THIS SUBDIVISION ARE AN ALTERNATIVE RESIDENTIAL SUBDIVISION. AT TIME OF PLAT RECORDING DEVELOPMENT OF LOTS, INCLUDING FURTHER SUBDIVISION OR USE, IS SUBJECT TO CBJ 49.15 ARTICLE IX. SEE CITY AND BOROUGH OF JUNEAU LAND USE CODE FOR CURRENT REGULATIONS.

Plat Note: THERE SHALL BE NO DISTURBANCE OR DEVELOPMENT WITHIN THE PERIMETER BUFFER SHOWN ON THIS PLAT, AS REQUIRED BY CBJ 49.15.920(j).

TRAFFIC

Traffic – According to CBJ 49.40.300(a)(2) a traffic impact analysis is not required; the development is not anticipated to generate more than 250 Average Daily Trips (ADTs).

Use	Units	Trips Generated	Total Trips
Single-family Residential	14	9.52 per dwelling	133.28

ACCESS AND PUBLIC IMPROVEMENTS

Access – Per 49.35.250(a), staff has determined that the primary access to the subdivision is Delta Drive. Within the ARS, the development will be served by a privately maintained road extending from Delta Drive. This is allowed per 49.15.920(f), as discussed in the staff report for ARP20200001. An easement for utilities, drainage, and driveway access on the parent lot is dedicated by the plat.

It is recommended the following plat note be added to the plat:

Plat note: ACCESS TO LOTS SHALL BE VIA ACCESS EASEMENTS SHOWN ON THIS PLAT AND IS SUBJECT TO THE REQUIREMENTS IN THE “[private common driveway access, utility, and maintenance agreement – edit title as appropriate]” RECORDED WITH THIS SUBDIVISION.

49.35.240 Table of Roadway Construction Standards – Delta Drive is a CBJ right-of-way constructed to CBJ standards and maintained by CBJ. The Capital Improvement Program (CIP) has designated funds for Fiscal Year 2020/2021 to reconstruct and improve Delta Drive. The plans for the reconstruction include new water and sewer mains, new drainage systems, resurfacing the street, and the addition of sidewalks on one side of the street. These improvements are planned to be completed by CBJ during the summer of 2021 (CSP20200009). Additional improvements by the developer to Delta Drive are not required.

December 29, 2020

SMP2020 0004

Page 5 of 8

Within the ARS, the privately maintained access road must be 20 feet in width and paved, and installed by the developer. The development is anticipated to generate 133 ADTs. A 20-foot wide paved roadway is adequate for the trips generated according to the Table of Roadway Construction Standards, see below [49.35.240].

Condition: Prior to the issuance of the first temporary certificate of occupancy, access to and within the development shall be paved.

49.35.240 Table of roadway construction standards excerpt:

<i>ADTs</i>	<i>TIA</i>	<i>Sidewalks</i>	<i>Travel Way Width</i>	<i>Street Lights</i>	<i>ROW Width</i>	<i>Paved</i>	<i>Publically Maintained</i>
<i>0 to 211</i>	<i>No</i>	<i>Not required</i>	<i>20 ft.</i>	<i>At intersection of subdivision streets and external street system.</i>	<i>60 ft. Public ROW*</i>	<i>No, if outside the urban service area</i>	<i>No</i>

*49.15.920(f) allows for a privately maintained access road within the ARS.

Street Lighting – Street lighting is not required within the ARS. Delta Drive currently has street lighting.

Pedestrian Access – Delta Drive currently does not have sidewalks; however, sidewalks on one side of the street are planned through the CIP reconstruction project (CSP20200009). The access road within the ARS is not required to have sidewalks, according to the Table of Roadway Construction Standards [49.35.240].

Utilities – CBJ 49.15.920(g) requires that a master meter is installed on the parent-lot, and each unit-lot must be connected to water and sewer through the master meter. The parent lot is currently connected to public water and sewer. The applicant has submitted preliminary construction drawings showing each new unit-lot will be connected to public utilities through a master meter on the parent lot (Attachment C). The applicant has also submitted a preliminary water-line memo (Attachment D).

Once the preliminary plat is approved, the applicant is required to submit final construction drawings for review by CBJ Engineering & Public Works (E&PW). Because the parent-lot is currently connected to public utilities, additional work is not required before the applicant can receive final plat approval. It will be the responsibility of the Homeowners Association (HOA) to provide water and sewer to each unit-lot prior to the issuance of a Certificate of Occupancy or Temporary Certificate of Occupancy for each structure.

CBJ E&PW has reviewed the preliminary construction drawings and water line memo and finds that the proposed improvements conform to the requirements of Title 49 and can feasibility be constructed (Attachment F).

Condition: Prior to the issuance of the first temporary certificate of occupancy, each dwelling unit shall be connected to public sewer and water, and a master meter for water shall be installed by the developer.

Condition: 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 for review by the director of Engineering & Public Works for compliance with CBJ 49.35.140.

Plat Note: DOMESTIC WATER AND SANITARY SEWER DISPOSAL PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC UTILITIES.

Drainage – A preliminary drainage report and plan has been submitted, see Attachment C and E. The preliminary drainage plan demonstrates the drainage will be collected into drainage swales and underground storm drains, which connect to the existing drainage systems in Delta Drive. CBJ E&PW has reviewed the preliminary drainage report and construction drawings and finds that the preliminary drainage plan conforms to drainage and water quality requirements (Attachment F).

Condition: Prior to approval of the final plat, the developer shall submit a final drainage plan to be approved by CBJ Engineering & Public Works. This drainage plan must be prepared by an Alaskan licensed engineer in accordance with CBJ 49.35.510.

Fire Code Improvements – According to the CBJ Fire Marshall, the proposed 20-foot-wide access road is adequate for emergency service response. No fire turnaround is required since the access road is a connected loop.

AGENCY REVIEW

CDD conducted an agency review comment period between October 15 and October 31, 2020. Comments from Engineering and Public works and Capital City Fire and Rescue are incorporated into this report. No additional comments were received.

PUBLIC COMMENTS

CDD conducted a public comment period between December 7 and December 21, 2020. Public notice was mailed to property owners within 500 feet of the subject parcel. A public notice sign was also posted on-site two weeks prior to the scheduled hearing. At time of writing this staff report, no public comments were received.

FINDINGS

Major Subdivision Preliminary Plat Approval Criteria - Per CBJ 49.15.402(c)(4), the director makes the following findings on the proposed development:

1. *Does the preliminary plat comply with CBJ 49.15.411?*

Analysis: No additional analysis needed.

Finding: Yes. With recommended conditions listed below, the preliminary plat complies with preliminary platting requirements listed in CBJ 49.15.411.

2. *Will applicable subdivision development standards be met, or can reasonably be met with conditions?*

Analysis: The applicant is required to install a privately maintained access road, utilities, and drainage systems.

Finding: Yes. With recommended conditions, applicable subdivision development standards can be reasonably met.

3. *Will the proposed subdivision provide suitable building sites for the zoning district?*

Analysis: Minimum lot dimensional requirements for the unit-lots created through this ARS are waived [49.15.920(c)]; the applicant has demonstrated adequate building sites are provided for an ARS in the D18 zoning district.

Finding: Yes. The proposed subdivision provides building sites suitable for the D18 zoning district.

4. Will the proposed street names be unique or continuations of existing streets?

Analysis: No new street names are proposed. The CDD GIS Analyst will assign addresses from Delta Drive; the privately maintained street functions as an extension of Delta Drive.

Finding: Not applicable.

5. Has the director of Engineering and Public Works reviewed the application and determined that:

(i) The subdivision can be constructed to conform to applicable drainage and water quality requirements;

(ii) The streets, pioneer paths, and pedestrian ways as proposed accommodate anticipated traffic, align with, and, where appropriate, connect with streets and pedestrian ways serving adjacent properties;

(iii) Any proposed improvements conform to the requirements of this Title 49 and can be feasibly constructed; and,

(iv) Where public sewer is not required, the applicant has shown that soils are suitable for individual on-lot wastewater treatments and disposal or has shown the feasibility of alternative methods of wastewater disposal and treatment.

Analysis: CBJ E&PW has submitted a memorandum that demonstrates the above criteria can reasonably be met (Attachment F).

Finding: Yes. CBJ E&PW has reviewed the proposed subdivision application and supplemental materials, and finds the above criteria can be met.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and **APPROVE** the preliminary plat for the Delta Drive Subdivision, an Alternative Residential Subdivision creating 14 unit-lots and one (1) parent lot. This permit would allow the applicant to submit for the final plat.

This approval is subject to the following conditions:

1. Prior to approval of the final plat, Certification from the CBJ Treasurer is required 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 for review by the director of E&PW for compliance with CBJ 49.35.140.
3. Prior to approval of the final plat, the developer shall submit a final drainage plan to be approved by CBJ Engineering & Public Works. This drainage plan must be prepared by an Alaskan licensed engineer in accordance with CBJ 49.35.510.
4. Prior to approval of the final plat, the applicant shall submit a revised preliminary plat with the following revisions:
 - a. Add the following plat note:

- i. ACCESS TO LOTS SHALL BE VIA ACCESS EASEMENTS SHOWN ON THIS PLAT AND IS SUBJECT TO THE REQUIREMENTS IN THE “[private common driveway access, utility, and maintenance agreement – edit title as appropriate]” RECORDED WITH THIS SUBDIVISION.
- b. Show a five-foot perimeter buffer along the southwest lot line bordering Delta Acres Addition 1 Lot 8.
- c. Include bearing labels for:
 - i. The eastern lot line of Lot 6
 - ii. The lot lines between lots 7 and 8 and 9 and 10
- d. Per sheet C203, Grading Plan, a drainage easement should be added to the following locations:
 - i. Eastern side of the development in the 10-foot perimeter buffer
 - ii. Rear of Lot 11
5. Prior to the issuance of the first temporary certificate of occupancy, each dwelling unit shall be connected to public sewer and water, and a master meter for water shall be installed by the developer.
6. Prior to the issuance of the first temporary certificate of occupancy for the development, access to and within the development shall be paved.

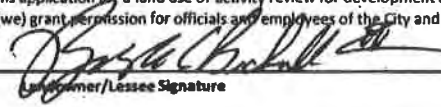
STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Preliminary Plat and Closure Report
Attachment C	Preliminary Construction Drawings
Attachment D	Preliminary Water Memo
Attachment E	Preliminary Drainage Report
Attachment F	Memorandum from CBJ Engineering & Public Works
Attachment G	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.

To be completed by Applicant	PROPERTY LOCATION		
	Physical Address 4090 Delta Drive, Juneau, AK 99801		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) Thunder Mountain Park TR 1A		
	Parcel Number(s) 5B2401620011		
	☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner Bicknell, Inc.	Contact Person David Blommer	
	Mailing Address P.O. Box 33517	Phone Number(s) 907-789-5727	
	E-mail Address dblommer@bicknellinc.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		10/8/20 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 Landowner, enter SAME			
Applicant SAME	Contact Person SAME		
Mailing Address SAME	Phone Number(s)		
E-mail Address SAME			
X _____ Applicant's Signature		_____ Date of Application	

DEPARTMENT USE ONLY BELOW THIS LINE

RECEIVED

OCT 12 2020

PERMIT CENTER/CDD

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.

Intake Initials 
Case Number Smp20200004
Date Received 10/12/20



SUBDIVISION AND DEVELOPMENT PLAN APPLICATION

See subdivision hand-outs 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

An alternative residential subdivision (ARS) of Thunder Mountain Park TR 1A into Delta Drive Subdivision comprised of 15 unit lots and 1 parent lot.

Number of Existing Parcels 1 Total Land Area 1.82 acres Number of Resulting Parcels 16

HAS THE PARCEL BEEN CREATED BY A MINOR SUBDIVISION IN THE PRECEDING 24 MONTHS

☐ NO

☐ YES Case Number _____

TYPE OF SUBDIVISION OR PLATTING APPROVAL REQUESTED

MINOR DEVELOPMENT

(changing or creating 13 or fewer lots)

- ☐ Preliminary Plat (MIP)
- ☐ Final Plat (MIF)
- ☐ Panhandle Subdivision
- ☐ Accretion Survey
- ☐ Boundary Adjustment
- ☐ Lot Consolidation (SLC)
- ☐ Bungalow Lot Subdivision
- ☐ Common Wall/Zero Lot Subdivision
- ☐ Other _____

MAJOR DEVELOPMENT

(changing or creating 14 or more lots)

- ☒ Preliminary Plat (SMP)
- ☐ Final Plat (SMF)
- ☐ Preliminary Development Plan – PUD (PDP)
- ☐ Final Development Plan – PUD (PDF)
- ☐ Development Plan – ARS (ARP)
- ☐ Development Plan – ARS (ARF)
- ☐ Bungalow Lot Subdivision
- ☐ Common Wall/Zero Lot Subdivision
- ☐ Other _____

ALL REQUIRED DOCUMENTS ATTACHED

- ☒ Pre-application conference notes
- ☒ Narrative including:
 - ☒ Legal description(s) of property to be subdivided
 - ☒ Existing structures on the land
 - ☒ Zoning district
 - ☒ Density
 - ☒ Access
 - ☒ Current and proposed use of any structures
 - ☒ Utilities available
 - ☒ Unique characteristics of the land or structure(s)

☒ Preliminary Plat checklist

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

SUBDIVISION/PLATTING FEES	Fees	Check No.	Receipt	Date
Application Fees	\$ <u>1760.00</u>			
Admin. of Guarantees <i>Public Notice Sign</i>	\$ <u>150.00</u>			
Adjustment	\$ _____			
Total Fee	\$ <u>1910.00</u>			

*major sub:
\$110 per lot
x 16 lots*

RECEIVED

OCT 12 2020

PERMIT CENTER/CDD

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

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

Case Number

Smp20200004

Date Received

10/12/20



October 9, 2020

Laurel Christian, Planner II
City and Borough of Juneau
Community Development Department
155 S. Seward St.
Juneau, AK 99801

SUBJECT: Delta Drive Subdivision - Alternative Residential Subdivision
Project Narrative – PDC Project No. 20098JN

Dear Laurel;

On behalf of our client Bicknell Inc., PDC Engineers (PDC) is submitting this project narrative as part of the Delta Drive Subdivision Alternative Residential Subdivision (ARS) application. The property to be subdivided under the CBJ ARS code has a legal description of Thunder Mountain Park TR 1A with a land area of 79,189 square feet. Currently there are no dwelling structures on the property. Ten (10) existing concrete foundations exist on the property from where previous modular homes were located that have since been removed.

CBJ Zoning - The property is zoned D-18 Multifamily with an allowable density of 18 units per acre. The proposed use of the structures to be developed within the ARS will be residential and will meet the permissible uses as outlined for their zoning district and in the ARS code. The surrounding neighborhood is similarly zoned D-18 and is made up of single family and multi-family residences. The proposed development will be in harmony with the surrounding neighborhood.

Access - The existing parcel is accessed from the cul-de-sac at the end of Delta Drive, a CBJ owned and maintained paved roadway.

Utilities – CBJ public water and sanitary sewer utilities currently service the property. An existing 2-inch water line coming from the end of the existing 6-inch water line in Delta Drive supplies water to this property. Individual $\frac{3}{4}$ " water services are located from the 2-inch line within the property serving the original 10 modular homes. A 6-inch PVC sanitary sewer line exists within the property acting as the sewer collector. This 6-inch sewer pipe connects to the CBJ sewer main located in the Delta Drive cul-de-sac. Individual 4-inch PVC sewer services coming from the building foundations connect to the 6-inch sewer. Under the CBJ Delta Drive Reconstruction project scheduled for construction in the Spring/Summer of 2021, new water and sanitary sewer utilities will be provided to the lot line of this property. An 8-inch PVC sewer service will be provided and an 8-inch HDPE water line. The Delta Drive Subdivision project will connect to these new services and extend into the subdivision. The existing sewer system has been found to be in good condition and will continue to be reused. Lots which previously did not have a 4-inch

Anchorage | Fairbanks | Juneau | Palmer | Soldotna
9109 Mendenhall Mall Road, Suite 4, Juneau, Alaska 99801
907.780.6060
www.PDCENG.com

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Delta Drive Subdivision - ARS
October 9, 2020
Page 2

sewer service will have a new ones installed. The subdivision has an existing 2" Poly water main serving the existing lots. PDC water system analysis (attached) indicates that the existing 2" water service can supply adequate flow and pressure to 7 dwelling units. There are two 2" Poly water line branches that will connect to the new 8" HDPE line. The existing 2" poly water line will be flushed, disinfected and pressure testing in compliance with CBJ Standards for domestic water supply. Existing 3/4" water services will be used or new 1-inch Poly water services will be installed. A master water meter with vault structure will be installed prior to service lines.

Drainage – Surface storm water will be collected in drainage swales on the perimeter and interior lots of the property. The drainage system will involve construction of drainage swales, underground storm drain pipe and underdrain system to safely route the drainage to the existing Delta Drive drainage system which is planned for reconstruction in Spring/Summer 2021 by CBJ. As the designers for CBJ on the Delta Drive Reconstruction project, the storm drain improvements have been designed to accommodate the Delta Drive Subdivision storm drainage. There are two locations where storm drainage will discharge to Delta Drive, both of these locations have pipe sized at 12" diameter. Lots 11-15 will have a drainage swale near the rear of the property and then transition to an 8" underdrain in an existing 10' drainage easement that goes to a new culvert inlet being installed under the Delta Drive Reconstruction project. Lots 7-10 (new foundations) will be graded to drain to a drainage swale in the front of the lots where storm drainage will be collected and routed underground through a 12" drain pipe to the discharge location at the new culvert on Delta Drive. Lots 1-6 will have a perimeter drainage swale at the rear of the property that is graded to drain to the new culvert being installed under the CBJ Delta Drive Reconstruction project.

Parking and Circulation– Each lot will have two parking spaces as shown in the site plan. The existing gravel roadway will be reconstructed to accommodate a 20' wide paved access road through the property. This paved roadway will allow for safe and convenient emergency fire vehicle access throughout the subdivision.

Buffer/Setback – A perimeter buffer has been shown on the site plan with a new wooden fence located at the property line for screening and privacy. Buffers match the required setbacks for this zoning district.

Vegetative Cover – The parent lot has roughly 46% vegetative cover.

Lighting – Lighting will be installed on the individual structures.

Mailbox, Garbage and Snow Storage – CBJ Standard Mailboxes have been shown on Lot 1 to allow for each lot to have US Postal mail delivery. Two garbage dumpsters have been shown on Lot 1 to allow for refuse to be placed from each lot. Snow storage has been shown on Lot 1.

Delta Drive Subdivision - ARS
October 9, 2020
Page 3

Should you have any questions or require any additional information, please do not hesitate to contact me at your convenience.

Sincerely,

A handwritten signature in black ink that reads "J. Mark Pusich". The signature is fluid and cursive, with the first name "J." and last name "Pusich" clearly legible.

J. Mark Pusich, PE
Principal | Civil/Structural Engineer
PDC Engineers

Attachments: ARS Application: CBJ Development Application, ARS Subdivision Preliminary Plat, Lot Closure Comps, Subdivision Application, Preliminary Plat Checklist, Pre-App meeting minutes, Construction Improvement Drawings



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

Delta Drive Alternative Residential Subdivision

Case Number: PAC20200026

Applicant: Spike Bicknell & David Blommer

Property Owner: Delta Park LLC

Property Address: 4090 Delta Drive

Parcel Code Number: 5B2401620011

Site Size: 79,189 Square Feet

Zoning: D-18

Existing Land Use: Manufactured Homes

Conference Date:	4/29/20
Report Issued:	05/06/20
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
David Blommer	Applicant	dblommer@bicknellinc.com
Laurel Christian	Planning	Laurel.christian@juneau.org
Kyle Paw	Permit staff	Kyle.paw@juneau.org
Autumn Sapp	General Engineering	Autumn.Sapp@juneau.org
Mark Pusich	PDC	MarkPusich@pdceng.com

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.

The Alternative Residential Subdivision (ARS) requires a two-step approval process. The ARS preliminary plan is reviewed the and then then ARS final plan is reviewed. A major subdivision application is also required. The applicant may apply for the preliminary ARS plan and preliminary major subdivision plat at the same time.

The preliminary ARS plan is reviewed through the conditional use permit process with additional requirements found in the ARS section of code. The major subdivision plat is reviewed for platting requirements. The ARS section of code is attached to this report, approval criteria are highlighted.

Planning Division

1. **Zoning** – D18 Zoning District. There is no minimum lot size for the unit lots, however; you should demonstrate on the plan their size, and show how large the parent parcel is. CBJ 49.80 Definitions for Parent Lot and Unit Lot:

Parent lot means the original lot and the residual area from which unit-lots are created through an alternative residential subdivision.

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

2. **Setback/buffer** – There are no setbacks for the unit lots. A perimeter buffer is required in lieu of the setback requirements of this title on the parent lot. The buffer shall not be less than the setbacks required for the zoning district. Setbacks for the D18 zoning district are: Front: 20'; Rear: 10'; Side: 5'; Street side:13'
 - a. The commission may enlarge the required buffer to up to 25 feet.
 - b. The buffer shall be vegetated unless the commission requires non-vegetated screening. A buffer may include fencing, natural berm, or other similar features.
 - c. No parking areas, dwelling units, unit-lots, or permissible uses may be located within the perimeter buffer. Access to the development may cross a portion of the buffer.
3. **Height** – 35' primary uses; 25' accessory uses
4. **Parking & Circulation** – Each single-family dwelling requires 2 parking spaces. Residential parking lots with more than 10 parking spaces but fewer than 25 parking spaces require 1 ADA van accessible parking space.
 - a. Parking can be either on the unit lots or on the parent lot. On the ARS plan, parking areas should be shown.
5. **Access** – Access to the ARS must be publically maintained (Delta Drive is a publically maintained right-of-way). Access within the ARS must be located completely on the parent lot, be paved, and meet emergency service access requirements.

Pre-Application Conference Final Report

6. **Lot Coverage** – There is no maximum lot coverage for the unit lots, maximum lot coverage applies to the parent lot. The maximum lot coverage is 50%.
7. **Vegetative Coverage** – There is a minimum vegetative cover requirement for the parent lot. In the D18 zoning district, 30% vegetative cover is required.
 - a. Shared open space is not required for an ARS in the D18 zoning district.
8. **Density** – Site measures 79,189 square feet (1.8 acres). At 18 units per acre, the site could accommodate up to 32 dwelling units.
 - a. **Density bonuses** – The commission may award a density bonus to an ARS for enhancements to the development. For the D18 zoning district, the total bonus shall not exceed 25%. Applicant should state in the project narrative if they are requesting density bonuses and how they meet the enhancement criteria.
9. **Lighting** – In the project narrative, the applicant should discuss if lighting will be installed.
10. **Noise** – Noise is not expected to be out of character with the D18 residential zoning district.
11. **Flood** – NA
12. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – No Known
13. **Wetlands** – No Known
14. **Habitat** – (Eagle – remind applicant to check with Feds; Riparian, etc.) – No Known
15. **Plat or Covenant Restrictions** – No known
16. **Traffic** – Per CBJ 49.40.300 a traffic impact analysis is required for projects that are anticipated to generate more than 500 average daily trips (ADTs). A single-family dwelling generates 9.52 ADTs. The proposal of 14 lots for single-family dwellings would generate 133.28 ADTs. A TIA will not likely be required for this project.
17. **Homeowners Association** – The ARS requires that a HOA be formed. The HOA documents must be recorded with the final plat.

Building Division

18. **Building** - plans will be addressed in plan review
19. **Outstanding Permits** -

	Permit Application	Pstatus	Permit Type	Location	Permit Id	Purpose
1	BLD20130336	Issued	BMH	4090 DELTA DR	2000993	Place 10 manufactured homes on existing foundations

General Engineering/Public Works

20. **Engineering** –
 - a. **Easements:** 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.
 - b. **Agreements:** A maintenance and hold harmless (of CBJ) agreement will need to be drafted, signed, and recorded for all shared infrastructure for the development, e.g. driveway, water, sewer, etc.

Pre-Application Conference Final Report

21. **Drainage** – Submit a drainage plan indicating how drainage from the proposed subdivision will join an established drainage channel or channels. Easements must be provided on the plat for all established drainage ways or any proposed drainage ways that cross any current or future abutting property lines.

22. **Utilities** – (water, power, sewer, etc.) A master water meter shall be installed by the developer prior to any branches or services. The meter must be in an above ground heated space. Water and sewer sizing shall be determined by an Alaskan licensed civil or mechanical engineer.

Beyond the shared private main and master water meter, a minimum of 1" water service and 4" sewer service will need to be installed to the front property line of each newly created lot prior to the recording of the final plat. At the time of preliminary plat submittal, please submit a construction plan with for the new utilities. The plan needs to include pipe locations, sizing, and grades for sewer to indicate appropriate fall will be achieved. Existing water services not being utilized shall be decommissioned and removed back to the mainline. If utilizing existing services or branches please show their location, size, and material type on the plan.

If a new private water and/or sewer mains are to be installed within the ROW, the following permits will need to be obtained to provide utilities to the newly created lot:

- a. **CBJ right-of-way (ROW) permit**- Once the construction plan for the utilities is approved, CBJ will create the ROW permit. The permit will allow the tapping of the water and sewer mains, water and sewer service installation, and road restoration within the right-of-way. Inspection fees, refundable bond amount, and conditions will be determined after review of the proposed construction plan. The extension of the utilities within the property will require further permitting and fee assessments. This process is done separately from the subdivision and typically in conjunction with the building permit application.
- b. **CBJ Water and Sewer Utility permits** – The installation of the private water and sewer main lines, services, and the water meter within the private property will be covered by these utility permits.

Fire Marshal

23. **Fire Items/Access** –

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. ARS Preliminary Plan Approval Application
2. Major Subdivision Application (Required when the subdivision plat is submitted)
3. 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.

Pre-Application Conference Final Report

2. Preliminary Plat Checklist (Required when the subdivision plat is submitted)
3. Please see 49.15.940(b) for a description of the Required submissions with an ARS Preliminary Plan Approval:
 - a. Ownership
 - b. Preliminary Development Plan
 - c. Design
 - d. Open space, common facilities, and general landscaping
 - e. Request for density bonuses (if applicable)
 - f. Description of phased development (if applicable)
4. As built survey of existing foundations if you plan to utilize them.

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. ARS Review Fee
 - a. Preliminary Plan – \$400.00 plus \$80.00 per residential unit
 - b. Final Plan - \$300.00 plus \$60.00 per residential unit
 - c. Public notice sign fee \$50 plus \$100 refundable deposit
2. Major Subdivision Review Fee
 - a. Preliminary Plat - \$110 per lot
 - b. Final Plat - \$70 per lot
 - c. Public notice sign fee \$50 plus \$100 refundable deposit
3. ROW Permit (work within the ROW):
 - a. \$10 permit fee
 - b. Inspection fees - \$60 per inspection trip or hour, will be determined at time of construction plan review
 - c. Refundable bond – will be determined at time of construction plan review. Can be paid in the form of cash, check, surety, or conveyance.
 - d. Bond fee – dependent on type of bond payment.
1. Water Utility Permit (work within private property):
 - a. Water Connection charge – based on the line size at the location of the water meter as determined by an Alaskan licensed civil engineer.
2. Sewer Utility Permit (work within private property):
 - a. Sewer Connection charge – based on the number of drainage fixture units and shall be supplied in the civil construction plans as determined by an Alaskan licensed civil engineer.

Pre-Application Conference Final Report

- b. \$60.00 per inspection or trip, will be determined at time of construction plan review.

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

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



PRELIMINARY PLAT CHECK LIST

Name of Proposed Subdivision: Delta Drive Subdivision

The following items must be included with the initial submittal of a Preliminary Plat:

- | | |
|--|---|
| ☒ Application, filled out completely | ☐ Application fee (see fee schedule) |
| ☒ Project Narrative | ☐ Five (5) – 24" by 36" Copies |
| ☒ Pre-application Conference Report | ☒ Lot Closure Report |
| ☒ Disclosure of all known environmental hazards and any proposed mitigation measures recommended in the applicable environmental document. | |
| ☐ Preliminary Plat Checklist: I have reviewed the checklist and all submittals for completeness and accuracy. | |

Applicant or Surveyor - Signature

Date

Applicant or Surveyor - Print Name

GENERAL REQUIREMENTS

- ☐ The preliminary plat shall be prepared by a professional land surveyor, registered in the State of Alaska
- ☐ The preliminary plat shall be submitted on 22 by 34 inch sheets. The director of engineering and public works may approve alternate sheet sizes
- ☐ The preliminary plat shall be drawn with black ink to a scale of one-inch to 100 feet or less, or other suitable scale approved by the director of engineering and public works
- ☐ The preliminary plat shall be oriented with north toward the top of the sheet.
- ☐ A vicinity map shall be located in the upper right-hand corner of the sheet
- ☐ The vicinity map shall be oriented in the same direction as the plat
- ☐ A suitable north arrow shall be shown for the plat and vicinity map
- ☐ All line work and lettering must be of professional quality, and all line widths and lettering sizes must be of such size that all information can be clearly shown without overlap or confusion

GRAPHIC REQUIREMENTS - A preliminary plat shall contain the following information:

Title block - An enclosed title block in the lower right-hand corner containing the following information:

- ☐ The proposed name of the subdivision
- ☐ The legal description of the parcel to be subdivided including U.S. Survey, U.S. Mineral Survey, A.T.S. number or section, township, and range number, as applicable
- ☐ "City and Borough of Juneau, Alaska"
- ☐ "State Recorder's Office at Juneau"
- ☐ The date the preliminary plat was prepared and revised
- ☐ The horizontal scale
- ☐ The name and address of the owner of record
- ☐ The name, address, and telephone number of the surveyor preparing the preliminary plat

Preliminary Plat Checklist

Updated 1/2018

Page 2 of 5

Lot, block, and street information:

- ☒ The area of each lot
- ☒ The dimensions in feet and hundredths of a foot
- ☒ An identifying number and letter for lots and blocks
- ☒ Lots numbered consecutively, commencing with the number "1," with no omissions or duplications
- ☒ If the remainder of an original parcel being subdivided is relatively large, it shall be designated as a "tract" with an identifying number
- ☒ All parcels of land intended to be dedicated for public use or reserved for the use of all of the property owners in the proposed subdivision shall be shown as lots, and consecutively numbered. The purpose and any conditions or limitations on the use of the parcel shall be noted on the plat
- ☒ Abutting properties shall be shown with dashed lines, numbers, and/or letters
- ☒ For resubdivisions or public way vacations, the lines and legal description of the previous lots shall be shown with light dashed lines, numbers, and/or letters, or by a separate plat on the same sheet showing the previous lot lines
- ☒ The minimum data shown for each curve shall be as follows:
 - ☐ Length
 - ☐ Central angle
 - ☐ Radius
 - ☐ Bearing and distance of long chord
- ☐ Setbacks shall be shown on all corner lots and any lots with multiple frontage. Setbacks shall be shown on typical lots

Boundary lines:

- ☒ All boundary lines of the subdivision with bearings and distances described
- ☒ All retraced boundary lines shall show record and measured bearings and distances where they differ. Record dimension information shall be shown within parentheses and include a record source identification
- ☒ The exterior boundary lines of the subdivision shall be a solid black opaque line that is of a width that distinguishes it from all other property lines shown on the plat
- ☐ If phasing is proposed, then the boundaries and number of each phase, sequential lot numbering, and a subdivision name consistent with previous phases shall be shown

Monumentation:

- ☒ The monuments used to establish the basis of bearing
- ☒ Each monument found or set shall be identified on the plat by a symbol
- ☒ A complete description of the monument, including type and all information printed on the cap. A typical drawing shall be shown for each type of monument cap set
- ☒ A legend showing the symbols for all the types of monuments
- ☒ The identification, description location, elevation, and datum of the benchmark used to establish vertical control

Site access, circulation, and utilities:

- ☒ The widths and names of existing rights-of-way within the subdivision and within 100 feet of the subdivision boundary
- ☐ Proposed rights-of-way, including their widths and proposed names
- ☐ The grades of existing and proposed streets within these rights-of-way
- ☐ The width, ownership, use, and record reference of all proposed and existing easements within the subdivision and within 100 feet of the subdivision boundary
- ☐ The width, ownership, and use of all proposed easements

Preliminary Plat Checklist

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- ☒ All proposed and existing easements shall have sufficient dimensions shown to determine their location on the ground
- ☐ Existing trails or pathways within the subdivision and within 100 feet of the subdivision boundary, including the width of any associated rights-of way or easements
- ☐ Proposed trails or pathways and widths of their rights-of-way
- ☐ If the plat submitted covers only a part of the tract under the control of the applicant, a sketch plat of the prospective street system of the unplatted part shall be submitted
- ☒ The location of any existing or proposed driveways/curb cuts that access or are proposed to access any existing or proposed street

Topographic information:

- ☒ For slopes of less than five percent, show one foot contour lines and include spot elevations at all breaks in grade, along all drainage channels or swales, and at selected points not more than 100 feet apart in all directions
- ☐ For slopes between five percent and ten percent, show two foot contour lines
- ☐ For slopes greater than ten percent, show five foot contour lines
- ☒ Every fifth elevation contour shall be distinctive and clearly labeled
- ☒ Dashed lines shall represent existing contours
- ☒ Mapping shall include any significant features which can materially affect the design of the subdivision, including, but not limited to, structures, fences, walls, and utility poles
- ☒ If irregular slopes or special features are present, additional contour information may be required by the director of engineering and public works for planning or construction purposes. Additional required information may include projecting the topography of the site after grading has taken place, showing such items as:
 - ☐ Pad elevations and drainage patterns for each lot
 - ☐ Tops and toes of all manufactured slopes, including daylight lines
 - ☐ Existing and proposed retaining wall locations and heights
- ☐ For subdivisions located in hillside areas with slopes greater than eighteen percent, additional requirements apply in accordance with CBJ 49.70, Article II

Sewer and water:

- ☒ Existing sewer and water mains within the tract with pipe sizes and grades
- ☒ A draft plan for proposed water and sewer lines showing the size, approximate slope, and connection points with elevations for the purpose of determining the feasibility of construction

Multisheet plats:

- ☐ When a plat requires more than one sheet, exclusive of a certificate sheet, an index sheet shall be included. When a plat requires more than three sheets, a cover sheet shall also be included, showing the subdivision title, a key map, and all certificates. Each additional sheet shall include the following data:
 - ☐ North arrow
 - ☐ Legend
 - ☐ Surveyor's seal and signature
 - ☐ Title block
 - ☐ Sheet _____ of _____
 - ☐ Scale
 - ☐ All plat notes
 - ☐ Vicinity map

N/A

Preliminary Plat Checklist

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ADDITIONAL MAPPING OR REPORTS- At the pre-application meeting, it will be determined if any of the following additional mapping or reports are required to be submitted with the preliminary plat. If required, the following additional mapping or reports shall be submitted:

Hazard and Special Habitat Areas:

- ☐ Any portion of a special flood hazard area, landslide or avalanche area, habitat area as defined by CBJ 49.70.310, or watersheds, either existing at the proposed subdivision site or shown on the overlay maps, adopted pursuant to this title, to exist at the proposed subdivision site, must be depicted on the preliminary plat
- ☐ The boundaries of any wetland areas must be depicted on the preliminary plat. Boundaries must be determined by a person qualified to perform wetland delineations *N/A*

Soils report:

- ☐ A soils report prepared by an engineer licensed by the State of Alaska shall be required if the proposed subdivision is located farther from the existing public sewer system than specified in CBJ 49.35, and the applicant chooses to provide on-lot waste disposal rather than to connect to the public system. A soils report shall include the following:
 - ☐ Certification that the proposed lots are large enough and have soil of sufficient permeability to permit the construction of approved waste treatment systems for on-lot waste disposal
 - ☐ The location and size of drain fields for each lot
 - ☐ The locations and logs of test borings, percolation test results, and a hydrological evaluation of on-site sewage disposal
 - ☐ If the soils report indicates that the soils found on the site are not of sufficient permeability or the lots are not large enough to permit the construction of systems for on-lot waste disposal, the size of the proposed lots must be increased or alternate methods for waste disposal proposed
 - ☐ The soils report shall describe the nature of the subsurface soils and any soil conditions that would affect the design of the proposed development. The soils report shall state whether the proposed subdivision plan is feasible and provide general solutions for all known geotechnical conditions or problems

Drainage report:

- ☐ A preliminary report specifying the method by which the applicant proposes to manage surface and subsurface drainage for the subdivision and the effect of such method on adjacent areas. Unlike the drainage plan required by CBJ 49.35.510, the preliminary drainage report does not need to be prepared by a licensed engineer. The report must address the following:
 - ☐ A calculation of the increase in stormwater runoff resulting from the proposed development as well as the runoff from all drainage areas associated with the site. Runoff calculations shall be based on a fully-developed subdivision and a 25-year storm event
 - ☐ How drainage from the proposed subdivision will join an established drainage channel or channels, unless the director of engineering and public works approves use of an alternative drainage way
 - ☐ An evaluation of existing drainage ways and structures located between the subdivision and the receiving water body, and verification that the existing drainage ways can accommodate the increased runoff. If the increased runoff cannot be handled, the plan must propose solutions to the problem
 - ☐ All required improvements, on or off site, that are shown on the construction plans in accordance with CBJ 49.35, Article V, and that will be constructed as part of the subdivision

Water:

- ☐ For subdivisions of five or more lots, including major subdivisions, the following shall be included, where applicable, in accordance with CBJ 49.15.412:
 - ☐ If a proposed subdivision is located at greater distance from the existing public water system than specified in CBJ 49.35, Article III, and the applicant chooses not to connect to the public system, a statement that the applicant will provide a community water system or that individual wells will be used

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- ☐ A report by a registered engineer or geologist that clearly supports the legal and physical availability of adequate water. Methods for proof of water availability and the standards for quantity are listed in CBJ 49.35, Article III
- ☐ A copy of the State application for a permit to appropriate water in the quantity required to meet the subdivisions demands
- ☐ This does not apply to remote subdivisions unless: the subdivider of the remote subdivision chooses to provide potable water, a public water system is available and the subdivision falls within the criteria outlined in CBJ 49.35.310(a), or the subdivision has four or fewer lots.
- ☐ The director for minor subdivisions, and the planning commission for major subdivisions, may, for good cause, temporarily waive the requirement to provide a water report and proof of water, and condition the approval of the preliminary plat upon the provision of both documents as part of the final plat application and approval process.

Erosion control:

- ☐ A report explaining the method by which the applicant proposes to control erosion and manage runoff, and potential impacts to adjacent properties or water bodies. The report shall include a plan for preservation of ground cover in areas where runoff and resulting erosion need to be minimized.

Traffic study:

- ☐ A traffic impact analysis may be required with the preliminary plat in accordance with CBJ 49.40.300.

Shadow plats:

- ☒ For subdivisions of five or more lots in transition areas, a shadow plat shall be submitted according to CBJ 49.70.710. The shadow plat shall consist of a sketch superimposed on the proposed subdivision layout. This sketch shall reflect any future resubdivision of the parcels into smaller lots consistent with the higher density and the lot size allowed under the transition zoning.

GENERAL NOTES

- ALL BEARINGS SHOWN ARE TRUE BEARINGS AS ORIENTED TO THE BASIS OF BEARING AND DISTANCES SHOWN ARE REDUCED TO HORIZONTAL FIELD DISTANCES.
- THE ERROR OF CLOSURE OF THIS SURVEY DOES NOT EXCEED 1:10,000.
- BASIS OF BEARING**
THE BASIS OF BEARING FOR THIS PLAT IS THE BEARING OF S 0° 01' 00" W, AS SHOWN ON PLAT No. 73-17, DATED OCTOBER 29, 1973. BETWEEN THE RECOVERED MONUMENTS, AS SHOWN ON THIS PLAT.
- WHERE RECORD SURVEY COURSES (BEARINGS AND/OR DISTANCES) DIFFER FROM THAT OF ACTUAL FIELD MEASURED AND/OR COMPUTED SURVEY COURSES, THE RECORD BEARING AND/OR DISTANCES IS SHOWN WITHIN PARENTHESIS AND REFERENCED TO A RECORDED PLAT (R#).
- THE PRELIMINARY FIELD SURVEYING WAS PERFORMED ON MAY 26-27, 2020, UTILIZING A TRIMBLE S7 ROBOTICS TOTAL STATION WITH STANDARD LASER RANGING MEASUREMENTS.
- RECORD INFORMATION**
THE RECORD INFORMATION USED FOR THIS SUBDIVISION IS DERIVED FROM THE OFFICIAL PLATS: PLAT No. 73-17, JUNEAU RECORDING DISTRICT, DATED OCTOBER 29, 1973 (R1), PLAT No. 92-18, JUNEAU RECORDING DISTRICT, DATED APRIL 28, 1992 (R2);
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET, AND HAVE BEEN REDUCED TO THEIR HORIZONTAL EQUIVALENTS.
- DOMESTIC WATER AND SANITARY SEWER DISPOSAL PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC UTILITIES.
- THE LOTS CREATED THROUGH THIS SUBDIVISION ARE AN ALTERNATIVE RESIDENTIAL SUBDIVISION. AT TIME OF PLAT RECORDING DEVELOPMENT OF LOTS, INCLUDING FURTHER SUBDIVISION OR USE, IS SUBJECT TO CBJ 49.15 ARTICLE IX. SEE CITY AND BOROUGH OF JUNEAU LAND USE CODE FOR CURRENT REGULATIONS.
- THERE SHALL BE NO DISTURBANCE OR DEVELOPMENT WITHIN THE PERIMETER BUFFER SHOWN ON THIS PLAT, AS REQUIRED BY CBJ 49.15.920(j).
- AT TIME OF RECORDING, LOTS 2 THROUGH 11 AND 13 THROUGH 15 ARE LIMITED TO ONE SINGLE FAMILY DWELLING. LOT 12 MAY BE PERMITTED ONE SINGLE FAMILY DWELLING AND ONE ACCESSORY APARTMENT. SEE CBJ 49.15 ARTICLE IX FOR CURRENT REGULATIONS.

OWNERSHIP CERTIFICATE

BICKNELL, INC. HEREBY CERTIFIES THAT BICKNELL, INC. IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT IT HEREBY ADOPTS THIS PLAT OF SUBDIVISION WITH ITS FREE CONSENT, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED:

OWNER: ROSCOE V. BICKNELL, IV
BICKNELL, INC.
DATE: 2020
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NOTARY ACKNOWLEDGMENT

UNITED STATES OF AMERICA }
STATE OF ALASKA } SS

THIS IS TO CERTIFY THAT ON THIS DAY OF , 2020, BEFORE ME, THE UNDERSIGNED A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, PERSONALLY APPEARED TO ME KNOWN TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT THEY SIGNED AND SEALED THE SAME FREELY AND VOLUNTARILY FOR THE USES AND PURPOSES THEREIN MENTIONED. WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA

MY COMMISSION EXPIRES:

PLANNING COMMISSION PLAT APPROVAL

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS OF THE CITY AND BOROUGH OF JUNEAU, ALASKA AND THAT SAID PLAT HAS BEEN APPROVED BY THE PLANNING COMMISSION BY PLAT RESOLUTION NO. , DATED , 2020 , AND THAT THE PLAT SHOWN HEREON HAS BEEN APPROVED FOR RECORDING IN THE JUNEAU RECORDING DISTRICT, STATE RECORDERS OFFICE AT ANCHORAGE.

CHAIRMAN OF THE PLANNING COMMISSION
CITY AND BOROUGH OF JUNEAU

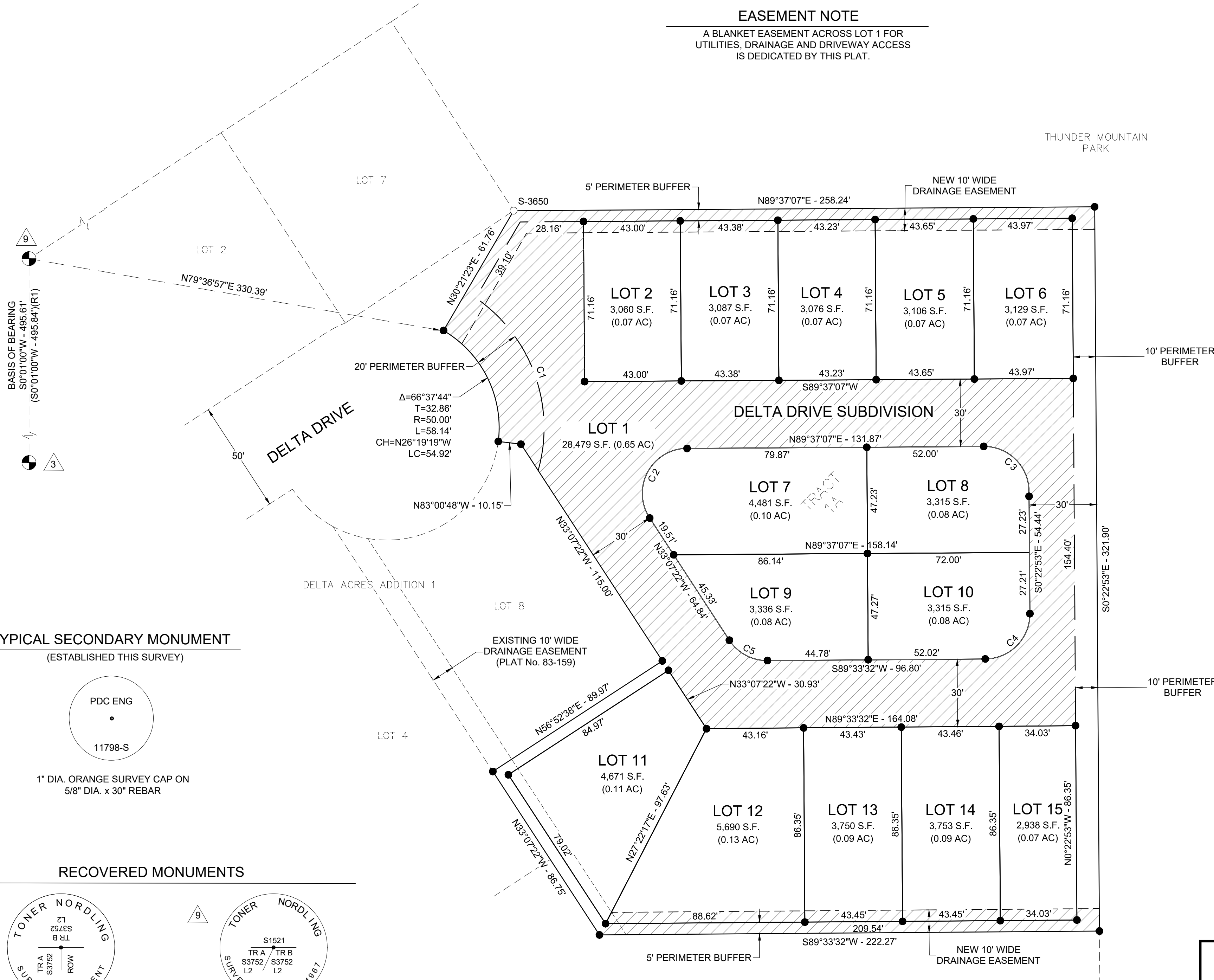
DATED , 2020

ATTEST:

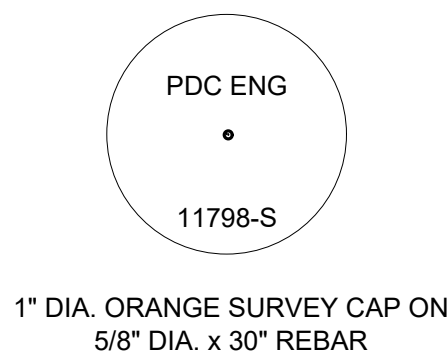
MUNICIPAL CLERK
CITY AND BOROUGH OF JUNEAU

EASEMENT NOTE

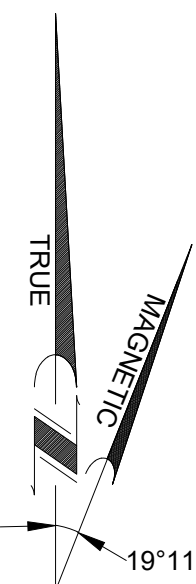
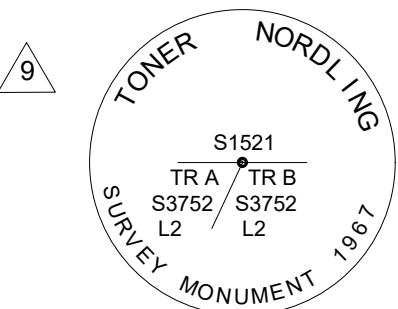
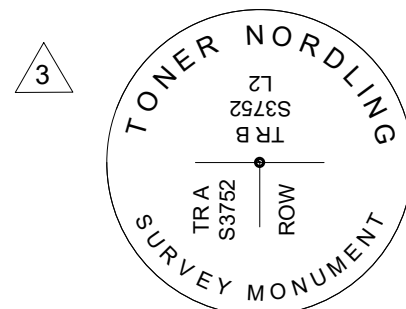
A BLANKET EASEMENT ACROSS LOT 1 FOR UTILITIES, DRAINAGE AND DRIVEWAY ACCESS IS DEDICATED BY THIS PLAT.



TYPICAL SECONDARY MONUMENT
(ESTABLISHED THIS SURVEY)

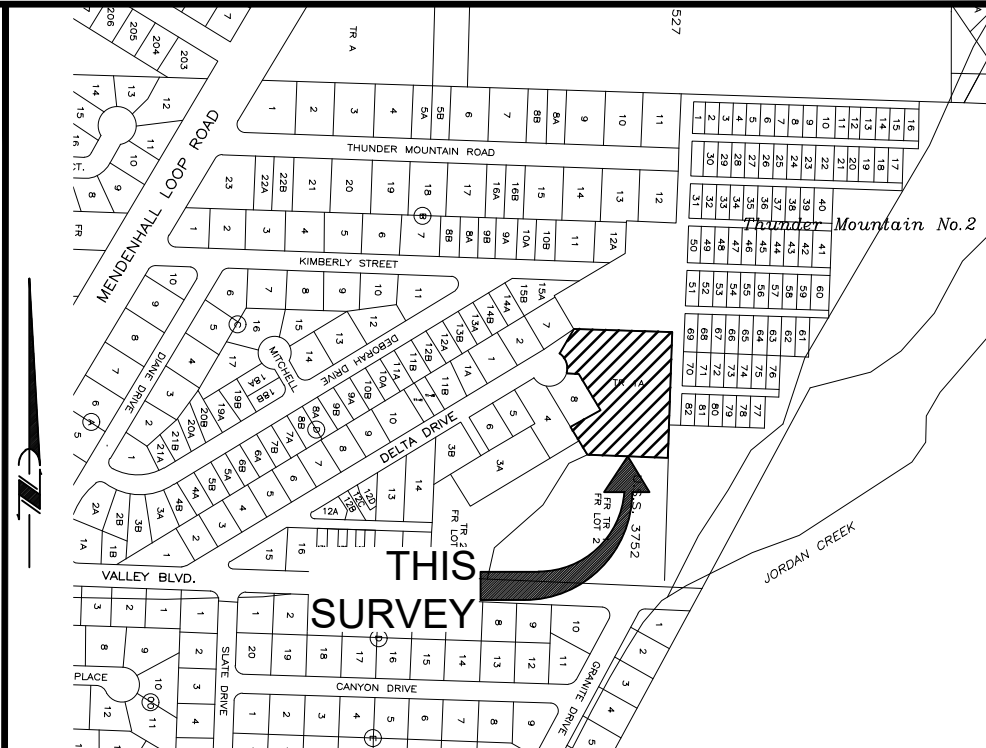
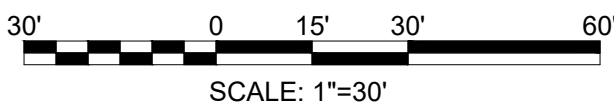


RECOVERED MONUMENTS



SOURCE: N.O.A.A.
MAGNETIC DECLINATION 19°11'E
NOVEMBER 14, 2017 CHANGING BY
0°17' W/YEAR

CURVE TABLE					
CURVE #	LENGTH	DELTA	RADIUS	CHORD BEARING	CORD DISTANCE
C1	87.15'	71° 20' 01"	70.00'	N19° 52' 32"W	81.63'
C2	42.84'	122° 44' 29"	20.00'	S28° 14' 53"W	35.11'
C3	31.42'	90° 00' 00"	20.00'	N45° 22' 53"W	28.28'
C4	31.40'	89° 56' 25"	20.00'	N44° 35' 20"E	28.27'
C5	20.01'	57° 19' 06"	20.00'	S61° 46' 55"E	19.18'



VICINITY MAP

SOURCE: CBJ PROPERTY ATLAS
SCALE: 1"= 500'

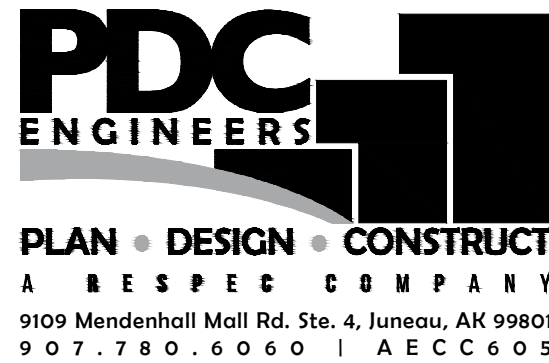
LEGEND

- PRIMARY MONUMENT (RECOVERED)
- SECONDARY MONUMENT (RECOVERED)
- SECONDARY MONUMENT (ESTABLISHED)
- SURVEYED LINE
- UNSURVEYED LINE
- EASEMENT LINE
- NEW EASEMENT LINE
- PLAT No. 73-17, JRD
- PLAT No. 92-18, JRD
- ACCESS, UTILITY & DRAINAGE EASEMENT
- PERIMETER BUFFER

SURVEYOR'S CERTIFICATE

I, CRAIG O. RANSON, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATE: 12/04/20



A PLAT OF
DELTA DRIVE SUBDIVISION
A SUBDIVISION OF
THUNDER MOUNTAIN PARK
TRACT 1A

WITHIN U.S. SURVEY NO. 3752
WITHIN CITY AND BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT

STATE RECORDER'S OFFICE AT ANCHORAGE

OWNER: BICKNELL, INC.
P.O. BOX 33517
JUNEAU, AK 99803
SURVEYOR: PDC ENGINEERS
9109 MENDENHALL MALL ROAD SUITE 4
JUNEAU, ALASKA 99801
(907) 780-6060
DATE: December 04, 2020 SCALE: 1"=30' SHEET 1 OF 1 PDC PROJ. No. 20098JN

Parcel Map Check Report

Parcel Name: Delta Drive Subdivision - Lot 1

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 10,010.3222'

East: 10,349.3290'

Segment# 1: Curve

Length: 58.145'

Radius: 50.000'

Delta: 66.6288 (d)

Tangent: 32.862'

Chord: 54.923'

Course: N26° 19' 19.00"W

Course In: N83° 00' 27.08"W

Course Out: N30° 21' 49.08"E

RP North: 10,016.4091'

East: 10,299.7009'

End North: 10,059.5508'

East: 10,324.9752'

Segment# 2: Line

Course: N30° 21' 23.00"E

Length: 61.760'

North: 10,112.8435'

East: 10,356.1873'

Segment# 3: Line

Course: N89° 37' 07.00"E

Length: 258.240'

North: 10,114.5624'

East: 10,614.4216'

Segment# 4: Line

Course: S0° 22' 53.00"E

Length: 321.900'

North: 9,792.6696'

East: 10,616.5643'

Segment# 5: Line

Course: S89° 33' 32.00"W

Length: 222.270'

North: 9,790.9584'

East: 10,394.3009'

Segment# 6: Line

Course: N33° 07' 22.00"W

Length: 86.750'

North: 9,863.6116'

East: 10,346.8977'

Segment# 7: Line

Course: N56° 52' 38.00"E	Length: 89.970'
North: 9,912.7744'	East: 10,422.2477'

Segment# 8: Line

Course: N33° 07' 22.00"W	Length: 115.000'
North: 10,009.0870'	East: 10,359.4077'

Segment# 9: Line

Course: N83° 00' 48.00"W	Length: 10.154'
North: 10,010.3222'	East: 10,349.3291'

Perimeter: 2,929.504'	Area: 28,479.40Sq.Ft.
Error Closure: 0.0000	Course: S81° 36' 37.42"E
Error North : 0.00000	East: 0.00003

Precision 1: 1,224,189,000.000

Parcel Name: Delta Drive Subdivision - Lot 10

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 9,913.6361'	East: 10,565.7788'
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Segment# 1: Line

Course: S89° 33' 32.00"W	Length: 52.021'
North: 9,913.2356'	East: 10,513.7594'

Segment# 2: Line

Course: N0° 22' 53.00"W	Length: 47.265'
North: 9,960.4996'	East: 10,513.4448'

Segment# 3: Line

Course: N89° 37' 07.00"E	Length: 72.000'
North: 9,960.9788'	East: 10,585.4432'

Segment# 4: Line

Course: S0° 22' 53.00"E	Length: 27.211'
North: 9,933.7684'	East: 10,585.6243'

Segment# 5: Curve

Length: 31.395'	Radius: 20.000'
Delta: 89.9403 (d)	Tangent: 19.979'
Chord: 28.270'	Course: S44° 35' 19.50"W
Course In: S89° 37' 07.00"W	Course Out: S0° 26' 28.00"E
RP North: 9,933.6353'	East: 10,565.6247'
End North: 9,913.6359'	East: 10,565.7787'

Perimeter: 229.892'	Area: 3,314.75Sq.Ft.
Error Closure: 0.0002	Course: S29° 57' 17.16"W
Error North : -0.00021	East: -0.00012

Precision 1: 1,149,460.000

Parcel Name: Delta Drive Subdivision - Lot 11

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 9,795.9792'	East: 10,396.9951'
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Segment# 1: Line

Course: N33° 07' 22.00"W	Length: 79.017'
North: 9,862.1561'	East: 10,353.8175'

Segment# 2: Line

Course: N56° 52' 38.00"E	Length: 84.970'
North: 9,908.5867'	East: 10,424.9800'

Segment# 3: Line

Course: S33° 07' 22.00"E	Length: 30.932'
North: 9,882.6811'	East: 10,441.8823'

Segment# 4: Line

Course: S27° 22' 16.70"W	Length: 97.632'
North: 9,795.9794'	East: 10,396.9955'

Perimeter: 292.552'	Area: 4,671.19Sq.Ft.
---------------------	----------------------

Error Closure: 0.0004
Error North : 0.00016

Course: N67° 05' 38.55"E
East: 0.00037

Precision 1: 731,377.500

Parcel Name: Delta Drive Subdivision - Lot 12

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 9,796.6615'

East: 10,485.6157'

Segment# 1: Line

Course: S89° 33' 32.00"W

Length: 88.623'

North: 9,795.9792'

East: 10,396.9954'

Segment# 2: Line

Course: N27° 22' 16.70"E

Length: 97.632'

North: 9,882.6809'

East: 10,441.8822'

Segment# 3: Line

Course: N89° 33' 32.00"E

Length: 43.160'

North: 9,883.0132'

East: 10,485.0409'

Segment# 4: Line

Course: S0° 22' 53.00"E

Length: 86.354'

North: 9,796.6611'

East: 10,485.6157'

Perimeter: 315.770'

Area: 5,690.00Sq.Ft.

Error Closure: 0.0004

Course: S4° 29' 32.15"W

Error North : -0.00041

East: -0.00003

Precision 1: 789,422.500

Parcel Name: Delta Drive Subdivision - Lot 13

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 9,796.9959'

East: 10,529.0453'

Segment# 1: Line

Course: S89° 33' 32.00"W

Length: 43.431'

North: 9,796.6615'

East: 10,485.6155'

Segment# 2: Line

Course: N0° 22' 53.00"W

Length: 86.354'

North: 9,883.0136'

East: 10,485.0407'

Segment# 3: Line

Course: N89° 33' 32.00"E

Length: 43.431'

North: 9,883.3480'

East: 10,528.4704'

Segment# 4: Line

Course: S0° 22' 53.00"E

Length: 86.354'

North: 9,796.9959'

East: 10,529.0453'

Perimeter: 259.570'

Area: 3,750.42Sq.Ft.

Error Closure: 0.0000

Course: N0° 00' 00.00"E

Error North : 0.00000

East: 0.00000

Precision 1: 259,570,000.000

Parcel Name: Delta Drive Subdivision - Lot 14

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:9,797.3305'

East:10,572.5072'

Segment# 1: Line

Course: S89° 33' 32.00"W

Length: 43.463'

North: 9,796.9959'

East: 10,529.0455'

Segment# 2: Line

Course: N0° 22' 53.00"W

Length: 86.354'

North: 9,883.3480'

East: 10,528.4707'

Segment# 3: Line

Course: N89° 33' 32.00"E	Length: 43.463'
North: 9,883.6826'	East: 10,571.9324'

Segment# 4: Line

Course: S0° 22' 53.00"E	Length: 86.354'
North: 9,797.3305'	East: 10,572.5072'

Perimeter: 259.634'	Area: 3,753.22Sq.Ft.
Error Closure: 0.0000	Course: N0° 00' 00.00"E
Error North : 0.00000	East: 0.00000

Precision 1: 259,634,000.000

Parcel Name: Delta Drive Subdivision - Lot 15

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 9,797.5925'	East: 10,606.5313'
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Segment# 1: Line

Course: S89° 33' 32.00"W	Length: 34.025'
North: 9,797.3305'	East: 10,572.5073'

Segment# 2: Line

Course: N0° 22' 53.00"W	Length: 86.354'
North: 9,883.6826'	East: 10,571.9325'

Segment# 3: Line

Course: N89° 33' 32.00"E	Length: 34.025'
North: 9,883.9445'	East: 10,605.9565'

Segment# 4: Line

Course: S0° 22' 53.00"E	Length: 86.354'
North: 9,797.5925'	East: 10,606.5313'

Perimeter: 240.758'	Area: 2,938.20Sq.Ft.
Error Closure: 0.0000	Course: N0° 00' 00.00"E
Error North : 0.00000	East: 0.00000

Precision 1: 240,758,000.000

Parcel Name: Delta Drive Subdivision - Lot 2

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:10,108.0499'

East:10,387.2190'

Segment# 1: Line

Course: N89° 37' 07.00"E

Length: 43.000'

North: 10,108.3361'

East: 10,430.2180'

Segment# 2: Line

Course: S0° 22' 53.00"E

Length: 71.160'

North: 10,037.1777'

East: 10,430.6917'

Segment# 3: Line

Course: S89° 37' 07.00"W

Length: 43.000'

North: 10,036.8915'

East: 10,387.6926'

Segment# 4: Line

Course: N0° 22' 53.00"W

Length: 71.160'

North: 10,108.0499'

East: 10,387.2190'

Perimeter: 228.320'

Area: 3,059.88Sq.Ft.

Error Closure: 0.0000

Course: N0° 00' 00.00"E

Error North : 0.00000

East: 0.00000

Precision 1: 228,320,000.000

Parcel Name: Delta Drive Subdivision - Lot 3

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:10,037.4666'

East:10,474.0756'

Segment# 1: Line

Course: S89° 37' 07.00"W	Length: 43.385'
North: 10,037.1778'	East: 10,430.6916'

Segment# 2: Line

Course: N0° 22' 53.00"W	Length: 71.160'
North: 10,108.3362'	East: 10,430.2179'

Segment# 3: Line

Course: N89° 37' 07.00"E	Length: 43.385'
North: 10,108.6250'	East: 10,473.6020'

Segment# 4: Line

Course: S0° 22' 53.00"E	Length: 71.160'
North: 10,037.4666'	East: 10,474.0756'

Perimeter: 229.090'	Area: 3,087.27Sq.Ft.
Error Closure: 0.0000	Course: N0° 00' 00.00"E
Error North : 0.00000	East: 0.00000

Precision 1: 229,090,000.000

Parcel Name: Delta Drive Subdivision - Lot 4

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:10,037.7543'	East:10,517.3055'
--------------------	-------------------

Segment# 1: Line

Course: S89° 37' 07.00"W	Length: 43.231'
North: 10,037.4666'	East: 10,474.0755'

Segment# 2: Line

Course: N0° 22' 53.00"W	Length: 71.160'
North: 10,108.6250'	East: 10,473.6018'

Segment# 3: Line

Course: N89° 37' 07.00"E	Length: 43.231'
North: 10,108.9128'	East: 10,516.8319'

Segment# 4: Line

Course: S0° 22' 53.00"E

Length: 71.160'

North: 10,037.7543'

East: 10,517.3055'

Perimeter: 228.782'

Area: 3,076.31Sq.Ft.

Error Closure: 0.0000

Course: N0° 00' 00.00"E

Error North : 0.00000

East: 0.00000

Precision 1: 228,782,000.000

Parcel Name: Delta Drive Subdivision - Lot 5

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:10,038.0449'

East:10,560.9569'

Segment# 1: Line

Course: S89° 37' 07.00"W

Length: 43.652'

North: 10,037.7543'

East: 10,517.3059'

Segment# 2: Line

Course: N0° 22' 53.00"W

Length: 71.160'

North: 10,108.9128'

East: 10,516.8322'

Segment# 3: Line

Course: N89° 37' 07.00"E

Length: 43.652'

North: 10,109.2033'

East: 10,560.4833'

Segment# 4: Line

Course: S0° 22' 53.00"E

Length: 71.160'

North: 10,038.0449'

East: 10,560.9569'

Perimeter: 229.625'

Area: 3,106.30Sq.Ft.

Error Closure: 0.0000

Course: N0° 00' 00.00"E

Error North : 0.00000

East: 0.00000

Precision 1: 229,624,000.000

Parcel Name: Delta Drive Subdivision - Lot 6

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:10,038.3376'

East:10,604.9288'

Segment# 1: Line

Course: S89° 37' 07.00"W

Length: 43.973'

North: 10,038.0449'

East: 10,560.9568'

Segment# 2: Line

Course: N0° 22' 53.00"W

Length: 71.160'

North: 10,109.2033'

East: 10,560.4831'

Segment# 3: Line

Course: N89° 37' 07.00"E

Length: 43.973'

North: 10,109.4960'

East: 10,604.4551'

Segment# 4: Line

Course: S0° 22' 53.00"E

Length: 71.160'

North: 10,038.3376'

East: 10,604.9288'

Perimeter: 230.265'

Area: 3,129.10Sq.Ft.

Error Closure: 0.0000

Course: N0° 00' 00.00"E

Error North : 0.00000

East: 0.00000

Precision 1: 230,266,000.000

Parcel Name: Delta Drive Subdivision - Lot 7

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North:9,959.9262'

East:10,427.3039'

Segment# 1: Line

Course: N33° 07' 22.00"W

Length: 19.510'

North: 9,976.2659'

East: 10,416.6430'

Segment# 2: Curve

Length: 42.845'	Radius: 20.000'
Delta: 122.7414 (d)	Tangent: 36.638'
Chord: 35.110'	Course: N28° 14' 52.50"E
Course In: N56° 52' 38.00"E	Course Out: N0° 22' 53.00"W
RP North: 9,987.1946'	East: 10,433.3930'
End North: 10,007.1941'	East: 10,433.2599'

Segment# 3: Line

Course: N89° 37' 07.00"E	Length: 79.872'
North: 10,007.7258'	East: 10,513.1301'

Segment# 4: Line

Course: S0° 22' 53.00"E	Length: 47.227'
North: 9,960.4998'	East: 10,513.4445'

Segment# 5: Line

Course: S89° 37' 07.00"W	Length: 86.143'
North: 9,959.9264'	East: 10,427.3034'

Perimeter: 275.598'	Area: 4,481.08Sq.Ft.
Error Closure: 0.0006	Course: N68° 20' 16.23"W
Error North : 0.00021	East: -0.00054

Precision 1: 459,328.333

Parcel Name: Delta Drive Subdivision - Lot 8

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 10,007.7259'	East: 10,513.1305'
---------------------	--------------------

Segment# 1: Line

Course: N89° 37' 07.00"E	Length: 52.000'
North: 10,008.0720'	East: 10,565.1294'

Segment# 2: Curve

Length: 31.416'	Radius: 20.000'
Delta: 90.0000 (d)	Tangent: 20.000'
Chord: 28.284'	Course: S45° 22' 53.00"E
Course In: S0° 22' 53.00"E	Course Out: N89° 37' 07.00"E
RP North: 9,988.0725'	East: 10,565.2625'
End North: 9,988.2056'	East: 10,585.2621'

Segment# 3: Line

Course: S0° 22' 53.00"E	Length: 27.227'
North: 9,960.9792'	East: 10,585.4433'

Segment# 4: Line

Course: S89° 37' 07.00"W	Length: 72.000'
North: 9,960.4999'	East: 10,513.4449'

Segment# 5: Line

Course: N0° 22' 53.00"W	Length: 47.227'
North: 10,007.7259'	East: 10,513.1305'

Perimeter: 229.871'	Area: 3,314.53Sq.Ft.
Error Closure: 0.0000	Course: S45° 00' 00.00"E
Error North : 0.00000	East: 0.00000

Precision 1: 229,870,000.000

Parcel Name: Delta Drive Subdivision - Lot 9

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 9,960.4996'	East: 10,513.4449'
--------------------	--------------------

Segment# 1: Line

Course: S0° 22' 53.00"E	Length: 47.265'
North: 9,913.2357'	East: 10,513.7595'

Segment# 2: Line

Course: S89° 33' 32.00"W	Length: 44.783'
North: 9,912.8909'	East: 10,468.9778'

Segment# 3: Curve

Length: 20.008'

Delta: 57.3183 (d)

Chord: 19.184'

Course In: N0° 26' 28.00"W

RP North: 9,932.8903'

End North: 9,921.9616'

Radius: 20.000'

Tangent: 10.931'

Course: N61° 46' 55.00"W

Course Out: S56° 52' 38.00"W

East: 10,468.8239'

East: 10,452.0738'

Segment# 4: Line

Course: N33° 07' 22.00"W

North: 9,959.9264'

Length: 45.331'

East: 10,427.3034'

Segment# 5: Line

Course: N89° 37' 07.00"E

North: 9,960.4998'

Length: 86.143'

East: 10,513.4445'

Perimeter: 243.529'

Error Closure: 0.0004

Error North : 0.00017

Area: 3,336.39Sq.Ft.

Course: N67° 37' 18.74"W

East: -0.00041

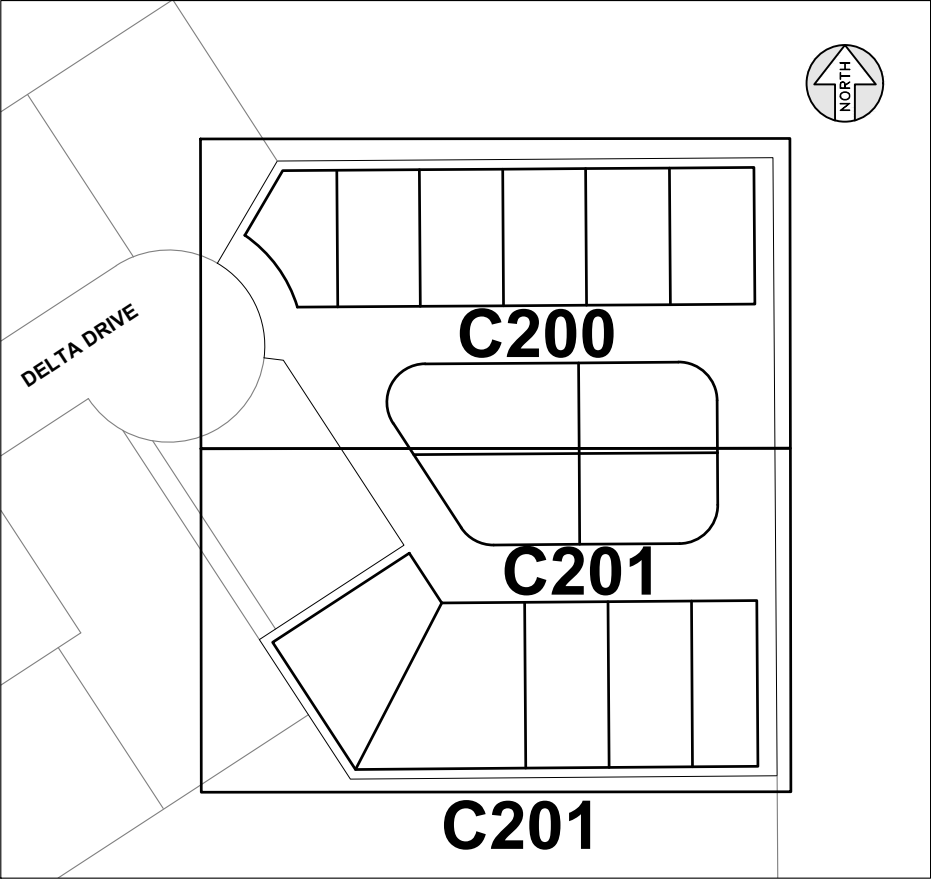
Precision 1: 608,825.000

DELTA DRIVE SUBDIVISION

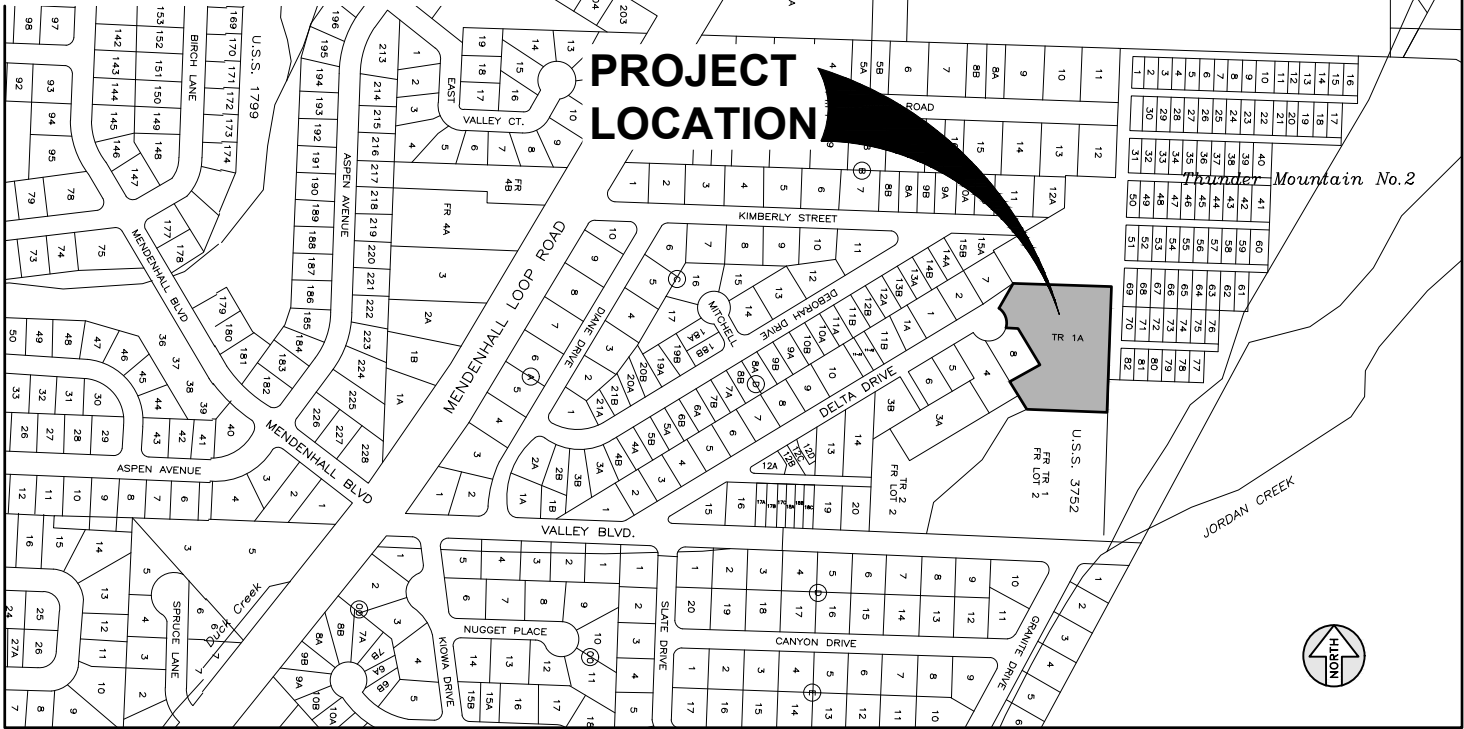
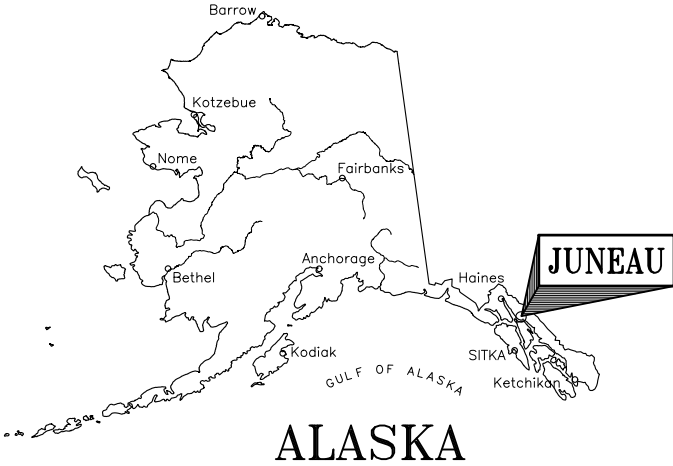
CONSTRUCTION IMPROVEMENT PLAN

JUNEAU, ALASKA

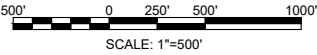
SHEET INDEX	
SHEET No.	DESCRIPTION
C001	COVER SHEET
C002	GENERAL NOTES, ABBREVIATIONS AND SYMBOLS
C003	SUMMARY TABLES
C004	EXISTING SITE CONDITIONS
C100	TYPICAL SECTIONS
C101	CONSTRUCTION DETAILS
C102	CONSTRUCTION DETAILS
C200	OVERALL SITE PLAN
C201	SITE & UTILITY PLAN
C202	SITE & UTILITY PLAN
C203	GRADING PLAN
C204	WATER METER ENCLOSURE DETAILS
C205	WATER METER ENCLOSURE DETAILS
C206	WATER METER ENCLOSURE DETAILS
C207	WATER METER ENCLOSURE DETAILS
C300	EROSION & SEDIMENT CONTROL PLAN
C301	EROSION & SEDIMENT CONTROL DETAILS



SHEET KEY MAP
N.T.S.



PROJECT LOCATION MAP

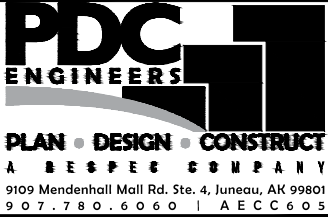
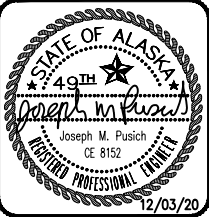


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SUBDIVISION

JUNEAU, AK



COVER SHEET

DATE: Dec 03, 2020
PDC No. 20098JN

SHEET
C001

GENERAL CONSTRUCTION NOTES

1. CBJ ENGINEERING STANDARD DETAILS BOOK FOR CIVIL ENGINEERING PROJECTS AND SUBDIVISION IMPROVEMENTS DATED AUGUST, 2011 AND CBJ ENGINEERING STANDARD SPECIFICATIONS DATED DECEMBER, 2003 ARE MADE A PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
2. LARGE BOULDERS, HARDPAN, STUMPS, LOGS, ORGANICS AND GROUND WATER MAY BE ENCOUNTERED AT VARIOUS DEPTHS DURING EXCAVATION OPERATIONS. THESE MATERIALS SHALL BE DISPOSED OF AS REQUIRED BY THE ENGINEER.
3. GRADES AND ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
4. LOCATION OF WATER SYSTEM IMPROVEMENTS, SANITARY SEWER MANHOLES, STORM DRAIN STRUCTURES, PIPING AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
5. LOCATIONS OF EXISTING UNDERGROUND SEWER, WATER, TELEPHONE, CABLE TELEVISION, AND POWER UTILITIES SHOWN ON THESE PLANS WERE DERIVED FROM CBJ AS-BUILTS OR FIELD LOCATES. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING THE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE RESULTING TO THESE UNDERGROUND UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. CALL "DIAL BEFORE YOU DIG" @ 586-1333 FOR UNDERGROUND UTILITY LOCATES AND 811 ALASKA DIG LINE FOR ACS AND GCI PRIOR TO ANY EXCAVATION ACTIVITIES.
6. CONTRACTOR SHALL ASSURE GARBAGE PICKUP, DAILY MAIL SERVICE, FUEL AND SERVICE DELIVERIES WILL BE UNINTERRUPTED TO ALL RESIDENTS AFFECTED BY THIS PROJECT.
7. PROPERTY LINE LOCATIONS USED IN THESE PLANS WERE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A SUBDIVISION BOUNDARY SURVEY.
8. ALL SIGN INSTALLATIONS OR RELOCATIONS SHALL BE PERFORMED ACCORDING TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.) WITH THE ALASKA SUPPLEMENT.
9. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
10. PROVIDE KNOCKOUTS IN PRECAST STORM DRAIN STRUCTURES FOR ALL PIPES SHOWN ON THE PLANS.
10. ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN ON THE PLANS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTION TO EXISTING PIPES, AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
11. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY WITHOUT THE WRITTEN APPROVAL OF THE PROPERTY OWNER.
11. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES OPERATOR LONI VANKIRK (723-4975) OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (COSIGNED BY THE ENGINEER) AT LEAST 48-HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. NO WATER SERVICE INTERRUPTION MAY PROCEED UNTIL THIS APPROVAL IS OBTAINED.
12. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. BRASS CAP MONUMENTS, REBARS OR CHISELED X'S) PRIOR TO CONSTRUCTION THAT WILL BE DISTURBED DURING HIS WORK, AND REMONUMENT AFTER CONSTRUCTION OPERATIONS. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR. ALL EXISTING PROPERTY CORNERS ARE NOT NECESSARILY SHOWN ON THE PLANS.
13. THE PLAN DRAWINGS DO NOT NECESSARILY SHOW ALL TREES AND SHRUBS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO TREES, SHRUBS OR LANDSCAPING ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
14. "JUMPING JACK", OR SIMILAR TYPE COMPACTORS SHALL BE USED FOR COMPACTION WITHIN 18-INCHES OF THE OUTSIDE SURFACE OF ALL WATER VALVE BOXES, CATCH BASINS AND MANHOLES.
15. THE USE OF GROUT AND QUICKSET CEMENT PRODUCTS WITH ADJUSTING RINGS, BRICKS, WOOD, STONES AND OTHER SIMILAR GRADE ADJUSTMENT DEVICES TO SUPPORT CATCH BASIN FRAMES OVER CATCH BASINS AND MANHOLES WILL NOT BE PERMITTED ON THIS PROJECT. SEE CBJ STANDARD SPECIFICATIONS, SECTION 02502 - STORM SEWER MANHOLES, INLETS AND CATCH BASINS AND THE DRAWINGS FOR CATCH BASIN FRAME SUPPORT REQUIREMENTS. SANITARY SEWER MANHOLES SHALL BE ADJUSTED PER CBJ STANDARD SPECIFICATIONS 02402 - SANITARY SEWER MANHOLES AND CLEANOUTS.
16. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ENGINEER APPROVED EROSION CONTROL DEVICES DURING CONSTRUCTION PER CBJ STANDARD SPECIFICATIONS SECTION 01570 REQUIREMENTS.
17. ALL WORK FOR THESE PLANS SHALL BE CONDUCTED IN STRICT ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND STANDARDS.

Attachment C-00 Preliminary Construction Drawings

AC	ASBESTOS CEMENT
ACS	ALASKA COMMUNICATIONS SYSTEMS
AEL&P	ALASKA ELECTRIC LIGHT & POWER
APPROX	APPROXIMATE
AST	ABOVEGROUND STORAGE TANK
BC	BACK OF CURB
BLVD	BOULEVARD
BOP	BEGINNING OF PROJECT
CB	CATCH BASIN
CBJ	CITY & BOROUGH OF JUNEAU
CHB	CHORD BEARING
CHL	CHORD LENGTH
C/L	CENTERLINE
CI	CAST IRON
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CONT	CONTINUOUS
CPP	CORRUGATED POLYETHYLENE PIPE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
E	EASTING
EG	EXISTING GRADE
EL	ELEVATION
EOP	END OF PROJECT
EP	EDGE OF PAVEMENT
EXIST	EXISTING
EXP	EXPANSION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GCI	GENERAL COMMUNICATION INC.
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH PRESSURE
IE	INVERT ELEVATION
L	LENGTH
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTE	MATCH TO EXISTING
N	NORTHING
N/A	NOT APPLICABLE
NFS	NON-FROST SUSCEPTIBLE
NTS	NOT TO SCALE
NVC	NO VERTICAL CURVE
OC	ON CENTER
PC	POINT OF CURVATURE
PERF	PERFORATED
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POC	POINT ON CURVE
POL	POINT ON LINE
PP	POWER POLE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
ROW	RIGHT-OF-WAY
RP	RADIUS POINT
RT	RIGHT
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TANGENT
TBG	TOP BACK OF GUTTER
TBM	TEMPORARY BENCH MARK
TC	TOP OF CONCRETE
TOB	TOP OF BANK
TOP	TOP OF PIPE
TYP	TYPICAL
UD	UNDERDRAIN
UON	UNLESS OTHERWISE NOTED
UST	UNDERGROUND STORAGE TANK
VC	VERTICAL CURVE
VERT	VERTICAL
VPI	VERTICAL POINT OF INTERSECTION
W/	WITH

SYMBOLS

EXISTING	PROPOSED	
		PRIMARY MONUMENT
		SECONDARY MONUMENT
		SURVEY SPIKE / MAG NAIL
		TEMPORARY BENCHMARK
		PROPERTY / BOUNDARY LINE
		PROPERTY / BOUNDARY LINE UNSURVEYED
		PROJECT BASELINE
		TOP OF BANK
		TOE OF SLOPE
		WATER GATE VALVE/CURB STOP
		WATER LINE/SERVICE
		SEWER LINE/SERVICE
		WOODEN FENCE
		CHAIN-LINK FENCE
		OVERHEAD ELECTRIC LINE
		ASPHALT PAVEMENT
		TREE LINE
		FIRE HYDRANT
		SANITARY SEWER MANHOLE
		SANITARY SEWER CLEANOUT
		CONCRETE HEADWALL W/ TRASH RACK
		STORM SEWER PIPE
		CATCH BASIN W/ AREA DRAIN
		TELEPHONE PEDESTAL
		CABLE PEDESTAL
		ELECTRICAL PEDESTAL
		POWER POLE WITH LIGHT
		GUY WIRE
		GANG STYLE MAILBOX
		STREET SIGN
		CONIFEROUS TREE
		DECIDUOUS TREE
		BUILDING FOUNDATION

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DELTA DRIVE
SUBDIVISION
JUNEAU, AK



GENERAL NOTES,
ABBREVIATIONS AND
SYMBOLS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C002

Attachment C-4 Preliminary Construction Drawings

WATER SERVICE SUMMARY			
LOT No.	STATION & OFFSET	SIZE/TYPE	REMARKS
2	10+95.1, 13.5' LT	1" POLY	SEE NOTE 1
3	11+28.9, 13.5' LT	1" POLY	SEE NOTE 1
4	11+81.8, 13.5' LT	1" POLY	SEE NOTE 1
5	12+15.3, 13.5' LT	1" POLY	SEE NOTE 1
6	12+58.8, 21.4' LT	1" POLY	SEE NOTE 1
7	11+68.0, 13.4' RT	1" POLY	NEW SERVICE
8	12+28.0, 13.5' RT	1" POLY	NEW SERVICE
9	14+71.4, 13.4' RT	1" POLY	NEW SERVICE
10	14+11.4, 13.3' RT	1" POLY	NEW SERVICE
11	15+22.0, 18.1' LT	1" POLY	SEE NOTE 1
12	14+96.0, 13.5' LT	1" POLY	SEE NOTE 1
13	14+62.5, 13.5' LT	1" POLY	SEE NOTE 1
14	14+09.2, 13.5' LT	1" POLY	SEE NOTE 1
15	13+85.5, 21.6' LT	1" POLY	SEE NOTE 1
NOTES: 1. EXISTING FOUNDATION PADS REPORTED TO HAVE 3/4" POLY WATER SERVICES TO EACH UNIT. EXISTING WATER SERVICES MAY BE REUSED IF FOUND TO BE IN SATISFACTORY CONDITION. FLUSHING, DISINFECTION AND PRESSURE TESTING SHALL BE PERFORMED ON THE EXISTING 3/4" POLY WATER SERVICES.			

STORM DRAIN STRUCTURE FRAME & GRATE SUMMARY	
STRUCTURE No.	EAST JORDAN, OLYMPIC FOUNDRY Co., CBJ STANDARD No., OR APPROVED EQUAL
S-1	OLYMPIC FOUNDRY MH34SC

SEWER SERVICE SUMMARY			
LOT No.	STATION & OFFSET	SIZE/TYPE	REMARKS
2	10+82.7, 14.0' LT	4" PVC	SEE NOTE 1
3	11+16.6, 14.0' LT	4" PVC	SEE NOTE 1
4	11+71.4, 14.0' LT	4" PVC	SEE NOTE 1
5	12+02.3, 14.0' LT	4" PVC	SEE NOTE 1
6	12+52.1, 14.0' LT	4" PVC	SEE NOTE 1
7	11+38.0, 14.5' RT	4" PVC	NEW SERVICE
8	11+98.0, 14.5' RT	4" PVC	NEW SERVICE
9	15+01.5, 14.5' RT	4" PVC	NEW SERVICE
10	14+41.4, 14.5' RT	4" PVC	NEW SERVICE
11	15+27.7, 14.0' LT	4" PVC	SEE NOTE 1
12	15+07.9, 14.0' LT	4" PVC	SEE NOTE 1
13	14+77.6, 14.0' LT	4" PVC	SEE NOTE 1
14	14+22.8, 14.0' LT	4" PVC	SEE NOTE 1
15	13+92.1, 14.0' LT	4" PVC	SEE NOTE 1
NOTES: 1. SEWER SERVICE LOCATIONS SHOWN ARE FROM LIMITED AS-BUILT INFORMATION AND WERE NOT FIELD LOCATED. EXISITNG 4" PVC SEWER SERVICES EXIST FOR LOTS 2-6 AND LOTS 11-15. CONTRACTOR SHALL FIELD LOCATE ALL SEWER SERVICES TO CONFIRM FINAL LOCATION FOR NEW SEWER SERVICE CLEANOUT INSTALLATION. STATION & OFFSET ARE GIVEN TO THE CENTER OF THE NEW CLEANOUT LID. IF EXISTING SANITARY SEWER SERVICES FOUND TO BE IN GOOD CONDITION CONTRACTOR MAY KEEP THEM IN SERVICE. 2. CONSTRUCT NEW 4" PVC SEWER SERVICE AND INSTALL NEW CLEANOUT NEAR PROPERTY LINE PER CBJ STANDARD DETAIL 213 AND CONNECT TO EXISTING SEWER SERVICE. 3. ADJUST SEWER SERVICE SLOPE TO PROVIDE MAXIMUM SEPARATION BETWEEN UTILITY CROSSINGS. INSTALL SWEEPS AS REQUIRED UPON APPROVAL OF THE ENGINEER.			

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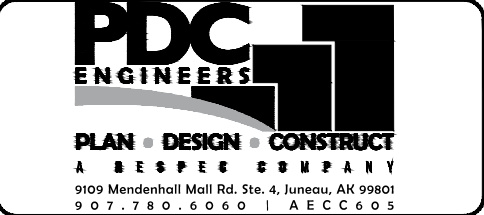
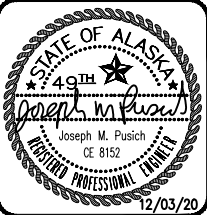
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BY

APRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK



SUMMARY TABLES

DATE: Dec 03, 2020

PDC No. 20098JN

SHEET

C003

Attachment C-2 Preliminary Construction Drawings

SURVEY NOTES

1. THE PURPOSE OF THIS SURVEY IS TO PROVIDE A TOPOGRAPHIC DESIGN SURVEY OF THE DELTA DRIVE DEVELOPMENT.
2. THE FIELD SURVEYS WERE PERFORMED ON MAY 26-27, 2020.
3. THE SURVEY EQUIPMENT UTILIZED DURING THIS SURVEY WAS TRIMBLE R8-2 GNSS ROVER AND BASE AND A TRIMBLE S-7 ROBOTIC TOTAL STATION UTILIZING STANDARD LASER MEASURING TECHNIQUES.
4. ALL DISTANCES AND DIMENSIONS ARE IN U.S. SURVEY FEET AND REDUCED TO THEIR HORIZONTAL VALUES.
5. CONTROL AND MONUMENT COORDINATES ARE IN AN ASSUMED LOCAL COORDINATE SYSTEM.
6. ELEVATIONS ARE IN AN ASSUMED LOCAL VERTICAL DATUM.
7. CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
8. ALL UTILITIES WERE LOCATED BY PDC AND ARE BASED ON OBSERVABLE EVIDENCE AND ABOVE GROUND APPURTENANCES AND FIELD RETRACEMENT PERFORMED BY PDC.
9. THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS PER ALASKA STATUTE 40.15.900(5)(a).

EXIST. SSCO	(CO1)
STA 10+04.9,	33.3 LT
EXIST. LID EL=	97.31
SW 8" (OUT) IE=	94.81

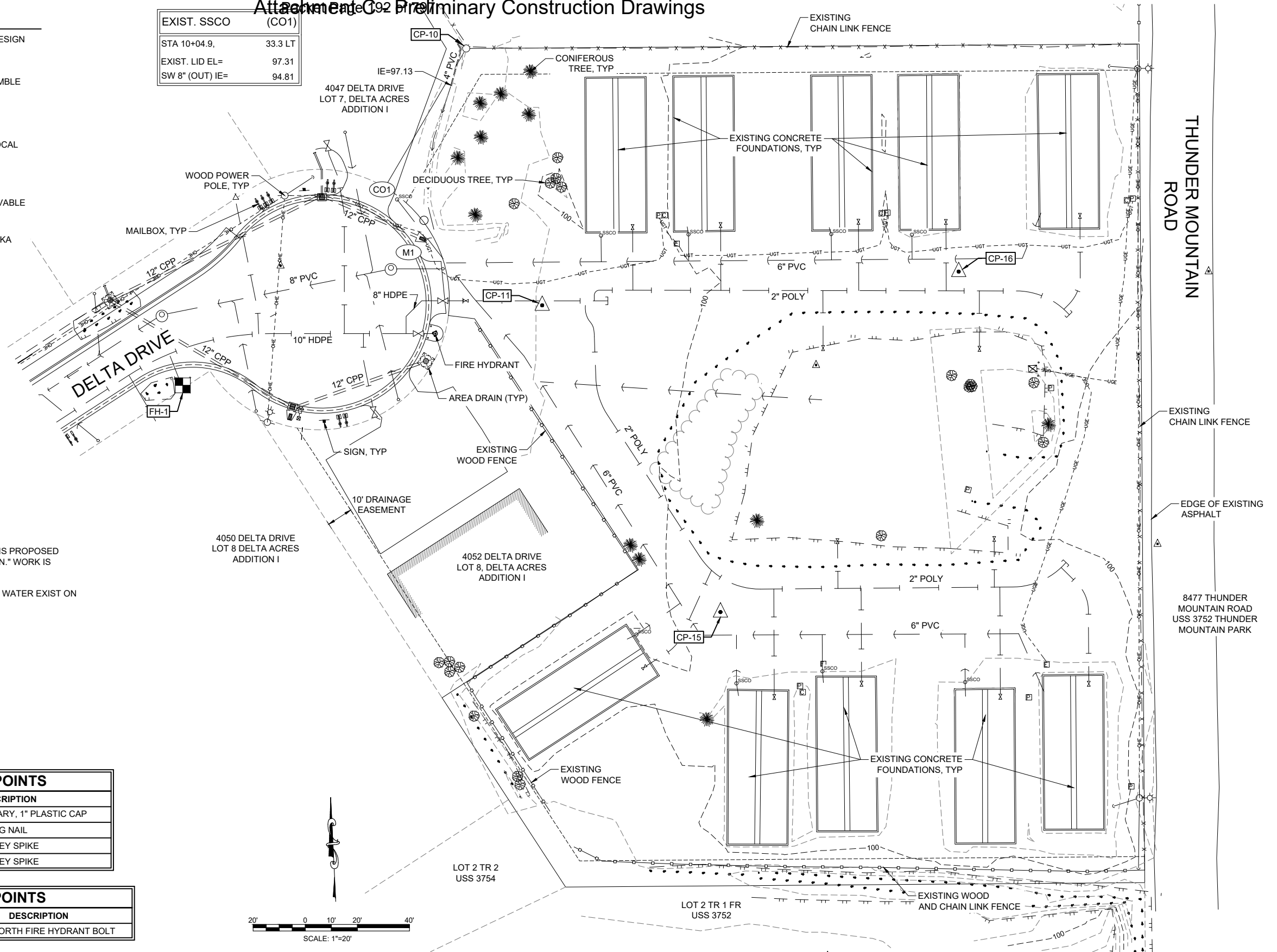
EXIST. SSMH	(M1)
STA 08+90.8,	25.9 RT
EXIST. LID EL=	98.50
E 6" (IN) IE=	92.94
NW 8" (OUT) IE=	92.84

NOTES:

1. ROADWAY AND UTILITY INFORMATION SHOWN ON DELTA DRIVE IS PROPOSED FROM CBJ CONTRACT BE21-028 "DELTA DRIVE RECONSTRUCTION." WORK IS SCHEDULED FOR SPRING/SUMMER 2021.
2. EXISTING 6" PVC SEWER MAIN AND 2" POLY PIPE FOR DOMESTIC WATER EXIST ON SITE.

TABLE OF HORIZONTAL CONTROL POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
CP 10	10112.63	10356.34	S-3650, SECONDARY, 1" PLASTIC CAP
CP 11	10014.23	10385.34	MAG NAIL
CP 15	9896.49	10453.74	SURVEY SPIKE
CP 16	10027.18	10545.16	SURVEY SPIKE

TABLE OF VERTICAL CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
FH-1	9983.52	10247.42	100.44'	"X" ON NORTH FIRE HYDRANT BOLT

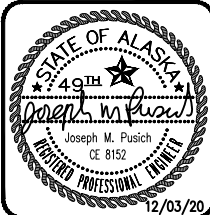


P:\2020\20098JN-Bicknell-Delta\CC2001.dwg PLOT: December 03, 2020 at: 9:58pm Mick Minich

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APPRVD.

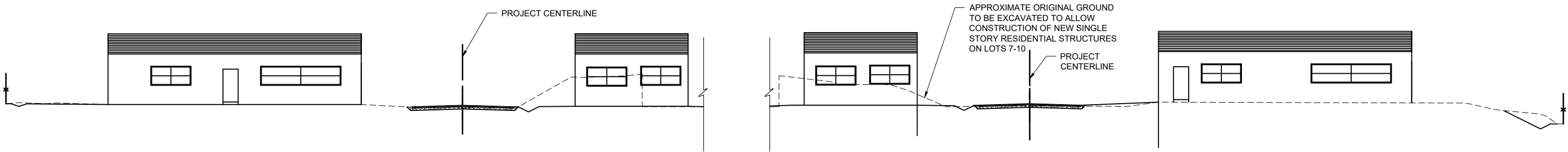
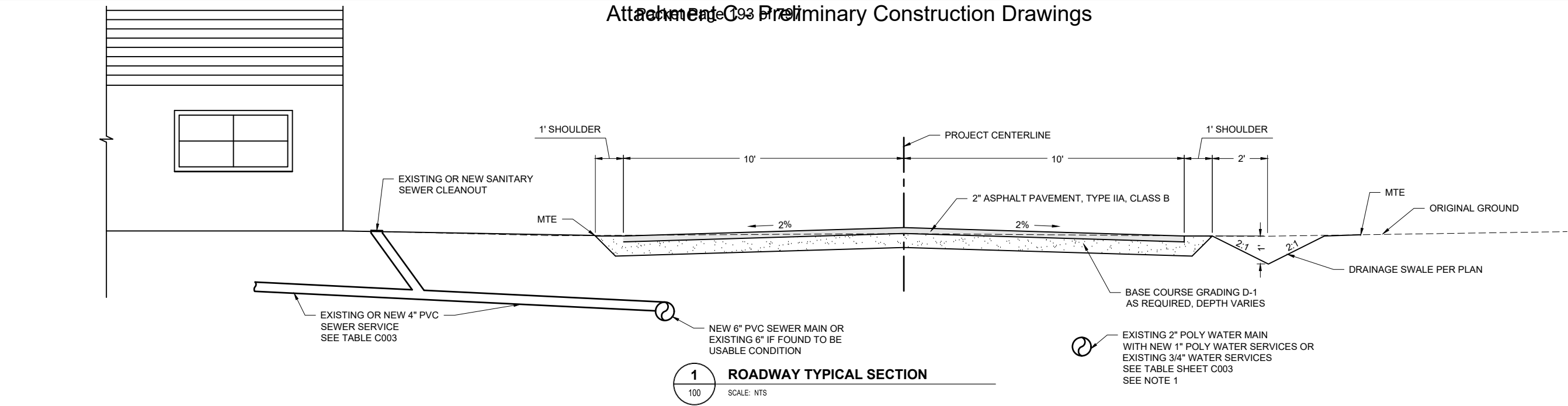
DELTA DRIVE
SUBDIVISION
JUNEAU, AK



EXISTING SITE CONDITIONS

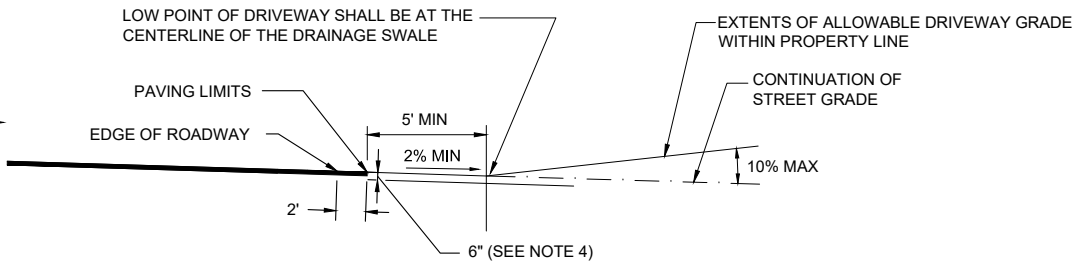
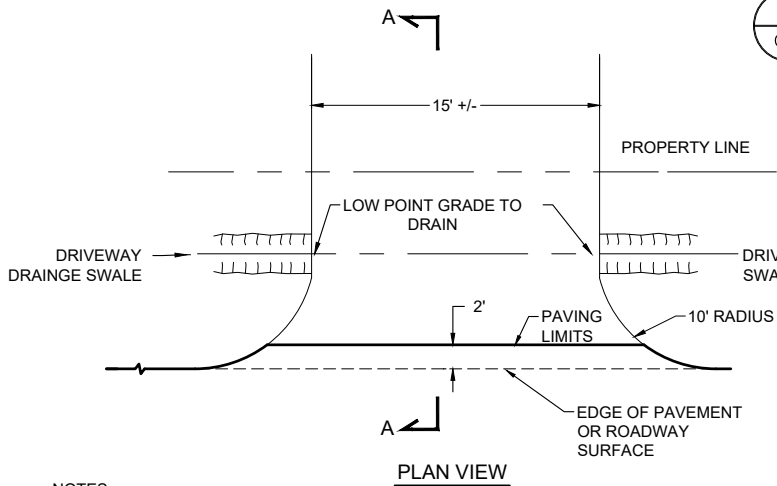
DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C004

Attachment C-03 Preliminary Construction Drawings



2 SITE TYPICAL SECTION

C100 SCALE: NTS



NOTES:

- PAVING LIMIT FOR DRIVEWAYS SHALL BE 2' FROM THE EDGE OF ROADWAY OR AS APPROVED BY THE ENGINEER.
- DRIVEWAY SWALE SHALL BE GRADED TO DRAIN INTO DRAINAGE SWALE

3 TYPICAL DRIVEWAY SWALE DETAIL

C100 SCALE: NTS

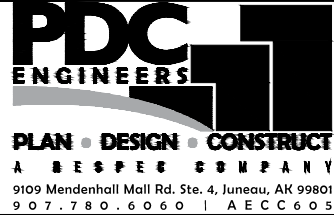
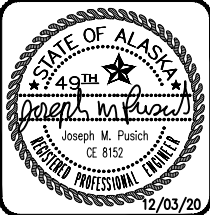
SHEET C100 NOTES:

- EXISTING 2" POLY WATER LINE WILL BE FLUSHED, DISINFECTED AND PRESSURE TESTED IN ACCORDANCE WITH CBJ STANDARD SPECIFICATIONS TO ENSURE COMPLIANCE WITH PUBLIC DRINKING WATER REGULATIONS.

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.

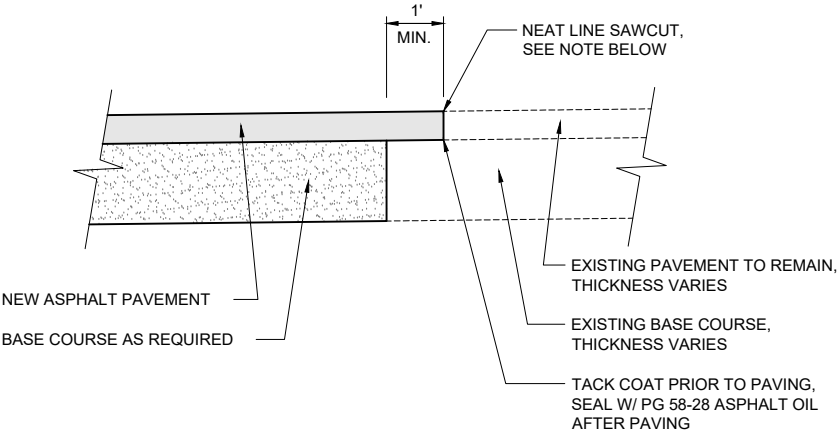
DELTA DRIVE
SUBDIVISION
JUNEAU, AK



TYPICAL SECTIONS

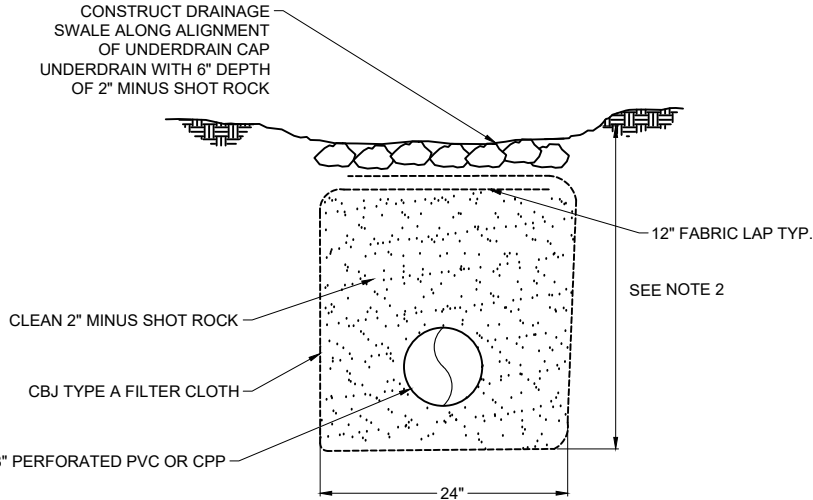
DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C100

Attachment C-194 Preliminary Construction Drawings



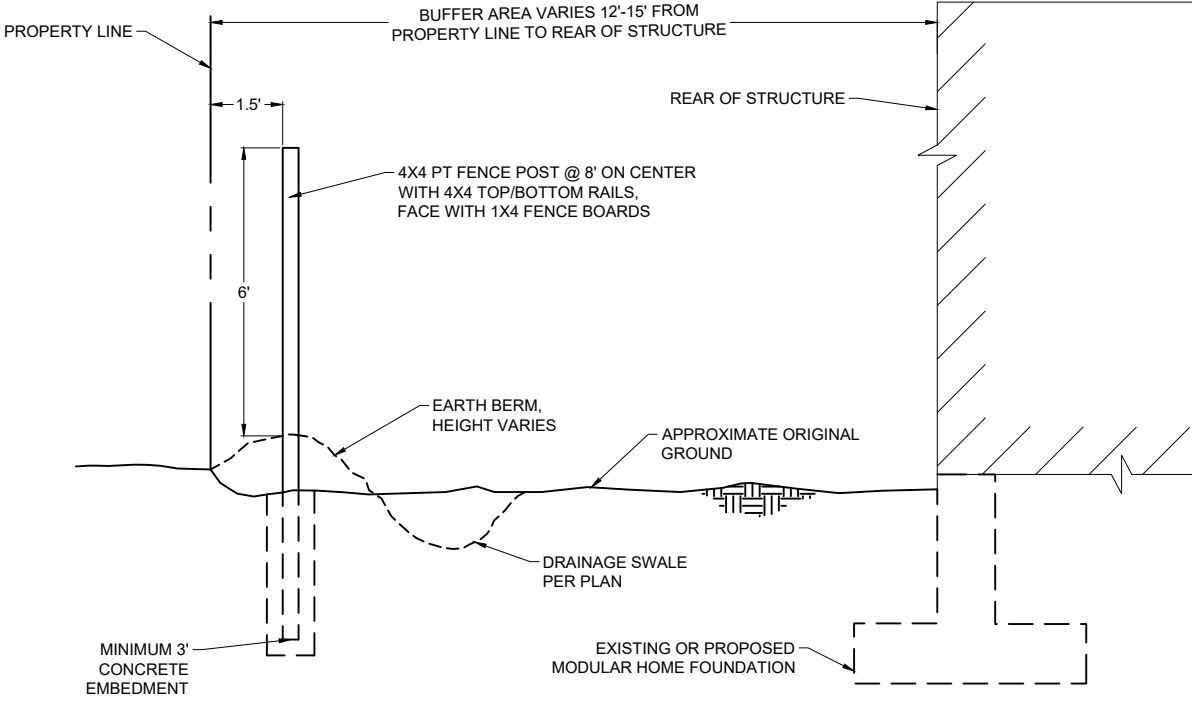
NOTE:
SAWCUT OF EXISTING PAVEMENT SHALL NOT BE
MADE UNTIL 24 HOURS PRIOR TO FINAL PAVING.

1 PAVEMENT MATCH DETAIL
C101 SCALE: NTS

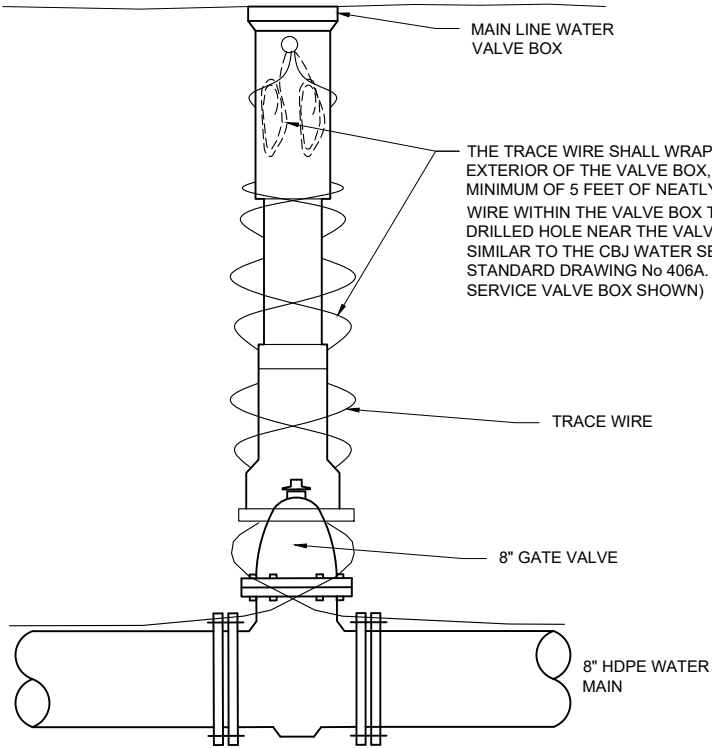


NOTES:
1. OUTFALL CONNECTIONS TO DAYLIGHT NEAR CULVERT INLETS PER PLAN.
2. DEPTH OF UNDERDRAIN VARIES, MIN SLOPE=0.50%

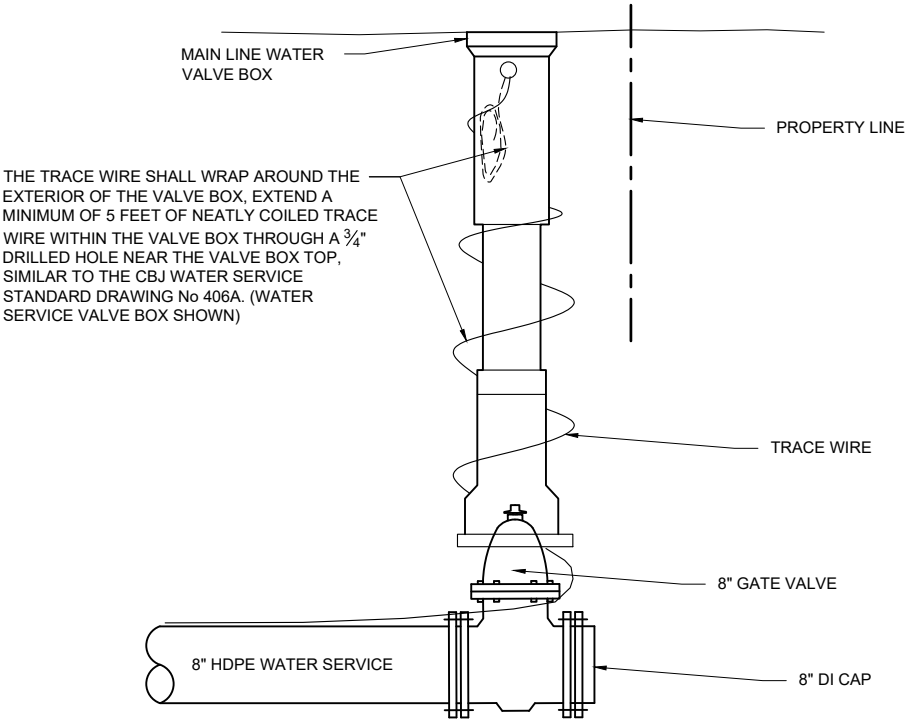
2 8\"/>



3 TYPICAL FENCE AT REAR OF DWELLING
C101 SCALE: 1"=2'



4 MAIN LINE VALVE TRACE WIRE TERMINATION DETAIL
C101 SCALE: NTS



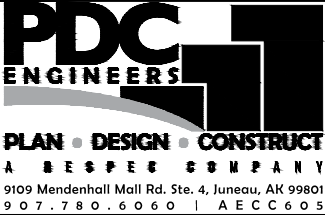
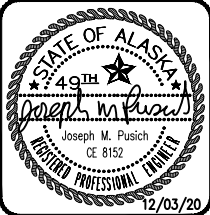
5 WATER SERVICE VALVE TRACE WIRE TERMINATION DETAIL
C101 SCALE: NTS

P:\2020\20098JN-Bicknell-Delta\CC3001 raw\20098JN.dwg PLOT: December 03, 2020 at: 9:59pm Mick Minich

DESIGN MSM
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FILE:

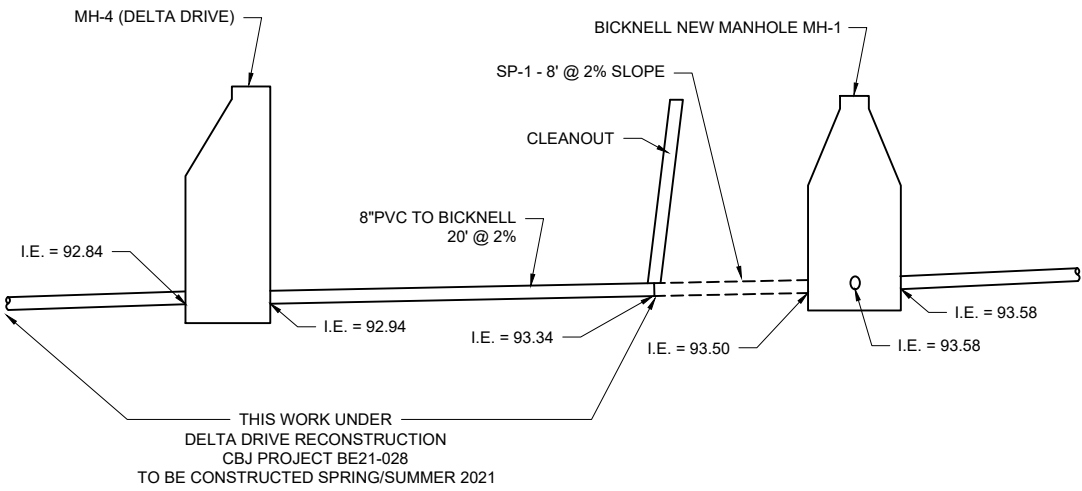
No.	DATE	REVISION	BY	APPRVD.

DELTA DRIVE
SUBDIVISION
JUNEAU, AK



CONSTRUCTION DETAILS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C101



1 SEWER PROFILE CONNECTION
C102 SCALE: NTS

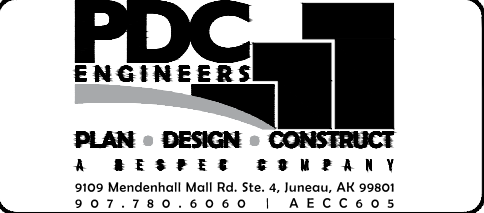
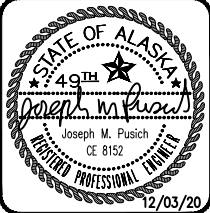
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DESIGN	MSM
DRAWN	MSM
CHECK	JMP
APPROVED	JMP
FILE:	

No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK

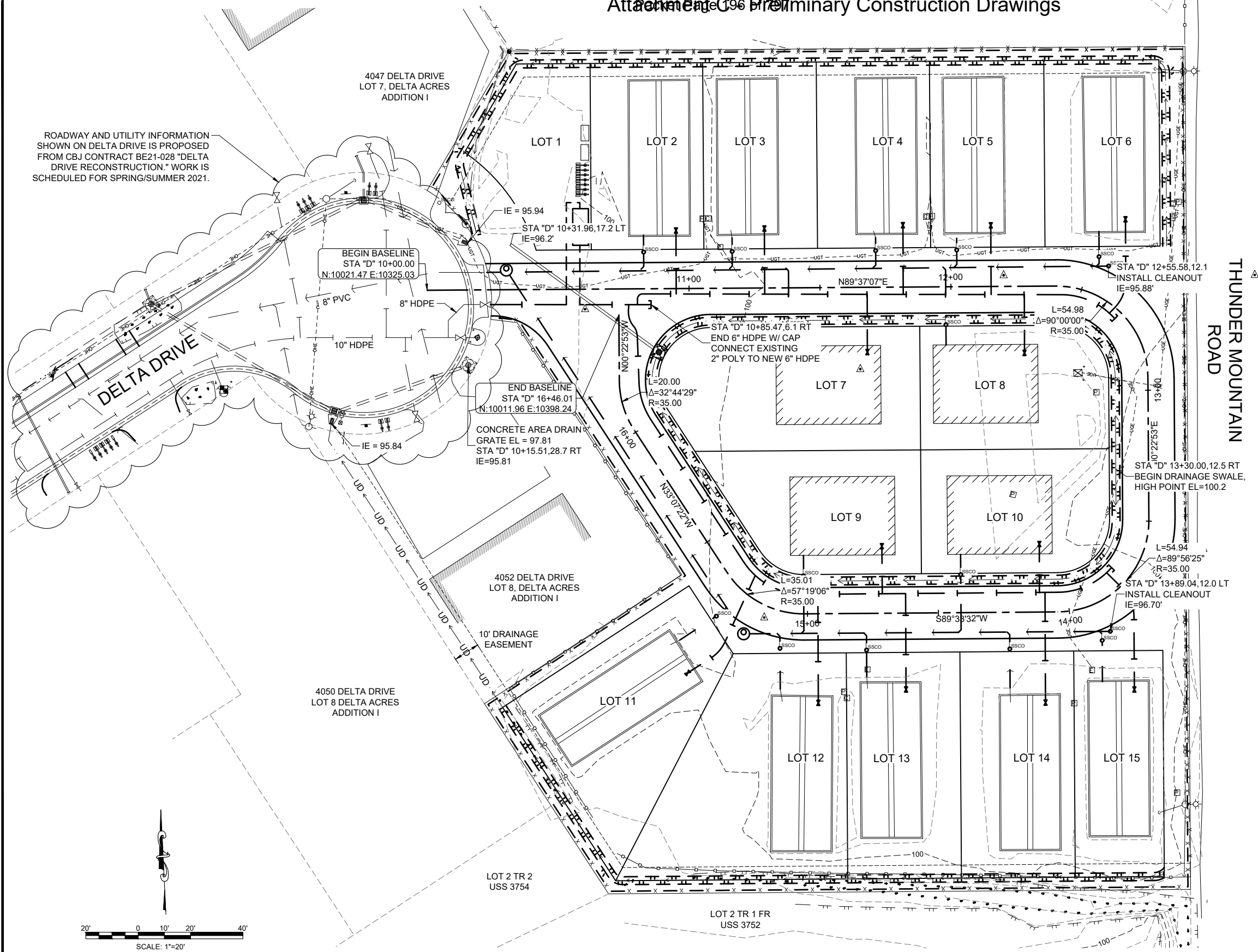


CONSTRUCTION DETAILS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C102

Attachment C-196 Preliminary Construction Drawings

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FOR ACS AND GCI LOCATES
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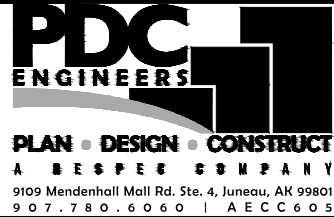
8477 THUNDER MOUNTAIN ROAD
USS 3752 THUNDER MOUNTAIN PARK

DESIGN	MSM
DRAWN	MSM
CHECK	JMP
APPROVED	JMP
FILE:	

No.	DATE	REVISION	BY	APPRVD.

DELTA DRIVE
SUBDIVISION

JUNEAU, AK



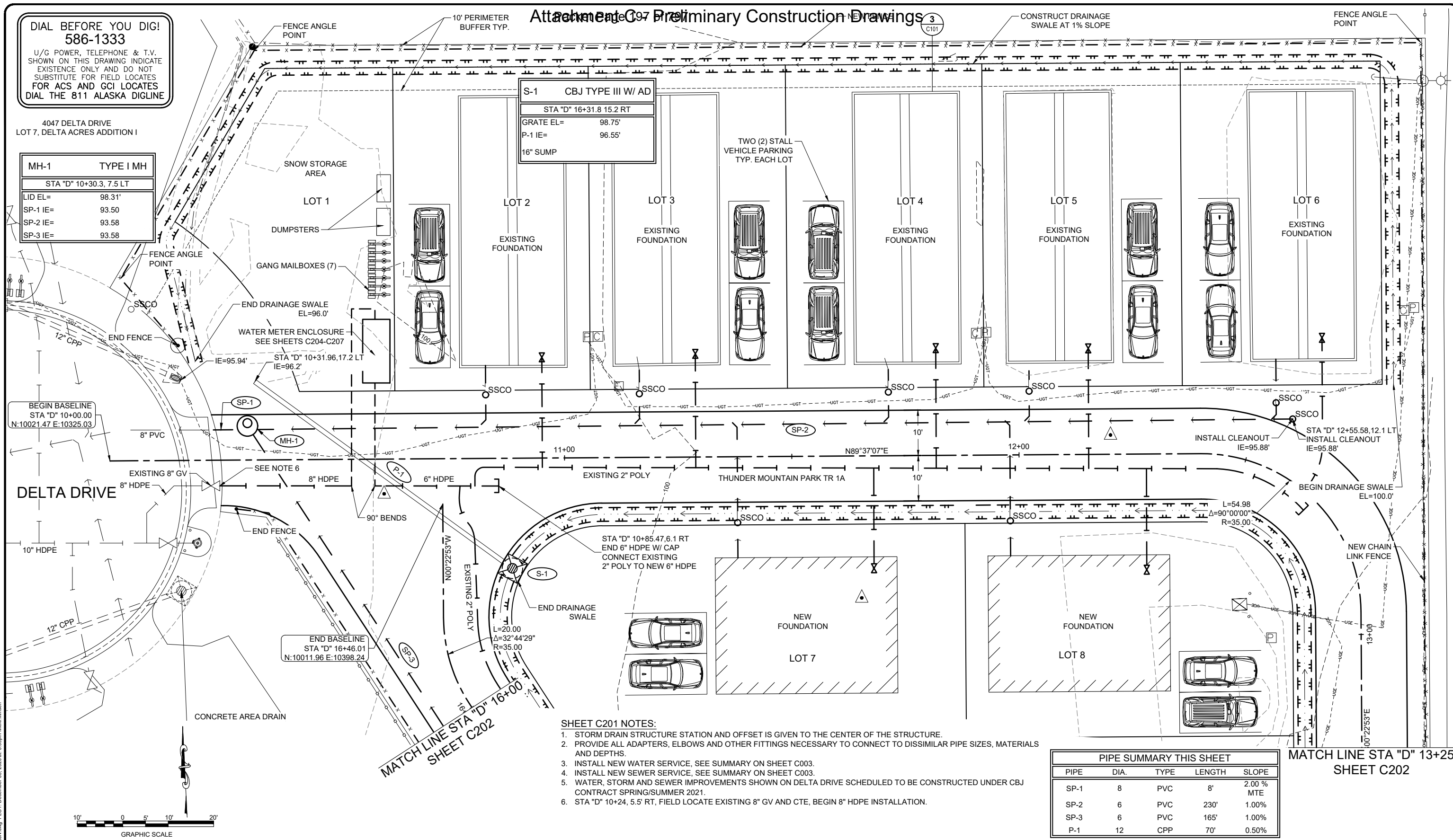
OVERALL SITE PLAN

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C200

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DIAL THE 811 ALASKA DIGLINE

4047 DELTA DRIVE
LOT 7, DELTA ACRES ADDITION I

MH-1	TYPE I MH
STA "D" 10+30.3, 7.5 LT	
LID EL=	98.31'
SP-1 IE=	93.50
SP-2 IE=	93.58
SP-3 IE=	93.58



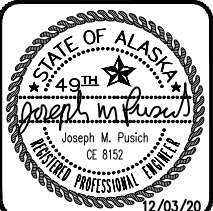
- SHEET C201 NOTES:
1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE.
 2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
 3. INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C003.
 4. INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C003.
 5. WATER, STORM AND SEWER IMPROVEMENTS SHOWN ON DELTA DRIVE SCHEDULED TO BE CONSTRUCTED UNDER CBJ CONTRACT SPRING/SUMMER 2021.
 6. STA "D" 10+24, 5.5' RT, FIELD LOCATE EXISTING 8" GV AND CTE, BEGIN 8" HDPE INSTALLATION.

PIPE SUMMARY THIS SHEET				
PIPE	DIA.	TYPE	LENGTH	SLOPE
SP-1	8	PVC	8'	2.00 % MTE
SP-2	6	PVC	230'	1.00%
SP-3	6	PVC	165'	1.00%
P-1	12	CPP	70'	0.50%

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION
JUNEAU, AK



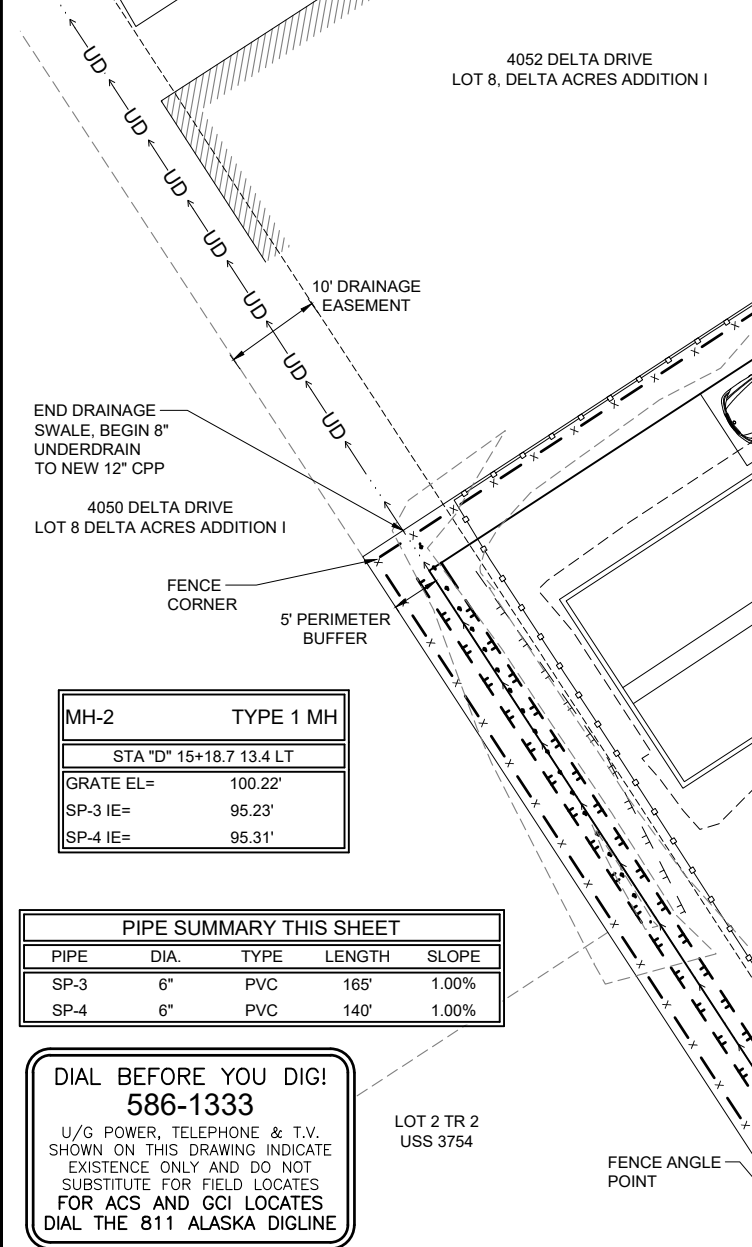
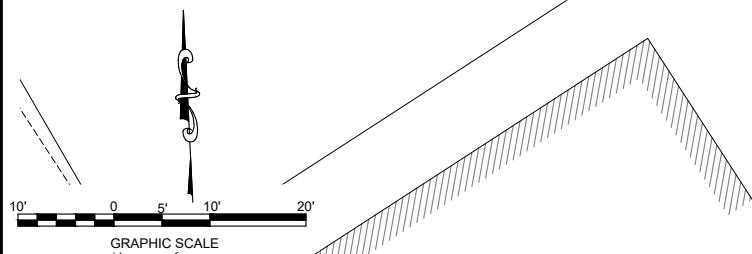
SITE & UTILITY PLAN

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C201

P:\2020\20098JN-Bicknell-Delta\CC201.dwg PLOT: December 03, 2020 at: 9:59pm Mick Minich

SHEET C202 NOTES:

1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE. FRAME ELEVATION IS GIVEN TO THE TOP, FRONT OF FRAME.
2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
3. INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C003.
4. INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C003.



MH-2	TYPE 1 MH
STA "D" 15+18.7 13.4 LT	
GRATE EL=	100.22'
SP-3 IE=	95.23'
SP-4 IE=	95.31'

PIPE SUMMARY THIS SHEET				
PIPE	DIA.	TYPE	LENGTH	SLOPE
SP-3	6"	PVC	165'	1.00%
SP-4	6"	PVC	140'	1.00%

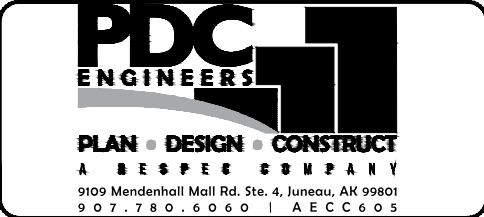
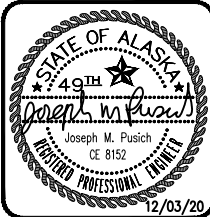
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DIAL THE 811 ALASKA DIGLINE

LOT 2 TR 2
USS 3754

FENCE ANGLE
POINT

DESIGN	MSM	No.	DATE	REVISION	BY	APRVD.
DRAWN	MSM					
CHECK	JMP					
APPROVED	JMP					
FILE:						

DELTA DRIVE
SUBDIVISION
JUNEAU, AK

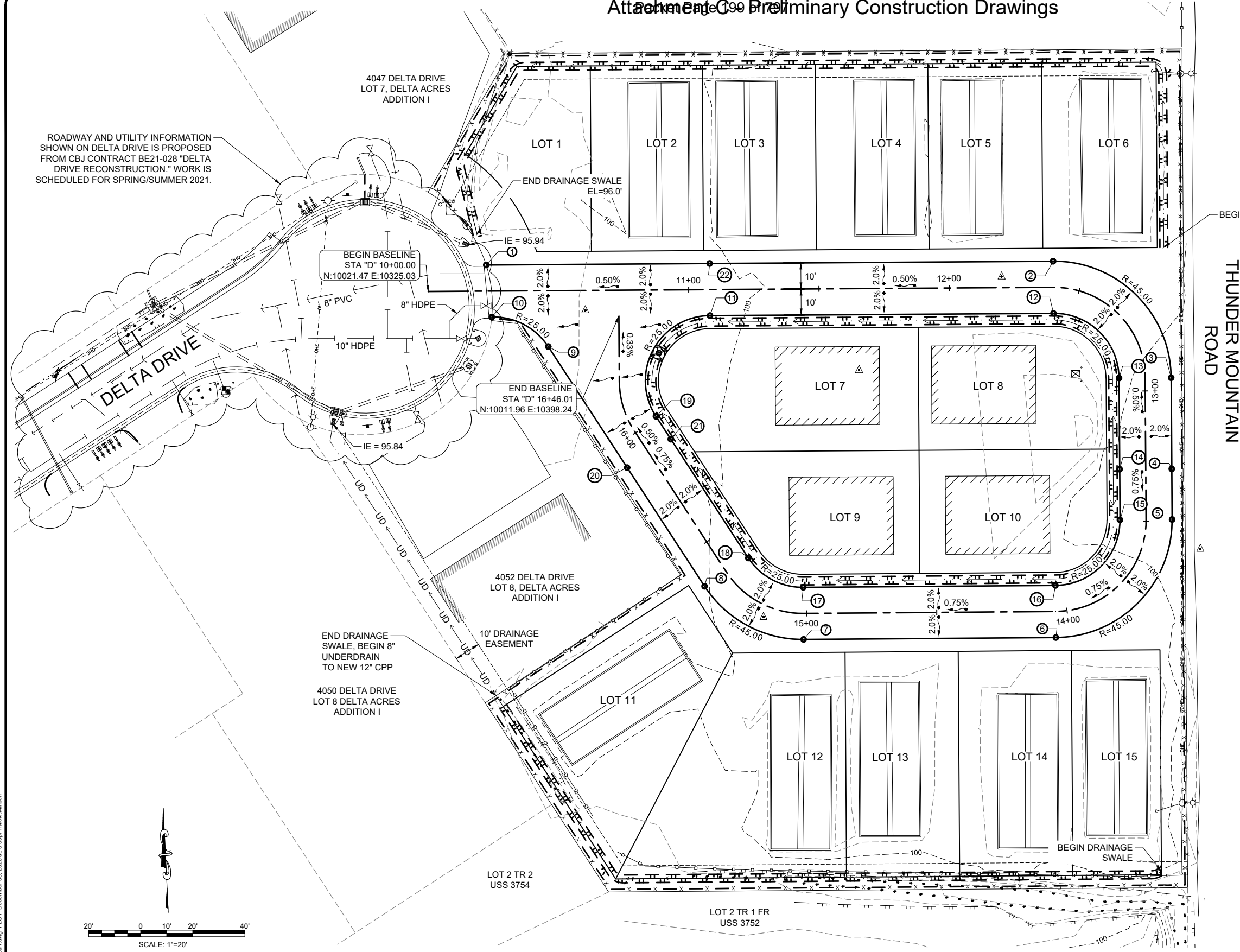


SITE & UTILITY PLAN

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C202

Attachment C-99 Preliminary Construction Drawings

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DIAL THE 811 ALASKA DIGLINE



GRADE POINT SUMMARY TABLE THIS SHEET				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	10031.62	10347.33	98.29 *	EDGE OF PAVEMENT/MTE
2	10033.07	10564.96	100.32	EDGE OF PAVEMENT/PC
3	9988.37	10610.26	100.88	EDGE OF PAVEMENT/PT
4	9953.35	10610.49	101.24	EDGE OF PAVEMENT/HIGH POINT
5	9933.92	10610.62	101.09	EDGE OF PAVEMENT/PC
6	9888.64	10565.97	100.68	EDGE OF PAVEMENT/PT
7	9887.89	10469.17	99.97	EDGE OF PAVEMENT/PC
8	9908.30	10431.14	99.67	EDGE OF PAVEMENT/PT
9	10000.30	10371.11	98.59	EDGE OF PAVEMENT/PC
10	10011.64	10349.47	98.34 *	EDGE OF PAVEMENT/PT/MTE
11	10012.19	10433.23	99.66	EDGE OF PAVEMENT/PT
12	10013.07	10565.10	100.32	EDGE OF PAVEMENT/PC
13	9988.24	10590.26	100.88	EDGE OF PAVEMENT/PT
14	9953.22	10590.50	101.24	EDGE OF PAVEMENT/HIGH POINT
15	9933.79	10590.62	101.09	EDGE OF PAVEMENT/PC
16	9908.64	10565.82	100.68	EDGE OF PAVEMENT/PT
17	9907.89	10469.02	99.97	EDGE OF PAVEMENT/PC
18	9919.17	10447.92	99.67	EDGE OF PAVEMENT/PT
19	9973.53	10412.46	99.19	EDGE OF PAVEMENT/PC
20	9953.85	10401.42	99.29	EDGE OF PAVEMENT
21	9964.78	10418.17	99.29	EDGE OF PAVEMENT
22	10032.19	10433.09	99.66	EDGE OF PAVEMENT

*CBJ DELTA DRIVE RECONSTRUCTION TOP OF ASPHALT PAVEMENT ELEVATION

DESIGN MSM
DRAWN MSM
CHECK JMP
APPROVED JMP
FILE:

No.	DATE	REVISION	BY	APPRVD.

DELTA DRIVE SUBDIVISION
JUNEAU, AK

PLAN • DESIGN • CONSTRUCT
A BESPEC COMPANY
9109 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801
907.780.6060 | AECC605

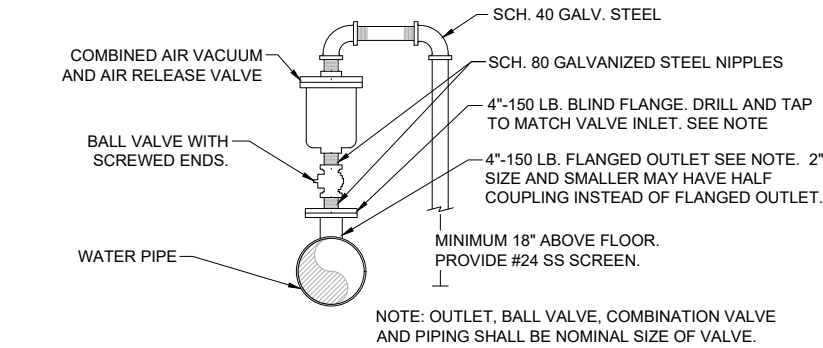
GRADING PLAN

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET C203

NOTES:

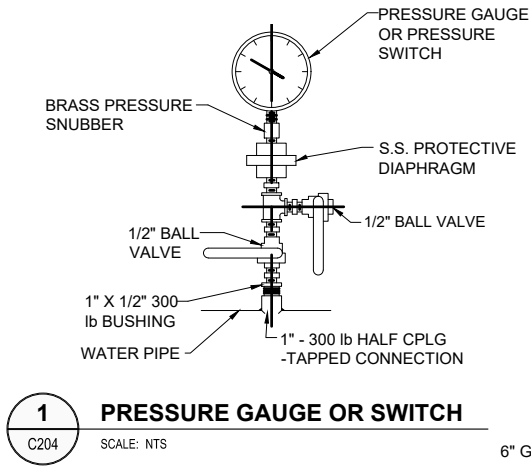
1. CBJ SPECIFICATION 02601 - WATER SYSTEM AND 02602 - VALVES, AND OTHER CBJ STANDARD SPECIFICATIONS APPLY EXCEPT AS MODIFIED BELOW.
2. ALL JOINTS BETWEEN THE CONNECTIONS TO THE MAINLINES ON BOTH SIDES OF THE METER ENCLOSURE SHALL BE RESTRAINED.
3. ALL BOLTS, NUTS AND WASHERS SHALL BE SERIES 300 STAINLESS STEEL.
4. ALL METALLIC VALVES AND FITTINGS SHALL BE FACTORY EPOXY COATED INSIDE AND OUT, 8 MILS MINIMUM.
5. BURIED FITTINGS SHALL BE THRUST BLOCKED PER CBJ STANDARD DETAILS.
6. DIP, HDPE PIPE AND PIPE STANDS ARE PER CBJ SECTION 02602.
7. ALL PIPE AND SPOOL PIECES ABOVE GRADE ARE TO BE FLANGED, WITH 125# FLANGES. USE A FLANGE ADAPTOR WITH THE CONNECTION TO HDPE.
8. GATE VALVES SHALL HAVE HAND WHEELS.
9. PRESSURE GAUGE IS TO BE STAINLESS STEEL, GLYCERIN FILLED, WITH A 3½ OR 4-INCH FACE AND 150 TO 160 PSI PRESSURE RANGE.
10. THE GATE VALVE AHEAD OF THE METER IS TO BE FLXFL, WHILE THE VALVES ON EITHER SIDE OF THE DOUBLE CHECK MAY BE FLXVIC. VALVES SHALL COMPLY WITH AWWA C509 OR C515.
11. THE METER SHALL BE A 4-INCH NEPTUNE TRUFLO COMPOUND METER WITH A STRAINER.
12. THE DOUBLE CHECK VALVE SHALL BE A 6-INCH ZURN 350A WITH THE GATE VALVES, OR APPROVED EQUAL. THE DOUBLE CHECK SHALL MEET THE REQUIREMENTS OF AWWA C510 AND BE ASSE AND NSF LISTED.
13. TWO DUPLEX 120-V ELECTRICAL OUTLETS SHALL BE INSTALLED INSIDE THE ENCLOSURE. CONDUIT SHALL RUN FROM THE EXTERIOR MOUNTED DISCONNECT BOX NEAR THE ELECTORAL METER, UNDERGROUND, AND COME UP THROUGH THE CONCRETE SLAB. THE OUTLETS SHALL BE MOUNTED ABOVE THE FLOOR AND LOCATED FOR EASY ACCESS THROUGH THE PANELS.
14. ALL ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN AND COMPLY WITH ALL APPROPRIATE ELECTRICAL CODES. ANY REQUIRED ELECTRICAL PERMITS SHALL BE OBTAINED. COORDINATE WITH THE LOCAL ELECTRICAL UTILITY AS NECESSARY AND PROVIDE ANY EQUIPMENT THEY REQUIRE TO COMPLETE THEIR SERVICE TO THIS LOCATION.

DESIGNATION	COMPONENT DESCRIPTION
A	6X4" DI REDUCING 90° ELBOW W/ TAP AND 1" AIR RELEASE VALVE
B	4" NRS GATE VALVE
C	4" DISMANTLING JOINT, SET TO 8" ±
D	4" METER W/ STRAINER
E	4" DI PIPE SPOOL W/ 1" TAPPED CONNECTION, SAMPLING PORT, AND PRESSURE GAGUE (SEE DETAIL)
F	4" SPOOL PIECE
G	4" DOUBLE CHECK VALVE
H	4" DI 90° BEND

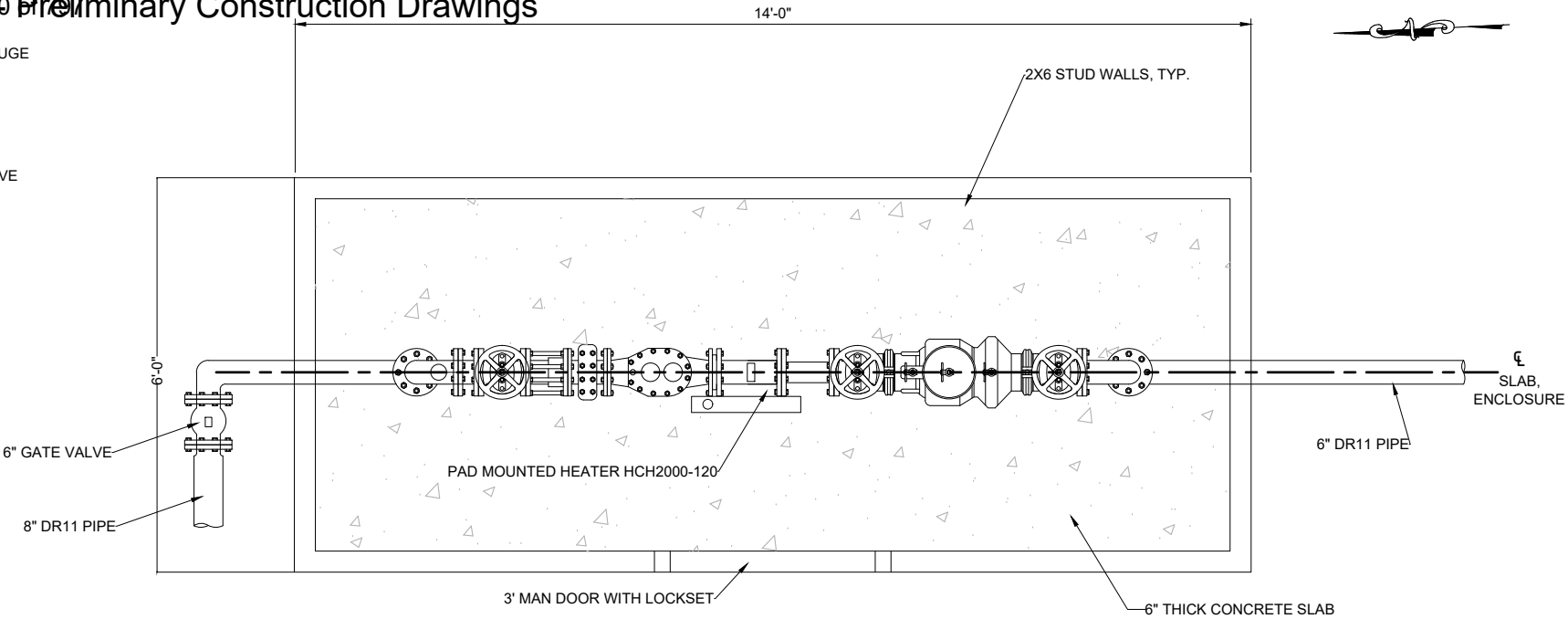


3 AIR/VACUUM & AIRE RELEASE VALVE ASSEMBLY
C204 SCALE: NTS

Attachment C204 Preliminary Construction Drawings



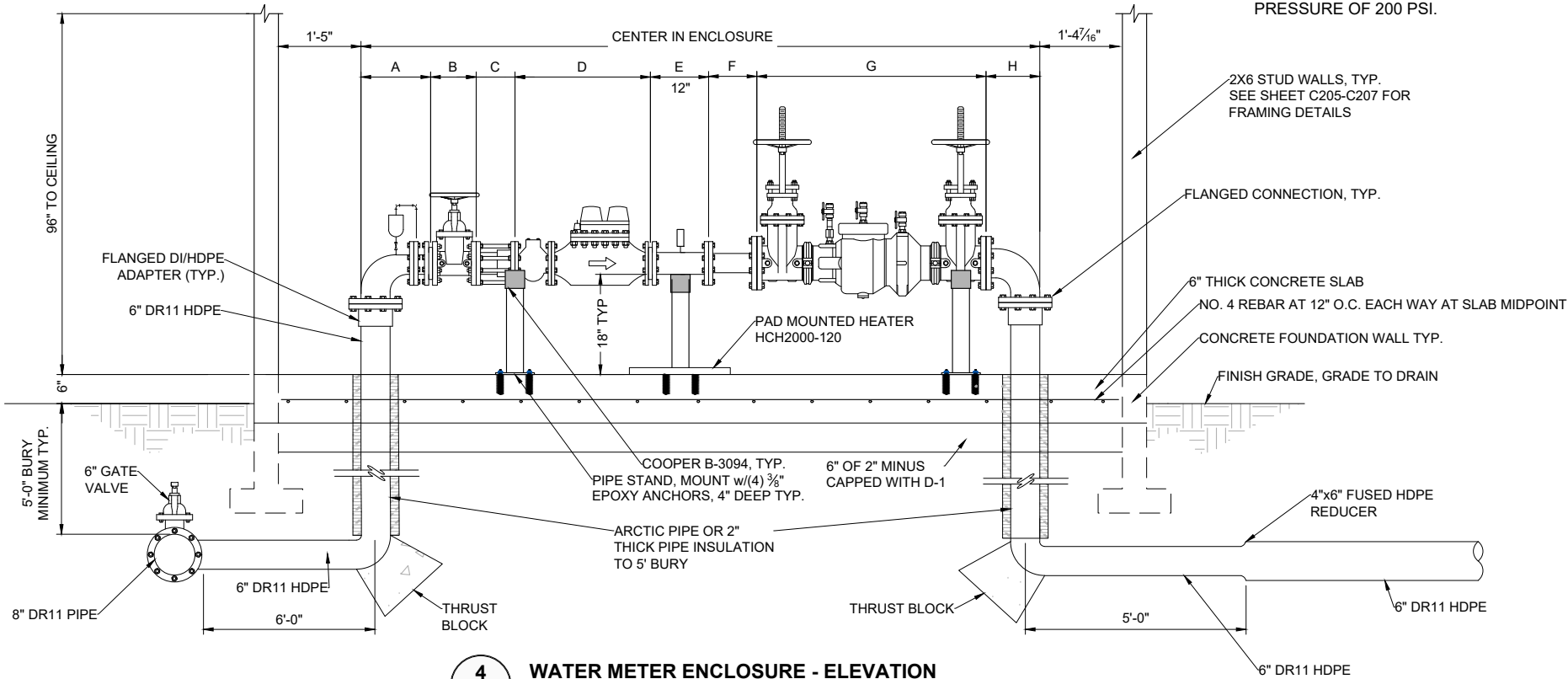
1 PRESSURE GAUGE OR SWITCH
C204 SCALE: NTS



2 WATER METER ENCLOSURE - PLAN
C204 SCALE: NTS

NOTES:

1. ALL JOINTS TO BE FUSED, FLANGED, OR RESTRAINED TO WITHSTAND A MINIMUM PRESSURE OF 200 PSI.

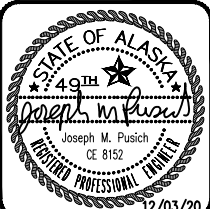


4 WATER METER ENCLOSURE - ELEVATION
C204 SCALE: NTS

DESIGN MSM
DRAWN MSM
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FILE:

No.	DATE	REVISION	BY	APRVD.

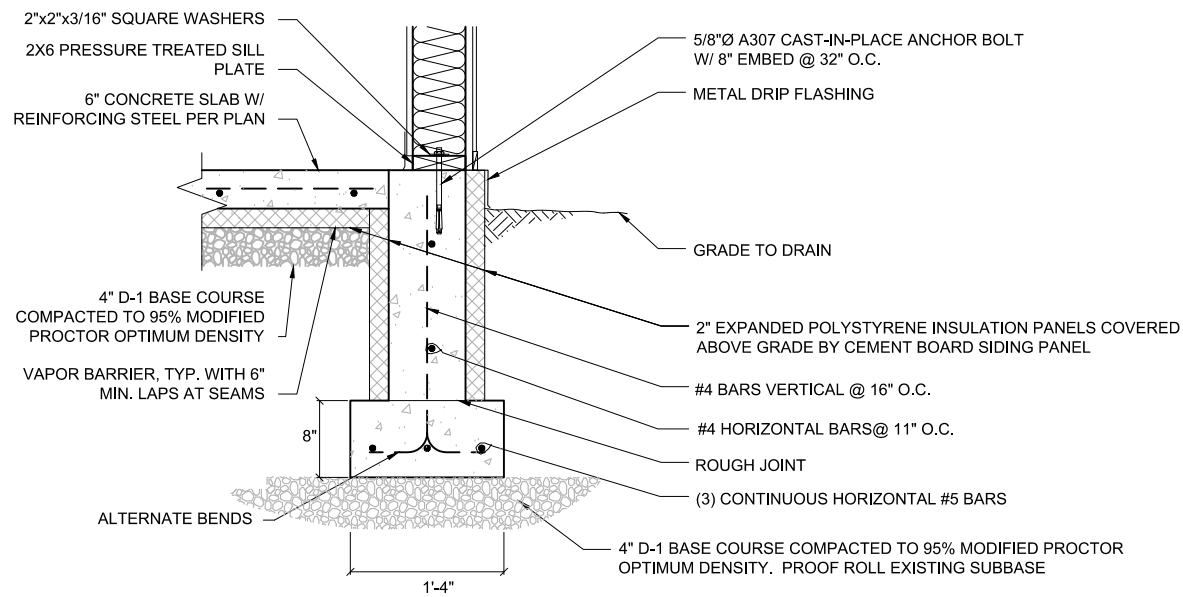
DELTA DRIVE
SUBDIVISION
JUNEAU, AK



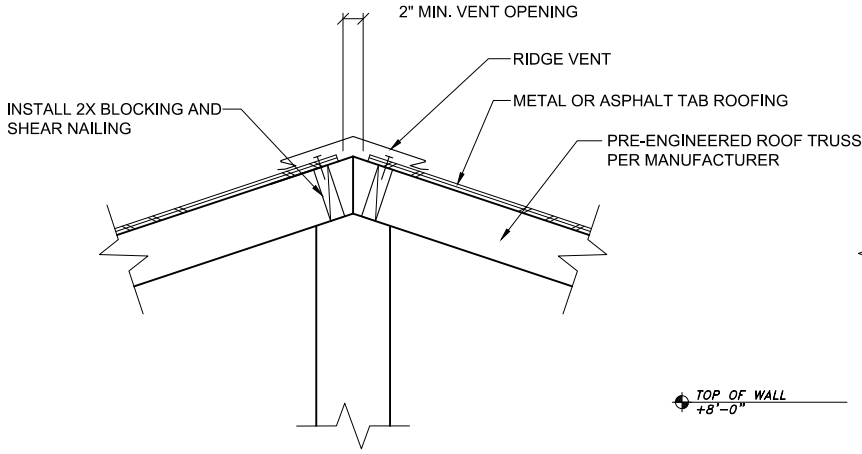
WATER METER
ENCLOSURE DETAILS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C204

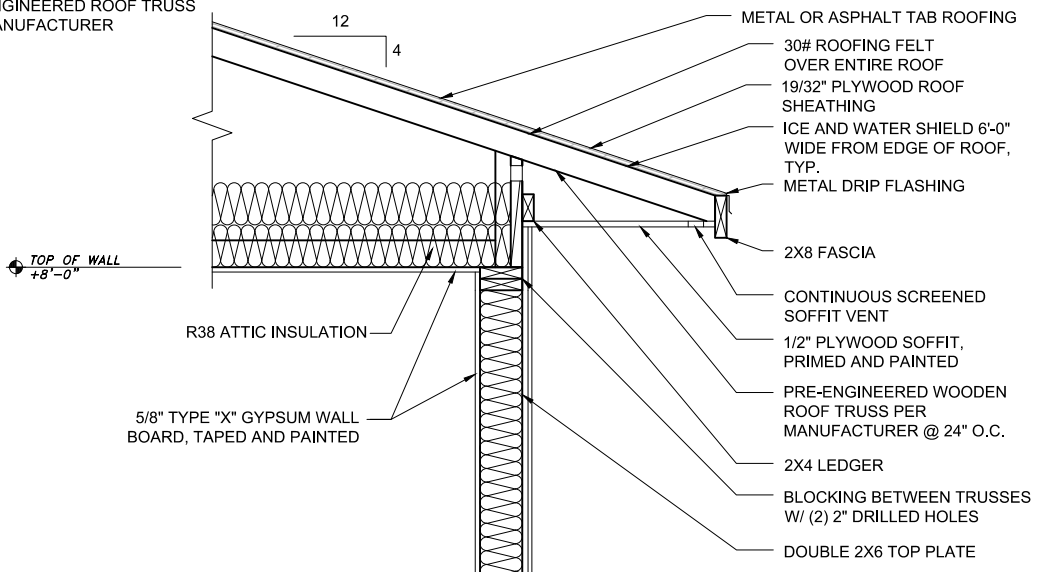
Attachment 204 Preliminary Construction Drawings



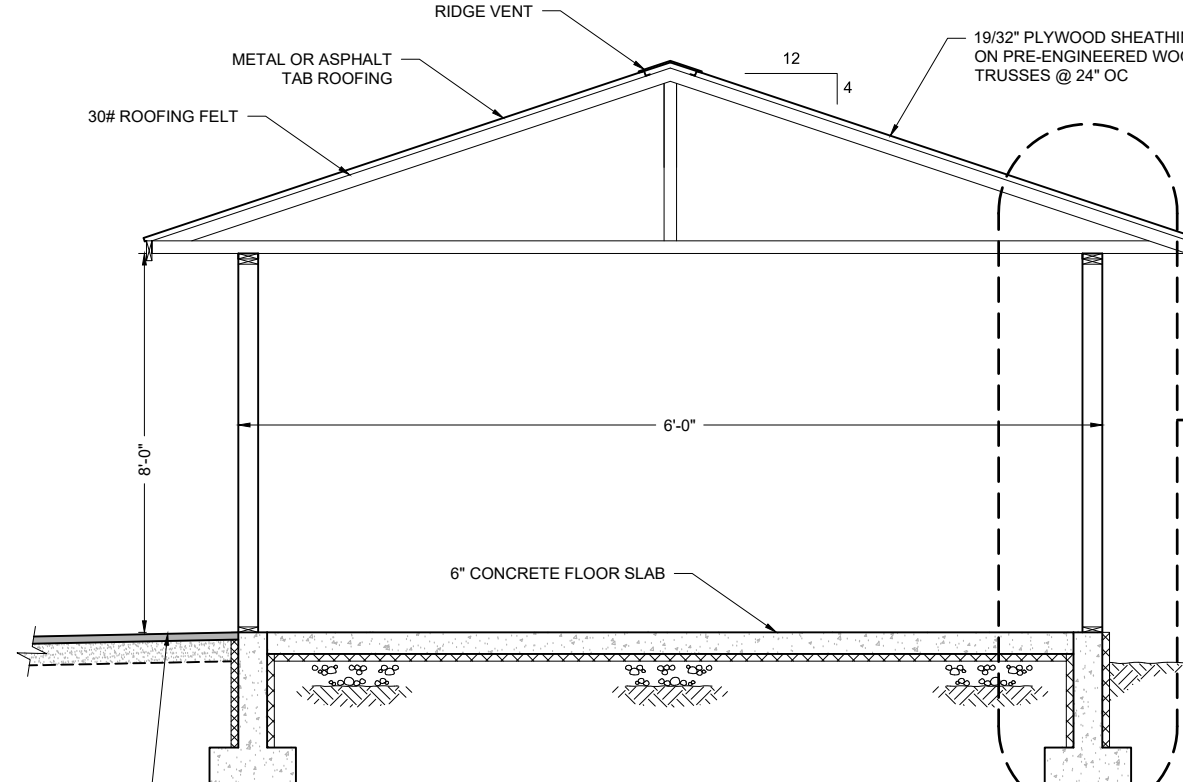
1 FOUNDATION AND STEM WALL DETAIL
C205 SCALE: NTS



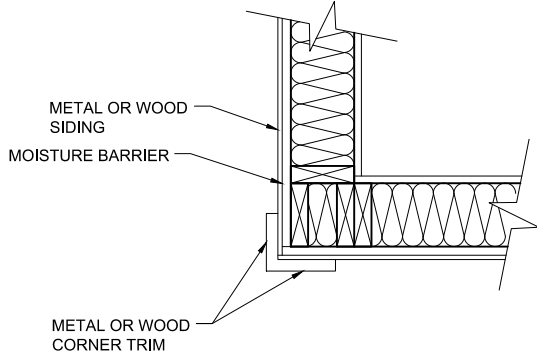
2 ROOF RIDGE VENT DETAIL
C205 SCALE: NTS



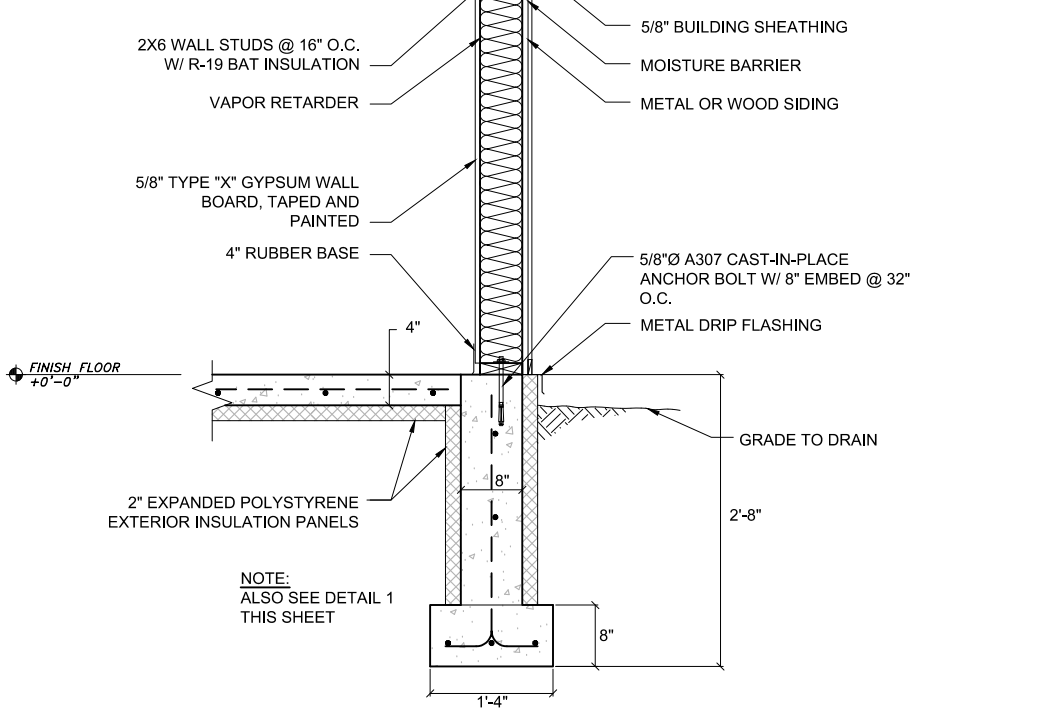
5 WALL SECTION
C205 SCALE: NTS



3 BUILDING SECTION
C205 SCALE: NTS



4 OUTSIDE CORNER DETAIL
C205 SCALE: NTS

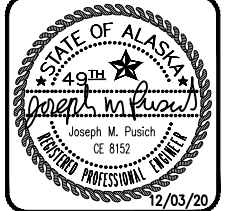


P:\2020\20098JN-Bicknell-Delta\CC2001 raw\20098JN.dwg PLOT: December 03, 2020 at: 9:59pm Mick Minich

DESIGN	MSM
DRAWN	MSM
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FILE:	

No.	DATE	REVISION	BY	APRVD.

DELTA DRIVE
SUBDIVISION
JUNEAU, AK

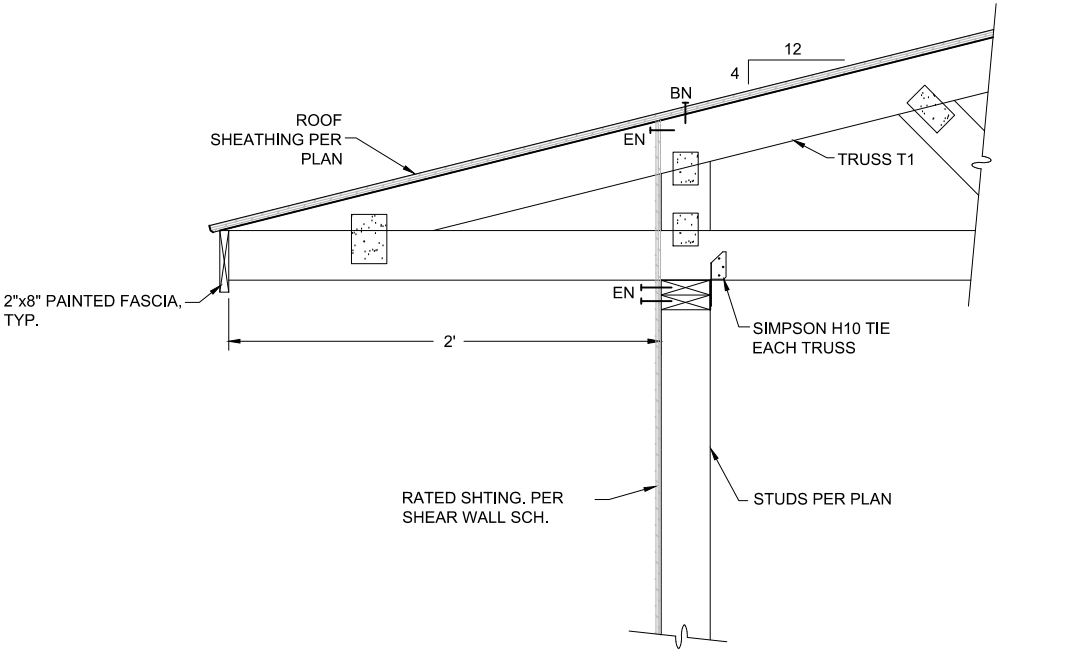


WATER METER
ENCLOSURE DETAILS

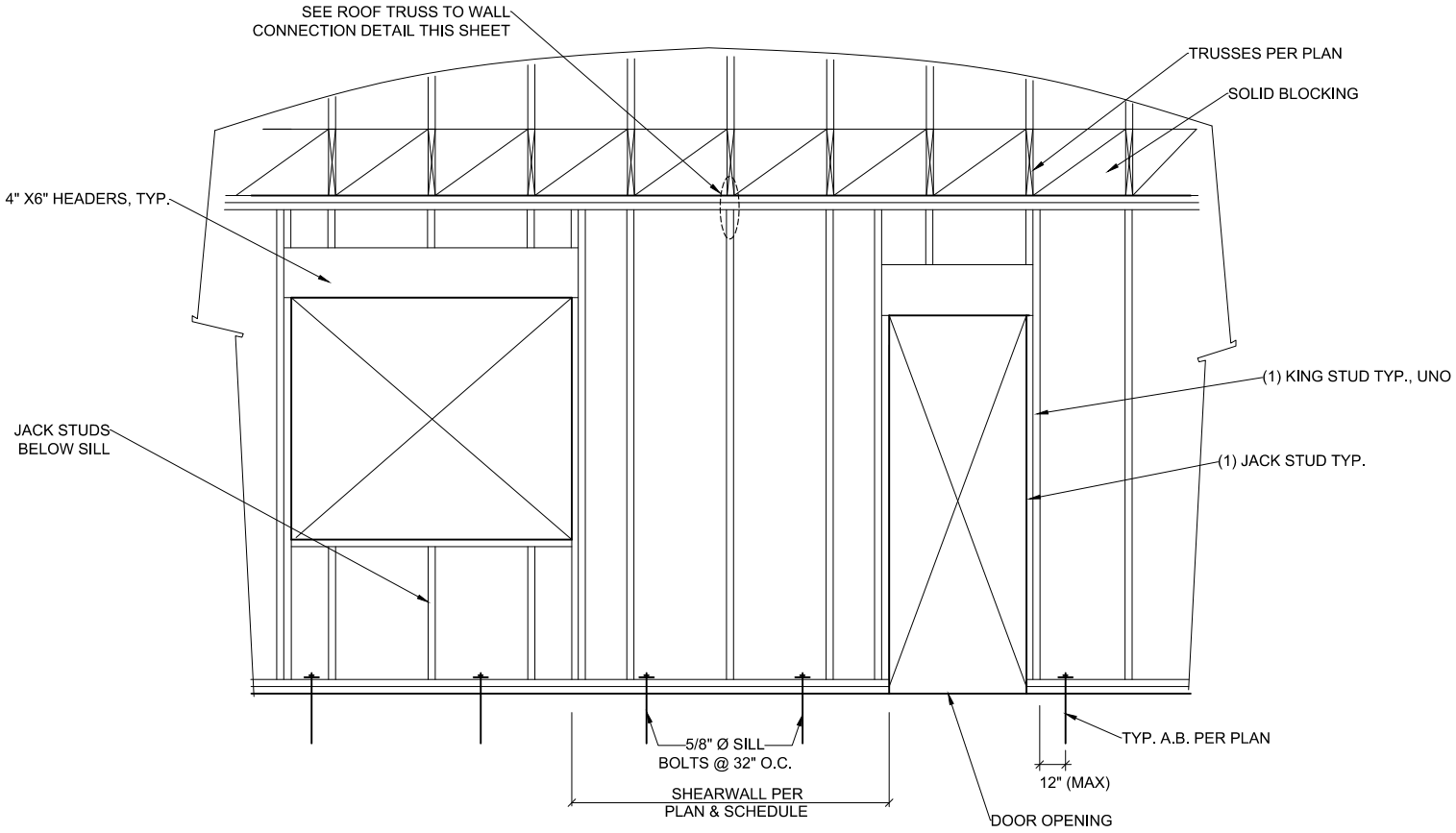
DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C205

Attachment C206 Preliminary Construction Drawings

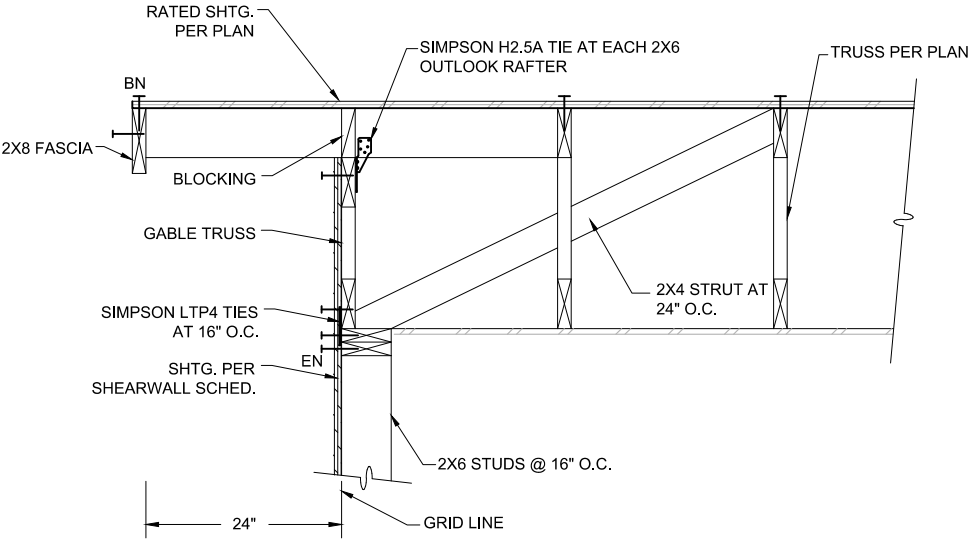
- 1. WHERE NO STUD TO STUD NAILING IS INDICATED, NAIL STUDS TOGETHER w/ 16d @ 12"o.c., TYP.
- 2. REF. PLANS FOR STUD SIZE & SPACING



1 ROOF TRUSS TO WALL CONNECTION
C206 SCALE: NTS



3 TYPICAL STUD FRAMING
C206 SCALE: NTS



2 GABLE END DETAIL
C206 SCALE: NTS

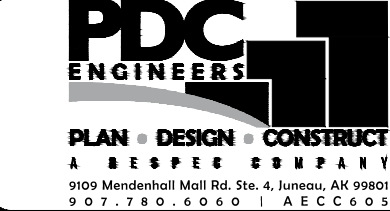
FRAMING NAILING SCHEDULE			
CONNECTION	NAILING	CONNECTION	NAILING
TOP PLATE TO STUD, END NAIL	2x4 (2)- 16d 2x6 (3)- 16d 1 3/4"x5 1/2" LVL (3)-16d 1 3/4"x7 1/4" LVL (4)-16d 1 3/4"x9 1/4" LVL (5)-16d 1 3/4"x11 1/4" LVL (6)-16d	TOP PLATE LAPS (4'-0" MINIMUM)	16d AT 6" O.C.
		BUILT-UP HEADERS AND BEAMS	16d AT 16" O.C. ALONG TOP AND BOTTOM EDGE
		BUILT-UP COLUMNS BELOW BEAMS, FACE NAIL	16d AT 16" O.C. - EACH FACE
STUD TO SILL PLATE, END NAIL	2x4 (2)- 16d 2x6 (3)- 16d 1 3/4"x5 1/2" LVL (3)-16d 1 3/4"x7 1/4" LVL (4)-16d 1 3/4"x9 1/4" LVL (5)-16d 1 3/4"x11 1/4" LVL (6)-16d	BUILT-UP CORNER STUDS (3 STUDS MINIMUM)	16d AT 24" O.C.
		BACKING AND BLOCKING AT TRUSSES AND 2x FRAMING, END NAIL OR TOE NAIL	(2)- 16d EACH END
DOUBLE SILL PLATES, FACE NAIL (STAGGER)	10d AT 12" O.C.	BACKING AND BLOCKING AT I-JOIST FRAMING	SIMPSON Z2 OR EQUAL AT EACH END [W/(4)-10dx1 1/2" NAILS]
DOUBLE STUDS, FACE NAIL (STAGGER)	10d AT 12" O.C. - EACH FACE		
DOUBLE TOP PLATES, FACE NAIL	16d AT 24" O.C.		
TOP PLATES AT WALL INTERSECTIONS, FACE NAIL	(2)- 16d		

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DESIGN	MSM	DATE REVISION BY APRVD.
DRAWN	MSM	
CHECK	JMP	
APPROVED	JMP	
FILE:		

DELTA DRIVE
SUBDIVISION

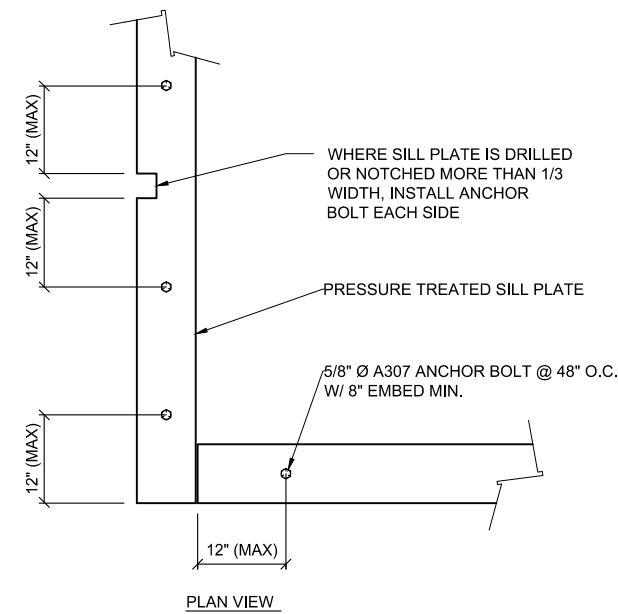
JUNEAU, AK



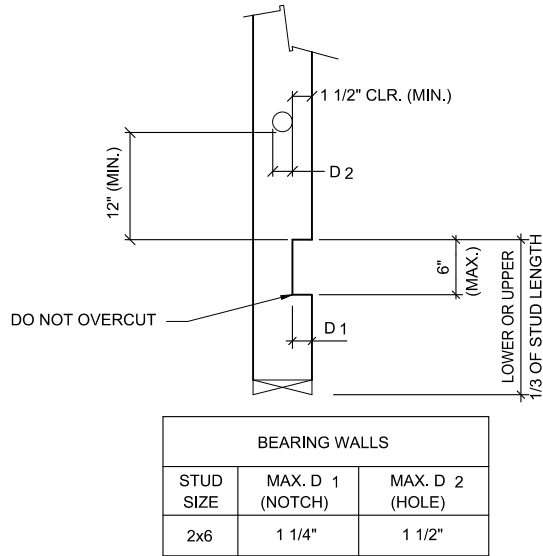
WATER METER
ENCLOSURE DETAILS

DATE: Dec 03, 2020
PDC No. 20098JN
SHEET
C206

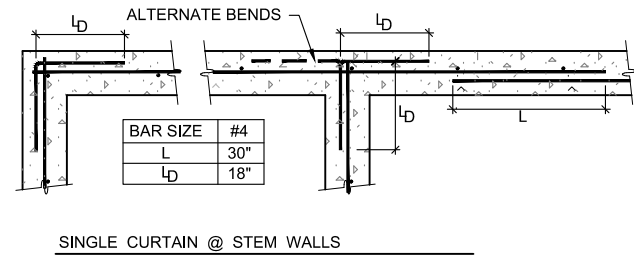
Attachment C203 Preliminary Construction Drawings



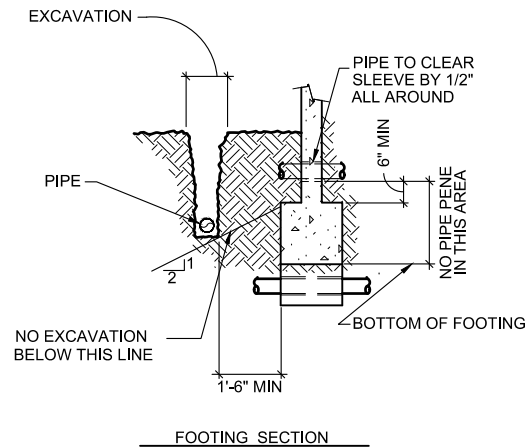
1 SILL PLATE BOLTING TO CONCRETE
C207 SCALE: NTS



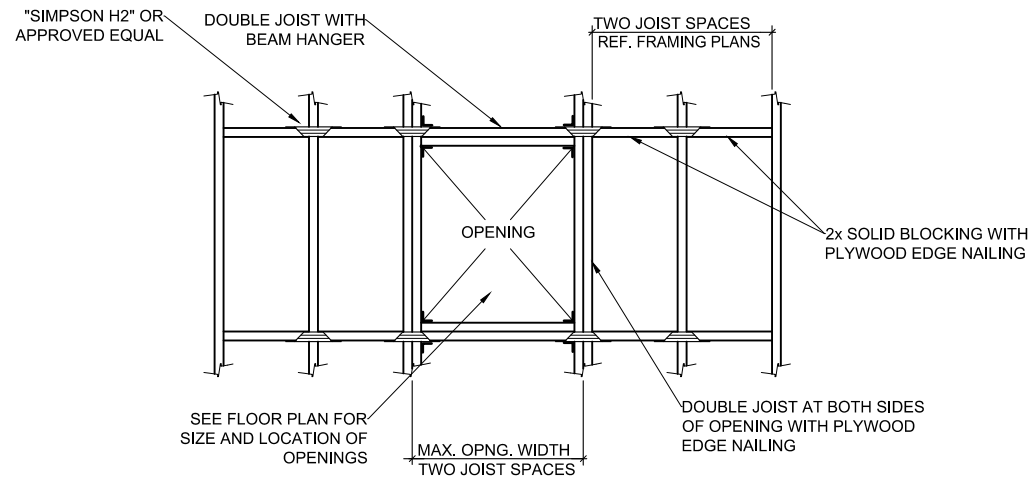
2 ALLOWABLE HOLES AND NOTCHES IN STUDS
C207 SCALE: NTS



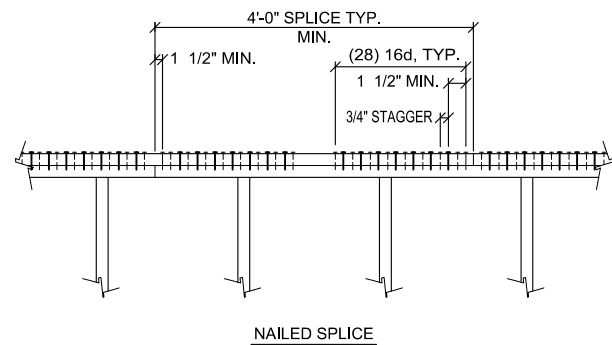
3 WALL & FOOTING REINFORCING AT CORNERS & INTERSECTIONS
C207 SCALE: NTS



4 PIPES & TRENCHES AT FOUNDATIONS
C207 SCALE: NTS

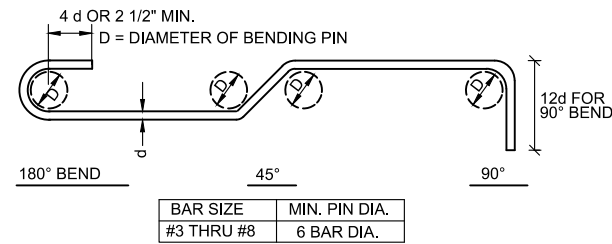


5 TYP. OPENINGS IN FLOORS AND ROOF
C207 SCALE: NTS



- NOTES:
1. MINIMUM PLATE SPLICE IS (28) 16d EA. SIDE OF EA. PLATE JOINT. MSTC78 IS ALTERNATE.
 2. STAGGER NAILS IN 2 ROWS.
 3. OCCURS AT TOP PLATES UNDER ROOF.

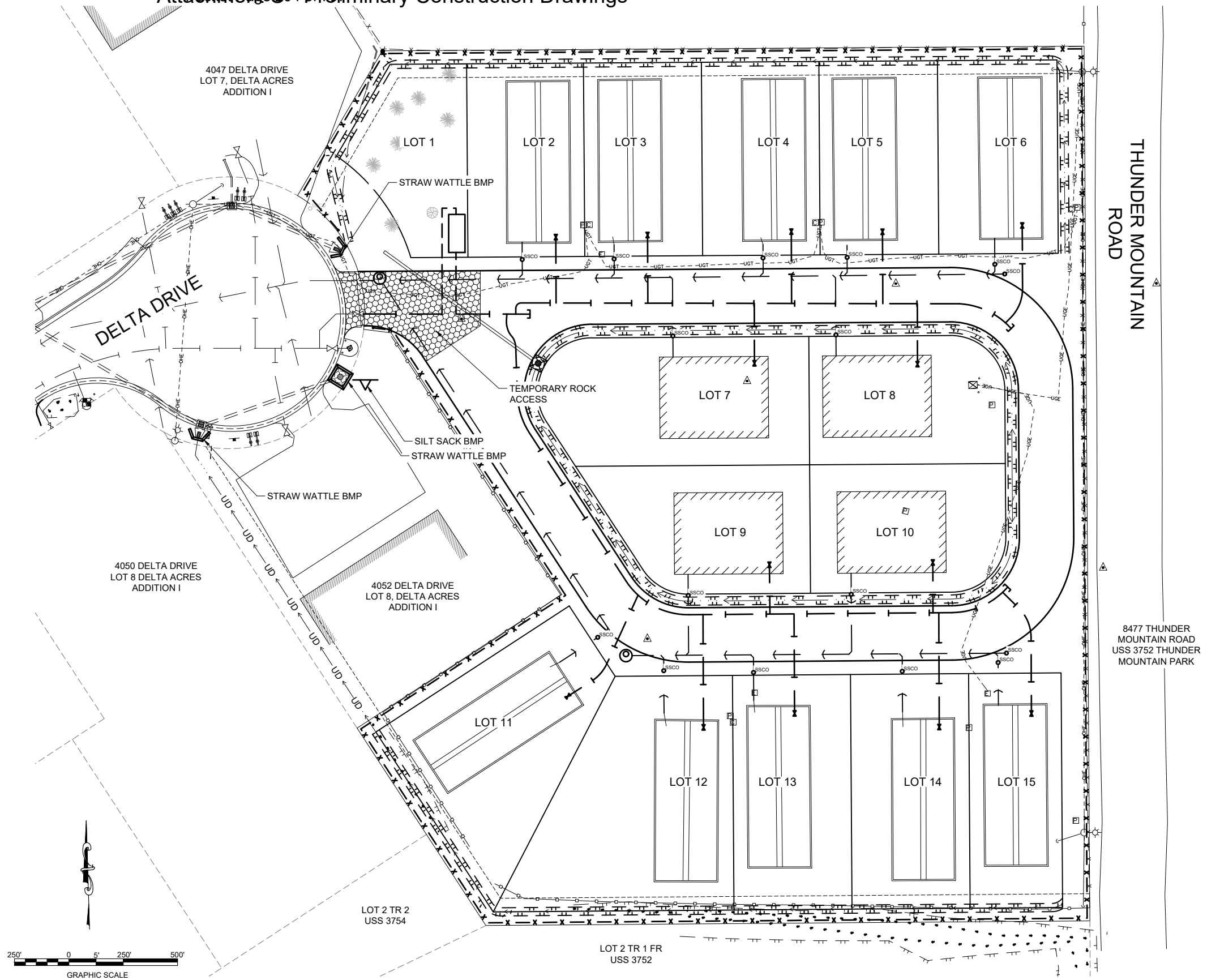
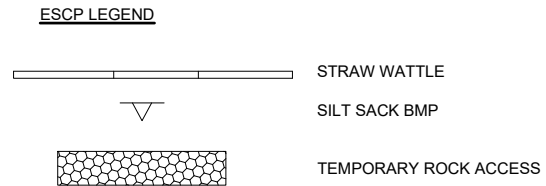
6 TYPICAL PLATE SPICE
C207 SCALE: NTS



- LEGEND (FOR REINF. BENDS NOT SHOWN TO SCALE)
- DENOTES 90° BEND IN THE PLANE OF THE DWG.
 - DENOTES 90° BEND PERPENDICULAR TO THE PLANE OF THE DWG.
 - DENOTES BEND PERPENDICULAR TO THE PLANE OF THE DWG.
 - DENOTES BEND IN THE PLANE OF THE DWG.
 - DENOTES OFFSET IN THE PLANE OF THE DWG.

7 STANDARD HOOKS AND BENDS
C207 SCALE: NTS

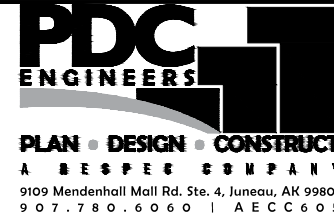
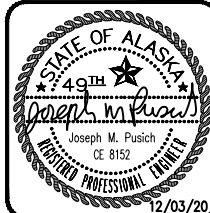
Attachment 2 Preliminary Construction Drawings



DESIGN <u>MSM</u>					
DRAWN <u>MSM</u>					
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APPROVED <u>JMP</u>					
FILE:	No.	DATE	REVISION	BY	APRVD.

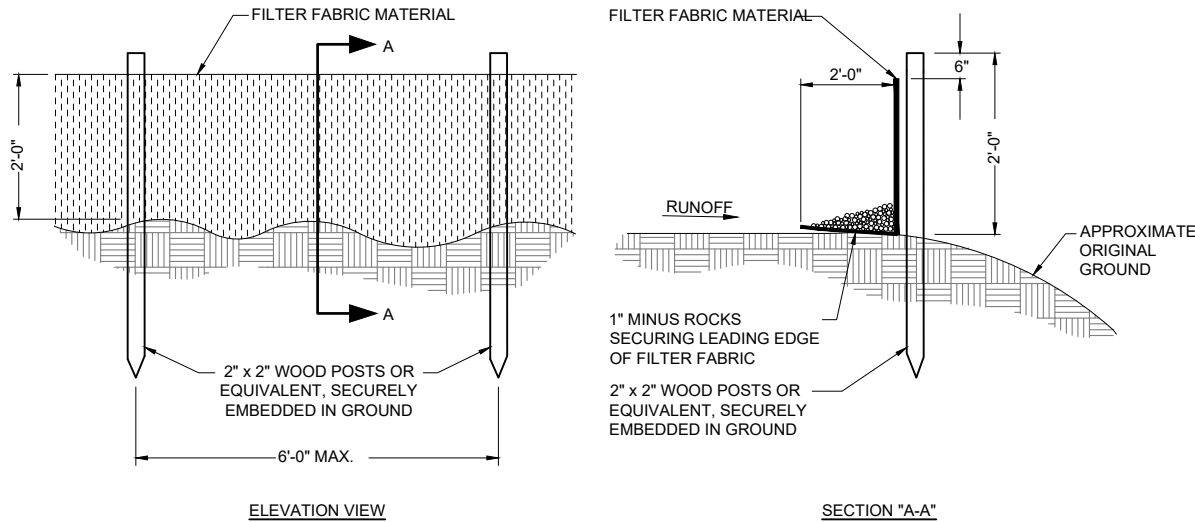
DELTA DRIVE
SUBDIVISION

JUNEAU, AK

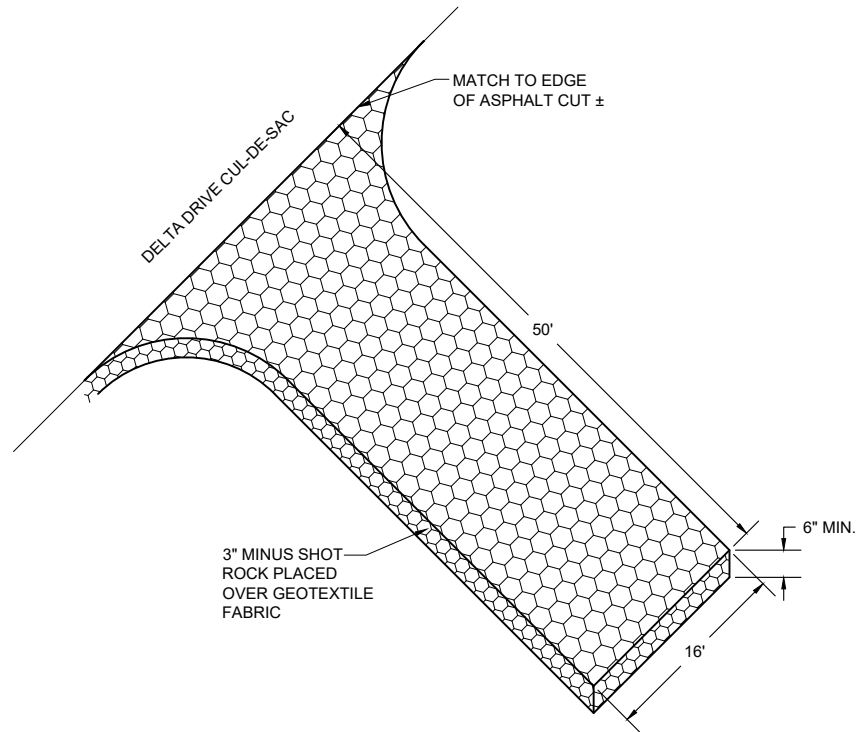


EROSION & SEDIMENT CONTROL PLAN

DATE: Dec 03, 2020
DC No. 20098JN
SHEET
C300

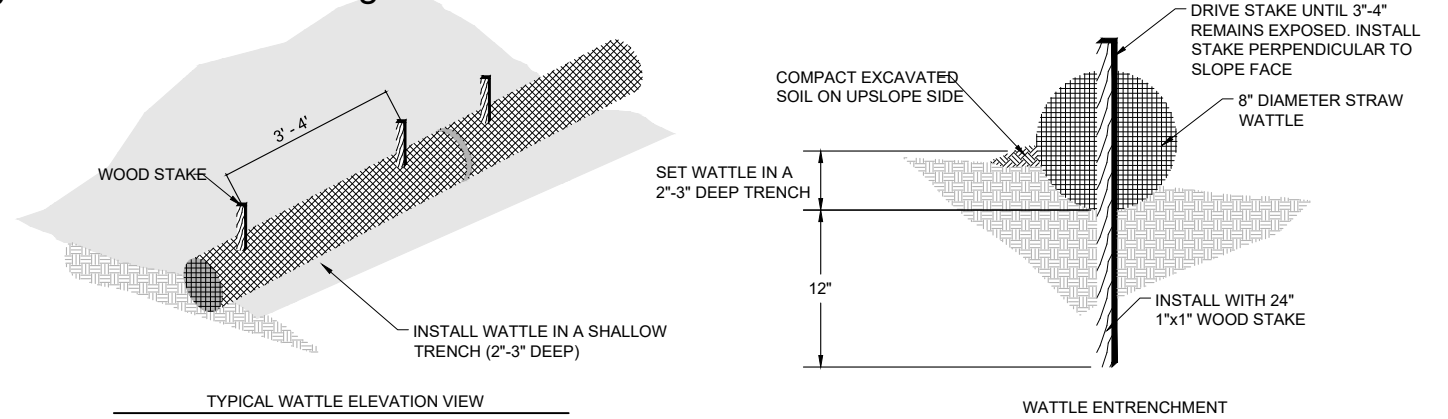


1 SILT FENCE DETAIL
C301 SCALE: NTS



- NOTES:
1. MAINTENANCE OF TEMPORARY ROCK ACCESS SHALL INCLUDE REPLACING ROCK AS REQUIRED TO MAINTAIN AN EFFECTIVE AREA FOR SHEDDING EARTHEN MATERIAL FROM CONSTRUCTION EQUIPMENT AND PREVENTING MATERIAL FROM GETTING TRACKED ON TO DELTA DRIVE.
 2. CLEAN AND REMOVE ALL TRACKED MATERIAL (MUD, SILT, DEBRIS, ETC.) OFF OF THE PROJECT SITE DAILY AND DISPOSE OF MATERIAL AT AN APPROVED DISPOSAL LOCATION.
 3. TEMPORARY ROCK ACCESS APPROACHES SHALL BE INSTALLED AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN OR AS DIRECTED BY THE ENGINEER.

3 TEMPORARY ROCK ACCESS
C301 SCALE: NTS



- WATTLE NOTES:
1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2'-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
 2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT EACH OTHER.
 3. SECURE THE WATTLE WITH 24" STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 3-4" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.

2 STRAW WATTLE IN GROUND DETAIL
C301 SCALE: NTS

- EROSION AND SEDIMENT CONTROL NOTES:
1. EROSION AND SEDIMENT CONTROL PLANS (E.S.C.P.) SHOWN ARE INTENDED AS A MINIMUM LEVEL OF EROSION CONTROL ONLY. THE E.S.C.P. IS TO BE USED BY THE CONTRACTOR TO DEVELOP A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP). ALL SEDIMENTATION FROM ON SITE DRAINAGE AND GRADING SHALL BE CONTAINED ON SITE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGE TO ADJACENT PROPERTIES AND STREAMS FROM CONSTRUCTION RELATED EROSION AND SILTATION DURING THE COURSE OF WORK. ANY DAMAGE RESULTING FROM SUCH EROSION AND SILTATION SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
 2. ALL EROSION CONTROL/SEDIMENTATION CONTROL BARRIERS SHALL BE IN PLACE PRIOR TO COMMENCING EXCAVATION OR FILLING OPERATIONS.
 3. TEMPORARY EROSION CONTROL SYSTEM WILL NOT BE REMOVED UNTIL GERMINATION OF SEEDING AND NO EROSION/SEDIMENT PROBLEMS EXIST.
 4. COLLECTED SEDIMENT WILL BE DISPOSED OF OFF SITE AT AN EXISTING APPROVED DUMPSITE. COLLECTED SEDIMENT MAY NOT BE USED AS EMBANKMENT.
 5. DEWATERING OF WORK AREAS BY PUMPING SHALL BE IMPLEMENTED TO REDUCE THE PROJECTS WATER QUALITY IMPACTS. THE PUMP DISCHARGE NEEDS TO BE FILTERED THROUGH SEDIMENT CONTROL DEVICES SUCH AS "DIRTBAG" OR SEDIMENT CONTROL STRUCTURES BEFORE IT CAN ENTER FISH HABITATS AT ANY POINT.
 6. CONTRACTOR SHALL KEEP CLEAN AND DISPOSE OF ALL EARTHEN MATERIAL TRACKED ONTO DELTA DRIVE. THIS SHALL INCLUDE SWEEPING WITH POWER BROOM, VACUUMING AND WATERING ON A DAILY BASIS DURING HAULING ACTIVITY OR MORE FREQUENTLY AS DIRECTED BY THE ENGINEER.



TECHNICAL MEMORANDUM

Client #	Bicknell Inc.	Date	10/2/2020
PDC #	20098JN	Prepared by	Sean Kelly, EIT
Project Name	Delta Drive Subdivision	Reviewed by	Mark Pusich, PE
Subject	Delta Drive Subdivision – Water Main Branch Sizing Memo		

Topic	Discussion
Introduction	Bicknell Inc. is the owner of Delta Drive subdivision and is proposing the replacement of a water main servicing the subdivisions lots. The subdivision includes 15 lots, 14 of which will have single family structures installed on the lots. The proposed water main installation will involve connecting a water submain off of the new 8" HDPE water line.
Existing Conditions	The existing subdivision includes 10 modular homes on concrete foundations with buildings previously removed. The inner island of the subdivision has four lots that have been recently cleared. The existing homes were served with ¾" water lines from the 2" main.
Peak Design Flow	The Delta Drive Subdivision is not a new development and is residential, so the flow design is straight forward. Testing data from the CBJ fire hydrant located at the cul-de-sac entrance of the subdivision was provided by the CBJ Water Department. Fixture count and pipe sizes were determined with the 2012 Uniform Plumbing Code, IAPMO/ANSI UPC1-2012.
Assumptions	For the design of the water main servicing the Delta Drive Subdivision several assumptions were made. The following are the assumptions made for this design: • Each home has two bathrooms which include shower with tub, sink and toilet. • Each home has a washing machine. • Each home has one hose bib. • Each home has a kitchen sink.
Fixture Count & Pipe Sizing	From the 2012 Uniform Plumbing Code, the following fixture counts (FC) were obtained from table 610.3 (attached) for private units:

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Technical Memo
October 1, 2020
Page 2

Topic	Discussion
	• Lavatory (x2) – 2.0 FC • Water Closet, 1.6 GPF Gravity Tank (x2) – 5.0 FC • Bathtub or Combination Bath/Shower (x2) – 8.0 FC • Clothes Washer – 4.0 FC • Kitchen, domestic with or without dishwasher – 1.5 FC • Hose Bibb – 2.5 These fixtures bring the total fixture count per residential unit to 23 FC. The available static pressure is 64 psi, provided by CBJ, at Delta Drive fire hydrant. The longest line necessary from the tee off of the 8" line is 250'. Due to the configuration of the water main having two branches off of the 8" water main, the total fixture count is determined with seven units instead of the total 14. Total fixture count (TFC) for seven units is as follows, $TFC = \left(\frac{23 \text{ FC}}{\text{UNIT}} \right) * 7 \text{ UNITS} = 161 \text{ FC}$
Design Recommendation	Using Table 610.4 from the 2012 Uniform Plumbing Code (attached), the minimum pipe size for the water branches is two-inch pipe. It is recommended that two-inch pipe be used for the water main servicing the Delta Drive Subdivision.

TABLE 610.3
WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES³

APPLIANCES, APPURTENANCES OR FIXTURES ²	MINIMUM FIXTURE BRANCH PIPE SIZE ^{1,4} (Inches)	PRIVATE	PUBLIC	ASSEMBLY ⁵
Bathtub or Combination Bath/Shower (fill)	½	4.0	4.0	—
¾ inch Bathtub Fill Valve	¾	10.0	10.0	—
Bidet	½	1.0	—	—
Clothes Washer	½	4.0	4.0	—
Dental Unit, cuspidor	½	—	1.0	—
Dishwasher, domestic	½	1.5	1.5	—
Drinking Fountain or Water Cooler	½	0.5	0.5	0.75
Hose Bibb	½	2.5	2.5	—
Hose Bibb, each additional ⁸	½	1.0	1.0	—
Lavatory	½	1.0	1.0	1.0
Lawn Sprinkler, each head ⁵	—	1.0	1.0	—
Mobile Home, each (minimum)	—	12.0	—	—
Sinks	—	—	—	—
Bar	½	1.0	2.0	—
Clinic Faucet	½	—	3.0	—
Clinic Flushometer Valve with or without faucet	1	—	8.0	—
Kitchen, domestic with or without dishwasher	½	1.5	1.5	—
Laundry	½	1.5	1.5	—
Service or Mop Basin	½	1.5	3.0	—
Washup, each set of faucets	½	—	2.0	—
Shower, per head	½	2.0	2.0	—
Urinal, 1.0 GPF Flushometer Valve	¾	See Footnote ⁷		—
Urinal, greater than 1.0 GPF Flushometer Valve	¾	See Footnote ⁷		—
Urinal, flush tank	½	2.0	2.0	3.0
Wash Fountain, circular spray	¾	—	4.0	—
Water Closet, 1.6 GPF Gravity Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve	1	See Footnote ⁷		—
Water Closet, greater than 1.6 GPF Gravity Tank	½	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve	1	See Footnote ⁷		—

For SI units: 1 inch = 25 mm

Notes:

¹ Size of the cold branch pipe, or both the hot and cold branch pipes.

² Appliances, appurtenances, or fixtures not referenced in this table shall be permitted to be sized by reference to fixtures having a similar flow rate and frequency of use.

³ The listed fixture unit values represent their load on the cold water building supply. The separate cold water and hot water fixture unit value for fixtures having both hot and cold water connections shall be permitted to be each taken as three-quarter of the listed total value of the fixture.

⁴ The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.

⁵ For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (gpm) (L/s), and add it separately to the demand in gpm (L/s) for the distribution system or portions thereof.

⁶ Assembly [Public Use (See Table 422.1)].

⁷ Where sizing flushometer systems, see Section 610.10.

⁸ Reduced fixture unit loading for additional hose bibbs is to be used where sizing total building demand and for pipe sizing where more than one hose bibb is supplied by a segment of water distribution pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.

TABLE 610.4
FIXTURE UNIT TABLE FOR DETERMINING WATER PIPE AND METER SIZES

METER AND STREET SERVICE (Inches)	BUILDING SUPPLY AND BRANCHES (Inches)	MAXIMUM ALLOWABLE LENGTH (feet)														
		40	60	80	100'	150	200	250	300	400	500	600	700	800	900	1000
PRESSURE RANGE - 30 to 45 psi ¹																
3/4	1/2 ²	6	5	4	3	2	1	1	1	0	0	0	0	0	0	0
3/4	3/4	16	16	14	12	9	6	5	5	4	4	3	2	2	2	1
3/4	1	29	25	23	21	17	15	13	12	10	8	6	6	6	6	6
1	1	36	31	27	25	20	17	15	13	12	10	8	6	6	6	6
3/4	1 1/4	36	33	31	28	24	23	21	19	17	16	13	12	12	11	11
1	1 1/4	54	47	42	38	32	28	25	23	19	17	14	12	12	11	11
1 1/2	1 1/4	78	68	57	48	38	32	28	25	21	18	15	12	12	11	11
1	1 1/2	85	84	79	65	56	48	43	38	32	28	26	22	21	20	20
1 1/2	1 1/2	150	124	105	91	70	57	49	45	36	31	26	23	21	20	20
2	1 1/2	151	129	129	110	80	64	53	46	38	32	27	23	21	20	20
1	2	85	85	85	85	85	85	82	80	66	61	57	52	49	46	43
1 1/2	2	220	205	190	176	155	138	127	120	104	85	70	61	57	54	51
2	2	370	327	292	265	217	185	164	147	124	96	70	61	57	54	51
2	2 1/2	445	418	390	370	330	300	280	265	240	220	198	175	158	143	133
PRESSURE RANGE - 46 to 60 psi ¹																
3/4	1/2 ²	7	7	6	5	4	3	2	2	1	1	1	0	0	0	0
3/4	3/4	20	20	19	17	14	11	9	8	6	5	4	4	3	3	3
3/4	1	39	39	36	33	28	23	21	19	17	14	12	10	9	8	8
1	1	39	39	39	36	30	25	23	20	18	15	12	10	9	8	8
3/4	1 1/4	39	39	39	39	39	39	34	32	27	25	22	19	19	17	16
1	1 1/4	78	78	76	67	52	44	39	36	30	27	24	20	19	17	16
1 1/2	1 1/4	78	78	78	78	66	52	44	39	33	29	24	20	19	17	16
1	1 1/2	85	85	85	85	85	85	80	67	55	49	41	37	34	32	30
1 1/2	1 1/2	151	151	151	151	128	105	90	78	62	52	42	38	35	32	30
2	1 1/2	151	151	151	151	150	117	98	84	67	55	42	38	35	32	30
1	2	85	85	85	85	85	85	85	85	85	85	85	85	85	83	80
1 1/2	2	370	370	340	318	272	240	220	198	170	150	135	123	110	102	94
2	2	370	370	370	370	368	318	280	250	205	165	142	123	110	102	94
2	2 1/2	654	640	610	580	535	500	470	440	400	365	335	315	285	267	250
PRESSURE RANGE - Over 60 psi ¹																
3/4	1/2 ²	7	7	7	6	5	4	3	3	2	1	1	1	1	1	0
3/4	3/4	20	20	20	20	17	13	11	10	8	7	6	6	5	4	4
3/4	1	39	39	39	39	35	30	27	24	21	17	14	13	12	12	11
1	1	39	39	39	39	38	32	29	26	22	18	14	13	12	12	11
3/4	1 1/4	39	39	39	39	39	39	39	39	34	28	26	25	23	22	21
1	1 1/4	78	78	78	78	74	62	53	47	39	31	26	25	23	22	21
1 1/2	1 1/4	78	78	78	78	78	74	65	54	43	34	26	25	23	22	21
1	1 1/2	85	85	85	85	85	85	85	85	81	64	51	48	46	43	40
1 1/2	1 1/2	151	151	151	151	151	151	130	113	88	73	51	51	46	43	40
2	1 1/2	151	151	151	151	151	151	142	122	98	82	64	51	46	43	40
1	2	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
1 1/2	2	370	370	370	370	360	335	305	282	244	212	187	172	153	141	129
2	2	370	370	370	370	370	370	370	340	288	245	204	172	153	141	129
2	2 1/2	654	654	654	654	654	650	610	570	510	460	430	404	380	356	329

For SI units: 1 inch = 25 mm, 1 foot = 304.8 mm, 1 pound-force per square inch = 6.8947 kPa

Notes:

¹ Available static pressure after head loss.

² Building supply, not less than 3/4 of an inch (20 mm) nominal size.

From: Loni VanKirk <Loni.VanKirk@juneau.org>
Sent: Monday, September 28, 2020 8:18 AM
To: Kevin Puustinen <KevinPuustinen@pdceng.com>
Subject: RE: Hydrant Test Data - Delta Drive

CAUTION: This email originated from outside of the organization. Exercise caution when viewing attachments, clicking links, or responding to requests.

ACROSS FROM 4045 DELTA		MUELLER	WET	64	1110/48	8/13/2019
DR.						

Kevin,

Here is the Data you requested.

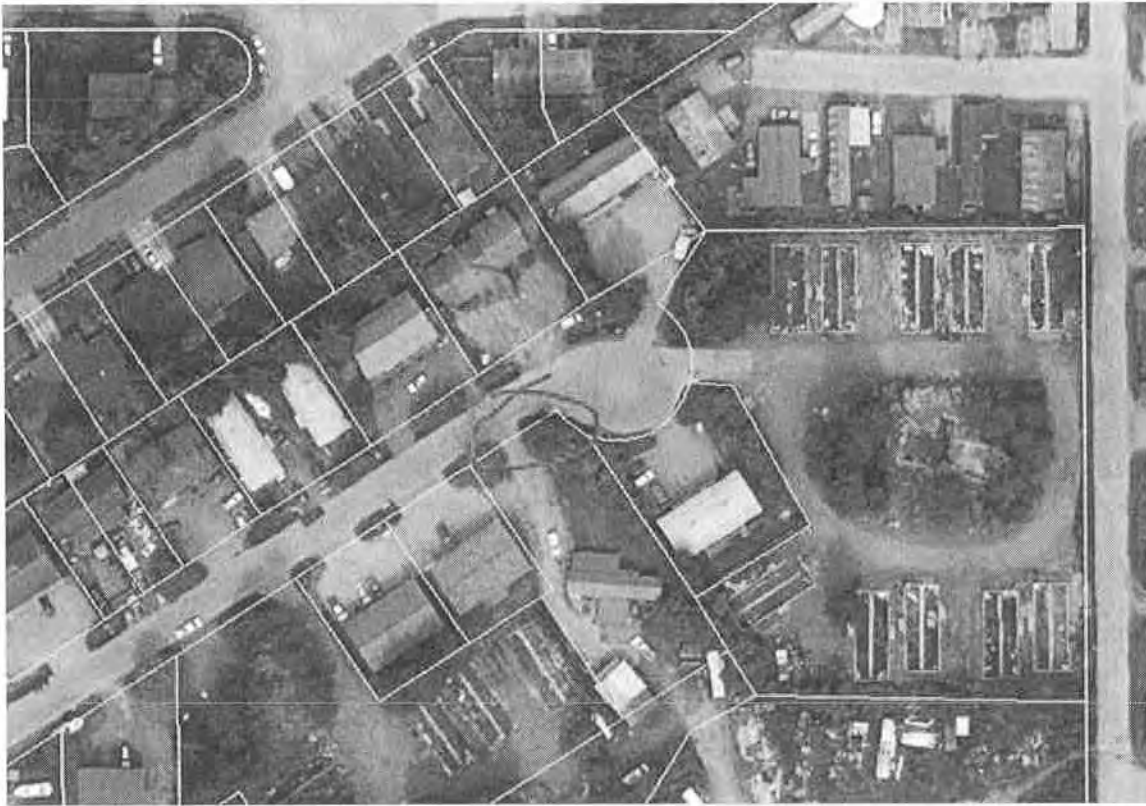
Static PSI Flow/residual PSI

Loni Van Kirk
Distribution Senior Operator
CBJ Water Utility
907-723-4975

From: Kevin Puustinen <KevinPuustinen@pdceng.com>
Sent: Wednesday, September 23, 2020 10:06 AM
To: Loni VanKirk <Loni.VanKirk@juneau.org>
Subject: Hydrant Test Data - Delta Drive

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

Hi Loni – Can you please send me your most recent test data for the hydrant in the cul-de-sac on Delta Drive?



Thanks,

Kevin Puustinen, PE
Civil Engineer

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DRAINAGE REPORT FOR DELTA DRIVE SUBDIVISION JUNEAU, ALASKA

Prepared For:

Bicknell Development

2275 Brandy Lane, Suite 1
Juneau, AK 99801

Prepared By:

PDC Engineers

9109 Mendenhall Mall Road Suite 4
Juneau, AK 99801

Date: November 20, 2020
PDC Project No. 20098JN

1.0 PROJECT OVERVIEW

1.1 Project Description

Bicknell Inc., is proposing to redevelop an existing residential property. The project is located off the cul-de-sac at the end of Delta Drive. The property previously had 10 double wide mobile homes and a structure in the center of the property. The mobile homes and the center structure have been removed and the mobile home concrete foundations remain. The property has been divided into 15 lots. Lot 1 is the parent lot, lots 2 through 6 make up the northern lots. The center of the property has been divided into four lots to create lots 7 through 10. Lots 11 through 15 make up the southern lots.

1.2 Project Duration

The developer (Bicknell) will begin construction in the spring of 2021. The subdivision development is anticipated to occur over a period of approximately 3 months.

2.0 SOIL INFORMATION

Soil conditions present in the project area consists of a vegetated surface layer underlain by a soil matrix of sand, gravels and silt material. The ground water is located approximately 3 feet below the surface as confirmed by excavated test pits. The project area is fairly flat.

3.0 STORM WATER SYSTEM

Currently drainage leaves the site through a 12" CMP culvert located at the end of Delta Drive on the northeast side of the cul-de-sac.

The storm water system along Delta Drive has been proposed to be upgraded per CBJ Contract BE21-028 "Delta Drive Reconstruction." Work is scheduled for spring/summer 2021. For the purpose of this report, the proposed culverts for Delta Drive Reconstruction were used for the analysis of the Delta Drive Subdivision project site.

Drainage from the proposed Delta Drive Subdivision project site will be discharged into the Delta Drive storm water system at three locations, the 12" CPP ditch culvert (Pipe P-1) on the northeast side of the Delta Drive cul-de-sac, the 12" CPP culvert (Pipe P-3) at the area drain on the southeast side of the cul-de-sac, and a 12" CPP ditch culvert (Pipe P-4) located on the southwestern side of the cul-de-sac where it meets the 10' drainage easement.

A drainage swale along the northern perimeter of the proposed project area will be

graded at 1.0% from the east to the west to then discharge in to Pipe P-1 at the northeast side of the Delta Drive cul-de-sac. Drainage from the swale around lots 7 through 10 will drain into a Type III catch basin where it will then flow through a 12" CPP pipe (Pipe P-2) to a ditch where it will leave the site through Pipe P-1 at the northeast side of the Delta Drive cul-de-sac.

A drainage swale along the southern perimeter of the proposed project area will be graded at 1.0% from east to west to an underdrain that runs along a 10' drainage easement to Pipe P-4 at the southwestern side of the Delta Drive cul-de-sac.

All of the discharge from the site would then meet at a catch basin on Delta Drive where it will be discharge through an 18" CPP culvert (Pipe P-5) to continue through the storm system.

Storm drain structures and piping would follow CBJ Standard Specifications and Standard Drawings for the development.

3.0 SITE RUNOFF CALCULATION METHOD:

A total of four catchment areas were analyzed representing the existing and proposed drainage conveyance systems relevant to the project. The catchment areas include: The existing 12" CPP culvert (Pipe P-1) that is located at the northeastern side of the Delta Drive cul-de-sac, the proposed 12" CPP culvert (Pipe P-2) that is located on the project site near the entrance to the subdivision, the existing 12" CPP culvert (Pipe P-3) that is located on the southeastern edge of the cul-de-sac, and the existing 12" CPP culvert (Pipe P-4) at the southwestern end of the cul-de-sac.

The catchment areas were determined using the proposed design model. A delineation of the areas can be found in Appendix A.

To calculate the site runoff we have elected to use the Rational Method. The Rational Method is most appropriate for evaluating drainage basins less than 10 acres. Appendix D of the "2010 CBJ Manual of Storm Water Best Management Practices" was utilized as a guide. The calculations and supporting documentation can be found in Appendix B, C, D & E of this report.

3.1 Anticipated Site Runoff (Q):

Using the Rational Method, the amount of stormwater runoff during the 25-year storm event per catchment area was determined. See Table 1.1 for results, the calculations can be found in Appendix B.

Table 1.1 Anticipated Site Runoff (Q):	
Catchment Area	Q (cfs)
Pipe P-1	1.03
Pipe P-2	0.94
Pipe P-3	0.42
Pipe P-4	0.74

3.2 Conveyance/Discharge Structure Capacities:

The capacity of the existing and proposed drainage systems was calculated using the Manning's Equation to determine if proposed 25-year storm even flows could be conveyed. See Table 1.2 below for results, calculations can be found in Appendix B.

Table 1.2 Conveyance/Discharge Structure Capacities:	
Catchment Area	Q (cfs)
Pipe P-1	2.57
Pipe P-2	2.34
Pipe P-3	2.59
Pipe P-4	14.51
Pipe P-5	6.16

Summary

Table 1.3 below compares anticipated 25-year runoff in the proposed and existing conveyance systems to their available hydraulic capacity.

Table 1.3 Comparison			
Drainage Basin	Anticipated Runoff Q (cfs)	Capacity Check	Available Capacity Q (cfs)
Pipe P-1	1.12	<	2.57
Pipe P-2	0.94	<	2.34
Pipe P-3	0.42	<	2.59
Pipe P-4	0.74	<	14.51
Pipe P-5	3.13	<	6.16

In summary our analysis shows that there is enough capacity in the existing and proposed drainage structures to handle flows from the altered drainage patterns as a result of the proposed Delta Drive Subdivision improvements.

Delta Drive Subdivision
Juneau, Alaska



11/20/2020

J. Mark Pusich, P.E.
Principal Civil Engineer
PDC Engineers

Appendices:

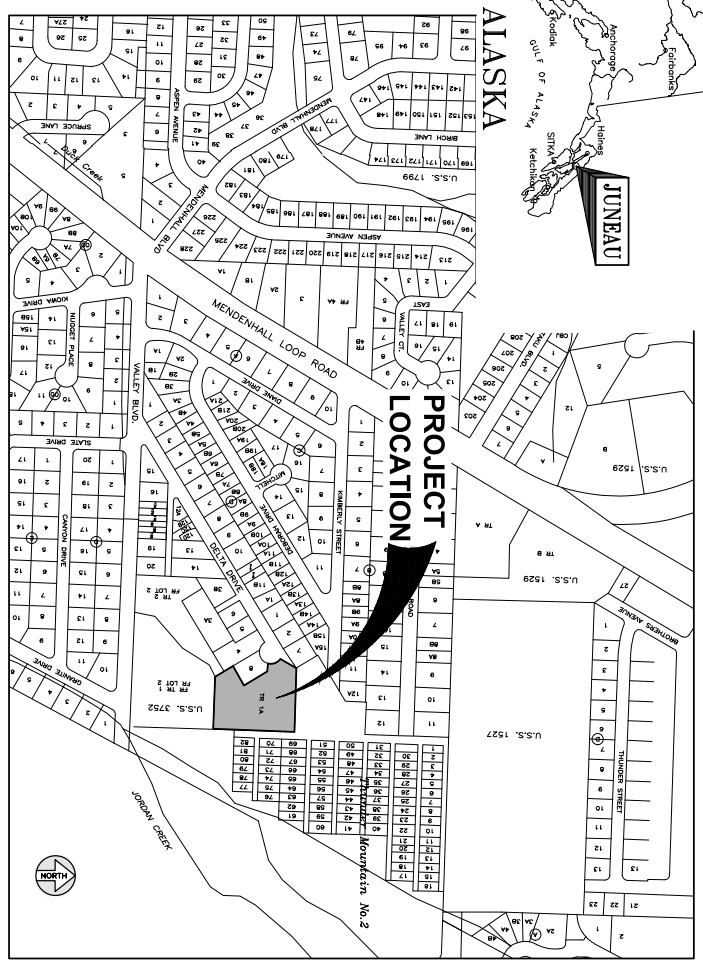
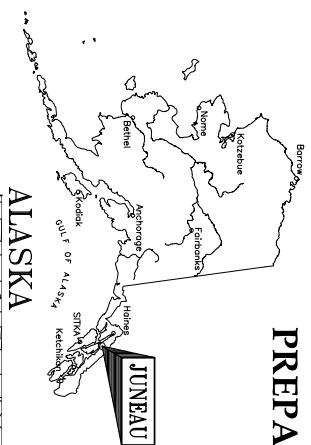
- A – Catchment Areas
- B – Rational Method
- C – Runoff Coefficient
- D – Time of Concentration
- E – Rainfall Intensity
- F – Existing & Proposed

Appendix A

Catchment Areas

DELTA DRIVE SUBDIVISION CONSTRUCTION IMPROVEMENT PLAN DRAINAGE MAP

JUNEAU, ALASKA
PREPARED FOR BICKNELL, INC.



SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	P-1 EXISTING 12" CPP CULVERT
3	P-2 PROPOSED 12" CPP CULVERT
4	P-3 EXISTING 12" CPP CULVERT
5	P-4 EXISTING 12" CPP CULVERT

DESIGN XXX	DATE MAY 20, 2020
DRAWN XXX	PROJECT NO. 200983LN
CHECK JLP	
APPROVED JLP	
DATE MAY 20, 2020	
REGION JUNEAU, AK	
BR PENDING	
DELTA DRIVE SUBDIVISION	
JUNEAU, AK	
PDC ENGINEERS	
PLAN & DESIGN CONSULTANTS	
4000 Mendenhall Loop Rd. Ste. 4, Juneau, AK 99801	
907.778.0000 A E C A O S	
COVER SHEET	
SHEET 1	

DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
FILE	

NO. DATE	REVISION	BY	DATE

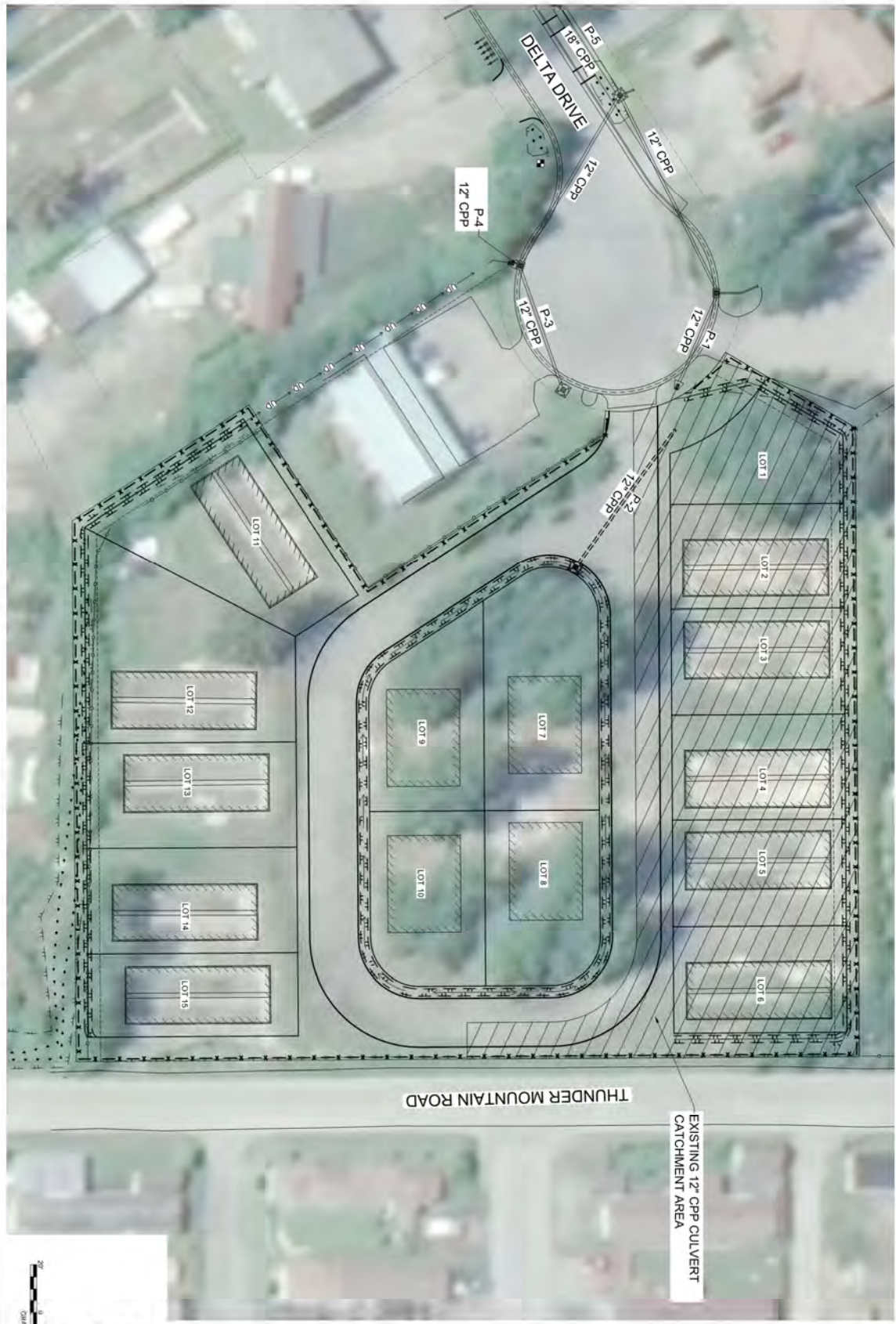
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SUBDIVISION**
JUNEAU, AK

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907.730.6000 | A E C C O R S

**P-1: EXISTING 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020	REV: No. 2020.04.14
SHEET	2



DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
DATE	

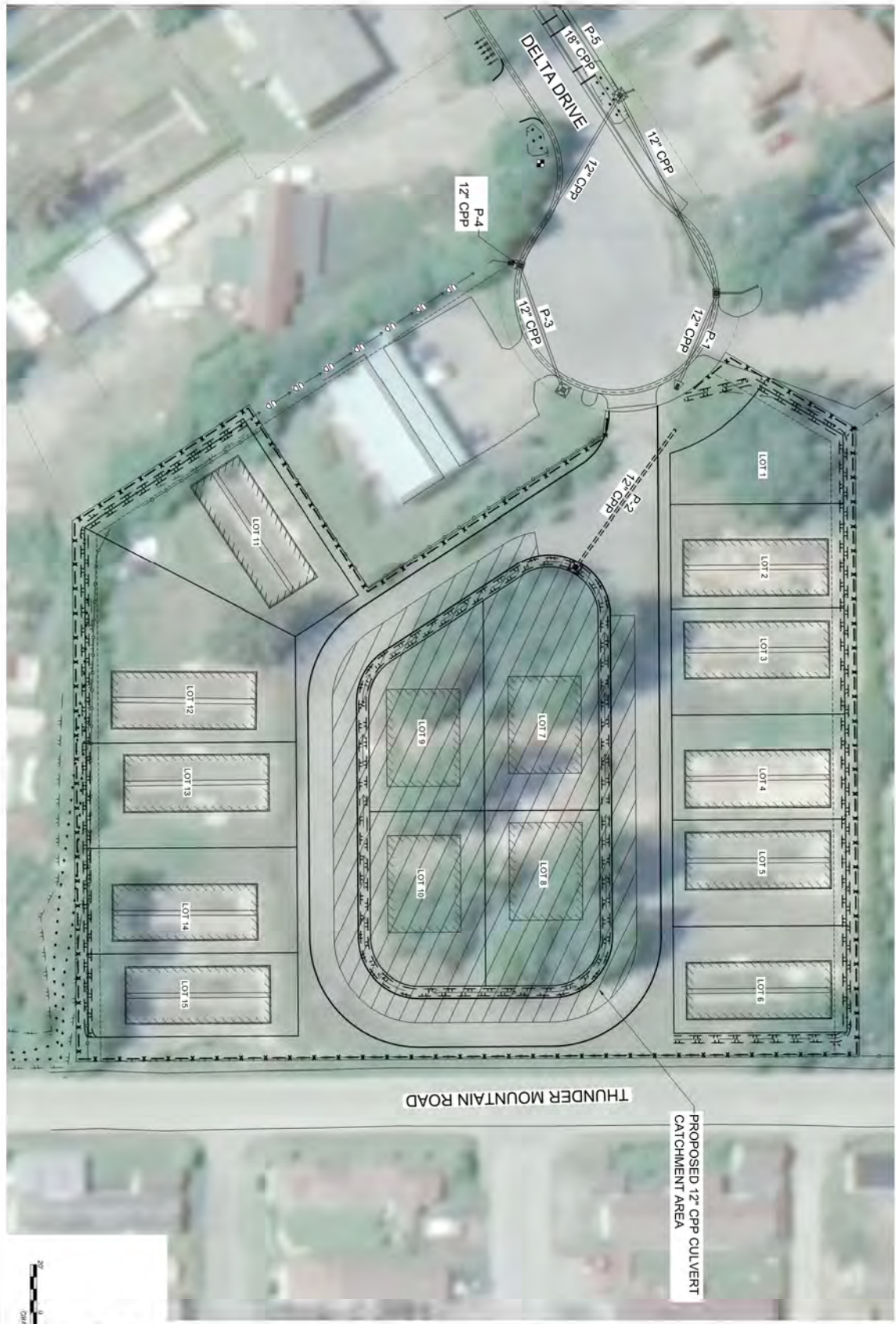
NO. DATE	REVISION	BY	DATE

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**P-2: PROPOSED 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020	PROJECT: 2020SLN
SHEET	
3	



DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
FILE	

NO. DATE	REVISION	BY	DATE

**DELTA DRIVE
SUBDIVISION**
JUNEAU, AK

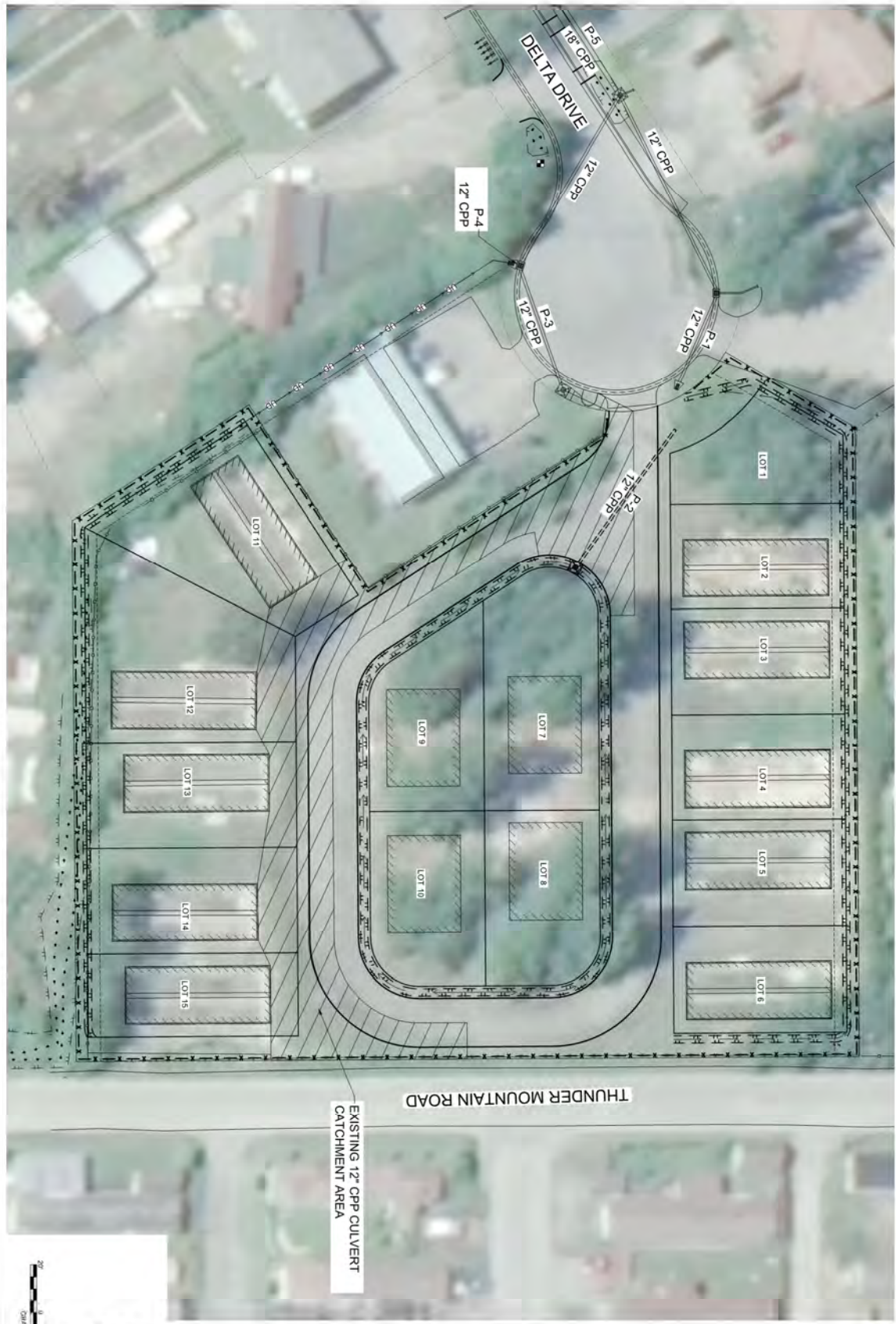
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**P-3: EXISTING 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020
PROJECT: 20190601
SHEET
4



DESIGN	XXX
DRAWN	XXX
CHECK	JMP
APPROVED	JMP
FILE	

NO. DATE	REVISION	BY	DATE

**DELTA DRIVE
SUBDIVISION**
JUNEAU, AK

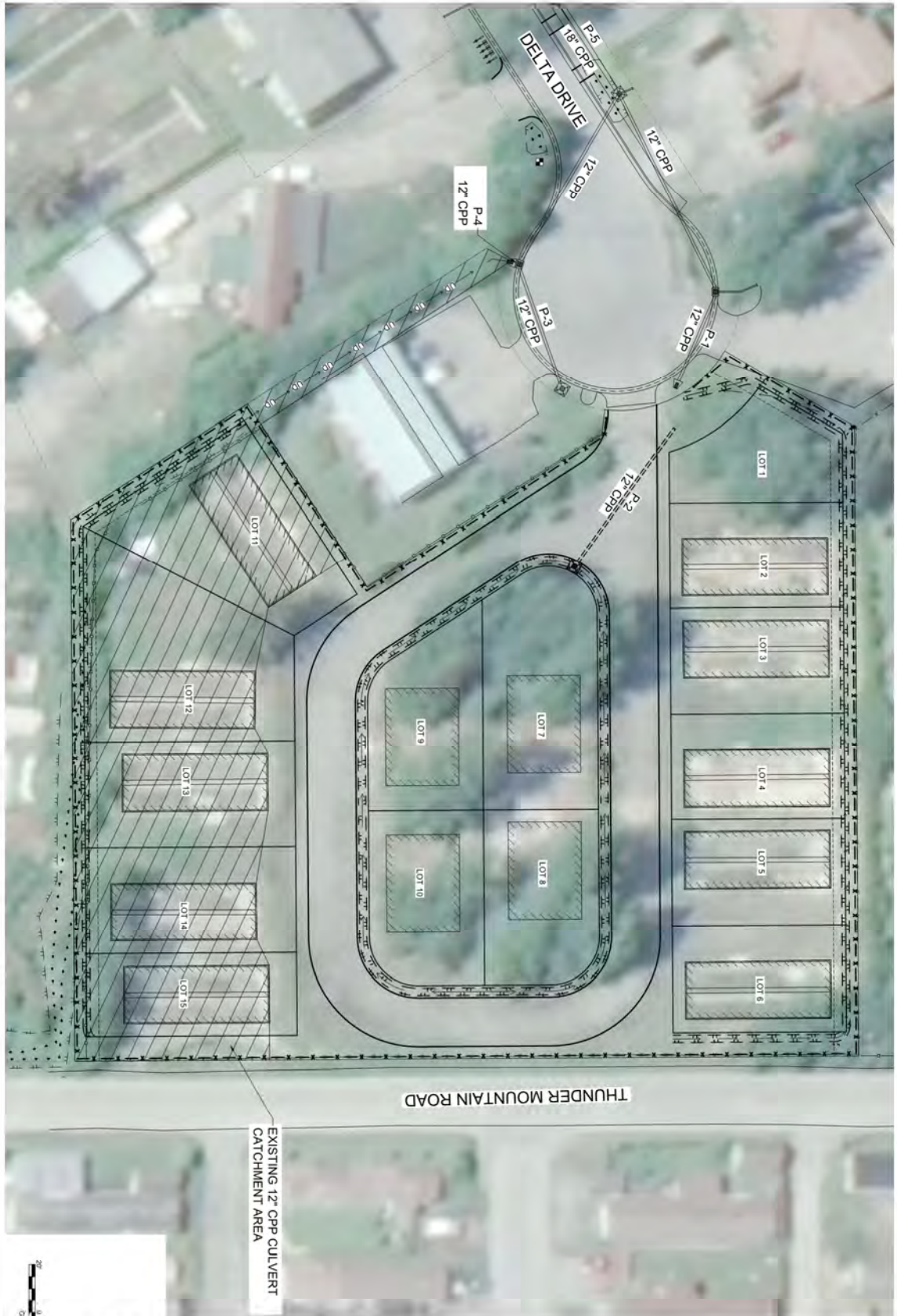
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**P-4: EXISTING 12" CPP
CULVERT CATCHMENT AREA**

DATE: May 20, 2020
PROJECT: 20190601
SHEET: 5



Appendix B

Rational Method

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-1: Existing 12" CPP		
Project:	Delta Drive Subdivision	
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)
C = runoff coefficient
I = rainfall intensity (inches per hour)
A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient
 $C_{1,2}$ = runoff coefficient for each area land cover type
 A_t = total area (acres)
 $A_{1,2}$ = areas of land cover (acres)
 $C_c = 0.84$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)
 $T_{1,2}$ = travel time across separate flow path segments (min)
 $T_c = 13.10$ min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)
 L = the distance of flow across a given segment (feet)
 $V = k_r\sqrt{S_0}$ = average velocity $\left(\frac{\text{feet}}{\text{sec}}\right)$ across land cover
 k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)
 S_0 = slope of flow path $\left(\frac{\text{feet}}{\text{feet}}\right)$

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 13.10 (min)	25-year
Interpolated Intensity (in/hr)=	2.03

Pipe P-1 is an existing 12" CPP culvert on the northeast side of the Delta Drive cul-de-sac that drains into the Delta Drive storm system at the location where the new subdivision access will tie into the shoulder of the cul-de-sac. The area that is proposed to contribute runoff to this culvert was delineated in AutoCAD.

$$A = 26270 \text{ sqft} / 43,560 = 0.60 \text{ acres}$$

	C_c	I	A		
Q (cfs)=	0.84	2.03	0.60	=	1.03

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-2: Proposed 12" CPP		
Project:	Delta Drive Subdivision	 PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mendota Hill Mall Rd. Ste. 4, Juneau, AK 99801 907.780.6060 A E C C 6 0 5
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)
C = runoff coefficient
I = rainfall intensity (inches per hour)
A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient
 $C_{1,2}$ = runoff coefficient for each area land cover type
 A_t = total area (acres)
 $A_{1,2}$ = areas of land cover (acres)
 $C_c = 0.84$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)
 $T_{1,2}$ = travel time across separate flow path segments (min)
 $T_c = 11.27$ min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)
 L = the distance of flow across a given segment (feet)
 $V = k_r\sqrt{S_0}$ = average velocity $\left(\frac{\text{feet}}{\text{sec}}\right)$ across land cover
 k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)
 S_0 = slope of flow path $\left(\frac{\text{feet}}{\text{feet}}\right)$

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 11.27 (min)	25-year
Interpolated Intensity (in/hr)=	2.22

P-2 is a proposed 12" CPP pipe is being installed to maintain the runoff from part of the subdivision access road and from proposed lots 7 through 10. Runoff will be carried down to a ditch where it will then flow into pipe P-1 and discharge into the Delta Drive storm system. The area that is proposed to contribute runoff to this culvert was delineated in AutoCAD.

$$A = 21,736 \text{ sqft} / 43,560 = 0.50 \text{ acres}$$

Q (cfs)=	C_c	I	A	=	0.94
	0.84	2.22	0.50		

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-3: Existing 12" CPP		
Project:	Delta Drive Subdivision	 PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801 907.780.0000 AEC605
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)

C = runoff coefficient

I = rainfall intensity (inches per hour)

A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient

$C_{1,2}$ = runoff coefficient for each area land cover type

A_t = total area (acres)

$A_{1,2}$ = areas of land cover (acres)

C_c = 0.85, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)

$T_{1,2}$ = travel time across separate flow path segments (min)

T_c = 12.93 min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)

L = the distance of flow across a given segment (feet)

$V = k_r\sqrt{S_0}$ = average velocity ($\frac{\text{feet}}{\text{sec}}$) across land cover

k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)

S_0 = slope of flow path ($\frac{\text{feet}}{\text{feet}}$)

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 12.93 (min)	25-year
Interpolated Intensity (in/hr)=	2.05

Pipe P-3 is an existing 12" CPP culvert on the southeast side of the Delta Drive cul-de-sac that drains into the Delta Drive ditch system that is near the location where the new subdivision access will tie into the shoulder of the cul-de-sac. Runoff will flow into the area drain and catch basin before flowing through the culvert. The area that is proposed to contribute runoff to this culvert was delineated in AutoCAD.

$$A = 10,626 \text{ sqft} / 43,560 = 0.24 \text{ acres}$$

	C_c	I	A		
Q (cfs)=	0.85	2.05	0.24	=	0.42

Delta Drive Subdivision
Juneau, Alaska

Rational Method Site Runoff Pipe P-4: Existing 12" CPP		
Project:	Delta Drive Subdivision	 PDC ENGINEERS PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mendonhall Mall Rd, Ste. 4, Juneau, AK 99801 907.780.6060 AEC605
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

$$Q = CIA$$

Q = peak flow in cubic feet per second (cfs)

C = runoff coefficient

I = rainfall intensity (inches per hour)

A = catchment area (acres)

$$C_c = (C_1A_1 + C_2A_2)/A_t$$

C_c = composite runoff coefficient

$C_{1,2}$ = runoff coefficient for each area land cover type

A_t = total area (acres)

$A_{1,2}$ = areas of land cover (acres)

$C_c = 0.83$, see Appendix C for calculation

$$T_c = T_1 + T_2 + \dots + T_n$$

T_c = time of concentration (min)

$T_{1,2}$ = travel time across separate flow path segments (min)

$T_c = 16.60$ min, see Appendix D for calculation

$$T_t = L/60V$$

T_t = travel time (min)

L = the distance of flow across a given segment (feet)

$V = k_r\sqrt{S_0}$ = average velocity ($\frac{\text{feet}}{\text{sec}}$) across land cover

k_r = time of concentration velocity factor (CBJ Manual of Storm Water BMP 2010, Table D - 5, PG. D - 10)

S_0 = slope of flow path ($\frac{\text{feet}}{\text{feet}}$)

Per CBJ Manual of Storm Water BMP 2010, Table 5-1, page 5-1, design event frequencies are specified. For driveway culvert, a 25-year storm event is the required design return period. We will base our analysis on a 25-year design return period for all drainage structures and catchment areas. Per CBJ Manual of Storm Water BMP 2010, page D-9, basins with a time and concentration 10 minutes or less shall use the 10 minute intensity. Basins with a time of concentration greater than 10 minutes and less than 30 minutes shall interpolate between the 10 and 30 minute values. Rainfall intensity for the site was sourced from the NOAA Atlas 14, Point Precipitation Frequency Estimates, see Appendix E, and is summarized as follows:

	Design Return Period
Tc 16.60 (min)	25-year
Interpolated Intensity (in/hr)=	1.77

There is an existing 12" CMP culvert that drains into the existing Delta Drive drainage system at the location where the new subdivision access will tie into the end of the Delta Drive cul-de-sac. The 12" CMP culvert is proposed to be replaced with a 12" CPP culvert along with the rest of the Delta Drive storm system under CBJ Contract BE21-028 "Delta Drive Reconstruction." Work is scheduled for spring/summer 2021. The 12" CPP culvert is being installed to maintain the existing flow around the Delta Drive cul-de-sac.

$$A = 21,786 \text{ sqft} / 43,560 = 0.50 \text{ acres}$$

	C_c	I	A		
Q (cfs)=	0.83	1.77	0.50	=	0.74

Appendix C

Runoff Coefficient

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Juneau, Alaska



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Pipe P-1: Existing 12" CPP Culvert

Composite Runoff Coefficient

Pipe P-2: Proposed 12" CPP

Composite Runoff Coefficient

Packet Page 230 of 797



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Runoff Coefficient Calculations		
Project:	Delta Drive Subdivision	 PDC ENGINEERS PLAN • DESIGN • CONSTRUCT A R E S P E C T C O M P A N Y 9109 Meridenhall Mall Rd. Ste. 4, Jumeau, AK 99801 907.780.6060 A E C C 6 0 5
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

Surface Type	Location	Area (SQFT)	Total (SQFT)	Total (Acre)	% Overall Basin	Surface Runoff Coefficient	Runoff Coefficient for Each Area
Pavement	Road	5115					
			5115	0.11742424	48.14%	0.9	0.1
Gravel Area	Everywhere else	5511					
			5511	0.12651951	51.87%	0.8	0.1
		Total=	10626	0.24	100.00%		0.2
					Composite Runoff Coefficient		0.84

Surface Type	Location	Area (SQFT)	Total (SQFT)	Total (Acre)	% Overall Basin	Runoff Coefficient	Runoff Coefficient for Each Area
Pavement	Road	7037					
			7037	0.16154729	32.30%	0.9	0.1
Gravel Area	Everywhere else	14750					
			14750	0.33861341	67.70%	0.8	0.3
		Total=	21786	0.50	100.00%		0.4
					Composite Runoff Coefficient		0.83

Appendix D

Time of Concentration

Delta Drive Subdivision
Juneau, Alaska

Time of Concentration Calculations

Project:	Delta Drive Subdivision
Owner:	Bicknell Inc.
Date:	11/19/2020
Prepared By:	M. Minsch
Checked By:	M. Pusich



Pipe P-1: Existing 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	393
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	13.10

Pipe P-2: Proposed 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	338
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	11.27

Pipe P-3: Existing 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	388
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	12.93

Pipe P-4: Existing 12" CPP Culvert	
Time of Concentration	
Distance of Flow (Ft):	498
Time of concentration velocity factor:	20
Slope of Flow Path (Ft/Ft):	0.01
Velocity (Ft/Sec):	2
Time of Concentration (Min):	16.60

Appendix E

Rainfall Intensity

Delta Drive Subdivision
Juneau, Alaska

NOAA Atlas 14, Volume 7, Version 2
Location name: Juneau, Alaska, USA*
Latitude: 58.3922°, Longitude: -134.5604°
Elevation: 50.42 ft**
* source: ESRI Maps
** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Penca, Douglas Kane, Sarah Dietz, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishari Roy, Svetlana Stuefer, Amy Tidwell, Carl Trypanuk, Dale Uhrh, Michael Yokta, Erica Bettis, Geoffrey Bonnin, Sarah Heim, Lillian Hiner, Elizabeth Lilly, Jayashree Narayanan, Fenglin Yan, Tan Zhao

NOAA, National Weather Service, Silver Spring, Maryland
and
University of Alaska Fairbanks, Water and Environmental Research Center

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PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.74 (0.936-2.21)	2.03 (1.61-2.62)	2.52 (1.94-3.34)	2.94 (2.22-3.97)	3.50 (2.58-4.86)	3.95 (2.84-5.59)	4.38 (3.10-6.34)	5.05 (3.49-7.45)	5.95 (4.01-9.01)	6.62 (4.38-10.2)
10-min	1.16 (0.936-1.48)	1.36 (1.08-1.76)	1.69 (1.31-2.24)	1.97 (1.49-2.68)	2.35 (1.73-3.26)	2.65 (1.91-3.75)	2.94 (2.08-4.25)	3.40 (2.35-5.01)	4.00 (2.69-6.05)	4.45 (2.94-6.86)
15-min	0.908 (0.728-1.16)	1.06 (0.840-1.37)	1.32 (1.02-1.75)	1.54 (1.16-2.08)	1.84 (1.35-2.55)	2.06 (1.49-2.92)	2.30 (1.62-3.32)	2.65 (1.83-3.90)	3.12 (2.10-4.72)	3.47 (2.30-5.35)
30-min	0.602 (0.484-0.766)	0.704 (0.556-0.908)	0.876 (0.676-1.16)	1.02 (0.770-1.38)	1.22 (0.896-1.89)	1.37 (0.986-1.94)	1.52 (1.07-2.20)	1.76 (1.22-2.59)	2.07 (1.39-3.13)	2.30 (1.52-3.55)
60-min	0.413 (0.332-0.525)	0.482 (0.381-0.622)	0.600 (0.463-0.794)	0.699 (0.528-0.944)	0.834 (0.613-1.16)	0.939 (0.676-1.33)	1.04 (0.736-1.51)	1.20 (0.833-1.78)	1.42 (0.955-2.14)	1.58 (1.04-2.43)
2-hr	0.306 (0.246-0.390)	0.358 (0.283-0.462)	0.447 (0.345-0.592)	0.520 (0.394-0.703)	0.622 (0.457-0.862)	0.698 (0.503-0.990)	0.775 (0.547-1.12)	0.894 (0.619-1.32)	1.05 (0.710-1.59)	1.17 (0.776-1.81)
3-hr	0.270 (0.217-0.343)	0.315 (0.249-0.407)	0.394 (0.304-0.521)	0.459 (0.347-0.620)	0.548 (0.403-0.761)	0.616 (0.444-0.872)	0.683 (0.482-0.987)	0.788 (0.545-1.16)	0.927 (0.625-1.40)	1.03 (0.683-1.59)
6-hr	0.218 (0.175-0.277)	0.255 (0.201-0.328)	0.317 (0.245-0.420)	0.369 (0.279-0.498)	0.441 (0.324-0.612)	0.496 (0.357-0.703)	0.551 (0.389-0.796)	0.636 (0.440-0.938)	0.748 (0.505-1.13)	0.834 (0.552-1.29)
12-hr	0.163 (0.131-0.207)	0.190 (0.150-0.245)	0.234 (0.181-0.310)	0.271 (0.205-0.366)	0.324 (0.238-0.450)	0.368 (0.265-0.521)	0.414 (0.292-0.598)	0.478 (0.331-0.705)	0.563 (0.380-0.852)	0.627 (0.415-0.968)
24-hr	0.118 (0.107-0.131)	0.138 (0.124-0.155)	0.167 (0.147-0.192)	0.192 (0.166-0.225)	0.230 (0.194-0.275)	0.262 (0.218-0.319)	0.298 (0.243-0.369)	0.344 (0.276-0.434)	0.405 (0.317-0.522)	0.451 (0.348-0.591)
2-day	0.080 (0.073-0.089)	0.093 (0.083-0.104)	0.111 (0.098-0.128)	0.127 (0.110-0.148)	0.150 (0.127-0.180)	0.170 (0.141-0.207)	0.192 (0.156-0.237)	0.219 (0.176-0.276)	0.255 (0.200-0.329)	0.283 (0.218-0.370)
3-day	0.063 (0.058-0.070)	0.073 (0.065-0.082)	0.087 (0.076-0.100)	0.098 (0.085-0.115)	0.116 (0.098-0.138)	0.130 (0.108-0.159)	0.146 (0.119-0.181)	0.166 (0.133-0.209)	0.192 (0.151-0.248)	0.212 (0.163-0.278)
4-day	0.054 (0.049-0.060)	0.062 (0.055-0.069)	0.073 (0.064-0.084)	0.082 (0.071-0.096)	0.096 (0.081-0.115)	0.108 (0.090-0.132)	0.121 (0.099-0.150)	0.137 (0.110-0.173)	0.158 (0.124-0.204)	0.174 (0.134-0.228)
7-day	0.040 (0.036-0.044)	0.045 (0.041-0.051)	0.053 (0.047-0.061)	0.060 (0.052-0.070)	0.070 (0.059-0.084)	0.079 (0.065-0.096)	0.088 (0.072-0.109)	0.100 (0.080-0.126)	0.116 (0.091-0.149)	0.127 (0.098-0.167)
10-day	0.033 (0.030-0.037)	0.038 (0.034-0.042)	0.044 (0.039-0.051)	0.050 (0.043-0.058)	0.058 (0.049-0.069)	0.065 (0.054-0.079)	0.073 (0.059-0.090)	0.082 (0.066-0.104)	0.095 (0.075-0.123)	0.105 (0.081-0.138)
20-day	0.025 (0.023-0.028)	0.029 (0.026-0.032)	0.034 (0.030-0.039)	0.038 (0.032-0.044)	0.043 (0.037-0.052)	0.048 (0.040-0.059)	0.053 (0.044-0.066)	0.060 (0.048-0.076)	0.068 (0.054-0.088)	0.075 (0.058-0.098)
30-day	0.022 (0.020-0.025)	0.025 (0.023-0.029)	0.030 (0.026-0.034)	0.033 (0.029-0.039)	0.038 (0.032-0.046)	0.042 (0.035-0.051)	0.046 (0.038-0.058)	0.052 (0.041-0.065)	0.058 (0.046-0.075)	0.064 (0.049-0.083)
45-day	0.020 (0.018-0.022)	0.023 (0.021-0.026)	0.027 (0.023-0.031)	0.030 (0.026-0.035)	0.034 (0.029-0.040)	0.037 (0.031-0.045)	0.041 (0.033-0.050)	0.044 (0.036-0.056)	0.050 (0.039-0.064)	0.054 (0.041-0.070)
60-day	0.018 (0.017-0.020)	0.021 (0.019-0.024)	0.024 (0.022-0.028)	0.027 (0.023-0.032)	0.031 (0.026-0.037)	0.033 (0.028-0.041)	0.036 (0.029-0.045)	0.039 (0.031-0.049)	0.042 (0.033-0.054)	0.045 (0.035-0.058)

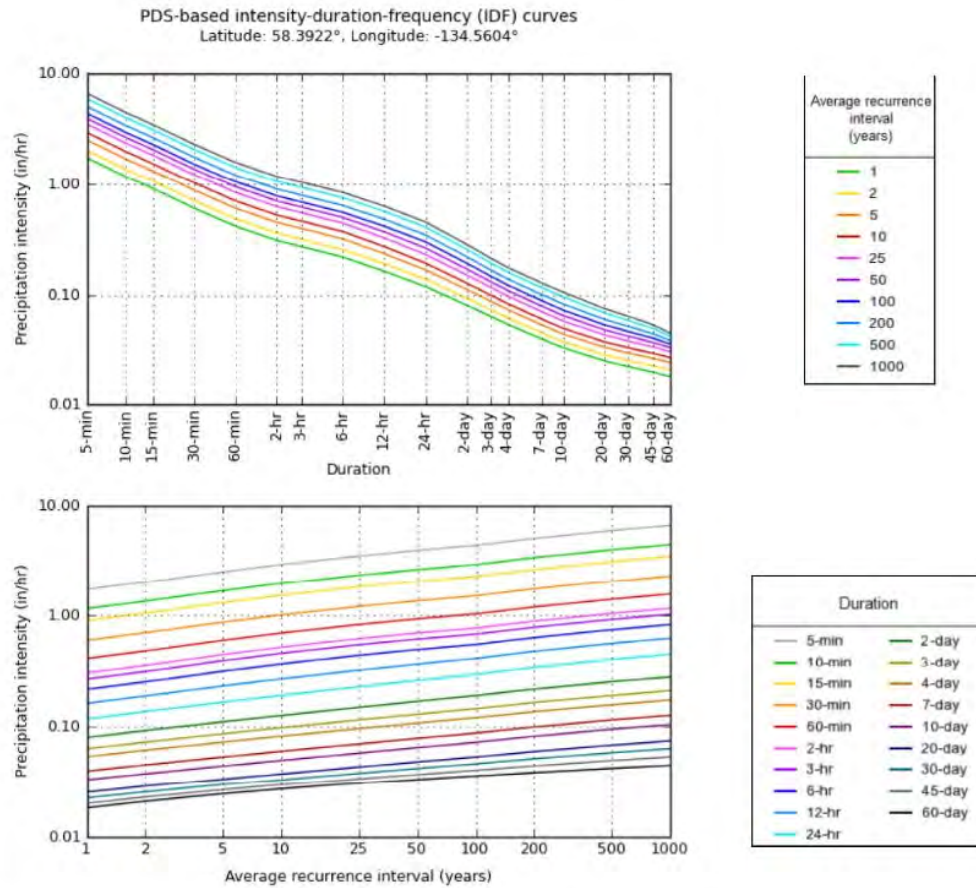
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_printpage.html?lat=58.3922&lon=-134.5604&data=intensity&units=english&series=pds

Delta Drive Subdivision
Juneau, Alaska

PF graphical



NOAA Atlas 14, Volume 7, Version 2

Created (GMT): Thu Nov 19 20:30:02 2020

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_printpage.html?lat=58.3922&lon=-134.5604&data=intensity&units=english&series=pds

Maps & aerals

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



Appendix F

Existing & Proposed Capacity Calcs

Delta Drive Subdivision
Juneau, Alaska

Discharge Capacity Calculations		
Project:	Delta Drive Subdivision	 PLAN • DESIGN • CONSTRUCT A RESPECT COMPANY 9109 Mendonhall Mall Rd, Ste. 4, Juneau, AK 99801 907.780.0000 A E C C O S
Owner:	Bicknell Inc.	
Date:	11/19/2020	
Prepared By:	M. Minsch	
Checked By:	M. Pusich	

The following equation was used to calculate the capacity of pipes P-1, P-2, P-3 and P-4 that drain into the existing Delta Drive ditch system. Capacity was also calculated for the 18" CPP culvert that will transport all of the water discharged from the proposed site into the Delta Drive storm system. The equation is from "Urban Drainage Design Manual: Hydraulic Engineering Circular No. 22, Third Edition."

$$Q = (K/n) \times A \times R^{0.67} \times S^{0.5}$$

Q= Discharge in cubic feet per second (cfs)

K = Coefficient for English units (1.486)

n = Manning's coefficient of roughness, obtained from Table 5-3, Page 5-5, of the CBJ Stormwater Manual

A = Cross sectional area in square feet

R = Hydraulic radius

S= Slope

Pipe P-1: Existing 12" CPP Culvert

Inlet Invert=95.19, Outlet Invert=94.98, Length=43', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	.25	0.006	=	2.57

Pipe P-2: Proposed 12" CPP Culvert

Inlet Invert=96.55, Outlet Invert=96.20, Length=70', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	0.25	0.005	=	2.34

Pipe P-3: Existing 12" CPP Culvert

Inlet Invert=95.21, Outlet Invert=94.88, Length=54', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	0.25	0.0061	=	2.59

Pipe P-4: Existing 12" CPP Culvert

Inlet Invert=95.84, Outlet Invert=94.88, Length=5', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S		
Q (cfs)	1.486	0.014	0.79	0.25	.1920	=	14.51

Pipe P-5: Existing 18" CPP Culvert

Inlet Invert=95.21, Outlet Invert=94.88, Length=5', n=0.014. The Manning's n value of 0.014 was determined by the pipe type (CPP-smooth interior) Table 5-3.

	k	n	A	R	S	
Q (cfs)	1.486	0.014	1.77	0.375	.004	= 14



DATE: December 12, 2020

TO: Laurel Christian, CDD

FROM: Autumn Sapp, Engineering & Public Works Department

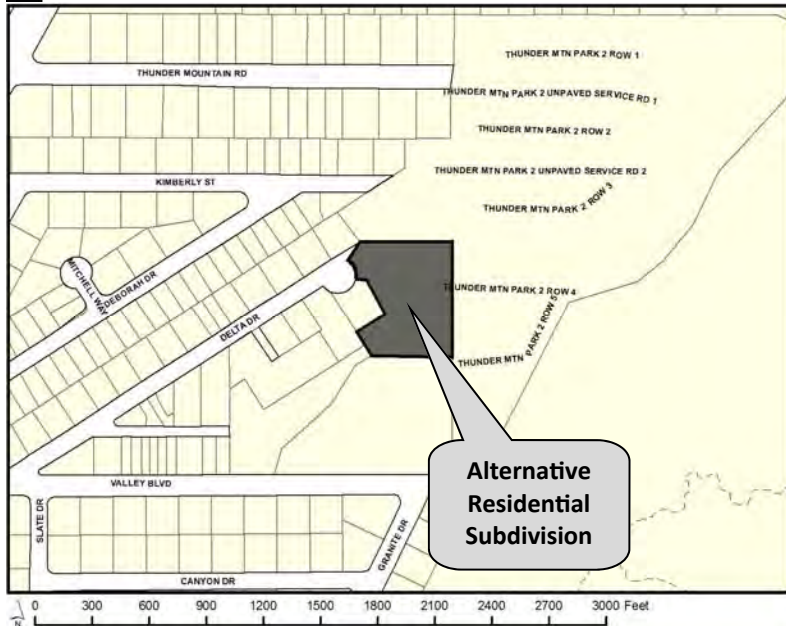
RE: SMP20200004 – Delta Drive Subdivision, Major Subdivision Engineering & Public Works Department Review

Engineering and Public Works Department has completed a preliminary review of the proposed Delta Drive Subdivision to create a total of 15 lots. The following has been determined as required by CBJ code 49.15.402(c)(4)(e):

1. The submitted drainage plan is conforms to drainage and water quality requirements. The plan is approved by Engineering.
2. The Delta Drive Subdivision will not change the current connection with Delta Drive and the existing configuration is acceptable.
3. The proposed improvements conform to the requirements of this title and can be feasibly constructed in accordance with Title 49.

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 an **Alternative Residential Subdivision** creating **15 lots** at **4090 Delta Drive** in a **D18 zone**.

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2020** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 21	Dec. 22 — noon, Jan. 11	HEARING DATE & TIME: 7:00 pm, Jan. 12, 2021	Jan. 13
Comments received during this period will be sent to the Planner, Laurel Christian , to be included as an attachment in the staff report.	Comments received during this period will be sent to Commissioners to read in preparation for the hearing.	This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: https://juneau.zoom.us/j/93626358724 . The Webinar ID is: 936 2635 8724. 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.	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 December 7, 2020

Case No.: SMP2020 0004/ARP2020 0001
Parcel No.: 5B2401620011
CBJ Parcel Viewer: <http://epv.juneau.org>

Laurel Christian

From: dbloommer@bicknellinc.com
Sent: Monday, December 28, 2020 10:23 AM
To: Laurel Christian
Subject: Delta Dr Sign Posted
Attachments: Resized_20201228_092437.jpeg

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

Hi Laurel,

Here is the picture of the sign at Delta Dr. Let me know if we need to do anything else.

Thanks,
David





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: January 25, 2021
File No.: SMP2020 0004

Bicknell, Inc.
Attn: David Blommer
P.O. Box 33517
Juneau, AK 99803

Proposal: Applicant proposes an Alternative Residential Subdivision creating 15 lots
Property Address: 4090 Delta Drive
Legal Description: Thunder Mountain Park Tract 1A
Parcel Code No.: 5B2401620011
Hearing Date: January 12, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 29, 2020, and late file memorandum (provided January 12, 2021) with amendments and approved the Alternative Residential Subdivision Preliminary Plat for a 15 lot subdivision to be conducted as described in the project description and project drawings submitted with the application (and with the following conditions :)

1. Prior to approval of the final plat, Certification from the CBJ Treasurer is required 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 for review by the Director of Engineering & Public Works for compliance with CBJ 49.35.140;

Bicknell, Inc.
 File No.: SMP2020 0004
 January 25, 2021
 Page 2 of 3

3. Prior to approval of the final plat, the developer shall submit a final drainage plan to be approved by CBJ Engineering & Public Works. This drainage plan must be prepared by an Alaskan licensed engineer in accordance with CBJ 49.35.510;
4. Prior to approval of the final plat, the applicant shall submit a revised preliminary plat with the following revisions:
 - a. Add the following plat note:
 - i. ACCESS TO LOTS SHALL BE VIA ACCESS EASEMENTS SHOWN ON THIS PLAT AND IS SUBJECT TO THE REQUIREMENTS IN THE “[private common driveway access, utility, and maintenance agreement – edit title as appropriate]” RECORDED WITH THIS SUBDIVISION.
 - b. Show a five-foot perimeter buffer along the southwest lot line bordering Delta Acres Addition 1 Lot 8.
 - c. Include bearing labels for:
 - i. The eastern lot line of Lot 6
 - ii. The lot lines between lots 7 and 8 and 9 and 10
 - d. Per sheet C203, Grading Plan, a drainage easement should be added to the following locations:
 - i. Eastern side of the development in the 10-foot perimeter buffer
 - ii. Rear of Lot 11;
5. Prior to the issuance of the first temporary certificate of occupancy, the master water meter for the development shall be installed by the developer;
6. Prior to the issuance of the eleventh (11) temporary certificate of occupancy for the development, access to and within the development shall be paved.

Attachments: December 29, 2020, memorandum from Laurel Christian, Community Development, to the CBJ Planning Commission regarding ARP2020 0001; and memorandum from Jill Maclean, Director, AICP, Community Development regarding ARP2020 0001 and SMP2020 0004 provided January 12, 2021.

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

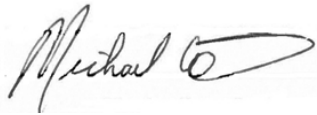
This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance to CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030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

Bicknell, Inc.
 File No.: SMP2020 0004
 January 25, 2021
 Page 3 of 3

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, January 12, 2021.

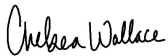
Expiration Date: The permit will expire five (5) years after the effective date, or January 12, 2026, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the subdivision permit was authorized or no final plat has been approved. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael LeVine, Chair
 Planning Commission

January 26, 2021

Date



Filed With City Clerk

January 26, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this subdivision. 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**

SMF2020 0003: Modification of plat of Pederson Hill subdivision to eliminate restrictions on driveways on
to Karl Reishus Blvd - NOT APPROVED

AGENDA ITEM:

Case No.: SMF2020 0003

Applicant: City and Borough of Juneau

Location: Pederson Hill subdivision; Karl Reishus Blvd

Proposal: Modification of plat of Pederson Hill subdivision to eliminate restrictions on driveways on to Karl Reishus Blvd

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and **APPROVE** the requested final plat. The permit would allow the final plat approval for the modification of the plat in a D10-SF zone to eliminate restrictions on driveways on to Karl Reishus Boulevard.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for SMF2020 0003, Part 1	1/6/2021	Staff Report
☐ Staff Report for SMF2020 0003, Part 2	1/5/2021	Staff Report
☐ Staff Report for SMF2020 0003, Part 3	1/5/2021	Staff Report
☐ Staff Report for SMF2020 0003, Part 4	1/5/2021	Staff Report
☐ Staff Report for SMF2020 0003, Part 5	1/5/2021	Staff Report
☐ Staff Report for SMF2020 0003, Part 6	1/5/2021	Staff Report
☐ Notice of Decision for SMF2020 0003	1/26/2021	Notice of Decision



PLANNING COMMISSION STAFF REPORT
MAJOR SUBDIVISION SMF2020 0003
HEARING DATE: JANUARY 12, 2021

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

DATE: December 30, 2020
TO: Michael LeVine, Chair, Planning Commission
BY: Irene Gallion, Senior Planner 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a final plat review for modifications to plat for Pederson Hill Subdivision II, Phase 1A.

STAFF RECOMMENDATION: Approval

KEY CONSIDERATIONS FOR REVIEW:

- Karl Reishus Boulevard (KRB) was misclassified in 2016.
- Reclassification of KRB from Major Collector to Minor Collector.
- Plat notes limiting driveways onto KRB no longer apply.
- Plat notes limiting access onto KRB prevent CDD from issuing building permits that use access onto KRB.

GENERAL INFORMATION	
Property Owner	City and Borough of Juneau
Applicant	City and Borough of Juneau
Property Address	Karl Reishus Blvd
Legal Description	Karl Reishus Blvd
Parcel Number	Not applicable
Zoning	D10-SF
Lot Size	Not applicable
Water/Sewer	CBJ
Access	Glacier Highway
Existing Land Use	Roadway
Associated Applications	None

ALTERNATIVE ACTIONS:

1. **Amend:** amend the approval to require conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-3 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 49.15.402
 - o 49.15.412
 - o 49.20.200
 - o 49.35.210(c)(1)(A)
 - o 49.80

The Commission shall hear and decide the case per 49.15.400(a) - Purpose and applicability. *The purpose of this article is to facilitate the subdivision of land to promote the public health, safety, and general welfare of the citizens of the CBJ in accordance with the Comprehensive Plan of the City and Borough of Juneau, Alaska.*

And per 49.15.402(a) *A major subdivision permit is required for subdivisions resulting in 14 or more lots.*

SITE FEATURES AND ZONING



SURROUNDING ZONING AND LAND USES	
North (D10-SF)	Vacant, un-subdivided
South (Industrial)	Glacier Highway
East (D10-SF)	In development
West (D10-SF)	In development

SITE FEATURES	
Anadromous	No
Flood Zone	No
Hazard	No
Hillside	No
Wetlands	Yes
Parking District	No
Historic District	No
Overlay Districts	No

BACKGROUND INFORMATION

Project Description – This project reclassifies Karl Reishus Boulevard (KRB) from a major collector to a minor collector, updating plat notes to reflect the change (Attachment A). Reclassification is consistent with federal standards, and allows legal driveway development along the road per CBJ code.

Importance – Lots have been developed with curb cuts onto KRB, and have been sold. CBJ cannot issue building permits for access to KRB, and owners cannot get building permits for their lots under the current classification.

Background – The Pederson Hill Subdivision project is a CBJ effort to increase the buildable lots available. The plat recorded in September of 2019 shows the first phase of development broken into three sub-phases (1A, 1B, and 1C) creating 86 residential lots (Attachment B). While the record does not show an explicit discussion with the Planning Commission (Attachment C, D, E), staff classified KRB as a “Major Collector.”

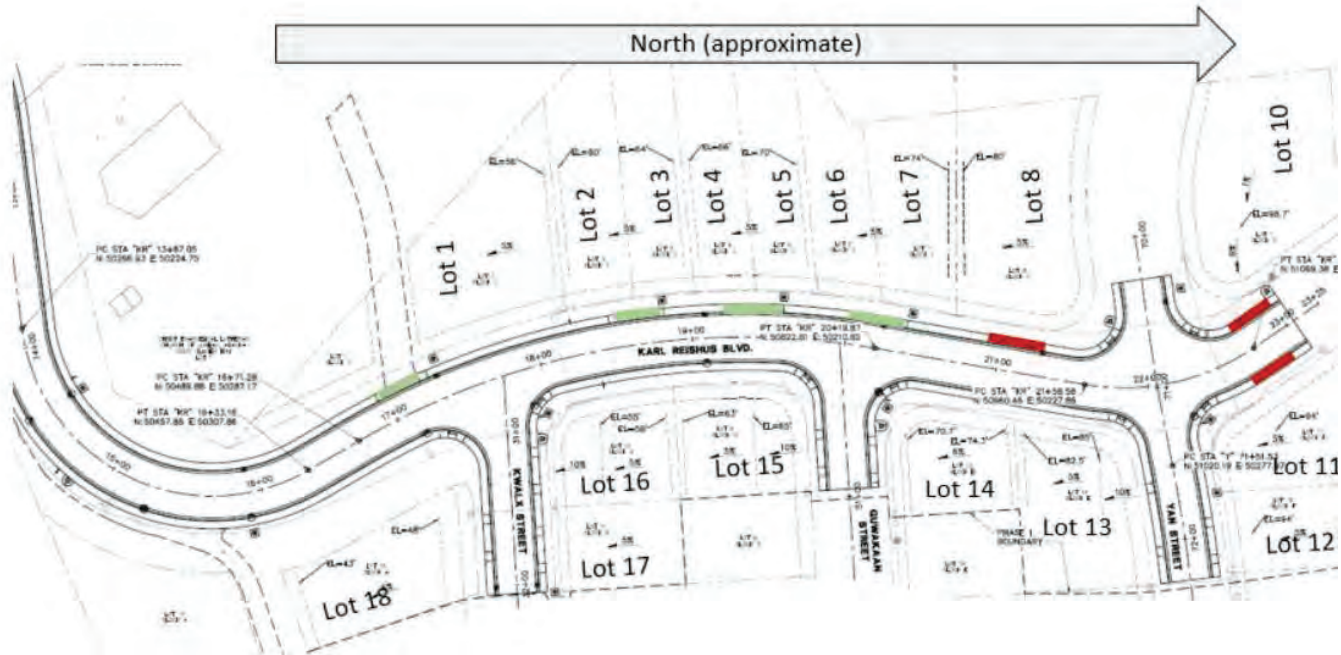
Driveway access is not permitted onto major collectors [CBJ 49.35.210(c)(1)(A)]. CBJ 49.35 cannot be varied [CBJ 49.20.200].

Driveway access was built onto KRB under CBJ Contract Number BE18-025, construction of Phase 1A, despite limitations outlined in plat notes seven and eight.

7. DRIVEWAY ACCESS FROM THE KARL REISHUS BOULEVARD IS RESTRICTED. LOT 1 DRIVEWAY SHALL ACCESS FROM THE EMERGENCY ACCESS EASEMENT. DRIVEWAY ACCESS FOR LOTS 2-7 SHALL BE RESTRICTED TO JOINT USE DRIVEWAYS CENTERED ON THE COMMON LOT LINE FOR LOTS 2 & 3, LOTS 4 & 5 AND LOTS 6 & 7.
8. CORNER LOTS ABUTTING KARL REISHUS BOULEVARD SHALL HAVE DRIVEWAYS LIMITED TO ACCESSING A STREET OTHER THAN KARL REISHUS BOULEVARD.

December 30, 2020
SMF2020 0003
Page 3 of 6

The image below highlights the driveways on KRB built in accordance with the plat notes (green), and those not (red). Lot numbers on the construction plans vary from those on the plat, so the image below has the platted lot numbers added.



Lots 8 and 10 access KRB instead of Yan Street, because Yan Street is not extended far enough to the west to construct safe access.

CBJ does not include definitions of road classifications in code. The United States Department of Transportation's Federal Highway Administration (FHWA) establishes standards for roadway classification in order to establish design standards and to help make funding decisions. The distinctions between Major Collectors and Minor Collectors are subtle. Major collectors are longer, have lower driveway densities, higher speed limits, are spaced at greater intervals, and have higher traffic volumes. Major Collectors provide more mobility whereas Minor Collectors provide more land access.

Major Collectors	Minor Collectors	Karl Reishus Boulevard
Serve both land access and traffic circulation in <i>higher density</i> residential, and commercial/industrial areas.	Serve both land access and traffic circulation in <i>lower density</i> residential and commercial/industrial areas.	Zoned single-family.
Penetrate residential neighborhoods, often for significant distances.	Penetrate neighborhoods, often only for a short distance.	Dead end road in subdivision.
Distribute and channel trips between Local Roads and Arterials, usually over a distance of <i>greater than</i> three-quarters of a mile.	Distribute and channel trips between Local Roads and Arterials, usually over a distance of <i>less than</i> three-quarters of a mile.	At full build-out KRB will eventually be 0.5 miles, currently 0.25 miles.
Operating characteristics include higher speeds and more signalized intersections.	Operating characteristics include lower speeds and fewer signalized intersections.	No signalized intersections. 20 mph.

Source: https://www.fhwa.dot.gov/planning%20processes/statewide/related/highway_functional_classifications/section03.cfm

Next Steps – A pdf of the proposed plat is attached (Attachment F). If the Planning Commission approves, the survey consultant will draft a letter to CBJ with the recommended changes. CBJ will sign the letter approving the changes. The consultant surveyor has their main office in Anchorage, Alaska, so they are able to walk the letter over to the Alaska Department of Natural Resources (DNR), redline the official plat, and sign a Surveyor Affidavit regarding the changes. The DNR will then record the amended plat with the surveyor's affidavit. This option is most seamless for current property owners.

The table below summarizes relevant history for the lot and proposed development.

Item	Summary
AME 2014 0003	Rezone from D1(T)D5 to D10 and D10-SF.
Ordinance 2014-29	Rezone of land to D10-SF (AME2014 0003).
SMP2016 0002	Staff report for preliminary subdivision. Approved February 28, 2017.
CSP2016 0006	Project consistency review.
SMP2017 0001	Staff report for plat modification. Three phases of development, new emergency vehicle access via Christ Evangelical parking lot rather than using the equestrian trail as previously intended. Includes final minutes from the February 28, 2017 Planning Commission meeting where original subdivision was approved.
Minutes	October 10, 2017 Planning Commission meeting minutes where plat modification was approved.
Plat 2019-34	Pederson Hill Subdivision II, Phase 1A.
Contract BE18-025	Conformed documents from construction of improvements.

ANALYSIS

Compliance with Title 49 - The proposed change improves conformance with Title 49.

While Note 7 allows driveway access on to KRB for certain lots, code prohibits driveway access onto a Major Collector.

Preliminary Plat Conditions of Approval – This project modifies an existing plat, which met conditions of approval for recording.

The proposed modification of Note 7 and elimination of Note 8 modify previous conditions. Notes 7 and 8 limit driveway access to KRB based on KRB classification as a Major Collector. This project reclassifies the road to a Minor Collector.

Proposed modification to note 7:

7. ~~DRIVEWAY ACCESS FROM THE KARL REISHUS BOULEVARD IS RESTRICTED.~~ LOT 1 DRIVEWAY SHALL ACCESS FROM THE EMERGENCY ACCESS EASEMENT. DRIVEWAY ACCESS FOR LOTS 2-7 SHALL BE RESTRICTED TO JOINT USE DRIVEWAYS CENTERED ON THE COMMON LOT LINE FOR LOTS 2 & 3, LOTS 4 & 5 AND LOTS 6 & 7.

Note 8 will be eliminated.

AGENCY REVIEW

CDD conducted an agency review comment period between December 2 and December 14, 2020. Agency review comments can be found in Attachment G.

Agency	Summary
Alaska Department of Transportation and Public Facilities	No objection, seems like a good move.
CBJ Engineering and Public Works	In support of the project.

PUBLIC COMMENTS

CDD conducted a public comment period between December 10 and December 21, 2020. Public notice was mailed to property owners within 500 feet of KRB. A public notice sign was also posted on-site two weeks prior to the scheduled hearing (Attachment H). Public comments submitted at time of writing this staff report can be found in Attachment I.

Name	Summary
Gary Miller	Owns Lot 10, support the project.
Joyce Niven	Checking on impacts to Tlingit Haida Regional Housing Association lot.

FINDINGS

Final plat approval criteria - Per CBJ 49.15.402(f)(3), the Director makes the following findings:

1. *Has the applicant complied with any conditions or plat notes as required in the notice of decision approving the preliminary plat?*

Analysis: This project modifies conditionally-required notes for previous versions of the plat. Changing the road classification from Major Collector to Minor Collector eliminates the need for driveway restrictions onto KRB.

Finding: **Yes.** All conditions of preliminary plat approval have been met.

2. *Has the applicant constructed all required improvements or provided a financial guarantee in accordance with CBJ 49.55.010?*

Analysis: This modification of an existing plat requires no additional improvements.

Finding: **Yes.** The applicant has constructed all required improvements.

3. *Does the final plat meet the standards set forth in CBJ 49.15.412 for final plats?*

Analysis: No additional analysis needed.

Finding: **Yes.** The final plat complies with CBJ 49.15.415 Final Plat Standards.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and **APPROVE** the requested final plat. The permit would allow the final plat approval for the modification of the plat in a D10-SF zone to eliminate restrictions on driveways on to Karl Reishus Boulevard.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Plat 2019-34
Attachment C	SMP2016 0006: Original Plat
Attachment D	SMP2017 0001: Plat Modification
Attachment E	Planning Commission Minutes, October 10, 2017. Date of SMP2017 0001 Consideration.
Attachment F	Proposed Modified Plat
Attachment G	Agency Review Comments
Attachment H	Abutters Notice
Attachment I	Public Notice Sign
Attachment J	Public Comments

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 3032 Karl Reishus Blvd., 6746 Marguerite St., 3031 Karl Reishus Blvd		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) PEDERSON HILL II LT 10, PEDERSON HILL II LT 8, PEDERSON HILL II LT 11		
	Parcel Number(s) 4B2201080100, 4B2201080080, 4B2201080110		
	☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner CBJ (lot 11)	Contact Person Dan Bleidorn	586-5252
	Mailing Address 155 S Seward Street		
	E-mail Address Lands_Office@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 <u><i>Daniel Bleidorn</i></u> Landowner/Lessee Signature		11-19-2020 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	586-5252	
Mailing Address			
E-mail Address			
X <u><i>Daniel Bleidorn</i></u> Applicant's Signature		11-19-2020 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.

Intake Initials <i>img</i> 11/19/2020	Date Received 11/19/20
---	---------------------------

Case Number SMF20200003



SUBDIVISION AND DEVELOPMENT PLAN APPLICATION

Packet Page 254 of 797

See subdivision hand-outs 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

see attached

Number of Existing Parcels 18 Total Land Area 9 acres Number of Resulting Parcels 18

HAS THE PARCEL BEEN CREATED BY A MINOR SUBDIVISION IN THE PRECEDING 24 MONTHS

☐ NO ☐ YES Case Number _____

TYPE OF SUBDIVISION OR PLATTING APPROVAL REQUESTED

MINOR DEVELOPMENT

(changing or creating 13 or fewer lots)

- ☐ Preliminary Plat (MIP)
- ☐ Final Plat (MIF)
- ☐ Panhandle Subdivision
- ☐ Accretion Survey
- ☐ Boundary Adjustment
- ☐ Lot Consolidation (SLC)
- ☐ Bungalow Lot Subdivision
- ☐ Common Wall/Zero Lot Subdivision
- ☐ Other _____

MAJOR DEVELOPMENT

(changing or creating 14 or more lots)

- ☐ Preliminary Plat (SMP)
- ☐ Final Plat (SMF)
- ☐ Preliminary Development Plan – PUD (PDP)
- ☐ Final Development Plan – PUD (PDF) Preliminary
- ☐ Development Plan – ARS (ARP) Final
- ☐ Development Plan – ARS (ARF)
- ☐ Bungalow Lot Subdivision
- ☐ Common Wall/Zero Lot Subdivision
- ☐ Other _____

ALL REQUIRED DOCUMENTS ATTACHED

☒ Pre-application conference notes

☒ Narrative including:

- ☐ Legal description(s) of property to be subdivided
- ☐ Existing structures on the land
- ☐ Zoning district
- ☐ Density
- ☐ Access
- ☐ Current and proposed use of any structures
- ☐ Utilities available
- ☐ Unique characteristics of the land or structure(s)

☐ Preliminary Plat checklist

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

SUBDIVISION/PLATTING FEES	Fees	Check No.	Receipt	Date
Application Fees	\$ <u>585</u>	Plat amendment = \$110+(\$25x19)		
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Total Fee	\$ _____			

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

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

Case Number	Date Received
SMF20200003	11/19/20

Legal description: Pederson Hill Subdivision II, Phase 1A Lot 8, Lot 10, Lot 11.

Existing Structures: No structures on the three corner lots with access on KR Boulevard

Zoning District: D10SF

Density: D10

Access: Glacier Highway and Karl Reishus Boulevard

Current and proposed use of any structures: residential

Utilities available: All

Unique characteristics of the land or structures: Terrain steepens at the top of KRB. Lots have a steep slope on the south property line (Yan Street).

This proposal would modify plat note 7 and eliminate plat note 8.

The Plat for Pederson Hill Subdivision II, Phase 1A includes plat notes that states driveways with access from the Karl Reishus Boulevard are restricted and that corner lots abutting Karl Reishus Boulevard shall have driveways limited to accessing a street other than Karl Reishus Boulevard. These notes were included because Karl Reishus Boulevard was incorrectly designated a major collector rather than a minor collector. The US DOT Federal Highways Administration Standards classifies the road as a minor collector. Alaska DOT&PF classifications conform to USFHWA standards. By altering from federal standards CBJ has inadvertently created inconsistent road management and use regimes. For Lot 8 and Lot 10, the cross street is not constructed and there are no plans to continue Yan Street west. Lot 11 is a corner lot that has access via KR Boulevard. This lot has less than 18 feet of road frontage on Yan Street and the proximity to the arc at the intersection of Yan and KR Boulevard made it unsafe to have to have the driveway access via Yan Street. Lots 10 and 11 are steep along the southern lot line and, as currently platted and developed, preclude safe access along Yan. Lot 1A has no other practical access to the lot.

OWNERSHIP CERTIFICATE
THE UNDERSIGNED, THE CITY AND BOROUGH OF JUNEAU, ALASKA, IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT THE SAID PROPERTY ADJACENT TO THE SURVEY HAS BEEN USED FOR THE PURPOSES OF THE SURVEY, AND THAT THE SAID PROPERTY IS NOT SUBJECT TO ANY OTHER SURVEY, AND THAT THE SAID PROPERTY IS NOT SUBJECT TO ANY OTHER SURVEY, AND THAT THE SAID PROPERTY IS NOT SUBJECT TO ANY OTHER SURVEY.

NOTARY ACKNOWLEDGMENT
STATE OF ALASKA
JANUARY 10, 2019
JANUARY 10, 2019

NOTES
1. THE SURVEY WAS MADE BY A LICENSED SURVEYOR, AND THE SURVEY WAS MADE IN ACCORDANCE WITH THE ALASKA SURVEYING ACT, AND THE SURVEY WAS MADE IN ACCORDANCE WITH THE ALASKA SURVEYING ACT, AND THE SURVEY WAS MADE IN ACCORDANCE WITH THE ALASKA SURVEYING ACT.

PLANNING COMMISSION PLAT APPROVAL
THE PLANNING COMMISSION HAS REVIEWED THE PLAT AND HAS APPROVED THE PLAT FOR RECORDING. THE PLANNING COMMISSION HAS REVIEWED THE PLAT AND HAS APPROVED THE PLAT FOR RECORDING. THE PLANNING COMMISSION HAS REVIEWED THE PLAT AND HAS APPROVED THE PLAT FOR RECORDING.

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NOTES

1. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO EXISTING.
2. PIPE LENGTHS ARE MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF STRUCTURES. SLOPES ARE CALCULATED TO ENDS OF PIPE.
3. WATER MAIN PIPE BENDS SHALL BE LOCATED TO AVOID CONFLICTS AND TO MAINTAIN ALL REQUIRED ADEQ SEPARATION DISTANCES.

SERVICE LOCATIONS		
STATION/OFFSET	TYPE	INV. EL.
21+00.38' LT	WS	75.9
21+12.38' LT	SSS	78.5
21+25.38' RT	SOS	76.5
21+45.38' RT	SSS	76.5
21+51.38' RT	WS	—
22+29.10' RT	SSS	86.9
22+29.95' RT	SSS	77.0
22+30.84' RT	SOS	90.1
22+32.62' RT	WS	—
22+40.44' RT	SOS	92.9
22+75.60' LT	SOS	92.1
22+88.39' LT	SSS	92.0
22+91.38' LT	WS	—

STORM DRAIN STRUCTURE AND GRATE NOTES

1. RIM ELEVATIONS GIVEN ARE AT FINISHED GRADE. CURB INLET GRADE ELEVATIONS SHALL BE LOWERED PER CBJ STANDARD DETAIL 309.
2. OFFSETS SHOWN VARY SLIGHTLY. ALL CURB INLETS SHALL MATCH THE CURB AND GUTTER.

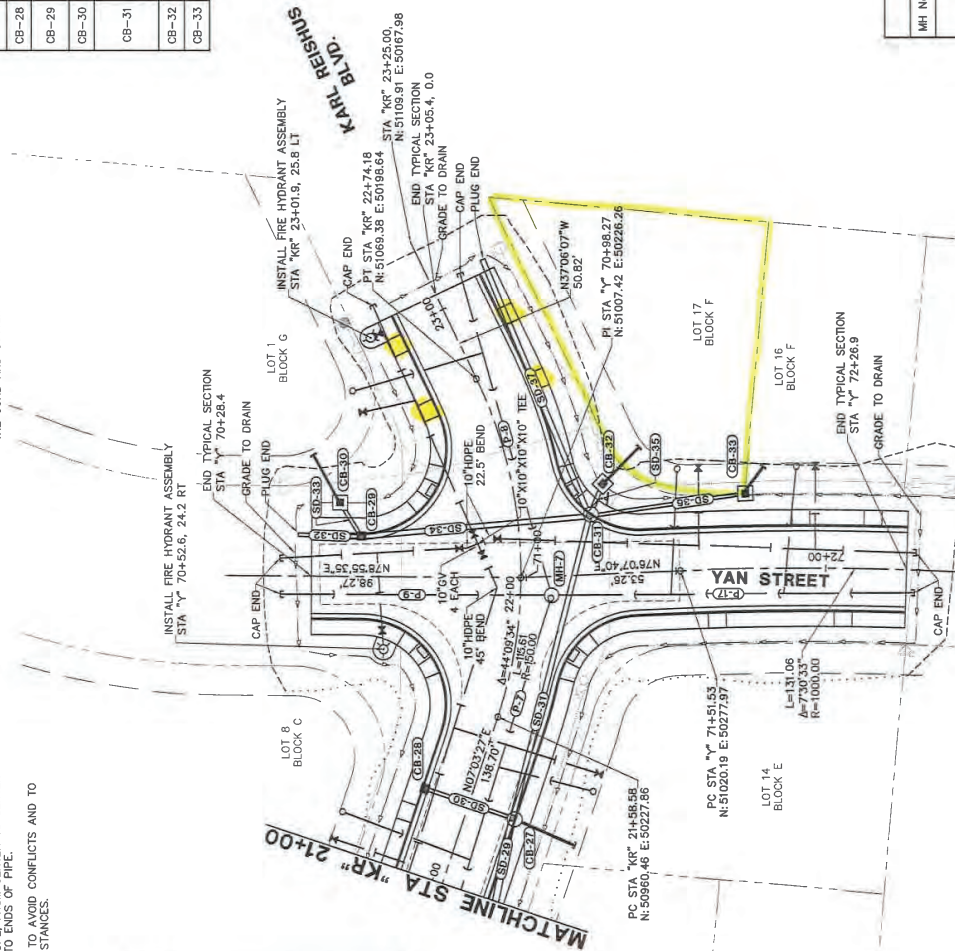
STORM DRAIN STRUCTURE TABLE

CB No.	RIM EL.	TYPE	STA/OFF	PIPES IN	PIPES OUT
CB-27	82.03	I	21+28.02, 15.24 RT	SD-31, 18" INV IN =77.60 SD-30, 12" INV IN =77.60	SD-29, 24" INV OUT =77.50
CB-28	82.05	III	21+28.17, 15.25 LT	SD-32, 12" INV IN =85.44 SD-33, 12" INV IN =85.97	SD-30, 12" INV OUT =79.70
CB-29	88.81	IV	22+26.05, 52.44 LT	SD-34, 18" INV IN =84.50 SD-33, 12" INV IN =86.41	SD-34, 18" INV OUT =85.26
CB-30	88.43	III W/ AD	22+45.84, 57.20 LT	SD-34, 18" INV IN =84.50 SD-37, 18" INV IN =85.23 SD-36, 12" INV IN =84.52	SD-33, 12" INV OUT =86.10
CB-31	86.64	I	22+23.56, 23.82 RT	SD-35, 12" INV IN =86.41	SD-31, 18" INV OUT =84.30
CB-32	89.62	III W/AD	22+32.13, 29.77 RT	SD-35, 12" INV IN =86.41	SD-35, 12" INV OUT =87.00
CB-33	87.25	III W/ AD	71+73.68, 25.12 LT	SD-36, 12" INV IN =85.05	SD-36, 12" INV OUT =85.05

STORM DRAIN PIPE TABLE			
PIPE	SIZE	3D LENGTH	TYPE SLOPE
SD-29	24"	102.0'	CPP 0.083
SD-30	12"	30.6'	CPP 0.089
SD-31	18"	104.0'	CPP 0.085
SD-32	12"	20.8'	CPP 0.010
SD-33	12"	13.3'	CPP 0.010
SD-34	18"	76.3'	CPP 0.010
SD-35	12"	11.7'	CPP 0.050
SD-36	12"	52.6'	CPP 0.010
SD-37	18"	93.3'	CPP 0.111

SANITARY SEWER PIPE TABLE			
PIPE	SIZE	3D LENGTH	TYPE SLOPE
P-7	8"	243.8'	PVC 0.068
P-8	6"	112.6'	PVC 0.119
P-9	8"	90.4'	PVC 0.004
P-17	8"	147.4'	PVC 0.004

SANITARY SEWER STRUCTURE TABLE			
MAN No.	RIM EL.	STATION/OFFSET	PIPES IN PIPES OUT
MAN-7	86.10	22+00.25, 10.33 RT	P-8, 8" PVC INV IN =79.70 P-17, 8" PVC INV IN =79.68 P-9, 8" PVC INV IN =79.70



DOWL
Consulting Engineers • Land Surveyors • Construction Administration
JOB No. J0808.01 | DRAWN BY: STAFF | DESIGNED BY: STAFF | CHECKED BY: STAFF | DATE: MAY 2017

5368 COMMERCIAL BOULEVARD
JUNEAU, ALASKA 99801
907-780-3533
AEC248

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

PEDERSON HILL SUBDIVISION
PHASE I,
CBJ CONTRACT NO. BE18-025
CONFORMED PLAN SET

PLAN -
STA "KR" 21+00 TO EOP
& YAN STREET

SHEET NO.
12 of **27**



CURVE TABLE				CHORD BEARING & DISTANCE	
CURVE No.	RADIUS	DELTA	LENGTH	CHORD BEARING	DISTANCE
C1					
C2	530.00	350°40'3"	324.38	N10°28'34"W	310.34
C3					
C4	530.00	N87°07'52"	56.62	N47°07'29"W	48.58
C5	230.00	189°30'8"	79.56	S88°30'08"W	79.16
C6	30.00	189°49'08"	58.80	N88°30'08"E	58.51
C7	30.00	N61°01'42"	60.75	N20°54'44"E	50.89
C8	30.00	66°29'31"	34.82	N70°29'52"W	32.89
C9	1025.00	07°15'31"	125.36	S80°11'15"W	125.27
C10					
C11	975.00	07°02'04"	130.48	N84°48'17"E	130.39
C12	30.00	72°30'37"	35.48	N84°53'25"E	35.48
C13	180.00	031°54'58"	11.25	N20°51'00"E	11.25
C14	30.00	103°25'14"	54.15	N44°39'10"W	47.69
C15					
C16					
C17					
C18					
C19					
C20	30.00	85°02'02"	44.51	N41°08'12"E	40.54
C21					
C22	470.00	14°22'18"	117.89	N20°32'50"W	117.59
C23	30.00	86°37'39"	42.22	N35°02'57"W	38.82
C24					
C25					
C26					
C27					
C28					
C29					
C30					
C31	530.00	1°23'27"	116.16	N1°43'52"E	115.93
C32	530.00	0°52'49"	45.15	S13°00'45"E	45.13
C33	530.00	0°49'31"	40.01	N08°34'34"W	40.00
C34	530.00	0°47'02"	40.13	S04°34'38"E	40.13
C35	830.00	0°25'27"	42.50	S00°07'35"E	40.40
C36	530.00	0°43'51'4"	42.43	S04°45'51"W	42.42
C37	1025.00	02°08'38"	137.08	N76°33'42"E	137.48
C38					
C39	30.00	02°38'04"	55.49	S78°29'03"W	53.08
C40					
C41					
C42	975.00	0°43'08"	76.71	N78°13'23"E	76.69
C43	470.00	07°01'49"	57.67	N24°53'52"E	57.63
C44	470.00	07°03'30"	60.22	S10°35'53"E	60.18
C45					
C46					
C47					
C48					
C49	30.00	32°03'27"	16.79	N87°36'30"E	16.57
C50	445.00	05°38'19"	46.38	N29°34'08"W	46.38
C51	180.00	15°38'23"	49.13	N25°14'07"W	49.08
C52					
C53	780.00	44°40'00"	45.00	S45°00'00"E	45.00

SURVEYOR'S CERTIFICATE



PER NOTE 5 PLAT 2015-40, IN THE JUNEAU RECORDING DISTRICT, THE ORIGINAL GOVERNMENT LAND OFFICE CONCRETE FILED PIPE, WAS REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP. SUBSEQUENT CONSTRUCTION AND RESETTING MEASURES ARE DETAILED IN 2017-004754-0 AND 2018-002443-0. SAID MONUMENT RESET THIS SURVEY FROM REFERENCES MADE DURING THE 2015 SURVEY COMPLETED BY THIS SURVEY.

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL SUBDIVISION
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT ANCHORAGE

DOWL
AEC/L&D
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1" = 40'
DATE: SEPT. 2019
PROJECT NO: J70697
FILE NO:
SHEET NO: 25



CURVE TABLE					CHORD BEARING & DISTANCE	
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD BEARING & DISTANCE		
C1						
C2	530.00	35°04'33"	324.38			N1078°34'W 319.34
C3	30.00	100°07'52"	58.62			N47°00'33"W 46.50
C4	230.00	19°49'06"	79.56			S88°50'08"W 79.16
C5	170.00	19°49'06"	58.80			N88°50'08"E 58.51
C6	30.00	116°01'42"	60.75			N24°54'44"E 50.89
C7	30.00	66°29'31"	34.82			N70°20'52"W 32.89
C8	1025.00	0°13'51"	129.35			S80°01'18"W 129.27
C9						NOT USED
C10						NOT USED
C11	915.00	0°14'00"	32.48			N7848°11'E 135.39
C12	30.00	72°59'37"	37.96			N3483°10'E 35.48
C13	180.00	03°24'56"	11.25			N0516°00"E 11.25
C14	30.00	03°25'14"	54.15			N447°39'00"W 47.69
C15						NOT USED
C16						NOT USED
C17						NOT USED
C18						NOT USED
C19						NOT USED
C20						NOT USED
C21	30.00	85°00'02"	44.51			N4108°12'E 40.54
C22	470.00	14°22'19"	117.89			N83°58'28"W 117.59
C23	30.00	80°37'39"	43.22			N56502°57'W 38.82
C24						NOT USED
C25						NOT USED
C26						NOT USED
C27						NOT USED
C28						NOT USED
C29						NOT USED
C30						NOT USED
C31	530.00	12°33'27"	116.16			N214°52'29" 115.93
C32	530.00	04°52'49"	45.15			S13°00'45"E 45.13
C33	530.00	04°19'31"	40.14			N0824°34'W 40.00
C34	530.00	04°20'31"	40.14			S044°38'E 40.13
C35	530.00	04°22'42"	40.50			S00°16'33"W 40.49
C36	530.00	04°25'14"	41.43			S04°45'33"E 42.42
C37	1025.00	00°58'58"	129.35			N78°53'42"E 127.48
C38						S78°52'03"W 50.08
C39						NOT USED
C40						NOT USED
C41						NOT USED
C42	975.00	04°40'48"	76.71			N7841°13'E 76.68
C43	470.00	0°10'49"	57.67			N0452°43'W 57.63
C44	470.00	0°10'49"	60.22			S1203°33'E 60.18
C45						NOT USED
C46						NOT USED
C47						NOT USED
C48						NOT USED
C49	30.00	32°03'27"	16.19			N67°36'30"E 16.57
C50	445.00	05°38'19"	48.38			N29°54'08"W 48.36
C51	180.00	05°38'23"	48.13			N25°04'07"W 49.98
C52						NOT USED
C53	175.00	44°10'12"	134.91			S14°53'33"E 131.59

11. PER NOTE 5 PLAT 2015-40 IN THE JUNEAU RECORDING DISTRICT, THE ORIGINAL GOVERNMENT LAND OFFICE CONCRETE FILLED PIPE WAS REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP. SUBSEQUENT CONSTRUCTION AND SETTING MEASURES ARE DETAILED IN 2017-004754-0 AND 2018-002433-0. SAID MONUMENT RESET THIS SURVEY FROM REFERENCES MADE DURING THE 2015 SURVEY COMPLETED BY THIS SURVEY FIRM.

SCALE: 1" = 40'

DATE: SEPT. 2019

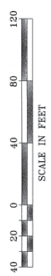
PROJECT NO: J70687

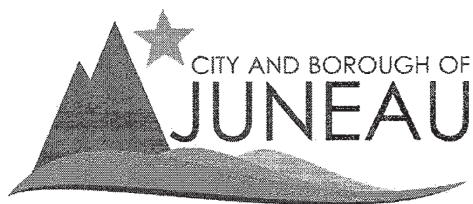
FILE NO:

SHEET NO: 3 OF 4

SURVEYOR'S CERTIFICATE

I, WILLIAM STOLL, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF LINEAUX, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.





Juneau Recording District
Plat 2019-34

Treasury Division
155 S. Seward Street
Juneau, AK 99801
(907) 586-0377 Phone
(907) 586-5367 Fax

CERTIFICATION OF TAXES AND ASSESSMENTS PAID

I, the undersigned, being duly appointed, qualified Treasurer for the City and Borough of Juneau, First Judicial District, State of Alaska, do hereby certify that, according to the records of the City and Borough of Juneau, the following described real property is carried on the tax records in the name of:

City and Borough of Juneau Lands and Resources

Current Owner

PEDERSON HILL LT 2

Legal Description

4B2201010101

Parcel Code Number

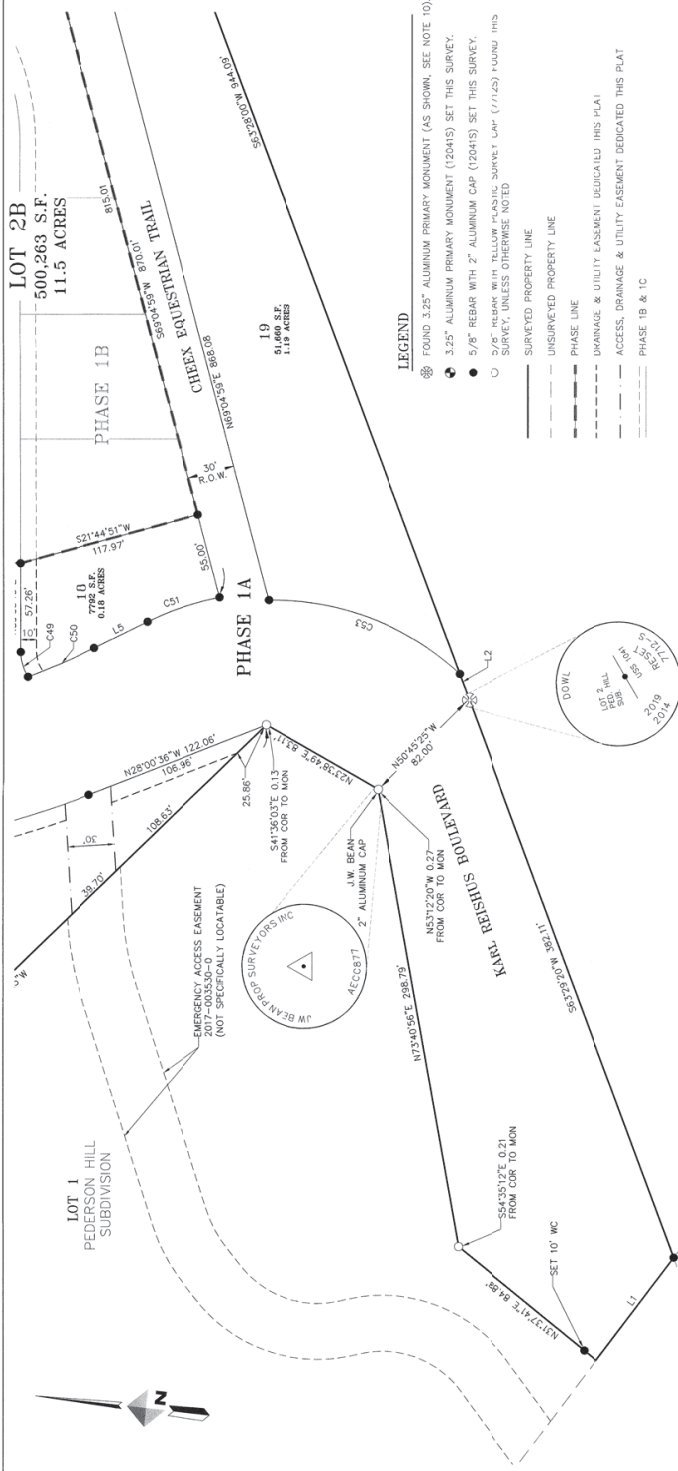
and that, according to the records in my possession, there are no taxes assessed against said parcel as this parcel is owned by the City and Borough of Juneau, which is a tax exempt entity; and any special assessments assessed against said parcel and in favor of the City and Borough of Juneau have been paid in full.


Cheryl A. Crawford

October 8, 2019

Date

This Certification of Payment of Taxes is valid through December 31, 2019



LINE TABLE	
LINE	BEARING & DISTANCE
L1	S59°31'07"E 82.74
L2	N6.328°00'W 17.98
L3	NOT USED
L4	NOT USED
L5	S32°53'18"E 38.10
L6	NOT USED
L7	N78°55'35"E 23.23
L8	S811°51'5"E 17.41
L9	S811°51'5"E 17.41
L10	N78°55'35"E 37.27
L11	N45°10'7"W 60.13
L12	N52°53'53"E 60.00

CURVE TABLE				CHORD BEARING & DISTANCE	
CURVE No.	RADIUS	DELTA	LENGTH	CHORD BEARING	DISTANCE
C1					
C2	530.00	350°40'3"	324.38	N10°28'34"W	310.34
C3	530.00	80°07'52"	56.62	N47°00'29"W	48.58
C4	230.00	184°30'08"	79.56	S88°30'08"W	79.16
C5	170.00	184°09'08"	58.80	S88°30'08"E	58.51
C6	30.00	160°14'42"	60.75	N20°54'44"E	50.89
C7	30.00	66°29'31"	34.82	N70°29'52"W	32.89
C8	1025.00	07°15'31"	125.36	S80°11'15"W	125.27
C9			NOT USED		
C10	975.00	07°00'04"	130.48	N84°48'17"E	130.39
C12	30.00	72°30'37"	35.48	N84°30'52"E	35.48
C13	180.00	031°54'48"	11.25	N20°51'00"E	11.25
C14	30.00	101°25'14"	54.15	N44°39'10"W	47.69
C15			NOT USED		
C16			NOT USED		
C17			NOT USED		
C18			NOT USED		
C19			NOT USED		
C20	30.00	85°00'02"	44.51	N41°08'12"E	40.54
C22	470.00	14°22'18"	117.89	N20°32'50"W	117.59
C23	30.00	86°07'39"	42.22	N35°02'57"W	38.82
C24			NOT USED		
C25			NOT USED		
C26			NOT USED		
C27			NOT USED		
C28			NOT USED		
C29			NOT USED		
C30			NOT USED		
C31	530.00	1°23'27"	116.16	N1°43'52"E	115.93
C32	530.00	0°42'49"	45.15	S13°00'45"E	45.13
C33	530.00	0°49'31"	40.01	N08°34'34"W	40.00
C34	530.00	0°47'02"	40.13	S04°34'38"E	40.13
C35	830.00	0°21'22"	42.50	S00°07'35"E	40.40
C36	530.00	0°43'51'4"	40.43	S04°45'51"W	42.42
C37	1025.00	00°08'38"	17.48	N76°33'42"E	17.48
C38			NOT USED		
C39	30.00	02°28'04"	53.09	S78°29'03"W	53.08
C40			NOT USED		
C41			NOT USED		
C42	975.00	0°43'08"	76.71	N78°13'23"E	76.69
C43	470.00	07°01'49"	57.67	N24°53'52"E	57.63
C44	470.00	07°00'30"	60.22	N10°35'53"E	60.18
C45			NOT USED		
C46			NOT USED		
C47			NOT USED		
C48			NOT USED		
C49	30.00	320°32'7"	16.79	N87°36'30"E	16.57
C50	445.00	05°38'19"	46.38	N29°34'08"W	46.38
C51	180.00	15°38'23"	49.13	N25°14'07"W	49.08
C52			NOT USED		
C53			NOT USED		

SURVEYOR'S CERTIFICATE

SURVEYOR'S CERTIFICATE

I, WILLIAM STOLL, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.



Juneau Recording District 2019-34

Attachment B - Plat 2019-34 - Page 2

U.S.S. 1041

NOTES

- [illegible]

SMF2019-0003

FLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL SUBDIVISION
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDERS' OFFICE AT ANCHORAGE

DOWL
AFCL848
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801
907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

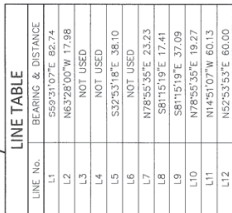
SCALE: 1" = 40'

DATE: SEPT. 2019

PROJECT NO: J70687

FILE NO:

SHEET NO: 26



CURVE TABLE					CHORD BEARING & DISTANCE	
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD BEARING & DISTANCE		
C1						
C2	530.00	35°04'33"	324.38			N1078°34'W 319.34
C3	30.00	100°07'52"	58.62			N47°00'33"W 46.50
C4	230.00	19°49'06"	79.56			S88°50'08"W 79.16
C5	170.00	19°49'06"	58.80			N88°50'08"E 58.51
C6	30.00	116°01'42"	60.75			N24°54'44"E 50.89
C7	30.00	66°29'31"	34.82			N70°20'52"W 32.89
C8	1025.00	0°13'51"	129.35			S80°01'18"W 129.27
C9						NOT USED
C10						NOT USED
C11	915.00	0°14'00"	32.48			N7848°11'E 135.39
C12	30.00	72°59'37"	37.96			N3043°10'E 35.48
C13	180.00	03°24'56"	11.25			N6516°00'E 11.25
C14	30.00	03°25'14"	54.15			N44°39'00"W 47.69
C15						NOT USED
C16						NOT USED
C17						NOT USED
C18						NOT USED
C19						NOT USED
C20						NOT USED
C21	30.00	85°00'02"	44.51			N4108°12'E 40.54
C22	470.00	14°22'19"	117.89			N83°58'28"W 117.59
C23	30.00	80°37'39"	43.22			N56502°37'W 38.82
C24						NOT USED
C25						NOT USED
C26						NOT USED
C27						NOT USED
C28						NOT USED
C29						NOT USED
C30						NOT USED
C31	530.00	12°33'27"	116.16			N214°52'28" 115.93
C32	530.00	04°52'49"	45.15			S13°00'45"E 45.13
C33	530.00	04°19'31"	40.14			N0824°34'W 40.00
C34	530.00	04°20'31"	40.14			S0404°38'E 40.13
C35	530.00	04°22'42"	40.50			S00°16'53"W 40.49
C36	530.00	04°25'14"	41.43			S04°45'33"E 42.42
C37	1025.00	00°58'56"	53.95			S78°53'42"E 17.48
C38	1025.00	02°58'54"	53.95			N78°52'03"W 53.08
C39						NOT USED
C40						NOT USED
C41	975.00	04°40'48"	76.71			N7841°13'E 76.68
C42	470.00	0°10'49"	57.67			N0452°43'E 57.63
C43	470.00	0°10'49"	57.67			S120°53'E 60.18
C44						NOT USED
C45						NOT USED
C46						NOT USED
C47						NOT USED
C48						NOT USED
C49	30.00	32°03'27"	16.19			N67°36'30"E 16.57
C50	445.00	05°38'19"	48.38			N29°54'08"W 48.36
C51	180.00	05°38'23"	48.13			N25°04'07"W 49.98
C52						NOT USED
C53	175.00	44°10'12"	134.91			S14°53'33"E 131.59

SURVEYOR'S CERTIFICATE

I, A. WILLIAM STOLL, in my capacity as a PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE ALASKA STATUTES, CHAPTER 13, AND THE GLASSBOROUGH-JOURNAL, THAT ALL DIMENSIONS AND THE BEARING OF THE MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

Tuneau Recording District 2019-34

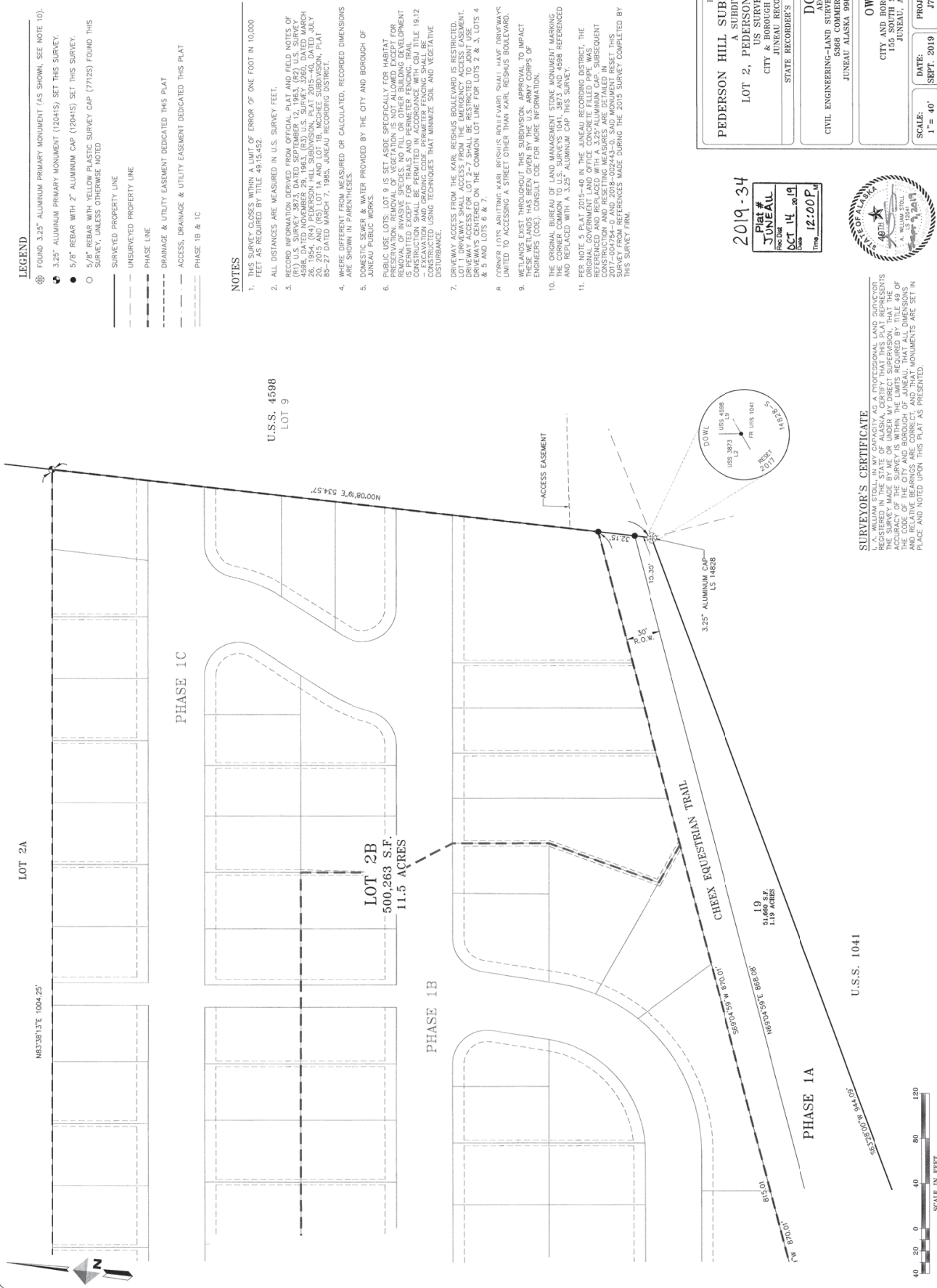
PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL SUBDIVISION
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU; ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT ANCHORAGE

DOWL
AEC1848
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-760-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1" = 40'
 DATE: SEPT. 2019
 PROJECT NO: J70687
 FILE NO:
 SHEET NO: 26 OF 36

[illegible]



LEGEND

- FOUND 3.25" ALUMINUM PRIMARY MONUMENT (AS SHOWN, SEE NOTE 10).
- 3.25" ALUMINUM PRIMARY MONUMENT (120415) SET THIS SURVEY.
- 5/8" REBAR WITH 2" ALUMINUM CAP (120415) SET THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY, UNLESS OTHERWISE NOTED
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- PHASE LINE
- DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
- ACCESS, DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
- PHASE 1B & 1C

NOTES

- THIS SURVEY CLOSURES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 48.15.452.
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
- RECORD INFORMATION DERIVED FROM OFFICIAL PLAT AND FIELD NOTES OF (R1) U.S. SURVEY 3873, DATED SEPTEMBER 12, 1963, (R2) U.S. SURVEY 4598, DATED NOVEMBER 29, 1963, (R3) U.S. SURVEY 2660, DATED MARCH 20, 2015 AND (R4) LOT 1A AND LOT 1B, MCNEE SUBDIVISION, PLAT 85-27 DATED MARCH 7, 1985, JUNEAU RECORDING DISTRICT.
- WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
- DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.
- PUBLIC USE LOTS: LOT 9 IS SET ASIDE SPECIFICALLY FOR HABITAT RESTORATION AND CONSERVATION. THE REMOVAL OF INVASIVE SPECIES, NO FILL OR OTHER BUILDING DEVELOPMENT IS PERMITTED EXCEPT FOR TRAILS AND PERMETER FENCING. TRAIL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 1912 EXCAVATION AND GRADING CODE. PERMETER FENCING SHALL BE CONSTRUCTED USING TECHNIQUES THAT MINIMIZE SOIL AND VEGETATIVE DISTURBANCE.
- DRIVEWAY ACCESS FROM THE KARL REISCHS BOULEVARD IS RESTRICTED. LOT 1 DRIVEWAY SHALL ACCESS FROM THE EMERGENCY ACCESS EASEMENT. DRIVEWAY ACCESS FOR LOT 2-7 SHALL BE RESTRICTED TO JOINT USE. DRIVEWAY ACCESS SHALL BE LIMITED TO THE COMMON LOT LINE FOR LOTS 2 & 3, LOTS 4 & 5 AND LOTS 6 & 7.
- FORWARD LOT 9, ABUTTING KARL REISCHS BOULEVARD, SHALL HAVE DRIVEWAYS LIMITED TO ACCESSING A STREET OTHER THAN KARL REISCHS BOULEVARD.
- NETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT THESE WETLANDS HAS BEEN GIVEN BY THE U.S. ARMY CORPS OF ENGINEERS (COE). CONSULT COE FOR MORE INFORMATION.
- THE ORIGINAL BUREAU OF LAND MANAGEMENT STONE MONUMENT MARKING THE CORNER COMMON TO U.S. SURVEYS 1041, 3873 AND 4598 IS REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP THIS SURVEY.
- THE SETBACKS FROM THE JUNEAU RECORDING DISTRICT, THE ORIGINAL GOVERNMENT AND OFFICE CONCRETE COLUMNS WERE REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP. SUBSEQUENT TO THE SURVEY, THE SETBACKS FROM THE JUNEAU RECORDING DISTRICT, 2017-0047594-0 AND 2018-002443-0, SAID MONUMENT RESET THIS SURVEY FROM REFERENCES MADE DURING THE 2015 SURVEY COMPLETED BY THIS SURVEY FIRM.

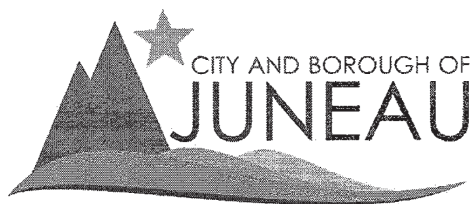
U.S.S. 4598
LOT 9

2019-34
Plat #
JUNEAU
Rec Date
OCT 14, 2019
Time
12:00 P.M.



SURVEYOR'S CERTIFICATE
I, A. WILLIAM STOLL, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR, REGISTERED WITH THE STATE OF ALASKA, HAVE PERSONALLY AND INDEPENDENTLY CONDUCTED THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 48 OF THE ALASKA STATUTES. I HAVE BEEN AWARE OF THE REQUIREMENTS OF THE ALASKA STATUTES AND THE REQUIREMENTS OF THE ALASKA BOARD OF SURVEYING AND MAPPING, AND I HAVE PLACED AND NOTED UPON THIS PLAT AS PRESENTED.

PLAT PEDERSON HILL SUBDIVISION II, PHASE 1A A SUBDIVISION OF LOT 2, PEDERSON HILL SUBDIVISION US SURVEY NO. 3873 CITY & BOROUGH OF JUNEAU, ALASKA JUNEAU RECORDING DISTRICT STATE RECORDERS OFFICE AT ANCHORAGE	
DOWL ACCLB48 CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 6900 COMMERCIAL BOULEVARD JUNEAU ALASKA 99801 907-760-3535	
OWNER CITY AND BOROUGH OF JUNEAU 155 SOUTH Seward Street JUNEAU, ALASKA 99801	PROJECT NO: J70687
DATE: SEPT. 2019	SHEET NO: 4 of 4
SCALE: 1" = 40'	



Juneau Recording District
Plat 2019-34

Packet Page 267 of 797
Treasury Division
155 S. Seward Street
Juneau, AK 99801
(907) 586-0377 Phone
(907) 586-5367 Fax

CERTIFICATION OF TAXES AND ASSESSMENTS PAID

I, the undersigned, being duly appointed, qualified Treasurer for the City and Borough of Juneau, First Judicial District, State of Alaska, do hereby certify that, according to the records of the City and Borough of Juneau, the following described real property is carried on the tax records in the name of:

City and Borough of Juneau Lands and Resources

Current Owner

PEDERSON HILL LT 2

Legal Description

4B2201010101

Parcel Code Number

and that, according to the records in my possession, there are no taxes assessed against said parcel as this parcel is owned by the City and Borough of Juneau, which is a tax exempt entity; and any special assessments assessed against said parcel and in favor of the City and Borough of Juneau have been paid in full.


Cheryl A. Crawford

October 8, 2019

Date

This Certification of Payment of Taxes is valid through December 31, 2019



Community Development

(907) 586-0715

PC_Comments@juneau.org

www.juneau.org/plancomm

155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION

NOTICE OF DECISION

Date: March 3, 2017

File No.: SMP2016 0002; CSP2016 0006

City & Borough of Juneau
Lands Division
155 South Seward Street
Juneau, AK 99801

Application For: A Preliminary Plat for Phase 1 Pederson Hill Subdivision resulting in 86 Residential lots and 5 lots for preservation/park purposes.

Legal Description: Lot 2 Pederson Hill USS 5504

Property Address: N/A

Parcel Code No.: 4-B22-0-101-010-1

Hearing Date: February 28, 2017

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated February 21, 2017, and approved the preliminary plat to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. Prior to Construction Plan approval, the applicant shall submit detailed data for future utilities per 49.15.411(f)(7).
2. Prior to Construction Plan approval, the applicant shall submit required documentation meeting 49.15.411(6) *Erosion Control*.
3. Prior to Construction Plan, the applicant shall submit an updated lot closure report. **(Updated closure report was submitted on 2/28/2017. This condition has been met).**
4. Prior to Construction Plan approval, the applicant shall submit another subdivision plat to ensure labels and naming are consistent throughout the plat sheets.

City & Borough of Juneau
File No.: SMP2016 0002; CSP2016 0006
March 3, 2017
Page 2 of 3

5. Remove labels 'Preservation Lot' and 'Park Lot' and replace with new plat note, as shown below. [Note: this is in reference to Condition 6.]
6. Prior to Final Plat approval, the applicant shall submit another draft plat with the following plat notes on the subdivision plat:
 - o Plat Note: "Right-of-way access for Lots 1-7 Block C shall be restricted to common driveways for each pair of lots. Only one of the seven lots may have its own driveway that is not common to an adjacent lot."
 - o Plat Note: "Corner lots abutting Karl Reishus Boulevard shall have driveways limited to accessing a street other than Karl Reishus Boulevard."
 - o Plat Note: "Wetlands exist throughout this subdivision. Approval to impact these wetlands has been given by the US Army Corps of Engineers (COE). Consult COE for more information."
 - o Plat Note: "Lots 10 & 12 Block A and Lot 9 Block C shall be Public Use Lots. Restriction of building development, further subdivision, and other limitations or restrictions apply."
7. Prior to Plat recording, the applicant [shall] submit documentation that places a permanent protected status on Lots 10 & 12 Block A and Lot 9 Block C in accordance with 49.15.422.
8. Prior to Construction Plan approval, the applicant shall submit a design showing a drainage infrastructure that would allow fish passage through the equestrian trail east of Karl Reishus Boulevard.
9. Prior to Construction Plan approval, the applicant shall submit a design showing a minimum 10-foot wide walking surface within the Wild Rose Walk ROW per 49.35.610(a).
10. Prior to Construction Plan approval, the applicant shall submit a lighting plan meeting applicable CBJ standards.
11. Prior to Construction Plan approval, the applicant shall submit documentation ensuring compliance with section D107.1 of the International Fire Code.

Staff notes that after the publication of staff's memorandum 2/21/2017, the applicant submitted and the Planning Commission approved a design change that relocated the western portion of the proposed Cheex Equestrian Trail from behind Lots 1-5 BL C to along the eastern side of the proposed Karl Reishus Boulevard. This new portion of the trail would be five feet wide. This design change also reduced the width of the planned east side sidewalk along Karl Reishus Boulevard from six feet to five feet. This is the design of the preliminary plat that was approved by the Planning Commission.

City & Borough of Juneau
 File No.: SMP2016 0002; CSP2016 0006
 March 3, 2017
 Page 3 of 3

Attachment: February 21, 2017 memorandum from Eric Feldt, Community Development, to the CBJ Planning Commission regarding SMP2016 0002 and CSP2016 0006.

This Notice of Decision does not authorize any construction. 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 to 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).

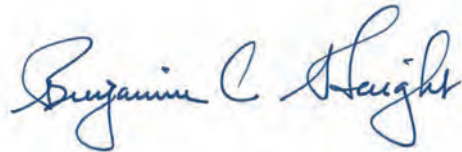
Effective Date: The permit is effective upon approval by the Commission, February 28, 2017.

Expiration Date: The permit will expire 18 months after the effective date, or August 28, 2018, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the subdivision permit was authorized or no final plat has been approved. Application for permit extension must be submitted thirty days prior to the expiration date.

Project Planner:



Eric Feldt, Planner
 Community Development Department



Ben Haight, Chair
 Planning Commission



Filed With City Clerk

March 3, 2017

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this subdivision. 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: October 16, 2017
File No.: SMP2017 0001

City & Borough of Juneau
155 S. Seward Street
Juneau, Alaska 99801

Proposal: Modification to the Pederson Hill Subdivision Preliminary Plat
Property Address: N/A
Legal Description: Lot 2, Pederson Hill
Parcel Code No.: 4B2201010101
Hearing Date: October 10, 2017

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated October 5, 2017, and approved the modification to the preliminary plat to be conducted as described in the project description and project drawings submitted with the application.

Attachment: October 5, 2017 memorandum from Jill Maclean, AICP, Senior Planner, Community Development, to the CBJ Planning Commission regarding SMP2017 0001.

This Notice of Decision does not authorize any construction. 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 to 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, October 10, 2017.

City & Borough of Juneau

File No.: SMP2017 0001

October 16, 2017

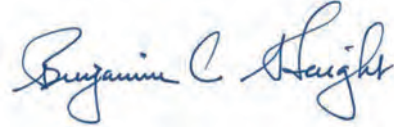
Page 2 of 2

Expiration Date: The permit will expire five (5) years after the effective date, or October 10, 2022, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the subdivision permit was authorized or no final plat has been approved. Application for permit extension must be submitted thirty days prior to the expiration date.

Project Planner:



Jill Maclean, AICP, Senior Planner
Community Development Department



Benjamin Haight, Chair
Planning Commission



Filed With City Clerk

October 16, 2017

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this subdivision. 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: October 5, 2017

TO: Planning Commission

FROM: Jill Maclean, AICP, Senior Planner
Community Development Department

FILE NO.: SMP2017 0001

PROPOSAL: Modification to the Pederson Hill Preliminary Plat

A handwritten signature in black ink, appearing to read "Jill Maclean", is written over the "FROM:" line of the letter.

GENERAL INFORMATION

Applicant: City & Borough of Juneau

Property Owner: City & Borough of Juneau

Legal Description: Pederson Hill Lot 2

Parcel Code No.: 4B2201010101

Site Size: Approximately 120 acres

Project Size: Approximately 20 acres

Comprehensive Plan Future
Land Use Designation: Medium Density Residential (MDR)

Zoning: D-10SF

Utilities: CBJ Water / Sewer

Access: Glacier Highway

Existing Land Use: Undeveloped Vacant Land

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Surrounding Land Use: North – Vacant, University of Alaska (D1(T) D5)
South – Vacant, Sherwood Lane (I)
East – Vacant, University of Alaska (D1(T) D5)
West – Church (D10)

VICINITY MAP



ATTACHMENTS

Attachment A: Application for Modification to Pederson Hill Preliminary Plat
Attachment B: Pederson Hill Modified Preliminary Plat and Phasing Overview
Attachment C: Pederson Hill Subdivision Design 65% Excerpt
Attachment D: SMP2016 0002 Staff Report and Attachments for Pederson Hill Subdivision
Attachment E: Agency Review and Public Comments

BACKGROUND

The Planning Commission approved with conditions the preliminary plat for Pederson Hill Subdivision (SMP2016-02) on February 28, 2017 (see Attachment A p.33 Notice of Decision and Attachment D Staff Report and Attachments). Due to internal financing mechanisms necessary to complete the project, the applicant is seeking to modify the approved subdivision into three phases of development – Phases 1A, 1B, and 1C. The subdivision remains essentially the same, except for a new emergency vehicle access via the Christ Evangelical parking lot, rather than using the equestrian trail as previously intended (see Attachment A p.36).

As the proposed modifications are minor in scope and do not affect the analysis and review of the subdivision, attached is the staff report from the previously approved subdivision for reference (see Attachment A Application and Attachment D SMP16-02 Staff Report).

The Notice of Decision (see Attachment A p.33) issued by the Planning Commission included the conditions listed below, several of which the applicant has subsequently addressed and the status of which are shown below in bold font following the condition.

Please note that due to the modification to the subdivision and phasing of development, the lot numbering has changed from the preliminary plat approved on February 28, 2017. Where renumbering has occurred, the condition(s) below identifies the new lot number.

The conditions from the February 28, 2017, NOD are:

1. Prior to Construction Plan approval, the applicant shall submit detailed data for future utilities per 49.15.411(f)(7). **(This condition has been met – see Attachment C.)**
2. Prior to Construction Plan approval, the applicant shall submit required documentation meeting 49.15.411(6) *Erosion Control*. **(This condition has been met – see Attachment A p.42.)**
3. Prior to Construction Plan, the applicant shall submit an updated lot closure report. **(This condition has been met.)**
4. Prior to Construction Plan approval, the applicant shall submit another subdivision plat to ensure labels and naming are consistent throughout the plat sheets. **(The modified preliminary plat sheets are consistent. This condition has been met.)**
5. Remove labels 'Preservation Lot' and 'Park Lot' and replace with new plat note, as shown below. [Note: this is in reference to Condition 6.] **(The modified preliminary plat includes this note. This condition has been met.)**
6. Prior to Final Plat approval, the applicant shall submit a draft plat with the following plat notes on the subdivision plat:
 - a. Plat Note: "Right-of-way access for Lots 1-7 Block C (modified on Phase 1A Lots 2-7) shall be restricted to common driveways for each pair of lots. Only one of the seven

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October 5, 2017
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- lots may have its own driveway that is not common to an adjacent lot.” **(The modified preliminary plat includes this note. This condition has been met.)**
- b. Plat Note: “Corner lots abutting Karl Reishus Boulevard shall have driveways limited to accessing a street other than Karl Reishus Boulevard.” **(The modified preliminary plat includes this note. This condition has been met.)**
 - c. Plat Note: “Wetlands exist throughout this subdivision. Approval to impact these wetlands has been given by the US Army Corps of Engineers (COE). Consult COE for more information.” **(The modified preliminary plat includes this note. This condition has been met.)**
 - d. Plat Note: “Lots 10 & 12 Block A and Lot 9 Block C (modified to Phase 1A Lot 9 and Phase 1B Lots 5, 7) shall be Public Use Lots. Restriction of building development, further subdivision, and other limitations or restrictions apply. **(The modified preliminary plat includes notes to this effect. This condition has been met.)**
- 7. Prior to Plat recording, the applicant shall submit documentation that places a permanent protected status on Lots 10 & 12 Block A and Lot 9 Block C (modified to Phase 1A Lot 9 and Phase 1B Lot 7) in accordance with 49.15.422.
 - 8. Prior to Construction Plan approval, the applicant shall submit a design showing a drainage infrastructure that would allow fish passage through the equestrian trail east of Karl Reishus Boulevard. **(This condition has been met – see Attachment C.)**
 - 9. Prior to Construction Plan approval, the applicant shall submit a design showing a minimum 10-foot wide walking surface within the Wild Rose Walk ROW per 49.35.610(a). **(This condition has been met – see Attachment C.)**
 - 10. Prior to Construction Plan approval, the applicant shall submit a lighting plan meeting applicable CBJ standards. **(This condition has been met – see Attachment C.)**
 - 11. Prior to Construction Plan approval, the applicant shall submit documentation ensuring compliance with section D107.1 of the International Fire Code. **(This condition has been met.)**

The NOD also contained the following Staff Note:

*After the publication of staff’s memorandum 2/21/2017, the applicant submitted and the Planning Commission approved a design change that relocated the western portion of the proposed Cheex Equestrian Trail from behind Lots 1-5 BL C to along the eastern side of the proposed Karl Reishus Boulevard. This new portion of the trail would be five feet wide. This design change also reduced the width of the planned east side sidewalk along Karl Reishus Boulevard from six feet to five feet. This is the design of the preliminary plat that was approved by the Planning Commission. **(The modified preliminary plat addresses this item. This item has been met.)***

AGENCY REVIEW

The following agencies provided comments on the proposed modification to the preliminary plat.

Capital City Fire/Rescue: *Capital City Fire Rescue has no objections to the Pederson Hill Subdivision proceeding as planned. The fire access and water requirements have been reviewed and are acceptable to the fire department.*

Alaska Dept. of Fish and Game Wildlife Division: *In our experience even after development occur wildlife will continue to use historical travel corridors which will bring animals, primarily bears, into contact and perhaps conflict with future residents. Both CBJ and DWC resources are already overburdened responding to the current level of human- wildlife conflicts, so we believe steps should be taken in design of this and any new subdivision to minimize the potential for new conflicts before any houses are built. To ensure we maintain safe neighborhoods for both people and wildlife we offer the following ideas for minimizing effects on wildlife and the potential for conflicts between future residents of the subdivision and wildlife.*

To mitigate wildlife conflicts we recommend that builders be required to include bear-proof trash structures sized to accommodate the larger trash and recycling cans with each house built. We understand that a borough-wide requirement would be ideal, but it would be difficult to enact. Limited staff and resources make enforcement of existing CBJ ordinances and subsequent management of nuisance urban wildlife (managed by the State) conditioned to trash difficult. We continue to believe there would be value in using this development as a demonstration project to evaluate the effectiveness of such a requirement. If residents use them and they are effective, it would be much easier to sell the idea as a borough-wide requirement. Alternately, perhaps the city could work with the local refuse company to aid in purchasing effective bear-resistant trash cans, such as the Kodiak Products KP95-HD can, for newly developed residential areas to minimize future human-bear conflicts.

These comments only reflect the division of wildlife conservation (see Attachment E for full comment letter; see Attachment A p.30 for comments regarding wildlife corridors provided by CBJ Lands and Resources Division).

Alaska Dept. of Fish and Game Habitat Division: *No comments at this time (see Attachment A p.5 for Minutes from SMP2016-02 hearing on February 28, 2017).*

Alaska Dept. of Environmental Conservation: *No issues at this time.*

PUBLIC COMMENTS

Two comments were received from the public (for complete emails, see Attachment E):

- Bobbie Epperly, James Pietan and Esther K. Epperly: *Are concerned with over-building and spending funds that the city does not have but are more supportive of the phasing of the*

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development, rather than developing the entire subdivision at once. There is concern with the proposed intersection at Karl Reishus Blvd and Sherwood Lane, and they request that the city work with DOT to lower the speed limit to 40MPH.

- Katherine Savage and Chris Cunningham (Frank Maier Drive): *Request that as few trees as possible are removed from the southernmost lot (previously Lot 15 in the original preliminary plat – bordering the Cheex Equestrian Trail, southwest corner) and that Lot 15 (previously Lot 1 in the original preliminary plat) remain CBJ undeveloped property to afford more privacy, protect wildlife and wildlife corridors, and buffer noise. They support affordable housing, while keeping the needs of established neighborhoods on the forefront for a positive outcome for all.*

FINDINGS

CBJ 49.15.402(4) Major Subdivisions, the Director shall prepare and submit a report to the Planning Commission noting any conditions of approval or plat notes recommended and addressing the following criteria:

- (A) Whether the preliminary plat complies with CBJ 49.15.411.
Yes. The modified preliminary plats comply with CBJ 49.15.411.
- (B) Whether the applicable subdivision development standards of this title are met, or can reasonably be met with conditions.
Yes. The modified subdivision meets the standards of Title 49.
- (C) Whether the proposed subdivision will provide building sites suitable for the zoning district.
Yes. All lots have building sites that are suitable for D-10SF zoning district.
- (D) Whether the proposed street names are unique in the City and Borough or are continuations of existing streets and are otherwise acceptable.
Yes. All proposed street names are unique to the City and Borough.
- (E) Whether the director of engineering and public works has reviewed the application and determined that:
 - (i) The subdivision can be constructed to conform to applicable drainage and water quality requirements;

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- (ii) The streets, pioneer paths, and pedestrian ways as proposed accommodate anticipated traffic, align, and, where appropriate, connect with streets and pedestrian ways serving adjacent properties;
- (iii) Any proposed improvements conform to the requirements of this title and can feasibly be constructed in accordance with this title; and
- (iv) Where public sewer is not required, the applicant has shown that soils are suitable for individual on-lot wastewater treatment and disposal or has shown the feasibility of alternative methods for wastewater treatment and disposal.

Yes. The subdivision has been reviewed by the Director of Engineering and Public Works for appropriate drainage, traffic, compliance with code, and access to public sewer.

CBJ 49.15.402(5) Major Subdivisions. *In issuing its notice of decision on a preliminary plat, the Commission may accept, amend, or reject the director's proposed recommendations. The decision of the commission approving or denying a preliminary plat application will be set forth in a notice of decision, and will specify any conditions or plat notes required for final plat approval. If the preliminary plat is denied, the applicant may submit a revised plat application, without paying additional application fees, within 180 days from the date of the notice of decision.*

RECOMMENDATION

Staff recommends that the Planning Commission adopt the Director's analysis and findings and approve the Modification to the Preliminary Plat for Pederson Hill Subdivision. This approval would allow the applicant to submit the Final Plat application.

MEMORANDUM

CITY/BOROUGH OF JUNEAU

Lands and Resources Office
155 S. Seward St., Juneau, Alaska 99801
Dan_Bleidorn@juneau.org
(907) 586-5252

TO: CDD Staff and the Planning Commission

FROM: Dan Bleidorn, Deputy Lands Manager


SUBJECT: Modification to Pederson Hill Preliminary Plat request

DATE: September 19th, 2017

On February 28th, 2017 the Planning Commission reviewed and unanimously approved a preliminary plat request for the Pederson Hill II Subdivision (SMP2016-0002). As a result, the Community Development Department issued a Notice of Decision (Attachment A) on March 3, 2017, which outlines the conditions of this approval.

There have been a number of updates to the preliminary plat since its approval, namely the need to approach Pederson Hill in a three-phased development to match the internal financing mechanisms necessary to complete the project. Staff is also using this opportunity to address concerns presented by the Planning Commission and public at the February 2017 preliminary plat hearing. Staff findings addressing these concerns are presented below:

1. Three Phased Development Approach

This is the most substantial change to the preliminary plat request. After evaluating options for financing this project, staff concluded that this project should move forward without the utilization of a central treasury loan. City Manager Rorie Watt stated at the August 10, 2017 Committee of the Whole (CBJ Assembly) meeting that “staff has evolved the project into three phases, which will make development more streamlined, save money, and by not having the whole plat recorded at once, selling and building can move forward without utilization of a central treasury loan. This accomplishes the same goals in a less confusing way. Staff took the complete scope of the project to the Planning Commission for review, so this is not ‘piece-mealing’ or phasing, but just scaling back on the method of development.”

2. Acquisition of Emergency Access Easement

Since the preliminary plat approval the CBJ has secured a secondary emergency access easement through 10300 Glacier Hwy (Christ Evangelical Lutheran Church of Juneau Alaska) and Lot 1 Block C of this proposed subdivision. A copy of this easement has been included with the preliminary plat modification application as attachment B.

3. Change in Cheex Equestrian Trail Location

Due to the concerns of a nearby private property owner, the Cheex Equestrian Trail has been relocated. This change was discussed at the preliminary plat hearing on February 28, 2017 but the plat at that time had not been updated. This change has since been included in the draft plat for phase 1A. The updated trail corridor terminates at Glacier Highway along Karl Reishus Boulevard.

4. Setbacks No Longer Shown on Plat

As per direction given by the City's General Engineering Department, setbacks are no longer shown on the plat.

5. Lots 10 and 12 Block A Renamed "Public Use Lot"

As per direction given by the City's General Engineering Department and per CBJ Code 49.15.422, Lots 10 and 12 Block A, originally platted as "Preservation Lot," were renamed "Public Use Lot."

6. Wildlife Corridor Review with the Alaska Department of Fish and Game (ADF&G)

The Planning Commission asked the applicant to work with ADF&G to address concerns regarding the subdivision's impacts on the wildlife travel corridor that were discussed at the preliminary plat hearing. Attached to this preliminary plat modification request is a memo received from Stephanie Sell, ADF&G Wildlife Biologist III and City staff's follow-up to identify and address these concerns (Attachment C).

Thank you,



Dan Bleidorn
Deputy Lands & Resources Manager
City & Borough of Juneau

Attachments:

- Subdivision or Platting application
- Development Permit application
- Attachment A: NOD from 02/28/2017 Planning Commission review of Pederson Hill preliminary plat
- Attachment B: Emergency access easement
- Attachment C: Memo from Stephanie Sell, ADF&G Wildlife Biologist III & Greg Chaney's response



DEVELOPMENT PERMIT APPLICATION

Project Number	CITY and BOROUGH of JUNEAU		Date Received: 9/22/17
Project Name (City Staff to Assign Name)			

INFORMATION	Project Description Three preliminary plats for the Pederson Hill residential subdivision. (1) Primary access road from Glacier Highway to the subdivision site, second emergency access, and 17 residential lots and two public use lots (1B) Local access roads, two public use lots and 30 residential lots (1C) Additional local access roads and 39 residential lots		
	PROPERTY LOCATION		
	Street Address 10300 Glacier Highway	City/Zip 99801	
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot) USS 5504, Pederson Hill Lot 2		
	Assessor's Parcel Number(s) 4B2201010101		
	LANDOWNER/ LESSEE		
	Property Owner's Name City and Borough of Juneau	Contact Person: Greg Chaney	Work Phone: 586-0205
	Mailing Address 155 South Seward Street, Juneau, Alaska 99801	Home Phone: 586-2594	Fax Number: 465-2465
	E-mail Address greg.chaney@juneau.org	Other Contact Phone Number(s):	
	LANDOWNER/ LESSEE CONSENT ****Required for Planning Permits, not needed on Building/ Engineering Permits****		
PROJECT / APPLICANT	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	Daniel Bleidorn	09/15/2017
		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 SAME		Contact Person: Work Phone:
	Mailing Address		Home Phone: Fax Number:
	E-mail Address		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)			
	X	Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)			SMP 17-CC1
		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 jmm

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

SUBDIVISION OR PLATTING APPLICATION

Project Number	Project Name (15 characters)	Case Number <i>SMP 17-001</i>	Date Received
----------------	------------------------------	----------------------------------	---------------

TYPE OF SUBDIVISION OR PLATTING APPROVAL REQUESTED
(see submittal requirements on reverse)

MINOR SUBDIVISION
(changing or creating 13 or fewer lots)

☐ Preliminary Plat (MIP)

☐ Final Plat (MIF)

☐ Panhandle Subdivision

☐ Accretion Survey

☐ Boundary Adjustment

☐ Lot Consolidation (SLC)

☐ Bungalow Lot Subdivision

☐ Common Wall/Zero Lot Subdivision

☐ Other _____

MAJOR SUBDIVISION
(changing or creating 14 or more lots)

☒ Preliminary Plat (SMP)

☐ Final Plat (SMF)

☐ Preliminary Development Plan - PUD (PDP)

☐ Final Development Plan - PUD (PDF)

☐ Bungalow Lot Subdivision

☐ Common Wall/Zero Lot Subdivision

☐ Other _____

Please attach a cover letter to fully explain the project if there is not adequate space on this form.

LEGAL DESCRIPTION(S) OF PROPERTY TO BE SUBDIVIDED OR PLATTED:

USS 5504, Pederson Hill Subdivision Lot 2

Number of Existing Parcels 1 Total Land Area 121.4 acres Number of Resulting Lots or Parcels 86

HAS THE PARCEL BEEN CREATED BY A MINOR SUBDIVISION IN THE PRECEDING 24 MONTHS: ☒ NO ☐ YES If Yes, provide the Case Number _____

EXISTING BUILDING(S) OR STRUCTURES ON THE LAND: ☐ YES ☒ NO

CURRENT USE OF LAND OR BUILDING(S): Undeveloped municipal property

PROPOSED USE OF LAND OR BUILDING(S): D10 SF Single Family Residential Subdivision

UTILITIES AVAILABLE: **WATER:** ☒ Public ☐ On Site **SEWER:** ☒ Public ☐ On Site

UNIQUE CHARACTERISTICS OF LAND OR BUILDING(S): _____

For more information regarding the permitting process and the submittals required for a complete application, please see the reverse side. If you need any assistance filling out this form, please contact the Permit Center at 586-0770.	SUBDIVISION/PLATTING FEES				
		Fees	Check No.	Receipt	Date
	Application Fees	\$ <u>9460</u>	_____	_____	_____
	Admin. of Guarantee	\$ _____	_____	_____	_____
	Adjustment	\$ _____	_____	_____	_____
	Total Fee	\$ _____	_____	_____	_____

TO BE COMPLETED BY THE APPLICANT

NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM

Agenda
Planning Commission
Regular Meeting
CITY AND BOROUGH OF JUNEAU
Ben Haight, Chairman
February 28, 2017

I. ROLL CALL

Paul Voelckers, Vice Chairman, called the Regular Meeting of the City and Borough of Juneau (CBJ) Planning Commission (PC), held in the Assembly Chambers of the Municipal Building, to order at 7:01 p.m.

Commissioners present: Paul Voelckers, Vice Chairman; Michael LeVine, Nathaniel Dye, Dan Miller, Percy Frisby, Dan Hickok, Kirsten Shelton-Walker, Carl Greene (telephonically)

Commissioners absent: Ben Haight

Staff present: Rob Steedle, CDD Director; Beth McKibben, Planning Manager; Laura Boyce, Senior Planner; Jill Maclean, Senior Planner; Eric Feldt, Planner II; Greg Chaney, Lands and Resources Manager; Dan Bleidorn, Deputy Lands and Resources Manager; Robert Palmer, Deputy City Attorney; Michele Elfers, Chief Landscape Architect

Assembly members: Debbie White, Assembly Liaison to the Planning Commission

II. APPROVAL OF MINUTES

- a. January 10, 2017 Draft Minutes – Regular Planning Commission Meeting
- b. January 24, 2017 Draft Minutes – Regular Planning Commission Meeting

MOTION: *by Mr. LeVine, to approve the January 10, 2017 and the January 24, 2017 Planning Commission regular meeting minutes with any minor changes by staff or Commission member.*

III. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

Juneau resident Mike Allen expressed his concern to the Planning Commission about the over 70 new trees which have been planted in the Statter Harbor parking area. He said the Littleleaf

Linden trees planted in the area are not native to this community and that the view from the road and from the small commercial Auke Bay area including the Squires Rest will be compromised due to the trees blocking the view. Mr. Allen said this is a parking lot, not a park. Mr. Allen showed the Commission pictures indicating how the trees will block the view from the Auke Bay area. Mr. Allen said he was told the trees were required in the Statter Harbor plan or it would not be approved by the Planning Commission. He said this was difficult for him to understand. He said it would be nice if the trees planted along the sea walk from the boat launch to the creek could be moved to restore optimal views for the area.

IV. PLANNING COMMISSION LIASON REPORT

Assembly Liaison to the Planning Commission Debbie White reported that at last night's Assembly Committee of the Whole (COW) meeting that there were two items which will be coming before the Planning Commission. A drainage easement will be requested between the Johnson Youth Center and the Sleepy Spruce Apartments. The Johnson Youth Center site is leased from the City and Borough of Juneau, she noted.

Also coming before the Commission is the possible downtown transfer of City Star Hill property to a private owner so that they can install retaining walls on their property, said Ms. White.

Of interest to the Commission is information on Senate Bill 14 which has to do with network transportation companies such as Uber and Lyft, said Ms. White. There is concern that this bill would take away local control, and those vehicles are not identified as commercial passenger vehicles, she said. In the past the Planning Commission has provided input on commercial traffic vehicle rules, said Ms. White.

The Assembly also held joint meetings with the school board and the Eaglecrest board, said Ms. White. On February 13, (2017) the Assembly heard the introduction of the ordinance which addresses the Land Use Code and the parking waivers, she said. Those items should be before the Assembly on March 6, (2017) she said.

At the February 13, (2017) meeting the Assembly also adopted their decisions on the Olmo and Meek appeals, upholding the Planning Commission decisions on both issues, she said.

V. RECONSIDERATION OF THE FOLLOWING ITEMS - None

VI. CONSENT AGENDA - None

VII. CONSIDERATION OF ORDINANCES AND RESOLUTIONS - None

VIII. UNFINISHED BUSINESS - None

IX. REGULAR AGENDA

A. SMP2016 0002 A Preliminary Plat for Phase 1 Pederson Hill Subdivision resulting in 86 Residential lots and 5 lots for preservation/park purposes.

B. CSP2016 0006 A City consistency review of Preliminary Plat Phase I Pederson Hill Subdivision resulting in 86 residential lots and five lots for preservation/park purposes.

Vice Chairman Voelckers asked Mr. Steedle to explain the differences between the two items on the same project that were before the Commission.

Mr. Steedle said the Commission has two questions to address: does this City capital project comport with adopted plans and the code, and does this subdivision as proposed meet the requirements of Title 49.15 for a preliminary plat. He said in the past these types of items have been split into two separate staff reports. He said for simplicity he felt this should be combined into one report for the Commission.

Mr. LeVine asked Mr. Steedle if there was any direction he could give to the Commission to assist with evaluating the first issue in terms of the proposed project consistency with the adopted plans. He asked how specific the Commission needs to be regarding this particular plat proposal and subdivision when making its determination about whether the proposed project and City expenditure are consistent with the plans.

Mr. Steedle said he felt the relevant question is whether there is any conflict between this item and the Comprehensive Plan and its subordinate plans. He said recently the Commission has recommended the adoption of the Housing Action Plan. The foundation for this plan is based upon studies performed over the years on Juneau's housing shortage, he added. The Assembly did adopt the Housing Action Plan by resolution, but it was not incorporated into the Comprehensive Plan, said Mr. Steedle. The Juneau Economic Development Plan as well has pointed to a lack of housing in Juneau as a key factor contributing to the constriction of economic growth within the community, he said. Mr. Steedle said he did not feel the Commission needed to get to the level of detail in the Housing Action Plan and the Economic Development Plan and the other housing action plans which have been before the Commission in the past.

Mr. LeVine said his question pertained to the specifics of the actual plat before the Commission. When making its determination, said Mr. LeVine, how specific does the Commission need to be regarding the proposed plat itself, or should it take a broader view as to how the City is using its funds to encourage development on Pederson Hill.

Mr. Steedle said the Commission should separate it from the design of Phase 1 of the subdivision.

Staff Report

Mr. Feldt told the Commission the staff's findings lists all of the findings listed under the preliminary plat section of the Land Use Code in quite extensive detail. He said his verbal report will not go into that level of detail but that he was prepared to answer any questions the Commission may have.

The Commission has two cases for one project, said Mr. Feldt. SMP 2016 0002 is a preliminary plat approval and CSP 2016 0006 is a City consistency review, he said. At the end of the presentation the Commission would have two separate motions for the two separate items on the agenda for the one project, he said.

Pederson Hill is a large vacant area that is covered by multiple properties, said Mr. Feldt. The 120 acre City property is surrounded to the north by vacant University of Alaska land, south by vacant land and Sherwood Lane, to the east by vacant University of Alaska land and to the west by a church and Glacier Highway. The proposed development encompasses about 20 acres of property.

The 1999 CBJ Land Management Plan designated the CBJ land on Pederson Hill to be considered for disposal for development once sewer was provided and a subdivision feasibility study was complete. There is now available sewer at the subject site, noted Mr. Feldt. The current proposal before the Commission is for 10 single-family units per acre, said Mr. Feldt. The subject property was rezoned in 2014 from D-1 / D-5 to a mix of D-10 and D-10 SF, said Mr. Feldt. The D-10 zoning is intended to primarily accommodate multi-family development at 10 units per acre; D-10 SF (Single Family) is intended to primarily accommodate single family residential development also at a density of 10 units per acre, said Mr. Feldt. The smaller lot sizes resulting from the rezone make it possible to achieve lower housing costs, he said. Recently a land swap has transpired between the City and a church in the area making it possible to connect the large CBJ parcel to Glacier Highway, said Mr. Feldt.

Mr. Feldt showed the Commission maps indicating the three phases of development. The D-10 SF piece would be the first to be developed, he said. Phases two and three are concepts to be developed at some point in the future, he said. Multi-family development is offered for consideration as the next phase of development with another connection to Glacier Highway, said Mr. Feldt.

Mr. Voelckers asked if the road proposed for the second phase of development was on land already acquired, or would it be a future acquisition.

Mr. Feldt said that when Mr. Chaney, the Lands and Resources Manager spoke, that he could address that question.

A public meeting on the proposed development was held in early February with Mr. Chaney and a local architect present, noted Mr. Feldt. A very detailed explanation was given regarding the development as well as conceptual drawings of what it might look like provided by the local architect, noted Mr. Feldt.

The project was also sent out for review to various City, State and federal agencies, said Mr. Feldt. The project was reviewed by:

- 🏠 CBJ Engineering
- 🏠 Wetland Review Board
 - Feels the project reduces impact on the wetlands because it proposes higher density and a smaller area which minimizes the total acreage affected and provides - the board emphasized the importance of preserving stream quality while developing the area conservation of highly valued wetlands
- 🏠 US Army Corps of Engineers
 - Involved because the applicant (City) had submitted a wetland fill permit
- 🏠 Alaska Department of Environmental Conservation
 - Involved for habitat purposes -
- 🏠 Alaska Department of Fish and Game
 - Involved because of the fill in the wetlands and the construction plan located near an anadromous stream – there were several salmon in the Pederson Hill Creek
- 🏠 Affordable Housing Commission
 - Supports the project
- 🏠 CBJ Capital City Fire and Rescue
 - That access is provided for emergency vehicles

Mr. Feldt said the first critical step involved in the development of a major subdivision requires Planning Commission review and approval of the preliminary plat. As the project progresses it moves forward to construction drawings prepared by a private engineering company, and then circulated to the various agencies to assure that all of the proposed construction meets local codes, said Mr. Feldt. The infrastructure is then constructed or bonded. These construction improvements consist of the development of roads and utilities, added Mr. Feldt. The project would then come back to the Planning Commission for final plat approval. The subdivision plat itself can then be deemed acceptable to be recorded by the State, he said.

There are three main preliminary plat requirements, said Mr. Feldt:

1. The Platting Standards: the plat itself must be adequately prepared including surveys indicating the lot lines, the monumentation and the technical aspects of the plat itself
2. Public Improvements: must show the layout of the roads, utility lines, etc.
3. Additional Reports or Maps Addressing Unique Aspects of the Site: such as drainage, traffic, flood map, etc.

The plat would address Phase 1 which includes 86 single-family residential lots with access to Glacier Highway, said Mr. Feldt. This includes pedestrian paths and an equestrian trail, said Mr. Feldt. The equestrian trail has been relocated along Karl Reishus Boulevard, said Mr. Feldt. The equestrian trail would be located on the east side of the new street, said Mr. Feldt, showing the Commission a map. Mr. Feldt indicated on the map land allocated for a second access for emergency fire and rescue, which is required, he said, by the International Fire Code. The trail would be essentially a driveway with restricted use for emergency vehicles only, he said. At some point in the future the pedestrian trail would be connected to the trail which leads along the Mendenhall River, said Mr. Feldt.

The average lot size is about 5,000 square feet, said Mr. Feldt. The yard setbacks for the D-10 SF district are 20 feet along the front, a 10-foot rear setback and a 3-foot setback along both side lot lines, he explained. The properties abutting the east side of this subdivision are zoned D-1, said Mr. Feldt. In this situation, he said, the property which holds the greater setback applies, he noted. The project as it moves forward in the future would carry the requirement of two on-site parking spaces, he said.

The unique street names required for the subdivision are:

-  Karl Reishus Boulevard, named after a police officer who died while serving the force. This is the widest street proposed for the development, and would be a collector for the other streets.
-  Yan Street (Hemlock trees)
-  Guwakaan Street (Black Tail deer)
-  Kwalx Street (Fiddlehead ferns)
-  Keishish Lane (Alders)

The interior streets will all be designed the same, with a 50-foot-wide right-of-way, five feet sidewalks on both sides, including two 12.5 feet wide driving lanes, explained Mr. Feldt. The non-motorized pathways including the equestrian trail and pedestrian walk (Wild Rose Walk) will be 10 feet wide, but where the equestrian trail needs to accommodate emergency vehicles it will be expanded to at least 20 feet in width, he said.

The US Army Corps of Engineers has provided approval to fill approximately nine acres of forested wetlands to allow for the construction of the future streets and pedestrian ways, and some buildable lots, said Mr. Feldt.

The portion of Pederson Hill Creek which has been found to be a home to spawning salmon requires a 50-foot setback on each side of the stream, said Mr. Feldt. The stream terminates in one of the preservation lots, he added. With the approval of the sale of certain portions of the wetlands there will be lots set aside in which no development will be allowed, he said. The long, narrow lot will be undeveloped for habitat purposes and to act as a buffer between the privately owned southern lot and the other adjacent development, said Mr. Feldt. City utilities will not be extended to the public use lots as they are not identified for development, said Mr. Feldt. The Land Use Code allows lots to be provided without City services, but they have to be held as public use lots, and noted on the plats, he explained.

The applicant provided a preliminary assessment and map, noted Mr. Feldt. The project is located on a hill and one side slopes toward Glacier Highway he added. The applicant proposes to allow an insignificant amount of that drainage to continue to channel along Karl Reishus Boulevard. The majority of the drainage will be connected to curb and gutter underground, said Mr. Feldt. It would then be directed along the north side of the equestrian trail and to a vacant City property, he said. The applicant has already initiated a request for an easement from the University of Alaska to cross a very small part of its property for access for the trail itself, he noted, and for the drainage as well.

Commission Comments and Questions

Mr. LeVine asked if the drainage plan changed with the relocation of the equestrian trail.

Mr. Feldt said the change to the equestrian trail has happened very recently and that he would like to let Mr. Chaney answer that question.

Staff Report

The land use code requires a fairly extensive analysis to be done regarding drainage. There are still several items on the drainage plan requirement that have not yet been submitted, noted Mr. Feldt. In past major subdivision projects those elements had also not yet been submitted and were a condition of approval, said Mr. Feldt. A detailed drainage plan addressing that section of the code must be provided at the construction drawing step, he said. When the Engineering Department reviews the storm water and drainage plan they will be looking at a complete detailed analysis for their review, said Mr. Feldt.

Commission Comments and Questions

Mr. Voelckers asked if this is the conventional process or if this is a case where it should have already been submitted with the original application.

Mr. Feldt said the situation contains a little bit of both of those aspects: the staff has accepted a partial submitted analysis knowing that there is the condition that the remainder will be submitted when it is needed at the construction drawing review.

Staff Report

Due to the high number of lots proposed a Traffic Impact Analysis (TIA) was submitted. It indicated that there was acceptable intersection volume, and it did not recommend that any traffic mitigation was necessary, said Mr. Feldt.

This portion of the report involves the City consistency review, noted Mr. Feldt. This project would dispose lots to the private market, said Mr. Feldt. The 2016 Housing Action Plan calls for housing types and sizes to accommodate present and future housing needs for all economic groups, said Mr. Feldt. It also calls for preserving natural areas that possess important recreational and scenic fish and wildlife and other environmental qualities, he added. This would be a development that young families or older families wanting to downsize would be attracted to, noted Mr. Feldt. The 2016 Land Action Plan indicates which CBJ parcels should be disposed of to the general market for future development opportunities, he said.

The 2015 Juneau Economic Development Plan has an initiative to promote housing affordability and availability. Juneau's current housing stock and possible future development include the development of access roads, the installation of utilities and plat subdivision land for about 200 lots, he said. That would include phases one through three of the Pederson Hill subdivision, he said. The 2009 Non-Motorized Transportation Plan indicates a 10-foot-wide separated path across the Pederson Hill subdivision which would connect Auke Lake to the pedestrian bridge at Dimond Park, said Mr. Feldt. This will be realized later on as phases two and three of the development are constructed, he said.

There is currently a new bike path along the north side of Glacier Highway that provides a more indirect connection from Auke Lake and along Riverside Drive to the Dimond Park location, he said. The 2001 Area Wide Transportation Plan recommends support for the development of off-street pedestrian or bicycle pathways in the Mendenhall Valley area that connects to existing main pathway systems, said Mr. Feldt. The east bound pedestrian trail would eventually connect to Dimond Park, said Mr. Feldt.

Regarding the City consistency review, the staff finds that phase 1 of the Pederson Hill subdivision with the conditions and recommendations of SMP2016 0002 complies with the provisions of Title 49, the Comprehensive Plan and the CIP as required by the City and Borough of Juneau land acquisitions, disposals and projects, and the City project review, said Mr. Feldt.

The staff recommends that the Planning Commission accept the Director's analysis and findings and approve the preliminary plat for phase 1 of Pederson Hill subdivision with six conditions. The necessary elements can be met by conditions 3, (Prior to construction plan, the applicant

shall submit an updated lot closure report) 4, (prior to construction plan approval the applicant shall submit another subdivision plat to ensure labels and naming are consistent throughout the plat sheets) 5, (remove labels "Preservation Lot " and "Park Lot " and replace with new plat note as shown below and 6, (prior to final plat approval, the applicant shall submit another draft plat with the identified plat notes on the subdivision plat), said Mr. Feldt.

The second findings shall be met with conditions 1, (prior to construction plan approval, the applicant shall submit detailed data for future utilities per 49.15.411 (F) (7) 9, (prior to construction plan approval, the applicant shall submit a design showing a minimum 10 foot wide walking surface within the Wild Rose walk right-of-way per 49.35.610 (a), 10, (prior to construction plan approval, the applicant shall submit a lighting plan meeting applicable CBJ standards) and 11, (prior to construction plan approval, the applicant shall submit documentation ensuring compliance with section D107.1.1 of the International Fire Code), said Mr. Feldt.

The applicant will also meet conditions 2, (prior to construction plan approval, the applicant shall submit required documentation meeting 49.15.411 (6) and 8, (prior to construction plan approval, the applicant shall submit a design showing a drainage infrastructure that would allow for fish passage to the equestrian trail east of Karl Reishus Boulevard), said Mr. Feldt.

Mr. Feldt said the second motion would forward the subject proposal to the Assembly with the recommendation of approval with the conditions associated with the SMP case. This means that if the Planning Commission approves the SMP case and approves the CSP case then the conditions of the SMP will also relate to the CSP, said Mr. Feldt.

Commission Comments and Questions

Mr. LeVine asked how carefully the Commission needs to consider all 11 conditions outlined in the staff report when deciding how consistent this plan is with the Comprehensive Plan.

Mr. Feldt said the consistency review asks if this is consistent with the adopted City plan. The other part has to do with consistency with Title 49, he said.

Mr. Voelckers said at this point he felt it was appropriate to ask for clarification from the Deputy City Attorney. He said he felt that several Commissioners were concerned about several important distinctions between the items. Mr. Voelckers said, similar to Mr. LeVine, that he was under the impression the general consistency review was far broader in scope and did not address particular items such as conforming lighting.

Mr. Miller said that Mr. Feldt had made a statement that if the Commission approved the SMP with the accompanying conditions, that the CSP would also be approved. Mr. Miller said he did not necessarily agree that this would be the proper order. Mr. Miller said he felt the list of conditions could certainly satisfy the CSP because it is a broader review based upon its

adherence to City plans and codes. Mr. Miller said a preliminary plat is very specific with Title 49 design elements and a very specific listing of things that are required in a preliminary plat. Perhaps the conditions would not satisfy those elements, he said. Mr. Miller said he felt that perhaps consistency should be evaluated before the preliminary plat.

Mr. Palmer said he felt that this case presented one of the most unique opportunities the Commission has had at this juncture to deal with the new subdivision amendments. The CSP review and Title 49.15.580 was drafted with the intent to cover projects that do not have another permit associated with it. This is the first permit which has come before the Planning Commission for a City project that falls cleanly within another permit process that Title 49 provides, said Mr. Palmer.

One way to address this is as described by Mr. Miller, said Mr. Palmer. Another way is to actually look at the more technical aspects of the subdivision permit, review it, and within that same review the CSP process would also be satisfied, he said, because they would be doing the technical review and adherence to Title 49 as they would with any other subdivision project. When the City develops a subdivision it needs to be treated just like any other land owner who is developing a subdivision, said Mr. Palmer. The CSP process was created as a review when there is no other review process in place, said Mr. Palmer.

Mr. Voelckers said the consistency review also covers things like the capital improvement project, and then it is also up to the Planning Commission to see that the project is adequate for the community and that the City is doing the right thing for the population. He said he feels there are situations where there are projects with a permit in place in which the Commission is still asked to review the project on an overview level.

Mr. Palmer said this can certainly be done if the Commission wants to delve into that level of detail. Title 49.15.280 (a) only requires that the Commission reviews City projects for consistency with this Title when it is performing a subdivision review, he added.

Ms. McKibben said the staff recommendation is that if the preliminary plat meets requirements of Title 49 then it meets the consistency review regarding its compliance with Title 49 and in this recommendation staff has said that the preliminary plat requires conditions in order to meet the requirements of Title 49. The other piece of the consistency review is conformance with the plans which the staff has evaluated and found to be consistent with the policies of the plan. She added that there is the third piece which is the CIP (Capital Improvement Projects) under which this project is already listed in various formats.

Mr. LeVine said he understands that the Commission needs to review the plat and its consistency with Title 49 under which there are numerous conditions which must be met. He said from listening to Mr. Palmer and Ms. McKibben that if the Commission finds that the findings and conditions meet Title 49 then they had found consistency with the Plan. He said he

wonders if a subdivision could be concocted by the City which meets Title 49 but which is demonstrably inconsistent with the Housing Action Plan or the Comprehensive Plan, for example. Mr. LeVine said in his opinion he did not think a condition about a lighting plan has anything to do with consistency with the broad policies of the Housing Action Plan, for example.

Ms. McKibben said that goes back to Title 49.10.170 which requires the Planning Commission to review the City projects for consistency with the plans. Ms. McKibben said that perhaps Mr. LeVine was co-mingling the items a bit more than she was. She said to her lighting is part of the preliminary plat review for consistency with Title 49, not necessarily for consistency with the plan.

Mr. LeVine said if they were to approve this they would need two motions: one which would state they would approve the preliminary plat subject to 11 conditions, and another motion stating that the Commission found this proposal consistent with plans.

Applicant

Mr. Chaney said this process has taken over 10 years. The installation of the sewer line in this area was a huge investment by the City making this development possible, said Mr. Chaney. The lots currently up for review are now zoned D-10 SF with the other two phases of the project also zoned D-10SF, said Mr. Chaney. The rest of the region is zoned D-10 for multi-family development. That rezone was approved in 2014, he noted. He said they felt the community needed more small affordable single family homes, and that development within the community has been fairly strong over the last few years with the building of multi-housing developments. The land trade with the church was also critical for this project as it provides access between the project and Glacier Highway, said Mr. Chaney. They are also asked to look for partners, because this is an expensive project, he said. Tlingit and Haida Regional Housing Corporation has expressed interest in partnering with the City on this project, said Mr. Chaney. The City will be seeking other partners as well, he noted.

This is a neighborhood layout, said Mr. Chaney, with sidewalks on both sides of the streets. They have already received an Army Corps of Engineers fill permit, said Mr. Chaney. They are still discussing how they would put the project out to bid; whether to put the lots out for bid in bite-size chunks rather than all at once, said Mr. Chaney. Park Place is a similar type of development in the Mendenhall Valley next to Rotary Park that is zoned D-18, said Mr. Chaney. Those are single-family attached homes with a much denser zoning than the proposed development, he said. Another example of similar density is the lots in Chelsea Court which are closer in size to the proposed Pederson Hill development, said Mr. Chaney.

Mr. Chaney said a 728 square foot starter home with one bedroom and one bathroom could be built for an estimated cost of about \$146,000 for the house itself, excluding the land. The lot would be valued at about \$100,000, said Mr. Chaney. With the cost of land included, there could be a starter home built for \$250,000, said Mr. Chaney. With the cost of a master

bedroom and bath addition the cost for the home itself would climb to about \$211,000, said Mr. Chaney. A third bedroom would put the cost at about \$268,000 he said. So a three bedroom, two bath home with the garage would come to over \$400,000, he said.

It is up to the Assembly to decide how the lots would be released, said Mr. Chaney. They could have some lots open for sealed competitive bids and some blocks of lots open for contractors, or a fair market value lottery, said Mr. Chaney. There are a variety of ways these lots could be released to a variety of groups, said Mr. Chaney.

If the Auke Bay Bypass ever came to fruition, it may nick a corner of the development but probably not, noted Mr. Chaney. If this item is approved tonight it will next go before the Assembly at its March 13, (2017) meeting, said Mr. Chaney. Assuming approval in the spring, detailed engineering for the project would begin, he said. The bid opening would happen sometime in the fall, said Mr. Chaney.

Commission Comments and Questions

Replying to a note from the staff, Mr. Chaney stated that this project is consistent with the Land Management Plan which was adopted in 2016.

Mr. LeVine asked if the plans for drainage have changed with the relocation of the equestrian trail.

The plans have changed somewhat, said Mr. Chaney. They would probably have to construct a berm to direct the drainage to the desired area, said Mr. Chaney.

Mr. Miller asked how far along the plans were when they were reviewed by the Wetlands Review Board in the summer. Mr. Miller noted that the Wetlands Review Board had favorably commented on the open channel streamflow which he does not see in the existing plans. He said he wondered if the wetlands review board was aware that the majority of the drainage would be underground.

Mr. Chaney said the designs were pretty far along when reviewed by the Wetlands Review Board. He said this is a hybrid drainage plan with some sculpting of the landscape to preserve the existing natural drainage on the property. There will also be a fish passage structure, he said. The drainage coming off of the roads will come down, go through an oil water separator, then go to a berm area with a swale in the bottom, he added. There simply is not enough room to have open ditches and sidewalks in a neighborhood with this size of lots, he said.

Mr. Dye asked if the open swale near the equestrian trail would be running perpendicular to the stream.

Mr. Chaney said it will have to be designed to have water running underneath and a swale constructed above. There will be an actual drainage ditch constructed over the stream, said Mr. Chaney.

Mr. Miller asked how the 50-foot setback from the stream could be met with an 80-foot-wide lot.

That lot is set aside as a conservation area and it will not be built upon, said Mr. Chaney.

Mr. Voelckers said he thought the 50-foot buffer ended at lot 12 and then becomes unregulated.

Mr. Hickok asked about how snow storage would be handled.

Mr. Chaney pointed on a map to the areas where snow could be stored. The snow will not need to be trucked out, said Mr. Chaney.

Mr. Hickok asked if parking would be allowed on the streets.

Parking would not be allowed when there was snow which Public Works needed to plow, commented Mr. Chaney.

Mr. LeVine said he wondered with the subsequent phases if there had been analysis on the cumulative impacts on the wetlands.

Mr. Chaney said the vast majority of the property in this area owned by the City is not being developed. With development of the subsequent phases more decisions would need to be made, said Mr. Chaney.

Mr. Miller said he has lived in a subdivision with the sidewalk only on one side and that there was room at the end of the road for snow removal. However, he said the snow would not all be able to accumulate at the end of the road and that it would end up on the sides of the road as well, which would put snow over both sidewalks in some places.

Mr. Chaney said there will certainly be years of very heavy snowfall when it could be backed up onto the sidewalks, but that they are designing the development for a typical year.

In answer to Mr. Dye's question about the equestrian trail, Mr. Chaney said when it goes along the sidewalk along the main road it may be as narrow as five feet.

Mr. Voelckers asked if the City currently has reasonably accurate construction cost estimates. He asked how those numbers aggregate for this development.

This is basically a road project, said Mr. Chaney. He added that you never really know until the bids are opened. They currently have rough numbers, he said. The last time they did a subdivision the bid came in 70 percent below the engineer's estimate, he said. The current estimate is for about \$8 million for full construction costs. They hope to bring this project in for less than the fair market value of the lot, he said.

Mr. Miller said other preliminary plats he has seen or been involved with had drainage easements, especially in a tight neighborhood like this. He said every single lot is going to be a challenge. Usually in the preliminary plat phase drainage is required to be shown, he said.

Mr. Chaney said it is their intent to plat drainage easements along property lines. They had a pretty refined plan for this development and then with the subsequent adoption of the new subdivision ordinance they have had to adjust their plans, said Mr. Chaney. He said drainage easements could have been included in this plat and he is sorry that they are not included. The requirements for a preliminary plat are now much more detailed, he said.

Mr. Chaney said if he were in the private sector and required to do this thorough level of detail for the roads and the drainage, it would be extremely unfortunate if it were then denied. Preliminary plats can be denied, said Mr. Chaney. If he were a private developer, said Mr. Chaney, and he put all of this money into developing the plat and that was denied, he would be extremely disappointed. With the final plat, said Mr. Chaney, individuals are investing money in something that they know they will get a return on.

Public Comment

Juneau resident Jeremy Sidney said that his parents own Swampy Acres, land contiguous to the proposed Pederson Hill development. Mr. Sidney asked what the cost was for the City to acquire the Pederson Hill property. He also asked what the property would go for if it was sold on the open market. Mr. Sidney also complained that all of the residents along Glacier Highway in that area had to help pay for the sewer lines which were installed which the City was then going to use for the Pederson Hill development. He said he did not think this was fair.

He asked if the lots in the proposed subdivision would be filled and ready to build. He said after the lots are purchased it will cost \$25,000 - \$35,000 to fill in each lot. He said he felt the City was becoming housing developers for the private sector. He said he felt this was a really big mistake which the City should not have done. He said he did not feel it was the City's role as a government to be in the land developing business.

Carl Koch, wildlife biologist for the Alaska Department of Fish and Game, said there is about 400 acres surrounding that area between the Auke Lake and the Brotherhood Bridge trail. That area is used by black bears, wolves, coyotes and deer, he said. It is a very important travel corridor and most of the animals passed through the proposed subdivision, he said. He said

they recommend some sort of buffers such as around the equestrian trail or the bottom half of the hill.

Commission Comments and Questions

Mr. LeVine said they have notes from Fish and Game regarding the anadromous stream but they have no information on the wildlife in their packet from Fish and Game. He asked if this was just reviewed by the fish portion of Fish and Game and not the wildlife portion.

Mr. Koch said he felt this went through the Habitat Division and it frequently focuses on fish. He said this issue was only brought to his attention today when one of his colleagues asked him to come and speak before the Commission.

Juneau resident Bobbi Epperly said she found the timing of the Pederson Hill subdivision to be poor judgment on the City's part. She said the current economic outlook for Alaska is bleak with the loss of jobs, revenue, and people moving out of the state. She said spending 4 ½ million dollars and asking investors for the balance is fiscally irresponsible during a time of recession. She said CBJ is basing this project upon a housing shortage and demand which was prevalent in the community 10 years ago. Juneau's population has been dropping and in 2016 she said Juneau has lost 600 people from its population. She said the microscopic lots are overpriced and that homes will not sell at a low enough price to be of benefit to individuals with lower incomes.

Dr. Eric Olsen said he is the owner of the Family Practice building which is located across Glacier Highway in close proximity to the proposed development. He asked the Commission to consider the safety of the intersection in this area which would then be a four-way intersection. He said Family Practice must be included as an element when considering the safety concerns on the road. He said that Family Practice alone probably generates 60 trips per hour during certain times of the day in addition to the 86 trips per hour estimated to be engendered by the proposed Pederson Hill development. He said they prepared their lot for construction in 1984 and the cost of clearing out the lot and preparing it was \$100,000 at that time.

Juneau resident Zachary Stetson said he is 23 years old and that he moved to Juneau several years ago. He said he has found the housing market in Juneau to be extremely difficult. He said he purchased a condominium about one year ago. He said, with a degree in accounting, that he cannot afford a house, and there are many other people in Juneau with lower incomes who would also not be able to afford a home. He said he is in full support of more housing in Juneau.

Former Commission member and Juneau resident Dennis Watson said he was in support of this development. He said he has been an employer in Juneau until just a few years ago and that it is very difficult to recruit people to move to Juneau once they discover how much housing costs in the community. In this case the Borough is taking up a lot of the responsibility of the

development of the subdivision providing paved streets and sidewalks on both sides and utilities. Mr. Watson said one concern he has is that although Swampy Acres is currently a farm site, at some point in the future that could be developed into a commercial property. He suggested that potential property buyers in the Pederson Hill development be made aware of that future possibility of commercial development in their area. He said he feels this project is in compliance with the code and that he felt it would be a disservice to the community if the City did not move forward with the development.

Juneau resident and former Chancellor of the University of Alaska Southeast John Pugh spoke in favor of the Pederson Hill subdivision. He said he has been a resident of the "flats" in Juneau for 37 years. Their area is constructed upon small lots with tight housing and he said they have never been bothered by a lack of privacy. He said that he knows his neighbors really well and that they have developed into a neighborhood that takes care of each other because of how close they live together. He said there are real opportunities to develop a tight neighborhood where friends can be made and neighbors can help take care of one another. He said he felt the Pederson Hill neighborhood would provide many advantages for employers such as the University of Alaska employees which would benefit from that housing.

Applicant

The CSP is a recommendation to the Assembly, said Mr. Chaney. The approval or denial of the plat is for the subdivision development, said Mr. Chaney.

The City's lot preparation will be minimal, said Mr. Chaney. He said he would not be surprised if it did not cost a fair amount to develop the lots prior to construction. The City has spent about \$200,000 on the project to date which is for design, said Mr. Chaney. The amount of money the residents were assessed for the extension of the sewer line was less than half the amount of the cost of that project, said Mr. Chaney. The City pays more than half of those costs, he said. The purpose of extending the sewer was so they could increase the density in the area, he said. The City acquired the property from the State of Alaska, he said. The City's cash outlay for the project is therefore very low, he said. Providing a buffer for the wildlife is a problem if you only look within the proposed subdivision boundary, said Mr. Chaney. They are leaving a lot of this area outside of the proposed subdivision undeveloped, he noted, which will be available for animal crossings. They do not need to release the lots if the market is flooded and the community is in a recession, said Mr. Chaney.

Commission Comments and Questions

Mr. Miller noted there has been some comment by private developers in the community that they were being held to a different standard than the City in terms of the development process. Mr. Miller said in reviewing the documents he felt there may be some of this transpiring with this project. He said he knew the standard was different for City road construction than those for developers building their own roads, for example. He said he did not feel that the 50-foot stream setback was addressed clearly with this development at the preliminary plat stage. He

said typically in every situation he has been involved in this would have had to have been done at this stage. He said perhaps with the enactment of the new subdivision rules that plat requirements have changed. Mr. Miller said he has never been involved in a situation where a plat note could come before the Planning Commission before it was finalized. He asked Mr. Chaney for his input on any discrepancies between City and private development procedures.

Mr. Chaney said that all subdivisions are different from each other. He said a private developer would have probably kept that lot and simply put a 50-foot setback from the stream. For this development they have actually set aside the lot for conservation purposes rather than for just the provision of a setback. 50' setbacks are rarely shown on the plat because they actually move with the stream and as the stream changes course so will the setback, said Mr. Chaney. They submitted their design about 10 months ago and so far had about five rounds with the reviewing agent for the City involving many corrections. There has been no intent at any point in the review process for the standards for this project to be held any lower than what a private developer would experience, said Mr. Chaney.

Mr. Steedle said the review for this development has been treated the same as the previous subdivision which went through the new subdivision ordinance requirements. They have tightened up the requirement for a preliminary plat, noted Mr. Steedle; maybe they are too tight, he said.

Mr. Frisby asked about the solicitation process for comment from agencies. He said he was referring to Fish and Game which initially just commented on the anadromous stream.

Mr. Feldt said when comments are solicited from other agencies they have one point of contact with that agency.

Ms. Shelton-Walker asked Mr. Chaney if he had any comment on the remarks made by Dr. Olsen, the owner of Family Practice, about traffic intersections in the area.

Mr. Chaney said the traffic engineer reviewed the intersection and determined that putting that intersection in would be acceptable. He said he knows there is an attempt to improve the area around Wild Meadow Lane. That might change the traffic flow in that area as well, he said.

Mr. LeVine said he was troubled on a few levels regarding the lack of proper contact with Fish and Game on this project. He said he felt this reflected a certain lack of communication within its own agency on the part of Fish and Game. He said also he felt it was their job to try to prevent interaction between bears and people. He asked how it would affect the development process to provide a decent buffer for the travel of wildlife in the area. Mr. LeVine said he felt this was an important consideration.

Mr. Chaney said he guessed they would lose about 20 lots because the development is already pushing up the hillside and cannot really proceed any further up the hill. There is already a large portion of land set aside for wildlife habitat which cannot be built on, said Mr. Chaney.

Mr. Voelckers asked if there have been studies done on the travel patterns of the animals in the area as far as where they are coming from and where they are going to.

Mr. Chaney said he knew that wildlife likes to spend the winters on the Mendenhall Peninsula because it is warmer in general. He added there definitely is passage of wildlife in this area. He said he was not aware of the exact corridors that they use for passage.

Mr. Voelckers said there were two motions to be made by the Commission and that perhaps it made the most sense to do the broad consistency review prior to the plat itself.

Mr. Voelckers said they were going to bring Mr. Palmer forward for more commentary on whether the Commission needed to make one motion or two motions regarding the Pederson Hill subdivision.

The first question asked by Mr. LeVine is how deep of a review on this subdivision the commission needs to Perform at this point, said Mr. Palmer. When the subdivision ordinance was amended in 2015 and 49.15.580 (a) was specifically amended to clarify that when a City project is before the Commission the only thing the Commission has to do is to look for consistency with Title 49. This is different than it was in the past, said Mr. Palmer. Mr. Palmer recommended that the Commission look at 49.15.580. He said if the Commission wants to do both a CSP and a subdivision review it can do so. But the code only requires the Commission to do a subdivision review, he said. Part of that logic is that the Planning Commission is the platting authority for major subdivisions, said Mr. Palmer. If the CSP is done there is nothing the Assembly can do because the subdivision determination by the Planning Commission is the final authority on the subdivision.

Mr. Voelckers said based upon the information just provided by Mr. Palmer that the Commission will be reviewing SMP2016 0002.

MOTION: *by Mr. Miller, to approve SMP2016 0002 with staff's findings, analysis and conditions.*

Speaking in favor of his motion, Mr. Miller said this project has been a long time in development and that in the previous nine years he served on the Planning Commission he recalled that a lot of work was done trying to make housing more affordable for the community. He said there is no single action which can accomplish this, and 10 years ago this is one of the few pieces of CBJ property identified as developable. Due to the small size of the lots there will definitely be some issues in their development and that lots of preparation will

certainly be expensive. There is the possibility that smaller homes may be built and there is the possibility that they may provide less expensive homes for members of the community to purchase, said Mr. Miller.

Ms. Shelton-Walker said she does have some concerns about an adequate habitat buffer for the development. She said she does support the motion and she does not want to hold up the development of but that she would like to see attention paid to the wildlife corridor as this project moves forward.

Mr. LeVine said he shared the concerns just expressed by Ms. Shelton-Walker. He said he wanted to encourage the City to think carefully as it moved forward in its development and in future phases of the project. He added that he felt it was not the best process to be approving a project with items placed as conditions when they are items which could have already been addressed prior to coming before the Planning Commission. These items should not be coming before the Planning Commission with items such as this listed as conditions, said Mr. LeVine. He added they should be resolved prior to coming before the Planning Commission. He said he encouraged the Community Development Department to see that these items are addressed before they come to the Commission in the future. He said he did approve of the project and that no variances would be required.

Mr. Hickok said he had lots of concerns about this project. He said he kind of agreed with Mr. Sidney and that perhaps the City should not be involved in the development of land. He said he did not know if chopping up a piece of property would make it affordable. He said he felt indifferent about the project but that he has often heard the need expressed for affordable housing. He said he would vote in favor of the motion.

Mr. Dye spoke in favor of the motion, saying that the Commission's role was to ascertain if this project was consistent with Title 49, not if the City should be in the development business or not.

Mr. Greene said he was in support of the motion.

Mr. LeVine said he did want to go on the record and say he felt this project was consistent with the codes and plans that it must abide by.

Mr. Frisby said he did have some concerns about the wildlife and that he did think that some studies on that topic have been completed in that area. He requested that the staff explore and see if it could identify studies done on the wildlife in that area. He said he felt a buffer was very important for the wildlife which migrates through that area.

Roll Call Vote:

Yeas: Mr. Hickok, Mr. Miller, Mr. LeVine, Mr. Frisby, Mr. Greene, Ms. Shelton-Walker, Mr. Dye
Mr. Voelckers

The motion passed by unanimous vote.

X. BOARD OF ADJUSTMENT - None

XI. OTHER BUSINESS

Recycle Works Presentation: The slide show detailing the information provided by Ms. Elfers can be accessed at Juneau recycling.com.

Ms. Elfers said she has been making this presentation to various groups and agencies within Juneau. They will be making this presentation to the Assembly Committee of the Whole in March, she said. A lot of the talk in Juneau is in regard to the cost of bringing goods into the community. But also the disposal of goods needs to be considered, said Ms. Elfers. They either need to be shipped out or dealt with locally, she said.

The Environmental Protection Agency (EPA) states that it should be possible to recycle 60% to 70% of our trash, she said. Juneau currently recycles about 10% of its waste, she said. of cardboard a year.

The landfill is owned by a private company called Waste Management, said Ms. Elfers. This is a worldwide company, she said. Arrow Refuse, a private company, collects the garbage, said Ms. Elfers. The City at this point cannot legally collect garbage, she said. The City could obtain a certificate so that it could collect the garbage but the costs were too high when this was explored several years ago, she said. Therefore, the City cannot control where the garbage goes or what happens to it, she added. The City can collect recycling, she said.

In 20 years the landfill will be full, she said. It is difficult to identify a location for a new landfill, she said. There is really not flat, accessible land for that site, she said. Regulatory requirements for landfills are very high, she said. Another option is to ship garbage to the lower 48, she said. That will probably happen unless other options are identified within the next 20 years, she said. The cost for an incinerator is prohibitive, she said.

Mr. Frisby asked for a distinction between the recycling which is collected by the trucks and the recycling which is dropped off at the recycling center.

The recycle works program has been focusing its efforts recently on maximizing diversion of waste from the landfill for beneficial reuse. They also have a hazardous waste facility located at

Lemon Creek which has been a popular program, she said. They also have a junk metal recycling program, she said, in which they collect junk cars. Through a contractor they take noncommercial vehicles for free, she said.

For recycling the City has a drop off program at the CBJ landfill, said Ms. Elfers. Arrow Refuse runs the recycling program picked up by its trucks, she said. Within the last year the City has installed recycling drop boxes throughout the community which it takes back to the recycling center, she said. This program has been wildly successful, she said. They have five more drop box containers arriving within the next few weeks, she said.

Commission Comments and Questions

Mr. Hickok said he owns a liquor store. He said he did not feel it was necessary for Alaskan Brewery to deliver their product to the local liquor stores in large cardboard containers.

Ms. Elfers said she thought that was a great idea and that going to the source to reduce waste is a popular component of recycling.

Ms. Elfers said they were surprised when the curbside recycling program began, that the drop-off recycling at the CBJ site still remains strong.

Mr. LeVine asked how Arrow can make money shipping recycling down south and not the City doing the same thing.

Ms. Elfers said mixed recycling such as Arrow does is for ease of use. It sends the recycling to a recycling center where the items which do have value are salvaged and the items which cannot be recycled are put in the landfill. There is no recycling market at this time for plastic other than the type that the CBJ accepts for recycling, said Ms. Elfers.

Composting is a way the community can recycle locally and not have to ship items out of the community, said Ms. Elfers.

Mr. Voelckers commented that extending the longevity of the landfill through recycling must have value for the community.

It is a difficult calculation to make, said Ms. Elfers, since they cannot foresee what shipping costs will be in the future.

Mr. LeVine said there has been a lot of interest in the community on composting. He said it is a shame that items such as lawn waste are placed into the landfill.

There is not currently a composting pilot program, said Ms. Elfers. They have been identifying pilot programs for review. Mr. Frisby asked what the recycling rates were between Arrow and CBJ recycling. Ms. Elfers said she was not sure what the rates were at this time.

Mr. Voelckers asked what the relationship was like between Arrow Refuse and the City. He asked if Arrow was amenable to working more closely together with the City.

They do not collaborate with each other, said Ms. Elfers. She said she feels that is a good direction in which to move.

Mr. LeVine asked if the study has been done on the costs and benefits of recycling, and of some form of mandatory recycling.

Ms. Elfers said she thinks the direction the City needs to head in is partnering with the other waste entities in town which is Waste Management and Arrow Refuse.

Ms. Shelton-Walker said she felt it was very important that the community recycle as much as it could with recycling that can remain within the community.

Ms. Elfers said she is not aware of at this time of any waste technology programs which would be economically feasible for the community.

DIRECTOR'S REPORT

The APOC filing is due by March 15, (2017) for Commission members, said Mr. Steedle.

Ms. McKibben reported that there is a Title 49 Committee meeting on March 8, (2017) at 3:15 pm.

XII. REPORT OF REGULAR AND SPECIAL COMMITTEES

Wetlands Review Board

Mr. Miller reported that there was a Wetlands Review Board meeting on January 19, (2017). They did a Juneau Wetlands Management Plan update. WESPAK (Wetland Ecosystem Services Protocol for Southeast Alaska (WESPAK-SE) is the new means of determining wetlands. There was a pretty extensive peer review that WESPAK underwent and it appears to be a successful venture and ready to function, said Mr. Miller.

XIII. PLANNING COMMISSION COMMENTS AND QUESTIONS – None

XIV. ADJOURNMENT

The meeting was adjourned at 10:34 p.m.



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Fish and Game

DIVISION OF WILDLIFE CONSERVATION
Southeast Region

802 3rd Street
P.O. Box 110024
Juneau, Alaska 99811-0024
Main: 907.465.4265
Fax: 907.465.4272

June 27, 2017

Ms. Beth McKibben
Planning Manager
City and Borough of Juneau
230 S. Franklin St.
Juneau, AK 99801

Ms. McKibben:

Thank you for considering our comments on Phase 1 of the Pederson Hill Subdivision. During public testimony at a February 28, 2017 meeting of the Juneau Assembly the ADF&G, Division of Wildlife Conservation (DWC) learned that the City and Borough of Juneau (CBJ) had already received ADF&G's comments on the project. However, through an oversight the ADF&G, Division of Habitat submitted those comments without first soliciting input from DWC. Regardless of where the Phase I development is in the approval process, DWC believes the project, future residents, and area wildlife can still benefit from our comments.

Currently, Pederson Hill and adjacent undeveloped lands provide habitat for a variety of wildlife including deer, black bears, wolves, coyotes, and recently moose. With this project CBJ proposes to develop 86 units of high-density affordable housing on the south side of Pederson Hill. Although the Phase 1 footprint is relatively small, about 20 acres, as designed, the development will block the most direct, and therefore most used wildlife travel corridor from Montana Creek to the Mendenhall Peninsula, Mendenhall Wetlands, and Douglas Island. We know this is a heavily used corridor from animal sign in the area, road kills (deer, bears, wolf), and movements of one radio-collared bear.

Even with the development wildlife will continue to use this area as a travel corridor bringing animals, primarily bears, into contact and perhaps conflict with future residents. Both CBJ and DWC resources are already overburdened responding to the current level of wildlife-human conflicts, so we believe steps should be taken in design of this and any new subdivision to minimize the potential for new conflicts before any houses are built. Increased traffic resulting from the subdivision will also likely lead to more vehicle-wildlife collisions. We offer the following ideas for minimizing effects on wildlife and the potential for conflicts between future residents of the subdivision and wildlife.

To mitigate wildlife conflicts and allow the area to continue functioning as a wildlife corridor between Douglas Island and the mainland we recommend that; 1) builders be required to include bear-proof trash structures sized to accommodate the larger trash and recycling cans with each house built; 2) design of the subdivision be altered to provide a dedicated forested wildlife travel corridor (~100 yards wide) on CBJ land; and 3) wildlife crossing signs be installed on both Glacier Highway and the Backloop road in areas of known crossings and vehicle collisions.

Ms. Beth McKibben, CBJ

- 2 -

June 27, 2017

Thanks again for considering our comments. I am available to work with CBJ staff in the design of wildlife corridors and placement of wildlife crossing signs.

Stephanie K. Sell

Wildlife Biologist III

Alaska Department of Fish and Game

Division of Wildlife Conservation

P. O .Box 110024

Juneau, AK 99811-0024

907-465-4266 office

stephanie.sell@alaska.gov

cc: Jackie Timothy, ADF&G, Div. of Habitat, Juneau
Holly Zafian, ADF&G, Div. of Habitat, Anchorage
Tom Schumacher, ADF&G, Div. of Wildlife Conservation, Juneau
Greg Chaney, CBJ, Lands Manager

From: Schumacher, Tom V (DFG) [<mailto:tom.schumacher@alaska.gov>]
Sent: Thursday, June 29, 2017 11:29 AM
To: Greg Chaney
Cc: Beth McKibben; Sell, Stephanie K (DFG); Scott, Ryan (DFG); Timothy, Jackie L (DFG)
Subject: RE: ADF&G, DWC Comments - Pederson Hill

Hi Greg,

Thanks very much for your reply. I don't think Stephanie Sell (or any of us) was aware that CBJ had considered wildlife travel corridors when planning this subdivision, so thank you for pointing those out.

Also, for the record, the original comment letter mistakenly indicated that ADF&G, Habitat Division coordinated our agency's review of this subdivision when they were only contributors to that process. The attached version corrects that error, but is otherwise identical.

Tom

From: Greg Chaney [<mailto:Greg.Chaney@juneau.org>]
Sent: Wednesday, June 28, 2017 9:58 AM
To: Beth McKibben; Rob Steedle; Schumacher, Tom V (DFG)
Cc: Dan Bleidorn; Rachel Friedlander
Subject: FW: ADF&G, DWC Comments - Pederson Hill

Hi Tom, Beth and Rob,

Below is a rough diagram showing CBJ land currently available for wildlife to travel from the Mendenhall Peninsula to the Montana Creek area. I look forward to the opportunity to discuss the extensive effort that CBJ has made to accommodate wildlife migration in this region. The corridors shown on the diagram below represent areas that are being managed as natural areas on CBJ property. The proposed subdivision is outlined in red.

Corridor #1 is the primary area established for this purpose. It is approximately 1,100 feet wide on the Pederson Hill Subdivision side of Glacier Highway.

Corridor #2 is also set aside as a natural area. North of Glacier Highway, CBJ has set aside a park along the Mendenhall River that provides access to the Montana Creek area. This area is roughly 600 feet wide at its narrowest point. However south of Glacier Highway is an active industrial area that is not owned by CBJ so this would be less desirable than Corridor #1.

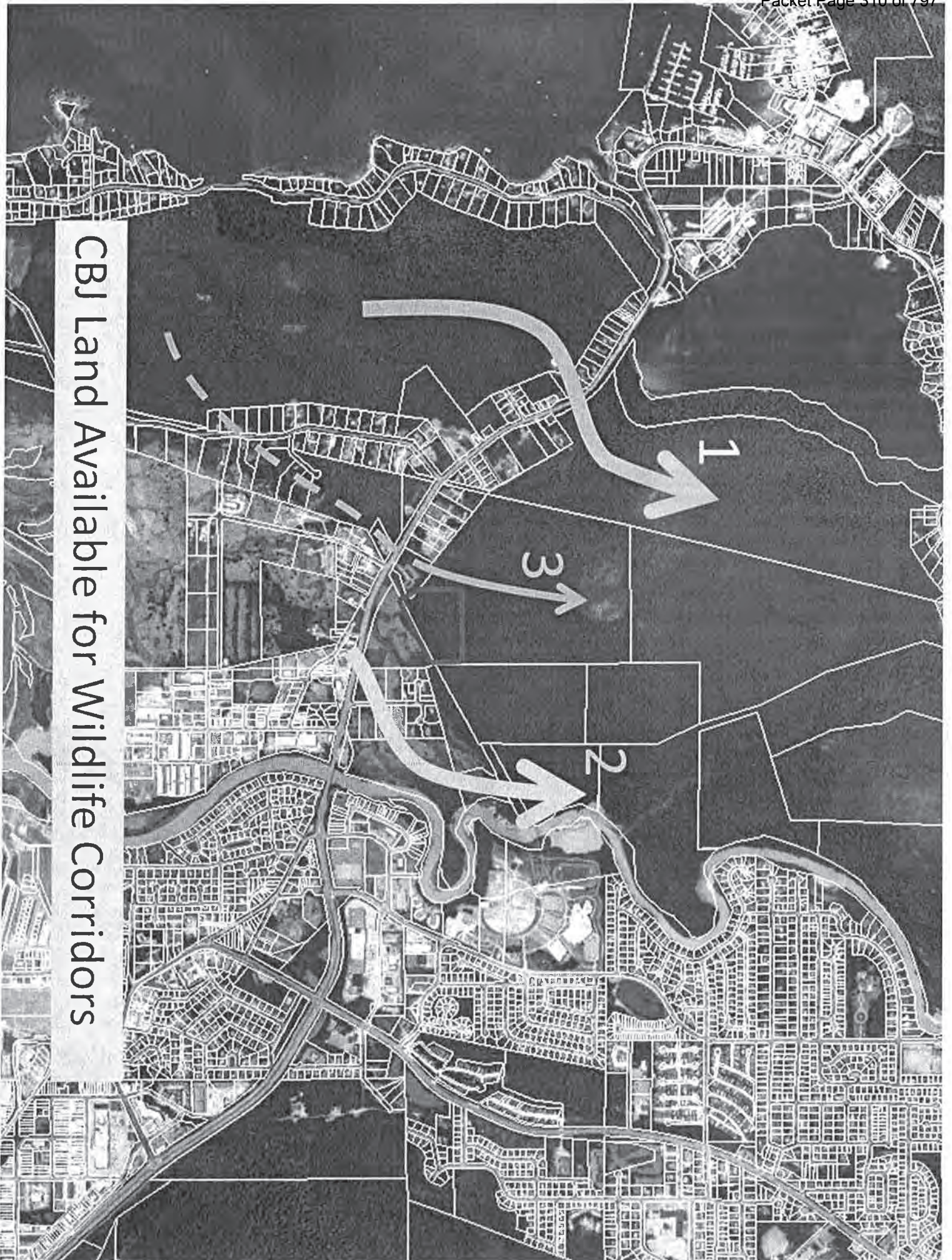
Corridor #3 is near the proposed subdivision but is the least desirable because south of Glacier Highway is a network of industrial and residential private property. CBJ does not have any land holdings in this area so we are unable to provide for wildlife in this region. North of Glacier Highway is also lined with private property. The proposed subdivision is shown in red. The western edge of the subdivision will include a natural area park that could be used for wildlife migration if they are able to negotiate the private property separating the proposed subdivision from the Mendenhall Peninsula. This park will be about 200 feet wide.

I support regulations that would protect wildlife from garbage but I think it would be most appropriate and effective to enact rules borough wide rather than create special rules that only apply to this development.

Thank you for the opportunity to comment on this important topic. Please let me know if you have additional questions, comments or concerns.

- Greg Chaney

CBJ Land Available for Wildlife Corridors



From: Schumacher, Tom V (DFG) [<mailto:tom.schumacher@alaska.gov>]

Sent: Tuesday, June 27, 2017 4:33 PM

To: Beth McKibben

Cc: Greg Chaney; Zafian, Holly K (DFG); Timothy, Jackie L (DFG); Scott, Ryan (DFG); Sell, Stephanie K (DFG)

Subject: ADF&G, DWC Comments - Pederson Hill

Dear Ms. McKibben,

The ADF&G, Division of Wildlife Conservation Juneau Area Management Biologist, Stephanie Sell, asked that I provide you with her comments on Phase 1 of the Pederson Hill Subdivision project. The attached letter explains why these comments were not submitted earlier. Ms. Sell is in the field this week and will not return to the office until after the 4th of July. Thank you for considering these comments.

Tom Schumacher

Regional Management Coordinator
Alaska Department of Fish and Game
Division of Wildlife Conservation
P. O. Box 110024
Juneau, AK 99811-0024
(907) 465-4267



Community Development

(907) 586-0715

PC_Comments@juneau.org

www.juneau.org/plancomm

155 S. Seward Street • Juneau, AK 99801

PLANNING COMMISSION

NOTICE OF DECISION

Date: March 3, 2017

File No.: SMP2016 0002; CSP2016 0006

City & Borough of Juneau
Lands Division
155 South Seward Street
Juneau, AK 99801

Application For: A Preliminary Plat for Phase 1 Pederson Hill Subdivision resulting in 86 Residential lots and 5 lots for preservation/park purposes.

Legal Description: Lot 2 Pederson Hill USS 5504

Property Address: N/A

Parcel Code No.: 4-B22-0-101-010-1

Hearing Date: February 28, 2017

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated February 21, 2017, and approved the preliminary plat to be conducted as described in the project description and project drawings submitted with the application and with the following conditions:

1. Prior to Construction Plan approval, the applicant shall submit detailed data for future utilities per 49.15.411(f)(7).
2. Prior to Construction Plan approval, the applicant shall submit required documentation meeting 49.15.411(6) *Erosion Control*.
3. Prior to Construction Plan, the applicant shall submit an updated lot closure report. **(Updated closure report was submitted on 2/28/2017. This condition has been met).**
4. Prior to Construction Plan approval, the applicant shall submit another subdivision plat to ensure labels and naming are consistent throughout the plat sheets.

City & Borough of Juneau
File No.: SMP2016 0002; CSP2016 0006
March 3, 2017
Page 2 of 3

5. Remove labels 'Preservation Lot' and 'Park Lot' and replace with new plat note, as shown below. [Note: this is in reference to Condition 6.]
6. Prior to Final Plat approval, the applicant shall submit another draft plat with the following plat notes on the subdivision plat:
 - Plat Note: "Right-of-way access for Lots 1-7 Block C shall be restricted to common driveways for each pair of lots. Only one of the seven lots may have its own driveway that is not common to an adjacent lot."
 - Plat Note: "Corner lots abutting Karl Reishus Boulevard shall have driveways limited to accessing a street other than Karl Reishus Boulevard."
 - Plat Note: "Wetlands exist throughout this subdivision. Approval to impact these wetlands has been given by the US Army Corps of Engineers (COE). Consult COE for more information."
 - Plat Note: "Lots 10 & 12 Block A and Lot 9 Block C shall be Public Use Lots. Restriction of building development, further subdivision, and other limitations or restrictions apply."
7. Prior to Plat recording, the applicant [shall] submit documentation that places a permanent protected status on Lots 10 & 12 Block A and Lot 9 Block C in accordance with 49.15.422.
8. Prior to Construction Plan approval, the applicant shall submit a design showing a drainage infrastructure that would allow fish passage through the equestrian trail east of Karl Reishus Boulevard.
9. Prior to Construction Plan approval, the applicant shall submit a design showing a minimum 10-foot wide walking surface within the Wild Rose Walk ROW per 49.35.610(a).
10. Prior to Construction Plan approval, the applicant shall submit a lighting plan meeting applicable CBJ standards.
11. Prior to Construction Plan approval, the applicant shall submit documentation ensuring compliance with section D107.1 of the International Fire Code.

Staff notes that after the publication of staff's memorandum 2/21/2017, the applicant submitted and the Planning Commission approved a design change that relocated the western portion of the proposed Cheex Equestrian Trail from behind Lots 1-5 BL C to along the eastern side of the proposed Karl Reishus Boulevard. This new portion of the trail would be five feet wide. This design change also reduced the width of the planned east side sidewalk along Karl Reishus Boulevard from six feet to five feet. This is the design of the preliminary plat that was approved by the Planning Commission.

City & Borough of Juneau
File No.: SMP2016 0002; CSP2016 0006
March 3, 2017
Page 3 of 3

Attachment: February 21, 2017 memorandum from Eric Feldt, Community Development, to the CBJ Planning Commission regarding SMP2016 0002 and CSP2016 0006.

This Notice of Decision does not authorize any construction. 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 to 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).

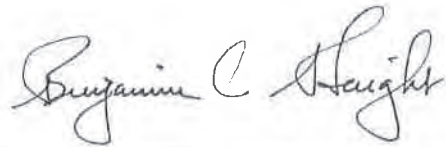
Effective Date: The permit is effective upon approval by the Commission, February 28, 2017.

Expiration Date: The permit will expire 18 months after the effective date, or August 28, 2018, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the subdivision permit was authorized or no final plat has been approved. Application for permit extension must be submitted thirty days prior to the expiration date.

Project Planner:



Eric Feldt, Planner
Community Development Department



Ben Haight, Chair
Planning Commission



Filed With City Clerk

March 3, 2017

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this subdivision. 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.

Recorded in the Juneau Recording District.

When recorded return to:

City and Borough of Juneau, AK
Attn: Division of Lands and Resources
155 S. Seward St
Juneau, AK 99801

Document Title: Emergency Vehicle Access Easement

Grantor: Christ Evangelical Lutheran Church of Juneau

Grantee: City and Borough of Juneau

Grantor's Legal Description: Lot 1 of Plat 2015-40

Grantor's Parcel Number: 4-B22-0-102-001-4

Christ Evangelical Lutheran Church Emergency Vehicle Access Easement

PART I. PARTIES. This easement is made between the **City and Borough of Juneau, Alaska**, a municipal corporation in the State of Alaska, whose address is 155 S. Seward Street, Juneau, Alaska 99801, hereinafter "City," and the **Christ Evangelical Lutheran Church of Juneau, Alaska** "Grantor" whose address is 10300 Glacier Highway, Juneau Alaska 99801.

PART II. ADMINISTRATION. All communications about this easement shall be directed as follows, and any reliance on a communication with a person other than that listed below is at the party's own risk.

City/Grantee:

Attn: Lands and Resources Manager
City and Borough of Juneau
155 S. Seward Street
Juneau, Alaska 99801
Phone: (907) 586-0205; Fax: (907) 586-5385

Grantor:

Attn: Christ Evangelical Lutheran Church of
Juneau, Alaska
PO Box 34104
Juneau, Alaska 99803-4104
Phone: (907) 790-4267

PART III. EASEMENT TERMS AND CONDITIONS.

- (a) **Easement.** In exchange for the valuable consideration herein, Grantor conveys a perpetual easement in gross to the City on the real property located at 10300 Glacier Highway, Juneau Alaska more particularly described as follows: a fraction of Lot 1, Pederson Hill Subdivision, Plat 2015-40, Juneau Recording District, First Judicial District, State of Alaska. The Grantor agrees to provide a thirty-six foot (36') wide

easement for emergency vehicles access as shown in Exhibits A and B. This easement may be relocated by the Grantor, at the Grantor's sole expense, upon written approval of City and Borough of Juneau Fire Marshal.

- (b) **Limitations on access.** This agreement also includes the installation of gates or bollards to restrict non-emergency access to the site. Keys to gates or bollards will be provided to the Grantor's authorized representative so that the Grantor may use these access points if desired and as permitted by the State of Alaska, Department of Transportation.
- (c) **Construction and Maintenance.** The City is responsible for construction and maintenance of any improvements required for emergency access purposes, including gates, bollards, grading or snow removal. The City shall maintain the access easement consistent with the purpose of the easement. The Grantor further agrees to allow the City access for the purposes of maintaining the access easement.
- (d) **Term.** This easement shall be effective SEPTEMBER 15, 2017, and shall remain in effect until such time when a second access for emergency vehicles is constructed to service the Pederson Hill Subdivision; at which time this easement will be vacated by signature of the City Manager and returned to its original condition. This easement runs with the Grantor's land.
- (e) **Purpose.** The easement is for the sole purpose of providing emergency access to or from Lot 2, Pederson Hill Subdivision, Plat 2015-40, Juneau Recording District, and Glacier Highway. The City intends to subdivide Lot 2 into approximately 86 lots for residential development. This easement is granted for the owner of Lot 2, and its successors its agents, lessees, and licensees to be able to subdivide Lot 2 and provide emergency access to and from the subdivision. This easement is not intended to provide non-emergency or pedestrian access.
- (f) **Permitting.** The City shall obtain all authorizations and permits required to construct an emergency access through this easement.
- (g) **Revocation by Dedication of Right-of-Way or Secondary Access.** If and at such time as a right-of-way or second access suitable for emergency vehicle access is dedicated and developed allowing for the uses and purposes contemplated by this easement, all, or relevant portions of this easement shall be revoked.
- (h) **Governing Law.** The laws of the State of Alaska shall govern this agreement. The venue for any proceedings brought by either party to enforce the terms of this agreement shall be in the First Judicial District at Juneau, Alaska.
- (i) **Integration and Modification.** This agreement, including all appendices, exhibits, and references, constitutes the entire agreement between parties. Any modification, amendment, or waiver of any provisions of this agreement shall not be effective, unless it is mutually agreed to in writing and signed by both parties.

(j) **Payment.** The City agrees to pay the Christ Evangelical Lutheran Church twenty eight thousand six hundred and twenty dollars (\$28,620) for this easement.

(k) **CBJ Authority.** The City is authorized to acquire this easement pursuant to CBJ 53.04.020 and 53.04.035.

PART V. EXECUTION. The City and Grantor agree and sign below. This contract is not effective until signed by the City.

Grantor: Christ Evangelical Lutheran Church of Juneau, Alaska

Date: 8/11/2017

By: William Coleman
 Print name: William Coleman
 Title: Interim Church President

GRANTOR'S ACKNOWLEDGMENT

STATE OF ALASKA)
) ss:
 FIRST JUDICIAL DISTRICT)

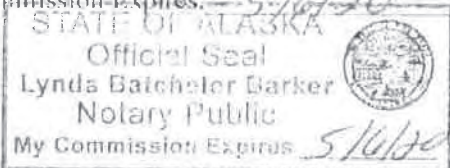
THIS IS TO CERTIFY that on the 11th day of August, 2017, before me the undersigned, a Notary Public, in and for the State of Alaska, duly commissioned and sworn, personally appeared William Coleman, who on oath stated that he was duly authorized to execute said instrument on behalf of Christ Evangelical Lutheran Church of Juneau, Alaska, and acknowledged that he/she executed the same freely and voluntarily for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year in the certificate first above written.

Lynda Barker
 Notary Public for the State of Alaska

My Commission Expires: 5/16/20

(seal)



Grantee: City and Borough of Juneau, Alaska

Date: 8/11/17

By: [Signature]
Duncan Rorie Watt
City & Borough Manager

Approved as to content, Lands & Resources
Approved as to form, Law Department

By: [Signature]
By: [Signature]

CITY'S ACKNOWLEDGMENT

STATE OF ALASKA)
) ss:
FIRST JUDICIAL DISTRICT)

THIS IS TO CERTIFY that on the 11th day of August, 2017, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared DUNCAN RORIE WATT to me known to be the identical individual described in and who executed the foregoing instrument as the MANAGER of the CITY AND BOROUGH OF JUNEAU, ALASKA, a municipal corporation which executed the above and foregoing instrument; who on oath stated that he was duly authorized to execute said instrument on behalf of said corporation; who acknowledged to me that he signed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year in the certificate first above written.

[Signature]
Notary Public for the State of Alaska
My Commission Expires: 1/14/20

(seal)

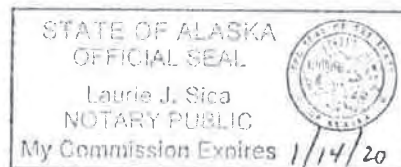


Exhibit A – Emergency Vehicle Access Easement

36' Wide Easement May Be Relocated With Approval of CBJ Fire Marshal & Authorized Church Representative

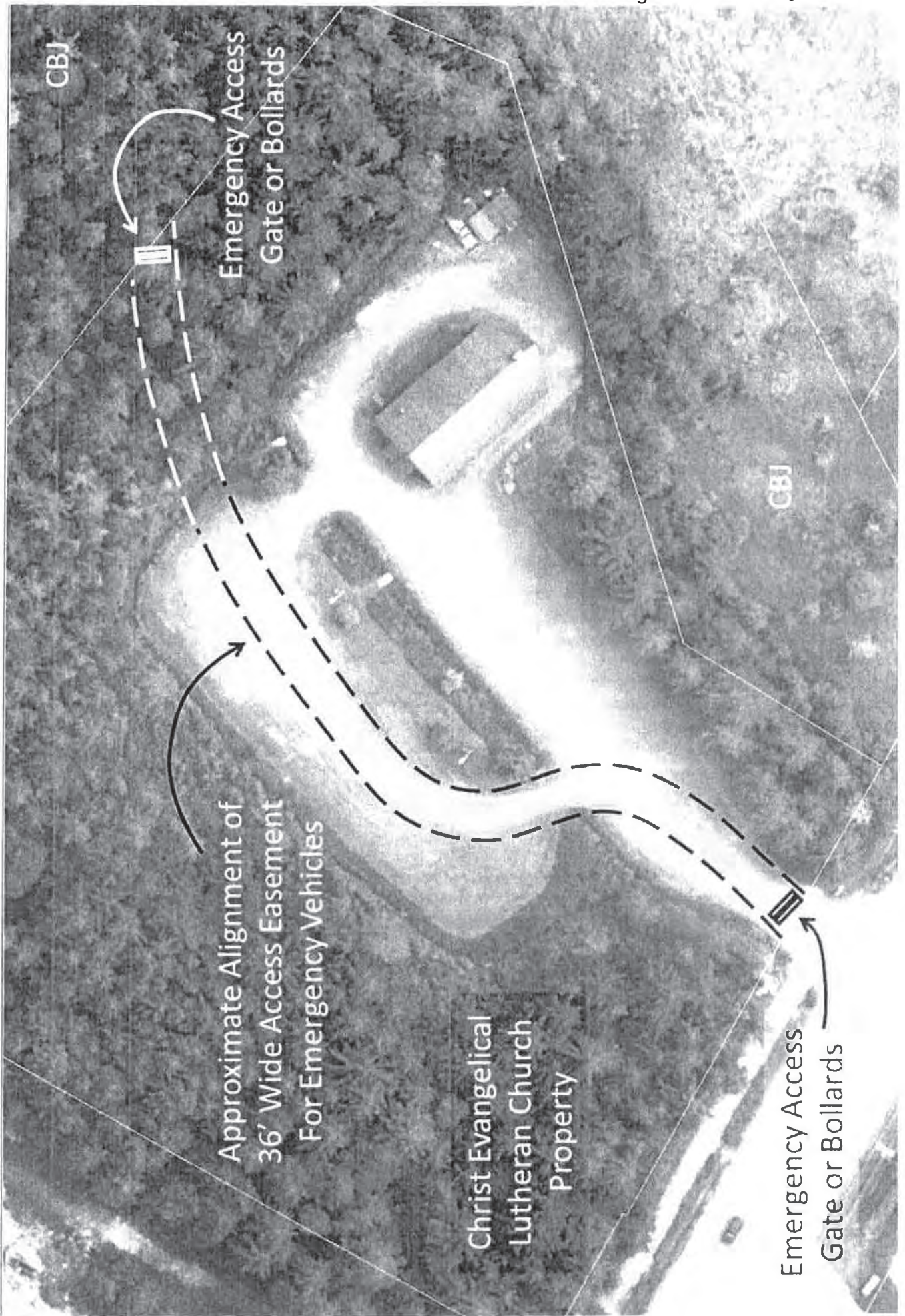
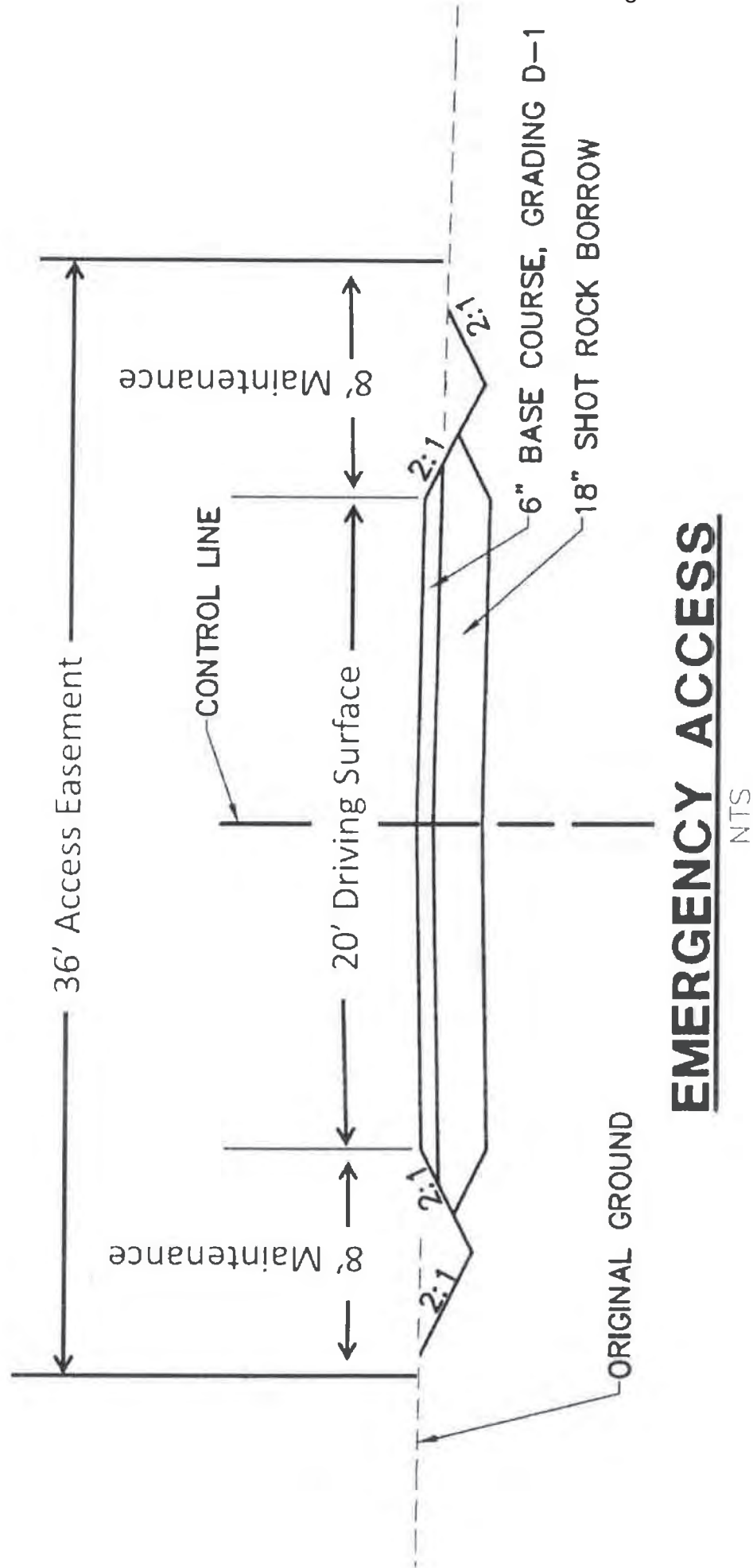


Exhibit B – Emergency Vehicle Access Easement

36' Wide Easement May Be Relocated With Approval of CBJ Fire Marshal & Authorized Church Representative



MEMORANDUM

CITY/BOROUGH OF JUNEAU

Lands and Resources Office
155 S. Seward St., Juneau, Alaska 99801
Greg_Chaney@juneau.org
(907) 586-5252

TO: The Planning Commission

FROM: Greg Chaney



SUBJECT: RE: Erosion Control

DATE: October 4, 2017

At the February 28th meeting the Planning Commission provided the condition of the preliminary plat that prior to Construction Plan approval, the applicant shall submit required documentation meeting 49.15.411(6) *Erosion Control* which states that the application shall provide a report explaining the method by which the applicant proposes to control erosion and manage runoff, and potential impacts to adjacent properties or water bodies. The report shall include a plan for preservation of ground cover in areas where runoff and resulting erosion need to be minimized.

The City has produced bid documents which contain an erosion and sediment control plan. This plan includes the proposed storm drainage system, including all storm drain inlets, manholes, pipe sections, and outfalls. The contractor will be required to prepare and provide a storm water pollution prevention plan (SWPPP) and file a notice of intent to discharge (NIO) under the Alaska Pollutant Discharge Elimination System (APDES) Construction general Permit (CGP). This plan cannot be prepared until the contractor has been selected. The SWPPP preparer will select and apply appropriate controls to prevent sediment and other pollutants from entering the piped system during construction and discharging to any waters of the U.S. Inlet protection shall be provided at all inlets within and adjacent to the project limits. Specific control devices and locations shall be selected by the SWPPP preparer or contractor. All disturbance areas will be seeded; erosion controls can include fiber rolls, curb inlet protection, abiding by cut and fill limits, and temporary inlet sediment traps.

The first page of the attached document titled “Erosion and Sediment Control Plan” provides an overview of the erosion control plan for the development. A significant feature of this diagram is the inclusion of a drainage swale along the uphill side of the equestrian trail. A cross section of the equestrian trail with the swale/ditch system is shown on the sheet labeled “Typical Sections Miscellaneous Details.” This drainage swale is downhill from the project and will collect runoff from the majority of the site. The water will then percolate through the

bottom of the swale to enter the ground water or if flow rates are high, storm water will be diverted to CBJ owned wetlands along the banks of the Mendenhall River. Prior to being discharged into the wetlands, the water will have flowed through the vegetated drainage swale which will reduce flow velocity and capture suspended sediment. A detailed plan view of the drainage swale, including cut and fill limits, is shown on sheet "Plan – Sta CT 207+00 to EOP".

The underground storm drain system for the development will discharge into the drainage swale system. A detailed diagram showing how Class I riprap will be used to minimize erosion where the storm drain enters the lower velocity swale system is shown on the attached sheet titled "Riprap Details". The location of the primary riprap apron is shown on sheet "Plan – Sta "CT" 201+00 to Sta "CT" 207+00".

Another significant feature of the drainage system will be the installation of a fish passage structure. The general location of this partially buried culvert is shown on first attached diagram. Detailed side, plan and cross-sectional views are shown on sheets "Fish Passage Plan and Profile" and "Fish Passage Details". This structure has been designed to allow salmon to spawn while minimizing sediment entering the stream.

The final attached sheet indicates measures to be taken during construction to minimize sedimentation during construction. The general location of where these items will be installed is indicated on the first sheet but additional measures will be installed during construction depending on site specific conditions.

Attachments:

Erosion and Sediment Control Plan Details



NOTES:

1. SEE THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC) STORM WATER WEBSITE FOR THE LATEST EROSION CONTROL MEASURES. THE SWPPP FOR THIS PROJECT SHALL BE BASED ON THE LATEST EROSION CONTROL MEASURES. THIS PROJECT WILL RESULT IN A GROUND DISTURBANCE GREATER THAN ONE ACRE AND HAS THE POTENTIAL TO DISCHARGE STORM WATER TO WATERS OF THE U.S. THE CONTRACTOR WILL BE REQUIRED TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND FILE A NOTICE OF INTENT TO DISCHARGE (NOI) TO APPLY FOR COVERAGE UNDER THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) CONSTRUCTION GENERAL PERMIT (CGP).
2. THIS SHEET CONTAINS A PLAN VIEW OF THE PEDERSON HILL SUBDIVISION AND ITS PROPOSED STORM DRAIN SYSTEM, INCLUDING ALL STORM DRAIN INLETS, MANHOLES, PIPED SECTIONS, AND OUTFALLS. THE SWPPP FOR THIS PROJECT SHALL BE BASED ON THE LATEST EROSION CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE STORM DRAIN SYSTEM DURING CONSTRUCTION AND DISCHARGE TO ANY WATERS OF THE U.S. AT A MINIMUM, INLET PROTECTION SHALL BE PROVIDED AT ALL INLETS WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT LIMITS. OUTLET PROTECTION MAY ALSO BE NEEDED AT OUTFALL LOCATIONS TO CONTROL EROSION. SPECIFIC CONTROL DEVICES AND LOCATIONS SHALL BE SELECTED BY THE SWPPP PREPARED BY THE CONTRACTOR.
3. STREET SURFACES ADJACENT TO THE WORK AREA SHALL BE SWEEPED DAILY TO COLLECT ANY SEDIMENT OR OTHER CONSTRUCTION DEBRIS TRACKED OFFSITE.

ESCP LEGEND

PERIMETER CONTROL	--- CUT LIMITS
FIBER ROLL	 FILL LIMITS
CURB INLET PROTECTION	→ SURFACE STORMWATER FLOW
CULVERT STORMWATER FLOW	→ DRAINAGE FLOW

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SUBDIVISION DESIGN
CONTRACT NO. BE18-025



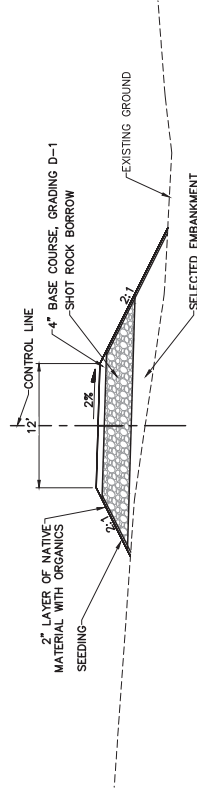
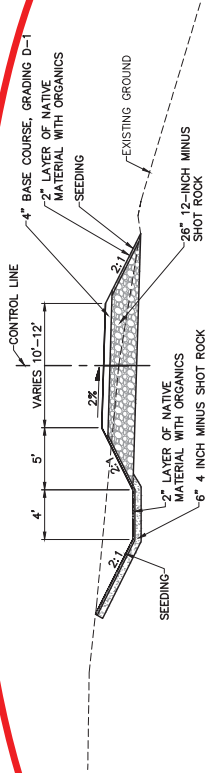
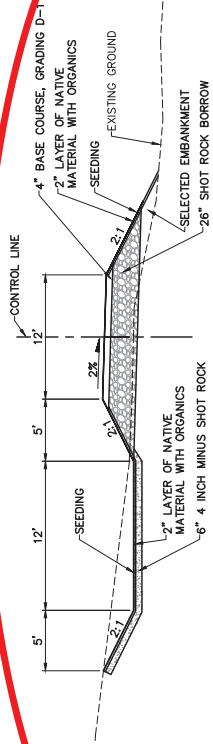
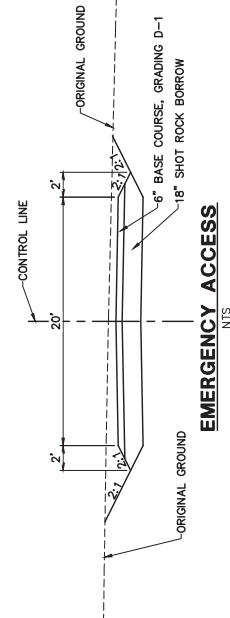
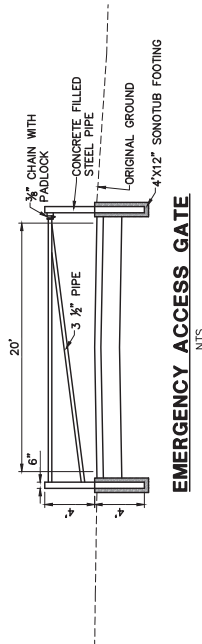
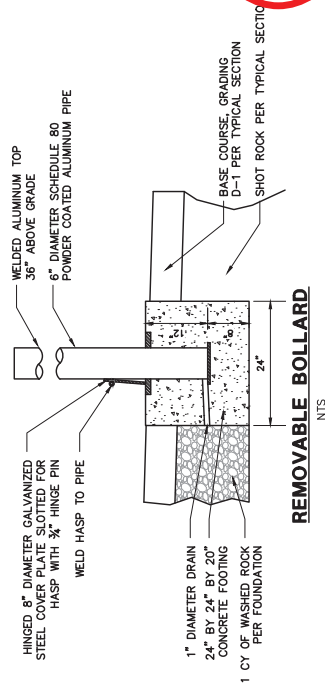
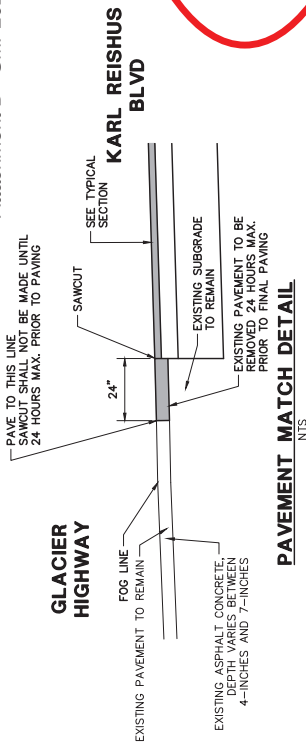
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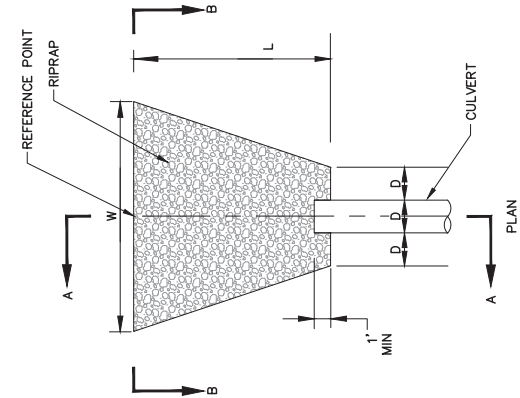


**EROSION AND SEDIMENT
CONTROL PLAN**



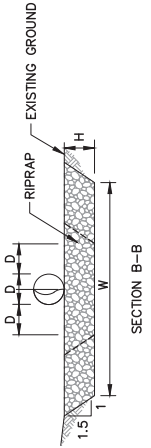
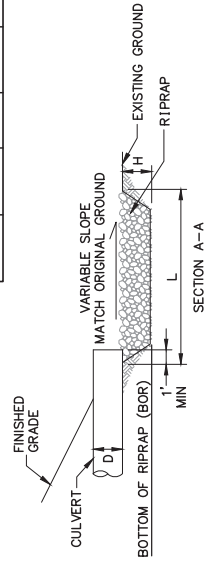
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			TYPICAL SECTIONS AND MISCELLANEOUS DETAILS

OUTLET APRON SUMMARY					
PIPE ID	RIPRAP CLASS	D (IN)	L (FT)	W (FT)	H (FT)
SD-1	I	36.0	12.0	14.0	2.0
SD-4	I	24.0	12.0	14.0	2.0
SD-86	I	18.0	9.0	10.0	2.0
SD-87	I	12.0	9.0	8.0	2.0
SD-88	I	12.0	9.0	8.0	2.0



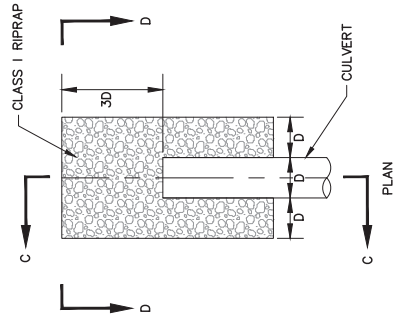
OUTLET RIPRAP APRON

N.T.S.



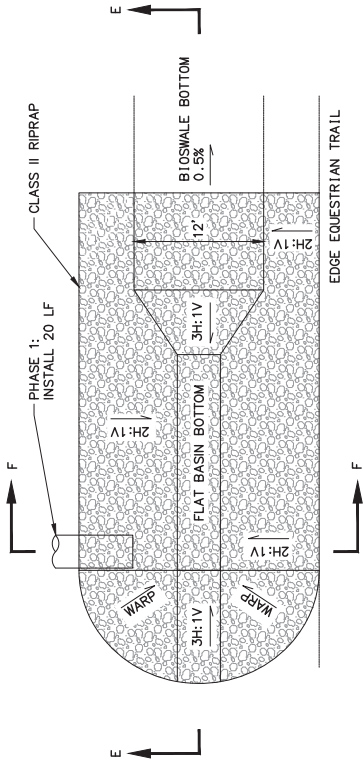
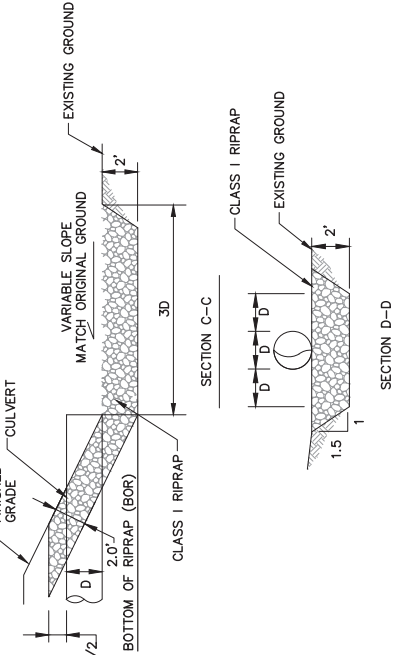
OUTLET RIPRAP APRON

N.T.S.



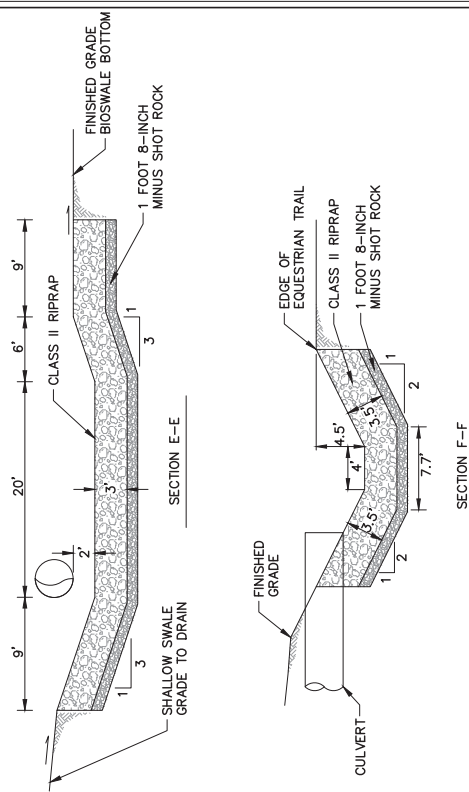
INLET RIPRAP APRON

N.T.S.



STORM DRAIN OUTLET TO BIOSWALE

N.T.S.



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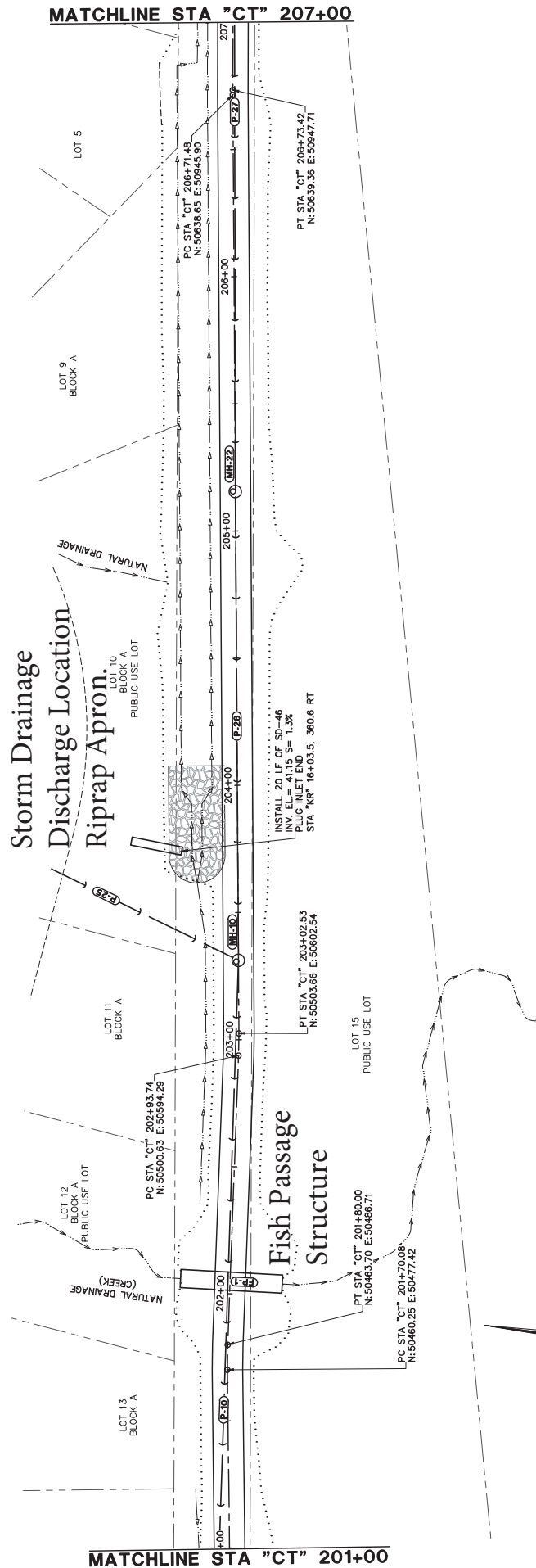
RIPRAP DETAILS

NOTES

1. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS. CONNECT TO EXISTING.
2. PIPE LENGTHS ARE MEASURED ALONG THE SLOPE, FROM CENTER TO CENTER OF STRUCTURES. SLOPES ARE CALCULATED TO ENDS OF PIPE.

SANITARY SEWER STRUCTURE TABLE			
MH No.	RIM EL	STATION/OFFSET	PIPES IN PIPES OUT
MH-10	43.19	203+31.22, 0.00	P-25, 8" PVC INV IN = 33.74 P-26, 8" PVC INV IN = 33.74
MH-22	42.91	205+15.54, 0.00	P-27, 8" PVC INV IN = 34.81 P-26, 8" PVC INV OUT = 34.48

SANITARY SEWER PIPE TABLE			
PIPE	SIZE	3D LENGTH	SLOPE
P-10	8"	313.3'	0.004
P-25	8"	106.2'	0.063
P-26	8"	184.3'	0.004
P-27	8"	298.5'	0.004



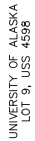
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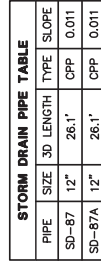
PLAN -
STA "CT" 201+00 TO
STA "CT" 207+00

- PC STA "CT" 210+96.12
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SANITARY SEWER PIPE TABLE			
PIPE	SIZE	3D LENGTH	SLOPE
P-27	8"	298.5'	PVC 0.004

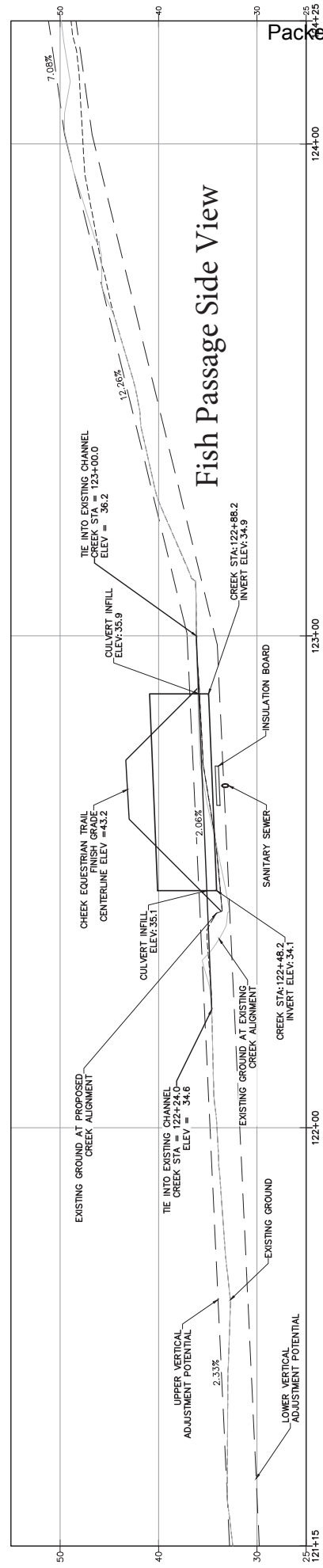
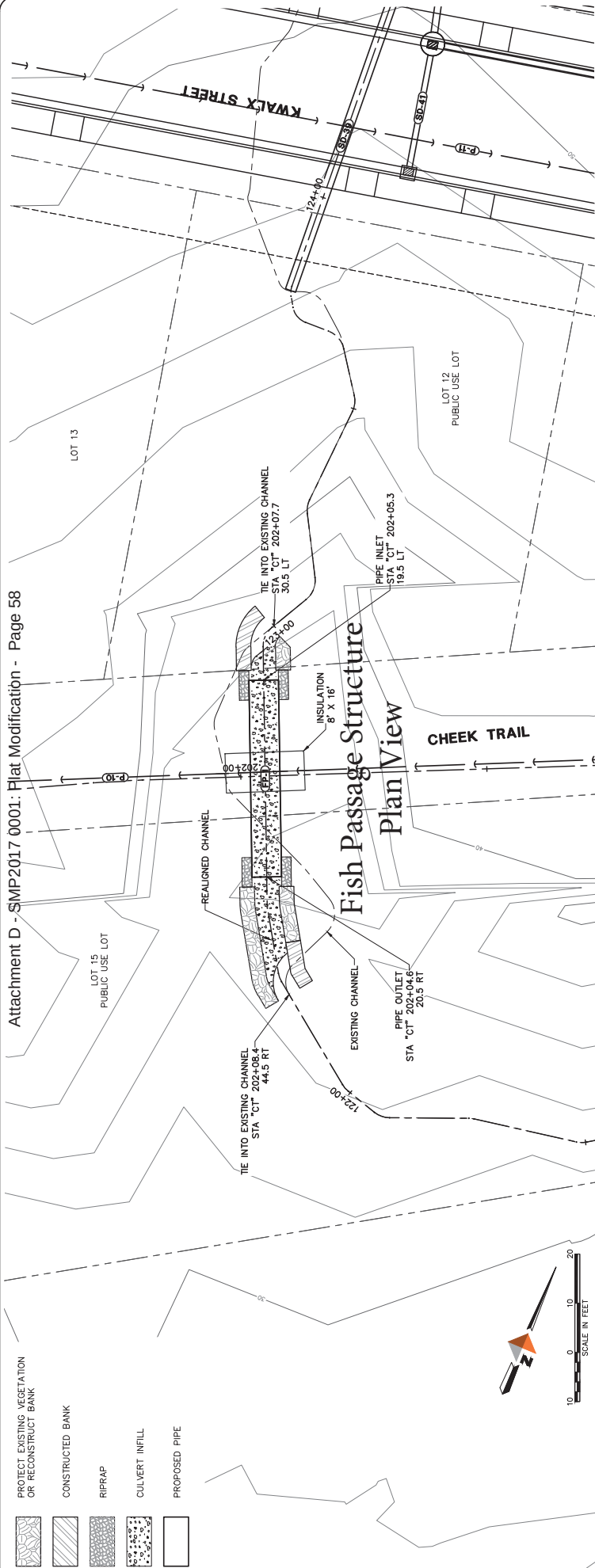
Drainage Swale Plan View Detail



STORM DRAIN PIPE TABLE				
PIPE	SIZE	3D LENGTH	TYPE	SLOPE
SD-87	12"	26.1'	CPP	0.011
SD-87A	12"	26.1'	CPP	0.011



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STATE OF ALASKA 49th Department of Transportation Division of Highway Planning and Construction Section of Engineering	Consulting Engineers & Land Surveyors • Construction Administration Thomas S. Hubbs No. CE9959	DEPARTMENT OF ENGINEERING improvement on front ★ ALASKA'S CAPITAL CITY	100% CHECK SET PEDERSON HILL SUBDIVISION DESIGN CONTRACT No. BE18-025	PLAN - STA "CT" 207+00 TO EOP	SHEET 15 of 34 327
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FISH PASSAGE PLAN AND PROFILE

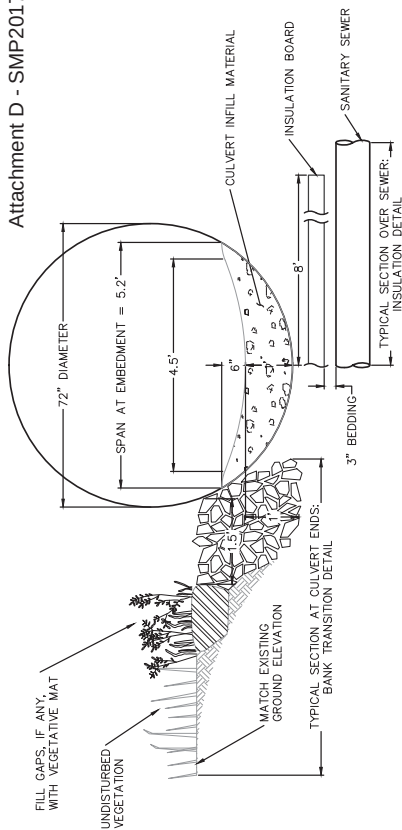


FIGURE 1
CULVERT TYPICAL SECTION

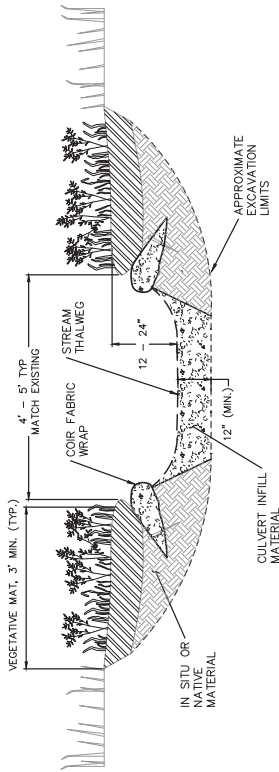


FIGURE 2
STREAM TYPICAL SECTION WITH CONSTRUCTED BANKS

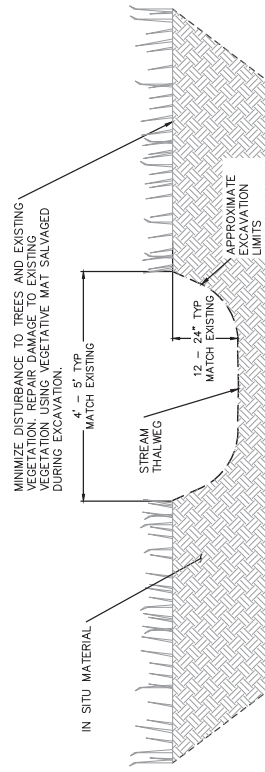


FIGURE 3
STREAM TYPICAL SECTION WITH PROTECTED EXISTING VEGETATION

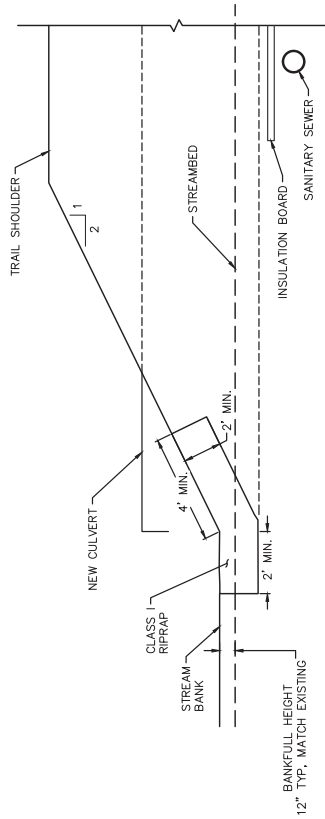


FIGURE 4
INLET AND OUTLET SLOPE PROTECTION

- INSULATION NOTES:**
1. PROVIDE 4" THICK INSULATION, MIN 50 PSI AND MIN R=5 PER INCH FOR A TOTAL MIN R=20.
 2. STAGGER JOINTS OF 2" THICK INSULATION SO THAT THE JOINTS ARE NOT ON THE SAME VERTICAL PLANE.
- CULVERT NOTES:**
1. CULVERT JOINTS SHOULD NOT LEAK.
 2. BACKFILL SHALL BE PLACED AND COMPACTED WITH CARE AND SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY ON BOTH SIDES OF PIPE.
 3. CULVERT INFILL MATERIAL SHALL BE INSTALLED IN PIPE ACCORDING TO PLANS. MANUAL INSTALLATION IS REQUIRED.
- CULVERT INFILL NOTES:**
1. CULVERT INFILL MATERIAL MAY BE PREPARED BY MIXING EQUAL PARTS BY VOLUME:
 - UNCLASSIFIED MATERIAL RICH IN FINES OR USABLE EXCAVATION
 - UNCLASSIFIED MATERIAL RICH IN FINES OR USABLE EXCAVATION
 - CLASS 1 RIPRAP
 2. SALVAGED STREAMBED MATERIAL MAY BE ADDED AT ANY RATIO.
 3. CONSTRUCT CHANNEL BED LEAVING A ROUGH, UNEVEN SURFACE.
 4. CONSTRUCT CHANNEL BED LEAVING A ROUGH, UNEVEN SURFACE WITH A DEPRESSION IN THE MIDDLE FOR LOW FLOW.
- CHANNEL NOTES:**
1. ALL VEGETATION IN THE AREAS NOT AFFECTED BY WORK SHALL BE PRESERVED AND PROTECTED BY THE CONTRACTOR.
 2. THE CONSTRUCTED STREAMBANKS INTO EXISTING STREAMBANKS AT THE LOCATIONS SHOWN OR AS DIRECTED BY ENGINEER.
 3. SALVAGE VEGETATIVE MAT WITH A MINIMUM THICKNESS OF 12 INCHES FROM THE DISTURBANCE AREA OR THE LOCAL AREA.
 4. IF LOSS OF TOPSOIL DURING HANDLING AND STOCKPILING REDUCES MAT THICKNESS TO LESS THAN 12 INCHES, PLACE VEGETATIVE MAT OVER EXISTING MAT. PLACE VEGETATIVE MAT OVER EXISTING MAT TO MINIMIZE GAPS BETWEEN PIECES OF MAT.
 5. PLACE VEGETATIVE MATS TIGHTLY TOGETHER TO MINIMIZE GAPS BETWEEN PIECES OF MAT.
 6. FILL SURFACE VOIDS IN RIPRAP SLOPE PROTECTION WITH UNCLASSIFIED FILL THEN SEED.
- MEASUREMENT AND PAYMENT:**
- STREAM DIVERSION, EXCAVATION, DOWELING, AND CULVERT INFILL ARE SUBSIDIARY TO PIPE.

CULVERT SUMMARY SCHEDULE		
SIZE	72" ROUND	
LENGTH	40'	
CORRUGATION	3" X 1"	
MATERIAL	ALUMINUM	
LOADING	HL-93	

ESTIMATE OF QUANTITIES SUBSIDIARY TO PIPE		
ITEM DESCRIPTION	QUANTITY	UNIT
EXCAVATION	40	CUBIC YARDS
PIPE BEDDING	20	CUBIC YARDS
CULVERT INFILL MATERIAL	11	CUBIC YARDS
BANK CONSTRUCTION	25	LINEAR FEET
RIPRAP	3.5	CUBIC YARDS
TOPSOIL AND SEED	39	SQUARE YARDS
DIVERSION AND DOWELING	ALL REQUIRED	ALL REQUIRED



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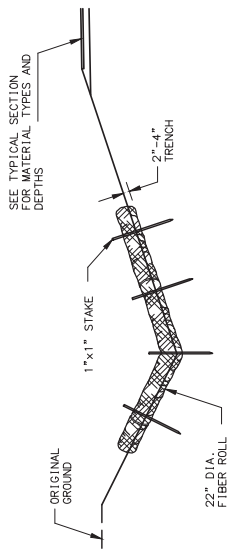
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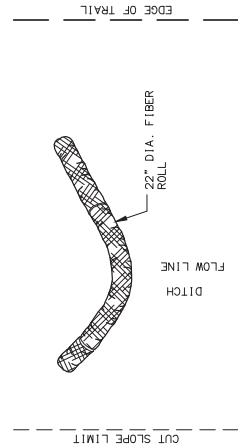


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FISH PASSAGE
DETAILS



ELEVATION VIEW



PLAN VIEW

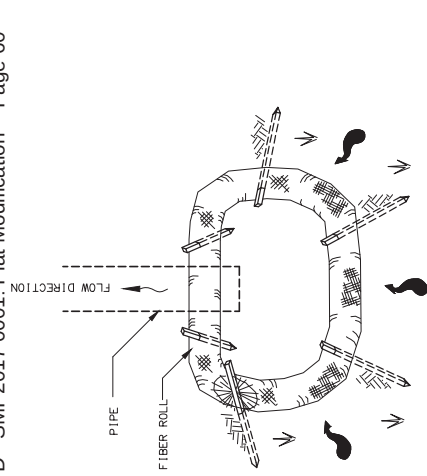
FIBER ROLL CHECK DAM

NOTES:

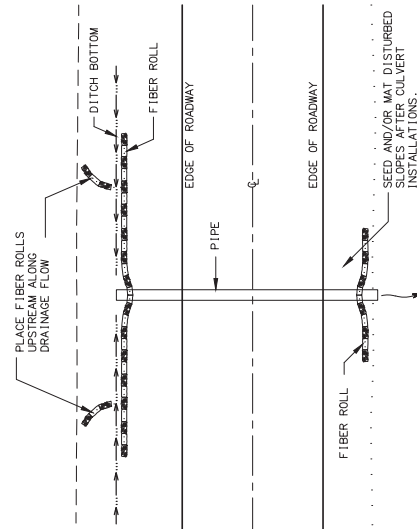
1. FIBER ROLL CHECK DAMS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED OR AS DIRECTED BY THE ENGINEER IMMEDIATELY AFTER THE DITCH FLOW LINE HAS BEEN ESTABLISHED.
2. GRADE CHECK DAMS ON 100 FOOT CENTERS FOR GRADES BETWEEN 2% AND 3%. GRADE CHECK DAMS FOR STEEPER GRADES UP TO 6% AS DIRECTED BY THE ENGINEER.
3. FIBER ROLL INSTALLATION FOR CHECK DAMS REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH 2'-4" DEEP. ROLLOFF MUST NOT BE ALLOWED TO FLOW UNDER THE ROLL.

FIBER ROLL REMOVAL NOTES:

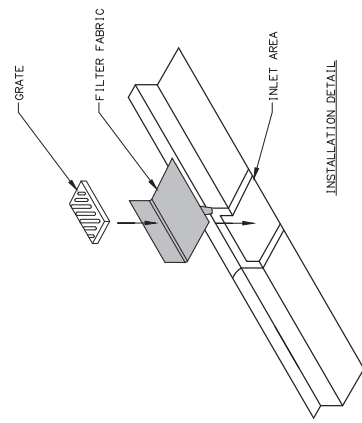
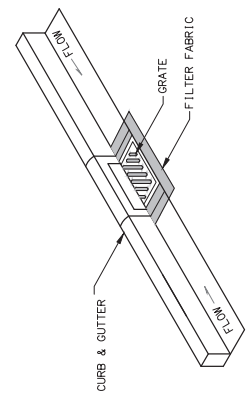
1. EXCEPT AS NOTED BELOW, FIBER ROLL INSTALLATIONS ON HIGH CUT OR FILL SLOPES FOR SLOPE STABILIZATION ARE CONSIDERED PERMANENT. ALL OTHER FIBER ROLL INSTALLATIONS ARE TEMPORARY AND SHALL BE REMOVED PRIOR TO FINAL STABILIZATION, UNLESS APPROVED OTHERWISE BY THE ENGINEER.
(A) PERMANENT FIBER ROLL INSTALLATIONS SHALL HAVE THE STAKES REMOVED AND THE FIBER ROLL LEFT IN PLACE FOLLOWING FINAL STABILIZATION.
(B) TEMPORARY FIBER ROLL INSTALLATIONS SHALL BE REMOVED WHEN DIRECTED BY REMOVING THE STAKES, CUTTING OPEN AND REMOVING THE NETTING, AND SPREADING THE CONTENTS UPON THE SLOPE.
2. FOR FIBER ROLLS WITH UV-DEGRADABLE PLASTIC NETTING LOCATED WITHIN 50 FEET OF A WATERBODY, REMOVE THE STAKES AND NETTING AND SPREAD THE FIBER ROLL CONTENTS UPON THE SLOPE WHEN DIRECTED BY THE ENGINEER.
3. REPAIR ANY DAMAGE TO PERMANENT VEGETATION RESULTING FROM FIBER ROLL REMOVAL ACTIVITIES.



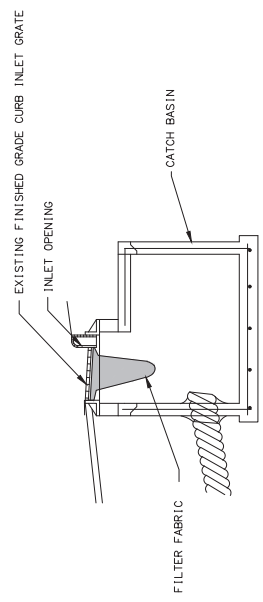
TEMPORARY INLET SEDIMENT TRAP



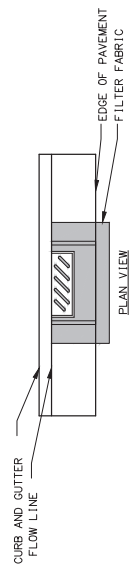
FIBER ROLL DETAIL



INSTALLATION DETAIL

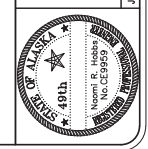


SECTION



PLAN VIEW

CURB INLET PROTECTION
OR APPROVED EQUAL BMP





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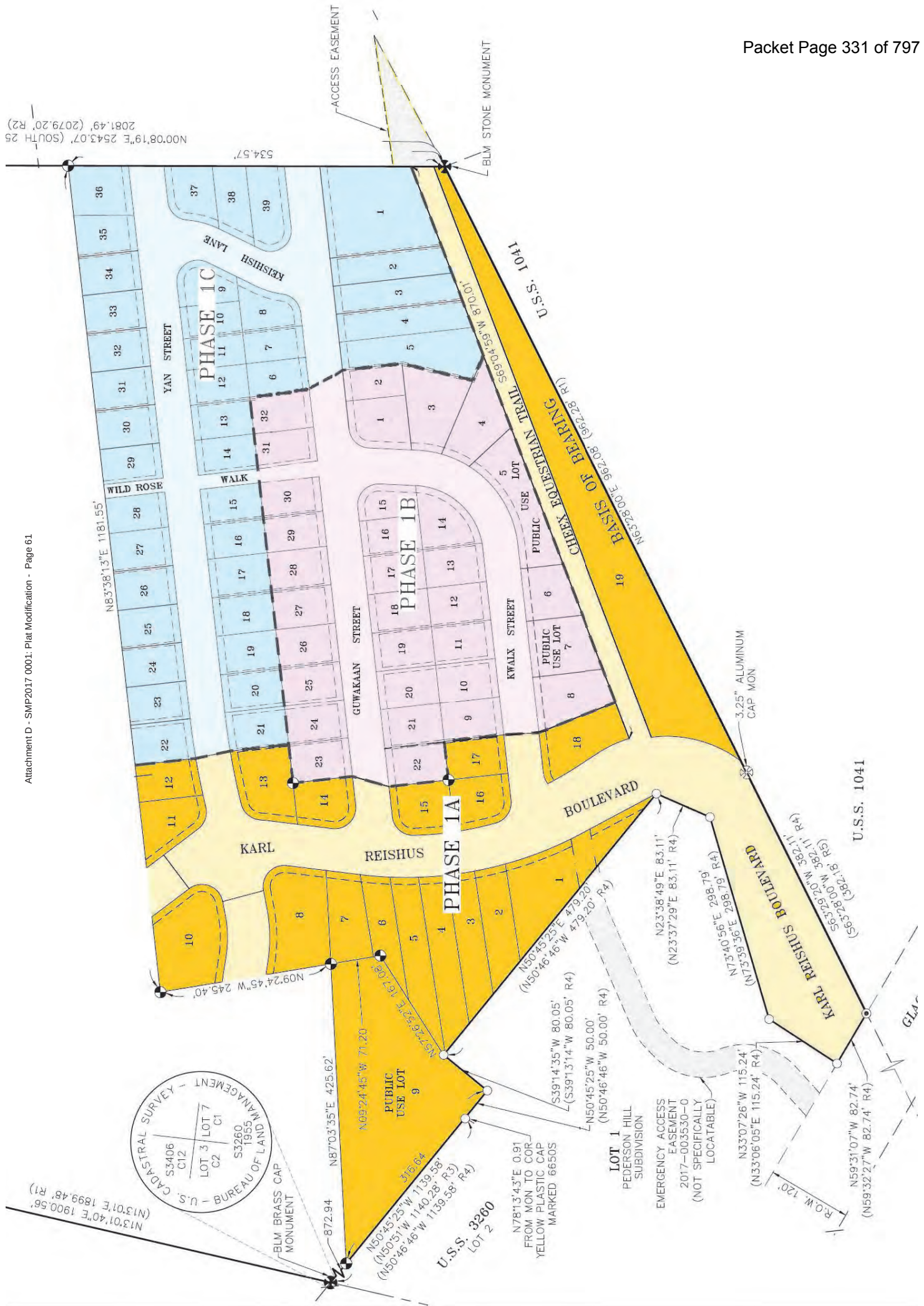
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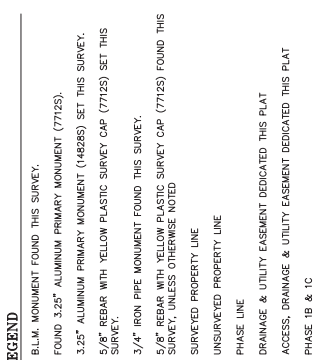
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EROSION AND SEDIMENT
CONTROL PLAN





NOTARY ACKNOWLEDGMENT

NOTARY PUBLIC FOR ALASKA
MY COMMISSION EXPIRES:

CERTIFICATION OF PLAT APPROVAL

HEREBY CERTIFY THAT THE PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS OF THE CITY AND BOROUGH OF JUNEAU, ALASKA AND THAT SAID PLAT HAS BEEN APPROVED BY THE PLANNING COMMISSION BY PLAT RESOLUTION No. _____, DATED _____, 2017, AND THAT THE PLAT SHOWN HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE DISTRICT RECORDING OFFICE, JUNEAU, ALASKA.

ATTEST:
CLERK
CITY AND BOROUGH OF JUNEAU

PRELIMINARY

FLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL SUBDIVISION
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
ABCLB48
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5366 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

OWNER

CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

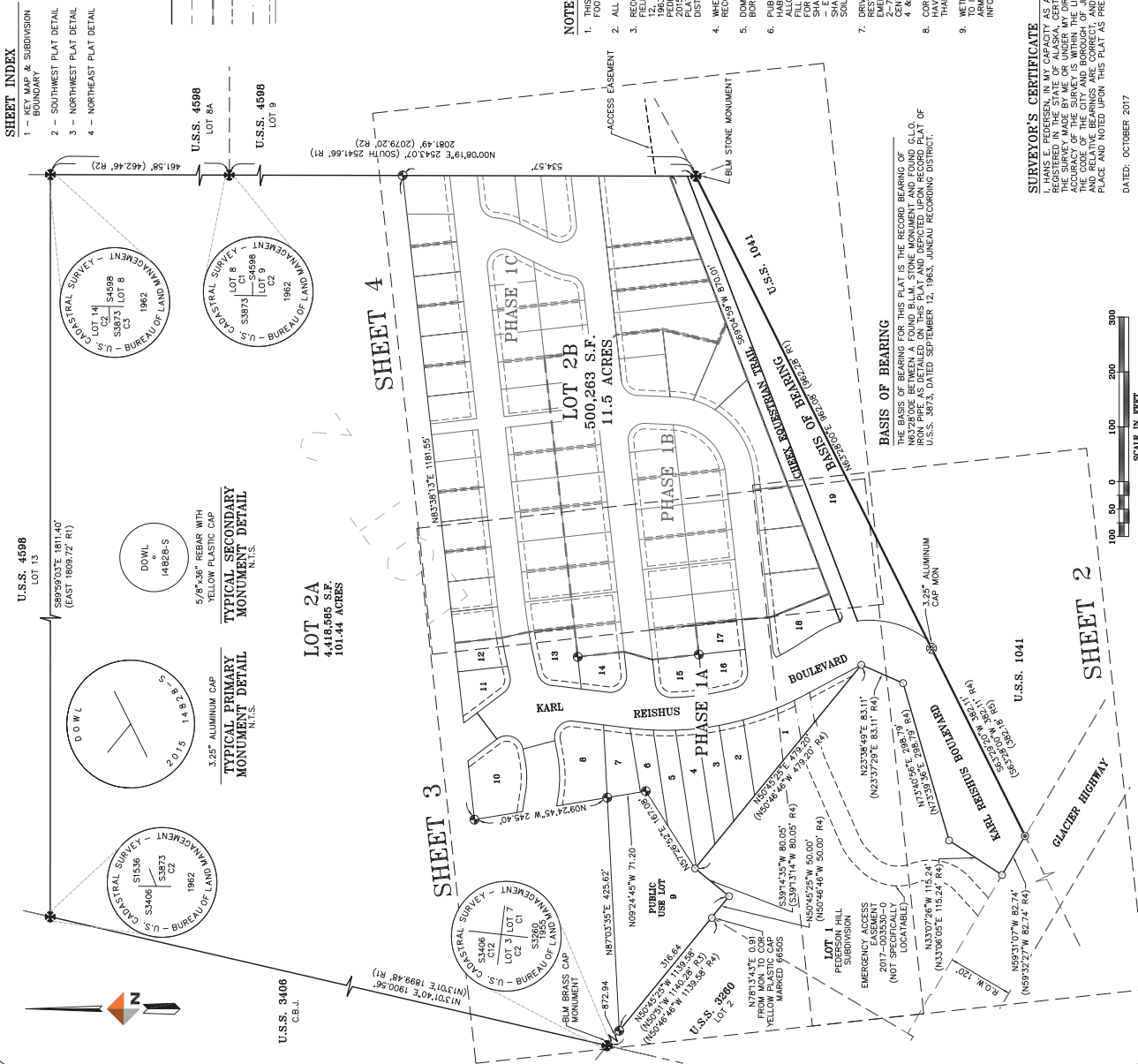
SCALE: 1" = 100'	DATE: OCT. 2017	PROJECT NO: J70687	FILE NO:	SHEET NO: 1 OF 4
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SUPERVISOR'S CERTIFICATE

SURVEYOR'S CERTIFICATE

I, HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATED: OCTOBER 2017





FLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL SUBDIVISION
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
AECLB48
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801
907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

DATE: OCT. 2017	PROJECT NO: J70687	FILE NO:	SHEET NO: 204
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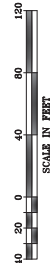


SURVEYOR'S CERTIFICATE

ACCEPTED: OCTOBER 2017

LINE TABLE	
LINE No.	BEARING & DISTANCE
L1	S59°31'07" E 82.74
L2	N63°28'00" W 17.98
L3	NOT USED
L4	NOT USED
L5	S32°53'18" E 38.10
L6	NOT USED
L7	N78°55'35" E 23.23
L8	S81°15'19" E 17.41
L9	S81°15'19" E 37.09
L10	N78°55'35" E 19.27
L11	N45°10'7" W 60.13
L12	N52°53'53" E 60.00

CURVE No.	CURVE TABLE			
	RADIUS	DELTA	LENGTH	CHORD BEARING & DISTANCE
C1	530.00	350°10'3"	324.38	N10°29'54"W 319.34
C2	530.00	108°07'52"	56.62	N17°07'29"W 48.58
C3	530.00	189°06'06"	79.56	S88°50'08"W 79.16
C4	230.00	194°00'06"	58.80	N88°50'08"E 58.51
C5	170.00	194°00'06"	60.75	N0°05'44"E 50.89
C6	30.00	116°01'42"	60.75	N0°05'52"W 32.89
C7	30.00	66°29'31"	34.62	S80°07'18"W 120.27
C8	1025.00	07°15'51"	728.36	NOT USED
C9				NOT USED
C10				NOT USED
C11	975.00	07°40'04"	130.48	N79°48'1"E 130.39
C12	30.00	72°23'57"	37.86	N30°43'20"E 35.48
C13	180.00	03°39'56"	11.25	N05°10'10"W 47.09
C14	30.00	103°25'14"	11.15	NOT USED
C15	30.00	03°39'56"	11.25	NOT USED
C16	30.00	103°25'14"	11.15	NOT USED
C17	30.00	03°39'56"	11.25	NOT USED
C18	30.00	103°25'14"	11.15	NOT USED
C19	30.00	03°39'56"	11.25	NOT USED
C20				NOT USED
C21	30.00	80°00'22"	44.51	N41°08'17"E 40.54
C22	470.00	102°29'18"	117.89	N08°35'58"W 117.59
C23	30.00	80°07'59"	42.22	N90°02'57"W 38.82
C24				NOT USED
C25				NOT USED
C26				NOT USED
C27				NOT USED
C28				NOT USED
C29				NOT USED
C30				NOT USED
C31	530.00	123°32'7"	116.16	N12°14'52"W 115.93
C32	530.00	04°52'48"	45.15	S130°45'45"E 45.15
C33	530.00	04°52'48"	45.15	N08°13'34"W 40.13
C34	530.00	04°52'48"	45.15	S04°16'53"W 40.13
C35	530.00	04°22'42"	40.50	S00°16'53"W 40.49
C36	530.00	04°35'14"	42.42	S04°44'55"W 42.42
C37	1025.00	00°58'38"	57.09	N76°31'42"E 57.08
C38	1025.00	0°29'04"	13.48	S78°52'03"W 53.08
C39				NOT USED
C40				NOT USED
C41				NOT USED
C42	975.00	04°30'28"	76.71	N78°13'23"E 76.69
C43	470.00	07°01'49"	60.62	N04°54'25"W 57.63
C44	470.00	07°20'30"	60.62	S12°03'55"E 60.18
C45				NOT USED
C46				NOT USED
C47				NOT USED
C48	30.00	320°32'7"	16.79	N67°30'30"E 16.57
C49	30.00	05°58'19"	46.36	N29°54'08"W 46.36
C50	445.00	15°39'23"	49.13	N25°04'07"W 49.08
C51	180.00	15°39'23"	49.13	NOT USED
C52	276.00	14°45'04"E	49.13	NOT USED



LINE TABLE	
LINE NO.	BEARING & DISTANCE
L1	S59°31'07"E 82.74
L2	N63°28'00"W 17.98
L3	NOT USED
L4	NOT USED
L5	S32°31'18"E 38.10
L6	NOT USED
L7	N78°52'35"E 23.23
L8	S81°15'19"E 17.41
L9	S81°15'19"E 37.09
L10	N78°52'35"E 19.27
L11	N14°51'07"W 60.13
L12	S52°53'52"E 60.00



CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH CHORD BEARING & DISTANCE
C1	NOT USED	NOT USED	NOT USED
C2	530.00	35°04'03"	324.35 N107°28'34"W 319.34
C3	30.00	108°07'52"	56.62 N47°00'29"W 48.58
C4	230.00	19°49'06"	79.56 S84°50'08"W 79.16
C5	170.00	19°49'06"	58.80 N89°50'08"E 58.51
C6	30.00	116°01'42"	60.75 N2°54'44"E 50.89
C7	30.00	66°29'31"	34.82 N70°20'52"W 32.89
C8	1025.00	07°13'51"	129.36 S80°01'18"W 129.27
C9	NOT USED	NOT USED	NOT USED
C10	975.00	07°40'04"	130.48 N79°48'11"E 130.39
C11	30.00	72°29'37"	37.96 N39°43'20"E 35.48
C12	180.00	03°24'36"	11.25 N05°16'00"E 11.25
C13	30.00	103°25'14"	54.15 N44°39'10"W 47.09
C14	NOT USED	NOT USED	NOT USED
C15	NOT USED	NOT USED	NOT USED
C16	NOT USED	NOT USED	NOT USED
C17	NOT USED	NOT USED	NOT USED
C18	NOT USED	NOT USED	NOT USED
C19	NOT USED	NOT USED	NOT USED
C20	NOT USED	NOT USED	NOT USED
C21	30.00	89°00'00"	44.51 N41°08'12"E 40.44
C22	470.00	14°27'10"	117.89 N09°32'58"W 117.59
C23	30.00	80°37'39"	42.22 N46°02'57"W 38.82
C24	NOT USED	NOT USED	NOT USED
C25	NOT USED	NOT USED	NOT USED
C26	NOT USED	NOT USED	NOT USED
C27	NOT USED	NOT USED	NOT USED
C28	NOT USED	NOT USED	NOT USED
C29	NOT USED	NOT USED	NOT USED
C30	530.00	12°33'27"	116.16 N21°43'52"W 115.93
C31	530.00	04°52'49"	45.15 S100°45'E 45.13
C32	530.00	04°52'49"	45.15 S100°45'E 45.13
C33	530.00	04°19'31"	40.01 N09°24'34"W 40.00
C34	530.00	04°20'21"	40.14 S00°04'36"E 40.13
C35	530.00	04°22'42"	40.50 S00°16'53"W 40.49
C36	530.00	04°22'42"	40.50 S00°16'53"W 40.49
C37	1025.00	00°58'38"	17.48 N78°53'42"E 17.48
C38	1025.00	02°58'04"	53.09 S78°52'03"W 53.08
C39	NOT USED	NOT USED	NOT USED
C40	NOT USED	NOT USED	NOT USED
C41	NOT USED	NOT USED	NOT USED
C42	975.00	04°30'28"	76.71 N78°13'23"E 76.69
C43	470.00	07°01'49"	57.67 N04°52'43"W 57.63
C44	470.00	07°00'30"	60.22 S17°03'53"E 60.18
C45	NOT USED	NOT USED	NOT USED
C46	NOT USED	NOT USED	NOT USED
C47	NOT USED	NOT USED	NOT USED
C48	30.00	32°03'27"	16.79 N67°36'30"E 16.57
C49	445.00	05°38'19"	46.38 N28°54'08"W 46.36
C50	180.00	15°38'23"	49.13 N25°04'07"W 49.98
C51	NOT USED	NOT USED	NOT USED
C52	175.00	44°10'12"	134.91 S14°33'30"W 131.59
C53	NOT USED	NOT USED	NOT USED



SURVEYOR'S CERTIFICATE
I, HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE RESULTS OF A SURVEY MADE BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE PLAT ACCURACIES ARE WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU. I HAVE NOTED ALL DIMENSIONS OF THE SURVEYED MONUMENTS AND HAVE SET THEM IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATE: OCTOBER 2017



LEGEND

- 3.25" ALUMINUM PRIMARY MONUMENT (14828S) SET THIS SURVEY.
- 6/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (14828S) SET THIS SURVEY.
- 6/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (7712S) FOUND THIS SURVEY, UNLESS OTHERWISE NOTED.
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- PHASE LINE
- DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
- ACCESS, DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
- EXISTING EASEMENT AS NOTED
- PHASE 1B & 1C

NOTES

- THIS SURVEY CLOSURES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.452.
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
- RECORD INFORMATION DERIVED FROM OFFICIAL PLAT AND FIELD NOTES OF (R) U.S. SURVEY 3573 DATED SEPTEMBER 12, 1983, (R2) U.S. SURVEY 4588 DATED NOVEMBER 29, 1960, (R3) U.S. SURVEY 4588 DATED NOVEMBER 29, 1960, PEDERSON HILL SUBDIVISION, PLAT 2015-40, DATED JULY 20, 2015 AND (R4) LOT 1A AND LOT 1B, MOGHEE SUBDIVISION, DISTRICT 27 DATED MARCH 7, 1985, JUNEAU RECORDING DISTRICT.
- WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
- DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.
- PUBLIC USE LOTS: LOT 9 IS SET ASIDE SPECIFICALLY FOR HABITAT PRESERVATION. REMOVAL OF VEGETATION IS NOT PERMITTED. THE LOT IS TO BE MAINTAINED IN A NATURAL STATE. NO OTHER BUILDING DEVELOPMENT IS PERMITTED EXCEPT FOR TRAILS AND PERMETER FENCING. TRAIL CONSTRUCTION SHALL BE CONSTRUCTED USING TECHNIQUES THAT MINIMIZE SOIL AND VEGETATION DISTURBANCE.
- DRIVEWAY ACCESS FROM THE KARL REISHUS BOULEVARD IS NOT PERMITTED. DRIVEWAY ACCESS FROM LOT 1A AND LOT 1B IS NOT PERMITTED TO JOINT USE DRIVEWAYS 4 & 5 AND LOTS 6 & 7.
- CORNER LOTS ABUTTING KARL REISHUS BOULEVARD SHALL HAVE DRIVEWAYS LIMITED TO ACCESSING A STREET OTHER THAN KARL REISHUS BOULEVARD.
- WETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL BY THE JUNEAU BOARD OF SUPERVISORS AND THE JUNEAU ARMY CORPS OF ENGINEERS (COE) CONSULT CDE FOR MORE INFORMATION.

PRELIMINARY

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL, SUBDIVISION
LOT 2, PEDERSON HILL, SUBDIVISION
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
ABCL48
CIVIL ENGINEERING-LAND SURVEYING/CONSTRUCTION MANAGEMENT
6340 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801
907-780-3533

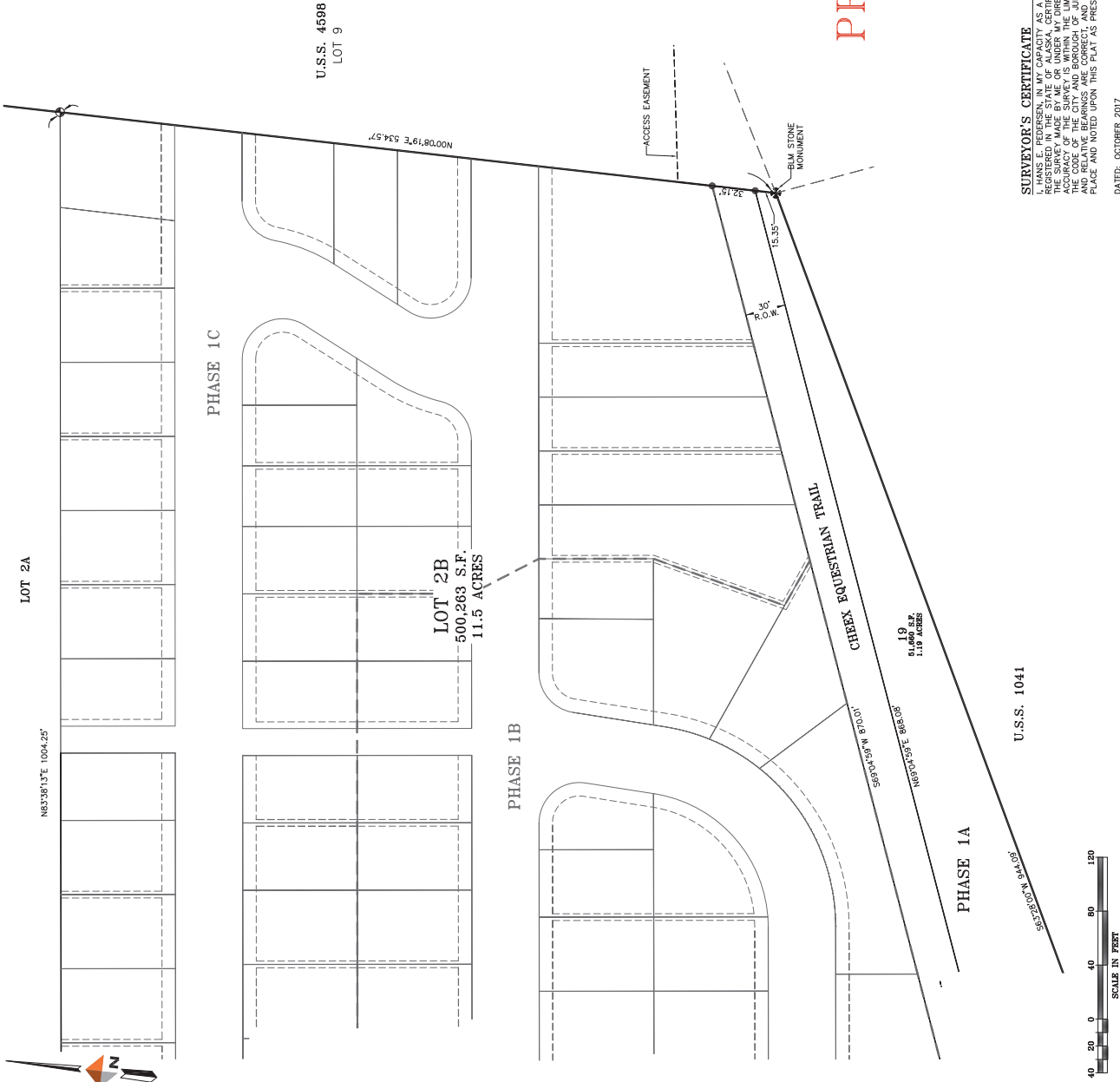
OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU ALASKA 99801

SCALE:
1"= 40'

DATE:
OCT. 2017

PROJECT NO:
70887

SHEET NO:
3 OF 4



PRELIMINARY

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL, SUBDIVISION
U.S. SURVEY 3873, DATED SEPTEMBER 12, 1983
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

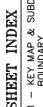
OWNER
DOWL
ABCLP48
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT
6340 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1" = 40'
DATE: OCT. 2017
PROJECT NO: 470887
SHEET NO: 4



SURVEYOR'S CERTIFICATE
I, [Name], being duly sworn, depose and say that I am a duly Licensed Professional Land Surveyor registered in the State of Alaska, and that I am the author of the foregoing plat. I certify that the plat represents the survey made by me or under my direct supervision, that the plat is a true and correct copy of the original, and that the dimensions and relative bearings are correct, and that the monuments are set in place and noted upon this plat as presented.
DATED: OCTOBER 2017



OWNERSHIP CERTIFICATE

I HEREBY CERTIFY THAT CITY AND BOROUGH OF JUNEAU, AK IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I AS LANDS MANAGER, HEREBY ADOPT THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT, AND I DO HEREBY DEDICATE ALL STREETS, WALKS, PARKS, TRAILS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED:

DATE: .2017

GREG CHANEY
CBJ LANDS MANAGER

NOTARY ACKNOWLEDGMENT

STATE OF ALASKA) ss.
FIRST JUDICIAL DISTRICT)

THIS IS TO CERTIFY THAT ON THE _____ DAY OF _____, 2017, BEFORE THE UNDERSIGNED A NOTARY PUBLIC IN AND TO OR FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, APPEARED GREG CHANEY TO ME KNOWN AND KNOWN TO ME TO BE THE PERSON HE REPRESENTS HIMSELF TO BE AND THE LANDS MANAGER FOR THE CITY & BOROUGH OF JUNEAU, ALASKA, WHO ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING INSTRUMENT AS THE FREE ACT AND DEED OF THE SAID CORPORATION FOR THE PURPOSES THEREIN MENTIONED, BEING FULLY AUTHORIZED TO DO SO.

WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA
MY COMMISSION EXPIRES:

NOTES

7. THIS SURVEY CLOSURES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49, §14.62.
8. ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
9. RECORD INFORMATION DERIVED FROM OFFICIAL MAP OF BEDFORD HILL SUBDIVISION IN PHASE 1A, PLAT NO. 2017-XX, JNEAU RECORDING DISTRICT.
10. WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
11. DOMESTIC SEWER & WATER WORKS BY THE CITY AND BOROUGH OF JNEAU PUBLIC UTILITIES.
12. PUBLIC USE LOTS: LOT 5 HAS BEEN SET ASIDE AS AN OPEN SPACE FOR PARK RECREATION IS APPROPRIATE. LOT 7 HAS BEEN SET ASIDE SPECIFICALLY FOR HABITAT PRESERVATION. REMOVAL OF EXISTING TREES SHALL BE LIMITED TO THOSE NECESSARY TO PREVENT INVASIVE SPECIES, NO FILL OR OTHER BUILDING DEVELOPMENT IS PERMITTED ON THESE LOTS.
13. THE ENTIRE TRACT SHALL BE PRIMUM TO FARMSTEAD ZONING, THAT THE 1912 ZONING SHALL BE APPLIED TO ANY REMAINING TRACTS. THE INTENDED EXCAVATION AND GRADING CODE FERMETER MINIMIZE SOIL AND VEGETATIVE DISTURBANCE.
14. WETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT THESE WETLANDS HAS BEEN OBTAINED BY THE U.S. ARMY CORPS OF ENGINEERS (COE).

BASIS OF BEARING

SUPERVISOR'S CERTIFICATE

HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT (AS PRESENTED).

DATED: OCTOBER 2017



FLAT
PEDERSON HILL SUBDIVISION II, PHASE 1B
A SUBDIVISION OF
LOT 2B, PEDERSON HILL SUBDIVISION II, PHASE 1A
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
AEC/L48
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: " = 100'	DATE: OCT. 2017	PROJECT NO: J70687	FILE NO:	SHEET NO: 1 OF 4
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- [illegible]

LEGEND

- ④ FOUND 3.25" ALUMINUM PRIMARY MONUMENT (77125).
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) SET THIS SURVEY.
- ⊗ 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) FOUND THIS SURVEY.
- ⊙ 3/4" IRON PIPE MONUMENT FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY.

EYED PROPERTY LINE

HASE LINE

RAINAGE & UTILITY EASEMENT CREATED THIS PLAT

EXISTING ACCESS, DRAINAGE & UTILITY EASEMENT

EXISTING EASEMENT AS NOTED

HASE 1A

PRELIMINARY

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1B
A SUBDIVISION OF
LOT 2B, PEDERSON HILL SUBDIVISION II, PHASE 1A
US SURVEY No. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
AECL848
CIVIL ENGINEERING—LAND SURVEYING—C
5368 COMMERCIAL B
JUNEAU ALASKA 99801

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

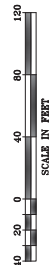
SCALE: 1"= 40'	DATE: OCT. 2017	PROJECT NO: J706887	FILE NO:	SHEET NO: 204
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SURVEYOR'S CERTIFICATE

I, HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS IN ACCORDANCE WITH THE STANDARD OF PRACTICE OF THE SURVEYING PROFESSION IN THE STATE OF ALASKA, THAT THE UNITS AND DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATED: OCTOBER 2017



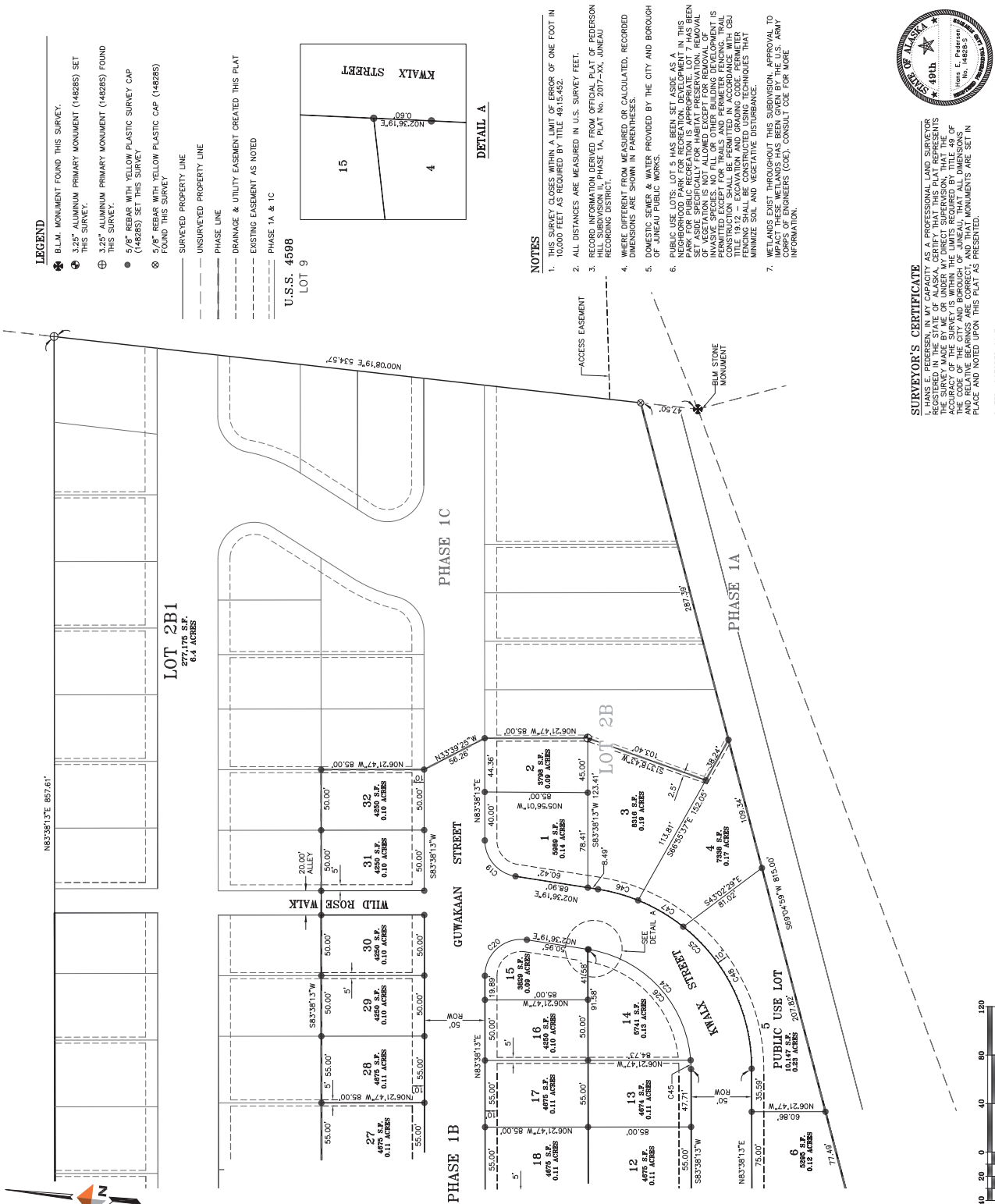


OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1" = 40'
 DATE: OCT. 2017
 PROJECT NO: J70667
 FILE NO:
 SHEET NO: 3 OF 4

DATED: OCTOBER 2017

1. THE SURVEY CLOSURES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 1000 FEET AS REQUIRED BY TITLE 16, W.S.A.C.
2. ALL DISTANCES ARE MEASURED IN FEET AND INCHES.
3. RECORD INFORMATION DERIVED FROM OFFICIAL PLAN OF PEDERSON RECREATION PHASE I-A, PLAN NO. 0701-PAZ, JANUARY 1983 REGARDING DISTANCE.
4. WHERE DIFFERENCE FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
5. DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JENEAH PUBLIC WORKS.
6. PUBLIC USE LOT# 10 HAS BEEN SET ASIDE AS A TRAIL FOR THE PARK FOR PUBLIC RECREATION IS APPROPRIATE. LOT 7 HAS BEEN SET ASIDE SPECIFICALLY FOR HABITAT PRESERVATION. REMOVAL OF INVASIVE SPECIES SUCH AS BURNING THRUOUT THE LOT WILL BE PERMITTED EXCEPT FOR TRAILS AND PERMETER FENCING THAT WILL BE LEFT TO PROTECT HABITAT. LOT #10 WILL BE LEFT TO GROW NATURAL VEGETATION. LOT #11 IS EXCAVATION AND GRADING CODE. FERMENTER CODE INDICATES THAT MINIMIZE SOIL COMPACTIVE DISTURBANCE.
7. WETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT THESE WETLANDS HAS BEEN GIVEN BY THE U.S. ARMY CORPS OF ENGINEERS (COE). CONSULT COE FOR MORE



PRELIMINARY

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1B
A SUBDIVISION OF
LOT 2B, PEDERSON HILL SUBDIVISION II, PHASE 1A
JUNEAU, ALASKA 99801
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
ABCLP48
CIVIL ENGINEERING-LAND SURVEYING
5040 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

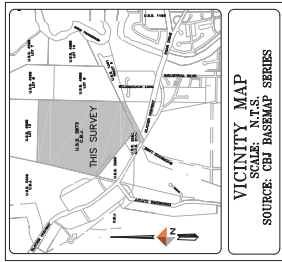
OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1"= 40'
DATE: OCT. 2017
PROJECT NO: 470887
SHEET NO: 4



SURVEYOR'S CERTIFICATE
I, HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, DO HEREBY CERTIFY THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 48 OF THE ALASKA STATUTES. I HAVE REVIEWED THE SURVEY AND THE PLAT AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATED: OCTOBER 2017



SHEET INDEX

- 1 - KEY MAP & SUBDIVISION BOUNDARY
- 2 - SOUTHWEST PLAT DETAIL
- 3 - NORTHWEST PLAT DETAIL
- 4 - NORTHEAST PLAT DETAIL

U.S.S. 4598
LOT 13

S89°59'03"E 181.40'



3.25" ALUMINUM CAP
TYPICAL PRIMARY MONUMENT DETAIL
N.T.S.

5/8" REBAR WITH YELLOW PLASTIC CAP

TYPICAL SECONDARY MONUMENT DETAIL
N.T.S.

U.S.S. 3408
C.B.M.

LOT 2A
PEDERSON HILL SUBDIVISION II, PHASE 1A

SHEET 4

SHEET 3

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

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LOT 49

LOT 50

LOT 51

LOT 52

LOT 53

LOT 54

LOT 55

LOT 56

LOT 57

LOT 58

LOT 59

LOT 60

LEGEND

- BLM MONUMENT FOUND THIS SURVEY.
- FOUND 3.25" ALUMINUM PRIMARY MONUMENT (77125).
- 3.25" ALUMINUM PRIMARY MONUMENT (148285) SET THIS SURVEY.
- 3.25" ALUMINUM PRIMARY MONUMENT (148285) FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) SET THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) FOUND THIS SURVEY.
- 3/4" IRON PIPE MONUMENT FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY, UNLESS OTHERWISE NOTED.
- 3/4" IRON PIPE MONUMENT FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY, UNLESS OTHERWISE NOTED.
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- PHASE LINE
- EXISTING ACCESS, DRAINAGE & UTILITY EASEMENT
- PHASE 1A & 1B

OWNERSHIP CERTIFICATE

I, HANS E. PEDERSON, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, HEREBY CERTIFY THAT THE SUBDIVISION HEREIN AND THAT I AS LANDS MANAGER, HEREBY ADOPT THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS, TRAILS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED. DATE: 2017

GREG CHANEY
CBL LANDS MANAGER

NOTARY ACKNOWLEDGMENT

STATE OF ALASKA
FIRST JUDICIAL DISTRICT

THIS IS TO CERTIFY THAT ON THE DAY OF 2017, BEFORE THE UNDERSIGNED A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, APPEARED GREG CHANEY TO ME, KNOWN AND KNOWN TO ME TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AS THE FREE ACT AND DEED OF THE SAID CORPORATION FOR THE PURPOSES THEREIN MENTIONED, BEING FULLY AUTHORIZED TO DO SO.

WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA
MY COMMISSION EXPIRES:

- NOTES**
- THIS SURVEY CLOSES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.452.
 - ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
 - RECORD INFORMATION DERIVED FROM OFFICIAL PLAT OF PEDERSON HILL SUBDIVISION PHASE II, A SUBDIVISION OF TRACT 1, JUNEAU RECORDING DISTRICT.
 - WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
 - DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.
 - METLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT THESE METLANDS HAS BEEN GIVEN BY THE U.S. ARMY ENGINEERS (COE), CONSULT COE FOR MORE INFORMATION.

CERTIFICATION OF PLAT APPROVAL

I HEREBY CERTIFY THAT THE PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS OF THE CITY AND BOROUGH OF JUNEAU, ALASKA AND THAT THE PLAT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE DISTRICT RECORDING OFFICE, JUNEAU, ALASKA.

CHARMAN
CITY AND BOROUGH OF JUNEAU
PLANNING COMMISSION

ATTEST:
CLERK
CITY AND BOROUGH OF JUNEAU

PRELIMINARY

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1C
A SUBDIVISION OF
LOT 2C, PEDERSON HILL SUBDIVISION II, PHASE 1B
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
ABCL48
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT
6340 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1" = 100'
DATE: OCT. 2017
PROJECT NO: 70887
SHEET NO: 4



SURVEYOR'S CERTIFICATE

I, HANS E. PEDERSON, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, HEREBY CERTIFY THAT THE SUBDIVISION HEREIN AND THAT I AS LANDS MANAGER, HEREBY ADOPT THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS, TRAILS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED. DATE: OCTOBER 2017

BASIS OF BEARING

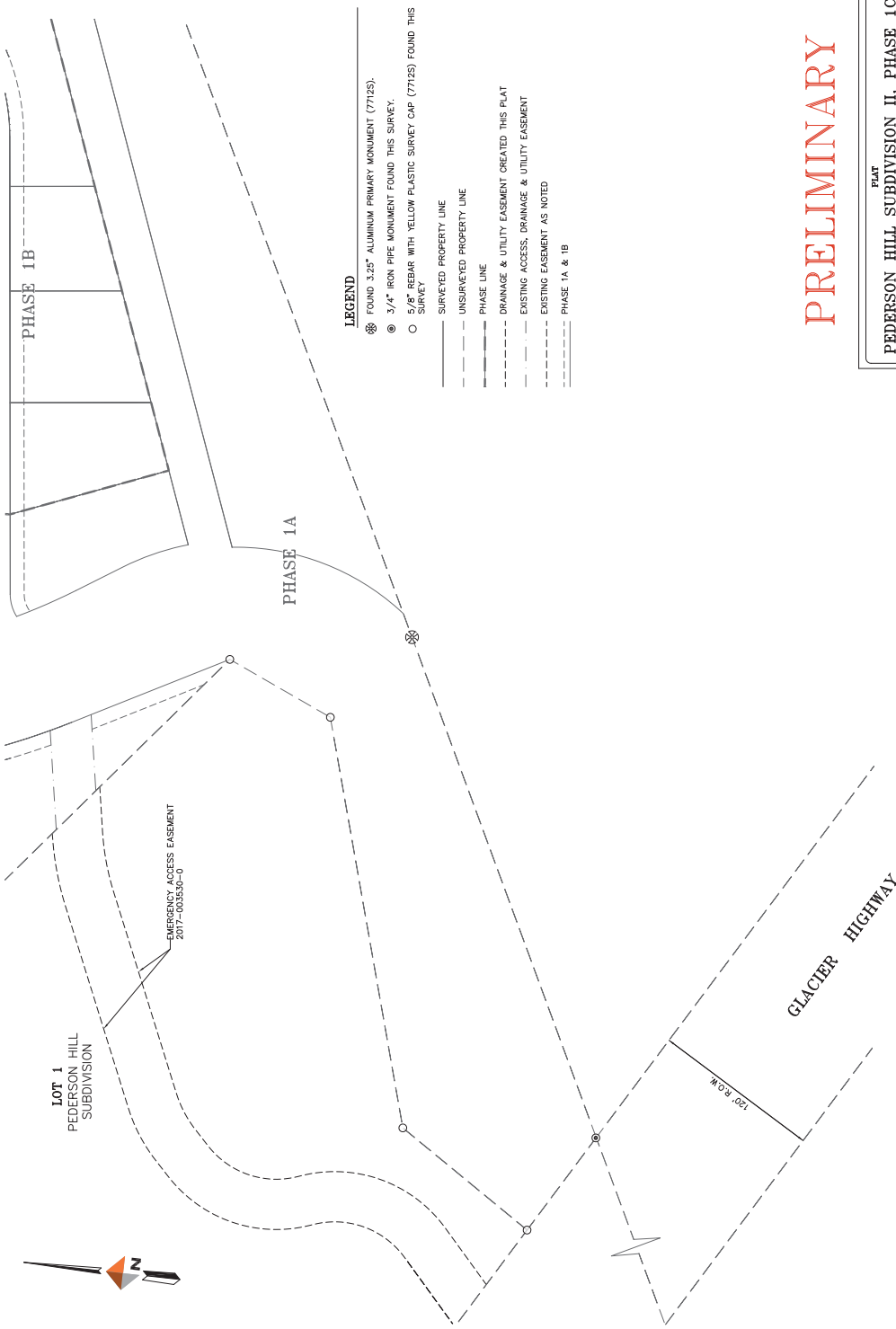
THE BASIS OF BEARING FOR THIS PLAT IS THE RECORD BEARING OF N63°28'00"E BETWEEN A FOUND BLM STONE MONUMENT AND FOUND G.L.O. IRON PIPE AS DETAIL ON THE PLAT AND DEPICTED UPON RECORD PLAT OF U.S.S. 3075, DATED SEPTEMBER 12, 1965, JUNEAU RECORDING DISTRICT.

SHEET 2

SCALE IN FEET
0 100 200 300

NOTES

1. THIS SURVEY CLOSES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 48.15.452.
2. ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
3. RECORD INFORMATION DERIVED FROM OFFICIAL PLAT OF PEDERSON HILL SUBDIVISION II, PHASE 1B, A SUBDIVISION OF TRACT 11, PEDERSON HILL SUBDIVISION II, PHASE 1B, PLAT No. 2017-XX, JUNEAU RECORDING DISTRICT.
4. WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
5. DOWNSIDE FENCE & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU.
6. METEANS EAST THROUGHOUT THIS SURVEY, APPROVAL TO IMPACT THESE METEANS HAS BEEN GIVEN BY THE U.S. ARMY CORPS OF ENGINEERS (COE), CONSULT COE FOR MORE INFORMATION.



LEGEND

- FOUND 3.25" ALUMINUM PRIMARY MONUMENT (77125)
- 3/4" IRON PIPE MONUMENT FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- PHASE LINE
- DRAINAGE & UTILITY EASEMENT CREATED THIS PLAT
- EXISTING ACCESS, DRAINAGE & UTILITY EASEMENT
- EXISTING EASEMENT AS NOTED
- PHASE 1A & 1B

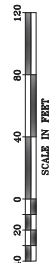
PRELIMINARY

PLAT	
PEDERSON HILL SUBDIVISION II, PHASE 1C	
A SUBDIVISION OF	
LOT 2C, PEDERSON HILL SUBDIVISION II, PHASE 1B	
UNSUBDIVIDED LAND	
CITY & BOROUGH OF JUNEAU, ALASKA	
JUNEAU RECORDING DISTRICT	
STATE RECORDER'S OFFICE AT JUNEAU	
DOWL	
ABCL48	
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT	
6340 COMMERCIAL BOULEVARD	
JUNEAU ALASKA 99801 907-780-3533	
OWNER	
CITY AND BOROUGH OF JUNEAU	
155 SOUTH SEWARD STREET	
JUNEAU, ALASKA 99801	
SCALE:	DATE:
1"= 40'	OCT. 2017
SHEET NO:	PROJECT NO:
2017-4	70887



SURVEYOR'S CERTIFICATE
I, HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF ALASKA, DO HEREBY CERTIFY THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 48 OF THE ALASKA STATUTES. I HAVE PERSONALLY CONDUCTED THE SURVEY AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATED: OCTOBER 2017





SURVEYOR'S CERTIFICATE

DATED: OCTOBER 2017

LEGEND

- ⊕ 3.25" ALUMINUM PRIMARY MONUMENT (148285) FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) SET THIS SURVEY
- ⊗ 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) FOUND THIS SURVEY
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY

SURVIVED PROPERTY LINE
 UNSURVIVED PROPERTY LINE
 PHASE LINE
 DRAINAGE & UTILITY EASEMENT
 EXISTING ACCESS, DRAINAGE &
 EXISTING EASEMENT AS NOTED
 PHASE 1A & 1B

NOTES

1. THIS SURVEY CROSSES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49, § 15, 452.
2. ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
3. RECORD INFORMATION DERIVED FROM ORIGINAL PLAT OF PEDERSON SURVEY, JUNE 1900, AND RECORDED IN PLAT NO. 10, 1900, OF PEDERSON HILL SUBDIVISION, 1ST PHASE, 1ST PLAT NO. 17-XX, JUNE 4, 1900, RECORDING DISTRICT.
4. WHERE DIFFERENCE FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
5. DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.
6. WETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT THESE WETLANDS HAS BEEN GIVEN BY THE U.S. ARMY CORPS OF ENGINEERS (COE). CONSULT COE FOR MORE INFORMATION.

PRELIMINARY

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1C
A SUBDIVISION OF
LOT 2C, PEDERSON HILL SUBDIVISION II, PHASE 1B
US SURVEY NO. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
AEC1848
CIVIL ENGINEERING—LAND SURVEYING—CONSTRUCTION MANAGEMENT
5368 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801
907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

DATE:	PROJECT NO:	FILE NO:	SHEET NO:
CALE:			

CURVE TABLE			
CURVE NO.	RADIUS	DELTA	LENGTH CHORD BEARING & DISTANCE
C1	30.00	79°11'48"	41.47 S44°02'19"W 38.24
C2	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C3	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C4	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C5	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C6	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C7	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C8	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C9	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C10	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C11	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C12	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C13	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C14	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C15	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C16	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C17	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C18	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C19	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C20	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C21	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C22	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C23	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C24	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C25	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C26	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C27	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C28	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C29	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C30	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C31	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C32	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C33	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C34	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C35	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C36	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C37	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C38	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C39	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C40	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C41	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C42	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C43	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C44	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C45	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C46	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C47	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C48	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C49	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C50	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C51	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C52	30.00	122°29'45"	64.14 N45°06'56"W 52.60
C53	30.00	122°29'45"	64.14 N45°06'56"W 52.60

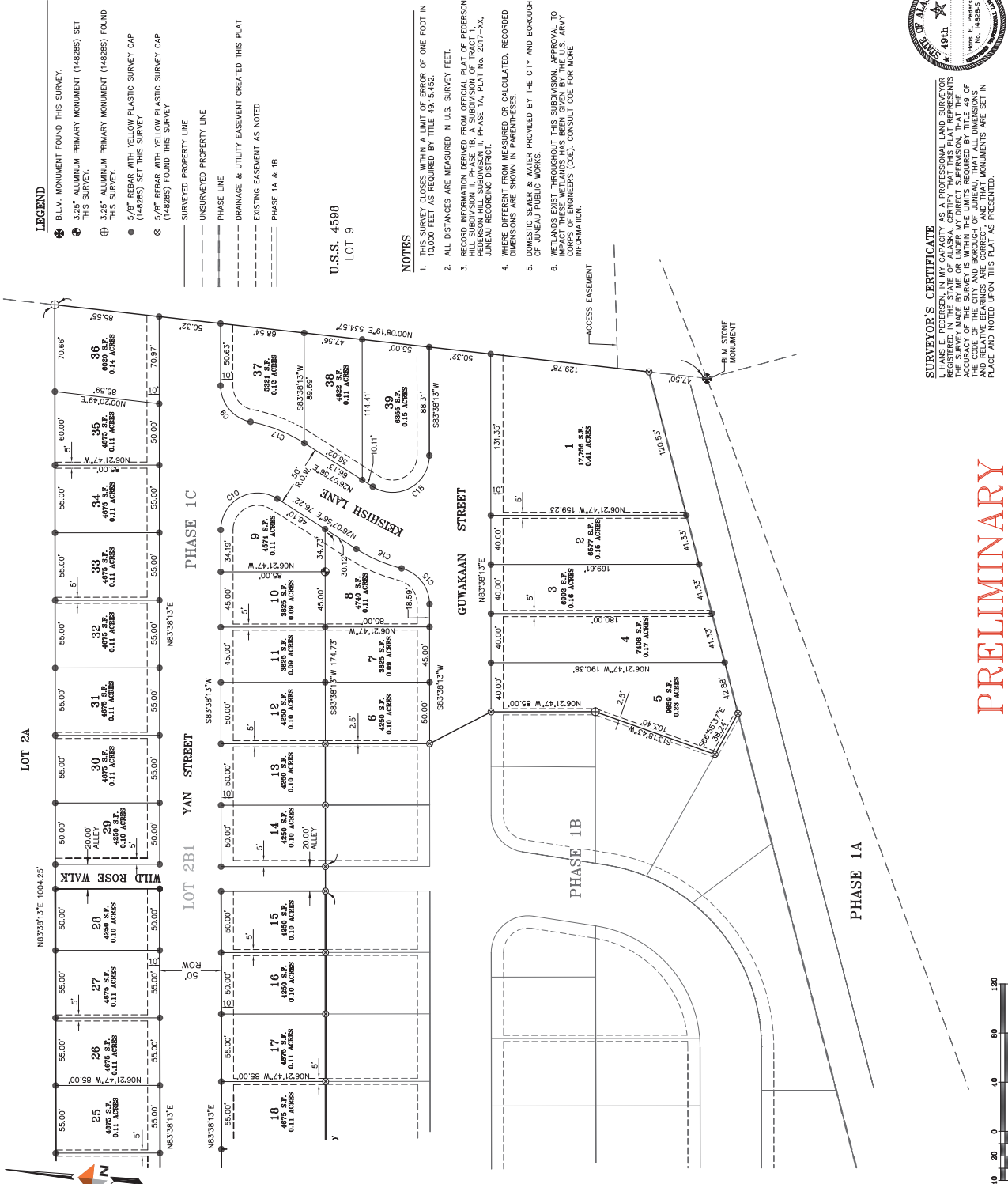
LEGEND

- BLM MONUMENT FOUND THIS SURVEY.
- 3.25" ALUMINUM PRIMARY MONUMENT (148285) SET THIS SURVEY.
- 3.25" ALUMINUM PRIMARY MONUMENT (148285) FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) SET THIS SURVEY
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (148285) FOUND THIS SURVEY
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- PHASE LINE
- DRAINAGE & UTILITY EASEMENT CREATED THIS PLAT
- EXISTING EASEMENT AS NOTED
- PHASE 1A & 1B

U.S.S. 4598
LOT 9

NOTES

- THIS SURVEY CLOSES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.452.
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
- RECORD INFORMATION DERIVED FROM OFFICIAL PLAT OF PEDERSON HILL SUBDIVISION II, PHASE 1B, A SUBDIVISION OF TRACT 1, JUNEAU RECORDING DISTRICT, PHASE 1A, PLAT No. 2071-XX, JUNEAU RECORDING DISTRICT.
- WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
- DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.
- WETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT THESE WETLANDS HAS BEEN GIVEN BY THE U.S. ARMY CORPS OF ENGINEERS (COE). CONSULT COE FOR MORE INFORMATION.



SURVEYOR'S CERTIFICATE
I, HANS E. PEDERSEN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, HEREBY CERTIFY THAT I HAVE PERSONALLY MADE A VISUAL INSPECTION OF THE LAND AND THE MONUMENTS AND BEARING BEINGS ARE CORRECT AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATED: OCTOBER 2017

PRELIMINARY



PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1C
A SUBDIVISION OF
LOT 2C, PEDERSON HILL SUBDIVISION II, PHASE 1B
JUNEAU RECORDING DISTRICT
CITY & BOROUGH OF JUNEAU, ALASKA
STATE RECORDER'S OFFICE AT JUNEAU

DOWL
ABC148
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT
6300 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-780-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801

SCALE: 1"= 40'
DATE: OCT. 2017
PROJECT NO: 470887
SHEET NO: 4

CIVIL INDEX

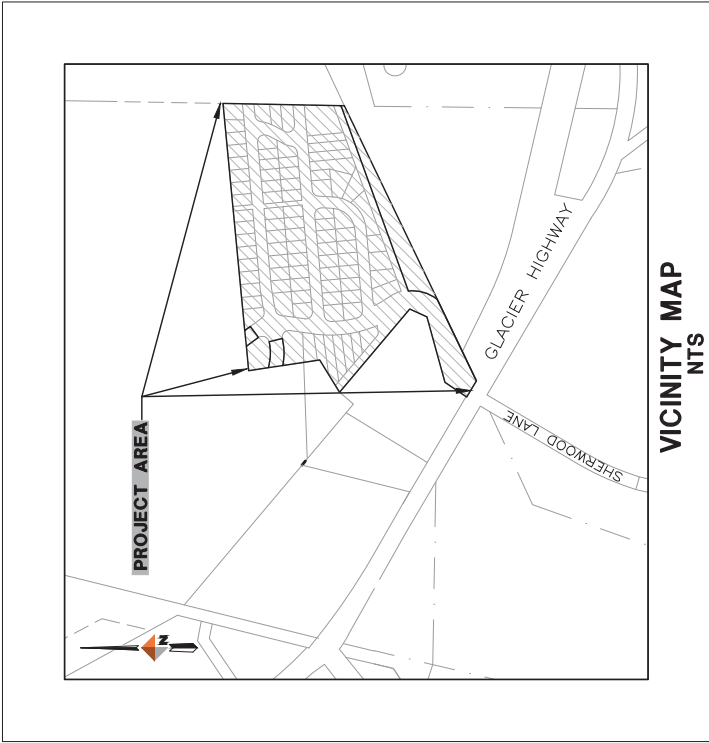
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TYPICAL SECTIONS	4 OF 40
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SANITARY SEWER MANHOLE & STORM DRAIN CATCH BASIN AND MANHOLE TABLES	6 OF 40
STORM DRAIN CATCH BASIN AND MANHOLE TABLES	7 OF 40
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PLAN - STA "KR" 11+00 TO STA "KR" 16+00 AND STA "CT" 201+00	10 OF 40
PLAN - STA "KR" 16+00 TO STA "KR" 21+00 KARL RESHUS BLVD. TO STA "KS" 31+90 & STA "G" 51+00	11 OF 40
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CIVIL INDEX

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ELECTRICAL PLAN - STA "KS" 32+00 TO STA "KS" 36+75	E7, 34 OF 40
ELECTRICAL PLAN - STA "G" 51+00 TO STA "G" 56+00 & STA "KS" 36+75 TO GUWAKAAN STREET	E8, 35 OF 40
ELECTRICAL PLAN - STA "G" 56+00 TO EOP GUWAKAAN STREET TO STA "KL" 101+50	E9, 36 OF 40
ELECTRICAL PLAN - STA "Y" 72+00 TO STA "Y" 75+50	E10, 37 OF 40
ELECTRICAL PLAN - STA "Y" 75+50 TO EOP STA "KL" 101+50 TO YAN STREET	E11, 38 OF 40
LOAD CENTER DETAILS	E12, 39 OF 40
LIGHT POLE DETAILS	E13, 40 OF 40

PEDERSON HILL SUBDIVISION
CONTRACT NO. E1X-XXX



PLANS DEVELOPED BY:
DOWL
5368 COMMERCIAL BOULEVARD
JUNEAU, ALASKA 99801
907-780-1333
AECLE48

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LEGEND

DESCRIPTION	EXISTING	REMOVE	PROPOSED
BURIED ELECTRICAL UTILITIES			
CATCH BASIN			
CONTROL POINT			
CURB & GUTTER			
CUT LIMITS			
FIRE HYDRANT			
HOUSE NO			
MAILBOX			
PROJECT CONTROL LINE			
PROPERTY LINE			
SANITARY SEWER PIPE			
SANITARY SEWER MANHOLE			
SIGN			
STORM DRAIN PIPE			
STORM DRAIN MANHOLE			
SURVEY MONUMENT-REBAR W/ PLASTIC CAP			
TREE CONIFER			
TREE DECIDUOUS			
WATER LINE PIPE			
WATER VALVE BOX			

ABBREVIATIONS

AC	ASPHALT CONCRETE
BVC	BEGIN VERTICAL CURVE
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIA	DIAMETER
EVC	END VERTICAL CURVE
FG	FINISHED GRADE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
LG	LIP OF GUTTER
LP	LOW POINT
LT	LEFT
MH	MANHOLE
MN	MAGNETIC NAIL
MTE	MATCH TO EXISTING
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PRC	POINT OF REVERSE CURVATURE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
RT	RIGHT
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBG	TOP BACK OF GUTTER
TP	TOP OF PAVEMENT
TSW	TOP OF SIDEWALK
TYP	TYPICAL
ABBREVIATIONS TO BE USED WITHOUT PERIODS	

GENERAL NOTES

1. LARGE Boulders, BEDROCK, STUMPS, LOGS, ORGANICS AND GROUND WATER MAY BE ENCOUNTERED AT VARIOUS DEPTHS DURING TRENCHING AND ROADWAY EXCAVATION OPERATIONS. THESE MATERIALS SHALL BE DISPOSED OF AS REQUIRED BY THE ENGINEER. APPLICABLE.
2. CBI ENGINEERING STANDARD DETAILS 4TH EDITION - AUGUST 2011, IS MADE PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
3. EXISTING PIPE LOCATIONS ARE DERIVED FROM CBI AS-BUILTS OR FIELD LOCATED. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. DEPTH OF SOME OF THE EXISTING PIPES SHOWN ON THE ELEVATIONS ARE ASSUMED. DIAL BEFORE YOU DIG 586-1333.
4. GRADING AND ALIGNMENT ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. LOCATION OF PROPOSED WATER AND STORM DRAINAGE FACILITIES ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. PROVIDE KNOCKOUTS IN CATCH BASINS FOR ALL PIPES SHOWN ON THE PLANS.
5. THE CONTRACTOR SHALL NOTIFY CBI WATER UTILITIES AT 780-6888 OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" TO CBI WATER UTILITIES SUPERINTENDENT FOR APPROVAL AT LEAST 48 HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. NO WATER SERVICE INTERRUPTION MAY PROCEED UNTIL THIS APPROVAL IS OBTAINED.
6. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. BRASS CAP MONUMENTS, REBARS, CONCRETE NAILS, CHISELED X's) PRIOR TO CONSTRUCTION AND REMOVAL AFTER SURFACING IS REPLACED. EXISTING SURVEY MONUMENTS MAY NOT BE SHOWN ON THE DRAWINGS. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR.
7. ALL ASPHALT PAVEMENT TO BE REMOVED AND DISPOSED OF SHALL BE DELIVERED TO A STOCKPILE AREA AT THE LEMON CREEK CITY PIT TO BE DESIGNATED BY THE ENGINEER. CONTACT THE ENGINEER FOR THE EXACT LOCATION OF THE STOCKPILE.
8. ALEKSI, ACS, AND CBI MAY CONDUCT WORK WITHIN THE PROJECT LIMITS TO INSTALL UTILITIES. THE CONTRACTOR SHALL COORDINATE ITS ACTIVITIES WITH EACH UTILITY COMPANY AND PROVIDE ACCESS AS NECESSARY FOR UTILITY COMPANIES TO CONDUCT THEIR WORK.
9. ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN (NOT ALL ARE LABELED) ON DRAWINGS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTIONS TO EXISTING PIPES, AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
10. THE USE OF GROUT AND QUICKSET CEMENT PRODUCTS WITH ADJUSTING RINGS, BRICKS, WOOD, STONES AND OTHER SIMILAR GRADE ADJUSTMENT DEVICES TO SUPPORT CATCH BASIN FRAMES OVER CATCH BASINS AND MANHOLES WILL NOT BE PERMITTED. SEE THE REQUIREMENTS FOR CATCH BASIN FRAMES AND GRATES SHALL BE SET AT 6-3/4" BELOW TOP BACK OF CURB ELEVATION, WITH 3" LONG CONCRETE GUTTER TRANSITIONS TO BOTH SIDES OF GRATE.
11. THE CONTRACTOR SHALL ARRANGE FOR ELECTRICAL UTILITY LOCATES PRIOR TO ANY EXCAVATION. UNDERGROUND ELECTRICAL UTILITIES, IF SHOWN ON THE DRAWINGS, SHALL BE LOCATED AND DISTANCE TO ANY MANHOLE SHOWN ON THE DRAWINGS. OTHER BURIED ELECTRICAL UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE DRAWINGS. DIAL BEFORE YOU DIG AT 586-1333.



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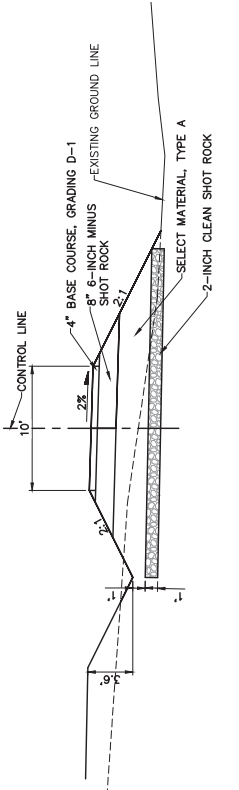
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SUBDIVISION DESIGN
CONTRACT NO.

LEGEND, ABBREVIATIONS,
AND GENERAL NOTES



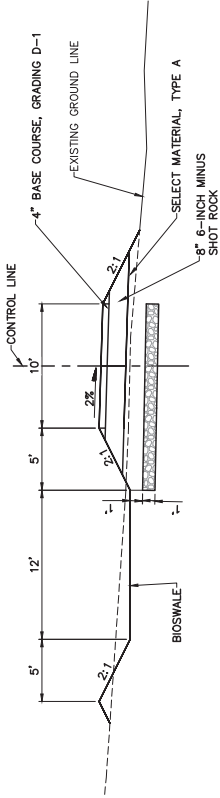
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TYPICAL SECTIONS



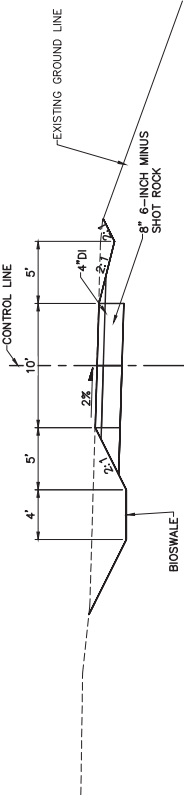
EQUESTRIAN TRAIL WITH RAINGARDEN
STA "E" 200+90 TO STA "E" 201+90

NTS



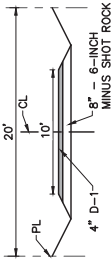
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STA "E" 203+50 TO STA "E" 206+90

NTS

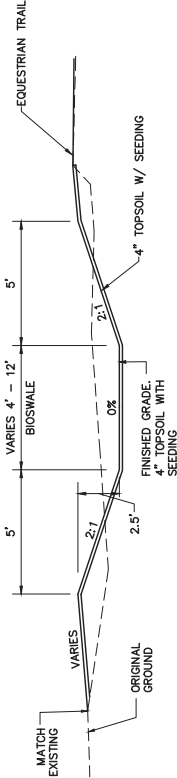


EQUESTRIAN TRAIL WITH BIOSWALE
STA "E" 206+90 TO STA "E" 217+00

NTS



WILD ROSE WALK



BIOSWALE DETAIL

NTS



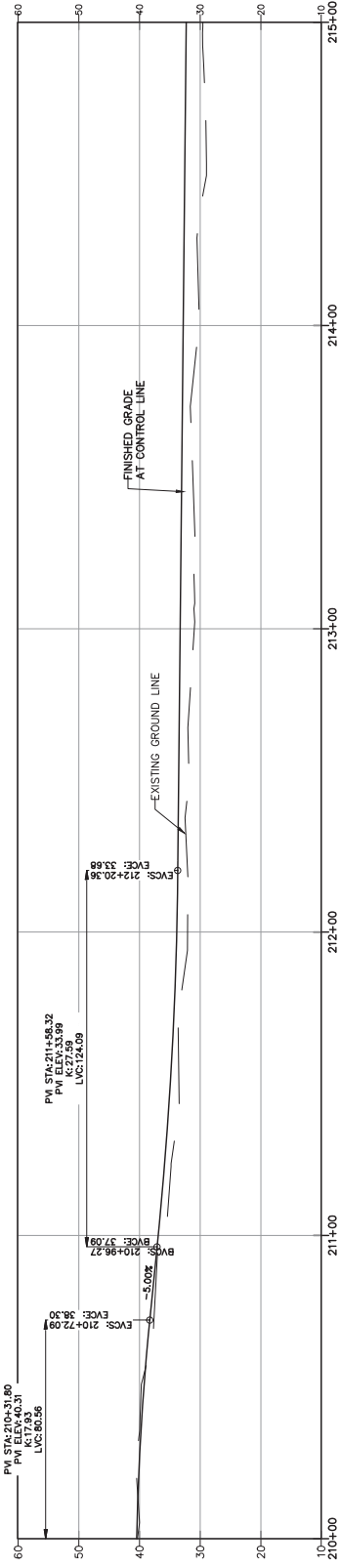
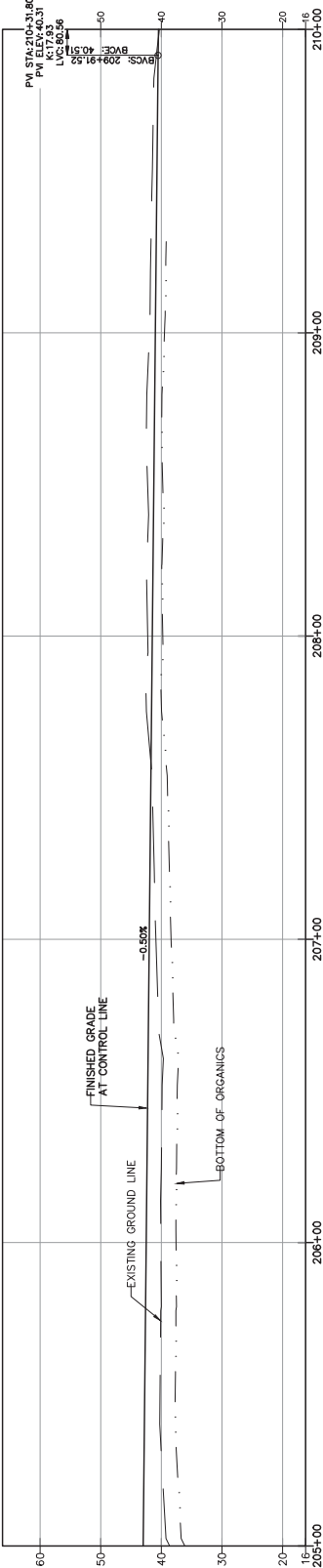
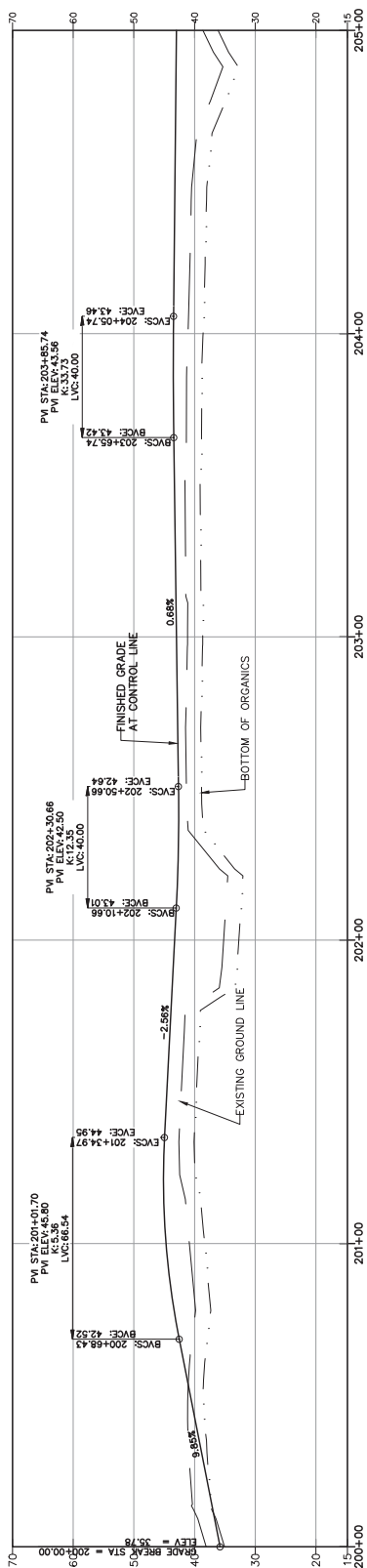
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TYPICAL SECTIONS





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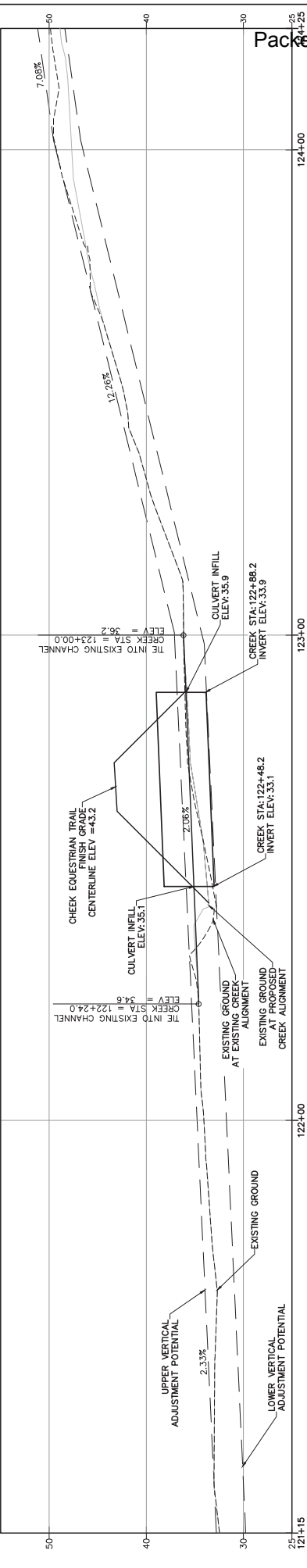
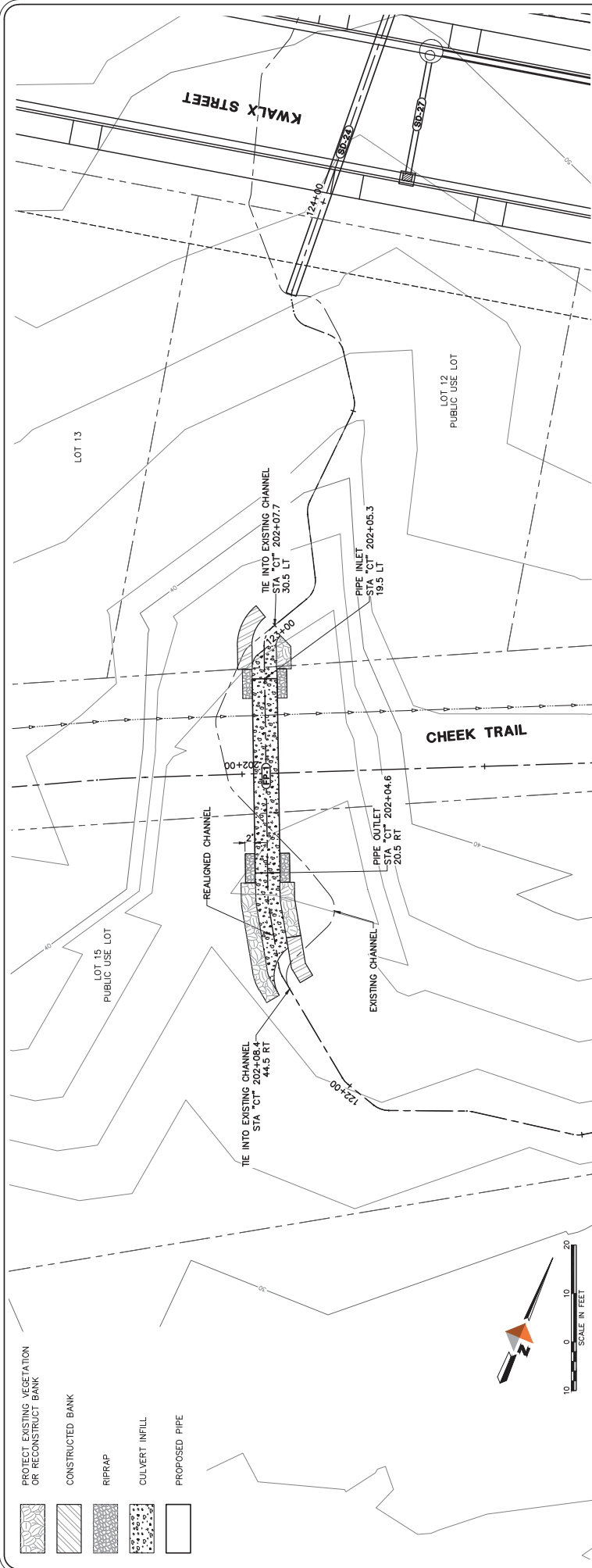
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PROFILE -
EQUESTRIAN TRAIL



 DOWL Consulting Engineers • Land Surveyors • Construction Administration 5368 COMMERCIAL BOULEVARD JUNEAU, ALASKA 99801 907-780-3533 ACE1848	 CITY OF JUNEAU ALASKA'S CAPITAL CITY DEPARTMENT OF ENGINEERING	65% SUBMITTAL PEDERSON HILL SUBDIVISION DESIGN CONTRACT NO.	FISH PASSAGE PLAN AND PROFILE	Sheet No. 26 of 349
				Packet Page 6 of 349

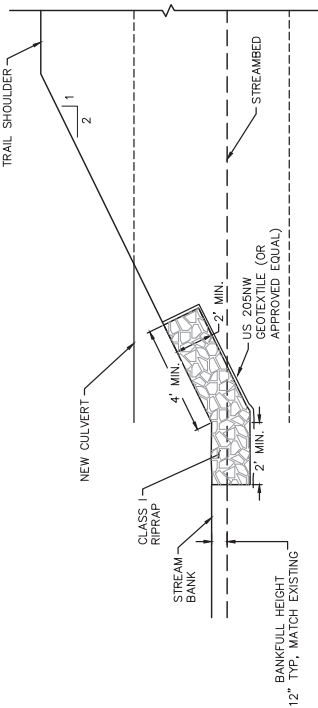


FIGURE 4
INLET AND OUTLET SLOPE PROTECTION

- CULVERT NOTES:**
1. FOR EASE OF INFILL, CONTRACTOR MAY SUBSTITUTE A LARGER DIAMETER PIPE, PROVIDED THAT THE SUBSTITUTED PIPE IS WITHIN THE SIZE LIMITS PROVIDED AND GAGE IS INCREASED AS APPROPRIATE FOR THE SPECIFIED LOADING. NO PRICE INCREASE FOR THE SUBSTITUTION SHALL BE ALLOWED.
 2. CULVERT JOINTS SHALL BE SEALED WITH AN ADDITIONAL EXCAVATION, INFILL, RIPRAP, OR PIPE MATERIAL.
 3. BACKFILL SHALL BE PLACED AND COMPACTED WITH CARE AND SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY ON BOTH SIDES OF PIPE.
 4. CULVERT INFILL MATERIAL SHALL BE INSTALLED IN PIPE ACCORDING TO PLANS. MANUAL INSTALLATION IS REQUIRED.

- CULVERT INFILL NOTES:**
1. CULVERT INFILL MATERIAL MAY BE PREPARED BY MIXING EQUAL PARTS BY VOLUME:
 - POROUS BACKFILL MATERIAL
 - SAND OR UNCLASSIFIED MATERIAL RICH IN FINES
 - DITCH LINING MATERIAL
 2. SALVAGED STREAMBED MATERIAL MAY BE ADDED AT ANY RATIO.
 3. CULVERT INFILL MATERIAL SHALL BE INSTALLED IN PIPE ACCORDING TO PLANS. MANUAL INSTALLATION IS REQUIRED.

- CHANNEL NOTES:**
1. CONSTRUCT CHANNEL BED LEAVING A ROUGH, UNEVEN SURFACE WITH A DEPRESSION IN THE MIDDLE FOR LOW FLOW. ALL VEGETATION IN THE AREAS NOT AFFECTED BY WORK SHALL BE PRESERVED AND PROTECTED BY THE CONTRACTOR.
 2. CONSTRUCT CHANNEL BED LEAVING A ROUGH, UNEVEN SURFACE.
 3. THE CONSTRUCTED STREAMBANKS INTO EXISTING STREAMBANKS AT THE LOCATIONS SHOWN OR AS DIRECTED BY ENGINEER.
 4. SALVAGE VEGETATIVE MAT WITH A MINIMUM THICKNESS OF 12 INCHES FROM THE DISTURBANCE AREA OR THE LOCAL AREA.
 5. IF LOSS OF TOPSOIL DURING HANDLING AND STOCKPILING REDUCES MAT THICKNESS TO LESS THAN 12 INCHES, PLACE VEGETATIVE MATS TIGHTLY TOGETHER TO MINIMIZE GAPS BETWEEN PIECES OF MAT.
 6. PLACE VEGETATIVE MATS TIGHTLY TOGETHER TO MINIMIZE GAPS BETWEEN PIECES OF MAT.
 7. FILL SURFACE VOIDS IN RIPRAP SLOPE PROTECTION WITH UNCLASSIFIED FILL THEN SEED.

MEASUREMENT AND PAYMENT:
STREAM DIVERSION, EXCAVATION, DEWATERING, BANK CONSTRUCTION, AND CULVERT INFILL (INCLUDING RIPRAP BANKS WITHIN CULVERT IF PIPE SIZE INCREASED) ARE SUBSIDIARY TO PIPE.

CULVERT SUMMARY SCHEDULE	
SIZE	60" ROUND
LENGTH	40'
CORRUGATION	3" X 1"
MATERIAL	ALUMINUM
THICKNESS	0.060" (16 GA)
INCREASE TO 12 GA FOR 84" DIAMETER	

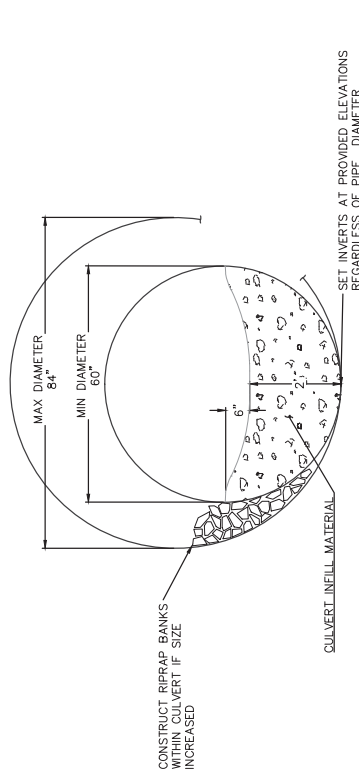


FIGURE 1
CULVERT TYPICAL SECTION

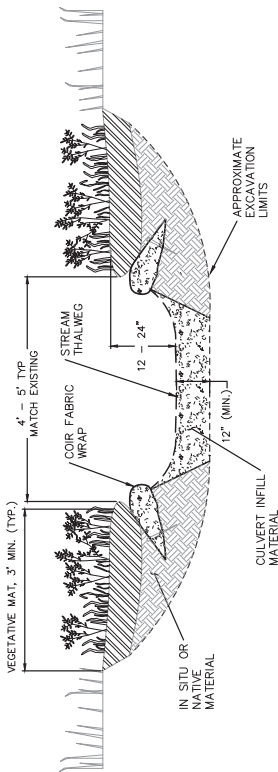


FIGURE 2
STREAM TYPICAL SECTION WITH CONSTRUCTED BANKS

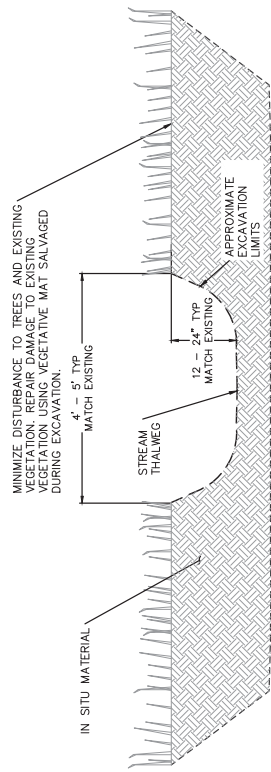


FIGURE 3
STREAM TYPICAL SECTION WITH PROTECTED EXISTING VEGETATION



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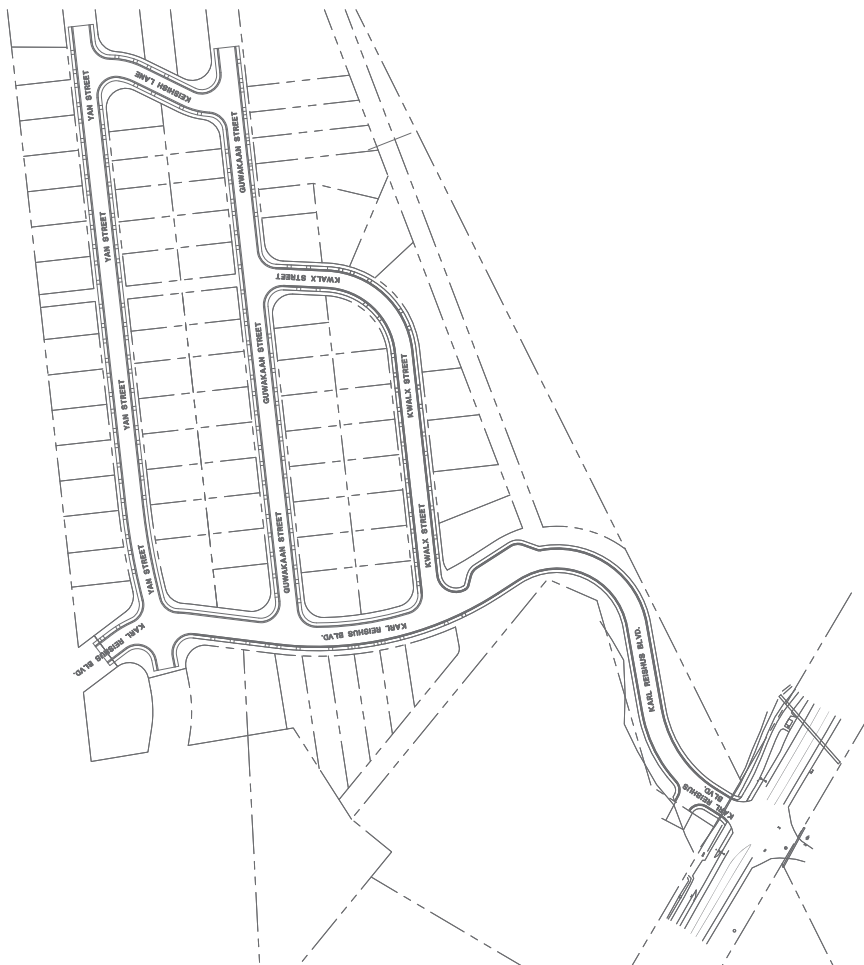
FISH PASSAGE
DETAILS

27 of 350
SHEET

SHEET NUMBER	TITLE, INDEX, LEGEND & GENERAL NOTES	SHEET TITLE
E1		
E2	PEDERSON HILL – ELECTRICAL LAYOUT	
E3	ELECTRICAL PLAN – GLACIER HIGHWAY TO STA "KR" 11+00	
E4	ELECTRICAL PLAN – STA "KR" 11+00 TO STA "KR" 16+00	
E5	ELECTRICAL PLAN – STA "KR" 16+00 TO STA "KR" 21+00 KARL REISHUS BLVD TO STA "KS" 32+00 & STA "G" 51+00	
E6	ELECTRICAL PLAN – STA "KR" 21+00 EOP KARL REISHUS BLVD TO STA "Y" 72+00	
E7	ELECTRICAL PLAN – STA "KS" 32+00 TO STA "KS" 36+75	
E8	ELECTRICAL PLAN – STA "G" 51+00 TO STA "G" 56+00 & STA "KS" 36+75 TO GUWAKAAN STREET	
E9	ELECTRICAL PLAN – STA "G" 56+00 TO EOP GUWAKAAN STREET TO STA "KL" 101+50	
E10	ELECTRICAL PLAN – STA "Y" 72+00 TO STA "Y" 75+50	
E11	ELECTRICAL PLAN – STA "Y" 75+50 TO EOP STA "KL" 101+50 TO YAN STREET	
E12	LOAD CENTER DETAILS	
E13	LIGHT POLE DETAILS	

CKT	CIRCUIT
C/B	CIRCUIT BREAKER
$\frac{20}{1}$	CIRCUIT BREAKER (AMPS/POLES)
	CONTACTOR
GND	GROUND
HOA	HAND-OFF-AUTO
	HAND-OFF-AUTO SWITCH
	LIGHTING CONTACTOR
	LIGHT POLE WITH LUMINAIRE
	METER
NEC	NATIONAL ELECTRICAL CODE
	PHOTOCELL
	RECEPTACLE
TYPE-#	TYPICAL

1. PERFORM ALL WORK PER NATIONAL ELECTRICAL CODE (NEC), 2017 EDITION.
2. PERFORM ALL WORK AS SHOWN ON DRAWINGS AND AS REQUIRED TO PROVIDE OPERATIONAL SYSTEMS.
3. COORDINATE WITH POWER, TELEPHONE, AND TELEVISION UTILITIES TO ALLOW WORK WITHIN WORK AREA. IF ANY UTILITIES ARE FOUND TO BE DAMAGED, DO NOT INSTALL ANYTHING IN CONFLICT WITH UTILITIES. BRING ALL CONFLICTS TO THE ATTENTION OF THE ENGINEER. OBTAIN LOCATES BEFORE WORKING TO AVOID NEWLY INSTALLED UTILITIES.
4. ALL CONDUIT SHALL BE SCHEDULE 40 PVC EXCEPT ALL ROAD CROSSINGS SHALL BE SCHEDULE 80 PVC. PROVIDE SCHEDULE 80 PVC WITHIN 10' OF SHALLOW FOUNDATIONS, TYPE 1A JUNCTION BOXES AND CONCRETE STRUCTURES.
5. ALL WIRING SHALL BE IN CABLE WITH COPPER CONDUCTOR, 600V RATED XHHW INSULATION, AND OVERALL PVC JACKET. PROVIDE ADDITIONAL BARE GROUNDING CONDUCTOR, TYPE 1A JUNCTION BOXES, LIGHT POLES, USE BARRINGS, ETC. BOND GROUND INSIDE CABLE TO LOAD CENTER AND LIGHT POLES.



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CITY/BOROUGH OF JUNEAU
 ☆ **ALASKA'S CAPITAL CITY**
DEPARTMENT OF ENGINEERING

TITLE, INDEX, LEGEND & GENERAL NOTES



Packet Page 352 of 797

Page 3 of 3

**PEDERSON HILL -
ELECTRICAL LAYOUT**

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907-780-3533
AFCI 848

PHONE: 907-789-3550, LEXIPOL ACQUISITION

Consulting Engineers • Land Surveyors • Construction Administration						
NO. 10	THREAT OF	DESIGNED BY	STAGE	DESIGNED BY	STAGE	DATE, MIN. 2015

OB No	170697 04	DRAWN BY: STAFF	DESIGNED BY: STAFF	CHECKED BY: STAFF	DATE: MAY 2017
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OBJ. NO.	DATE	DRAWN BY:	STAGE
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OP N°	170697 04	DRAWN BY
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OP No. 170697 of

172

[illegible]

NOTES:

1. ALL DIMENSIONS ARE MINIMUM.
2. SEE CULVERT DRAWINGS FOR TYPICAL SECTIONS UNDER PAVED AREAS. PROVIDE BACKFILL (MATERIAL, COMPACT, ETC.) PER THE CULVERT DRAWINGS. WHERE NOT SHOWN UNDER PAVEMENT, PROVIDE D1 IN THE TOP 12" WITH SELECT BORROW BELOW.
3. THE LOCATION OF ALL EXISTING PIPING, CONDUIT, ETC MAY NOT BE WHERE SHOWN AND MAY NOT BE SHOWN. ALL LOCATIONS THAT ARE SHOWN ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED. OBTAIN UTILITY LOCATES PRIOR TO DIGGING. DIG WITH CAUTION. AVOID WATER, SEWER, DRAINAGE PIPES AND OTHER CONFLICTS.
4. MAINTAIN 12 INCHES MINIMUM SEPARATION (ALL DIRECTIONS) BETWEEN POWER AND OTHER PIPES, ETC.
5. CUT & REPLACE EXISTING ASPHALT, CONCRETE, CONCRETE CURB, GUTTER, SIDEWALK, ETC AS NECESSARY.
6. SAWCUT EXISTING ASPHALT TO INSTALL CONDUIT AND OTHER ELECTRICAL ITEMS. SAWCUT ASPHALT BACK 18" ON EACH SIDE OF EDGE OF TRENCH OR EXCAVATION AREA (ALL SIDES). THERE SHALL BE 18" OF UNDISTURBED SOIL BETWEEN EDGE OF SAWCUT AND EXCAVATION LIMITS. ALL TRENCHES SHALL BE 18" WIDE MINIMUM. COMPACT TO 95% OF STANDARD SPEC TO 100% WHERE COVERED WITH PAVEMENT. RE-PATE SAWCUT AREAS PER PAVING SPECIFICATIONS.
7. POWER UTILITY CONDUITS SHALL BE BURIED AT A MINIMUM OF 3'-6". BURY CONDUITS DEEPER WHERE REQUIRED TO AVOID OTHER PIPES AND STRUCTURES.
8. MODIFY CONDUIT BURIAL DEPTH WHERE SHOWN ON DRAWINGS AND AS REQUIRED TO AVOID ALL OBSTACLES.
9. THIS DETAIL APPLIES TO DRAIN CONDUITS.
10. PROVIDE 36" MINIMUM BURY IN ROAD PRISM.

① TRENCH DETAIL
NO SCALE

NO SCALE



DOWL

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NO. 10	THREAT 01	DESIGNED BY	STAGE
		RECEIVED BY	STAGE
		DATE, TIME, YEAR	

OB No	170697 04	DRAWN BY: STAFF	DESIGNED BY: STAFF	CHECKED BY: STAFF	DATE: MAY 2017
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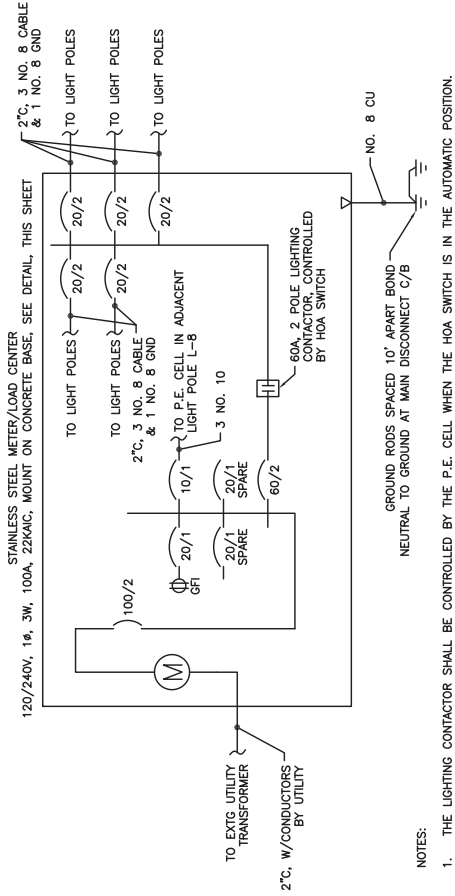
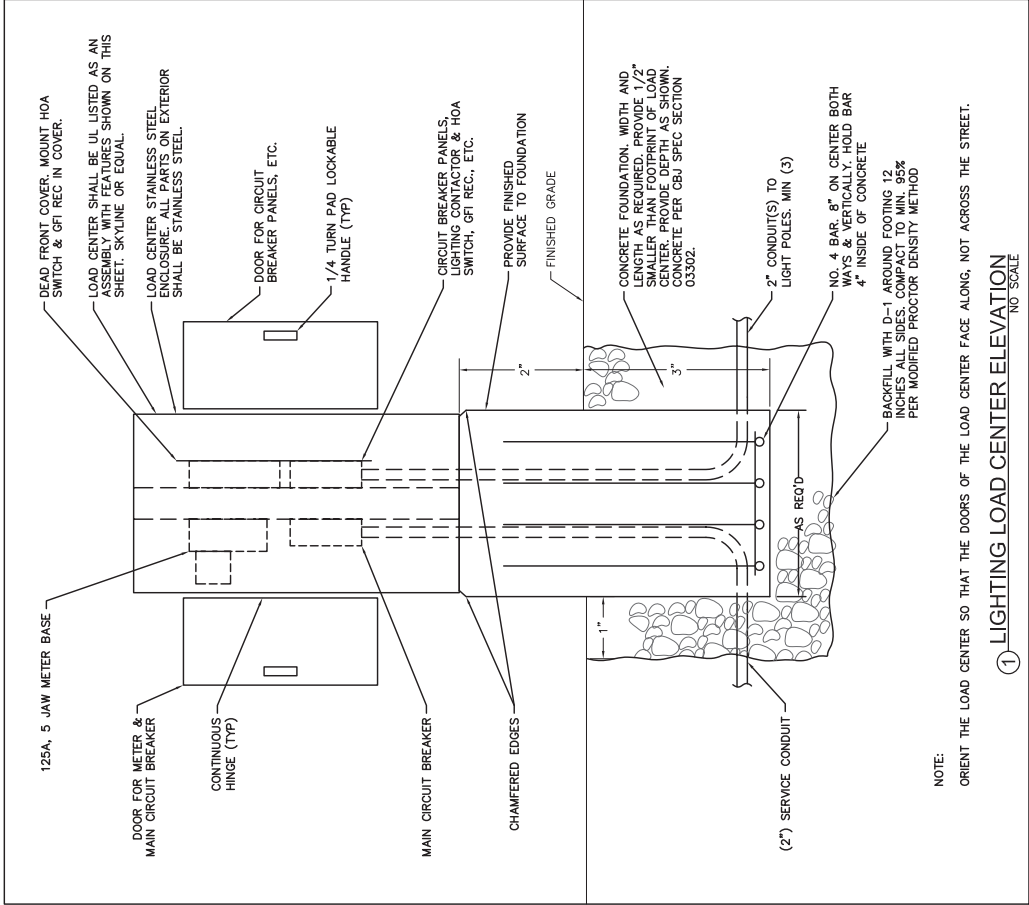
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OP No. 170697 of

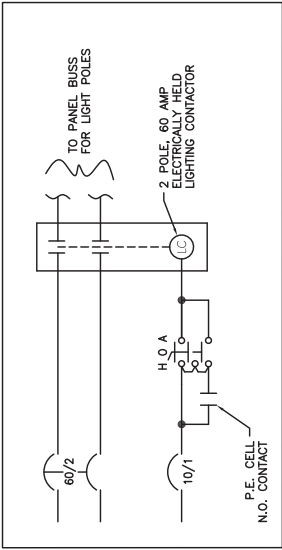
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- NOTES:
1. THE LIGHTING CONTACTOR SHALL BE CONTROLLED BY THE P.E. CELL WHEN THE HOA SWITCH IS IN THE AUTOMATIC POSITION.
 2. A STATE OF ALASKA DOT/PF STANDARD LOAD CENTER FOR HIGHWAY ILLUMINATION MAY BE SUBSTITUTED FOR THE LOAD CENTER SHOWN.
 3. INSTALL GROUNDING HUBS, THIRD PARTY CERTIFIED FOR WET LOCATIONS (MYERS TYPE), WHEN ATTACHING CONDUITS TO THE LOAD CENTER ENCLOSURE.
 4. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION. LABEL THE SELECTOR SWITCH "LIGHTING" AND ITS POSITIONS "ON-OFF-AUTO".
 5. STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST THAT INCLUDES THE MANUFACTURER'S NAME AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER. INSTALL THE POCKET ON THE LOAD CENTER DOOR AND PROVIDE DRAIN HOLES IN THE LOAD CENTER TO PREVENT WATER ACCUMULATION.

② SINGLE LINE DIAGRAM - LTG LOAD CENTER
NO SCALE

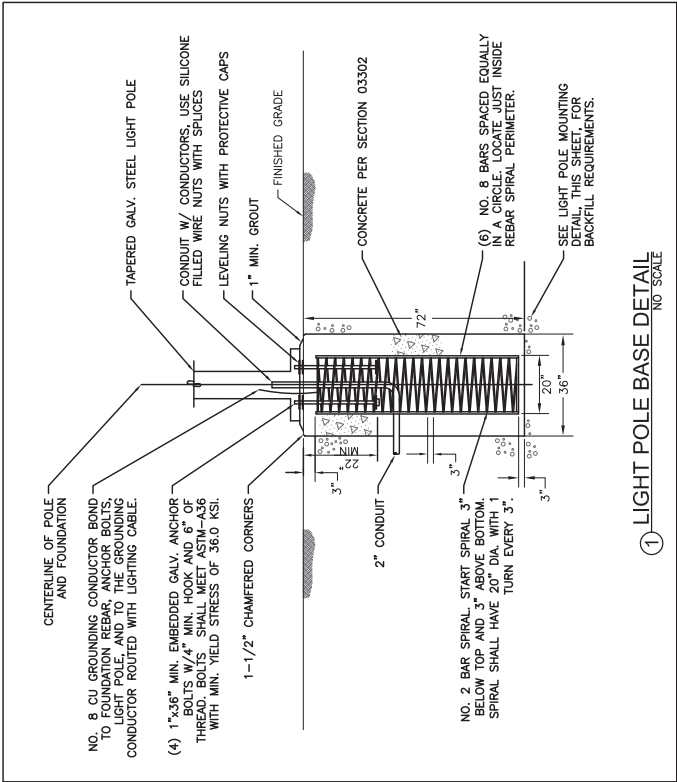
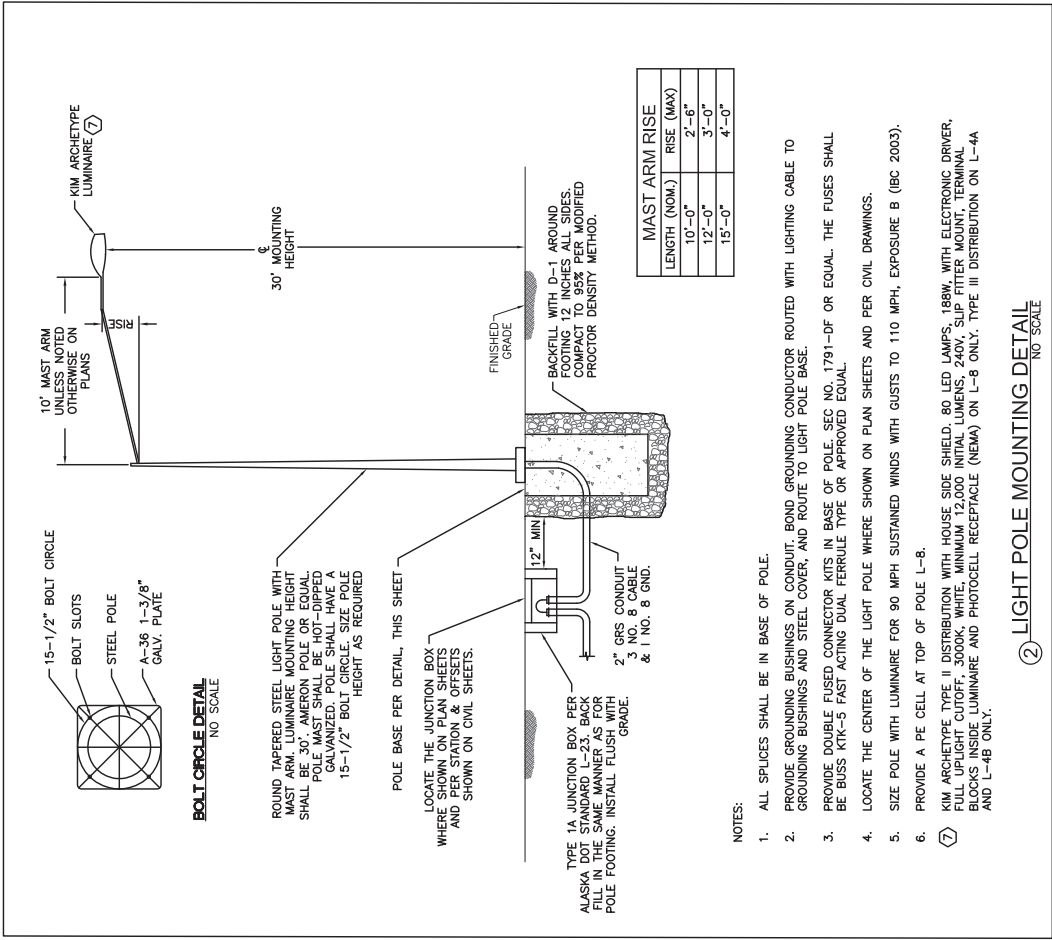


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CITY/BOARDS OF JUNEAU
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DEPARTMENT OF ENGINEERING

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CONTRACT NO.



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LIGHT POLE DETAILS



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

DATE: February 21, 2017
TO: Planning Commission
FROM: Eric Feldt, Planner II, AICP, CFM
Community Development Department

FILE NO's: SMP2016 0002 and CSP2016 0006

PROPOSAL: A Preliminary Plat for Phase 1 Pederson Hill Subdivision resulting in 86 Residential lots and 5 lots for preservation/park purposes.

GENERAL INFORMATION

Applicant: Lands & Resources Division of the City and Borough of Juneau
Property Owner: City and Borough of Juneau (CBJ)
Legal Description: Pederson Hill Lot 2
Parcel Code No.: 4-B22-0-101-010-1
Site Size: Approx. 120 acres
Project Size: Approx. 20 acres
Comprehensive Plan Future Land Use Designation: Medium Density Residential (MDR)
Zoning: D-10SF (Single-Family) and D-10
Utilities: CBJ Water & Sewer
Access: Glacier Highway
Existing Land Use: Vacant

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Surrounding Land Use: North – Vacant; University of Alaska; D-1(T) D-5
South – Vacant; Sherwood Ln; Industrial (I)
East - Vacant; University of Alaska; D-1(T) D-5
West – Church; Glacier Hwy; D-10

Vicinity Map



ATTACHMENTS

ATTACHMENT	A	Subdivision Application
ATTACHMENT	B	Project Narrative
ATTACHMENT	C	Draft Preliminary Plat
ATTACHMENT	D	Pederson Hill Phases 1-3 Layout
ATTACHMENT	E	2/2/17 Neighborhood Meeting Document
ATTACHMENT	F	Public Comments
ATTACHMENT	G	Street Design Profiles
ATTACHMENT	H	Pedestrian Route Design Profiles
ATTACHMENT	I	Contour Plan

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ATTACHMENT	J	Drainage Plan and Report
ATTACHMENT	K	DOT/ PF Letter
ATTACHMENT	L	Traffic Study
ATTACHMENT	M	Wetland Boundary Map
ATTACHMENT	N	Wetland Fill Permit
ATTACHMENT	O	ADF&G Letter
ATTACHMENT	P	DEC Letter
ATTACHMENT	Q	Secondary Emergency Access Route
ATTACHMENT	R	Comprehensive Plan Map
ATTACHMENT	S	Housing Action Plan
ATTACHMENT	T	CBJ Lands Management Plan
ATTACHMENT	U	Non-Motorized Transportation Plan

PROPOSAL

The City & Borough of Juneau Lands and Resources Division is seeking Preliminary Plat approval for Phase 1 of the Pederson Hill Subdivision. This phase (herein referred to as the 'Project') is located next to the Christ Evangelical Lutheran Church accessed by Glacier Highway in the Mendenhall Valley area. The project consists of 86 residential lots; five lots for preservation and park purposes; new streets; and pedestrian routes. Future phases of the Pederson Hill Subdivision are conceptually shown at this time for contextual purposes.

The applicant has submitted a subdivision application (Attachment A), project narrative (Attachment B), and Preliminary Plat (Attachment C). Associated documents required to complete the Preliminary Plat application are also provided as attachments.

Concurrent with SMP2016-0006 (subject subdivision review), CSP2016 0006 has been filed to ensure the Planning Commission reviews all proposed capital improvement projects for consistency with adopted CBJ plans, per CBJ 49.15.580(a). Detailed analyses of CBJ plans are provided under 'Adopted Plans' later in this report.

BACKGROUND

The Pederson Hill area has long been identified for future housing. The 1999 CBJ Land Management Plan designated the CBJ land on Pederson Hill be considered for disposal for development once sewer is provided and a subdivision feasibility study is completed. Sewer is now available at the subject site. Through later studies and analyses, the CBJ determined that a subdivision in the area of the subject site is feasible. The 2006 Buildable Lands Study determined that this part of Pederson Hill is appropriate for development. The 2008 Comprehensive Plan

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designated this area for future housing up to 20 units per acre. In 2010, the Conceptual Master Plan Study for Pederson Hill identified the area of Phases 1-3 for future housing.

In 2014, the Assembly rezoned the property from D-1(T) D-5 to a mix of D-10 and D-10SF. D10 zoning is intended to primarily accommodate multifamily development at 10 units per acre. D10SF is intended to primarily accommodate single family residential development, also at a density of 10 units per acre. The smaller lot sizes resulting from the rezone make it possible to achieve lower housing costs.

Formerly the site did not have access to a public right-of-way. Space for a new access right-of-way (ROW) was established through a land swap and lot line adjustment with the adjacent Christ Lutheran Church in 2015 (Plat #2015-40; Subdivision Case #SMN2015-004; City Consistency Review #CSP2015-0004). This provided the needed access to Glacier Highway. Since 2015, the CBJ Lands and Resources Division and DOWL's Juneau office (an engineering firm) have been designing various subdivision layouts and have finalized their efforts with the subject proposal for Phase 1 (Attachment C). Phases 2 and 3 are shown in Attachment D as future concepts and are not part of this subject proposal.

AGENCY REVIEW

CBJ Engineering

Phase 1 consists of five new streets with sidewalks and curb and gutter drainage. The CBJ Engineering Department has reviewed these public improvements and found that the project complies with CBJ 49.35.240 *Table of roadway construction standards*. Detailed discussion of the proposed roads and drainage plan are provided later in this report.

Wetland Review Board (WRB)

Approximately nine acres of wetlands will be filled for Phase 1. In June of 2016, the WRB reviewed the project's impact to the wetlands and concluded that the Board did not have specific concerns at this time. However, they did provide the following statement:

June 16, 2016 WRB meeting recommendation

"While we feel it is unfortunate that this project requires the fill of wetlands, the Wetland Review Board notes that this project reduces wetland effects by (1) proposing high-density construction, which minimizes the total acreage affected, and (2) proposing the nearby conservation of high-value wetlands. We ask that as more details are developed that CBJ planners take steps to preserve the quality of stream flow through the development. Specifically, we support the preservation of open-channel stream water flow. The CBJ Wetland Review Board has no specific concerns at this time."

U.S. Army Corps of Engineers (COE)

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The applicant has received an approved permit from the COE to fill the wetlands to allow the construction of the public improvements. Some lots will be preserved as mitigation. This is discussed in detailed later in this report.

Alaska Department of Environment Conservation (DEC)

DEC commented on the project because of the proposed wetland fill and possible impacts to Pederson Hill Creek (also known as Casa del Sol Creek). DEC submitted a Certificate of Reasonable Assurance, also known as a state issued water quality certificate, with conditions requiring the use of Best Management Practices to ensure water flow, quality, and preserved habitat.

Alaska Department of Fish and Game (ADF&G)

ADF&G conducted a site visit of the Phase 1 area to record any observed fish in Pederson Hill Creek (Casa del Sol Creek). Several salmon were observed. ADF&G continues to classify Pederson Hill Creek as anadromous (fish spawning). Development restrictions apply near this creek, as discussed later in this report under Habitat.

Affordable Housing Commission

On February 7, 2017 the CBJ Affordable Housing Commission provided a motion supporting the Pederson Hill Subdivision.

Motion by Kathleen Strasbaugh, support for the Pederson Hill Subdivision plat as an opportunity to provide affordable lots to the community. Tamara Rowcroft, second. Vote: 5-2, in favor.

CBJ Capital City Fire and Rescue (CCF/R)

All proposed streets meet CBJ 49.35.240 construction standards (see detailed discussion later in this report) and, therefore, provide emergency vehicle accommodations for CCF/R. Also, the streets that dead-end (east side of subdivision) are near intersections providing adequate turning accommodations for fire apparatuses. Per D107.1.1 of the International Fire Code (IFC), two emergency routes for CCF/R vehicles are provided: 1) Karl Reishus Boulevard and 2) a new emergency vehicle-only driveway to Wildmeadow Lane. The second route is created by extending the eastern portion of Cheex Equestrian Trail eastward through the adjacent University of Alaska (UA) property and CBJ property to connect to the dead-end of Wildmeadow Lane. The CBJ has filed for an easement to use UA property for access. The trail would have a minimum 20-foot wide driving surface to accommodate CCF/R vehicles. Both emergency access routes would meet D107.1.1 of the IFC. If the applicant seeks an alternative emergency access route, it shall meet D107.1.1 of the IFC and be approved by the Community Development Department. Staff recommends as a condition of approval requiring the applicant to submit construction drawings that meet D107.1.1 of the International Fire Code prior to Construction Plan approval.

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Lastly, CCF/R is aware that detailed plans of utilities, including fire hydrants, will be submitted during the Construction Plan to ensure adequate access to necessary utilities during times of emergencies.

PUBLIC COMMENTS

Neighborhood Meeting

A neighborhood meeting was held by CBJ staff to discuss the project with the general public on February 2, 2017. Approximately 30 people attended the meeting. CBJ staff provided a handout (Attachment E) explaining the purpose of the subdivision, permitting process, design, and layout of the project.

Public Comment

Staff has received comments from the general public about this project. These comments can be read in Attachment F. One commenter opposes the project because of the belief that the homes that will be built on Pederson Hill will not be affordable, and multifamily units should be built instead to achieve the goal of an affordable rate. The second submitted public comment expressed the belief that the CBJ may not have full title or otherwise authority to development the CBJ-owned site.

ANALYSIS

Subdivision proposals are processed pursuant to CBJ 49.15.400. This subdivision results in 14 or more lots and is considered a Major Subdivision pursuant to 49.15.402. Major Subdivisions require three main approval steps: 1) Planning Commission approval of a Preliminary Plat; 2) CBJ Engineering and Community Development Department approval of a Construction Plan, followed by construction or bonding of public improvements; and 3) Planning Commission of a Final Plat. Phase 1 of Pederson Hill Subdivision is currently at the Preliminary Plat step, which is the subject of this report.

Zoning

The project area is zoned D-10SF, permitting 10 Single Family (SF) units per acre. This Preliminary Plat does not propose housing, only subdividing the property and providing new public improvements (streets, sidewalks, utilities, etc.). However, the project will provide 86 lots for future homes to be built.

Per CBJ 49.25.400 *Table of Dimensional Standards*, the D-10SF minimum lot size is 3,600 square feet with a minimum lot dimension of 40 feet (wide) by 85 feet (deep). The proposed lots have an overall average size of 5,000 square feet. All lots meet or exceed the minimum lot dimensions

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(Attachment C).

All zoning districts require yard setbacks wherein buildings must be set back a minimum distance from property lines, including right-of-ways. Buildings are not allowed to be built within yard setbacks. The submitted plat shows those yard setbacks on every lot (Attachment C). Detailed discussion of the setbacks is provided later in this report.

Access

The proposal consists of five new streets and two pedestrian routes, as shown on the Preliminary Plat. In summary, the proposed street designs meet CBJ 49.35.240 *Table of roadway construction standards*. An illustration of the streets is provided in Attachment G. Karl Reishus Boulevard will provide access to the subdivision from Glacier Highway, across from Sherwood Lane. All other new streets will provide internal circulation and will connect to adjacent properties. Some of these streets will provide access to future Phases 2 and 3 of the Pederson Hill development. These phases are not planned at this time. Further discussion of the new streets is provided later in the report.

The proposed pedestrian routes are designed to meet CBJ 49.35.610. An illustration of these routes is provided in Attachment H. The routes will provide internal circulation, such as to the new park (Lot 10 BL A), and external to the Kaxdigoowu Heen Dei (Mendenhall River Trail) to the east. Further discussion of those routes is provided later in this report.

Drainage

The project area is located on a downhill sloping hillside (see contour map in Attachment I). Existing drainage flows towards Glacier Highway. In summary, the proposal is to re-direct most drainage away from the highway and towards a vacant CBJ parcel to the east, near the Mendenhall River. Future drainage from each new lot is expected to be directed toward its adjacent street. The drainage plan and map are provided in Attachment J. With recommended conditions discussed later in this report, the drainage plan will meet CBJ 49.15.411(i)(4). The DOT/PF has reviewed and accepted the drainage plan (Attachment K).

Traffic Analysis

In summary, the resulting traffic volume and number of vehicle trips from the proposed 86 residential lots requires the submittal of a Transportation Impact Analysis (TIA) per CBJ 49.40.300. See the *Traffic Study* in Attachment L. The submittal TIA concludes no negative impact on existing streets. The TIA is discussed in detail later in this report. The DOT/PF has reviewed and accepted the TIA (Attachment K).

Habitat

Mapped wetlands exist throughout the subdivision. See the wetland map in Attachment M. The applicant has received approval from the COE to fill wetlands in areas of proposed ROWs and

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residential lots. See Attachment N for the COE approval document. Further discussion of wetlands is provided later in this report.

Pederson Creek is located within a small section of Block A and is classified as an anadromous stream (fish spawning). The attached letter from ADF&G indicates this designation and provides a map of the creek (Attachment O). The proposed lots in the location of this creek are to be preserved or have limited development potential. Development on those lots shall meet the 50-foot streamside yard setback from the creek per CBJ 49.70.310. Further discussion about this creek is provided later in this report.

According to staff's records, no other mapped habitat regulated by Title 49 exists within the scope of Phase 1.

Preliminary Plat Review

A complete Preliminary Plat application is established when the applicant submits required documentation pursuant to CBJ 49.15.402(c)(1-5).

CBJ 49.15.402(c) Preliminary Plat. The commission shall be responsible for approval of the preliminary plat. The subdivision proposal has been reviewed to ensure it meets the following:

49.15.402(c)(1) Application for a preliminary plat shall be on a form provided by the department, accompanied by a draft preliminary plat and the appropriate fee. The draft plat shall meet the standards set forth in CBJ 49.15.411.

The applicant submitted the CBJ Subdivision Application and associated Development Permit Application (Attachment A) and a draft preliminary plat (Attachment C). The applicant paid a Preliminary Plat fee of \$10,160.

Standards set forth in CBJ 49.15.411. The standards of CBJ 49.15.411 are expanded below for detailed explanation.

Subsections CBJ 49.15.411(a) - (e) and (f)(1-5) In summary, this section of code requires the submission of a preliminary plat showing the location and dimensions of all ROWs and properties, land ownership, easements and restrictions, and technical platting information. The plat and survey must be completed by an Alaskan licensed surveyor.

With staff's recommended modifications to the submitted plat, standards of this subsection are met:

Recommended Conditions to the Draft Plat:

- Ensure consistency with labels and naming throughout the Preliminary Plat pages.
- Remove labels 'Preservation Lot' and 'Park Lot' and replace with new plat note, as

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shown below.

- Add the following Plat notes:
 - Plat Note: "Right-of-way access for Lots 1-7 Block C shall be restricted to common driveways for each pair of lots. Only one of the seven lots may have its own driveway that is not common to an adjacent lot."
 - Plat Note: "Corner lots abutting Karl Reishus Boulevard shall have driveways limited to accessing a street other than Karl Reishus Boulevard."
 - Plat Note: "Wetlands exist throughout this subdivision. Development restrictions may apply. Permits/approvals shall be obtained prior to impacting wetlands."
 - Plat Note: "Lot 10 and 12 Block A and Lot 9 Block C shall be considered Public Use Lots. Restriction of building development, further subdivision, and other limitations or restrictions apply."

Subsection CBJ 49.15.411(f)(6) Requires showing topographical conditions of the area to be subdivided. This is provided in Attachment I.

Subsection CBJ 49.15.411(f)(7) Requires the applicant to indicate how new or changes to existing sewer and water utilities will be established. The applicant would extend the adjacent water and sewer lines along Glacier Highway throughout the subdivision to each new lot. A preliminary illustration of intended water and sewers lines can be seen in Attachment G.

This subsection also requires documentation of specific sizing, slope angle, and elevations of the intended water and sewer utilities. The applicant has not provided this detailed data at this time. Therefore, staff recommends as a condition of Preliminary Plat approval that the applicant submit this data as part of the construction plan phase of the overall subdivision development process. This will ensure appropriate sizing and design of water and sewer utilities for the subdivision.

Subsection 49.15.411(g) Requires an index sheet to be provided when multiple plat sheets are needed. This is provided as the cover sheet of the Preliminary Plat. See Attachment C.

Subsection 49.15.411(h) Requires the submission of a lot closure report. The applicant's submitted lot closure report has become outdated after several edits were made to a previous draft of the preliminary plat. For this reason, the outdated submitted lot closure report is not attached. Staff recommends as a condition of approval that the applicant

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submit a new lot closure report that accurately reflects the approved preliminary plat prior to Construction Plan approval.

This subsection also requires the disclosure of all known environmental hazards and proposed mitigation. According to staff's records, no environmental hazards have been identified in the project area at this time. If during construction or further site analyses environmental hazards are found, further assessment and permitting, if necessary, will be undertaken.

Subsection 49.15.411(i) Where applicable, this subsection requires eight elements to be addressed. Those that are relevant to the proposal are addressed below.

Subsection 49.15.411(i)(2) *Wetlands*. Requires a qualified person to delineate wetlands and map them on the subdivision plan.

Approximately nine acres of wetlands are mapped. A wetland boundary map is provided in Attachment M. The applicant has received approval by the US Army Corps of Engineers (COE) (approval letter provided in Attachment N) to fill wetlands in areas of future streets, drainages, and buildable lots. Lots 12 Block A and Lot 9 Block C will be preserved as wetland mitigation.

Subsection 49.15.411(i)(4) *Drainage Report*. This subsection requires the submission of a preliminary drainage report showing existing and proposed drainage conditions, preliminary drainage conveyances, and capacities. The drainage report, completed by DOWL Engineering, is provided in Attachment J.

Future drainage paths will be directed eastward along the new equestrian trail toward a vacant CBJ site near the Mendenhall River. CBJ Engineering has reviewed and accepted the drainage report. The Alaska Department of Transportation/Public Facilities has also reviewed and accepted the drainage report (Attachment K).

Subsection 49.15.411(i)(6) *Erosion Control Plan*. This subsection requires the submission of an erosion control plan indicating the management of slopes within the subdivision and for adjacent properties. This data has not been submitted at this time. Staff recommends as a condition approval that the applicant submit this data as part of the Construction Plan phase following Preliminary Plat approval. This condition will ensure that erosion issues are minimized throughout the development of the subdivision.

Subsection 49.15.411(i)(7) *Traffic Study*. This subsection requires the submission of a traffic study if forecasted average daily vehicle trips from the development are expected to exceed 500 daily trips. A Transportation Impact Analysis (TIA) addresses three primary issues: 1) future traffic impact to existing streets; 2) the

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Level of Service ('A' = Best, 'E' = Worst) on existing and proposed streets; and 3) recommended traffic mitigation measures, if needed.

A traffic study is required for the project because more than 800 daily trips are forecasted for the 86 residential lots. The required TIA is found in Attachment L. The TIA concludes that the existing streets can accommodate future traffic levels. Phase 1 build out of 86 homes is expected to have an acceptable Level of Service rating 'C'. The TIA does not recommend any mitigating measures. Although mitigating measures are not required, the TIA notes four items to consider for the subdivision:

1) Preliminary estimates suggest adequate sight distance can be provided at the proposed access driveway with Glacier Highway; however, more precise measurements should be performed as part of the roadway design.

Staff notes that this will be addressed when necessary permits are filed by CBJ with DOT/PF for constructing Karl Reishus Boulevard.

2) The proposed subdivision can serve pedestrian and bicycle needs by providing wide shoulders and/or sidewalks along the access road connecting to Glacier Highway.

Staff notes that sidewalks will be provided on both sides of the access road (Karl Reishus Boulevard).

3) Additional turn lanes on Glacier Highway are not required but may be beneficial due to their safety benefits and the potential future need if more development occurs and increases traffic volumes at the project access. Thresholds are met for adding a left-turn lane for westbound Glacier Highway (which could be an extension of the [Two-Way Left-Hand Turn Lane] (TWLTL) and a right-turn lane for eastbound Glacier Highway.

Staff notes that DOT/PF will address turn lanes in the future, if necessary, since they maintain Glacier Highway.

4) The relocated church driveway onto the new access road should have 80 feet of corner clearance, as measured from the nearest edge of the driveway to the Glacier Highway's nearest edge of traveled way

Staff notes that this will be addressed during the Construction Plan phase of this project.

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The TIA has been reviewed and accepted by the CBJ and Alaska Department of Transportation/Public Facilities (Attachment K).

49.15.402(c)(2) Public notice of the application shall be provided pursuant to CBJ 49.15.230.

The applicant will post a public notice sign in front of the site at least two weeks before the date of the Planning Commission hearing (by Tuesday, February 14, 2017). As of the date of this report, the public notice sign was installed along Glacier Highway near the entrance of the subdivision.

Public notice in the local newspaper (Juneau Empire) will be provided on February 17 and 27 of 2017.

As of the date of this report, a public mailing has been sent to all property owners within 500 feet of the boundary of the project and to all neighborhood associations recognized by the CBJ Clerk's Office.

49.15.402(c)(3) The director or applicant may request review by the Subdivision Review Committee.

The CBJ director finds that as the proposal consists of a typical subdivision layout and design, additional review by the Subdivision Review Committee was not needed. The applicant did not request review by the Subdivision Review Committee.

49.15.402(c)(4). The director shall prepare and submit a report to the commission noting any conditions of approval or plat notes recommended and addressing the following criteria:

(A) Whether the preliminary plat complies with CBJ 49.15.411;

The applicant's submitted preliminary plat complies with 49.15.411 with staff's recommended conditions, as shown in item (B) below.

(B) Whether the applicable subdivision development standards of this title are met, or can reasonably be met with conditions;

With staff's recommended conditions, the subdivision meets the applicable development standards pursuant to 49.15.402(c). The conditions are listed below.

1. Prior to Construction Plan approval, the applicant shall submit detailed data for future utilities per 49.15.411(f)(7).
2. Prior to Construction Plan approval, the applicant shall submit required documentation meeting 49.15.411(6) *Erosion Control*.

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3. Prior to Construction Plan approval, the applicant shall submit an updated lot closure report.
4. Prior to Construction Plan approval, the applicant shall submit another subdivision plat to ensure labels and naming are consistent throughout the plat sheets.
5. Add the following Plat notes:
 - Plat Note: "Right-of-way access for Lots 1-7 Block C shall be restricted to common driveways for each pair of lots. Only one of the seven lots may have its own driveway that is not common to an adjacent lot."
 - Plat Note: "All corner lots abutting Karl Reishus Boulevard ROW shall only have driveways that access streets other than Karl Reishus Boulevard"
 - Plat Note: "Wetlands exist throughout this subdivision. Development restrictions may apply. Necessary permits/approvals shall be obtained prior to impacting wetlands."
 - Plat Note: "Lots 10 & 12 Block A, and Lot 9 Block C shall be considered Public Use Lots. Restriction of building development, further subdivision, and other limitations or restrictions apply,"

(C) Whether the proposed subdivision will provide building sites suitable for the zoning district;

As explained below, the proposed subdivision will provide building sites suitable for the D-10SF district.

The proposal results in 86 residential lots and five sites for future development, preservation or park purposes. Within the 86 residential lots, the building sites are those areas located outside of yard setbacks. The Preliminary Plat shows the yard setbacks of the underlying D-10SF district (Attachment C). The yard setbacks of the D-10SF district are provided below.

D-10SF Yard Setbacks

- Front: 20 feet (Measured from ROW line)
- Rear: 10 feet
- Side: 3 feet, or 15 feet for those abutting the D-1 district to the east per 49.25.400, Table Note 3
- Street Side: 10 feet (Measured from second abutting ROW)

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Other factors limiting the building sites are steep hillsides, wetlands, environmental hazards, and unsuitable soils. Although nearly all lots in the Pederson Hill Subdivision are on a hillside, the slope angle is not severe enough to render the lots undevelopable or extraordinarily challenging to build upon. Secondly, the wetlands that affect a large number of lots will be filled to support future development, as allowed with the approved US Army Corps of Engineer permit (COE). See Attachment G for COE approval. No environmental hazards or unsuitable soils have been documented in the area of the subdivision. Further site analysis of soils will be completed upon the construction design phase of the project.

All lots indicated as for development provide building sites suitable for the D10SF zoning district as shown on Attachment C.

As stated earlier, five lots will not be developed for housing and, instead, will be used for future development, habitat, park space, wetland, or buffering purposes.

1. Lot 10 Block 'A' will be used as a small neighborhood park and may have children's playground equipment and a shelter. The park will also provide a direct pedestrian connection to the Cheex Equestrian Trail.
2. Lot 12 Block 'A' has the terminus of a Pederson Hill Creek (mapped anadromous), thus having sensitive habitat purposes. Therefore, this lot will be preserved in its existing natural state.
3. Lot 15 Block 'A' will be preserved in its existing natural state for the foreseeable future as a buffer to the private property to the south. Limited development may occur in the future.
4. Lot 9 Block C will be preserved in its natural state for wetland mitigation. Since this lot backs up to several homes and the Cheex Equestrian Trail, a foot path may be constructed on the lot to minimize pedestrian impact to sensitive wetlands while providing pedestrian connection throughout the area.
5. Lot 2A is part of the remainder of the large lot and will be used for future development and will have some preservation purposes.

Since CBJ water and sewer services will not be provided to Lots 10 and 12 Block A and Lot 9 Block C, they must be considered Public Use Lots and meet criteria under CBJ 49.15.422. The criteria are discussed below.

49.15.422 - Public use lots.

The director for minor subdivisions, or the commission for major subdivisions, may waive the dimensional standards of the public use lot for minimum lot size, lot width, and lot depth as set forth in CBJ_49.25.400, for lot frontage and access

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requirements as set forth in CBJ 49.15.420, and the provision of public improvements as set forth in CBJ 49.35, if the proposed use of the lot is for open space, natural area park, public or private utilities, conservation lot, or similar use, and if the following requirements are met: (emphasis added)

(1) The director or the commission finds that there is no public purpose or need that would be served by requiring the parcel to meet these code provisions and that the provisions are not applicable for the proposed public or quasi-public use of the lot;

Lots 10 and 12 Block A and Lot 9 Block C do meet the codes provisions of 49.25.400 and 49.15.420. However, those lots will not meet 49.35 because public utilities (water and sewer) are not applicable for the use of lots held for habitat and wetland preservation purposes.

(2) Restriction of building development, further subdivision, and other limitations or restrictions shall be noted on the plat in accordance with CBJ 49.15.412;

Staff recommends as a condition of approval, that the applicant add a plat note on the subdivision plat indicating the restriction of development in accordance with 49.15.412.

(3) For uses restricted from any building development, the land must be put into some form of permanent protected status through the use of conservation easements, deed restriction, or other instruments to assure building development will not occur where prohibited; and

Staff recommends as a condition of approval that the applicant submit documentation that places a permanent protected status on Lots 10 & 12 Block A and Lot 9 Block C.

(4) Unless otherwise provided, the minimum yard setback requirements may not be waived with respect to lots abutting the public use lot.

The underlying D-10SF districts have been noted on the attached subdivision plan.

(D) Whether the proposed street names are unique in the City and Borough or are continuations of existing streets and are otherwise acceptable;

All proposed street names are unique in the City and Borough of Juneau. The names are listed below and can be seen in Attachment C. Karl Reishus Boulevard is named after a CBJ police officer who passed away while serving on the force. The other street names are derived from Tlingit words for common features in the Pederson Hill area.

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New street names

1. Karl Reishus Boulevard
2. Yan Street = Hemlock trees
3. Guwakaan Street = Blacktail Deer
4. Kwalx Street = Fiddlehead Ferns
5. Keishish Lane = Alders

(E) Whether the director of engineering and public works has reviewed the application and determined that:

(i) The subdivision can be constructed to conform to applicable drainage and water quality requirements;

As discussed earlier, the submitted preliminary drainage plan has been reviewed and approved by CBJ Engineering and DOT/PF.

The subdivision will preserve water quality by utilizing multiple measures. The CBJ Engineering Department will ensure that new drainage and infrastructure utilize Best Management Practices (BMP). Secondly, the physical location of property lines will run along natural drainages whereas the corresponding yard setbacks measured from those property lines will ensure development avoids the drainage ditches. Thirdly, the terminus of Pederson Hill Creek ("Casa del Sol") (mapped anadromous stream) is located on Lot 12 Block A. As stated earlier, this lot will be preserved to minimize development impacts to the stream. Where the new equestrian trail crosses Pederson Hill Creek (south of Lot 12), a culvert, pedestrian bridge, or similar infrastructure will be provided to ensure proper water flow and fish transport. Staff recommends as a condition of approval the installation of a fish-passage infrastructure.

(ii) The streets, pioneer paths, and pedestrian ways as proposed accommodate anticipated traffic, align, and, where appropriate, connect with streets and pedestrian ways serving adjacent properties;

The proposed streets, paths, and pedestrian ways will accommodate anticipated traffic of the 86 residential lots and connect to adjacent properties. As described below, the new ROWs and improvements are designed in conformance with 49.35 Articles II and VI.

NEW STREETS

All proposed streets are designed to meet 49.35.240 *Table of roadway construction standards*. This table establishes minimum street standards based on anticipated Average Daily Trips (ADT). The higher the ADT, the

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greater standards apply. The applicable standards are discussed below.

Karl Reishus Boulevard is projected to have over 500 ADT because it is the only street connecting to Glacier Highway for all 86 residential lots. The Boulevard will also receive additional traffic from future subdivision phases. Per 49.35.240, Karl Reishus Boulevard must have a designed travel way width of at least 26 feet, 5-foot wide sidewalks on both sides of street, and a paved street surface. The applicant's submitted street profile (Attachment G) meets these standards.

All proposed interior streets are expected to have an ADT between 212 and 499. Per 49.35.240, those streets must have a minimum 24-foot wide travel way width, 5-foot sidewalks on at least one side of street, and a paved street surface. The applicant's submitted street profile (Attachment G) meets these standards.

All proposed streets will have a driving surface slope of 8% or less. This is below the maximum allowed slope per 49.35.240(d) *Street Grades*. The applicant indicates that the street slope allows school buses to access the subdivision.

Per 49.35.240 *Table of roadway construction standards* street lighting will also be provided at street intersections to illuminate the roadway areas. The applicant has not provided a lighting plan at this time. Therefore, staff recommends as a condition of approval that the applicant provide this data for the Construction Plan step.

Detailed drawings of the street material, grade, lighting, etc. will be provided at the Construction Plan step of the Major Subdivision process.

Right-Of-Way (ROW) Dimensions

CBJ 49.35.240 *Table of roadway construction standards* also establishes a uniform 60-foot wide right-of-way (ROW) for new public ROWs. Karl Reishus Boulevard ROW is designed at 60 feet wide, while the other ROWs are only 50 feet wide. The Land Use Code allows ROWs to be less than the standard 60-foot width pursuant to 49.35.240(b)(5).

CBJ 49.35.240 (b)(5) The director shall make written findings supporting right-of-way minimum width reductions granted under this section. The director's findings shall state that:

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(A) The applicant has provided room for electric utility features and demonstrates that if the road is upgraded in the future to include additional sidewalks that there is sufficient right-of-way for construction of the sidewalks without need for retaining walls over two feet in height.

Director's findings: Sidewalks will be included with the initial design and will be constructed when the property is developed therefore no additional property will be needed.

(B) There is sufficient right-of-way or easements to allow for drainage improvements required by construction of the sidewalks.

Director's findings: Since sidewalks will be constructed when the development is completed, the drainage design will be integrated with sidewalks.

(C) That any driveways shall be constructed to accommodate the elevations of future sidewalks.

Director's findings: All streets will be constructed with sidewalks. Driveway curb cuts will be installed when sidewalks are constructed.

(D) No additional right-of-way width will be required in order to provide for sufficient access to abutting lands.

Director's findings: Several rights-of-way have been extended to adjacent properties to accommodate future adjacent developments.

(E) There is sufficient room for snow storage.

Director's findings: The end of streets that are stubbed to adjacent properties will be available for snow storage until the streets are extended. When street extensions are proposed, new snow storage sites will be proposed.

NEW NON-VEHICULAR PATHS

Sidewalks will be provided along both sides of all proposed streets at widths of five and six feet (Attachment G) and will meet minimum width per 49.35.610(b). As stated earlier, only one sidewalk is required along the interior streets. The "extra" sidewalk will accommodate the higher pedestrian demand expected to access the park and trail system.

The Cheex Equestrian Trail ROW (accommodating horse riders, pedestrians, and bicyclists) is 30 feet wide and will have a 10-foot wide trail surface for

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pedestrians and a 20-foot wide surface where needed to accommodate emergency vehicles, as discussed earlier. A profile drawing of this trail is provided in Attachment H. This trail will provide a connection between the existing Mendenhall River Trail to the east and the Swampy Acres equestrian facility to the west. Horseback riders from Swampy Acres currently use a narrow path to connect to the Kaxdigoowu Heen Dei (Mendenhall River Trail). The Cheex Equestrian Trail will better, and more comfortably, accommodate equestrians and pedestrians/bicyclists. This trail will not be paved. As stated earlier, the western portion of the equestrian trail would be removed if the second emergency access is provided along the eastern portion of the equestrian trail.

The Wild Rose Walk ROW (pedestrian route) will provide a short and direct walking route between Yan Street and the proposed park (Lot 10 BL A), Cheex Equestrian Trail, and the existing non-motorized path along Glacier Highway. A profile view of this ROW is provided in Attachment H and is labeled on the Preliminary Plat. This ROW is designed at 20 feet wide with a five-foot wide walking surface. CBJ 49.35.610(a) requires a minimum 10-foot wide walking surface. Staff recommends as a condition of approval that the walking surface within the Wild Rose Walk ROW be at least 10 feet wide per 49.35.610(a).

Continuation of 49.15.402(c)(4) (E)

(iii) Any proposed improvements conform to the requirements of this title and can feasibly be constructed in accordance with this title; and

With the recommended conditions, the proposed improvements conform to 49.35 Articles II and VI, and can feasibly be constructed in accordance with Title 49.

(iv) Where public sewer is not required, the applicant has shown that soils are suitable for individual on-lot wastewater treatment and disposal or has shown the feasibility of alternative methods for wastewater treatment and disposal.

N/A. Public sewer exists along Glacier Highway and will be extended throughout all phases of the Pederson Hill subdivision.

If Preliminary Plat approval is given, the applicant will submit detailed plans of all public improvements (streets, sidewalk, utilities, etc.) for the Construction Plan step. After Construction Plan approval is gained and installation of improvements is completed and approved, the applicant will file the Final Plat for Planning Commission approval. After approval is received, the subdivision plat will be recorded with the State Recorder's Office.

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FINDINGS

CBJ 49.15.402(C)(4) Major Subdivisions. The Director shall prepare and submit a report to the Planning Commission noting any conditions of approval or plat notes recommended and addressing the following criteria:

(A) Whether the preliminary plat complies with CBJ 49.15.411.

Yes. With the recommended conditions, the Preliminary Plat complies with CBJ 49.15.411.

(B) Whether the applicable subdivision development standards of this title are met, or can reasonably be met with conditions.

Yes. With the recommended conditions, the subdivision meets the standards of Title 49.

(C) Whether the proposed subdivision will provide building sites suitable for the zoning district.

Yes. All lots will have building sites suitable for the D10SF zoning district.

(D) Whether the proposed street names are unique in the City and Borough or are continuations of existing streets and are otherwise acceptable.

Yes. All proposed street names are unique in the City and Borough of Juneau.

(E) Whether the director of engineering and public works has reviewed the application and determined that:

(i) The subdivision can be constructed to conform to applicable drainage and water quality requirements;

Yes. As described above, the applicant's drainage report is acceptable by CBJ and DOT/PF agencies. Also, several lots will be preserved as wetland mitigation and anadromous stream protection. DEC's recommendation of utilizing Best Management Practices will ensure water flow and quality.

(ii) The streets, pioneer paths, and pedestrian ways as proposed accommodate anticipated traffic, align, and, where appropriate, connect with streets and pedestrian ways serving adjacent properties;

Yes. As described above, the proposed streets and pedestrian ways will accommodate anticipated traffic and connect to adjacent properties. Further, the submitted Traffic Study indicates an acceptable level of service and does not required mitigating measures. CBJ and DOT/PF have both found the Traffic Study acceptable.

(iii) Any proposed improvements conform to the requirements of this title and can feasibly be constructed in accordance with this title; and,

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Yes. With staff's recommended conditions, all proposed improvements (proposed streets, sidewalks, pathways, and utilities, etc.), will conform to the requirements of Title 49.

- (iv) **Where public sewer is not required, the applicant has shown that soils are suitable for individual on-lot wastewater treatment and disposal or has shown the feasibility of alternative methods for wastewater treatment and disposal.**

Not Applicable. Public sewer is available for the project.

CBJ 49.15.402(C)(5) Major Subdivisions. In issuing its notice of decision on a preliminary plat, the Commission may accept, amend, or reject the director's proposed recommendations. The decision of the commission approving or denying a preliminary plat application will be set forth in a notice of decision, and will specify any conditions or plat notes required for final plat approval. If the preliminary plat is denied, the applicant may submit a revised plat application, without paying additional application fees, within 180 days from the date of the notice of decision.

CONFORMITY WITH ADOPTED PLANS

As indicated earlier in this report, local consistency of adopted CBJ plans is required for city projects pursuant to CBJ 49.15.580. A list of the relevant CBJ plans reviewed in this report is provided below. A full analysis of each plan follows.

- 2013 Comprehensive Plan
- 2016 Housing Action Plan
- 2016 CBJ Land Management Plan
- 2015 Juneau Economic Development Plan
- 2009 Juneau Non-Motorized Transportation Plan
- 2001 Area Wide Transportation Plan

2013 Comprehensive Plan

The Comprehensive Plan provides a long-range blueprint designed to guide growth, development, and conservation of valued resources within the community over the next 20 years. This plan identifies Juneau's long history of housing shortage and lack of affordability. As of the date of this report, the housing shortage remains a high community concern. The following excerpts from the Housing Element Chapter touch on this issue

Introduction

Like many communities across the country, Juneau residents are suffering from a housing crisis: There is an inadequate supply of housing to provide residents adequate choice in

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housing size, location and price, resulting in residents paying more than 30% of their income on housing. (Page 25)

Housing Need

Juneau households live in single-family detached and attached homes, accessory apartments, condominium units, two- to four-plex structures, apartments, mobile homes on lots or in parks, group homes or congregate housing units with support services, extended stay hotels and motels, RV parks, float homes and boats, and campgrounds. A variety of dwelling unit types and sizes need to be provided throughout the borough, but particularly within the roaded area. Due to the cost of land and construction, small unit sizes and high density developments located within the area served by sewers are needed in order to achieve affordability. (Page 25)

Juneau has several distinctive housing needs that many other communities do not have. These are Legislative Session workers, Tourism/Fishing Season workers as well as members of the Coast Guard and their families. (Page 26)

Housing Policies

The purpose of this section is to recommend policies that encourage adequate housing for all Juneau residents and to protect the character and livability of its neighborhoods. As housing choice is influenced both by lifestyle and income, the CBJ government should encourage and facilitate the provision of a variety of affordable housing opportunities to its residents including: Single family detached and attached housing, condominiums, apartments, efficiency units or Single Room Occupancy (SRO) units, modular homes and manufactured homes, and float homes. Ensuring an adequate supply of rental housing, particularly for low-income residents, is also an important priority. (Page 36)

POLICY 4.1. TO FACILITATE THE PROVISION AND MAINTENANCE OF SAFE, SANITARY AND AFFORDABLE HOUSING FOR CBJ RESIDENTS. (Page 36)

POLICY 4.2. TO FACILITATE THE PROVISION OF AN ADEQUATE SUPPLY OF VARIOUS HOUSING TYPES AND SIZES TO ACCOMMODATE PRESENT AND FUTURE HOUSING NEEDS FOR ALL ECONOMIC GROUPS. (Page 37)

4.2 - SOP3 The CBJ government should seek and facilitate new housing production, for all types, at an annual rate that mimics the growth rate of new households in Juneau, in order to maintain adequate choice of residence type, location, and cost. (Page 36)

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The following policy of the 2013 Comprehensive Plan recommends providing various transportation choices for the community and ensuring non-motorized routes are incorporated into future development.

POLICY 8.5 IT IS THE POLICY OF THE CBJ TO PROMOTE A BALANCED, WELL INTEGRATED LOCAL MULTI-MODAL SURFACE TRANSPORTATION SYSTEM THAT PROVIDES SAFE, CONVENIENT AND ENERGY-EFFICIENT ACCESS AND TRANSPORT FOR PEOPLE AND COMMODITIES. (Page 109)

8.5 - DG1 Require dedication of all rights-of-way and easements, including those for trails, roads and transit corridors and facilities on subdivision plats and development plans as determined to be appropriate by the Planning Commission for that development. Obtain commitments to construct trails and local and collector roadway improvements from private developers when projects are approved, and ensure that those improvements are complete prior to issuing building permits on adjacent properties within that development. (Page 109)

Chapter 9 of the Comprehensive Plan addresses parks, recreation trails and natural resources. The following policy recommends incorporating parks, open space, and recreational facilities in future development for the community.

POLICY 9.1. IT IS THE POLICY OF THE CBJ TO PROVIDE QUALITY DISPERSED OUTDOOR RECREATIONAL OPPORTUNITIES AND TO ACQUIRE AND DEVELOP SUFFICIENT LOCAL PARKS AND RECREATIONAL FACILITIES IN LOCATIONS CONVENIENT TO ALL AREAS OF THE CBJ. PLACES GIVEN PRIORITY FOR NEW FACILITIES INCLUDE RAPIDLY DEVELOPING AREAS AND CURRENTLY DEVELOPED AREAS THAT LACK ADEQUATE PARKS AND RECREATION FACILITIES. (Page 124)

9.1 - IA23 Develop parks and recreation facilities, for both urban level and dispersed recreation, based on the CBJ's unique characteristics, needs, and traditions. In developing dispersed recreation opportunities such as fish and wildlife viewing areas and increased sport fishing opportunities, recognize the importance of habitat and sensitive area protection. (Page 126)

9.1 - IA21 Incorporate park lands in developing areas through designation of publicly owned lands, acquisition of private lands, or dedication of lands during the subdivision process. (Page 126)

The following policies recommend the preservation of wildlife and stream corridor systems when creating natural trail systems or other outdoor recreational provisions within a development.

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POLICY 9.2. IT IS THE POLICY OF THE CBJ TO DEVELOP AND MAINTAIN AN INTERCONNECTED NON-MOTORIZED TRAIL SYSTEM THAT IS COMPLEMENTARY WITH, AND MAY BE CONTIGUOUS WITH, UN-FRAGMENTED FISH AND WILDLIFE CORRIDORS ALONG ANADROMOUS STREAMS WITHIN THE ROADED AREA THAT PROVIDES FISH AND WILDLIFE AND HUMAN ACCESS TO THE SEA FROM THE UPLANDS. (Page 127)

9.2 - IA2 When reviewing capital improvement plans and building or use permit applications, seek to protect lands necessary to establish and/or maintain the unfragmented fish and wildlife corridors and trail network. This may include the dedication of conservation easements or “no build” zones within a development as well as dedication provision of public access through the trail easements. (Page 127)

9.2 - IA3 Improve and expand the CBJ trail system to provide an un-fragmented trail system that offers opportunities for a wide range of experiences, safety of the users, and protection of fish and wildlife habitat. (Page 127)

POLICY 9.3. IT IS THE POLICY OF THE CBJ TO PRESERVE AS PUBLIC NATURAL AREAS THOSE PUBLICLY-OWNED LANDS AND SHORELINE AREAS THAT POSSESS IMPORTANT RECREATIONAL, SCENIC, FISH AND WILDLIFE, AND OTHER ENVIRONMENTAL QUALITIES OR ARE SUBJECT TO NATURAL HAZARDS. (Page 128)

9.3 - SOP2 Acquire land or regulate its use as necessary to protect the public from natural hazards and to preserve sensitive natural resources. (Page 128)

Chapter 17, Community Development, speaks to the development of public facilities and land. The following policy recommends public and private sector coordination or partnership when carrying out projects that serve public needs.

POLICY 17.1 IT IS THE POLICY OF THE CBJ TO COORDINATE DEVELOPMENT ACTIVITIES OF THE PRIVATE AND PUBLIC SECTORS FOR PROJECTS THAT ARE CONSISTENT WITH THE COMPREHENSIVE PLAN AND MEET IMPORTANT PUBLIC NEEDS. (Page 226)

The following policy recommends that the CBJ provide lands for future development that serve a public interest.

POLICY 17.2 IT IS THE POLICY OF THE CBJ TO HOLD CERTAIN LANDS IN THE PUBLIC TRUST, AND TO DISPOSE OF CERTAIN LANDS FOR PRIVATE USE WHEN DISPOSAL SERVES THE PUBLIC INTEREST. (Page 227)

Phase 1 of the Pederson Hill subdivision is consistent with the policies identified above because it increases housing options for the community, provides multi-modal transportation routes,

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preserves natural wetlands and habitat areas, and provides a neighborhood-scale park for future residents.

In addition to those policies, the Comprehensive Plan categorizes various areas of the community into land use designations which provide policy direction for future zoning. Phase 1 of the Pederson Hill Subdivision is identified as Medium Density Residential (MDR) (Attachment R) which is defined as “...lands are characterized by urban residential lands for multifamily dwelling units at densities ranging from 5 to 20 units per acre. Any commercial development should be of a scale consistent with a residential neighborhood, as regulated in the Table of Permissible Uses (CBJ 49.25.300).” Phase 1 is zoned D-10SF, 10 units per acre. The proposal complies with the D-10SF and is consistent with the MDR density.

Staff finds the project consistent with the policies and land use designation of the Comprehensive Plan.

2016 Housing Action Plan

The Assembly adopted the 2016 Housing Action Plan by resolution on December 19, 2016. This plan builds upon past housing assessments, analyses, and reports and recommends specific action items to increase housing affordability and diversity in housing types. Attachment S provides a short narrative describing some of the challenges confronted when providing lower-cost housing development in Juneau.

The following excerpts in the plan provide some history of Juneau’s housing problem.

Juneau’s housing challenges are significant and long-standing. Completed in 2010 and 2012 by the Juneau Economic Development Council, the Housing Needs Assessments found vacancy rates that indicated a critical shortage in housing. Based upon these concerning findings, the 2013 Comprehensive Plan recommended undertaking a housing plan that strategizes methods to successfully create and sustain quality neighborhoods by developing affordable housing through a diversity of housing types and densities. [Page 7]

In 2014, the adopted Juneau Economic Development Plan further found that Juneau’s housing supply does not meet demand in terms of housing type, size, price, or location. Its top ten initiatives included the development of a housing action plan. Supporting the findings from the previous studies of 2010 and 2012, the Economic Development Plan further strengthened the case for the critical need of housing for all ages and income groups to gain and maintain a strong, stable economy. [Page 7]

Part 1: Housing Market Challenges & Problems of this Plan have been attached as additional information to help explain the many reasons that have kept Juneau’s housing ‘stuck’ in a limited market. (Attachment S)

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On pages 12-17, the plan states that housing data from all tiers of government (federal, state, and local) indicate that Juneau's housing challenges are real and that 'business-as-usual' housing development will only worsen this challenge into the future. The following relevant changes recommended in the plan to increase housing choice and affordability are: use CBJ land, create partnerships with non- and for-profit developers, use CBJ resources, and create more housing for young families and seniors.

The project is consistent with the Housing Action Plan because it will result in additional housing development. By platting small lots and subsequently facilitating the construction of small homes, the project will provide housing options for people interested in starter homes and downsizing. It is expected that because of the smaller lots the development costs will be reduced, resulting in opportunities for lower cost homes. Lastly, the CBJ will look toward forming partnerships with housing developers and builders for this project.

2016 CBJ Land Management Plan

One of the main purposes of the CBJ Land Management Plan is to recommend which CBJ parcels should be disposed to the general market for future development opportunities. The property in question is listed in the Land Management Plan for disposal (Item 0420; page 25). See Attachment T for the mapped parcel. The proposal of subdividing Phase 1 and later phases of Pederson Hill for future private and public development is consistent with the 2016 CBJ Land Management Plan.

2015 Juneau Economic Development Plan

The purpose of the Economic Development Plan is to advance Juneau's position on a path of economic resilience and prosperity by promoting economic industries, including more diverse housing options. This plan was adopted as an element of the Comprehensive Plan. The following excerpts from the plan further emphasize the need for more housing and identify that the lack of housing options has a direct negative impact on Juneau's economic prosperity.

Initiative: Promote Housing Affordability and Availability

Introduction

Juneau's housing supply does not meet demand in terms of housing type, size, price, or location. In particular, there is a shortage of affordable housing in Juneau (not to be confused with "low-income" housing). [Page 94]

Juneau households and businesses agree that the lack of housing and lack of affordable housing in Juneau has become a critical barrier to economic opportunity (2014, JEP Household and Business Surveys). Nearly three-quarters (72 percent) of Juneau's households find availability of affordable housing as a significant barrier to Juneau's economic development. When asked to identify the extent to which various factors were barriers to their own business or organization's growth, business owners and employers

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completing the JEP Business Survey rated the cost of living as #1 barrier (44 percent) and the lack of available housing for employees as the #2 barrier (39 percent). [Page 94]

Potential Threats/Opportunities

Critical Gaps

Resident and business concerns are verified by academic studies that show a relationship between unaffordable housing and slower local employment growth, and, between high housing costs and out-migration and job loss. For cities, being family-friendly is becoming increasingly important as the large millennial generation enters their 30s, the primary years for raising children and seeking more stable housing. Recent analyses have suggested that, "All else being equal, high housing prices, particularly for single-family homes, drive people with young children away." [Page 94]

Having an adequate supply of affordable housing has become an important economic development consideration, as well as a route to social inclusion. [Page 94]

Juneau's Current Housing Stock and Possible Future Development

There are currently 13,387 Dwelling Units (DU) in Juneau. Looking five years out, future housing development may be affected by several factors, including:

2. The CBJ is proceeding to develop access roads, install utilities, and plat a subdivision in phases for about 200 lots on CBJ land at Pedersen Hill. New Single-Family D-10 zoning there will encourage small-lot (5000 sf) residential development similar to the federal "flats" area neighborhood. Yet to be determined is where any financing rules or other incentives should be put into place to help ensure the affordability or prevent speculative land acquisition of these homesites. Initial phases of lots could be ready within five years. (*Emphasis Added*) [Page 95]

The Economic Development Plan includes the following action item for increasing housing development.

Action 1-A Establish goals and specific targets for types of housing and in specific locations. [Page 103]

The subject project will result in 86 residential lots. This will help alleviate some of the housing shortage for the community and, therefore, is consistent with the 2015 Juneau Economic Development Plan.

2009 Juneau Non-Motorized Transportation Plan

The purpose of the Non-Motorized Transportation Plan is to promote active transportation by

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establishing an integrated, community-wide bicycle and walking network that can be used by all Juneau residents for all types of trips. This plan was adopted as an element of the Comprehensive Plan.

The Non-Motorized Transportation Plan recommends new infrastructure (i.e. sidewalks, pathways) throughout various neighborhoods of the community. Page 62 recommends a 10-foot wide, separated path across Pederson Hill that connects Auke Lake to the pedestrian bridge at Dimond Park (over 1 mile in length). This path is shown in Attachment U and is mapped near the subject subdivision. The subdivision's planned equestrian trail could eventually facilitate this separated path as future phases of the Pederson Hill subdivision are completed. Also, future Phases 2 and 3 will facilitate non-motorized pedestrian connection to Auke Lake.

Another separated path recommended in the plan is also located near the proposed subdivision along Glacier Highway. This path was built in 2015 with a 10-foot wide paved surface and connects the UAS campus to Riverside Drive via Glacier Highway. The proposed subdivision's sidewalks will connect to Glacier Highway and the separated pathway. Future residents of the Phase 1 subdivision would easily be able to reach other parts of the community via non-motorized transportation.

The Non-Motorized Transportation Plan also recommends that sidewalks be provided throughout a development at a minimum width of five feet. The proposed subdivision includes sidewalks on both sides of all streets with a minimum width of 5 feet. Appropriate intersection crossings/markers and accessible ramp design features will be incorporated in the project. Therefore, easy and safe access within the subdivision and to adjacent areas will be provided.

The project's non-motorized transportation infrastructure is consistent with the Non-Motorized Transportation Plan.

2001 Area Wide Transportation Plan

The Area Wide Transportation Plan provides a 20-year direction on long-term transportation needs for motorized and non-motorized users. Some of the main goals include: measures that enhance safety for all user groups, improvements to existing facilities, and increasing transit operations and route efficiencies. This plan was adopted as an element of the Comprehensive Plan

As a general recommendation listed on page 37, this plan supports the development of off-street pedestrian/bicycle pathways in the Mendenhall Valley area that connect to existing main pathway systems, such as the Mendenhall River pathway, nearby schools, and shopping areas. Also, the plan recommends that sidewalks be installed in new residential developments. Based on pedestrian needs, one or two sidewalks should be provided.

The proposal is consistent with the recommendations of the Area Wide Transportation Plan.

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Sidewalks will be provided on both sides of the streets throughout the subdivision, as well as be provided connecting to the pathway along Glacier Highway. The proposed equestrian trail will eventually connect to the paved pathway along Kaxdigoowu Heen Dei (Mendenhall River trail) and Dimond Park; and, future Phases will also connect to Auke Lake and UAS.

Based on the analysis above, staff concludes that the project is consistent with the relevant CBJ plans.

RECOMMENDATION

Staff recommends that the Planning Commission accepts the Director's analysis and findings and approve the Preliminary Plat for Phase 1 of Pederson Hill subdivision, resulting in 86 Residential lots and 5 lots for future development, preservation, or park purposes. This approval would allow the applicant to submit for the Final Plat Application. We further recommend that the approval be subject to the following conditions:

1. Prior to Construction Plan approval, the applicant shall submit detailed data for future utilities per 49.15.411(f)(7).
2. Prior to Construction Plan approval, the applicant shall submit required documentation meeting 49.15.411(6) *Erosion Control*.
3. Prior to Construction Plan, the applicant shall submit an updated lot closure report.
4. Prior to Construction Plan approval, the applicant shall submit another subdivision plat to ensure labels and naming are consistent throughout the plat sheets.
5. Remove labels 'Preservation Lot' and 'Park Lot' and replace with new plat note, as shown below.
6. Prior to Final Plat approval, the applicant shall submit another draft plat with the following plat notes on the subdivision plat:
 - o Plat Note: "Right-of-way access for Lots 1-7 Block C shall be restricted to common driveways for each pair of lots. Only one of the seven lots may have its own driveway that is not common to an adjacent lot."
 - o Plat Note: "Corner lots abutting Karl Reishus Boulevard shall have driveways limited to accessing a street other than Karl Reishus Boulevard."

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- o Plat Note: "Wetlands exist throughout this subdivision. Approval to impact these wetlands has been given by the US Army Corps of Engineers (COE). Consult COE for more information."
- o Plat Note: "Lots 10 & 12 Block A and Lot 9 Block C shall be Public Use Lots. Restriction of building development, further subdivision, and other limitations or restrictions apply."

7. Prior to Plat recording, the applicant submit documentation that places a permanent protected status on Lots 10 & 12 Block A and Lot 9 Block C in accordance with 49.15.422.

8. Prior to Construction Plan approval, the applicant shall submit a design showing a drainage infrastructure that would allow fish passage through the equestrian trail east of Karl Reishus Boulevard.

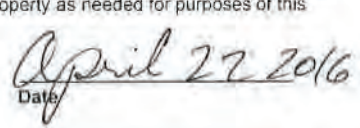
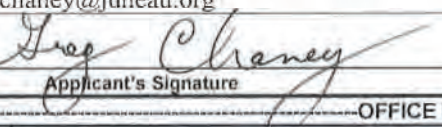
9. Prior to Construction Plan approval, the applicant shall submit a design showing a minimum 10-foot wide walking surface within the Wild Rose Walk ROW per 49.35.610(a).

10. Prior to Construction Plan approval, the applicant shall submit a lighting plan meeting applicable CBJ standards.

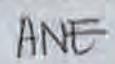
11. Prior to Construction Plan approval, the applicant shall submit documentation ensuring compliance with section D107.1.1 of the International Fire Code.

DEVELOPMENT PERMIT APPLICATION

Project Number	CITY and BOROUGH of JUNEAU	Date Received: 4/25/16
Project Name (City Staff to Assign Name)		

PROJECT / APPLICANT INFORMATION	Project Description Preliminary plat for residential subdivision for 86 single family lots as shown on the attached draft plat.		
	PROPERTY LOCATION		
	Street Address 10300 Glacier Highway	City/Zip 99801	
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot) USS 5504, Pederson Hill Lot 2		
	Assessor's Parcel Number(s) 4B2201010101		
	LANDOWNER/ LESSEE		
	Property Owner's Name City and Borough of Juneau	Contact Person: Greg Chaney	Work Phone: 586-0205
	Mailing Address 155 South Seward Street, Juneau, Alaska 99801	Home Phone: 586-2594	Fax Number: 465-2465
	E-mail Address greg.chaney@juneau.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	 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 Greg Chaney	Contact Person: Greg Chaney	Work Phone: 586-0205	
Mailing Address 155 South Seward Street, Juneau, Alaska 99801	Home Phone: 586-2594	Fax Number: 586-5385	
E-mail Address greg.chaney@juneau.org	Other Contact Phone Number(s): Dan Bleidorn 586-0224		
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			
	X	City/State Project Review and City Land Action		4/25/16	SMP 2016 0006
		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)			
	X	Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)		4/25/16	SMP 2016 0002
		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)				
Comments:					Permit Intake Initials 

***Public Notice Sign Form filled out and in the file.

SUBDIVISION OR PLATTING APPLICATION

Project Number	Project Name (15 characters)	Case Number <u>SMP20160002</u>	Date Received <u>4/25/16</u>
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TYPE OF SUBDIVISION OR PLATTING APPROVAL REQUESTED

(see submittal requirements on reverse)

MINOR SUBDIVISION

(changing or creating 13 or fewer lots)

- ☐ Preliminary Plat (MIP)
☐ Final Plat (MIF)
☐ Panhandle Subdivision
☐ Accretion Survey
☐ Boundary Adjustment
☐ Lot Consolidation (SLC)
☐ Bungalow Lot Subdivision
☐ Common Wall/Zero Lot Subdivision
☐ Other _____

MAJOR SUBDIVISION

(changing or creating 14 or more lots)

- ☒ Preliminary Plat (SMP)
☐ Final Plat (SMF)
☐ Preliminary Development Plan - PUD (PDP)
☐ Final Development Plan - PUD (PDF)
☐ Bungalow Lot Subdivision
☐ Common Wall/Zero Lot Subdivision
☐ Other _____

Please attach a cover letter to fully explain the project if there is not adequate space on this form.

LEGAL DESCRIPTION(S) OF PROPERTY TO BE SUBDIVIDED OR PLATTED:Lot 2 Pederson Hill Subdivision

Number of Existing Parcels 1 Total Land Area 121.4 acres Number of Resulting Lots or Parcels 91

HAS THE PARCEL BEEN CREATED BY A MINOR SUBDIVISION IN THE PRECEDING 24 MONTHS: ☐ NO ☒ YES If Yes, provide the Case Number AME 2014 0003

EXISTING BUILDING(S) OR STRUCTURES ON THE LAND: ☐ YES ☒ NO

CURRENT USE OF LAND OR BUILDING(S): Vacant

PROPOSED USE OF LAND OR BUILDING(S): D10 SF Single Family Residential Subdivision

UTILITIES AVAILABLE: WATER: ☒ Public ☐ On Site SEWER: ☒ Public ☐ On Site

UNIQUE CHARACTERISTICS OF LAND OR BUILDING(S): _____

For more information regarding the permitting process and the submittals required for a complete application, please see the reverse side.

If you need any assistance filling out this form, please contact the Permit Center at 586-0770.

SUBDIVISION/PLATTING FEES

	Fees	Check No.	Receipt	Date
Application Fees	\$10,160	PAC (see attached)		4/25/16
Admin. of Guarantee	\$			
Adjustment	\$			
Total Fee	\$10,160			4/25/16

NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM

MEMORANDUM

CITY/BOROUGH OF JUNEAU
Lands and Resources Office
155 S. Seward St., Juneau, Alaska 99801
greg.chaney@juneau.org

Voice (907) 586-0205

Fax (907) 586-5385

TO: The Planning Commission
FROM: Greg Chaney, Lands and Resources Manager
SUBJECT: Pederson Hill Major Subdivision Preliminary Plat
DATE: April 22, 2016



Design Notes Pederson Hill Subdivision Phase I

Developing a residential subdivision on CBJ property at the base of Pederson Hill area has a long history. This location was identified as Development Area 3 in the July 2010 Conceptual Master Plan Study for Pederson Hill.

On March 25, 2014 the Planning Commission considered AME2014 0003, a rezone request submitted by the Lands and Resources Division to rezone CBJ parcels on Pederson Hill from D1(t)D5 to a combination of D10 Multi-Family and D10SF (single-family). The Planning Commission recommended expanding the area designated as D10SF and unanimously adopted a motion of support for the concept. The Assembly approved the rezone on June 9 2014.

In order to develop this property, the CBJ needed an access route to the site. A land trade was arranged with neighboring Christ Lutheran Church and the plat finalizing the land trade was recorded in October 2015. Since that time the CBJ Lands Division and Engineering Department have been working with DOWL to develop a Phase I preliminary plat for a D10SF residential subdivision.

D10SF Design Standards

Minimum Lot Size 3,600 square feet
Minimum Lot Width 40'
Minimum Lot Depth 85'

Typical Lot Depicted: 4,500 square feet
Average Lot Width 50'
Average Lot Depth 85'
Main Access Right-Of-Way 60' wide
Other Rights-of-Way 50' wide
Pedestrian stairway width 20' wide

RECEIVED

APR 26 2016

PERMIT CENTER/CDD

Specific Design Features (see attached subdivision plat)

- A. Karl Reishus Boulevard is the primary access road for Subdivision. A significant design feature is that it is directly across Glacier Highway from Sherwood Lane. This property was obtained via a land trade with the adjacent Lutheran Church.
- B. The access driveway to the church parking lot from Glacier Highway will have to be moved and combined with Karl Reishus Boulevard so that there will only be one access to Glacier Highway at this location.
- C. Lot 15 Block A is along the edge of a meadow and has habitat value. This long narrow strip of property is not currently defined for any specific use but it is anticipated that it will be retained in a natural state for a buffer and habitat purposes. It is possible that in the future this property might be utilized for snow storage, developed park or further subdivided and disposed of for private use.
- D. Lot 9 Block C has been set aside as a Conservation Lot. This park is intended to be left in its natural state as partial mitigation for wetland impacts. A few foot paths may be constructed to protect the wetlands from being trampled.
- E. The Cheex Equestrian Trail will border the lower portion of the subdivision. The equestrian trail will begin at the edge of "Swampy Acres" and for now will terminate at the eastern border of the subdivision. Alignment of the trail from this point to the trail network along the Mendenhall River will be finalized if the preliminary plat is approved.
- F. Some small streams thread their way through the property. Lot 12 Block A contains the terminus of an anadromous stream. Therefore this lot has been set aside as a Conservation Lot for habitat purposes. For the streams that are not anadromous, lot lines were laid out to follow these streams. This provides for a water amenity to be located on the edges of lots and provides for buildable sites on these lots.
- G. Oversized lots for this subdivision border Karl Reishus Boulevard. These lots are some of the largest private lots in the subdivision. They were designed to be larger than normal in order to provide buildable sites set back from the busy traffic that is expected to utilize Karl Reishus Boulevard.
- H. Due to the grade of the property, a pedestrian stairway/path "Wild Rose Walk" has been established to reduce block size. Earlier subdivision designs had shown more connecting streets but in order to handle the steep grade, these roads had to be aligned at a 45 degree angle to the main streets. This resulted in a significant amount of the area being set aside for right-of-way. As shown, there are still appropriate road connections between the tiers of lots in the subdivision. Wild Rose Walk augments pedestrian connections.
- I. Lot 10 Block A is a wide lot set aside near the lower middle of the subdivision for a community park. This park is intended to be an improved park with playground equipment and possibly a community shelter. The site also allows for a pedestrian connection to the Cheex Equestrian Trail.
- J. At intersections, lots are larger than average in order to provide an opportunity for residents to build back from the right-of-way. In addition, these larger lots might be utilized for small shops, another community park or neighborhood restaurants.

- K. Several roads dead end at the outer edges of the proposed subdivision. This will allow for future connections to provide for development options on adjacent property.
- L. Connections with adjacent lots have been set aside along the eastern border shown but temporary cul-de-sacs are not required because Keishish Lane provides a connecting loop for circulation.
- M. Maximum grade for any street within the subdivision will be 8%. At this grade, all streets will be accessible for school busses.
- N. Notes on proposed street names:

All streets have unique names that have been determined to be appropriate for 911 responders by the City Cartographer.

- Karl Reishus Boulevard is named after Karl Reishus who was killed in an accident at the Hagavig Fire Training Center. Mr. Reishus was killed as a result of taking swift action to save the lives of two other participants in the training exercise.
- Wild Rose Walk is named after roses that grow wild in the area.
- The following street names are derived from Tlingit words for common sights in the area:
 - Yan Street = Helmock Street
 - Guwakaan Street = Blacktail Deer Street
 - Kwalx Street = Fiddlehead Fern Street
 - Keishish Lane = Alder Lane
 - Cheex Equestrian Trail = Thimbleberry Equestrian Trail

Future Design

The proposed preliminary plat is an initial phase of what could be a larger development in the Pederson Hill region. The development would allow for future single family residential housing in the vicinity. In addition, multifamily housing would be possible at the northwest edge of the neighborhood. Streets are stubbed to the adjacent property to the east which is currently owned by the University of Alaska. CBJ Lands staff has reached out to the University Lands Office and is engaged in discussions about collaborative development opportunities on University property. A second access from Glacier Highway is needed for developments of over 100 units. The preliminary plat proposes approximately 86 single family lots. If another phase of a similar magnitude were to be considered, developing the unnamed ROW opposite Engineer's Cutoff would be the next logical step. Once sufficient water pressure is supplied to the area, another tier of lots above the Phase I could be developed.

Wetland Considerations

The majority of mapped wetlands on the site are relatively common, lower value forested wetlands. Given the nature of this development, disturbance of these wetlands is unavoidable. Wetland impacts are anticipated to be approximately 9.5 acres. The CBJ is investigating paying a Fee In

Lieu of Mitigation to the Southeast Alaska Land Trust if this preliminary plat is approved and applying to the Army Corps of Engineers for a wetland permit.

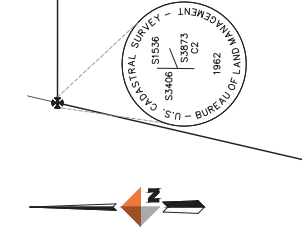
The development has been laid out in a manner to reduce wetland impacts to the greatest extent possible while still allowing for single family development. For example, while the ROW set aside for Karl Reishus Boulevard encompasses wetlands, the actual road footprint will be less than the full ROW width. Outside of the Karl Reishus Boulevard development footprint, wetlands will be left in their natural state to the greatest degree practical.

The proposed subdivision has set aside Lot 9 Block C which is an area of open muskeg wetlands near Swampy Acres as a Conservation Lot. Lot 12 Block A has also been set aside as another Conservation Lot since it contains the terminus of an anadromous stream. Lot 15 Block A is along the edge of the meadow and has habitat value. During construction, this 1.25 acres strip of property will be retained in a natural state for a sedimentation buffer and for habitat purposes. It is possible that in the future this property might be utilized for other purposes but since sediment runoff during construction creates the most significant impacts to wetlands, it will remain undisturbed to the maximum extent possible while the subdivision is being developed.

Traffic Impact Analysis

Attached is a traffic impact analysis completed in April 2016 for the new intersection that will be created where Karl Reishus Boulevard enters Glacier Highway. The new intersection will form a four way intersection with Sherwood Lane. As explained in the report, the proposed intersection will function at a level "C" or better.

In the future, if additional units are added that utilize this intersection as their primary access to the subdivision, it may be beneficial to add an additional turn lane.



U.S.S. 3406

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SMP2017

Figure 1 is a plan view map of the study area. It shows a network of roads and a monument. A specific distance of 872.94 meters is marked between two points on the map. The monument is labeled 'MONUMENT'.

Mod

ation

SCALE: 1" = 100'

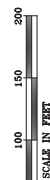
DATE: FEB. 2017

PROJECT NO: J70887

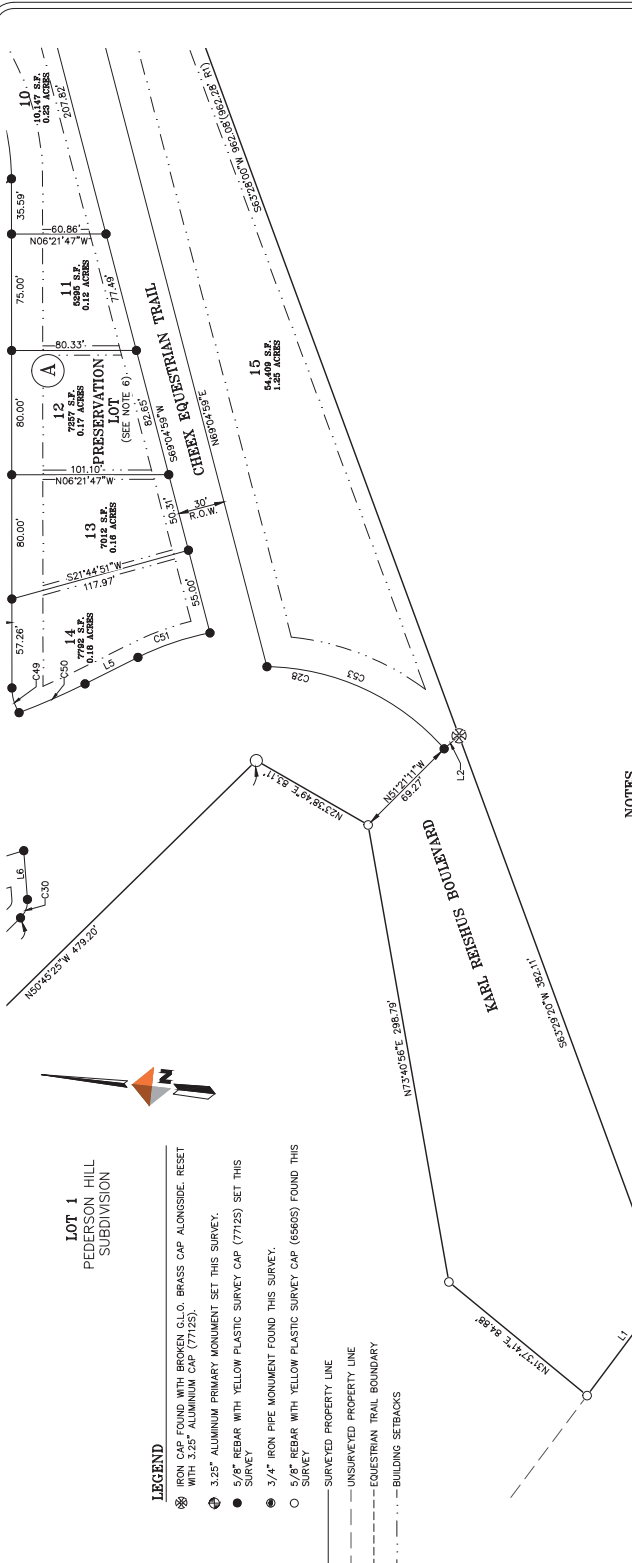
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SHEET NO: 1 OF 4

DATED: FEBRUARY 2017



CURVE TABLE				CHORD BEARING & DISTANCE	
CURVE NO.	RADIUS	DELTA	LENGTH	BEARING	DISTANCE
C1	—	—	—	—	—
C2	530.00	39°56'45"	369.51	N12°54'55"W 362.07	—
C3	30.00	108°07'52"	56.62	N17°40'29"W 46.56	—
C4	230.00	19°49'06"	79.56	S88°50'08"E 79.16	—
C5	170.00	19°49'06"	58.80	N88°50'08"E 58.51	—
C6	30.00	116°01'42"	60.75	N20°54'44"E 50.89	—
C7	30.00	66°29'31"	34.82	N70°20'52"W 32.69	—
C8	1025.00	07°13'51"	128.36	S80°10'16"W 129.27	—
C9	30.00	79°14'48"	41.47	S44°02'19"W 38.24	—
C10	30.00	122°29'45"	64.14	N35°06'56"W 52.60	—
C11	975.00	07°40'04"	130.48	N79°48'11"E 130.39	—
C12	30.00	72°29'37"	37.96	N39°43'20"E 35.48	—
C13	180.00	03°34'56"	11.25	N05°16'00"E 11.25	—
C14	30.00	103°25'14"	54.15	N44°39'10"W 47.09	—
C15	30.00	79°58'38"	39.78	N45°38'54"E 36.93	—
C16	125.00	18°28'21"	40.30	N16°53'46"E 40.13	—
C17	125.00	21°41'31"	47.32	S15°17'11"W 47.04	—
C18	30.00	122°29'45"	64.14	S35°06'56"E 52.60	—
C19	30.00	81°01'54"	42.43	S43°07'16"W 36.98	—
C20	30.00	98°58'05"	51.82	S46°52'44"E 45.61	—
C21	30.00	85°00'02"	44.51	N41°08'12"E 40.54	—
C22	470.00	14°27'19"	117.89	N05°02'56"W 117.59	—
C23	30.00	80°37'39"	42.22	N65°02'57"W 38.82	—
C24	100.00	81°01'54"	141.43	S43°07'16"W 129.93	—
C25	150.00	81°01'55"	212.14	S43°07'16"W 194.90	—
C26	—	—	—	—	—
C27	—	—	—	—	—
C28	155.00	75°22'15"	203.90	S04°47'49"W 189.51	—
C29	—	—	—	—	—
C30	15.00	49°48'09"	13.04	S75°39'59"E 12.64	—
C31	530.00	08°55'56"	82.62	N19°22'28"W 82.54	—
C32	530.00	04°20'11"	40.11	S12°44'25"E 40.10	—
C33	530.00	04°19'31"	40.01	N08°24'34"W 40.00	—
C34	530.00	04°20'21"	40.10	S04°04'38"E 40.13	—
C35	530.00	04°22'42"	40.50	N05°16'53"W 40.49	—
C36	530.00	04°35'14"	42.48	S04°45'31"W 42.42	—
C37	1025.00	07°58'38"	127.48	N78°53'42"E 117.46	—
C38	1025.00	08°26'04"	131.48	S75°32'05"W 125.05	—
C39	1025.00	03°11'07"	56.98	S81°39'37"W 56.97	—
C40	1025.00	03°09'57"	1.80	S83°30'35"E 4.85	—
C41	975.00	04°30'28"	53.77	S03°32'45"E 53.77	—
C42	975.00	04°30'28"	76.71	N78°13'31"E 76.69	—
C43	470.00	07°01'46"	57.67	N04°52'43"E 57.63	—
C44	470.00	07°02'50"	60.22	S12°03'53"E 60.18	—
C45	100.00	04°00'07"	6.98	N01°58'10"E 6.98	—
C46	150.00	13°07'58"	34.38	N09°10'47"E 34.31	—
C47	150.00	16°32'11"	43.29	N24°00'22"E 43.01	—
C48	150.00	51°21'45"	134.47	N67°52'21"E 130.01	—
C49	30.00	37°03'27"	16.79	N67°56'30"E 16.57	—
C50	445.00	09°58'19"	46.38	N29°54'08"W 46.36	—
C51	180.00	15°58'23"	49.13	N25°04'07"W 49.98	—
C52	—	—	—	—	—
C53	155.00	47°51'47"	129.48	S18°33'03"W 125.75	—



LOT 1
PEDERSON HILL
SUBDIVISION

LEGEND

- IRON CAP FOUND WITH BROKEN G.L.O. BRASS CAP ALONGSIDE. RESET WITH 3.25" ALUMINUM CAP (77125).
- 3.25" ALUMINUM PRIMARY MONUMENT SET THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) SET THIS SURVEY.
- 3/4" IRON PIPE MONUMENT FOUND THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (66605) FOUND THIS SURVEY.
- INSURVEYED PROPERTY LINE
- EQUESTRIAN TRAIL BOUNDARY
- BUILDING SETBACKS

NOTES

- THIS SURVEY CLOSER WITHIN A LIMIT OF ERROR OR ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.422.
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
- RECORD INFORMATION DERIVED FROM OFFICIAL PLAT AND NUMBER 12, 1983, (R2) U.S. SURVEY 4984, DATED NOVEMBER 29, 1983, (R3) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R4) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R5) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R6) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R7) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R8) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R9) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R10) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R11) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R12) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R13) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R14) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R15) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R16) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R17) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R18) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R19) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R20) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R21) U.S. SURVEY 3860, DATED MARCH 26, 1984, (R22) U.S. 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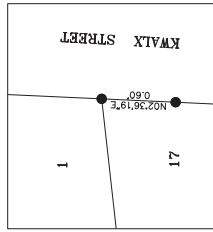
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD BEARING & DISTANCE
C1	530.00	39°56'45"	369.51	N1254°55'W 362.07
C2	530.00	108°07'52"	56.62	N47°00'29"W 48.58
C3	30.00	19°49'06"	79.56	S89°50'08"W 79.16
C4	230.00	19°49'06"	58.80	N89°50'08"E 58.51
C5	170.00	116°01'42"	60.75	N20°54'44"E 50.89
C6	30.00	67°29'31"	34.82	N70°20'52"W 32.89
C7	1025.00	07°13'51"	129.36	S80°01'18"W 129.27
C8	30.00	79°11'48"	41.47	S44°02'19"W 38.24
C9	30.00	122°29'45"	64.14	N35°06'56"W 52.60
C10	30.00	72°29'37"	37.96	N79°48'11"E 30.39
C11	975.00	07°40'04"	130.48	N39°43'20"E 35.48
C12	30.00	103°54'56"	11.25	N05°16'00"E 11.25
C13	180.00	03°54'56"	54.15	N44°39'10"W 47.09
C14	30.00	103°54'56"	39.78	N45°36'54"E 36.93
C15	30.00	75°58'38"	40.30	N6°53'46"E 40.13
C16	125.00	18°28'21"	42.43	S15°17'11"W 47.04
C17	125.00	21°41'31"	64.14	S35°06'55"E 52.60
C18	30.00	122°29'45"	42.43	S43°07'16"W 38.98
C19	30.00	81°01'54"	51.82	S45°52'44"E 45.61
C20	30.00	98°58'05"	44.51	N41°08'12"E 40.54
C21	30.00	85°00'02"	117.89	N08°32'58"W 117.59
C22	470.00	142°21'9"	42.22	N56°02'57"W 36.82
C23	30.00	80°71'39"	14.43	S43°07'16"W 129.83
C24	100.00	81°01'54"	212.14	S43°07'16"W 194.90
C25	150.00	81°01'55"	—	—
C26	—	—	—	—
C27	—	—	—	—
C28	155.00	75°27'15"	203.90	S04°47'49"W 189.51
C29	—	—	—	—
C30	15.00	49°49'09"	13.04	S75°39'39"E 12.64
C31	530.00	08°55'56"	82.62	N19°22'28"W 82.54
C32	530.00	04°20'11"	40.11	S12°44'25"E 40.10
C33	530.00	04°19'31"	40.01	N02°24'34"W 40.00
C34	530.00	04°20'21"	40.14	S04°04'38"E 40.13
C35	530.00	04°22'42"	40.50	S06°16'53"W 40.49
C36	530.00	04°31'14"	42.43	S04°45'51"W 42.42
C37	1025.00	02°58'38"	17.46	N19°33'42"E 17.48
C38	1025.00	02°58'04"	53.09	S76°23'05"W 53.08
C39	1025.00	03°11'01"	18.86	S81°36'35"W 18.97
C40	1025.00	03°08'02"	53.77	S85°39'25"E 53.76
C41	975.00	03°07'48"	78.71	N78°13'43"E 78.69
C42	470.00	07°51'40"	60.22	N10°52'43"E 60.18
C43	470.00	07°50'40"	60.22	S10°53'43"E 60.18
C44	100.00	04°20'07"	6.98	N81°30'10"E 6.98
C45	150.00	13°07'48"	34.38	N24°02'22"E 43.19
C46	150.00	16°32'11"	43.29	N24°02'22"E 43.14
C47	150.00	16°32'11"	134.47	N5°57'21"E 130.01
C48	30.00	32°03'27"	16.79	N67°56'30"E 16.57
C49	30.00	05°58'19"	46.38	N29°54'08"W 46.36
C50	445.00	15°58'23"	49.13	N25°04'07"W 49.98
C51	180.00	—	—	—
C52	—	—	—	—
C53	155.00	47°51'47"	129.48	S18°33'03"W 125.75

LEGEND

- BLM MONUMENT FOUND THIS SURVEY.
- 3.25" ALUMINUM PRIMARY MONUMENT SET THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77155) SET THIS SURVEY
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- BUILDING SETBACKS

U.S.S. 4598
LOT 9

PRELIMINARY



DETAIL A

NOTES

- THIS SURVEY CLOSES WITHIN A LIMIT OF ERROR OR ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.452.
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
- RECORD INFORMATION DERIVED FROM OFFICIAL PLAT AND FIELD NOTES OF (R1) U.S. SURVEY 3873, DATED SEPTEMBER 1983, (R2) U.S. SURVEY 3260, DATED MARCH 26, 1954, (R3) PEDERSON HILL SUBDIVISION, LOT 2, DATED MARCH 20, 1983, (R4) PEDERSON HILL SUBDIVISION, LOT 2, DATED MARCH 20, 1983, (R5) LOT 9, DATED MARCH 7, 1985, JUNEAU RECORDING DISTRICT.
- WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
- DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.



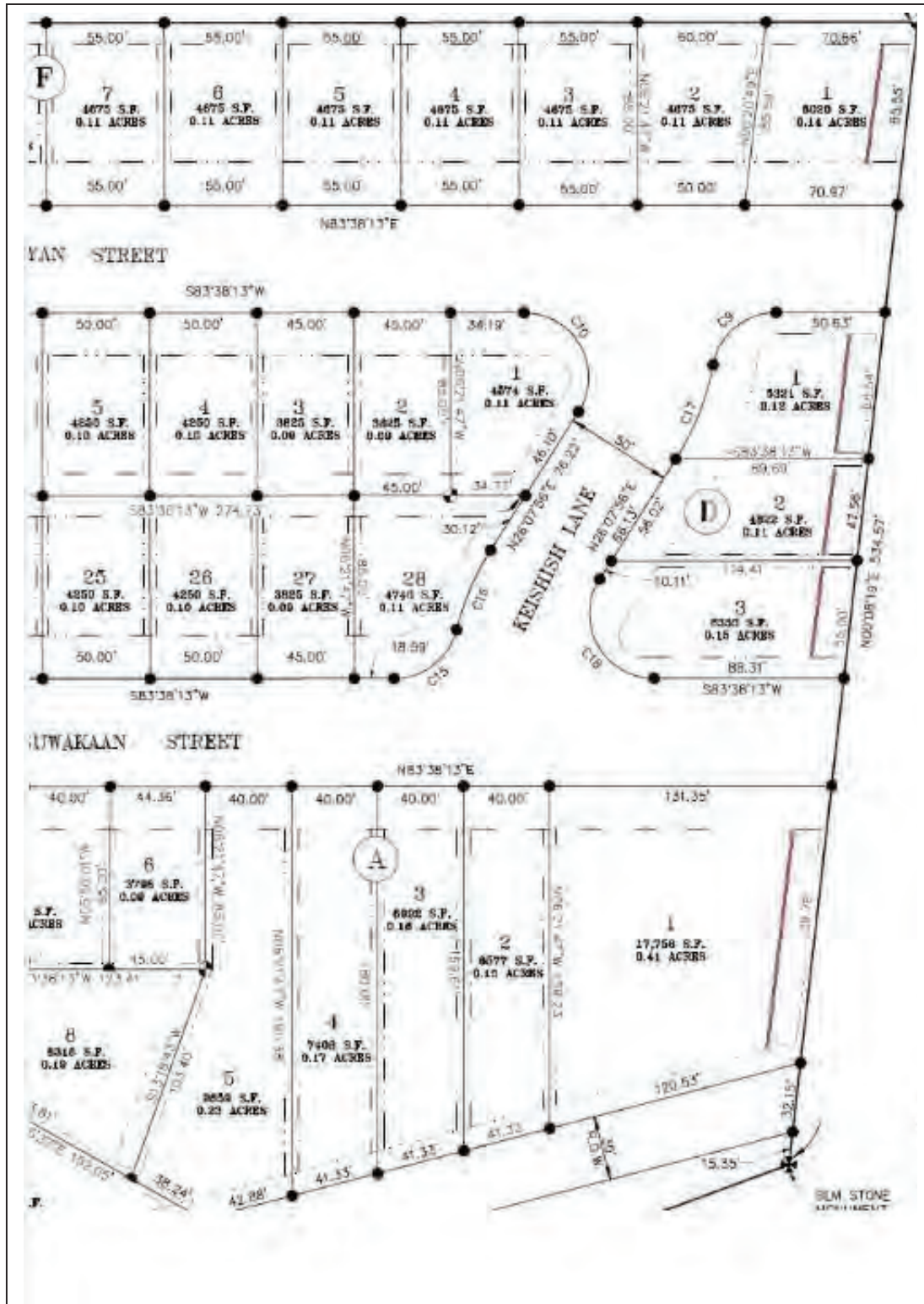
SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, AND THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, AT THE REQUEST OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONAL AND RELATIVE MONUMENTS AND BUILDING SETBACKS SHOWN ON THIS PLAT AS PRESENTED.

DATED: FEBRUARY 2017

LINE NO.	BEARING & DISTANCE
L1	S59°31'07"E 82.74
L2	N47°31'03"W 12.75
L3	—
L4	—
L5	S32°31'47"E 38.10
L6	N72°20'47"E 10.50
L7	N78°53'47"E 21.33
L8	S81°51'07"E 17.41
L9	S81°15'07"E 37.09
L10	N78°53'47"E 19.27
L11	N45°10'07"W 60.13
L12	N52°53'55"E 60.00





RECEIVED

APR 26 2016

PERMIT CENTER/CDD

Pederson Hill Subdivision
Potential Development Phases

Multifamily

Phase 3

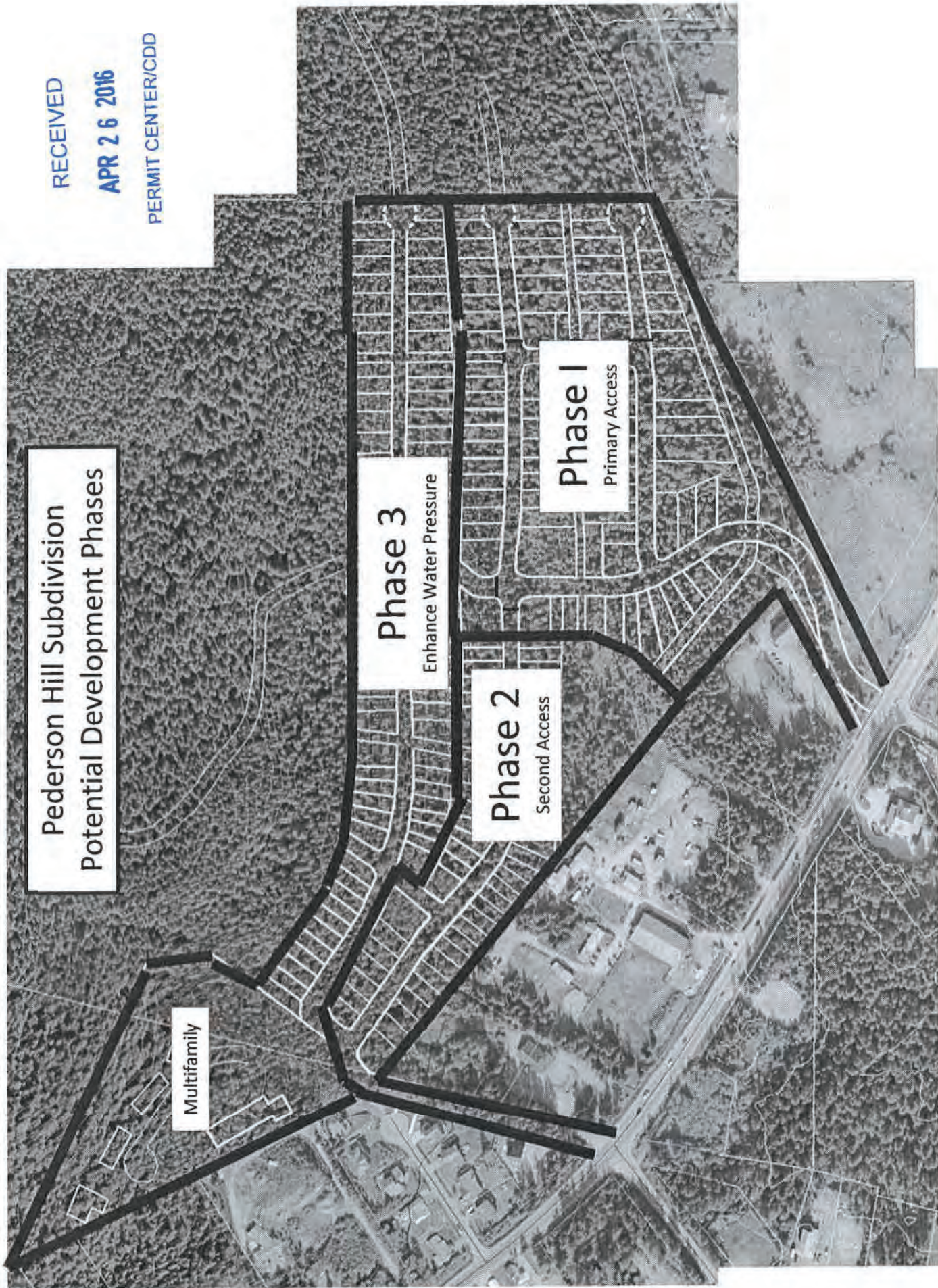
Enhance Water Pressure

Phase 2

Second Access

Phase 1

Primary Access



Proposed Pederson Hill Subdivision

This neighborhood would be located at the base of a hill between Auke Lake and the Mendenhall River

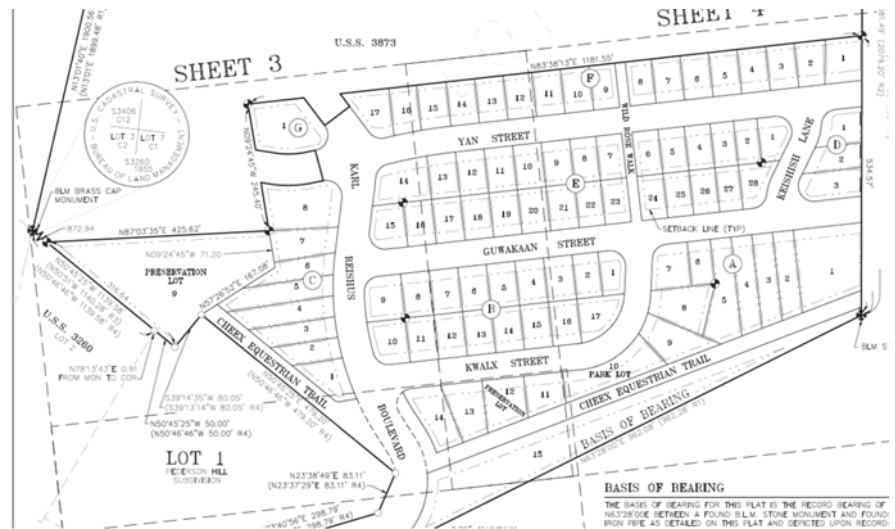


Street-view of the future entrance to Pederson Hill. Photo: Google Maps

Pederson Hill Subdivision History

- 2006: Buildable Lands Study
- 2010: Pederson Hill Access Study
- 2010/2011: Sewer lines were extended
- 2014: Ordinance passed to rezone Pederson Hill to mix of D-10 and D-10SF
- 2015: Ordinance passed to conduct a land trade with Christ Evangelical Lutheran Church
- 2016: Land Management Plan adopted

CBJ is evaluating this subdivision in an effort to create opportunities for private sector housing



Goal: Create Small Lots for Entry-Level, Single Family Homes

***NEXT STEP - Planning Commission hearing February 28, 2017, 7pm Assembly Chambers**

Note: The CBJ Assembly will have full discretion to determine when lots are put on the market and how many will be sold at a time.

The Juneau Housing Market lacks entry-level, single family homes and the economy cannot grow if people do not have a place to live. The proposed Pederson Hill subdivision will bring

lots to the market. This project will allow retirees to down-size; young families and professionals to own and build equity; miners to live in town; professors to own close to the University—all

adding mobility to Juneau's housing sector. The project will also provide economic opportunity for contractors and builders during a time when work is needed.

Frequently Asked Questions

Does Juneau need more housing?

While there has been steady housing production in the community the last few years, certain housing types did not meet the development targets listed in the 2012 Juneau Housing Needs Assessment. Single Family Homes and Low-Income Affordable Housing categories are still areas in need of more development despite recent economic concerns, job losses, and some out-migration.

- Please note, even with the recent population decline, Juneau's population is at 2012 levels. (2012: 32,817 people; 2016: 32,739 people)

Housing Type	Housing Need: 2012 Juneau Housing Needs Assessment	2012 Housing Production Targets	Performance: Units Permitted 2012- 2016
Single Family Homes* (SFH)	New Single Family Homes in the \$251,000 - \$377,00 Price Range	513-517 Single-Family Homes	228 Single-Family Homes
Accessory Apartments		* No production targets noted in 2012 Housing Needs Assessment	98 units
Fair Market Multi- Family Rental Units**	Achieve 5% vacancy rate	170-230 Fair Market Multi-Family Rentals	324 units
Low-Income Affordable Housing	Fill the gap between what is available for Juneau's public housing, low-income and housing for the homeless.	441 new units or housing vouchers	154 units *** Vouchers: Updated information available shortly

(Data Sources: JEDC 2012 Juneau Housing Needs Assessment, CDD Permitting Data)

* Single Family Homes includes attached homes (townhomes). These 324 units are all SFH's permitted, not just those in the 2012 targeted price range.

** Multi-Family includes duplex, tri-plex, four-plex, condo, and apartment dwellings.

 Volunteers of America Phase I (26 units)
 Volunteers of America Phase II (35 units)
 AWARE, Inc. (12 Units)
 Trillium Landing Senior Housing (49 Units)
 Juneau Housing First Coalition (32 units)

Do we need more housing when there are many homes and rental units available?

Economic Growth: The Juneau Economic Development Plan notes that Juneau's housing supply does not meet demand in terms of housing type, size, price, or location. Juneau households and businesses have indicated that the lack of housing and lack of affordable housing for employees was a critical barrier to economic development.

Long-Term Goals and Future Housing Targets: The recently adopted Housing Action Plan (November 2016) set conservative targets of developing 66 units per year over the next 30 years to address future housing need and facilitate economic growth in the community.

Provide Choice for Residents: In the rental market, even with the addition of many multi-family units and slightly higher vacancy rates, affordability, choice, and quality of rental units is still a concern for many residents – many whom are cost-burdened. Single-Family Home listings continue to be in the double digits for all price ranges and days on the market are in line with recent years.

Even in 2016, A Seller's Market: JEDC reports that Juneau continued to have a strong "seller's" market for homes in 2016, where demand is larger than the supply. Continuing to pursue additional Single-Family Home opportunities for future residents or renters is important for economic growth.

Would the Pederson Hill Subdivision compete with the private sector?

There has been some concern that the Pederson Hill Subdivision would flood the market or adversely impact the private sector.

- The Pederson Hill Subdivision consists of 86 lots that would greatly assist in making up the Single Family Home gap in the 2012 Juneau Housing Needs Assessment;
- The earliest that this subdivision would come on-line would be in 2018 and the CBJ Assembly would control the rate and manner of land disposal;
- Through CBJ investment and public-private partnership with Tlingit-Haida Regional Housing Authority, the opportunity to provide future homeownership opportunities to residents is important;
- A goal of the Pederson Hill Subdivision is plat small lots for small homes which the existing private industry has not been developing; and
- Another goal is to let private developers acquire less expensive lots to build homes that are less expensive for first-time homebuyers and those looking to downsize.
- Home-building is great for the local economy and local contractors looking to line up work in the coming years.

Proposal: Pederson Hill Subdivision

Full build-out over 3 phases: +200 new single family homes & multifamily units

Phase 1 (Current Project)

86 Residential lots (Single Family Dwelling units)
 5 New CBJ streets with sidewalks, streetlights
 5 Lots preserved for Habitat/ Wetlands/ future Park (playground)
 New CBJ Park
 New Equestrian Trail
 New Pedestrian Pathways

Phases 2 & 3 (Not proposed at this time – future phases)

Mix of Single family homes and multifamily (Apt/ Condos)
 New CBJ Streets
 New Pedestrian connections

What is the permitting process for Phase 1 of Pederson Hill Subdivision?

Major Subdivision permitting process (49.15.402). Phase 1 will be processed as a Major Subdivision and will go through **3 major steps**

Step 1) Preliminary Plat (49.15.402(c) **[WE ARE AT THIS STEP]**)

- This step requires review and approval by Planning Commission.
 - **Commission meeting has been scheduled for Tuesday, February 28 at 7pm, Assembly Chambers.**
- Purpose of this step: Ensures the Preliminary Subdivision Plat layout meets/ addresses applicable CBJ codes.
 - Preliminary Subdivision Plat: Meets specific CBJ design and layout standards; shows yard setbacks; dimensional requirements; etc.
 - Supplemental Documents:
 - Street Profile: Shows specific CBJ Street standards and dimensions;
 - Utility Plan: Shows water, sewer, and storm sewer location and design
 - Drainage Plan: Show future drainage routes, etc.
 - Traffic Plan: Analysis of future traffic levels and impacts to existing traffic in the area;
 - Environmental: Impacts to wetlands, floodprone areas, etc.

Step 2A) Construction Plans (49.15.402(d)) (Assuming Commission approves Preliminary Plat step)

- Purpose of this step: Design all improvements (new street, utilities, etc.) per CBJ standards.
- A private company will prepare and submit the Construction Plans showing the new subdivision improvements:
 - Utilities: Water, sewer, power, TV, cable, etc.
 - Streets: Pavement, curb, sidewalks, street lights, etc.
 - Drainage: Slopes, retaining walls, drainage capacity, routes, etc.
 - Pedestrian Routes: dimensions, material, etc.
- The Construction Plans are only reviewed by CBJ staff, no Planning Commission meeting for this step.

Step 2B) Construct new improvements per the Construction Plans

- The purpose of this step: Create the physical layout of the subdivision and build to CBJ standards.
- This will also be accomplished by a private company, awarded through the CBJ bid process.
- CBJ Engineering staff will provide inspections to ensure all improvements are built according to the Construction Plans.

Step 3) Final Plat (49.15.402(f)) [LAST STEP OF THE MAJOR SUBDIVISION PROCESS]

- This step (final step) requires Planning Commission review and approval in order to allow the Draft Subdivision Plat to be finalized and recorded by the State.
- The purpose of this step: Inform the Commission that all required subdivision improvements have been constructed according to the approved Construction Plans.
- The Commission will review, and approve the Subdivision Plat if:
 - All subdivision improvements have been correctly installed and inspected; and
 - Subdivision Plat meets all CBJ and State surveying standards, design layout and dimensional standards.
- After Commission approval, the Subdivision plat is recorded with the State recorder's office.

How can I follow Phase 1 of Pederson Hill Subdivision?

For general project process and stages of development contact:

CBJ Lands & Resources Division Manager,
Greg Chaney

Ph: 907-586-0205

Email: Greg.Chaney@juneau.org

For the permitting process of the subdivision, contact:

CBJ Planner Eric Feldt

Phone: 907-586-0764

Email at Eric.Feldt@juneau.org

Where can I learn more about Juneau's housing data, plans, research?

Through multiple resources:

- For Market data, homes/ lots for sale, available rentals:
 - Contact local realtors and property managers. Check the YellowPages, Internet, local newspapers and magazines, etc.
- For CBJ Plans, Assessments, Data, etc.:
 - Contact Sco Ciambor , CBJ Chief Housing Officer (907-586-0220)
- For Housing construction costs, etc.:
 - Contact local developers/ home builders, Check the YellowPages, Internet, local newspapers and magazines, etc.
- For Permitting process of housing:
 - Contact CBJ Permit Center (907-586-0770)

Key Project Contacts: Pederson Hill Subdivision

Overall Project Manager

Facilitates project through all steps of process

CBJ Lands & Resources Division

Manager: Greg Chaney

Ph: 907-586-0205

Email: Greg.Chaney@juneau.org

Major Subdivision Permitting Process

CBJ staff reviews subdivision to ensure consistency with applicable CBJ codes

CBJ Community Development Department

Assigned CBJ Planner for Project: Eric Feldt, CBJ Planner

Ph: 907-586-0764

Email: Eric.Feldt@juneau.org

CBJ Planning Commission

Reviews and Votes on Major Subdivision steps

Contact: PC_Comments@juneau.org

CBJ Lands Division

Provides comments and recommendaon to the Planning Commission and Assembly about development on or affecng CBJ land.

Contact: Greg.Chaney@juneau.org

CBJ Assembly

Approves public funding for project

Approves which and when properes of the Pederson Hill subdivision are released to the market for development

Contact: BoroughAssembly@juneau.org

General Housing Issues

For resources on local housing data, plans, analyses, etc.

Contact: Sco Ciambo r, CBJ Chief Housing Officer

Ph: 907-586-0220

Email: Scott.Ciambor@juneau.org

5/27/16

City & Borough of Juneau
Community Development Dept.
155 South Seward Street
Juneau, Alaska 99801

Attn: Laura Boyce,

RE: Pederson Hill Subdivision

I have to agree with the Juneau area contractors; the C/B Juneau should not be in competition nor should they be dictating prices. As we all know, you cannot pay \$80,000 for an under 5,000 sq.ft size lot, fill it, put in the foundation, run the utilities from the C/B/J stub in & build this house for \$300,000. This is unrealistic and poor planning on the C/B/J's part. Affordable housing would be more along the lines of modular housing like Eagles Edge over on Gull Way in Lemon Creek. The people needing affordable housing are not going to be able to qualify for a bank loan and if they have lower paying jobs will be unable to make the payments. What is the C/B/J thinking? I agree we do need affordable housing but not this way. Pederson Hill as a subdivision made up of tiny unaffordable houses on tiny unsellable lots is not the way to go. Why not address our need for Senior housing and low income housing with larger multi-family buildings, with playgrounds, green belts, & walking paths. Most of these people do not have cars and there is no grocery stores on the Pederson Hill side of the river. Is the C/B/J going to provide bus service? Making a subdivision look like it stepped out of a California hill side full of ticky, tacky little boxes is not in keeping with the neighborhood or general area of Pederson Hill. Multihousing units sold as Condos, 4 plexes, 8 plexes all on large lots would be a far better idea. Please rethink and redo your ugly preliminary Pederson Hill Subdivision. The other alternative is to leave Pederson Hill alone and make it a game preserve. Many deer, bears, fish, birds & other wildlife call this hillhome. Where are you getting the 8 Million dollars to put in this subdivision.....I object to having my TAX dollars used on such a poorly planned project.

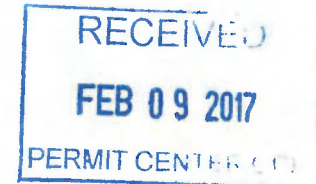
Thank you for listening.

Phone#789-5659

Sincerely, 
Esther K. Epperly, property owner on Pederson Hill
Box 34358
Juneau, Alaska 99803



January 30, 2017



RE: Pedersen Hill Development

Dear CBJ Land Management, CBJ Planning Commission, CBJ Assembly and Mayor Ken Koelsch,

After conducting some research of my own, regarding the Pedersen Hill Housing Project, I have thoughts and concerns that I hope you will take into consideration before approving and/or proceeding with this housing development.

As of 1/30/17 there are **117 homes for sale** posted on Trulia.com alone. I'm suspecting that not ALL the houses for sale in Juneau are posted on this site, so the number is probably higher. Yes, I filtered out the land and apartments when searching for homes available on this website. Out of these 117 houses **41 of them are listed for \$300,000 or less**. I feel this important to point out, since the projected "affordable" cost of a house in this new development will be near or above \$350,000 price tag.

As of 1/30/17 there have been **165 rentals advertised on Craigslist in January 2017** alone. Being that not everyone advertises on Craigslist I'm certain this number is higher as well. In January 2014 KTOO wrote that 87 new apartments were nearly completed and ready to rent. KTOO also reported on July 26th, 2016 that the new Jackie Renninger Subdivision will provide up to 189 new units mixed with apartments, condos and single family homes. Today the rental market has become soft. Landlords are reporting vacancies throughout Juneau, and with over 165 rentals currently on the market one should ask if the market has become saturated.

CBJ is basing this project on a housing demand or shortage that was prevalent over 10 years ago, but as the Juneau Empire reported on January 13, 2017, Juneau's **population has dropped to levels seen in 2012**. In 2016 Juneau saw a **deficit of nearly 600 people**. As demographer Eddie Hunsinger stated, "It's the fourth year in a row of a pretty big net migration loss. It is another year of net migration losses for the state and for Juneau." The Juneau Empire also reports in this article that, "employment figures show Juneau's economy shedding jobs, and the unemployment rate has been rising slowly over the past year and a half." "It's not just losing the state jobs," said Meilani Schijvens of Rain Coast Data, a private firm, "but also the trickle-down effect of those positions." Juneau Empire also reported that the Department of Labor predicted that **Southeast Alaska will lose 600 jobs in the coming year and most will come from Juneau**.

The Alaska Economic Trends January 2017 article reported that as the baby boomers reach retirement age, many of their government held positions will be eliminated or left unfilled. They stated that between 2014 and 2015 Southeast Alaska lost 500 state jobs, and the state government is expected to remain the fastest-losing industry this year. They also reported that the Federal job openings have been flat and declining for the past decade and are expected to decline even more in 2017.

With the decline of professional job opportunities and people moving out of Juneau, I'd like to know the following:

- Where are people going to work, that pays a high enough salary, to afford a mortgage?
- With no mid to higher ranged paying jobs available how are you going to keep people from moving out of Juneau and get new families to move in?

- With over 100 homes on the market today, how can you warrant building a new subdivision? You will be flooding the market with new homes, and those trying to sell their older homes are stuck holding the debt difference that has been caused by years of CBJ property tax inflation on older homes.
- Where is the 1.5 million dollars slated this year coming from, along with the additional 4 million in the coming years? I suspect our tax dollars, and if this is the case, as a lifelong resident of Juneau, I'd hate to see my tax dollars being spent on such a project.
- How can you claim that these homes will be "affordable," when it is estimated that these homes will be sold in the \$300-\$350 thousand dollar range? This project has been "sold" to the Juneau public as an "affordable" housing subdivision.

I just finished building a 400 sq. ft. log cabin efficiency rental unit next to my home, and it cost me \$126,000. This log building has no bedrooms, a very small kitchen and bathroom. Also, I already owned the land. I will be honest, I was shocked at the inflated labor and material prices. We built most of this log cabin ourselves, but needed to hire out professionals for the ground work, foundation, roof, electrical and plumbing. How can you claim that this subdivision will offer "affordable" housing when you plan to sell the lots for \$75,000 to \$90,000, and the lots will not be cleared, cored and filled? I spent \$25,000 alone on just dirt work and my lot was already cleared and partially filled!

If CBJ feels the need to develop affordable housing then why are they not building multi-family housing units? It would cost less to develop a smaller tract of land to build a few multi-family housing units that could be sold in the \$100,000 to \$150,000 range. This would provide opportunities for the low income family to own a home.

With the decline in population and the decline of good paying jobs in Juneau one has to admit we are in a recession. I'd hope CBJ can recognize these issues, and will put the Pedersen Hill Housing Project on the back burner until the economy warrants such a development. Juneau needs another driving industry to keep people here and to bring new people in, but at this time it is on the decline. The 5 million dollars CBJ wants to pump into this project, over the next 4 years, could be spent more efficiently on multi-unit housing projects that offer a truly affordable opportunity for low income families to own a home.

CBJ is going to be facing more budget cuts down the line as the State of Alaska cannot provide the accustomed funds in the future. The 5 million dollars for this project could be spent more wisely by maintaining the infrastructure that Juneau already possess. The Pedersen Hill Subdivision Project is a project for the distant future, after the State of Alaska has financially recuperated, and/or Juneau has found a new driving industry that can bring in new families and pay a descent wage.

Please reconsider this project and spend our tax dollars wisely.

Sincerely,

 ,Bobbi Epperly-Pietan
 ,James Pietan

Certified Mail No. 7007 0710 0003 2950 6278

Certified Mail No. 7007 0710 0003 2950 6247

Gordon Warren Epperly
P.O. Box 34358
Juneau, Alaska 99803

Tel: (907) 789-5659

February 01, 2017

City and Borough of Juneau
Community Development Department
155 South Seward Street
Juneau, Alaska 99801

Commissioner Andrew T. Mack
Department of Natural Resources
State of Alaska
550 W. 7th. Avenue, Ste 1400
Anchorage, AK 99501

In Reg: A preliminary Plat (SMP2016 0002) and a City Consistency Review (CSP2016 0006) for Phase 1 Pederson Hill Subdivision resulting in 86 Residential lots and 5 lots for preservation / park purposes.

To whom it may concern

The following written "Testimony" of Gordon Warren Epperly is to be submitted into the record of the "Assembly" / "Planning Commission" for the City and Borough of Juneau and into the record of the "Office of the Commissioner" for the State of Alaska, Department of Natural Resources.

Introduction

On January 3rd, 1959, the Territory of Alaska was brought into the Union as the Forty-Ninth State of the United States of America. Under the Statehood Act of July 7th, 1958 [Pub.L. 85-508, 72 Stat. 339], the State of Alaska was to select its lands that were to be secured with "Federal Land Patents" [see Section 6 of the Statehood Act]. Among those lands selected was an area known as "Pederson Hill" of Juneau, Alaska (*Land embraced in U.S. Survey 3873, situated about 12 miles northwesterly from Juneau, Alaska, containing 121.56 acres.*)^{1/} and was purportedly sold and secured by a "Land Patent"^{2/} of the State of Alaska to the City and Borough of Juneau on March 26th, 1982. This State of Alaska Land Patent No. 6159 is defective on its face and is void as follows:

State of Alaska Restrictions and Reservations of Land Patent No. 6159

The words of "Restrictions" and "Reservations" of the State of Alaska Land Patent No. 6159 reads as follows:

~~"Save And Except~~ those restrictions appearing in the Federal Patent or other conveyance by which the Grantor acquired title;

~~"And Further,~~ Alaska, as Grantor, hereby expressly saves, excepts and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, all oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every name, kind or

^{1/} Attached as " Exhibit 'A' "

^{2/} Excerpt of Land Patent is attached as " Exhibit 'B' "

description, and which may be in or upon said lands above described, or any part thereof, and the right to explore the same for such oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils, and it also hereby expressly saves and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right to enter by itself, its or their agents, attorneys, and servants upon said lands, or any parts or parts thereof, at any and all times for the purpose of opening, developing, drilling, and working mines or wells on these or other lands and taking out and removing therefrom all such oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils, and to that end it further expressly reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right by its or their agents, servants and attorneys at any and all times to erect, construct, maintain, and use all such buildings, machinery, roads, pipelines, powerlines, and railroads, sink such shafts, drill such wells, remove such soil, and to remain on said lands or any part thereof for the foregoing purposes and to occupy as much of said lands as may be necessary or convenient for such purposes hereby expressly reserving to itself, its lessees, successors, and assigns, as aforesaid, generally all rights and power in, to, and over said land, whether herein expressed or not, reasonably necessary or convenient to render beneficial and efficient the complete enjoyment of the property and rights hereby expressly reserved.

~~"To Have And To Hold~~ the said land, together with the tenements, hereditaments, and appurtenances thereunto appertaining, unto the said Grantee and its successors and assigns forever."

which many of the "*Restrictions*" and "*Reservations*" are in conflict with several provisions of the Constitution for the State of Alaska.

Giving the benefit of the doubt, we may presume that the authority for the issuance of Alaska Land Patent No. 6159 is founded upon Article VIII, Section 9 (*Sales and Grants*) of the Constitution for the State of Alaska which states:

"Subject to the provisions of this section, the legislature may provide for the sale or grant of state lands, or interest therein, and establish sales procedures. All sales or grants shall contain such reservations to the State of all resources as may be required by Congress or the State and shall provide for access to those resources. Reservations of access shall not unnecessarily impair the owner's use, prevent the control of trespass, or preclude compensation for damages." *[Emphasis added]*

With the restrictive and reserved provisions of the Alaska Land Patent No. 6159 which states in part:

"... and it also hereby expressly saves and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right to enter by itself, its or their agents, attorneys, and servants upon said lands, or any parts or parts thereof, at any and all times ..."

and the wording of:

"... and to that end it further expressly reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right by its or their agents, servants and attorneys at any and all times to erect, construct, maintain, and use all such buildings, machinery, roads, pipelines, powerlines, and railroads, sink such shafts, drill such wells, remove such soil, and to remain on said lands or any part thereof for the foregoing purposes and to occupy as much of said lands as may be necessary or convenient for such purposes ..."

and the wording of:

"... hereby expressly reserving to itself, its lessees, successors, and assigns, as aforesaid, generally all rights and power in, to, and over said land, whether herein expressed or not, reasonably necessary or convenient to render beneficial and efficient the complete enjoyment of the property and rights hereby expressly reserved."

said provisions do indeed impair the owner's use, prevents the control of trespass, and precludes compensation for damages.

The people declared within their State Constitution at Article I, Section 1 (*Inherent Rights*) that:

"This Constitution is dedicated to the principles that all persons have a natural right to life, liberty, the pursuit of happiness, and the enjoyment of the rewards of their own industry; ..."

With the stated "*restrictions*" and "*reservations*" of Alaska Land Patent No. 6159, does anyone in their right mind really believe that the property owners of the "*Lots*" that are divided up out of the lands of "*Pederson Hill*" will have access to their "*inherent rights*" to pursue happiness and enjoy of their rewards of ownership of owning a Dwelling or other Real Estate? I think not! No such rights exist when the "*reservations*" and "*restrictions*" of the "Land Patent" grants government employees, government agents, or attorneys authority to have free reign to enter into and upon the lands of the property owner without announcement any time of the day or night seven days a week for the purpose of taking possession of any and all Dwellings that are on the property or damaging the land in the name of "*mining*" without compensation or consent of the owner.

What about Article I, Section 14 (*Searches and Seizures*) of the Constitution for the State of Alaska which states:

"The right of the people to be secure in their persons, houses, and other property, papers and effects shall not be violated ..."

It is common knowledge in law that upon the grant of entry onto private property by a government employee, the property owner surrenders all rights to be secure in their persons, houses, and other property, papers, and effects. (e.g. <http://tinyurl.com/zgtl6k9>).

How about Article I, Section 18 (*Eminent Domain*) of the Constitution for the State of Alaska which states:

"Private property shall not be taken or damaged for public use without just compensation"

There are no provisions in the "*reservation*" and "*restriction*" clauses of Land Patent No. 6159 that provides "Compensation" to the property owner for the taking or damaging of land and real estate for mining purposes.

What about Article I, Section 22 (*Right of Privacy*) of the Constitution for the State of Alaska which states:

"The right of the people to privacy is recognized shall not be infringed. ..."

When the "*reservation*" and "*restriction*" clauses of Land Patent No. 6159 declares that government employees, government agents, and attorneys may enter upon the land of a property owner without notice twenty-four (24) hours a day, seven days a week is a statement that the property owner has no rights to "*privacy*."

Then we get to Article VIII, Section 1 (*Statement of Policy*) of the Constitution for the State of Alaska which states:

"It is policy of the state to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with public interest"

This is statement that there must be a balance for homesteading and mining. The "*reservation*" and "*restriction*" clauses of Land Patent No. 6159 are "*lopsided*" for they don't provide any rights or protections for the homesteader. The author, *Warner T. May*, and others who drafted the "*reservation*" and "*restriction*" clauses designed Land Patent No. 6159 for the purpose of discouraging private ownership of the lands of the State.

Looking at Article VIII, Section 16 (*Protections of Rights*) of the Constitution for the State of Alaska which states:

"No person shall be involuntarily divested of his right to the use of waters, his interest in lands, or improvements affecting either, except for a superior beneficial use or public purpose and then only with just compensation and operation of law." [*Emphasis added*]

The "*reservation*" and "*restrictive*" clause of Land Patent No. 6159 divest a homesteader of all rights and interest in the land or improvements which the homesteader may make thereon. The Land Patent No. 6159 proclaims that employees and agents of the State (*as well as attorneys*) have unlimited access to the land and the Real Estate of

the property owner for use of the State to explore and develop the mineral resources that may be found upon or under the land. There are no rights to be found when employees of the State of Alaska have laid claim of authority to destroy the land and take the "*Real Estate*" of the property owner without owner consent or compensation in the name of "*mining exploratory*" and the development of mines.

More problems are found in Article VIII, Section 18 (*Private Ways of Necessity*) of the Constitution for the State of Alaska which states:

"Proceeding in eminent domain may be undertaken for private ways of necessity to permit essential access for extraction or utilization of resources. Just compensation shall be made for property taken or for resultant damages to other property rights."

The "*reservation*" and "*restrictive*" clauses of Land Patent No. 6159 circumvents the Constitution for the State of Alaska by "*compelling*" a perspective homesteader to surrender constitutional protected rights for the right of ownership to lands of the State. The "*reservation*" and "*restrictive*" clauses of Land Patent No. 6159 are designed to circumvent the Constitution for the State of Alaska for they declare that the State is not required to use its "*eminent domain*" powers to access and use the lands and Real Estate of the property owner for private ways of necessity of extraction or utilization of resources of the State, nor pay compensation for property taken or for resultant damages to other property rights of the property owner. "***Where rights secured by the Constitution are involved, there can be no rule making or legislation which would abrogate them.***" (Miranda v. Arizona, 384 U.S. 436, 491).

Lawful Money Defined

The State of Alaska Land Patent No. 6159 of March 26th, 1982 declares that the City and Borough of Juneau paid "*Ten Dollars*" in "*Lawful Money*" of the United States to the State of Alaska as payment for the land of U.S. Survey 3873 ("*Pederson Hill*") is

statement that is not true. There has been no payments made to the State of Alaska for the transfer of "Title" of "Lands" of the State to the City and Borough of Juneau. There were no "Dollars" in "Lawful Money" of the United States in circulation during the year of 1982 and as there were no provisions in Federal Law that provides the City and Borough of Juneau (as a "Municipal Corporation" of a State) with a medium of exchange that "Pays" the "Debts" due to the State, there is no lawful transfer of "Title" of lands of the State of Alaska to the City and Borough of Juneau.

Notwithstanding the U.S. Court of Appeals, Ninth Circuit court ruling of Mobley M. Milam, Appellant, v. United States of America et al., Appellees, 524 F.2d 629 (1974), ³ it is not the place of a Federal Judge to define what constitutes "Lawful Money" for that authority is with the U.S. Congress. The U.S. Congress has defined "Lawful Money" to be "Coin Dollars" or "Currency Dollars" (e.g. "United States Notes") of the government of The United States of America as declared within several "Coinage Acts" over the past two hundred (200) years of our Nation. The last "Coin Dollar" to be issued was the "Susan B. Anthony Coin Dollar" that was minted from 1979 to 1981 and was pulled from circulation for being unpopular with the public. Congress tried again in the year of 1999 to mint the "Susan B. Anthony Coin Dollar" without much success. ⁴ The last "Currency Dollar" to be printed and circulate as "Lawful Money Dollars" of The United States of America was the "Series 1963 United States Note." This "Note" of the United States was identified with the words: "**UNITED STATES NOTE**" and "**THE UNITED STATES OF AMERICA {denomination value} DOLLARS**" with a "Red Seal" of the U.S. Treasury being displayed on its face.

³/ The Court cites the U.S. Supreme Court case of Juilliard v. Greenman, 110 U.S. 421, 448, 4 S. Ct. 122, 130, 28 L. Ed. 204 (1884) in support of its ruling. The Court erred in declaring that the lawful money authority of Juilliard v. Greenman was delegated to the Federal Reserve Bank under 31 USC 411. To the contrary; 31 USC 411 explicitly states that Federal Reserve Bank Notes are not "lawful money" of the government of The United States of America. (see infra.). The Court also cites 31 USC 392 (now codified as 31 USC 5103) which only declares that the "Notes" of the Federal Reserve Bank shall be "Legal Tender" for debts public and private, not "Lawful Money" of The United States of America.

⁴/ see Internet Hyperlink <http://tinyurl.com/zdvxc76>



This "Note" of the United States was issued by "Executive Order" of President John F. Kennedy. Upon Lyndon B. Johnson taking his "Oath of Office" on November 22, 1963 as President of the United States, President Johnson issued forth a "Presidential Executive Order" mandating the pulling of the "1963 Series United States Notes" from circulation. Please take notice that "Lawful Money" of the United States of America is "Legal Tender," but not all "Legal Tender" is "Lawful Money." From hard knocks of lawsuits, the "Banks" of our Nation no longer use the term "Lawful Money" within their Bank issued "Mortgages."

Under the "CLEARFIELD DOCTRINE" of Clearfield Trust Co. v. United States, 318 U.S. 363-371 (1942), the U.S. Supreme Court has declared that when governments operate under securities / federal reserve notes (USA) they devolve to corporate status operating under corporate policies. There is **NO IMMUNITY** for any individual or person who does business in commercial paper under the Erie and Clearfield Doctrine. [see F.R.C.P. Evidence 902 para. 9, but not limited to these laws]. The "Notes" of the Federal Reserve Bank are not "Lawful Money" of the United States:

12 U.S. Code § 411 - Issuance to reserve banks; nature of obligation; redemption

"Federal reserve notes, to be issued at the discretion of the Board of Governors of the Federal Reserve System for the purpose of making advances to Federal reserve banks through the Federal reserve agents as hereinafter set forth and for no other purpose, are authorized. The said notes shall be obligations of the United States and shall be receivable by all national and member banks and Federal reserve banks and for all taxes, customs, and other public dues. **They shall be redeemed in lawful money on demand** at the Treasury Department of the United States, in the city of Washington, District of Columbia, or at any Federal Reserve bank." [*Emphasis added*]

(Dec. 23, 1913, ch. 6, § 16 (par.), 38 Stat. 265; Jan. 30, 1934, ch. 6, § 2(b)(1), 48 Stat. 337; Aug. 23, 1935, ch. 614, title II, § 203(a), 49 Stat. 704.)

31 U.S. Code § 5103 - Legal Tender

"United States coins and currency (including Federal reserve notes and circulating notes of Federal reserve banks and national banks) are legal tender for all debts, ^{5/} public charges, taxes, and dues. Foreign gold or silver coins are not legal tender for debts." [*Emphasis added*]

(Pub. L. 97-258, Sept. 13, 1982, 96 Stat. 980; Pub. L. 97-452, § 1(19), Jan. 12, 1983, 96 Stat. 2477.)

^{5/} Please take notice that the U.S. Congress did not declare that "*Federal Reserve Notes*" and the Coins and Currency of the United States is a "*Legal Tender*" for "*payment*" of debts.

**31 U.S.C.A. § 463; [HJR 192 of June 5, 1933;
73d Congress. Sess I. Ch. 48], states in part**

"Every provision contained in or made with respect to any obligation which purports to give the obligee a right to require payment in gold or a particular kind of coin or currency, or in an amount in money of the United States measured thereby, is declared to be against **public policy**; and no such provision shall be contained in or made with respect to any obligation hereafter incurred. Every obligation, heretofore or hereafter incurred, whether or not any such provision is contained therein or made with respect thereto, shall be **discharged** upon payment, dollar for dollar, in any coin or currency which at the time of payment is legal tender for public and private debts." ¹⁶ [Emphasis added]

Notwithstanding the Court Cases of Chermack v. Bjornson, 302 Minn. 213, 223 N.W.2d 659, 660-61 (1974), *cert. denied*, 421 U.S. 915, 95 S.Ct. 1573, 43 L.Ed.2d 780 (1975); Accord Rush v. Casco Bank and Trust Co., 348 A.2d 237 (Me. 1975); Leitch v. State, Department of Revenue, 519 P.2d 1045 (Or. App. 1974); and Gordon W. Epperly, Appellant, v. State of Alaska, Appellee., 648 P.2d 609 (Ak. 1982) in which the Courts were not asked the proper question: "**By what authority does the U.S. Congress rely upon to grant the States of the Union authority to 'Discharge' their Debts in Bankruptcy?**" no State has made a payment on their "Debts" since the year of 1933.

One should take "Judicial Notice" that the governments of the States are governed by "Constitutions," not by "Public Policies" of the U.S. Congress. The "Public Policies" of the U.S. Congress are not "Public Laws" of our Nation and they apply only to "Agencies" and "Departments" of the government of the United States and those "citizens" which the U.S. Congress has jurisdiction over under the [purported] Fourteenth Amendment to the U.S. Constitution. As no State of the Union are "citizens" of the United States and as no authority may be found within any Federal or State Constitution that allows a State or its "Political Subdivisions" to "Discharge" their "Debts" in Bankruptcy, those "Debts" are

¹⁶ For full text of HJR 192, see Internet Hyperlink: <http://tinyurl.com/jq5w5t3>

required to "*Paid*" and the only medium of exchange that may pay the "*Debts*" of a State is a "*Coin*" of Gold or Silver (U.S. Const., Art. I, Sec. 10, Cl. 1). The "*Notes*" of the Federal Reserve Banks (*Commercial Paper*) only "*Discharge Debts*" to some period of time in the future for payment when those "*Notes*" are presented for and are redeemed in "*Lawful Money*" of the United States. (see HJR 192 of June 5, 1933 [73d Congress, Sess. I, Ch. 48]). **FEDERAL RESERVE "NOTES" ARE NOT "DOLLARS" NOR ARE THEY "UNITED STATES NOTES" OF THE U.S. DEPARTMENT OF TREASURY.**

Please take notice that the Federal Reserve Bank is a private bank ^{7/} in which its "*Notes*" are regulated by private law of the "Uniform Commercial Code [UCC]." ^{8/} The wording "***Pay to the Bearer on Demand***" the declared value of the "*Note*" which appears on the face of older "Federal Reserve Notes" may be found on the Internet at: <http://tinyurl.com/zdy3o6m>. Since the year of 1963, the Federal Reserve Bank no longer honors the '*Pay to the Bearer on Demand*' "***Dollars***" for its "*Notes*" but instead, the "Board of Governors" of the Federal Reserve Bank have taken upon themselves (*without authority of law*) to declare that their "Federal Reserve Notes" are now "*Dollars*." {*which usurpation of power and authority does not seem to bother the "Legislatures" of the States nor the "U.S. Congress"*}.

PLEASE TAKE NOTICE OF THE FOLLOWING:

1. That, Legal tender under the Uniform Commercial Code (U.C.C.), Section 1-201 (24) ^{9/} (Official Comment); "The referenced Official Comment notes that the definition of *money* is not limited to *legal tender* under the U.C.C. The test adopted is that of sanction of government, whether by authorization before issue

^{7/} see U.S. Court of Appeals case of "Lewis v. United States, 680 F.2d 1239 (1982)." In truth, "*Agents*" of a foreign Country known as "Vatican City State" holds the seats of the "Board of Governors" of the Federal Reserve Bank and as such, the "Papacy" of the Roman Catholic Church controls the economy of The United States of America and of the World.

^{8/} Did you know that the Uniform Commercial Code [UCC] is "*private law*" that was "*patented*" in the year of 1952? With permission of the "Patent Holders," the States of the Union have adopted the "UCC" as a law of their States. (See Internet Hyperlink: <http://tinyurl.com/hawzadj>).

^{9/} see Internet Hyperlink: <http://tinyurl.com/zmqzcup>

or adoption afterward, which recognizes the circulating medium is a part of the official currency of that government. The narrow view that money is limited to legal tender is rejected."

2. That, the Federal Reserve Bank in its booklet; MODERN MONEY MECHANICS /¹⁰ page 3, states; "In the United States neither paper currency nor deposits have as commodities, Intrinsically, a dollar bill is just a piece of paper, deposits merely book entries."
3. That the "giving a (federal reserve) note does not constitute payment." See Echart v. Commissioners C.C.A., 42 Fd2d 158.
4. That the use of a (federal reserve) 'Note' is only a promise to pay. See Fidelity Savings v. Grimes, 131 P2d 894.
5. That Legal Tender (federal reserve) Notes are not good and lawful money of the United States. See Rains v. State, 226 S.W. 189.
6. That (federal reserve) 'Notes do not operate as payment in the absence of an agreement that they shall constitute payment.' See Blackshear Mfg. Co. v. Harrell, 2 S.E.2d 766.
7. Also, Federal Reserve Notes are valueless. (See IRS Code Section 1.1001-1 (4657) C.C.H. /¹¹).
8. In light of the holding of Fidelity Bank Guarantee vs. Henwood, 307 U.S. 847 (1939), /¹² take notice of ... "As of October 27, 1977, legal tender for discharge of debt is no longer required. That is because legal tender is not in circulation at par with promises to pay credit. There can be no requirement of repayment in legal tender was not loaned [nor in circulation] and repayment [or payment] need only be made in equivalent kind; A negotiable instrument."
9. **UCC 3-603**; /¹³ "If tender of payment of an obligation to pay an instrument is made to a person entitled to enforce the instrument and the tender is refused, there is discharge, to the extent of the amount of the tender ..." and:

^{10/} A PDF copy of booklet "*MODERN MONEY MECHANICS*" may be downloaded from the Internet at: <http://tinyurl.com/25pekI>

^{11/} see PDF Document of IRS Code Section 1.1001-1 at: <http://tinyurl.com/h5scm8r>

^{12/} see Internet Hyperlink: <http://tinyurl.com/zz3t8et>

^{13/} see Internet Hyperlink: <http://tinyurl.com/jbtkrnm>

10. **ORS 81.010**; ¹⁴ "Effect of unaccepted offer in writing to pay or deliver. An offer in writing to pay a particular sum of money or to deliver a written instrument or specific personal property is, if not accepted, equivalent to the actual production and tender of the money, instrument or property." (The latter here operates via the rule of Para Materia in all other States.)

I realize that most of you that read this written "*Testimony*" will be saying to yourselves that "Payment vs. Discharge" and "Legal Tender vs. Lawful Money" are frivolous arguments that may be swept under the rug. Don't fool yourselves. The monetary laws of our Nation are not frivolous.

The State of Alaska Land Patent No. 6159 is a defective document conferring no rights of "Title" to any lands described therein. The City and Borough of Juneau (CBJ) has no lawful "Title" of ownership to land described as USS Survey 3873 (Pederson Hill).

Nexus

The nexus that exist between Gordon Warren Epperly and the "State of Alaska Land Patent No. 6159" is his wife's ownership of "*land*" and "*Real Estate*" that borders the land of U.S. Survey 3873. This land of the Epperly's is "Federal Patented" land that is described as follows:

"Lot 6 of the Mendenhall Peninsula Small Tract unit No. 2 of the land embraced in U.S. Survey 3260, situated about 11 miles northwest of Juneau, Alaska."

The issuance of "Title" to this land is founded upon Federal Land Patent No. 1185194 as issued to "Elizabeth Kristina Warwick" on July 31st, 1958 in the District of Columbia in the year of Independence of the United States the One Hundred and Eighty-Third. The Patent claimant, "Elizabeth Kristina Warwick" is the grandmother of my wife whose

^{14/} see Internet Hyperlink: <http://tinyurl.com/hbbsgag>

maiden name is "Esther Katherine Madsen." My wife, "Esther Katherine Epperly" (Madsen) is the heir and assignee of "Federal Land Patent No. 1185194" and is the holder of the "Title" to the above described land.

Notwithstanding that the City and Borough of Juneau has, and is, obstructing the granting of "Rights" of the above described "Federal Land Patent," the provisions of the Alaska Statehood Act, and the Constitution for the State of Alaska in preventing the Epperly's to the "full use and enjoyment of the land" by regulating the land with "Zoning Ordinances" and assessment of "ad valorem taxes" upon the land. The Epperly's are not "Tenants" on the land to which "ad valorem taxes" may lawfully be assessed, for they are "owners" Federal Patented land that has immunity from such taxes. /¹⁵

Nevertheless, the Epperly's have paid "ad valorem taxes" over the years in support of services which the City and Borough Juneau has provided to their land and Real Estate. As an unspecified amount of "ad valorem taxes" of the Epperly's are being used to finance the development of U.S. Survey 3873 (Pederson Hill) property, said expenditure of "ad valorem tax" revenue of the City and Borough of Juneau upon land which it does not own is "Nexus" for the Epperly's to file this "Objection" with the State of Alaska and with the City and Borough of Juneau.

The fact that the State of Alaska has made it clear within its Land Patent No. 6159 that it is the desire of the State to develop the land for mining use, an activity which may be detrimental to the Federal Patented land of the Epperly's and the fact that the City and Borough of Juneau is using "monies" of "ad valorem taxes" as assessed upon the land of the Epperly's to fund a development of lands to which it does not own for want of having a lawful "Title" to the land in its possession is the "Nexus" that authorizes

^{15/} This immunity comes from the fact that a taxpayer failure to pay an "ad valorem tax" results in the taking of his land by the government. This taking of land for such taxes is a deprivation of the "full use and enjoyment of the land" that is guaranteed to the holder of a "Federal Land Patent" in the State of Alaska as it violates the "full use and enjoyment of the land" guarantee clause of Section 6(a) & 6(b) of the Alaska Statehood Act [Pub. L. 85-508, 72 Stat. 339] and which in turn violates the "consent" clause of Article XII, Section 13 (Consent to Act of Admission) to the Constitution for the State of Alaska.

the Epperly's to make "*Objections*" to any sale of land of U.S. Survey 3873 or any further expenditure of moneys on what is identified as the development of a Twenty (20) Acre Subdivision of "Pederson Hill."

Conclusion

The "Director" for the Division of Technical Services of the Department of Natural Resources for the State of Alaska did issue forth a "Land Patent" in the name of the State of Alaska to a "Municipal Corporation" known as the City and Borough of Juneau. This "Land Patent" describes several parcels of lands of the State of Alaska that was "sold" under the mandate of Article VIII, Section 9 (Sales and Grants) of the Constitution for the State of Alaska:

"Subject to the provisions of this section, the legislature may provide for the sale or grant of state lands, or interest therein, and establish sales procedures. All sales or grants shall contain such reservations to the State of all resources as may be required by Congress or the State and shall provide for access to these resources. Reservations of access shall not impair the owners' use, prevent the control of trespass, or preclude compensation for damages."

The "*restrictions*" and "*reservations*" that were drafted for the State of Alaska "Land Patent No. 6159" appears to have been written without the "*Staff*" of the Division of Technical Services of the Department of Natural Resources for the State of Alaska conferring to the "*limitations of power*" clauses of the "Constitution" for the State of Alaska. The "*restrictions*" and "*reservations*" are written overly broadly and they do impair the "*Rights*" of a Property Owner to the use of the land and prevents the Property Owner from establishing controls of trespass. The "*restrictions*" and "*reservations*" clauses as written makes it clear that the "*Rights*" of the Property Owner as found within many provisions of the Alaska State Constitution have been "*circumvented*" including the "*Right*" to be compensated for any damages that the State or its "*Agents*" and "*Employees*" may do to the land and Real Estate of the Property Owner or the "*Rights*" of the Property Owner to be secured in his "*Dwelling*"

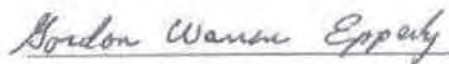
or his "Rights of Privacy." As Land Patent No. 6159 does not conform to many "Sections" of the Alaska State Constitution, the "Land Patent" is a "*defective instrument*" that is without authority to transfer any "Title" of lands of the State of Alaska into the hands of any "Grantee."

In regard to Article VIII, Section 9 of the Constitution for the State of Alaska the following request is made of the "Commissioner" for the State of Alaska, Department of Natural Resources:

1. Please provide a true and correct copy of the "*Directive*" / "*Law*" of the Alaska State Legislature that authorizes the sale and the procedure of the sale of lands that are described within Alaska Land Patent No. 6159.
2. Please provide the legal description of the "*right-of-ways*" that are to be used to access resources of the State on the lands as described within Alaska Land Patent No. 6159.
3. Correct the identified "*defects*" of Alaska Land Patent No. 6159 so that the Land Patent will be in conformity with all provisions of the Alaska State Constitution.
4. Provide the people of the City and Borough of Juneau with lawful "Titles" to lands sold under "State Land Patents" showing that all perspective property owners have "*natural rights*" to the land as identified within the Alaska State Constitution.

A demand is place upon the "Staff" of the City and Borough of Juneau to cease and desist in expending funds of the City and Borough of Juneau (CBJ) for the development of U.S. Survey 3873 (Pederson Hill) until such time the "Commissioner" of the State of Alaska, Department of Natural Resources provides the CBJ with a lawful "Title" and "Land Patent" for said described lands.

Respectfully Submitted



Gordon Warren Epperly

Exhibit "A"

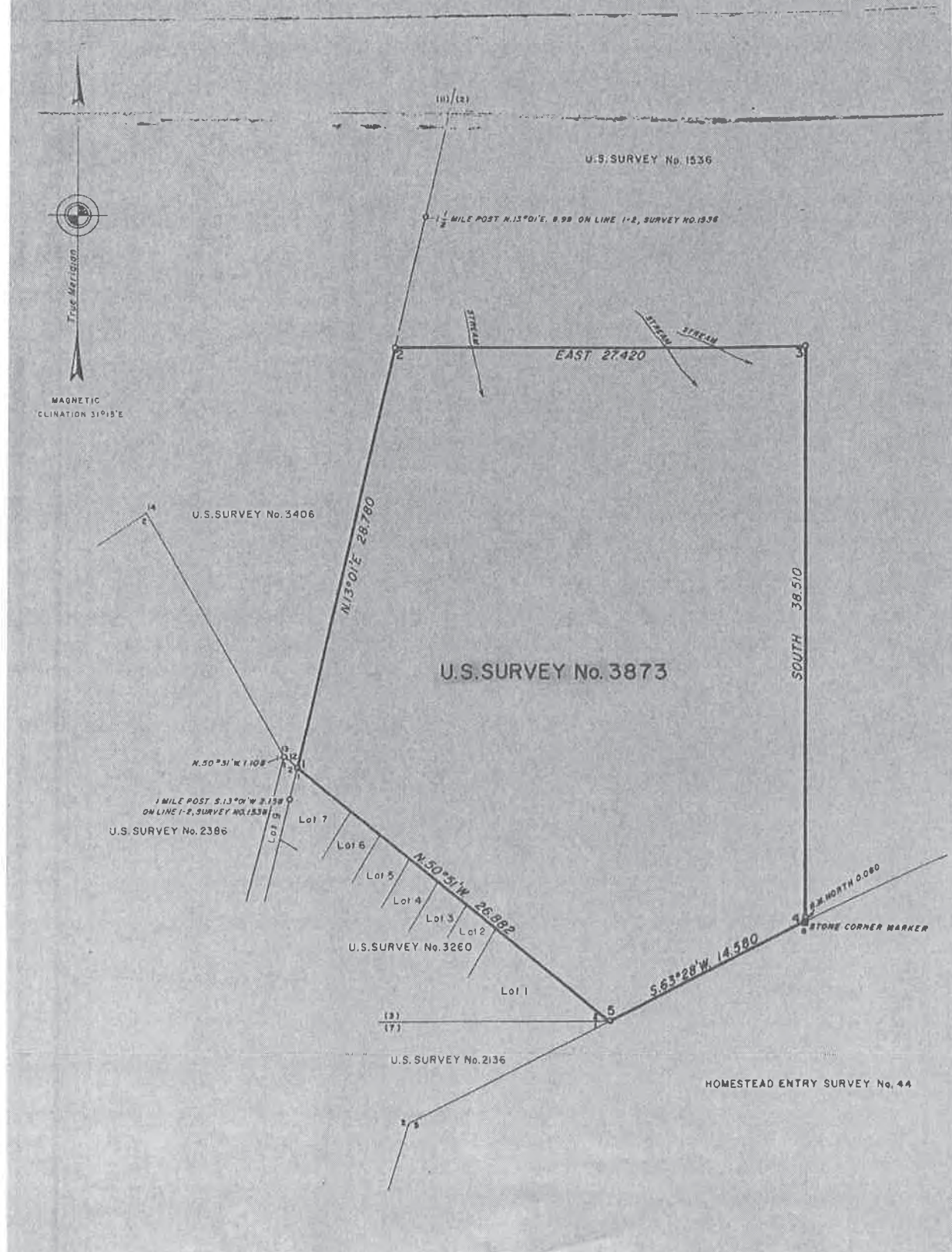
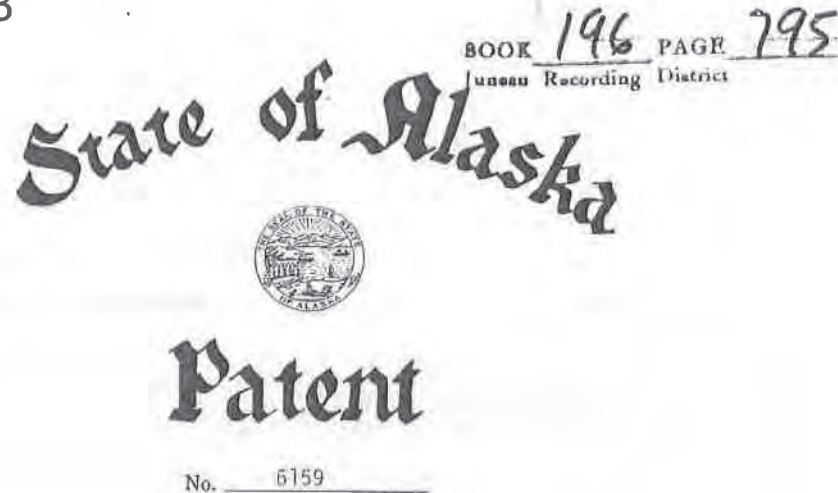


Exhibit "B"



Know All Men By These Presents that the State of Alaska, in consideration of the sum of TEN AND NO/100----- DOLLARS lawful money of the United States, and other good and valuable considerations, now paid, the receipt whereof is hereby acknowledged, does hereby grant to _____

CITY AND BOROUGH OF JUNEAU

155 South Seward Street, Juneau, Alaska 99801 and to its successors and assigns, all that real property situated in the Borough of City and Borough of Juneau, State of Alaska, and described as follows:

U.S. SURVEY NO. 3266, ALASKA

LOT 29, containing 3.20 acres. Excluding the Glacier Highway Right-of-Way (Airport Road to Tee Harbor) Alaska Project No. F-095-4. Subject to Right-of-Way ACS Cable Pole and Land Lease ADL 39218.

LOT 28, containing 3.82 acres. Subject to Right-of-Way ACS Cable Pole and Land Lease ADL 39218.

ACCORDING TO U.S. SURVEY NO. 3266, ALASKA, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON JUNE 22, 1954.

U.S. SURVEY NO. 2389, ALASKA

LOT A-1, containing 2.41 acres. Excluding the Glacier Highway Right-of-Way (Airport Road to Tee Harbor) Alaska Project No. F-095-4.

ACCORDING TO THE SUPPLEMENTAL PLAT OF U.S. SURVEY NO. 2389, ALASKA, SHOWING LOT A-1, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON MARCH 15, 1961.

U.S. SURVEY NO. 3274, ALASKA

LOT 54, containing 0.70 acres. Excluding the Glacier Highway Right-of-Way (Airport Road to Tee Harbor) Alaska Project No. F-095-4.

ACCORDING TO U.S. SURVEY NO. 3274, ALASKA AND DEPENDENT RESURVEYS OF LINE 6-7, U.S. SURVEY NO. 2386 AND LINE 1-2, U.S. SURVEY NO. 2741, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON MAY 4, 1954.

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U.S. SURVEY NO. 3261, ALASKA

LOT 66, containing 0.48 acres. Excluding the Fritz Cove Road Right-of-Way (Alaska Project No. S-0970(2), Parcel No. 19, Right-of-Way Permit ADL 21897).

Subject to a maximum 50 foot wide easement pursuant to A.S. 38.05.127(a)(2) for access from the Fritz Cove Road Right-of-Way to the line of mean high water of Auke Bay.

LOT 45, containing 0.67 acres.
Subject to Right-of-Way Permit BLM Serial No. A-021881-A (J-010086).
Subject to Right-of-Way Permit ADL 25335.

ACCORDING TO U.S. SURVEY NO. 3261, ALASKA, AND DEPENDENT RESURVEYS OF PORTIONS OF ADJOINING U.S. SURVEYS NOS. 2112, 2281 AND 2546 ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON APRIL 21, 1954.

U.S. SURVEY NO. 2390

RIGHT-OF-WAY LOT, containing 0.79 acres. Excluding the Fritz Cove Road Right-of-Way Alaska Project No. S-0970(2).

ACCORDING TO THE PLAT OF U.S. SURVEY NO. 2390 OF THE FRITZ COVE GROUP OF HOMESITES, TRACTS A AND B, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE IN WASHINGTON, D.C., ON MARCH 4, 1940.

U.S. SURVEY NO. 3814, ALASKA

LOT 1, containing 1.15 acres. Excluding the Mendenhall Peninsula Road.

Subject to a maximum 50 foot wide easement pursuant to A.S. 38.05.127(a)(2) for access from the Mendenhall Peninsula Road Right-of-Way to the Mendenhall Wetlands State Game Refuge Boundary Line.

Subject to a reservation for the Mendenhall Wetlands State Game Refuge pursuant to A.S. 16.20.034.

The reservation for access along public and navigable waters is waived along Gastineau Channel.

ACCORDING TO U.S. SURVEY NO. 3814, ALASKA, EMBRACING LOTS 1 AND 2, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON FEBRUARY 23, 1961.

U.S. SURVEY NO. 3873, ALASKA

Containing 121.56 acres.
Subject to Water Right Permit Nos. ADL 43542, ADL 79918 and ADL 79284.
Subject to ADL 79285, ADL 79962 and ADL 101705.

ACCORDING TO U.S. SURVEY NO. 3873, ALASKA, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON SEPTEMBER 12, 1963.

U.S. SURVEY NO. 3054, ALASKA

LOT 18A, containing 0.73 acres.
Subject to Right-of-Way ACS Cable Pole.

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Subject to a maximum 50 foot wide easement pursuant to A.S. 38.05.127(a)(2) for access from the Point Lena Loop Road Right-of-Way to the line of mean high water of Auke Bay.

LOT 25A, containing 0.32 acres.

Subject to a maximum 50 foot wide easement pursuant to A.S. 38.05.127(a)(2) for access from the Glacier Highway Right-of-Way to the line of mean high water of Auke Bay.

ACCORDING TO U.S. SURVEY NO. 3054, ALASKA, LENA POINT NO. 2, SMALL TRACT GROUP EMBRACING LOTS 16 TO 34 INCLUSIVE, AND LOTS 18A AND 25A, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON NOVEMBER 6, 1951.

U.S. SURVEY NO. 2392, ALASKA

LOT DD OF TRACT A, containing 4.97 acres.

ACCORDING TO U.S. SURVEY NO. 2392, ALASKA, AUKE LAKE GROUP OF HOMESITES, TRACT A, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE IN WASHINGTON, D.C., ON MARCH 20, 1940.

U.S. SURVEY NO. 3055, ALASKA

LOT 3A, containing 0.14 acres.

ACCORDING TO U.S. SURVEY NO. 3055, ALASKA, LENA COVE NO. 1, SMALL TRACT GROUP EMBRACING LOTS 1 TO 22 INCLUSIVE, AND LOTS 3A, 10A, 16A, AND 21A, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON AUGUST 8, 1952.

Subject to a maximum 50 foot wide easement pursuant to A.S. 38.05.127(a)(2) for access from the Point Lena Loop Road Right-of-Way to the line of mean high water of Lena Cove.

U.S. SURVEY NO. 3051, ALASKA

LOT 10A, containing 0.15 acres.

ACCORDING TO U.S. SURVEY NO. 3051, ALASKA, POINT LOUISA SMALL TRACT GROUP EMBRACING LOTS 1 TO 10 INCLUSIVE, AND LOTS 10A, 10B AND 10C, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON NOVEMBER 6, 1951.

U.S. SURVEY NO. 3260, ALASKA

LOT 9, containing 0.91 acres.

LOT 11, containing 0.95 acres.

ACCORDING TO U.S. SURVEY NO. 3260, ALASKA, MENDENHALL PENINSULA SMALL TRACT UNIT NO. 2, LOTS 1 TO 39 INCLUSIVE, ACCEPTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT IN WASHINGTON, D.C., ON MARCH 26, 1954.

CONTAINING AN AGGREGATE OF 142.95 ACRES, MORE OR LESS.

Subject to valid existing trails, roads and easements.

The Grantee may manage all easements pursuant to A.S. 38.05.127(a)(2) stated above, including but not limited to authorizing the placement of improvements within the easements, the expansion, relocation or reduction of the easement widths stated above to not less than 10

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feet, or other modification of the easements as long as the purpose of the easements is not substantially impaired and the need of the public for the easements is met.

Net chargeable acreage under A.S. 29.18.201 is 142.00 acres.

82-003639

FILED
JUL 9 1982
JUL 9 8 36 AM '82
REQUESTED BY JC+B

ADDRESS _____

Township 40 SOUTH, Range 65 EAST, COPPER RIVER Meridian.

Alaska, according to the official survey thereof numbered USS 2392, USS 3055, USS 3051, USS 3260, USS 3054, USS 3266, USS 2389, USS 3274, [USS 3873] USS 3261, USS 2390, USS 3814
Save And Except those restrictions appearing in the Federal Patent or other conveyance by which the Grantor acquired title.

And Further, Alaska, as Grantor, hereby expressly saves, excepts and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, all oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every name, kind or description, and which may be in or upon said lands above described; or any part thereof; and the right to explore the same for such oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils, and it also hereby expressly saves and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right to enter by itself, its or their agents, attorneys, and servants upon said lands, or any part or parts thereof, at any and all times for the purpose of opening, developing, drilling, and working mines or wells on these or other lands and taking out and removing therefrom all such oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils, and to that end it further expressly reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right by its or their agents, servants and attorneys at any and all times to erect, construct, maintain, and use all such buildings, machinery, roads, pipelines, powerlines, and railroads, sink such shafts, drill such wells, remove such soil, and to remain on said lands or any part thereof for the foregoing purposes and to occupy as much of said lands as may be necessary or convenient for such purposes hereby expressly reserving to itself, its lessees, successors, and assigns, as aforesaid, generally all rights and power in, to, and over said land, whether herein expressed or not, reasonably necessary or convenient to render beneficial and efficient the complete enjoyment of the property and rights hereby expressly reserved.

To Have And To Hold the said land, together with the tenements, hereditaments, and appurtenances thereunto appertaining, unto the said Grantee and its successors and assigns forever.

In Testimony Whereof the State of Alaska has caused these presents to be executed by the Director of the Division of Technical Services, Department of Natural Resources, State of Alaska, pursuant to delegated authority, this 26th day of March, A.D. 1982.

Warner T. May
For Director, Division of Technical Services

State of Alaska)
) ss
THIRD Judicial District)

This Is To Certify that on the 26th day of March, 1982, appeared before me
Warner T. May

who is known to me to be the Director of the Division of Technical Services, Department of Natural Resources, State of Alaska, or the person who has been lawfully delegated the authority of said Director to execute the foregoing document; that he executed said document under such legal authority and with knowledge of its contents; and that such act was performed freely and voluntarily upon the premises and for the purposes stated therein



Notary Public in and for Alaska
My Commission expires July 29, 1984

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2/11/17

City & Borough of Juneau
Community Development Dept.
155 S. Seward St.
Juneau, AK. 99801

Attn: Eric Feldt, et. all

RE: Phase 1, 2 & 3 Pederson Hill Sub.

Gentlemen,

I wish to go on record as objecting to this proposed subdivision on Pederson Hill. See following reasons listed below.

1. By flooding the market you will make it difficult for property owners who wish to sell. As you know Juneau's property have been inflated for years & with cheaper land & homes available no one will be able to recoup the difference between what they paid & what they can sell their house & lot for.
2. You appear to be competing with private land developers. The C/B/J should not be involved in land development. Sell the land to the private sector as undeveloped.
2. Has anyone made a study on the amount of water & run off Pederson Hill soaks up with its natural ground cover & trees? I think you would be surprised by the answer.
3. Have you considered that Pederson Hill is a major wildlife corridor & habitat. The number of deer, bear, porcupines, mink, weasels, fox, cyotes, wolves, & birds that live on Pederson Hill is amazing. Where are they going to go?
3. The tiny lots do not appear to big enough for a house & parking for 2 cars. Most families have 2 cars & a child or children. You said at the meeting at the Library that there would be no "on" street parking. This is a problem.
5. The entry and exit to the Pederson Hill Subdivision will be hazardous. Having any where from 86 to 150 plus cars coming & going with out a proper Glacier Highway/Subdivision intersection with a stop light (ON A HILL) is dangerous. RETHINK THIS!
6. I appreciate the horse trail but strongly object to it being obviously attached to Swampy Acres. We do not need people using our land for public use. As you are aware the families in the subdivision will be using the horse trail for bikés, hiking & walking their many dogs. We do not need them using our property for a short cut. PLEASE REROUTE THE HORSE TRAIL TO ALONG SIDE THE ROAD WHICH ENTERS FROM GLACIER HWY. (see photo)

Please consider my observations. I have lived in Juneau all my life & was born here. I do not think you are doing anyone any favors wasting money on this Pederson Hill Project.

Sincerely, 
Esther K. Epperly, Box 34358, Juneau, AK. 99803
10440 Glacier Highway/Swampy Acres

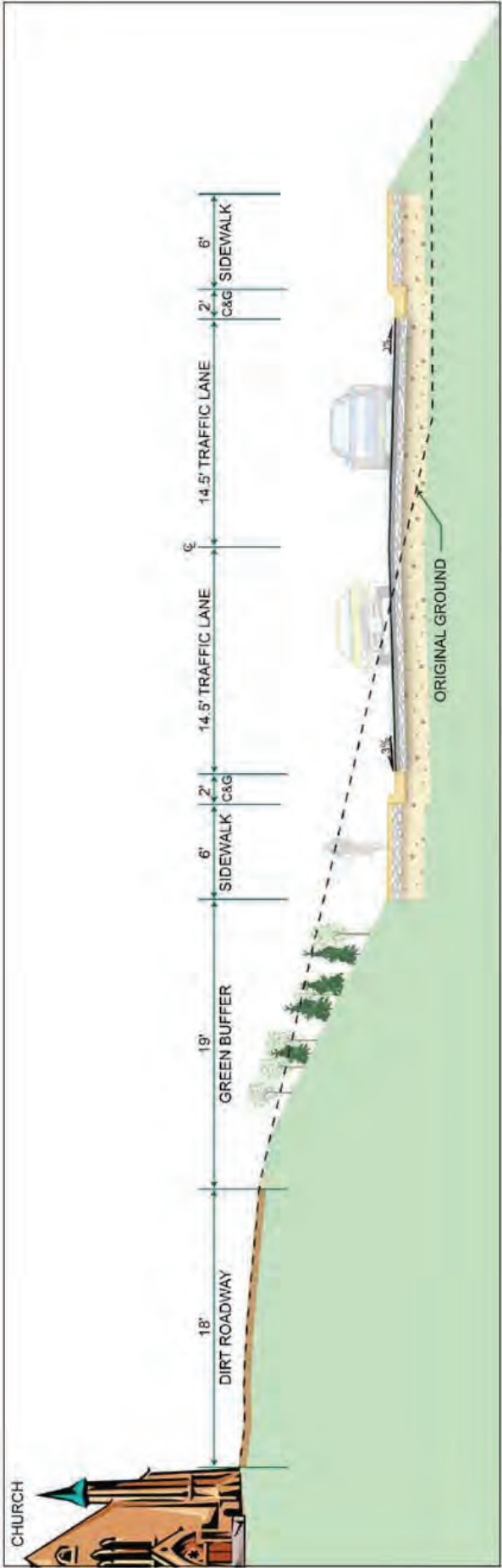
Ph#789-5659

2/29/17 Moon Belt 100 feet wide road along existing lots 155 3260

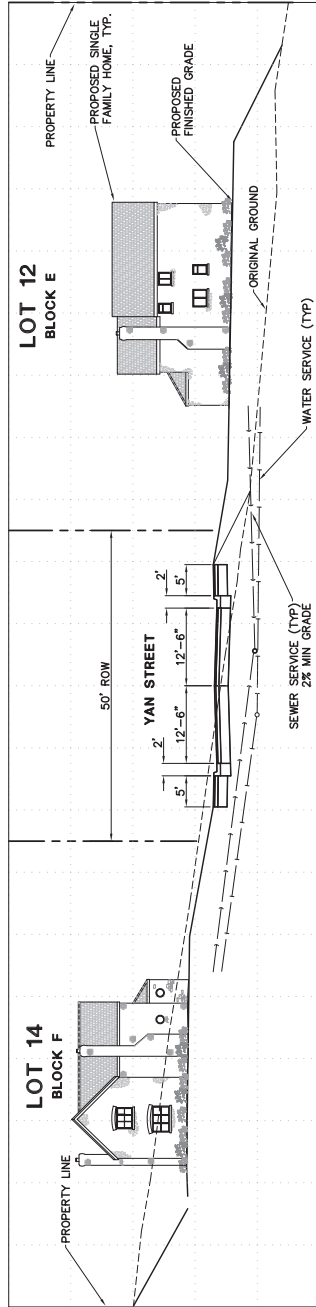


Conceptual Profile

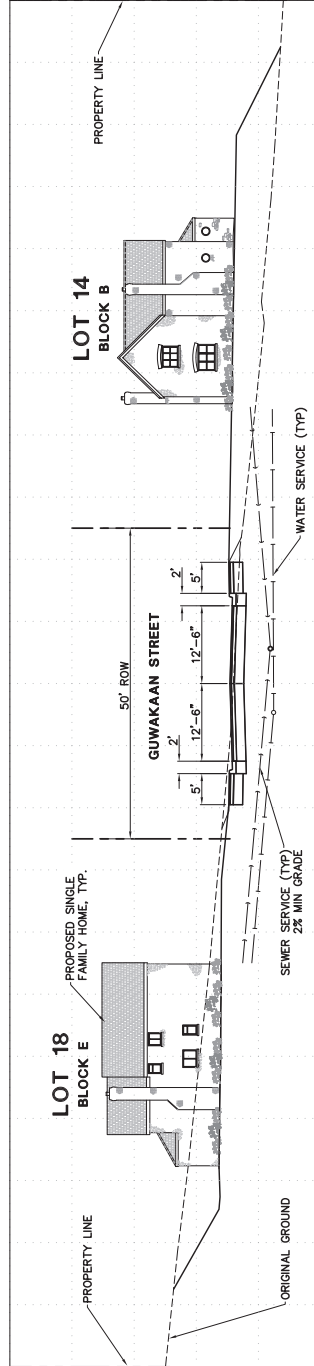
Karl Reishus Boulevard



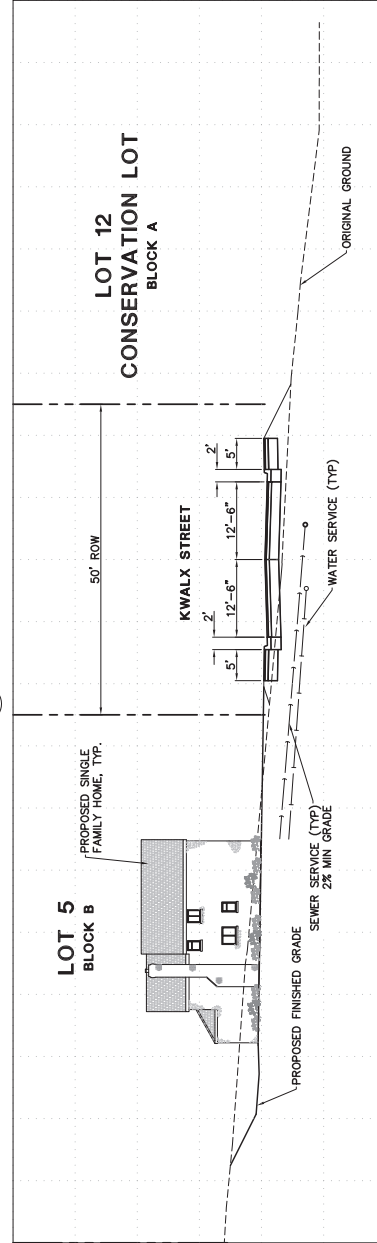
SECTION A - ROAD BELOW CHURCH



D CROSS SECTION
1" = 10'



D CROSS SECTION - CONTINUED
1" = 10'



D CROSS SECTION - CONTINUED
1" = 10'



SHEET NO.
2 of 2

PEDERSON HILL
CROSS SECTION

PEDERSON HILL

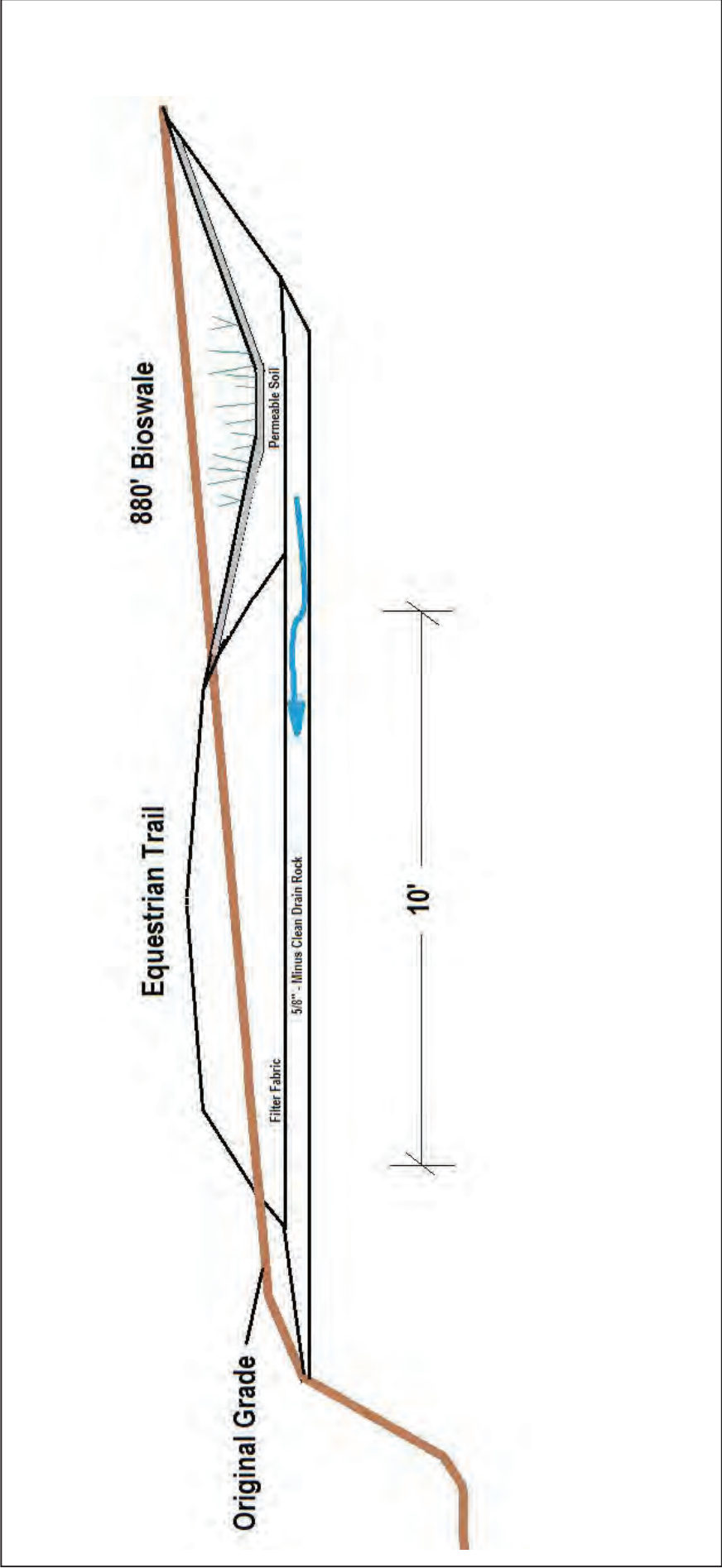


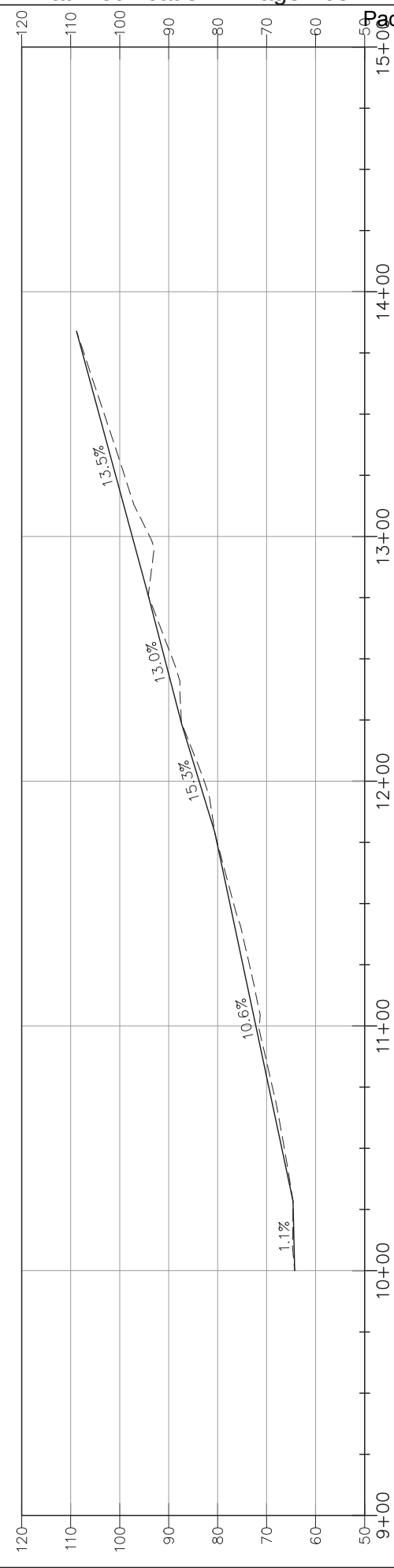
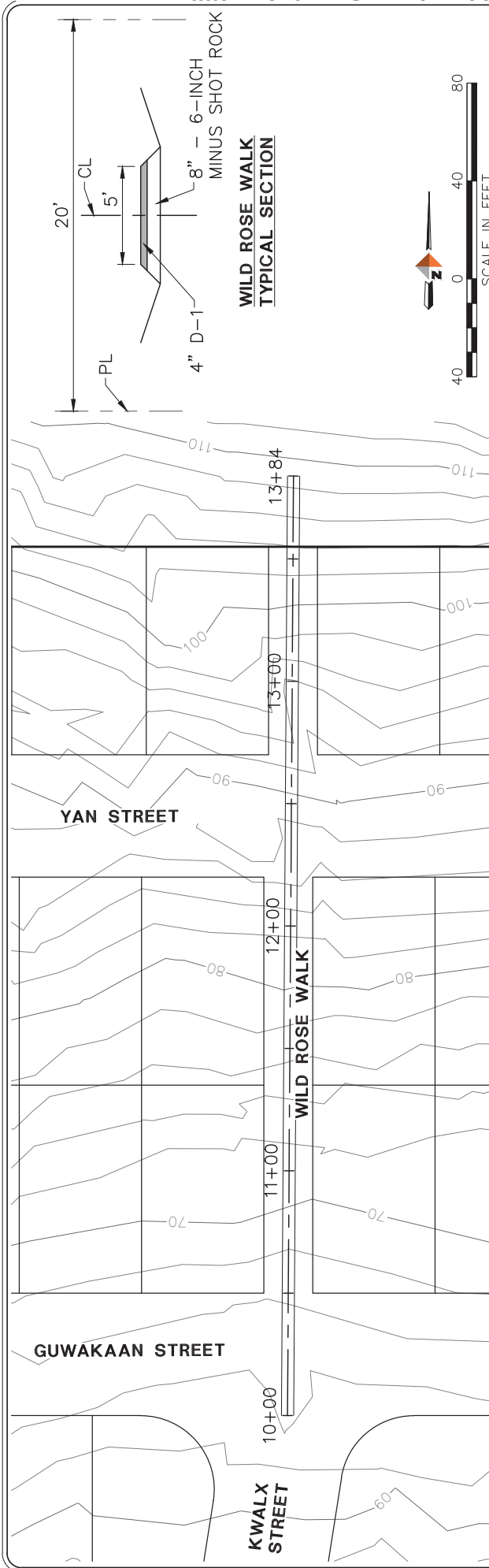
5368 Commercial Bld.
Juneau, Alaska 99801
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Consulting Engineers • Land Surveyors • Construction Administration
JOB NO. J10487 DRAWN BY: STAFF DESIGNED BY: H. WOODS CHECKED BY: STAFF DATE: JAN. 2016



Profile View of Equestrian Trail (Preliminary)
Provided by Applicant





	 DOWL Consulting Engineers • Land Surveyors • Construction Administration	 CITY OF JUNEAU ALASKA'S CAPITAL CITY	PEDERSON HILL	PEDERSON HILL SUBDIVISION WILD ROSE WALK	SHEET NO. 1 of 1
	5368 Commercial Blvd. Juneau, Alaska 99801 (907) 780-3533 Office (907) 780-3535 Fax	Construction Administration No. CE9553	DESIGNED BY: N. HOBBS CHECKED BY: STAFF DATE: OCT. 2018		





November 21, 2016
W.O. #70687.01

Mr. Nathan Coffee
Project Manager
City & Borough of Juneau
155 South Seward Street
Juneau, AK 99801

Subject: Pederson Hill Subdivision – Drainage Plan Memo

Dear Mr. Coffee:

The intent of this memorandum is to present the findings of the pre- and post-development drainage conditions for the Pederson Hill Subdivision draft drainage plan. The following assumptions were made for evaluation of the drainage plan:

- All existing drainage north of the development area will be captured and conveyed through the development area via culverts to private wetlands, maintaining existing drainage patterns; off-site drainage is thereby not accounted for in drainage calculations for development area.
- All drainage from the development area will drain to a proposed bioswale adjacent to the equestrian trail and discharge to City and Borough of Juneau (CBJ)-owned lands; drainage from the development area will not contribute to stormwater discharged to private wetlands.

Condition 1: Drainage to Glacier Highway

In pre-development conditions, the drainage basin flowing to the Glacier Highway cross culvert, southeast of Sherwood Lane, is approximately 32 acres in size and encompasses a densely forested area. In post-development conditions, the drainage basin is reduced to approximately 12 acres and only includes the drainage area south of the development, including the paved access road to the development. Runoff from the pre-development basin north of the development will be collected uphill of the development and conveyed via culverts through the development to the private wetlands. Runoff from the pre-development basin within the development area will be captured through the proposed storm drain system and directed to the bioswale along the equestrian trail. Since the contributing drainage area to the Glacier Highway cross culvert is reduced, the post-development peak flows will decrease; the existing drainage infrastructure downstream of the development is not expected to be detrimentally affected.

Recurrence Interval	Pre-Development Runoff (cfs)	Post-Development Runoff (cfs)
2-Year	1.40	0.64
5-Year	2.83	1.37
10-Year	4.20	2.04
25-Year	6.40	3.10
50-Year	8.30	4.02
100-Year	10.40	5.04

Condition 2: Drainage to Private Wetlands

The pre-development drainage basin delineated for the private wetlands is approximately 107 acres of densely forested area. Runoff from the pre-development basin north of the development access road will be collected uphill of

Mr. Nathan Coffee
 CBJ
 Nov. 2016
 Page 2

the development and conveyed via culverts through the development to the private wetlands. Since the runoff from the development will be collected through the storm drain system and directed to the proposed bioswale, only the runoff from the existing forested area north of the development is assumed to drain to the private wetlands. Therefore, the post-development drainage basin is reduced to approximately 74 acres in size, and peak flows discharging to the private wetlands decrease accordingly.

Recurrence Interval	Pre-Development Runoff (cfs)	Post-Development Runoff (cfs)
2-Year	3.96	2.67
5-Year	8.05	5.61
10-Year	12.17	8.75
25-Year	18.89	13.90
50-Year	24.75	18.45
100-Year	31.31	23.51

Condition 3: Drainage to Bioswale

Development runoff will be collected in the proposed storm drain system and directed to the bioswale parallel to the equestrian trail. The bioswale will discharge to CBJ-owned wetlands. The bioswale will be designed to accommodate the 2-year, 6-hour design storm for water quality and the 25-year peak flow for conveyance. Flow reduction features will be incorporated into the final storm drainage design to mitigate the potential for erosion of the bioswale at outfalls from the subsurface drainage system.

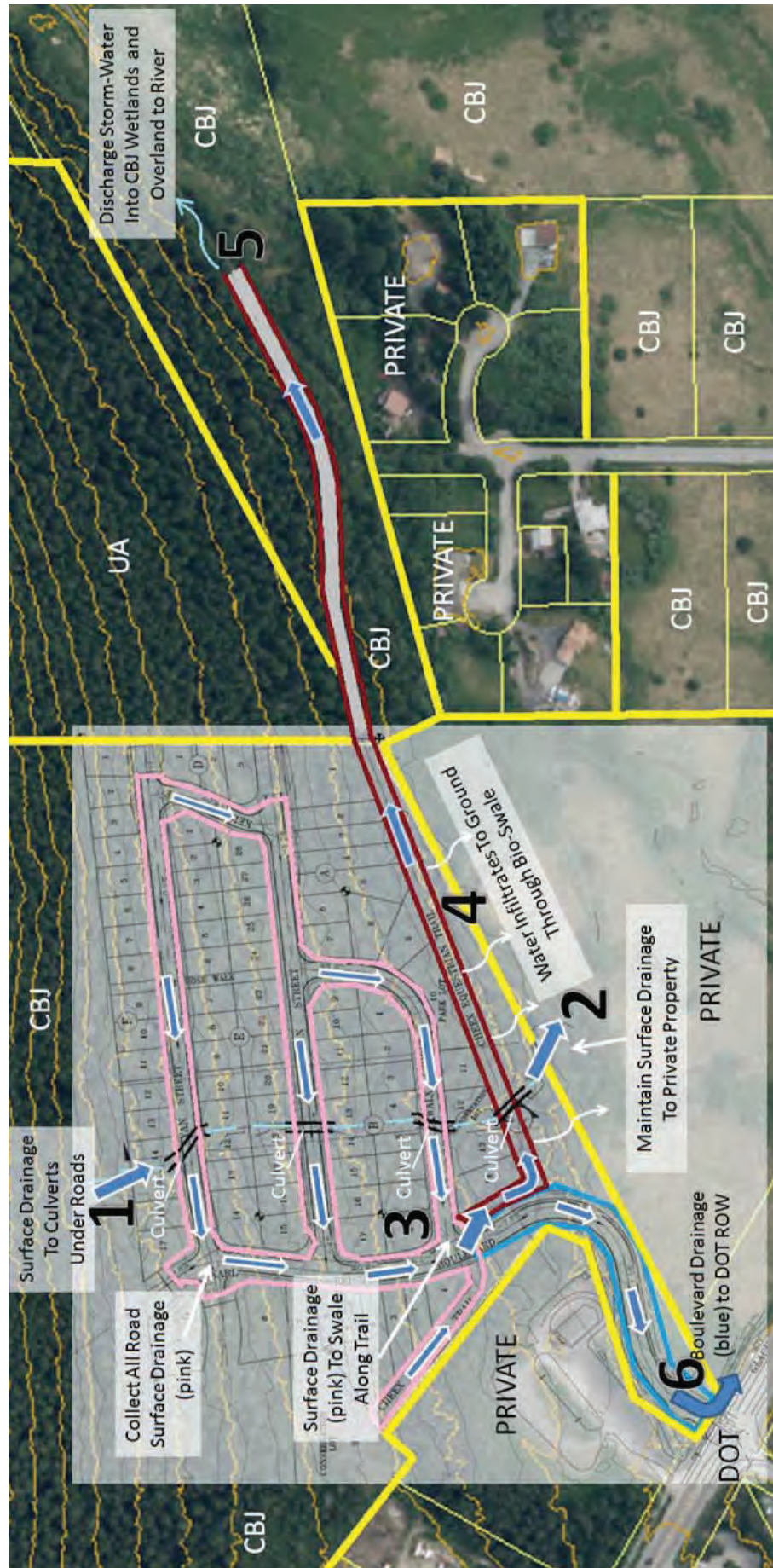
Recurrence Interval	Pre-Development Runoff (cfs)	Post-Development Runoff (cfs)
2-Year, 6-Hour	0	2.72
2-Year	0	10.86
5-Year	0	14.27
10-Year	0	17.03
25-Year	0	20.94
50-Year	0	24.00
100-Year	0	27.25

Sincerely,
 DOWL



Naomi Hobbs, P.E.
 Transportation Engineering Manager

PEDERSON HILL SUBDIVISION STORM DRAINAGE PLAN

[illegible]

PEDERSON HILL SUBDIVISION STORM DRAINAGE PLAN

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THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Transportation and Public Facilities

SOUTHCOST REGION

6860 Glacier Highway
PO Box 112506
Juneau, Alaska 99801-2506
Main: (907) 465-4444
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January 17, 2017

CBJ Planning Commission

Re: Pederson Hill Subdivision Proposed Development
Preliminary Plat Review

To Whom It May Concern,

The Alaska Department of Transportation and Public Facilities (DOT&PF), Southcoast Region has reviewed the Traffic Impact Analysis and preliminary Drainage Plan concerning the proposed City and Borough of Juneau's (CBJ) Pederson Hill Subdivision.

DOT&PF has no objection to the proposed development and new intersection at Karl Reishus Boulevard and Glacier Highway, as it pertains to DOT&PF interests. We will continue to coordinate with CBJ during design to ensure the intersection and development will be designed to DOT&PF standards and will not compromise safety of our highway. We understand that as this subdivision proceeds through the CBJ Major Subdivision process, a detailed drainage plan and approach road design meeting our specifications will be provided. With that said, we accept the current documents for the Preliminary Plat step of the Pederson hill Subdivision.

If you have any questions regarding DOT&PF's review, please feel free to contact DOT&PF's review coordinator, Emily Haynes, at (907) 465-2838 or emily.haynes@alaska.gov.

Regards,

A handwritten signature in cursive script, appearing to read "Mike Coffey".

Michael J. Coffey, Director
Southcoast Region
Department of Transportation & Public Facilities

FINAL
PEDERSON HILL SUBDIVISION
TRAFFIC IMPACT ANALYSIS
ANCHORAGE, ALASKA

Prepared for:

Skye Stekoll, City & Borough of Juneau
Juneau, Alaska

Prepared by:

DOWL
4041 B Street
Anchorage, Alaska 99503
(907) 562-2000



W.O. 70687
December 2016

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1.0 INTRODUCTION AND SUMMARY

This study evaluates the transportation impacts for the proposed Pederson Hill Subdivision (with 86 single-family homes) located north of the Glacier Highway intersection with Sherwood Lane in Juneau, Alaska (see Figure 1).

The purpose of this transportation impact analysis (TIA) is to identify whether the proposed residential development would result in transportation impacts on the nearby transportation network and require mitigation measures to offset the impacts. The focus of the TIA is on the study intersection shown in Figure 1. Typically, Glacier Highway is locally referred to as travelling northbound and southbound, but at this location and for the purpose of this report, Glacier Highway will be described as westbound and eastbound travel.

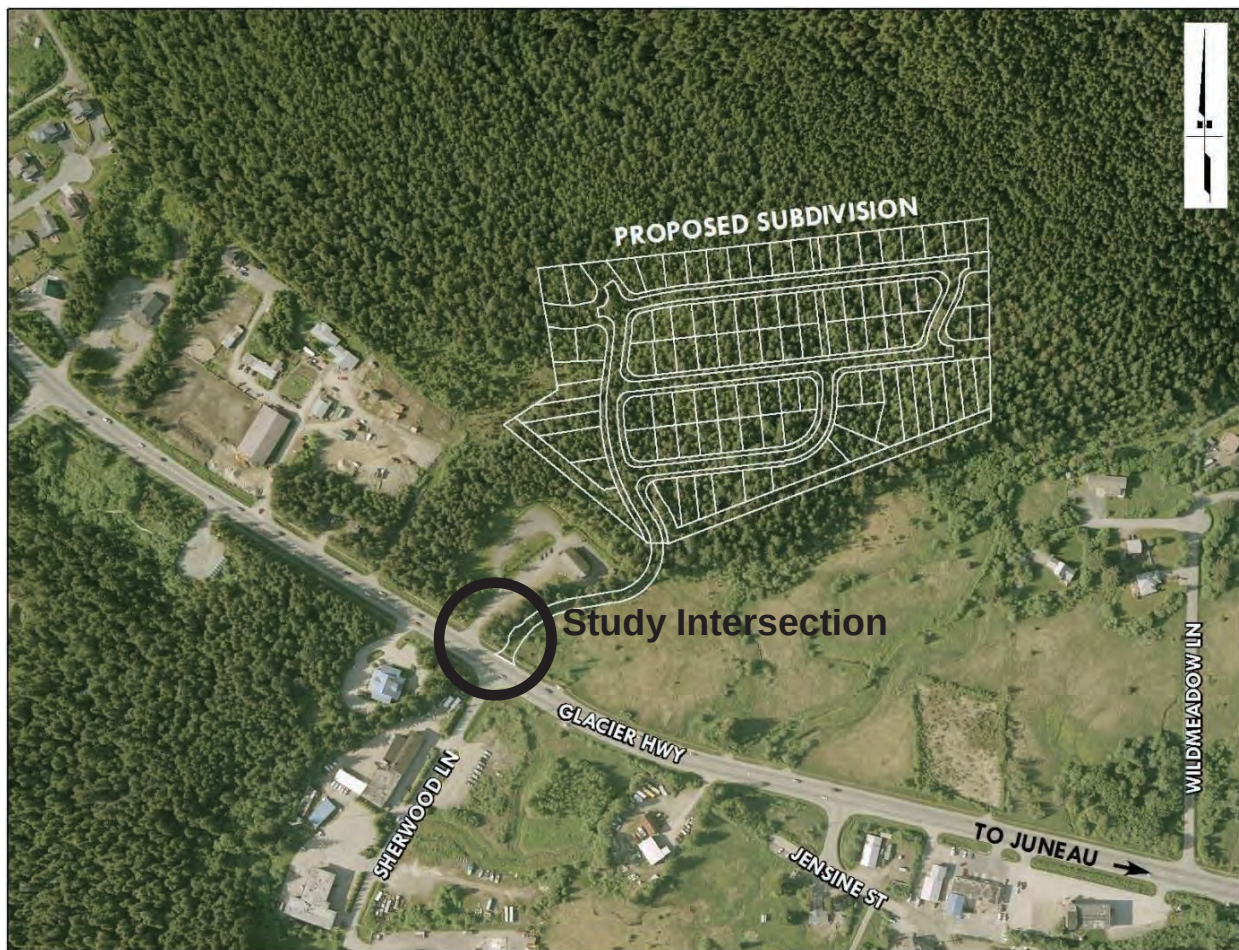


Figure 1: Study Area

Table 1 lists important characteristics of the study area and proposed project. The remaining sections of this report document existing conditions, background conditions, project traffic impacts, and any recommended mitigations.

Table 1: Key Study Area and Proposed Development Characteristics

Characteristics	Information
Study Area	
Number of Study Intersections	One
Analysis Period	Weekday AM and PM Peak Hours
Analysis Scenarios	Existing (2016) Future (2019) Background Future (2019) with Project
Project Site	
Existing Land Use	Vacant
Proposed Development	86 Single Family Homes to be completed in 2019.
Project Trip Generation ^a	65 (16 in, 49 out) a.m. peak hour trips 86 (54 in, 32 out) p.m. peak hour trips
Project Access	The project would create a 4-legged intersection with Glacier Highway and Sherwood Lane.

^a Trip generation based on the Institute of Transportation Engineers, *Trip Generation Manual*, 9th Edition, Land Use Code 210, Single-Family Detached Housing.

2.0 EXISTING CONDITIONS

Located two miles northwest of the Juneau International Airport in Juneau, Alaska, the project site is approximately 12.3 acres in size and currently undeveloped. The project sponsor has proposed to construct 86 single-family homes with a new roadway connection to Glacier Highway. The new access road would connect the proposed Pederson Hill Subdivision into the intersection of Glacier Highway and Sherwood lane, resulting in a 4-legged intersection. The intersection would be 75 feet east of the driveway on the north side of the Glacier Highway that provides access to Christ Evangelical Lutheran Church.

While the new road will be the only access to the proposed subdivision at this time, there will be roadway stubs constructed in the subdivision to allow future connection with adjacent parcels. As these adjacent parcels develop, additional connections to Glacier Highway are expected. However, the extent of future development is unknown and cannot be estimated at this time. Accordingly, the focus of this analysis is only on the 86 unit subdivision and the proposed access road and its intersection with Glacier Highway. A future traffic impact analysis will be needed to assess expansion of the subdivision and additional connections to Glacier Highway.

2.1 Study Area Roadway Network

The key roadways in the study area are listed in Table 2 along with their existing roadway characteristics.

Table 2: Study Area Roadway Characteristics

Roadway	Jurisdiction	Classification	Number of Lanes ^a	Posted Speed	Shoulder	Street Parking
Glacier Highway	AK DOT&PF	Principle Arterial	2 west of Sherwood Ln 3 east of Sherwood Ln	50 mph	10'	No
Sherwood Lane	City & Borough of Juneau	Local Road	2	Not Posted	Unpaved	No

^a Number of lanes includes both directions and the center turn lane (e.g., 3 lanes means 1 lane in each direction plus a center turn lane)

2.2 Pedestrian and Bicycle Facilities

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) is currently installing a 10-foot multiuse pathway on the north side of Glacier Highway that will provide improved pedestrian and bicycle connectivity to the area.

2.3 Traffic Counts

Traffic counts were conducted along Glacier Highway using a Jamar traffic counting radar system. The radar was installed on a light pole on the northeast side of Glacier Highway between the Lutheran Church entrance and the bus stop. The radar recorded traffic from Tuesday, February 23, 2016, 12:00 PM to Thursday, February 25, 2016, 12:00 PM. The Average Daily Traffic (ADT) count from the data collected was 12,675 vehicles per day (vpd). The traffic counts also confirmed the AM and PM peak hour periods occur between 7:30 AM and 8:30 AM, and 4:30 PM and 5:30 PM, respectively. The radar counts also measured travel speeds, and the 85th percentile speed ¹ was 52 miles per hour (mph).

AM and PM peak hour turning movement counts were collected at the Glacier Highway/Sherwood Lane intersection on Wednesday, February 24, 2016. The AM peak hour traffic count was conducted between 7:00 AM and 9:00 AM, with the peak hour determined to be between 7:30 – 8:30 AM. The PM peak hour traffic count was performed between 4:00 PM to 6:00 PM, with the peak hour determined to be between 4:30 – 5:30 PM. Figure 2 shows the existing 2016 AM and PM peak hour traffic volumes, and the detailed traffic count data is provided in Appendix A. The turning movements at the Lutheran Church entrance were also counted to understand the interaction between these two intersections, but no traffic accessed the church during the peak hours.

¹ The 85th percentile speed is the speed at or below which 85 percent of vehicles are observed to travel under free flowing conditions.

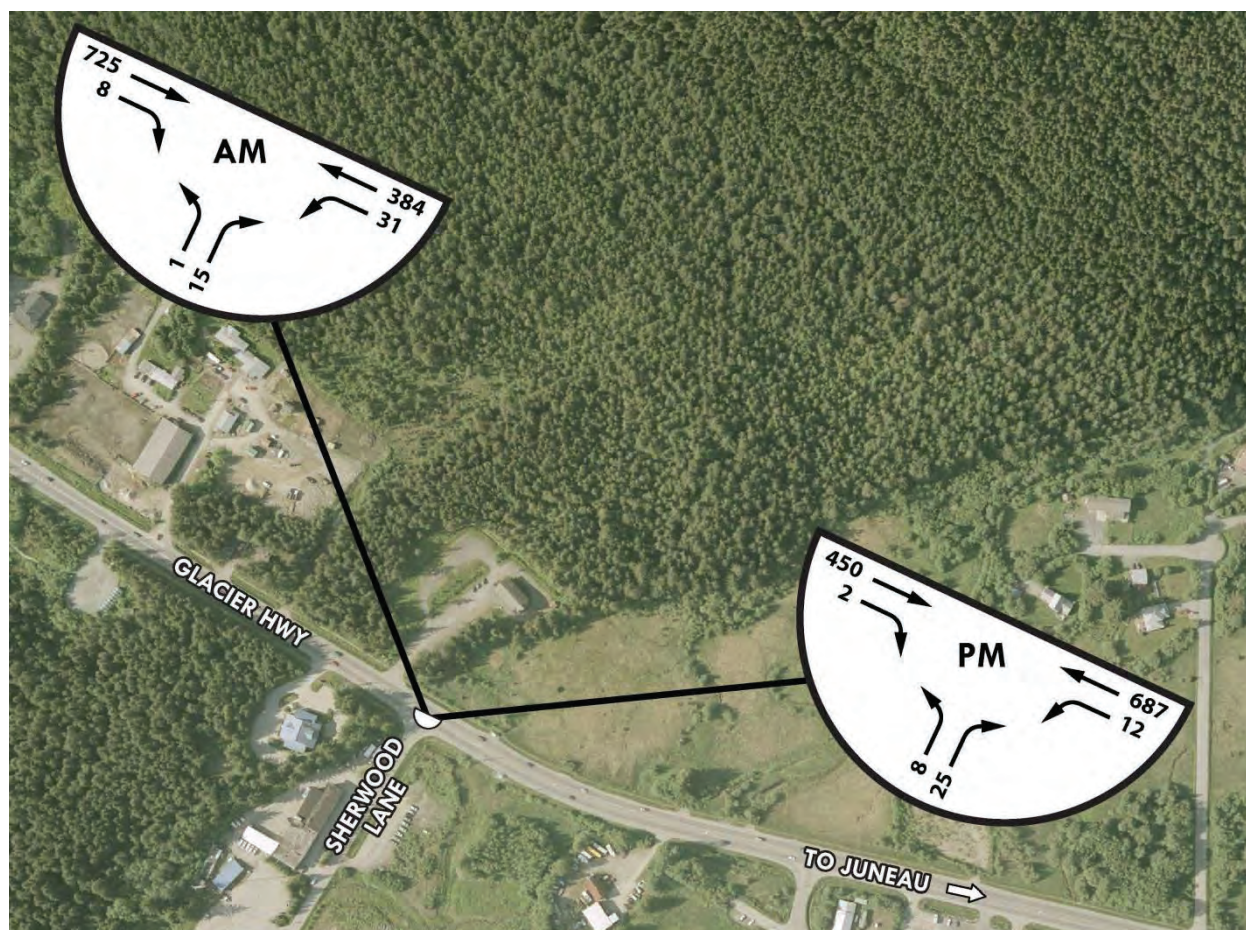


Figure 2: Existing 2016 Traffic Volumes

2.4 Traffic Operations

The purpose of intersection analysis is to ensure that the transportation network remains within desired performance levels as required by the City and Borough of Juneau (CBJ). Intersections are the focus of the analysis because they are the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is nearly always diminished in their vicinity. Before the analysis results of the study are presented, discussion is provided for two important analysis issues: intersection performance measures (definitions of typical measures) and required operating standards (as specified by the agency with roadway jurisdiction).

2.4.1 Intersection Performance Measures

Level of service (LOS) ratings and volume-to-capacity (v/c) ratios are two commonly used performance measures that provide a good picture of intersection operations. In addition, they are often incorporated into agency mobility standards.

- **Level of service (LOS):** A “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection.² LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity. This condition is typically evident by the presence of long queues and delays.
- **Volume-to-capacity (v/c) ratio:** A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

2.4.2 Required Operating Standards

DOT&PF has jurisdiction over Glacier Highway. Therefore, their *Driveway Design Standards and Regulations* (17 AAC 10.070) establishes a minimum acceptable LOS for intersections along the highway with relation to impacts associated with the development’s construction and design years. These standards state that the minimum acceptable LOS at the time of the driveway permit application in both the construction and design years is:

- LOS C, if the LOS on the date of the application is LOS C or better or
- LOS D, if the LOS on the date of the application is LOS D or poorer; however, if the LOS is poorer than LOS D, a lower minimum LOS is acceptable if the operation of the

² A description of Level of Service (LOS) is provided in the appendix and includes a list of the delay values (in seconds) that correspond to each LOS designation.

highway does not deteriorate more than ten percent (10%) in terms of delay time or any other appropriate measure of effectiveness from the LOS before the development’s opening date.

Based on the DOT&PF’s regulations, if a highway or intersection has an acceptable LOS without traffic generated by the development and an unacceptable LOS with traffic generated by the development, the driveway permit applicant is required to evaluate mitigation options, consult with DOT&PF, and construct improvements to the highway or intersection as required by DOT&PF to maintain an acceptable LOS.

2.4.3 Existing Intersection Operations

Currently Glacier Highway is striped for a center two-way left-turn lane (TWLTL) at the Glacier Highway/Sherwood Lane intersection and to the east of the intersection. West of the intersection, the road does not have a TWLTL but narrows down to a two-lane roadway. Sherwood Lane is currently two lanes, unstriped and controlled by stop sign. Table 3 shows the existing LOS and v/c ratios for the current 3-legged intersection at Glacier Highway and Sherwood Lane during both the AM and PM peak hours.

Table 3: 2016 Existing Traffic Operations (AM and PM Peak Hours)

Intersection	Jurisdiction	Operating Standard	AM Peak			PM Peak		
			LOS	Delay	V/C	LOS	Delay	V/C
Glacier Highway/ Sherwood Lane	AK DOT&PF	LOS C*	B/C	16.8	0.06	A/C	15.0	0.09

*Note: In some situations LOS D may be considered the appropriate standard (see discussion in Section 2.4.2).

LOS = Level of Service (Major/Minor Approaches)

Delay = Average Control Delay (Worst Movement)

V/C = Volume-to-Capacity Ratio (Worst Movement)

2.4.4 Observations

The Glacier Highway and Sherwood Lane intersection was observed during both AM and PM peak conditions to better understand intersection movements and verify operations are consistent with model outputs. During the traffic counts, little traffic was observed turning into or leaving Sherwood Lane. At the end of Sherwood Lane, a heavy equipment yard and construction company headquarters had minimal activity during the observance times. During other times of

the year, Sherwood lane potentially might have heavier traffic entering and exiting from Glacier Highway, but it is expected to have minimal effect on the intersection's level of service during the AM and PM peak hours.

2.5 Collision History

Five years of collision records (2008-2012) for the study area were obtained from DOT&PF. The data identified four total collisions at the intersection of Glacier Highway/Sherwood Lane. Table 4 shows a breakdown of the collision severity at the intersection, as well as the collision rate of 0.19 vehicles per million entering vehicles.³

Table 4: Study Area Collision Analysis

Intersection	Collisions (by Severity)				Collision Rate ^b
	<i>Fatal</i>	<i>Injury</i>	<i>PDO^a</i>	<i>Total</i>	
Glacier Highway/Sherwood Lane	0	0	4	4	0.19

^a PDO = Property damage only.

^b Collision rate for intersections= average annual collisions per million entering vehicles (MEV); MEV estimates based on daily traffic count and applicable factors.

2.6 Transit Operations

Capital Transit operates bus routes along Glacier Highway. Two bus stops with shelters are located approximately 200 feet east of Sherwood Lane (one on each side of the highway). From Monday to Saturday a bus frequents each stop every hour, 13 times daily. On Sunday there are less trips in the early and late hours of the day with only 10 trips in each direction.

³ The collision rate was calculated by dividing the total number of collisions by the study years' average ADT. The average ADT from 2008-2012 (data missing for 2011) is 11,754 vpd. The historical ADTs were obtained from Alaska DOT&PF's "Southeast Region Traffic and Safety Reports, Lower Mendenhall Valley Traffic Map" (2007-2010, 2012).

3.0 BACKGROUND CONDITIONS

Currently the Glacier Highway/Sherwood Lane intersection is a 3-legged intersection with Sherwood Lane stop sign controlled. It is expected that the proposed Pederson Hill subdivision will be completed in 2019. To account for background growth and future developments, a 1.2% yearly compounding growth rate was used to forecast AM and PM peak period for consecutive purposes. The 1.2% growth was estimated by comparing historical ADTs with the new traffic counts collected in March 2016. The yearly growth rate and resulting traffic forecasts were reviewed and approved by the City and Borough of Juneau.⁴

3.1 Traffic Volumes

Figure 3 shows the projected future 2019 background traffic volumes for the AM and PM peak hours based on the 1.2% yearly compounding growth rate.

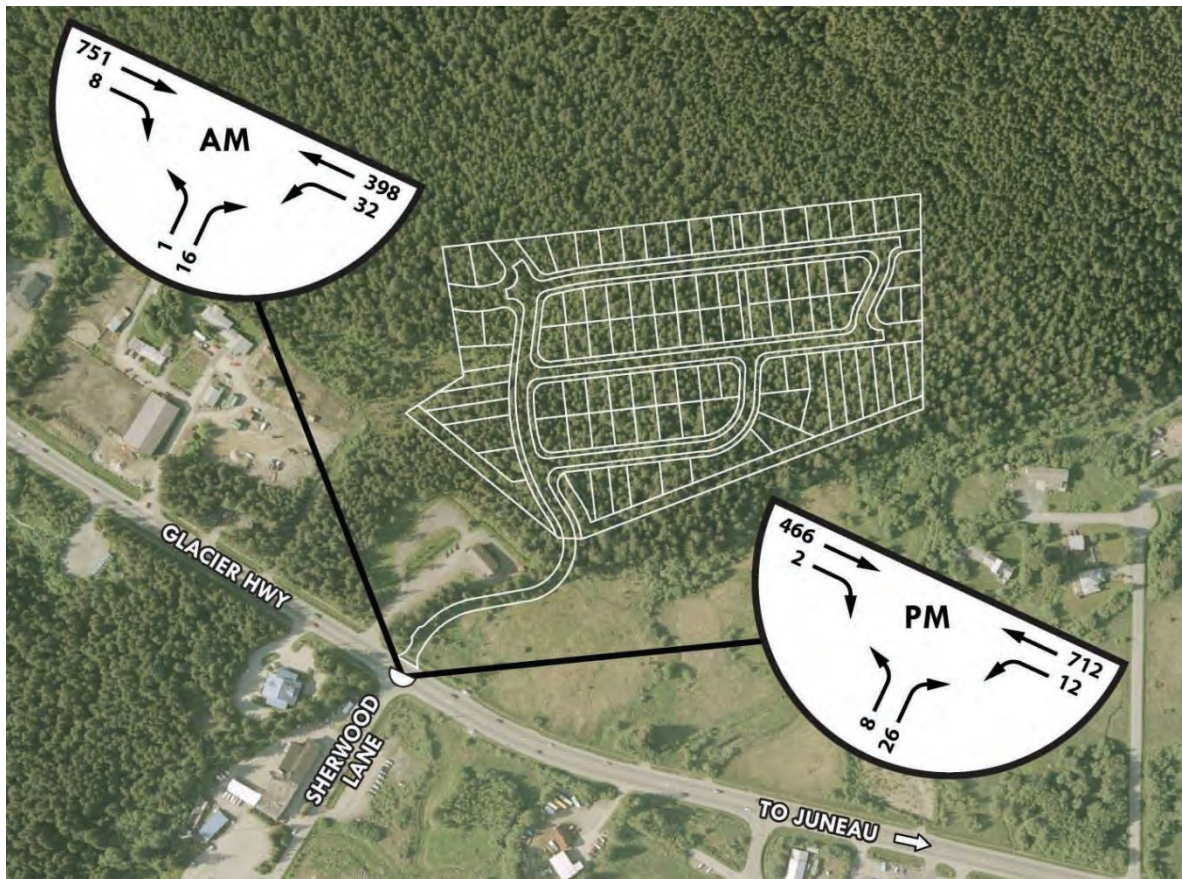


Figure 3: Future 2019 Background Traffic Volumes

⁴ Email from Skye Stekoll, City and Borough of Juneau, March 10, 2016.

3.2 Traffic Operations

Table 5 shows the future background traffic operations for 2019. Both AM and PM peak hours are shown. This data represents the operations without the traffic from the proposed subdivision or the associated fourth leg that would be added to the intersection. As shown, under background conditions the intersection is expected to operate at LOS C, which is similar to existing conditions.

Table 5: 2019 Background Traffic Operations (AM and PM Peak Hours)

Intersection	Jurisdiction	Operating Standard	AM Peak			PM Peak		
			LOS	Delay	V/C	LOS	Delay	V/C
Glacier Highway/ Sherwood Lane	AK DOT&PF	LOS C*	B/C	17.4	0.06	A/C	15.4	0.09

*Note: In some situations LOS D may be considered the appropriate standard (see discussion in Section 2.4.2).

LOS = Level of Service (Major/Minor Approaches)

Delay = Average Control Delay (Worst Movement)

V/C = Volume-to-Capacity Ratio (Worst Movement)

4.0 PROJECT TRAFFIC IMPACTS

4.1 Proposed Project

The proposed Pederson Hill Subdivision includes 86 single family homes with the only access point being the proposed fourth leg at the intersection of Glacier Highway and Sherwood Lane. The surrounding areas to the west, north and east all are currently undeveloped, and the subdivision site plan will be constructed with roadway stub-outs that will enable future connections to these areas. As adjacent areas develop, it is expected that additional accesses to Glacier Highway will be added at that time and can serve as secondary access to the Pederson Hill Subdivision.

4.2 Trip Generation

Traffic generated by the proposed subdivision for AM and PM peak hours was calculated using trip generation rates for ITE Land Use Code 210, Single-Family Detached Housing. The rates are based on the number of dwelling units. Table 6 shows the trip generation calculations. An 86 unit single-family detached housing subdivision is expected to generate 65 total trips in the AM and 86 total trips in the PM.

Table 6: Residential Trip Generation (Weekday AM and PM Peak Hours)

ITE Land Use (ITE Code)	Size	Peak Hour	Trip Rate	Total	Entering	Existing
Single Family Detached Housing (210)	86 Dwelling Units	AM	0.75	65	16	49
		PM	1.00	86	54	32

4.3 Trip Distribution

Trip distribution for the subdivision was based on existing traffic patterns in the area. Based on the existing turning volumes at Sherwood Lane shown previously in Figure 2, approximately 80% of vehicles are traveling to/from the east on Glacier Highway (i.e., northbound right and westbound left turns) with 20% of vehicles traveling to/from the west (i.e., northbound left and eastbound right turns). The proposed subdivision access road is assumed to have a similar trip distribution, and the resulting AM and PM peak hour trips are shown in Figure 4.

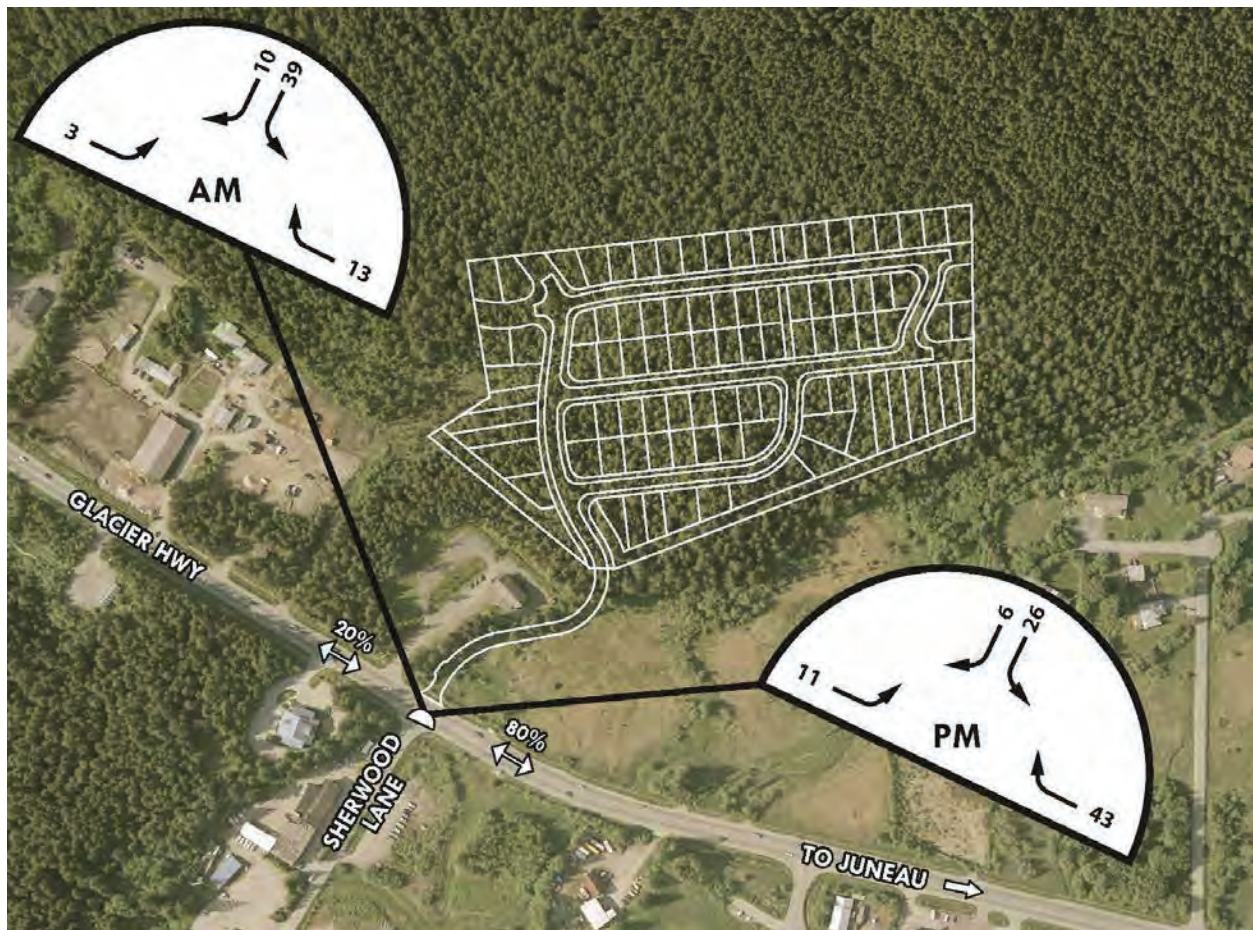


Figure 4: AM and PM Peak Hour Trip Distribution

4.4 Future Volumes

Combining the site generated traffic volume of the proposed subdivision with the future background traffic volume gives perspective to the future traffic volumes expected at the study intersection. Figure 5 combines the project-generated traffic with the future background traffic volumes for the 2019 future build year.

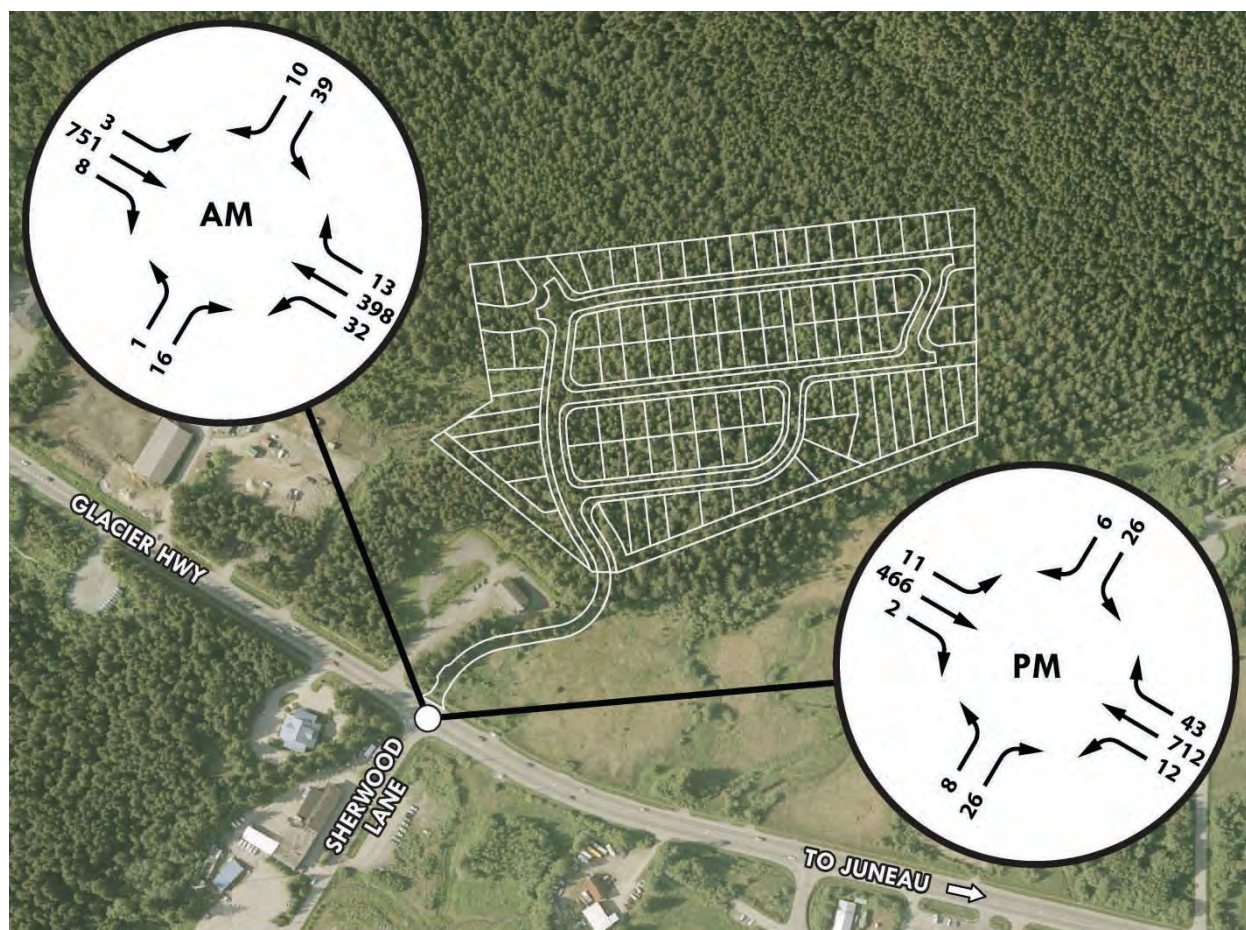


Figure 5: Future 2019 Total Traffic Volumes

4.5 Traffic Operations

Intersection operations analysis was performed for the intersection of Sherwood Lane and Glacier Highway for the 2019 build year with the addition of the Pederson Hill Subdivision project traffic. The analysis utilized Highway Capacity Manual 2010 (HCM 2010) methodology for unsignalized intersections and accounts for the existing TWLTL on the east leg of Glacier Highway.

Table 7 shows the resulting 2019 level of service (LOS) and volume-to-capacity (V/C) ratio for the study intersection. As shown, the intersection is expected to operate at LOS C for both the AM and PM peak hours. This meets the City and Borough of Juneau's applicable operating standard.

Table 7: 2019 Total Traffic Operations with Project (AM and PM Peak Hours)

Intersection	Jurisdiction	Operating Standard	AM Peak			PM Peak		
			LOS	Delay	V/C	LOS	Delay	V/C
Glacier Highway/ Sherwood Lane	AK DOT&PF	LOS C*	B/C**	24.8	0.24	A/C**	20.0	0.12

*In some situations LOS D may be considered the appropriate standard (see discussion in Section 2.4.2).

**Accounts for some traffic using TWLTL for two-stage gap acceptance.

LOS = Level of Service (Major/Minor Approaches)

Delay = Average Control Delay (Worst Movement)

V/C = Volume-to-Capacity Ratio (Worst Movement)

4.6 Turn Lane Warrants

In the Alaska Highway Preconstruction Manual (HPCM), speed-change lanes are discussed in *Chapter 1190: Driveway Standards*. It states that “on high-speed (50 miles per hour [mph] or over) or high-volume arterial roadways, speed change lanes may be required for the acceleration or deceleration of vehicles entering or leaving the public roadway from or to a higher-volume traffic generation (greater than or equal to 100 vehicles per hour) or attracting development.” The Pederson Hill Subdivision is expected to generate 86 PM peak hour trips at most; therefore, it does not meet the criterion and turn lanes are not required.

While not yet required, turn lanes may be beneficial to consider due to their safety benefits and the potential future need if more development occurs and increases traffic volumes at the project access. By separating the slower-moving vehicles from the higher speed through traffic, the turn lanes can reduce collision frequency and severity.

Using the Engineering Study Guide for Evaluating Intersection Report 457 (NCHRP Report 457), left and right lane turn warrant analysis was conducted to understand which lanes might be beneficial to consider. Based on the AM and PM peak hour traffic volumes with the inclusion of project traffic, the corresponding thresholds are met for adding a left-turn lane for westbound Glacier Highway (which could be an extension of the TWLTL) and a right-turn lane for eastbound Glacier Highway. In conjunction with other factors (e.g., right-of-way, cost, etc.) the design of the proposed access to Glacier Highway should consider whether to accommodate the potential future addition of these turn lanes.

4.7 Church Driveway Relocation Considerations

The Lutheran Church driveway is planned for relocation to the new access road in order to close its existing driveway along Glacier Highway due to the close proximity to the intersection. Two considerations associated with the church driveway relocation include the following:

- The church's peak hour occurs on a Sunday and is not accounted for in the AM or PM peak hour analysis.
- Driveway corner clearance is a key design criterion affecting the placement of the relocated church driveway onto the new access road.

4.7.1 Sunday Peak Hour Traffic

As indicated previously in this report, the turning movements at the Lutheran Church entrance were observed as part of the weekday peak hour counts for this study but no traffic accessed the church during the peak hours. Because Sunday is expected to be a higher use day for the church, additional traffic analysis was performed to estimate how Sunday peak hour operations compare with the AM and PM operations.

Table 8 provides trip generation estimates for the church, which is 3,000 square feet. The estimates were calculated using ITE Land Use Code 560, Church. During the Sunday peak hour of generator, the church is expected to generate 35 total trips. Sunday peak hour trip generation estimates were also performed for the 86 residential units to account for the combined traffic from the residential development. While it is not certain that the peak hours from the two uses will coincide, this assumption allows for a conservative analysis.

Table 8: Church and Residential Trip Generation (Sunday Peak Hour)

ITE Land Use (ITE Code)	Size	Sunday Peak Hour of Generator			
		Trip Rate	Total	Entering	Existing
Church (560)	3,000 square feet	11.76	35	17	18
Single Family Detached Housing (210)	86 Dwelling Units	0.86	74	39	35
Total			109	56	53

Because Glacier Highway traffic is also expected to differ on Sunday compared to a regular weekday, the analysis requires adjustments to the highway volumes. Permanent traffic recorders

(PTR) provide continuous counts throughout the year and allow for comparisons to be made. The Southeast Region 2010 Traffic and Safety Report⁵ provides the most recent PTR data in the Juneau area. Because there are no PTRs on this segment of Glacier Highway, three nearby PTRs (Riverside Drive Mile Point 1.47, Glacier Highway Mile Point 14.07, and Douglas Highway Mile Point 1.058) were used as the basis for the comparison between weekday and Sunday traffic volumes. These PTRs experienced an average of 13 percent less traffic on Sunday than on a weekday; therefore, the through traffic on Glacier Highway was factored down by 13 percent compared to the weekday PM peak hour volumes for the purpose of this analysis.

Table 9 shows the estimated level of service (LOS) and volume-to-capacity (V/C) ratio for the study intersection during the Sunday peak hour. As shown, the intersection is expected to operate at LOS C and continue to meet the City and Borough of Juneau's applicable operating standard.

Table 9: 2019 Total Traffic Operations with Project and Relocated Church Driveway (Sunday Peak Hour)

Intersection	Jurisdiction	Operating Standard	PM Peak		
			LOS	Delay	V/C
Glacier Highway/ Sherwood Lane	AK DOT&PF	LOS C*	A/C**	21.4	0.22

*In some situations LOS D may be considered the appropriate standard (see discussion in Section 2.4.2).

**Accounts for some traffic using TWLTL for two-stage gap acceptance.

LOS = Level of Service (Major/Minor Approaches)

Delay = Average Control Delay (Worst Movement)

V/C = Volume-to-Capacity Ratio (Worst Movement)

4.7.2 Driveway Corner Clearance

The Alaska Highway Preconstruction Manual specifies that driveways are to have sufficient corner clearance, which is the distance measured from the nearest edge of the driveway to the nearest face of curb (or nearest edge of traveled way for uncurbed roadways) of an intersecting public roadway. Corner clearance standards are based on the size of the traffic generator and the speed or functional classification of the roadway. Because the church is estimated to generate 35 trips during its Sunday peak hour and the new access road is planned for a speeds less than or equal to 30 mph, the church driveway should have 80 feet of corner clearance.⁶

⁵ Southeast Region 2010 Traffic and Safety Report, Alaska DOT&PF, Prepared April 2013.

⁶ Alaska Highway Preconstruction Manual, Alaska DOT&PF, 1190. Driveway Standards, Table 1190-4 (Corner Clearance), Effective January 1, 2005.

4.8 Site Access and Circulation

Factors affecting the site access and circulation for the Pederson Hill Subdivision were considered and include sight distance at the new highway access point, internal roadway circulation, and pedestrian and bicycle facilities.

4.8.1 Sight Distance at Highway Access

The new access to Glacier Highway will need to meet American Association of State Highway and Transportation Officials (AASHTO) sight distance requirements.⁷ Adequate intersection sight distance is required for drivers to see oncoming traffic from a stop controlled minor road to allow the driver to safely turn and accelerate into the traffic stream.

The required intersection sight distance is based on the speed of the uncontrolled (major) roadway. As discussed previously in this report, Glacier Highway's 85th percentile speed was measured at 52 mph. Based on this speed, AASHTO standards specify the required intersection sight distance to be 575 feet. Preliminary intersection sight distance estimates were performed during a field visit on February 23, 2016, and the findings are summarized in Table 10. As shown, preliminary estimates suggest adequate sight distance can be provided at the proposed access driveway; however, more precise measurements should be performed as part of the roadway design.

Table 10: Intersection Sight Distance

Direction	Intersection Control	Operating Speed	Intersection Sight Distance		
			AASHTO Required	Preliminary Measurement	Adequate?
Proposed Access to Glacier Highway					
Looking East	Two-Way Stop	52 mph	575 ft	> 575 ft	Yes
Looking West			575 ft	> 700 ft	Yes

4.8.2 Internal Roadway Circulation

The proposed subdivision site plan includes two small loops that connect to one another and to the road providing access to Glacier Highway. In addition, the site plan shows four road stub-

⁷ *Geometric Design of Highways and Streets*, AASHTO, 2011; Case B1, p. 9-38. Calculated based on interpolation.

outs (two on the east and two on the west) that would accommodate possible future development in the surrounding areas. As these areas develop, additional access is envisioned between the Pederson Hill Subdivision and Glacier Highway.

4.8.3 Pedestrian and Bicycle Facilities

The proposed subdivision can serve pedestrian and bicycle needs by providing wide shoulders and/or sidewalks along the access road connecting to Glacier Highway. It appears from the site plan that a strategic easement is planned between properties near where the southern loop intersects the northern loop. This could allow a pathway to be constructed and facilitate shorter travel distances for pedestrians and bicycles.

5.0 RECOMMENDED MITIGATIONS

Based on this traffic study, no mitigation measures are required for the Pederson Hill Subdivision. However, the following items should be taken into consideration for the project:

- Preliminary estimates suggest adequate sight distance can be provided at the proposed access driveway with Glacier Highway; however, more precise measurements should be performed as part of the roadway design.
- The proposed subdivision can serve pedestrian and bicycle needs by providing wide shoulders and/or sidewalks along the access road connecting to Glacier Highway.
- Additional turn lanes on Glacier Highway are not required but may be beneficial due to their safety benefits and the potential future need if more development occurs and increases traffic volumes at the project access. Thresholds are met for adding a left-turn lane for westbound Glacier Highway (which could be an extension of the TWLTL) and a right-turn lane for eastbound Glacier Highway.
- The relocated church driveway onto the new access road should have 80 feet of corner clearance, as measured from the nearest edge of the driveway to the Glacier Highway's nearest edge of traveled way.⁸

⁸ *Alaska Highway Preconstruction Manual*, Alaska DOT&PF, 1190. Driveway Standards, Table 1190-4 (Corner Clearance), Effective January 1, 2005.

APPENDIX A

Traffic Count Data

Start Date: 2/24/2016
Start Time: 6:45:00 AM

Start Time	Southbound			WB Glacier Hwy			From Sherwood Lane			EB Glacier Hwy		
	Right	Thru	Left - EB Glacier	Right - Church	Thru	Left - Sherwood	Right - EB Glacier	Thru	Left - WB Glacier	Right - Sherwood	Thru	Left - Church
06:45 AM	0	0	0	0	31	4	1	0	0	2	101	0
07:00 AM	0	0	0	0	39	3	0	0	0	0	117	0
07:15 AM	0	0	0	0	42	1	1	0	0	0	143	0
07:30 AM	0	0	0	0	86	9	2	0	0	2	202	0
07:45 AM	0	0	0	0	117	9	2	0	1	2	208	0
08:00 AM	0	0	0	0	88	8	6	0	0	3	186	0
08:15 AM	0	0	0	0	93	5	5	0	0	1	129	0
08:30 AM	0	0	0	0	66	3	1	0	2	3	112	0
08:45 AM	0	0	0	0	87	6	2	0	1	0	108	0
09:00 AM	0	0	0	0	102	3	6	0	0	1	91	0

total

0	0	0	0	0	384	31	15	0	1	8	725	0
												PHF
												0.86

0	1164
---	------

Start Date: 2/24/2016
Start Time: 3:45:00 PM

Start Time	Southbound			WB Glacier Hwy			From Sherwood Lane			EB Glacier Hwy		
	Right	Thru	Left - EB Glacier	Right - Church	Thru	Left - Sherwood	Right - EB Glacier	Thru	Left - WB Glacier	Right - Sherwood	Thru	Left - Church
03:45 PM	0	0	0	0	0	130	4	9	0	0	0	78
04:00 PM	0	0	1	1	123	4	9	9	0	2	1	97
04:15 PM	0	0	0	0	142	4	7	0	0	0	0	106
04:30 PM	0	0	0	0	156	4	8	0	0	0	0	138
04:45 PM	0	0	0	0	159	6	10	0	0	2	0	100
05:00 PM	0	0	0	0	171	1	4	0	0	5	0	123
05:15 PM	0	0	0	0	201	1	3	0	0	1	2	89
05:30 PM	0	0	0	2	127	6	3	0	0	2	0	84
05:45 PM	0	0	1	0	158	6	2	0	0	0	0	64
total	0	0	0	0	687	12	25	0	0	8	2	450
												PHF
												0.97

1184
0

224
231

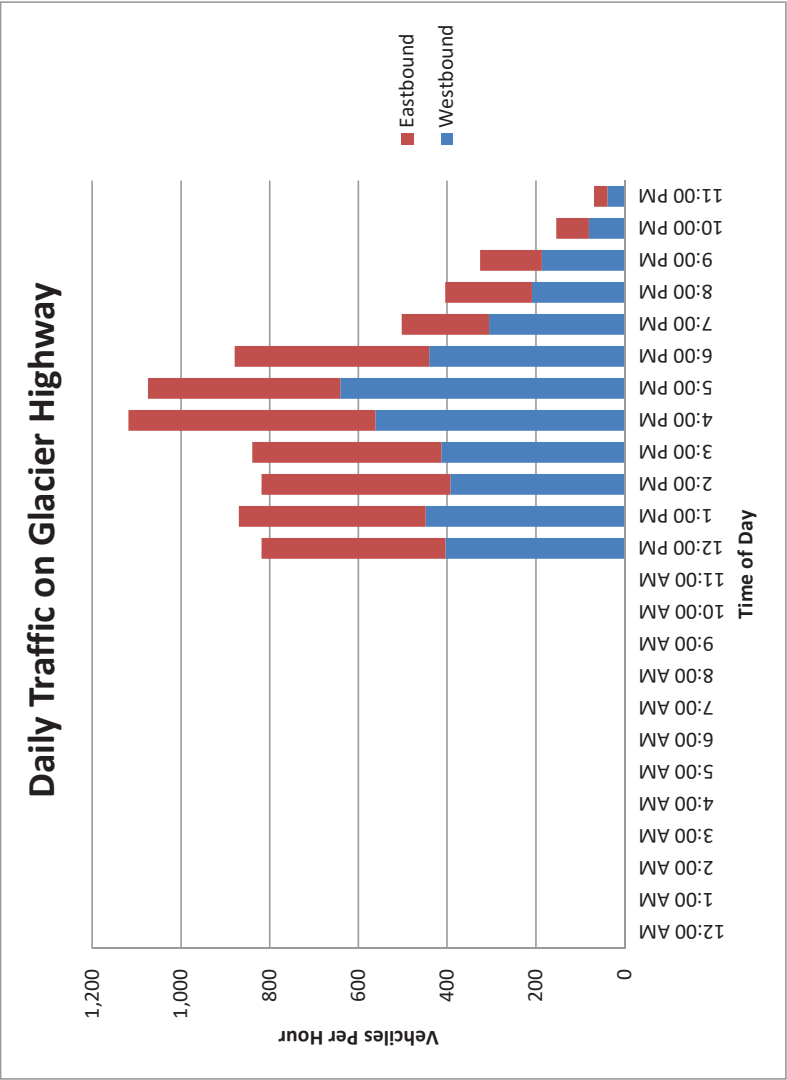
221
238
259

306
277
304
297

Hourly Traffic Volumes on Glacier Highway East of Sherwood Lane

Tuesday, February 23, 2016

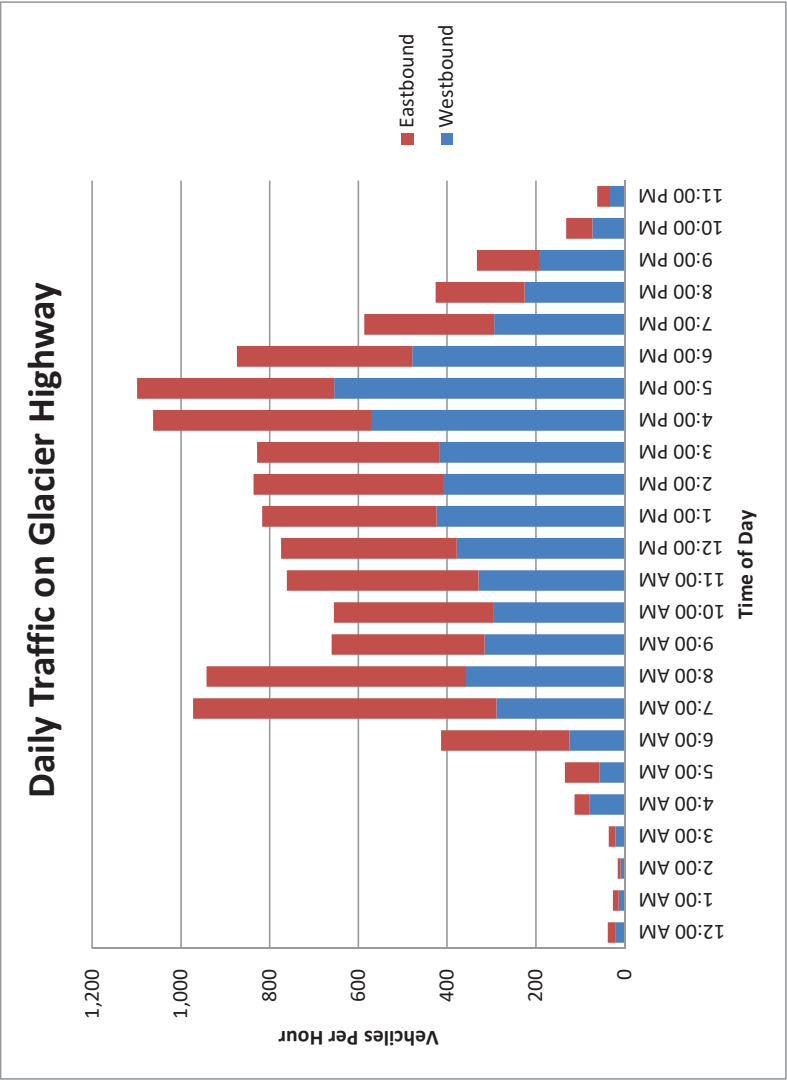
Hour of Day	Westbound	Eastbound	Total
12:00 AM			
1:00 AM			
2:00 AM			
3:00 AM			
4:00 AM			
5:00 AM			
6:00 AM			
7:00 AM			
8:00 AM			
9:00 AM			
10:00 AM			
11:00 AM			
12:00 PM	404	415	819
1:00 PM	449	421	870
2:00 PM	393	426	819
3:00 PM	413	427	840
4:00 PM	562	557	1119
5:00 PM	641	434	1075
6:00 PM	441	438	879
7:00 PM	306	197	503
8:00 PM	209	196	405
9:00 PM	187	139	326
10:00 PM	81	73	154
11:00 PM	39	30	69
Total	4125	3753	7878



Hourly Traffic Volumes on Glacier Highway East of Sherwood Lane

Wednesday, February 24, 2016

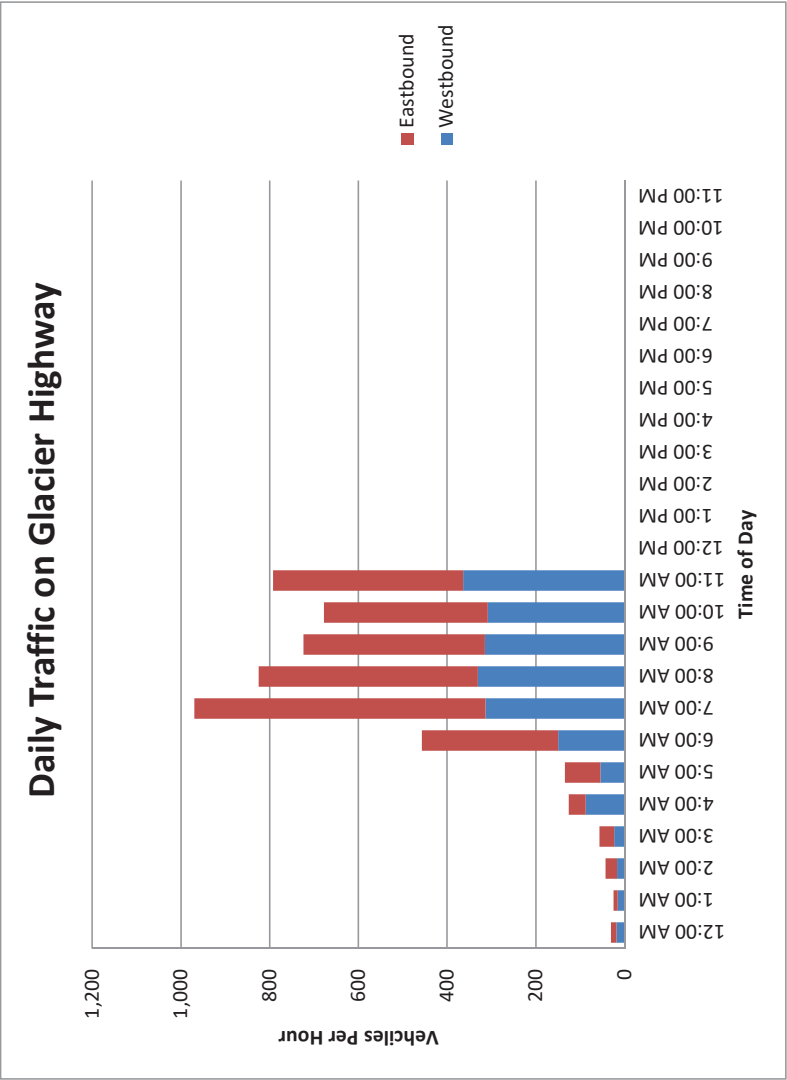
Hour of Day	Westbound	Eastbound	Total
12:00 AM	20	18	38
1:00 AM	14	13	27
2:00 AM	9	7	16
3:00 AM	21	15	36
4:00 AM	80	33	113
5:00 AM	57	78	135
6:00 AM	125	289	414
7:00 AM	289	684	973
8:00 AM	358	585	943
9:00 AM	316	345	661
10:00 AM	295	361	656
11:00 AM	330	432	762
12:00 PM	379	396	775
1:00 PM	424	393	817
2:00 PM	410	427	837
3:00 PM	417	412	829
4:00 PM	570	493	1063
5:00 PM	655	444	1099
6:00 PM	479	395	874
7:00 PM	294	293	587
8:00 PM	226	200	426
9:00 PM	191	142	333
10:00 PM	73	59	132
11:00 PM	33	29	62
Total	6065	6543	12608



Hourly Traffic Volumes on Glacier Highway East of Sherwood Lane

Thursday, February 25, 2016

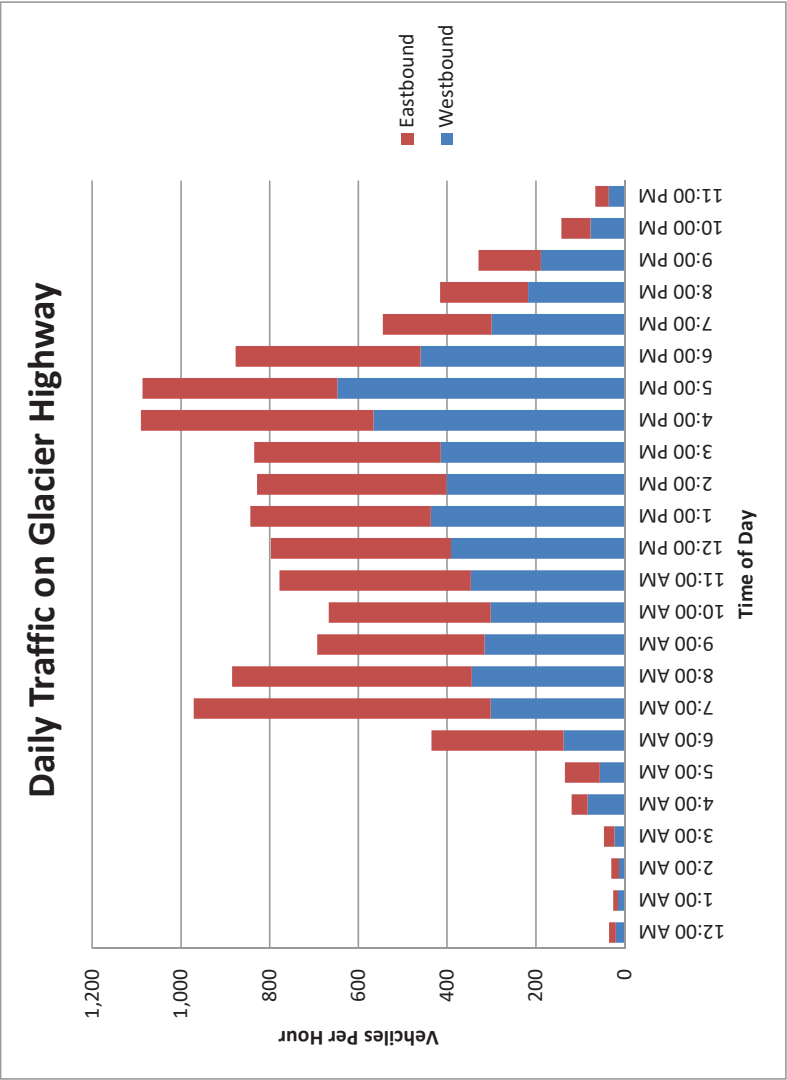
Hour of Day	Westbound	Eastbound	Total
12:00 AM	19	12	31
1:00 AM	16	9	25
2:00 AM	17	26	43
3:00 AM	24	33	57
4:00 AM	88	38	126
5:00 AM	55	80	135
6:00 AM	150	307	457
7:00 AM	314	656	970
8:00 AM	331	494	825
9:00 AM	315	409	724
10:00 AM	309	369	678
11:00 AM	364	429	793
12:00 PM			
1:00 PM			
2:00 PM			
3:00 PM			
4:00 PM			
5:00 PM			
6:00 PM			
7:00 PM			
8:00 PM			
9:00 PM			
10:00 PM			
11:00 PM			
Total	2002	2862	4864



Average Hourly Traffic Volumes on Glacier Highway East of Sherwood Lane

12 pm on Tuesday, February 23, 2016 to 12 pm on Thursday, February 25, 2016

Hour of Day	Westbound	Eastbound	Total
12:00 AM	20	15	35
1:00 AM	15	11	26
2:00 AM	13	17	30
3:00 AM	23	24	47
4:00 AM	84	36	120
5:00 AM	56	79	135
6:00 AM	138	298	436
7:00 AM	302	670	972
8:00 AM	345	540	885
9:00 AM	316	377	693
10:00 AM	302	365	667
11:00 AM	347	431	778
12:00 PM	392	406	798
1:00 PM	437	407	844
2:00 PM	402	427	829
3:00 PM	415	420	835
4:00 PM	566	525	1091
5:00 PM	648	439	1087
6:00 PM	460	417	877
7:00 PM	300	245	545
8:00 PM	218	198	416
9:00 PM	189	141	330
10:00 PM	77	66	143
11:00 PM	36	30	66
Total	6101	6584	12685



B. Permanent Traffic Recorder Data

Permanent Traffic Recorders (PTRs) consist of electronic counting devices connected to inductive loops buried in the roadway. As vehicles pass over the loops, a cumulative total is compiled for selected periods of time and reported to a mainframe database for analysis. PTRs are installed to collect the number of vehicles that travel over a particular road classification. PTRs are located on select roadways that are representative for a community. There are sixteen PTRs in the region, and the oldest one has been in operation since 1959. The sixteen PTRs and their locations are as follows:

1. Ketchikan – North Tongass Highway (CDS Mile Pt 1.33)
2. Ketchikan – South Tongass Highway (CDS Mile Pt. 3.07)*
3. Ketchikan – 3rd Avenue (CDS Mile Pt. 0.508)
4. Sitka – Sawmill Creek Road (CDS Mile Pt. 0.73)
5. Sitka – Halibut Point Road (CDS Mile Pt. 0.53)
6. Sitka – Airport Road (CDS Mile Pt. 0.573)
7. Prince of Wales – Craig / Klawock / Hollis Highway (CDS Mile Pt. 6.71)*
8. Wrangell – Zimovia Highway (CDS Mile Pt. 0.71)
9. Petersburg – Mitkof Highway (CDS Mile Pt. 2.55)
10. Juneau – Egan Drive (CDS Mile Pt. 2.58)*
11. Juneau – Egan Drive (CDS Mile Pt. 6.311)*
12. Juneau – Riverside Drive (CDS Mile Pt. 1.47)
13. Juneau – Glacier Highway (CDS Mile Pt. 14.07)
14. Juneau – Douglas Highway (CDS Mile Pt. 1.058)
15. Haines – Haines Highway (CDS Mile Pt. 1.29)
16. Skagway – Klondike Highway (CDS Mile Pt. 2.55)

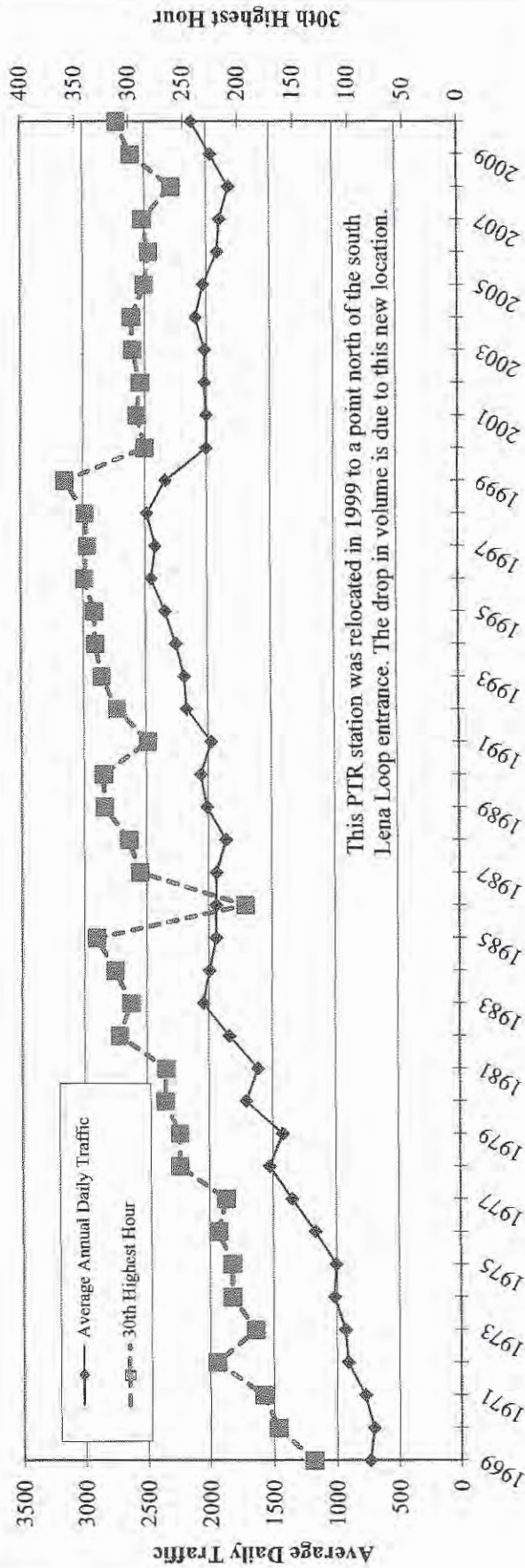
* Represents incomplete or missing data for 2010. Because of this no detail data is available for the year.

PTR data is presented in several different ways. The graphs depict annual average daily traffic (AADT) and 30th highest hour volumes for each year the PTRs have been in operation as well as AADT for each day of the week, and the annual average hourly traffic for weekdays (weekends and holidays excluded) for 2006. The numerical matrices provide the most detailed and comprehensive data.

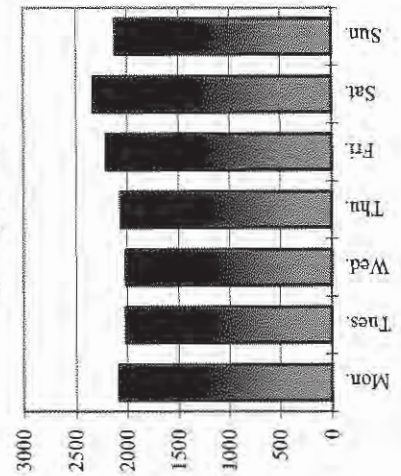
The 30th highest hour volumes, also called the Design Hourly Volume (DHV), are shown because highway projects are usually designed to accommodate this volume in the design year.

PTR data is very important to traffic engineers because they record hourly traffic volumes in both directions 24 hours per day, 365 days per year. Unlike rubber road tube counts, the PTRs collect traffic volumes year round and show seasonally adjusted traffic volumes. These seasonal factors can then be used to adjust other traffic volume counts taken by road tubes.

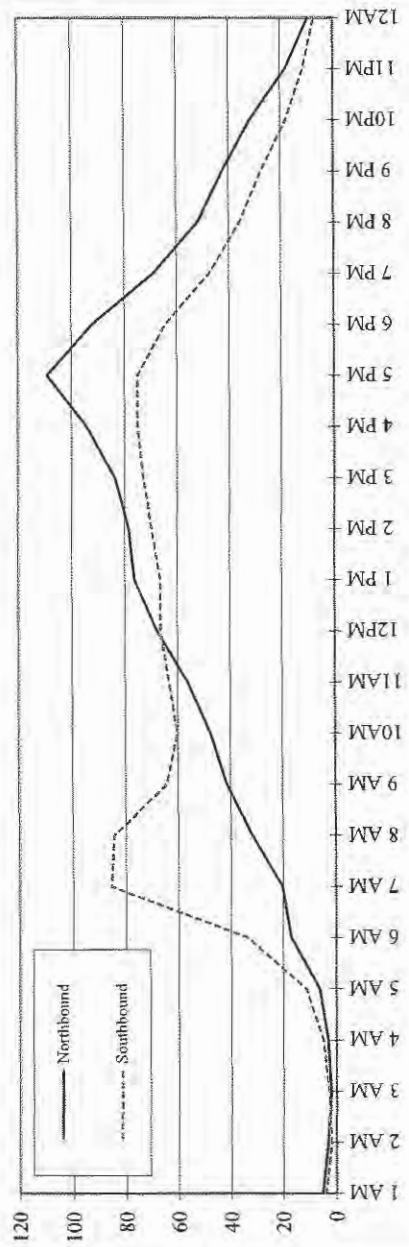
Permanent Traffic Recorder At 16 Mile Glacier Hwy. (CDS MP 14.07)



2010 Annual Average Daily Traffic by Day of Week

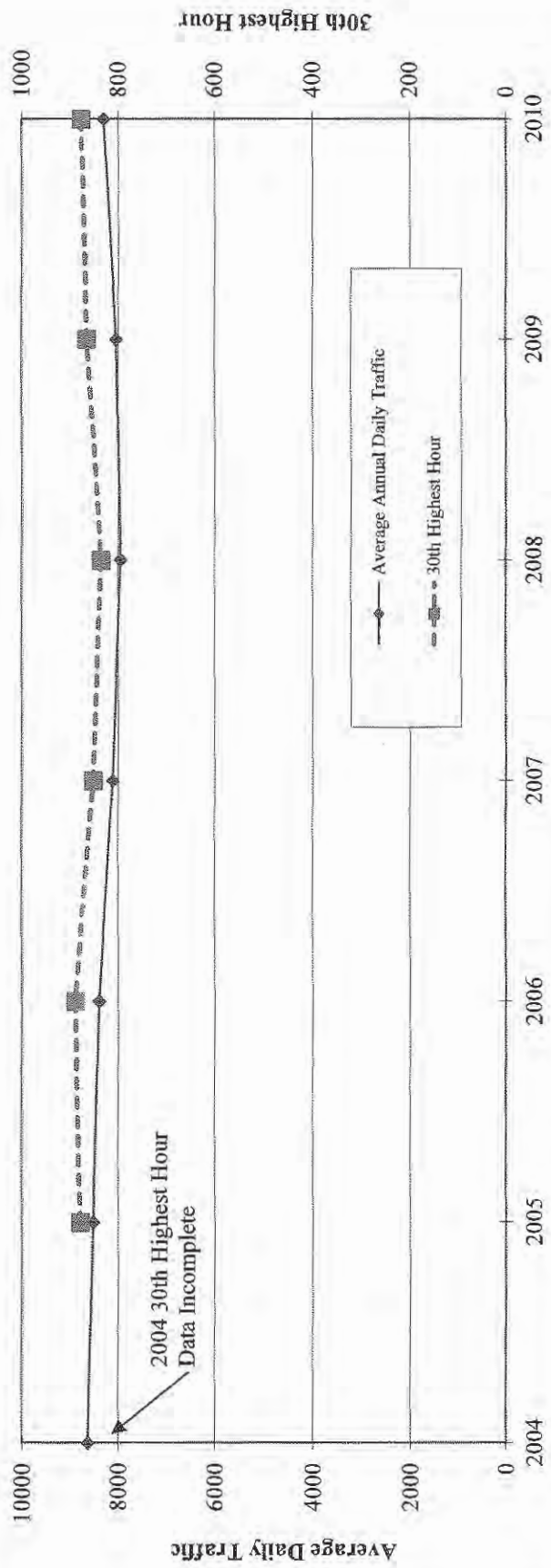


2010 Annual Average Weekday Traffic by Hour of Day

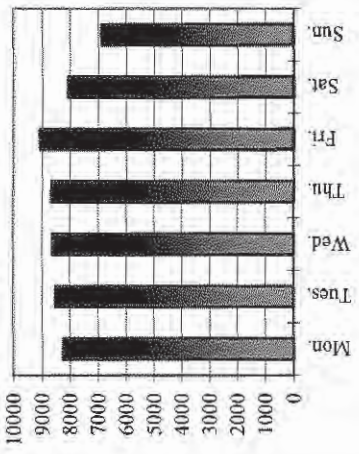


GLACIER HWY BTW N LENA LOOP & AUKE REC ROAD													JUNEAU				ON 296000				AT MILEPOINT		15,758		HISTORICAL DATA				
MONTH		MADT		%		6-10		10-6		MON		TUE		WED		THU		FRI		WKDY		SAT		SUN					
JAN		1557		73.5		93.4		6.6		98.8		99.1		97.9		100.7		107.1		100.7		107.5		89.0		2010		2118	
FEB		1815		85.7		94.3		5.7		96.0		92.4		93.3		97.6		111.5		98.2		113.9		95.2		2009		1965	
MAR		1943		91.7		93.8		6.2		101.5		96.4		98.1		105.2		100.1		100.3		105.0		93.6		2008		1825	
APR		2259		106.7		93.0		7.0		88.4		90.4		88.0		96.4		110.7		94.8		125.3		100.9		2007		1899	
MAY		2789		131.7		92.9		7.1		96.4		86.7		86.9		91.1		103.6		92.9		120.8		114.4		2006		1914	
JUN		2522		119.1		92.1		7.9		98.9		91.7		93.0		93.3		98.3		95.0		106.9		117.7		2005		2028	
JUL		2565		121.1		92.5		7.5		101.1		95.6		96.3		96.1		105.1		98.8		107.4		98.3		2004		2089	
AUG		2636		124.5		93.2		6.8		91.0		93.3		93.9		97.7		100.4		95.3		117.8		105.9		2003		2015	
SEP		2320		109.5		93.3		6.7		102.0		96.8		92.1		90.2		102.1		96.6		113.5		103.1		2002		2019	
OCT		1868		88.2		93.4		6.6		98.2		96.7		100.7		102.2		107.0		101.0		102.2		92.9		2001		2005	
NOV		1627		76.8		94.1		5.9		105.4		100.1		101.1		93.3		101.3		100.2		104.6		94.0		2000		2005	
DEC		1513		71.4		93.1		6.9		101.1		102.8		100.0		103.4		104.7		102.4		93.4		94.2		1999		2333	
ANN		2118		93.3		6.7		98.2		95.2		95.1		97.3		104.3		98.0		109.9		99.9				1998		2487	
HIGHEST DAYS													HIGHEST				HIGHEST				AVG								
1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH		20TH		30TH		40TH		50TH		AVG	
4401		4330		4006		3932		3663		3654		3583		3458		3435		3300		329		311		301		293		361	
05/29		08/14		05/30		08/15		05/28		04/24		05/22		05/08		06/06		06/20		05/29		08/15		04/24		06/06			
207.8		204.4		189.1		185.6		172.9		172.5		169.2		163.3		162.2		155.8		178.3									
HIGHEST HOURS													HIGHEST HOURS				HIGHEST HOURS				AVG								
1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH		20TH		30TH		40TH		50TH		AVG	
389		380		369		365		363		355		351		347		346		344		329		311		301		293		361	
14		16		15		12		16		13		16		16		18		14		11		16		16		15			
08/15		08/14		08/15		05/29		05/30		05/29		05/29		06/06		08/14		05/29		05/29		08/15		04/24		06/06			
18.4		17.9		17.4		17.2		17.1		16.8		16.6		16.4		16.3		16.2		15.5		14.7		14.2		13.8		17.0	
AM													PERCENT BY HOUR				PM												
1		2		3		4		5		6		7		8		9		10		11		12		1		2		3	
0.4		0.3		0.3		0.4		0.9		2.4		5.0		5.5		5.0		5.1		5.6		6.4		6.8		7.0		7.4	
8.7		7.4		8.0		8.7		7.4		5.5		4.2		3.3		2.4		1.4		0.8									

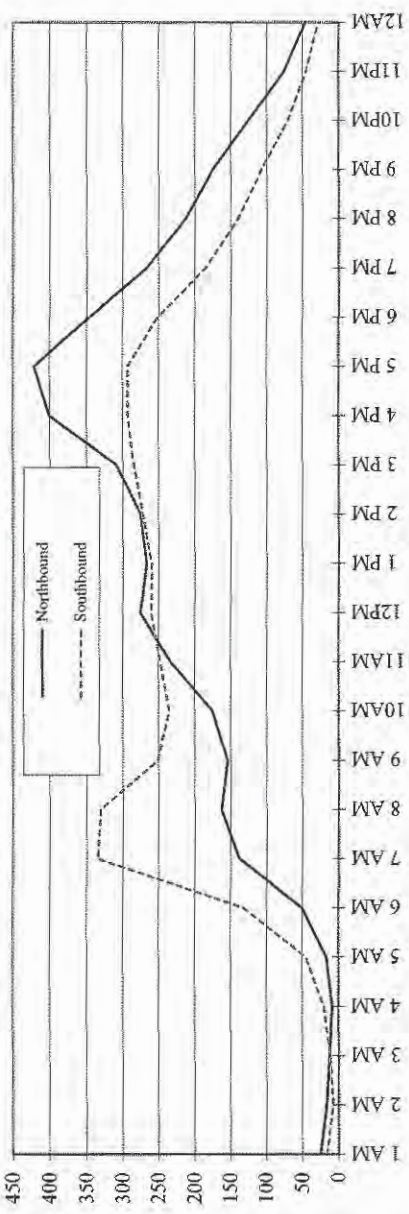
Permanent Traffic Recorder At Douglas Hwy (CDS Mi 1.04)



2010 Annual Average Daily Traffic by Day of Week



2010 Annual Average Weekday Traffic by Hour of Day



ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
TRAFFIC STUDIES FOR ROUTES IN SOUTHEAST REGION
FIXED RECORDER SUMMARY: 2010

RECORDER NUMBER 60348000 9

DOUGLAS HIGHWAY AT JOHN STREET **PTR***TOTAL***										ON 296110		AT MILEPOINT		1.058		HISTORICAL DATA	
MONTH	MADT	%	6-10	MON	TUE	WED	THU	FRI	WKDY	SAT	SUN						
JAN	7509	90.4	93.0	7.0	97.9	103.6	102.7	107.7	107.1	103.8	99.6	81.3					2010 8307
FEB	7960	95.8	93.4	6.6	97.3	102.3	103.9	104.6	112.9	104.2	98.0	81.0					2009 8044
MAR	7996	96.3	93.2	6.8	100.2	103.7	103.7	107.7	105.0	104.1	98.0	81.7					2008 7948
APR	8697	104.7	93.2	6.8	99.9	99.3	101.7	103.7	113.4	103.6	99.9	82.2					2007 8146
MAY	9091	109.4	93.0	7.0	99.2	100.2	103.2	105.3	111.3	103.8	97.4	83.4					2006 8399
JUN	9113	109.7	92.6	7.4	98.1	101.1	101.5	105.3	104.8	102.2	99.9	89.3					2005 8528
JUL	8660	104.2	92.3	7.7	96.4	102.1	103.0	104.8	109.6	103.2	94.3	89.8					2004 8638
AUG	8735	105.2	92.9	7.1	100.9	102.2	103.7	105.1	107.9	104.0	96.6	83.6					
SEP	8642	104.0	93.3	6.7	97.7	104.7	104.4	104.4	109.6	104.2	98.8	80.4					
OCT	8222	99.0	92.9	7.1	97.5	103.6	104.4	106.4	112.1	104.8	97.1	78.8					
NOV	7689	92.6	93.3	6.7	105.1	104.5	108.3	92.4	110.1	104.1	99.3	80.3					
DEC	7374	88.8	93.2	6.8	102.1	105.6	106.0	107.2	108.5	105.9	89.2	81.3					
ANN	8307		93.0	7.0	99.4	102.7	103.9	104.6	109.4	104.0	97.3	82.8					

HIGHEST DAYS

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	AVG
10958	10912	10757	10411	10342	10295	10292	10281	10138	10017	10440
07/04	06/26	05/28	06/04	06/03	04/23	07/02	05/27	06/01	05/21	
131.9	131.4	129.5	125.3	124.5	123.9	123.9	123.8	122.0	120.6	125.7

HIGHEST HOURS

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	20TH	30TH	40TH	50TH	AVG
1133	1037	994	987	971	971	946	943	933	929	900	878	871	864	984
17	16	14	13	16	16	14	13	13	16	16	7	16	16	
06/24	06/24	06/26	06/26	09/23	07/04	07/04	06/27	07/04	05/17	09/16	09/22	08/12	08/16	
13.6	12.5	12.0	11.9	11.7	11.7	11.4	11.4	11.2	11.2	10.8	10.6	10.5	10.4	11.8

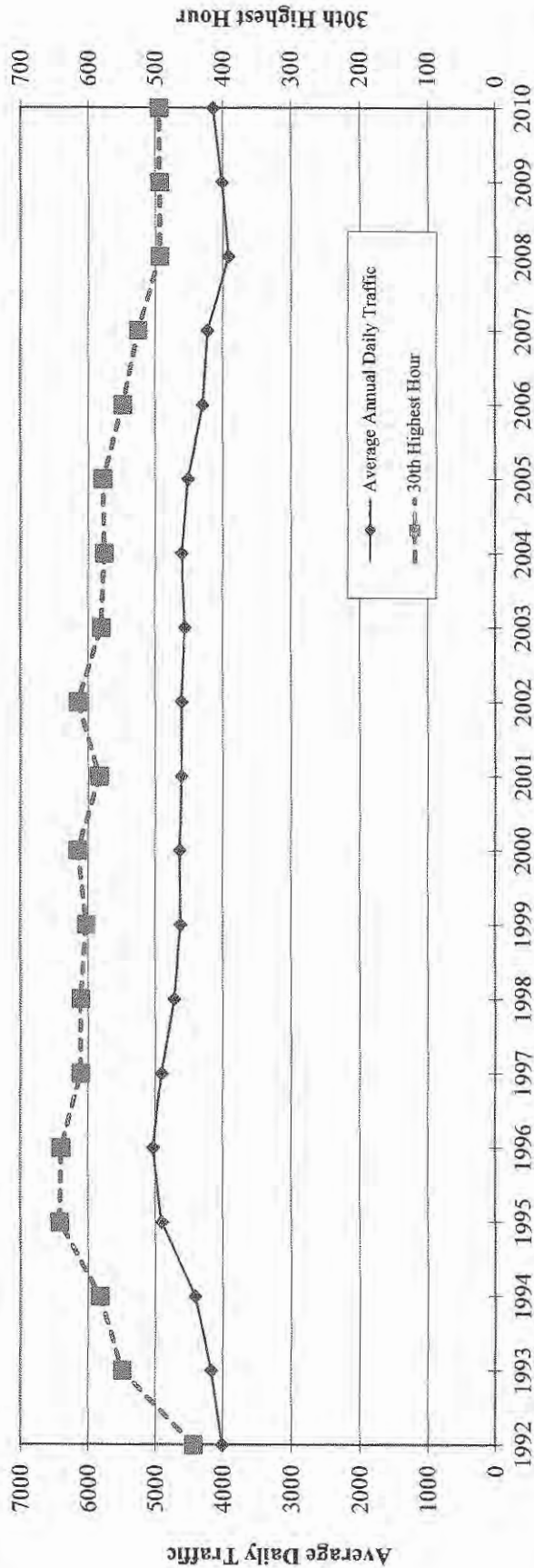
AM

PERCENT BY HOUR

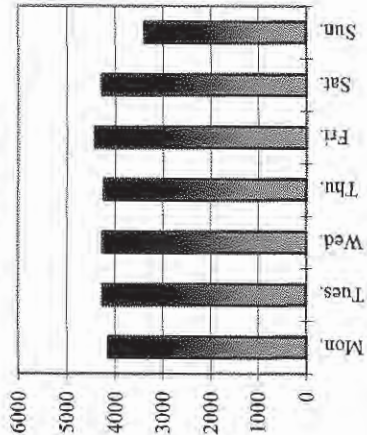
PM

FAM												PERCENT BY HOUR											
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
0.6	0.3	0.3	0.4	0.7	2.1	5.3	5.6	4.7	4.8	5.8	6.6	6.4	7.0	8.3	8.4	7.1	5.6	4.4	3.7	2.6	1.6	1.0	

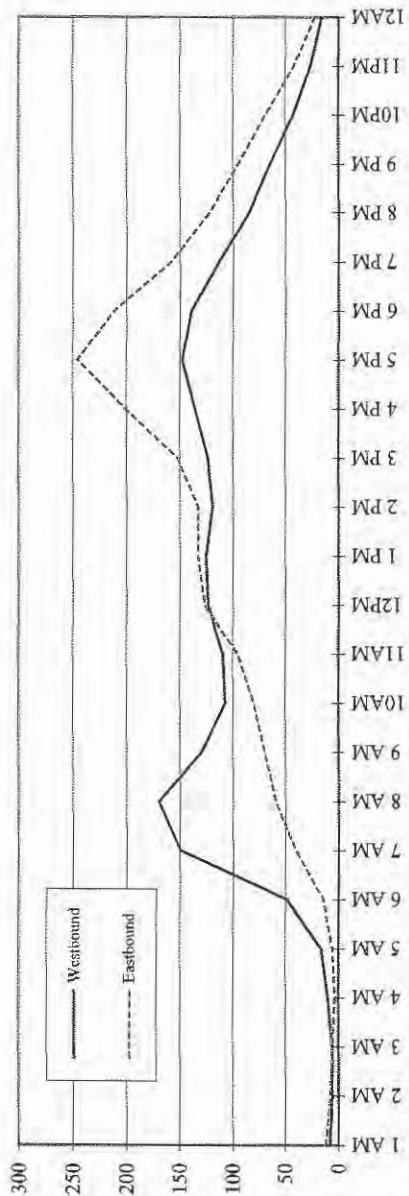
Permanent Traffic Recorder At Riverside Dr. (CDS Mi 1.47)



2010 Annual Average Daily Traffic by Day of Week



2010 Annual Average Weekday Traffic by Hour of Day



ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
TRAFFIC STUDIES FOR ROUTES IN SOUTHEAST REGION

FIXED RECORDER SUMMARY: 2010

RECORDER NUMBER 60500370 0

RIVERSIDE PTR CEMETARY ACCESS TO DIVISION JUNEAU ON 296500

AT MILEPOINT

1.471

HISTORICAL DATA

2010 4142
2009 4013
2008 3919
2007 4228
2006 4298
2005 4522
2004 4613
2003 4563
2002 4615
2001 4617
2000 4641
1999 4630
1998 4727
1997 4914
1996 5036
1995 4912
1994 4413
1993 4173
1992 4014

MONTH	MADT	%	6-10	MON	TUE	WED	THU	FRI	WKDY	SAT	SUN
JAN	3770	91.0	93.0	7.0	99.8	106.3	104.4	106.5	103.8	104.2	99.4 79.8
FEB	3899	94.1	93.7	6.3	98.1	102.4	101.6	104.0	110.2	103.3	102.7 81.1
MAR	3897	94.1	93.9	6.1	101.3	101.7	103.6	103.7	106.3	103.3	102.5 80.8
APR	4260	102.8	94.1	5.9	98.0	98.7	99.8	101.7	109.9	101.6	111.5 80.4
MAY	4690	113.2	94.5	5.5	98.1	99.5	99.6	100.9	107.0	101.0	109.9 84.9
JUN	4450	107.4	93.4	6.6	99.3	101.3	100.2	101.9	104.3	101.4	107.7 85.3
JUL	4403	106.3	93.2	6.8	100.1	111.1	103.3	102.2	106.0	104.5	99.4 78.0
AUG	4384	105.8	93.9	6.1	102.4	101.2	102.6	103.8	105.2	103.0	104.4 80.5
SEP	4202	101.4	94.4	5.6	97.0	103.8	102.2	103.2	107.8	102.8	104.3 81.7
OCT	4014	96.9	94.2	5.8	99.2	99.1	103.7	102.0	107.8	102.4	103.9 84.2
NOV	3791	91.5	93.9	6.1	104.7	104.4	106.1	91.7	105.4	102.5	104.7 83.0
DEC	3949	95.3	93.3	6.7	103.6	105.2	106.1	105.9	108.3	105.8	89.0 81.9
ANN	4142		93.8	6.2	100.1	102.9	102.8	102.3	106.8	103.0	103.3 81.8

HIGHEST DAYS

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	AVG
5966	5893	5436	5220	5197	5156	5153	5138	5086	5041	5329
07/27	05/01	05/22	05/28	05/08	04/30	04/24	05/21	06/01	07/20	
144.0	142.3	131.2	126.0	125.5	124.5	124.4	124.0	122.8	121.7	128.7

HIGHEST HOURS

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	20TH	30TH	40TH	50TH	AVG
587	544	539	538	530	527	521	520	519	519	505	495	488	484	534
17	17	17	17	16	17	17	17	17	17	17	17	17	17	
07/27	08/31	05/25	05/24	07/27	08/03	08/19	07/07	09/16	05/04	08/17	08/11	08/20	09/13	
14.2	13.1	13.0	13.0	12.8	12.7	12.6	12.6	12.5	12.5	12.2	12.0	11.8	11.7	12.9

AM

PERCENT BY HOUR

PM

1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
0.5	0.3	0.3	0.3	0.5	1.5	4.6	5.5	4.8	4.5	5.0	6.1	6.3	6.1	6.7	8.1	9.5	8.5	6.6	5.0	3.9	2.7	1.7	1.0

APPENDIX B

Synchro 9.0 Reports

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2016 Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	725	8	31	384	1	15
Future Vol, veh/h	725	8	31	384	1	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	843	9	36	447	1	17
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	852	0	1367	848
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	519	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	754	-	156	350
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	581	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	754	-	149	350
Mov Cap-2 Maneuver	-	-	-	-	149	-
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	553	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.7		16.8	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	323	-	-	754	-	
HCM Lane V/C Ratio	0.058	-	-	0.048	-	
HCM Control Delay (s)	16.8	-	-	10	-	
HCM Lane LOS	C	-	-	B	-	
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2016 Existing PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	450	2	12	687	8	25
Future Vol, veh/h	450	2	12	687	8	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	464	2	12	708	8	26
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	466	0	1198	465
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	733	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	1055	-	198	581
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	461	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1055	-	196	581
Mov Cap-2 Maneuver	-	-	-	-	196	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	456	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		15	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	394	-	-	1055	-	
HCM Lane V/C Ratio	0.086	-	-	0.012	-	
HCM Control Delay (s)	15	-	-	8.5	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	0.3	-	-	0	-	

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2019 Background AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	751	8	32	398	1	16
Future Vol, veh/h	751	8	32	398	1	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	873	9	37	463	1	19
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	883	0	1415	878
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	537	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	733	-	145	336
Stage 1	-	-	-	-	394	-
Stage 2	-	-	-	-	570	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	733	-	138	336
Mov Cap-2 Maneuver	-	-	-	-	138	-
Stage 1	-	-	-	-	394	-
Stage 2	-	-	-	-	541	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.8		17.4	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	310	-	-	733	-	
HCM Lane V/C Ratio	0.064	-	-	0.051	-	
HCM Control Delay (s)	17.4	-	-	10.2	-	
HCM Lane LOS	C	-	-	B	-	
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-	

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2019 Background PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	466	2	12	712	8	26
Future Vol, veh/h	466	2	12	712	8	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	480	2	12	734	8	27
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	482	0	1240	481
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	759	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	1040	-	186	569
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	448	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1040	-	184	569
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	443	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		15.4	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	381	-	-	1040	-	
HCM Lane V/C Ratio	0.092	-	-	0.012	-	
HCM Control Delay (s)	15.4	-	-	8.5	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	0.3	-	-	0	-	

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2019 Total AM Peak Hour

Intersection												
Int Delay, s/veh		1.4										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	751	8	32	398	13	1	0	16	39	0	10
Future Vol, veh/h	3	751	8	32	398	13	1	0	16	39	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	10	10	10	10	2	10	2	10	2	2	2
Mvmt Flow	3	873	9	37	463	15	1	0	19	45	0	12
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	478	0	0	883	0	0	1436	1437	878	1439	1435	470
Stage 1	-	-	-	-	-	-	885	885	-	545	545	-
Stage 2	-	-	-	-	-	-	551	552	-	894	890	-
Critical Hdwy	4.12	-	-	4.2	-	-	7.2	6.52	6.3	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.29	-	-	3.59	4.018	3.39	3.518	4.018	3.318
Pot Cap-1 Maneuver	1084	-	-	733	-	-	107	133	336	111	134	594
Stage 1	-	-	-	-	-	-	329	363	-	523	519	-
Stage 2	-	-	-	-	-	-	505	515	-	336	361	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1084	-	-	733	-	-	100	126	336	100	127	594
Mov Cap-2 Maneuver	-	-	-	-	-	-	219	245	-	206	232	-
Stage 1	-	-	-	-	-	-	327	361	-	520	493	-
Stage 2	-	-	-	-	-	-	470	489	-	316	359	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.7			16.8			24.8		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	326	1084	-	-	733	-	-	238				
HCM Lane V/C Ratio	0.061	0.003	-	-	0.051	-	-	0.239				
HCM Control Delay (s)	16.8	8.3	0	-	10.2	-	-	24.8				
HCM Lane LOS	C	A	A	-	B	-	-	C				
HCM 95th %tile Q(veh)	0.2	0	-	-	0.2	-	-	0.9				

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2019 Total PM Peak Hour

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	466	2	12	712	43	8	0	26	26	0	6
Future Vol, veh/h	11	466	2	12	712	43	8	0	26	26	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	10	10	10	10	2	10	2	10	2	2	2
Mvmt Flow	11	480	2	12	734	44	8	0	27	27	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	778	0	0	482	0	0	1288	1307	481	1299	1286	756
Stage 1	-	-	-	-	-	-	504	504	-	781	781	-
Stage 2	-	-	-	-	-	-	784	803	-	518	505	-
Critical Hdwy	4.12	-	-	4.2	-	-	7.2	6.52	6.3	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.29	-	-	3.59	4.018	3.39	3.518	4.018	3.318
Pot Cap-1 Maneuver	839	-	-	1040	-	-	135	160	569	138	164	408
Stage 1	-	-	-	-	-	-	536	541	-	388	405	-
Stage 2	-	-	-	-	-	-	375	396	-	541	540	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	839	-	-	1040	-	-	130	155	569	129	159	408
Mov Cap-2 Maneuver	-	-	-	-	-	-	249	270	-	254	277	-
Stage 1	-	-	-	-	-	-	526	531	-	381	400	-
Stage 2	-	-	-	-	-	-	365	391	-	506	530	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	14	20
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	437	839	-	-	1040	-	-	273
HCM Lane V/C Ratio	0.08	0.014	-	-	0.012	-	-	0.121
HCM Control Delay (s)	14	9.3	0	-	8.5	-	-	20
HCM Lane LOS	B	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.4

HCM 2010 TWSC

Juneau Pederson Hill TIA

1: Sherwood Lane & Glacier Highway

2019 Total Sunday Peak Hour

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	405	2	10	619	45	7	0	23	42	0	11
Future Vol, veh/h	11	405	2	10	619	45	7	0	23	42	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	10	10	10	10	2	10	2	10	2	2	2
Mvmt Flow	13	471	2	12	720	52	8	0	27	49	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	772	0	0	473	0	0	1274	1293	472	1280	1268	746
Stage 1	-	-	-	-	-	-	498	498	-	769	769	-
Stage 2	-	-	-	-	-	-	776	795	-	511	499	-
Critical Hdwy	4.12	-	-	4.2	-	-	7.2	6.52	6.3	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.29	-	-	3.59	4.018	3.39	3.518	4.018	3.318
Pot Cap-1 Maneuver	843	-	-	1048	-	-	139	163	576	143	168	413
Stage 1	-	-	-	-	-	-	540	544	-	394	411	-
Stage 2	-	-	-	-	-	-	378	399	-	545	544	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	843	-	-	1048	-	-	131	158	576	133	163	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	248	272	-	258	281	-
Stage 1	-	-	-	-	-	-	529	533	-	386	406	-
Stage 2	-	-	-	-	-	-	362	394	-	509	533	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	13.9	21.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	440	843	-	-	1048	-	-	280
HCM Lane V/C Ratio	0.079	0.015	-	-	0.011	-	-	0.22
HCM Control Delay (s)	13.9	9.3	0	-	8.5	-	-	21.4
HCM Lane LOS	B	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.8

APPENDIX C

Level of Service Definitions

Level of service (LOS) is a qualitative measure that describes the operating conditions within an intersection or roadway section, and the perception of those conditions by the facility's users. The factors used to measure the LOS provided by any given facility, might include any or all of the following:

- User comfort
- Convenience
- Travel time
- Maneuverability
- Interruptions in traffic
- Speed
- Cost
- Number of stops
- Fuel consumption

Every type of facility (intersections, freeway, segment, arterial, or pedestrian) has different operating parameters that are used to determine its LOS. For intersections, the primary operating parameter is average control delay per vehicle defined in units of seconds per vehicle. There are six LOS defined for each facility type. Each level has a letter identification from A to F with LOS A representing the best operating conditions and LOS F the worst.

SIGNALIZED INTERSECTIONS

The delay experienced by motorists in a signalized intersection is affected by a number of factors related to geometrics, traffic, control, and incidents. The total delay is defined as the difference between the actual travel time and travel time that would result from ideal conditions. An ideal signalized intersection has 12-foot lane widths, level grade, no curb parking, only passenger cars in the traffic stream, no turning movements, green signal available all the time, and is located outside the central business district. For signalized intersections, only the portion of total delay associated with control is measured. This delay is referred to as control delay and includes the following: initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Table 1 summarizes the *2000 Highway Capacity Manual*'s description of the six LOS for a signalized intersection. The range of delays in each LOS is the same for the *2010 Highway Capacity Manual*.

Table 1: Level of Service Criteria for Signalized Intersections

LOS	Average Delay per Vehicle
A	Very low control delay, 10 or less seconds per vehicle; progression is very favorable; most vehicles arrive during the green cycle; most vehicles do not stop. Short cycle lengths may also contribute to low delay.
B	Control delay greater than 10 and up to 20 seconds per vehicle; progression is good and/or cycle lengths are short. More vehicles stop than for LOS A, causing higher levels of average delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle; progression is fair and/or cycle lengths are longer. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many vehicles still pass through without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle; progression is unfavorable, cycle lengths are long, or has a high flow rate to capacity ratio. Many vehicles stop, and the proportion of vehicles not stopping diminishes. Individual cycle failures are obvious.
E	Control delay greater than 55 and up to 80 seconds per vehicle; progression is poor, cycle lengths are long, and has a high flow rate to capacity ratio. Individual cycle failures are frequent occurrences.
F	Control delay greater than 80 seconds per vehicle; progression is very poor, cycle lengths are long. Many individual cycle failures. Arrival flow rates exceed the capacity of the intersection. This level is considered unacceptable to most drivers.

UNSIGNALIZED INTERSECTIONS

The two types of unsignalized intersections include two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections. The LOS for a TWSC intersection is defined by control delay for each minor approach and major street left-turn movement rather than the overall intersection. The LOS for an AWSC intersection is defined by control delay for the intersection as a whole. The delay ranges for unsignalized intersections are different from those for signalized intersections primarily due to driver expectation. The expectation is that signalized intersections are designed to carry higher volumes of traffic and therefore higher levels of delay are acceptable. Table 2 summarizes the *2000 Highway Capacity Manual*'s description of the six LOS for an unsignalized intersection. The range of delays in each LOS is the same for the *2010 Highway Capacity Manual*.

Table 2: Level of Service Criteria for Unsignalized Intersections

LOS	Average Delay per Vehicle
A	Very low control delay, 10 or less seconds per vehicle. All drivers find freedom of operation. Very rarely more than one vehicle in queue.
B	Control delay greater than 10 and up to 15 seconds per vehicle. Some drivers begin to consider the delay troublesome. Seldom is there more than one vehicle in queue.
C	Control delay greater than 15 and up to 25 seconds per vehicle. Most drivers feel restricted, but tolerable so. Often there is more than one vehicle in queue.
D	Control delay greater than 25 and up to 35 seconds per vehicle. Drivers feel restricted. Most often, there is more than one vehicle in queue.
E	Control delay greater than 35 and up to 50 seconds per vehicle. Drivers find delays approaching intolerable levels. There is frequently more than one vehicle in queue. This level denotes a state in which the demand is close to or equal to the probable maximum number of vehicles that can be accommodated by the movement.
F	Control delay greater than 50 seconds per vehicle. Very constrained flow. Represents an intersection failure situation that is caused by geometry and/or operational constraints external to the intersection.

SUMMARY

The average control delay for signalized and unsignalized intersections is summarized in Table 3.

Table 3: Summary of Average Control Delay per Vehicle (in seconds) for Signalized and Unsignalized Intersections

LOS	Unsignalized Intersections	Signalized Intersections
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80



SHEET NO.
2 of 3

PEDERSON HILL
SUBDIVISION & WETLANDS

PEDERSON HILL

CITY OF JEROME
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

DOWL
Consulting Engineers • Land Surveyors • Construction Administration
JAN 14, 2017 DRAWN BY: STAFF REVISION BY: N. KIMMEL CHECKED BY: STAFF DATE: OCT. 2016



DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 22270
JUNEAU, AK 99802-2270

SEP 28 2016

Regulatory Division
POA-2016-206

Mr. Daniel Bleidorn
City and Borough of Juneau
155 South Seward Street
Juneau, Alaska 99801

Dear Mr. Bleidorn:

Enclosed is the signed Department of the Army permit, file POA-2016-206, Casa Del Sol Creek, which authorizes the discharge of fill material into waters of the United States, including wetlands to construct a residential subdivision.

The project site is located within Section 25, T. 40 S., R. 65 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.37423° N., Longitude 134.612969° W.; Pederson Hill Lot 2, in Juneau, Alaska. Also enclosed is a Notice of Authorization which should be posted in a prominent location near the authorized work.

If changes to the plans or location of the work are necessary for any reason, plans must be submitted to us immediately. Federal law requires approval of any changes before construction begins.

Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact me via email at Randal.P.Vigil@usace.army.mil, by mail at the address above, or by phone at (907) 790-4491, if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Randal P. Vigil", is written over a large, stylized circular flourish.

Randal P. Vigil
Project Manager

Enclosures

DEPARTMENT OF THE ARMY PERMIT

Permittee: City and Borough of Juneau

Permit No.: POA-2016-206 (Casa Del Sol Creek)

Issuing Office: U.S. Army Engineer District, Alaska

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Discharge 38,119 cubic yards of shot rock, 4,765 cubic yards of crushed rock and 1,588 cubic yards of sand and gravel fill material into 9.47 acres of waters of the United States consisting of forested wetlands in order to construct a 60 foot wide boulevard, three 50 foot wide streets, and a 50 foot wide lane, 87 residential lots (cleared and prepped for home construction), underground municipal water, sewer, and electrical lines to each lot, a 10 feet wide equestrian trail, and a 15 feet wide pedestrian walk.

All work will be performed in accordance with the attached plan, sheets 1-3, dated May 25, 2016.

Project Location: Section 25, T. 40 S., R. 65 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.37423° N., Longitude 134.612969° W.; Pederson Hill Lot 2, in Juneau, Alaska.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **September 30, 2021**

If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions: N/A

Further Information: N/A

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorization required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

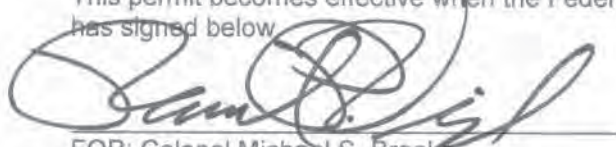
6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.


 Daniel Bleidorn
 Deputy Lands Manager
 City and Borough of Juneau

09 26 16
 (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.


 FOR: Colonel Michael S. Brooks
 Randal P. Vigil
 South Branch, Regulatory Division

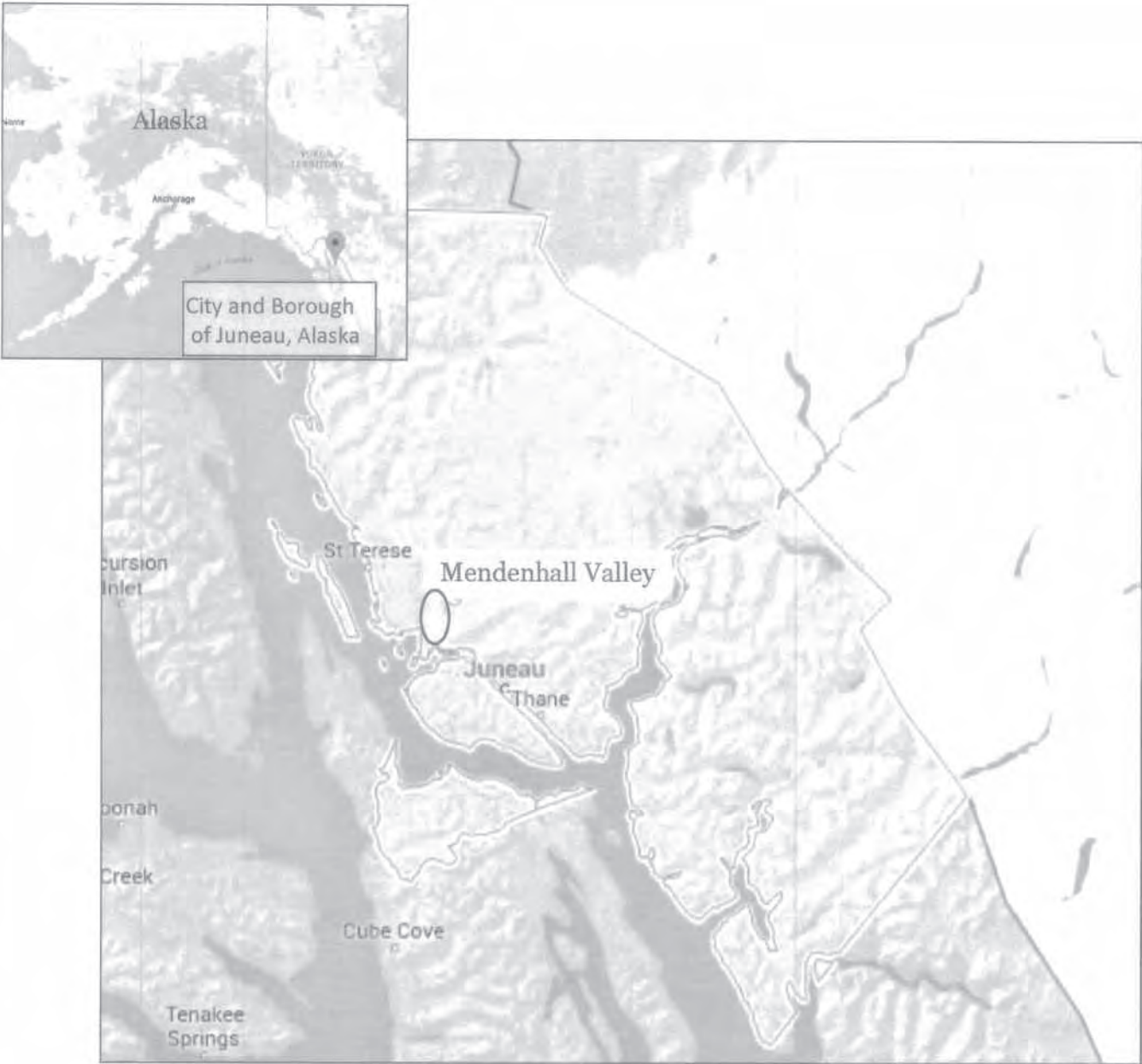
09/28/2016
 (DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions have the transferee sign and date below.

 (TRANSFEEE)

 (DATE)

City & Borough of Juneau
Pederson Hill Subdivision
Vicinity Map





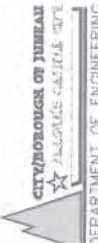
A portion of U.S. Survey
No. 3873, According to
Plat No. 2015-40
Containing; 39,254 ft.²
Tax ID: 4B2201010101

U.S. Survey No. 3873,
Alaska Containing
121.56 Acres
Tax ID:
4B2201010101
Legal Description:
Pederson Hill LT 2
134° 36' 47.917" W
58 22' 25.882" N

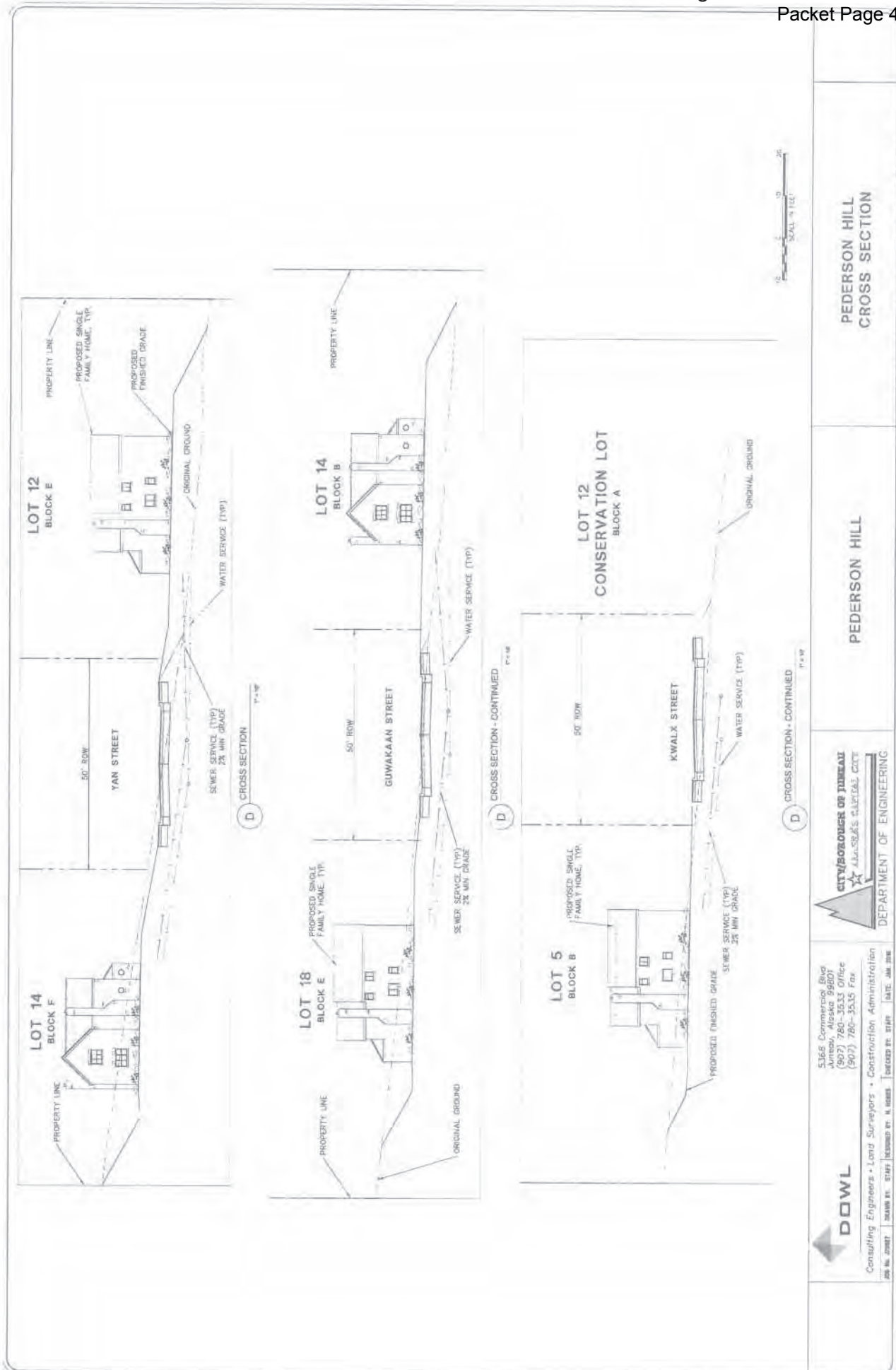


POA-2016-206, Casa Del Sol Creek
City & Borough of Juneau
Residential
June 6, 2016

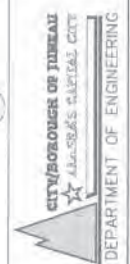


 CITY/BOROUGH OF JUNEAU ALASKA CAPITAL CITY DEPARTMENT OF ENGINEERING		PEDERSON HILL SUBDIVISION		SHEET NO.
DOWL HKM Consulting Engineers • Land Surveyors • Construction Administration 5368 Commercial Blvd. Juneau, Alaska 99801 (907) 780-3533 Office (907) 780-3535 Fax		PEDERSON HILL		POA-2016-206, Casa Del Sol Creek City & Borough of Juneau Residential Sheet 1 of 3 May 25, 2016
DATE: JAN 2016	CHECKED BY: STAFF	DATE: JAN 2016	DATE: JAN 2016	DATE: JAN 2016

City and Borough of Juneau
Pederson Hill Subdivision



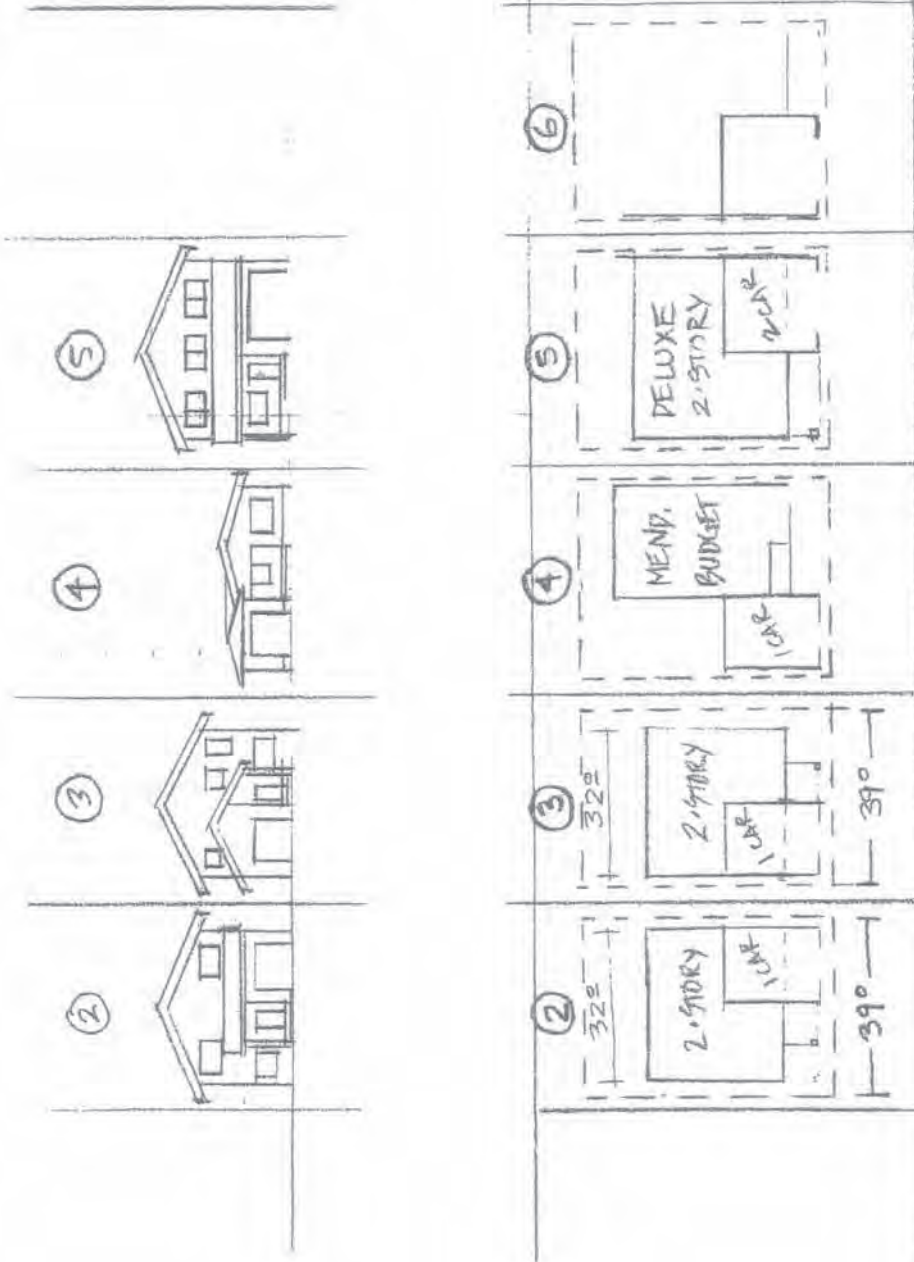
5365 Commercial Blvd
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax
Consulting Engineers • Land Surveyors • Construction Administration
JES JR. JONES | JAMES R. STAFF | TERRY R. H. HARRIS | TERRY R. H. HARRIS | DATE: JAN 2016



PEDERSON HILL
CROSS SECTION

POA-2016-206, Casa Del Sol Creek
City & Borough of Juneau
Residential
Sheet 2 of 3
May 25, 2016

PEDERSON HILL
4.27.16 CBT
BLOCK E



POA-2016-206, Casa Del Sol Creek
City & Borough of Juneau
Residential
Sheet 3 of 3
May 25, 2016

YAN STREET



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF WATER
Wastewater Discharge Authorization Program

555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.dec.alaska.gov/water/wwdp

July 20, 2016

City & Borough of Juneau (CBJ), Division of Lands & Resources
Attention: Dan Bleidorn
155 South Seward Street
Juneau, AK 99801

Re: City & Borough of Juneau (CBJ), Pederson Hill Subdivision
POA-2016-206, Casa Del Sol Creek aka Pederson Hill Creek

Dear Mr. Bleidorn:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation (DEC) is issuing the enclosed Certificate of Reasonable Assurance for placement of dredged and/or fill material in waters of the U.S., including wetlands and streams, associated with the development of a subdivision near Juneau, Alaska.

DEC regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. An informal review request must be delivered to the Director, Division of Water, 555 Cordova Street, Anchorage, AK 99501, within 15 days of the permit decision. Visit <http://dec.alaska.gov/commish/ReviewGuidance.htm> for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the U.S. Army Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

A handwritten signature in cursive script that reads "James Rypkema".

James Rypkema
Program Manager, Storm Water and Wetlands

Enclosure: 401 Certificate of Reasonable Assurance

cc: (with encl.)
Randy Vigil, USACE, Juneau
Jackie Timothy, ADF&G

USFWS Field Office Juneau
Mark Jen, EPA Operations, Anchorage

**STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE**

In accordance with Section 401 of the Federal Clean Water Act (CWA) and the Alaska Water Quality Standards (18 AAC 70), a Certificate of Reasonable Assurance, is issued to CBJ, attention: Dan Bleidorn, at 155 South Seward Street, Juneau, Alaska 99801, for placement of dredged and/or fill material in waters of the U.S. including wetlands and streams in association with the development of a subdivision in Juneau, Alaska.

The purpose of the project is to subdivide a large tract of CBJ owned property in order to provide small residential lots to help meet the current demand for affordable housing. CBJ proposes to discharge approximately 38,119 cubic yards of shot rock, 4,765 cubic yards of crushed rock and 1,588 cubic yards of sand and gravel fill material into approximately 9.47 acres of waters of the United States consisting of forested wetlands in order to construct a 60 foot wide boulevard, three 50 foot wide streets, and a 50 foot wide lane, 87 residential lots (cleared and prepped for home construction), underground municipal water, sewer, and electrical lines to each lot, a 10 foot wide equestrian trail, and a 15 foot wide pedestrian walk.

DEC identified Pederson Hill Creek on the 2006 303(d) list as an impaired waterbody due to fecal coliform, with failing septic tanks listed as the expected pollutant source. A total maximum daily load (TMDL) was developed and approved by EPA and is available at [http://dec.alaska.gov/water/tmdl/pdfs/Pederson Hill TMDL final.pdf](http://dec.alaska.gov/water/tmdl/pdfs/Pederson%20Hill%20TMDL%20final.pdf). Among the proposed minimization measures, CBJ has extended the municipal sewer system to include the section of Glacier Highway at the head waters of Pederson Hill Creek so that privately owned septic tanks/systems would be minimized, which will reduce fecal coliform loads to the creek.

A state issued water quality certification is required under Section 401 because the proposed activity will be authorized by a U.S. Army Corps of Engineers permit (POA-2016-206) and a discharge of pollutants to waters of the U.S. located in the State of Alaska may result from the proposed activity. Public notice of the application for this certification was given as required by 18 AAC 15.180 in the Corps Public Notice POA-2016-206 posted from June 9, 2016 to July 11, 2016.

The proposed activity is located within Section 25, T. 40 S., R. 65 E., Copper River Meridian; Latitude 58.37423° N., Longitude -134.612969° W.; in Juneau, Alaska.

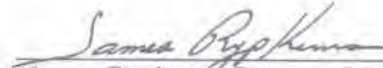
The Department of Environmental Conservation (DEC) reviewed the application and certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the CWA and the Alaska Water Quality Standards, 18 AAC 70, provided that the following additional measures are adhered to.

1. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products or other hazardous substances. Fuel storage and handling activities for equipment must be sited and conducted so there is no petroleum contamination of the ground, subsurface, or surface waterbodies.

2. During construction, spill response equipment and supplies such as sorbent pads shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze, or other pollutant spills. Any spill amount must be reported in accordance with Discharge Notification and Reporting Requirements (AS 46.03.755 and 18 AAC 75 Article 3). The applicant must contact by telephone the DEC Area Response Team for Southeast Alaska (907) 465-5340 during work hours or 1-800-478-9300 after hours. Also, the applicant must contact by telephone the National Response Center at 1-800-424-8802.
3. Runoff discharged to surface water (including wetlands) from a construction site disturbing one or more acres must be covered under Alaska's General Permit for Storm Water Discharges from Large and Small Construction Activities in Alaska (AKR100000). This permit requires a Storm Water Pollution Prevention Plan (SWPPP). For projects that disturb more than five acres, this SWPPP must also be submitted to DEC (William Ashton, 907-269-6283) prior to construction.
4. All work areas, material access routes, and surrounding wetlands involved in the construction project shall be clearly delineated and marked in such a way that equipment operators do not operate outside of the marked areas.
5. Natural drainage patterns shall be maintained, to the extent practicable, without introducing ponding or drying.
6. Excavated or fill material, including overburden, shall be placed so that it is stable, meaning after placement the material does not show signs of excessive erosion. Indicators of excess erosion include: gullying, head cutting, caving, block slippage, material sloughing, etc. The material must be contained with siltation best management practices (BMPs) to preclude reentry into any waters of the U.S., which includes wetlands.
7. Include the following BMPs to handle storm water and total storm water volume discharges as they apply to the site:
 - a. Divert storm water from off-site around the site so that it does not flow onto the project site and cause erosion of exposed soils;
 - b. Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
 - c. Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.
8. Fill material must be clean sand, gravel or rock, free from petroleum products and toxic contaminants in toxic amounts.
9. Any disturbed ground and exposed soil not covered with fill must be stabilized and re-vegetated with endemic species, grasses, or other suitable vegetation in an appropriate manner to minimize erosion and sedimentation, so that a durable vegetative cover is established in a timely manner.

This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under U.S Army Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18 AAC 15.100).

Date: July 20, 2016



James Rypkema, Program Manager
Storm Water and Wetlands



This notice of authorization must be
conspicuously displayed at the site of work.

UNITED STATES ARMY CORPS OF ENGINEERS
CASA DEL SOL CREEK

A PERMIT TO: DISCHARGE FILL MATERIAL INTO WATERS OF THE
UNITED STATES, INCLUDING WETLANDS TO CONSTRUCT A
RESIDENTIAL SUBDIVISION

AT: SECTION 25, T. 40 S., R. 65 E., COPPER RIVER MERIDIAN; USGS
QUAD MAP JUNEAU B-2; LATITUDE 58.37423° N., LONGITUDE 134.612969°
W.; PEDERSON HILL LOT 2, IN JUNEAU, AK

HAS BEEN ISSUED TO: THE CITY AND BOROUGH OF JUNEAU
ON: SEPTEMBER 28, 2016, AND EXPIRES ON: SEPTEMBER 30, 2021.

ADDRESS OF PERMITTEE: 155 SOUTH SEWARD STREET, JUNEAU, AK
99801.

PERMIT NUMBER:

POA-2016-206

FOR: DISTRICT COMMANDER
RANDAL P. VIGIL
PROJECT MANAGER
REGULATORY DIVISION

ENG FORM 4336, Jul 81 (33 CFR 320-330) EDITION OF JUL 70 MAY BE USED (Proponent: CECW-O)

MEMORANDUM

State of Alaska

Department of Fish and Game
Division of Habitat

TO: Jackie Timothy
Southeast Regional Supervisor

DATE: September 2, 2015

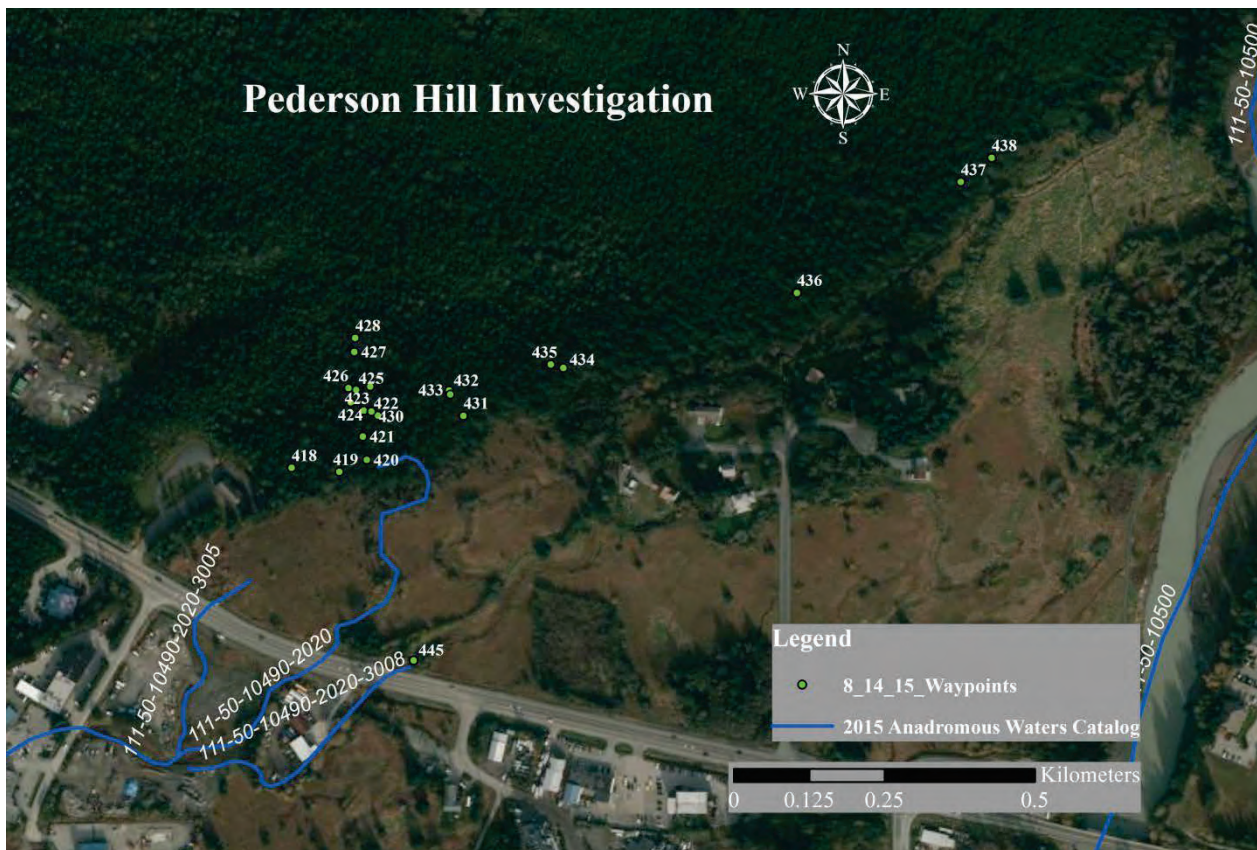
FILE NO: 58.3733, -134.6126

SUBJECT: Pederson Hill Area Land: CBJ
August 14, 2015 Site Visit

FROM: Johnny Zutz *JZ*
Habitat Biologist

PHONE NO: (907) 465-6474

On Friday August 15th, Tess Quinn and I visited the headwaters of Casa Del Sol above Glacier Highway. CBJ is preparing to design a subdivision in the area uphill from Wildmeadow Lane and Christ Lutheran Church. We parked near the church and hiked east, northeast along the ridgeline. We netted one coho and visually identified several others at waypoint 420; just above the cataloged upper extent of Stream No. 111-50-10490-2020 (CO_r, DV_r). We did not observe or capture any other fish during our survey of the area and will not make any changes to the catalog.



Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
418	58.3733	-134.6139	Pedersen Hill fish survey. Start at Christ Lutheran Church (across from Sherwood Lane) and walking along hillside towards Mendenhall River. Proposed corridor, flagging on stake.		
419	58.3733	-134.6131	First stream, also smaller stream or side shannel just east that was not fished.	EF	0
420	58.3734	-134.6127	Second stream. Electrofish heading upstream.	EF	1 CO
421	58.3736	-134.6128		EF	0
422	58.3737	-134.6126	Five foot tall log dam in stream.		
423	58.3738	-134.6128		EF	0
424	58.3738	-134.6130	Stream flows subsurface upstream.	EF	0
425	58.3739	-134.6129		EF	0
426	58.3740	-134.6130		EF	0
427	58.3742	-134.6129		EF	0
428	58.3743	-134.6129	End tracking upstream due to lack of fish.	EF	0
429	58.3740	-134.6127	Tracking stream down, tributary of last stream.		
430	58.3738	-134.6127	Back at dam. Continue east.		
431	58.3737	-134.6113	Third stream. Tracking up.	EF	0
432	58.3739	-134.6115		EF	0
433	58.3739	-134.6115	End tracking, no place to fish.		
434	58.3741	-134.6098	Fourth stream. Metal siding sitting in stream.	EF	0
435	58.3741	-134.6100		EF	0
436	58.3747	-134.6063	Very small stream, upper extent, did not fish.		
437	58.3756	-134.6039	Small steep gully. No photos.		
438	58.3758	-134.6034	Second small gully.		
445	58.3718	-134.6120	Trap set 20' upstream of inlet to dual culverts; Time in 12:00. Pulled at 15:30 Stream No. 111-50-10490-2020-3008	MT	46 CO

Email cc:

Al Ott, ADF&G Habitat, Fairbanks
 Staff, ADF&G Habitat, Juneau
 Dan Teske, ADF&G-SF, Juneau
 Greg Chaney, CBJ, Juneau

Stephanie Sell, ADF&G-WC
 Linda Speerstra, USACE, Sitka
 Cindy Hartmann Moore, NMFS, Juneau
 Steve Brockmann, USFWS, Juneau



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Environmental
Conservation**

DIVISION OF WATER
Wastewater Discharge Authorization Program

555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.dec.alaska.gov/water/wwdp

July 20, 2016

City & Borough of Juneau (CBJ), Division of Lands & Resources
Attention: Dan Bleidorn
155 South Seward Street
Juneau, AK 99801

Re: City & Borough of Juneau (CBJ), Pederson Hill Subdivision
POA-2016-206, Casa Del Sol Creek aka Pederson Hill Creek

Dear Mr. Bleidorn:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation (DEC) is issuing the enclosed Certificate of Reasonable Assurance for placement of dredged and/or fill material in waters of the U.S., including wetlands and streams, associated with the development of a subdivision near Juneau, Alaska.

DEC regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. An informal review request must be delivered to the Director, Division of Water, 555 Cordova Street, Anchorage, AK 99501, within 15 days of the permit decision. Visit <http://dec.alaska.gov/commish/ReviewGuidance.htm> for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the U.S. Army Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

A handwritten signature in cursive script, appearing to read "James Rypke".

James Rypke
Program Manager, Storm Water and Wetlands

Enclosure: 401 Certificate of Reasonable Assurance

cc: (with encl.)
Randy Vigil, USACE, Juneau
Jackie Timothy, ADF&G

USFWS Field Office Juneau
Mark Jen, EPA Operations, Anchorage

**STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE**

In accordance with Section 401 of the Federal Clean Water Act (CWA) and the Alaska Water Quality Standards (18 AAC 70), a Certificate of Reasonable Assurance, is issued to CBJ, attention: Dan Bleidorn, at 155 South Seward Street, Juneau, Alaska 99801, for placement of dredged and/or fill material in waters of the U.S. including wetlands and streams in association with the development of a subdivision in Juneau, Alaska.

The purpose of the project is to subdivide a large tract of CBJ owned property in order to provide small residential lots to help meet the current demand for affordable housing. CBJ proposes to discharge approximately 38,119 cubic yards of shot rock, 4,765 cubic yards of crushed rock and 1,588 cubic yards of sand and gravel fill material into approximately 9.47 acres of waters of the United States consisting of forested wetlands in order to construct a 60 foot wide boulevard, three 50 foot wide streets, and a 50 foot wide lane, 87 residential lots (cleared and prepped for home construction), underground municipal water, sewer, and electrical lines to each lot, a 10 foot wide equestrian trail, and a 15 foot wide pedestrian walk.

DEC identified Pederson Hill Creek on the 2006 303(d) list as an impaired waterbody due to fecal coliform, with failing septic tanks listed as the expected pollutant source. A total maximum daily load (TMDL) was developed and approved by EPA and is available at [http://dec.alaska.gov/water/tmdl/pdfs/Pederson Hill TMDL final.pdf](http://dec.alaska.gov/water/tmdl/pdfs/Pederson%20Hill%20TMDL%20final.pdf)). Among the proposed minimization measures, CBJ has extended the municipal sewer system to include the section of Glacier Highway at the head waters of Pederson Hill Creek so that privately owned septic tanks/systems would be minimized, which will reduce fecal coliform loads to the creek.

A state issued water quality certification is required under Section 401 because the proposed activity will be authorized by a U.S. Army Corps of Engineers permit (POA-2016-206) and a discharge of pollutants to waters of the U.S. located in the State of Alaska may result from the proposed activity. Public notice of the application for this certification was given as required by 18 AAC 15.180 in the Corps Public Notice POA-2016-206 posted from June 9, 2016 to July 11, 2016.

The proposed activity is located within Section 25, T. 40 S., R. 65 E., Copper River Meridian; Latitude 58.37423° N., Longitude -134.612969° W.; in Juneau, Alaska.

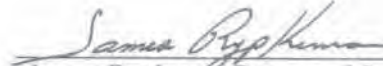
The Department of Environmental Conservation (DEC) reviewed the application and certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the CWA and the Alaska Water Quality Standards, 18 AAC 70, provided that the following additional measures are adhered to.

1. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products or other hazardous substances. Fuel storage and handling activities for equipment must be sited and conducted so there is no petroleum contamination of the ground, subsurface, or surface waterbodies.

2. During construction, spill response equipment and supplies such as sorbent pads shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze, or other pollutant spills. Any spill amount must be reported in accordance with Discharge Notification and Reporting Requirements (AS 46.03.755 and 18 AAC 75 Article 3). The applicant must contact by telephone the DEC Area Response Team for Southeast Alaska (907) 465-5340 during work hours or 1-800-478-9300 after hours. Also, the applicant must contact by telephone the National Response Center at 1-800-424-8802.
3. Runoff discharged to surface water (including wetlands) from a construction site disturbing one or more acres must be covered under Alaska's General Permit for Storm Water Discharges from Large and Small Construction Activities in Alaska (AKR100000). This permit requires a Storm Water Pollution Prevention Plan (SWPPP). For projects that disturb more than five acres, this SWPPP must also be submitted to DEC (William Ashton, 907-269-6283) prior to construction.
4. All work areas, material access routes, and surrounding wetlands involved in the construction project shall be clearly delineated and marked in such a way that equipment operators do not operate outside of the marked areas.
5. Natural drainage patterns shall be maintained, to the extent practicable, without introducing ponding or drying.
6. Excavated or fill material, including overburden, shall be placed so that it is stable, meaning after placement the material does not show signs of excessive erosion. Indicators of excess erosion include: gullying, head cutting, caving, block slippage, material sloughing, etc. The material must be contained with siltation best management practices (BMPs) to preclude reentry into any waters of the U.S., which includes wetlands.
7. Include the following BMPs to handle storm water and total storm water volume discharges as they apply to the site:
 - a. Divert storm water from off-site around the site so that it does not flow onto the project site and cause erosion of exposed soils;
 - b. Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
 - c. Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.
8. Fill material must be clean sand, gravel or rock, free from petroleum products and toxic contaminants in toxic amounts.
9. Any disturbed ground and exposed soil not covered with fill must be stabilized and re-vegetated with endemic species, grasses, or other suitable vegetation in an appropriate manner to minimize erosion and sedimentation, so that a durable vegetative cover is established in a timely manner.

This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under U.S Army Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18 AAC 15.100).

Date: July 20, 2016



James Rypkema, Program Manager
Storm Water and Wetlands

Profile View of Equestrian Trail (Preliminary)
Provided by Applicant

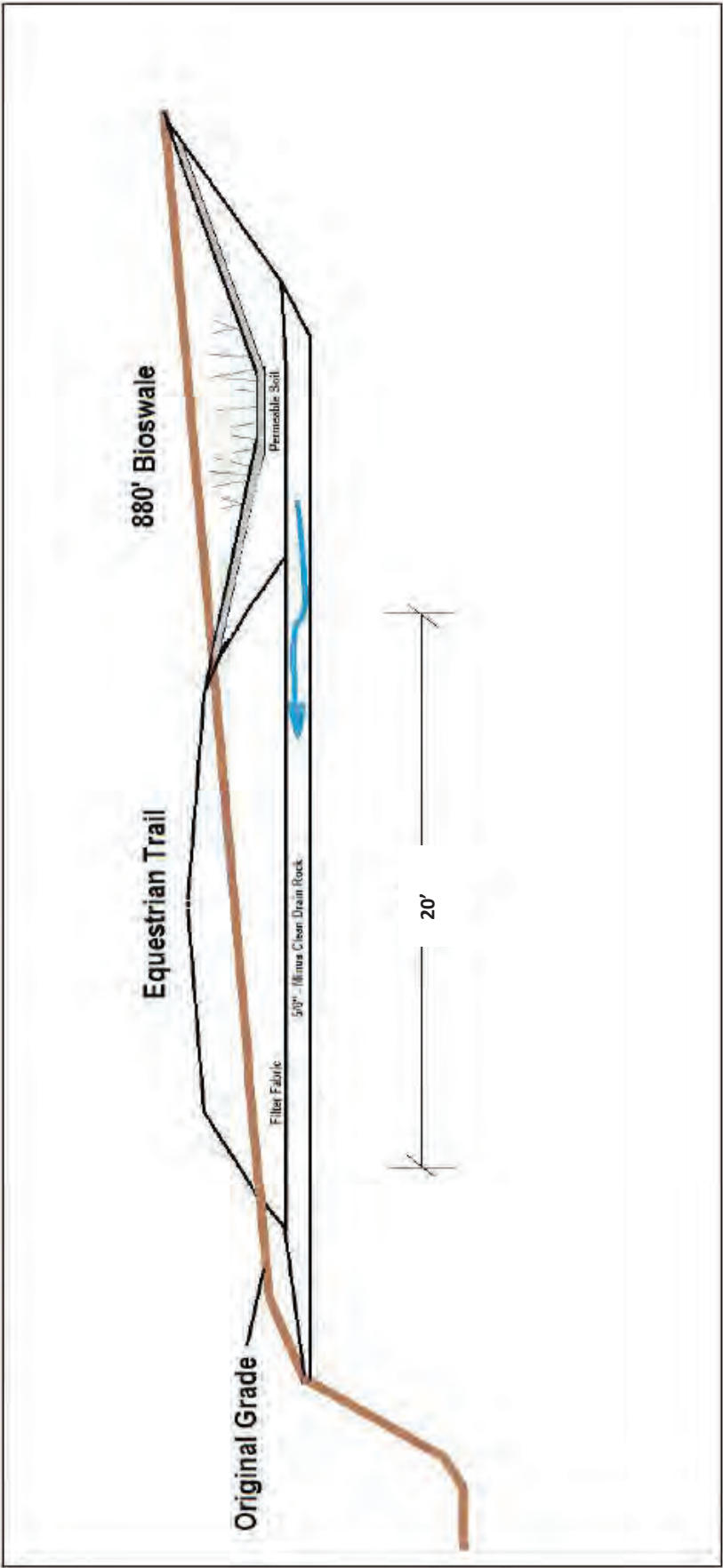
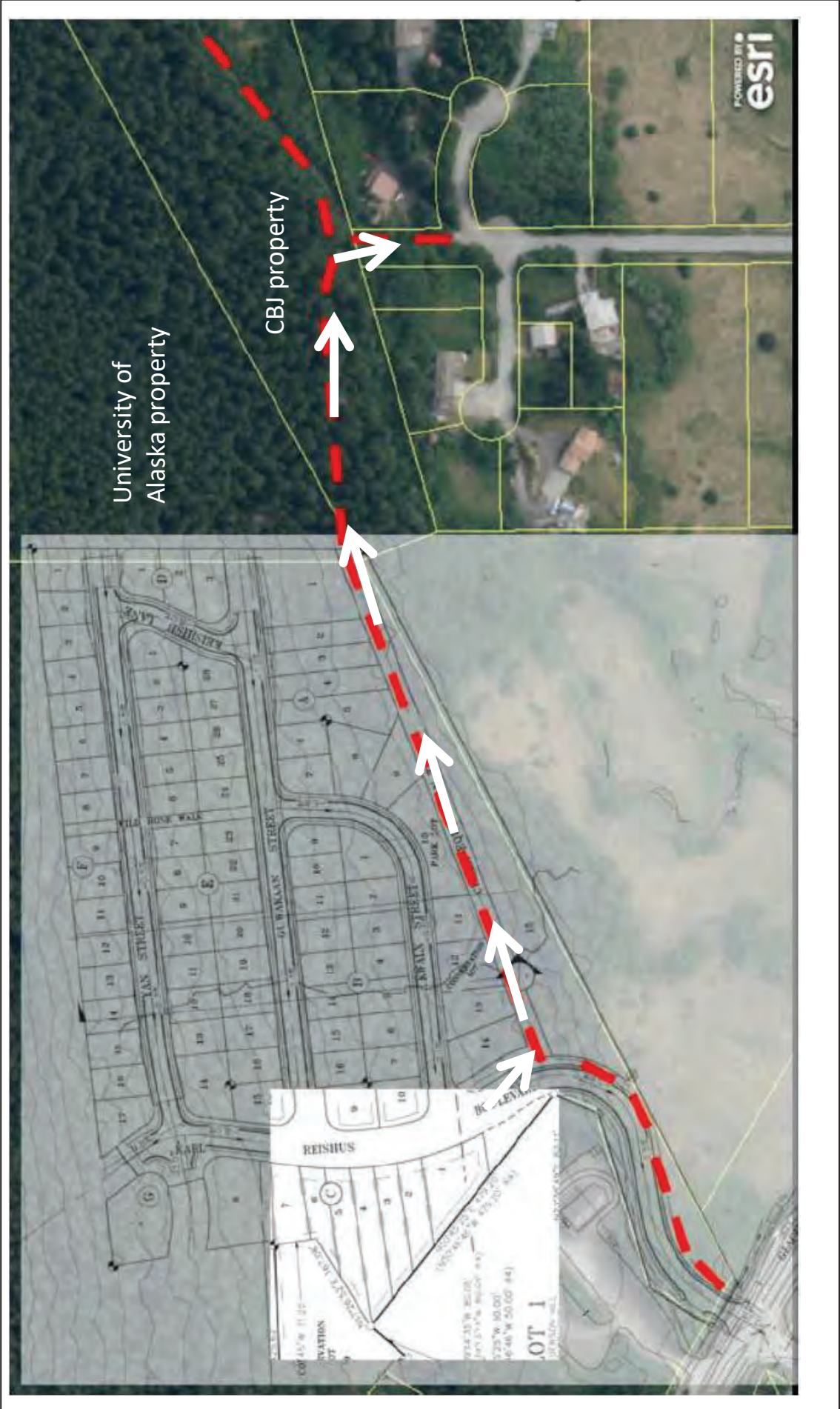
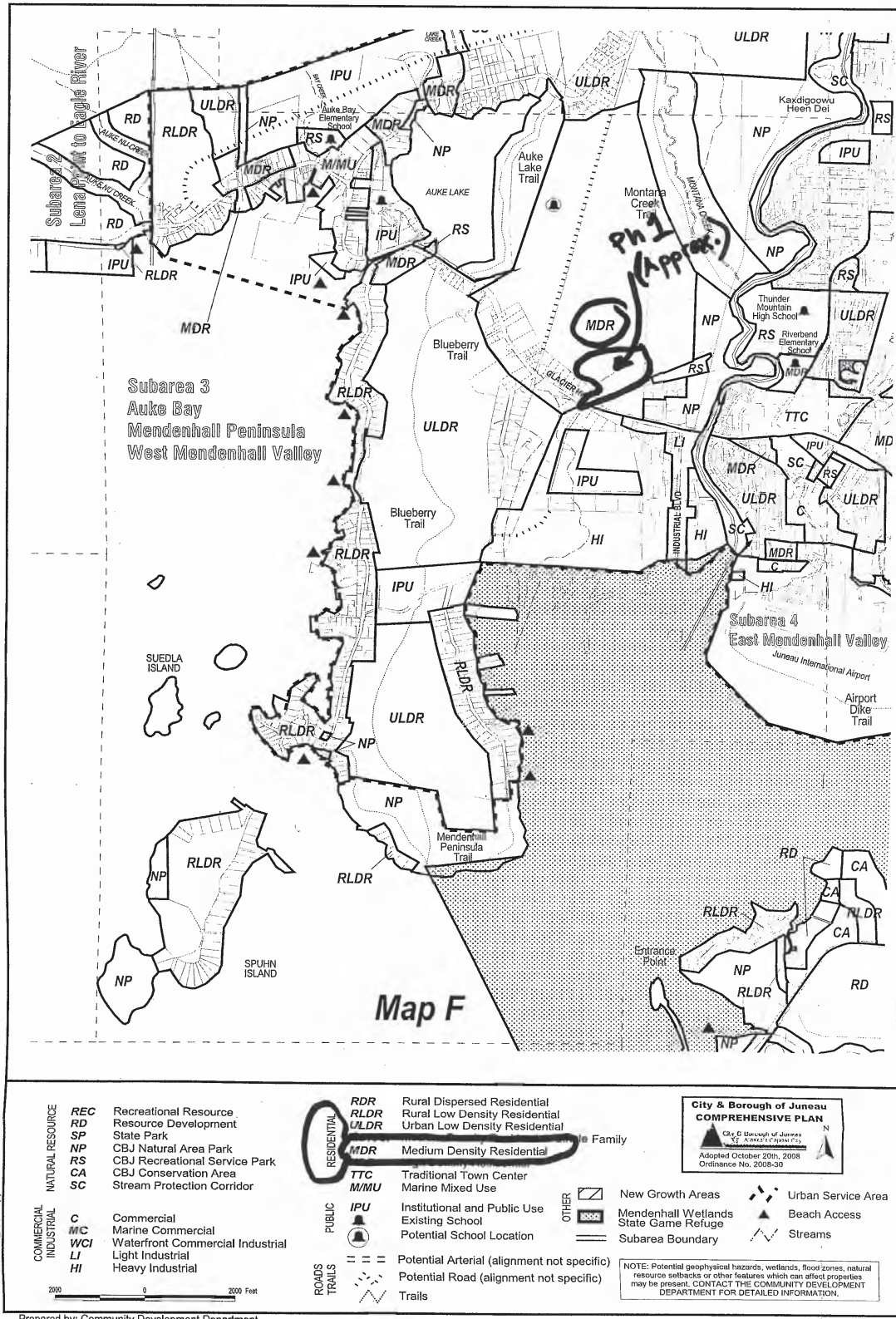


Illustration depicting Second Emergency Access Route





This report provides a framework for a new direction for Juneau housing policy. It has been designed to help create fluidity in Juneau's housing market, create an inviting place for workers and new families to call home, and enable seniors to age in the community. The framework contained here requires more direct effort by the public sector than has historically been the case.

Part 1:

Housing Market Challenges & Problems

Challenges and Problems

Juneau's population has been relatively flat for more than a decade. This is projected to remain the case through 2040.¹ Juneau has what may be called a "*what comes first*" problem. If people can't find places to live, new workers and families considering moving to Juneau won't move there. If new families and workers don't move to Juneau, it won't be in a position to grow its economy. State workers currently have challenges finding places to live as do private sector workers. The stuck nature of Juneau's housing market hampers the economic potential of Juneau.

When the value of housing is uncertain, the willingness of the market to take risks declines. In Juneau today, many in the private sector view investment in the housing market as too risky. As a result, new housing products come on line infrequently. This greatly restricts the supply, or availability, of housing, in general and at specific points on the housing ladder. Limited choice in the housing market discourages businesses to invest because their employees have no place to live. It stifles entrepreneurial activities because businesses don't have potential employees living in the community to hire. It discourages people to move to Juneau for vacation housing or retirement.

Just as a consumer wouldn't want to go to a grocery store with only a small shelf of products, consumers don't like to participate in a housing market that does not have enough choices to satisfy their needs. To overcome these risks, those developers who do choose to invest typically do so only at the highest price points. This contributes to the community's housing stocks being less affordable, making it particularly hard for young families and lower wage workers to call Juneau home.

The focus of new housing at the higher price point makes it harder for current residents to move into new homes. Would-be sellers stay put because they are unable to move into new homes due to the lack of options. When these households do not move through the housing ladder – from starter homes up to dream homes – there are two results: 1) developers have even less incentive to provide the array of housing options needed for Juneau's housing market to be healthy; and 2) choices of entry-level homes are further restricted because "starter" homes become "lifelong" homes for residents

¹ Alaska Population Projections 2012-2042; Alaska Department of Labor, April 2014 pp 10-12 and 17-23.

and therefore are only infrequently made available to another young family or working household. Juneau's housing pipes are clogged.

A lack of confidence by developers for a positive return on the basis of real and perceived risks in the local economy, coupled with limited movement through the housing stocks creates a situation that forces many to look elsewhere to live and will ultimately threaten Juneau's ability to maintain its population. This certainly weakens Juneau's chances for population and economic growth. In this way, the development and implementation of a robust and strategic approach to housing in Juneau is the community's most important economic development initiative.

Furthermore, when there is little available housing on the market and little, if any, incentive for the private market to correct for this, most of the housing stock becomes stale. This further clogs the housing pipeline. When local housing markets become truly stuck, as *Juneau's has been for some time*, challenges on the owner side of the market spill onto the rental side. Renters hoping to buy their first home discover they cannot, and like owners, stay put. This lowers rental vacancy rates and puts pressure on rents. The clogged housing pipeline prohibits renters from purchasing their own homes as well as eliminating the opportunity for renters in subsidized housing to move up the housing ladder as well.

This is a problem with important contextual notes.

For starters, Juneau's housing problem is a long-standing one. The Borough's market has been stuck for an extended period of time. While Juneau has made strides to address these housing issues, its housing market is stuck to such a degree that far more effort is needed. As trends in sales and new development make clear, this is not a situation that the "market" is likely to magically "fix."

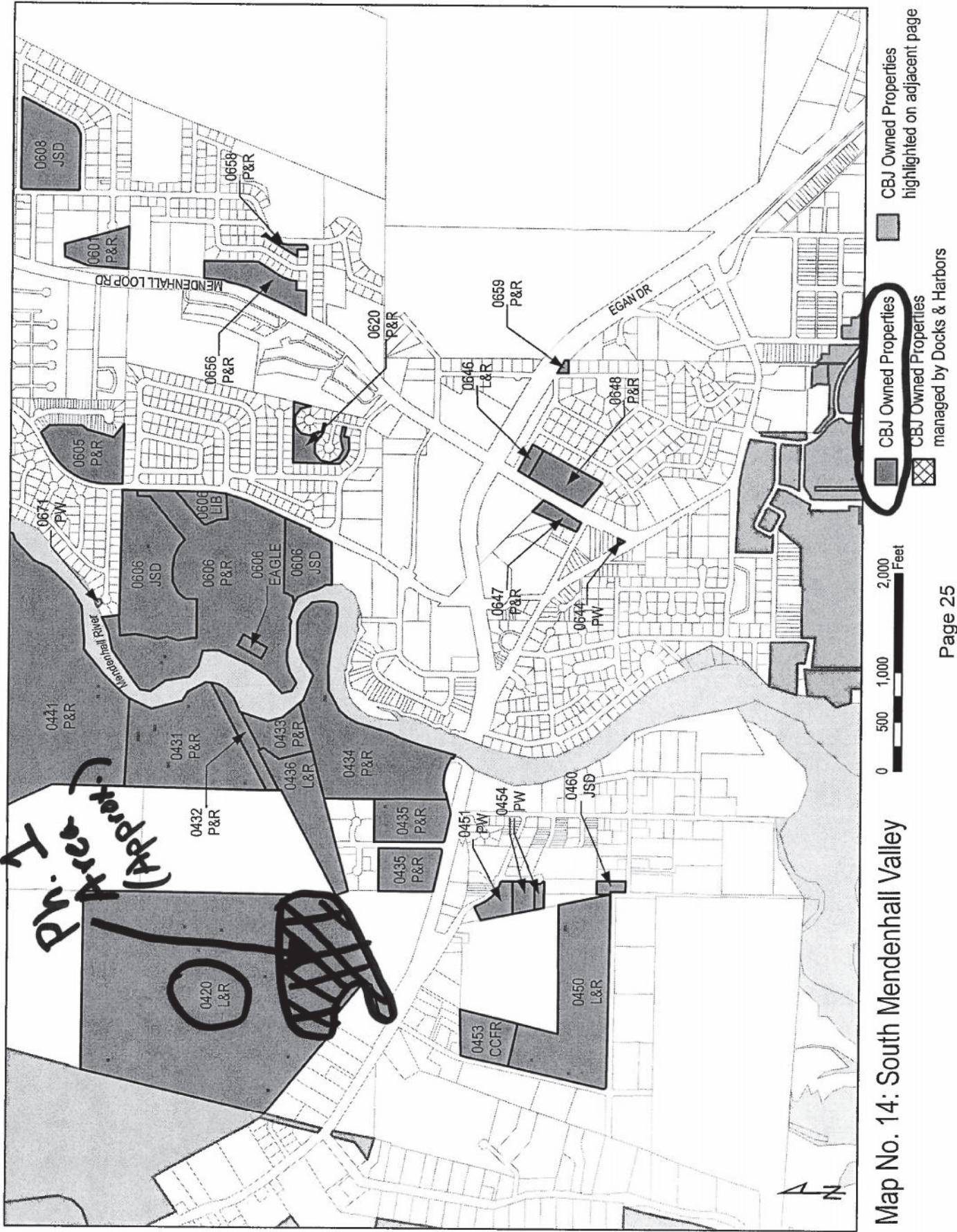
There are too many factors, real and perceived, standing in the way: land scarcity, higher development costs stemming from higher material costs, a difficult financing market as many lenders rely on decision making outside of Juneau, high labor costs, and the highly seasonal and state-dependent nature of the local economy. Taken together, these factors create too many expenses and too much risk for private developers and funders.

Explicit action to address either side of this equation – the expenses or the risks – will be required to better engage the private sector in Juneau's housing market to create more affordability and availability and, ultimately, rewrite currently soft projections for population growth and economic vitality.

Community Awareness

It is clear that the general public is aware of these issues and ready for bold action. The examination of 688 survey responses to the community wide survey highlights a general

General Location	Lands Number	Parcel Number	Legal Description	Size (acres)	Comments	Managing Department	Retention Status
Montana Creek	LND-0416	4B2901260120	Block C Park, Brigadoon Estates I; Block B Park, Brigadoon Estates II; 3 Greenbelt Corridors, Brigadoon Estates I & II	2.13	Brigadoon Estates dedicated open space; three parcels and 20' wide strips either side of Skaters Cabin Road	Parks & Recreation	Retain
	LND-0417	3M000MTACRK3	USMS 939	165.29	Patented claims south of McGinnis Creek; Natural Area Park; remote	Parks & Recreation	Retain
	LND-0418	4B2901410012	Tract B, USS 2337	2.10	Property to be managed for wetland values	Parks & Recreation	Retain
	LND-0419	4B2901410011	Tract A, USS 2337	2.09	Adjacent to Montana Creek Road to be managed for wetlands	Parks & Recreation	Retain
	LND-0420	4B2201010100	USS 3873	121.56	Pederson Hill; future residential subdivision	Lands & Resources	Dispose
West Mendenhall Valley	LND-0429	4B2201010030 4B2501050020 4B2601020030	Fraction of Lot 1, 2, & 5, USS 4598	135.25	Former Kaiser Property; Mendenhall River frontage and greenbelt; trail	Parks & Recreation	Retain
	LND-0431	4B2201010050	Lot 14, USS 4598	27.36	South of junction of Montana & Mendenhall Rivers; Mendenhall River greenbelt	Parks & Recreation	Retain
	LND-0432	4B2201010061	Lot 15, USS 4598	2.67	North of Brotherflood Bridge Park; Mendenhall River greenbelt	Parks & Recreation	Retain
	LND-0433	4B2201010072	Tract B, USS 1041	5.11	Mendenhall River greenbelt; north of Brotherflood Park	Parks & Recreation	Retain
	LND-0434	4B1601000010 4B2101000011 4B1701000010	Tract B, USS 1042 & Fraction USS 1193	24.63	Brotherflood Bridge Park	Parks & Recreation	Retain
	LND-0435	4B1701000020 4B1701000030 4B1701000070 4B1701000080 4B1701000090 4B1701000100	Tracts 1-3 & 8-11, Wildmeadow Park Subdivision	13.46	Seven parcels in Wildmeadow Park	Parks & Recreation	Retain
	LND-0436	4B2201010071	Tract A, USS 1041	10.48	Brotherflood Park (future Repton Center)	Lands & Resources	Retain
	LND-0440	4B2201010010 4B2201010011	USS 3406	231.00	Auke Lake, entire east side; 400 foot band along shore managed by Parks & Recreation	Parks & Recreation and Lands & Resources	Retain / Dispose
	LND-0441	4B2201010042	Lot 7A, USS 4598	128.33	Montana Creek greenbelt	Parks & Recreation	Retain
	LND-0442	4B2601040110 4B2601040240	Parcels A & B, Moraine Edge Subdivision	7.12	Playground and open space	Parks & Recreation	Retain
Auke Lake	LND-0449	4B2301030080	Lot 2, USS 3832	1.20	Auke Lake Wayside	Parks & Recreation	Retain
West Mendenhall Valley	LND-0450	4B1701100120	USS 1401	31.97	South and east of Fire Training Center, Pollution Control Project, west Mendenhall valley; Southeast Alaska Food Bank; vacant land along Sherwood Lane & Crazy Horse Drive	Lands & Resources	Retain / Dispose



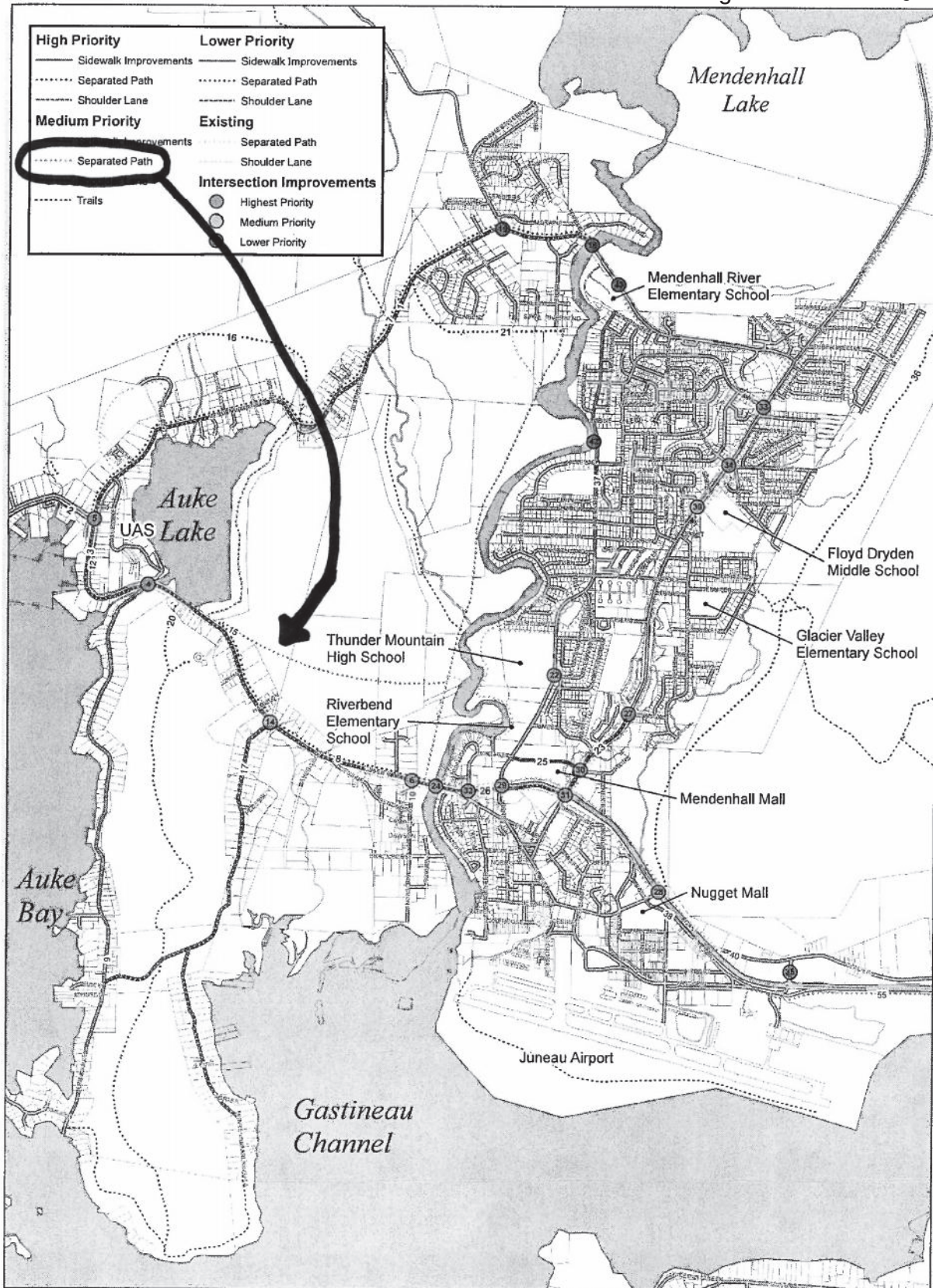
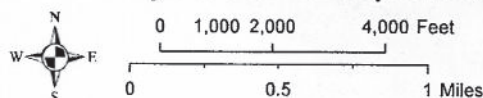


Figure 7: Mendenhall Valley Area - Proposed

Source data: City and Borough of Juneau GIS
USGS National Elevation Dataset
Date: 11/05/2009
Drawn By: GAG
Datum: Nad 27
Projection: Alaska State Plane Zone 1



Juneau
Non-Motorized
Transportation Plan

Information originates from the City of Juneau and is used to create this product. The City assumes no responsibility for the completeness or accuracy of the data contained within.



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Fish and Game

DIVISION OF WILDLIFE CONSERVATION
Southeast Region

802 3rd Street
P.O. Box 110024
Juneau, Alaska 99811-0024
Main: 907.465.4265
Fax: 907.465.4272

October 3, 2017

Ms. Jill Maclean
Senior Planner, AICP
City and Borough of Juneau
230 S. Franklin St.
Juneau, AK 99801

Ms. Maclean:

Thank you for considering our comments on Phase 1 of the Pederson Hill Subdivision. During public testimony at a February 28, 2017 meeting of the Juneau Assembly the ADF&G, Division of Wildlife Conservation (DWC) learned that the City and Borough of Juneau (CBJ) had already received ADF&G's comments on the project. However, the local DWC office was not asked to contribute to those comments. Regardless of where the Phase I development is in the approval process, DWC believes the project, future residents, and area wildlife can still benefit from our comments.

Currently, Pederson Hill and adjacent undeveloped lands provide habitat for a variety of wildlife including deer, black bears, wolves, coyotes, and recently moose. With this project CBJ proposes to develop 86 units of high-density affordable housing on the south side of Pederson Hill. After discussions with Greg Chaney, Lands and Resources Manager, we appreciate the visual and commitment by CBJ to leave undeveloped lands around the proposed subdivision available as wildlife travel corridors from Montana Creek to the Mendenhall Peninsula, Mendenhall Wetlands, and Douglas Island. We know these lands are within a heavily used corridor from animal sign in the area, road kills (deer, bears, wolf), and movements of one radio-collared bear. Wildlife will typically use greenbelt areas within urban environments as a source of refugia when available so any chance to maintain these areas would help reduce urban wildlife conflict situations.

In our experience even after development occur wildlife will continue to use historical travel corridors which will bring animals, primarily bears, into contact and perhaps conflict with future residents. Both CBJ and DWC resources are already overburdened responding to the current level of human- wildlife conflicts, so we believe steps should be taken in design of this and any new subdivision to minimize the potential for new conflicts before any houses are built. To ensure we maintain safe neighborhoods for both people and wildlife we offer the following ideas for minimizing effects on wildlife and the potential for conflicts between future residents of the subdivision and wildlife.

To mitigate wildlife conflicts we recommend that builders be required to include bear-proof trash structures sized to accommodate the larger trash and recycling cans with each house built. We understand that a borough-wide requirement would be ideal, but it would be difficult to enact. Limited staff and resources make enforcement of existing CBJ ordinances and subsequent management of nuisance urban wildlife (managed by the State) conditioned to trash difficult. We continue to believe

Ms. Jill Maclean, CBJ

- 2 -

October 3, 2017

there would be value in using this development as a demonstration project to evaluate the effectiveness of such a requirement. If residents use them and they are effective, it would be much easier to sell the idea as a borough-wide requirement. Alternately, perhaps the city could work with the local refuse company to aid in purchasing effective bear-resistant trash cans, such as the Kodiak Products KP95-HD can, for newly developed residential areas to minimize future human-bear conflicts.

Thanks again for considering our comments. I am available to work with CBJ staff in the design of bear resistant enclosures.

Stephanie K. Sell

Wildlife Biologist III

Alaska Department of Fish and Game

Division of Wildlife Conservation

P. O .Box 110024

Juneau, AK 99811-0024

907-465-4266 office

stephanie.sell@alaska.gov

cc: Jackie Timothy, ADF&G, Div. of Habitat, Juneau
Holly Zafian, ADF&G, Div. of Wildlife Conservation, Anchorage
Tom Schumacher, ADF&G, Div. of Wildlife Conservation, Juneau
Greg Chaney, CBJ, Lands Manager

From: [PC_Comments](#)
To: [Jill Maclean](#)
Subject: FW: Pederson Hill Subdivision
Date: Friday, September 22, 2017 8:19:14 AM

From: Bobbi Epperly [mailto:bepperly@gci.net]
Sent: Thursday, September 21, 2017 8:36 PM
To: PC_Comments
Subject: RE: Pederson Hill Subdivision

Case No: SMP2017 0001
Parcel No: 4B2201010101

Dear Jill Maclean and Assembly Members,

First off I'd like to thank you for revamping how you develop Pederson Hill. I am happy to hear that you've decided to divide phase one into three separate sub-phases. This will allow for CBJ to develop at the pace the market will bear. As a lifelong citizen of Juneau, it was very concerning to see CBJ leaders potentially losing 8.8 million dollars on a housing project when Alaska's economy is in a recession. Taking smaller steps and spending 3 million dollars for phase one is easier to accept, although I still feel that this is not the time for over building and spending money we don't have. Thank you.

I do have great concern with the proposed intersection light being placed at Sherwood Lane and Karl Reishus Blvd. I've lived on Pederson Hill my entire life, and I've witnessed many near accidents with drivers flying down the hill going faster than the posted speed limit of 50 MPH. I watched my school bus back in the 80's and 90's almost get rear ended numerous times as it stopped at Swampy Acres' driveway to pick me up. I myself have almost been rear ended many times making a left hand turn into my driveway at Swampy Acres. The high speed limit on Pederson Hill has been a problem for decades, and it's time to address it with the incoming new intersection. I am asking that you work with the State Highways Dept. to get the speed limit on Pederson Hill dropped to 40 MPH like it is once you crest over the hill to Auke Lake.

Sincerely,
Bobbi Epperly and James Pietan
Esther K. Epperly



Virus-free. www.avg.com

From: [PC_Comments](#)
To: [Jill Maclean](#)
Subject: FW: Pederson Hill Subdivision comments
Date: Thursday, September 28, 2017 11:41:13 AM

From: Katharine Savage [mailto:kkcandc@hotmail.com]
Sent: Thursday, September 21, 2017 7:20 AM
To: PC_Comments
Subject: Pederson Hill Subdivision comments

To the members of the Planning Commission and Juneau Assembly:

Greetings,

My husband, two kids and I have lived on Frank Maier Drive next to Pederson Hill for almost 20 years, we enjoy living there and we consider Frank Maier Drive our permanent neighborhood and home. I have reviewed the current Pederson Hill plat with both planner Jill Maclean and Deputy Lands and Resources Manager Dan Bleidorn and I am hoping you will consider the following requests/modifications.

I would like request that as few trees as possible are removed from the southernmost lot (#15 in the plat in use as of 9/20/2017 which includes the horse trail) and that lot #1 be kept as CBJ undeveloped property. I am making these requests for the following reasons:

1. We would like to preserve an element of privacy. Our back yard and patio directly face the southeast corner of the proposed subdivision and trees would continue to ensure our privacy.
2. As a wildlife biologist, I have recognized over the years that the area is a significant wildlife corridor between the forest and wetlands. It would be worthwhile preserving the integrity of the woods for this reason as much as possible.
3. Maintaining a corridor of trees would limit noise from the subdivision. Frank Maier Drive gets substantial traffic noise from the highway throughout the year and almost constant helicopter noise during summer months. It would be to everyone's benefit to limit any increase in noise as much as possible.

My husband and I support affordable housing in our community and we applaud Juneau for working towards this goal. At the same time, we feel that keeping the needs of established neighborhoods on the forefront as well leads to a positive outcome for all.

Thank you,

Katharine Savage and Chris Cunningham

MINUTES
Planning Commission
Regular Meeting
 CITY AND BOROUGH OF JUNEAU
Ben Haight, Chairman
 October 10, 2017

I. ROLL CALL

Ben Haight, Chairman, called the regular meeting of the City and Borough of Juneau (CBJ) Planning Commission (PC), held in the Assembly Chambers of the Municipal Building, to order at 7:03 p.m.

Commissioners present: Ben Haight, Chairman; Paul Voelckers, Vice Chairman; Michael LeVine, Nathaniel Dye, Dan Miller, Dan Hickok, Kirsten Shelton

Commissioners absent: Percy Frisby, Carl Greene

Staff present: Rob Steedle, CDD Director; Laura Boyce, Senior Planner; Jill Maclean, Senior Planner; Greg Chaney, Lands and Resources Manager; Dan Bleidorn, Deputy Lands and Resources Manager; Rachel Friedlander, Lands and Resources Specialist; Robert Palmer, Assistant Municipal Attorney

Assembly members: Debbie White

II. APPROVAL OF MINUTES

September 12, 2017 Draft Minutes - Regular Planning Commission Minutes

MOTION: *by Mr. LeVine, to approve the September 12, 2017, regular Planning Commission meeting minutes with any minor modifications by Commission member or staff.*

The motion was approved with no objection.

III. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS – None

IV. PLANNING COMMISSION LIAISON REPORT

Assembly Liaison to the Planning Commission Debbie White thanked the Commission for its hard work and service to the community. She said it is one of the most hard working boards serving the community of Juneau under the Assembly.

V. RECONSIDERATION OF THE FOLLOWING ITEMS - None

VI. CONSENT AGENDA - None

VII. CONSIDERATION OF ORDINANCES AND RESOLUTIONS - None

VIII. UNFINISHED BUSINESS - None

IX. REGULAR AGENDA

SMP2017 0001: A Modification to the Pederson Hill Subdivision Preliminary Plat

Applicant: City and Borough of Juneau

Location: Pederson Hill

Staff Recommendation

Staff recommends that the Planning Commission adopt the Director's analysis and findings and approve the modification to the preliminary plat for Pederson Hill Subdivision. This approval would allow the applicant to submit the final plat application.

Ms. Maclean told the Commission this item is before them again in order to divide the project into three phases; 1A, 1B, and 1C. This way, she explained, the project it is more financially viable for the City. Alternate access would be through the Christ Evangelical Church parking lot, rather than using the equestrian trail as previously intended, she said.

For this development, the lighting plan has been submitted and the fish passage issue has been addressed, said Ms. Maclean. She said there have been no comments received by the Habitat Division of Fish and Game, with a few comments received by the Wildlife Division.

In addition, there have been two comments received from property abutters, said Ms. Maclean. Those comments include the opinion that it would be better for the City to proceed with this project in stages, and concern was expressed about the intersection of Karl Reishus Boulevard and Meadow Lane, she noted. Residents on Frank Maier Drive have requested that as few trees as possible be cut on the southernmost lot which borders the equestrian trail.

The Alaska Department of Fish and Game Wildlife Division has suggested that the development implement bear-proof trash cans, to help mitigate unwanted interactions between bears and humans in this area.

Almost all of the 11 conditions for the project have been met, except for Condition 7, which states that prior to recording the plat, the applicant place a permanent, protected status on Phase 1A Lot 9, and Phase 1B Lot 7.

Applicant (CBJ Lands Division)

Mr. Chaney told the Commission that they have planned for wildlife corridors, but that they can't cover the land the City does not own. He added that the numbering of lots has changed. They propose this development be implemented in three stages to make this as cost effective as possible for the City, said Mr. Chaney. He added that Phase 1 will be the "bones" of the project, in which sewer, water and cable will be brought in.

Emergency vehicles can use the Evangelical Church road if needed in an emergency. There is a hammerhead turnaround constructed in Phase 1, so emergency vehicles can turn around. They have created a loop through the development, so there will be no dead-end road in both phases, said Mr. Chaney.

There are 86 residential lots not including Lot 19, said Mr. Chaney. They do not intend on making Lot 19 available for residential use for some time, he added. Lot 1 will be one of the last lots to be developed, because it is in Phase 3 and is very large, he added. They do have the intention that Lot 1 eventually be developed, said Mr. Chaney.

Commission Comments and Questions

Mr. Voelckers asked Mr. Chaney if he could elaborate more on Lot 19, since it has a private lot next to it on the south side.

Mr. Chaney replied that it will be difficult for the subdivision to be viewed from that private lot due to the line of trees.

Mr. Dye asked if lots six – eight have a street-side setback or a standard setback.

Ms. Maclean responded that those lots will have an alley setback.

MOTION: *by Mr. LeVine, to approve staff's findings, analysis and recommendations and approve SMP2017 0001*

The motion passed with no objection.

X. BOARD OF ADJUSTMENT - None

XI. OTHER BUSINESS - None

XII. DIRECTOR'S REPORT

Commission members Miller, Hickok and Greene will be travelling to Anchorage for the state-wide planning meeting, said Mr. Steedle.

XIII. REPORT OF REGULAR AND SPECIAL COMMITTEES

Mr. Voelckers reported that the Rules Committee is working on coming up with amended rules for Commission meetings. They want to make sure that materials the Commission is to review are ready a week prior to the meetings, said Mr. Voelckers. He said in consultation with the Municipal Assistant Attorney, that they may find it most expedient to start fresh and identify a cleaner model from which to fabricate the rules. He said early November would be the earliest they could bring this before the Commission.

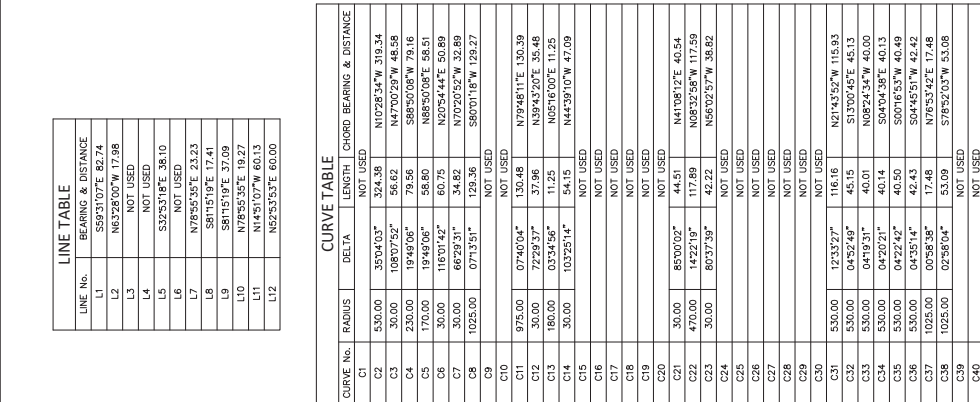
XIV. PLANNING COMMISSION COMMENTS AND QUESTIONS

Mr. Voelckers asked when variances will be back before the Commission for review..

Mr. Steedle said they hope to have it before the Commission in November for a public hearing.

XV. ADJOURNMENT

The meeting was adjourned at 7:39 p.m.



CURVE NO.	CURVE TABLE				CHORD BEARING & DISTANCE
	RADIUS	DELTA	LENGTH	CHORD	
C1					
C2	530.0	350/403°	324.38	N10°25'54" W 313.34	
C3	530.0	108°57'22"	56.62	N47°02'29" W 48.58	
C4	230.0	194°06'57"	79.56	S88°30'02" E 79.16	
C5	700.0	194°06'57"	56.86	N68°30'02" E 56.81	
C6	700.0	118°53'31"	50.89	N20°53'31" E 50.89	
C7	30.0	69°33'31"	34.82	N20°53'31" E 34.82	
C8	1025.0	07°15'51"	129.36	S80°16'16" W 129.27	
C9					
C10					
C11	975.0	07°40'04"	130.48	N79°48'17" E 130.39	
C12	30.0	72°29'37"	37.96	N94°34'22" E 35.48	
C13	180.0	03°34'56"	11.25	N05°16'02" E 11.25	
C14	30.0	103°25'14"	54.15	N44°39'10" W 47.09	
C15	30.0				
C16					
C17					
C18					
C19					
C20					
C21	30.0	85°50'02"	44.51	N41°08'12" E 40.54	
C22	470.0	142°21'19"	117.89	N08°32'58" W 117.59	
C23	30.0	80°37'59"	42.22	N65°02'57" W 38.82	
C24					
C25					
C26					
C27					
C28					
C29					
C30					
C31	530.0	123°32'7"	116.16	N27°43'52" W 115.93	
C32	530.0	04°52'49"	45.15	S13°04'45" E 45.13	
C33	530.0	04°19'31"	45.15	N08°24'58" W 40.00	
C34	530.0	04°27'21"	45.15	N04°45'45" E 40.13	
C35	530.0	04°27'21"	40.50	S04°45'45" W 40.13	
C36	530.0	04°15'41"	47.48	S04°45'57" E 42.42	
C37	1025.0	02°58'38"	174.48	N76°53'42" E 174.42	
C38	1025.0	02°28'04"	53.09	S76°52'03" W 53.08	
C39					
C40					
C41					
C42	975.0	04°30'28"	76.71	N78°132'52" E 76.69	
C43	470.0	07°01'48"	57.67	N04°52'41" W 57.63	
C44	470.0	07°20'30"	60.22	S12°03'53" E 60.18	
C45					
C46					
C47					
C48	30.0	32°03'27"	16.79	N6°7'36" S 16.57	
C49	30.0	32°03'27"	16.79	N6°7'36" S 16.57	
C50	445.0	05°58'19"	46.38	N29°54'08" W 46.36	
C51	180.0	15°38'23"	49.13	N25°04'07" E 49.08	
C52					
C53	175.0	44°10'12"	134.91	S14°53'50" S 131.59	

AMENDED PLAT		Packet Page 6 of 4	
PEDERSON HILL SUBDIVISION II, PHASE 1A A SUBDIVISION OF LOT 2, PEDERSON HILL SUBDIVISION US SURVEY NO. 3678 JUNEAU, ALASKA CITY & BOROUGH OF JUNEAU RECORDING DISTRICT STATE RECORDER'S OFFICE AT ANCHORAGE		DOWL ASCI248 CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 150 SOUTH SEWARD STREET JUNEAU ALASKA 99801 207-780-3633	
PLAT		OWNER CITY AND BOROUGH OF JUNEAU 150 SOUTH SEWARD STREET JUNEAU, ALASKA 99801	
SCALE: 1" = 40'	DATE: SEPT. 2019	PROJECT NO.: J70067	FILE NO.:
SHEET NO.: 6 of 4			

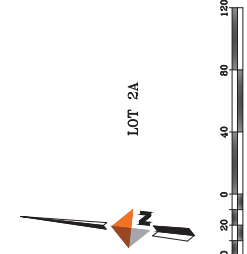
SCALE: 1" = 40'	DATE: SEPT. 2019	PROJECT NO: J700687	FILE NO: 98901	SE 2
CITY AND BOROUGH OF JUNEAU 135 WEST STREET JUNEAU, ALASKA 99801				
OWNER				
DOWL CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGER 5368 COMMERCIAL BOULEVARD JUNEAU ALASKA 99801 907-760-3533				

40 80 120 160

SCALE IN FEET

Attachment F - Proposed Modified Plat - Page 2

LINE TABLE		
LINE NO.	BEARING & DISTANCE	
L1	S89°31'07"E 62.74	
L2	N63°28'00"W 17.68	
L3	NOT USED	
L4	NOT USED	
L5	S32°53'18"E 38.10	
L6	NOT USED	
L7	N78°55'35"E 23.23	
L8	S81°15'19"E 17.41	
L9	S81°15'19"E 37.09	
L10	N78°55'35"E 19.27	
L11	N4°51'07"W 60.13	
L12	N52°53'53"E 60.00	



CURVE TABLE			
CURVE NO.	RADIUS	DELTA	CHORD BEARING & DISTANCE
C1	NOT USED	NOT USED	NOT USED
C2	530.00	35°04'03"	324.38 N107°28'34"W 319.34
C3	30.00	108°07'52"	56.62 N47°00'29"W 48.58
C4	230.00	19°49'06"	79.56 S88°50'08"W 79.16
C5	170.00	19°49'06"	58.80 N88°50'08"E 58.51
C6	30.00	116°01'42"	60.75 N20°54'44"E 50.89
C7	30.00	66°29'31"	34.82 N70°20'52"W 32.89
C8	1025.00	07°13'51"	128.36 S80°01'18"W 128.27
C9	NOT USED	NOT USED	NOT USED
C10	975.00	07°40'04"	130.48 N79°48'11"E 130.39
C11	30.00	72°29'37"	37.96 N39°43'20"E 35.48
C12	180.00	03°34'56"	11.25 N05°16'00"E 11.25
C13	30.00	103°25'14"	54.15 N44°39'10"W 47.09
C14	NOT USED	NOT USED	NOT USED
C15	NOT USED	NOT USED	NOT USED
C16	NOT USED	NOT USED	NOT USED
C17	NOT USED	NOT USED	NOT USED
C18	NOT USED	NOT USED	NOT USED
C19	NOT USED	NOT USED	NOT USED
C20	NOT USED	NOT USED	NOT USED
C21	30.00	85°00'02"	44.51 N41°08'12"E 40.54
C22	470.00	14°22'19"	117.89 N05°12'55"W 117.59
C23	30.00	80°37'39"	42.22 N56°02'57"W 38.82
C24	NOT USED	NOT USED	NOT USED
C25	NOT USED	NOT USED	NOT USED
C26	NOT USED	NOT USED	NOT USED
C27	NOT USED	NOT USED	NOT USED
C28	NOT USED	NOT USED	NOT USED
C29	NOT USED	NOT USED	NOT USED
C30	NOT USED	NOT USED	NOT USED
C31	530.00	12°53'27"	116.16 N21°43'52"W 115.93
C32	530.00	04°52'49"	45.15 S13°00'45"E 45.13
C33	530.00	04°19'31"	40.01 N08°24'34"W 40.00
C34	530.00	04°29'21"	40.14 S04°04'38"E 40.13
C35	530.00	04°22'42"	40.50 S00°16'53"W 40.49
C36	530.00	04°35'14"	42.43 S04°45'31"W 42.42
C37	1025.00	02°59'38"	117.48 N78°53'42"E 117.48
C38	1025.00	02°59'04"	53.09 S78°52'03"W 53.08
C39	NOT USED	NOT USED	NOT USED
C40	NOT USED	NOT USED	NOT USED
C41	975.00	04°12'28"	76.71 N78°13'37"E 76.69
C42	470.00	07°01'46"	57.67 N04°52'43"E 57.63
C43	470.00	07°22'50"	60.22 S12°03'53"E 60.18
C44	NOT USED	NOT USED	NOT USED
C45	NOT USED	NOT USED	NOT USED
C46	NOT USED	NOT USED	NOT USED
C47	NOT USED	NOT USED	NOT USED
C48	30.00	37°03'27"	16.79 N67°06'10"E 16.57
C49	445.00	09°58'19"	46.38 N29°54'08"W 46.36
C50	180.00	15°59'23"	49.13 N25°54'07"W 49.98
C51	175.00	44°10'12"	134.91 S14°53'50"W 131.59

SURVEYOR'S CERTIFICATE

I, A. WILLIAM STOLL, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT THE FOREGOING SURVEY WAS MADE BY ME OR UNDER MY DIRECT SUPERVISION AND REPRESENTS AN ACCURATE STATEMENT OF THE SURVEY. THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE ALASKA STATUTES, AND THE SURVEY IS ACCORDING TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE BEARINGS AND DISTANCES ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.



PRELIMINARY

REV.	DATE	DESCRIPTION	DWN.	APP.
1	12/21/2020	REMOVED FIRST SENTENCE OF "NOTE 7" & "NOTE 8" COMPLETELY	NC	

LEGEND

- 3.25" ALUMINUM PRIMARY MONUMENT (120415) SET THIS SURVEY.
- 5/8" REBAR WITH 2" ALUMINUM CAP (120415) SET THIS SURVEY.
- 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (77125) FOUND THIS SURVEY, UNLESS OTHERWISE NOTED
- SURVEYED PROPERTY LINE
- UNSURVEYED PROPERTY LINE
- PHASE LINE
- DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
- ACCESS, DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
- EXISTING EASEMENT AS NOTED
- PHASE 1B & 1C

NOTES

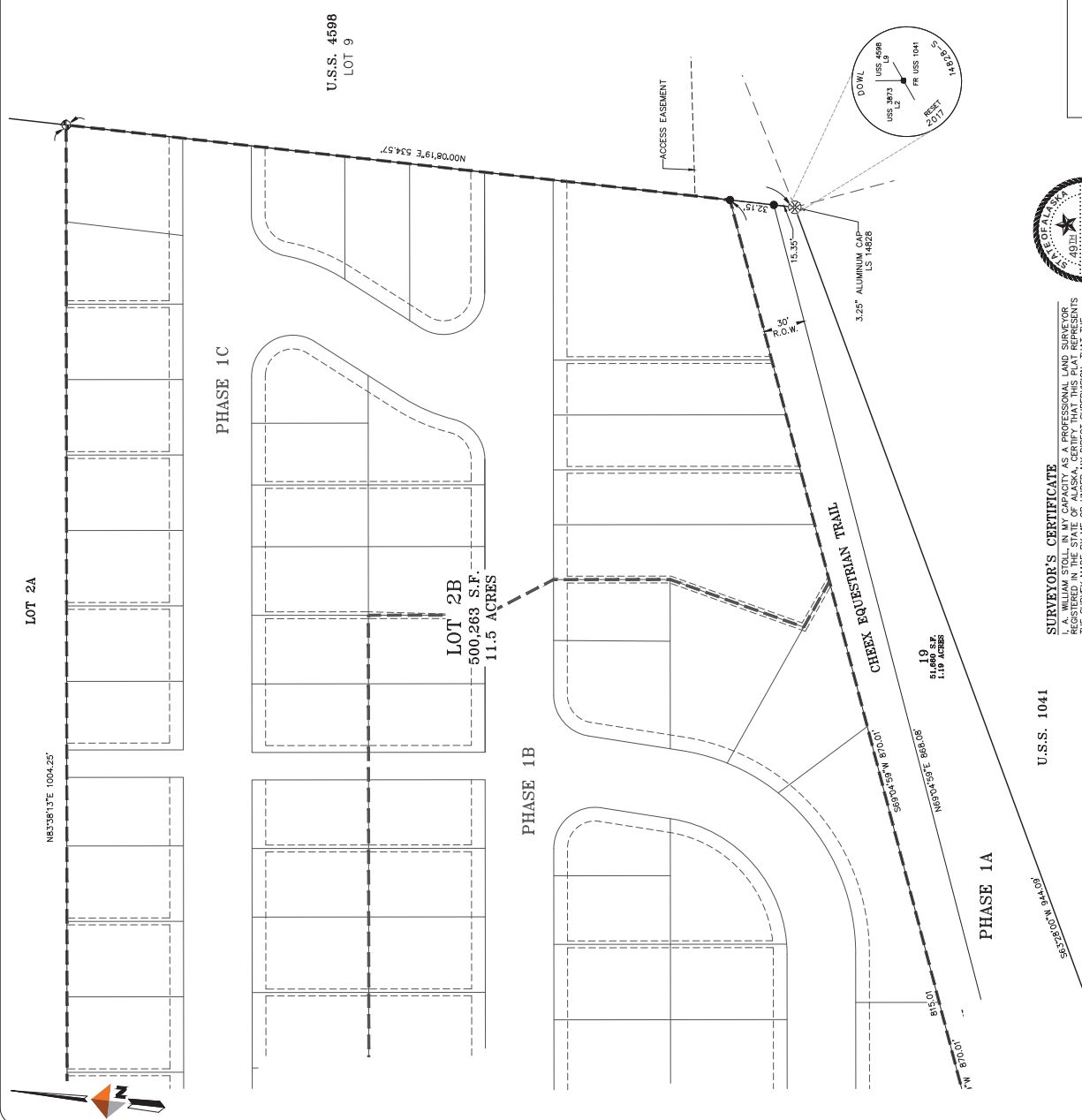
- THIS SURVEY CLOSURES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.452.
- ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
- RECORD INFORMATION DERIVED FROM OFFICIAL PLAT AND FIELD NOTES OF (R) U.S. SURVEY 3873, DATED SEPTEMBER 12, 1963, (R2) U.S. SURVEY 4598, DATED NOVEMBER 29, 1983, (R3) U.S. SURVEY 3260, DATED JULY 20, 2015 AND (R4) U.S. SURVEY 3873, DATED JULY 20, 2015-40, DATED JULY 20, 2015 AND (R5) LOT 1A AND LOT 1B, MOORE SUBDIVISION, PLAT 85-27 DATED MARCH 7, 1985, JUNEAU RECORDING DISTRICT.
- WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED SURVEYS ARE SHOWN IN PARENTHESES.
- CONVEYANCE PUBLIC MONUMENTS PROVIDED BY THE CITY AND BOROUGH OF JUNEAU.
- PUBLIC USE LOTS, LOT 9 IS SET ASIDE SPECIFICALLY FOR MARSH PRESERVATION. REMOVAL OF VEGETATION IS NOT ALLOWED EXCEPT FOR REMOVAL OF INVASIVE SPECIES. NO FILL OR OTHER BUILDING CONSTRUCTION SHALL BE PERMITTED ON LOT 9. FENCING SHALL BE PERMITTED IN ACCORDANCE WITH CBA TITLE 19.12 - EXCAVATION AND GRADING CODE. PERMITTER SHALL BE RESPONSIBLE FOR USING TECHNIQUES THAT MINIMIZE SOIL AND VEGETATION DISTURBANCE.
- DRIVEWAY ACCESS FROM THE KARL REISHUS BOULEVARD IS RESTRICTED. LOT 1 DRIVEWAY ACCESS FOR LOT 2 SHALL BE RESTRICTED TO EASEMENT DRIVEWAYS ACCESS FOR LOT 2. LOT 2 SHALL BE RESTRICTED TO LOT 2, LOTS 4 & 5 AND LOTS 4 & 7.
- OWNER OF LOT 2 SHALL BE RESPONSIBLE FOR MAINTAINING DRIVEWAY ACCESS TO LOT 2. DRIVEWAY ACCESS SHALL HAVE A MINIMUM WIDTH OF 10 FEET.
- WETLANDS EXIST THROUGHOUT THIS SUBDIVISION. APPROVAL TO IMPACT WETLANDS SHALL BE OBTAINED FROM THE U.S. ARMY CORPS OF ENGINEERS (COE). CONSULT COE FOR MORE INFORMATION.
- THE ORIGINAL BUREAU OF LAND MANAGEMENT STONE MONUMENT 4598 REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP THIS SURVEY.
- PER NOTE 5, PLAT 2015-40 IN THE JUNEAU RECORDING DISTRICT, THE ORIGINAL BUREAU OF LAND MANAGEMENT STONE MONUMENT 4598 REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP. SUBSEQUENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ORIGINAL SURVEY FROM REFERENCES MADE DURING THE 2015 SURVEY COMPLETED BY THIS SURVEY FIRM.

AMENDED PLAT

PLAT
PEDERSON HILL SUBDIVISION II, PHASE 1A
A SUBDIVISION OF
LOT 2, PEDERSON HILL SUBDIVISION
US SURVEY NO. 3873
CITY & BOROUGH OF JUNEAU, ALASKA
JUNEAU RECORDING DISTRICT
STATE RECORDERS' OFFICE AT ANCHORAGE

DOWL
ACILB
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT
6588 COMMERCIAL BOULEVARD
JUNEAU ALASKA 99801 907-760-3533

OWNER
CITY AND BOROUGH OF JUNEAU
155 SOUTH STREET
JUNEAU, ALASKA 99801
DATE: SEPT. 2019
PROJECT NO: J70067
SCALE: 1"= 40'
SHEET NO: 3 OF 4



- LEGEND**
- FOUND 3.25" ALUMINUM PRIMARY MONUMENT (AS SHOWN, SEE NOTE 10).
 - 3.25" ALUMINUM PRIMARY MONUMENT (12041S) SET THIS SURVEY.
 - 5/8" REBAR WITH 2" ALUMINUM CAP (12041S) SET THIS SURVEY.
 - 5/8" REBAR WITH YELLOW PLASTIC SURVEY CAP (7712S) FOUND THIS SURVEY, UNLESS OTHERWISE NOTED.
 - SURVEYED PROPERTY LINE
 - UNSURVEYED PROPERTY LINE
 - PHASE LINE
 - DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
 - ACCESS, DRAINAGE & UTILITY EASEMENT DEDICATED THIS PLAT
 - PHASE 1B & 1C

- NOTES**
- THIS SURVEY CLOSURES WITHIN A LIMIT OF ERROR OF ONE FOOT IN 10,000 FEET AS REQUIRED BY TITLE 49.15.452.
 - ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.
 - RECORD INFORMATION DERIVED FROM OFFICIAL PLAT AND FIELD NOTES OF 4598, DATED NOVEMBER 29, 1963, (R3) U.S. SURVEY 3873, DATED MARCH 20, 2015 AND (R5) LOT 1A AND LOT 1B, MCGHEE SUBDIVISION, PLAT 85-27 DATED MARCH 7, 1985, JUNEAU RECORDING DISTRICT. ARE SHOWN IN PARENTHESES.
 - WHERE DIFFERENT FROM MEASURED OR CALCULATED, RECORDED DIMENSIONS ARE SHOWN IN PARENTHESES.
 - DOMESTIC SEWER & WATER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS.
 - PUBLIC USE LOTS: LOT 9 IS SET ASIDE SPECIFICALLY FOR HABITAT RESTORATION AND RECREATION. THE REMOVAL OF INVASIVE SPECIES, NO FIRE OR OTHER BUILDING DEVELOPMENT IS PERMITTED EXCEPT FOR TRAILS AND PERMETER FENCING. TRAIL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE JUNEAU CITY ENGINEERING CODE. EXCAVATION AND GRADING CODE PERMETER FENCING SHALL BE CONSTRUCTED USING TECHNIQUES THAT MINIMIZE SOIL AND VEGETATIVE DISTURBANCE.
 - DRIVEWAY ACCESS FROM THE KARL RESHUS BOULEVARD IS RESTRICTED. DRIVEWAY ACCESS FOR LOT 2-7 SHALL BE RESTRICTED TO JOINT USE. DRIVEWAYS CENTERED ON THE COMMON LOT LINE FOR LOTS 2 & 3, LOTS 4 & 5 AND LOTS 6 & 7.
 - OWNER SHALL MAINTAIN AND REPAIR DRIVEWAYS, DRAINAGE, DRIVEWAYS AND UTILITY EASEMENTS.
 - NEEDLANDS MUST THROUGHOUT THIS SURVEY. APPROVAL TO IMPACT THESE WETLANDS HAS BEEN GIVEN BY THE U.S. ARMY CORPS OF ENGINEERS (COE). CONSULT COE FOR MORE INFORMATION.
 - THE ORIGINAL BUREAU OF LAND MANAGEMENT STONE MONUMENT MARKING THE CORNER COMMON TO U.S. SURVEYS 1041, 3873 AND 4598 REFERENCED AND REPLACED WITH A 3.25" ALUMINUM CAP THIS SURVEY.
 - PER NOTE 5 PLAT 2015-40 IN THE JUNEAU RECORDING DISTRICT, THE CONSTRUCTION AND SETTING MEASUREMENTS ARE DETAILED IN THE CONSTRUCTION AND SETTING MEASUREMENTS ARE DETAILED IN THE SURVEY FROM REFERENCES MADE DURING THE 2015 SURVEY COMPLETED BY THIS SURVEY FIRM.

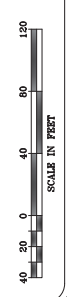
PRELIMINARY

AMENDED PLAT	
PLAT	
PEDERSON HILL SUBDIVISION II, PHASE 1A	
A SUBDIVISION OF	
LOT 2, PEDERSON HILL SUBDIVISION	
US SURVEY NO. 3873	
CITY & BOROUGH OF JUNEAU, ALASKA	
JUNEAU RECORDING DISTRICT	
STATE RECORDER'S OFFICE AT ANCHORAGE	
DOWL	
ACQUA	
CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT	
6588 COMMERCIAL BOULEVARD	
JUNEAU ALASKA 99801	
907-780-3533	
OWNER	
CITY AND BOROUGH OF JUNEAU	
155 WEST STREET	
JUNEAU, ALASKA 99801	
SCALE: 1"= 40'	DATE: SEPT. 2019
PROJECT NO: J70687	PLAT NO: 4
SHEET NO: 4	SHEET NO: 4



SURVEYOR'S CERTIFICATE

I, A. WILLIAM STOLL, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT I AM A LICENSED SURVEYOR IN THE STATE OF ALASKA. THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE ALASKA STATUTES. I HAVE REVIEWED THE PLAT AND THE FIELD NOTES AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.



Irene Gallion

From: Heidemann, Marie E (DOT) <marie.heidemann@alaska.gov>
Sent: Friday, December 11, 2020 4:21 PM
To: Irene Gallion
Subject: RE: SMF20-03: Pederson Plat Note Change

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

Irene,

This looks like a good move. Agree that it is likely more consistent with federal functional classification. I have not received any objections from folks here at DOT&PF.

Marie Heidemann

Juneau Field Office Planning Chief
 Statewide Program Development and Planning
 Alaska DOT&PF
 907-465-4477

From: Irene Gallion <Irene.Gallion@juneau.org>
Sent: Wednesday, December 2, 2020 7:53 AM
To: Heidemann, Marie E (DOT) <marie.heidemann@alaska.gov>
Subject: FW: SMF20-03: Pederson Plat Note Change

Hi Marie!

We have an application to reclassify Karl Reishus Boulevard (KRB) from a major collector to a minor collector (Peterson Hill Subdivision, across Glacier Highway from Sherwood Drive). This would be more consistent with federal guidance and (under CBJ code) allow driveway construction along the road.

Let me know if DOT&PF has any concerns by December 14, 2020. If you need more time for consideration let me know.

Thanks!

IMG

From: Irene Gallion <Irene.Gallion@juneau.org>
Sent: Wednesday, December 2, 2020 7:42 AM
To: Autumn Sapp <Autumn.Sapp@juneau.org>; Dan Jager <Dan.Jager@juneau.org>
Cc: John Bohan <John.Bohan@juneau.org>; Dan Bleidorn <Dan.Bleidorn@juneau.org>; Irene Gallion <Irene.Gallion@juneau.org>
Subject: SMF20-03: Pederson Plat Note Change

Hello all,

Attached is an application to reclassify Karl Reishus Boulevard (KRB) from a major collector to a minor collector. This will be more consistent with federal standards, and allow driveway development for certain lots along KRB.

Please advise of any concerns by December 14. If you need more time due to the holidays let me know.

Thanks!

Irene Gallion | Senior Planner

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street | 4th Floor Marine View Building

Office: 907.586.0753



Fostering excellence in development for this generation and the next.

Irene Gallion

From: Autumn Sapp
Sent: Wednesday, December 9, 2020 12:45 PM
To: Irene Gallion
Cc: John Bohan
Subject: RE: SMF20-03: Pederson Plat Note Change

Good afternoon,

Spoke with Bohan Engineering is in support.

Thanks,

Autumn Sapp
 City and Borough of Juneau
 Engineering & Public Works
 Business Manager
 907-586-0917

From: Irene Gallion <Irene.Gallion@juneau.org>
Sent: Wednesday, December 2, 2020 7:42 AM
To: Autumn Sapp <Autumn.Sapp@juneau.org>; Dan Jager <Dan.Jager@juneau.org>
Cc: John Bohan <John.Bohan@juneau.org>; Dan Bleidorn <Dan.Bleidorn@juneau.org>; Irene Gallion <Irene.Gallion@juneau.org>
Subject: SMF20-03: Pederson Plat Note Change

Hello all,

Attached is an application to reclassify Karl Reishus Boulevard (KRB) from a major collector to a minor collector. This will be more consistent with federal standards, and allow driveway development for certain lots along KRB.

Please advise of any concerns by December 14. If you need more time due to the holidays let me know.

Thanks!

Irene Gallion | Senior Planner

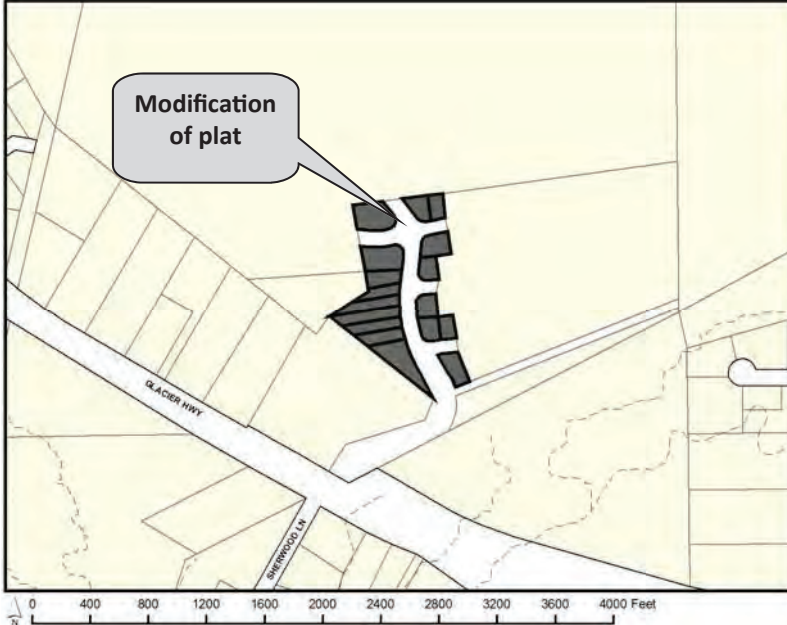
[Community Development Department](#) | City & Borough of Juneau, AK
 Location: 230 S. Franklin Street | 4th Floor Marine View Building
 Office: 907.586.0753



Fostering excellence in development for this generation and the next.

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 **modification of plat of Pederson Hill subdivision** in a **D10SF zone** to eliminate restrictions on driveways on to Karl Reishus Boulevard.

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2020** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 21

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

Dec. 22— noon, Jan. 11

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

HEARING DATE & TIME: 7:00 pm, Jan. 12, 2020

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/93626358724>. The Webinar ID is: 936 2635 8724. 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.

January 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 December 10, 2020

Case No.: SMF2020 0003
Parcel No.: 4B2201080100 and surrounding
CBJ Parcel Viewer: <http://epv.juneau.org>

Irene Gallion

From: Dan Bleidorn
Sent: Sunday, December 27, 2020 1:43 PM
To: Irene Gallion
Subject: Pederson hill sign posted
Attachments: 8518C8AC-F0B6-4EB1-AD81-9D747E2E1FA7.jpeg; 2A69C170-D4ED-40F3-93FF-40033390E8C4.jpeg; CF38E198-D1BE-4B38-8451-D9865FB9EF98.jpeg



Irene Gallion

From: PC_Comments
Sent: Monday, December 14, 2020 10:52 AM
To: Irene Gallion
Cc: Jill Maclean; Jack Scholz; Meredith Savage
Subject: FW: Case No SMF2020 0003 Karl Reishus Boulevard

Hey Irene,

We just received this comment regarding SMF20-03. I placed a copy in the Public Comments folder within the case file.

Thank you!
 Chelsea

From: Gary Miller <gmiller.juneauak@gmail.com>
Sent: Monday, December 14, 2020 10:12 AM
To: PC_Comments <PC_Comments@juneau.org>
Cc: Kathy Miller <kmillerrn.juneau@gmail.com>
Subject: Case No SMF2020 0003 Karl Reishus Boulevard

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

Gary & Kathleen Miller
 20135 Cohen Dr
 Juneau, AK 99801-8211
 Phone: (907) 789-3757
 Email: gmiller.juneauak@gmail.com

Planning Commission
 Community Development
 155 S Seward St
 Juneau, AK 99801

Subject: Case No: SMF2020 0003

My wife and I bought lot 10 in the Pederson Hill Subdivision. We support the elimination of restrictions on driveways on to Karl Reishus Boulevard.

The designated driveway to our lot goes directly over the utilities. Once we build and pave the driveway, any required access to the utilities would require breaking out the payment over them. The designated access also goes up a slope so when the driveway is icy, access would be difficult. We need to change the access point to our lot from Karl Reishus Boulevard.

Our lot also borders Yan Street. Access to our lot from Yan Street is impossible because that side of our lot is very steep. We have to access our property from Karl Reishus Boulevard.

Many of the lots along Karl Reishus Boulevard, before ours, are fairly large, so driveways would be spread out. There should not be much traffic congestion, even during “rush” hour.

Please remove the restrictions on driveways on to Karl Reishus Boulevard.

Thank you.

Gary Miller
20135 Cohen Dr
Juneau, AK 99801-8211
(907) 789-3757

Irene Gallion

From: Joyce Niven <jniven@thrha.org>
Sent: Tuesday, December 15, 2020 4:51 PM
To: Irene Gallion
Subject: RE: Pederson Hill

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

Thank you for that.

Joyce

From: Irene Gallion <Irene.Gallion@juneau.org>
Sent: Tuesday, December 15, 2020 4:19 PM
To: Joyce Niven <jniven@thrha.org>
Subject: RE: Pederson Hill

The difference is subtle. Major collectors tend to be longer, have lower driveway densities, higher speed limits, and higher traffic volumes. Major collectors in our town include North Douglas Highway, Stephen Richards Drive, Twin Lakes Drive or downtown's Main Street. Minor collectors include Mountainside Drive, Tongass Boulevard, Valley Boulevard, or Alaway Avenue. KRB seems to fit better with the minor collectors. By CBJ code, we must limit driveway construction on Major Collectors – which makes developing a subdivision tricky!

From: Joyce Niven <jniven@thrha.org>
Sent: Tuesday, December 15, 2020 3:59 PM
To: Irene Gallion <Irene.Gallion@juneau.org>
Subject: RE: Pederson Hill

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

Thank you. I was trying to determine if the change was going to have any impact on the lots that we own.

What's the difference between minor and major collector?

From: Irene Gallion <Irene.Gallion@juneau.org>
Sent: Tuesday, December 15, 2020 3:12 PM
To: Joyce Niven <jniven@thrha.org>
Subject: RE: Pederson Hill

Hi Joyce,

The staff report is not done yet.

In summary, the plat has a note disallowing driveways onto Karl Reshius Boulevard except in very limited situations. This modification would get rid of those limits, and "reclassify" the road as a minor collector instead of a major collector. The classification name is for transportation planning purposes.

Are there any specific concerns you need addressed?

Thanks!

IMG

From: Joyce Niven <jniven@thrha.org>
Sent: Tuesday, December 15, 2020 12:38 PM
To: Irene Gallion <Irene.Gallion@juneau.org>
Subject: Pederson Hill

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

Hi Irene,

I received the card regarding the public comment for the plat modification on Pederson Hill. Where can I find more information? Case# SMF20200003. I was not successful looking at the website.

Thank you,

Joyce M. Niven
Vice President
(907) 780-3156
jniven@thrha.org





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: January 25, 2021
File No.: SMP2020 0004

Bicknell, Inc.
Attn: David Blommer
P.O. Box 33517
Juneau, AK 99803

Proposal: Applicant proposes an Alternative Residential Subdivision creating 15 lots
Property Address: 4090 Delta Drive
Legal Description: Thunder Mountain Park Tract 1A
Parcel Code No.: 5B2401620011
Hearing Date: January 12, 2021

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 29, 2020, and late file memorandum (provided January 12, 2021) with amendments and approved the Alternative Residential Subdivision Preliminary Plat for a 15 lot subdivision to be conducted as described in the project description and project drawings submitted with the application (and with the following conditions :)

1. Prior to approval of the final plat, Certification from the CBJ Treasurer is required 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 for review by the Director of Engineering & Public Works for compliance with CBJ 49.35.140;

Bicknell, Inc.
 File No.: SMP2020 0004
 January 25, 2021
 Page 2 of 3

3. Prior to approval of the final plat, the developer shall submit a final drainage plan to be approved by CBJ Engineering & Public Works. This drainage plan must be prepared by an Alaskan licensed engineer in accordance with CBJ 49.35.510;
4. Prior to approval of the final plat, the applicant shall submit a revised preliminary plat with the following revisions:
 - a. Add the following plat note:
 - i. ACCESS TO LOTS SHALL BE VIA ACCESS EASEMENTS SHOWN ON THIS PLAT AND IS SUBJECT TO THE REQUIREMENTS IN THE “[private common driveway access, utility, and maintenance agreement – edit title as appropriate]” RECORDED WITH THIS SUBDIVISION.
 - b. Show a five-foot perimeter buffer along the southwest lot line bordering Delta Acres Addition 1 Lot 8.
 - c. Include bearing labels for:
 - i. The eastern lot line of Lot 6
 - ii. The lot lines between lots 7 and 8 and 9 and 10
 - d. Per sheet C203, Grading Plan, a drainage easement should be added to the following locations:
 - i. Eastern side of the development in the 10-foot perimeter buffer
 - ii. Rear of Lot 11;
5. Prior to the issuance of the first temporary certificate of occupancy, the master water meter for the development shall be installed by the developer;
6. Prior to the issuance of the eleventh (11) temporary certificate of occupancy for the development, access to and within the development shall be paved.

Attachments: December 29, 2020, memorandum from Laurel Christian, Community Development, to the CBJ Planning Commission regarding ARP2020 0001; and memorandum from Jill Maclean, Director, AICP, Community Development regarding ARP2020 0001 and SMP2020 0004 provided January 12, 2021.

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

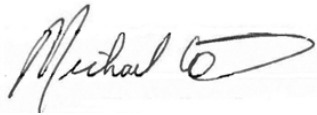
This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance to CBJ 01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ 01.50.030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

Bicknell, Inc.
 File No.: SMP2020 0004
 January 25, 2021
 Page 3 of 3

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, January 12, 2021.

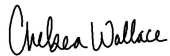
Expiration Date: The permit will expire five (5) years after the effective date, or January 12, 2026, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the subdivision permit was authorized or no final plat has been approved. Application for permit extension must be submitted thirty days prior to the expiration date.



Michael LeVine, Chair
 Planning Commission

January 26, 2021

Date



Filed With City Clerk

January 26, 2021

Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this subdivision. 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**

CSP2020 0009: Complete street and underground utility maintenance (and replacements as necessary) on 4th Street, Delta Drive, and Tongass Boulevard - **RECOMMENDED FOR APPROVAL TO THE CBJ ASSEMBLY**

AGENDA ITEM:

Case No.: CSP2020 0009

Applicant: City & Borough of Juneau

Location: 4th Street (in Douglas), Delta Drive, and Tongass Boulevard

Proposal: Complete street and underground utility maintenance (and replacements as necessary) on 4th Street, Delta Drive, and Tongass Boulevard

RECOMMENDATION:

Staff recommends the Planning Commission adopt the Director's analysis and findings and forward a recommendation of **APPROVAL WITH CONDITION** to the CBJ Assembly for the proposed complete street and underground utility maintenance (and replacements where necessary) for Delta Drive, Tongass Boulevard, and 4th Street in Douglas.

Condition #1: CBJ Engineering and Public Works must submit a hydrologic or hydraulic analysis to the Flood Plain Manager indicating that reconstruction of Tongass Boulevard would not result in increase in flood levels during the occurrence of a base flood discharge. The analysis will be conducted by an engineer licensed in the State of Alaska, in accordance with standard engineering practices acceptable to the Federal Emergency Management Agency.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for CSP2020 0009, Part 1	1/4/2021	Staff Report
☐ Staff Report for CSP2020 0009, Part 2	1/4/2021	Staff Report
☐ Notice of Recommendation for CSP2020 0009	1/21/2021	Notice of Recommendation



PLANNING COMMISSION STAFF REPORT
CITY PROJECT REVIEW CSP2020-0009
HEARING DATE: JANUARY 12, 2020

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

DATE: January 4, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Irene Gallion, Senior Planner 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a City Project Review for complete street and underground utility maintenance (and replacements where necessary) for Delta Drive, Tongass Boulevard, and 4th Street in Douglas.

STAFF RECOMMENDATION: Approval with one condition.

KEY CONSIDERATIONS FOR REVIEW:

- Projects are primarily maintenance of existing road and utilities.
- Delta will have sidewalk installed. Tongass will have a second sidewalk installed.
- All projects in early design phase.

GENERAL INFORMATION	
Property Owner	City and Borough of Juneau (CBJ)
Applicant	CBJ Engineering and Public Works
Property Address	Delta Drive, Tongass Boulevard, Douglas 4 th Street
Legal Description	N/A
Parcel Number	N/A
Zoning	Multiple
Land Use Designation	Multiple
Lot Size	N/A
Water/Sewer	CBJ
Access	Various
Existing Land Use	Roadway
Associated Applications	CSP2020 0011 – Calhoun Avenue, CSP2020 0012 – Crest Street

ALTERNATIVE ACTIONS:

1. **Amend:** amend the recommendation to include conditions and recommend approval to the Assembly.
2. **Deny:** recommend denial of the proposed project. Planning Commission must make its own findings.
3. **Continue:** continue the hearing to a later date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

A Notice of Recommendation will be forwarded to the Assembly for further action.

STANDARD OF REVIEW:

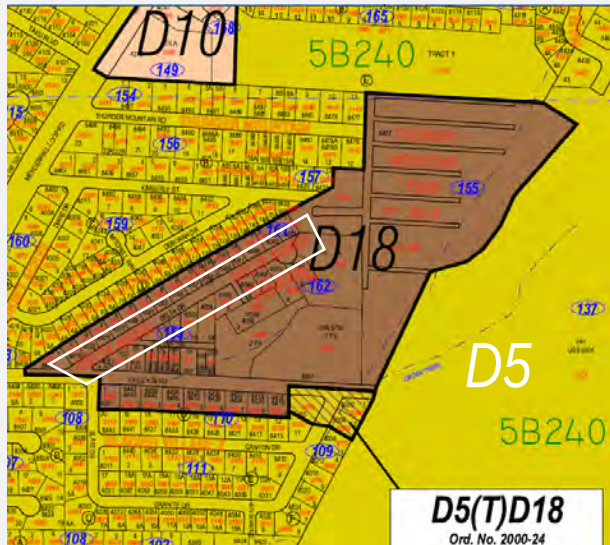
- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - o 49.15.580(a)
 - o 49.80

The Commission shall hear and decide the case per CBJ 49.15.580(a) - CBJ Project Review: *The commission shall review all proposed City and Borough capital improvement projects estimated to cost \$500,000 or more for consistency with this title. The commission may review, at the director's discretion, all proposed City and Borough capital projects estimated to cost more than \$250,000 but less than \$500,000. The commission may recommend conditions on and modifications to any project reviewed by the commission through a notice of recommendation. The notice of recommendation shall be forwarded to the assembly for further action.*

CBJ 49.10.170(c) Planning Commission Duties: *The commission shall review and make recommendations to the assembly on land acquisitions and disposals as prescribed by Title 53, or capital improvement project by any City and Borough agency. The report and recommendation of the commission shall be based upon the provisions of this title, the comprehensive plan, and the capital improvements program.*

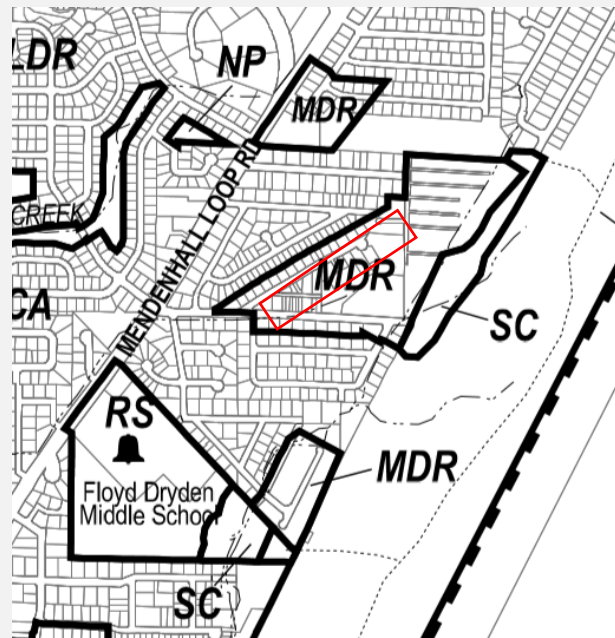
Delta Drive

CURRENT ZONING MAP



LAND USE DESIGNATION MAP

Medium Density Residential

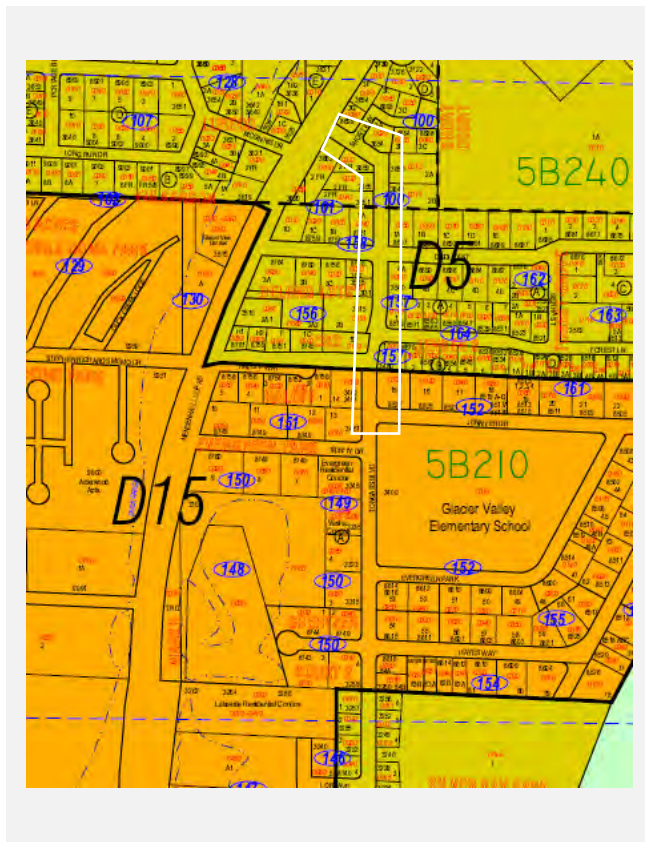


SURROUNDING LAND USES AND ZONING

Direction	Zoning District	Land Use
North	D18	Residential
South	D5	Residential
East	D18	Residential
West	D18	Residential

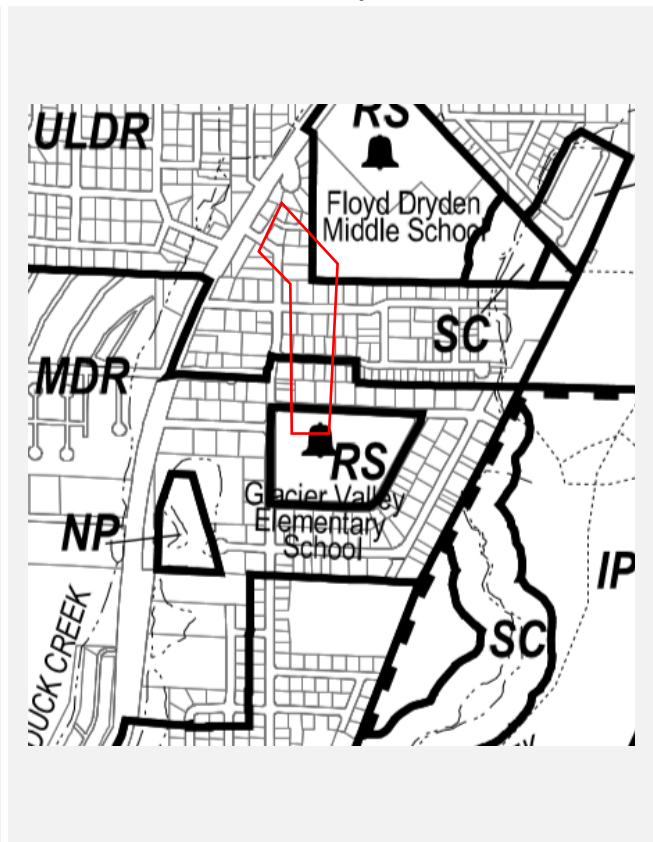
Tongass Boulevard

CURRENT ZONING MAP



LAND USE DESIGNATION MAP

Urban Low Density Residential and Medium Density Residential



SURROUNDING LAND USES AND ZONING

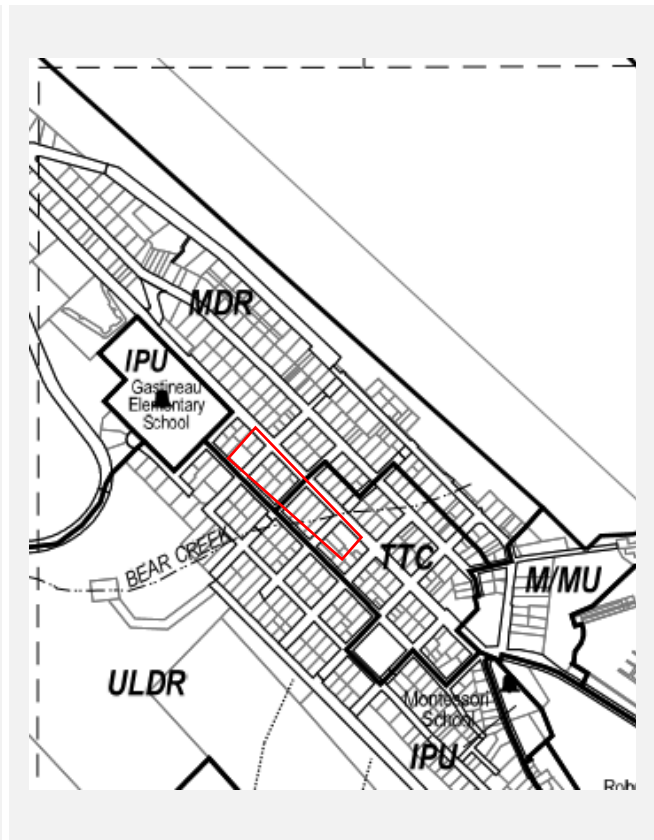
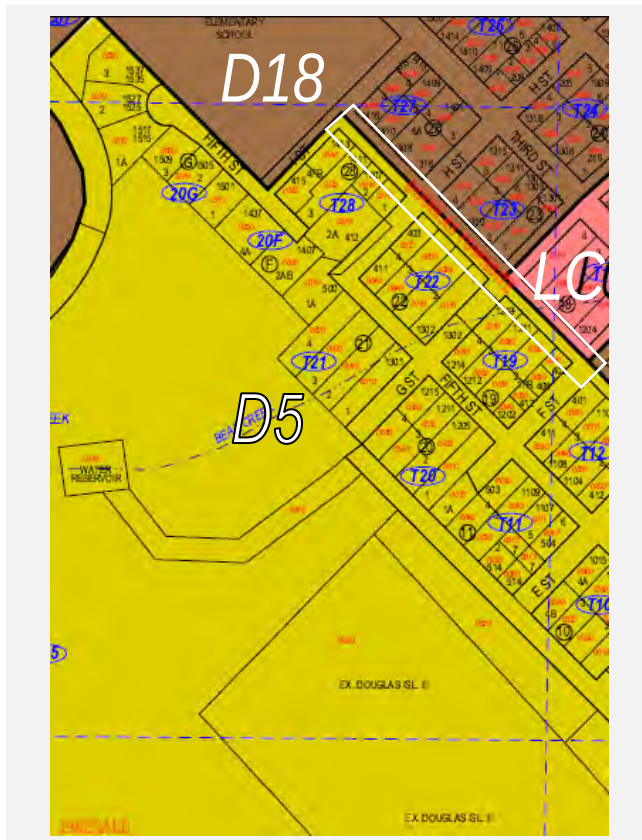
Direction	Zoning District	Land Use
North	D5	Residential
South	D15	Residential
East	D5/D15	Residential
West	D5/D15	Residential

4th Street Douglas

CURRENT ZONING MAP

LAND USE DESIGNATION MAP

Urban Low Density Residential
and Medium Density Residential
and Traditional Town Center



SURROUNDING LAND USES AND ZONING

Direction	Zoning District	Land Use
North	D18/LC	Institution (Gastineau Elementary)
South	D5	Residential
East	D5/LC	Residential
West	D18/LC	Residential

BACKGROUND INFORMATION

Project Description – The primary purpose of these projects is infrastructure maintenance (**Attachment A**). Considerations include road condition, utility condition, and age of infrastructure. Project boundaries may expand or contract depending on how far funding can be stretched. Planned sidewalk additions leverage mobilization costs to bring roadways closer to CBJ roadway standards.

The addition of sidewalk on Delta Drive will bring the roadway closer to CBJ standards. Delta Drive has multiple multi-family structures, zoned D18 (**Attachment B**).

The addition of a second sidewalk on Tongass Boulevard (**Attachment C**) is a desirable improvement under the 2012 Safe Routes to Schools plan (**Attachment D**, excerpt).

4th Street in Douglas is not currently paved. No paving is planned in this project. Paving this road would require a Local Improvement District (LID) and property owner participation in paving costs.

Background – To foster consistent review and reduce workload for CBJ staff and the Planning Commission, CBJ Engineering and Public Works submitted borough-wide maintenance projects as one CSP. Projects that generated significant public comment or with significant design modifications get their own CSP projects. In this case, Calhoun Avenue and Crest Street were originally part of this application packet, but public interest warrants each having their own CSP (CSP2020 0011 and CSP2020 0012, respectively).

Name	Age of...			
	Road	Water	Sewer	Storm Drainage
Delta Drive	1983	1986	1977	1977
Tongass Boulevard	1993	1986	Est 1970	1993
4 th Street Douglas	Unknown	Unknown	Unknown	Unknown

The table below summarizes relevant history for the roads and proposed development.

Item	Summary
Juneau Areawide Water System	(Delta, Tongass) 1986: water system construction project
Local Improvement District #2	(Delta) 1975: Sewer LID
Mendenhall Valley Sewer Project	(Delta) 1977: Sewer construction
Tongass Boulevard Sidewalk and Storm Drain	(Tongass) 1993: Portion of LID 75
Tongass Boulevard Grading, Paving and Drainage	SOS-003(15) 1982: Area south of the proposed project
Nancy Street and Tongass Boulevard Reconstruction	(Tongass) 1997: Area south of proposed project
Bear Creek Culvert	(4 th Street) 1972: Reconstruction of culvert

Current Conditions – The water and sewer systems have exceeded expected service life for Delta Drive, Tongass Boulevard and 4th Street Douglas. Delta Drive and Tongass Boulevard will be repaved with this project. 4th Street in Douglas is currently unpaved. Paving is not funded at this time.

4th Street in Douglas is primarily an underground utility replacement project, but is still in the investigation phase. After utility replacement, the road will be shaped and graded then topped with aggregate. The image below left shows the extent of needed utility replacements in the area in red, and the Bear Creek culvert replacement in blue. The photo to the right shows Bear Creek culvert condition.



ZONING ANALYSIS

49.05.100 - Purpose and intent. The purpose and Intent of Title 49 Land Use Code is:

- (1) To achieve the goals and objectives, and implement the policies, of the Juneau comprehensive plan, and coastal management program;*
- (2) To ensure that future growth and development in the City and Borough is in accord with the values of its residents;*
- (3) To identify and secure, for present and future residents, the beneficial impacts of growth while minimizing the negative impacts;*
- (4) To ensure that future growth is of the appropriate type, design and location, and is served by a proper range of public services and facilities such as water, sewage, and electrical distribution systems, transportation, schools, parks and other public requirements, and in general to promote public health, safety and general welfare;*
- (5) To provide adequate open space for light and air; and*
- (6) To recognize the economic value of land and encourage its proper and beneficial use.*

Roadway Construction Standard Waivers – Public improvements are required to meet the standards of 49.35 Table 200 or receive a waiver.

- Tongass Boulevard does not need a waiver because it meets these standards.

- 4th Street Douglas does not need a waiver because it is a utility reconstruction project that does not propose changes to the existing roadway.
- Delta Drive requires a Director's waiver for sidewalk on one side of the road. CBJ 49.35 would require sidewalk on both sides.

Public improvements include any construction incidental to servicing or furnishing facilities to a development. Improvement standards are based on Annual Average Daily Traffic (AADT).

- According to the Alaska Department of Transportation and Public Facilities 2019 data, Tongass Boulevard has an Annual Average Daily Traffic (AADT) of 1,590 between Trinity Drive and Haloff Way, and requires sidewalk on both sides of the roadway.
- 4th Street Douglas is a utility replacement project that will return the road to current conditions.
- AADT is not collected for Delta Drive. Assuming 23 lots fronting Delta Drive are four-plexes, there are 92 occupied units. Assuming an AADT of 6.59 for each unit, AADT for Delta Drive is 606 [Institute of Traffic Engineers Trip Generation Manual, 9th Edition, Volume 2, page 362].

The "traveled way" is reserved for operation of vehicles. "Vehicles" is not defined in code, but definitions include a piece of mechanized equipment that carries or transports something. In that case, both Tongass Boulevard and Delta Drive proposed typical sections meet the standards of CBJ 49.35 Table 200 with the inclusion of bike lanes.

Roadway standards for Delta Drive can be waived by the Director if [CBJ49.35.210(h)(4)]:

(i) The existing roadway does not comply with the roadway construction standards identified in Table 49.35.240;

Delta Drive does not have an AADT recorded that would trip a certain sidewalk standard. The road currently does not have sidewalk on either side.

(ii) There are unique circumstances that make compliance with the requirements of the table unreasonable;

A sidewalk can be added to one side of Delta Drive without undue impacts on neighboring properties or project budget.

(iii) The proposed project will not aggravate the intent of the requirements of this chapter; and

Sidewalk installation on one side of Delta Drive will bring it closer to standards outlined in 49.35 Table 200.

(iv) The proposed project complies with the American Association of State Highway and Transportation Officials' guidelines.

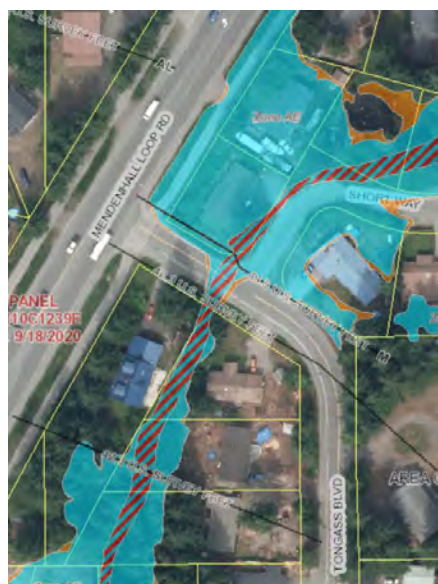
AASHTO recognizes that local roads in urban areas are constrained by the practical considerations of the built environment, as well as terrain [AASHTO Policy on Geometric Design of Highways and Streets, 7th Edition, 2018, page 5-13].

In residential areas, sidewalks should be provided on at least one side of a local street [AASHTO Policy on Geometric Design of Highways and Streets, 7th Edition, 2018, page 5-18].

Roadway Classification Maps – Juneau’s road classification maps have been adopted per Ordinance 2013-9. Tongass Boulevard is a Collector (pink), while Delta Drive and 4th Street Douglas are local roads (black).



Hazard Areas – Flood



The property at the north end of Tongass Boulevard is in an AE Special Flood Hazard Area (SFHA), indicating 1% annual chance of flood. The floodway associated with the SFHA crosses Tongass Boulevard. The floodway is a channel that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. The plans for this section of Tongass Boulevard require a “no rise” certification from a qualified engineer. This would have the added benefit of a stronger City position if there are questions of impacting flood levels through the reconstruction.

Flooding is an issue in the Sort Way area. CBJ Engineering and Public Works are incorporating modifications to the Tongass Boulevard system that will accommodate future improvements to Short Way.

Condition #1: CBJ Engineering and Public Works must submit a hydrologic or hydraulic analysis to the Flood Plain Manager indicating that reconstruction of Tongass Boulevard would not result in increase in flood levels during the occurrence of a base flood discharge. The analysis will be conducted by an engineer licensed

in the State of Alaska, in accordance with standard engineering practices acceptable to the Federal Emergency Management Agency.

Delta Drive and 4th Street Douglas are in areas of minimal hazard (Flood Zone X).

Hazard Areas – Hillside Endorsement

4th Street Douglas will not require a Hillside Endorsement. The project repairs utilities in the existing roadway then regrades the road. When the CBJ decides to reconstruct this road a hillside endorsement may be required, depending on toe-of-slope for the reconstruction.

Tongass Boulevard and Delta Drive do not require a hillside endorsement for construction.

COMMUNITY SERVICES

Service	Summary
Urban Service Boundary	Yes
Water/Sewer	CBJ
Fire Service Area	Yes
Schools	Glacier Valley Elementary, Gastineau Elementary
Recreation	Not applicable.

ENVIRONMENTAL, CONSERVATION, HISTORIC, AND ARCHEOLOGICAL RESOURCES

The below table summarizes Conservation, Historic, and Archeological Resources which may be affected by the maintenance projects.

Resource	Summary
Wetlands	No
Anadromous	No
Impaired Waterbodies	No
Historic	No
Archeological	None known
Comprehensive Plan View sheds	No

CONFORMITY WITH ADOPTED PLANS

2013 COMPREHENSIVE PLAN VISION: *The City and Borough of Juneau is a vibrant State Capital that values the diversity and quality of its natural and built environments, creates a safe and satisfying quality of life for its diverse population, provides quality education and employment for its workers, encourages resident participation in community decisions and provides an environment to foster state-wide leadership.*

2013 COMPREHENSIVE PLAN - The proposed text amendment is in compliance with the 2013 Comprehensive Plan.

Chapter	Page No.	Item	Summary
8	102	Narrative	Maintaining transportation infrastructure is of critical importance, including repair and snow removal.
8	108	8.4-IA4	Consider life-cycle costs of operation and maintenance when considering transportation system improvements.

2001 AREA WIDE TRANSPORTATION PLAN - The proposed text amendment complies with the 2016 Housing Action Plan

Chapter	Page No.	Item	Summary
	4	Last bullet	<i>Improving the transportation system can be costly.</i> Proposed additions will be evaluated in terms of their cost-effectiveness and long-term maintenance costs.
	6	Second bullet	Better sidewalk linkages improve opportunities for active lifestyles and positive social interaction.
	11	Area Wide Priority Solution List,	5: fund enhanced routes to school for bicycle and pedestrian routes. 6: With new and re-construction, evaluate pedestrian and bicycle needs and recommend sidewalks on one or both sides of the street, where appropriate.

The 2009 Non-Motorized Plan did not include information that would support proposed sidewalk improvements in project areas.

2012 Safe Routes to Schools Plan -

Chapter	Page No.	Item	Summary
Glacier Valley School	77	Engineering, Infrastructure, Maintenance – Improvement/Action	4. Complete Tongass Boulevard sidewalk system by adding segment on east side from Forest Land to Mendenhall Loop Road (approximately 950 feet). <i>Action: Evaluate policies designed to encourage new development areas that already have infrastructure.</i>

AGENCY REVIEW

CDD conducted an agency review comment period between December 2 and December 14, 2020. No comments were received from CBJ agencies nor from the Alaska Department of Transportation and Public Facilities.

PUBLIC COMMENTS

Abutters notices were sent out to neighbors within 500 feet of the proposed project for Delta Drive, Tongass Boulevard, Crest Street and 4th Street Douglas. Due to public interest Crest Street is removed from this CSP and will have its own at a later date. A revision to the public notice was sent for Crest Street (**Attachment E**). Public

notice signs were posted for the remaining projects (**Attachment F**). A public meeting for the Tongass Boulevard project was held on December 29, 2020 (**Attachment G**). Public comments can be found in **Attachment H**.

Name	Summary
Lisa Gable	Tongass Boulevard – Concerns about flooding on Short Way.
Bill Cameron	Tongass Boulevard – Concerns about drainage.

No comments were received regarding Delta Drive or 4th Street Douglas at the time of this staff report. Public meetings on those projects have not yet been held.

FINDINGS

In accordance with CBJ 49.15.580 staff finds the proposed complete street and underground utility maintenance (and replacements where necessary) for Delta Drive, Tongass Boulevard, and 4th Street in Douglas complies with Title 49 Land Use Code and conforms with adopted plans, specifically the 2019 Comprehensive Plan, the 2001 Area Wide Transportation Plan, and the 2012 Safe Routes to Schools Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and forward a recommendation of **APPROVAL WITH CONDITION** to the CBJ Assembly for the proposed complete street and underground utility maintenance (and replacements where necessary) for Delta Drive, Tongass Boulevard, and 4th Street in Douglas.

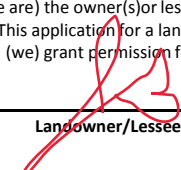
Condition #1: CBJ Engineering and Public Works must submit a hydrologic or hydraulic analysis to the Flood Plain Manager indicating that reconstruction of Tongass Boulevard would not result in increase in flood levels during the occurrence of a base flood discharge. The analysis will be conducted by an engineer licensed in the State of Alaska, in accordance with standard engineering practices acceptable to the Federal Emergency Management Agency.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	Delta Drive plan and profile
Attachment C	Tongass Boulevard Plan and Profile
Attachment D	2012 Safe Routes to Schools, Glacier Valley Elementary excerpt
Attachment E	Abutters Notices
Attachment F	Public notice signs
Attachment G	Notes from the public meeting on the Tongass Boulevard project
Attachment H	Public comments

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 Delta Drive, Tongass Boulevard, Calhoun Ave, Crest Street , Douglas 4th Street - specific locations identified by project titles and attached descriptions		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot)		
	Parcel Number(s)		
	This property located in the downtown historic district This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner CBJ	Contact Person Bohan	Phone Number(s) 0876
	Mailing Address		
	E-mail Address john.bohan@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	11/17/20 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 CBJ Engineering	Contact Person "SAME"	Phone Number(s) "SAME"	
Mailing Address			
E-mail Address "SAME"			
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 CSP20-009	Intake Initials  11/19/2020
	Date Received 11/19/20



CITY/STATE PROJECT AND LAND ACTION REVIEW APPLICATION

Packet Page 558 of 797

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 Complete street and underground utility maintenance (and replacements as necessary) on the following streets: Delta Drive, Tongass Boulevard, Calhoun Ave, Crest Street, Douglas 4th Street
	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.: _____ NO Capital Improvement Program # (CIP) YES -see attached narrative _____ Local Improvement District # (LID) _____ State Project # _____
	ESTIMATED PROJECT COST: \$ n/a
	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
CSP20-009	11/19/20

City and State project review is outlined in CBJ 49.15.580

Each application for a City/State Project is reviewed by the Planning Commission at a public hearing. The permit procedure is intended to provide the Commission the flexibility necessary to make recommendations tailored to individual applications.

Application: An application for a City/State Project Review 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 City/State Project Review Application and Development Permit Application forms.
2. **Fees:** No fee required for projects that cost less than \$2.5 million. For projects costing more than this amount, the fee is \$1,600.00. 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. Plat, site plan, floor plan and elevation views of existing and proposed structures and land;
 - 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; and,
 - 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. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All City/State Project Review Permit Applications must be reviewed by the Planning Commission. 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. The Planning Commission will make a recommendation based on staff's analysis and forward it to the Assembly for final approval/denial.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

CSPs – Street and CBJ Utilities’ maintenance projects proposed for 2021 construction season

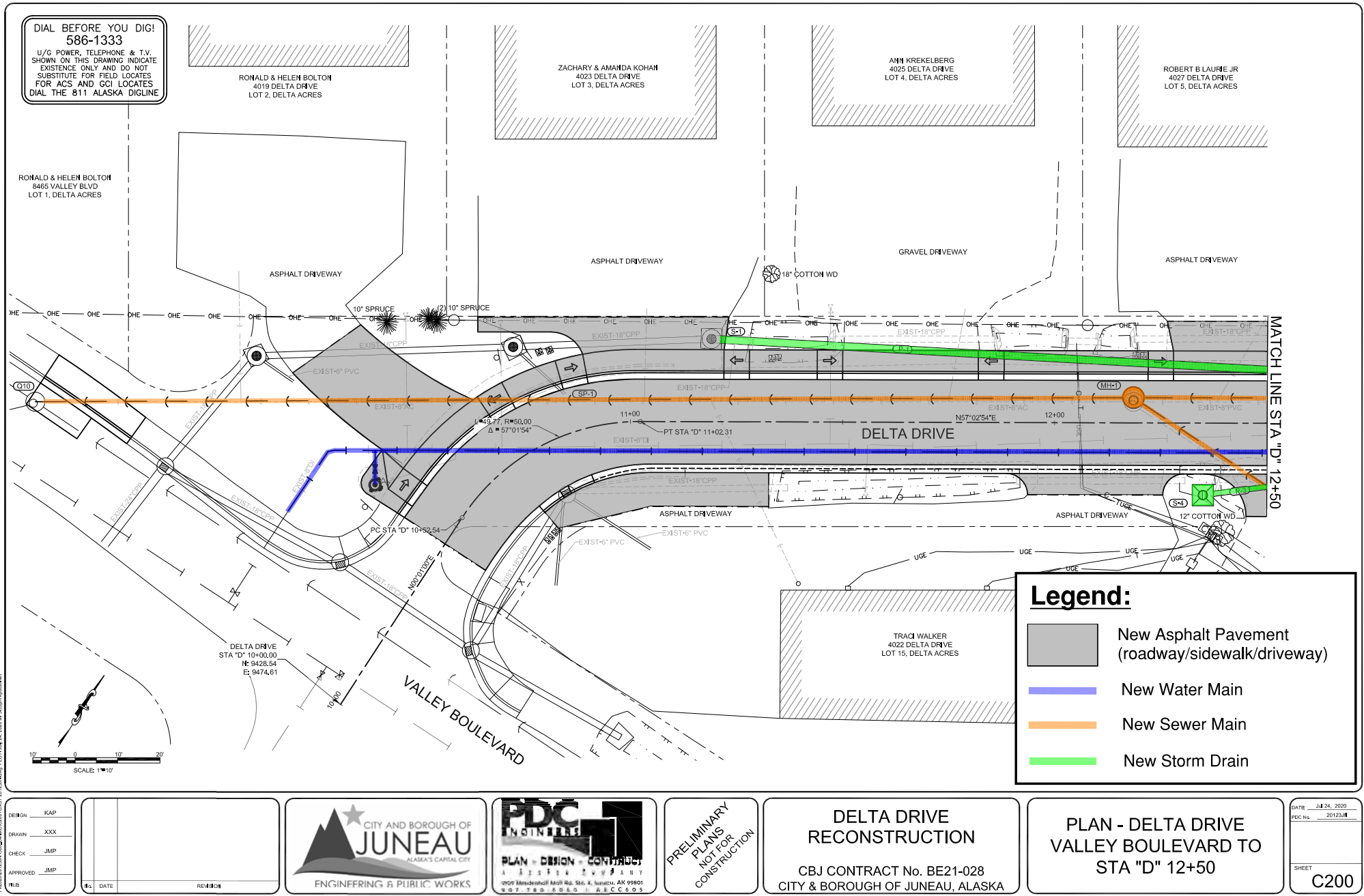
Delta Drive (R72-148): segment: Valley Boulevard to end. Add sidewalk to one side, rehabilitate road prism, and drainage, replace underground water and sewer systems that have exceeded expected service life, repave roadway

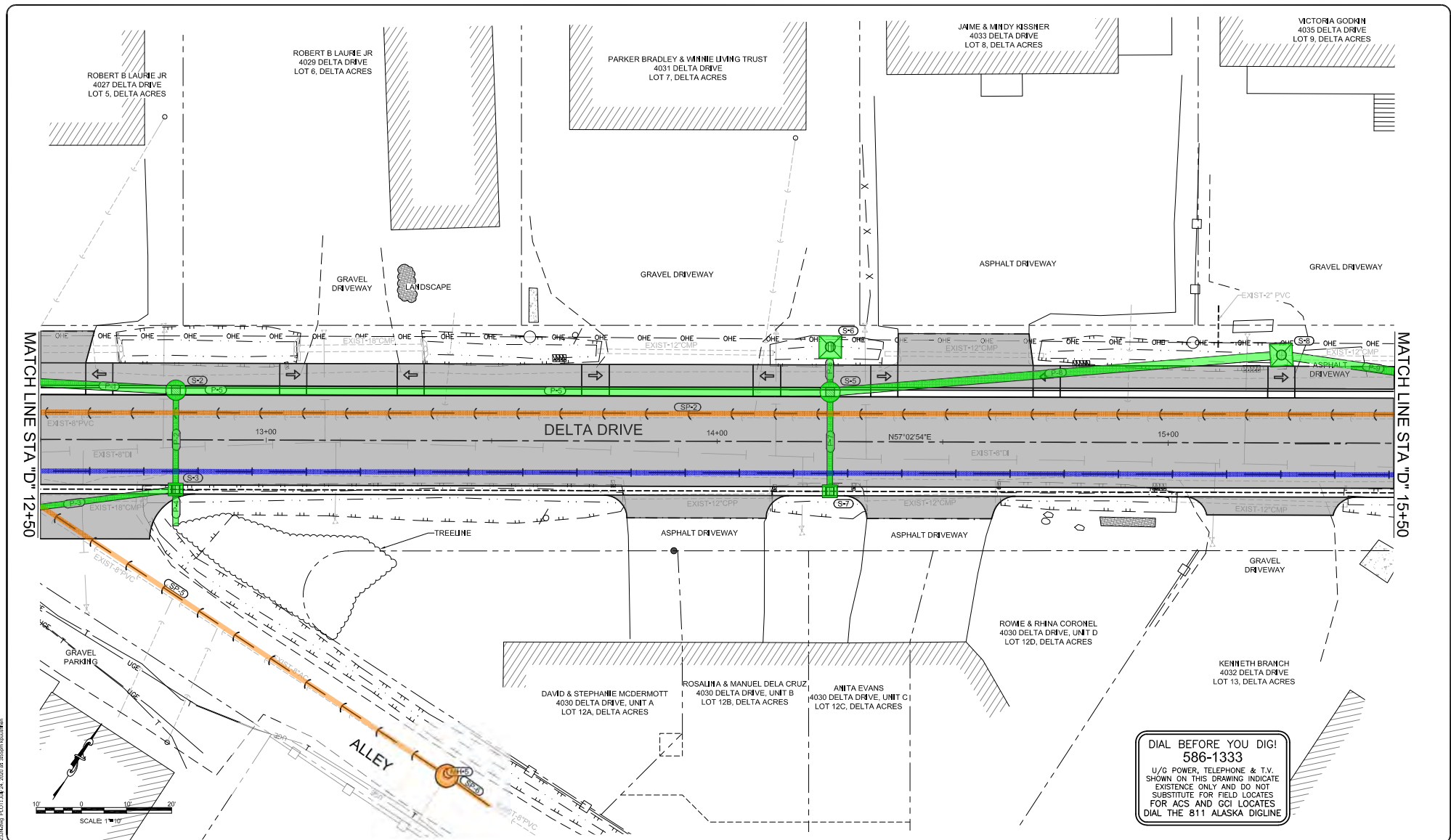
Tongass Boulevard(R72-152)-segment: Jennifer Drive north to end at Loop Road: Add second sidewalk as identified by SRTS, rehabilitate road prism and drainage, replace underground water and sewer systems that have exceeded expected service life, replace existing sidewalk and repave roadway

~~**Calhoun Avenue(R72-132):** [2 phases] 1. Governor’s house to Cope Park: Rehabilitate road prism and drainage, replace water and sewer system that have exceed expected service life, replace sidewalks and repave roadway – scheduled for summer 2021
2. Main Street to Governor’s House: Rehabilitate road prism and repave roadway minor utility improvements as identified during design – scheduled for summer 2022~~

~~**Crest Street(COVID Bond project – CIP number not assigned yet):** segment: Old Dairy Rd to Yandukin. Add sidewalk to one side, rehabilitate road prism and drainage, replace water and partial sewer system that have exceed expected service life, repave roadway~~

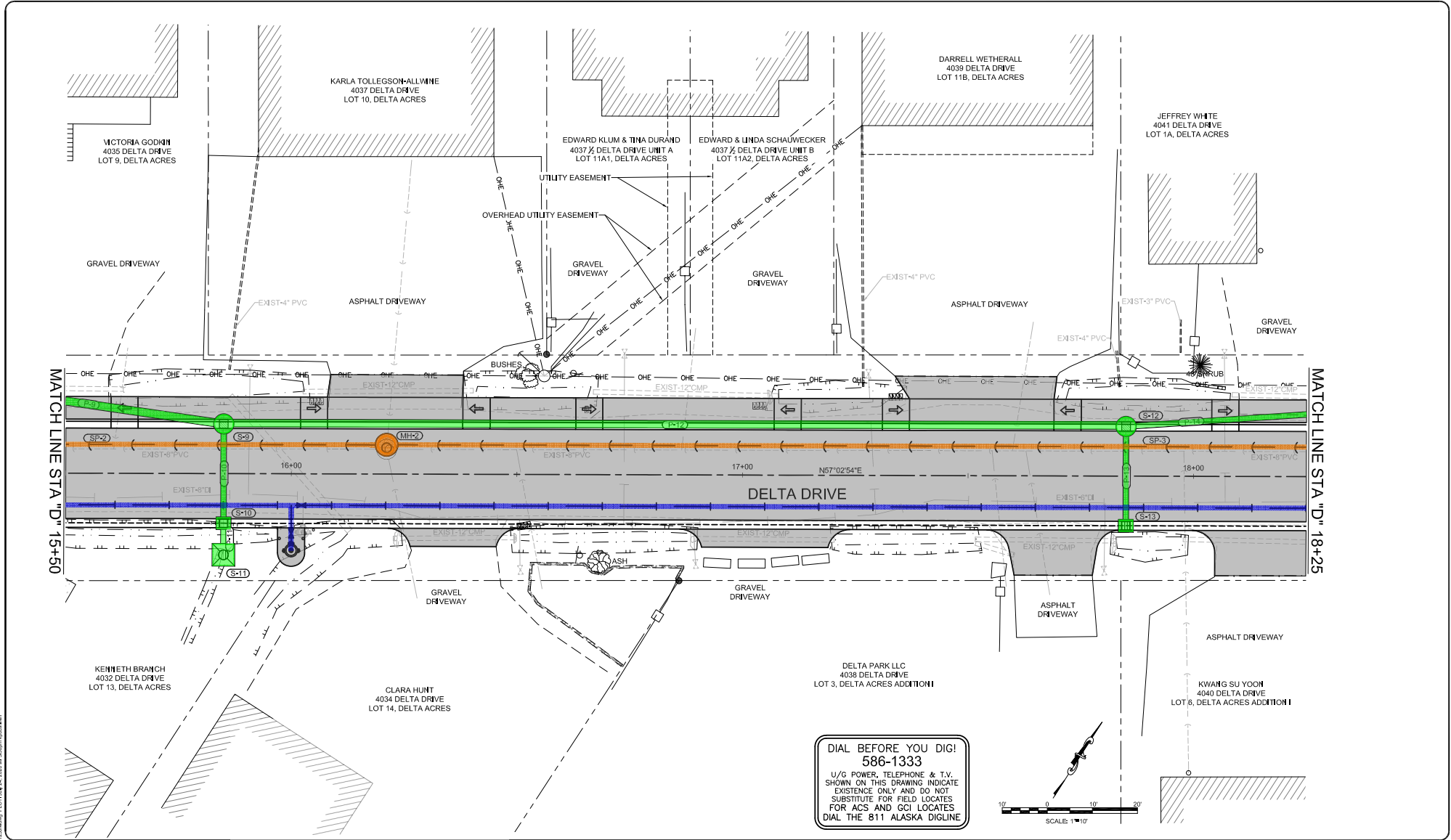
Douglas 4th Street F to I and Side Streets Improvements (R72-154): segment: F to I Streets. Replace existing water and sewer infrastructure, which have exceeded expected service life, improve drainage infrastructure within these existing gravel roadways. Paving of these gravel roadways is not funded at this time.



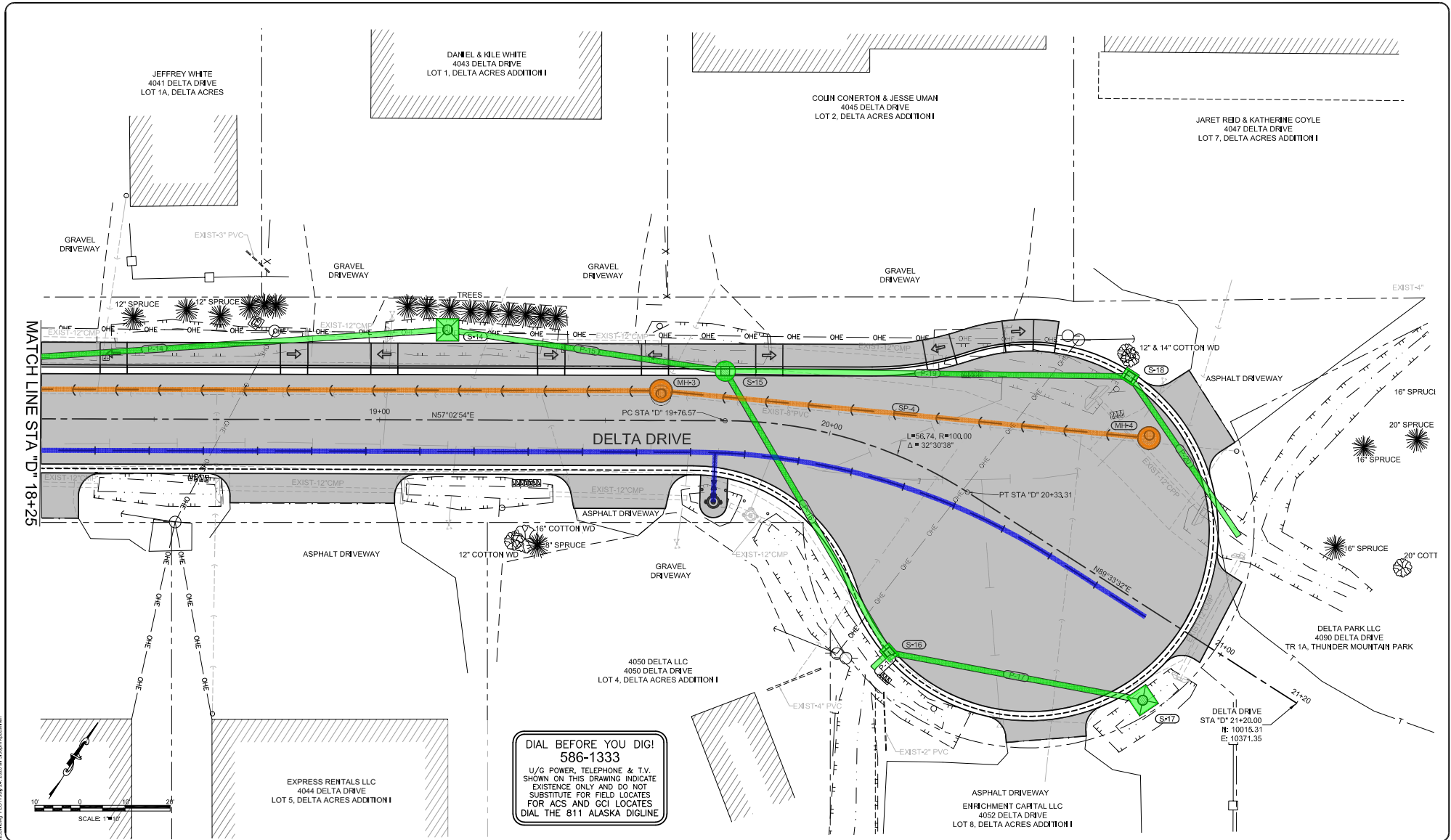


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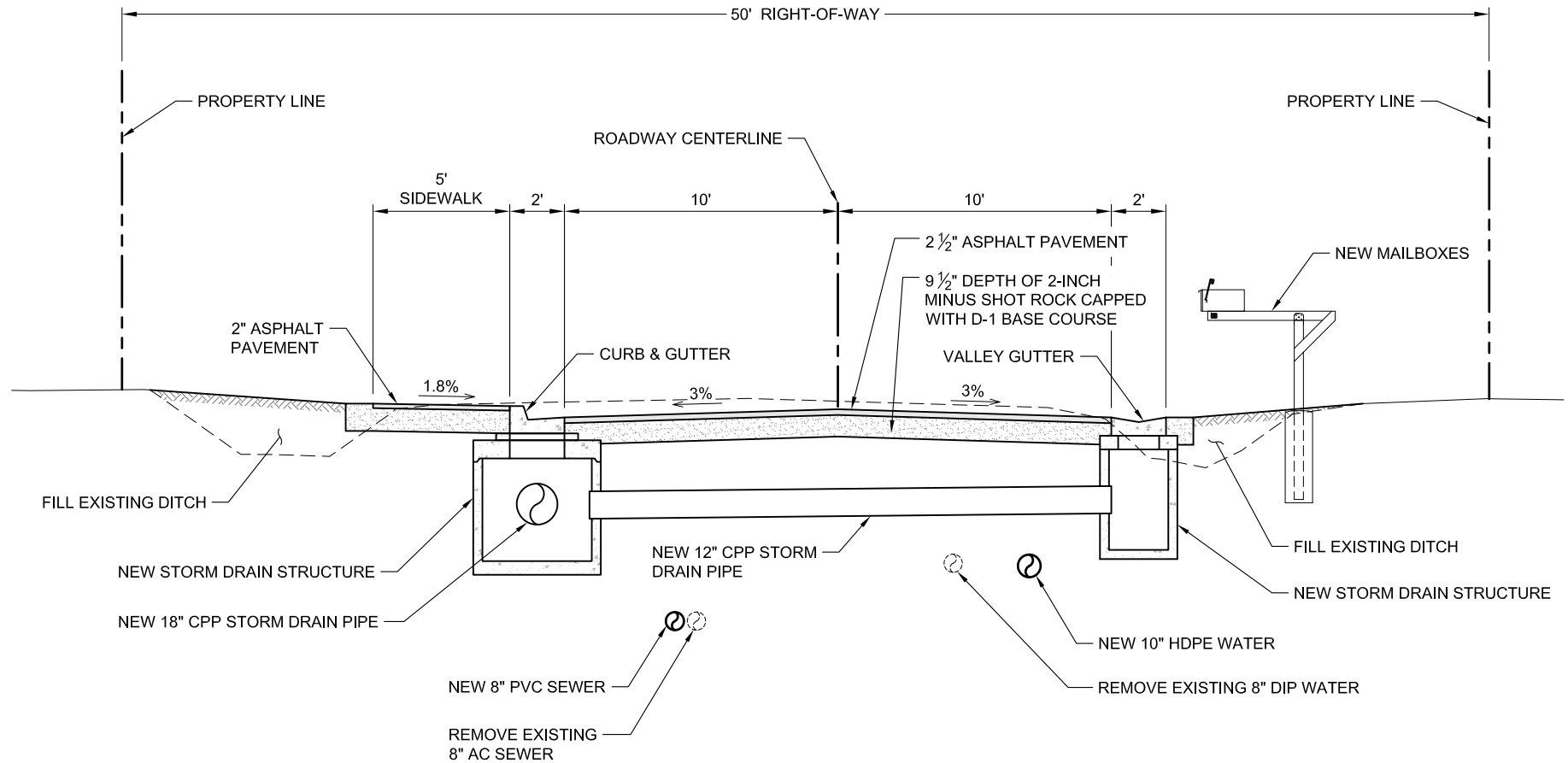
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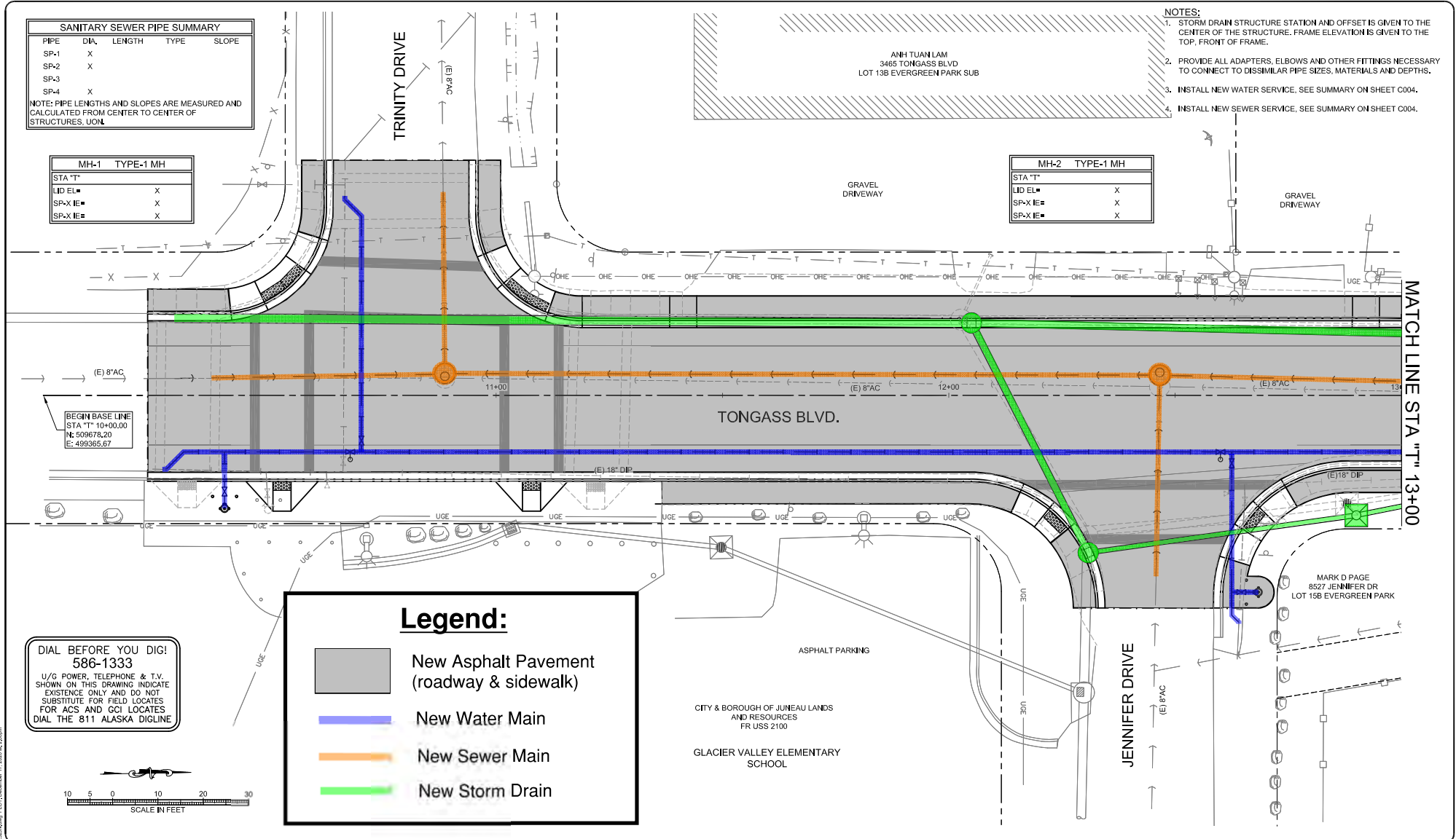


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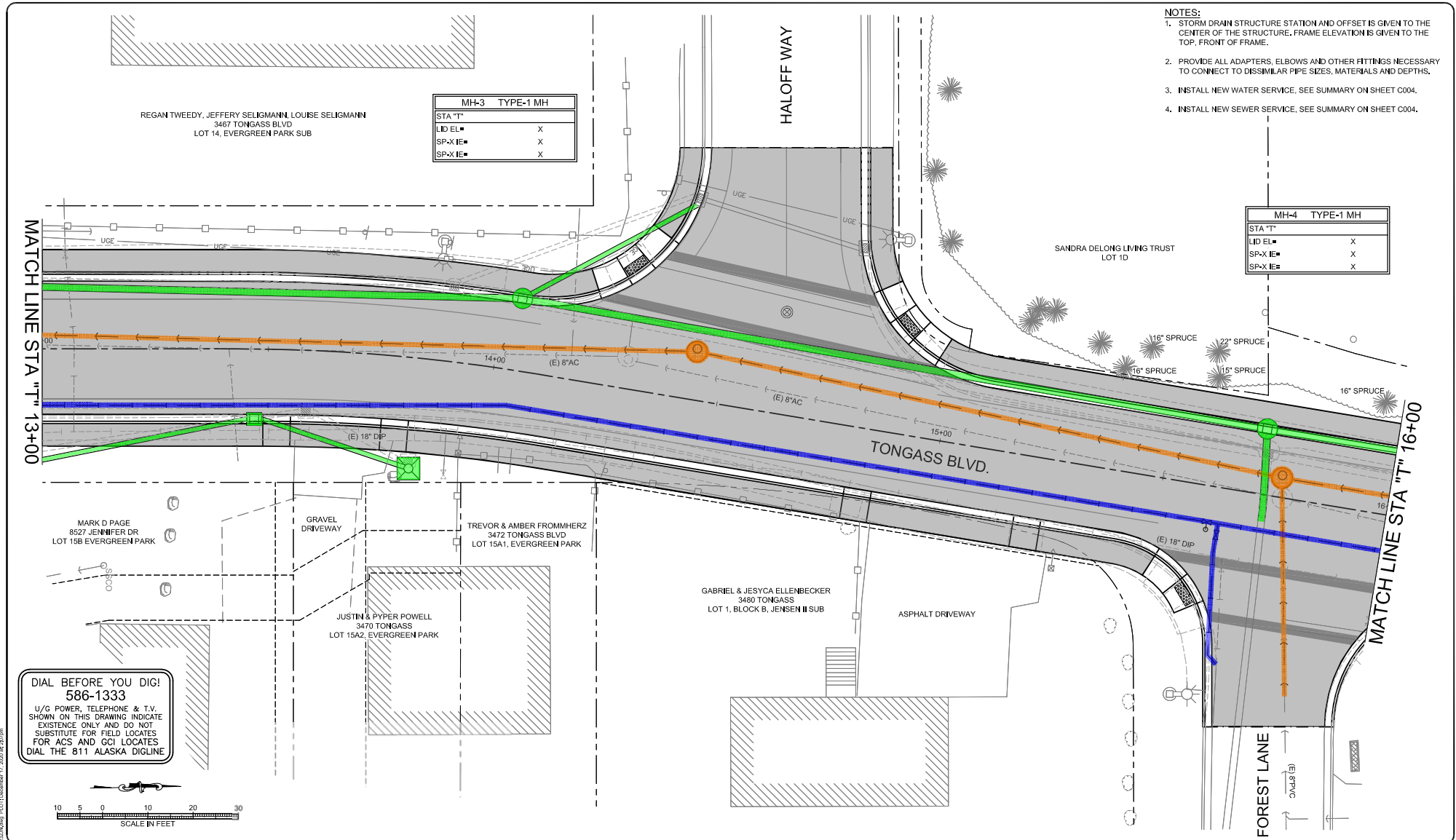


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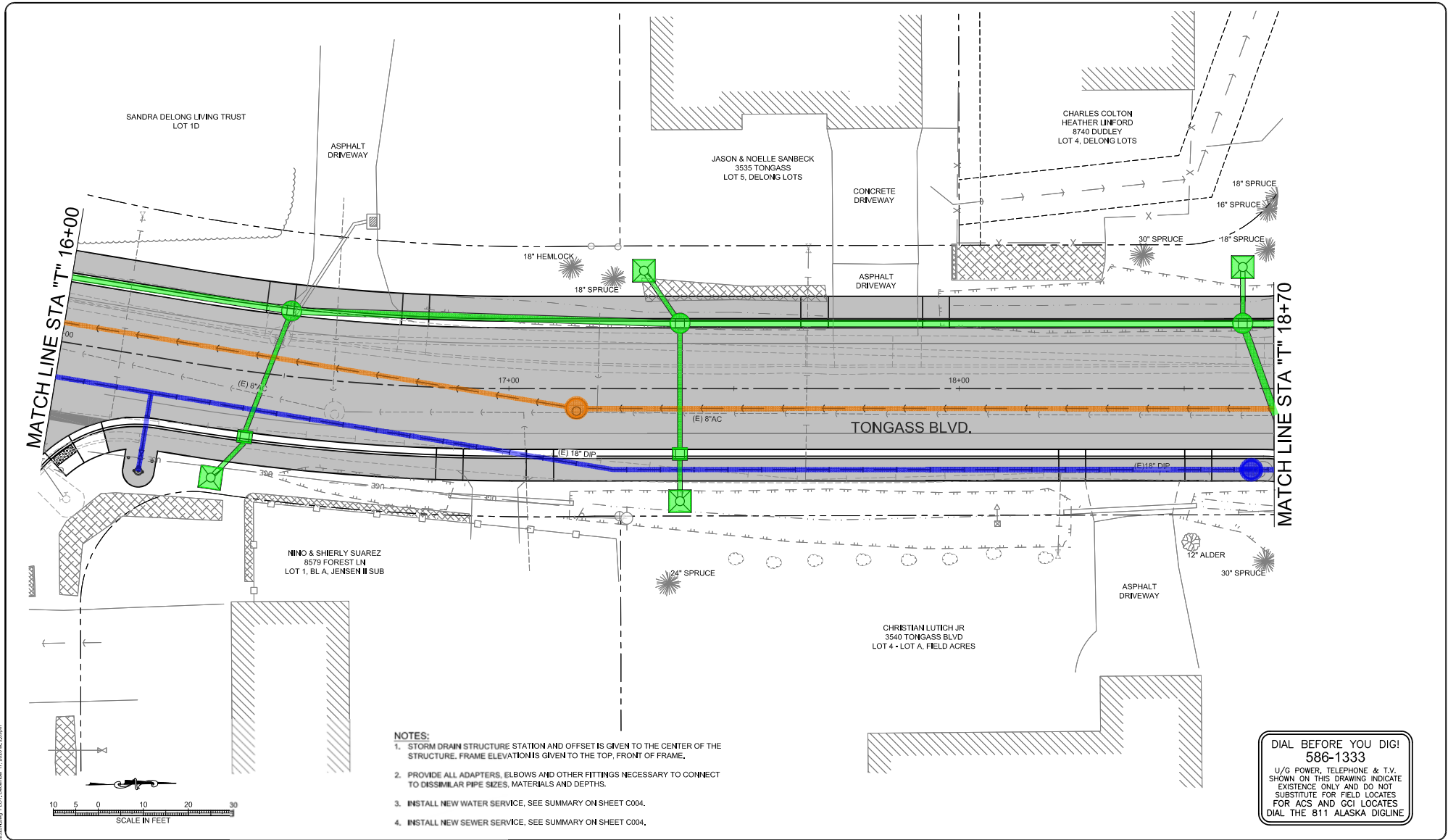
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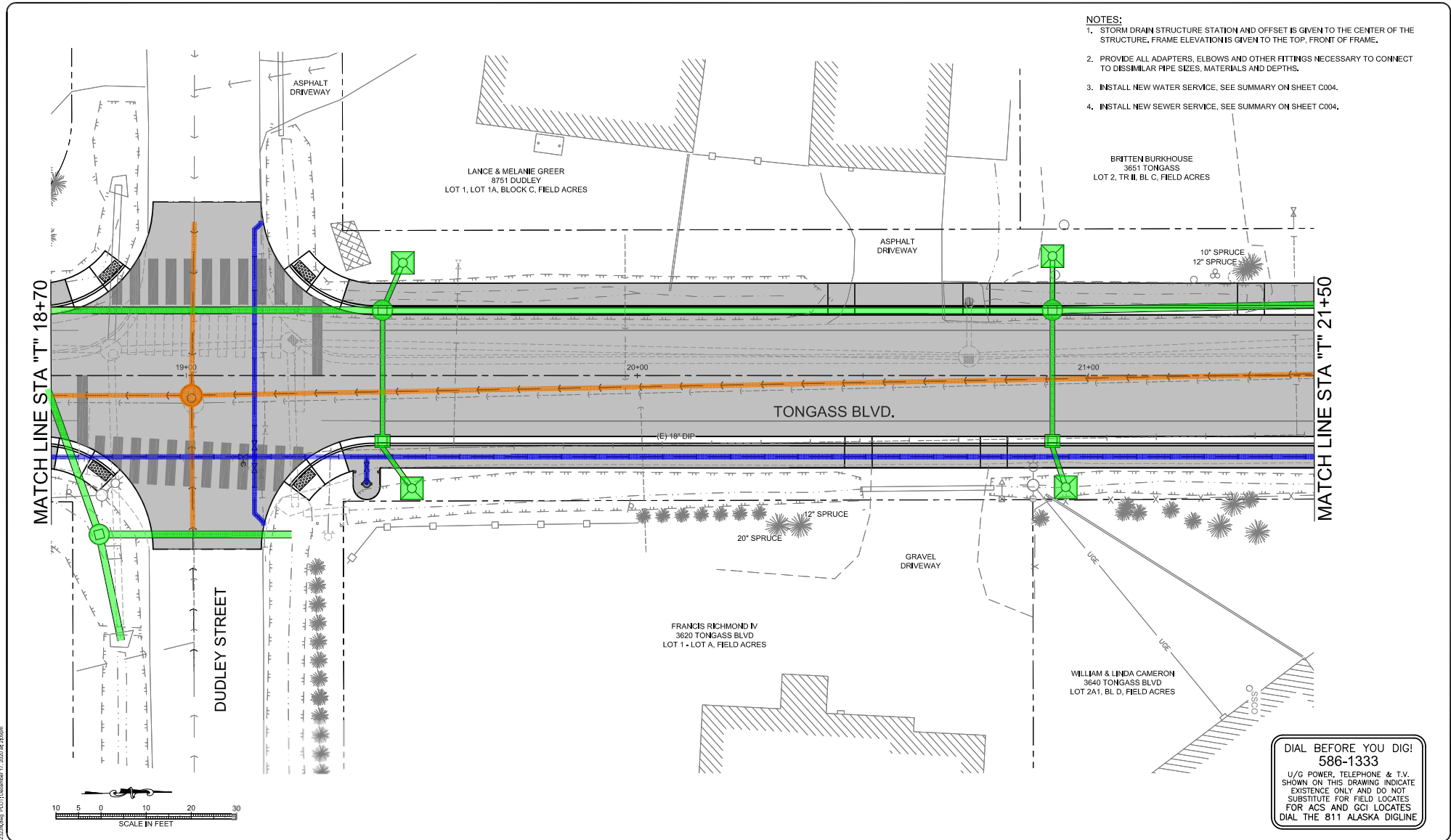
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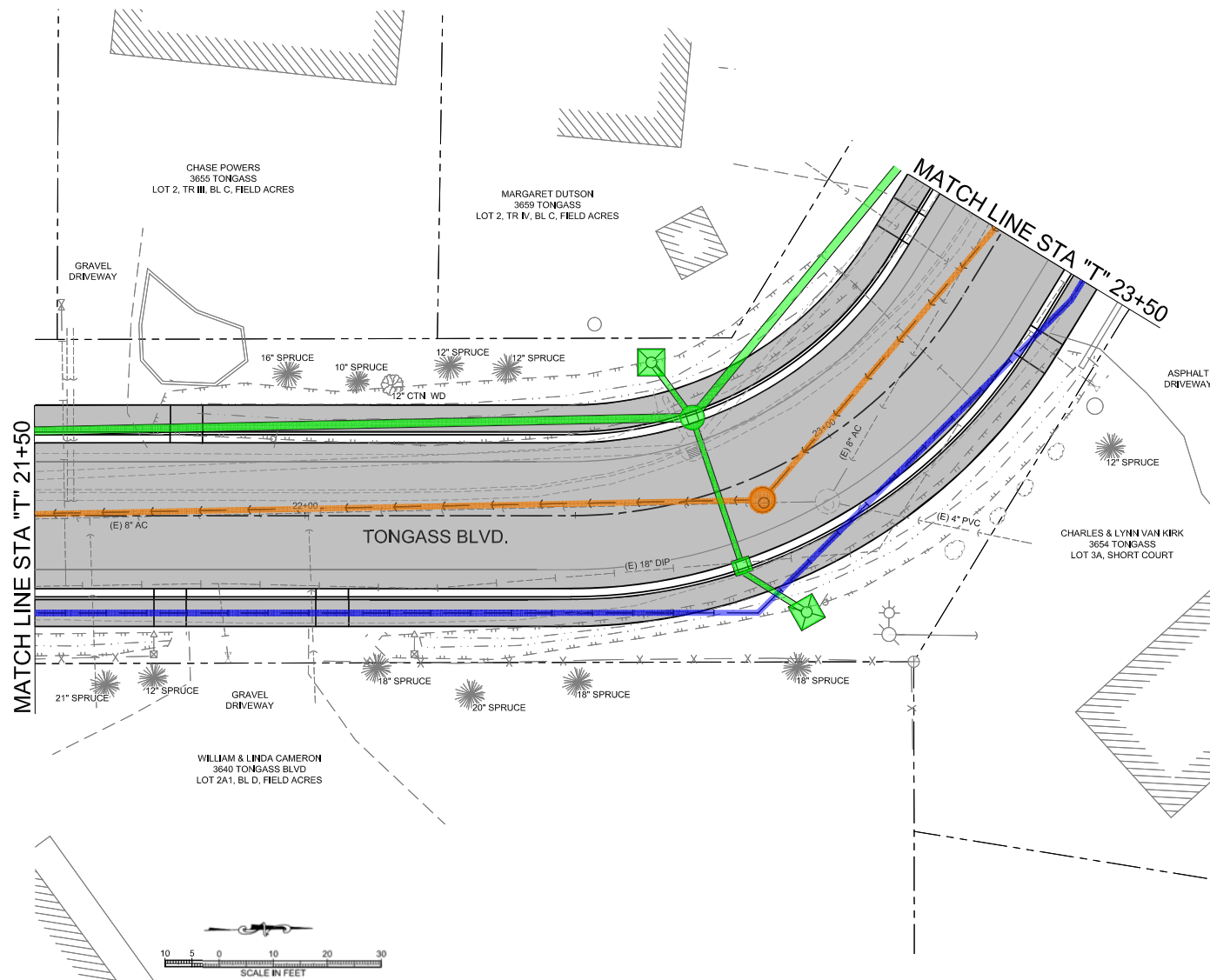
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- NOTES:**
1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE. FRAME ELEVATION IS GIVEN TO THE TOP, FRONT OF FRAME.
 2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
 3. INSTALL NEW WATER SERVICE, SEE SUMMARY ON SHEET C004.
 4. INSTALL NEW SEWER SERVICE, SEE SUMMARY ON SHEET C004.

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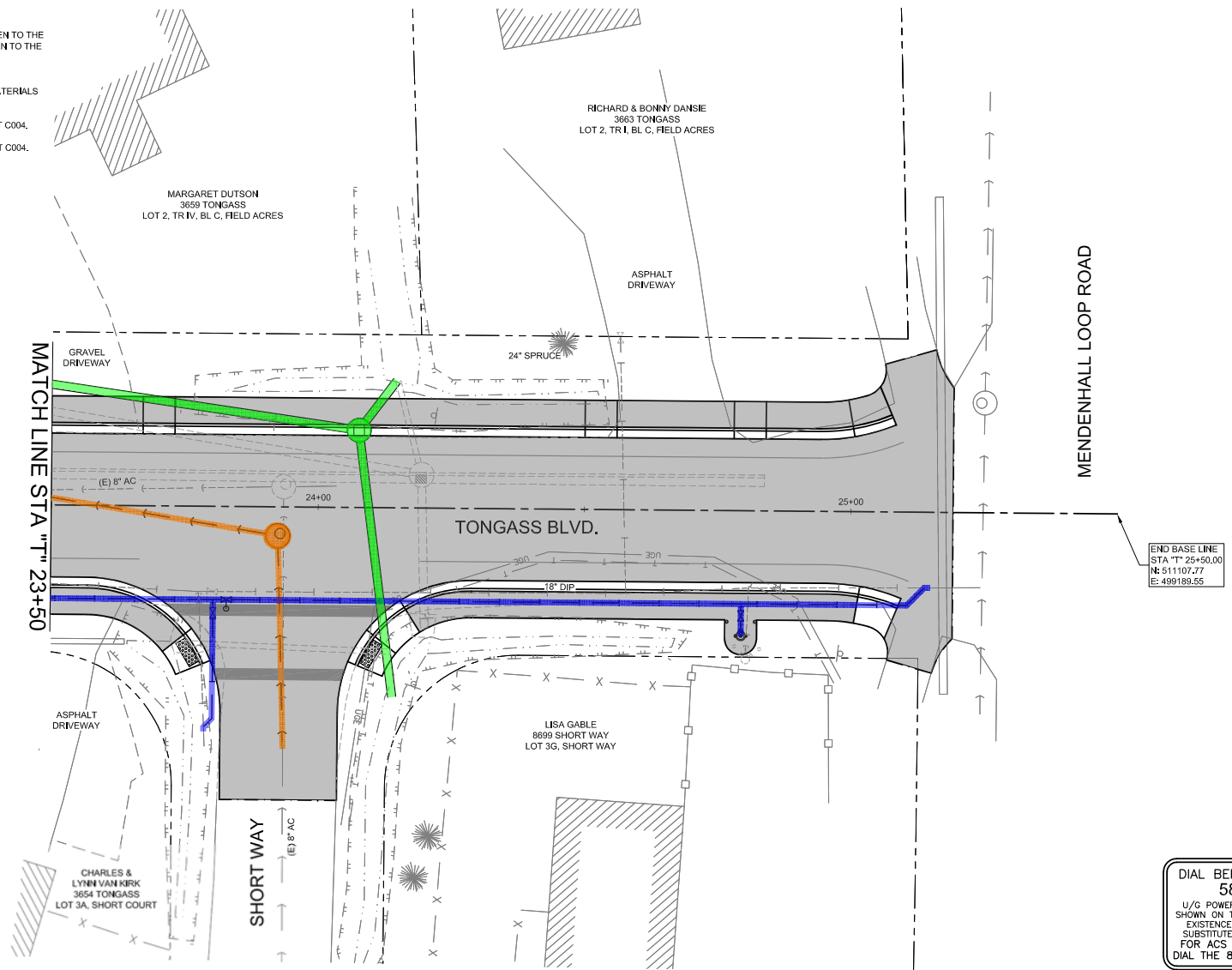
PRELIMINARY PLANS

**TONGASS BOULEVARD
 RECONSTRUCTION**
 CBJ CONTRACT No. BE21-150
 CITY & BOROUGH OF JUNEAU, ALASKA

**PLAN - TONGASS BLVD.
 STA "T" 21+50 TO
 STA "T" 23+50**

DATE: Dec 17, 2020
 PDC No. 20232JH
 SHEET
C204

- NOTES:**
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 2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
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 4. INSTALL NEW SEWER SERVICE. SEE SUMMARY ON SHEET C004.



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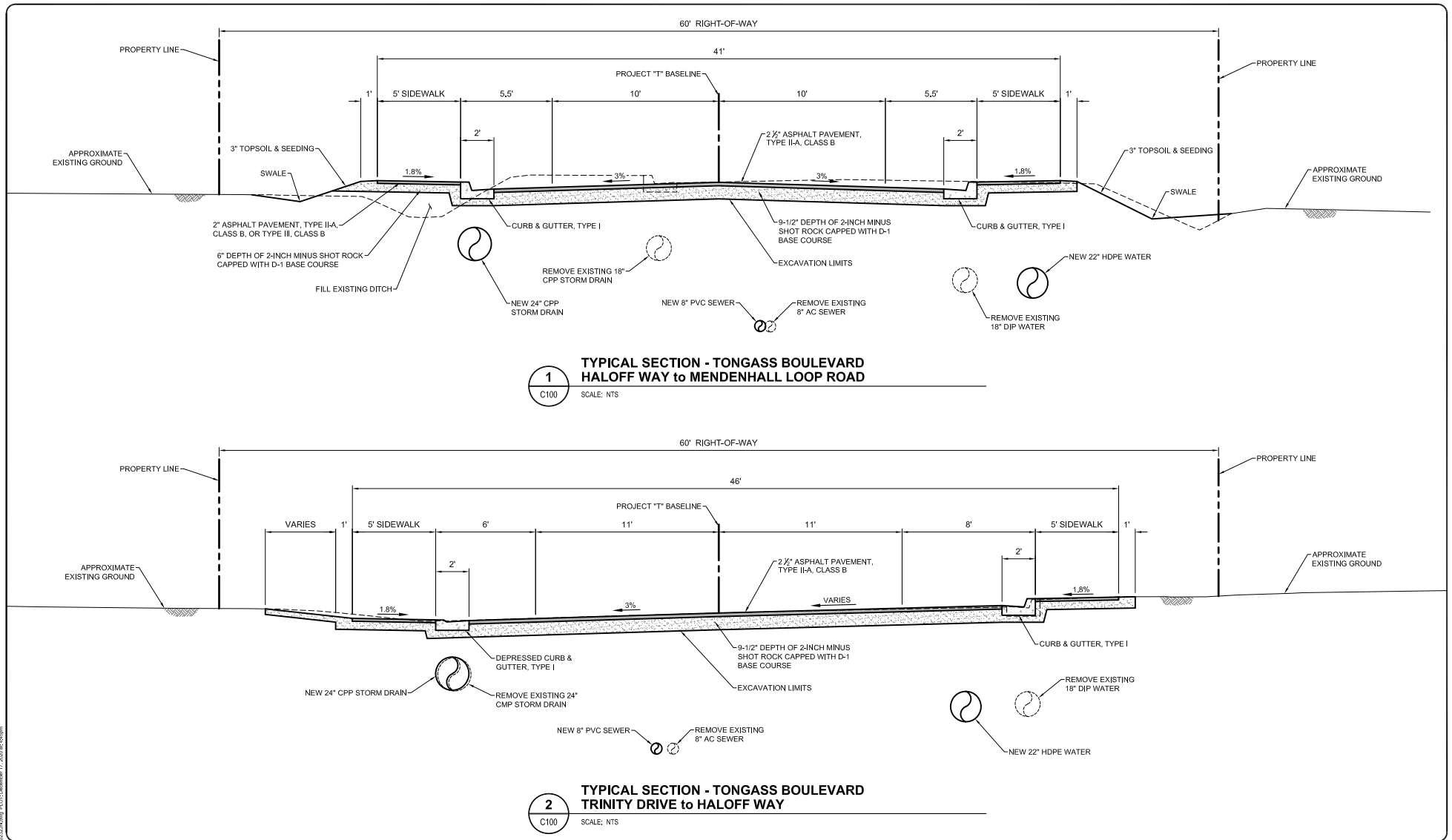


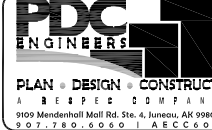
PRELIMINARY PLANS

**TONGASS BOULEVARD
 RECONSTRUCTION**
 CBJ CONTRACT No. BE21-150
 CITY & BOROUGH OF JUNEAU, ALASKA

**PLAN - TONGASS BLVD.
 STA "T" 23+50 TO
 MENDENHALL LOOP ROAD**

DATE: Dec 17, 2020
 PDC No. 20232JH
 SHEET
C205



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Tongass Boulevard Reconstruction

CBJ Contract No. BE21-150
City & Borough of Juneau, Alaska

JUNEAU SAFE ROUTES TO SCHOOLS PLAN

SHEINBERG ASSOCIATES

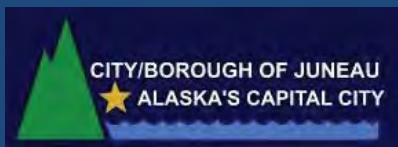
with assistance from

KITTELSON & ASSOCIATES, INC

CORVUS DESIGN

ALASKA MAP COMPANY

JUNE 2012



GLACIER VALLEY ELEMENTARY SCHOOL SAFE ROUTES TO SCHOOL - AUDIT, RECOMMENDATIONS & WALKING MAP

Data for the Glacier Valley Elementary School audit report comes from systematic observation of student arrival and dismissal conditions on November 30; results and information from a parent survey (79% of students returned completed surveys); data from a teacher conducted show-of-hands tally about how students traveled to and from school one day during mid-October (87% of students tallied); accident data from the City and Borough of Juneau (CBJ) Police; conversations with Glacier Valley School teachers and staff during a staff meeting; and an interview regarding school biking and walking programs or policies. Information about the Safe Routes to School plan was also published in a September school newsletter and available at the fall school open house.

Observational Audit

- **Date:** November 30, 2011
- **Weather/Notes:** The audit was performed on an overcast day, with rain in the afternoon. Juneau received several feet of snow the week prior to the audit and the warmer weather lead to the formation of slush, ice and puddles
- **Audit Participants:** Zoë Morrison, Donovan Bell, Garry Remsberg, Ann Ferlauto

How Glacier Valley Students Travel to/ from School	
Mode	Share
Walk	12 – 22%
Bike	5 – 8%
Bus	12 – 24%
Vehicle	49 – 74%
<i>Sources: October 2011 SRTS Parent Survey and Student Travel Tally</i>	



Walking students arrive and head into Glacier Valley School on a winter morning.



BACKGROUND AND PARENT ATTITUDES

Glacier Valley Elementary School is a grade K-5 school with 349 students (2010-2011 school year). Glacier Valley School is located on Tongass Boulevard between Jennifer Street and Evergreen Park Road. Tongass Boulevard is a CBJ-owned street with an average annual daily traffic count of 1,105.

The Glacier Valley Elementary School attendance area includes the area east of Mendenhall Loop Road from Egan Drive north to Erin Street, Sprucewood Park off Stephen Richards Memorial Drive, and a neighborhood to the west of Mendenhall Loop Road that includes McGinnis Drive, Portage Boulevard, and El Camino Street. To get to school, some students must cross Mendenhall Loop Road, which has an average annual daily traffic count of 15,879.

There are three designated School Zones: 1) Mendenhall Loop Road from just south of Trinity Drive to just south of Dudley Street; 2) on Trinity Drive in the half block west of Tongass Boulevard; and 3) on Tongass Boulevard from just south of Evergreen Park Road to just south of Haloff Way. There is a crossing guard at the Tongass Boulevard/Trinity Drive intersection.

Most students are driven to school. Depending on the weather and other factors on any given day approximately 13 to 30% walk and bike. Of parents completing the survey, 10-16% say their student walks every day.

Between 1999 and 2011, CBJ Police records show there were 13 accidents involving a vehicle and either a pedestrian or bicyclist within ¼ mile of Glacier Valley School. Eleven were at the intersection of Stephen Richards Memorial Drive and Mendenhall Loop Road, including one fatality. The last accident there was in 2008.

In 2009, the State installed a high intensity pedestrian activated crosswalk (HAWK light) across Mendenhall Loop Road at the Floyd Dryden Middle School entrance, which many now use to help cross this street. A pedestrian bridge over Mendenhall Loop Road built in 1977 near Glacier Valley Elementary School was damaged in 2011 and not rebuilt due to the nearby HAWK light, the overpass's lack of compliance with the American with Disabilities Act, the low level of use it was getting, and the high cost of reconstruction.

Factors Affecting Glacier Valley Parent Decision to Allow Student to Walk to School		
	% parents that say <u>this factor affects my decision to let student walk</u>	% parents that say <u>if this factor is improved it would influence my decision to let student walk</u>
Weather	66%	34%
Darkness	62%	30%
Distance	59%	28%
Traffic	54%	35%
Safety	54%	35%
Time	38%	18%
Bears	35%	20%
Crime	35%	19%
Adult	29%	25%
Sidewalks	29%	22%
Convenience	21%	11%
Activities	19%	10%
Crossing Guards	15%	18%
Backpack	14%	7%
Source: 2011 Parent Survey		



In 2010, a portion of the Glacier Valley Elementary School parking lot was renovated, including the addition of a separated walkway from the crosswalks at Jennifer Avenue to the front entrance of the school.

Fifty-eight percent (58%) of Glacier Valley Elementary School parents report that their child has asked for permission to walk to school at some point. The top reasons that parents cite for not wanting their child to walk to or from school are weather, darkness, distance, traffic and safety.

CURRENT CONDITIONS

Programs/Policies to Encourage Walking and Biking to and from School

Each year a Juneau Police Officer comes and provides 30 minutes of training in each classroom, which includes pedestrian safety education. Teachers are encouraged to follow up on these lessons. The school Physical Education teacher also teaches bike safety in the spring and encourages helmet use. There has been a bike rodeo at the school in years past, but this was not sponsored by the school. Police occasionally assist with enforcement of traffic rules by the school. There is one staff crossing guard, parents have tried to staff additional locations, but this was inconsistent and did not work well. The school parent group is interested in working on Safe Routes to Schools. A top safety concern of school administrators is to clear walking routes of ice and snow hazards throughout the winter. Parents generally follow school drop-off/pick-up rules in front of the school, but not at the side entrance by the library. In addition, the intersection at Mendenhall Loop Road still needs work to be better for walkers/bikers.

Student Departure and Arrival on Foot

Approximately 10-22% of students walk to or from Glacier Valley Elementary School. Many students arriving on foot were observed to be accompanied by an adult, but some arrived alone or in small groups. Walkers/bicyclists mostly arrived from neighborhoods to the north and south along Tongass Boulevard. There is a crossing guard at the north side of the Tongass Boulevard/Trinity Drive intersection. The day of the audit the crossing guard was on duty from approximately 7:45 am to 8:05 am and from 2:30 pm to 2:50 pm.

Although the audit was conducted several days after a snow fall, there were still sidewalks that were snow covered and icy.

Only a couple of students were observed crossing Mendenhall Loop Road at Stephen Richards Memorial Drive the day of the audit and all were accompanied by an adult. Some middle school students, probably heading to Floyd Dryden Middle School, were seen crossing at this intersection. Many parent comments cite safety concerns about this intersection.

Issues

- Several nearby sidewalks used by walkers were completely snow covered and many sidewalks were icy.



- The Mendenhall Loop Road/Stephen Richards Memorial Drive intersection has high traffic speeds, high traffic volumes, a large crossing distance (approx. 80 ft), and has been the site of 11 accidents between a pedestrian/bicyclist and a car.
- Traffic on Mendenhall Loop Road was observed exceeding the 20 mph school zone speed limit.
- Sidewalks are missing on Jennifer Drive and Evergreen Park Road. Evergreen Park Road is a major drainage area for this section of the valley and adding a sidewalk would probably require burying the drainage system.
- Crosswalks are not consistently present along both sides of well-used Tongass Boulevard for students approaching from either direction. Drivers were observed rolling through the stop sign at the Tongass Boulevard/Dudley Street intersection.
- When vehicles stop on Tongass Boulevard at Dudley Street, it is difficult for drivers to see pedestrians without pulling forward into the intersection. There are no crosswalks at the Dudley Street/Tongass Boulevard intersection.
- During the observation period vehicles at times did not yield to pedestrians on green lights when turning from Stephen Richards Memorial Drive or Haloff Way onto Mendenhall Loop Road.
- Students arriving from the south cut across the southern part of the parking lot (where buses park) to get to the sidewalk that leads into the school. There is no crosswalk at the southern end of the main parking lot.
- Some students arriving from the north cut through the north parking lot to get to the building instead of staying on the sidewalk.
- At dismissal time several cars were observed at the Mendenhall Loop Road/Stephen Richards Memorial Drive intersection without headlights on, even though it was dark.
- Students were observed crossing Tongass Boulevard and Trinity Drive both before and after the crossing guard's shift.

Student Departure and Arrival by Bicycle

Depending on the weather, up to 8% of students ride bikes to and from school. The day of the audit a few students rode bikes even though there was a lot of snow. There is a covered bike storage area directly adjacent to the front doors of the school. Most bicyclists arrive via Tongass Boulevard, which has bike lanes on both sides.

Student Departure and Arrival by Bus

Somewhere between 12-24% of students take one of four buses to or from school. The drop-off and pick-up area for school buses is in the main parking lot, just south of the school. Students use the sidewalk adjacent to the school to get to and from the buses; no staff supervised students.

Issues

- School bus parking area is not clearly marked.



Student Departure and Arrival by Vehicle

At Glacier Valley Elementary School between 43-74% of students get a ride to or from school. Of this total, 3-5% said they are part of a carpool. Most students are dropped off and picked up in the main school driveway; at arrival and dismissal times this area becomes quite congested. A second parent drop-off/pick-up area is in the parking lot on the north side of the school. Some parents also park in vacant spaces in the staff parking lot and walk students into school.

Issues

- Parents use the handicapped space for drop-off and pick-up. When pulling out of these spots there is potential conflict with cars pulling into the parking lot.
- Parents park along the front of school and go into the building with children. This leads to congestion in the main drop-off and pick-up area in front of the school. As a result some parents cannot find space to pull into the drop-off area and choose to drop children in locations where they have to walk across traffic lanes to get into the building.
- Some parents park in the southwest portion of the main parking lot to wait for children; children were observed crossing the parking lot to get to parents waiting in this area.
- Drop-off areas in both parking lots are not marked as one way.
- In the north parking lot, some parents go out the first entrance, against the main flow of traffic, instead of going out the second entrance.

RECOMMENDED SAFE ROUTE TO SCHOOL IMPROVEMENTS

KEY - SAFE ROUTES TO SCHOOL IMPROVEMENT TABLE			
Cost (estimated)		Human Effort(HE) (estimated)	
NC =no cost -\$100	VL =\$100-\$5,000	PJ =part of existing job	OT =one time
L1 =\$5,000-\$50,000	L2 =\$50,000-\$100,000	VL = 1-5 hrs	L = 1-5 hrs/mon
M =\$100,000-\$500,000	H =\$500,000-\$1 million	M = 20 hrs/mon	H = fulltime job
VH = >\$1 million		S =seasonal work, level of effort depends on weather	

IMPROVEMENT/ ACTION	TYPE	RESP. PARTY	COST	HE
ENGINEERING, INFRASTRUCTURE, MAINTENANCE				
1. Increase pedestrian crossing safety at Mendenhall Loop Road/Stephen Richards Memorial Drive intersection. Options include: putting one-two crossing guards at this location during arrival and dismissal times of both Glacier Valley Elementary School and Floyd Dryden Middle School, adding a pedestrian island/median, decreasing the turning radius by adding curb bulb-outs, or installing a signalized pedestrian crossing. There have been 11 pedestrian or bike and vehicle accidents here from 1999 to 2011, including one fatality. Mendenhall Loop Road speed limit is 40 mph. There are young (K-5) students crossing unassisted, including from dense residential areas. Many Glacier	Intersection crossing improvement	ADOT&PF	H	O



IMPROVEMENT/ ACTION	TYPE	RESP. PARTY	COST	HE
Valley parents list concerns with crossing this intersection. Mendenhall Loop Road is an Urban Minor Arterial and Stephen Richards Memorial Drive is an Urban Collector street. Also improve signage at Mendenhall Loop and Stephen Richards/Haloff Way intersection on the Haloff side by instructing "Left Turn Yields To All Incoming Traffic" not just "Left Turn Yields." At Stephen Richards, post an instructional sign stating, "Right Turn on Green Light Has Right of Way." Alternatively an occasional police officer directing traffic and educating/ticketing drivers could help reinforce proper driving rules. The ADOT&PF Highway Safety Improvement Program (HSIP) is in the final design stage of a project to reconfigure this intersection. A project goal is to shorten the crossing length of Mendenhall Loop Road on the north side. Improvements also focus on clarifying and formalizing left turns. Construction is scheduled for spring 2013. (Same recommendations for Floyd Dryden Middle School.)				
2. More consistent and timely snow and ice removal on sidewalks is needed focusing on 1) sidewalks and access to crosswalks near the school, and 2) ensuring that snow berms do not block sight lines for drivers at crosswalks. Several parent comments noted about lack of snow removal with emphasis on Tongass Boulevard.	Snow removal, maintenance	Home owners, CBJ	VL	S
3. Install traffic calming on Tongass Boulevard between Gail Avenue and Jennifer Drive to slow traffic. This part of Tongass "feels" like a 35 mph street because it is wide and lacks some stop signs, even though it is 20 mph. This is probably linked to the parent comments and observations about speeding on this street. Narrow the street to slow traffic by widening sidewalks or other techniques (will increase snow storage too). (Same recommendation for Floyd Dryden Middle School.)	Sidewalk improvement, street modification	CBJ	M	OT
4. Complete Tongass Boulevard sidewalk system by adding segment on east side from Forest Lane to Mendenhall Loop Road (approx 950 ft). This would allow safer access to the Floyd Dryden Middle School trail system entrance at Short Way. Sidewalks will get walkers off Tongass Boulevard. Glacier Valley Elementary School parent concern was verified during audit when several vehicles appeared to exceed the speed limit on Tongass Boulevard. The AADT on Tongass Boulevard is 1,055. (Same recommendation for Glacier	Sidewalk missing	CBJ	M	OT



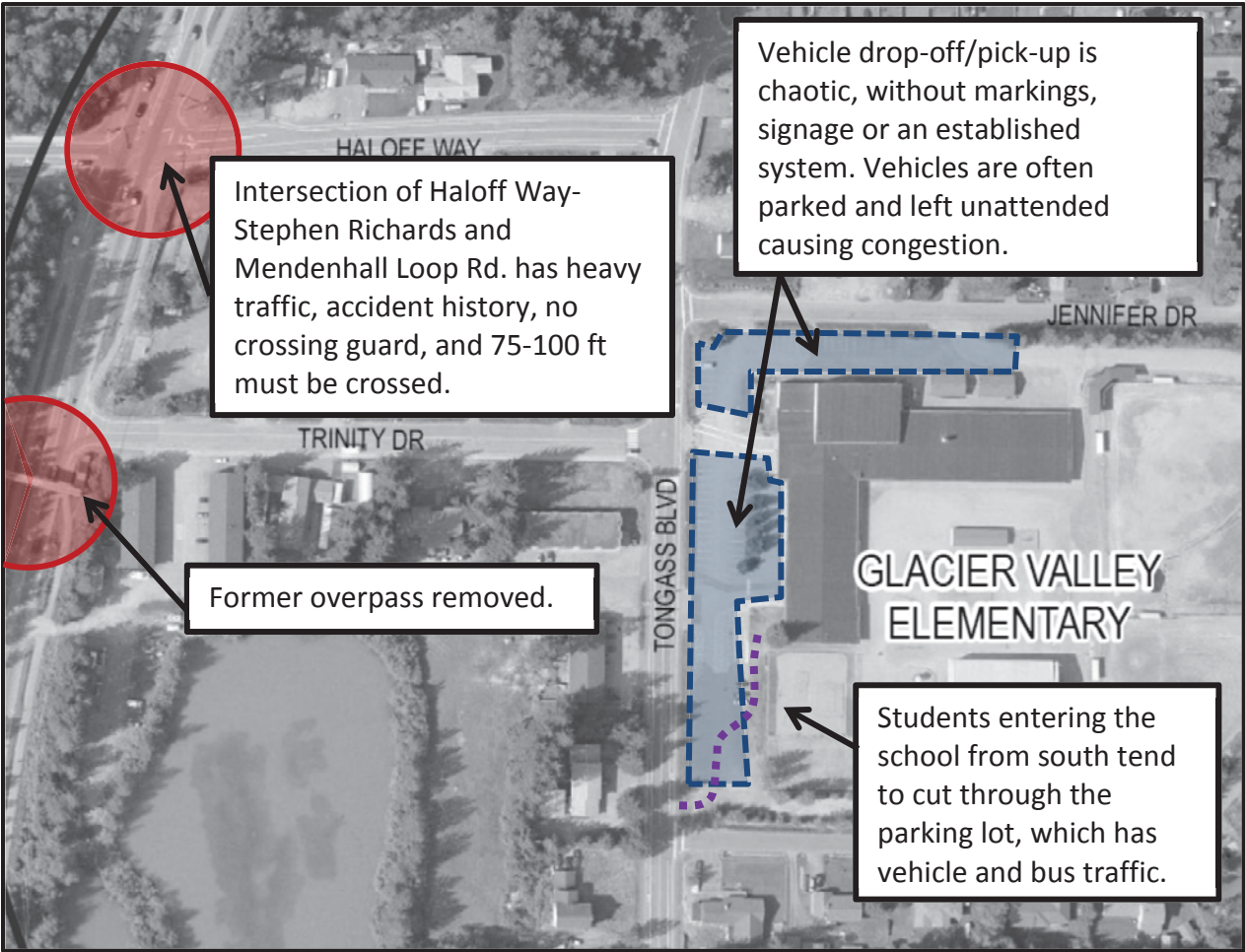
IMPROVEMENT/ ACTION	TYPE	RESP. PARTY	COST	HE
Valley Elementary School.)				
5. Determine if traffic warrants (MUTCD) adding stop signs on Dudley Street to make the Tongass Boulevard/Dudley Street intersection a 4-way stop. If stop signs warranted, also add a crosswalk parallel and across Tongass Boulevard, at Dudley Street. There are many walkers through this intersection to and from school and a 4 way stop would slow vehicular traffic. Glacier Valley Elementary School parent concern was verified during audit when several vehicles appeared to exceed the speed limit on Tongass Boulevard, and, rolled through the stop sign at this intersection. (Same recommendation for Floyd Dryden Middle School.)	Intersection crossing improvement	CBJ	VL then M if done	OT
6. Add sidewalks on at least one side of Jennifer Drive (approx. 1,200 ft).	Sidewalk missing	CBJ	M	OT
7. Direct flow of traffic in, through and out, of both main and north parking lots by adding signage to discourage parents from parking in the drop-off and pick-up areas. During the audit several drop-off/pick-up problems were noted that caused congestion around the school including: parents using handicap parking for drop off, parking in pick-up/drop-off zone and walking children into school causing congestion, and drop-off zones aren't marked as one-way causing traffic flow both directions. Remedying these issues will decrease congestion, enhance walker safety and thus give parents more confidence to allow students to walk/bike.	Vehicle flow/ drop-off & pick-up	Glacier Valley	L1	OT
ENCOURAGEMENT AND EDUCATION				
8. Identify someone at Glacier Valley to specifically task with helping to organize Walking/Biking Encouragement Activities at the start of the school year, whether a staff person, teacher, PTO volunteer or parent volunteer. Many examples of fun Safe Routes to School education and encouragement programs and activities are listed in Appendix A. The Parent Teacher Organization, playground committee, safety committee or a similar group at the school should be designated/asked to identify activities or programs that seem exciting and relevant for Glacier Valley Elementary School. Select at least one activity and commit to doing it every year. There are many cross-curriculum (PE, music, counseling, art) activities at the school already; build upon these models.	Education & Encouragement	Glacier Valley	NC to VL	VL to L
9. Distribute the Glacier Valley School Walking Map to students at beginning of school year and again in spring, have available at School Fall Open-House.	Education & Encouragement	Glacier Valley, PTO	NC	VL

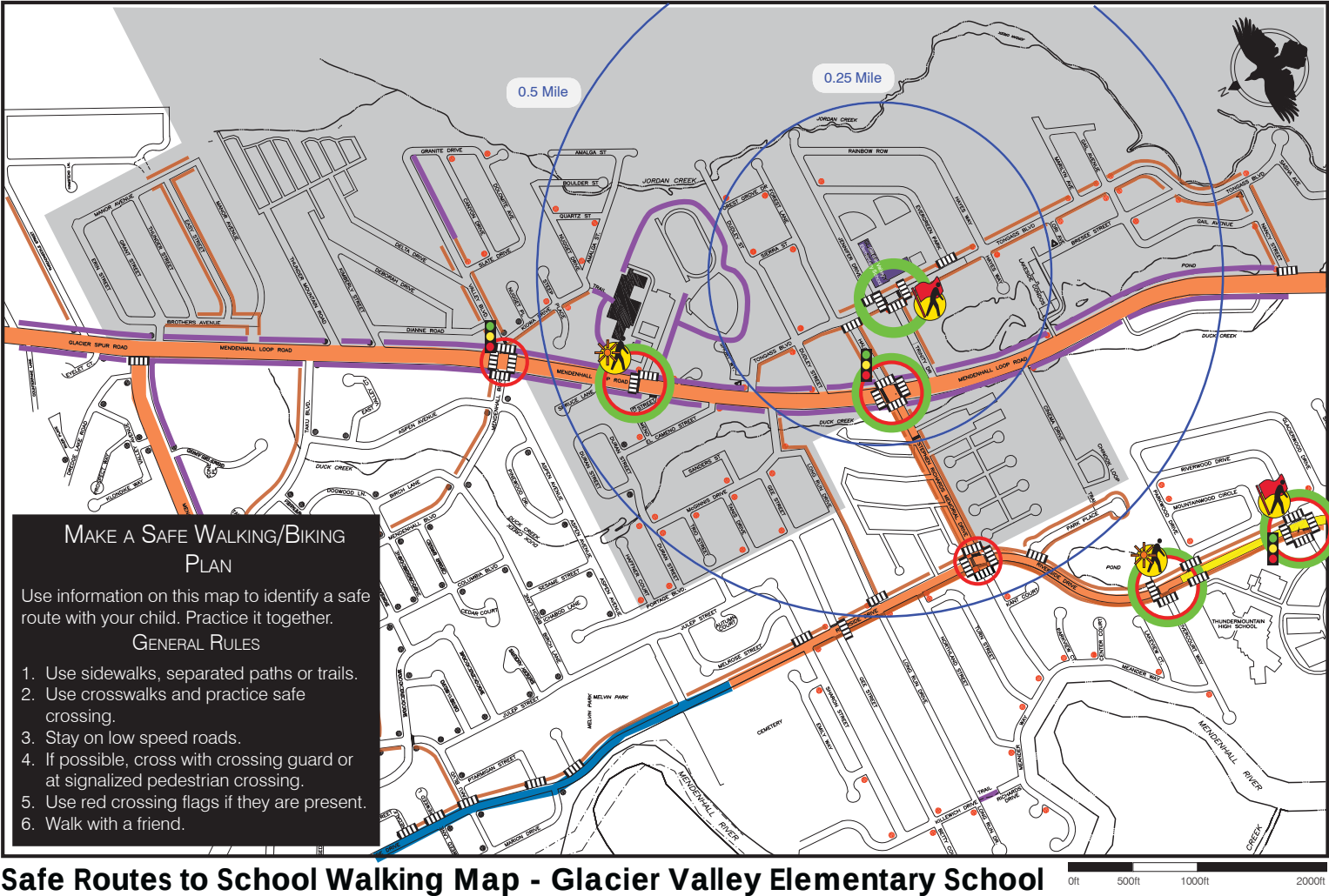


IMPROVEMENT/ ACTION	TYPE	RESP. PARTY	COST	HE
10. Organize Walking School Buses, if there is parent interest, from neighborhoods west of Mendenhall Loop Road including Sprucewood and Black Bear neighborhoods on either side of Stephens Richards Memorial Drive. These are the neighborhoods where grade K-5 students must cross Mendenhall Loop Road to get to Glacier Valley School. Walking in a group with an adult would improve safety and encourage more walking and biking.	Encouragement	Glacier Valley, PTO, parents, others	VL	L to M
11. Develop a Juneau School District-wide, Education Campaign aimed at parents (especially) and students about the self-perpetuating cycle... that by driving their student (or being driven) to school they are personally contributing to school-zone congestion which causes congestion and discourages walking and biking. Regularly use the materials developed by JSD in newsletters, etc.	Education	JSD, Glacier Valley	VL	VL
12. Develop a School District-wide, safe walking, street crossing and biking curriculum for physical education classes (many examples exist) that includes hands-on outdoor practice sessions in the parking lot and on the sidewalk/streets each spring and fall.	Education & Encouragement	JSD, Glacier Valley	VL	PJ
13. Install anti-idling signs in parking lots and parent drop-off and pick-up areas. Vehicle emissions have negative health effects and should be minimized.	Education	JSD, Glacier Valley	VL	OT
ENFORCEMENT				
14. Periodic police enforcement of the School Zone speed limit on Mendenhall Loop Road by adding a mobile radar speed detection sign at the beginning of the school year, at the beginning of spring, and at random other times and occasional ticketing. (Same recommendation for Floyd Dryden Middle School.)	Enforce speed limit/walker/cyclist safety	Juneau Police	NC	VL
15. An adult should monitor and enforce traffic rules at the drop-off/pick-up area & greet students. This will create more consistent pick-up/drop-off in the parking lot, reduce congestion, enhance walker safety in this area, and as a result give parents more confidence about student safety when walking/biking to and from school.	Enforce drop-off/pick-up rules	Glacier Valley, PTO	NC	M
EVALUATION				
16. Repeat and tabulate results of a Student Travel Tally in all classrooms in the fall and spring each year at Glacier Valley. This is easy to do and takes about five minutes of teacher time. Baseline Travel Tally data was established as part of this plan's development. Make it a contest and challenge students to beat the school's walking/biking percentages from last year.	Evaluation	Glacier Valley	NC	VL



Current Conditions – Glacier Valley Elementary School





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 **complete street and underground utility maintenance and addition of a sidewalk to one side (and replacements as necessary) on Delta Drive.**

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 28	Dec. 29 — noon, Jan. 11	HEARING DATE & TIME: 7:00 pm, January 12, 2021	January 13
Comments received during this period will be sent to the Planner, Irene Gallion , to be included as an attachment in the staff report.	Comments received during this period will be sent to Commissioners to read in preparation for the hearing.	This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: https://juneau.zoom.us/j/93626358724 . The Webinar ID is: 936 2635 8724. 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.	The results of the hearing will be posted online.

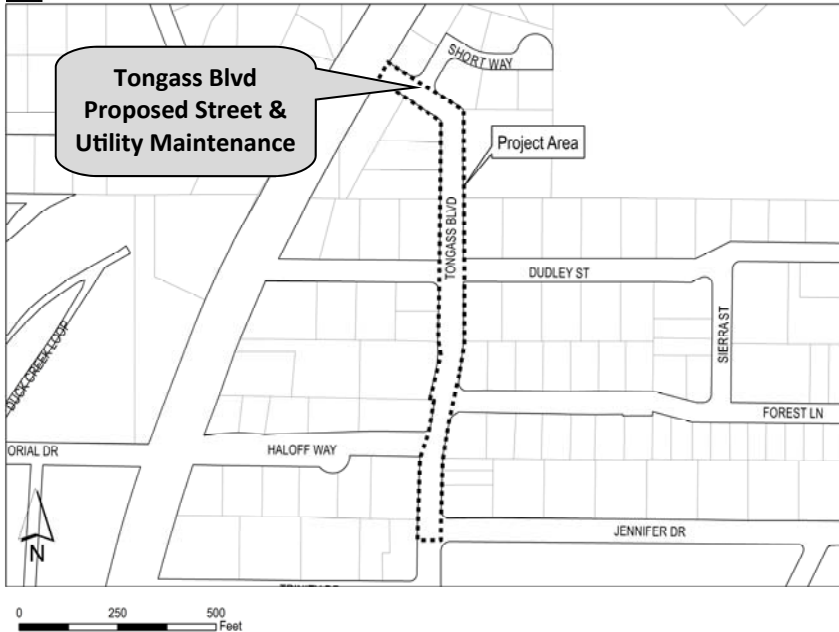
Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed December 17, 2020

Case No.: CSP2020 0009
Parcel No.: 0
CBJ Parcel Viewer: <http://epv.juneau.org>

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 **complete street and underground utility maintenance and addition of a sidewalk (and replacements as necessary) on Tongass Blvd.**

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 28

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

Dec. 29 — noon, Jan. 11

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

HEARING DATE & TIME: 7:00 pm, January 12, 2021

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January 13

The results of the hearing will be posted online.

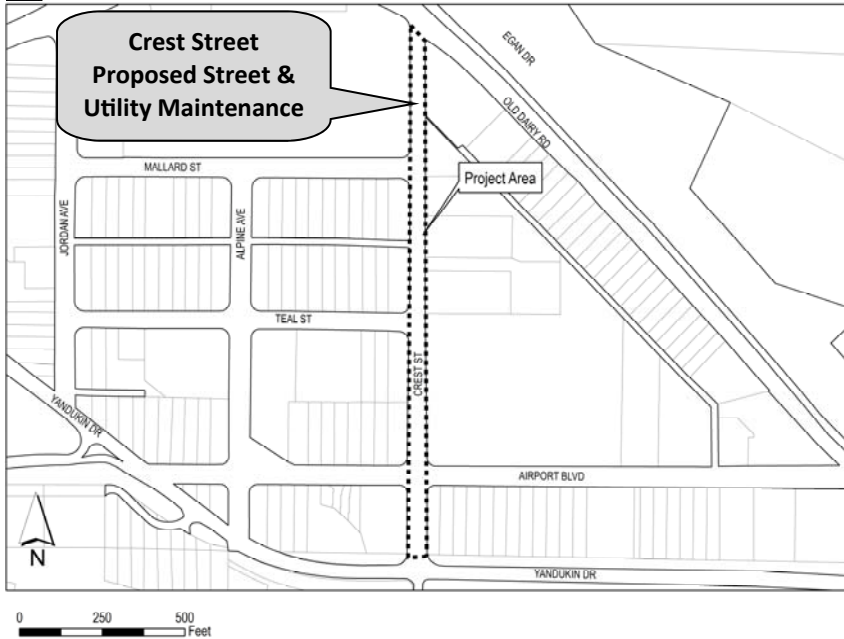
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Invitation to Comment

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 **complete street and underground utility maintenance and addition of a sidewalk to one side (and replacements as necessary) on Crest Street.**

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 28

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

Dec. 29 — noon, Jan. 11

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

HEARING DATE & TIME: 7:00 pm, January 12, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/93626358724>. The Webinar ID is: 936 2635 8724. 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.

January 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

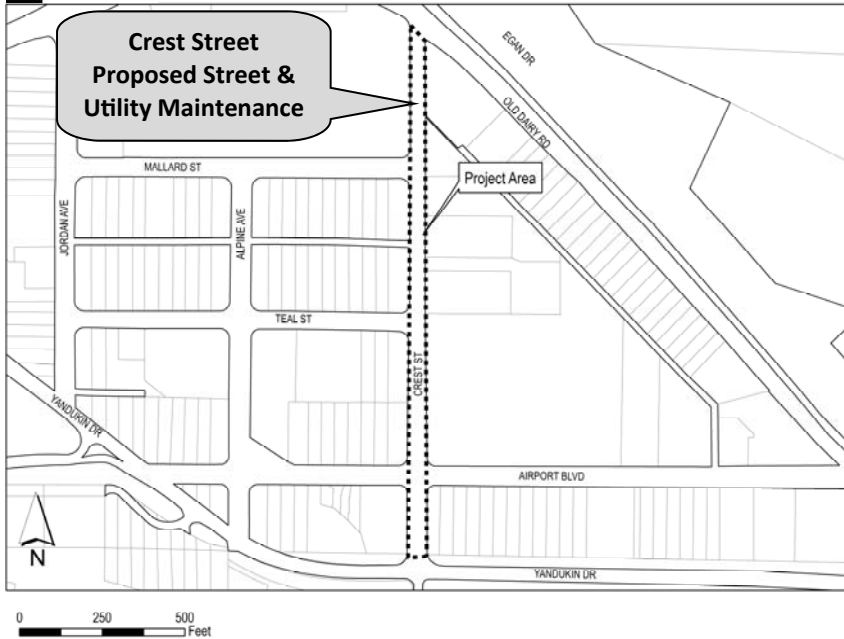
Printed December 17, 2020

Case No.: CSP2020 0009
Parcel No.: 0
CBJ Parcel Viewer: <http://epv.juneau.org>

Revised Notice

Hearing Rescheduled; Case Information Updated

Re: Crest Street Proposed Maintenance



155 S. Seward Street Juneau, Alaska 99801

TO:

You are receiving this notice regarding an application being heard by the Planning Commission for complete street and underground utility maintenance (and replacements as necessary) and addition of a sidewalk to one side on Crest Street. Originally, the hearing was set for January 12, 2021.

The hearing has been rescheduled for January 26, 2021 and the case number has been updated to CSP2020 0012.

TIMELINE

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

Now through Jan. 4

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

Jan. 5 — noon, Jan. 25

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

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

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/98351893348>. The Webinar ID is: 983 5189 3348. 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.

January 26

The results of the hearing will be posted online.

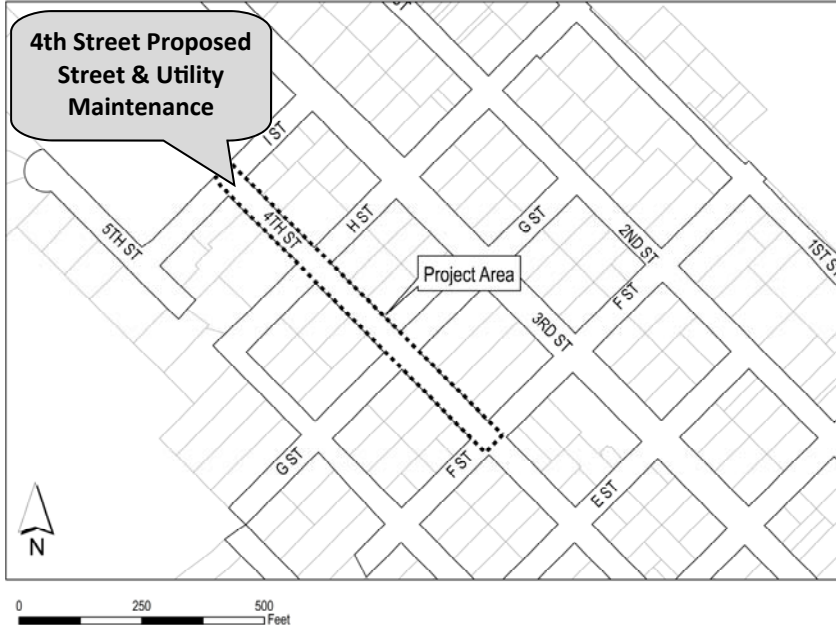
Phone: (907)586-0715 ♦ Email: pc_comments@juneau.org
Mail: Community Development, 155 S. Seward St, Juneau AK 99801

Printed December 22, 2020

Case No.: CSP2020 0012
Parcel No.: 0
CBJ Parcel Viewer: <http://epv.juneau.org>

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 **complete street and underground utility maintenance (and replacements as necessary)** on **4th Street** in Douglas.

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 28

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

Dec. 29 — noon, Jan. 11

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

HEARING DATE & TIME: 7:00 pm, January 12, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/93626358724>. The Webinar ID is: 936 2635 8724. 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.

January 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 December 17, 2020

Case No.: CSP2020 0009
Parcel No.: 0
CBJ Parcel Viewer: <http://epv.juneau.org>

Irene Gallion

From: Alec Venechuk
Sent: Monday, December 28, 2020 12:13 PM
To: Irene Gallion
Subject: Fw: Signs
Attachments: image0.jpeg; image1.jpeg; ATT00001.txt

Hi Irene, the signs are up on Tongass and Delta. No sign on Crest as its pushed to the PC meeting later in the month of January. The tongass sign is at the intersection of Haloff and Tongass, and the Delta sign is at the Delta and Valley intersection.

-Alec

From: Alec Venechuk <a.venechuk@gmail.com>
Sent: Monday, December 28, 2020 11:44 AM
To: Alec Venechuk
Subject: Signs

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

Irene Gallion

From: Alan Steffert
Sent: Monday, December 28, 2020 10:24 AM
To: Irene Gallion
Subject: 4th Street Douglas CSP
Attachments: IMG_5296.JPG; ATT00001.txt

Irene, CSP sign for 4th Street Douglas is erected. See photographic proof, attached.
Alan

Delta Drive:



Tongass Boulevard:



4th Street Douglas



Tongass Boulevard Public Meeting

December 29, 2020, 2020

Notes by Irene Gallion, Planner

Presentation by the team: Alec Venechuk and Kevin Puustinen (PDC Engineers)

After tonight if you have any questions don't hesitate to contact Alec. So you have some background, this road was last done in 1993, 27 years ago, and is beginning to show age. The water line was replaced in 1986 and the sewer is almost 50 years old as far as we can tell. We plan to rebuild and upgrade both during the construction project.

The goal of the meeting is to give an overview. We are about 30% into the design. Project limits are from the Trinity Drive intersection (south side) to the intersection with Mendenhall Loop Road. Construction will extend down the side streets just enough to provide tie in for utilities and curb and gutter. From Trinity to Haloff the surface will not change. Beyond Haloff way the road will widen slightly with addition of bike lanes – 10 foot drive lanes and five foot bike lanes. Similar to Tongass south but slightly narrower. Narrower lanes help calm traffic and reduce speeding. Bike lane and sidewalk continue to Mendenhall Loop Road. Sidewalk on west is currently seven feet, will be narrowed to five feet. On the west the sidewalk will be pushed 8-9 feet, to the edge of where the ditches currently are. Shallow swales will drain to slotted drains.

Water main will be replaced with new HDPE, and include services to the property line. Sanitary sewer and services will be replaced up to the property line. At the property line will be a clean-out with a lid. With new underground storm drain system residents will have 6" services, so if you have gutter lines that feed into the ditch the new system will pick it up. If you have drainages on your property that we are not showing please let us know. We will do an analysis of street lighting to make sure all intersections are properly lit.

(On graphic) Shaded area is new pavement and sidewalks. We've not yet determined impacts to driveways, there will be some grade changes and disturbance beyond the end of the sidewalk. Changes typically happen within the right-of-way lines. If we have to extend into private property we will contact you on a case-by-case basis. We will replace driveways with like materials – asphalt with asphalt, concrete with concrete.

We will be replacing the mail box posts, and relocating closer to the driveway in some circumstances. Driveways may need to be widened a bit to allow the post office to pull in and drop off mail.

At Dudley/Tongass – currently the N/S traffic stop, we will look at if it makes sense to stop E/W flow in order to enhance pedestrian safety.

You will notice more area drains than installed in the past. With the addition of sidewalk on east side, will be using area drains and catch basins to direct flow into the new underground drainage system.

In the mailer graphic, the green is the new drainage. Blue is new water main, new services are not yet highlighted. The orange is the new sanitary sewer, also not yet showing the new services.

On the far north end, the storm drain system will increase pipe diameter from 18" to 24" to improve natural drainage in the Short Way area. By upsizing the pipe we will move water faster, we know you

guys had some pretty heavy flooding so we want to improve those conditions. We will model that and make sure we don't create issues downstream.

Residents have a unique understanding of the area, would like to hear your ideas.

Lance Greer: Corner of Tongass and Dudley. My house and garage are lower than the road, don't get a lot of flooding in the yard, do get some in the crawl space. I'm a bit concerned you are pushing toward the west side of the road quite a bit, I'm concerned about the steepness of the driveway. Also, are there new power poles or raising the lines? Comes from across the street from my garage, cable and telephone has been ripped off by larger trucks. Third, street lighting, wondering how much there will be.

Street lighting: we are still early in the analysis. The intersections will probably have LED lighting. Degree of lighting may be determined by budget. We noted the low power line – we don't have plans to replace but we will let AEL&P know this project is happening so they have an opportunity to install new poles. We will bring that low pole up to them. (AEL&P has noted it is a very old pole). (Sump drain location from the home was verified). The driveway, it may steepen slightly, but we will minimize that as much as we can. We are early in corridor modeling, will look at all the driveways to minimize impacts. There will be improved area drains and things will be less steep, draining to the west.

What about vegetation? We have flowers and plants. Should we move it before construction? Will we get assistance from the contractor?

There will be a bid item to move vegetation, or it can be removed and disposed of. It is up to the owner.

Is that going to be a concrete apron? (Reference to corner of Dudley and Tongass)

This symbol is an area drain. It will be a 5x5 apron around a 2' diameter metal grate, to keep vegetation from overwhelming the grate and keep things moving.

My thoughts on stop signs – traffic flows quite fast down Tongass. My concern is that the stop sign does slow traffic. I understand pedestrian concerns, but my thoughts are to leave as is.

Noted.

Chuck Van Kirk - I agree with Lance about the stop signs. I've already had one car totaled coming around the corner. The stop signs need to be on Tongass to slow people down. Other than that, I've talked to Alec about improvements. If the beginning point in the corner of Sort Way is as low as possible so some ditching can happen, so a subsequent Short Way project could relocate the road, that would be good. I did offer to sell the corner of the property to the city if they need it for the next project. Do we know the size of the proposed culvert at Short Way?

At least a 12" if not an 18".

That could be critical. If there is any sort of back-up like there was at this last storm, it will flood homes on Short Way. Right now there is not even ditching on the east side. If we could make as low as possible with an 18" culvert preferable. Other than that, great job, looking good.

Lisa Gable – corner of Sort Way and Tongass. Every spring that corner ditch gets plugged with ice and the yard floods. I am confused about the storm drain. I've been told the corner is an overflow drain, but the only one there is. Will there be a new drain?

Overflow is across the street, and runs down the other side of the street. When overwhelmed it backs into the overflow area opposite Tongass from your house. The original drainage used to go straight through.

The pipes on Short Way is 18", the overflow is 12".

The majority of the drainage will go down what is currently an 18" but we plan to make a 24", and when that gets backed up it will hold on the opposite side of the road from your house. Current pipes are also corrugated metal, we are proposing a plastic smooth-wall pipe that carries more volume. With larger size and smooth pipe we hope to eliminate flooding.

Just past Short Way where the sidewalk will go, that side of my yard will fill up. The back yard comes down to help flow into a ditch along the Loop. When you make the new sidewalk you'll need to cut into the ditch, want to make sure it is not brought up higher. Keep yard slopes.

We will reinstall the ditch, and we may need to move the fire hydrant so we can extend the ditch toward Mendenhall Loop Road, or a culvert under the fire hydrant pad.

When the new storm drains go in at that corner, is it going to be a sidewalk with underground, or open ditch?

There will be shallower ditches, but there will also be underground piping. Curb and gutter will channel road drainage to grates.

There may be some re-ditching on Short Way to accommodate design modifications.

I like the additional lighting at intersections, at the corner of Short Way it is really dark. I like lights at all intersections. I agree with Chuck and Lance on the remarks regarding the stop sign. My only other suggestion might be a four way stop. Otherwise, thank you for the opportunity to have things explained.

Lance again – wondering about construction progress. Seems like an aggressive schedule, obviously the whole road will be torn up. What are your thoughts on the timeline? Don't want it to turn into a mud pit through the winter.

Not uncommon for projects to carry into October. We've allocated five months, but they should be able to get a lot of that done. Team will discuss construction phasing so that they can't tear up what they cannot rebuild.

Maybe split it in half?

It will depend on when contractor breaks ground. We usually give them a maximum length that they can be operating. With a project like this we would probably bid it to be constructed in phases so that the contractor will not open all at once. This project lends itself well to phasing. Traffic can be redirected without too much headache.

Chuck again – one quick one. Which end would we start on?

When we get into the phasing that might dictate which zone, but the end is usually left up to the contractor.

If school is happening it might be a consideration for the contractor.

That is something that we will consider during phasing.

Irene Gallion

From: Irene Gallion
Sent: Wednesday, December 23, 2020 11:34 AM
To: Alec Venechuk
Cc: John Bohan
Subject: Tongass query

Hi Alec,

Please call Bill Cameron a call at (907) 789-9072. He lives at 3640 Tongass and has questions about drainage, saying that the Short Way homes already drain onto his property. He is concerned that more drainage is being routed toward Tongass without adequate facilities being considered, and the problem will be exacerbated. He bought his house in the 60s and remembers when the city had two 26" culverts between Short and the loop, then a construction project necked the culvert down to one at 18". He suspects that of causing many drainage problems.

I told him we were interested in knowing of any drainage problems, and that the Tongass project was being developed to accept drainage improvements from other streets.

Bill says "I'm a pain!" I've definitely dealt with worse! But he is certainly enthusiastic and concerned. He is in his 80s so doesn't deal well with tech or computers, so a phone call or visit would be best.

Let me know how it goes. Thank you!

Irene Gallion | Senior Planner

[Community Development Department](#) | City & Borough of Juneau, AK
 Location: 230 S. Franklin Street | 4th Floor Marine View Building
 Office: 907.586.0753



Fostering excellence in development for this generation and the next.

Irene Gallion

From: John Bohan
Sent: Monday, December 21, 2020 1:18 PM
To: Irene Gallion; Alec Venechuk
Subject: RE: CSP20-09: Tongass Boulevard

Alec can follow up with her, if he hasn't already been in touch. We are aware of the flooding issues that exist in the area and accommodating future improvements to Short with infrastructure in Tongass.

Thanks
John Bohan, PE
 CBJ Chief CIP Engineer
 155 S. Seward St
 Juneau AK 99801
 (907)586-0876 fax 463-2606

From: Irene Gallion <Irene.Gallion@juneau.org>
Sent: Monday, December 21, 2020 1:16 PM
To: Irene Gallion <Irene.Gallion@juneau.org>
Cc: John Bohan <John.Bohan@juneau.org>
Subject: CSP20-09: Tongass Boulevard

Lisa Gable lives on the corner of Short Way and Tongass Boulevard. She says that during heavy rains city crews always come out to check drainage, it is a problem. Part of the concern is that there are 18" culverts on her side of Short Way (north side), but 12" culverts on the other side of the road. The 12" culverts restrict flow and cause flooding.

Ms. Gable had heard the road was going to be lowered. I advised her I did not believe that was the case.

Irene Gallion | Senior Planner

[Community Development Department](#) | City & Borough of Juneau, AK
 Location: 230 S. Franklin Street | 4th Floor Marine View Building
 Office: 907.586.0753



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Planning Commission

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

PLANNING COMMISSION NOTICE OF RECOMMENDATION

Date: January 15, 2021
File No.: CSP2020 0009

City and Borough of Juneau
CBJ Assembly Members
155 S Seward Street
Juneau, AK 99801

Proposal: Planning Commission Recommendation to the City and Borough Assembly regarding complete street and underground utility maintenance (and replacements as necessary) for Delta Drive, Tongass Boulevard, and Douglas 4th Street.

Property Address: Delta Drive, Tongass Boulevard, Douglas 4th Street

ROW name: Delta Drive, Tongass Boulevard, Douglas 4th Street

Parcel Code No.: Not applicable

Hearing Date: January 12, 2021

The Planning Commission, at a regular public meeting, adopted the analysis and findings listed in the attached memorandum dated January 4, 2021, and recommended that the Assembly direct the City Manager to direct CBJ staff to design and build the project in accordance with the following recommendations:

1. CBJ Engineering and Public Works must submit a hydrologic or hydraulic analysis to the Flood Plain Manager indicating that reconstruction of Tongass Boulevard would not result in increase in flood levels during the occurrence of a base flood discharge. The analysis will be conducted by an engineer licensed in the State of Alaska, in accordance with standard engineering practices acceptable to the Federal Emergency Management Agency.

City and Borough of Juneau
CBJ Assembly
File No.: CSP2020 0009
January 15, 2021
Page 2 of 2

Attachments: January 4, 2021 memorandum from Irene Gallion, Community Development, to the CBJ Planning Commission regarding CSP2020 0009.

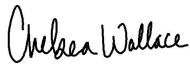
This Notice of Recommendation constitutes a recommendation of the CBJ Planning Commission to the City and Borough Assembly. Decisions to recommend an action are not appealable, even if the recommendation is procedurally required as a prerequisite to some other decision, according to the provisions of CBJ 01.50.020(b).



Michael LeVine, Chair
Planning Commission

January 20, 2021

Date



Filed With Municipal Clerk

January 21, 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. The CBJ and project 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**

CSP2020 0010: Resurface Vanderbilt Hill Rd from Glacier Hwy/Lemon Rd to Egan Dr -
RECOMMENDED FOR APPROVAL TO THE CBJ ASSEMBLY

AGENDA ITEM:

Case No.: CSP2020 0010

Applicant: State of Alaska

Location: Vanderbilt Hill Road from Glacier Hwy/Lemon Rd to Egan Dr

Proposal: Resurface Vanderbilt Hill Rd from Glacier Hwy/Lemon Rd to Egan Dr

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for CSP2020 0010 - Part 1	12/29/2020	Staff Report
☐ Staff Report for CSP2020 0010 - Part 2	12/29/2020	Staff Report
☐ Notice of Recommendation for CSP2020 0010	1/25/2021	Notice of Recommendation



PLANNING COMMISSION STAFF REPORT
STATE PROJECT REVIEW CSP2020 0010
HEARING DATE: JANUARY 12, 2020

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

DATE: December 24, 2020
TO: Michael LeVine, Chair, Planning Commission
BY: Laurel Christian, Planner II *Laurel Christian*
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: State Project Review for Vanderbilt Hill Road resurfacing.

STAFF RECOMMENDATION: Approval

KEY CONSIDERATIONS FOR REVIEW:

- Project repairs and reconstructs existing infrastructure
- Life of the roadway will be extended.
- Project increases the safety and quality of the driving surface.
- Proposal does not conflict with Title 49 or adopted plans.

GENERAL INFORMATION	
Property Owner	State of Alaska
Applicant	State of Alaska
Property Address	Vanderbilt Hill Road
Legal Description	N/A
Parcel Number	0
Zoning	Multiple
Land Use Designation	Stream Corridor/Medium Density Residential
Lot Size	N/A
Water/Sewer	N/A
Access	N/A
Existing Land Use	Roadway
Associated Applications	N/A

ALTERNATIVE ACTIONS:

1. **Amend:** amend the recommendation to include conditions and recommend approval to the Assembly.
2. **Deny:** recommend denial of the proposed project. Planning Commission must make its own findings.
3. **Continue:** continue the hearing to a later date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

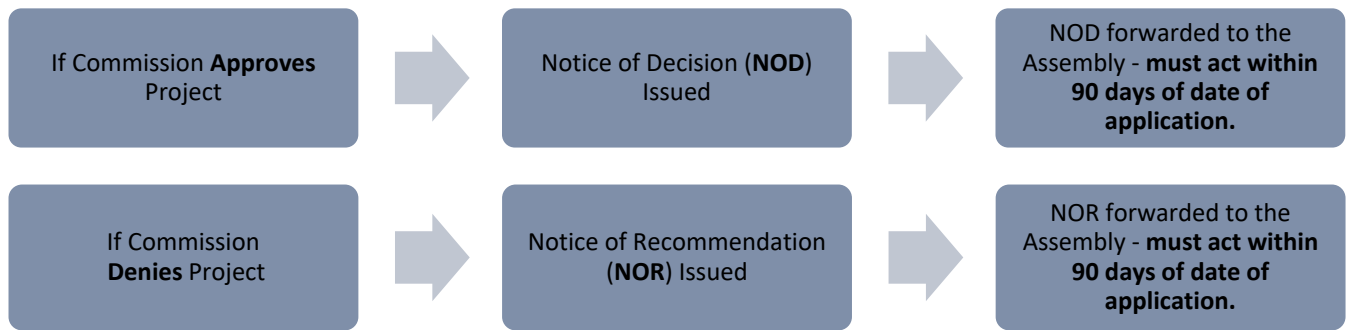
ASSEMBLY ACTION REQUIRED:

The Notice of Decision will be forwarded to the Assembly.

STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - o 49.15.580(b)
 - o 49.80

The Commission shall hear and decide the case per 49.15.580(b) - State Project Review: *The commission shall review proposed Alaska State capital improvement projects for consistency with this title pursuant to AS 35.30.010 and may impose conditions on and modifications to such projects. If the commission approves or approves with conditions or modifications, a notice of decision shall be issued. A notice of decision becomes final 90 days from the date the project was submitted unless modified or disapproved by the assembly. If the commission disapproves, a notice of recommendation and draft resolution shall be forwarded to the assembly for further action.*



VICINITY MAP



SURROUNDING LAND USES AND ZONING

Direction	Zoning District	Land Use
North	Rural Reserve and Industrial	Mendenhall Wetlands
South	D15	US Coast Guard and Pioneer Home
East	D15	Residential
West	None	Egan Drive

BACKGROUND INFORMATION

Project Description – The applicant requests a State Project Review for resurfacing Vanderbilt Hill Road between Egan Drive and Glacier Highway. The project includes resurfacing, minor structural section improvements, drainage repairs, replacement and repair of guardrail and end terminals, striping, and signs (Attachment A). The project is estimated to cost \$1.8 million and will be completed during the spring and fall of 2021.

Typical road sections for the project show a 56-foot-wide travel way, with no sidewalks, and lighting dispersed throughout the project area and concentrated near intersections. The existing right-of-way width varies from 190 feet to 90 feet.

Background - The table below summarizes relevant history for the subject parcel and proposed development.

Item	Summary
CSP20190011	In 2019, the Planning Commission reviewed and approved a CSP for improvements to Glacier Highway in Lemon Creek (State Project No. 68124). These improvements ended at the intersection of Vanderbilt Hill Road and Glacier Highway.

Current Conditions – The existing roadway is in poor condition; current pavement surface, striping, signage, and lighting is inadequate.



ZONING ANALYSIS

49.05.100 - Purpose and intent. The purpose and Intent of Title 49 Land Use Code is:

- (1) To achieve the goals and objectives, and implement the policies, of the Juneau comprehensive plan, and coastal management program;*
- (2) To ensure that future growth and development in the City and Borough is in accord with the values of its residents;*
- (3) To identify and secure, for present and future residents, the beneficial impacts of growth while minimizing the negative impacts;*
- (4) To ensure that future growth is of the appropriate type, design and location, and is served by a proper range of public services and facilities such as water, sewage, and electrical distribution systems, transportation, schools, parks and other public requirements, and in general to promote public health, safety and general welfare;*
- (5) To provide adequate open space for light and air; and*
- (6) To recognize the economic value of land and encourage its proper and beneficial use.*

Roadway Classification Maps – The CBJ Adopted Roadway Classification Maps classify Vanderbilt Hill Road as a collector (Attachment B). The DOT&PF Functional Classification map classifies Vanderbilt Hill Road as a minor arterial (Attachment C). According to ADOT&PF traffic counts from 2019, the roadway experiences between 6 to 10 thousand Average Annual Daily Traffic Counts (Attachment D).

49.35.240 Table of Roadway Construction Standards – Because the roadway is within an ADOT&PF right-of-way, it is not required to adhere to the 49.35.240 Table of roadway construction standards. However, the proposed roadway meets all requirements except for the provision of sidewalks. Providing sidewalks on Vanderbilt Hill Road would not be reasonable as the roadway feeds onto Egan Drive, which does not allow pedestrian traffic. Additionally, there are no neighboring abutting parcels that are developed and would require pedestrian access. The parcel abutting the right-of-way to the north is an Alaska Department of Natural Resources-owned property containing wetlands and the parcel to the south contains a portion of Twin Lakes.

49.35.240 Table of roadway construction standards excerpt:

<i>ADTs</i>	<i>TIA</i>	<i>Sidewalks</i>	<i>Travel Way Width</i>	<i>Street Lights</i>	<i>ROW Width</i>	<i>Paved</i>	<i>Publically Maintained</i>
<i>≥500</i>	<i>Yes</i>	<i>Both Sides</i>	<i>26 ft.</i>	<i>At all intersections</i>	<i>60 ft. Public ROW</i>	<i>Yes</i>	<i>Yes</i>

COMMUNITY SERVICES

Service	Summary
Urban Service Boundary	Yes
Water/Sewer	CBJ
Fire Service Area	Yes
Schools	Not Applicable.
Recreation	Not Applicable.

ENVIRONMENTAL, CONSERVATION, HISTORIC, AND ARCHEOLOGICAL RESOURCES

The below table summarizes Conservation, Historic, and Archeological Resources that may be affected by the proposed resurfacing project.

Resource	Summary
Wetlands	According to the Wetlands Management Plan, there are wetlands surrounding the right-of-way. Wetlands will not be adversely affecting by resurfacing the existing roadway.
Anadromous	Vanderbilt Creek runs along the northwestern right-of-way boundary and is classified as an anadromous waterbody. The creek is approximately 100 feet from the edge of pavement. The project does not include work within the 50 feet no-development buffer from Vanderbilt Creek.

CONFORMITY WITH ADOPTED PLANS

2013 COMPREHENSIVE PLAN VISION: *The City and Borough of Juneau is a vibrant State Capital that values the diversity and quality of its natural and built environments, creates a safe and satisfying quality of life for its diverse population, provides quality education and employment for its workers, encourages resident participation in community decisions and provides an environment to foster state-wide leadership.*

2013 COMPREHENSIVE PLAN - The proposed CSP is in compliance with the 2013 Comprehensive Plan.			
Chapter	Page No.	Item	Summary
8	109	Policy 8.5	Policy supports providing a transportation system that provides safe, convenient and efficient access and transportation for people and commodities. Policy calls for improvements to transit corridors and maintenance of existing infrastructure.
11	158	Land Use Designation	The roadway is within the Stream Corridor and Medium Density Residential land use designations (Attachment E). Generally, improvements to infrastructure are allowed within these designation.
12	207	Policy 12.9	Policy calls for maintaining existing rights-of-way to ensure their use in providing for access and the provision of urban services.

2018 Lemon Creek Area Plan – The proposed CSP is in compliance with the 2018 Lemon Creek Area Plan.			
Chapter	Page No.	Item	Summary
5	43	Discussion	The plan discusses improved and routine maintenance of roadways as a key issue throughout the planning process. The plan promotes the maintenance and improvement of existing infrastructure.

AGENCY REVIEW

CDD conducted an agency review comment period between December 9, 2020 and December 23, 2020. No objections or issues were raised through this review.

PUBLIC COMMENTS

Public notice is not required for ADOT&PF projects since they have their own public notice protocols and standards. According to the project team, ADOT&PF performed online noticing, agency scoping and send an environmental mailer. At time of writing this staff report, no public comments have been received.

FINDINGS

In accordance with CBJ 49.15.580 staff finds the proposed State project for Vanderbilt Hill Road Resurfacing complies with Title 49 Land Use Code and is in general conformity with adopted plans, specifically the 2013 Comprehensive Plan and the 2018 Lemon Creek Area Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's analysis and findings and forward a Notice of Decision of **APPROVAL** to the CBJ Assembly for the State Project Review for Vanderbilt Hill Road Resurfacing.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	CBJ Roadway Classification Map
Attachment C	ADOT&PF Functional Classification Map
Attachment D	ADOT&PF Traffic Counts
Attachment E	Land Use Designation Map



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 Vanderbilt Hill Road		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot) 58.34666°N, 134.4969°W		
	Parcel Number(s)		
	☐ This property located in the downtown historic district ☐ This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner State of Alaska	Contact Person Ben Love	
	Mailing Address PO Box 112506 Juneau, AK 99811-2506	Phone Number(s) 465-1811	
	E-mail Address ben.love@alaska.gov		
	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 SAME		Contact Person	
Mailing Address	Phone Number(s)		
E-mail Address			
DocuSigned by: X <u>Ben Love</u> ED27A1722BEE41C Applicant's Signature		11/25/2020 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.

Intake Initials	

Case Number	Date Received
-------------	---------------



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 This project will resurface Vanderbilt Hill Road from Glacier Highway/Lemon Road to Egan Drive. The project will address associated preventative maintenance activities including resurfacing, minor structural section improvements, drainage repairs, replacement and repair of guardrail and end terminals, striping, and signs.
	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.: _____ ☒ NO Capital Improvement Program # (CIP) _____ Local Improvement District # (LID) _____ State Project # <u>SFHWHY00241</u>
	ESTIMATED PROJECT COST: \$ 1,800,000
	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	\$ No fee under 2.5 million			

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

City and State project review is outlined in CBJ 49.15.580

Each application for a City/State Project is reviewed by the Planning Commission at a public hearing. The permit procedure is intended to provide the Commission the flexibility necessary to make recommendations tailored to individual applications.

Application: An application for a City/State Project Review 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 City/State Project Review Application and Development Permit Application forms.
2. **Fees:** No fee required for projects that cost less than \$2.5 million. For projects costing more than this amount, the fee is \$1,600.00. 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. Plat, site plan, floor plan and elevation views of existing and proposed structures and land;
 - 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; and,
 - 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. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All City/State Project Review Permit Applications must be reviewed by the Planning Commission. 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. The Planning Commission will make a recommendation based on staff's analysis and forward it to the Assembly for final approval/denial.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Transportation and Public Facilities

DOT&PF Engineering Assistant
Ben Love, EIT

6860 Glacier Highway
P.O. Box 112506
Juneau, AK 99811-2506
Phone: 907-465-4490

December 4th, 2020

Re: *Vanderbilt Hill Rd, SFHWY00241, Juneau, AK*

Certified Mail #: _____
Return Receipt Requested

*City of Juneau Planning Commission
155 S. Seward Street
Juneau, Alaska 99801*

Vanderbilt Hill Road Narrative:

The project will resurface Vanderbilt Hill Road from Glacier Highway/Lemon Road to Egan Drive. Project SFHWY00241 will address associated preventative maintenance activities including resurfacing, minor structural section improvements, drainage repairs, replacement and repair of guardrail and end terminals, striping, and signs. The purpose of this project is to prolong the life of the roadway and increase safety by increasing the quality of the driving surface from its current condition.

The roadway is currently rutting and experiencing delamination in locations. Increases in traffic volume and fatigue have caused rutting and pavement breaks in the road surface. Rutting and pavement breaks allow for areas of surface water collection in the driving surface increasing the potential of hydroplaning. Existing culverts are corroded and nearing the end of their useful life. Guardrail is damaged or near the end of its useful life. Signs lack reflectivity.

Project SFHWY00241 will be constructed adjacent to project 68124 JNU Glacier Highway Improvements (Lemon Creek Area). Project 68124 will improve pedestrian and bicycle lanes, crossings, and vehicle travel with an emphasis on left turn access onto Glacier Hwy. Project SFHWY00241 was fast tracked to a construction schedule of Spring 2021 – Fall 2021 in order to coincide with the construction of project 68124. Table 1 depicts the project specific milestone timeline used to fast track Vanderbilt Hill Road for advertisement and construction in 2021.

Table 1 - SFHWY00241 Project Timeline

Estimated Project Milestones	
Project Management Plan Approval	October 2020
Preliminary Plan Development	September 2020
Environmental Document Completion Date	November 2020
Design Approval	January 2021
PIH/PS&E Combined Review	February 2021
Final PS&E	February 2021
Ready to Advertise	April 2021

The location maps and imagery depicting the current conditions of the project can be seen below.

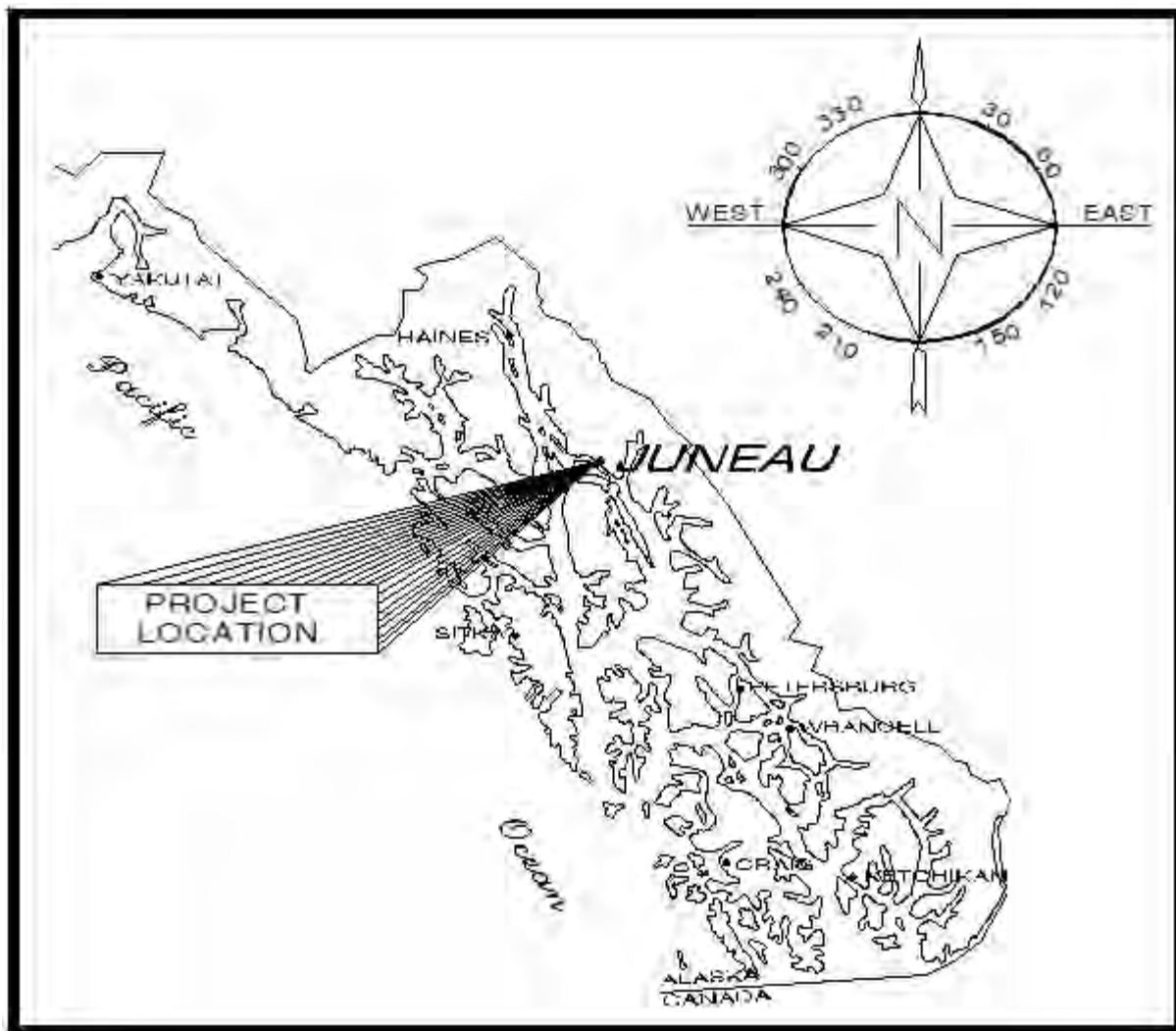


Figure 1 - Location Map

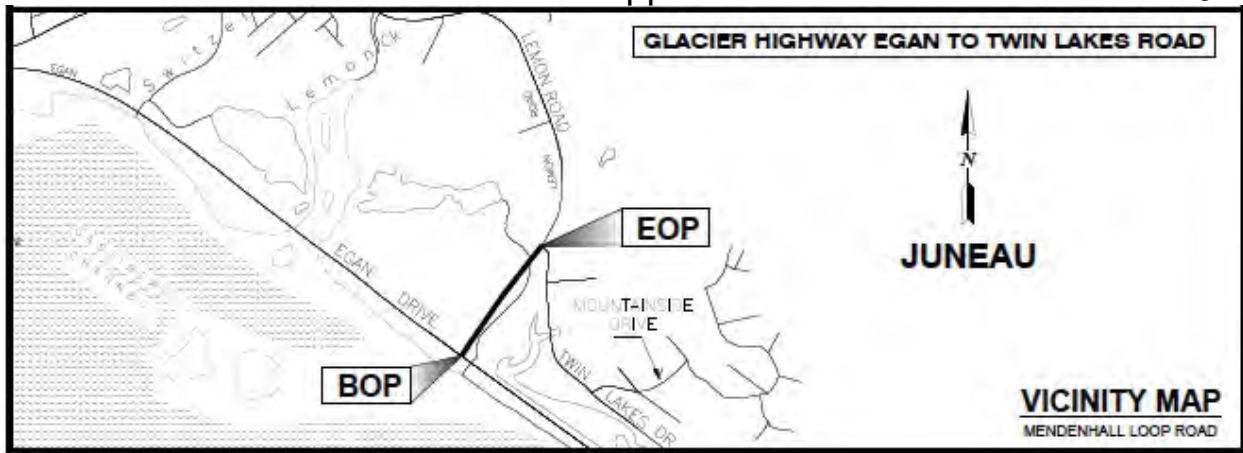


Figure 2 - Project Vicinity Map



Figure 3 - Right-hand Turning Lane and Pavement Joint Looking North East



Figure 4 – North East Bound Shoulder Conditions near Station 92+50



Figure 5 - Flattened Guardrail near Station 90+50 Adjacent to the North East Bound Lane, Looking South West



Figure 6 - Missing End Terminal Connection on the Southern Guardrail near Station 91+20

Sincerely,

DocuSigned by:

Ben Love

12/04/2020

ED27A1722BFF41C...

DOT&PF Engineering Assistant

Enclosure: Project Plans

FILE Q:\Jnu\SFWY00241\Planset\00241_A1_Vanderbilt.dwg DATE 12/1/2020 10:16 LAYOUT A1 CHECKED DP DRAFTED BLAC,BW,RG

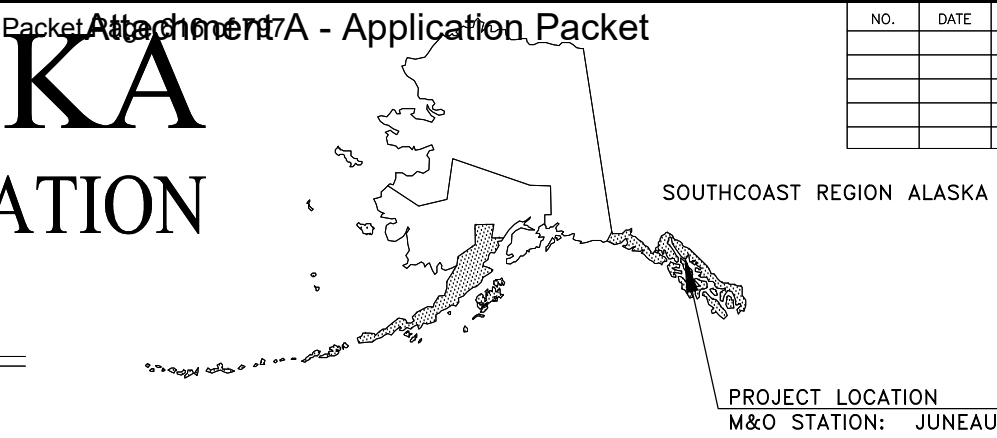
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

JNU RESURFACE GLACIER HIGHWAY: VANDERBILT HILL ROAD EGAN TO GLACIER HWY PROJECT NO. SFHWY00241/0003243

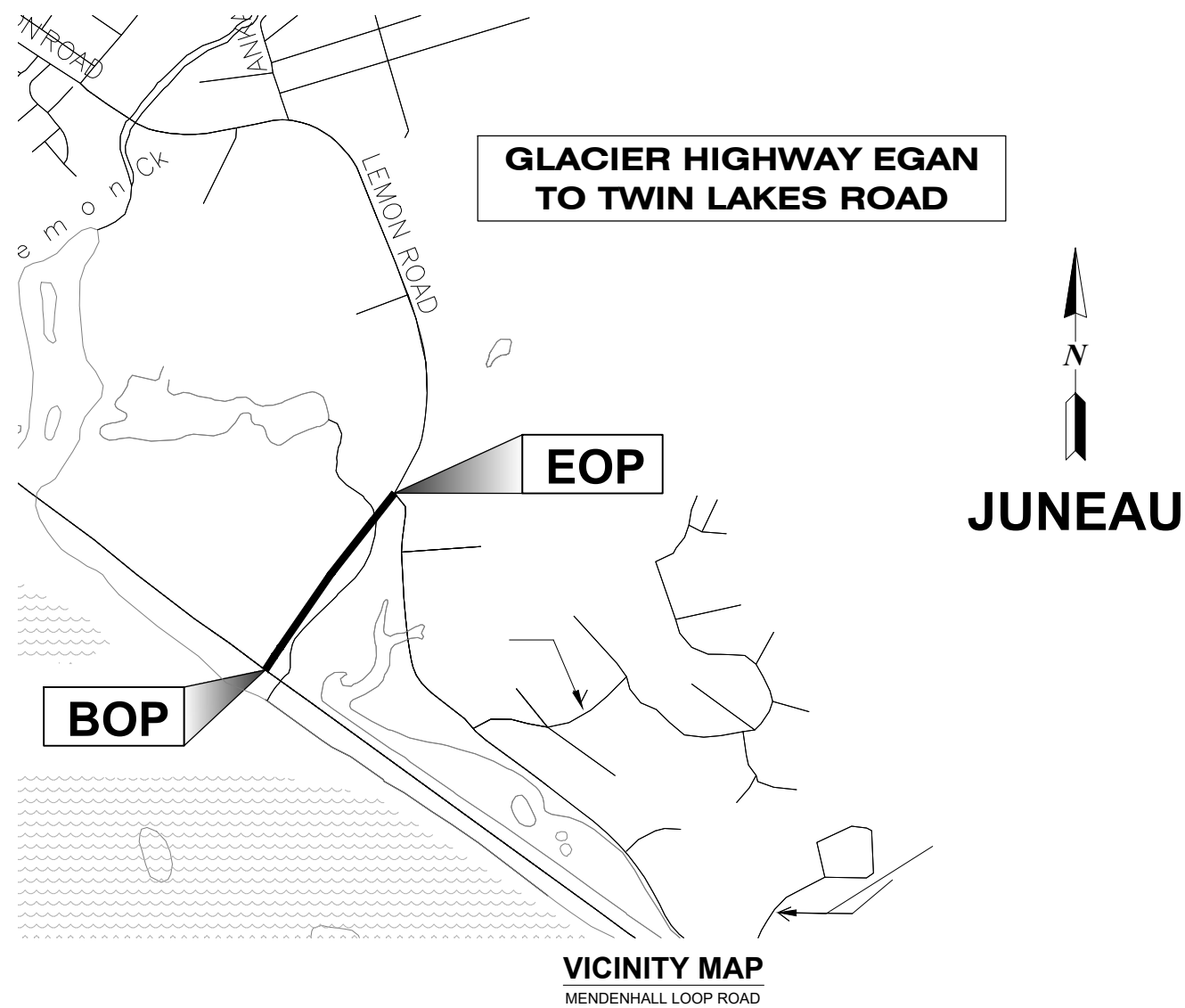
PAVING, SIGNING, STRIPING, GUARDRAIL, AND DRAINAGE



NO.	DATE	REVISIONS	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFWY00241/0003243	2021	A1	18
			CDS ROUTE: 295500		MILEPOINT: 0.03 TO 0.44		
			LATITUDE: 57°03'13"N		LONGITUDE: 135°19'50"E		

PROJECT SUMMARY	
	VANDERBILT HILL RD
WIDTH OF PAVEMENT	56' TO 71'
LENGTH OF PAVING	1177'
LENGTH OF PROJECT	1538'

DESIGN DESIGNATIONS	
PROJECT TYPE	PM
FUNCTIONAL CLASS	URBAN ARTERIAL
ADT (2020)	9,167
ADT (2030)	9,399
DHV 2020	1,045
DHV 2030	1072
PERCENT TRUCKS (T)	5%
DIRECTIONAL SPLIT (D)	62 / 38
DESIGN SPEED (V)	40 MPH
DESIGN EAL'S (10 YEARS)	X



USE THESE PLANS IN CONJUNCTION WITH THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2020 EDITION AND THE PROJECT SPECIAL PROVISIONS.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

APPROVED:

REGIONAL PRECONSTRUCTION ENGINEER
KIRK D. MILLER, P.E.

CONCUR:

REGIONAL DIRECTOR
D. LANCE MEARIG, P.E.

DATE

DATE

FILE G:\jnu\SFHWY00241\Planset\00241_A2_vanderbilt.dwg DATE 12/2/2020 12:47 LAYOUT A2 DESIGNED BL,AC,BW CHECKED DP DRAFTED BL,AC,BW,RG

GENERAL NOTES:

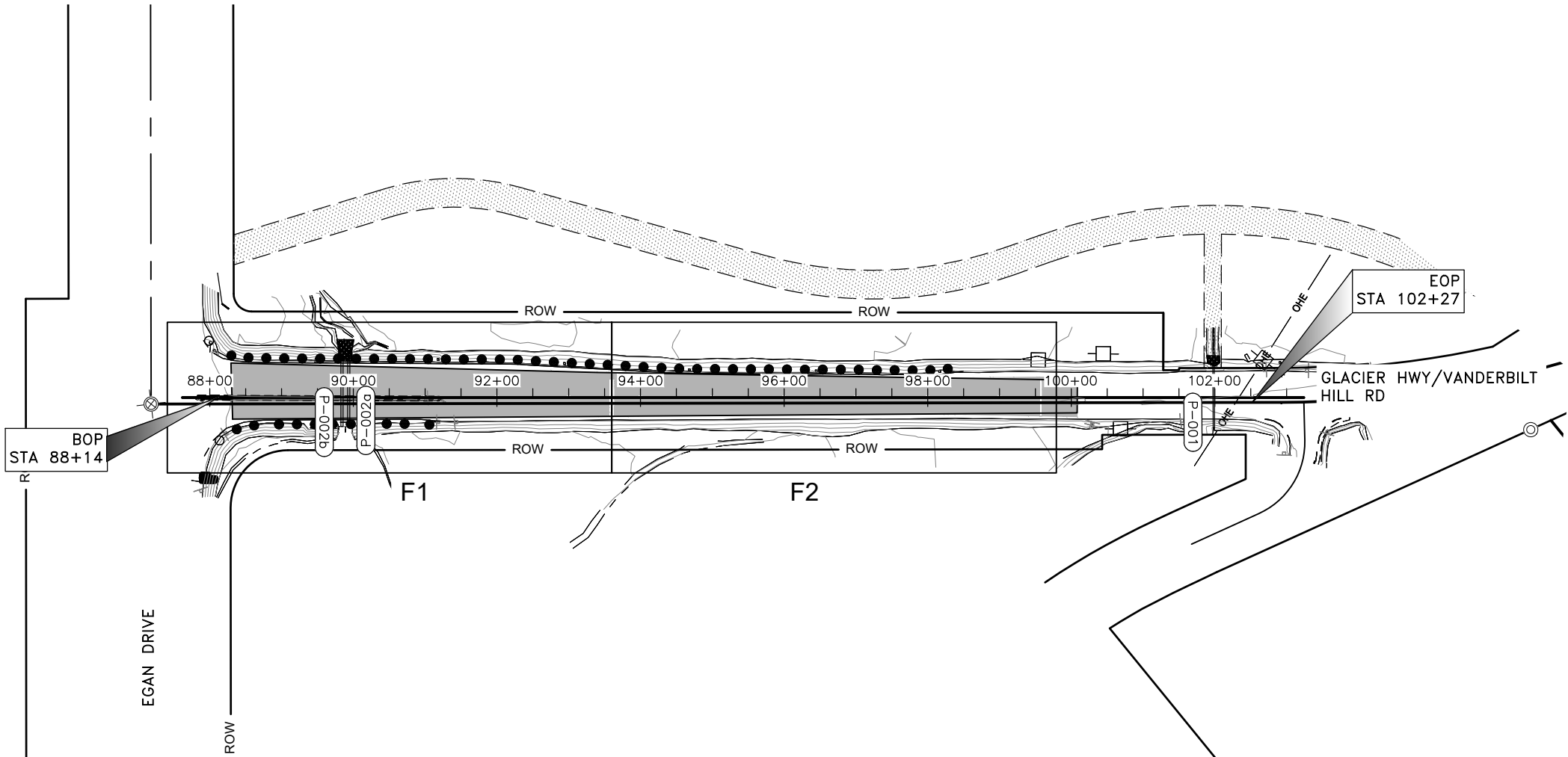
1. MAKE ALL PAVEMENT CUTS CLEAN, VERTICAL, AND TRUE TO THE REMOVAL LIMITS SHOWN ON THE PLANS.

Attachment A - Application Packet

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00241/0003243	2021	A2	18



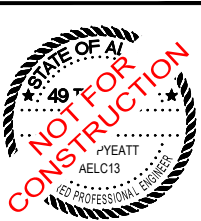
SCALE IN FEET



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LAYOUT & INDEX OF SHEETS
A3	LEGEND & SYMBOLS
A4	SURVEY CONTROL (PLACE HOLDER)
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1	SUMMARIES
E1	MISCELLANEOUS DETAILS
F1-F2	PLAN & PROFILE
H1-H2	SIGNING & STRIPING PLANS (PLACE HOLDER)
Q1-Q2	EROSION SEDIMENT CONTROL PLANS
P1-P2	STORM DRAIN
T1	TRAFFIC CONTROL PLANS

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:

- C-14.01 T-22.04
G-20.12
S-00.12
S-01.02
S-05.02
S-20.10
S-30.05
T-21.04



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
JNU RESURFACE GLACIER HIGHWAY:
VANDERBILT HILL ROAD EGAN TO
GLACIER HWY

INDEX

	RECOVERED	SET
BLM MONUMENT		
GLO MONUMENT		
USC&GS MONUMENT		
PRIMARY MONUMENT		
CENTERLINE MONUMENT IN CASING		
PRIMARY R.O.W. MONUMENT		
BEARING OBJECT		
MISCELLANEOUS MONUMENT		
LINE OF SIGHT MONUMENT		
CONCRETE R.O.W. MONUMENT		
BENCHMARK		
REBAR AND CAP		
REBAR		
IRON PIPE		
PK NAIL		
SPIKE		
HUB AND TACK		
CONSTRUCTION CENTERLINE		
MICELLANEOUS CENTERLINE		
STATION EQUATION	"L"48+97.23 POT BK= "O"48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE		
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE		
EXISTING EASEMENT LINE		
PROPOSED EASEMENT LINE		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE	T. 2 N. T. 1 N. T. 1 E. T. 2 E.	
MEANDER LINE	M1 M2 M3	

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)		
FUEL LINE		
GAS LINE		
WATER LINE		
METER, VALVE, FIRE HYDRANT		
EXISTING STORM DRAIN (FLOW DIRECTION →)		
PROPOSED STORM DRAIN		
FIBER OPTIC LINE		
DIRECT BURIAL TELEPHONE CABLE		
DIRECT BURIAL ELECTRIC CABLE		
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT		
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE		
SANITARY SEWER CLEAN OUT		
RIPRAP		
SPECIAL DITCH CENTERLINE		
HIGH TIDE LINE		
ANADROMOUS STREAM		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX		
RAILROAD TRACKS		
RAILROAD DEVICES		
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS		
POST OR BOLLARD		
WELL OR MONITORING WELL		
SEPTIC PIPE		
FUEL TANK FILL PIPE/VENT		
SATELLITE DISH		
TEST HOLE		
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		

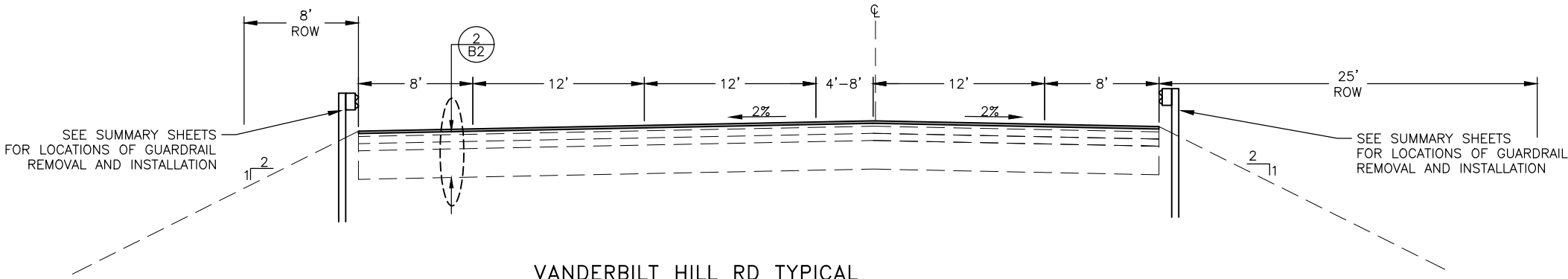
H = HOUSE
G = GARAGE
M = MERCHANT/STORE
B = BARN
S = SHED
P = PRIVY
SS= SERVICE STATION
W = WAREHOUSE

NO.	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	SFHWY00241/0003243	2021	A3	18
		EXISTING	PROPOSED		
JUNCTION BOX, TYPE IA					
JUNCTION BOX, TYPE II					
JUNCTION BOX, TYPE III					
SIGNAL FACE, VEHICULAR					
SIGNAL FACE, BACKPLATE					
SIGNAL FACE, LEFT TURN, BACKPLATE					
SIGNAL FACE, PEDESTRIAN					
LOOP DETECTOR					
VIDEO DETECTOR					
RADAR DETECTOR					
OPTICOM DETECTOR					
PEDESTRIAN PUSH BUTTON					
SIGNAL POST W/O MAST ARM					
SIGNAL POLE W/MAST ARM					
SIGNAL CONTROLLER					
LOAD CENTER					
LUMINAIRE					
RIGID METAL CONDUIT					
ACCRONYMS					
ADT = AVERAGE DAILY TRAFFIC BLM = BUREAU OF LAND MANAGEMENT BOP = BEGINNING OF PROJECT CL = CENTER LINE DHV = DESIGN HOURLY VOLUME EAL'S = EQUIVALENT AXLE LOAD'S EOP = END OF PROJECT GLO = GENERAL LAND OFFICE ROW = RIGHT OF WAY STA. = STATION TCP = TRAFFIC CONTROL PLAN USC & GS = UNITED STATES COAST AND GEODETIC SURVEY					
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 6860 GLACIER HIGHWAY, JUNEAU, AK 99801 (907) 465-1763 JNU RESURFACE GLACIER HIGHWAY: VANDERBILT HILL ROAD EGAN TO GLACIER HWY			
LEGEND					

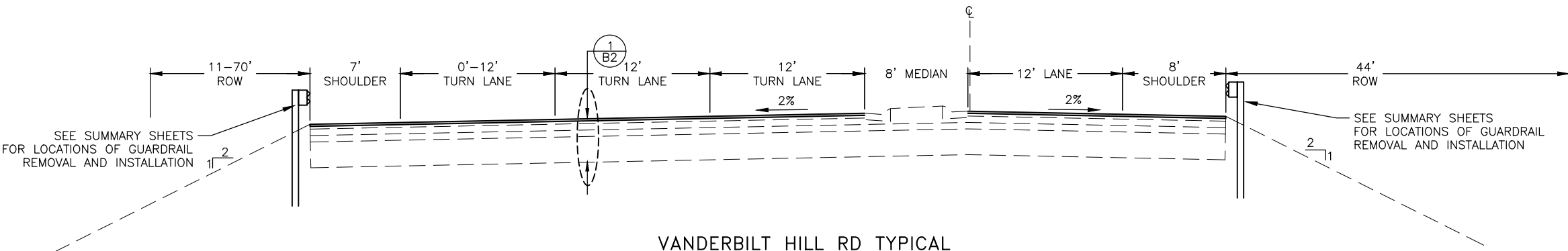
DESIGNED BY: JAC/BW
DRAWN BY: JAC/BW
CHECKED BY: DP
SCALE:
LAYOUT: B1
REVISED: 12/2/2020 12:47
FILE: Q:\Jnu\SFHWY00241\Planset\00241_B1_Vanderbilt.dwg

Attachment A - Application Packet

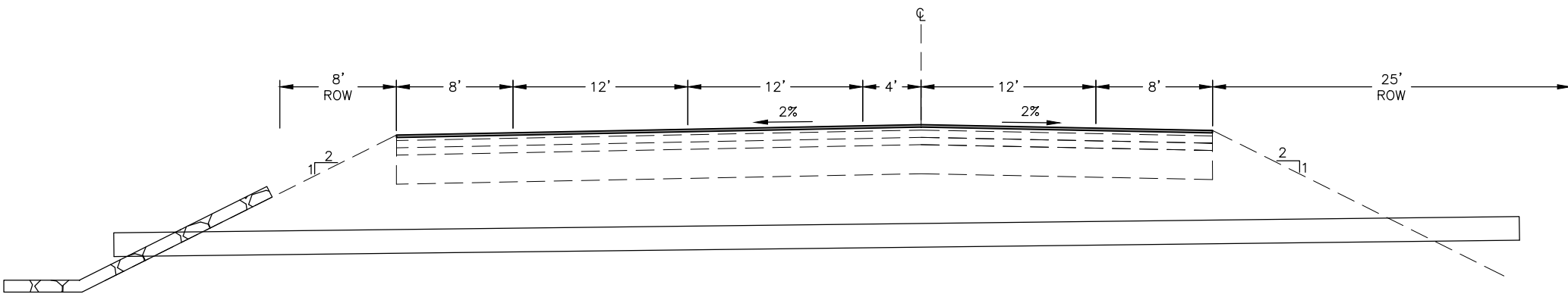
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00241/0003243	2021	B1	18



VANDERBILT HILL RD TYPICAL
STA. 93+21.86 TO STA. 100+08.42



VANDERBILT HILL RD TYPICAL
STA. 88+30.91 TO STA. 93+21.86



CROSS SECTION AT P-001
STA. 102+00.00



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

JNU RESURFACE GLACIER
HIGHWAY: VANDERBILT HILL ROAD
EGAN TO GLACIER HWY

TYPICAL SECTION

DESIGNED: BLAC, BW
DRAWN: BLAC, BW
CHECKED: DP

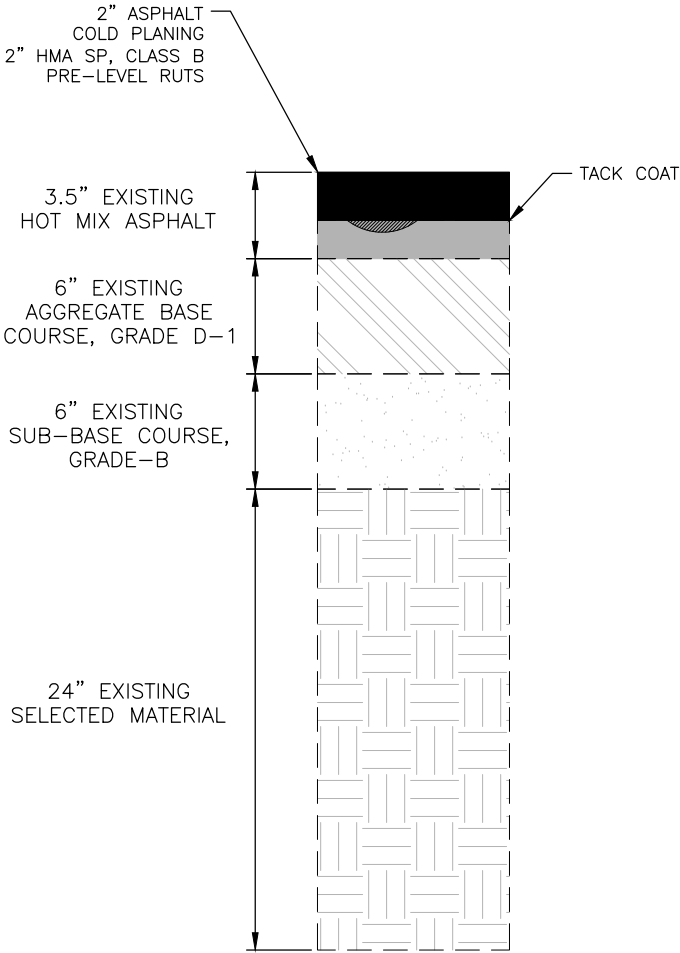
SCALE:

LAYOUT: B2

REVISED: 12/2/2020 12:47

FILE: Q:\Jnu\SFWY00241\Planset\00241_B1_Vanderbilt.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFWY00241/0003243	2021	B2	18

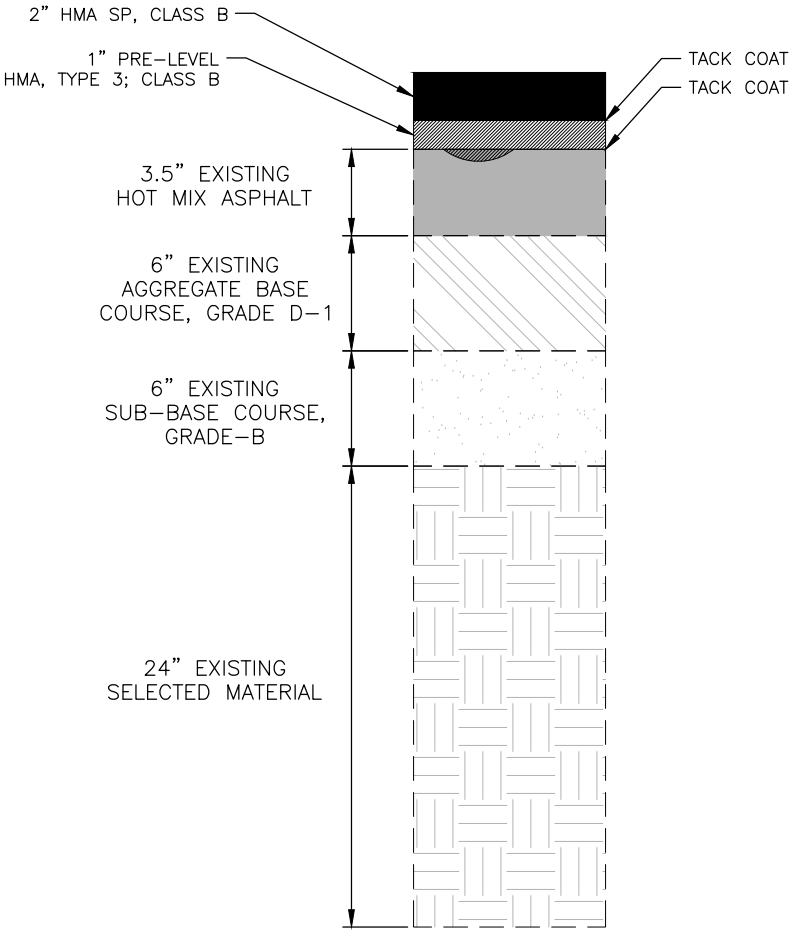


1

PAVEMENT STRUCTURAL SECTION

B2

SCALE: NOT TO SCALE

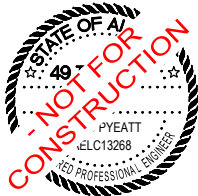


2

PAVEMENT STRUCTURAL SECTION

B2

SCALE: NOT TO SCALE



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

JNU RESURFACE GLACIER
HIGHWAY: VANDERBILT HILL ROAD
EGAN TO GLACIER HWY

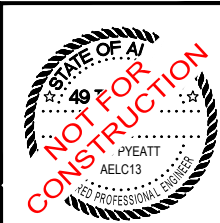
TYPICAL SECTION

FILE Q:\jnu\SFHwy00241\Planset\00241_C1_Vanderbilt.dwg DATE 12/4/2020 9:43 LAYOUT C1 ESTIMATE OF QUANTITIES DESIGNED AC, BL, BW CHECKED DP DRAFTED BL, RG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHwy00241/0003243	2021	C1	18

BASIS OF ESTIMATE		
ITEM No.	PAY ITEM	ESTIMATING FACTOR
401.0001.002B	HMA, TYPE III; CLASS B	150 PCF
401.0004.6428	ASPHALT BINDER, GRADE PG-64-28	6.0% OF ITEM 401(2)
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	0.10 GAL/S.Y. 240 GAL/TON
618.0004.0000	SEEDING	1.2 LB/ 1000 SF
	HYDRAULIC GROWTH MEDIUM	52.3 LB/ACRE
619.2013.0000	BONDED FIBER MATRIX (BFM)	4000 LB/ ACRE
670.2002.0000	MMA PAVEMENT MARKINGS, INLAID	SOLID, WHITE 4" = 2979 L.F.
		STOP BAR, WHITE 24" = 67 L.F
		SOLID DOUBLE, YELLOW 4" = 1278 L.F
		CROSSWALK, WHITE 24" = 70 L.F.

ESTIMATE OF QUANTITIES			
ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
201.0001.0000	Clearing	ACRE	1.11
201.2002.0000	Invasive Plant Survey	LUMP SUM	ALL REQUIRED
201.2003.0000	Invasive Plant Species Control, Removal, and Disposal	CONTINGENT SUM	ALL REQUIRED
202.0001.0000	Removal of Structures and Obstructions	LUMP SUM	ALL REQUIRED
401.0001.003B	HMA, Type III; Class B	TON	18
401.0008.003B	HMA Price Adjustment, Type III; Class B	CONTINGENT SUM	ALL REQUIRED
402.0001.STE1	STE-1 Asphalt for Tack Coat	TON	8.00
408.2001.000B	HMA, SP; Type B	TON	892.00
408.2004.6428	Asphalt Binder, Grade PG 64-28	TON	54
408.2008.000B	HMA Price Adjustment, SP; Type B	CONTINGENT SUM	ALL REQUIRED
408.2009.0000	Longitudinal Joint Density Price Adjustment	CONTINGENT SUM	ALL REQUIRED
410.2001.0000	Pavement Cold Planing	SQUARE YARD	7,922.00
603.2019.0024	Liner for Storm Drain 24 Inch, Liner for Storm Drain 24 inch	LINEAR FOOT	89.00
603.2019.0036	Liner for Storm Drain 36 Inch, Liner for Storm Drain 36 inch	LINEAR FOOT	211.00
606.0001.0000	W-Beam Guardrail	LINEAR FOOT	1,290.00
606.0006.0000	Removing and Disposing of Guardrail Removing and Disposing of Guardrail	LINEAR FOOT	1,290.00
606.0013.0000	Parallel Guardrail Terminal	EACH	2
606.2014.0000	Guardrail Paving	LINEAR FOOT	1350
611.0002.0001	Riprap, Class I	TON	60
613.0002.0000	Culvert Marker Post	EACH	4
618.0002.0000	Seeding	POUNDS	60
619.2013.0000	Bonded Fiber Matrix (BFM)	POUNDS	3885
640.0001.0000	Mobilization and Demobilization	LUMP SUM	ALL REQUIRED
641.0001.0000	Erosion, Sediment and Pollution Control Administration	LUMP SUM	ALL REQUIRED
641.0003.0000	Temporary Erosion, Sediment and Pollution Control	LUMP SUM	ALL REQUIRED
641.0005.0000	Temporary Erosion, Sediment and Pollution Control by Directive	CONTINGENT SUM	ALL REQUIRED
643.0002.0000	Traffic Maintenance	LUMP SUM	ALL REQUIRED
643.0025.0000	Traffic Control	CONTINGENT SUM	ALL REQUIRED
643.0032.0000	Flagging	CONTINGENT SUM	ALL REQUIRED
670.2002.0000	MMA Pavement Markings, Inlaid	LUMP SUM	ALL REQUIRED



Packet Attachment

Attachment A - Application Packet

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0966028/SFHWY00241	2021	D1	18

[201.0007.0000] CLEARING				
START STATION	END STATION	OFFSET	AREA (AC)	NOTES
Total			0.0	

[201.0009.0000] CLEARING AND GRUBBING				
START STATION	END STATION	OFFSET	AREA (SQFT)	NOTES
TOTAL:			0	

[202.0001.0000] REMOVAL OF STRUCTURES AND OBSTRUCTIONS		
STATION (CENTER)	OFFSET	NOTE

[303.2000.0000] LINEAR GRADING				
START STATION	END STATION	OFFSET	LENGTH (FT)	COMMENTS
TOTAL:			0	

[401.0003.003B] HMA, LEVELING COURSE, TYPE III; Class B						
START STATION	END STATION	AREA (SF)	DEPTH (FT)	VOLUME (CY)	WEIGHT (TON)	COMMENTS
TOTAL:					0	

[401.0017.0000] PRELEVEL FOR RUTS, DELAMINATION AND DEPRESSIONS					
START STATION	END STATION	START OFFSET (FT)	END OFFSET (FT)	AREA (SF)	COMMENTS
TOTAL:				0	

[402.0001.STE1] STE-1 ASPHALT FOR TACK COAT			
START STATION	END STATION	WEIGHT (TON)	NOTES
TOTAL:		0	

[408.2001.000B] HMA, SP; TYPE B						
START STATION	END STATION	AREA (SF)	THICKNESS (FT)	VOLUME (CY)	WEIGHT (TON)	COMMENTS
TOTAL:					0	

[410.2001.0000] PAVEMENT COLD PLANING				
START STATION	END STATION	MILLING DEPTH (IN)	MILLING AREA (SY)	NOTES
TOTAL:			0	

[603.2019.0024] LINER FOR STORM DRAIN 24 INCH, 24" SLIP LINER								
PIPE NUMBER	LENGTH (FT)	INLET			OUTLET			NOTES
		STATION	OFFSET (FT)	INVERT ELEV. (FT)	STATION	OFFSET (FT)	INVERT ELEV. (FT)	

[603.2019.0036] LINER FOR STORM DRAIN 36 INCH, 36" SLIP LINER								
PIPE NUMBER	LENGTH (FT)	INLET			OUTLET			NOTES
		STATION	OFFSET (FT)	INVERT ELEV. (FT)	STATION	OFFSET (FT)	INVERT ELEV. (FT)	

[606.0001.0000] W-BEAM GUARDRAIL					
START STATION	OFFSET (FT)	END STATION	OFFSET (FT)	LENGTH (FT)	NOTES
TOTAL:				0	

[606.2014.0000] GUARDRAIL PAVING			
START STATION	END STATION	LENGTH (FT)	COMMENTS
TOTAL:		0	

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0966028/SFWHY00241	2021	D2	18

[611.0001.0001] RIPRAP, CLASS 1									
PIPE NUMBER	INLET SLOPE STABILIZATION		OUTLET SLOPE STABILIZATION		VOLUME (CY)	ENERGY DISSIPATER			VOLUME (CY)
	WIDTH (FT)	HEIGHT (FT)	WIDTH (FT)	HEIGHT (FT)		LENGTH (FT)	WIDTH (FT)	DEPTH (FT)	
P-001									
P-002									
TOTAL (CY):									0
SUBTOTAL (TONS):									0

[613.0002.0000] CULVERT MARKER POST CONT.				
PIPE NUMBER	INLET STATION	OUTLET STATION	QUANTITY	NOTES
TOTAL:			0	

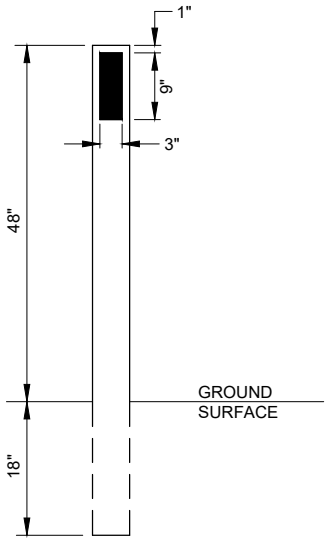
[618.0002.0000] SEEDING			
START STATION	END STATION	AREA (SQ. YDS.)	WEIGHT (LBS)
TOTAL (LBS):			0

[619.2013.0000] BFM			
START STATION	END STATION	AREA (SQ. YDS.)	WEIGHT (LBS)
TOTAL (LBS):			0

FILE Q:\jnu\SFWHY00241\Planset\00241_E1_Vanderbilt.dwg

DATE 12/1/2020 10:06 LAYOUT E1 MISCELLANEOUS DETAILS DESIGNED AC, BL, BW CHECKED DP DRAFTED BL, RG

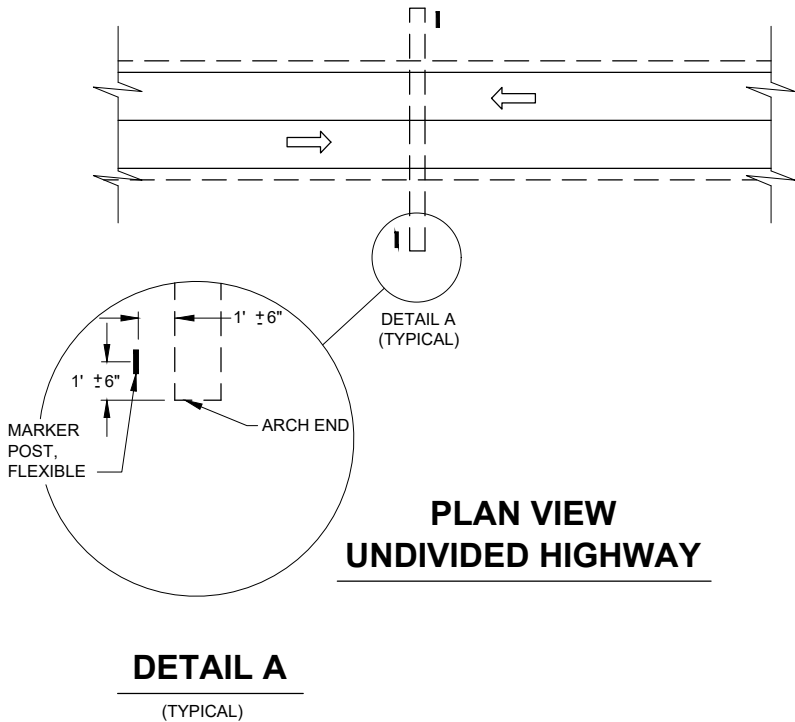
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0966028/SFWHY00241	2021	E1	18



1 FLEXIBLE MARKER POST DETAIL
E1 SCALE: NOT TO SCALE

FLEXIBLE MARKER POST NOTES:

- FLEXIBLE MARKER POSTS SHALL BE WHITE, FIBERGLASS COMPOSITE.
- A 3" BY 9" STRIP OF BLACK 2-MIL GRAPHIC FILM SHALL BE AFFIXED TO EACH SIDE OF THE POST AS SHOWN IN THE FLEXIBLE MARKER POST DETAIL DRAWING. THE MATERIAL SHALL BE CENTERED WITHIN THE WIDTH OF THE POST. APPLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.



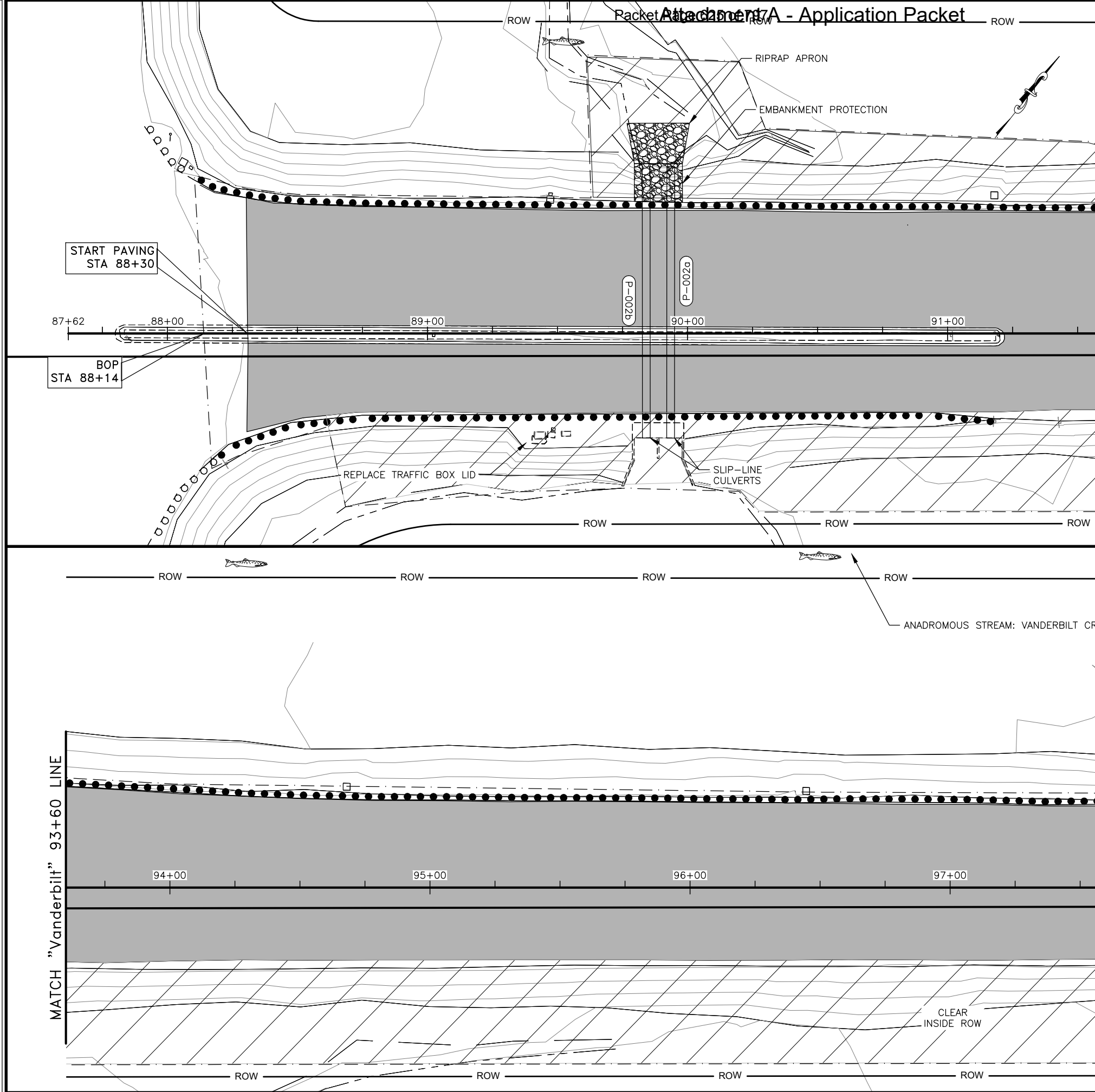
2 FLEXIBLE MARKER POST LOCATION
E1 SCALE: NOT TO SCALE



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU RESURFACE GLACIER
HIGHWAY: VANDERBILT HILL
ROAD EGAN TO GLACIER HWY

MISCELLANEOUS DETAILS



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFH\WY00241/0003243	2021	F1	18

040'80'
SCALE IN FEET

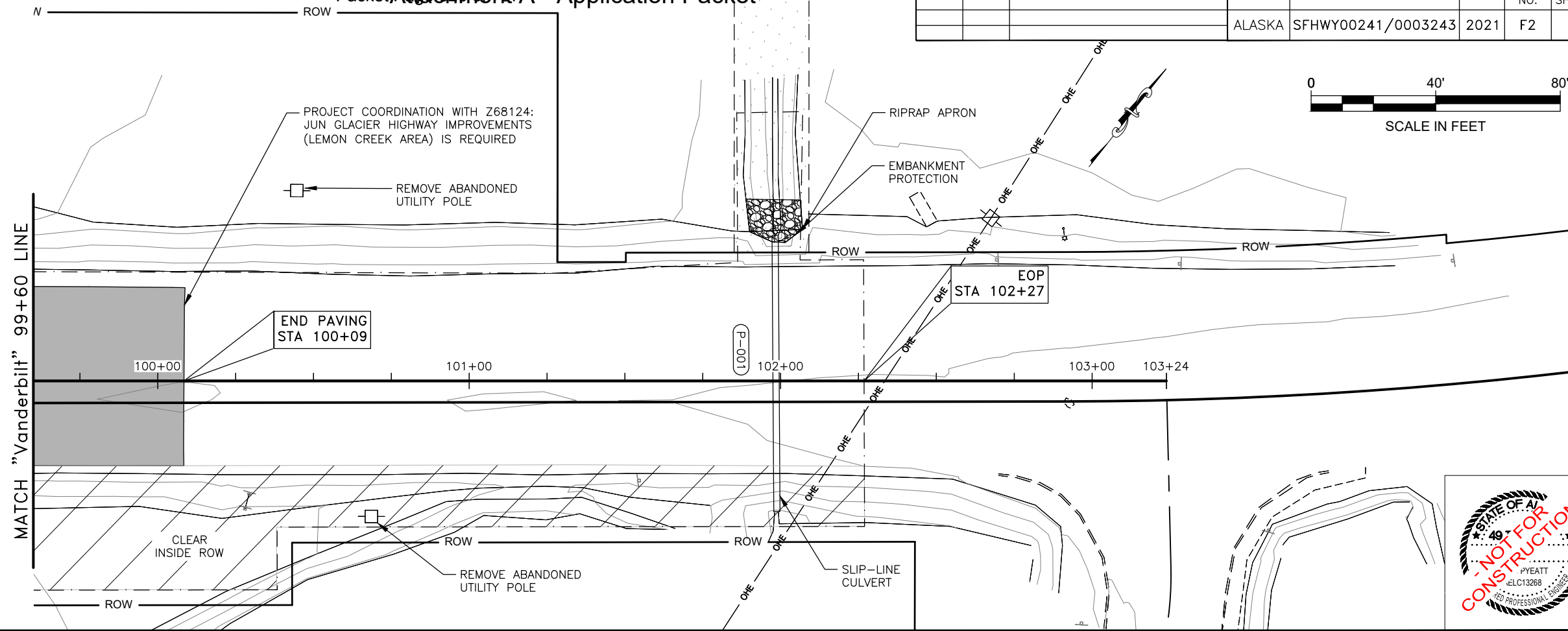
040'80'
SCALE IN FEET

STATE OF ALASKA
49
NOT FOR CONSTRUCTION
PYEATT
ELC13268
RED PROFESSIONAL ENGINEER

FIRM	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES				ADDRESS	6860 GLACIER HWY, JUNEAU, AK 99811		PHONE	(907) 465-1763		CERTIFICATE OF AUTH #:
FILE	Q:\Jnu\SFHWY00241\Planet\SFHWY00241_F-Sheet.dwg				DATE	12/2/2020 12:50		LAYOUT	F2 PLAN		DRAFTED
								DESIGNED	BL.AC.BW		BL.AC.BW.RG

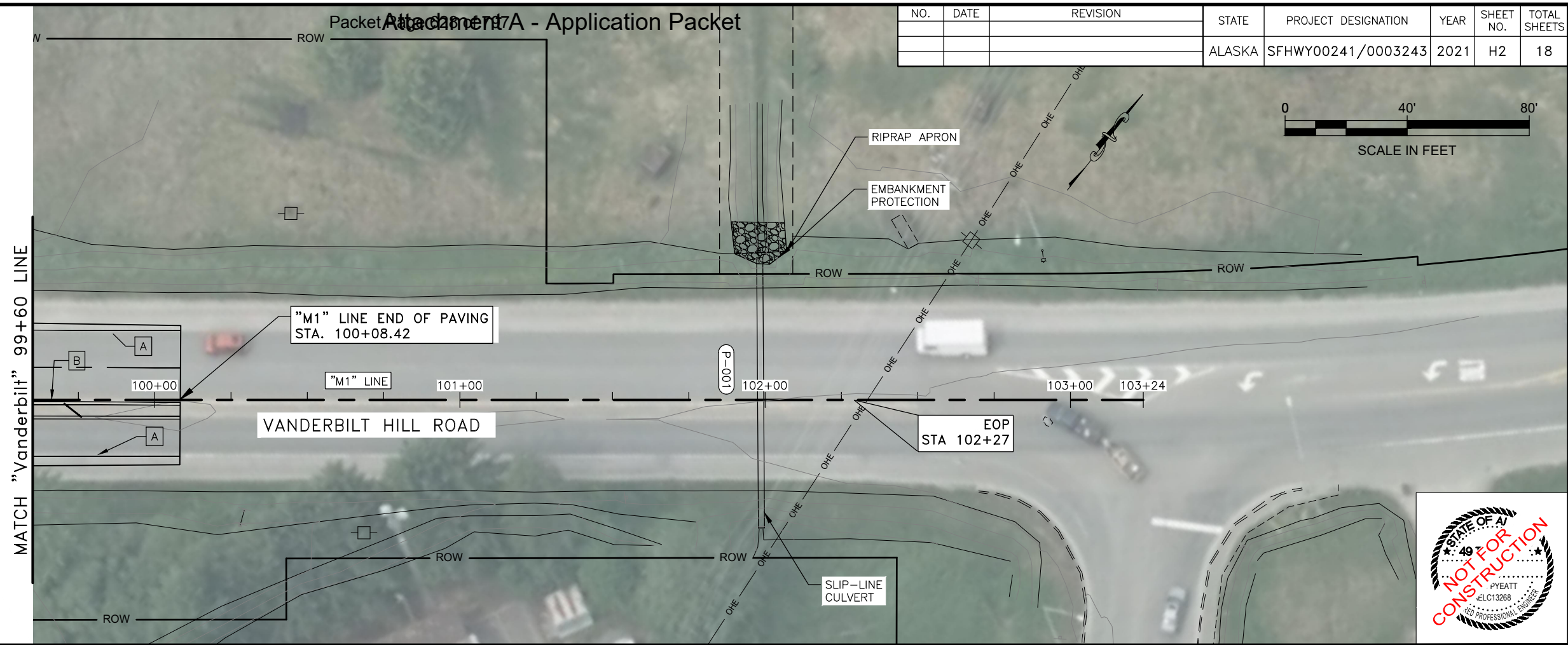
Attachment 17A - Application Packet

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00241/0003243	2021	F2	18



Attachment 7A - Application Packet

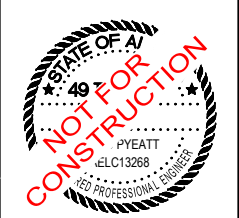
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFWHY00241/0003243	2021	H2	18

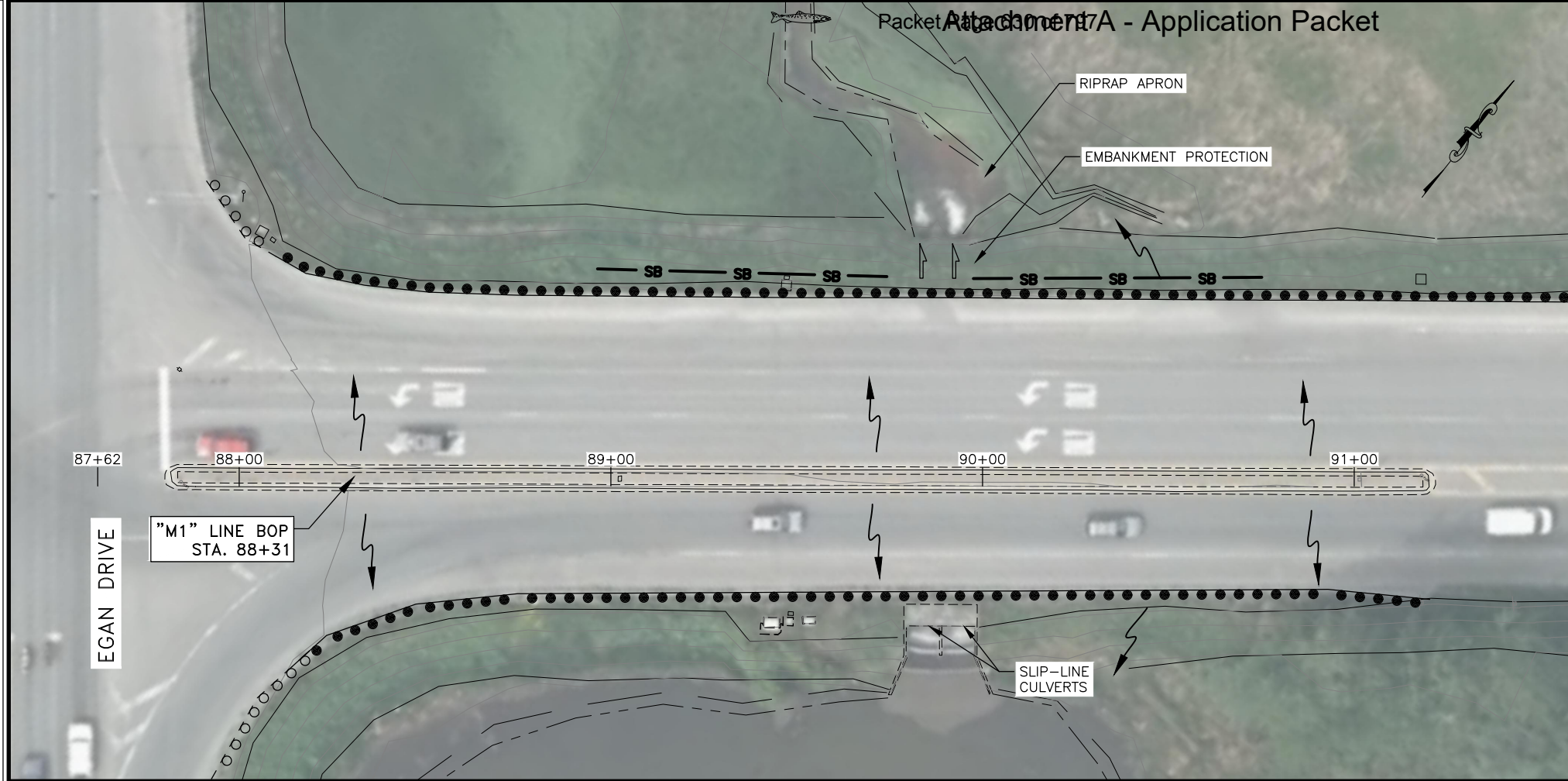


STRIPING LEGEND		
SYMBOL	DESCRIPTION	PATTERN
[A]	SOLID, WHITE 4"	
[B]	SOLID DOUBLE, YELLOW 4"	
[C]	STOP BAR, WHITE 24"	
[D]	CROSSWALK, WHITE 24"	
[E]	YELLOW CURB	
[F]	YELLOW BULL NOSE	
[G]	DASHED, WHITE 4"	
[H]	SOLID DIAGONAL, YELLOW 48"	

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00241/0003243	2021	H3	18

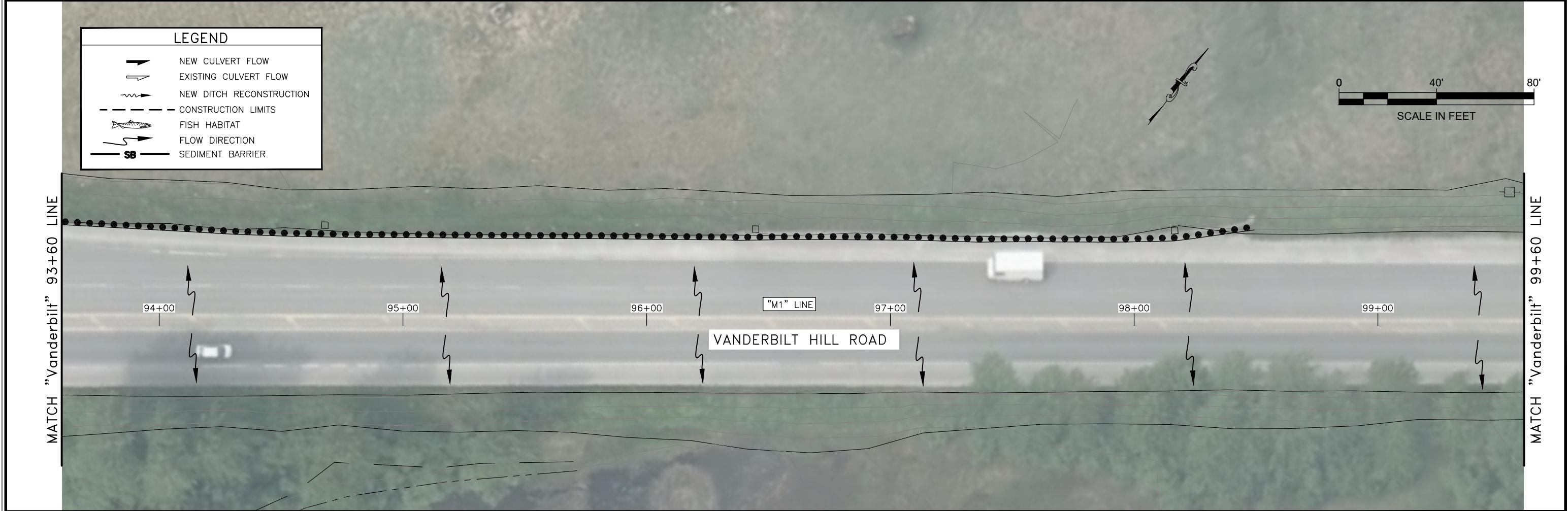
STANDARD SIGN SUMMARY										
SIGN NO.	LEGEND	STATION	OFFSET (FT)	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	AREA (SF)	POST	SIGN FACING	FRAMED/BRACED
1	SPEED	91+20	33	R2-1	30	48	10		West	BRACED





NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFH\WY00241/0003243	2021	P1	18

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.



LEGEND

NEW CULVERT FLOW

EXISTING CULVERT FLOW

NEW DITCH RECONSTRUCTION

CONSTRUCTION LIMITS

FISH HABITAT

FLOW DIRECTION

SEDIMENT BARRIER

MATCH "Vanderbilt" 99+60 LINE

"M1" LINE BOP
STA. 100+08.42

"M1" LINE

VANDERBILT HILL ROAD

100+00

101+00

102+00

103+00

103+24

RIPRAP APRON

EMBANKMENT PROTECTION

SLIP-LINE CULVERT

SB

OHE

040'80'

SCALE IN FEET

TCP NOT SEALED IN
ACCORDANCE
WITH ALASKA HIGHWAY
PRECONSTRUCTION MANUAL
SECTION 1400.3.5
DATED JANUARY 30, 2012.

Attachment A - Application Packet

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFWHY00241/0003243	2021	P2	18

FILE Q:\nu\SFHWY00241\Planset\00241_T1_Vanderbilt.dwg DATE 12/1/2020 9:49 LAYOUT T1 TRAFFIC CONTROL PLAN DESIGNED AC, BL, BW CHECKED DP DRAFTED BL, RG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0966028/SFHWY00241	2021	T1	18

TRAFFIC CONTROL NOTES

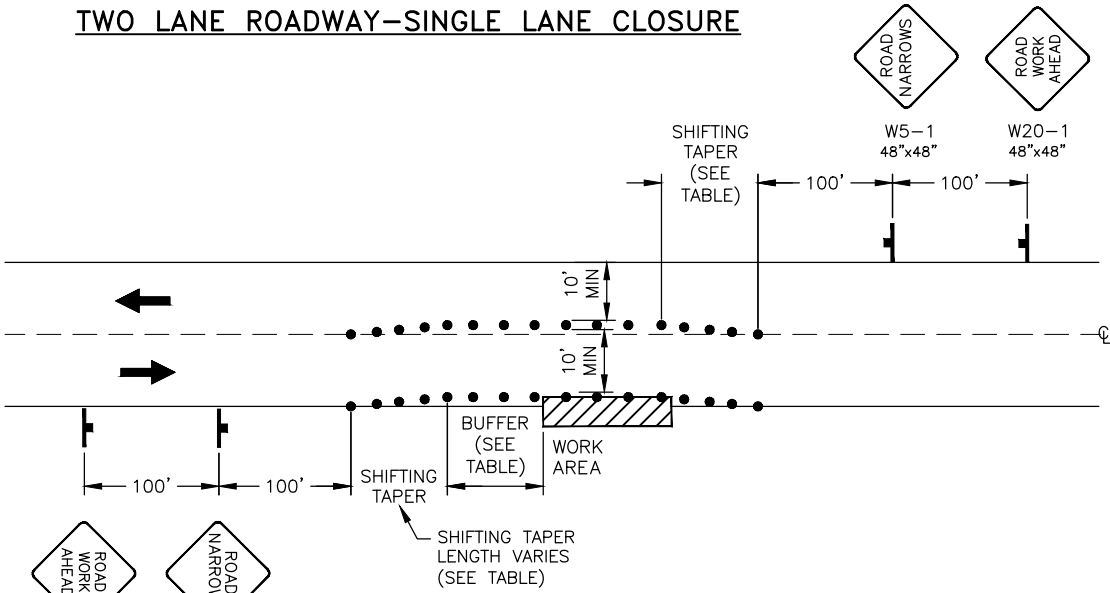
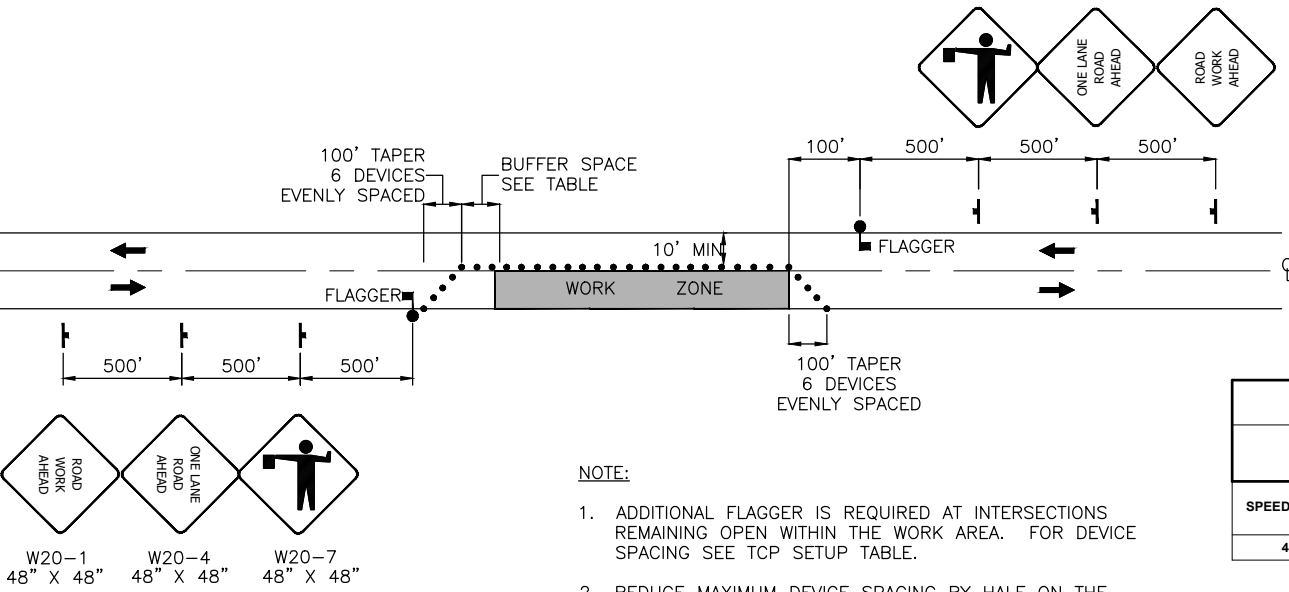
- TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'.
- CONSTRUCTION SIGNS SHALL BE IN PLACE ONLY WHEN THE CONDITIONS THEY WARN ABOUT EXIST.
- CHANNELIZATION DEVICES, IF USED AT NIGHT, SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
- TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.04 OF THE SPECIFICATIONS.
- THE MAXIMUM LENGTH OF A ONE LANE, TWO-WAY WORK ZONE (FLAGGER SETUP) SHALL BE 10,000', AND THE MINIMUM SEPARATION BETWEEN WORK ZONES SHALL BE 1,000'. IF VEHICLE STOP TIME EXCEEDS FIVE MINUTES, THE CONTRACTOR SHALL SHORTEN HIS WORK ZONE OR RESCHEDULE HIS WORK TO A LESS BUSY HOUR.
- ALWAYS ALLOW ACCESS TO EMERGENCY SERVICES DRIVEWAYS
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- DRIVEWAYS MAY BE CLOSED DURING ACTUAL WORK ON A GIVEN DRIVEWAY, PROVIDED THAT THE CLOSURE DOES NOT EXCEED 4 HOURS AND THE AFFECTED RESIDENTS HAVE BEEN GIVEN A MINIMUM 24 HOURS NOTICE OF THE CLOSURE.

TCP SETUP TABLE

TCP SETUP TABLE									
	MIN MERGING TAPER		LENGTH	MIN NUMBER OF DEVICES WIDTH			MAX DEVICE		BUFFER
	(L) IN FEET	WIDTH OF	WIDTH OF OFFSET	OF OFFSET (W) IN FEET			SPACING IN FEET		SPACE
		(W) IN FEET							
SPEED (MPH)	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGEN T	(FT)
40	270	295	320	8	9	9	40	80	305

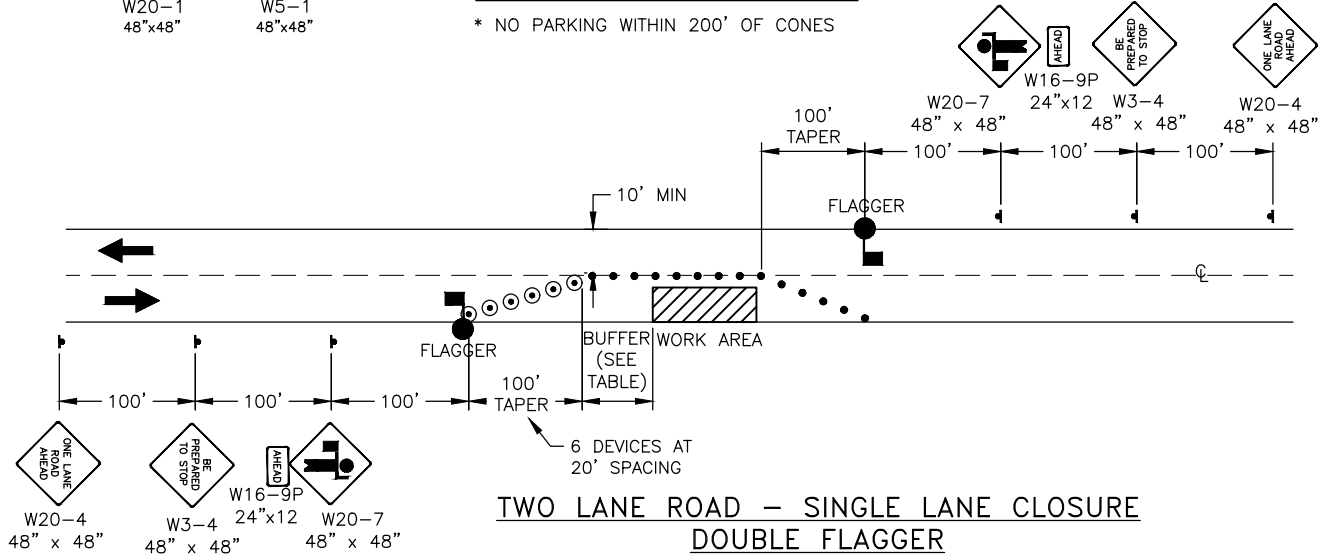
- NOTE:
- ADDITIONAL FLAGGER IS REQUIRED AT INTERSECTIONS REMAINING OPEN WITHIN THE WORK AREA. FOR DEVICE SPACING SEE TCP SETUP TABLE.
 - REDUCE MAXIMUM DEVICE SPACING BY HALF ON THE TANGENT BETWEEN LIMITS OF THE WORK ZONE.

TWO LANE ROADWAY-SINGLE LANE CLOSURE



ROADWAY ENCROACHMENT

* NO PARKING WITHIN 200' OF CONES



TWO LANE ROAD - SINGLE LANE CLOSURE
DOUBLE FLAGGER

* NO PARKING WITHIN 200' OF CONES
TAPERS ARE 6 DEVICES EVENLY SPACED

LEGEND

- SIGN
- CONE
- DRUM
- FLAGGING STATION

TCP NOT SEALED IN
ACCORDANCE
WITH ALASKA HIGHWAY
PRECONSTRUCTION MANUAL
SECTION 1400.3.5
DATED JANUARY 30, 2012.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU RESURFACE GLACIER
HIGHWAY: VANDERBILT HILL
ROAD EGAN TO GLACIER HWY

TRAFFIC CONTROL PLAN



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Transportation and
Public Facilities

DOT&PF Engineering Assistant
Ben Love, EIT

6860 Glacier Highway
P.O. Box 112506
Juneau, AK 99811-2506
Phone: 907-465-4490

December 4th, 2020

Re: *Vanderbilt Hill Rd, SFHWY00241, Juneau, AK*

Certified Mail #: _____
Return Receipt Requested

*City of Juneau Planning Commission
155 S. Seward Street
Juneau, Alaska 99801*

Dear *Planning Commission*,

The enclosed plans are submitted for your review and comment, and for determination of compliance with local planning and zoning ordinances. Under AS 35.30.020, the Department must comply with local planning and zoning ordinances and other regulations in the same manner and to the same extent as other landowners. If you believe the Department's construction of this project would result in a violation of planning, zoning, or other regulations generally applicable to landowners, please identify the portions of the project that would be in violation, and the specific planning, zoning, or other regulations that you believe would be violated.

Pursuant to AS 35.30.010, you have 90 days from delivery of the plans to provide comments on the project and to notify the Department whether the project violates any planning, zoning, or other regulations. If comments are not received within this time frame, the Department is authorized to proceed with the project.

Thank you for consideration of this matter.

Sincerely,

DocuSigned by:

Ben Love

12/04/2020

ED27A1722BFF41C...

DOT&PF Engineering Assistant

Enclosure: Project Plans

ROADWAY CLASSIFICATION MAP
Lemon Creek

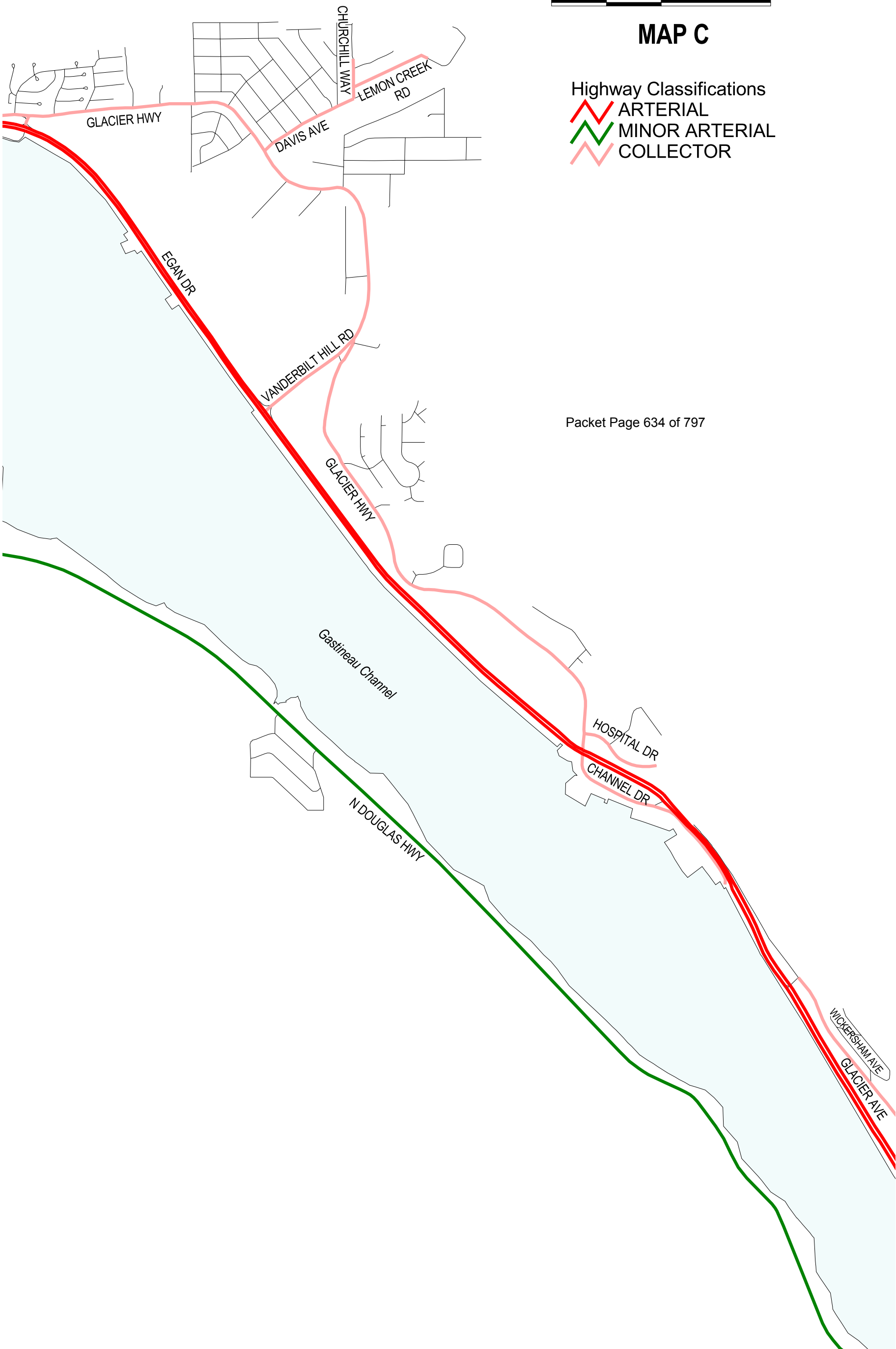
4000 0 4000 Feet



MAP C

- Highway Classifications
- ARTERIAL
 - MINOR ARTERIAL
 - COLLECTOR

Packet Page 634 of 797

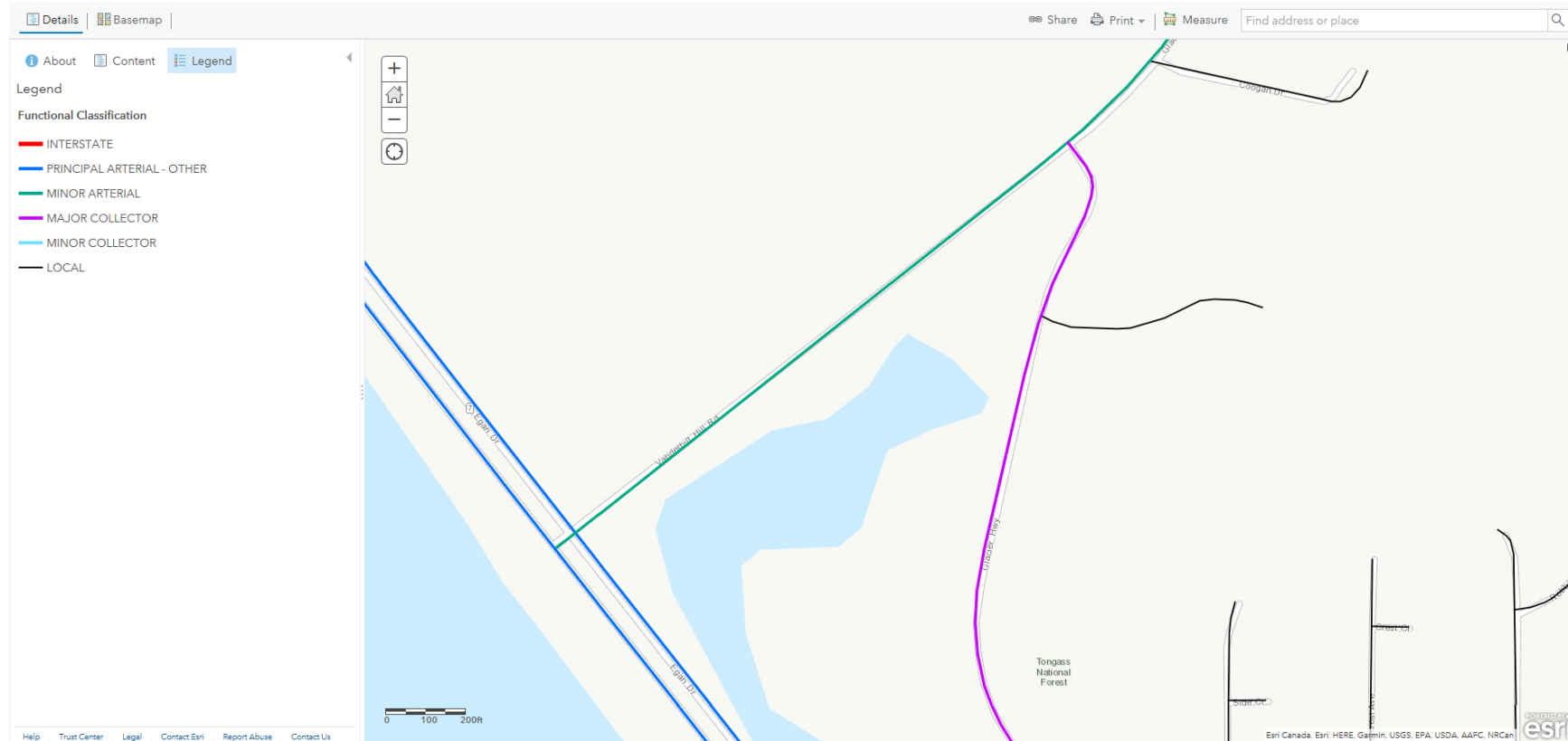


Attachment C - ADOT&PF Functional Classification Map

<https://akdot.maps.arcgis.com/home/webmap/viewer.html?webmap=8d34059bbfed4fada20a4fdc2a138aca>

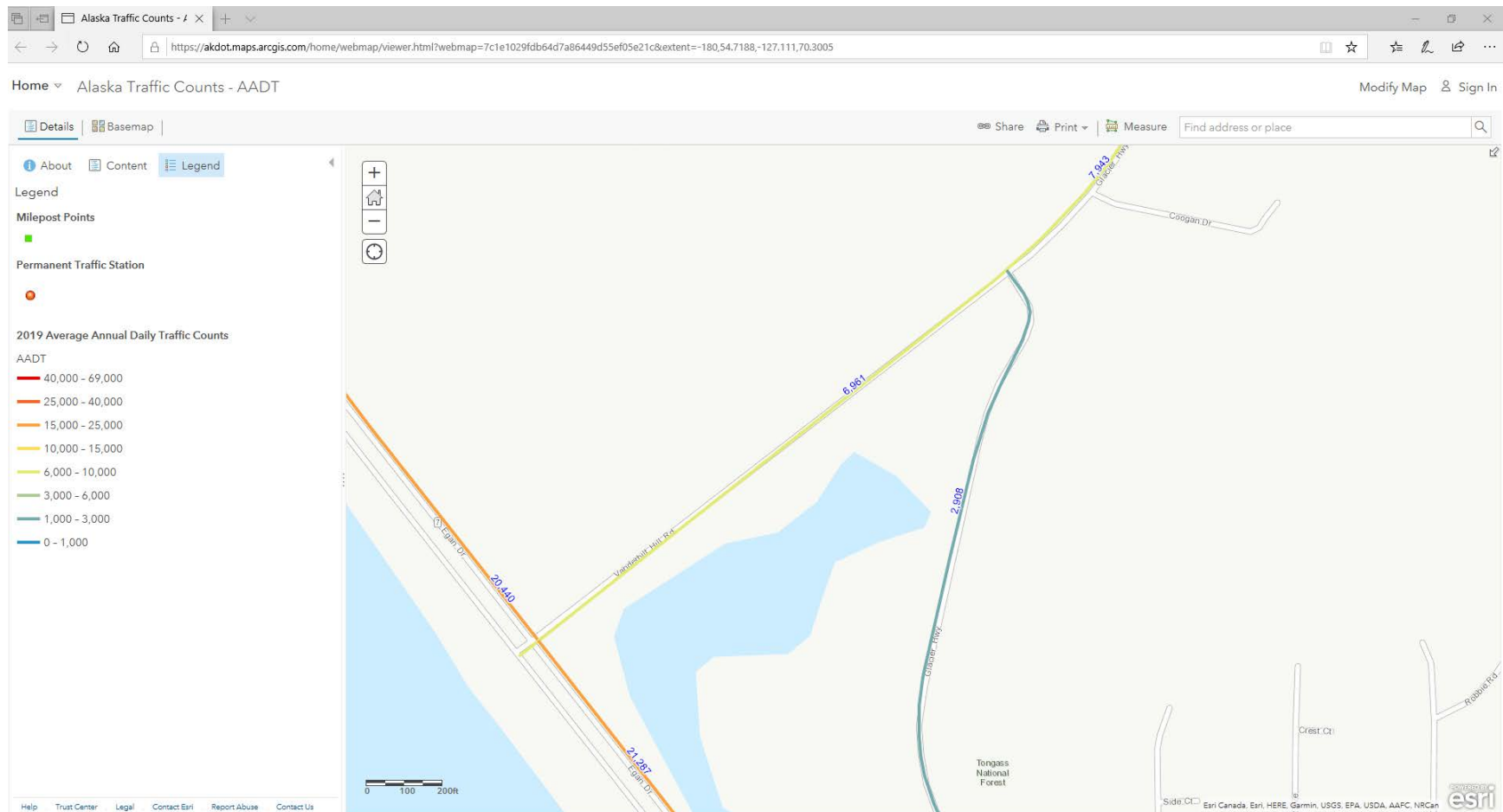
Home ▾ Functional Classification

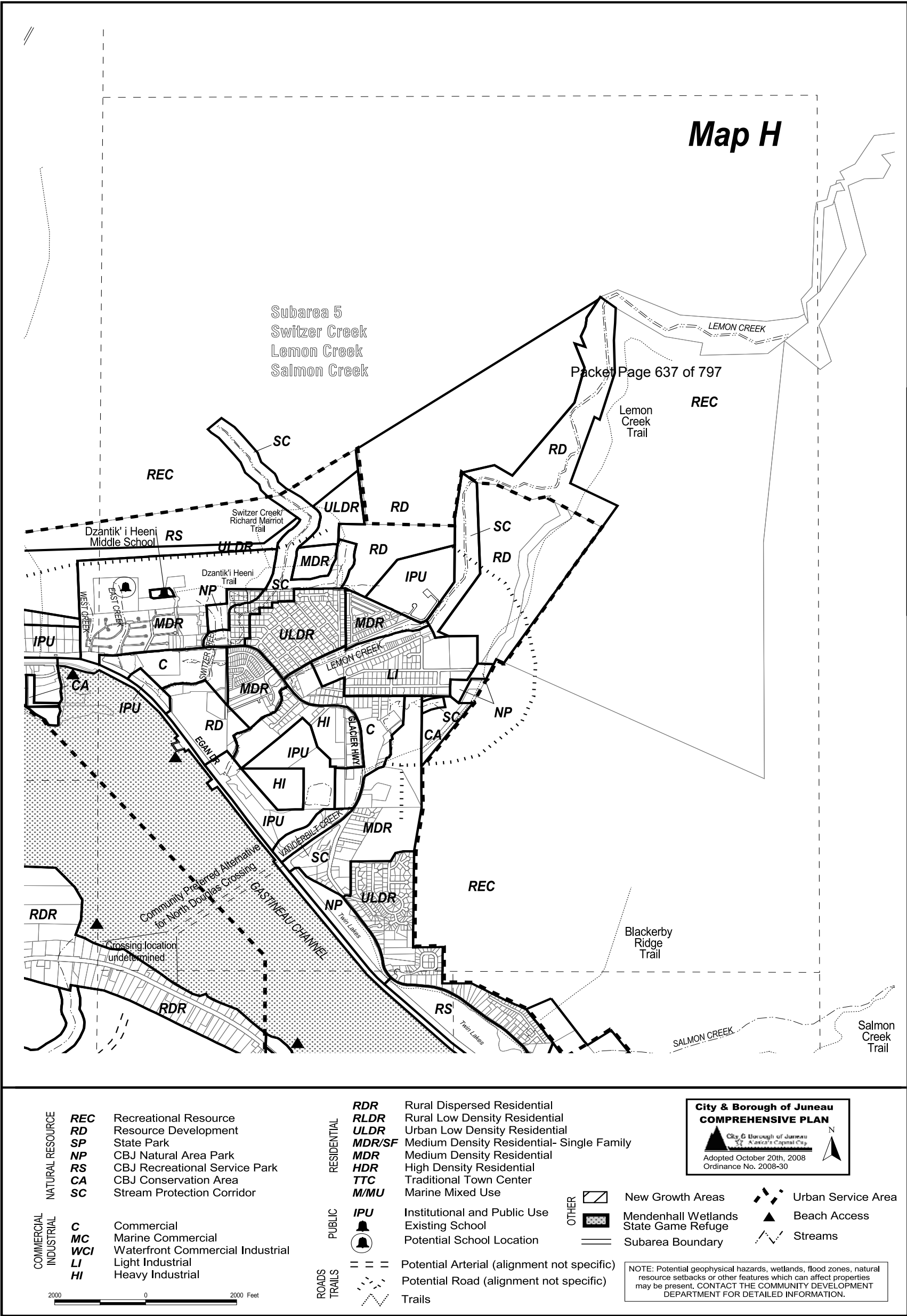
Modify Map Sign In



Attachment D - ADOT&PF Traffic Counts

<http://akdot.maps.arcgis.com/home/webmap/viewer.html?webmap=7c1e1029fdb64d7a86449d55ef05e21c&extent=-180,54,7188,-127,111,70.3005>







Planning Commission

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

PLANNING COMMISSION NOTICE OF RECOMMENDATION

Date: January 19, 2021
File No.: CSP2020 0010

City and Borough of Juneau
City and Borough Assembly
155 South Seward Street
Juneau, AK 99801

Proposal: Planning Commission Recommendation of Approval to the City and Borough Assembly regarding resurfacing Vanderbilt Hill Road from Glacier Highway/Lemon Road to Egan Drive

Property Address: Vanderbilt Hill Road

ROW Name: Vanderbilt Hill Road

Parcel Code No.: 0

Hearing Date: January 12, 2021

The Planning Commission, at a regular public meeting, adopted the analysis and findings listed in the attached memorandum dated December 24, 2020. The Planning Commission recommended that the City and Borough Assembly approve the project.

Attachments: December 24, 2020 memorandum from Laurel Christian, Community Development, to the CBJ Planning Commission regarding CSP2020 0010.

Assembly action must be taken by March 4, 2021. Under AS 35.30.010. The Assembly has 90 days from the delivery of the project. If comments are not received within this time frame, the Alaska Department of Transportation and Public Facilities is authorized to proceed with the project.

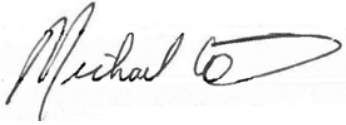
This Notice of Recommendation constitutes a recommendation of the CBJ Planning Commission to the City and Borough Assembly. Decisions to recommend an action are not appealable, even if the recommendation is procedurally required as a prerequisite to some other decision, according to the provisions of CBJ §01.50.020(b).

City and Borough Assembly

File No.: CSP2020 0010

January 19, 2021

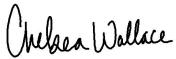
Page 2 of 2



Michael LeVine, Chair
Planning Commission

January 20, 2021

Date



Filed With Municipal Clerk

January 21, 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. The State Government and project 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**

CSP2020 0011: Complete street and underground utility maintenance (and replacements as necessary) on Calhoun Avenue - PLANNING COMMISSION VOTED TO BIFURCATE THE STREET CONSTRUCTION WAIVERS REQUEST FROM CSP2020 0011, AND SUBSEQUENTLY VOTED TO RECOMMEND DENIAL OF THE CALHOUN AVENUE RECONSTRUCTION PROJECT AND RECOMMEND FURTHER STUDY OF THE AREA. THE PLANNING COMMISSION DID NOT TAKE ACTION ON THE STREET CONSTRUCTION WAIVERS REQUEST.

AGENDA ITEM:

Case No.: CSP2020 0011

Applicant: City & Borough of Juneau

Location: Calhoun Avenue

Proposal: Complete street and underground utility maintenance (and replacements as necessary)

RECOMMENDATION:

Staff recommends the Planning Commission:

- **ADOPT** the Director's analysis and findings, and forward a **RECOMMENDATION OF APPROVAL** to the CBJ Assembly for the Calhoun Avenue Reconstruction Project.
- **APPROVE** the waiver of road construction standards for the Calhoun Avenue Reconstruction Project.

ATTACHMENTS:

Description	Upload Date	Type
☐ Staff Report for CSP2020 0011	1/5/2021	Staff Report
☐ Presentation for CSP2020 0011	1/13/2021	Presentation
☐ Notice of Recommendation for CSP2020 0011	1/21/2021	Notice of Recommendation



PLANNING COMMISSION STAFF REPORT
STATE PROJECT REVIEW CSP2020 0011
HEARING DATE: JANUARY 12, 2021

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

DATE: January 5, 2021
TO: Michael LeVine, Chair, Planning Commission
BY: Irene Gallion, Senior Planner 
THROUGH: Jill Maclean, Director, AICP

PROPOSAL: Applicant requests a City Project Review of Calhoun Avenue Reconstruction.

STAFF RECOMMENDATION: ADOPTION of the CSP analysis and findings with a recommendation to the Assembly for APPROVAL, and APPROVAL of a road standards waiver.

KEY CONSIDERATIONS FOR REVIEW:

- Water and sewer in poor condition, increases maintenance costs and risk of failure.
- Roadway evolved from pre-1914 origins, limited right-of-way for improvements.

GENERAL INFORMATION	
Property Owner	City & Borough of Juneau (CBJ)
Applicant	CBJ Engineering and Public Works (E&PW)
Property Address	Calhoun Avenue
Legal Description	Not applicable
Parcel Number	Not applicable
Zoning	D18/D10/MU/MU2
Land Use Designation	Traditional Town Center and Medium Density Residential
Lot Size	Not applicable
Water/Sewer	CBJ
Access	Calhoun Avenue, Main Street & 12 th Street
Existing Land Use	Roadway
Associated Applications	None

ALTERNATIVE ACTIONS:

1. **Amend:** amend the recommendation to include conditions and recommend approval to the Assembly.
2. **Deny:** recommend denial of the proposed project. Planning Commission must make its own findings.
3. **Continue:** continue the hearing to a later date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

ASSEMBLY ACTION REQUIRED:

A Notice of Recommendation will be forwarded to the Assembly for further action.

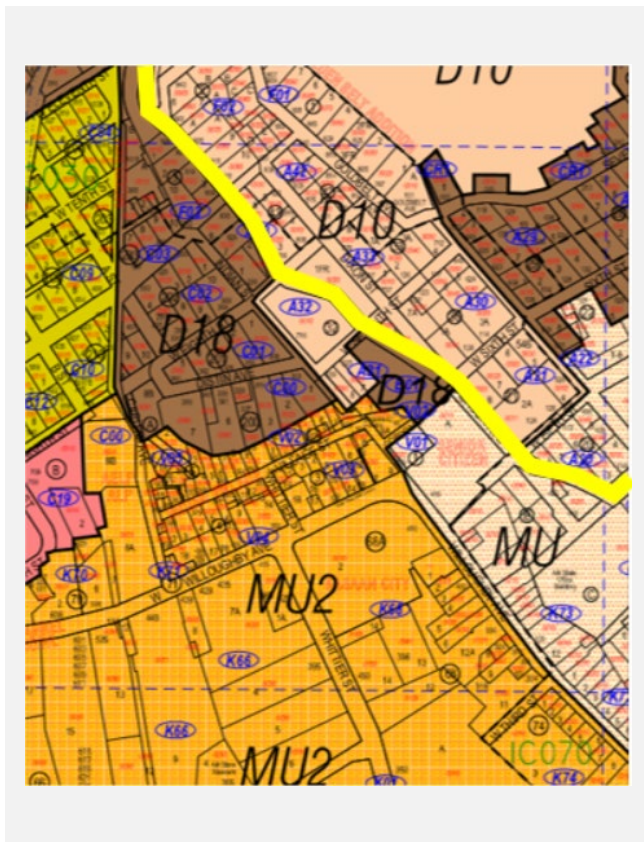
STANDARD OF REVIEW:

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
 - 49.15.580(b)
 - 49.35 Table 240
 - 49.35.240(i)(4)(B)
 - 49.80

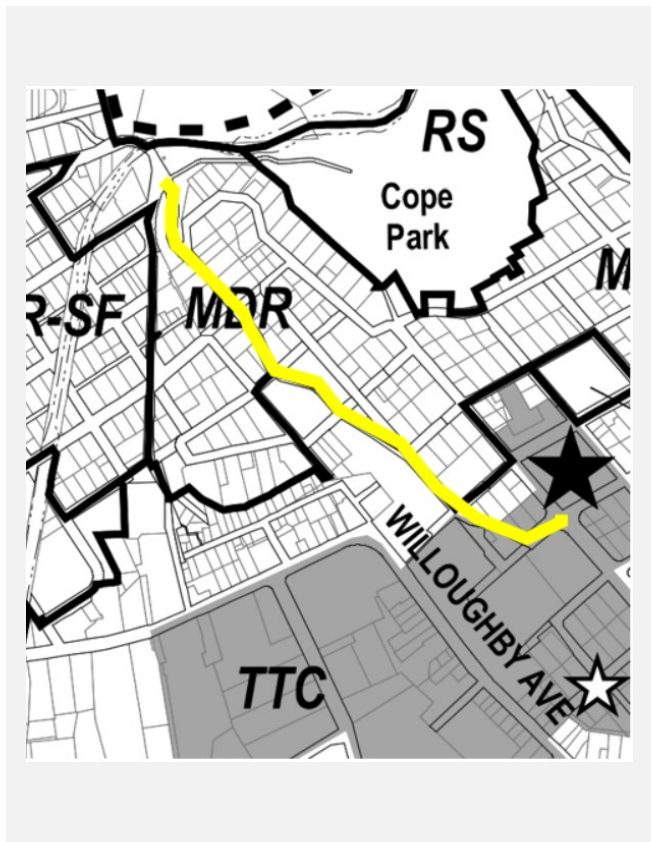
The Commission shall hear and decide the case per CBJ 49.15.580(a) - CBJ Project Review: *The commission shall review all proposed City and Borough capital improvement projects estimated to cost \$500,000 or more for consistency with this title. The commission may review, at the director's discretion, all proposed City and Borough capital projects estimated to cost more than \$250,000 but less than \$500,000. The commission may recommend conditions on and modifications to any project reviewed by the commission through a notice of recommendation. The notice of recommendation shall be forwarded to the assembly for further action.*

CBJ 49.10.170(c) Planning Commission Duties: *The commission shall review and make recommendations to the assembly on land acquisitions and disposals as prescribed by Title 53, or capital improvement project by any City and Borough agency. The report and recommendation of the commission shall be based upon the provisions of this title, the comprehensive plan, and the capital improvements program.*

CURRENT ZONING MAP



LAND USE DESIGNATION MAP



SURROUNDING LAND USES AND ZONING

Direction	Zoning District	Land Use
North	D10/MU	Residential
South	D18, D10, MU2, MU	Residential, Government
East	MU	City center
West	D18, D5	Residential

BACKGROUND INFORMATION

Project Description – This project will rehabilitate the road prism and drainage, replace the water and sewer systems that have exceeded expected service life, replace sidewalks and repave the roadway. Phase 1 is from the Governor’s Mansion to Cope Park. Phase 2 is from the Governor’s Mansion to Main Street, and only requires minor utility improvements (**Attachment A**).

An existing high-pressure ductile iron water line will be replaced with high-density polyethylene pipe. The low pressure line will be replaced and looped into the West 8th Street system, improving water quality, flow and pressure, and reducing freezing.

The sewer replacement will separate the sanitary and storm sewer systems to reduce load on treatment facilities.

The sanitary sewer replacement will connect to Goldbelt Avenue and go up Calhoun Avenue, redirecting flow toward West 8th Street. The sewer is trenched in bedrock, and CBJ Engineering & Public Works (E&PW) would like to use the current trenching for the new line. Manholes with fiberglass liners will reduce back-up.

The storm sewer system will include additional catch basins and underdrains.

Surface improvements include widening the sidewalk as much as possible. Pinch points in front of 214 West 8th Street and 911 Calhoun Avenue limit vicinity sidewalk to three feet wide, which meets ADA standards. For the remainder of the project, the sidewalk varies between four feet and five feet. The existing crosswalks at Cope Park will have ADA accessible ramps with minimum slope landings. Back of sidewalk will be matched at tie-in points. Curb and gutter will put the sidewalk six inches above the roadway.

This project was originally an element of CSP2020-0009, which combined road and utility maintenance projects. Calhoun Avenue has been given its own CSP due to public interest in the project.

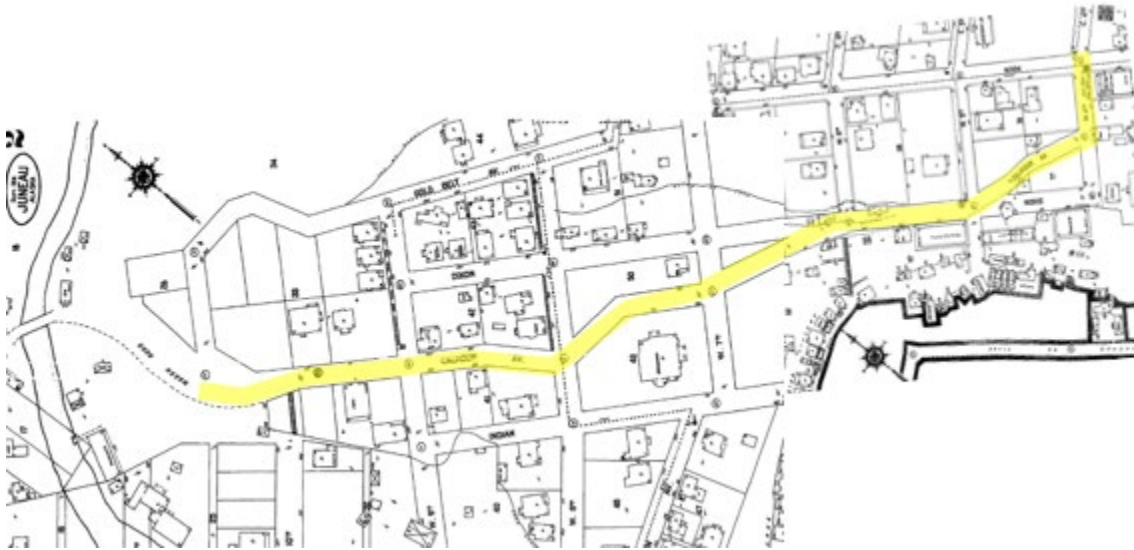
Members of the public expressed interest in making Calhoun Avenue one way in order to widen sidewalks and provide bike accommodations. During E&PW investigations of the option, Capital City Fire and Rescue (CCFR) expressed opposition to the plan due to the following reasons:

- CCFR uses Calhoun Avenue to access the upper downtown in the event that Egan Drive or Main Street is blocked.
- CCFR needs egress as well as access in the event that multiple emergency calls come in at once.
- West 9th Street and Indian Street are too narrow for a ladder truck.

In order to accommodate CCFR vehicles along West 9th Street and Indian Street, private land would need to be taken and 17 on-street parking spaces would be eliminated (**Attachment B**). The Fire Chief has emphasized Calhoun Avenue’s importance to CCFR’s downtown operations. Heavy summer traffic makes Calhoun Avenue the faster route to the Capitol building area, then provides a straight shot to Gastineau Avenue without a three-point-turn. The route has been used during 4th of July parades and other downtown events. Calhoun Avenue provides access to upper downtown when construction blocks other routes and provides an alternate route for downtown residents in the event of a blockage on Egan Drive. Finally, CCFR uses the route for most structure fires downtown in order to get above and closer to the fire without having to walk multiple blocks.

Given this life safety concern, E&PW continued the project with improvements to the existing two-way traffic configuration. Multiple plans recognize the importance of walkability in the area, and E&PW have expanded pedestrian accommodations within the constraints of limited right-of-way and two-lane traffic.

Background – Calhoun Avenue is on the Sanborn Maps from 1914, terminating in a wagon trail about 130 linear feet from crossing Gold Creek (**Attachment C**). The road was built prior to the prevalence of automobiles with less right-of-way or road width than current standards require. Construction dates of single-family structures on the uphill side of the road range from 1893 (835 Calhoun Avenue) to 1929. On the downhill side, single-family structure construction dates range from 1911 to 1950. Structures along this route were built before zoning was established in 1956. Residences, stone fences, retaining walls, and other structures were built within modern-day setbacks of Calhoun Avenue.



Road development construction included a reinforced concrete roadway. Due to the difficulties of removing it, subsequent paving projects covered it. The depth of asphalt has created a situation where the roadway is flush with the adjoining sidewalk. Utilities will be replaced in the current trenched location to reduce expensive and difficult concrete removal. The engineer consultant, ProHNS, has used Ground Penetrating Radar to determine the extents of the concrete and designed utility replacements accordingly.

The section between the Governor’s Mansion and Main Street was reconstructed in 1994 and included repairs to the viaduct. Utilities were undergrounded because they had to be moved for construction.

The table below summarizes relevant history for the proposed development.

Item	Summary
Calhoun (Avenue) Bridge Water Line Replacement and Intertie	1995, CBJ and AEL&P constructed
Proposed Widening of Calhoun Avenue	1972
Calhoun Avenue Bridge Waterline Reconstruction	E99-485: Water line replacement for Calhoun Avenue and West 8 th Street
Calhoun Avenue Retaining Wall	E88-145: Retaining wall in front of 214 West 8 th Street
Calhoun Avenue Reconstruction	E94-305: Reconstruction of West 7 th Street to Main Street, including repair of viaduct

Current Conditions – The existing water line is in poor shape. Surges, from turning water on and off for the addition of services or pipe maintenance, damage pipes and create leaks that need repair.

The sewer system has exceeded its design life. It also has a combined system for sanitary sewer and storm sewer. This routes all storm sewer through the treatment plant, increasing loads, reducing life span and increasing costs.

Multiple asphalt lifts have created a roadway flush with the sidewalk. Parts of the sidewalk show regular tire wear. Driving lanes are undefined. Curbs would usually divert low-speed traffic from the sidewalk. Sidewalk width varies from three feet to five feet.

ZONING ANALYSIS

49.05.100 - Purpose and intent. The purpose and Intent of Title 49 Land Use Code is:

(1) To achieve the goals and objectives, and implement the policies, of the Juneau comprehensive plan, and coastal management program;

(2) To ensure that future growth and development in the City and Borough is in accord with the values of its residents;

(3) To identify and secure, for present and future residents, the beneficial impacts of growth while minimizing the negative impacts;

(4) To ensure that future growth is of the appropriate type, design and location, and is served by a proper range of public services and facilities such as water, sewage, and electrical distribution systems, transportation, schools, parks and other public requirements, and in general to promote public health, safety and general welfare;

(5) To provide adequate open space for light and air; and

(6) To recognize the economic value of land and encourage its proper and beneficial use.

Roadway Construction Standard Waivers – Public improvements must meet the standards of 49.35 Table 240 or receive a waiver. This project requires a Planning Commission waiver [CBJ 49.35.2240(i)(4)(B), Roadway construction standards waivers].

Public improvements include any construction incidental to servicing or furnishing facilities to a development.

Calhoun Avenue does not meet the standards outlined in 49.35 Table 240 due to the historic nature of the road and neighborhood.

According to the Alaska Department of Transportation and Public Facilities 2019 data, Calhoun Avenue has an average annual daily traffic (AADT) of 2,877.

The Commission may waive roadway standards if:

(i) The existing roadway does not comply with the roadway construction standards identified in Table 49.35.240;

Table 240 requires 26-foot roadway and sidewalks on both sides of the street. Existing width varies from 17 feet to 18 feet, though Calhoun Avenue looks wider in areas because the gutter pan (not included in lane width calculations) has been paved over. Sidewalk runs the length of the downhill side, and in isolated areas on the uphill side.

(ii) There are unique circumstances that make compliance with the requirements of the table unreasonable;

The original road was constructed before 1914 and the prevalence of the automobile, and has inadequate right-of-way to conform to established modern standards. Structures have been built in a manner that does not provide for acquiring additional land to increase the existing right-of-way.

(iii) The proposed project will not aggravate the intent of the requirements of this chapter; and

The design meets the intent of Title 49, the 2013 Comprehensive Plan, and other adopted plans that recognize Calhoun as an important emergency and pedestrian corridor by:

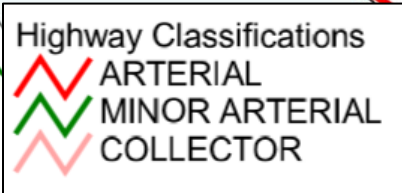
- Rehabilitating existing sidewalks;
- Raising sidewalks;
- Widening sidewalks where able;
- Meeting ADA standards;
- Providing improvements to water and sewer system;
- Preserving the historic features of downtown when integrating modern standards; and
- Providing reasonable access for public safety vehicles.

(i) Unique circumstances make compliance with the American Association of State Highway and Transportation Officials' guidelines unreasonable, and the commission requires sufficient safeguards to protect public health, safety, and welfare under the circumstances.

AASHTO recognizes that practical considerations of the built environment and terrain constrain old roads in urban areas. This often limits available right-of-way [AASHTO Policy on Geometric Design of Highways and Streets, 7th Edition, 2018, page 5-13]. Where available right-of-way imposes severe limitations, nine-foot lanes can be used in residential areas.

At West 8th Street a “pinch point” may result in lane widths of eight feet.

Roadway Classification Maps – Calhoun Avenue is classified a “collector” on Juneau’s Roadway Classification Map, adopted under Ordinance 2013-9.



Service	Summary
Urban Service Boundary	Yes
Water/Sewer	CBJ
Fire Service Area	Yes – CCFR uses the route for secondary access to upper downtown.
Schools	Discovery Preschool, Harborview Elementary, Juneau Community Charter, Juneau Douglas High School
Recreation	Cope Park

The below table summarizes possible Conservation, Historic, and Archeological Resources this project may impact.

Resource	Summary
Environmental	Access to areas of downtown in the moderate and severe hazard area
Wetlands	No
Anadromous	No
Impaired Waterbodies	No
Historic	While built before 1914, Calhoun Avenue is outside of Juneau’s Historic District. Structures along the route date from the late 1800s to the mid-1950s.
Archeological	None known
Comprehensive Plan View sheds	No

CONFORMITY WITH ADOPTED PLANS

2013 COMPREHENSIVE PLAN VISION: *The City and Borough of Juneau is a vibrant State Capital that values the diversity and quality of its natural and built environments, creates a safe and satisfying quality of life for its diverse population, provides quality education and employment for its workers, encourages resident participation in community decisions and provides an environment to foster state-wide leadership.*

2013 COMPREHENSIVE PLAN -			
Chapter	Page No.	Item	Summary
5	45	IA5.2-IA1(D)	Preserve the visual dominance of historic features when integrating modern standards.
8	109	3,5	Recognizes incomplete and dangerous pedestrian and bicycle systems, including inadequate sidewalks during tourist season. Recognizes lack of coordination of transportation plans among local agencies and private operators.
8	110	DG3	Designate corridors for subsequent site-based studies.
8	111	IA6	Develop a multi-agency “Downtown Transportation Management Program, including provision of safe pedestrian and bicycle routes through downtown. (Also IA3 on page 117).
12	197-98	SOP2	CIP is an important tool in determining priority, timing and funding of needed facilities, the “urban glue.” Use the six-year CIP for this purpose.
12	201	IA4	Separate sanitary and storm drain systems.
12	208	SOP1	Consider proposed parking reductions in light of area demand, land use, and physical restrictions.

2012 Safe Routes to Schools			
Chapter	Page No.	Item	Summary
Harborview Audit	49	Enforcement	Periodic police reinforcement of the 20 mph speed limit on Calhoun (<i>Avenue</i>) is needed.
Juneau Community Charter Audit	104	Issues	Calhoun (<i>Avenue</i>) is narrow and difficult for cyclists, has short sight distances, and traffic moves relatively quickly. Up to 9 percent of Juneau Charter School students ride their bikes to school.
Juneau Community Charter Audit	106	Improvement/Action	Rehabilitate the rundown sections of sidewalk along Calhoun Avenue from Cope Park to Main Street. Raise sidewalks to provide more contact between street and sidewalk, widen where possible.

2009 Nonmotorized Transportation Plan			
Chapter	Page No.	Item	Summary
7.3	57	Mid/Low Priority	Calhoun Avenue: Traffic calming to increase safety of pedestrians, including narrower lanes, reducing speed limit and adding signs.
Apx D	95	#78, Mid	Improvements for pedestrians needed on Calhoun Avenue.

2001 Areawide Transportation Plan			
Chapter	Page No.	Item	Summary
	4-5	Mission Statement	Paramount concern is public safety, transportation choice is important, pedestrian travel should be safe and convenient.

The Historic and Cultural Preservation Plan (2020) focuses on structures other than roads.

Plans that address pedestrian connections and walkability include:

- 2004 Long Range Waterfront Plan
- 2004 Downtown Tourism Transportation Study
- 2012 Willoughby District Land Use Plan
- 2008 Capital Transit Development Plan

While the Blueprint Downtown Area Plan is still in development, the Steering Committee recommended, “Implement traffic calming through streetscape design and/or enforcement to provide improved walking environment and safer crossing opportunities. Willoughby Avenue, Glacier Avenue from Willoughby to Highland Drive, W 10th Street, Egan Drive in the vicinity of harbors, Calhoun Avenue, Basin Road, Main Street.” The importance of walkability downtown is a theme throughout the Blueprint Downtown Area Plan.

AGENCY REVIEW

CDD conducted an agency review comment period from December second to December 14, 2020. No comments were received on the two-way traffic option in the Commissioner’s packet. CCFR comments opposing one-way traffic were gathered from subsequent communications and public meetings.

PUBLIC COMMENTS

Abutters notices were sent out to neighbors within 500 feet of the proposed project Calhoun Avenue. (**Attachment D**). A public notice sign was posted (**Attachment E**). E&PW hosted a public meeting for the Calhoun Avenue project on December 22, 2020 (**Attachment F**). Public comments can be found in **Attachment G**, and are summarized below. ProHNS has made personal contact with 14 people (**Attachment H**).

Name	Summary
Joyanne Bloom	Consider single lane, tourist circulation, and burying utilities.
Rebecca Braun	Broaden scope and study options for walkability.
Downtown Juneau Neighborhood Association	Prioritize walkability, and pedestrian and bike safety. Consider one-way operations and traffic calming measures.
W. Keith Gerken	Need expert analysis of options, current info inadequate.

Name	Summary
Dave Harris	Adjust the location of the crosswalk. Opposed to one-way.
Melinda Lamb	Safe walking and biking should be a priority for this rebuild project.
Peter and Sandy Metcalfe	Make the section people-friendly, do a traffic study.
Dana Owen and Joyce Thoresen	Unsafe corridor needs redesign to correct problems.
Jacob Resneck	Upgrade sidewalk and shoulder to improve non-motorized safety.
Rob Welton	Prioritize 60" sidewalk over lane width. Consider 3-way stop at W 8 th .
Demian Schane	Widen sidewalk to five feet wherever possible. Do traffic study.

FINDINGS

In accordance with CBJ 49.15.580 staff finds the proposed Calhoun Avenue Reconstruction Project complies with Title 49 Land Use Code and conforms with adopted plans, specifically the 2013 Comprehensive Plan, 2012 Safe Routes to Schools Plan, the 2009 Non-motorized Plan, and 2001 Area-wide Transportation Plan.

RECOMMENDATION

Staff recommends the Planning Commission:

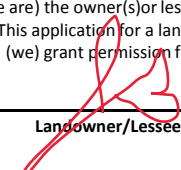
- **ADOPT** the Director's analysis and findings, and forward a **RECOMMENDATION OF APPROVAL** to the CBJ Assembly for the Calhoun Avenue Reconstruction Project.
- **APPROVE** the waiver of road construction standards for the Calhoun Avenue Reconstruction Project.

STAFF REPORT ATTACHMENTS

Item	Description
Attachment A	Application Packet
Attachment B	CCFR maneuverability and impacts
Attachment C	Sanborn Maps for the area
Attachment D	Abutters Notice
Attachment E	Public Notice Sign
Attachment F	Public Meeting Notes
Attachment G	Public Comments
Attachment H	ProHNS contact list

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 Delta Drive, Tongass Boulevard, Calhoun Ave, Crest Street, Douglas 4th Street - specific locations identified by project titles and attached descriptions		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot)		
	Parcel Number(s)		
	This property located in the downtown historic district This property located in a mapped hazard area, if so, which _____		
	LANDOWNER/ LESSEE		
	Property Owner CBJ	Contact Person Bohan	Phone Number(s) 0876
	Mailing Address		
	E-mail Address john.bohan@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	11/17/20 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 CBJ Engineering	Contact Person "SAME"	Phone Number(s) "SAME"	
Mailing Address			
E-mail Address "SAME"			
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 CSP20-0011	Intake Initials  11/19/2020
	Date Received 11/19/20



CITY/STATE PROJECT AND LAND ACTION REVIEW APPLICATION

Packet Page 652 of 797

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 Complete street and underground utility maintenance (and replacements as necessary) on the following streets: Delta Drive, Tongass Boulevard, Calhoun Ave, Crest Street, Douglas 4th Street
	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.: _____ NO Capital Improvement Program # (CIP) YES -see attached narrative _____ Local Improvement District # (LID) _____ State Project # _____
	ESTIMATED PROJECT COST: \$ n/a
	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
CSP20-009	11/19/20

City and State project review is outlined in CBJ 49.15.580

Each application for a City/State Project is reviewed by the Planning Commission at a public hearing. The permit procedure is intended to provide the Commission the flexibility necessary to make recommendations tailored to individual applications.

Application: An application for a City/State Project Review 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 City/State Project Review Application and Development Permit Application forms.
2. **Fees:** No fee required for projects that cost less than \$2.5 million. For projects costing more than this amount, the fee is \$1,600.00. 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. Plat, site plan, floor plan and elevation views of existing and proposed structures and land;
 - 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; and,
 - 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. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

Hearing: All City/State Project Review Permit Applications must be reviewed by the Planning Commission. 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. The Planning Commission will make a recommendation based on staff's analysis and forward it to the Assembly for final approval/denial.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

CSPs – Street and CBJ Utilities’ maintenance projects proposed for 2021 construction season

~~**Delta Drive (R72-148):** segment: Valley Boulevard to end. Add sidewalk to one side, rehabilitate road prism, and drainage, replace underground water and sewer systems that have exceeded expected service life, repave roadway~~

~~**Tongass Boulevard(R72-152)** segment: Jennifer Drive north to end at Loop Road: Add second sidewalk as identified by SRTS, rehabilitate road prism and drainage, replace underground water and sewer systems that have exceeded expected service life, replace existing sidewalk and repave roadway~~

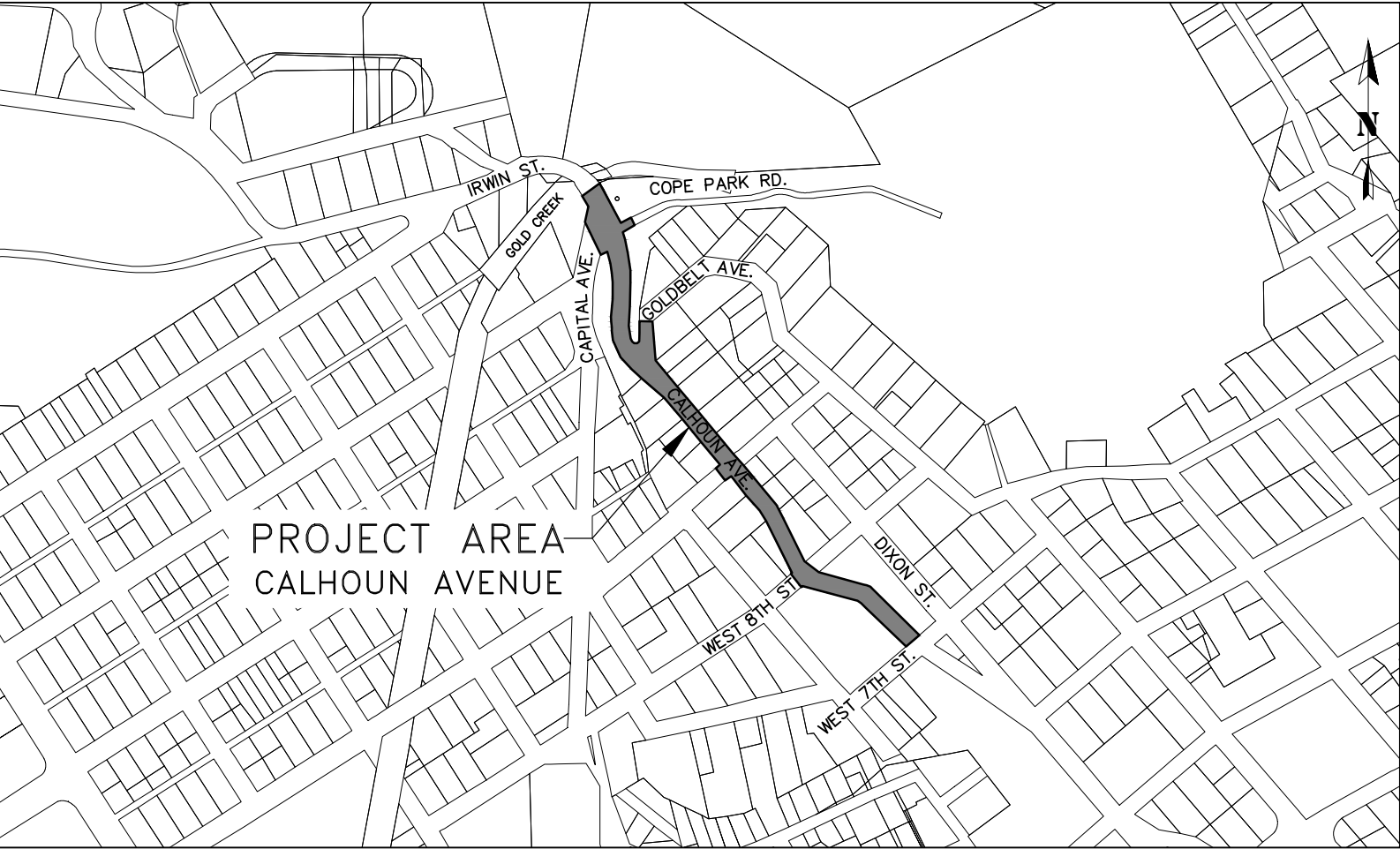
Calhoun Avenue(R72-132): [2 phases] – 1. Governor’s house to Cope Park: Rehabilitate road prism and drainage, replace water and sewer system that have exceed expected service life, replace sidewalks and repave roadway – scheduled for summer 2021
2. Main Street to Governor’s House: Rehabilitate road prism and repave roadway minor utility improvements as identified during design – scheduled for summer 2022

~~**Crest Street(COVID Bond project – CIP number not assigned yet):** segment: Old Dairy Rd to Yandukin. Add sidewalk to one side, rehabilitate road prism and drainage, replace water and partial sewer system that have exceed expected service life, repave roadway~~

~~**Douglas 4th Street F to I and Side Streets Improvements (R72-154):** segment: F to I Streets. Replace existing water and sewer infrastructure, which have exceeded expected service life, improve drainage infrastructure within these existing gravel roadways. Paving of these gravel roadways is not funded at this time.~~

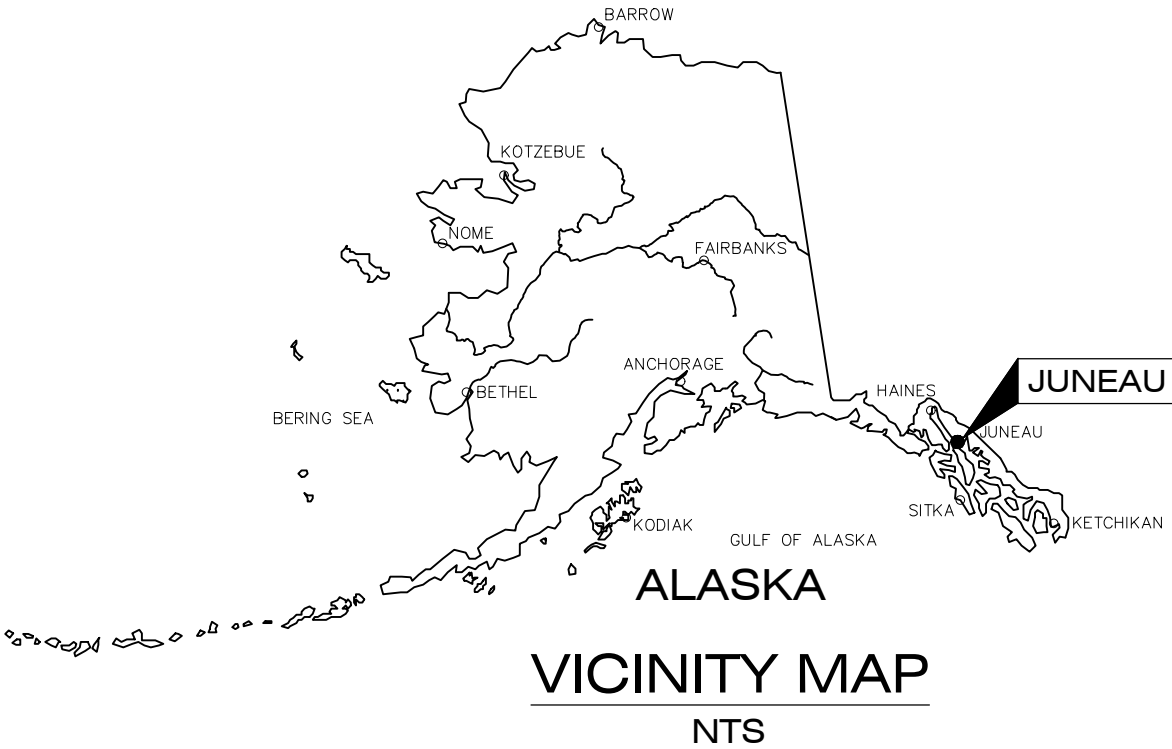
CALHOUN AVENUE RECONSTRUCTION

CBJ PROJECT NO. BE21-117
CITY & BOROUGH OF JUNEAU, ALASKA



PROJECT LOCATION MAP
NTS

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	LEGEND, ABBREVIATIONS & GENERAL NOTES
3-4	TYPICAL SECTIONS
5	PROJECT PHASING AND COORDINATION PLAN
6-11	DETAILS
12	SUMMARY TABLES
13	GRADING - BOP TO 12+90
14	GRADING - 12+90 TO 15+75
15	GRADING - 15+75 TO 18+40
16	GRADING - 18+40 TO 20+75
17	PLAN - BOP TO 12+90
18	PLAN - 12+90 TO 15+75
19	PLAN - 15+75 TO 18+40
20	PLAN - 18+40 TO 20+75
21	PROFILE - BOP TO 15+75
22	PROFILE - 15+75 TO EOP



VICINITY MAP
NTS

PRELIMINARY
PLANS

RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY

CERTIFICATE OF AUTHORIZATION
#100662

DRAWN BY: E. ROEMELING
DESIGNED BY: E. ROEMELING
CHECKED BY: L. CHAMBERS

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CITY AND BOROUGH OF
JUNEAU
ALASKA'S CAPITAL CITY

ENGINEERING & PUBLIC WORKS

CALHOUN AVENUE
RECONSTRUCTION

BE21-117

COVER SHEET

SHEET NUMBER	
1	OF
22	

LEGEND			
DESCRIPTION	EXISTING	REMOVE	PROPOSED
ASPHALT	EDGE OF ASPHALT		HATCHED AREA
BOLLARDS	● ●	⊗ ⊗	● ●
BUILDING			
CONCRETE			
CURB & GUTTER			
CURB – NO GUTTER			
FENCE	* * * * *		
FIRE HYDRANT			
MONUMENT			
PROPERTY LINE	— — — — —		
SANITARY SEWER CLEANOUT	○		
SANITARY SEWER PIPE	PIPE SIZE & TYPE		
SANITARY SEWER MANHOLE			
SIDEWALK RAMP			
SAWCUT & MTE LIMITS			
SIGN			
STORM DRAIN CATCH BASIN			
STORM DRAIN PIPE	PIPE SIZE & TYPE SD	PIPE SIZE & TYPE SD	SD
STORM DRAIN UNDERDRAIN	UD		UD
STORM DRAIN MANHOLE, GRATE			
STORM DRAIN MANHOLE, SOLID LID			
TREES			
UNDERGROUND PIPE CAP	[		
UTILITY POLE			
UTILITY POLE WITH LUMINAIRE			
WATER LINE PIPE	PIPE SIZE & TYPE	PIPE SIZE & TYPE	
WATER VALVE BOX			

ABBREVIATIONS

AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
BOP	BEGINNING OF PROJECT
BTM	BOTTOM
BVC	BEGIN VERTICAL CURVE
CB	CATCH BASIN
CBJ	CITY & BOROUGH OF JUNEAU
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
EL	ELEVATION
EOP	END OF PROJECT
EVC	END VERTICAL CURVE
EX	EXISTING
FG	FINISHED GRADE
FRP	FIBERGLASS REINFORCED PLASTIC
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH PRESSURE
INV	INVERT
LP	LOW PRESSURE
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
MH	MANHOLE
MIN	MINIMUM
MTE	MATCH TO EXISTING
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PRC	POINT OF REVERSE CURVATURE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
RP	RADIUS POINT
RT	RIGHT
ROW	RIGHT-OF-WAY
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBG	TOP BACK OF GUTTER
TBM	TEMPORARY BENCHMARK
TP	TOP OF PAVEMENT
TYP	TYPICAL
UD	UNDERDRAIN
VPC	VERTICAL POINT OF CURVATURE
VPT	VERTICAL POINT OF TANGENCY

GENERAL NOTES

1. CBJ ENGINEERING STANDARD DETAILS BOOK FOR CIVIL ENGINEERING PROJECTS AND SUBDIVISION IMPROVEMENTS FOURTH ADDITION DATED AUGUST, 2011 AND CBJ ENGINEERING STANDARD SPECIFICATIONS DATED DECEMBER, 2003 ARE MADE A PART OF THIS CONTRACT, INCLUDING ALL ERRATA (NOS. 1–16) AND CURRENT REVISIONS AS APPLICABLE.
2. CALL 586–1333 BEFORE YOU DIG FOR UNDERGROUND POWER, TELEPHONE AND CABLE. CALL 811 ALASKA DIGLINE BEFORE YOU DIG FOR UNDERGROUND ACS & GCI. LOCATIONS AND ELEVATION OF EXISTING UNDERGROUND WATER, SEWER, POWER, TELEPHONE AND CABLE TELEVISION SHOWN ON THE PLANS WERE DERIVED FROM CBJ AS–BUILTS AND FIELD LOCATES. THE ACTUAL LOCATION OF UTILITIES MAY VARY FROM THOSE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING THE UTILITIES THROUGHOUT THE CONSTRUCTION OF THE PROJECT. ANY DAMAGE TO THE UNDERGROUND UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
3. THE ESTIMATED TOTAL AREA OF DISTURBANCE RESULTING FROM THESE IMPROVEMENTS IS APPROXIMATELY 0.8 ACRES.
4. THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) HAS IDENTIFIED SEVERAL CONTAMINATED SITES WITHIN 1,500 FEET OF THE PROJECT LIMITS THAT ARE CURRENTLY IN "ACTIVE" OR "INSTITUTIONAL CONTROL" CLEANUP STATUS. THE ONLY SITE IN THE IMMEDIATE PROJECT AREA IS THE GOVERNORS RESIDENCE, WHICH IS LISTED AS "ACTIVE" AND "CLEANUP COMPLETE – INSTITUTIONAL CONTROLS". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSULT DEC AND OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK.
5. FINISHED GRADE AND ALIGNMENT ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. LOCATION OF PROPOSED WATER, SEWER AND STORM DRAINAGE FACILITIES ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
6. PROPERTY LINE LOCATIONS USED IN THESE PLANS ARE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT BOUNDARY SURVEY.
7. THE CONTRACTOR SHALL PERFORM A CLOSED LEVEL LOOP THROUGH ALL TBM'S TO VERIFY ELEVATIONS PRIOR TO BEGINNING ANY WORK.
8. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. BRASS CAP MONUMENTS, REBARS, CONCRETE NAILS, CHISELED X'S) PRIOR TO CONSTRUCTION AND REMONUMENT AFTER SURFACING IS REPLACED. EXISTING SURVEY MONUMENTS MAY NOT BE SHOWN ON THE DRAWINGS. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR.
9. CONTRACTOR SHALL ENSURE GARBAGE PICKUP, PRIVATE AND BUSINESS DELIVERIES, AND DAILY MAIL SERVICE WILL BE UNINTERRUPTED TO ALL BUSINESS AND RESIDENCES AFFECTED BY THIS PROJECT.
10. THE CONTRACTOR SHALL NOTIFY EACH PROPERTY OWNER OF EACH DRIVEWAY CLOSURE 48 HOURS PRECEDING THE DAY THE DRIVEWAY IS TO BE CLOSED TO VEHICULAR ACCESS. THE PROPERTY OWNER SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO DRIVEWAY CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.
11. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT, OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY, WITHOUT THE WRITTEN APPROVAL OF THE PROPERTY OWNER.
12. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES (LONI VANKIRK AT 723–4975) OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" TO CBJ WATER UTILITIES SUPERINTENDENT FOR APPROVAL AT LEAST 48 HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. NO WATER SERVICE INTERRUPTION MAY PROCEED UNTIL THIS APPROVAL IS OBTAINED. THE CONTRACTOR SHALL NOT SHUT OFF WATER SUPPLY TO SERVICES FOR MORE THAN 4 HOURS AT ONE TIME.
13. ALL MATERIALS PROPOSED FOR THE WATER SYSTEM THAT COME IN DIRECT CONTACT WITH THE WATER SHALL BE CERTIFIED BY AN ANSI ACCREDITED ORGANIZATION TO CONFORM WITH ANSI/NSF STANDARD 61 OR AN ANSI/NSF STANDARD WITH EQUIVALENT HEALTH REQUIREMENTS.
14. THE MATERIALS USED FOR THIS PROJECT SHALL COMPLY WITH THE NEW LEAD FREE REQUIREMENTS INCLUDING NOT MORE THAN 0.2% WHEN USED WITH RESPECT TO SOLDER AND FLUX AND NOT MORE THAN A WEIGHTED AVERAGE OF 0.25% LEAD WHEN USED WITH RESPECT TO THE WETTED SURFACES OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS AND FIXTURES.
15. THE CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER PIPES, INCLUDING ALL SERVICES ALONG THE STORM DRAIN AND WATER PIPE ALIGNMENTS TO DETERMINE PIPE INSULATION LOCATIONS AND TO ENSURE DAMAGE DOES NOT OCCUR TO THE SERVICE PIPES.
16. ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN (NOT ALL ARE LABELED) ON DRAWINGS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTIONS TO EXISTING PIPES, AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
17. THE PLAN DRAWINGS DO NOT SHOW ALL PLANTINGS AND OTHER LANDSCAPING THAT WILL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO PLANTINGS OR LANDSCAPING ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
18. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF OFF–SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
19. ALL ASPHALT PAVEMENT TO BE REMOVED AND DISPOSED OF SHALL BE DELIVERED TO A STOCKPILE AREA AT THE LEMON CREEK CITY PIT AT A LOCATION TO BE DESIGNATED BY THE ENGINEER. CONTACT THE ENGINEER FOR THE EXACT LOCATION OF THE STOCKPILE.
20. ALL OTHER MATERIALS TO BE REMOVED AND DISPOSED OF SHALL BECOME THE PROPERTY OF THE CONTRACTOR, INCLUDING CONCRETE, UNSUITABLE SOILS, WATER PIPE, SEWER PIPE, CULVERT, STORM AND SEWER STRUCTURES, SIGN POSTS AND ETC.
21. ALL EXISTING STORM DRAINAGE PIPES, CULVERTS AND STRUCTURES WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF IN THEIR ENTIRETY UNLESS OTHERWISE INDICATED IN THE CONTRACT DOCUMENTS. WATER AND SANITARY SEWER PIPE CALLED OUT ON THE DRAWINGS FOR REMOVAL SHALL BE REMOVED AND DISPOSED OF IN THEIR ENTIRETY.

PRELIMINARY
PLANS

RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY

1945 ALEX HOLDEN WAY #101
JUNEAU, AK 99801

CERTIFICATE OF AUTHORIZATION
#100662

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CITY AND BOROUGH OF
JUNEAU
ALASKA'S CAPITAL CITY

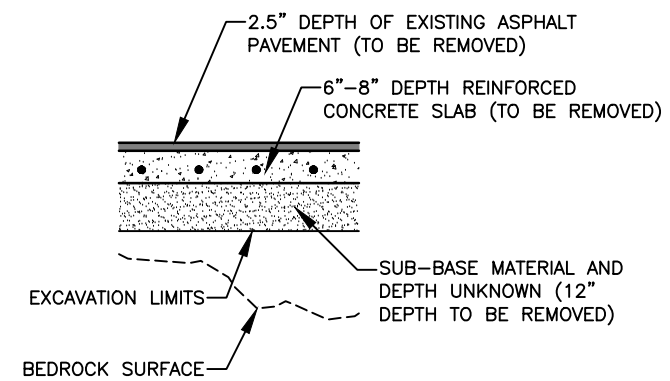
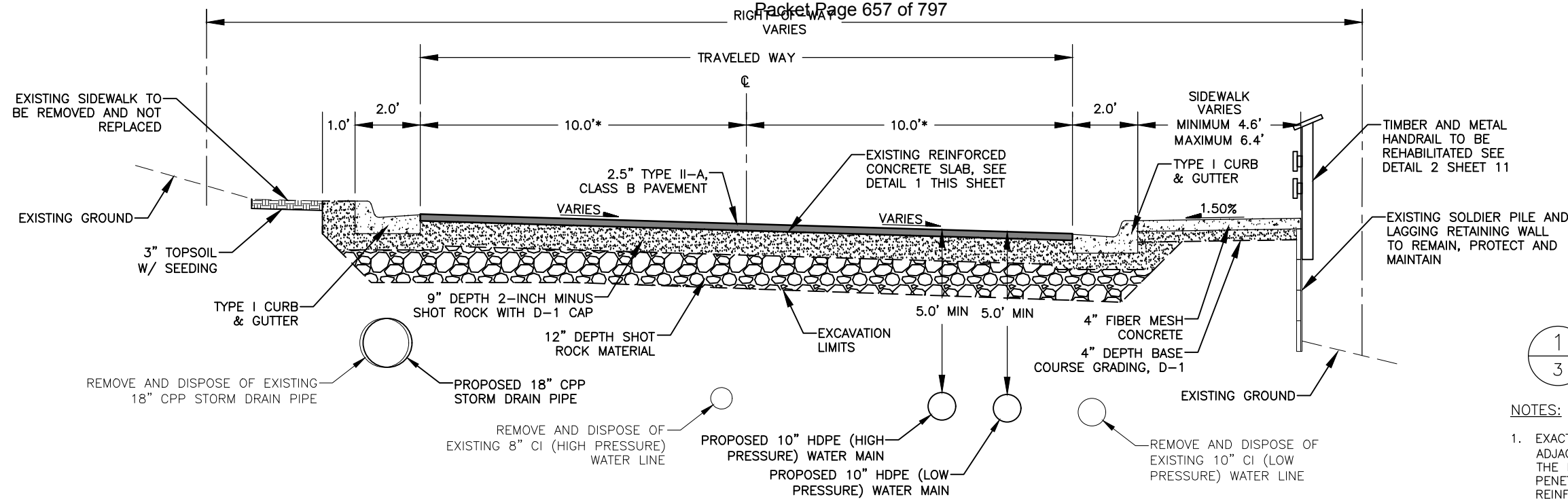
ENGINEERING & PUBLIC WORKS

CALHOUN AVENUE
RECONSTRUCTION

BE21-117

LEGEND,
ABBREVIATIONS &
GENERAL NOTES

SHEET NUMBER	
2	OF
22	



1
3
EXISTING ROADWAY SECTION
SCALE: NOT TO SCALE

- NOTES:
1. EXACT LIMITS OF REINFORCED CONCRETE SLAB UNKNOWN. FROM RECENT ADJACENT CBJ ROAD RECONSTRUCTION PROJECT FILES, WHAT'S VISIBLE AT THE ROADWAY SURFACE, AND RESULTS OBTAINED FROM A GROUND PENETRATING RADAR INVESTIGATION PERFORMED FOR THIS PROJECT THE REINFORCED CONCRETE SLAB IS ASSUMED TO EXIST FROM THE BOP TO EOP FROM EXISTING CURB TO EXISTING CURB.
 2. EXACT ELEVATION OF BEDROCK UNKNOWN. FROM DISCUSSIONS WITH CBJ WATER DEPARTMENT STAFF ABOUT SHALLOW BURY DEPTH OF EXISTING 4" STEEL WATER LINE AND RESULTS OBTAINED FROM GROUND PENETRATING RADAR INVESTIGATION PERFORMED FOR THIS PROJECT IT IS BELIEVED THAT BEDROCK EXISTS WITHIN UTILITY TRENCHING LIMITS.
 3. EXCAVATION OF BEDROCK TO INSTALL SHOT ROCK WILL NOT BE REQUIRED.

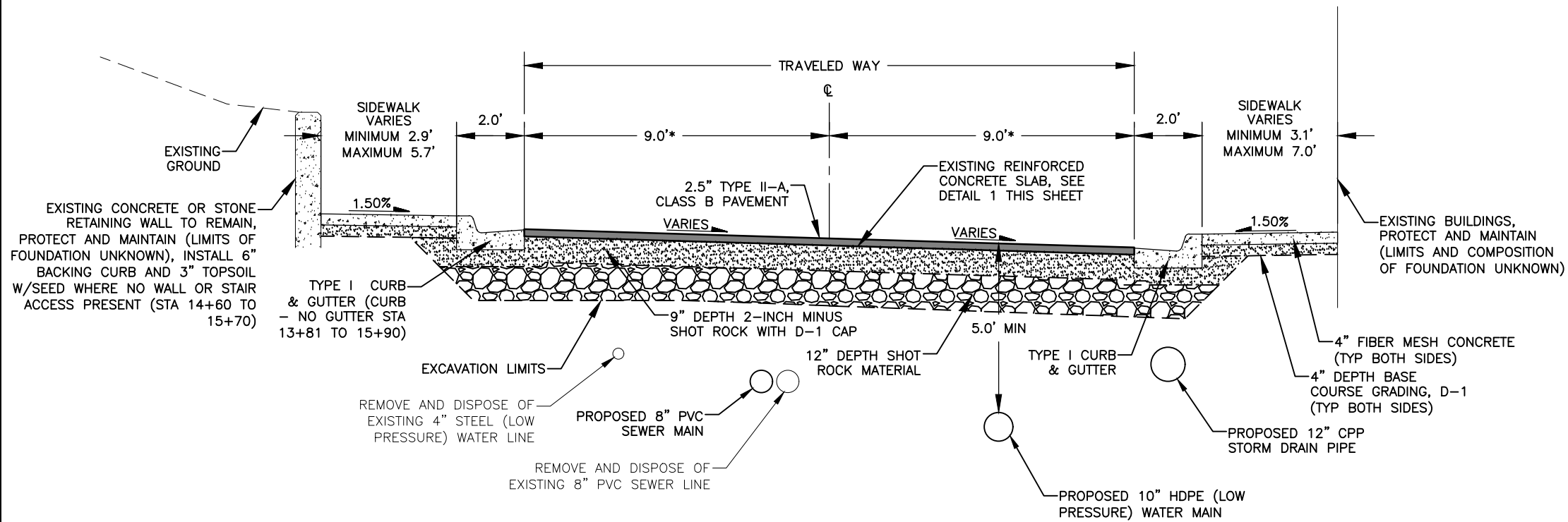
TYPICAL SECTION NOTES

1. TOP OF ASPHALT ALONG NEW GUTTER SHALL BE 1/4-INCHES ABOVE LIP OF GUTTER.
2. THE LIMITS OF USABLE MATERIAL, BASE COURSE GRADING D-1 AND TOPSOIL BEHIND THE PROPOSED CURB & GUTTER/VALLEY GUTTER VARY IN DISTANCE. PLACE AND GRADE THESE MATERIALS TO PROVIDE A SMOOTH, WELL-DRAINED TRANSITION TO EXISTING GRADES, AS DIRECTED BY THE ENGINEER.
3. PLACE AND GRADE TOPSOIL AND BASE COURSE GRADING, D-1 USED TO MATCH TO EXISTING GROUND TO PROVIDE A SMOOTH, WELL DRAINED TRANSITION TO EXISTING GRADES, AS DIRECTED BY THE ENGINEER.
4. EXISTING OVERHEAD ELECTRICAL LINES ARE NOT SHOWN IN PLAN VIEWS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND MAINTAINING THE UTILITY THROUGHOUT CONSTRUCTION OF THE PROJECT.
5. BACKFILL TRENCHES AND VOIDS FROM EXISTING UTILITY REMOVALS WITH NATIVE MATERIAL TO EXCAVATION LIMITS. PLACE AND COMPACT MAX 12 INCH THICK LIFTS TO SATISFACTION OF THE ENGINEER.

PAVING SEQUENCE NOTES

1. LAYDOWN OPERATIONS SHALL BE CONDUCTED IN A MANNER WHICH ENSURES THAT THE MINIMUM TEMPERATURE ALONG THE CENTERLINE EDGE OF THE FIRST PAVED LANE DOES NOT FALL BELOW 200°F BEFORE THE SECOND LANE IS PAVED.

CALHOUN AVENUE TYPICAL SECTION STATION RANGE 10+75 TO 13+50
NTS
*WIDTH VARIES AT INTERSECTIONS



CALHOUN AVENUE TYPICAL SECTION STATION RANGE 13+50 TO 15+90
NTS
*WIDTH VARIES AT INTERSECTIONS

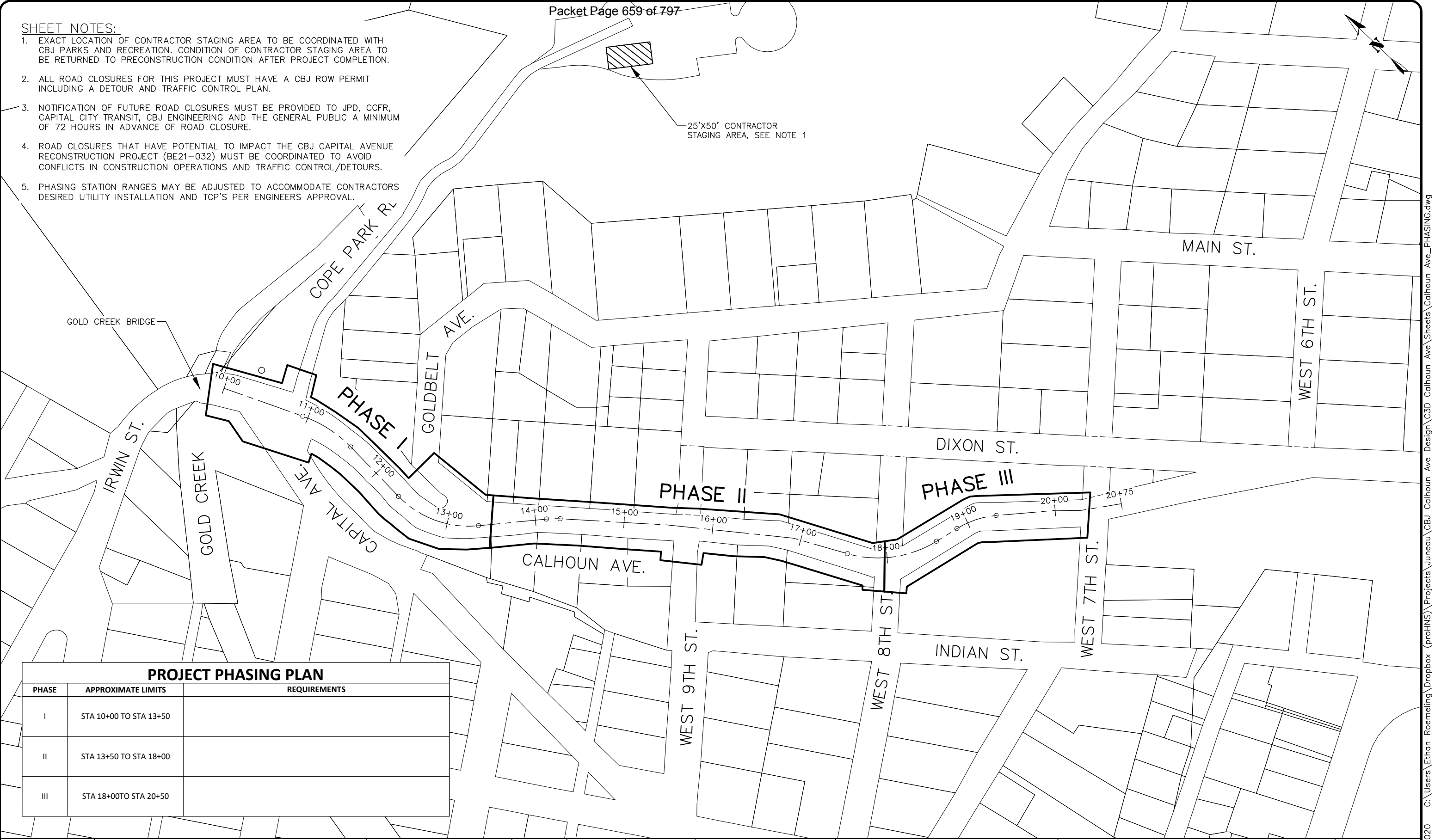
PRELIMINARY PLANS	RECORD OF REVISIONS				 1945 ALEX HOLDEN WAY #101 JUNEAU, AK 99801 solutions@proHNS.com www.proHNS.com	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION BE21-117	TYPICAL SECTIONS - 1	SHEET NUMBER
	No.	DATE	DESCRIPTION	BY					3
									OF
									22

INS.com ENGINEERING & PUBLIC WORKS
CSP2020 0011, ATTACHMENT A, Page 8

SHEET NOTES:

- 1. EXACT LOCATION OF CONTRACTOR STAGING AREA TO BE COORDINATED WITH CBJ PARKS AND RECREATION. CONDITION OF CONTRACTOR STAGING AREA TO BE RETURNED TO PRECONSTRUCTION CONDITION AFTER PROJECT COMPLETION.
- 2. ALL ROAD CLOSURES FOR THIS PROJECT MUST HAVE A CBJ ROW PERMIT INCLUDING A DETOUR AND TRAFFIC CONTROL PLAN.
- 3. NOTIFICATION OF FUTURE ROAD CLOSURES MUST BE PROVIDED TO JPD, CCFR, CAPITAL CITY TRANSIT, CBJ ENGINEERING AND THE GENERAL PUBLIC A MINIMUM OF 72 HOURS IN ADVANCE OF ROAD CLOSURE.
- 4. ROAD CLOSURES THAT HAVE POTENTIAL TO IMPACT THE CBJ CAPITAL AVENUE RECONSTRUCTION PROJECT (BE21-032) MUST BE COORDINATED TO AVOID CONFLICTS IN CONSTRUCTION OPERATIONS AND TRAFFIC CONTROL/DETOURS.
- 5. PHASING STATION RANGES MAY BE ADJUSTED TO ACCOMMODATE CONTRACTORS DESIRED UTILITY INSTALLATION AND TCP'S PER ENGINEERS APPROVAL.

25'X50' CONTRACTOR STAGING AREA, SEE NOTE 1



PROJECT PHASING PLAN

PHASE	APPROXIMATE LIMITS	REQUIREMENTS
I	STA 10+00 TO STA 13+50	
II	STA 13+50 TO STA 18+00	
III	STA 18+00 TO STA 20+50	

PRELIMINARY PLANS	RECORD OF REVISIONS			
	No.	DATE	DESCRIPTION	BY



proHNS LLC
CERTIFICATE OF AUTHORIZATION #100662

DRAWN BY: E. ROEMELING
DESIGNED BY: E. ROEMELING
CHECKED BY: L. CHAMBERS

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www.proHNS.com



CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

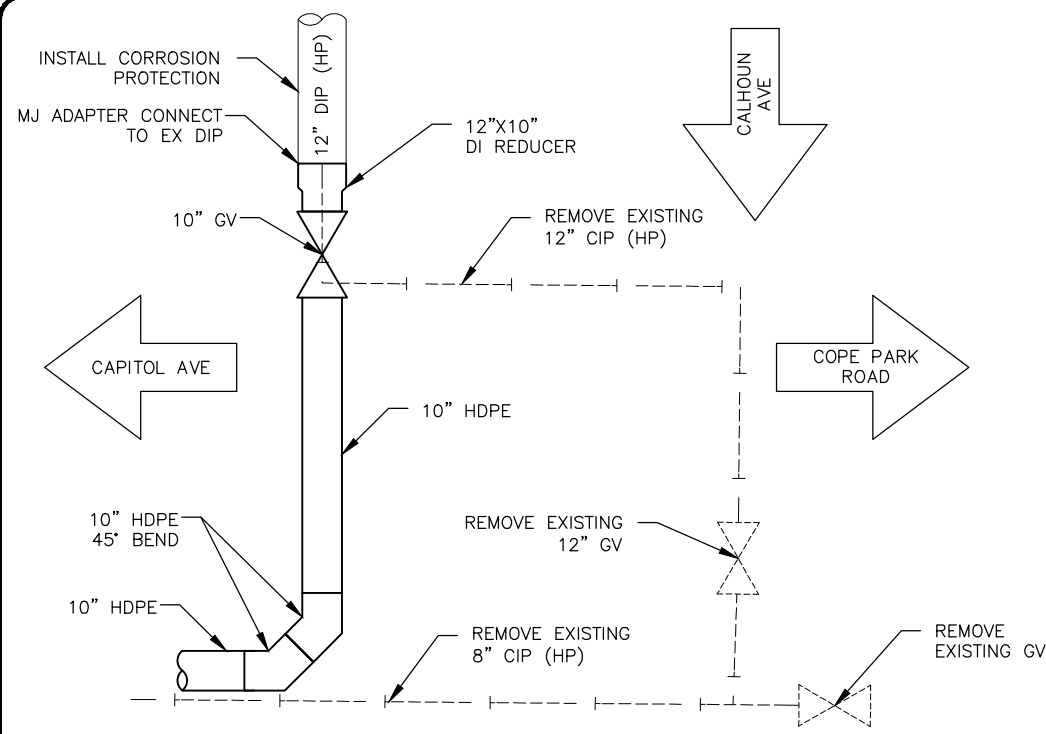
ENGINEERING & PUBLIC WORKS

CALHOUN AVENUE RECONSTRUCTION

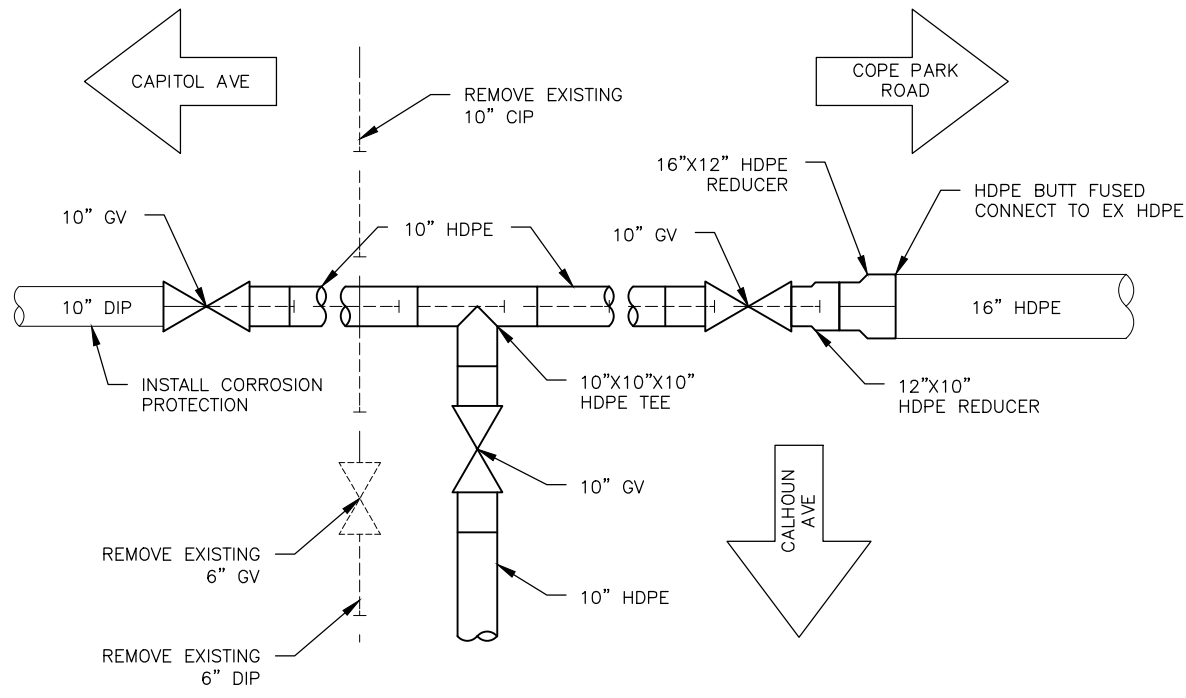
BE21-117

PROJECT PHASING AND COORDINATION PLAN

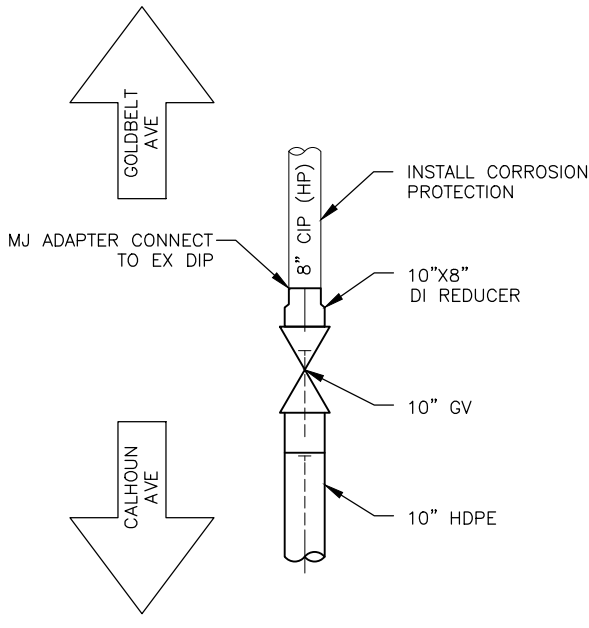
SHEET NUMBER	
5	OF
22	



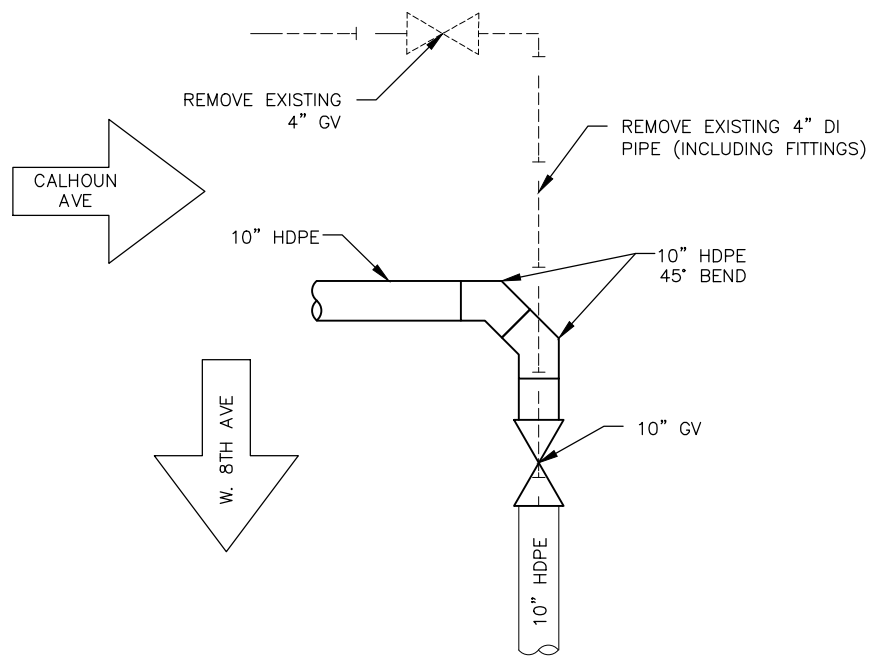
HP WATERLINE CONNECTION
DETAIL ~STA 10+78
SCALE: NOT TO SCALE



LP WATERLINE CONNECTION
DETAIL ~STA 10+88
SCALE: NOT TO SCALE



HP WATERLINE CONNECTION
DETAIL ~STA 13+24
SCALE: NOT TO SCALE



LP WATERLINE CONNECTION
DETAIL ~STA 18+98
SCALE: NOT TO SCALE

- SHEET 6 NOTES:
1. ALL DI CONNECTIONS SHALL BE MEGALUGGED OR CONNECTED WITH LOCKING FIELD GASKETS. ALL HDPE CONNECTIONS SHALL BE BUTT FUSED, ELECTROFUSION COUPLERS ARE DISCOURAGED AND SHALL ONLY BE ALLOWED WITH PRIOR, WRITTEN APPROVAL OF THE ENGINEER.

PRELIMINARY PLANS	RECORD OF REVISIONS				 1945 ALEX HOLDEN WAY #101 JUNEAU, AK 99801 solutions@proHNS.com www.proHNS.com	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION BE21-117	WATER LINE CONNECTION DETAILS	SHEET NUMBER
	No.	DATE	DESCRIPTION	BY					6
									OF
									22



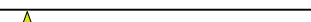
Diagram illustrating the profile of a pipe repair connection. The diagram shows a cross-section of a pipe with a thermite weld connection. The components and labels are:

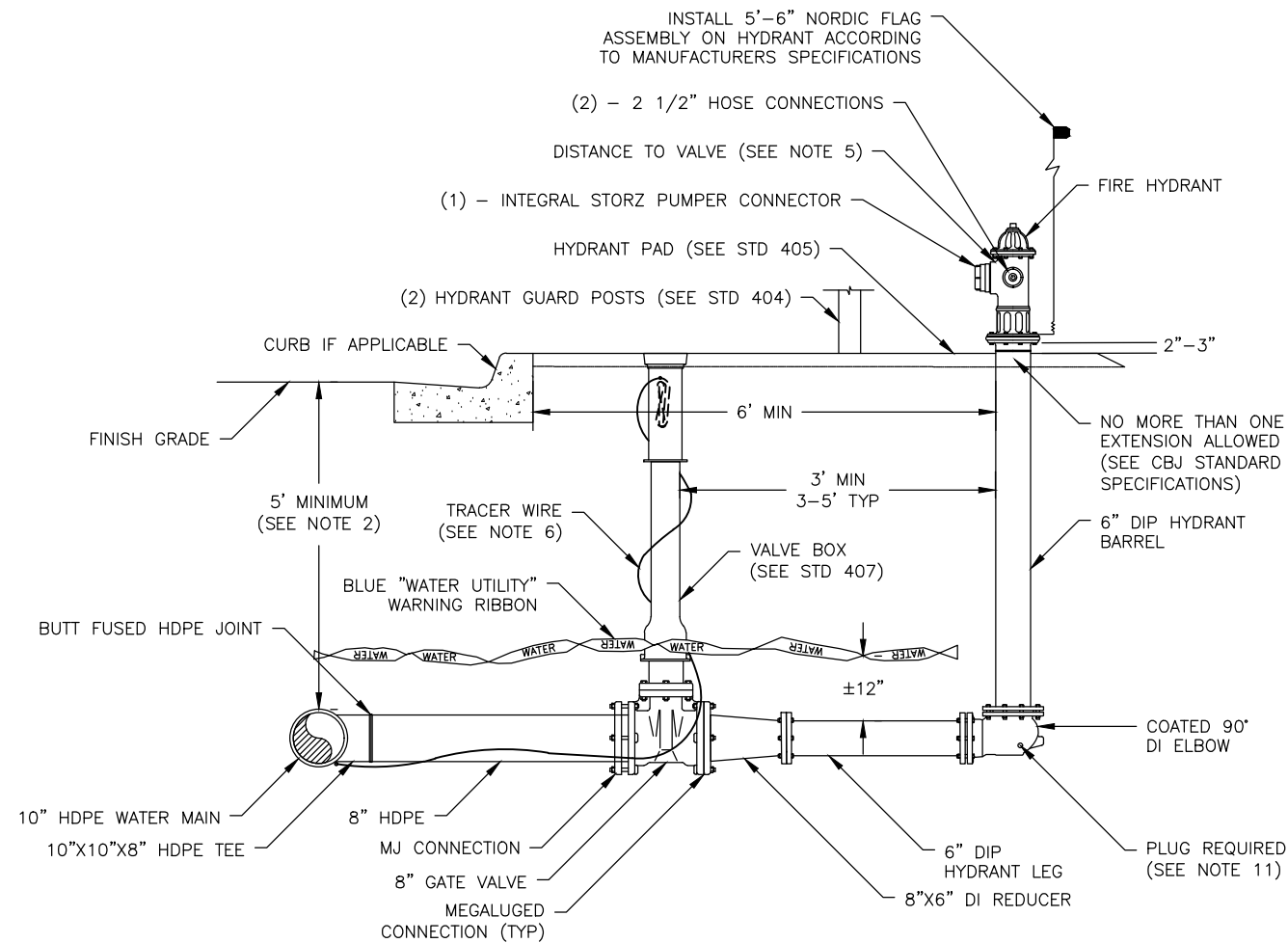
- THERMITE WELD CONNECTION PER SPECIFICATIONS
- DIP, TYP.
- VALVE, TRANSITION COUPLING OR LEAK REPAIR SLEEVE
- HDPE OR OTHER PIPE
- 1.0' MIN (distance from the weld to the anode)
- GALVANIC ANODE PER SPECIFICATIONS
- #8 AWG STRANDED COPPER WIRE WITH BLACK HMWPE INSULATION PER SPECIFICATIONS

PROFILE

4 GALVANIC ANODE INSTALLATION
7 AT FIRE HYDRANT ASSEMBLY DETAIL
SCALE: NOT TO SCALE



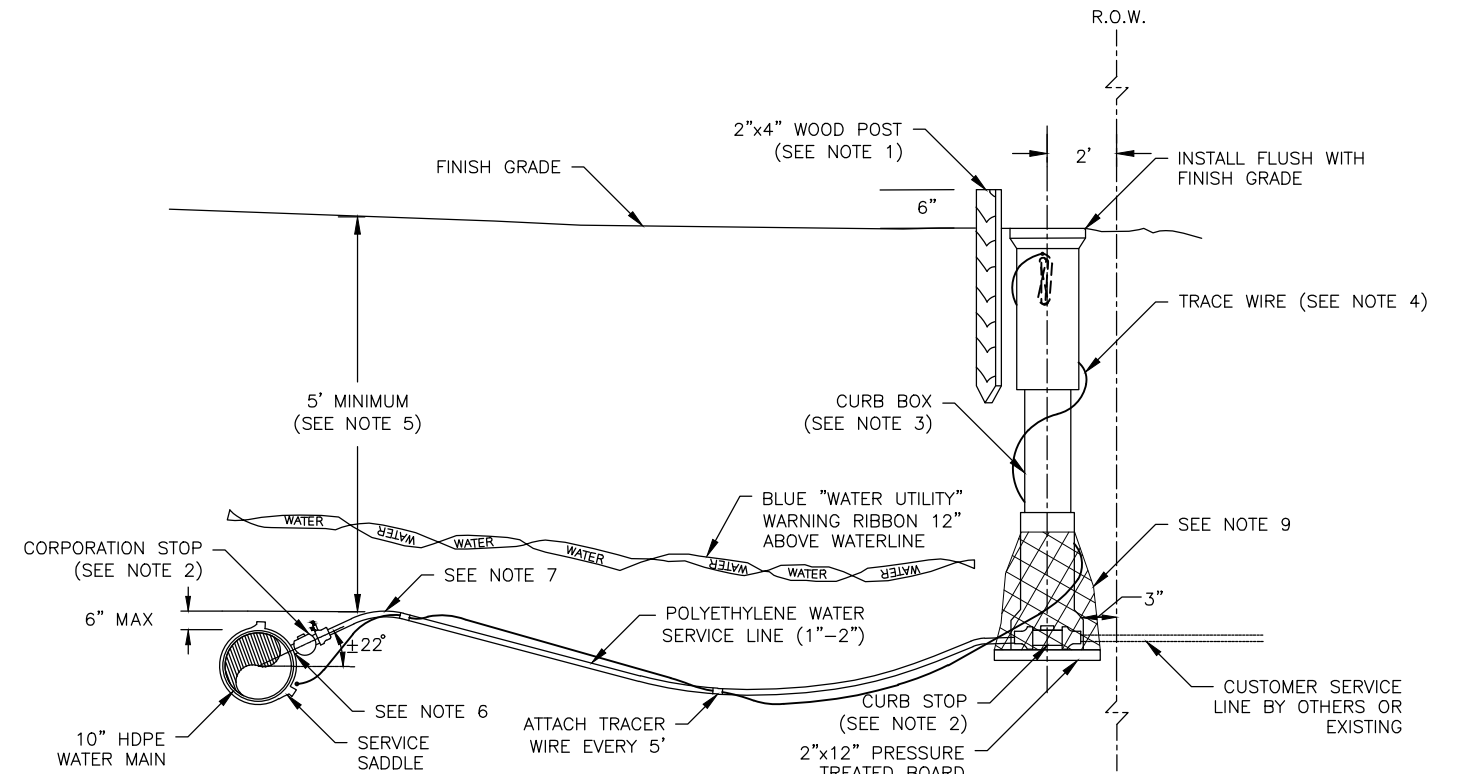
PRELIMINARY PLANS	RECORD OF REVISIONS				DRAWN BY: E. ROEMELING	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION	WATER LINE DETAILS	SHEET NUMBER
	No.	DATE	DESCRIPTION	BY	DESIGNED BY: E. ROEMELING				7
					CHECKED BY: L. CHAMBERS				OF
									22



1 8 FIRE HYDRANT ASSEMBLY DETAIL SCALE: NOT TO SCALE

DETAIL 1/8 NOTES:

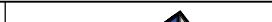
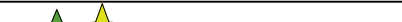
1. HYDRANT BARREL AND VALVE BOX SHALL BE PLUMB.
2. GROUND COVER SHALL BE 5' MINIMUM. ADDITIONAL COVER (MORE THAN 5') MAY BE REQUIRED BY THE ENGINEER.
3. ALL DI CONNECTIONS SHALL BE MEGALUGGED OR CONNECTED WITH LOCKING FIELD GASKETS. ALL HDPE CONNECTIONS SHALL BE BUTT FUSED, ELECTROFUSION COUPLERS ARE DISCOURAGED AND MAY ONLY BE ALLOWED WITH PRIOR, WRITTEN APPROVAL OF THE ENGINEER.
4. BENDS BETWEEN THE HYDRANT AND THE MAIN SHALL NOT EXCEED 11 1/4" UNLESS APPROVED BY THE ENGINEER.
5. ALL HYDRANTS SHALL BE PAINTED CATEPILLAR YELLOW, AND THE NUMBER OF FEET TO THE VALVE SHALL BE PRINTED IN BLACK 1/2" BLOCK LETTERS JUST BELOW THE TOP BONNET. PORT CAPS SHALL BE COLOR CODED PER NFPA STANDARD 291 AS DIRECTED BY THE CBJ WATER UTILITIES DEPARTMENT.
6. TRACER WIRE SHALL BE NO.10 AWG HIGH-STRENGTH COPPER CLAD STEEL WITH BLUE HDPE INSULATION JACKET. MAIN LINE TRACER WIRE SHALL NOT BE SPLICED AND SHALL BE CONTINUOUS BETWEEN VALVE BOXES. SERVICE AND HYDRANT LEGS SHALL USE WATERPROOF DIRECT BURY SPLICE CONNECTION LUGS. TRACER WIRE SHALL BE CONNECTED TO THE BOTTOM QUADRANT OF THE HDPE WATER PIPE. EACH END OF TRACER WIRE SHALL BE TERMINATED AT A VALVE BOX, TRACER WIRE SHALL RUN OUTSIDE THE VALVE BOX AND BE INSERTED INTO THE VALVE BOX THROUGH A 3/4" DRILLED HOLE WITHIN 9"-12" OF THE TOP. 5' OF ADDITIONAL TRACER WIRE SHALL BE NEATLY COILED WITHIN THE VALVE BOX.
7. INSTALL A PAVED HYDRANT PAD PER STANDARD 405 AND GUARD POSTS PER STANDARD 404.
8. HYDRANT SHALL BE MUELLER CENTURION 200 OR 250 WITH INTEGRAL STORZ PUMPER CONNECTION OR APPROVED EQUAL. CLOW F2500 SERIES HYDRANTS ARE NO LONGER ACCEPTED BY CBJ.
9. THIS STANDARD TO BE USED FOR ALL HYDRANTS AND BLOW-OFFS. ALTERNATE BLOW-OFF TYPE HYDRANTS ARE NO LONGER ACCEPTED BY CBJ.
10. FIRE HYDRANT TO THE VALVE SHALL BE TESTED TO A MINIMUM OF 200 PSI FOR TWO (2) HOURS PER STANDARD SPECIFICATION SECTION 02601 ARTICLE 3.5 PARAGRAPH B 2.
11. CBJ WATER UTILITIES DEPARTMENT SHALL DETERMINE FOR EACH HYDRANT INSTALLATION IF HYDRANT PLUGS SHALL BE REMOVED FOR SELF DRAINING. DO NOT BLOCK PLUG WITH THE THRUST BLOCK.

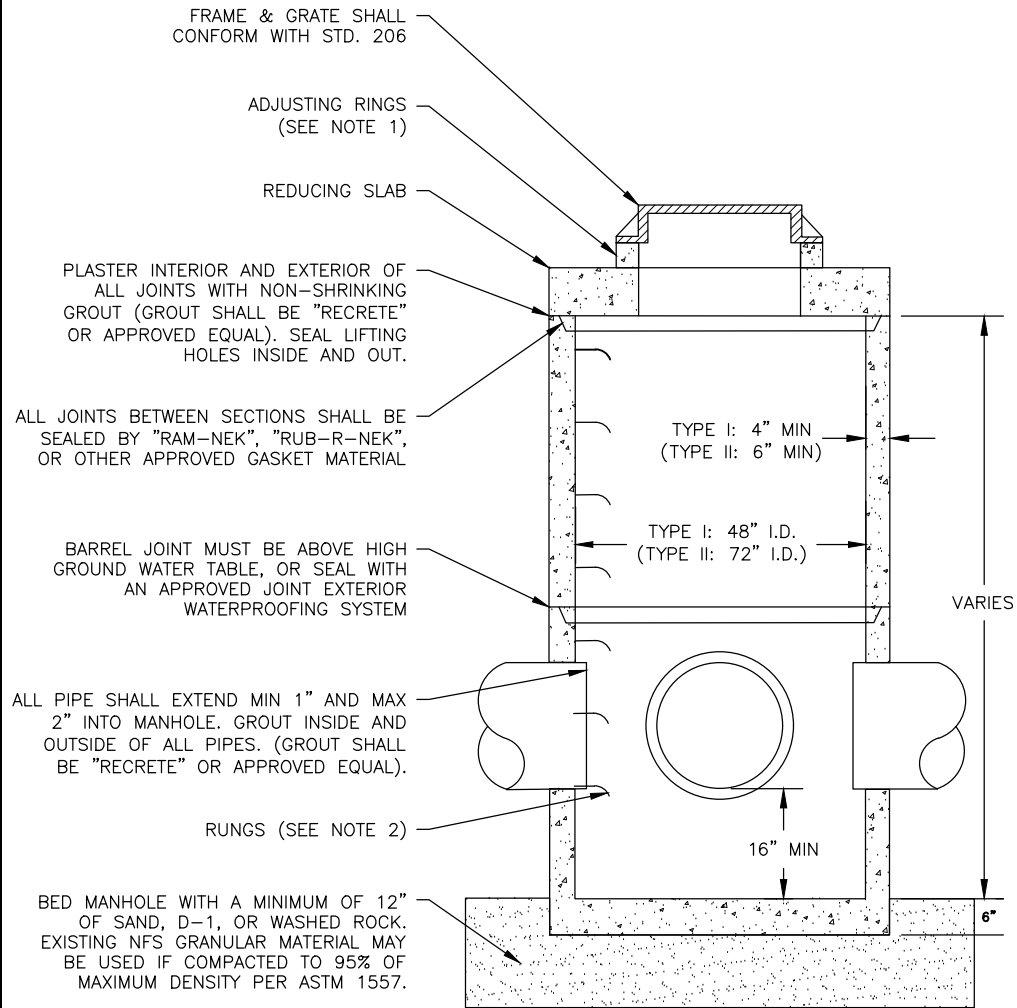


2 8 POLYETHYLENE WATER SERVICE DETAIL SCALE: NOT TO SCALE

DETAIL 2/8 NOTES:

1. AT CURB STOP MARK CURB BOX WITH BLUE 2"x4" WOOD POST OR MARK "W" ON CONCRETE CURB ABOVE THE SERVICE LINE OR CONNECT TO EXISTING LINE.
2. USE MUELLER CORPORATION STOP NO. B25025, FORD CORPORATION STOP NO. FB700-4, OR APPROVED EQUAL. USE MEULLER CURB STOP NO. H15201, OR NO. H15204, FORD CURB STOP B22-444 OR APPROVED EQUAL.
3. CURB BOX SHALL BE KEJRIWAL PACIFIC 145R 49"-62" LID, TOP, MIDDLE AND BOTTOM OR APPROVED EQUIVALENT.
4. TRACER WIRE SHALL BE NO.10 AWG HIGH-STRENGTH COPPER CLAD STEEL WITH BLUE HDPE INSULATION JACKET. MAIN LINE TRACER WIRE SHALL NOT BE SPLICED AND SHALL BE CONTINUOUS BETWEEN VALVE BOXES. SERVICES SHALL USE WATERPROOF DIRECT BURY SPLICE CONNECTION LUGS. TRACER WIRE SHALL BE CONNECTED TO THE BOTTOM QUADRANT OF THE HDPE WATER PIPE. EACH END OF TRACER WIRE SHALL BE TERMINATED AT A VALVE BOX, TRACER WIRE SHALL RUN OUTSIDE THE VALVE BOX AND BE INSERTED INTO THE VALVE BOX THROUGH A 3/4" DRILLED HOLE WITHIN 9"-12" OF THE TOP. 5' OF ADDITIONAL TRACER WIRE SHALL BE NEATLY COILED WITHIN THE VALVE BOX.
5. ALL SERVICES MUST HAVE A MINIMUM OF 5' OF COVER BELOW EXISTING CULVERTS AND DITCHES. ADDITIONAL DEPTH MAY BE REQUIRED BY THE ENGINEER. INSULATE SERVICE LINES PER CBJ STD 412 WHERE NEEDED.
6. HOLE DRILLED IN THE MAIN FOR THE CORPORATION STOP SHALL BE THE SAME DIAMETER AS THE SERVICE PIPE.
7. PROVIDE AN ADDITIONAL 12" OF SERVICE PIPE BEYOND STRAIGHT LINE LENGTH REQUIRED. LOOP AS SHOWN AT THE CORP STOP. MAINTAIN 5' MINIMUM BURIAL AT HIGH POINT OF SERVICE LINE.
8. MAINTAIN A MINIMUM OF 18" OF SEPARATION BETWEEN VALVE BOXES, AND BETWEEN VALVE BOXES AND OTHER STRUCTURES.
9. WRAP BOTTOM OF CURB BOX WITH FABRIC OR PLASTIC PRIOR TO BACKFILLING TO KEEP MATERIAL FROM INFILTRATING THE BOX.
10. SERVICE BOXES SHALL BE LOCATED 2 FEET INSIDE OF THE RIGHT-OF-WAY LINE.
11. CONTRACTOR TO SUPPLY ALL NECESSARY PARTS AND FITTINGS TO CONNECT THE PROPOSED 1"-2" WATER SERVICES TO THE EXISTING WATER SERVICES AFTER THE CURB STOP.

PRELIMINARY PLANS	RECORD OF REVISIONS				 1945 ALEX HOLDEN WAY #101 JUNEAU, AK 99801 solutions@proHNS.com www.proHNS.com	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION	WATER LINE DETAILS	SHEET NUMBER
	No.	DATE	DESCRIPTION	BY					8
									OF
									22



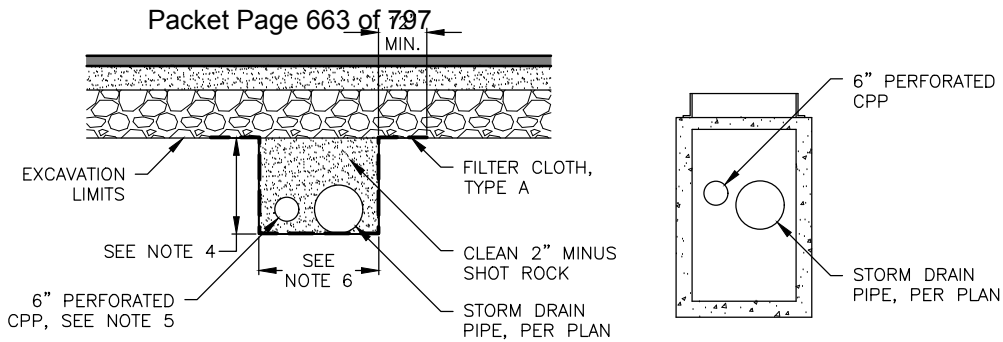
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CONCENTRIC STORM DRAIN MANHOLE
WITH REDUCING SLAB – TYPES I & II

SCALE: NOT TO SCALE

DETAIL 1/9 NOTES:

1. THE AREA BETWEEN THE TOP OF THE CATCH BASIN AND THE FRAME SHALL BE FILLED WITH CONCRETE MEETING THE REQUIREMENTS OF CBJ SPECIFICATION 03302-CONCRETE STRUCTURES. NO BRICKS, WOOD, STONES, ADJUSTING RINGS, OR OTHER GRADE ADJUSTMENT DEVICES SHALL BE USED. TEMPORARY FORM WORK SHALL BE CONSTRUCTED TO PROVIDE A SMOOTH INSIDE EXPOSED SURFACE FREE OF VOIDS AND PROJECTIONS. THE CONSTRUCTED FRAME SUPPORT MUST MATCH THE INTERIOR OF THE FRAME INSTALLED AS APPROVED BY THE ENGINEER.
2. RUNGS TO BE PLACED 12" O.C. ON UNOBSTRUCTED SIDE OF MANHOLE. LAST RUNG SHALL BE 18" MAX FROM BOTTOM OF MANHOLE, AND TOP RUNG SHALL BE 6" MAXIMUM FROM TOP OF CONE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, LAST RUNG SHALL BE PLACED 6" OVER SMALLEST PIPE. REFER TO A.S.T.M. C-478 FOR DESIGN REQUIREMENTS AND C-478-69 FOR MINIMUM STEEL FOR BARREL. BARREL SHALL BE IMBEDDED IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
3. FOR TYPE I MANHOLE, PRIMARY LEADS SHALL NOT EXCEED 30" C.M.P. OR 27" R.C.P. WITH INCLUDED ANGLE BETWEEN LEADS NO LESS THAN 135°. OR PRIMARY LEAD NOT TO EXCEED 24" C.M.P. OR 21" R.C.P. WITH INCLUDED ANGLE LESS THAN 135°.
4. FOR TYPE II MANHOLE, PRIMARY LEADS SHALL NOT EXCEED TWO 42" C.M.P. OR 36" R.C.P. WITH INCLUDED ANGLE BETWEEN LEADS NE LESS THAN 135° OR PRIMARY LEADS NOT TO EXCEED TWO 36" C.M.P. OR R.C.P. WITH INCLUDED ANGLE BETWEEN LEADS LESS THAN 135°.



TRENCH DETAIL

CONNECT TO STORM
DRAIN STURCTURE

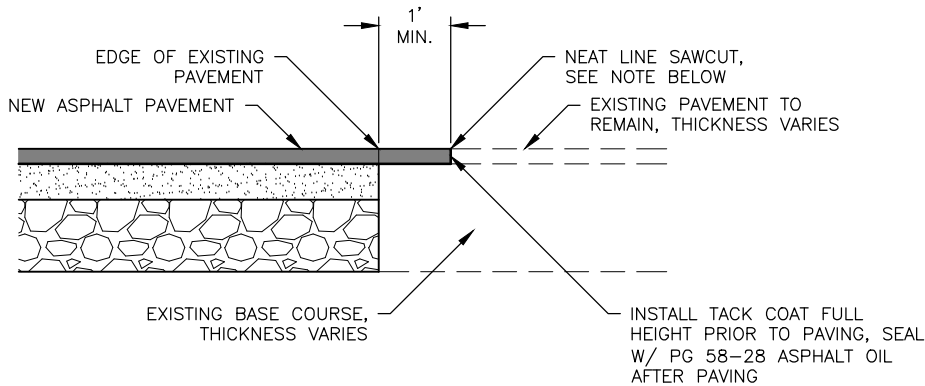
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6-INCH CPP UNDERDRAIN

SCALE: NOT TO SCALE

DETAIL 2/9 NOTES:

1. OUTFALL CONNECTIONS WILL BE INTO CATCH BASINS.
2. BOTH ENDS OF PIPES SHALL BE CONNECTED IN STORM DRAIN STRUCTURES OR CAPPED, SEE PLANS. FILTER CLOTH SHALL BE FOLDED AND OVERLAPPED TO SEAL END OF DRAIN ROCK SECTION.
3. PROVIDE KNOCK OUTS IN STORM DRAIN STRUCTURES LARGE ENOUGH TO ACCOMMODATE BOTH UNDERDRAIN AND STORM DRAIN PIPE.
4. DEPTH VARIES SEE PLAN OR PROFILE SHEETS.
5. MINIMUM PIPE SLOPE SHALL BE 1.00%.
6. TRENCH WIDTH SHALL BE 3'-2" WIDE AT 18" STORM PIPE CROSSINGS AND 1'-6" WIDE WHEN NO STORM DRAIN PIPE IS PRESENT.



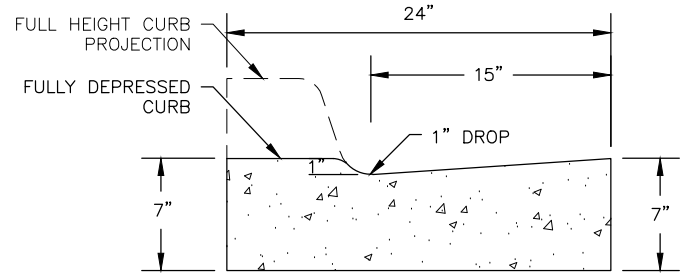
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PAVEMENT MATCH JOINT

SCALE: NOT TO SCALE

DETAIL 3/9 NOTES:

1. FINAL SAWCUT OF EXISTING ASPHALT SHALL NOT BE MADE UNTIL 24 HOURS PRIOR TO PAVING.



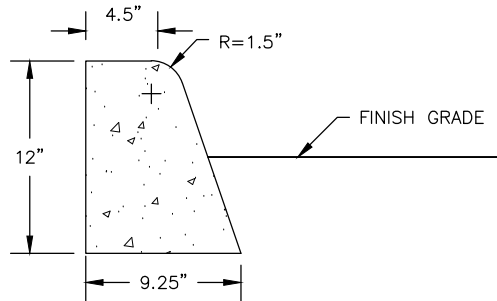
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DRIVEWAY CURB & GUTTER
CUT DETAIL

SCALE: NOT TO SCALE

DETAIL 4/9 NOTES:

1. DRIVEWAY CURB CUT DETAIL SHALL BE USED ONLY IN DRIVEWAYS WHERE SPECIFIED ON THE PLANS. SEE CBJ STANDARD DETAIL 105 FOR ADDITIONAL CURB CUT INFORMATION.
2. SEE CBJ DETAIL 111A FOR FULL HEIGHT TYPE I CURB & GUTTER.
3. USE A SMOOTH TRANSITION BETWEEN FULL HEIGHT CURB AND FULLY DEPRESSED CURB.



5
9

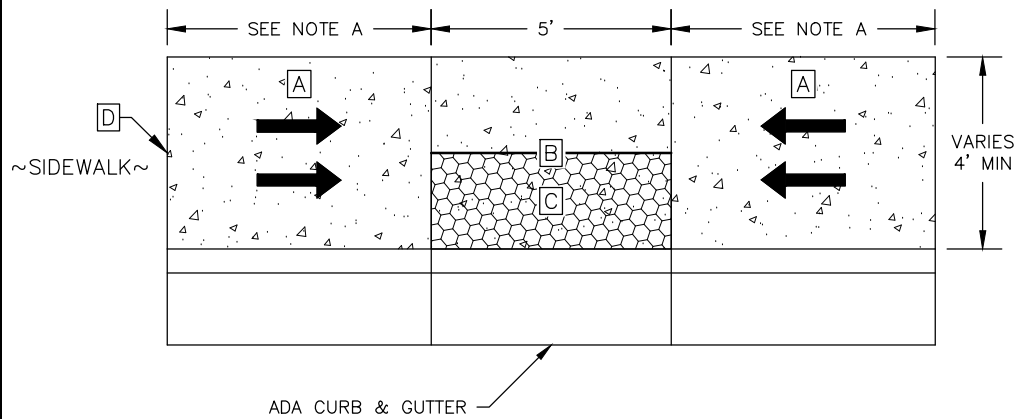
CONCRETE CURB
NO GUTTER DETAIL

SCALE: NOT TO SCALE

DETAIL 5/9 NOTES:

1. CURB – NO GUTTER DETAIL SHALL BE USED ONLY IN DRIVEWAYS WHERE SPECIFIED ON THE PLANS.
2. SEE CBJ DETAIL 111A FOR ADDITIONAL CONCRETE INFORMATION REGARDING REINFORCEMENT, CURING, JOINTS, FINISHING, ETC.

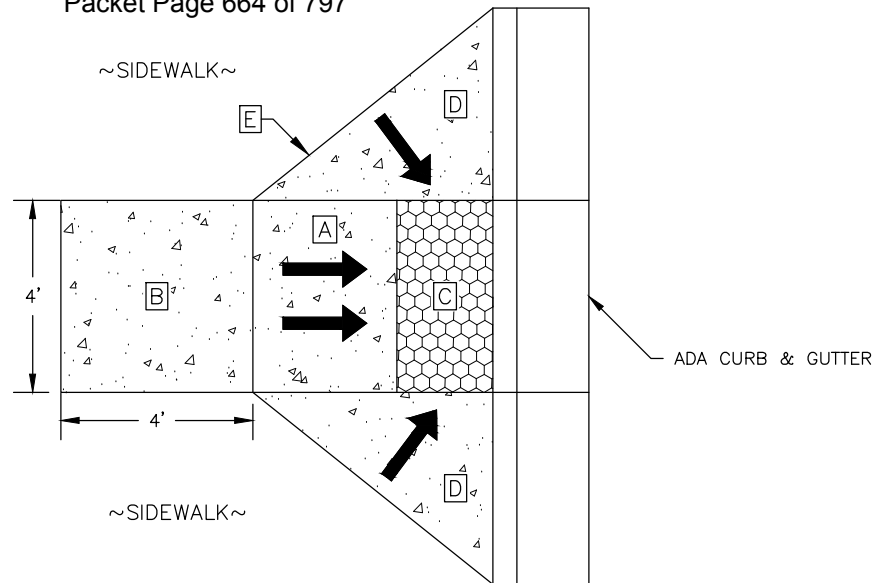
PRELIMINARY PLANS	RECORD OF REVISIONS				 proHNS LLC CERTIFICATE OF AUTHORIZATION #100662	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION	BE21-117	STORM AND STREET DETAILS	SHEET NUMBER	
	No.	DATE	DESCRIPTION	BY						9	
										OF	
										22	



1
10 ADA CURB RAMP DETAIL - TYPE I
SCALE: NOT TO SCALE

DETAIL 1/10 NOTES:

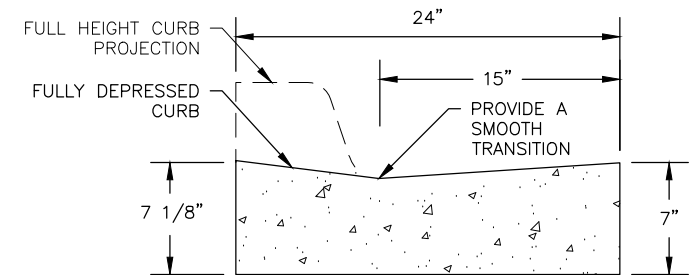
- CONSTRUCT RAMP SLOPES AT 7.70% NOMINAL GRADE, OR FLATTER. RAMP SLOPES MAY BE INCREASED TO A MAXIMUM 8.33% WHEN SITE CONDITIONS WARRANT IT. 1.50% CROSS SLOPE (MAXIMUM 2.0%).
- LANDING AREA - 4'x4' MIN DIMENSIONS AND 1.50% SLOPE IN ALL DIRECTIONS (MAXIMUM 2.0%). GRADE TO DRAIN TOWARD GUTTER FLOW LINE.
- 2'x5' DETECTABLE WARNING TILE.
- ALL CONCRETE SHALL BE 4" IN DEPTH.



2
10 ADA CURB RAMP DETAIL - TYPE II
SCALE: NOT TO SCALE

DETAIL 2/10 NOTES:

- CONSTRUCT RAMP SLOPES AT 7.70% NOMINAL GRADE, OR FLATTER. RAMP SLOPES MAY BE INCREASED TO A MAXIMUM 8.33% WHEN SITE CONDITIONS WARRANT IT. 1.50% CROSS SLOPE (MAXIMUM 2.0%).
- LANDING AREA - 4'x4' MIN DIMENSIONS AND 1.50% SLOPE IN ALL DIRECTIONS (MAXIMUM 2.0%). GRADE TO DRAIN TOWARD GUTTER FLOW LINE.
- 2'x4' DETECTABLE WARNING TILE.
- 8.00% TO 10.00% WALKABLE FLARE.
- ALL CONCRETE SHALL BE 4" IN DEPTH.



3
10 ADA CURB & GUTTER DETAIL
SCALE: NOT TO SCALE

DETAIL 3/10 NOTES:

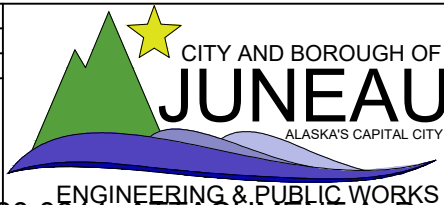
- ADA CURB & GUTTER DETAIL SHALL BE USED ONLY WHERE SPECIFIED ON THE PLANS. SEE CBJ STANDARD DETAIL 106 FOR ADDITIONAL INFORMATION.
- SEE CBJ DETAIL 111A FOR FULL HEIGHT TYPE I CURB & GUTTER.
- USE A SMOOTH TRANSITION BETWEEN FULL HEIGHT CURB AND FULLY DEPRESSED CURB.

PRELIMINARY
PLANS

RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY



DRAWN BY:	E. ROEMELING
DESIGNED BY:	E. ROEMELING
CHECKED BY:	L. CHAMBERS
1945 ALEX HOLDEN WAY #101 JUNEAU, AK 99801	
solutions@proHNS.com www.proHNS.com	

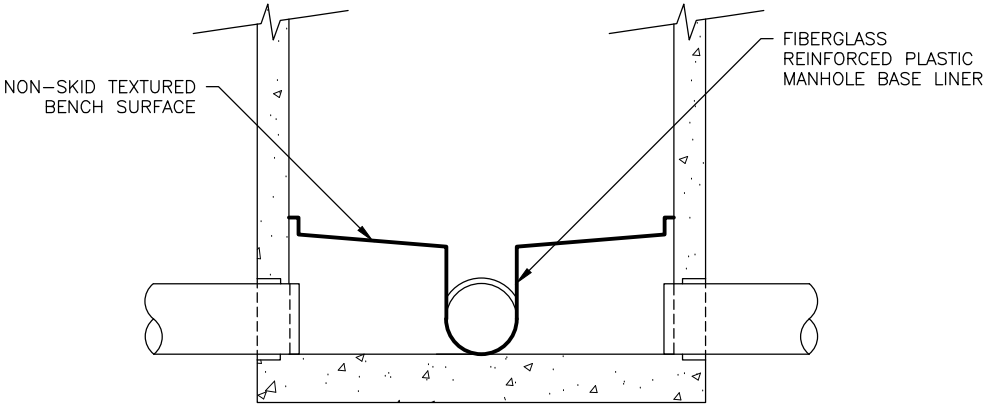


CALHOUN AVENUE
RECONSTRUCTION

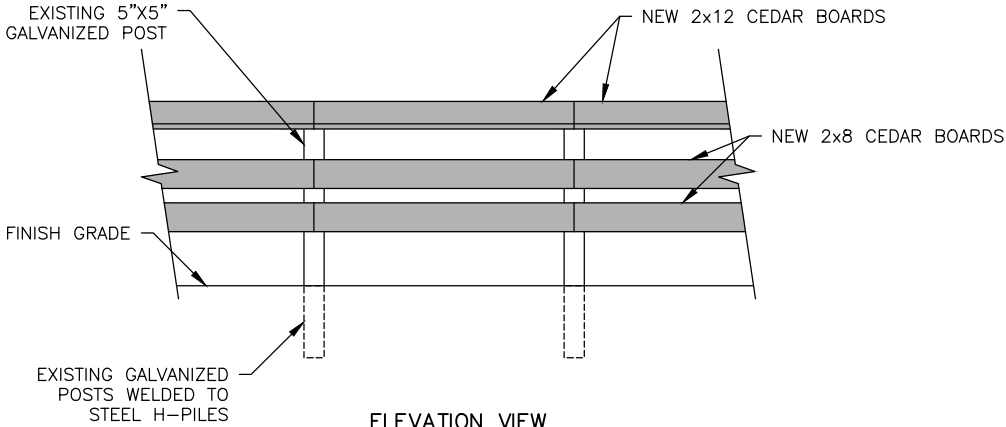
BE21-117

ADA RAMP DETAILS

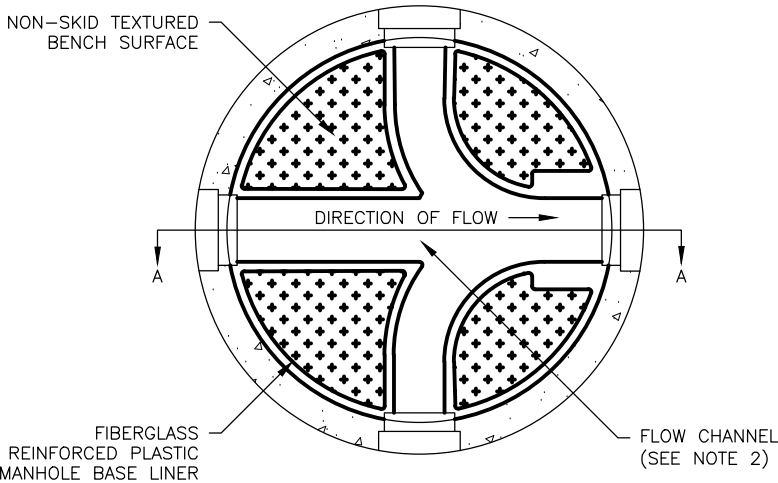
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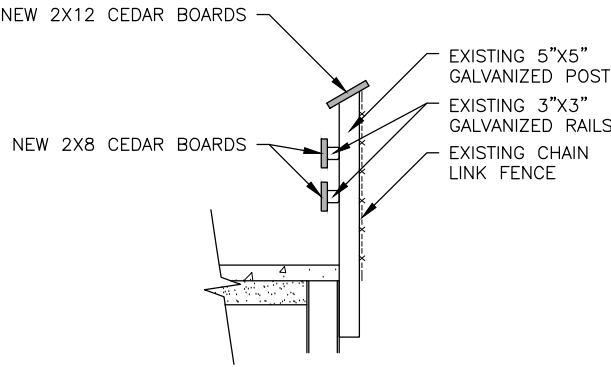
SECTION A-A



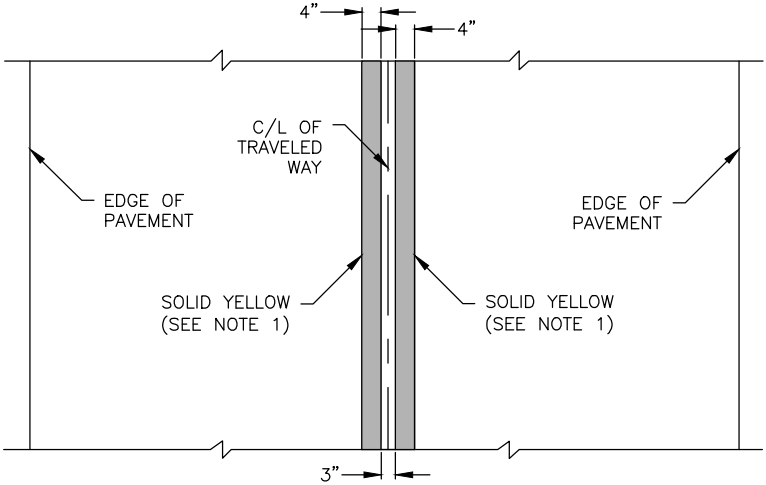
ELEVATION VIEW



PLAN

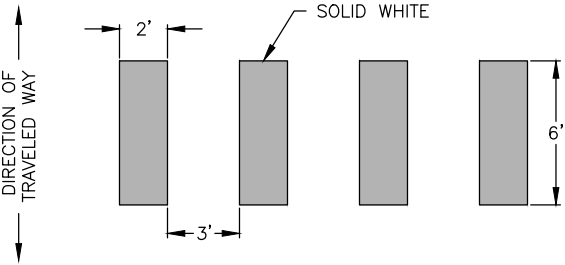


SECTION VIEW

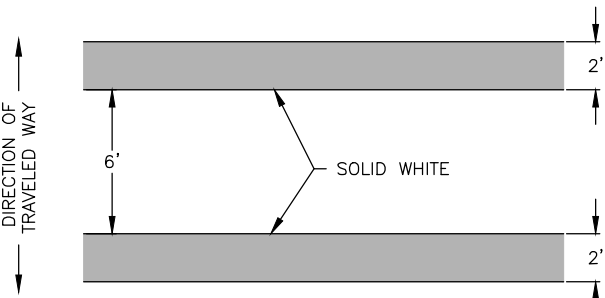


3
11 CENTERLINE PAVEMENT MARKING DETAIL
SCALE: NOT TO SCALE

DETAIL 3/11 NOTES:
1. DISCONTINUE CENTERLINE PAVEMENT MARKINGS AT INTERSECTIONS, AS SHOWN IN THE GRADING PLANS.



CONTINENTAL CROSSWALK



STANDARD CROSSWALK

4
11 CROSSWALK MARKING DETAIL
SCALE: NOT TO SCALE

1
11 PRECAST MANHOLE WITH FIBERGLASS REINFORCED PLASTIC BASE LINER DETAIL
SCALE: NOT TO SCALE

- DETAIL 1/11 NOTES:
1. THE MANHOLE BASE LINER SHALL BE FIBERGLASS REINFORCED PLASTIC (FRP) OR APPROVED EQUAL.
 2. FRP BASE LINER SHALL HAVE A MINIMUM DROP OF 0.1' BETWEEN INLET AND OUTLET PIPES.
 3. FRP BASE LINER SHALL BE PRE MANUFACTURED TO MATCH THE PIPE SIZES, ANGLES, SLOPES AND INVERTS AS SHOWN IN THE DESIGN DRAWINGS.
 4. WHERE EXISTING PIPES ARE TO BE TIED INTO NEW MANHOLE WITH A FRP BASE LINER, CONTRACTOR SHALL FIELD CONFIRM REQUIRED PIPE ANGELS, SLOPES AND INVERTS PRIOR TO ORDERING THE FRP MANHOLE BASE LINER.
 5. NOTES AND REQUIREMENTS IN CBJ DETAIL 203 FOR STANDARD SANITARY SEWER MANHOLE TYPE I & II APPLY TO THIS DETAIL.

2
11 HAND RAIL REHABILITATION DETAIL
SCALE: NOT TO SCALE

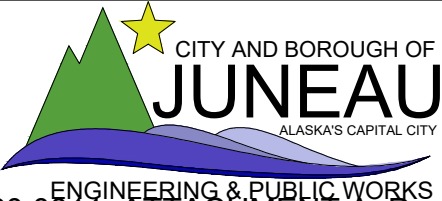
- DETAIL 2/11 NOTES:
1. ALL EXISTING WOOD MEMBERS TO BE REMOVED AND DISPOSED OF.
 2. CHAIN LINK FENCE TO REMAIN, NOT SHOWN IN ELEVATION VIEW FOR CLARITY. REMOVE AND REINSTALL AS NECESSARY TO REHABILITATE HAND RAIL.
 3. ALL EXISTING GALVANIZED POSTS AND RAILS TO REMAIN. CONTRACTOR TO CLEAN EXISTING METAL SURFACES. ANY DAMAGE OR VISIBLE CORROSION TO BE WIRE BRUSHED TO REMOVE RUST AND PAINTED WITH COLD GALVANIZING COMPOUND.
 4. ALL EXISTING WOOD BOARD FASTENERS AND HARDWARE TO BE REMOVED AND REPLACED. NEW FASTENERS AND HARDWARE TO BE GALVANIZED OR STAINLESS STEEL AND MATCH EXISTING SIZE, MATERIAL AND SPACING OF ORIGINAL HARDWARE.
 5. 1/2" ROUTERED RADIUS ON ALL EXPOSED TIMBER EDGES REQUIRED.

PRELIMINARY
PLANS

RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY



DRAWN BY: E. ROEMELING
DESIGNED BY: E. ROEMELING
CHECKED BY: L. CHAMBERS
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CALHOUN AVENUE
RECONSTRUCTION

BE21-117

CONSTRUCTION
DETAILS

SHEET NUMBER	
11	OF
22	

WATER SERVICE SUMMARY			
SERVICE TO	STATION & OFFSET	SIZE/TYPE	REMARKS
924 & 928 CALHOUN AVENUE	14+23.25, 13.49 RT	2" POLY	SEE NOTE 1
925 CALHOUN AVENUE	14+54.02, 14.47 LT	1" POLY	SEE NOTE 1
914 CALHOUN AVENUE	14+96.01, 13.71 RT	2" POLY	SEE NOTE 1
904 CALHOUN AVENUE	15+26.12, 14.02 RT	1" POLY	SEE NOTE 1
911 CALHOUN AVENUE	15+41.41, 12.97 LT	1" POLY	SEE NOTES 1 & 2
911 CALHOUN AVENUE	15+43.41, 12.91 LT	1" POLY	FOR FUTURE CONNECTION
212 WEST 9TH STREET	15+68.49, 63.54 RT	1" POLY	SEE NOTE 1
835 CALHOUN AVENUE	15+80.23, 14.98 LT	1" POLY	SEE NOTE 1
836 CALHOUN AVENUE	15+84.81, 48.25 RT	1" POLY	SEE NOTES 1 & 2
826 CALHOUN AVENUE	16+55.58, 12.49 RT	1" POLY	SEE NOTE 1
825 CALHOUN AVNEUE	16+75.12, 8.48 LT	1" POLY	SEE NOTE 1
214 WEST 8TH STREET	16+86.89, 7.31 LT	1" POLY	SEE NOTE 1
NOTES: 1. INSTALL NEW WATER SERVICE AND CURB BOX PER DETAIL 2 SHEET 8, CONNECT TO EXISTING WATER SERVICE. STATION AND OFFSET ARE GIVEN TO THE CENTER OF VALVE BOX. REMOVE AND DISPOSE OF EXISTING CURB BOX AND CURB STOP IF EXISTING. 2. THIS WATER SERVICE BOX WAS NOT FIELD LOCATED, CONTRACTOR SHALL DETRERMINE THE LOCATION OF THE EXISTING WATER SERVICE, PRIOR TO INSTALLING NEW WATER SERVICE.			

SEWER SERVICE SUMMARY			
SERVICE TO	STATION & OFFSET	SIZE/TYPE	REMARKS
925 CALHOUN AVENUE	14+45.05, 14.58 LT	6" PVC	SEE NOTE 1
911 CALHOUN AVENUE	15+58.03, 13.18 LT	6" PVC	SEE NOTE 1
911 CALHOUN AVENUE	15.58.68, 21.80 LT	6" PVC	FOR FUTURE CONNECTION
835 CALHOUN AVENUE	15+84.64, 21.02 LT	6" PVC	SEE NOTES 1 & 2
825 CALHOUN AVENUE	16+91.31, 6.87 LT	6" PVC	SEE NOTES 1 & 2
816 DIXON STREET	17+17.14, 10.48 LT	6" PVC	SEE NOTES 1 & 2
NOTES: 1. INSTALL NEW SEWER SERVICE AND CLEANOUT CBJ STANDARD DETAIL 213, CONNECT TO EXISTING SEWER SERVICE. STATION AND OFFSET ARE GIVEN TO THE CENTER OF CLEANOUT. 2. THIS SEWER SERVICE WAS NOT FIELD LOCATED, CONTRACTOR SHALL DETRERMINE THE LOCATION OF THE EXISTING SEWER SERVICE, PRIOR TO INSTALLING NEW SEWER SERVICE.			

SIGN ASSEMBLY SUMMARY			
SIGN NO.	STATION & OFFSET	MUTCD DESIGNATION	LEGEND & REMARKS
1	10+62.13, 25.01 LT	R1-1	"STOP" (30"X30")
2	10+97.85, 27.99 RT	R1-1	"STOP" (30"X30")
3	10+51.09, 14.00 LT	W11-2	PEDESTRIAN
4	13+22.37, 20.93 LT	R1-1	"STOP" (30"X30")
5	13+42.37, 17.98 RT	R7-1D W11-2	"NO PARKING ANY TIME" (12"X18") DOUBLE ARROW PEDESTRIAN
6	13+82.87, 21.77 LT	R7-1D	"NO PARKING ANY TIME" (12"X18") DOUBLE ARROW
7	14+61.45, 15.57 LT	W11-2	PEDESTRIAN
8	15+39.18, 13.23 LT	R7-1D	"NO PARKING ANY TIME" (12"X18") DOUBLE ARROW
9	15+45.09, 15.39 RT	R7-1D	"NO PARKING ANY TIME" (12"X18") DOUBLE ARROW
10	16+30.82, 15.00 RT	W11-2	PEDESTRIAN
11	19+23.63, 18.73 LT	W11-2	PEDESTRIAN

STORM DRAIN PIPE REMOVAL SUMMARY				
SIZE	PIPE TYPE	INLET	OUTLET	APPROXIMATE LINEAR FOOTAGE
		STATION & OFFSET	STATION & OFFSET	
18"	CPP	11+07.64, 18.90 LT	10+13.42, 22.82 LT	96
18"	CPP	12+26.56, 11.41 LT	11+07.64, 18.90 LT	125
12"	CPP	11+16.36, 15.28 RT	11+15.05, 21.04 RT	6
18"	CPP	13+29.24, 21.03 LT	12+26.56, 11.41 LT	94
18"	CPP	13+24.14, 25.83 LT	13+29.24, 21.03 LT	6
12"	CPP	13+78.77, 17.03 LT	13+29.24, 21.03 LT	49
8"	AC	12+56.22, 9.36 LT	15+66.96, 8.99 LT	11
8"	AC	15+58.21, 11.09 RT	15+67.72, 12.40 RT	10
8"	CPP	17+87.28, 15.59 RT	18+07.88, 21.75 RT	24
12"	CPP	18+11.58, 10.61 LT	18+07.53, 25.88 RT	37
12"	CPP	20+14.98, 13.88 LT	20+24.79, 14.10 RT	30

STORM DRAIN STRUCTURE FRAME & GRATE SUMMARY	
STRUCTURE NO.	EAST JORDAN, OLYMPIC FOUNDRY CO., NEENAH FOUNDRY, CBJ STANDARD NO., OR APPROVED EQUAL
S-1	EJ 7701, T2 HOOD & 7700 M3 GRATE
S-2	EJ 7701, T2 HOOD & 7700 M3 GRATE
S-3	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-4	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-5	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-6	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-7	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-8	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-9	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-10	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-11	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-12	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-13	CBJ STD 306 (NON-SKID W/OUT LUGS)
S-14	EJ 7701, T2 HOOD & 7700 M2 GRATE
S-15	EJ 7701, T2 HOOD & 7700 M2 GRATE
NOTES: 1. CATCH BASIN TOP SLAB OPENINGS SHALL BE DIMENSIONED TO FIT THE FRAME DIMENSIONS. ALL GRATES SHALL BE HEAVY DUTY CONSTRUCTION & BICYCLE SAFE. ALL FRAMES & GRATES TO BE DUCTILE IRON.	

SANITARY SEWER MANHOLE RECONSTRUCTION SUMMARY					
MANHOLE NUMBER	STATION & OFFSET	LID ELEVATION	INVERT ELEVATION	STRUCTURE DEPTH	REMARKS
SS-EX-4	13+64.35, 10.30 LT	125.06	120.63	4.43	SEE NOTES 1 & 2
NOTES: 1. REMOVE EXISTING COVER AND FRAME AND REPLACE WITH NEW, SEE CBJ STANDARD DETAIL 206A. INSTALL NEW COVER AND FRAME USING AN INFRA-RISER (RECYCLED RUBBER) GRADE RING. 2. EXISTING SANITARY SEWER MANHOLE SHALL BE WATERPROOFED AT EACH EXISTING JOINT WITH MIRADRI WATERPROOFING SYSTEM, OR APPROVED EQUAL.					

STRUCTURE REMOVAL SUMMARY	
STRUCTURE TYPE	STATION & OFFSET
CATCH BASIN	11+07.64, 18.90 LT
CATCH BASIN	11+16.36, 15.28 RT
CATCH BASIN	12+26.56, 11.41 LT
STORM DRAIN MAH HOLE	13+29.24, 21.03 LT
CATCH BASIN	13+78.77, 17.03 LT
CATCH BASIN	15+56.22, 9.36 LT
CATCH BASIN	15+58.21, 11.09 RT
SANITARY SEWER MANHOLE	15+67.18, 0.35 RT
CATCH BASIN	17+87.21, 15.51 RT
SANITARY SEWER MANHOLE	18+04.66, 2.87 LT
CATCH BASIN	18+11.58, 10.63 LT
CATCH BASIN	20+17.98, 13.89 LT

FIRE HYDRANT SUMMARY	
REMARKS	STATION & OFFSET
INSTALL NEW HYDRANT WITH GATE VALVE & BOLLARDS	11+15.57, 24.40 LT
INSTALL NEW HYDRANT WITH GATE VALVE & BOLLARDS	13+56.31, 27.09 LT

ANODES SUMMARY	
INSTALLED ON	STATION & OFFSET
EX 12" DIP (HP) AT COPE PARK ROAD	10+76.63, 40.71 LT
EX 10" DIP (LP) AT CAPITOL AVENUE	10+88.62, 19.98 RT
NEW FIRE HYDRANT	11+14.50, 21.05 LT
EX 8" CIP (HP) AT GOLDBELT AVENUE	13+28.98, 32.33 LT
NEW FIRE HYDRANT	13+55.61, 23.58 LT

PRELIMINARY
PLANS

RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY



CERTIFICATE OF AUTHORIZATION
#100662

DRAWN BY: E. ROEMELING
DESIGNED BY: E. ROEMELING
CHECKED BY: L. CHAMBERS

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CITY AND BOROUGH OF
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ENGINEERING & PUBLIC WORKS

CALHOUN AVENUE
RECONSTRUCTION

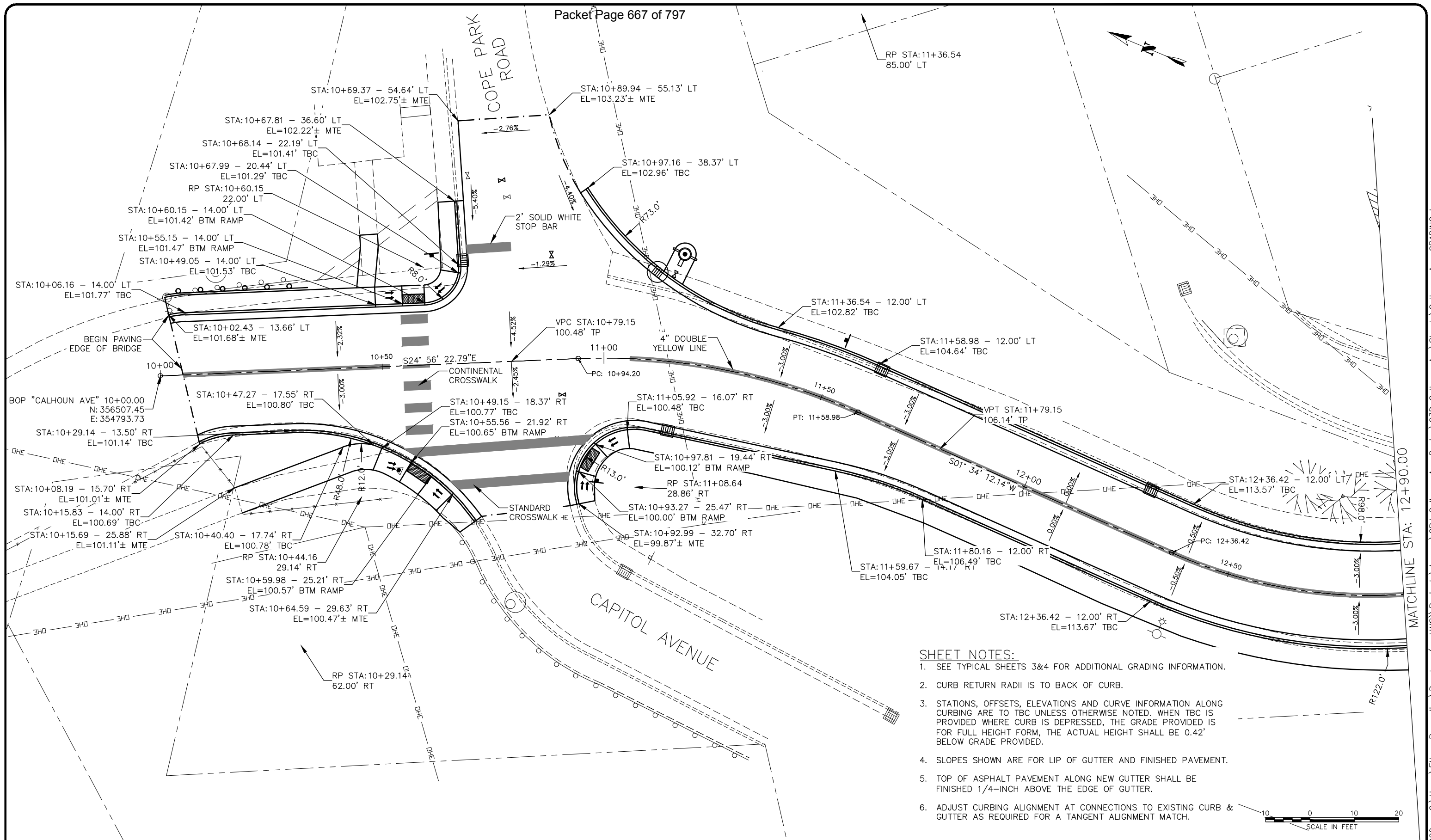
BE21-117

SHEET NUMBER

12
OF
22

CSP2020 0011, ATTACHMENT A, Page 16

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SHEET NOTES:

1. SEE TYPICAL SHEETS 3&4 FOR ADDITIONAL GRADING INFORMATION.
2. CURB RETURN RADII IS TO BACK OF CURB.
3. STATIONS, OFFSETS, ELEVATIONS AND CURVE INFORMATION ALONG CURBING ARE TO TBC UNLESS OTHERWISE NOTED. WHEN TBC IS PROVIDED WHERE CURB IS DEPRESSED, THE GRADE PROVIDED IS FOR FULL HEIGHT FORM, THE ACTUAL HEIGHT SHALL BE 0.42' BELOW GRADE PROVIDED.
4. SLOPES SHOWN ARE FOR LIP OF GUTTER AND FINISHED PAVEMENT.
5. TOP OF ASPHALT PAVEMENT ALONG NEW GUTTER SHALL BE FINISHED 1/4-INCH ABOVE THE EDGE OF GUTTER.
6. ADJUST CURBING ALIGNMENT AT CONNECTIONS TO EXISTING CURB & GUTTER AS REQUIRED FOR A TANGENT ALIGNMENT MATCH.



PRELIMINARY PLANS	RECORD OF REVISIONS				 proHNS LLC CERTIFICATE OF AUTHORIZATION #100662	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION	GRADING - BOP TO 12+90	SHEET NUMBER	
	No.	DATE	DESCRIPTION	BY					13	OF

DRAWN BY: E. ROEMELING

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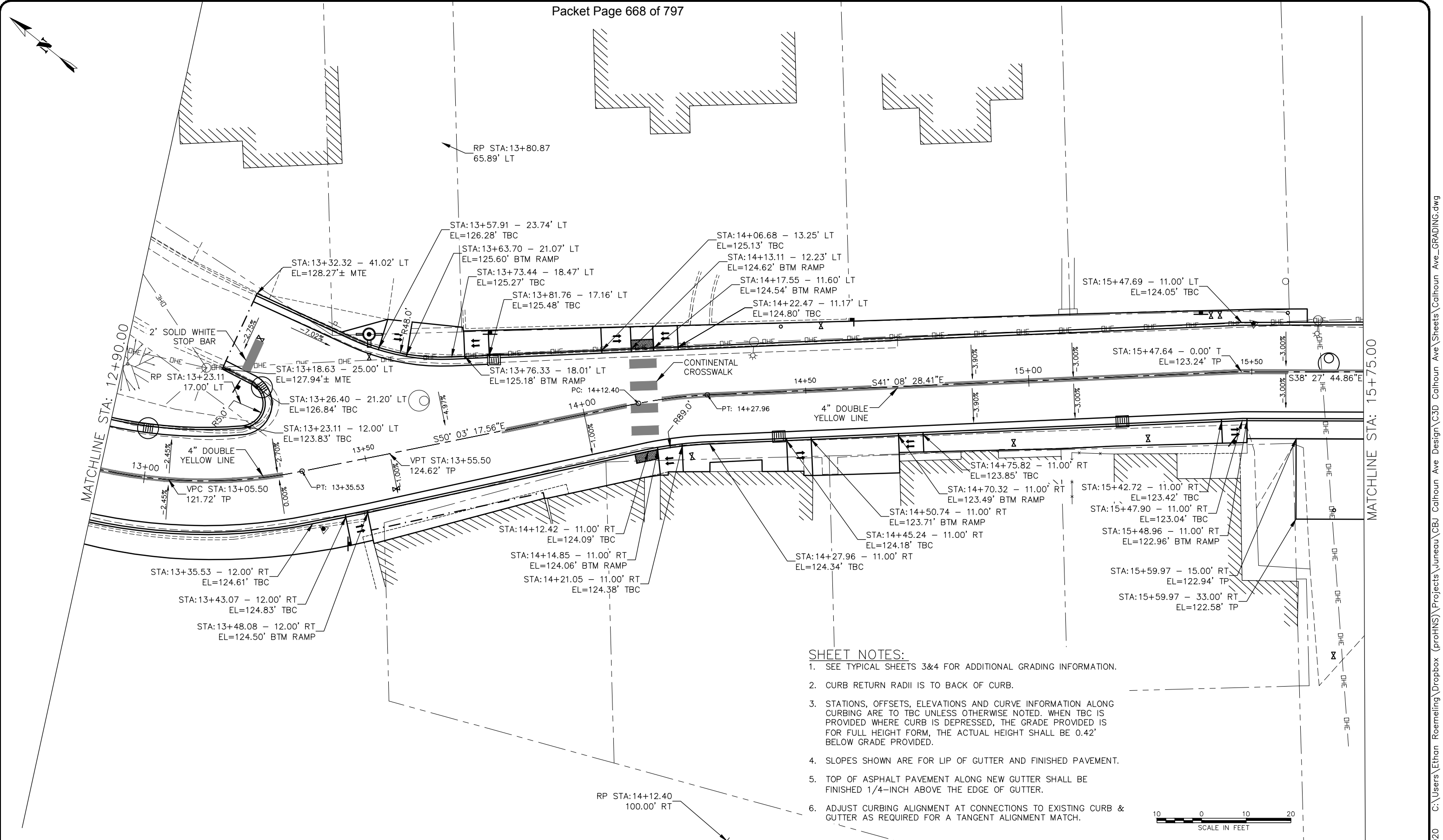
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13

OF

22



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CITY AND BOROUGH OF
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ENGINEERING & PUBLIC WORKS

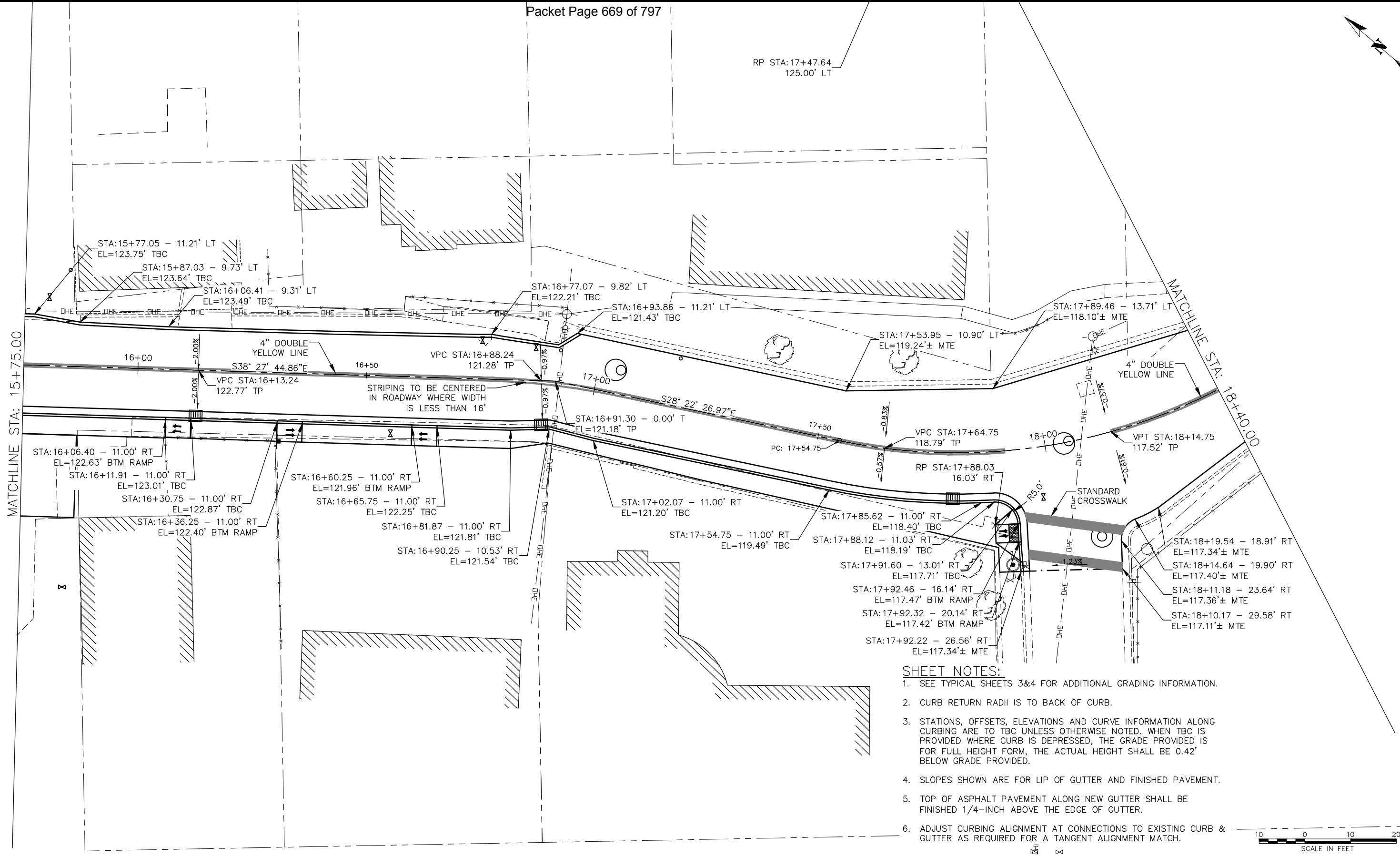
CALHOUN AVENUE
RECONSTRUCTION

BE21-117

GRADING - 12+90 TO
15+75

SHEET NUMBER	
14	OF
22	

RP STA:17+47.64
125.00' LT



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PRELIMINARY
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proHNS LLC
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**CITY AND BOROUGH OF
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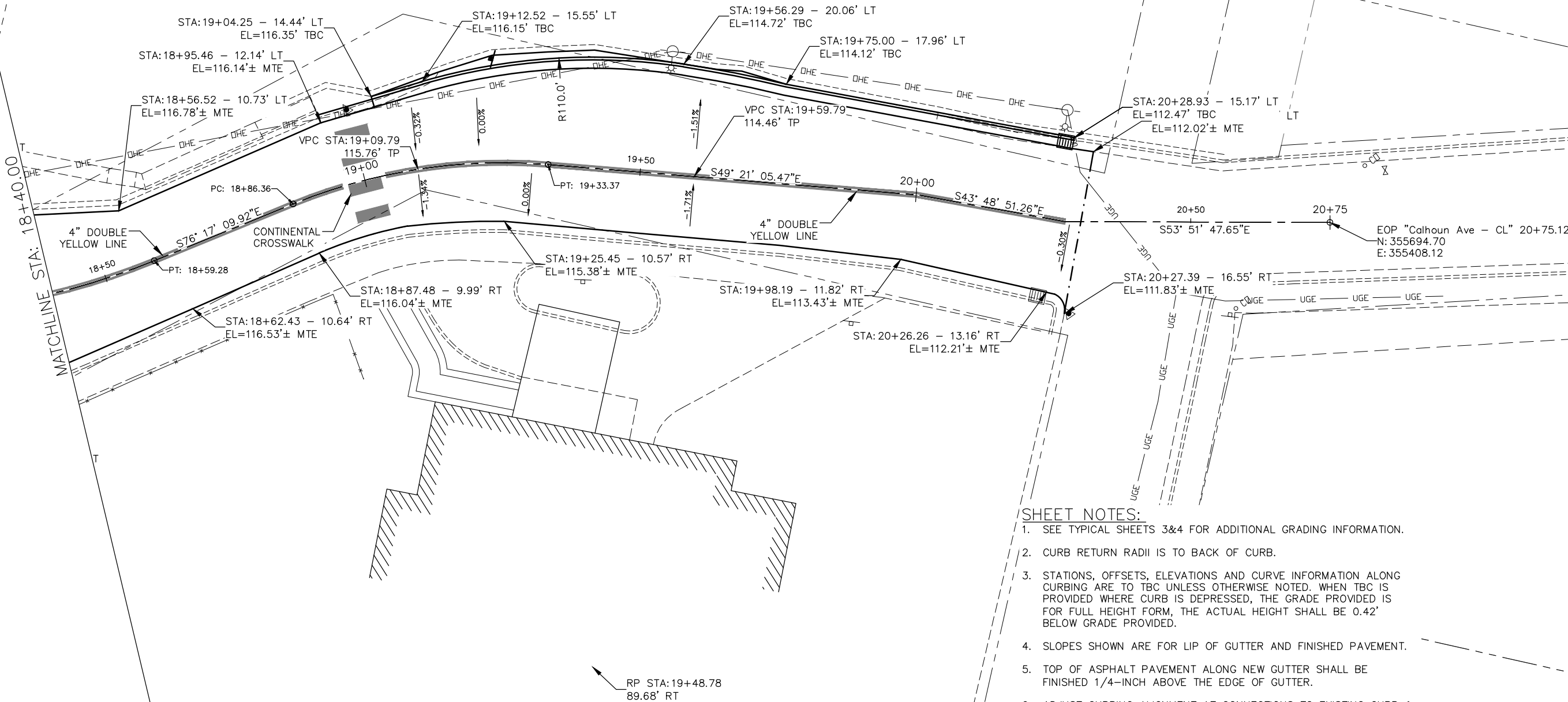
ENGINEERING & PUBLIC WORKS

**CALHOUN AVENUE
RECONSTRUCTION**

BE21-117

**GRADING - 15+75 TO
18+40**

SHEET NUMBER	
15	OF
22	



- SHEET NOTES:**
1. SEE TYPICAL SHEETS 3&4 FOR ADDITIONAL GRADING INFORMATION.
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PRELIMINARY PLANS	RECORD OF REVISIONS				 proHNS LLC CERTIFICATE OF AUTHORIZATION #100662	 CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY ENGINEERING & PUBLIC WORKS	CALHOUN AVENUE RECONSTRUCTION BE21-117	GRADING - 18+40 TO 20+75	SHEET NUMBER	
	No.	DATE	DESCRIPTION	BY					16	OF
									22	

SS-EX-1 (Q27)	
STA: 10+68.13	OFF: 111.14 LT
FRAME EL=	105.10
SP-EX-1	99.86
SP-EX-2	99.78

S-1 TYPE IV CB	
STA: 10+69.12	OFF: 23.21 LT
FRAME EL=	100.99
P-1	97.79
P-2	97.89

S-2 TYPE I SDMH	
STA: 11+10.61	OFF: 19.84 LT
FRAME EL=	101.48
P-2	98.26
P-3	98.36
6" EX PVC CONNECT	99.22

S-3 TYPE IV CB	
STA: 11+10.61	OFF: 19.84 LT
FRAME EL=	104.32
P-2	101.27
P-4	101.37
6" UD	101.37

S-EX-15 CB	
STA: 12+14.69	OFF: 55.47 LT
FRAME EL=	135.37
P-EX-7	131.47

SS-EX-3 (UNK1)	
STA: 12+29.84	OFF: 50.72 LT
FRAME EL=	133.36
SP-EX-4	128.26
SP-EX-5	128.26

S-EX-1 SDMH	
STA: 10+13.42	OFF: 22.82 LT
FRAME EL=	101.81
P-EX-1	97.31
P-1	97.51

REMOVE AND REPLACE EXISTING GUARD RAIL PER CBJ STD 110 WITH STEEL POST AND TYPE 2 END SECTION
STA 10+001.75, 18.11 LT
STA 10+33.90, 18.50 LT

PROTECT & MAINTAIN

WATER LINE CONNECTION
SEE DETAIL 1 SHEET 6

TWO 45° BENDS

CONNECT TO EXISTING 8" PVC

WATER LINE CONNECTION
SEE DETAIL 2 SHEET 6

INSTALL FIRE HYDRANT ASSEMBLY
STA: 11+15.57
OFFSET: 24.40 LT

10"X10"X10" HDPE TEE
STA: 10+88.76
OFFSET: 8.00 RT

10"X10"X8" HDPE TEE
STA: 11+09.65
OFFSET: 8.00 RT

WATER LINE CONNECTION
SEE DETAIL 2 SHEET 6

CONNECT TO EXISTING 12" CPP

REHABILITATE EXISTING HANDRAIL
SEE DETAIL 2 SHEET 10

SHEET NOTES:

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- PROVIDE ALL PIPE EXTENSIONS, ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS, AND DEPTHS.
- HDPE PIPE DEFLECTIONS SHALL NOT EXCEED PIPE MANUFACTURERS RECOMMENDATIONS.
- THE CONTRACTOR CANNOT SHUT OFF WATER SUPPLY TO SERVICES FOR MORE THAN 4 HOURS AT ONE TIME.
- SEE STANDARD SPECIFICATIONS, ERRATAS AND SPECIAL PROVISION SECTION 02601 WATER PIPE FOR WATERLINE INSTALLATION FOR TESTING, DISINFECTION & INSTALLATION REQUIREMENTS.
- ALL STORM DRAIN CROSSINGS WITH WATERLINE SHALL BE PRESSURE TESTED.
- MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN PROPOSED WATER PIPE AND ALL STORM OR SANITARY SEWER PIPE CROSSINGS.

SS-EX-2 (Q25)	
STA: 10+77.74	OFF: 54.26 RT
FRAME EL=	99.72
SP-EX-2	94.72
SP-EX-3	94.52

S-EX-7 CB	
STA: 11+07.07	OFF: 48.07 RT
FRAME EL=	97.86
P-EX-9	95.25

S-15 TYPE III CB	
STA: 11+16.14	OFF: 15.53 RT
FRAME EL=	100.47
PE-EX-9 CONNECT	98.09
6" UD	98.19

STORM DRAIN PIPE SUMMARY				
PIPE NO.	DIA	LENGTH	TYPE	SLOPE
P-1	18"	55.703	CPP	0.50%
P-2	18"	43.991	CPP	0.85%
P-3	18"	55.142	CPP	5.28%
P-4	18"	66.402	CPP	11.28%
P-5	18"	65.772	CPP	12.92%

S-4 TYPE IV CB	
STA: 12+26.38	OFF: 11.00 LT
FRAME EL=	111.92
P-4	108.87
P-5	108.97
6" UD	108.97

SANITARY SEWER PIPE SUMMARY				
PIPE NO.	DIA	LENGTH	TYPE	SLOPE
SP-1	8"	60.29	PVC	3.05%



PRELIMINARY
PLANS

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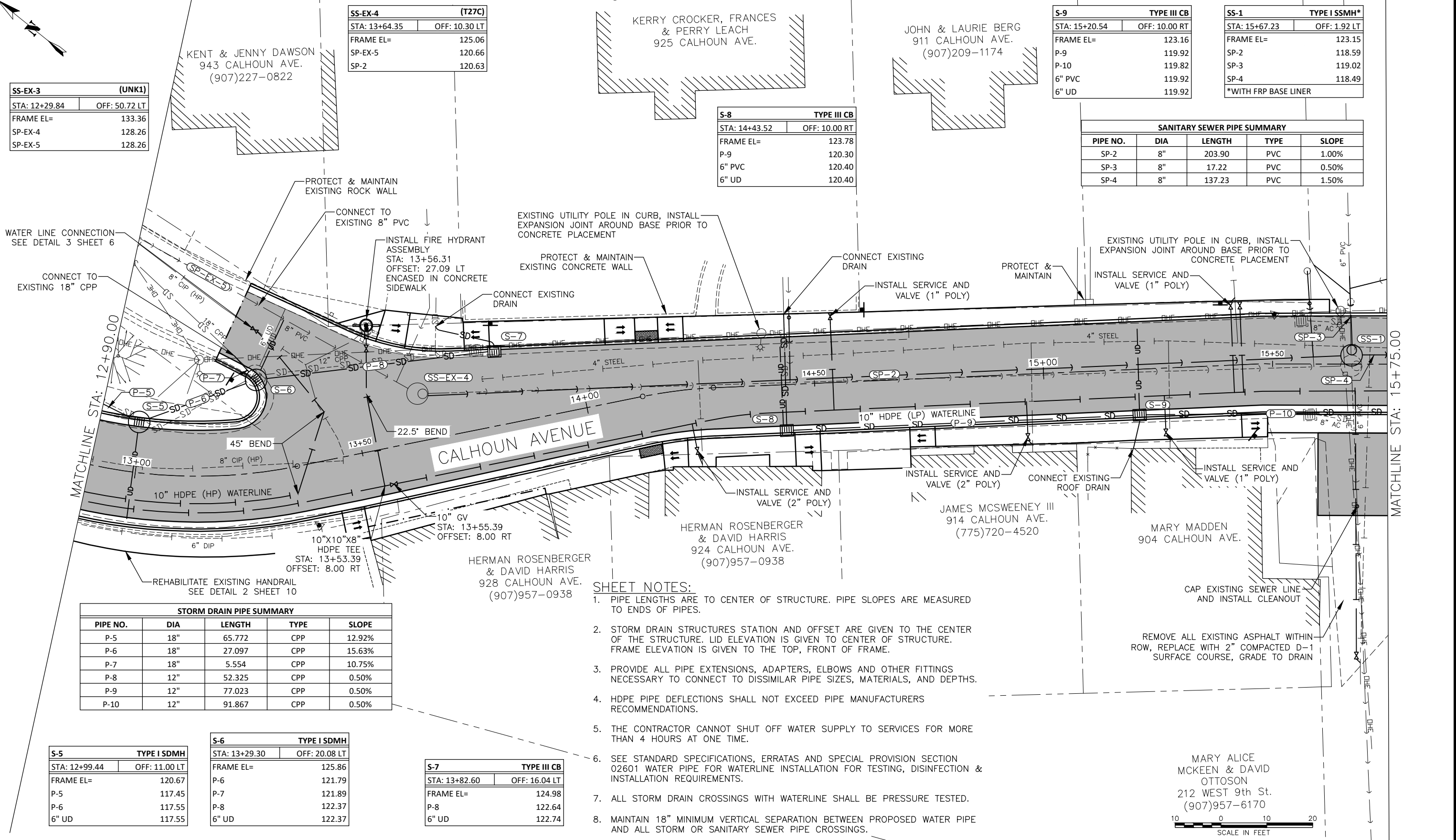


CALHOUN AVENUE
RECONSTRUCTION

BE21-117

PLAN - BOP TO 12+90

SHEET NUMBER	
17	OF
22	



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 - THE CONTRACTOR CANNOT SHUT OFF WATER SUPPLY TO SERVICES FOR MORE THAN 4 HOURS AT ONE TIME.
 - SEE STANDARD SPECIFICATIONS, ERRATAS AND SPECIAL PROVISION SECTION 02601 WATER PIPE FOR WATERLINE INSTALLATION FOR TESTING, DISINFECTION & INSTALLATION REQUIREMENTS.
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PRELIMINARY
PLANS

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CITY AND BOROUGH OF
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CALHOON AVENUE
RECONSTRUCTION

BE21-117

PLAN - 12+90 TO
15+75

SHEET NUMBER	
18	OF
22	

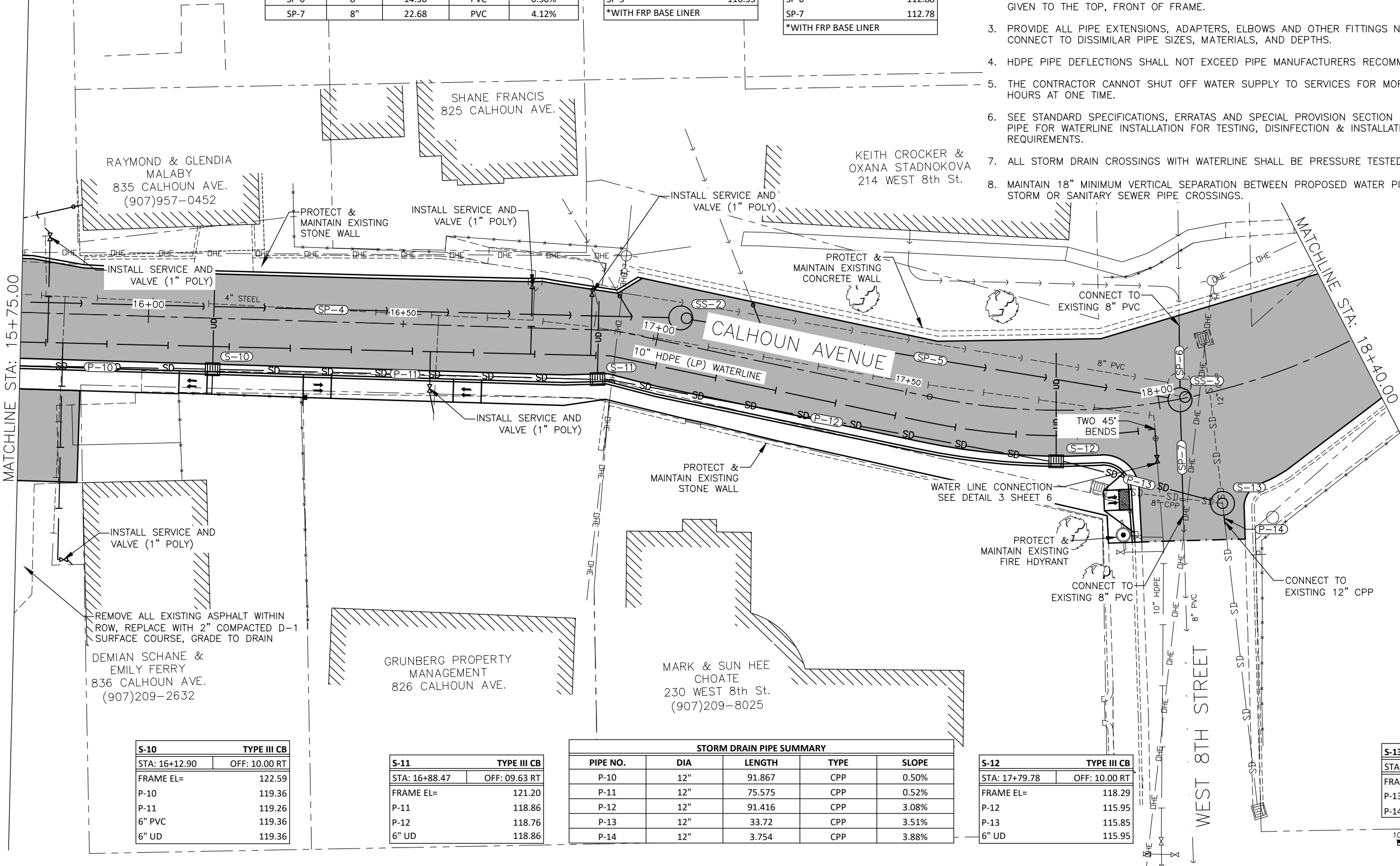
SANITARY SEWER PIPE SUMMARY				
PIPE NO.	DIA	LENGTH	TYPE	SLOPE
SP-4	8"	137.23	PVC	1.50%
SP-5	8"	99.29	PVC	3.47%
SP-6	8"	14.56	PVC	0.50%
SP-7	8"	22.68	PVC	4.12%

SS-2	TYPE I SSMH*
STA: 17+03.75	OFF: 5.11 LT
FRAME EL=	120.91
SP-4	116.43
SP-5	116.33
*WITH FRP BASE LINER	

SS-3	TYPE I SSMH*
STA: 18+04.16	OFF: 0.15 RT
FRAME EL=	117.72
SP-5	112.88
SP-6	112.88
SP-7	112.78
*WITH FRP BASE LINER	

SHEET NOTES:

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S-10	TYPE III CB
STA: 16+12.90	OFF: 10.00 RT
FRAME EL=	122.59
P-10	119.36
P-11	119.26
6" PVC	119.36
6" UD	119.36

S-11	TYPE III CB
STA: 16+88.47	OFF: 09.63 RT
FRAME EL=	121.20
P-11	118.86
P-12	118.76
6" UD	118.86

STORM DRAIN PIPE SUMMARY				
PIPE NO.	DIA	LENGTH	TYPE	SLOPE
P-10	12"	91.867	CPP	0.50%
P-11	12"	75.575	CPP	0.52%
P-12	12"	91.416	CPP	3.08%
P-13	12"	33.72	CPP	3.51%
P-14	12"	3.754	CPP	3.88%

S-12	TYPE III CB
STA: 17+79.78	OFF: 10.00 RT
FRAME EL=	118.29
P-12	115.95
P-13	115.85
6" UD	115.95

S-13	TYPE I SDMH
STA: 18+07.88	OFF: 21.75 RT
FRAME EL=	117.27
P-13	114.67
P-14	112.61

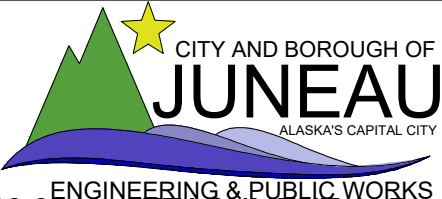


PRELIMINARY
PLANS

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CALHOUN AVENUE
RECONSTRUCTION

BE21-117

PLAN - 15+75 TO
18+40

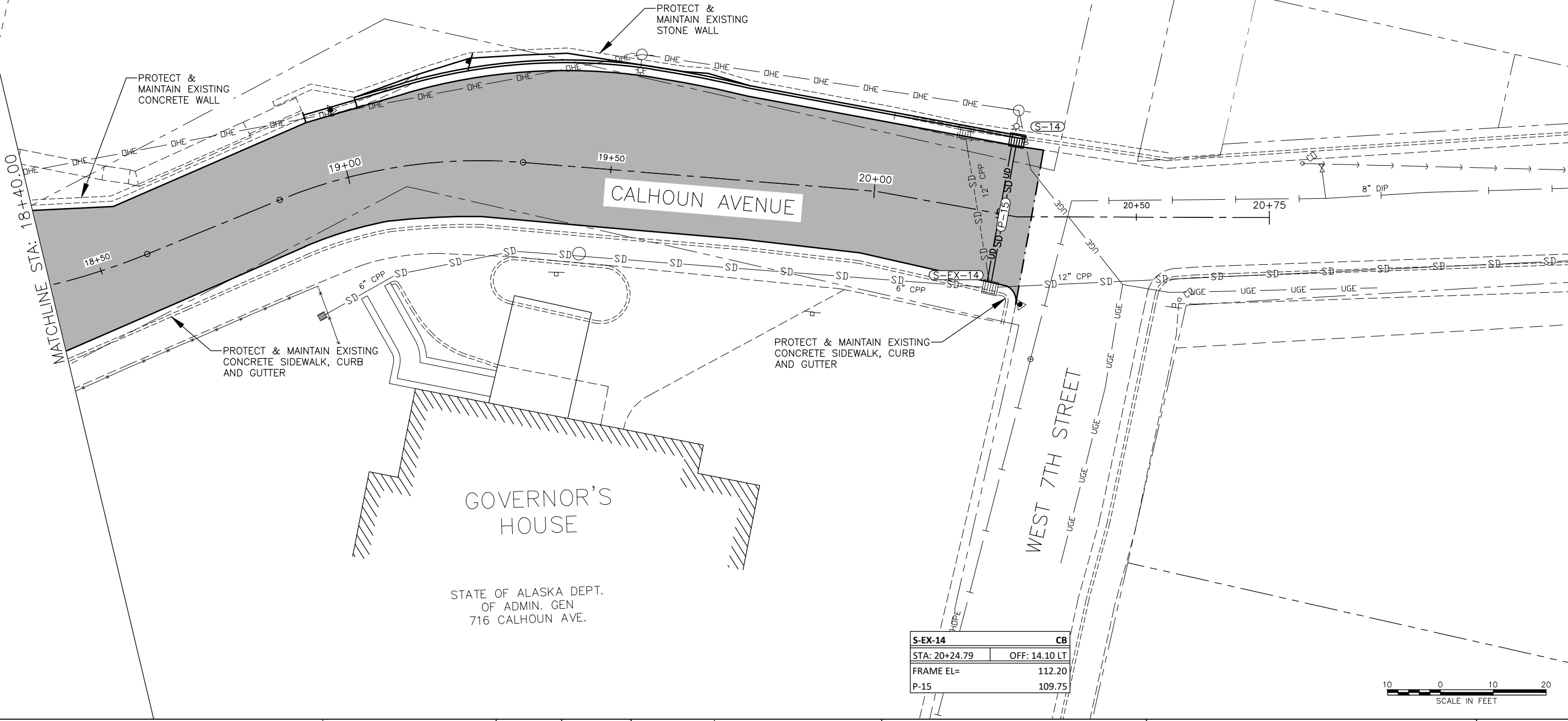
SHEET NUMBER	
19	OF
22	

SHEET NOTES:

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STORM DRAIN PIPE SUMMARY				
PIPE NO.	DIA	LENGTH	TYPE	SLOPE
P-15	12"	28.063	CPP	0.50%

S-14	TYPE III CB
STA: 20+24.84	OFF: 14.22 LT
FRAME EL=	112.09
P-15	109.85
6" UD	109.95



S-EX-14	CB
STA: 20+24.79	OFF: 14.10 LT
FRAME EL=	112.20
P-15	109.75



PRELIMINARY PLANS

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ENGINEERING & PUBLIC WORKS

CALHOUN AVENUE RECONSTRUCTION

BE21-117

PLAN - 18+40 TO 20+75

SHEET NUMBER	
20	OF
22	

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1. A MINIMUM OF 5' OF COVER IS REQUIRED FOR THE WATERLINE. INSULATION SHALL BE USED WHERE OBTAINING 5' OF COVER IS NOT PRACTICAL.
2. EXISTING PIPES AND STRUCTURES OUTSIDE OF THE PROJECT LIMITS ARE NOT SHOWN IN PROFILE VIEW FOR CLARITY. PLEASE SEE PLAN SHEETS FOR LOCATIONS OF THESE PIPES/STRUCTURES.
3. ALL STORM DRAIN CROSSINGS WITH WATERLINE SHALL BE PRESSURE TESTED.
4. MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN PROPOSED WATER PIPE AND ALL SEWER OR STORM PIPE CROSSINGS.
5. SHALLOW BEDROCK IDENTIFIED THROUGHOUT PROJECT LIMITS. CONTRACTOR TO TRENCH THROUGH ROCK/HARDPAN PER SPECIFICATION 2203.1 TO ALLOW MINIMUM DEPTH OF BURY OF 5'.

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PVI STA: 11+29.15
PVI ELEV: 99.98'
LVC: 100'

VPC STA: 10+79.15
ELEV: 100.48'

VPT STA: 11+79.15
ELEV: 106.14'

12.33%

EXISTING GROUND C/L

PROPOSED CALHOUN C/L

45° BEND

10" GV

45° BEND

8" HDPE SERVICE TO FIRE HYDRANT (BEHIND)

10" HDPE PIPE (LP)

10" HDPE PIPE (HP)

S-1 TYPE IV CB
STA: 10+69.12 OFF: 23.21 LT
FRAME EL= 100.99
P-1 97.79
P-2 97.89

S-2 TYPE I SDMH
STA: 11+10.61 OFF: 19.84 LT
FRAME EL= 101.48
P-2 98.26
P-3 98.36
6" EX PVC 99.22

S-3 TYPE IV CB
STA: 11+10.61 OFF: 19.84 LT
FRAME EL= 104.32
P-3 101.27
P-4 101.37
6" UD 101.37

S-4 TYPE IV CB
STA: 12+26.38 OFF: 11.00 LT
FRAME EL= 111.92
P-4 108.87
P-5 108.97
6" UD 108.97

S-15 TYPE III CB
STA: 11+16.14 OFF: 15.53 RT
FRAME EL= 100.47
P-16 98.09
6" UD 98.19

(P-EX-1)

(P-1)

(SS-EX-1)

(SS-EX-2)

(SP-1)

(P-2)

(S-EX-7)

(S-15)

(P-16)

(P-EX-9)

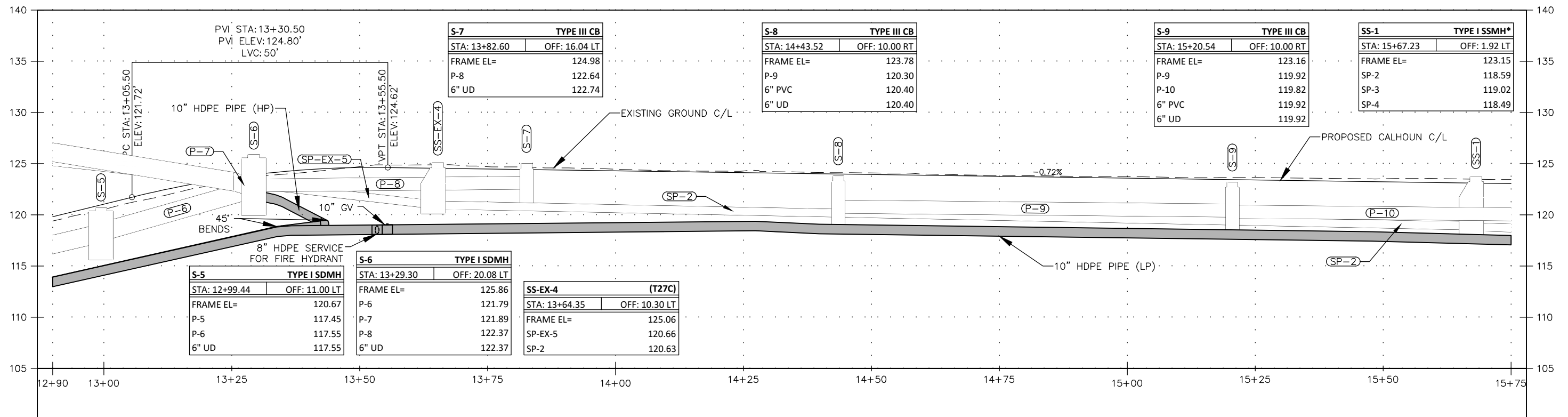
(P-3)

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(P-5)

10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50 12+75 12+90

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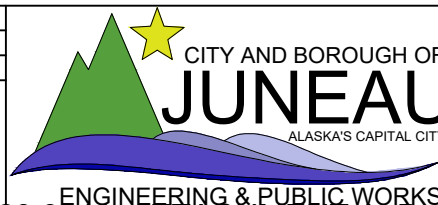
RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY



DRAWN BY:	E. ROEMELING
DESIGNED BY:	E. ROEMELING
CHECKED BY:	L. CHAMBERS

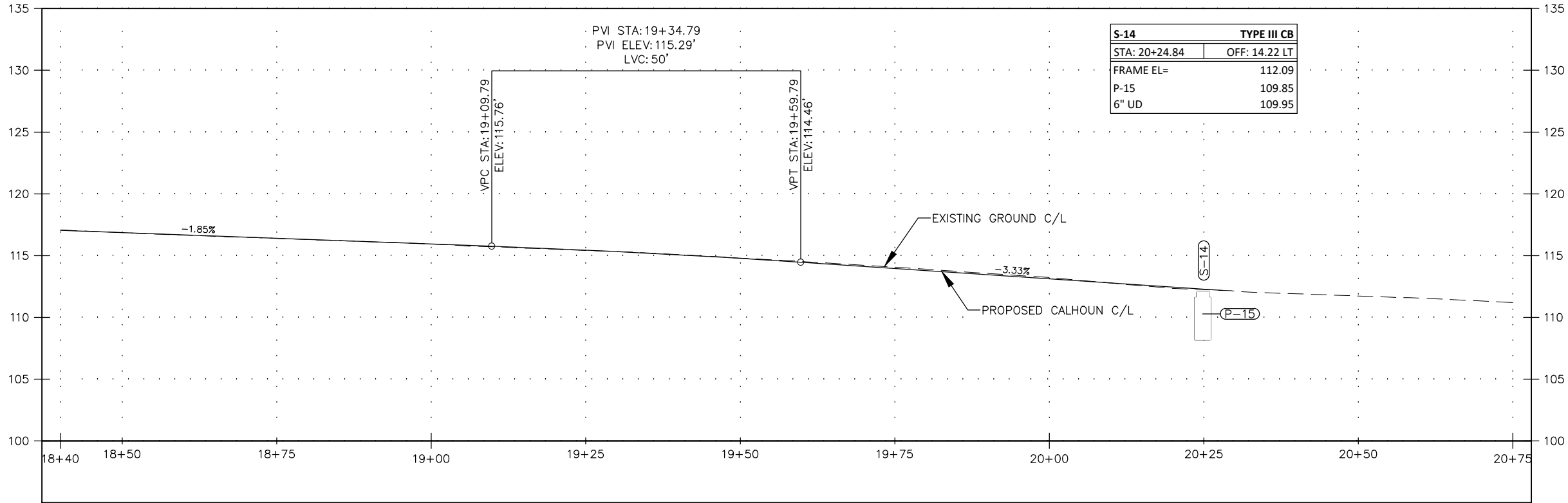
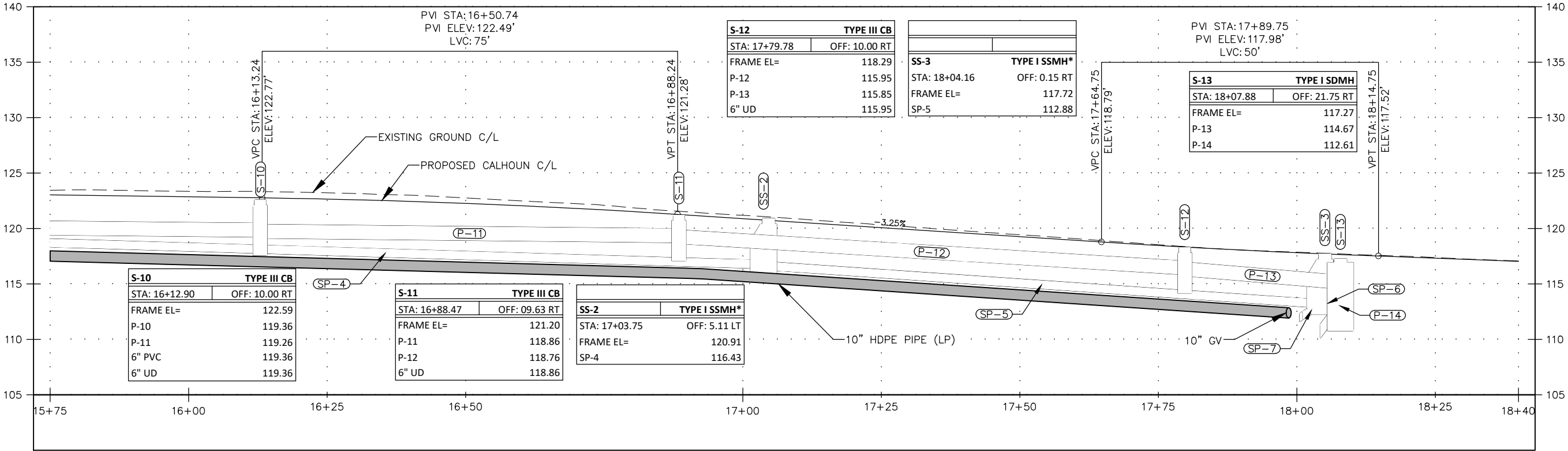
1945 ALEX HOLDEN WAY #101
JUNEAU, AK 99801

solutions@proHNS.com
www.proHNS.com



BE21-117

SHEET NUMBER
21
 OF
22



- SHEET NOTES:**
1. A MINIMUM OF 5' OF COVER IS REQUIRED FOR THE WATERLINE. INSULATION SHALL BE USED WHERE OBTAINING 5' OF COVER IS NOT PRACTICAL.
 2. EXISTING PIPES AND STRUCTURES OUTSIDE OF THE PROJECT LIMITS ARE NOT SHOWN IN PROFILE VIEW FOR CLARITY. PLEASE SEE PLAN SHEETS FOR LOCATIONS OF THESE PIPES/STRUCTURES.
 3. ALL STORM DRAIN CROSSINGS WITH WATERLINE SHALL BE PRESSURE TESTED.
 4. MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN PROPOSED WATER PIPE AND ALL SEWER OR STORM PIPE CROSSINGS.
 5. SHALLOW BEDROCK IDENTIFIED THROUGHOUT PROJECT LIMITS. CONTRACTOR TO TRENCH TROUGH ROCK/HARDPAN PER SPECIFICATION 2203.1 TO ALLOW MINIMUM DEPTH OF BURY OF 5'.

PRELIMINARY
PLANS

RECORD OF REVISIONS			
No.	DATE	DESCRIPTION	BY

CERTIFICATE OF AUTHORIZATION
#100662

DRAWN BY: E. ROEMELING
DESIGNED BY: E. ROEMELING
CHECKED BY: L. CHAMBERS

1945 ALEX HOLDEN WAY #101
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CITY AND BOROUGH OF
JUNEAU
ALASKA'S CAPITAL CITY

ENGINEERING & PUBLIC WORKS

CALHOUN AVENUE
RECONSTRUCTION

BE21-117

PROFILE - 15+75 TO
EOP

SHEET NUMBER	
22	OF
22	

pinch point. barely
able to maneuver
engine around this
corner - would not
be able to get
ladder or tanker
trucks around this
corner

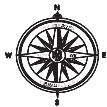
This is an aerial photograph of a residential street intersection. A red arrow points from the text box to a narrow section of the road at the corner. Another red arrow points from the text box to a building with a blue roof. A third red arrow points from the text box to a red line drawn across the street. A fourth red arrow points from the text box to a red line drawn across the street. A fifth red arrow points from the text box to a red line drawn across the street. A sixth red arrow points from the text box to a red line drawn across the street. A seventh red arrow points from the text box to a red line drawn across the street. A mouse cursor is visible near the center of the map.

Lose 4 - 5 parking
spaces here

lose 7 on street
parking spaces
here

lose 2 parking
spaces here

lose 3 on street
parking spaces
here



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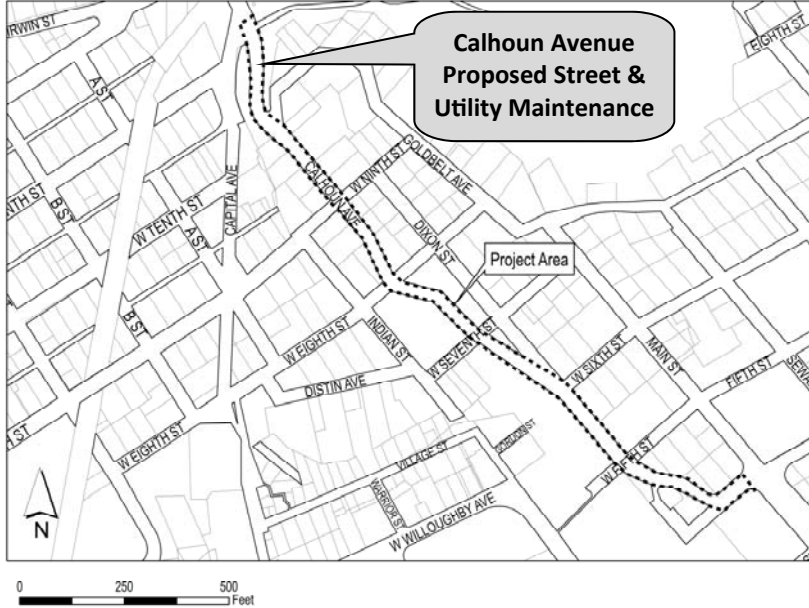
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Invitation to Comment

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 **complete street and underground utility maintenance (and replacements as necessary) on Calhoun Avenue.**

TIMELINE

Staff Report expected to be posted **Monday, January 4, 2021** at <https://juneau.org/community-development/planning-commission>. Find hearing results, meeting minutes and more here as well.

Now through Dec. 28

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

Dec. 29— noon, Jan. 11

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

HEARING DATE & TIME: 7:00 pm, January 12, 2021

This virtual meeting will be by video and telephonic participation only. To join the Webinar, visit: <https://juneau.zoom.us/j/93626358724>. The Webinar ID is: 93626358724. 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.

January 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 December 17, 2020

Case No.: CSP2020 0011
Parcel No.: 0
CBJ Parcel Viewer: <http://epv.juneau.org>

Irene Gallion

From: John Nelson
Sent: Monday, December 28, 2020 3:05 PM
To: Irene Gallion
Cc: John Bohan
Subject: Planning commission notice

Posted...





Sent from my iPhone

Calhoun Public Meeting

December 22, 2020

Notes by Irene Gallion, Planner

Presentation by the team: Lucas Chambers (ProHNS), John Bohan, and John Nelson

BOP: Beginning of Project

CBJ: City and Borough of Juneau

CCFR: Capital City Fire and Rescue

DI: Ductile Iron

DOT: Alaska Department of Transportation and Public Facilities

EOP: End of Project

EPW: City and Borough of Juneau Engineering and Public Works Department

HDPE: High Density Polyethylene Pipe

24 attendees

Intro by Bohan, meeting is being recorded

Calhoun is the second way into town. CBJ ran into a challenge while coordinating with DOT on their Egan Drive project (10th and Main Street). CBJ did not want to block traffic during their construction. Their initial plan was for a two season project. DOT let CBJ know in mid-July that they'd be done by this fall. CBJ hit the ground running, got ProHNS in July/August.

Calhoun is identified by the Assembly for reconstruction of failing infrastructure (water, sewer, storm, pavement and sidewalks). Currently sanitary and storm sewer are combined, increasing flow to treatment plant. Water is way past design life with a significant number of failures, especially when turning on and off to tie in. After years of additional pavement the sidewalk is nearly flush with the road, cars drive over the sidewalks. Maintenance requires reconstruction of these systems.

Early on ProHNS looked at one-way traffic. The concern is fire access. CCFR use Calhoun as a redundant safety feature. CCFR had informed EPW that they were unable to support converting Calhoun to one way due to challenges of running down 9th Street, and the hill and sharp corner on Indian. CCFR tried to drive the proposed one way route, but it was very tight and very challenging even with a smaller engine. They'd not be able to get the ladder truck through there. At that point CBJ shelved the one way analysis, returned to "repair and replace" mission. EPW Reached out to CDD to discuss pertinent adopted plans and studies. SRTS, Non-Motorized and Downtown Blueprint pertaining to Calhoun. Address traffic calming, signage, and improvements to walking environment and improve crossing opportunities.

Capital Avenue will become a one way street uphill towards Cope Park. That one way was a success story for safer pedestrian access. It is currently narrow with no pedestrian facilities. One-way operations improved the intersection safety at Capital and Willoughby.

We've heard through social media that community might like further investigation of one-way operations on Calhoun in order to widen sidewalks and perhaps add a bike lane. The consultant has done some analysis. Ultimately moving forward with the proposal would be a Planning Commission

decision. None of the plans identified changes to configuration of the neighborhood or the traffic orientation. The proposed change is beyond Engineering's charge due to the impacts. The Planning Commission could make a recommendation to the Assembly, who would authorize further study of reconfiguration. That would require traffic studies and planning, and require additional funding.

The project presented tonight, with two-way traffic, will be before the Planning Commission on January 12th, 2020.

ZOOM protocols discussed.

Project overview:

The topographic and ROW survey got the ball rolling in July. Soon after that in August was a scoping meeting with Water, Sewer and Streets. Water and sewer are in pretty horrible shape. Need to separate storm drainage and sewer. During this ProHNS suggested ground-penetrating radar to see what was under ground and might hamper the design. We identified better locations for water and storm. The roadway section will be excavated at least 24", replace with rock to improve base and draw water down, then repaved with 2.5" of asphalt. We are proposing removal of the north sidewalk at Goldbelt/Cope Park to allow a larger roadway prism. Curb and gutter will be added to separate pedestrians and vehicles. Curb and gutter also defines the roadway, gives some traffic calming to roadway when there is a defined edge. We propose adding some access ramps in a few locations, three at the intersection of Capital, Cope and W 8th.

This meeting is part of the process, we are not at a final product. We would like to hear from you. (Shares graphic) Overview of area, show BOP at Cope Park and EOP at intersection with West 7th. This project ties in to projects done over the last 20 years. Goldbelt was reconstructed in 2004. Distin and West 8th have been redone. Calhoun is the missing piece.

We are limited with our ROW and features right against side of the road such as homes, fences, and retaining walls. CBJ is working hard to maintain access to private driveways and staircases. Pedestrian, vehicle and bicycle safety are a priority, and CCFR uses the route as an alternative to Egan when they need to get to the upper part of downtown.

In particular, right before West 8th, there is lots of congestion and very narrow.

ProHNS looked at one-way into and out of town. One-way in allows 11 foot traffic lane, bike lane and full width sidewalk. Engineers were not able to balance this layout with the needs of CCFR. Other negatives: In order to make it work, would have to make some changes on W 9th and Indian. Tight corner would have to be reworked. Parking is a big concern, loose about 17 spots in the area.

Chief Ethridge; When turning right on the corner of Indian, quite often have to do a 3 point turn due to parking or snow removal. Slows things down. Where it says "pinch point" on the graphic, that 90 degree turn is a steep one we don't do in winter due to hazards. Traffic conflicts on Indian are regular. Area directly behind the Governor's mansion is a pinch point.

ProHNS – a couple of questions coming in via chat will be addressed as we go through. A big part of the project is the underground utilities. Whatever way the traffic gets configured, nomatter what goes on there will need to be a lot of underground work. From Capitol Avenue intersection over to the Governor's Mansion we will replace asphalt. There is a reinforced concrete slab under the

pavement, not something we usually see. We saw signs of that with other projects, so GPR confirmed reinforced concrete throughout the corridor. It needs to be removed for the new utilities.

Currently there is a high pressure water line from Cope Park to upper Goldbelt neighborhood. We propose replacing DI with HDPE to increase service life, and will move the fire hydrant off the high pressure line. We will replace a regular pressure line that services Calhoun residents. The existing water service ends at Goldbelt, so we will tie it into Capital Ave for water service the whole length up to 8th Street. That will create a “loop” system, should improve water quality and reduce freezing, will also upsize water line and increased flow and pressure. Each home between Goldbelt and 8th Street will get a new curb stop.

With the services being so old, this might be a good time for residents to look at the line from the road to your home, it might be a good time to replace or maintain since the sidewalk is ripped up.

Sewer line: As part of Goldbelt project they replaced the cement pipe, we will pick up that replacement at the bottom of Goldbelt and go up Calhoun. Would like to put sewer back where it is because we know otherwise there is a lot of bedrock. We will redirect main sewer flows to West 8th. Fiberglass liner man holes will reduce back-up.

Drainage: CBJ is adding catch basins to pick up surface flow and reduce flooding, get water off the road. Including some underdrains.

Above-ground changes include widening existing sidewalk and adding some dedicated crosswalks at Cope Park. Ramps are ADA accessible with minimum slope landing areas. In some areas we can widen the sidewalk. Uphill neighbors like the sidewalk access to their homes, so we will maintain as is where able, it is narrow. On the downhill side we are getting the sidewalk up against buildings, and narrowing traffic lanes. For the project we have a minimum four foot sidewalk, in some places we can get to 5-6 feet. ADA requirements make it navigable for all users. One thing we look at is slope. ADA requires minimum three feet width, ideally four to five feet. The private staircase is particularly constrained, and in that location we can maintain three feet with eight foot lanes. At crossing locations improvements include more general ramps and landing areas. Will be installing with a six inch curb and gutter, which will improve safety and make it unlikely for cars to drive across. We have had the question, if CBJ raises the sidewalk, what does that mean for my home access? We will need to remove the concrete slab to lower road and ideally won't raise back of sidewalk at tie-in points. This is important for old homes with close access, and directing water away from private property into drainage system. We will replace the wooden hand rail, and will install new striping and signage for crossings, narrow areas.

From 8th in front of the Governor's Mansion is basically just new asphalt.

Realignment of Cope Park crosswalk: We will add ADA crossing ramps and will have two crossings. One on the river side to Capital Avenue, then one across Capital Avenue. Pulling in that corner and increasing radii of that turn, shortens crossing distance and improves conditions for people coming out of Cope Park.

QUESTIONS AND COMMENTS

Q: Would widening the sidewalk require reconfiguring traffic and getting Planning Commission approval?

A: We are limited by the right of way available, especially in specific narrow locations. Will look at the overall plan view after this initial round of questions. There are a couple of locations with retaining walls and substantial private structures that don't allow widening the road.

Q: I live on property above the sidewalk you intend to take out, basically a cliff held in place by trees. What is the impact of taking out that sidewalk and removing it have on the hillside? Do you care? Just a little bit of taking out of dirt and part of that cliff will bring down trees and part of my lot and then my house. Sounds dramatic, but it is dramatic.

A: CBJ would not perform work that jeopardizes your property. As contractors pull the sidewalk it will give us an opportunity to develop a better "catch" at the bottom and reduce the steepness of the slope. Especially with recent storms, yours are valid concerns. The sidewalk is above the ground so can pull out without disturbing the slope behind, or existing vegetation that holds it in place. We will have stipulations for contractor to minimize earth disturbing activities. We know we are working around old retaining walls, older homes, and want to minimize damage to structure. Definitely taking steps to do that.

Q: Has there been any consideration of a retaining wall in that location?

A: Not at this point. We've not seen failures of that area in particular, so it is not a risk we are trying to mitigate. We will continue the dialogue.

Q: Would it be within EPW authority to ensure sidewalk is ADA accessible?

A: Yes, as discussed during the project overview.

Q: Are plans available for viewing?

A: We do not have a full set yet, but can put on our web site tomorrow. Preliminary plans are available to the public.

Comment submitted on chat: Planning Commission comments due by December 28th.

Q: Had a neighbor presentation on that at the last BluePrint committee meeting. Committee had not looked at this. Really no way to make it one way unless going to build another road there is no way to get emergency equipment to and from town. Right?

A: We need the Planning Commission to open up the scope if we are going to take a more detailed look at one-way operations.

Q: Maybe Beth McKibben would be interested in seeing the plans. Committee might like to look at those.

A: We've worked with Alix and she will know what we do moving forward.

Q: Just want to dig into the needs of the CCFR. I have seen them come up 9th Street in the summer. Based on concerns raised, if there was a one-way loop starting at Choate and looping to Capital and up 9th Street? Would there be concerns there?

A: Ethridge - When we have fires in the downtown area, with Main Street shut down, if there are additional calls or injuries we need to get in and OUT as well.

Q: Hypothetically, if 9th one way it would ease access issues because it is a terrible corner, if Choate to Cope one way would it be worth considering?

A: This would require a whole downtown study to do this. The charge is to reconstruct, and Ethridge has pointed out the issues with the current one-way proposal. At this point would put into the Planning Commission's court to look at a larger study. This would involve condemnation of property, roadways built against houses, and changes would impact residents of all of downtown. These are significant changes, and we don't have the charge.

Comment: Everyone saying "not our job" to look at one-way traffic. This route is the ONLY way that kids can bike to school.

Q: Undergrounding power, phone or cable?

A: Not the City's intent or job. That is up to those private entities.

Q: There is a question about how people will walk from Goldbelt to Calhoun.

A: The sidewalk between Goldbet and Cope is challenging to maintain during the winter. Right now we show elimination of that sidewalk, and creating a mid-block crossing up the hill, which allows for better sight distance for cars and pedestrians. Good to know if that makes sense to the user, so comments welcomed.

Q: Questions about sidewalk between Goldbelt and Cope Park. Concerns about removing it, as it is used to avoid bears or dogs. Also, human nature is to take the shortest route. Between Cope Park and Goldbelt could the project possibly include a small segment of bike lane? How much room will sidewalk removal free up?

A: About four feet. It would be a challenge to create a bike lane on both sides. Need to evaluate that sidewalk a little further.

Q: Can we turn one cross walk into a rainbow?

A: There is a process for that, there is a downtown partnership with a local group for private maintenance and funding. Reach out to Bohan for details.

Q: Right now it looks like both sidewalks coming off of Goldbelt – there is no beginning. One is a cliff, the other is a rock wall. I don't understand what they are supposed to be doing. Above Goldbelt, is there a crosswalk at the end? I don't know about these sidewalks, I don't see them being very functional. How to cross and where to go? A lot of children walk up there and have to skirt a rock wall. I'm questioning if this has been through.

A: We are not dealing with a perfect scenario. Having multiple crosswalks in a short stretch is not ideal. These sidewalks touch on the challenges of this section. We don't have anything to tie into as we go up to Goldbelt. The proposed crossing pulls it away from that steep intersection and blind corner. That is why it is located where it is. People want to take the shortest route, so we made it as close to the intersection as possible. Good point on no beginning and no end, homeowners

desire to keep the sidewalk in place. It will be impossible to put sidewalk on both sides at the retaining wall. Don't have a sidewalk on Goldbelt to hook into.

Comment: Removing the sidewalk and creating a bike lane will create a problem, which you might not know if you don't live here. Consider it carefully.

Comment: Seems to me in terms of safety of roadway the only real thing is to continue the status quo with sidewalks with a curb, but that misses the ongoing problem that the City uses Calhoun as the uphill arterial into and out of the city at high speeds and it is very narrow. Since we've lived here since 91 cars have hit the wall three times, and you can see cars hitting the retaining wall on the uphill side of the street. Whether or not you do a one way, CBJ needs to figure out a way to slow traffic, not just street signs. People in a hurry, people leaving bars, all impact a walking neighborhood. Need to look at a one way option or more dramatic means of reducing speeds. It is just pure luck that people are not killed on the roadway. It is inconsistent with the City's values to have that speed. Concerns that Bud Carpenetti will get flattened and we'll lose one of our greatest justices. Almost a guarantee that we will have bad things in the future.

A: Agree on traffic calming, curb and gutter will help with perceptions. We need to do enforcement. Narrow the road up and maximize what we can do safely.

Comment: Safety of the neighborhood is the main concern. Unless traffic is slowed considerably with speed bumps or stop signs we will have these issues. I've seen the trucks trying to get around the corner by our house, but it is a tight environment, something will have to give to make it safer. There is no need for people to race in or out of town. Things that physically slow traffic will be an improvement.

A: Speed humps are not installed for traffic calming. They are a hazard and impossible to maintain. We can look at road geometry or islands. Need to take into account our users for safety and slower traffic. Traffic calming may reduce traffic if people don't like the slower road.

Anticipate when this is constructed there will be some impacts to through traffic, which will be limited during construction. We will be able to maintain local traffic for trash pick up and mail delivery.

Q: Flashing lights at crosswalk?

A: Not typically something we will do but we will look into it

Q: Underground electric: Already SOB to Governor's house, why not continue?

A: That was during reconstruction of the viaduct the utilities were in the way and very old. There were few services on it so that was the most effective and efficient way to do that at that time. We would accommodate work being done, but would not pay for it.

COMMENT: TBMP weighs in: TBMP does not use this corridor for tourism traffic. We'll reach out to Kirby just to make sure there are no concerns.

Q: Surprised that a complete ban in the city on use of speed bumps. Some in University, some on back roads.

A: Most are private or state agencies. We have the ones in the Back Loop area and they've not worked out. Policy not to install.

Q: Seems the speed humps slow traffic down. I am concerned about walkability on this stretch of road. I sent in a photo of how much the sidewalk is worn down, also concerned about bike-ability. Unsafe, but people do it. This project does not meaningfully help bicyclists. Do you think this promotes bike-ability and how?

A: Best we can do is to reduce speed on the narrow road we are stuck with. We don't discount that people cycle on it, need better awareness of traffic calming and traffic speed. If larger than what we are doing, we need direction. We have limited infrastructure that needs maintenance.

Q: The way you describe what the PC needs to do would be humungous, you make it sound impossible. If it is presented like this huge thing, decreases the likelihood of it happening. What did you mean Chicken Ridge?

A: Star Hill and Chicken Ridge use this route, an informal priority route. We have to consider all the users and all the connections. Basically, serves upper downtown.

Q: Lucas, is there any hope for cyclists in this project?

A: Great to get feedback. Space is constrained. We will look at accommodations. Slowing some speeds down can help bikes use traffic lane, for higher level users. It is a matter of who gets the space at this point.

Q: Can you have some conversation about narrowing the street to calm traffic?

A: Narrowing makes someone feel like they are in a confined space. The more confined, the more likely to drive slowly, especially knowing curves. It is a proven industry-accepted standard.

Q: Stop signs for speed control?

A: An unwarranted stop sign is actually a liability.

Comment: The Goldbelt area is part of Chicken Ridge.

Q: Can conduit be laid for future lines?

A: No, the utilities are aware of the project, they are not interested in undergrounding and have no need to upgrade their system.

Q: Stop sign 8th Street intersection by Governor's Mansion?

A: Not warranted. Not a traffic implement that requires a stop sign.

Planning Commission comments can be provided:

- To staff by December 28,
- To Commission by January 11,
- Testify on the 12th.

Comment: I do appreciate water sewer, safer roadway and sidewalk. Could be more conversation with homeowners on what they'd contribute to the project if more space is needed. If that could make for a better, safer project, we would be willing to have a conversation about donating land.

Conclusion: Just because we focused on the two way, doesn't mean it is a done deal. We just need to look at a larger project that evaluates the project more thoroughly. It would require that we reconfigure not just this street, but the neighborhood to accommodate the different needs.

December 24, 2020

Dear Planning Commission,

Calhoun Avenue has been my family's walking route to school, Cope Park and the Flats for decades. It is also our bike route, getting off our hill, and my preferred driving route home to Basin Road. I appreciate CBJ's plan to upgrade the road, sidewalks and utilities. I sincerely hope it will be done the best possible way to improve safety. I have three points to share:

- At the 12/22/20 CBJ Public Works and Engineering Departments meeting, it was emphasized that narrow streets equate to slower traffic. I asked for an explanation of that concept and was told that studies show, narrowness causes cars to drive with more care. Narrowing the road is the most compelling reason to create one lane traffic. It will allow for wider sidewalks to meet recommended, not just acceptable, ADA standards. It will also allow for designated bike lanes. Pedestrian and bike safety were the two biggest concerns of the neighbors.
- CBJ is looking for "avenues" to expand cruise ship visitor offerings in anticipation of larger than ever numbers in the coming years. Tourists need to spread out. I envision more tourists using a pedestrian friendly Calhoun to go beyond the Governor's House walking to Gold Creek, visiting the burial sites of Joe Juneau and Richard Harris and circling back to the docks by way of the whale sculpture. (The newly installed sidewalks for visitors along Egan Drive are eight feet wide!)
- When Basin Road went through the same "big dig" that is planned for Calhoun, burying utilities was not in the original plan. However, when the CBJ engineers and Assembly Member John McKinnon saw how straightforward it would be to bury wires once the road was dug up, it happened. I was told following the business district's burying of wires to make the area more attractive for tourists was the best plan. (That rationale was in addition to the reasons all new Juneau developments require underground utilities.)

Thank you for considering my input in your decision making.

Sincerely,

Joyanne Bloom

From: Rebecca Braun <rebeccabraun71@gmail.com>
Sent: Monday, December 28, 2020 12:27 PM
To: PC_Comments
Cc: Borough Assembly

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

To Members of the Planning Commission:

I'm writing to respectfully request you broaden the scope of the Calhoun Avenue project in order to address safety, particularly for pedestrians.

I live in the Highlands neighborhood and (in better times) am a regular walk-commuter to the downtown core via Calhoun. It's a beautiful walk and I enjoy it, but at times it is definitely hairy, especially when it's icy and dark. I have flattened myself against buildings when large or fast-moving vehicles approach, and regularly step into the street to pass others on the sidewalk. When my children were smaller, walking Calhoun was especially nerve-wracking, and I have witnessed many close calls. It is just too narrow to safely and comfortably support all the vehicles, walkers and bikers that use it.

This project offers a rare opportunity to improve walkability, safety, and quality of life for Calhoun Avenue residents, neighbors, and visitors. I hope you will take time and bring an open mind to study the options and find the best way to maximize this opportunity.

Thank you,

Rebecca Braun
136 Behrends Ave.
Juneau

Downtown Juneau Neighborhood Association

Statement of Interest regarding the reconstruction of Calhoun Avenue

The reconstruction of Calhoun Avenue is a once-in-a-generation opportunity to make improvements to the safety and design of our community.

The design of this project impacts nearly every resident of downtown Juneau, as well as state office workers, legislators, tourists, pre-kindergarten, and school classes.

Calhoun has been a well-documented safety concern for at least two decades, with a sidewalk and roadway that is too narrow for safe multi-user passage.

Calhoun Avenue is one of only three corridors connecting downtown offices, restaurants, shops, and residences with the schools, parks, and greater geographic area that includes homes in the Flats, Behrends, Starr Hill, Chicken Ridge and Highlands neighborhoods. The other two routes - Egan Drive and Willoughby Ave - are not options for most walkers or cyclists as they experience higher vehicle speeds nearby and are more circuitous.

The residents of our neighborhood have hundreds of years of lived experience observing and experiencing the safety issues on Calhoun.

Therefore we respectfully request that the City and Borough of Juneau pursue:

- Design choices that prioritize walkability and pedestrian and bike safety including sidewalks that are fully compliant with the Americans with Disabilities Act's (ADA) standards and recommendations, and are at least five feet wide, even through the most narrow sections of the corridor.
- A study of car, pedestrian, and bike traffic which includes speed and motor vehicle crash data as well as trip purposes for all users.
- Opportunities for the neighborhood and general public to meaningfully inform the design of this project and more generally the holistic plan for flow and structure of streets in our neighborhood. Projects that primarily serve residents should receive the same attention as those intended to serve tourists.
- Consideration of traffic-calming measures like stop signs, speed bumps, and other well-known neighborhood friendly design choices that keep the roadway speeds slow.
- Consideration of one-way routing paired with bike lanes and burying the powerlines to give the necessary space for safe passage by anyone walking, rolling, or biking through the corridor.

Alida Bus
90 Spruce St. #303

Amy Dressel / Carol VanHorn
954 Goldbelt Ave

Amy Paige and John Dunker
592 Seater Street

Catherine Reardon and Mark Handley
630 Dixon Street

Dana Owen and Joyce Thoresen
949 Goldbelt Ave

Emily Ferry & Demian Schane
836 Calhoun Ave

Frances Leach & Kerry Crocker
925 Calhoun Ave

Frankie Pillifant
512 6th Street

Grey Pendleton
329 Distin Ave

Ian Fisk
923 A Street

Iris Matthews & Matthew Rogers
717 Dixon Street

Jeremy Bauer
943 Calhoun

John "Jonas" & Melinda Lamb
638 Gold

Joyanne Bloom
883 Basin Road

Ke Mell
850 Basin Road

Kevin Maier
570 Seater Street

Laurie Berg & John Connolly
911 Calhoun

Linda & Paul Rosenthal
342 Distin Ave

Marilyn Holmes
969 Goldbelt Ave

Mark and Sun Choate
230 W. 8th Street

Mary Alice McKeen and David Ottoson
212 W. 9th St.

Mary Sweeney
3rd Street

Michael & Ann Dombkowski
239 West 7th Street

Odin Brudie
512 6th Street

Rebecca Braun
136 Behrends Ave.

Richard Monkman & Tina Kobayashi
957 Goldbelt

Robin Stratton MacDonad
965 Goldbelt Avenue

Sally Schlichting & Bob King
419 Kennedy Street

Sandy and Peter Metcalfe
354 Distin

Sonia Nagorski
319 6th Street

Steve Krall
875 Basin Rd

W. Keith Gerken

328 Distin Avenue

December 28, 2020

Planning Commission

RE: Calhoun Avenue street and utility reconstruction

The proposal to change a portion of Calhoun Avenue to one-way vehicular traffic is likely to have complex impacts not just on the Calhoun neighborhood but also other downtown neighborhoods and traffic into and out of downtown. This proposal should not proceed without expert analysis beyond the sincere but insufficient discussion that has happened so far.

Without further analysis it is difficult to weigh the impacts versus the benefits of this traffic change.

Of particular concern would be the transfer of one-half of the Calhoun vehicular traffic to 9th street. As someone who has used 9th street on a routine basis for over 40 years, I am very familiar with the deficiencies of that route. The steepness and the blind 90 degree turn midway require caution in the best of circumstances, and avoidance in poor winter weather.

The general idea of including better accommodation of pedestrian and bicycle users is great. And this has been happening incrementally around the Borough in past few years. But this specific proposal to eliminate one vehicle lane to create a bike lane and wider sidewalk, would apply to just a one or two block distance with no apparent means for extending this configuration. While incremental improvements are often the only practical approach to change, those incremental improvements should be done within the context of a larger plan.

I urge the commission to take the time to evaluate both the benefits, costs and impacts of all of the options that exist to make this portion of Calhoun more amenable to all its users.

Irene Gallion

From: Lucas Chambers <lucas@prohns.com>
Sent: Monday, December 28, 2020 8:23 AM
To: John Bohan
Cc: John Nelson; Irene Gallion; Alexandra Pierce
Subject: RE: Calhoun Reconstruction - crosswalk

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

Received. Thanks.

Lucas Chambers, P.E.
 Cell: (907) 738-7384
 Office: (907) 780-4004

From: John Bohan <John.Bohan@juneau.org>
Sent: Thursday, December 24, 2020 1:57 PM
To: Irene Gallion <Irene.Gallion@juneau.org>; Alexandra Pierce <Alexandra.Pierce@juneau.org>; Lucas Chambers <lucas@prohns.com>
Cc: John Nelson <John.Nelson@juneau.org>
Subject: FW: Calhoun Reconstruction - crosswalk

FYI

Thanks
John Bohan, PE
 CBJ Chief CIP Engineer
 155 S. Seward St
 Juneau AK 99801
 (907)586-0876 fax 463-2606

From: Dave Harris <dkh@gci.net>
Sent: Thursday, December 24, 2020 1:51 PM
To: John Nelson <John.Nelson@juneau.org>; John Bohan <John.Bohan@juneau.org>
Subject: Calhoun Reconstruction - crosswalk

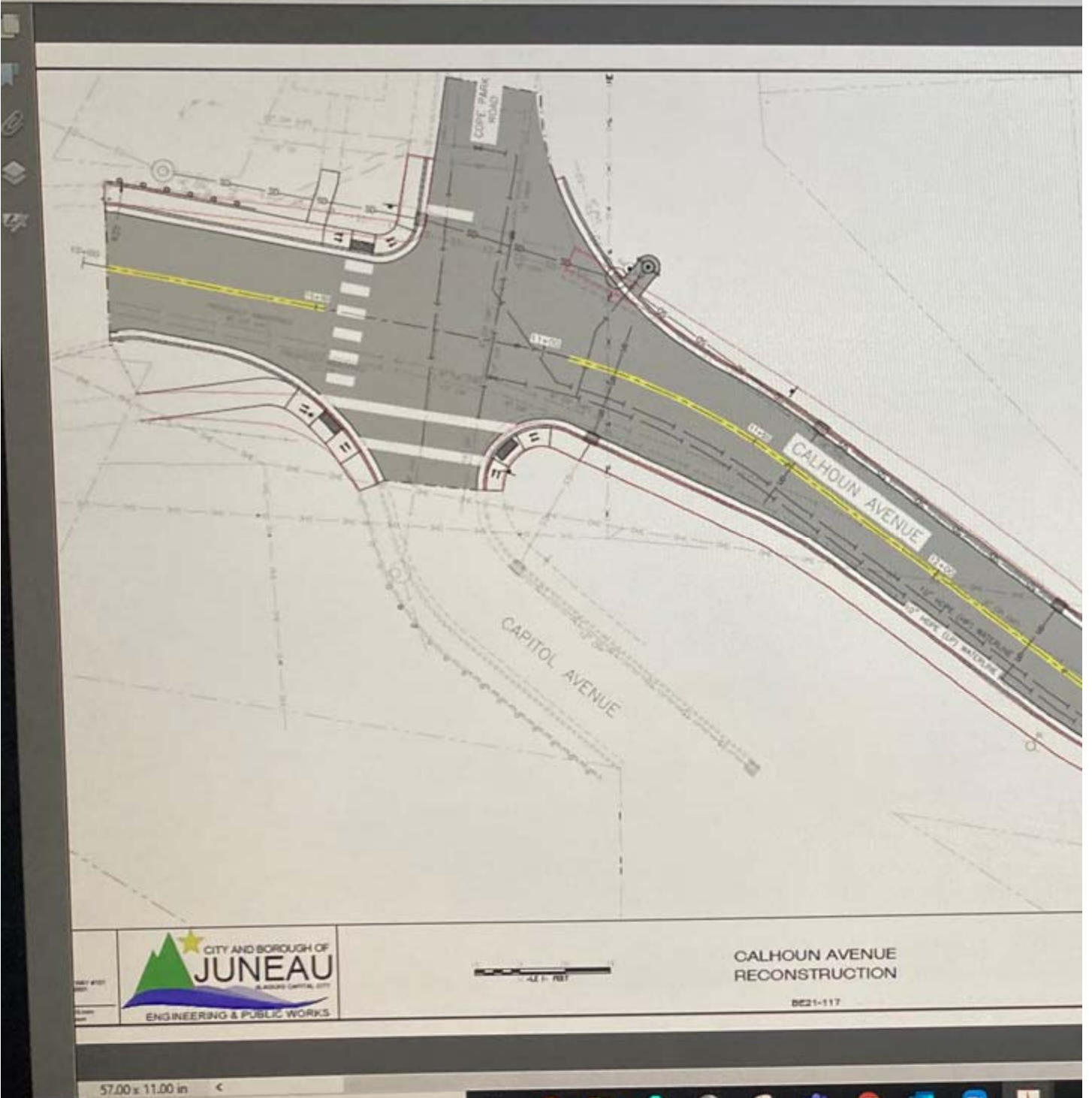
EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Hello, I'm Dave Harris and my brother in law Herman Rosenberger and I own the property at 924 and 928 Calhoun. I observed the Dec 22 zoom meeting. Thank you, it was very informative. We discussed the information and have a couple of comments. We see the cross walk close to Goldbelt is shown leading directly into the private passageway between our buildings. In order to maintain privacy and security for our tenants, we would like to see the cross walk shifted towards Goldbelt, I believe it was stated there was room to move it a bit either way. It could it could land in the middle of the wall of 928, between the passageway and the door to the street level apartment. We are not in favor of flashing lights at this cross walk as it would create a visual disturbance to our tenants with street facing windows. As a frequent pedestrian in the area coming and going from Cope Park, I use the uphill side walk and usually cross right at the crest of the hill as this gives you the best view of traffic coming both ways; up the hill as well as coming down Calhoun. With respect to the discussion about changing to a one way street we are opposed. As a matter of practicality, having the street be

two way helps our tenants negotiate our carport (the portion of 928 closest to Cope Park) and provides efficient access to the rest of town.

Thanks for your time, and please share these comments with Lucas Chambers.

Dave Harris
924&928 Calhoun
dkh@gci.net



From: Melinda Lamb <lamb.melinda@gmail.com>
Sent: Monday, December 28, 2020 9:49 AM
To: PC_Comments; lucas@prohns.com; John Nelson; Borough Assembly
Subject: Prioritize walking and biking for Calhoun rebuild

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

I'm a downtown Juneau homeowner and resident at 638 Gold St. I have lived in this neighborhood for 15 years and believe more integration of one-way streets would significantly improve driving in downtown. I value the Calhoun corridor and believe it should have a safer sidewalk and bike lane. I have felt uncomfortable walking with my small children on portions of the Calhoun sidewalk due to its narrow width and proximity to cars. I also feel uncomfortable with the current biking option along that road as the only real option is to ride bikes in the traffic lanes. My children age 9 and 13 use that road daily for their commute to school but I have never felt there is a truly safe option for them to independently bike. I would love safe biking and walking to be a priority for the Calhoun corridor in this rebuild project.

Thank you for your consideration,

Melinda Lamb

Peter & Sandy Metcalfe

354 Distin Ave, Juneau AK 99801 — 907-723-3483

To: Juneau Community Development Department

December 28, 2020

Re: Calhoun Ave. Rebuild Project

Since 1992, my wife and I have been residents of a neighborhood bordering Calhoun Ave. In those 28 years, we've witnessed or seen the results of numerous accidents and close calls, such as the several vehicle collisions that have damaged and in one case, destroyed a section of the Choate's stone wall along Calhoun, and an uncounted number of occasions when, upon entering Calhoun from W 8th, we've had to stop our car abruptly to barely avoid vehicles racing around the blind curves.

So far as I can see from the plans, the project will rebuild but not change Calhoun Ave. It is focused on the efficiency of vehicular traffic without any meaningful design changes to accommodate and protect pedestrians and bicyclers.

I believe it is time to reconsider such corridor rebuilds. We have an opportunity to, at little cost, make this section of downtown more people friendly with minimal impact on traffic efficiency.

I encourage a traffic study followed by a presentation of alternative designs that include speed bumps, possible one-way changes, and other improvements so that the Planning Commission and CBJ Assembly are presented with choices rather than a fete accompli.

For most of us who live in proximity to Calhoun, this is a once in a lifetime opportunity to influence a positive change in the traffic that passes through this corridor.

Respectfully,

A handwritten signature in black ink, appearing to read "Peter Metcalfe". The signature is fluid and cursive, with the first name "Peter" and last name "Metcalfe" clearly distinguishable.

From: Dana Owen <danaowen48@gmail.com>
Sent: Sunday, December 27, 2020 10:41 PM
To: PC_Comments
Subject: Calhoun Ave rebuild

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

Members of the Planning Commission,

As you consider the proposed renovation of Calhoun Avenue, please bear in mind what residents and other users of this neighborhood have long understood. Namely, that this transportation corridor is unsafe and way overdue for redesign. The proposed upgrade of utilities and repaving of the street presents an opportunity to correct these decades old problems. It would be an unfortunate and costly mistake to pass this opportunity by. We support expanding the scope of work to include

- safer passage for pedestrians and bicycles,
- traffic calming design to slow cars that often exceed the posted speed limit,
- traffic design that treats Calhoun as a neighborhood street and discourages its use as an arterial means of travel by commuters who can otherwise use Egan.

A walk down Calhoun from 12th to downtown, especially during morning, midday and afternoon should convince any interested observer of how important this corridor is for pedestrians and cyclists. It is common for walkers to have to step into the street where the sidewalks are so narrow as to make it difficult for people to pass each other. It goes without saying that this is not a safe condition, particularly if adults are shepherding children. Ditto for cyclist having to squeeze between the curb and possibly two lanes of autos,

People have suffered these difficult and dangerous conditions for at least as long as the more than thirty years that we've lived in this neighborhood. It's past time to address this issue.

Thank you for your work on the commission and your consideration of the wishes and needs of the people of the Calhoun neighborhood.

Dana Owen and Joyce Thoresen
 949 Goldbelt Ave.
 907-209-9913

From: Jacob Resneck <j@jacobresneck.com>
Sent: Sunday, December 27, 2020 10:44 PM
To: PC_Comments
Subject: Calhoun Rebuild - pedestrian/bicycle upgrades

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

I lived at 332 W. 12th for a year and walked/cycled to work downtown daily. I can attest that Calhoun Avenue is heavily trafficked by both bicycles and pedestrians. I would also observe foot traffic from cruise ship passengers. I would ask that the Planning Commission take this into account and upgrade the sidewalks/shoulder to make it safer for non-motorized traffic. Thank you, Jacob Resneck, Douglas

--

Signal: +1 707 874-8704 | Skype: yojaco | Twitter: @jacobresneck

"But what is the difference between literature and journalism? Journalism is unreadable and literature is not read. That is all." -- Oscar Wilde (1854 - 1900)

Irene Gallion

From: John Nelson
Sent: Monday, December 28, 2020 9:52 AM
To: Irene Gallion; Alexandra Pierce
Cc: John Bohan; Katie Koester; Lucas Chambers (lucas@prohns.com)
Subject: FW: Calhoun Ave Project Comments- Revised

FYI

From: robbrose@gci.net <robbrose@gci.net>
Sent: Monday, December 28, 2020 6:56 AM
To: John Nelson <John.Nelson@juneau.org>
Cc: Rob/Rose Welton <robbrose@gci.net>; 'Frankie Pillifant' <frankiepillifant@gmail.com>
Subject: RE: Calhoun Ave Project Comments- Revised

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

Hello,

I walked the course yesterday, and took a measuring tape to see how wide the sidewalk is. Doing so gave me a revised view of what a safe width is for the sidewalk. Around the Governor's Mansion, and also on the climb up from Cope Park, the sidewalk is roughly 60" wide. That's pretty good. But from the top of the hill to the 8th street intersection the broken down sidewalk averages 40-45" wide. I now think that's too narrow. Can CBJ find a way to ensure a 60" sidewalk width through the whole project area? In our Zoom meeting you mentioned narrowing traffic lanes to slow down traffic. If we narrowed the lanes from the 8th street to Goldbelt, it would provide right of way to widen sidewalks to 60". That would make things better for pedestrians. The narrower traffic lanes would allow sidewalk widening without taking right of way from any of the local residents.

Narrowing lanes would also reduce speed differential, and help with bike safety. I would also like to suggest adding a stop sign at Calhoun and 8th. This would lessen speeds through this section, and make it safer for bikes. Adding a stop sign would have an additional benefit. Whenever I drive up Indian Street, go left on 8th and stop on Calhoun, right now you face a blind corner and rock wall. So you have to inch out and hope for the best. Putting in a stop sign would help cars merge onto Calhoun. I believe adding a stop sign would help local residents as well, much like the three way stop signs in the valley, at the corner of Berners and Muir Street.

Thanks for considering my reflections on how to optimize the project. Rob Welton

From: robbrose@gci.net <robbrose@gci.net>
Sent: Wednesday, December 23, 2020 10:23 AM
To: john.nelson@juneau.org
Cc: Rob/Rose Welton <robbrose@gci.net>
Subject: Calhoun Ave Project Comments

Hi Mr. Nelson,

First, thanks for taking time for a Zoom meeting last night, to explain the broad outlines of the Calhoun Avenue project. I'd like to share a few thoughts with you on it:

In a perfect world, there would be right of way for AASHTO-compliant traffic lanes, bike lanes and sidewalks. I understand that the terrain is too constrained for a "perfect solution". If I have comments on a strategic change in the road, I'll forward them to the Planning Commission.

It would be great to enable a one way road on Calhoun, but understand it poses emergency access challenges. Would it be possible to make Calhoun a one way street, but add a system where signals and lights could stop traffic and allow emergency vehicles to drive against the normal traffic direction? This would allow safe bike-ped access, and potentially solve the emergency access problem. I'd love to know your thoughts on the feasibility of this;

One of the nice aspects of the current road is the pull-out by the museum. When riding toward Cope Park, if there is a car behind me I'll pull my bike into this and let cars pass before entering Calhoun. Adding a pull-out to the Cope Park end, for riders coming towards downtown would be a nice enhancement. Adding a bike lane to the uphill side of the street would be a bad idea. Since bikes go fast downhill, the speed differential between bikes and pedestrians would be unsafe. If forced to choose, put a pull out on the downhill side. On a related note, I agree with removing the uphill sidewalk between Cope Park and Goldbelt Ave.

The most hazardous part of Calhoun is near the 8th avenue intersection, where the road bends slightly around a rock wall. If riding toward Cope Park, there is a short section where bike riders are potentially invisible to cars coming from behind. This needs to be mitigated, one way or another. Perhaps by straightening out the curve and rock wall? Finding a way to do this would be the best fix possible given the space constraints. Perhaps it's more feasible to narrow the road on both sides of this constriction. This traffic calming would reduce speed differential and thus hazard;

Improved signage would also help communicate the need for slower speeds and awareness of cyclists and pedestrians. I haven't inventoried what's there, but a study of signage is warranted. I'd be glad to be a sounding board on this.

Anything that can be done to lessen the grade of the climb up from Cope Park to Goldbelt Ave will be helpful. It slows down bikers going up, and speeds them up going down. Not sure how much leeway CBJ has in this regard. Even a small change would help.

On a related note, though it's outside the scope of this project, lessening the grade on Indian Street would be helpful. So would softening the radius of the very steep corner there. Not sure how feasible any of this is, but it would help provide redundant access;

Adding mirrors or something to the curve below Cope Park may help all traffic see each other as they merge onto Calhoun Ave;

It is laudable that CBJ plans on widening sidewalks to the greatest extent possible. Sidewalk width should never go under 48", even at the 8th avenue dogleg/chokepoint. If some right of way is required to make this happen, that's what should be done. "where there is a will, there is a way". Let's find a way to improve this critical section.

That's all the comments that come to mind. Thanks again for taking time to get me and others up to speed on the project. Also, Merry Christmas! Rob Welton

Irene Gallion

From: PC_Comments
Sent: Tuesday, November 17, 2020 3:16 PM
To: Irene Gallion
Cc: Chelsea Wallace
Subject: FW: Calhoun Ave, Capital Ave, and community planning
Attachments: Traffic.pdf

Hey Irene,

We just received this comment, which I assume goes with CSP20-01? Is this anything that we need to bother with?

Jack Scholz | Administrative Assistant I

Community Development Department | City & Borough of Juneau, AK

Location: 230 S. Franklin Street, 4th Floor Marine View Building

Main Line: 907.586.0715 | Personal Line: 907.586.0736



Fostering excellence in development for this generation and the next.

From: Demian Schane <dschane@gmail.com>
Sent: Tuesday, November 17, 2020 2:19 PM
To: PC_Comments <PC_Comments@juneau.org>; Borough Assembly <BoroughAssembly@juneau.org>
Cc: Rorie Watt <Rorie.Watt@juneau.org>; Katie Koester <Katie.Koester@juneau.org>; Jill Maclean <Jill.Maclean@juneau.org>; John Nelson <John.Nelson@juneau.org>; Alan Steffert <Alan.Steffert@juneau.org>; Beth McKibben <Beth.McKibben@juneau.org>; Ethan Roemeling <ethan@prohns.com>; Emily Ferry <emily.ferry@gmail.com>
Subject: Re: Calhoun Ave, Capital Ave, and community planning

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

Good evening, and thanks for the feedback we've received thus far.

Continuing this conversation, I attach a recent picture of a group from Discovery Preschool out for a walk and having to navigate Calhoun Avenue's narrow sidewalk. It highlights the importance of widening them so that groups such as this do not have to walk so closely to the vehicles moving up the street and so that there would be room for passers-by coming in the opposite direction. Understandably, if we were designing the city from scratch, we'd all have sidewalks like those in front of Harborview Elementary. Those are very pedestrian friendly and encourage travel on foot. That said, the city should take every opportunity to improve the walkability of this town and widen its existing sidewalks to at least 5 feet whenever feasible.

I am also attaching a rudimentary sketch of our proposal to improve traffic flow by making it move in a circular fashion in our neighborhood. Our understanding is that Capital Avenue will become one-way, heading north from Willoughby Avenue. We encourage CBJ to undertake a traffic study, focusing on ways to make our streets safer (especially the steep street up Indian from 9th Street), keep traffic on the main arteries to/from downtown, and promote pedestrian friendly neighborhoods.

Thank you for your time and consideration.

Demian
209-2632

From: **Emily Ferry** <emily.ferry@gmail.com>
Date: Sun, Nov 8, 2020 at 10:09 PM
Subject: Calhoun Ave, Capitol Ave, and community planning
To: <pc_comments@juneau.org>, <BoroughAssembly@juneau.org>
Cc: Rorie Watt <Rorie.Watt@juneau.org>, <Katie.Koester@juneau.org>, Jill Maclean <Jill.Maclean@juneau.org>, <john.nelson@juneau.org>, Alan Steffert <Alan.Steffert@juneau.org>, <Beth.McKibben@juneau.org>, <ethan@prohns.com>

Good evening,

My husband and I submit the attached comments concerning Juneau's impending road reconstruction and coordination in our neighborhood.

Thank you for your time and consideration.

Sincerely,

Emily and Demian
907-723-6599 / 907-209-2632



Proposal for revised traffic patterns on Capital & Calhoun Aves



From: Demian Schane <dschane@gmail.com>
Sent: Monday, December 28, 2020 10:38 PM
To: PC_Comments
Subject: comments on the reconstruction of Calhoun Ave

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

Dear Planning Commissioners:

I write to comment on the reconstruction of Calhoun Avenue. On December 22, 2020, the CBJ Engineering Department presented a helpful overview of the project. During that presentation, it became clear to me that the city would benefit greatly from a more in-depth study of this and adjacent projects.

First, there is strong interest in weighing alternatives that would provide for better and safer pedestrian passage and bicycle lanes. CBJ indicated that it had considered this option (though it did not take public comment or otherwise discuss this option beyond the 2-hour presentation), but CBJ dismissed it because it could be done only by making a portion of Calhoun Ave one-way and that change created concerns from the Fire Department. However, as a landowner along the route, CBJ did not discuss the possibility of widening the sidewalk onto our property (and adjacent ones) and how we might be able to adjust to that. Further, even with the one-way option, the information that CBJ presented was somewhat confusing. At times, they indicated that in order for the fire engines to use Ninth and Indian streets as one-way routes, they would need to condemn certain private property above the intersection of Capitol Ave and Ninth Street. But, the street is currently two-way and the fire department is using it without such condemnation. CBJ did not make clear why converting that portion of Ninth to a one-way street would require the condemnation of private property. If it's the direction of traffic that lead CBJ to that conclusion, could it consider the other direction?

Second, reconstruction projects like this one happen once every 20-40 years. Calhoun Avenue is a major corridor for pedestrians and cyclists as it connects residents to their schools, parks, and downtown businesses. The city has been working to make Juneau more walkable for tourists (adding signs, widening other sidewalks, etc.). Indeed, nearly every planning document describes CBJ's interest in maximizing pedestrian safety. And there is a great opportunity to do that here. It might take some creative effort, but a primary goal should be to have 5' sidewalks for as much of Calhoun Ave as is possible.

Finally, the city is currently planning the construction of Capitol Avenue. These two projects of highly used access streets (and perhaps there are others) afford the city the chance to look holistically at the downtown neighborhoods and analyze what options exist to make the downtown streets more user friendly to pedestrians and cyclists, while making traffic flow efficient and focused on the main arterial roads (Egan Dr. and Glacier Highway). While the city is fortunate that its contractors completed the reconstruction on Egan Dr. early, thereby making this project feasible for the summer of 2021. However, rather than move quickly to get it done, the city should explore all alternatives to come up with the safest, most efficient design for all the corridor's user groups.

Thank you for the opportunity to comment.

Demian Schane
 836 Calhoun Ave

From: Rob and Rose Welton <robbrose@gci.net>
Sent: Monday, December 28, 2020 7:12 AM
To: PC_Comments
Cc: Rob and Rose Welton
Subject: Comments for CSP2020 0011 Calhoun Ave

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

I'd like to make a few comments about the proposed repair and repaving of Calhoun Avenue, project CSP2020 0011.

In a perfect world it would be nice to add bike lanes and a wider sidewalk to the project area, but there isn't enough right of way for this. One solution would be converting Calhoun to one way, going from Cope Park to downtown. This would complicate emergency medical and Fire Department access, and also disrupt parking and traffic in the neighborhood. That seems like too much disruption. So I suggest CBJ make a few less dramatic changes that will improve safety for the neighborhood residents, motorists, pedestrians and cyclists.

As a cyclist, the narrow road and speed differential with cars make it never wracking to ride. The CBJ Project Engineer John Nelson suggests narrowing traffic lanes through the project area, which will lower motorist speeds. I applaud this as a constructive change. This change will yield additional right of way that will allow CBJ to widen sidewalks through the project area to 60 inches throughout. That will be a nice improvement.

I also recommend CBJ approve adding a three-way stop sign to the intersection of 8th avenue and Calhoun. The lower speeds will benefit the local residents, like the three way stop at Berners and Muir Streets in the airport area. The intersection is a bit of a blind corner. So adding a three way stop will make merging less of a gamble. Plus, it will lower speeds which will improve safety for cyclists and pedestrians.

This project will enhance safety in the neighborhood, and while it won't offer the perfect solution for all modes of access, it represents a good compromise and nice improvement. Thank you

Robert Welton
Douglas



1945 Alex Holden Way #101	Juneau, AK 99801	907-780-4004	solutions@proHNS.com
219 Main Street #13	Haines, AK 99827	907-419-6070	www.proHNS.com

Resident Correspondence Summary

Calhoun Avenue Reconstruction

BE21-117

943 Calhoun Ave

Kent & Jenny Dawson

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 8/31/20 - Owner discussed project concerns with proHNS (in person meeting)
- 9/29/20 - Owner discussed project concerns with proHNS (email)
- 9/30/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)
- 11/2/20 – Provided ROW encroachment approval to proHNS (email)

928 Calhoun Ave

Herman Rosenberger

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 9/8/20 - Owner discussed project concerns with proHNS (telephone call)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)
- 10/21/20 – Provided ROW encroachment approval to proHNS (email)

925 Calhoun Ave

Kerry Crocker, Frances & Perry Leach

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

924 Calhoun Ave

Herman Rosenberger

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 9/8/20 - Owner discussed project concerns with proHNS (telephone call)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)
- 10/21/20 – Provided ROW encroachment approval to proHNS (email)

914 Calhoun Ave

James McSweeney III

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 8/31/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

911 Calhoun Ave

John & Laurie Berg

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 9/1/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/5/20 - Owner discussed project concerns with proHNS (email)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)
- 11/2/20 – Provided ROW encroachment approval to proHNS (email)



904 Calhoun Ave

Mary Madden

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

212 West 9th Street

Mary Alice McKeen & David Ottoson

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 8/31/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

836 Calhoun Ave

Demian Schane & Emily Ferry

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 8/31/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)
- 10/14/20 - Owner discussed project concerns with proHNS (email)
- 10/15/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/15/20 - Provided ROW encroachment approval to proHNS (email)

835 Calhoun Ave

Raymond & Glendia Malaby

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 8/31/20 - Owner discussed project concerns with proHNS (in person meeting)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

825 Calhoun Avenue

Shane Francis

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

26 Calhoun Avenue

Grunberg Property Management

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)

230 West 8th Street

Mark and Sun Hee Choate

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 8/31/20 - Owner discussed project concerns with proHNS (in person meeting)
- 9/9/20 - Owner discussed project concerns with proHNS (email/telephone call)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)



214 West 8th Street

Keith Crocker & Oxana Stadnokova

- 8/31/20 - Received public notice *Calhoun Avenue Reconstruction Design* (hard copy hand delivered)
- 10/13/20 - Received public notice *Calhoun Avenue Road Closure* (hard copy hand delivered)



Page 627 of your packet

1

CSP2020 0011

Calhoun Avenue Reconstruction

- Water Utility Replacement
- Sewer Utility Replacement – sanitary and storm
- Roadway Reconstruction – including pedestrian improvements

Photo by Pat McGonegal



Page 627 of your packet

2

Commission duties

CBJ 49.15.580(a)

- Review for consistency with Title 49 land use code
- Recommend conditions and modifications to the Assembly

CBJ 49.35.240(i)(4)(B)

- Waive roadway construction standards for unique circumstances that may not meet AASHTO guidance.



3

Your recommendation to the Assembly

- Does the route deserve more study?
- Should this project go forward as is or with mods?
- Why didn't E&PW do more?

7

CALHOUN AVE IMPROVEMENTS, Phase I - MAIN ST TO GOLD CREEK - Reconstruct roadway, sidewalk and curb and gutter. Replace Water Main, valves and services connects as needed. Replace sewer main and service connects as needed. Evaluate street light coverage and possible need for additional lights or moving existing. Roadway base to be excavated and replaced with shot rock to improve drainage under roadway and new asphalt.

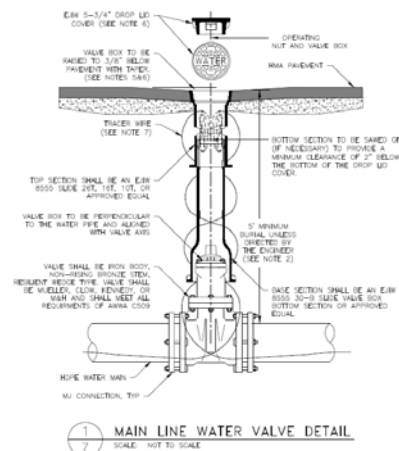


Page 629 of your packet

4

Brief touch on utilities

- Water system in poor condition
- Combined sewer needs separation into sanitary and storm



Page 629 of your packet

5

Possible one-way operations



Page 629 of your packet

6

How does CCFR use Calhoun?

- Access to upper downtown if Egan is blocked
 - Construction
 - 4th of July
 - Celebration
 - Tourist season
- Egress in the event of multiple calls
- Access to Gastineau
- “Get above” downtown fires quickly



Page 663 of your packet

7

CCFR maneuverability requirements



Page 629 of your packet

Maximizing sidewalk

- ADA min 3' wide
- Pinch point in W 8th area
- Otherwise, sidewalks are 4-5 feet wide
- Include curb and gutter
- Bikers share the road

Photo by Pat McGonegal



8

9

Pinch point



CITY AND BOROUGH OF
JUNEAU
ALASKA'S CAPITAL CITY

10

Shared roadway



CITY AND BOROUGH OF
JUNEAU
ALASKA'S CAPITAL CITY

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11

Need for road waiver [CBJ49.35.240(i)(4)(B)]

Existing roadway does not comply

- 26 foot required, 18 feet available

Unique circumstances

- Historic route, established before 1914

Will not aggravate intent of Title 49

- Adopted plans recognize need to improve pedestrian improvements in the limited ROW

AASHTO compliance unreasonable

- Recommend 9 foot lanes min. Pinch point has 8 foot lanes plus gutter



Page 635 of your packet

Public comments

- Do broader study of walkability, bike accommodations
- Consider one way traffic
- Prioritize sidewalks over lane width
- Consider burying utilities
- Find bike lanes

12



Page 634 of your packet

13

Plans

- Raise and rehab sidewalks where able
- Improvements for pedestrians needed
- Make ped travel safe and convenient
- Downtown Transportation Management Program
- Designate corridors for study



Photo by Pat McGonegal



14

Why approve?

- CCFR response capabilities need two way traffic at this time
- Historic ROW limits improvements
- Pedestrian safety improved with 6 inch curb
- Water needs replacement
- Sewer needs separation
- E&PW operating within scope of CIP
- If subsequent studies support, one-way ops could be accommodated with mods to sidewalks and paint



Photo by Pat McGonegal

Recommend planning effort?

Supported by Comp Plan

- Designate corridors for subsequent site-based studies
- Develop "Downtown Transportation Management Program"

Challenges

- Zero based budget
- Reduced tax revenue due to COVID-19



Page 636 of your packet

16

RECOMMENDATIONS

- **ADOPT** the Director's analysis and findings, and forward a **RECOMMENDATION OF APPROVAL** to the CBJ Assembly for the Calhoun Avenue Reconstruction Project.
- **APPROVE** the waiver of road construction standards for the Calhoun Avenue Reconstruction Project.

Thank You!





Planning Commission

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

PLANNING COMMISSION NOTICE OF RECOMMENDATION

Date: January 15, 2021
File No.: CSP2020 0011

City and Borough of Juneau
CBJ Assembly Members
155 S Seward Street
Juneau, AK 99801

Proposal: Planning Commission Recommendation to the City and Borough Assembly regarding complete street and underground utility maintenance (and replacements as necessary) for Calhoun Avenue

Property Address: Calhoun Avenue

ROW name: Calhoun Avenue

Parcel Code No.: Not Applicable

Hearing Date: January 12, 2021

The Planning Commission, at its regular public meeting, recommended that the Assembly DENY CBJ staff to design and build the project as described in the project description and drawings submitted with the application.

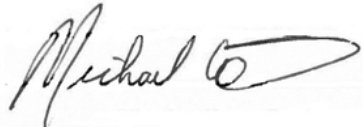
The Planning Commission recommended to the Assembly that a full traffic study of Calhoun Avenue traffic operations should be conducted prior to reconstruction.

Attachments: January 5, 2021 memorandum from Irene Gallion, Community Development, to the CBJ Planning Commission regarding CSP2020 0011.

This Notice of Recommendation constitutes a recommendation of the CBJ Planning Commission to the City and Borough Assembly. Decisions to recommend an action are not appealable, even

City and Borough of Juneau
CBJ Assembly
File No.: CSP2020 0011
January 15, 2021
Page 2 of 2

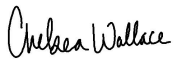
if the recommendation is procedurally required as a prerequisite to some other decision, according to the provisions of CBJ 01.50.020(b).



Michael LeVine, Chair
Planning Commission

January 20, 2021

Date



Filed With Municipal Clerk

January 21, 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. The CBJ and project 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**

Planning Commission Committee Assignments

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

Additional Materials for January 12, 2021 Planning Commission Meeting

ATTACHMENTS:

	Description	Upload Date	Type
▣	Additional Materials for January 12, 2021 Planning Commission Meeting	1/12/2021	Miscellaneous

Additional Materials

Regular Planning Commission Meeting

Virtual Meeting Only

7:00pm

Meeting Date: January 12, 2021

1. ARP2020 0001 & SMP2020 0004:

- a. Correction Memo from Jill Maclean

2. CSP2020 0009:

- a. Public Comment – Karl Bausler, received 1.7.21

3. CSP2020 0011:

- a. Public Comment – Marna Schwartz, received 12.29.20
- b. Public Comment – Frankie Pillifant, received 1.3.21
- c. Public Comment – Abbey Janes, received 1.3.21
- d. Public Comment – Doug Edgar, received 1.4.21
- e. Public Comment – Mark Choate, received 1.5.21
- f. Public Comment – Peter Metcalfe, received 1.5.21
- g. Public Comment – Emily Ferry, received 1.5.21
- h. Public Comment – John Bohan, CBJ Engineering, response to Emily Ferry, received 1.6.21
- i. Public Comment – Kristin Garot, received 1.6.21
- j. Public Comment – Michael Hekkers, received 1.7.21
- k. Public Comment – Darren Snyder, received 1.7.21
- l. Public Comment – Emily Ferry, received 1.7.21
- m. Public Comment – Demian A. Schane, received 1.8.21
- n. Public Comment – Britt Tonnessen, received 1.9.21
- o. Public Comment – Alida Bus, received 1.10.21
- p. Public Comment – Sally Schlichting, received 1.10.21
- q. Public Comment – Barb Mecum, received 1.10.21
- r. Public Comment – Tom Paul, received 1.10.21
- s. Public Comment – Claire Fordyce, received 1.10.21
- t. Public Comment – Morgan Michels, received 1.10.21
- u. Public Comment – Linda Rosenthal, received 1.10.21
- v. Public Comment – Robin Stratton MacDonald, received 1.10.21
- w. Public Comment – Marilyn Holmes, received 1.11.21
- x. Public Comment – Ryan Conarro, received 1.11.21
- y. Public Comment – Richard D. Monkman, received 1.11.21
- z. Public Comment – Terra Stark, received 1.11.21

- aa. Updated Statement of Interest from the Downtown Juneau
Neighborhood Association, received 1.11.21



(907) 586-0757
 Jill.Maclean@juneau.org
 www.juneau.org/CDD
 155 S. Seward Street • Juneau, AK 99801

MEMO

From: Jill Maclean, AICP, Director *Jill Maclean*

To: Michael LeVine, Planning Commission Chair

Case Number: ARP2020 0001 and SMP2020 0004

RE: Staff Report Correction

Staff received several questions and requests for clarification on staff reports ARP2020 0001 and SMP2020 0004. Below, please find corrections and / or additional clarification. Items bolded are necessary revisions or corrections to the staff report.

ARP2020 0001:

- **Page 3 of 12 (packet page 61): Inaccurately states that only single-family and accessory apartments are permissible. The Alternative Residential Subdivision (ARS) ordinance allows for residential uses (49.15.920(m)), including multifamily dwellings, e.g. condominiums, and is not restricted to single-family dwellings. The residential uses follow the underlying zoning district.**

SMP2020 0004:

- Page 4 of 8 (packet page 149): Clarifying that the staff report is accurate for the number of dwelling units proposed on this site. Density, under the ARS 49.15.920(e)(1) *Density*, is calculated by, *"The number of dwelling units permitted in the development shall be calculated by multiplying the maximum number of dwelling units per gross acre permitted in the underlying zoning district by the number of acres in the alternative residential subdivision and rounding to the nearest whole number."*
 - In this situation, the parent lot is 79,189 square feet in a D18 zoning district. Minimum lot size is 5,000 square feet, and the maximum number of dwelling units is 33. The developer is proposing 14 dwelling units.
 - In other words, the density is based upon the acreage of the parent lot; and a developer may choose how to divvy up the density; and even if a unit-lot on its own meets or exceeds the minimum lot size of the underlying zoning district, additional units are not permissible if the maximum number of dwelling units already exists on the other unit lots. This does not include density bonuses, which are not a consideration for this project.
 - Should the developer choose to modify the type of dwellings or add additional dwelling units, a modification to the plat and / or the Alternative Residential Plan may be required depending on the proposal.

- Page 5 of 8 (packet page 150): Clarifying that the staff report is accurate. Roads within an ARS development may be private *or* public (if the developer builds to city standards, the road may be adopted as a public street).
 - An ARS is permitted to have a private access roads within the development, if the criteria in 49.15.920(f) is met, and these are listed and discussed in the table. The table establishes that the ARS meets the criteria for private access within the development.
 - Exempting the access within the development from 49.35 does not exempt the parent lot from fronting and accessing onto a publically maintained right-of-way. Access to the development must be through a public right-of-way – this is criteria is met, because the parent lot fronts accesses onto Delta Drive.

Page 4 of 8 (packet page 149) Plat Notes:

- **First Plat Note on this page is not completely accurate and should be DELETED.** Plat Note Reads: At time of recording, Lots 2 through 11 and 13 through 15 are limited to one single-family dwelling. Lot 12 may be permitted one single-family dwelling and one accessory apartment. See CBJ 49.15 article ix for current regulations.
 - (Note: Generally, in multi-family zoning districts, units are units and are not considered “accessory apartments” because multiple units are permitted on one lot).
- Third Plat Note should be clarified to read:
 - **Plat Note: Per CBJ 49.15.920(j), No parking areas, dwelling units, unit-lots, or permissible uses may be located within the perimeter buffer. Access to the development may cross a portion of the buffer.**

From: Karl Bausler <bausler@ak.net>
Sent: Thursday, January 07, 2021 10:37 PM
To: Irene Gallion; PC_Comments
Subject: CSP20-09: 4th Street Douglas

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

These comments are for the hearing scheduled 1/12/21 noted on the sign posted at 4th and "I" Street, while the sign does not mention 5th Street it is my understanding it will impact "I" Street and the short section of 5th Street behind Gastineau School.

Of concern is the poor condition of "I" Street and required frequent maintenance for "I" Street.

"I" street may appear to be a quite residential street, however it is heavily impacted by CBJ activities. I have included photos from an earlier forwarded email to highlighting concerns to CBJ Engineering Dept. One side of the street (towards town/bridge) is CBJ property that includes a greenbelt and Gastineau school and parking, the other side has 5 residential properties- some of which may actually have their address on Douglas Hwy or 4th St.

"I" Street is frequently in various stages of break down, it has washouts at various times during the year, narrowing the usable portion of the street causing traffic to drive on the other side or straddle the road to avoid holes, sometime when students are present and crossing the street.

"I" street has frequent heavier vehicle use such as school buses and school supply delivery trucks.

In the winter the upper section of "I" St. is used as a snow dump site by CBJ.

In the summer the lower section of "I" St is used as a quick "round the block" turnaround, (up "I", left on 4th and then another left back to Douglas Hwy) by heavy long loader truck and dump trucks during the construction season.

It also has high personal vehicle use for the families/parents of school students and associated activities. (See photos below)

I would say "I" St. sees heavier use than the other lettered (A-G) streets that are paved.

"I" St requires frequent maintenance by CBJ Streets Dept from my observations.

It also requires maintenance by Gastineau school as they frequently use a leaf blower to blow the gravel out of there parking spaces back into the street.

It may make sense to pave all or at least the lower section that abuts the school properties to reduce the considerable time and expense involved with the ongoing maintenance budget.

The idea of an LID may not fairly balance the burden by just a few abutting residences (some of which may be retired persons on fixed income or rental with no residing owners) with those entities contributing to the heavy use of "I" Street.

Thank you for the opportunity to share these concerns,
 looking forward to improvement.

Karl Bausler
 5th Street (short section of) resident

Begin forwarded message:

From: Karl Bausler <bausler@ak.net>
Subject: "I"street drainage-Douglas
Date: September 18, 2020 at 1:50:19 PM AKDT
To: alan.steffert@juneau.org
Cc: Katie.Koester@Juneau.org

Hi Alan,

Karl Bausler here. Thanks for stopping by with Red the other day and taking time to talk with me and having a look at the "I" street drainage issues adjacent to the Gastineau school/ CBJ property. I have included some photos of the situation at its worst. Unfortunately, this is a recurring situation.

This is not a quiet residential street. Please note that in addition to school bus and delivery truck use when school is in session, the first section of "I" street is frequently used as a quick round the block turnaround for short, heavy (2.5 ton?) dump trucks and long load dump trucks in the construction season and the upper part of "I" street is used as a snow dump site in the spring.

Paving may be ideal. I have been told it is cost prohibitive. However, many of the street workers we have talked with say paving this street would actually save money and maintenance.

Across the street from the school and CBJ property are five residential addresses. We would like to work with CBJ on creating an efficient and cost saving solution to this chronic issue.

Please advise on who else at CBJ should be contacted about this situation.

Thank You for your help,
Karl and Katie Bausler

Cc: Public Works Director







From: Marna Schwartz <marna_schwartz@hotmail.com>
Sent: Tuesday, December 29, 2020 10:24 AM
To: PC_Comments
Subject: Calhoun Rebuild

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

I currently live at 308 7th St in downtown Juneau. I have lived on 7 th Street since 2007 and on 5th St from 1998-92.

Living downtown has its benefits and limitations. Choosing to live in an older neighborhood means living in a higher density community with challenging terrain and more limited options when it comes to space related considerations. Legislature related parking, tourist travel and weather complexities are all issues that are somewhat unique to living in this area and places limitations on activities that in other parts of town may be enjoyed with fewer safety issues.

Personally, I think the highest priority for downtown movement should be for walking. Our system of stairs is well maintained and allows for better options (both from an aesthetic and a safety perspective) for those wanting to avoid more heavily traveled roads. I am less concerned about the ability to bike through crowded downtown neighborhoods, my main concern is that residents sometimes believe that it is ok or appropriate to ride a bike on the sidewalk which unfortunately is not a safe choice for the rider or the walker. Perhaps having no ride areas in places that are an unsafe combination of riders and walkers would be a good option at this point, especially when roadways are too narrow to accommodate wider sidewalks or bike paths. This may be the situation on Calhoun.

If the community is interested in considering the impact of making more streets in the downtown area one ways, I think it would be more appropriate to discuss this as a whole downtown proposal rather than to have it come on a piece meal basis related to individual projects. It makes me uneasy to think a far reaching proposal to make significant changes in downtown traffic flow would come out of a public comment period on one specific planned upgrade of a heavily trafficked roadway. I am hopeful that comments requesting significant changes in traffic flow would be entertained in another forum rather than on a piece meal basis.

Thank you for the service you all provide to this community.

Marna Schwartz
308 7th St.
Juneau AK 99801

Irene Gallion

From: John Nelson
Sent: Monday, January 4, 2021 8:03 AM
To: Irene Gallion; Alexandra Pierce
Cc: John Bohan; Lucas Chambers (lucas@prohns.com)
Subject: FW: Calhoun Ave Project Comments- Revised

Another FYI

From: Frankie Pillifant <frankiepillifant@gmail.com>
Sent: Sunday, January 3, 2021 10:58 AM
To: John Nelson <John.Nelson@juneau.org>
Cc: robbrose@gci.net
Subject: Re: Calhoun Ave Project Comments- Revised

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

Hello Mr. Nelson,

I attended the Zoom meeting you conducted online a few weeks ago and have been thinking and reviewing the project since then and want to add my thoughts for your consideration. I have Cc'd Rob as we often discuss projects around the CBJ with regard to bicycle and pedestrian safety, and ADA. Together we have decades of experience as car drivers, bicyclists on roadways, and of course, we're all pedestrians. Though neither of us are in need of ADA considerations, those are often enhance safety for all users of a transportation route.

Calhoun has been, and continues to be, an integral part of my active transportation route off of 6th street in downtown. I raised two children in Juneau and they are both safe bicyclists and my 11 year old grandson is now learning the rules of the road. As a driver, and bicyclist, off the 6th street area of downtown I often use Calhoun to bypass the higher use area of Main Street intersections and Egan Drive. (Though I love the new bike lane along Egan there are still some maneuvers to be made by bicyclists to get over the left turn lane for the bridge crossing and into the left turn lane at Main).

I am intrigued by the idea of creating a looped one-way route and would love to see that explored. If that isn't possible at this time, I would like to ask you if you can recommend the implementation of well established tools for improving safety of all users on the Calhoun Avenue rebuild. Tools commonly in use for decades around the country, Alaska and Juneau, include signage for 'Share the Road', painted instructions on the roadway for sharing, speed limit signage, 'Pedestrians present', 'Children present', etc. I'm not a fan of speed bumps but understand their use. I do think a stop sign at 8th will be irritating for through Calhoun traffic (including bicyclists) but will send a strong message of 'take it easy, this is a very local road'.

I appreciate your consideration of my thoughts and your time helping the Planning Commissioners understand the tools already available that cost effectively improve safety in short order. Please let me know if you have any questions regarding my comments.

Regards,

Frankie Pillifant
 Juneau, Alaska

From: Abbey Janes <abbey_lu@icloud.com>
Sent: Sunday, January 03, 2021 7:36 PM
To: PC_Comments
Subject: Calhoun project

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

To whom it may concern,

It has come to my attention that Calhoun Ave downtown is in line for a rebuild soon and that currently, the plan does not include modifications to make it more safe for pedestrians and cyclists. In my opinion, this is a grave mistake, kicking the can down the road, and continuing to allow a street with very high foot traffic to prioritize only motorized vehicles. My family regularly uses Calhoun to bike to town, and my children attend a school in the flats school complex, using Calhoun regularly for field trips to Basin Road, Capitol Park, Cope Park, the Capitol, and the City Museum. Even when driving, it is currently extremely difficult to get through if two cars are passing. Please consider this opportunity to include all user groups and make Calhoun a safer option for everyone.

Sincerely,
Abbey Janes

From: douglas.w.edgar@gmail.com
Sent: Monday, January 04, 2021 7:57 AM
To: PC_Comments
Subject: Calhoun Avenue - complete street and underground utility maintenance comments

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

To the Planning Commission:

It would be a big improvement if the sidewalk on Calhoun Avenue between Goldbelt and the Governor's house could be widened. There is a significant amount of pedestrian traffic on Calhoun from Cope Park to downtown, with cars and trucks passing them within inches in places. During tourist season the danger is increased by bus and construction traffic.

I realize there is only a small width in that area to put two lanes of traffic and a sidewalk but even a 12 inch increase in sidewalk width would help.

Doug Edgar
108 6th Street #2
Juneau, AK 99801
907-321-5131

From: Mark Choate <mark.choate@gmail.com>
Sent: Tuesday, January 05, 2021 5:01 PM
To: PC_Comments; Emily Ferry; Peter Metcalfe
Subject: Calhoun Avenue Rebuild - Comments

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

Dear Planning Commission;

I live on the corner of West 8th and Calhoun and am very familiar with the road and the hazards that exist because of (1) failure to maintain the sidewalks and (2) general problems of speed on what has become the main arterial to access the upper part of downtown Juneau.

Calhoun is a significant safety problem - certainly the worst problem downtown - with traffic rushing in and out of the downtown on a narrow and twisting roadway. There are three main types of risk. First, pedestrians are at risk because the sidewalk curb is non-existent for much of the street, disappearing as car tires have driven over it and the layers of asphalt have been added to the street without consideration for the curb. It simply is not safe to walk on the sidewalk near our home and along on Calhoun. It is equivalent to walking on the street.

Second, bicyclists on Calhoun are at imminent risk of being struck by fast-moving cars especially heading northbound at the Governor's where there is an S-Curve that hides bicycles in the same lane.

Third, there's a risk of property damage as vehicles leave the roadway and crash into the properties adjoining Calhoun. I can remember the fence being hit with a vehicle traveling all the way across the yard and out the other side. We have had 3 vehicle strikes while we've owned our home. Each has caused significant damage - the most recent did almost \$100,000 in property damage plus hit a pedestrian as he bounced off the wall across from the Governor's and came into our property.

I do not believe the solution proposed by the planners - to basically replace the existing roadway with some curbing is a good fix for what is a consistent problem. The sidewalk along the street should be at least as wide as the one from the Capital to the Governors. There should be plans to slow traffic that include making part of the roadway one-way. No one really has much reason to rush in Juneau with the exception of emergency vehicles. Calhoun is perhaps one of the most walked, biked, stroller-pushed, pet exercised streets in Juneau. While there are few ways to make the street effectively any wider, slowing or limiting traffic will not decrease anyone's transit time by much while it will make the street safer and decrease the risk of serious injury or death that Calhoun has represented for the last couple of decades.

Mark Choate
 230 W. 8th Street
 Juneau, Alaska 99801
 Tel: (907) 586-4490
 EFax: (206) 424-9705
 Email: mark@choatelawfirm.com

From: Peter Metcalfe <petermmetcalfe@gmail.com>
Sent: Tuesday, January 05, 2021 7:02 PM
To: PC_Comments
Cc: Emily Ferry; lemannbluff@gmail.com; Jim & Jean Alter; clark branch; Jake Carpenter; markchoate@gmail.com; Erik Emert; Ann Dombkowski; Carol & Keith Gerken; carol Gerken; Grey Pendleton; Sandra R Metcalfe; Tony & Linda Newman; Sandy Parr; jessica.quintero@alaska.gov; Angela & Richard; linda rosenthal; Paul Rosenthal; Larry Woolford; Noelle Dersé; Rob Cadmus; lindoff31@gmail.com; Juanita Coronell; Frances Field; ottokeen@gmail.com; cscott11@alumni.nd.edu; Mark Handley; Staci Malaby; Meilani Schijvens; Rebecca Braun; Aurah Landau; Michelle Kissling; Mary Aparazuk Schlosser; Marc Wheeler & Jessica Paris; Naomi Davidson; Iris Matthews; Marilyn Holmes; <roblingray@gmail.com>; Elizabeth Davis; Patrick Race; Ian Fisk; Kate Glover; Bill Glude; Demian A. Schane; Kim Metcalfe; Mark Choate
Subject: Calhoun Ave. Rebuild

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

To the Planning Commission:

Before the rebuild plan for Calhoun Ave. was drafted, we as a neighborhood had no opportunity to express our concerns. So far as I know, the only opportunity for us to do so was during the Zoom meeting with the planning department days before Christmas. Conflicting holiday plans made it difficult to participate.

One of our neighbors, who lives in the Fosbee Apartments, was away that week, and asked me for an update. After I described the plan to rebuild Calhoun, she remarked, "Given the opportunity, why would the City not make that street more safe?" This young woman is a state employee who, like so many others, walks that street every work day on her way to and from the State Office Building.

From our house at 354 Distin, we have to enter Calhoun at the intersection with W 8th. All too often I have to stop abruptly to avoid cars racing through blind curves.

As our neighbor, Mark Choate, expressed in his remarks to you, curbs do not answer our concerns.

In long term plans, the CBJ has committed to make downtown streets more friendly to pedestrians and bicyclists. This is a golden opportunity to *walk the talk*. Let's not ignore our community's commitment to safer, user-friendly streets for the sake of expediency.

Sincerely,

Peter Metcalfe
 Metcalfe Communications
 354 Distin Ave., Juneau, AK 99801
 P.O. Box 021145, Juneau, AK 99802
 907-723-3483

Irene Gallion

From: Emily Ferry <emily.ferry@gmail.com>
Sent: Tuesday, January 5, 2021 7:35 PM
To: Irene Gallion
Cc: Beth McKibben; Alexandra Pierce; Demian A. Schane
Subject: Re: Calhoun Ave planning process

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

Hi Irene,

Thanks for the very thorough rundown of this process.

I'm wondering what a process might look like that would include meaningful public dialog and planning about this corridor and the residential areas of downtown. As I think we've established, Calhoun Ave is not just a neighborhood street; it is a major pedestrian arterial and a weak link the infrastructure needed to make Juneau a safe walkable, bikeable community. Certainly, if this was a state-owned route there would be a full EIS, a range of alternatives, and more opportunities for meaningful engagement during the planning process. I don't anticipate that the city would mimic that process per se, but I'm wondering if there are other examples of planning processes that actually entail taking a broader look at the needs, impacts, community design, traffic flow, safety of non-motorized, and desire of residents.

Take care,
 - Emily

On Tue, Jan 5, 2021 at 9:29 AM Irene Gallion <Irene.Gallion@juneau.org> wrote:

Hi Emily,

Thanks for checking in!

The staff report to the Planning Commission for the Calhoun Avenue Reconstruction project recommends approval of the project as presented by CBJ Engineering and Public Works.

Public comments received by noon on Friday, January 8th, will be bundled and sent to the Planning Commissioners for review over the weekend. They will also be posted on the agenda site (more later). This is the preferable option as it gives the Commissioners the weekend to consider the comments.

Comments received between noon on Friday, January 8th and noon on Monday, January 11th, will be provided to the Commissioners before the meeting. This does not give them as much time to review the comments.

When the project comes before the Commission, they have three options:

- Accept the staff recommendation and recommend the Assembly approve the project as presented.
- Accept the staff recommendation and recommend the Assembly approve the project with conditions.
- Recommend denial of the project.

They may also “continue” the project to another meeting if they feel they need more information or analysis.

The staff report, when completed, will be posted on the Assembly Minutes and Agenda

Site: <https://juneau.org/assembly/assembly-minutes-and-agendas>

Scroll down to the meeting on January 12, 2021. All meeting materials and zoom info will be posted here in either the online agenda or a downloadable .pdf agenda.

Meetings	Items						
Meeting Date	Meeting Type	Meeting Location	Online Agenda	Download Agenda	Minutes Recap	Legal Minutes	Board Details
01/26/21	Planning Commission - Regular Meeting	Virtual Meeting Only					
01/12/21	Planning Commission - Regular Meeting	Virtual Meeting Only					
01/06/21	Assembly Finance Committee	Zoom Webinar & FB Live Stream					

We anticipate posting the staff report by the middle of the week.

Public testimony will be taken at the Planning Commission meeting on January 12th. It will be in the “Zoom Webinar” format, which varies slightly from a regular Zoom meeting in that the public can listen, but need to be given permission to speak. This is similar to the project meeting held on December 22nd, but more formal. If participating via Zoom, an individual can raise their hand (icon at the bottom of the screen) to comment, and will be given permission in the order which they raised their hand. Phone participants can raise their hand by pressing *9, and can unmute themselves by pressing *6.

After the Planning Commission makes a recommendation, that will go to the Assembly and be placed on the “Consent Agenda.” The Consent Agenda is a group of actions that need to be addressed publicly but that tend to be routine. Before the Consent Agenda is approved, the public and the Assembly have the opportunity to remove items from the Consent Agenda. Then, those items will be the first thing heard during “Public Hearing.”

Thank you,

Irene Gallion | Senior Planner

[Community Development Department](#) | City & Borough of Juneau, AK

Location: 230 S. Franklin Street | 4th Floor Marine View Building

Office: 907.586.0753



Fostering excellence in development for this generation and the next.

From: Emily Ferry <emily.ferry@gmail.com>

Sent: Friday, January 1, 2021 1:23 PM

To: Irene Gallion <Irene.Gallion@juneau.org>; Beth McKibben <Beth.McKibben@juneau.org>; Alexandra Pierce <Alexandra.Pierce@juneau.org>

Cc: Demian A. Schane <dschane@gmail.com>

Subject: Calhoun Ave planning process

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

Hi Irene, Alex, and Beth,

Thanks for chatting with me recently. I wanted to confirm my understanding of the Calhoun Rebuild process before sharing with my neighbors:

*Community Development will be recommending that the Planning Commission approve the reconstruction of Calhoun Ave as proposed by the Engineering Department. The public has until Jan. 11th to submit comments. Publicly available information is [here](#).**

The Engineering Department has said it is up to the Planning Commission and/or Assembly to decide if the scope of this project should include a broader look at safety upgrades necessary to address the bike and pedestrian issues that have been identified along this corridor for the past two decades.

The Planning Commission can choose to approve, deny, or approve the project with modifications. From there, the Commission will make a recommendation to the Assembly.

Is this summary accurate?

I also have a few additional questions:

1) * This site contains very little information about the project making it exceedingly difficult for the general public to comment. I also looked at the parcel viewer but did not quite see how that would inform anyone about what the scope of the project is. Am I missing something?

2) What happens after the Assembly makes their decision?

3) When (if ever) will there be an opportunity for meaningful public input? Did any of you have the chance to attend the meeting hosted by the Engineers on Dec. 22nd? While it was helpful to get a better overview of the project, especially since I haven't succeeded in finding any online, it clearly wasn't designed to solicit or incorporate the concerns of the neighborhood. The discussion with the Fire Department, for example, added confusion rather than clarity and was cut short rather than allowing us to more deeply understand the fire department's needs. Simply put, their presentation about condemning property did not make sense. While there were many good ideas shared, I highly doubt that any changes were incorporated in the one to two working days between the meeting on Dec. 22nd and when comments were due to incorporate into the staff report on Dec. 28th.

[This map from Juneau Rides](#) illustrates well Calhoun is indeed a Bike Boulevard. Numerous parents have said they won't let their kids bike to school because Calhoun is unsafe for cyclists. Proceeding with a rebuild of the corridor as-is seems to be inconsistent with the desire for walkability, bikeability, sustainability and active transportation laid out in the comprehensive plan and just about every other planning document.

Again, thank you for helping me understand this process and how neighbors and other users can make sure it is an investment that gets us a step closer to the community we envision.

Take care,

- Emily

723-6599

Irene Gallion

From: John Bohan
Sent: Wednesday, January 6, 2021 4:38 PM
To: Irene Gallion
Subject: FW: Calhoun: Additional questions and bike design ideas

Fyi.

Thanks
John Bohan, PE
 CBJ Chief CIP Engineer
 155 S. Seward St
 Juneau AK 99801
 (907)586-0876 fax 463-2606

From: John Bohan
Sent: Wednesday, January 6, 2021 3:55 PM
To: Emily Ferry <emily.ferry@gmail.com>
Cc: Demian Schane <dschane@gmail.com>; Ethan Roemeling <ethan@prohns.com>; John Nelson <John.Nelson@juneau.org>; 'Lucas Chambers' <lucas@prohns.com>
Subject: RE: Calhoun: Additional questions and bike design ideas

Emily, I would like to add a little more information to Lucas's response so you don't feel like you are getting the run around.

Engineering did look into Calhoun as a one way and quickly came up against the CCFR access challenges. Addressing these impacts, and the impacts to how traffic moves through Downtown Juneau, is a bigger project that requires additional traffic and engineering study, additional public process to allow all impacted users the opportunity to comment, and further decision making by the Planning Commission (PC) and Assembly on the ultimate outcome. The Calhoun Reconstruction project as approved for funding by the Assembly in the Capital Improvement Program, is an infrastructure maintenance project to repair the existing worn out, failing infrastructure, make betterments within the limitations of the existing space, and is the limit of the current project's scope.

If the PC and Assembly decide to broaden the scope of the Calhoun project we would begin the additional public outreach, forums, meetings, brainstorming for creative alternatives, and analysis needed to look at all the opportunities, benefits and impacts created by turning Calhoun into a one-way road. All of this information would be compiled into a presentation to the Planning Commission for them to provide their recommendations to the Assembly to ultimately decide the path forward. It is important to note that proceeding on reconstructing Calhoun, which is a in large part replacing failing utility infrastructure underground, does not preclude Calhoun from becoming a one way in the future (even near future). The policy question, and necessary public process surrounding it, can proceed with Assembly direction in concert with those improvements. Changing signage, striping and widening the sidewalk is only a small portion of the project cost.

Thank you for your input, commitment and involvement on this project. It is nice to work with individuals and neighborhoods that are engaged and care about the project outcomes and want to make things better.

Thanks
John Bohan, PE

CBJ Chief CIP Engineer
 155 S. Seward St
 Juneau AK 99801
 (907)586-0876 fax 463-2606

From: Lucas Chambers <lucas@prohns.com>
Sent: Wednesday, January 6, 2021 1:40 PM
To: Emily Ferry <emily.ferry@gmail.com>
Cc: Demian Schane <dschane@gmail.com>; Ethan Roemeling <ethan@prohns.com>; John Bohan <John.Bohan@juneau.org>; John Nelson <John.Nelson@juneau.org>
Subject: RE: Calhoun: Additional questions and bike design ideas

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

Emily,

The one way option was originally considered as an alternative to provide the corridor with wider sidewalks, bike lanes and eliminate the pinch point in the vehicle lanes between the rock fence and rock retaining wall/ staircase near the location of your property. It is not the current alternative being presented and became the not preferred option after CCFR said they would appose it because it would cause a reduction in access. So to your first point it is more accurate to say that the one way option on its face could fit into the scope of the project, but the other infrastructure improvements to make the one way option work for CCFR are outside the current scope of the project.

If the scope is expanded to allow for additional infrastructure improvements the one way option along with several other options including many that you have identified would be on the table for consideration. So to your second point if I am reading it correctly is correct.

Thanks,

Lucas Chambers, P.E.
 Cell: (907) 738-7384
 Office: (907) 780-4004

From: Emily Ferry <emily.ferry@gmail.com>
Sent: Wednesday, January 6, 2021 12:14 PM
To: Lucas Chambers <lucas@prohns.com>
Cc: Demian Schane <dschane@gmail.com>; Ethan Roemeling <ethan@prohns.com>; John Bohan <John.Bohan@juneau.org> <john.bohan@juneau.org>; john.nelson@juneau.org
Subject: Re: Calhoun: Additional questions and bike design ideas

Thanks Lucas,

So to be clear, it is accurate to say a oneway is not being considered right now because it is not part of the scope of the project.

It would not be accurate to say that the fire department's concerns exclude any discussion of oneway options if the scope is expanded.

Is that correct?

Thanks for clarifying,

Emily

On Wed, Jan 6, 2021 at 12:01 PM Lucas Chambers <lucas@prohns.com> wrote:

Emily,

I am simply passing along the reasons why CCFR apposes making portions of Calhoun a one way without making other modifications to the streets in the neighborhood or greater downtown area. At this point those other modifications are outside the current scope of this project. The Planning Commission will need to recommend to the Assembly the scope of the project be expanded and the Assembly would need to approve that recommendation for the scope of the project to expand or change. We are currently waiting to see what comes of that process and will move the project forward accordingly.

Thanks,

Lucas Chambers, P.E.

Cell: (907) 738-7384

Office: (907) 780-4004

From: Emily Ferry <emily.ferry@gmail.com>

Sent: Tuesday, January 5, 2021 7:10 PM

To: Lucas Chambers <lucas@prohns.com>

Cc: Demian Schane <dschane@gmail.com>; john.nelson@juneau.org; John Bohan (John.Bohan@juneau.org) <john.bohan@juneau.org>; Ethan Roemeling <ethan@prohns.com>

Subject: Re: Calhoun: Additional questions and bike design ideas

Hi Lucas,

The text shows up ok, but the response still doesn't make sense to us.

The trucks currently come up 9th street and head downtown via Calhoun. Under the scenario attached (one developed after learning of the Fire Department's concerns of making 9th oneway going downhill)) the fire department would still come up 9th street and head downtown via Calhoun. From downtown it is unlikely that they would need to race back to the firehouse; it's more likely that they would need quick access to the hospital.

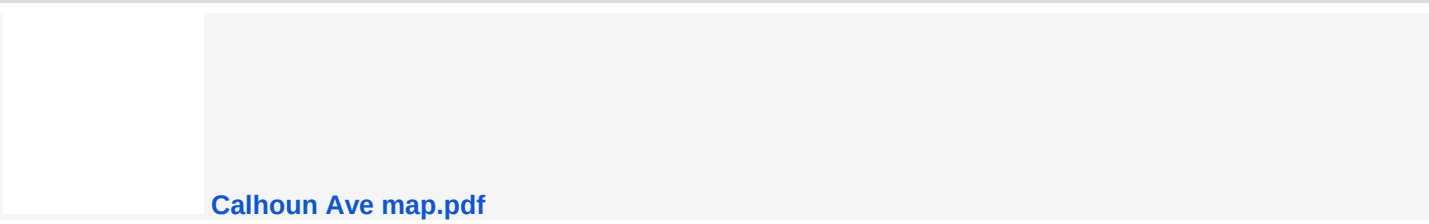
In the very unlikely scenario that Egan *and* 9th were unavailable (so unlikely that there is no record of that ever happening), the oneway stretch of Calhoun could be constructed to allow for wrong-way access by the ladder truck and/or a smaller truck could shoot up 9th and stop traffic at the intersection of 8th and Calhoun while the ladder truck made its way toward town via 12th and Calhoun.

In fact, one could easily argue that the traffic pattern proposed here could make for easier, faster fire access. Chief Etheridge mentioned during our meeting - and I've observed - times when firefighters had to stop on 9th-Indian hill/curve, get out of their trucks, and wait until cars could reverse out of the corridor because the truck could not get past with two way traffic around those tight corners. A oneway would remove this known problem and create faster access to downtown. Similarly, a truck could move more quickly from town to the hospital via Calhoun if needed. Here's a picture of fire trucks cruising down Calhoun during Santa's tour of town this December. Note that the trucks are straddling the centerline.

Instead of focusing on "we can't" I'd love to have a meaningful conversation that looks at what the actual needs are and how we can meet them while improving safety for the many people who use this route every day.

Take care,

- Emily



[Calhoun Ave map.pdf](#)

On Tue, Jan 5, 2021 at 11:38 AM Lucas Chambers <lucas@prohns.com> wrote:

Emily and Demian,

It was brought to my attention that the text might not have shown up in red so I have pulled it out separately for clarity.

CCFR's needs and concerns are that they need an alternative route into and out of the downtown and Thane area of Juneau in the event that Egan Drive is unavailable. Currently Calhoun Ave is that alternative route. The fire engine truck can use W. 9th and W. 8th or W. 7th to enter or exist downtown, but can barely make the sharp 90 degree steep turn on W. 9th where it is confined by a concrete staircase on one side and a concrete retaining wall on the other side and is limited during winter weather conditions due to ice and snow berms. It also is required to do a multiple point turn leaving downtown on the corner of W. 7th and Indian St when cars are parked there. CCFR's ladder and tanker trucks cannot make the sharp turn on W. 9th Street. So their concern is a loss of access to this area in an emergency.

1. What is it about making 9th street one-way going up from Capitol Ave to Indian and on to 8th that creates the need to condemn private property on 9th, 7th, or any of those streets behind the Governor's House?

In order to allow for CCFR's ladder and tanker trucks to make the sharp 90 degree turn on W. 9th the roadway would need to be widened which would require acquiring Right-of-Way (ROW) from either of the adjacent private properties. There could be a need to eliminate parking spaces or create parking restrictions on the streets behind the Governor's House to facilitate turning movements of CCFR's fleet, but would not require acquiring ROW.

2. Has anyone collected information on how often, on average, the fire department uses 9th street each year and does it exhibit a preference for going up or down it? How often and in what instances does the department need to use Calhoun?

No specific data on how often CCFR uses the streets in question has not been collected as part of this project. It would only take one instance where Egan Drive is unavailable and the alternative route is need and Calhoun Ave is no longer available for this to be an issue. So the concern is not how often, but if the scenario did happen.

Thanks,

Lucas Chambers, P.E.

Cell: (907) 738-7384

Office: (907) 780-4004

From: Lucas Chambers

Sent: Tuesday, January 5, 2021 11:25 AM

To: Demian Schane <dschane@gmail.com>; Emily Ferry <emily.ferry@gmail.com>

Cc: john.nelson@juneau.org; John Bohan (John.Bohan@juneau.org) <john.bohan@juneau.org>; Ethan Roemeling <ethan@prohns.com>

Subject: RE: Calhoun: Additional questions and bike design ideas

Demian and Emily,

Please see my responses below in **RED** to your inquiries about CCFR's concerns and needs.

Thanks,

Lucas Chambers, P.E.

Cell: (907) 738-7384

Office: (907) 780-4004

From: Demian Schane <dschane@gmail.com>

Sent: Friday, January 1, 2021 1:22 PM

To: Emily Ferry <emily.ferry@gmail.com>

Cc: Lucas Chambers <lucas@prohns.com>

Subject: Re: Calhoun: Additional questions and bike design ideas

Hi Lucas and happy new year. I would like to expand on Emily's question concerning the Fire Department's concerns and ask two specific questions.

CCFR's needs and concerns are that they need an alternative route into and out of the downtown and Thane area of Juneau in the event that Egan Drive is unavailable. Currently Calhoun Ave is that alternative route. The fire engine truck can use W. 9th and W. 8th or W. 7th to enter or exist downtown, but can barely make the sharp 90 degree steep

turn on W. 9th where it is confined by a concrete staircase on one side and a concrete retaining wall on the other side and is limited during winter weather conditions due to ice and snow berms. It also is required to do a multiple point turn leaving downtown on the corner of W. 7th and Indian St when cars are parked there. CCFR's ladder and tanker trucks cannot make the sharp turn on W. 9th Street. So their concern is a loss of access to this area in an emergency.

When CBJ and you were discussing the complications of making Calhoun Ave one-way, there was a discussion with the Fire Chief about 9th Street. I believe John Bohan discussed the need for condemning private property at the curve on 9th and I think you mentioned the need for condemning private property along 7th Street where cars currently park.

At present, 7th street is one way and 9th street is two-way. Fire trucks often come up 9th street; we rarely see them going the other direction.

1. What is it about making 9th street one-way going up from Capitol Ave to Indian and on to 8th that creates the need to condemn private property on 9th, 7th, or any of those streets behind the Governor's House?

In order to allow for CCFR's ladder and tanker trucks to make the sharp 90 degree turn on W. 9th the roadway would need to be widened which would require acquiring Right-of-Way (ROW) from either of the adjacent private properties. There could be a need to eliminate parking spaces or create parking restrictions on the streets behind the Governor's House to facilitate turning movements of CCFR's fleet, but would not require acquiring ROW.

2. Has anyone collected information on how often, on average, the fire department uses 9th street each year and does it exhibit a preference for going up or down it? How often and in what instances does the department need to use Calhoun?

No specific data on how often CCFR uses the streets in question has not been collected as part of this project. It would only take one instance where Egan Drive is unavailable and the alternative route is needed and Calhoun Ave is no longer available for this to be an issue. So the concern is not how often, but if the scenario did happen.

Thanks in advance for your thoughts.

On Fri, Jan 1, 2021 at 12:35 PM Emily Ferry <emily.ferry@gmail.com> wrote:

Hi Lucas,

Thanks for chatting earlier this week. My husband and I were chatting and realized that we still don't have a good handle on the Fire Department's needs and concerns. Their explanation during the public meeting added to confusion and was cut-off before we could get more clarity. Do you have a clear understanding of their needs and concerns?

I've also been looking at some transportation planning resources. Again, we understand that the scope of this would need to be expanded in order for your firm to put more time and energy towards these ideas, but I wanted to share a few that might be worth exploring if the scope is indeed expanded.

On the uphill side of the street a slightly raised/colored bike lane or shared use path might be the best use of what is now a raised sidewalk with very limited use. [This design manual](#) from the Oregon Dept of Transportation has a lot of great info. Page 14 has some good images/examples. This might make it easier to plow and clear, and meet more needs (a landing spot for the homeowners on the uphill side as they exit their stairs, occasional pedestrian use, and a space for bikes to move over so cars can pass.)

A design that could visually mark the space for bikers and pedestrians but would allow for bikes to roll on to it could also potentially allow for a small pull-over space/loading zone on the uphill side. Right now homeowners, delivery trucks including heating fuel trucks either pull up on to the downhill sidewalk or stop in the middle of the road. Designing the corridor to accommodate this use could also help keep traffic flowing.

If we were able to carve out space for a loading zone, it would be very helpful to have the powerlines buried. I've included an email from Steve Benke with the Juneau Commission on Sustainability, which expands on that issue.

As for other features that could make it safer for bikes, "sharrows" might help indicate that the route is a bike boulevard; it is ok and expected that bikes take the lane, especially between the Governor's house and main street and along 12th st. from Cope Park to Glacier Ave. [NACTO](#) has another good manual with lots of ideas.

If a one lane loop is to be further indicated, I think a contra-flow bike lane would make the most sense. In other words, bikes could travel in both directions. Page 11 of the Oregon manual describes this well.

Take care,

- Emily

From Steve Behnke:

They're probably too detailed for this phase, but I can think of 2 things relating to both the climate action plan and the Juneau Renewable Energy Strategy that should be considered:

1) Conduit/wiring should be incorporated for public EV chargers — esp. for places that don't have off-street parking. We're trying to get the CBJ to consider this whenever they tear up stuff downtown, and they're starting to work on a policy.

2) Access/chases for either hot water pipes for a future district heating system or for "warm" water piping for individual ground-source heat pumps. There's nothing really in the works for either of these, but they would make sense, and just having them mentioned would be useful.



From: Kristin Garot <garotk@gmail.com>
Sent: Wednesday, January 06, 2021 9:16 PM
To: PC_Comments
Subject: Calhoun Ave considerations

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

Dear Planning Commission Members,

I urge you to consider options for developing safer routes for students and staff traveling to and from school.

For almost 20 years I traversed Calhoun Ave from my home on Gastineau Ave to my place of employment on Glacier Ave -- I understand firsthand the dangers that section of road presents to all its users - folks walking, biking, driving are all put in danger on the narrow streets and sidewalks.

In my current role, I know this is a street students in my school use regularly traveling to and from school and home, where students at my school pass through on field trips to the capitol or city museum.

As you plan for the rebuild of Calhoun Ave, we encourage the City and Borough of Juneau Assembly, Planning Commission, and Engineering Department to consider creative options for enhancing safe, active transportation options for our students and our community.

Sincerely,

Kristin Garot

From: Michael Hekkers <mikehekkers@yahoo.com>
Sent: Thursday, January 07, 2021 8:53 AM
To: PC_Comments
Subject: Calhoun Ave Rebuild

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

Please consider the narrowness of the road and the lack of bike lanes and adequate sidewalk width.
My son has risked his life biking in that corridor to school. Some people speed through there too. Speeds should be reduced maybe through speed humps?
Mike Hekkers
423 3rd St.
Downtown

From: Darren Snyder <darrengsnyder@gmail.com>
Sent: Thursday, January 07, 2021 11:36 AM
To: PC_Comments
Subject: Calhoun Ave project

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

Greetings Planning Commission Members,

From my decades of experience as a regular user of Calhoun Ave, I find that this vital corridor is too narrow to safely, simultaneously, accommodate two-way vehicle traffic, pedestrians, bikers and disabled persons. This is apparent to all who go through that area. It was simply not originally designed to the necessary scale and, since widening it enough is not an option, something has to give.

The best option that I have been made aware of is a one-way vehicular traffic route which accommodates every identified need and provides improvement in safety while also improving health and wellbeing of our citizens by promoting more walking, biking and other non-vehicular transportation. The increased time impact to vehicular commuters with this option is minimal and well worth the benefits to all of the users positively impacted.

In the interest of your time, I will end here, but am happy to expound on specific impacts, needs, etc if contacted to do so.

Thank you for your important work for our community.

Best,

Darren Snyder
527 5th St.,
Douglas, AK 99801

From: Emily Ferry <emily.ferry@gmail.com>
Sent: Thursday, January 07, 2021 11:22 PM
To: PC_Comments
Subject: Additional Comments on Calhoun Ave Reconstruction

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

Dear Members of the Planning Commission,

My husband and I first shared a letter regarding the Calhoun Avenue Reconstruction process in early November. Since then we've talked, messaged, and emailed with dozens of neighbors and city officials. We've examined every aspect of the road and how people use it. I'm writing now to share what we've learned in order to help inform your decision-making process.

I'll focus on several key points and share a lot of supporting information in the form of emails and photos.

1) Calhoun is a critical artery for our community; it is one of only three ways to move among the shops and restaurants downtown and the schools, parks, and residences. Calhoun is the preferred route for walkers and bikers as it is more direct, less hilly and relatively speaking has less traffic than Egan or Willoughby. Groups of preschoolers, state office workers, kids going to and from school, and residents from Wildflower Court walk this route daily. In the spring, legislators and staffers walk to the Capitol Building, and in the summer maps and signs direct tourists to the Governor's House, Cope Park, and Evergreen Cemetery. And even more kids are riding their bikes and braving the narrow roadway to access the new pump park at Cope Park. Unfortunately - though understandably - there are many parents who won't allow their kids to ride their bikes to school or the park simply because Calhoun is too dangerous.

Below are some pictures to illustrate our concerns.



A group of kids from Discovery Preschool going to Cope Park. Note that the car passing them is straddling the center line to pass safely.



Image from the Juneau Rides bike map. Note that Calhoun, while being the most direct and flat route for bike riders - especially kids headed from downtown neighborhoods to schools - is also shown in yellow as a weak and dangerous link in our bike infrastructure.



A commercial truck straddled the sidewalk for over an hour forcing anyone walking home from school or work to step into the sidewalk as cars come up the hill and around the corner at fairly high speeds. With limited parking for the apartments along the corridor, it's not uncommon for commercial trucks or residents dropping off groceries to fill the lane or take the sidewalk.

2) Safety and other issues along the route have been well-documented for years. Juneau has at least 10 different planning documents calling for walkability, sustainability, non-motorized, and active transportation:

- 2001 Area-wide Transportation Plan
- 2004 Long Range Waterfront Plan
- 2004 Downtown Tourism Transportation Study
- 2008 Capital Transit Development Plan
- 2009 Juneau Non-Motorized Transportation Plan
- 2011 Juneau Climate Action and Implementation Plan
- 2012 Willoughby District Land Use Plan
- 2012 Safe Routes to Schools
- 2013 Juneau Comprehensive Plan
- 202? Blueprint Downtown

At least four of those specifically name Calhoun as a safety concern and/or make recommendations for improving it:

[2001 Area-wide Transportation Plan](#)

Sidewalks in the Flats neighborhood are too narrow in general; Calhoun Avenue specifically is too narrow for bicyclists and vehicles to share the street.

[2009 Juneau Non-Motorized Transportation Plan](#)

Sidewalks and streetscape improvements: Traffic calming to increase safety for pedestrians. Options include narrowing travel lanes, reducing the speed limit, and adding signs.

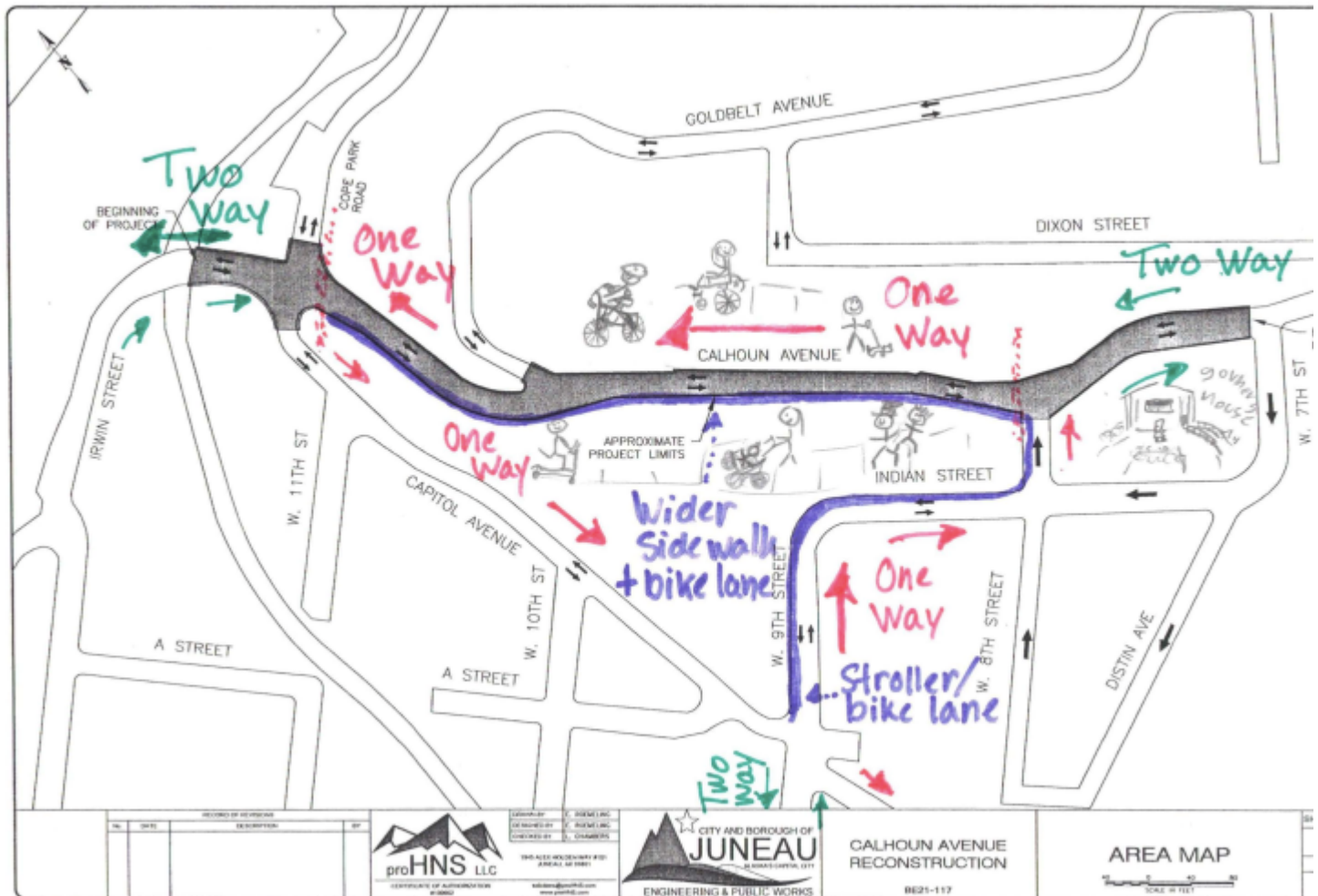
[2012 Safe Routes to Schools](#)

Calhoun is a narrow winding road with narrow sidewalks in spots. This is a “short-cut” to bypass Egan that many vehicles take in the fall, winter, and spring, and frequently exceed the speed limit according to parent observations.

2020 Blueprint Downtown

Implement traffic calming through streetscape design and/or enforcement to improve walking environment and provide safer crossing opportunities.

3) There has been no planning process to specifically address the safety and design concerns of the neighborhood. The Willoughby District Plan excluded the Calhoun Neighborhood and the Blueprint Downtown has been largely focused on accommodating the tourism industry and does not include a blueprint for residential neighborhoods. While downtown residents shared a number of creative suggestions during the project presentation from the Engineering Department on December 22nd, the Department has made it abundantly clear that they are not going to consider any suggestions unless directed to do so by the Planning Commission and/or Assembly. The engineers from ProHNS who were contracted to work on this project were the first to suggest a one-way option as a way to improve safety in an incredibly narrow right of way. We tried to envision what a one-way “loop” that could keep traffic flowing and maintain critical fire access might look like and, with the help of our ten-year old daughter, came up with this concept.



We're not sure if this is the best design, but we whole-heartedly believe that this and other more simple design considerations warrant a meaningful and well-considered evaluation. For example, bike passing zones on the hill, "sharrows" that identify the lane is to be shared with bikes, and a stop sign by the Governor's House at the intersection with 8th Street could improve safety. What's more, my husband and I would be willing to engage in a conversation about letting the city use more of our property in order to create passing zones on the sidewalk.

I'd also like to note that we understand that the fire department needs quick access to downtown and to the hospital. We want that too. However, the Engineering Department's claim that one-way routes cannot be considered due to the Fire Department's concerns simply does not make sense to us. When we asked for further explanation, we were essentially told that the Planning Commission would have to expand the scope of the project in order to address our questions. (Our email chain is copied below.)

4) Capital Ave and a portion of Calhoun Ave are supposed to be rebuilt this summer, with the second portion of Calhoun Ave to be rebuilt in the following summer. Why these three projects, which all influence the safety, feel and flow of the neighborhood, were not considered together is a bit baffling. What's more, if construction is happening on both Calhoun and Capital in the same summer, that will create a bit of a nightmare scenario for residents and truly limit fire access to downtown. These projects should be considered and planned in a comprehensive way.

In closing, we do not believe this project as currently designed and presented aligns with the Comprehensive Plan, the Non-motorized Transportation Plan, or the eight other plans that call for increased walkability, sustainability, and active transportation. Raising the height of the sidewalk is simply not enough to address the significant safety issues, and the planning process up to this point has not been at all reflective of the processes and policies outlined in CBJ's planning documents. We urge you to expand the scope of this project to address the needs expressed in 20 years worth of plans as well as the concerns and hopes of current residents.

Sincerely,

- Emily Ferry

836 Calhoun Ave

907 723-6599

Excerpts of a recent exchange with project Engineers re: CCFR's concerns and project scope (best read from the bottom up)

Emily Ferry <emily.ferry@gmail.com>

Jan 6, 2021, 6:47 PM (1 day ago)

to John, Demian, Ethan, John, Lucas

Thanks for this John and Lucas,

To be clear, we are not committed to a oneway road per se, but do believe that this corridor is too critical and too unsafe to be rebuilt in essentially the same way.

And while I appreciate the "we could always do that in the future" sentiment, the truth is that residents nearly had to bring about a trump-style siege of city hall just to get the mirror drivers use to make the turn off of goldbelt replaced. It's hard to imagine this road will get a second look after construction is complete.

Take care,
Emily

On Wed, Jan 6, 2021 at 3:55 PM John Bohan <John.Bohan@juneau.org> wrote:

Emily, I would like to add a little more information to Lucas's response so you don't feel like you are getting the run around.

Engineering did look into Calhoun as a one way and quickly came up against the CCFR access challenges. Addressing these impacts, and the impacts to how traffic moves through Downtown Juneau, is a bigger project that requires additional traffic and engineering study, additional public process to allow all impacted users the opportunity to comment, and further decision making by the Planning Commission (PC) and Assembly on the ultimate outcome. The Calhoun Reconstruction project as approved for funding by the Assembly in the Capital Improvement Program, is an infrastructure maintenance project to repair the existing worn out, failing infrastructure, make betterments within the limitations of the existing space, and is the limit of the current project's scope.

If the PC and Assembly decide to broaden the scope of the Calhoun project we would begin the additional public outreach, forums, meetings, brainstorming for creative alternatives, and analysis needed to look at all the opportunities, benefits and impacts created by turning Calhoun into a one-way road. All of this information would be compiled into a presentation to the Planning Commission for them to provide their recommendations to the Assembly to ultimately decide the path forward. It is important to note that proceeding on reconstructing Calhoun, which is a in large part replacing failing utility infrastructure underground, does not preclude Calhoun from becoming a one way in the future (even near future). The policy question, and necessary public process surrounding it, can proceed with Assembly direction in concert with those improvements. Changing signage, striping and widening the sidewalk is only a small portion of the project cost.

Thank you for your input, commitment and involvement on this project. It is nice to work with individuals and neighborhoods that are engaged and care about the project outcomes and want to make things better.

Thanks

John Bohan, PE

CBJ Chief CIP Engineer

[155 S. Seward St](#)

[Juneau AK 99801](#)

(907)586-0876 fax 463-2606

From: Lucas Chambers <lucas@prohns.com>
Sent: Wednesday, January 6, 2021 1:40 PM
To: Emily Ferry <emily.ferry@gmail.com>
Cc: Demian Schane <dschane@gmail.com>; Ethan Roemeling <ethan@prohns.com>; John Bohan <John.Bohan@juneau.org>; John Nelson <John.Nelson@juneau.org>
Subject: RE: Calhoun: Additional questions and bike design ideas

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

Emily,

The one way option was originally considered as an alternative to provide the corridor with wider sidewalks, bike lanes and eliminate the pinch point in the vehicle lanes between the rock fence and rock retaining wall/ staircase near the location of your property. It is not the current alternative being presented and became the not preferred option after CCFR said they would appose it because it would cause a reduction in access. So to your first point it is more accurate to say that the one way option on its face could fit into the scope of the project, but the other infrastructure improvements to make the one way option work for CCFR are outside the current scope of the project.

If the scope is expanded to allow for additional infrastructure improvements the one way option along with several other options including many that you have identified would be on the table for consideration. So to your second point if I am reading it correctly is correct.

Thanks,

Lucas Chambers, P.E.

Cell: (907) 738-7384

Office: (907) 780-4004

From: Emily Ferry <emily.ferry@gmail.com>
Sent: Wednesday, January 6, 2021 12:14 PM
To: Lucas Chambers <lucas@prohns.com>
Cc: Demian Schane <dschane@gmail.com>; Ethan Roemeling <ethan@prohns.com>; John Bohan (John.Bohan@juneau.org) <john.bohan@juneau.org>; john.nelson@juneau.org
Subject: Re: Calhoun: Additional questions and bike design ideas

Thanks Lucas,

So to be clear, it is accurate to say a oneway is not being considered right now because it is not part of the scope of the project.

It would not be accurate to say that the fire department's concerns exclude any discussion of oneway options if the scope is expanded.

Is that correct?

Thanks for clarifying,

Emily

On Wed, Jan 6, 2021 at 12:01 PM Lucas Chambers <lucas@prohns.com> wrote:

Emily,

I am simply passing along the reasons why CCFR apposes making portions of Calhoun a one way without making other modifications to the streets in the neighborhood or greater downtown area. At this point those other modifications are outside the current scope of this project. The Planning Commission will need to recommend to the Assembly the scope of the project be expanded and the Assembly would need to approve that recommendation for the scope of the project to expand or change. We are currently waiting to see what comes of that process and will move the project forward accordingly.

Thanks,

Lucas Chambers, P.E.

Cell: (907) 738-7384

Office: (907) 780-4004

From: Emily Ferry <emily.ferry@gmail.com>
Sent: Tuesday, January 5, 2021 7:10 PM
To: Lucas Chambers <lucas@prohns.com>
Cc: Demian Schane <dschane@gmail.com>; john.nelson@juneau.org; John Bohan
 (John.Bohan@juneau.org) <john.bohan@juneau.org>; Ethan Roemeling <ethan@prohns.com>
Subject: Re: Calhoun: Additional questions and bike design ideas

Hi Lucas,

The text shows up ok, but the response still doesn't make sense to us.

The trucks currently come up 9th street and head downtown via Calhoun. Under the scenario attached (one developed after learning of the Fire Department's concerns of making 9th oneway going downhill)) the fire department would still come up 9th street and head downtown via Calhoun. From downtown it is unlikely that they would need to race back to the firehouse; it's more likely that they would need quick access to the hospital.

In the very unlikely scenario that Egan *and* 9th were unavailable (so unlikely that there is no record of that ever happening), the oneway stretch of Calhoun could be constructed to allow for wrong-way access by the ladder truck and/or a smaller truck could shoot up 9th and stop traffic at the intersection of 8th and Calhoun while the ladder truck made its way toward town via 12th and Calhoun.

In fact, one could easily argue that the traffic pattern proposed here could make for easier, faster fire access. Chief Etheridge mentioned during our meeting - and I've observed - times when firefighters had to stop on 9th-Indian hill/curve, get out of their trucks, and wait until cars could reverse out of the corridor because the truck could not get past with two way traffic around those tight corners. A oneway would remove this known problem and create faster access to downtown.

Similarly, a truck could move more quickly from town to the hospital via Calhoun if needed. Here's a picture of fire trucks cruising down Calhoun during Santa's tour of town this December. Note that the trucks are straddling the centerline.

Instead of focusing on "we can't" I'd love to have a meaningful conversation that looks at what the actual needs are and how we can meet them while improving safety for the many people who use this route every day.

Take care,

- Emily

From: Lucas Chambers
Sent: Tuesday, January 5, 2021 11:25 AM
To: Demian Schane <dschane@gmail.com>; Emily Ferry <emily.ferry@gmail.com>
Cc: john.nelson@juneau.org; John Bohan (John.Bohan@juneau.org) <john.bohan@juneau.org>; Ethan Roemeling <ethan@prohns.com>
Subject: RE: Calhoun: Additional questions and bike design ideas

Demian and Emily,

Please see my responses below in **RED** to your inquiries about CCFR's concerns and needs.

Thanks,

Lucas Chambers, P.E.

Cell: (907) 738-7384

Office: (907) 780-4004

From: Demian Schane <dschane@gmail.com>
Sent: Friday, January 1, 2021 1:22 PM
To: Emily Ferry <emily.ferry@gmail.com>

Cc: Lucas Chambers <lucas@prohns.com>

Subject: Re: Calhoun: Additional questions and bike design ideas

Hi Lucas and happy new year. I would like to expand on Emily's question concerning the Fire Department's concerns and ask two specific questions.

CCFR's needs and concerns are that they need an alternative route into and out of the downtown and Thane area of Juneau in the event that Egan Drive is unavailable. Currently Calhoun Ave is that alternative route. The fire engine truck can use W. 9th and W. 8th or W. 7th to enter or exist downtown, but can barely make the sharp 90 degree steep turn on W. 9th where it is confined by a concrete staircase on one side and a concrete retaining wall on the other side and is limited during winter weather conditions due to ice and snow berms. It also is required to do a multiple point turn leaving downtown on the corner of W. 7th and Indian St when cars are parked there. CCFR's ladder and tanker trucks cannot make the sharp turn on W. 9th Street. So their concern is a loss of access to this area in an emergency.

When CBJ and you were discussing the complications of making Calhoun Ave one-way, there was a discussion with the Fire Chief about 9th Street. I believe John Bohan discussed the need for condemning private property at the curve on 9th and I think you mentioned the need for condemning private property along 7th Street where cars currently park.

At present, 7th street is one way and 9th street is two-way. Fire trucks often come up 9th street; we rarely see them going the other direction.

1. What is it about making 9th street one-way going up from Capitol Ave to Indian and on to 8th that creates the need to condemn private property on 9th, 7th, or any of those streets behind the Governor's House?

In order to allow for CCFR's ladder and tanker trucks to make the sharp 90 degree turn on W. 9th the roadway would need to be widened which would require acquiring Right-of-Way (ROW) from either of the adjacent private properties. There could be a need to eliminate parking spaces or create parking restrictions on the streets behind the Governor's House to facilitate turning movements of CCFR's fleet, but would not require acquiring ROW.

2. Has anyone collected information on how often, on average, the fire department uses 9th street each year and does it exhibit a preference for going up or down it? How often and in what instances does the department need to use Calhoun?

No specific data on how often CCFR uses the streets in question has not been collected as part of this project. It would only take one instance where Egan Drive is unavailable and the alternative route is needed and Calhoun Ave is no longer available for this to be an issue. So the concern is not how often, but if the scenario did happen.

Thanks in advance for your thoughts.

On Fri, Jan 1, 2021 at 12:35 PM Emily Ferry <emily.ferry@gmail.com> wrote:

Hi Lucas,

Thanks for chatting earlier this week. My husband and I were chatting and realized that we still don't have a good handle on the Fire Department's needs and concerns. Their explanation during the public meeting added to confusion and was cut-off before we could get more clarity. Do you have a clear understanding of their needs and concerns?

I've also been looking at some transportation planning resources. Again, we understand that the scope of this would need to be expanded in order for your firm to put more time and energy towards these ideas, but I wanted to share a few that might be worth exploring if the scope is indeed expanded.

On the uphill side of the street a slightly raised/colored bike lane or shared use path might be the best use of what is now a raised sidewalk with very limited use. [This design manual](#) from the Oregon Dept of Transportation has a lot of great info. Page 14 has some good images/examples. This might make it easier to plow and clear, and meet more needs (a landing spot for the homeowners on the uphill side as they exit their stairs, occasional pedestrian use, and a space for bikes to move over so cars can pass.)

A design that could visually mark the space for bikers and pedestrians but would allow for bikes to roll on to it could also potentially allow for a small pull-over space/loading zone on the uphill side. Right now homeowners, delivery trucks including heating fuel trucks either pull up on to the downhill sidewalk or stop in the middle of the road. Designing the corridor to accommodate this use could also help keep traffic flowing.

If we were able to carve out space for a loading zone, it would be very helpful to have the powerlines buried. I've included an email from Steve Benke with the Juneau Commission on Sustainability, which expands on that issue.

As for other features that could make it safer for bikes, "sharrows" might help indicate that the route is a bike boulevard; it is ok and expected that bikes take the lane, especially between the Governor's house and main street and along 12th st. from Cope Park to Glacier Ave. [NACTO](#) has another good manual with lots of ideas.

If a one lane loop is to be further indicated, I think a contra-flow bike lane would make the most sense. In other words, bikes could travel in both directions. Page 11 of the Oregon manual describes this well.

Take care,

- Emily

836 Calhoun Avenue
Juneau, AK 99801

January 8, 2021

Planning Commission
The City & Borough of Juneau,
Department of Community Development
155 S. Seward St.
Juneau, AK 99801

Submitted via Email

Re: Comments on the Calhoun Avenue Rebuild Project (CSP2020 0011)

Dear Commissioners:

I previously submitted comments on the above-referenced project via email, and I submit these additional comments to express my concern that the proposed Calhoun Avenue Rebuild Project does not comply with the 2013 Comprehensive Plan of the City & Borough of Juneau (Comprehensive Plan). That plan “adopted as an addendum” the 2009 Non-Motorized Transportation Plan (NMTP). Comp. Plan at 115. Accordingly, a failure to comply with the Non-Motorized Transportation Plan constitutes a failure to comply with the Comprehensive Plan.

The Comprehensive Plan provides that one of the top six priorities for Juneau’s 2001 Area Wide Transportation Plan is the establishment and maintenance of “bicycle lanes, pathways, sidewalks and bus stops where they are needed.” Comp. Plan at 101. The Comprehensive Plan explains (at p. 115):

Improved pedestrian and bicycle movement within and between major shopping and employment centers, schools and other concentrations of population are needed. Pedestrian and bicycle facilities are needed to provide safer and more efficient movement within and between neighborhoods and major concentrations of population. These facilities are also important as an aspect of recreation and can contribute to community health by facilitating active transportation and recreation.

In the Non-Motorized Transportation Plan, the first three of the plan’s five goals are (p. 1):

1. Use new approaches to street design that focus on working together early in project design to plan and build transportation projects that address the needs of all users: pedestrians, cyclists, public transit riders and motorists.
2. Encourage an increase in bicycling, walking and other active forms of transportation by providing safe, efficient and easy-to-use facilities that connect activity centers.

3. Improve Juneau's non-motorized transportation network and decrease the number of bicycle and pedestrian related accidents by identifying unsafe conditions, network gaps and deficiencies and making necessary improvements to sidewalks, bike lanes, paved shoulder lanes, separated paths, intersections and crosswalks.

As a general matter, the failure to widen the sidewalks or explore bike safety infrastructure in the Calhoun Ave rebuild project is inconsistent with these goals.

Similarly, the Non-Motorized Transportation Plan provides that "Sidewalks should be a minimum of 5 feet wide and meet the requirements of the American Disabilities Association for providing barrier free access." NMP at 41. Here, the sidewalks will be rebuilt only to 4 feet; therefore, the project is not consistent with Comprehensive Plan's recommendation on sidewalk width.

Further, the Non-Motorized Transportation Plan specifically identifies Calhoun Avenue as a medium priority for "Sidewalk and Streetscape Improvements" in the downtown area, highlighting the need for "[t]raffic calming to increase safety for pedestrians." NMTP at 57. Such calming measures may include "narrowing travel lanes, reducing speed limit, [and] adding signs." *Id.* Here, CBJ is proposing none of those options. Indeed, the only "traffic calming" measure that it has proposed is to rebuild the sidewalk to its initial height. I submit that that hardly constitutes a traffic calming measure. In short, the design of the project fails to meet the spirit and specific guidelines of the Non-Motorized Transportation Plan, as contained in and adopted by the Comprehensive Plan.

Finally, the process through which CBJ developed the rebuild project is inconsistent with the Non-Motorized Transportation Plan. The plan sets forth a policy for municipal projects and directs CBJ to "[i]mprove the process for Planning Commission review of CBJ projects to allow timely comment on non-motorized infrastructure and routes." NMTP at 68. The plan explains that this policy aims to "ensure consideration is given early in the project design to the recommended infrastructure improvements, policies and actions in this Non-Motorized Transportation Plan when the CBJ is designing or upgrading streets, sidewalks, trails, harbors and other projects that pedestrians and bicyclists will use. Waiting until the design is already significantly underway, complete or the project is ready to bid is too late for meaningful review and modification." NMTP at 69.

Here, the project under the Commission's review is too far along to permit serious consideration on ways to incorporate potential infrastructure improvements needed for pedestrian and bicycle safety. For example, as a resident of Calhoun Avenue who already allows the city to use 0.5 feet of my private land for sidewalk use, CBJ has never engaged me in a discussion of whether I would permit a larger use to accommodate a wider sidewalk. I am confident we could reach an agreement for that.

Similarly, when CBJ invited residents to discuss the project and ask questions, we raised the possibility of making a portion of Calhoun Avenue a one-way street. CBJ explained, however, that that option is not on the table. I understand that CBJ had considered it earlier in time but dismissed it from further or detailed consideration because the Fire Department expressed

opposition, principally on the ground that it would like to preserve two-way access on all of Calhoun Avenue so that that street can serve as an alternate route to downtown and Thane when Egan Drive is closed or otherwise unavailable.

I do not have a firm grasp of the Fire Department's concerns and obviously believe they deserve significant consideration. At this point, however, I do not believe there has been a meaningful review of a one-way option, including the safety risks that that would create balanced with the pedestrian/cyclist safety risks that that would improve.

In light of the above inconsistencies with the Comprehensive Plan, I respectfully request that the Planning Commission direct the City's planning staff to cure those defects by expanding the scope of the project in order to explore with the Commission and public ways to improve pedestrian and bicycle movement and institute traffic calming measures along Calhoun Avenue. I personally would like the City to widen the sidewalk along Calhoun Avenue to five feet (at least along as many sections as feasible), include bicycle safety infrastructure, and include measures to encourage vehicular through-traffic to use the main and wider artery, Egan Drive.

Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Demian Schane".

Demian A. Schane

From: Britt Tonnessen <betonnessen@gmail.com>
Sent: Saturday, January 09, 2021 9:36 PM
To: PC_Comments
Subject: Calhoun Ave

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

Dear Planning Commission,

I've recently heard about the Calhoun Ave project and the potential to increase the project for further developments including potentially making it a one way street.

As a home owner and resident in the Highlands and previously a tenant in the Flats, I believe this would significantly impact our access to downtown. I also believe it would significantly cram up traffic downtown in the summer. I would recommend, before starting anything or moving further, seeking the input house to house in the communities directly affected and other communities about how this would impact them. There are many many people who do not follow social media or are otherwise out of the digital loop and to be inclusive on the decisión i believe requires extra care.

I'm all about pedestrian friendly and bikes but this is one of the two major entrances year round in to downtown.

Thank you for your consideration and time.

Kind regards,
Britt Tonnessen

Thank you for your consideration.

Sent from my iPhone

From: Alida Bus <alidabus@gmail.com>
Sent: Sunday, January 10, 2021 8:05 AM
To: PC_Comments
Subject: Calhoun

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

Hello,

I've walk- and bike- commuted via Calhoun for a little over a decade. Sidewalks are narrow for walking and the street is narrow for cycling. I'm supportive of expanding the scope of the rebuild to consider safety and improvements for walkability and cycling, including widening the sidewalks.

Thanks for all you do for our community by serving on the Planning Commission.

Best,

--

Alida Bus
(907) 209-9128
alidabus@gmail.com

From: sally.schlichting@gmail.com
Sent: Sunday, January 10, 2021 10:01 AM
To: PC_Comments
Subject: Calhoun Ave project

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

Dear Planning Commission,

Thank you for embarking on this complex project. I am a downtown resident who walks and drives Calhoun on a daily basis, in both directions. I am not a fan of speed bumps, but I think a speed limit sign should be posted, but not sure what other traffic calming solutions are feasible. Speed bumps aren't the worst idea if nothing else seems appropriate.

I also bike Calhoun in the summer. This is an important bike route for getting to and from downtown because it's safer and shorter than going along Egan Drive. A bike lane doesn't seem possible without making the street one-way, and if it was one way, then theoretically, I couldn't bicycle Calhoun either out or coming back. I would like this thoroughfare to remain two-way if at all possible. But I wonder if there are other solutions, like signs instructing cars to yield to bikes and pedestrians, in lieu of that. I, like most pedestrians probably, would also like the sidewalk in front of the Choate residence to be wider and higher, especially here:



Thank you for considering my comments on this challenging project. Calhoun is one of the most pleasant streets in downtown Juneau, whether walking, driving or bicycling. I hope we can preserve that character.

Sally Schlichting
419 Kennedy Street

From: Barb Mecum <blmecum@gmail.com>
Sent: Sunday, January 10, 2021 3:22 PM
To: PC_Comments
Subject: Calhoun Ave. Rebuild

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

Hi,
Hoping the Calhoun Ave. rebuild can be done in a way to take into consideration bicycle and pedestrian traffic.
Thank you for your consideration,
Barb Mecum

From: Tom Paul <tomjan@gci.net>
Sent: Sunday, January 10, 2021 4:11 PM
To: PC_Comments
Subject: Calhoun Ave rebuild

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

Planning Commission members:

We live at 525 W 9th St in the “Flats” and have been in our home here for 27 years. We are concerned about some ideas that are being floated about the Calhoun Ave. rebuild scheduled for this summer. Whereas we are all for improving safety for pedestrians, bicyclists, residents and drivers, we are also concerned that some proposals would drastically and adversely impact traffic flow between our neighborhood and downtown including on 9th St.

Before any changes such as one-way traffic or bike lanes are made, it is important for the city to do a full and complete study about how such changes affect not just the few residents on Calhoun and the immediate area, but also those of us who regularly depend on that artery for access to and from downtown and others living elsewhere who pass through the neighborhoods around that street.

At this point we are not convinced that making Calhoun one-way would be a good thing. It is likely that would move considerable traffic to the already unsafe 9th Street hill and curve by the Governor’s House. We believe, based on our decades of experience driving in downtown Juneau, two-way traffic on narrow streets naturally inspires more caution in drivers than when they are on one-way streets.

We strongly support rebuilding the sidewalk on the west side of Calhoun to a safer width and elevating it to a safe height above the roadway. We also hope the mirror at the Goldbelt intersection will be replaced with one that is big enough to be useful.

If the street is too narrow to accommodate a standard safe sidewalk width, perhaps the sidewalk on the east side of Calhoun between Distin and the Goldbelt intersection could be removed. A safe sidewalk on one side of the street is better than two unsafe ones on both sides. Access from the three eastside residences to the sidewalk on the west side could be accomplished by installing marked crosswalks perhaps even with flashing lights.

Another improvement to safety might be installing speed bumps as well as posting a lower speed limit. While we understand that the Street Division doesn’t typically favor speed bumps, there is precedent for their use, as they have been installed in sensitive traffic areas to reduce speeding and are effective (e.g., Riverside Dr./Mint Way, Auke Recreation Area).

No downtown street currently has bike lanes. Bike lanes make sense where there is room to construct them. Adding a bike lane to an already constricted right-of-way does not make sense to us.

We understand and share the desire to make Calhoun Ave. a safer thoroughfare for nearby residents and all Juneauites. We also know it will be difficult to do. We hope any solutions will be arrived at only after thorough study and consideration of the needs of all residents.

Tom Paul
 Jan Caulfield

From: Claire Fordyce <clairefordyce@hotmail.com>
Sent: Sunday, January 10, 2021 5:52 PM
To: PC_Comments
Subject: Calhoun Ave considerations

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

Hello Planning Commission members,

Thank-you for this opportunity to weigh in on the important and timely topic of planning for Calhoun Ave.

Just yesterday after descending the stairs to Calhoun Ave, I stopped at the Pedestrian Crossing by the Governor's House, looked left, right and left again. 4 Pedestrians ran in both direction across Calhoun to safety just ahead of cars traveling at 30 mph in both directions. Cars do not consider it a Pedestrian crossing and pedestrians know better. When the Ave is coated in snow and ice, it is not able to be traversed by adult pedestrians with speed. Most neighbors have stories of a near hit, and the peril their children and dogs face using this crossing, and both intersections either side of the Governor's House. I was traveling to visit my daughter and shop at IGA on a cold Saturday afternoon in January. Consider how much greater the threat is for children walking or cycling to and from school, or for locals when buses transporting tourists careen along winding Calhoun Ave. It is not straight or wide enough to be safe.

I support research, analysis and planning to improve safe pedestrian use of Calhoun Ave. In the context of increased housing density that addresses Juneau's housing shortage, it is savvy development.

Reconfiguring Calhoun is a rare opportunity and the chance to do it right, is before the Planning Commission.

Kind Regards

Claire Fordyce

From: Morgan Michels <memichels.ak@gmail.com>
Sent: Sunday, January 10, 2021 7:04 PM
To: PC_Comments
Subject: Public Comment: Calhoun Ave Rebuild

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

Dear Planning Commission,

My name is Morgan Michels and I am writing to encourage the Planning you to expand the scope of this once-in-a-generation rebuild to consider bike and pedestrian safety. This is a chance to improve a weak link in our biking infrastructure in Juneau.

So many in Juneau, myself included have the opportunity to ride to work as distances are relatively short from the surrounding residential areas of twin lakes or west Juneau however, safety for riders and pedestrians is a real concern as there is often high traffic and not a lot of room or riding on the road is the only option, please direct the engineering department to include bike safety in their planning.

Best,

Morgan Michels

4016 Ridge Way Juneau, AK 99801

From: linda rosenthal <linda.rosenthal@gmail.com>
Sent: Sunday, January 10, 2021 8:46 PM
To: PC_Comments
Subject: Calhoun Ave Rebuild

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

To The Planning Commission:

We are writing to urge you to look at alternatives to the plan that is currently under consideration. We, like our neighbors, are concerned about the safety of pedestrians as well as the safety of drivers who enter the notoriously dangerous intersection at Calhoun Ave. and W. 8th St.

We ask that you please give serious consideration to all proposals that come before you.

Thank you for your time and attention

Linda and Paul Rosenthal
342 Distin Ave
Juneau, AK 99801
907-586-1934

From: Robin Stratton MacDonald <kingfisher_rsm@yahoo.com>
Sent: Sunday, January 10, 2021 10:42 PM
To: PC_Comments
Subject: Calhoun project

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

To whom it may concern:

My family and I reside at 965 Goldbelt Ave, just a couple of houses up from the Calhoun- Goldbelt intersection. We have lived at this address for just over 9 years and I wish to share my thoughts on the Calhoun project that is being planned.

Based on my daily observations, Calhoun (and Goldbelt) is a very heavily used area, both by pedestrians and cyclists of all ages. I strongly encourage you to examine this project more thoroughly before simply replacing what currently exists. Now is the time to make Calhoun safer for pedestrian traffic. While the present plan is one choice, I believe the best path forward is further study and identification of other viable choices that focus on safety. Calhoun is one of the most used pedestrian corridors in the downtown Juneau area, and deserves more planning attention.

Thank you very much,
Robin Stratton MacDonald
907-321-7132

Sent from my iPhone

From: Marilyn Holmes <holmesm@gci.net>
Sent: Monday, January 11, 2021 12:34 AM
To: PC_Comments
Subject: Finding Space to Make Calhoun A One Way St.

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

For the consideration of the Planning Commission:

When considering turning Calhoun Ave into a one way street between The Mansion and Cope Park, two issues arose for the fire department:

The fire chief claims

- 1.) that the proposed new access route through the 9th street pinch point is too difficult for their larger trucks to



travel

- 2.) that parked cars on Indian St and 8th St would prevent fire trucks from accessing Calhoun.



So here are a couple of ideas - *both of which will require purchases of private property by the City.*

This project might, therefore, be done in stages, in order to have time to procure the necessary funding.

First, widen the curve at the pinch point on 9th St. by moving the wall back, creating an area for trucks to



turn:

Second, purchase the property from Grunberg Management and replace the current structure with a two-level covered parking garage with entrances on Calhoun and Indian St.



Here is where residents are currently parking ON Calhoun (only a few yards away from the proposed parcel):



Respectfully yours,
Marilyn Holmes
907 957-1901
969 Goldbelt Ave
Juneau, 99801

From: Ryan Conarro <ryanconarro@gmail.com>
Sent: Monday, January 11, 2021 7:30 AM
To: PC_Comments
Subject: Calhoun Avenue concerns

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

To the Juneau Planning Commission,

My name is Ryan Conarro. I'm a long-time Juneau artist and citizen, and I write to ask you to carefully consider the need to widen the sidewalks along Calhoun Avenue, in order to protect the safety of pedestrians, bikers, and neighborhood residents at large.

Since 2014 I have not lived in Juneau full-time; when I'm fortunate enough to spend time back in Juneau, I often live with friends Emily Ferry and Demian Schane and their children on Calhoun Avenue. In the weeks and months I've spent there, I've experienced and witnessed first-hand how the narrowness of the sidewalks and streets creates hazards for residents and pedestrians--particularly children.

As a citizen-artist, I've been fortunate to contribute to CBJ's downtown wayfinding signage project, co-creating with Lillian Petershoare a series of audio installations that link to the signs. (For much of the period of creating this project in 2019-20, I was living on Calhoun Avenue.) I understand that the new wayfinding signage includes encouragement for downtown visitors to walk to the Governor's Mansion and Cope Park. ...I'm excited about the signage system and its encouragement to visitors to more fully experience Juneau. But, along with the inducement for more people to traverse Calhoun Avenue, I hope you will consider that it's necessary to plan adequate sidewalk improvements to make the street safe for all-- most importantly, for its residents and children.

Thank you,
Ryan Conarro
907-321-2888

From: Richard D. Monkman <rdm@sonosky.net>
Sent: Monday, January 11, 2021 9:12 AM
To: PC_Comments
Subject: Calhoun Street Rebuild

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

Dear Planning Commission:

First, I am very glad that CBJ is going to improve Calhoun Street. It's about time!

That said I have concerns that the current plan does not adequately address the public safety issues on this busy street.

By background, we have lived on Goldbelt Avenue, which meets Calhoun just south of Cope Park, since June 1985.

I work downtown and have walked, run, biked, and driven on Calhoun Street several times every day since then (excepting when out of town). That's 3 or 4 times a day for 36 years, something on the order of **50,000** trips up or down that stretch of Calhoun St., in all kinds of weather, in all seasons, and with and without our family members and our dog.

Calhoun St is dangerous for pedestrians.

- It is heavily used by commuters going in and out of town. Many of them barrel through like they're on Egan Drive.
- There are four blind corners in this short stretch of road: our intersection, where Goldbelt meets Calhoun; the 8th Ave intersection, between the Choate's house and the Governor's House; the Dixon St./Calhoun St. intersection; and at the large retaining wall on the east side of the street just north of 8th St. Drivers can't see cross traffic or pedestrians easily.
- The sidewalks from Goldbelt to 8th St are worn-down and narrow, often blocked by parked cars or trash cans, and heavily used by pedestrians including school children. People often have to step into the roadway to get around cars and trash cans in this stretch.
- I have had cars brush past me going at good speeds literally inches from me. I have seen cars fly by groups of children and pedestrians, again very close to hitting them.
- Not long ago there was a crash that knocked down part of the Choate's stone wall. A north-bound car went out of control, crossed the road, and smashed into the Choate's wall. If a child or other pedestrian had been walking on the sidewalk then, they would have been killed or seriously injured.

I strongly urge the Planning Commission to direct CBJ Engineering to expand the scope of this project to consider pedestrian safety in a more meaningful way. This is our only chance for the next few decades to improve safety on this dangerous stretch of road. I request in particular that the CBJ consider:

- Making Calhoun Street one way in the stretch from Cope Park to 8th St.
- Widening the sidewalks more than proposed and elevating them from the roadbed.

- Adding a dedicated bike lane.
- Consider additional stop signs and other measures to slow traffic, like the stop sign that CBJ added on 12th at C St. down in the flats. That simple expedient slowed traffic on 12th considerably.

Thanks for your consideration of these comments! Let me know if I can provide any other information.

Richard D. Monkman
957 Goldbelt Ave
Juneau, AK 99801
907.586.5880 (w)

From: Terra Stark <alaskaterra93@gmail.com>
Sent: Monday, January 11, 2021 10:31 AM
To: PC_Comments; Borough Assembly; John Nelson; lucas@prohns.com
Subject: Calhoun Avenue Project

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

January 11, 2021

Dear Planning Commission Members,

I urge you to consider options for developing safer routes for students and staff traveling to and from school.

I am a parent of two who lives in the flats, with my own parents (my children's grandparents) living around Calhoun from us, over on 5th Street.

Our school is located in the old Marie Drake building, part of the five school complex that also includes Harborview Elementary School, Yaakoosge Daakahidi High School, Juneau Community Charter School, and Juneau Douglas High School: Yadaa.At Kalé.

Calhoun Avenue is one of the only ways that students who live in the Capitol Hill, Starr Hill, Gastineau Ave and other downtown neighborhoods can bike to and from school. Unfortunately, many parents do not allow their children to bike to school or nearby parks because there is no space for bikes along the Calhoun corridor.

Calhoun is also one of the few routes our students can use for walking field trips like visits to the State Capitol or City Museum. The sidewalk is so narrow that it makes it difficult for groups of students and teachers to confidently make these field trips.

As you plan for the rebuild of Calhoun Ave, I encourage the City and Borough of Juneau Assembly, Planning Commission, and Engineering Department to consider creative options for enhancing safe, active transportation options for our students and our community.

Sincerely,

Terra Stark Dean
Concerned Citizen and Parent

CC: CBJ Assembly Members, BoroughAssembly@juneau.org
CBJ Engineer John Nelson, john.nelson@juneau.org
ProHNS Lucas Chamber, lucas@prohns.com

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Downtown Juneau Neighborhood Association

Statement of Interest regarding the reconstruction of Calhoun Avenue

The reconstruction of Calhoun Avenue is a once-in-a-generation opportunity to make improvements to the safety and design of our community.

The design of this project impacts nearly every resident of downtown Juneau, as well as state office workers, legislators, tourists, pre-kindergarten, and school classes.

Calhoun has been a well-documented safety concern for at least two decades, with a sidewalk and roadway that is too narrow for safe multi-user passage.

Calhoun Avenue is one of only three corridors connecting downtown offices, restaurants, shops, and residences with the schools, parks, and greater geographic area that includes homes in the Flats, Behrends, Starr Hill, Chicken Ridge and Highlands neighborhoods. The other two routes - Egan Drive and Willoughby Ave - are not options for most walkers or cyclists as they experience higher vehicle speeds nearby and are more circuitous.

The residents of our neighborhood have hundreds of years of lived experience observing and experiencing the safety issues on Calhoun.

Therefore we respectfully request that the City and Borough of Juneau pursue:

- Design choices that prioritize walkability and pedestrian and bike safety including sidewalks that are fully compliant with the Americans with Disabilities Act's (ADA) standards and recommendations, and are at least five feet wide, even through the most narrow sections of the corridor.
- A study of car, pedestrian, and bike traffic which includes speed and motor vehicle crash data as well as trip purposes for all users.
- Opportunities for the neighborhood and general public to meaningfully inform the design of this project and more generally the holistic plan for flow and structure of streets in our neighborhood. Projects that primarily serve residents should receive the same attention as those intended to serve tourists.
- Consideration of traffic-calming measures like stop signs, speed bumps, and other well-known neighborhood friendly design choices that keep the roadway speeds slow.
- Consideration of one-way routing paired with bike lanes and burying the powerlines to give the necessary space for safe passage by anyone walking, rolling, or biking through the corridor.

Alida Bus
90 Spruce St. #303

Amy Dressel / Carol VanHorn
954 Goldbelt Ave

Amy Paige and John Dunker
592 Seater Street

Catherine Reardon and Mark Handley
630 Dixon Street

Dana Owen and Joyce Thoresen
949 Goldbelt Ave

Emily Ferry & Demian Schane
836 Calhoun Ave

Frances Leach & Kerry Crocker
925 Calhoun Ave

Frankie Pillifant
512 6th Street

Grey Pendleton
329 Distin Ave

Ian Fisk
923 A Street

Iris Matthews & Matthew Rogers
717 Dixon Street

Jeremy Bauer
943 Calhoun

John "Jonas" & Melinda Lamb
638 Gold

Joyanne Bloom
883 Basin Road

Ke Mell
850 Basin Road

Kevin Maier
570 Seater Street

Laurie Berg & John Connolly
911 Calhoun

Linda & Paul Rosenthal
342 Distin Ave

Marilyn Holmes
969 Goldbelt Ave

Mark and Sun Choate
230 W. 8th Street

Mary Alice McKeen and David Ottoson
212 W. 9th St.

Mary Sweeney
3rd Street

Michael & Ann Dombkowski
239 West 7th Street

Odin Brudie
512 6th Street

Rebecca Braun
136 Behrends Ave.

Richard Monkman & Tina Kobayashi
957 Goldbelt

Robin Stratton MacDonad
965 Goldbelt Avenue

Sally Schlichting & Bob King
419 Kennedy Street

Sandy and Peter Metcalfe
354 Distin

Sonia Nagorski
319 6th Street

Steve Krall
875 Basin Rd

Alex Hildebrand
546 Hemlock St.

Bradelle Padon & Nicholas Hatch
740 5th St

Cecile Elliott
510 Kennedy St.

Claire Fordyce & Clay Good
313 7th St #4

Darrin Kelly & Megan Gahl
1780 Evergreen Ave

Jennifer Lefing
434 7th St

Marc Wheeler
427 W. 9th Street

Mike Hekkers & Di Johnson
423 3rd St.

Rosanne Schmitz
612 10th St.

Steve Suewing
423 East St.

Suzanne & Bob Sauerteig
318 Coleman St.