

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION AGENDA**

Vern Halter, Mayor

PLANNING COMMISSION

- Mary Anderson, District 1
- Jason Ortiz, District 2
- Patricia Chesbro, District 3
- Colleen Vague, Chair, District 4
- Chris Elder, District 5
- Stafford Glashan, District 6
- Sassan Mossanen, District 7



George Hays, Acting Borough Manager

**PLANNING & LAND USE
DEPARTMENT**

- Alex Strawn, Director of Planning & Land Use
- Kim Sollien, Planning Services Manager
- Mark Whisenhunt, Acting Development Services Manager
- Fred Wagner, Platting Officer
- Karol Riese, Planning Clerk

*Assembly Chambers of the
Dorothy Swanda Jones Building
350 E. Dahlia Avenue, Palmer*

**September 21, 2020
REGULAR MEETING
6:00 p.m.**

Ways to participate in Planning Commission meetings:

IN PERSON. Should you wish to testify in person, please adhere to the 6-foot distance between yourself and others. It is highly recommended that you bring your own mask to wear.

IN WRITING: You can submit written comments to the Planning Commission Clerk at planning@matsugov.us.

TELEPHONIC TESTIMONY:

- Dial 1-855-225-1887; Conference ID #7854; You will hear “Joining conference” when you are admitted to the meeting.
- You will be automatically muted and able to listen to the meeting.
- When the Chair announces audience participation or a public hearing you would like to speak to, press *3; you will hear, “Your hand has been raised.”
- When it is your turn to testify, you will hear, “Your line has been unmuted.”
- State your name for the record, spell your last name, and provide your testimony.

I. CALL TO ORDER, ROLL CALL, AND DETERMINATION OF QUORUM

II. APPROVAL OF AGENDA

III. PLEDGE OF ALLEGIANCE

IV. CONSENT AGENDA

Items on the consent agenda are considered to be routine and non-controversial by the Commission and will be approved by one motion. There will be no separate discussion of

these items unless a Commission Member so requests, in which case the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

- A. MINUTES
 - 1. August 17, Minutes

- B. INTRODUCTION FOR PUBLIC HEARING: QUASI-JUDICIAL MATTERS
 - 1. **Resolution PC 20-35**, A Conditional Use Permit in accordance with MSB 17.30 – Earth Materials Extraction has been submitted for the extraction of approximately 2 million cubic yards of earth material, on 19 acres of the 19.34 acre subject parcel. The request has no street address and is located adjacent to the Kashwitna Interim Materials District, near Mil3 78 Parks Highway; Tax ID #20N04W06B007; within Township 20 North, Range 4 West, Section 6, Seward Meridian. Public Hearing: October 5, 2020 (*Applicant: Emily McDonald, on behalf of COLASKA dba QAP; Staff: Joe Metzger*).
 - 2. **Resolution PC 20-36**, A Conditional Use Permit in accordance with MSB 17.60 – Conditional Uses; has been submitted for the operation of a marijuana retail facility, located at 3807 West Machen Road, Unit A; Tax ID #1111B01L011; within Township 17 North, Range 2 West, Section 1, Seward Meridian. Public Hearing: October 5, 2020 (*Applicant: Greg Miller, on behalf of TRICHS, LLC; Staff: Joe Metzger*).

- C. INTRODUCTION FOR PUBLIC HEARING: LEGISLATIVE MATTERS
 - 1. **Resolution PC 20-33**, a Resolution of the Matanuska-Susitna Borough Planning Commission recommending approval of an Ordinance adopting MSB 17.68 Outdoor Shooting Facilities in Order to Establish Standards for Commercial, Educational, and Nonprofit Outdoor Shooting Facilities. Public Hearing: October 5, 2020 (*Sponsored by: Planning Commissioner Patricia Chesbro*).
 - 2. **Resolution PC 20-37**, a Resolution of the Matanuska-Susitna Borough Planning Commission recommending approval of an ordinance amending MSB 17.60 to change the applicability and standards for Cultivation Facilities and Address on-site Consumption of Marijuana (*Staff: Mark Whisenhunt*).

- V. COMMITTEE REPORTS

- VI. AGENCY/STAFF REPORTS

- VII. LAND USE CLASSIFICATIONS

- VIII. AUDIENCE PARTICIPATION (*three minutes per person, for items not scheduled for public hearing*)

- IX. PUBLIC HEARING: QUASI-JUDICIAL MATTERS (*Public Hearings shall not begin before 6:15 p.m.*)

Commission members may not receive or engage in ex-parte contact with the applicant, other parties interested in the application, or members of the public concerning the application or issues presented in the application.

The Planning Commission members may submit questions to the Planning Commission Clerk concerning the following matters or request for more information from the applicant at the time of the introduction. All questions and requests submitted by the Commission shall be in writing, and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing.

1. **Resolution PC 20-30**, a Conditional Use Permit (CUP) in accordance with MSB 17.60 – Conditional Uses; allowing the operation of a junkyard/refuse area, located at 743 West Sunrise Drive (Tax ID# 640500L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian. Alaska Superior Court has issued an order remanding this item back to the Planning Commission (*Applicant: Dewayne Creech for Creech’s Junkyard, Staff: Mark Whisenhunt*).
2. **Resolution PC 20-32**, a variance request in accordance with MSB 17.65-Variances for a variance to the shoreline setback requirements of MSB 17.55-Setbacks. The variance would allow for the construction of a 38’ x 24’ single-family residence with deck to be situated approximately 21’ from the shorelands of Middle Caswell Lake. The location of the request is 49572 S. Jumpin Circle (Tax ID# 607000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian (*Applicant: Jason Nixa, Staff: Joe Metzger*).

X. PUBLIC HEARING: LEGISLATIVE MATTERS
(none)

XI. CORRESPONDENCE & INFORMATION

XII. UNFINISHED BUSINESS

XIII. NEW BUSINESS

XIV. COMMISSION BUSINESS

- A. Adjudicatory
- B. Reminder October 13, 2020, is a joint Assembly/Planning Commission
- C. Upcoming Planning Commission Agenda Items (*Staff: Alex Strawn*)

XV. DIRECTOR AND COMMISSIONER COMMENTS

XVI. ADJOURNMENT (Mandatory Midnight)

In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of "Interested Party." The procedures governing appeals to the Board of Adjustment & Appeals are contained in MSB 15.39.010-250, which is available on the Borough Internet home page, <http://www.matsugov.us>, in the Borough Clerk's office, or at various libraries within the Borough.

Persons with Disabilities needing reasonable accommodation in order to participate at a Planning Commission Meeting should contact the Borough ADA Coordinator at 861-8432 at least one week in advance of the meeting.

MINUTES August 17, 2020

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MINUTES

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION MINUTES****REGULAR MEETING
August 17, 2020**

The regular meeting of the Matanuska-Susitna Borough Planning Commission was held on August 17, 2020, at the Matanuska-Susitna Borough Assembly Chambers, 350 E. Dahlia Avenue, Palmer, Alaska. The meeting was called to order at 6:00 p.m. by Chair Colleen Vague.

I. CALL TO ORDER, ROLL CALL, AND DETERMINATION OF QUORUM

Planning Commission members present and establishing a quorum:

Ms. Mary Anderson, Assembly District #1, Vice-Chair
Ms. Patricia Chesbro, Assembly District #3
Ms. Colleen Vague, Assembly District #4, Chair
Mr. Chris Elder, Assembly District #5
Mr. Stafford Glashan, Assembly District #6*
Mr. Sassan Mossanen, Assembly District #7

Planning Commission members absent and excused were:

Mr. Jason Ortiz, Assembly District #2

Staff in attendance:

Mr. Alex Strawn, Acting Planning and Land Use Director
Ms. Kim Sollien, Planning Services Manager
Ms. Shannon Bodolay, Assistant Borough Attorney
Mr. Mark Whisenhunt, Acting Development Services Manager
Mr. Joseph Metzger, Planner II
Ms. Karol Riese, Planning Commission Clerk*

*Indicates that the individual attended telephonically due to COVID safety protocols.

II. APPROVAL OF AGENDA

Chair Vague inquired if there were any changes to the agenda.

GENERAL CONSENT: The agenda was approved without objection.

III. PLEDGE OF ALLEGIANCE

The pledge of allegiance was led by Mr. Whisenhunt.

IV. CONSENT AGENDA**A. Minutes**

1. August 3, 2020, regular meeting minutes

B. INTRODUCTION FOR PUBLIC HEARING: QUASI-JUDICIAL MATTERS

1. **Resolution PC 20-30**, a Conditional Use Permit (CUP) in accordance with MSB 17.60 – Conditional Uses; allowing the operation of a junkyard/refuse area, located at 743 West Sunrise Drive (Tax ID# 640500L006); within Township 18 North, Range 2 West, Section

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION MINUTES****REGULAR MEETING
August 17, 2020**

33, Seward Meridian. Alaska Superior Court has issued an order remanding this item back to the Planning Commission. Public Hearing: September 21, 2020 (*Applicant: Dewayne Creech for Creech's Junkyard, Staff: Mark Whisenhunt*).

2. **Resolution PC 20-32**, a variance request in accordance with MSB 17.65-Variations for a variance to the shoreline setback requirements of MSB 17.55-Setbacks. The variance would allow for the construction of a 26' x 24' single-family residence with deck to be situated approximately 33' from the shorelands of Middle Caswell Lake. The location of the request is 49572 S. Jumpin Circle (Tax ID# 607000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian. Public Hearing: September 21, 2020 (*Applicant: Jason Nixa, Staff: Joe Metzger*).

C. INTRODUCTION FOR PUBLIC HEARING: LEGISLATIVE MATTERS
(*none*)

GENERAL CONSENT: The consent agenda was approved as amended without objection.

V. COMMITTEE REPORTS

(*There were no committee reports.*)

VI. AGENCY/STAFF REPORTS

(*There were no Agency/Staff Reports.*)

VII. LAND USE CLASSIFICATIONS

(*There were no land use classifications.*)

VIII. AUDIENCE PARTICIPATION (Three minutes per person.)

The following person spoke regarding concerns with public process: Mr. Eugene Carl Haberman.

Recess at 6:09 PM; Reconvened at 6:15 PM.

IX. PUBLIC HEARING: QUASI-JUDICIAL MATTERS

- A. **Resolution PC 20-27**, A conditional use permit in accordance with MSB 17.70 – Regulation of Alcoholic Beverages Uses, for the operation of an alcoholic beverage package store, located at 23471 S. Parks Hwy; (Tax ID #7561000L001); within Township 26 North, Range 5 West, Section 29, Seward Meridian (*Applicant: Stephen Mierop, dba Three Bears Alaska, Inc. Staff: Mark Whisenhunt*).

Chair Vague read the resolution title into the record.

Mr. Whisenhunt provided a staff report:

- staff recommended approval of the resolution with conditions.

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION MINUTES****REGULAR MEETING
August 17, 2020**

Chair Vague invited the applicant or their representative to provide an overview of their application.

Mr. Mierop, applicant, explained the status of the SOA Driveway permit.

Chair Vague opened the public hearing.
(none)

There being no one else to be heard, Chair Vague closed the public hearing and discussion moved to the Planning Commission.

MOTION: Commissioner Anderson moved to approve Resolution PC 20-27. The motion was seconded.

Discussion ensued

VOTE: The main motion passed without objection.

Recess at 6:30 PM; Reconvened at 6:42 PM.

A. Resolution PC 20-28, A modification of an existing Conditional Use Permit in accordance with MSB 17.60 — Conditional Uses, for the expansion of an existing junkyard/refuse area operation, located at 572 S. Vine Road and 600 S. Vine Road (Tax ID # 6919000L002 & 6919000L001); within Township 17 North, Range 2 West, Section 10, Seward Meridian (*Applicant: Garold Jacobsen, dba Alaska Car Crushing, Staff: Mark Whisenhunt*).

Chair Vague read the resolution title into the record.

Mr. Whisenhunt provided a staff report:

- staff recommended approval of the resolution with conditions.

Commissioners questioned staff regarding:

- police impound lot; CUP applying to Lot 1; fence; and end date.

Chair Vague invited the applicant or their representative to provide an overview of their application.

Ms. Rebecca Powell (by phone), Office Manager for Alaska Car Crushing, applicant, provided an overview of their application and addressed the pictures in the handout.

Commissioners questioned the applicant regarding:
(none)

Chair Vague opened the public hearing.

The following person spoke regarding concerns with the public process: Mr. Eugene Carl Haberman.

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION MINUTES****REGULAR MEETING
August 17, 2020**

Chair Vague invited staff to respond to questions and statements from the audience.

Mr. Whisenhunt responded to questions and statements from members of the audience.

Chair Vague invited the applicant to respond to questions and statements from the audience.

Gerold Jacobsen (by phone), applicant, introduced himself.

There being no one else to be heard, Chair Vague closed the public hearing and discussion moved to the Planning Commission.

MOTION: Commissioner Massonen moved to approve Resolution PC 20-28. The motion was seconded.

Discussion ensued.

VOTE: The main motion passed without objection.

X. PUBLIC HEARING LEGISLATIVE MATTERS

(There were no legislative public hearings.)

XI. CORRESPONDENCE AND INFORMATION

(There was no correspondence and information.)

XII. UNFINISHED BUSINESS

(There was no unfinished business.)

XIII. NEW BUSINESS - *(There was no new business.)*

XIV. COMMISSION BUSINESS

A. Adjudicatory

B. Reminder October 13, 2020 is a joint Assembly/Planning Commission

C. Cancel of Planning Commission meeting scheduled for October 19, 2020 due to early and absentee voting occurring for the Borough's Regular Election and the State's General Election

D. Upcoming Planning Commission Agenda Items *(Staff: Alex Strawn)*

Mr. Strawn provided a brief update on projects that will be coming before the Planning Commission.

(Commission Business was presented, and no comments were noted.)

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION MINUTES**

**REGULAR MEETING
August 17, 2020**

XV. DIRECTOR AND COMMISSIONER COMMENTS

Commissioner Vague: Wetlands Mitigation project – would like an update on this project at the next meeting (October 5, 2020); running for District #4 Assembly.

XVI. ADJOURNMENT

The regular meeting adjourned at 7:13 p.m.

COLLEEN VAGUE, Planning Commission
Chair

ATTEST:

KAROL RIESE, Planning Commission Clerk

Minutes approved: _____

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**INTRODUCTION FOR PUBLIC HEARING
QUASI-JUDICIAL**

Resolution No. PC 20-35

Emily McDonald, on behalf of COLASKA dba QAP

(Pages 13 - 50)

INTRODUCTION FOR PUBLIC HEARING



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

Matanuska-Susitna Borough
Development Services

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

Email: permitcenter@matsugov.us

JUL 02 2020

Received

APPLICATION FOR A CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION – MSB 17.30

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

THIS APPLICATION IS FOR MATERIALS EXTRACTION THAT **DOES NOT** OCCUR WITHIN FOUR FEET OF THE SEASONAL HIGH WATER TABLE. IF YOUR PLAN INCLUDES EXTRACTION WITHIN FOUR FEET OF THE SEASONAL HIGH WATER TABLE YOU MUST COMPLETE THE APPLICATION SPECIFIC TO THAT PURPOSE.

Application fee must be attached, check one:

- \$500 for Administrative Permit (Less than two years or less than 7,000cy annually)
- \$1,000 for Conditional Use Permit (More than two years and more than 7,000cy annually)

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made prior to the application presentation before the Borough Planning Commission.

Subject Property: Township: 20N, Range: 04W, Section: 06, Meridian: Seward
 MSB Tax ID# 203582 (20N04W06) 2007 (20)
 SUBDIVISION: _____ BLOCK(S): _____, LOT(S): Govt. Lot 9
 STREET ADDRESS: _____
 FACILITY / BUSINESS NAME: COLASKA INC. (QAP)

Ownership: A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached? Yes No N/A

Name of Property Owner
Colaska, Inc (dba QAP)
 Mailing: 240 W 68th Ave
Anchorage, AK 99518
 Phone: Hm _____ Fax _____
 Wk (907) 522-2211 Cell _____
 E-mail PCummins@Colaska.com

Name of Agent / Contact for application
UMIAQ Environmental
 Mailing: 6700 Arctic Spur Road
Anchorage AK 99518
 Phone: Hm _____ Fax _____
 Wk (907) 952-7807 Cell _____
 E-mail Emily.McDonald@UICCS.com

CMP-7-6-3-16846
PLN - DVS - Permits - DVS - 20N04W06 - Earth
Materials Extraction - 173020200002

Description What type(s) of material is being extracted? Sand and gravel

Total acreage area of all parcels on which the activity will occur: _____

Total acreage area of earth material extraction activity: 19.92 acres

Total cubic yards extraction per year: 100-200,000

Total projected cubic yards to be extracted: 1.5 - 2 million

What is the estimated final year extraction will occur? 2035

Required information

1. Attach a plan of sufficient detail to demonstrate compliance with the requirements of MSB 17.28.050 and MSB 17.28.060.

Plan of Operation	Attached
Provide seasonal start and end dates	✓
Provide days of the week operations will take place.	✓
Provide hours of operation.	✓
Estimated end date of extraction	✓
Estimated end date of reclamation	✓
Describe all other uses occurring on the site	✓
Describe methods used to prevent problems on adjacent properties, such as lateral support (steep slopes), water quality, drainage, flooding, dust control and maintenance of roads; how will the operation monitor the seasonal high water table to stay at least four feet above it	✓
Provide quantity estimates and topographical information such as cross section drawings depicting depth of excavation, slopes and estimated final grade	✓

2. Submit a site plan. Drawings must be detailed and **drawn to scale**. Drawings under seal of an engineer or surveyor are recommended but not required.

SITE PLAN REQUIREMENTS	Attached
Identify location of permanent and semi-permanent structures on the site for verification of setback requirements. Include wells and septic systems.	✓
Depict buffer areas, driveways, dedicated public access easements, and noise buffers (such as fences, berms or retained vegetated areas), and drainage control such as ditches, settling ponds etc.	✓
Identify wetlands and waterbodies on site and within one mile	✓
Identify existing surrounding land uses within one mile	✓
Identify surrounding property ownership (i.e. public vs. private) within one mile of exterior boundaries	✓
Show entire area intended for gravel/material extraction activity and the boundary of the lot(s) containing the operation. Identify areas used for past and future phases of the activity. Identify phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, approximate time sequence for mining at particular locations, and general anticipated location of semi-permanent equipment such as conveyor belts, crushers, dredges, batch plants, etc.	✓

Road and access plan that includes anticipated routes and traffic volumes. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, traffic standards, a traffic control plan consistent with state regulations may be required	✓
Visual screening measures that include a detailed description of the type of visual screening to be utilized. Visual screening may include, but is not limited to, berms, natural vegetation, solid fences, walls, evergreen hedges or other means as approved by the commission	✓
Noise mitigation measures that include a description of measures to be taken by the applicant to mitigate or lessen noise impacts to surrounding properties. Measures shall include, but not be limited to, hours of operation of noise-producing equipment, erecting noise barriers (i.e., berms a minimum of 10 feet in height) between noise-producing equipment and adjacent uses, location of noise-producing equipment (i.e., below grade in excavated pit areas), and measures to utilize equipment with noise reduction features	✓
Proposed lighting plan	✓
Other (as required by MSB Planning Department)	

3. Submit a reclamation plan including the following:

Reclamation Plan	Attached
Provided timeline for reclamation at particular locations and that is in compliance with MSB 17.28.067	✓
Provide copy of reclamation financial assurance filed with the State of Alaska (If exempt, provide qualifying documents for exemption)	✓

4. Submit documentation of compliance with borough, state and federal laws:

COMPLIANCE WITH BOROUGH, STATE AND FEDERAL LAWS	Applied for (list file #)	Attached (list file #) or N/A
Mining license as required by the Alaska State Department of Revenue, pursuant to A.S.42.65		N/A
Mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land		N/A
Reclamation plan as required by ADNR, pursuant to A.S. 27.19		✓
Notice of intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Environmental Protection Agency (EPA) pursuant to the National Pollutant Discharge Elimination System (NPDES) requirements		N/A
United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes and streams.		N/A
Other (Such as, driveway / access permits. List as appropriate.)		✓

OWNER'S STATEMENT: I am owner or authorized agent of the following property:

MSB Tax account #(s) 20N04W06 - Parcel ID 203582 and, I hereby apply for approval of conditional use permit for earth material extraction activities on the property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.28, MSB 17.30 and with all other applicable borough, state and federal laws, including but not limited to, air quality, water quality, and use and storage of hazardous materials, waste and explosives, per MSB 17.30.055.

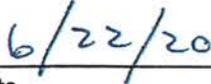
I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorizations may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

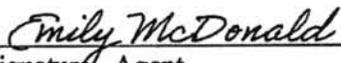
I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to operators on this property, and to the buyer when I sell the land. Additionally, I agree to comply with 17.30.120 Transfer of Conditional Use Permit, in the event this permit is transferred to a subsequent property owner.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, and at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

		
Signature: Property Owner	Printed Name	Date

	Emily McDonald	6/22/2020
Signature: Agent	Printed Name	Date

Joseph Metzger

From: Joseph Metzger
Sent: Friday, July 24, 2020 12:45 PM
To: 'McDonald, Emily'
Subject: RFAI Colaska Inc Mile 78 Parks Hwy



Colaska RFAI July
24, 2020.pdf...

Good Afternoon Emily,

Attached, please find a letter requesting additional information on your CUP request. As always, if you have any questions or need clarification on something, don't hesitate to contact me. Have a great weekend!

Respectfully,

Joe Metzger
MSB Planner
907-861-7862



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

www.permitcenter@matsugov.us

July 24, 2020

Emily McDonald (UMIAQ Environmental, LLC)
on Colaska, Inc (dba QAP)
6700 Artic Spur Road
Anchorage, AK 99518

Subject: Conditional Use Permit Application for Earth Materials Extraction – Request for Additional Information
Location: Mile 78 Parks Highway; Parcel Account #20N04W06

Dear Ms. McDonald,

Borough staff has reviewed the application material and the site plan(s) submitted on July 2, 2020 for a Conditional Use Permit for the extraction of earth materials under MSB 17.30 on the above referenced property. It has been determined that the following information needs to be provided and/or clarified in order to process this request.

1. Provide a copy of the approved Mining and Reclamation Plan and financial assurance by the Alaska Department of Natural Resources Division of Mining, Land, and Water for the proposed use.
2. Provided documentation from a qualified individual indicating “No-SWPPP needed.”
3. Identify phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, and approximate time sequence for mining at particular locations.
4. The application material indicates a conveyor system will be used to transport material to the adjacent Kashwitna IMD for further processing and transport. Please indicate the location of the conveyor system on the site plan.
5. The application material indicates an asphalt plant or crushing/screening operation could be located on the parcel or nearby at the Kashwitna IMD pit. If an asphalt plant, or crushing/screening equipment is located on the subject property, indicate the location on the site plan.
6. Please indicate how monitoring wells on adjacent property will be relevant in monitoring groundwater at the proposed location.

7. The application material contains a map of the surrounding land ownership, but it does not indicate the current land uses on these parcels. Identify the surrounding land uses within one mile of the proposed use.
8. Just to be clear, there are no visual screening measures proposed for the use?
9. The application material indicates there is a section line easement between the parcels. Please provide more information on the section line easement and indicate the location of the easement on the site plan.
10. The application material indicates there is a potential for seasonal projects and/or occasional local demand that would require a large haul out of approximately 500 trucks a days. This potential truck traffic would ingress and egress from the Kashwitna IMD?

Once the items above have been addressed and we have determined the application to be complete, staff will begin the public notice process. Should you have any questions or require additional information, please feel free to contact me at the above mailing address, phone: 861-7862, or email: joseph.metzger@matsugov.us. Thank you for your time and consideration on this matter.

Respectfully,



Joseph Metzger, Planner II
Development Services Division
Matanuska-Susitna Borough



August 21, 2020

Joseph Metzger
Matanuska-Susitna Borough (MSB) Planner
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue
Palmer, AK 99645

Re: Response to Request for Additional Information
Conditional Use Permit Application for Earth Materials Extraction
Mile 78 Parks Highway, Parcel Account #20N04W06

Dear Mr. Metzger:

Thank you for your request for additional information dated July 24, 2020. Below please find responses to your questions. Attached is documentation of stormwater discharge potential, a revised Plan of Operations, and set of project figures dated August 4, 2020.

1. Provide a copy of the approved Mining and Reclamation Plan and financial assurance by the Alaska Department of Natural Resources (DNR) Division of Mining, Land, and Water (DMLW) for the proposed use.

QAP has submitted their Mining and Reclamation Plan to Alaska DNR DMLW. Reclamation financial assurance will be provided prior to mining as required by the DNR and Alaska Statute 37.19.040.

2. Provided documentation from a qualified individual indicating "No-SWPPP needed."

Please see attached memo from UMIAQ Environmental dated August 4, 2020.

3. Identify phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, and approximate time sequence for mining at particular locations.

Phases 1 and 2 have been added to the Site Plan, Figure 2. Phase I is approximately 9.35 acres. Phase 2 is approximately 10.57 acres. Each Phase is anticipated to take five years with Phase 2 being opened once mining is complete in Phase 1. Mining of Phase 1 is anticipated to begin upon receipt of permits and regulatory approvals.

Vegetation at the site includes mixed and white spruce forest with areas of grasses and shrubs. The north east corner of the property contains a small hill of approximately +70 feet. Otherwise, the site is relatively flat with approximately 10 feet of relief.

Mat-Su Borough
August 21, 2020
Page 2

4. The application material indicates a conveyor system will be used to transport material to the adjacent Kashwitna IMD for further processing and transport. Please indicate the location of the conveyor system on the site plan.

The conveyor system is portable and moved to current gravel extraction and stockpile areas. Please see Figure 2 for a location of the conveyor system.

5. The application material indicates an asphalt plant or crushing/screening operation could be located on the parcel or nearby at the Kashwitna IMD pit. If an asphalt plant, or crushing/screening equipment is located on the subject property, indicate the location on the site plan.

The rock crushing activities are portable. This reduces movement of gravel onsite and therefore potential for sediment to become airborne.

6. Please indicate how monitoring wells on adjacent property will be relevant in monitoring groundwater at the proposed location.

Monitoring wells are currently installed on the adjacent property within the Kashwitna IMD. Three wells are installed on this property. The closest well to the proposed Kashwitna Addition is approximately 1,404 feet directly east. Another well is approximately 1,707 feet to the northeast, and the final well is approximately 3,528 feet southeast of the proposed mining area. Although they are on an adjacent property, the closed proximity of these wells to Kashwitna Addition will provide accurate groundwater data. The wells currently provide groundwater monitoring to the whole of the IMD, including areas that are more distant from the monitoring wells than the proposed mining area addition.

7. The application material contains a map of the surrounding land ownership, but it does not indicate the current land uses on these parcels. Identify the surrounding land uses within one mile of the proposed use.

Land uses were generated from the MSB Parcel Viewer. The surrounding land use of the IMD has been added to the map. Within one mile, land owners include the MSB, State, Native Corporation, and private entities. Private ownership is assumed to be residential based on aerial mapping. MSB, State and Native Corporation land appears to be primarily undeveloped. Please see Figure 5 of the attached packet.

8. Just to be clear, there are no visual screening measures proposed for the use?

The Railroad Right-of-Way (ROW) runs along the western boundary of the Kashwitna Addition as visible on Figure 1. Material may be loaded directly into train cars from the mining area. This will reduce handling of material and improve overall safety of the mining operation. A vegetative buffer will not allow material to be directly from the Kashwitna Addition on to the train, as is the practice within the surrounding IMD. No visual screening measures are proposed between the mining area and the railroad right of way. Lot B4, visible on Figure 2, is a currently forested lot that separates the Parks Highway from the Railroad at this location.

9. The application material indicates there is a section line easement between the parcels. Please provide more information on the section line easement and indicate the location

*Mat-Su Borough
August 21, 2020
Page 3*

of the easement on the site plan.

This has been corrected in the Plan of Operations, as it was inaccurate; there is no section line easement between the parcels.

10. The application material indicates there is a potential for seasonal projects and/or occasional local demand that would require a large haul out of approximately 500 trucks a days. This potential truck traffic would ingress and egress from the Kashwitna IMD?

That is correct. There would be no change for the truck haul from what is in the existing IMD, that is to say no additional traffic will be generated from adding the additional parcel.

Please do not hesitate to reach out if I may provide additional information for your review. Thank you.

Sincerely,



Emily McDonald
Environmental Specialist

Attachments: Memorandum dated August 4, 2020
Plan of Operations
Figures 1-6 dated August 4, 2020

cc: {Patrick Cummins, QAP}



MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



Memorandum

To: Patrick Cummins, QAP	From: Emily McDonald
cc:	Date: August 4, 2020
Re: Kashwitna Addition Parcel - Stormwater Discharge Potential	

UMIAQ Environmental, LLC (UMIAQ Environmental) has determined that the proposed Kashwitna Addition gravel pit located within section 6, township 20N, range 4W, Seward meridian does not have potential for stormwater discharge.

The Kashwitna Addition is adjacent to QAP's existing Kashwitna Interim Materials District (IMD), an approved and operating gravel pit (See Figure 1). Should the Kashwitna Addition parcel be developed as proposed in the Plan of Operations dated June 22, 2020, the Addition and the IMD will share a gravel pit floor, essentially operating as one project.



Figure 1: QAP Existing IMD and Kashwitna Addition Parcels

Existing and proposed gravel pit side slopes are graded in towards the open pit. All working areas within the footprint of the gravel pit are graded to drain towards the lowest point. Stormwater can collect in the bottom on the pit before filtering to groundwater. All processing and stockpiling will take place within the gravel pit floor.

Access to the Kashwitna Addition will be the same as currently provided for the existing IMD. The gravel pit will be accessed via Sockeye Drive, a gravel roadway used to access the Alaska Railroad Right-of-Way. Haul trucks will be exiting the gravel pit onto an unpaved road and will not carry sediment from the gravel pit offsite.

Due to the site design and gravel access, there is no potential for stormwater discharge or sediment transport offsite. In accordance with the Alaska Pollutant Discharge Elimination System (APDES) and associated regulations laid out in 18 AAC 83, an active Stormwater Pollution Prevention Plan (SWPPP) is not required.

Should any activity occur causing stormwater or sediment to migrate offsite, an activity-specific SWPPP shall be activated and made available to the Alaska Department of Environmental Conservation (ADEC) and the Matanuska-Susitna Borough.

Emily McDonald is an Environmental Specialist with UMIAQ Environmental with ten years of experience preparing and editing SWPPPs and Erosion and Sediment Control Plans (ESCPs) under the guidance of two Alaska Certified Erosion and Sediment Control Leads (AK-CESCL). Emily meets the ADEC definition of a person with professional qualifications in stormwater and can supply a resume documenting professional qualifications at the request of ADEC or QAP.

EMILY MCDONALD
ENVIRONMENTAL SPECIALIST III/ PROJECT COORDINATOR
UMIAQ ENVIRONMENTAL
SBA 8(a) Certified
direct: 907-677-8288 | mobile: 907-952-7807



KASHWITNA ADDITION GRAVEL PIT

PROPOSED GRAVEL MINING PLAN OF OPERATIONS AND SITE PLAN REQUIREMENTS

Location: Section 06, T20N, R04W, SM
Owner: COLASKA Inc. dba QAP
Operator: QAP
Tax ID: 20N04W06 Parcel ID 203582

The following information is an attachment to an application for Earth Materials Extraction activities under Matanuska-Susitna Borough (MSB) 17.30, Conditional Use Permit. Figures 1-6 are included to accompany the application.

1.0 Plan of Operations (MSB 17.28.050 & MSN 17.28.060)

The project site is located east of the Parks Highway and railroad at approximately mile marker 78 of the Parks Highway. See location map, Figure 1. This plan of operation details the activities and dates QAP intends on conforming to for the following parcel of land:

- ❖ MTRS: Seward, T20N, R04W, Section 06
- ❖ Parcel ID# 203582

QAP has an existing approved Interim Materials District (IMD), which shares a north, south, and east property line with the subject parcel. The Kashwitna IMD is on lands owned and operated by QAP. The railroad right-of-way forms the western property boundary. QAP currently holds permits from the Alaska Railroad for using the railroad siding and an access road along the siding. In January 2020, the Alaska Department of Natural Resources (ADNR) conveyed the subject parcel to QAP, who proposes extraction of earth materials from approximately 19 acres of the 19.34 acre parcel.

QAP proposes extracting sand and gravels from the parcel using similar operational processes as the Kashwitna IMD, and utilizing the same access, facilities, and equipment stored within the IMD. The Matanuska-Susitna (MatSu) Borough eliminated the IMD process in 2016 (2016-35), therefore, QAP seeks a Conditional Use Permit (CUP) in order to extract sand and gravel from this parcel.

1.1 Sand and Gravel Extraction

An estimated 100-200,000 cubic yards of useable material will be extracted annually. It is anticipated that 1.5 – 2 million cubic yards of usable material is available on the parcel. At this rate the resource is anticipated to be depleted in 10-15 years, approximately 2035, however extraction will be on a project-specific basis and dictated by area needs. See Figure 2 for the site plan.

Work may take place 24 hours per day, 7 days per week. The material extracted will be transported via a conveyor system to the adjacent Kashwitna IMD for further processing and transport. A water truck will be utilized for dust control as needed.

Access to the parcel will be provided by Sockeye Avenue, access which currently serves the existing Kashwitna IMD. Extraction at this parcel is not expected to increase current haul traffic from the baseline, existing IMD haul.

Vegetation at the site includes mixed and white spruce forests with areas of grasses and shrubs. The site is relatively flat with approximately 10 feet of relief, with exception of the north east corner, which rises to a small hill of approximately + 70 feet.

Prior to mining, each face will need to be stripped of organics and surface soils. Overburden will be stored on site on non-expandable slopes and used as needed for reclamation. The staging area will be located off site within neighboring Kashwitna IMD. If a silt layer is encountered disposal areas will be identified and a silt disposal plan may be initiated.

The seasonal start and end dates for operations are May through October, weather depending. Proposed mining and extraction activities for the property will occur over the course of several years of seasonal mining. The site will be cleared and grubbed. When extraction activities have been completed reclamation will begin.

Reclamation will include grading slopes to 2H:1V slope or flatter. Overburden will be redistributed as topsoil and seeded with certified seed. See Figure 3 for a typical reclamation section.

Dust will be managed by spraying roads and travelled areas with a water truck. Limited snow plowing during winter months may take place but is not anticipated. Monitoring wells are in place on the adjacent QAP property and seasonal high water table data in the area is well established.

2.0 Site Plan

Extraction at this parcel will utilize the same access, facilities, and equipment stored within the IMD. A 25-foot setback is required from all property lines for structures, permanent or portable facilities, and equipment or material storage per MSB code (17.28.070(A)).

No permanent structures are proposed on the parcel. An asphalt plant or crushing/screening operation could be located on the parcel or nearby on adjacent QAP properties, in accordance with the Kashwitna IMD approved site plan.

All easement information is from MSB tax maps. No utilities are known to exist on the parcel.

2.1 Wetlands and Water Bodies

The site is classified as uplands and material extraction is not planned to take place within wetlands. See Figure 4 for wetland and water body locations within a ½ mile and 1 mile radius of the proposed project site.

Mining will not take place within 4 feet of the seasonal high water table. Limited snow plowing during winter months may take place but is not anticipated.

A Storm Water Pollution Prevention Plan (SWPPP) will not be needed as there will be no storm water discharge offsite. The pit will be graded such that stormwater cannot travel offsite or into wetlands onsite. The exit from the site leads into an existing pit which has an established construction entrance/exit.

2.2 Surrounding Land Uses

Property bordering the north, east, and south sides of the proposed project site are privately owned by COLASKA INC. (QAP). These properties together comprise an Interim Materials District for gravel extraction. The property to the west is the Alaska Railroad right-of-way.

Within one mile, land owners include the MSB, State of Alaska, Native Corporation, and private entities. Private ownership is assumed to be residential based on aerial mapping. MSB, State and Native Corporation land appears to be primarily undeveloped. See Figure 5 showing property ownership within a ½ mile and 1 mile radius of the proposed project site.

2.3 Road and Access Plan

Access in and out of the parcel will be through the adjacent Kashwitna IMD, which is accessed through Sockeye Avenue. Material will be leaving the site by conveyor system to the adjacent property for further processing and transport. Vehicle traffic on and off the site will consist of employee vehicles and haul trucks. There is potential for seasonal projects and/or occasional local demand that would require a large haul out of approximately 500 trucks a day. QAP currently has an access permit to Sockeye Avenue (state road) that allows up to 30 trips per hour.

2.4 Visual Screen Measures

Vegetation will be cleared to facilitate material extraction. QAP maintains a permitted access along the railroad siding. As this parcel may be used to load aggregate on to the train, a vegetative buffer is not proposed between the railroad right-of-way and QAP's parcel. There will be no buffer between QAP properties. See Figure 6 for a topographical map.

2.5 Noise Mitigation

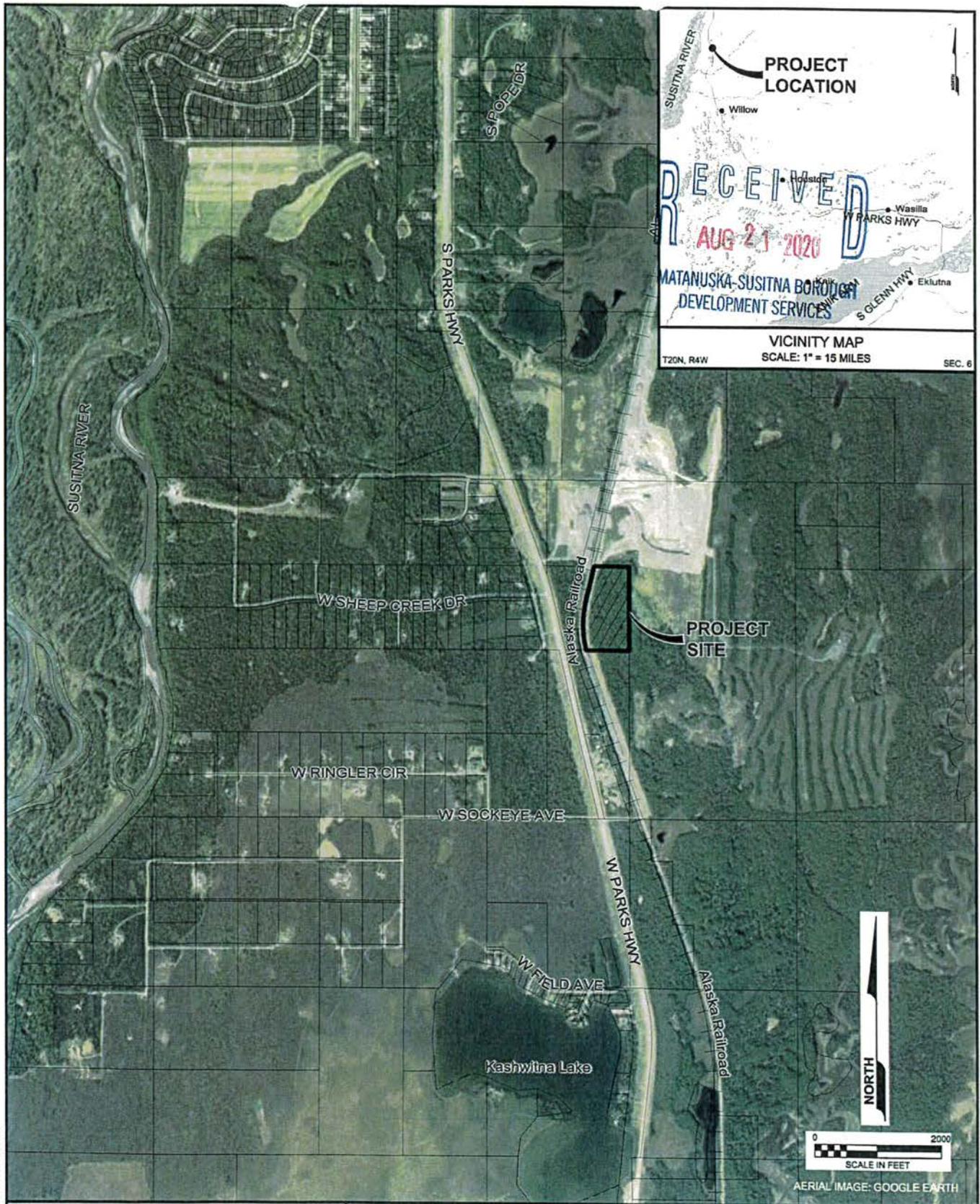
The inclusion of this parcel to the overall mining footprint in this area is not anticipated to increase noise beyond what is currently experienced. Proximity alarms have been installed on equipment used for mining to eliminate the noise from backup alarms. No sound resulting from the mining activities shall create a sound level that exceeds the limits set forth for the existing receiving land use category in Table 1 when measured at or within the property boundary of the receiving land use:

Table 1: Sound Levels by Receiving Land Use

Receiving Land Use Category	Time	Sound Level Limit (dB(A))
Residential area	7 a.m.-10 p.m.	60
	10 p.m.-7 a.m.	50
Commercial area	7 a.m.-10 p.m.	70
	10 p.m.-7 a.m.	60
Industrial area	At all times	80

2.6 Lighting Plan

Mining will take place May – October when natural light is abundant and need for additional lights is minimal. However, lightplants will be utilized to illuminate mining activities when needed. All lightplants will be focused away from the highway and directed onto the work at hand.



FILE 05-2012.01_Figure 1.dwg 09/11/20 8:44:20 AM



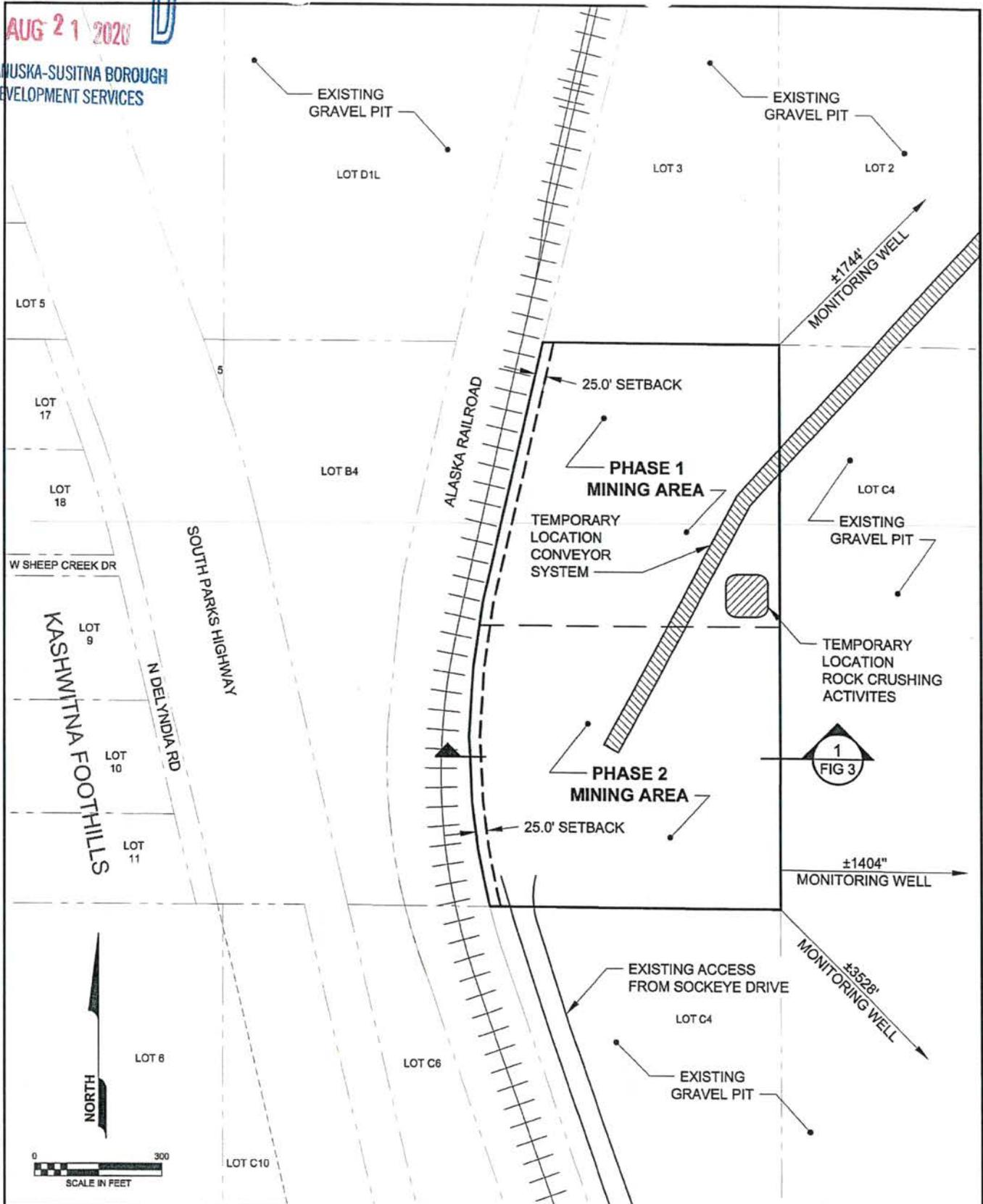
QAP KASHWITNA CONDITIONAL USE PERMIT

LOCATION MAP

WILLOW, ALASKA

DATE:	8/04/2020	DRAWN BY:	MMHN	SHEET:	FIGURE 1
SCALE:	AS SHOWN	CHECKED BY:	EM	JOB No:	05-2012.01

MATAWUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



FILE: 05-2012.01_Figure 2.dwg PRINTED: 8/13/2020



QAP KASHWITNA CONDITIONAL USE PERMIT

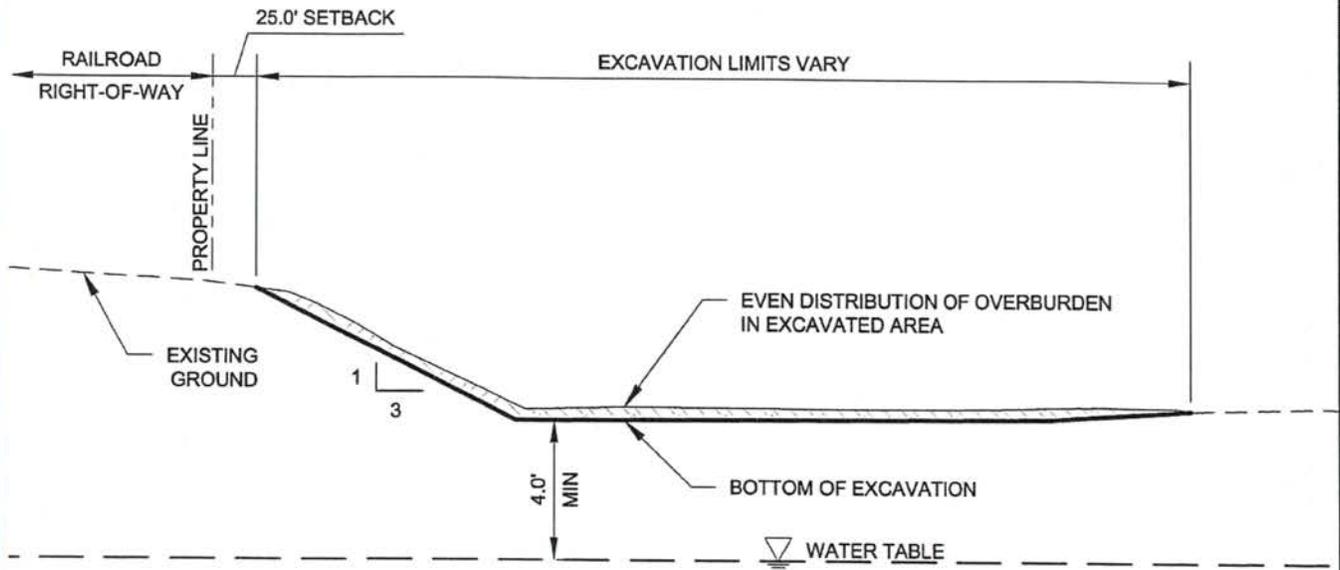
SITE PLAN

WILLOW, ALASKA

DATE: 8/04/2020	DRAWN BY: MMHN	SHEET: FIGURE 2
SCALE: AS SHOWN	CHECKED BY: EM	JOB No: 05-2012.01

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AUG 21 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



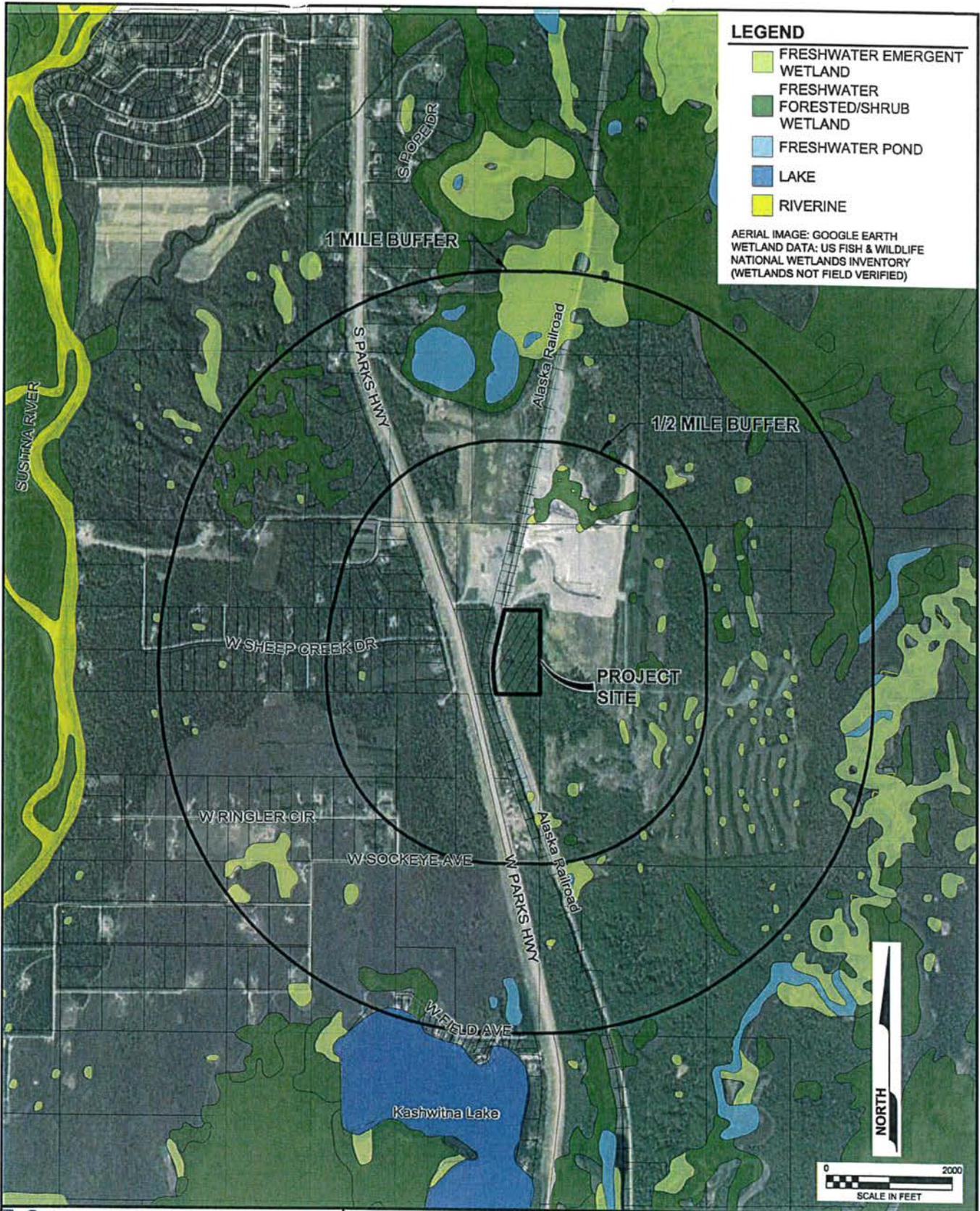
1 **TYPICAL RECLAMATION SECTION**
 FIG 3 SCALE: N.T.S.

FILE: 05-2012.01_Figure 3.dwg PRINTED: 04/2020



QAP KASHWITNA CONDITIONAL USE PERMIT
RECLAMATION SECTION
 WILLOW, ALASKA

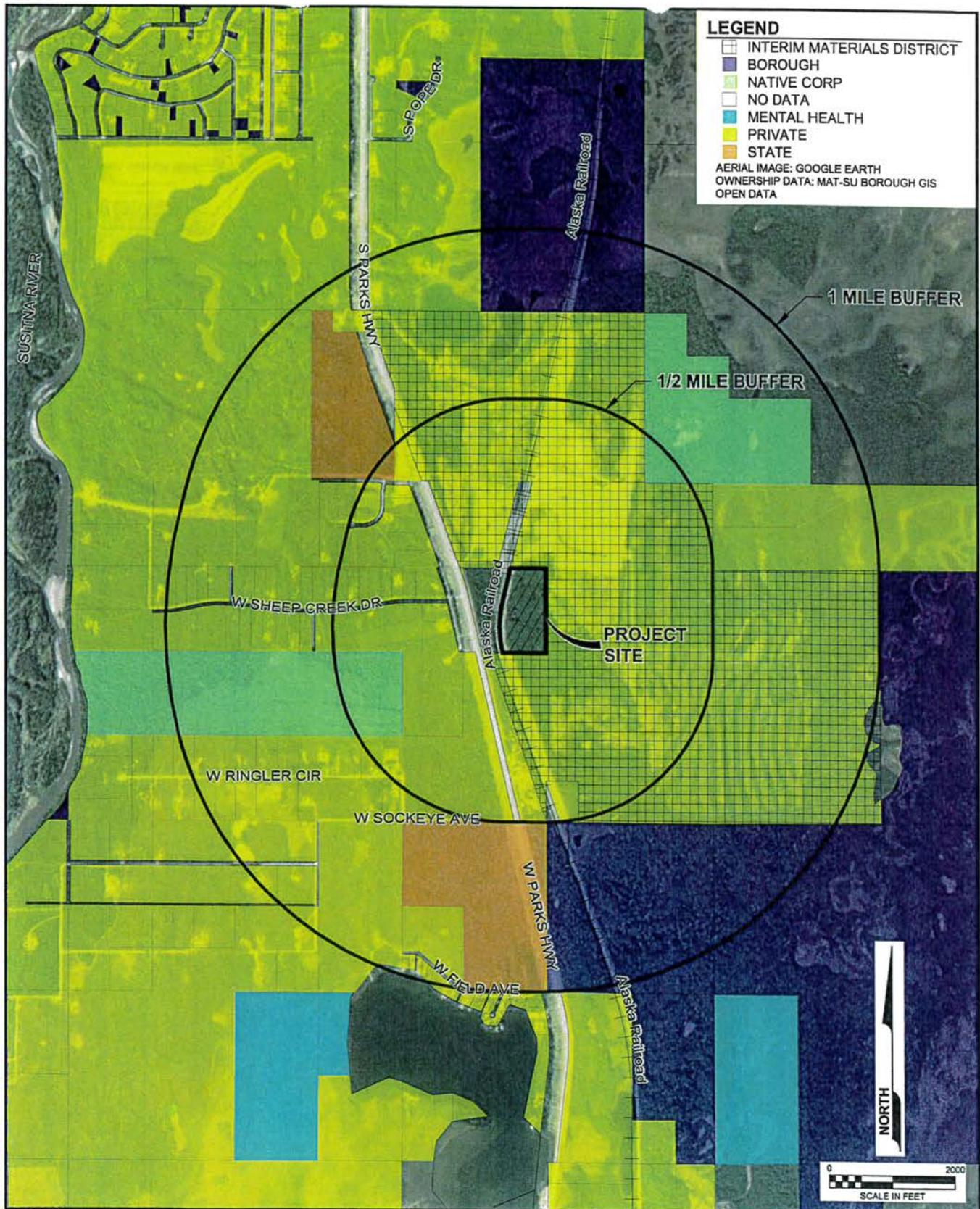
DATE:	8/04/2020	DRAWN BY:	MMHN	SHEET:	FIGURE 3
SCALE:	AS SHOWN	CHECKED BY:	EM	JOB No:	05-2012.01



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QAP KASHWITNA CONDITIONAL USE PERMIT			
WETLANDS			
WILLOW, ALASKA			
DATE:	8/04/2020	DRAWN BY:	MMHN
SCALE:	AS SHOWN	CHECKED BY:	EM
SHEET:	FIGURE 4		
JOB No:	05-2012.01		

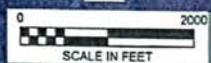
05-2012.01, Figure 4.dwg, PRINTED: 8/4/2020



LEGEND

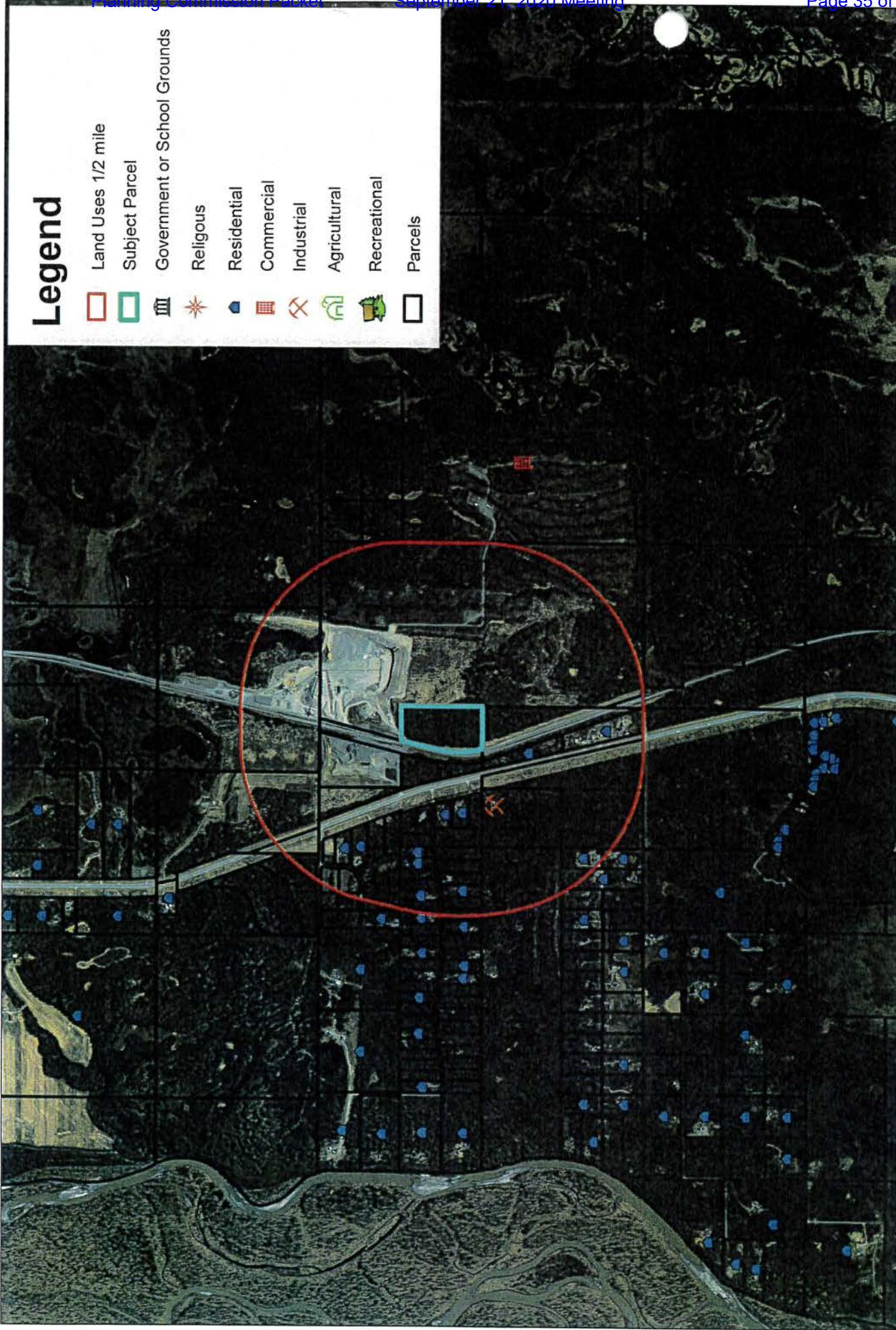
- INTERIM MATERIALS DISTRICT
- BOROUGH
- NATIVE CORP
- NO DATA
- MENTAL HEALTH
- PRIVATE
- STATE

AERIAL IMAGE: GOOGLE EARTH
 OWNERSHIP DATA: MAT-SU BOROUGH GIS
 OPEN DATA



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 AUG 21 2020
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 MATANUSKA-SUSITNA ENVIRONMENTAL
 DEVELOPMENT SERVICES

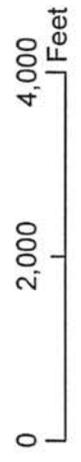
QAP KASHWITNA CONDITIONAL USE PERMIT			
PROPERTY OWNERSHIP AND USE			
WILLOW, ALASKA			
DATE:	8/04/2020	DRAWN BY:	MMHN
SCALE:	AS SHOWN	CHECKED BY:	EM
SHEET:	FIGURE 5		
JOB No:	05-2012.01		



Legend

-  Land Uses 1/2 mile
-  Subject Parcel
-  Government or School Grounds
-  Religious
-  Residential
-  Commercial
-  Industrial
-  Agricultural
-  Recreational
-  Parcels

1 inch = 2,000 feet



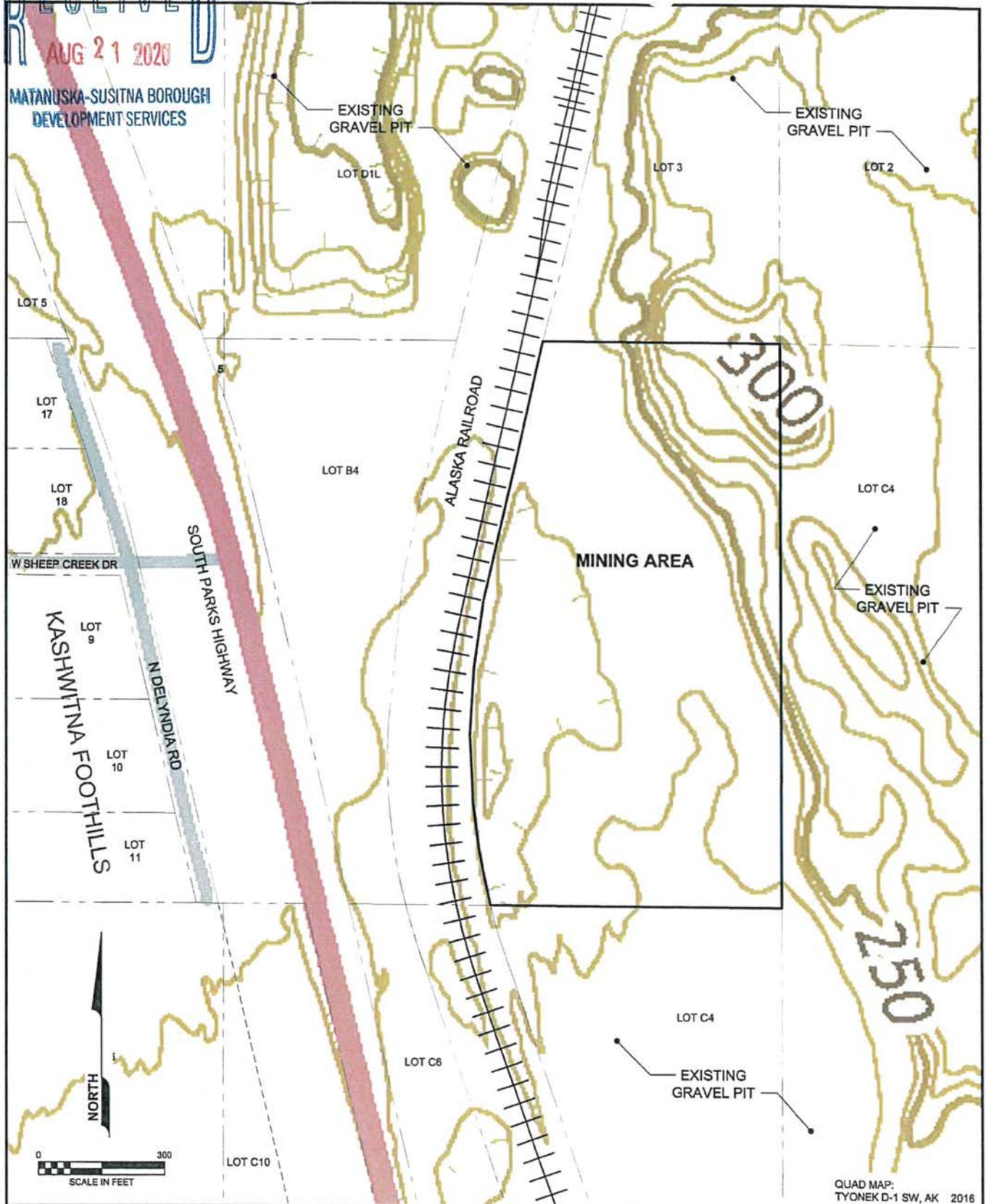
Surrounding Land Uses

Date: 8/27/2020

This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Municipal/Sustana Borough GIS Division at 907-981-7801.

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DEVELOPMENT SERVICES



FILE: 05-2012-01_Figure 6.dwg PRINTED: 8/4/2020



QAP KASHWITNA CONDITIONAL USE PERMIT
TOPOGRAPHIC MAP
 WILLOW, ALASKA

DATE: 8/04/2020	DRAWN BY: MMHN	SHEET: FIGURE 6
SCALE: AS SHOWN	CHECKED BY: EM	JOB No: 05-2012.01

RECLAMATION PLAN



General Contractors
240 West 68th Avenue
Anchorage, Alaska 99518
(907) 522-2211 Office
(907) 344-5798 Fax

RECLAMATION PLAN

May 18, 2020

Land Owner

Colaska, Inc. dba QAP
4000 Old Seward Highway, Suite 101
Anchorage, AK 99503

Contact Person

Patrick Cummins, QAP
240 W. 68th Avenue
Anchorage, AK 99518
Phone (907) 334-3250

Location

The project site is located east of the Parks Highway and railroad at approximately mile marker 78 of the Parks Highway in the Matanuska-Susitna Borough. This reclamation plan applies to the following parcels of land:

- ❖ MTRS: Seward Meridian, T20N, R04W, Section 6
 - Tax Parcel ID# 203582

Purpose:

The purpose of this work is sand and gravel extraction and reclamation.

Site Description:

QAP has an existing approved Interim Materials District (IMD), which shares a north, south, and east property line with the subject parcel. The Kashwitna IMD is on lands owned and operated by QAP. The railroad right-of-way forms the western property boundary. Vegetation at the site consists of mixed spruce forest.

Mining Operation:

QAP is planning to remove approximately 100,000 – 200,000 cubic yards of earth materials per year for approximately 15 years or until the resource is exhausted. When extraction and processing activities are completed reclamation will begin.

The following is a sequence of events:

1. Take photographs of the site.
2. Survey and locate property corners.
3. Set grade stakes for excavation.
4. Set up construction signs.
5. Begin excavation using an excavator and loaders.
6. Continue this process until gravel is removed.
7. Reclamation.
8. Remove construction signs.
9. Take photographs of reclaimed area.

Quantities:

- Approximately 100,000 – 200,000 cubic yards of gravel excavation per year over approximately 15 years.

A cross section survey will be used to compute the quantity of material removed and replaced.

Time Frame:

QAP anticipates that material extraction will begin in 2020. Reclamation will occur as practicable after material extraction has ceased in an area. Reclamation of the final portion of the property is estimated to be completed in 2035.

Equipment used for Mining:

Anticipated equipment to be used on site includes, but is not limited to, the following.

1. Caterpillar D8N Dozer
2. Caterpillar D10N Dozer
3. Hitachi EX 400 Hydraulic Excavator
4. Wheel Loaders
5. Caterpillar 14G Grader
6. International Water truck
7. Caterpillar 980 Loader

Additional Information:

QAP currently holds permits from the Alaska Railroad for using the railroad siding and an access road along the siding. In January 2020, the Alaska Department of Natural Resources (ADNR) conveyed the subject parcel to QAP. QAP proposes extracting sand and gravels from the parcel using similar operational processes as the Kashwitna IMD, and utilizing the same access, facilities, water monitoring wells, and equipment stored within the IMD.

The depth of the excavation will vary, so as not to go within 4 feet of the seasonal high water table. All areas mined by QAP will be reclaimed using overburden. Reclamation will occur annually in practicable locations where mining operations are complete.

Reclamation:

Any overburden that is encountered during mining will be stockpiled on non-expandable slopes and used for reclamation. QAP will track walk the slopes and seed all disturbed areas. Certified seed will be used. All slopes will be a 2H:1V or flatter.

Attachments and Drawings:

- Location Map
- Site Plan
- Reclamation Section
- Topographical Map

** In order to reduce file size and remove duplications, project drawings are included in the Conditional Use Permit application, following the Plan of Operations.*

DRIVEWAY PERMIT



Matanuska-Susitna Borough
Planning and Land Use Department
Permitting Center
350 East Dahlia Ave, Palmer AK 99645

FINAL DRIVEWAY ACCEPTANCE

PERMIT # D010491

TAX PARCEL ID # 220N04W06D001

April 22, 2015

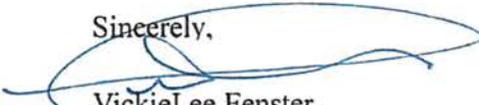
The Matanuska-Susitna Borough has performed the Final Inspection of your driveway. The driveway has been adequately constructed to Borough standards and to the conditions outlined by the initial driveway Inspector. Your Approved Driveway Permit number is listed above.

Please keep this letter.

If you have any questions, please call 861-7822, be sure and reference your permit number.

If any changes, or improvements, need to be made to this driveway, you will need to re-apply for a new driveway permit. Remember to maintain your driveway and help lower maintenance costs to the Borough. Annually clean out deposited materials in your culvert, ditches, and remove any light brush in the right of way that may grow-up and block your line of sight of the road and traffic.

Sincerely,



VickieLee Fenster
Matanuska-Susitna Borough
Planning Department
Permit Center
350 E. Dahlia Avenue
Palmer, Alaska 99645
Office (907)-861-7822



Matanuska-Susitna Borough

Planning Department
Development Services Division
350 East Dahlia Avenue
Palmer, Alaska 99645-6488
PHONE (907) 861-7822 FAX (907) 861-8407

GENERAL CONSTRUCTION PERMIT C150004

Extended Driveway Installation

THIS PERMIT is issued this 22 day of April, 2015, to:

COALASKA DBA QAP
240 W. 68TH AVE
Anchorage, AK. 99518

Phone #:522-2211

The Matanuska-Susitna Borough hereby grants the authorization necessary to work in the following described Public Right of Way or easement area to wit: Within the platted & verified 50' section line easements as shown on HDL KASHWITNA 2 INTERN MATERIAL DISTRICT MINING PLAN, QAP and in the surveyor field notes within Section 06, Township 22 North, Range 04 West, Seward Meridian, Alaska, as shown in the attached site maps, section line detail, and surveyor field notes. This work is for access on both the north and south sides and to improved access to tax parcel# 20N04W06D001. See driveway permit P010491.

PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, PERMITTEE MUST:

- A. Have a Registered Professional Land Surveyor verify that public rights-of-way exists, survey and mark the exterior boundary lines of the public rights-of-way and reference all property corners, monuments and witness markers within or bordering the public rights-of-way. Registered Professional Land Surveyor must provide a letter to Borough Public Works Department stating the above has been completed and attach documentation verifying public rights-of-way exist. Also, provide copy of field notes and drawings showing reference ties to property corners and monuments. (existing permit with surveying locating roadway within right of way boundaries)
- B. Notify adjacent property owners prior to construction.
- C. It is the Permittees responsibility to obtain any required permits from local, state, or federal agencies for the proposed construction.

The construction hereby authorized is described as and limited to the following:
Construct the extension of a 60' minimum driveway access road to minimum Matanuska-Susitna Borough Standards within a portion of the above described easements. For access to Tax Parcel #20N04W006D001.

This construction permit shall expire on October 30th, 2015.

SPECIAL CONDITIONS:

1. No public money will be spent on maintenance or capital improvements. This road may not serve to meet the minimum construction standards for any type of subdivision purposes and will not be maintained by the borough for work done under this permit.
2. Trees belong to property owners. Arrangements made with adjacent property owners during your notification process for the disposal of trees, is acceptable. Trees not wanted by property owners may be cut into four foot sections and advertized as free firewood. All spruce trees must be moved from within the easement area within one year of cutting.
3. Roads or driveways within public rights-of-way or public easements are for public use and cannot be gated or blocked without the authorization of the Borough.
4. Cut only the trees and disturb only the vegetation necessary for the construction of the road and its ditches and slopes.
5. The permittee agrees to accept all responsibility and bear the expense of re-establishing any property corner, monument, and/or witness marker damaged or destroyed as a result of the construction activities.
6. Utilities may not be placed within this public easement without a Borough approved Utility Facility Design. No clearing is authorized for Utility installation under this permit.

DURING CONSTRUCTION ACTIVITIES, PERMITTEE MUST:

7. Fall and skid all trees 4 inches in diameter and larger prior to beginning grubbing and road construction.
8. No strip mining for gravel will be allowed within the public easements.
9. All construction debris, large limbs, tree tops, uprooted stumps, disturbed organic material, and large rocks disturbed within clearing limits, must be removed from rights-of-way prior to the expiration date. Brush to be stacked for burning outside of section line easements. Obtain any necessary burn permits needed from the State of Alaska Division of Forestry.
10. Center the construction of the access as close as possible to the alignment of existing roadway to the south in the public easements. Clear and grub up to 20 feet each side of the center of the Right of Way for the purpose of road construction, ditching, and to induce maximum sunlight onto road prism. Construct ditches at foot of road fore-slope to a maximum depth of 2.5 feet, measured from finished grade of the driving surface, for drainage and snow storage purposes.
11. All cuts and fills shall be constructed to no more than 2 feet horizontal to 1 foot vertical slopes within the public easement and depending on soil type to minimize erosion. A minimum of 5 feet of undisturbed ground must be left between the top

of a cut slope or the toe of a fill slope and the exterior boundary of the public right-of-way. It is the Permittee's responsibility to obtain additional right-of-way and slope easements so as to contain all improvements.

12. Install appropriate sized culverts or swales to maintain natural drainage patterns. The authorized construction may not alter the natural drainage patterns.

In consideration for this permit, the Permittee shall indemnify, defend, and hold and save the Borough, its elected officers, agents and employees, harmless from any and all claims, demands, suits, or liability of any nature, kind or character, including costs, expenses, and attorney's fees. The permittee shall be responsible under this clause for any and all legal actions or claims of any character resulting from injuries, death, economic loss, damages, violation of statutes, ordinances, constitutions or other laws, rules or regulations, contractual claims, or any other kind of loss, tangible or intangible, sustained by any person, or property arising from Permittee's construction, alteration or maintenance and existence of the above described construction or for any damages whatsoever arising out of the granting of this permit.

The Borough reserves the right to revoke this permit upon 48 hours written notice to the Permittee. The Permittee, agrees upon said notice of revocation, to immediately stop all construction activity within the easement, street, or public right of way. Should the Permittee refuse or fail to comply with said written notice, the Borough, may without further notice to the Permittee, make any and all repairs to the originally permitted area. The Permittee hereby agrees to reimburse the Borough for all costs incidental to the repair thereof.

The PERMITTEE certifies that he has read and accepted the above conditions by evidence of the below signature and the Borough hereby authorizes said construction subject to the above conditions.

PERMITTEE

MATANUSKA-SUSITNA BOROUGH

CO ALASKA DBA QAP

VICKIELEE FENSTER, PERMIT TECHNICIAN

Joseph Metzger

From: Joseph Metzger
Sent: Wednesday, August 26, 2020 12:41 PM
To: 'McDonald, Emily'
Cc: CUMMINS, Patrick (ANQAP); Mitchell, Terri
Subject: RE: RFAI Colaska Inc Mile 78 Parks Hwy

Greetings All,

Borough Staff has deemed your application for a CUP near mile 78 of the Parks highway and adjacent to the Kashwitna IMD complete. We will now begin the public notice process. The notices are scheduled to be mailed on August 28, 2020 and the advertisement will be published in the August 28, 2020 edition of the Frontiersman. The public hearing for this request is October 5, 2020 at 6 pm in the Borough Assembly Chambers.

Staff will provide you with a copy of any comments that come in during the process. If you have any questions or need clarification on anything, please don't hesitate to contact me.

Please note that the parcel has been assigned an account ID #, however, I don't believe it has been updated on myProperty as of yet. The account # for this new parcel is **20N04W06B007**.

Have a great afternoon.

Respectfully,

Joe Metzger
MSB Planner
907-861-7862

From: McDonald, Emily <emily.mcdonald@UICCS.com>
Sent: Friday, August 21, 2020 1:53 PM
To: Joseph Metzger <Joseph.Metzger@matsugov.us>
Cc: CUMMINS, Patrick (ANQAP) <pcummins@colaska.com>; Mitchell, Terri <Terri.Mitchell@UICCS.com>
Subject: RE: RFAI Colaska Inc Mile 78 Parks Hwy

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hi there Joe,

Please see attached response to your request for more information. I'd love to chat next week re: land use on parcels which are showing no data on the Mat-Su parcel viewer. There is one within a mile of the proposed extraction (see Figure 5), which I am hoping to find more information on. Thanks much, and have a great weekend.

Emily

EMILY MCDONALD

ENVIRONMENTAL SPECIALIST II | UMIAQ ENVIRONMENTAL

SBA 8(a) Certified

direct: 907-677-8288 | mobile: 907-952-7807

From: Joseph Metzger <Joseph.Metzger@matsugov.us>
Sent: Friday, July 24, 2020 12:45 PM
To: McDonald, Emily <emily.mcdonald@UICCS.com>
Subject: RFAI Colaska Inc Mile 78 Parks Hwy

WARNING: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon Emily,

Attached, please find a letter requesting additional information on your CUP request. As always, if you have any questions or need clarification on something, don't hesitate to contact me. Have a great weekend!

Respectfully,

Joe Metzger
MSB Planner
907-861-7862

RMIT CENTER – FEE RECEIPT FORM

Property Location: 20NO4W06

Applicant: Colaska/UMIAQ

USE PERMITS {100.000.000.341.300}		Fee
<input type="checkbox"/>	8.35 Public Display of Fireworks	\$25.00
<input type="checkbox"/>	8.40.010 Liquor License - Alcohol & Marijuana Control Office (AMCO) Referrals for Matanuska Susitna Borough Review of Issuance, renewal or transfer (location, owner)	\$100.00
<input type="checkbox"/>	8.41.010 Marijuana License - Alcohol & Marijuana Control Office (AMCO) Referrals for Matanuska Susitna Borough Review of Issuance, renewal or transfer (location, owner)	\$100.00
<input type="checkbox"/>	8.52 Temporary Noise Permit	\$500.00
<input type="checkbox"/>	8.55 Special Events Permit 500 – 1000 Attendees	\$500.00
<input type="checkbox"/>	1000+ Attendees	\$1,000.00
<input type="checkbox"/>	8.55 Special Events Permit Site Monitor Fee / Per Day	\$300.00
<input type="checkbox"/>	1	\$25.00
<input type="checkbox"/>	1	\$150.00
<input type="checkbox"/>	1	\$1,000.00
<input type="checkbox"/>	1	\$500.00
<input type="checkbox"/>	1	\$1000.00
<input type="checkbox"/>	17.25 Talkeetna Conditional Use Permit – Variance	\$1000.00
<input type="checkbox"/>	17.27 Sutton Special Land Use District CUP	\$1000.00
<input type="checkbox"/>	17.29 Flood Damage Prevention Development Permit	\$100.00
<input type="checkbox"/>	17.29 Flood Damage Prevention Development Permit –Variance	\$500.00
<input type="checkbox"/>	17.30.040 Earth Materials Extraction Admin. Permit	\$500.00
<input checked="" type="checkbox"/>	17.30.050 Earth Materials Extraction CUP	\$1000.00
<input type="checkbox"/>	17.36 Residential Planned Unit Development Application – Concept Plan – up to 50 Lots	\$500.00
<input type="checkbox"/>	Additional Lots or tracts being created – Per Lot	\$100.00
<input type="checkbox"/>	17.48 Mobile Home Park Permit Application	\$500.00
<input type="checkbox"/>	17.52 Residential Land Use District App (Rezone)	\$1,000.00
<input type="checkbox"/>	17.52 Conditional Use Permit Application CUP	\$1,000.00
<input type="checkbox"/>	17.55 Shoreline Setback Exception Application	\$300.00
<input type="checkbox"/>	17.60 Conditional Use Permit Application	\$1000.00

Matanuska Susitna Borough
 Payment Date Wednesday, July 15, 2020
 Deposit Number 41239
 Operator hoff0401
 Real 2020 (Total) \$0.00
 MCR (Planning/Platting) \$1,000.00
 Misc Rec
 Map # 1MISC
 Total Paid \$1,000.00
 Check \$1,000.00
 Change \$0.00
 Receipt Number MSB91413420
 7/15/2020 11:25:32 AM
 Paid By UIC CONSTRUCTION
 Cashier Id. hoff0401

<input type="checkbox"/>	17.61 Commercial/Industrial Core Area Conditional Use Permit		\$1000.00
<input type="checkbox"/>	17.62 Coal Bed Methane		\$1000.00
<input type="checkbox"/>	17.63 Conditional Use Permit for Racetracks		\$1000.00
<input type="checkbox"/>	17.65 Variance		\$1000.00
<input type="checkbox"/>	17.67 Tall Structures -		\$100.00 \$200.00 \$500.00 \$1000.00
<input type="checkbox"/>	17.70 Regulation of Alcoholic		\$1000.00
<input type="checkbox"/>	17.73 Multi-Family Land Use		its. \$500.00
<input type="checkbox"/>	17.75 Single-Family Residen		\$1000.00
<input type="checkbox"/>	17.76 Large Lot Single-Fami Conditional Use Permi		\$1000.00
<input type="checkbox"/>	17.80 Nonconforming Struct Pre-Existing Legal No		\$300.00
<input type="checkbox"/>	17.90 Regulation of Adult Bu		\$1000.00
<input type="checkbox"/>	28.60 Timber Transport Perr		\$300.00
RIGHT-OF-WAY FEES:			
<input type="checkbox"/>	Driveway		\$50.00
<input type="checkbox"/>	Driveway Deposit {100.226		\$150.00
<input type="checkbox"/>	Construction		\$200.00
<input type="checkbox"/>	Utility (Application Fee = \$11		\$150.00
<input type="checkbox"/>	Encroachment		
<input type="checkbox"/>	Construction Bond {100.22		
PLATTING PRE-APPLICA			
<input type="checkbox"/>	Pre-Application Fee		\$50.00
FEES:			
<input type="checkbox"/>	Flood Plain Development S		\$10.00
<input type="checkbox"/>	CD/DVD/DVD-R		\$7.50
<input type="checkbox"/>	Construction Manual/Title 4		\$5.00
<input type="checkbox"/>	Plat Map/Tax Map Copies/		\$5.00
<input type="checkbox"/>	Color Maps		\$12.00
<input type="checkbox"/>	Xerox Copies (BW = \$0.2		
<input type="checkbox"/>	Advertising Fees		
<input type="checkbox"/>	Cultural Resources Books		
<input type="checkbox"/>	Citation Payment (If sent to collections – use total due from Courtview)		
<input type="checkbox"/>	Thumb Drive 2GB = \$5, 4GB = \$8, 8GB = \$10; 16GB = \$15; 32GB = \$20		

DATE	INVOICE NO	DESCRIPTION	INVOICE AMOUNT	BALANCE
6-01-20	PERMIT FEE	UMQ ENV/COALASKA	1000.00	1000.00
			.00	
CHECK DATE	CHECK NUMBER	TOTAL >		
6-04-20	3005477	1000.00	.00	1000.00

PLEASE DETACH AND RETAIN FOR YOUR RECORDS

\$ 1000 Amount Paid Date: 7-14-20 Receipt # 9141340 By: BA

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**INTRODUCTION FOR PUBLIC HEARING
QUASI-JUDICIAL**

Resolution No. PC 20-36

Greg Miller, on behalf of TRICHS, LLC

(Page s 51 - 94)

INTRODUCTION FOR PUBLIC HEARING



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department
Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822 • Fax (907) 861-8158
Email: permitcenter@matsugov.us

PAID
CR# 201

Matanuska-Susitna Borough
Development Services

MAY 19 2020

CONDITIONAL USE PERMIT FOR MARIJUANA RELATED FACILITIES – MSB 17.60

Received

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

Application fee must be attached:

- \$1,000 for Marijuana Retail Facility
- \$1,000 for Marijuana Cultivation Facility

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made prior to the application presentation before the Borough Planning Commission.

Required Attachments for a Marijuana Cultivation Facility:

- Wastewater and Waste Material Disposal Plan – 17.60.160 (A)
- Odor Mitigation and Ventilation Plan – 17.60.160 (B)
- Hazardous Chemicals Information – 17.60.160 (C)
- Security plan – 17.60.160 (D)

Required Attachments for Both Retail and Cultivation Facilities:

- Documentation demonstrating full compliance with applicable fire code – 17.60.150 (D) (2)

Subject Property: Township: S17N, Range: 02W, Section: 01, Meridian: Seward Meridian
 MSB Tax ID# 1111 BOLLON Parcel ID: 54581 TRS S17 No2 W01
 SUBDIVISION: wasilla west BLOCK(S): 1, LOT(S): 11
 STREET ADDRESS: 3807 West Machen Rd. w/ A
 FACILITY / BUSINESS NAME: TRICH5 LLC

Ownership: A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached? Yes No N/A

Name of Property Owner

Joey Bresser

Name of Agent / Contact for application

Greg Miller

Mailing: _____

Mailing: 1125 W Gail Dr.

Phone: Hm _____ Fax _____

Phone: Hm _____ Fax _____

Wk _____ Cell _____

Wk _____ Cell 907-715-1831

E-mail Joey.Bresser@ABL.com

E-mail Miller.Greg@live.com

Site Plan – Attach a detailed, to scale, site plan clearly showing the following information:	Attached
Proposed and existing structure(s) on the site. Indicate which structure(s) will be used for the proposed use. Dimensions and locations of all existing and proposed structures on the site in relationship to all property lines.	EXHIBIT - 1, 2, 3, 4, 5
Signage – Existing and Proposed.	MJ-01 Pg. 9
Location and dimensions for all access points to and from the site to public rights-of-way or public access easements.	EXHIBIT - 1, 2
Buffering – Fences, vegetation, topography, berms, and any landscaping	EXHIBIT - 1
Drainage	EXHIBIT - 1
Vehicular and pedestrian circulation patterns.	EXHIBIT - 1 PARKING AREA
Exterior site lighting.	MJ-01 Pg. 3
Location and dimensions of parking areas to be provided	EXHIBIT - 1
Scale and north arrow using standard engineering intervals such as 1" = 30', 1" = 50' or similar as required by project size.	1" = 30'

Map – Attach a detailed, to scale, vicinity map clearly showing the following information:	Attached
Identify all existing land uses within 1,000 feet.	EXHIBIT - 3, 4
Scale and north arrow using standard engineering intervals such as 1" = 30', 1" = 50' or similar as required by project size.	Varies per document

In order to grant a conditional use permit under MSB 17.60, the Planning Commission must find that each of the following requirements have been met. Explain the following in detail:	Attached
Is the conditional use compatible with and will it preserve or not materially detract from the value, character and integrity of the surrounding area?	✓
Will the granting of the conditional use permit be harmful to the public health, safety, convenience and welfare?	MJ-01 Pg. 2, 4, 5, 8 ✓ MJ-03 Pg. 5
Are sufficient setbacks, lot area, buffers and other safeguards being provided?	✓ EXHIBIT - 1
Does the conditional use fulfill all other requirements of MSB Chapter 17.60 pertaining to the conditional use in this section?	✓
Describe measures taken to prevent any potential negative effect upon other properties in the area due to such factors as noise and odor.	✓
Describe measures taken to reduce negative effects upon adjacent properties by: <ul style="list-style-type: none"> • Increased property line and right-of-way buffers • Planted berms and landscaping • Site and building design features which contribute to the character of the surrounding area 	✓
Describe how this use is compatible with the character of the surrounding area.	✓
Current status of State License application process – 17.60.150 (D) (1)	✓

17.60.170 Standards for Marijuana Retail Facilities:	Attached
Describe how the subject parcel is appropriate for the proposed conditional use. Include information detailing: <ul style="list-style-type: none"> • The proximity of the proposed use to existing businesses; • The proximity of parcels developed with residential uses; • Whether the roads associated with the proposed use have been, or will be, appropriate for commercial use; and • Proposed hours of operations. 	✓
Provide information showing minimum parking standards have been met as required by MSB 17.60.170 (B) and (C).	Exhibit 1

Floor Plan for Marijuana Retail Facilities – Attach a detailed, to scale, floor plan clearly showing the following information:	Attached
Dimensions of all structures.	EXHIBIT 6,7
Interior floor plans (specific location of the use or uses to be made of the development).	MT-02 Diagram 2
Net floor area square footage calculations.	74059 Ft.

OWNER'S STATEMENT: I am owner of the following property:

MSB Tax account #(s) 1111 8014 011 and, I hereby apply for approval of a conditional use permit to operate a marijuana related facility on the property as described in this application.

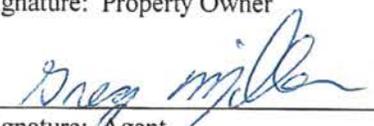
I understand all activity must be conducted in compliance with all applicable standards of MSB 17.60 and with all other applicable borough and state.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, and at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Signature: Property Owner	Printed Name	Date
	Greg Miller	5-18-2020
Signature: Agent	Printed Name	Date

From: [Mark Whisenhunt](#)
To: [Joseph Metzger](#)
Subject: FW: TRICHS LLC operating hours
Date: Thursday, May 28, 2020 8:27:31 AM

From: greg miller <miller.greg@live.com>
Sent: Tuesday, May 26, 2020 4:11 PM
To: Mark Whisenhunt <Mark.Whsenhunt@matsugov.us>
Subject: TRICHS LLC operating hours

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]
Mark please make an additional note to our Borough marijuana retail store conditional use permit. The store hours of operation Open 8am-12pm m-sun. The majority of the time store open hours will be 10am-10pm m-sat. Extended hours 8-12 midnight would occur on holidays and special events.

Thank you
Greg Miller member/manager

Commercial Net Lease for Part of Building

1. Names. This lease is made by Joey Bresser, Landlord and Greg Miller, John Guest, Tenant.

2. Premises Being Leased. Landlord is leasing to Tenant and Tenant is leasing from Landlord the following premises:
3807 W MACHEN RD. Unit A, Wasilla AK 99685

Part of Building Only. Specifically, Tenant is leasing the Unit A of the building.

Shared Facilities. As part of this lease, Tenant and Tenant's employees and customers may use the following additional facilities in common with other tenants, employees, and customers:

- Parking spaces: _____
- Restroom facilities: _____
- Storage areas: _____
- Hallways, stairways, and elevators: _____
- Conference rooms: _____
- Other: _____

3. Term of Lease. This lease begins on 02/01/2020 and ends on 02/2025.

4. Rent. Tenant will pay rent in advance on the 1 day of each month. Tenant's first rent payment will be on 05/01/2020 in the amount of \$ 4500.⁰⁰. Tenant will pay rent of \$ 2,000 per month thereafter.

- Tenant will pay this rental amount for the entire term of the lease.
- Rent will increase each year, on the anniversary of the starting date in paragraph 3, as follows:

5. Option to Extend Lease

First Option. Landlord grants Tenant the option to extend this lease for an additional 5 years. To exercise this option, Tenant must give Landlord written notice on or before 01/01/2025. Tenant may exercise this option only if Tenant is in substantial compliance with the terms of this lease. Tenant will lease the premises on the same terms as in this lease except as follows:

ORIGINAL

26. **Notices.** All notices must be in writing. A notice may be delivered to a party at the address that follows a party's signature or to a new address that a party designates in writing. A notice may be delivered:

- in person
- via email, at the addresses provided below
- by certified mail, or
- by overnight courier.

27. **Governing Law.** This lease will be governed by and construed in accordance with the laws of the state of Alaska.

28. **Counterparts.** The parties may sign several identical counterparts of this lease. Any fully signed counterpart shall be treated as an original.

29. **Modification.** This lease may be modified only by a writing signed by the party against whom such modification is sought to be enforced.

30. **Waiver.** If one party waives any term or provision of this lease at any time, that waiver will be effective only for the specific instance and specific purpose for which the waiver was given. If either party fails to exercise or delays exercising any of its rights or remedies under this lease, that party retains the right to enforce that term or provision at a later time.

31. **Severability.** If any court determines that any provision of this lease is invalid or unenforceable, any invalidity or unenforceability will affect only that provision and will not make any other provision of this lease invalid or unenforceable, and shall be modified, amended, or limited only to the extent necessary to render it valid and enforceable.

Dated: 02/01/2020

LANDLORD

Name of Business: Joey Bresser
at _____

By: [Signature]

Printed Name: Joey Bresser

Title: OWNER

Address: 3807 W MACHADO RD,

Email: Joey Bresse @ AOL . com

TENANT

Name of Business: Tricks LLC
at _____

By: [Signature]

Printed Name: Greg Miller, John Su

Title: OWNERS

Address: 1125 W Gail DR, Wasilla

Email: Miller greg @ Live . com

GUARANTOR

By signing this lease, I personally guarantee the performance of all financial obligations of Tricks under this lease.

Dated: 4/27/20

Printed Name: Johnathon Guest Title: Manager

Address: 2521 E Mtn View dr Ste B PMB 545

Email: Johnathon . J . Guest @ gmail . com



Matanuska-Susitna Borough Business License #: 36098

350 E. Dahlia Ave, Palmer, Alaska 99645

Effective Date: Jan 21 2020

Expiration Date: Dec 31 2021

**This license must be prominently displayed.
It is not transferable or assignable.**

This license shall not be taken as permission to do business in the State without having complied with the other requirements of the laws of the State of Alaska or the United States.

DEPARTMENT OF FINANCE

**TRICHS
GREG MILLER
1125 W GAIL DR
WASILLA, AK 99654**

Business Location(s): 3807 W MACHEN RD

This is to certify that the licensee named above holds a Matanuska-Susitna Borough Business license covering the period listed above.

Detach Here



Alaska Business License # 2101182

Alaska Department of Commerce, Community, and Economic Development

Division of Corporations, Business, and Professional Licensing
PO Box 110806, Juneau, AK 99811-0806

This is to certify that

Trichs LLC

1125 W Gail Dr, Wasilla, AK 99654

owned by

Trichs LLC

is licensed by the department to conduct business for the period

March 17, 2020 to December 31, 2020
for the following line(s) of business:

42 - Trade

This license shall not be taken as permission to do business in the state without having complied with the other requirements of the laws of the State or of the United States.

This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.

Julie Anderson
Commissioner

MSB • Department of Emergency Services • Central Mat-Su Fire Department

Fire & Life Safety Division

Physical: Station 51 – 1911 S Terrace Court, Palmer

Mailing: 101 W Swanson Avenue • Wasilla, AK 99654

Office (907) 861-8030 • Fax (907) 861-8157 • E-mail: FireCode@matsugov.us



June 19, 2020

RECEIVED
AUG 18 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES

Greg Miller
TRICHS, LLC
1125 W Gail Dr
Wasilla AK 99654

SUBJECT: 3807 W Machen Road, Tenant A: TRICHS, LLC
 FIRE SERVICE AREA: Central Mat-Su FSA
 PLAN REVIEW: 2020-140
 TYPE OF CONSTRUCTION: V-B
 OCCUPANCY TYPE: M
 2012 INTERNATIONAL BUILDING AND FIRE CODE

Dear Mr. Miller:

Plans for remodeling the subject facility have been reviewed by this office for conformity with the State Fire Safety Regulations and are hereby approved as submitted. Enclosed is a certificate of approval that must be posted on the premises until completion of the remodel work. Any changes to the approved plans must be submitted to this office for review and approval. **You are prohibited to occupy this building until construction is completed for which plans have been examined and approved. After completion of the construction, you must schedule a certificate of occupancy inspection prior to opening.**

It must be understood that the inclusion of and compliance with State Fire Safety Regulations does not preclude the necessity of compliance with the requirements of local codes and ordinances. Also understand that approval of submitted plans is not approval of omissions or oversights by this office or noncompliance with any applicable regulations. The plans have not been reviewed for compliance with the Federal Americans with Disabilities Act or structural requirements.

If we can be of further assistance in this matter, please contact us at the address above.

Sincerely,

Jacob R. Boothby
Fire Code Official

Fire and Life Safety Division

Central Mat-Su Fire Service Area No. 130 - District 1
Department of Emergency Services, Matanuska-Susitna Borough

RECEIVED
AUG 18 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



Plan Review #2020-140 3807 W Machen Road, Tenant A: TRICHS Tenant Improvement Approval

This is to certify that the plans for this building were reviewed by CMSFD's Fire & Life Safety Division on 6/19/2020, for conformance with AS 18.70.010-100; 13 AAC 50.027. This certificate becomes invalid 180 days after the work on the site is commenced within 180 days after issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the time work is commenced. An extension may be requested at the above mentioned address.

This certificate shall be posted in a conspicuous place on the premises listed above and shall remain posted until construction is completed. **Notice:** *Any changes or modifications to the approved plans must be resubmitted for review by the Central Mat-Su Fire Department.*

Authority: AS 18.70.080, 13 AAC 50.075 & MSB RS 06-054

by Jacob R. Boothby, Fire Code Official



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

**Department of Commerce, Community,
and Economic Development**

ALCOHOL & MARIJUANA CONTROL OFFICE

550 West Seventh Avenue, Suite 1600
Anchorage, AK 99501
Main: 907.269.0350

August 21, 2020

Trichs, LLC
DBA: Trichs, LLC
Via: miller.greg@live.com

Re: Trichs, LLC #24870

Dear Trichs, LLC:

At the August 19 - 20, 2020, meeting of the Marijuana Control Board via telephone, the board voted to approve your new retail marijuana store application with delegation to the director. Delegation means that the board has authorized me to issue the license once all outstanding approvals are received.

Attached are post-approval instructions and the pre-inspection checklist, which provide information on your next steps. Please note that the pre-inspection checklist is informational. You will be provided with an individualized checklist at the appropriate time.

Please contact marijuana.licensing@alaska.gov with any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carrie Craig".

Carrie Craig
Records and Licensing Supervisor

For
Glen Klinkhart,
Interim Director

cc: License File
Matanuska-Susitna Borough

17.60 CONDITIONAL USE PERMIT

The subject lot and building were constructed in 2000 and have retained original appearance and size. It will not materially detract from the value, character and integrity of the surrounding area.

RECEIVED
MAY 13 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES

The site and building design were professionally completed and built to very high standards. The building is steel framed with metal siding and metal roof. The site is level, capped with crush rock and has adequate drainage. The parking area will be paved this summer.

Granting of the conditional use permit will not bring harm to the public health, safety, convenience and welfare. The property will be well illuminated and secured with modern security components. There will be no loitering permitted on the property. No outside speakers will be employed. The nearest school is a private daycare over 1000 feet away from property. Please refer to attachment MJ-01 page 2, 4, 5, 8 and MJ-03 page 5 for outline of operating plan, security, signage, alarm systems, video surveillance, transportation and handling of marijuana products, and waste disposal procedures.

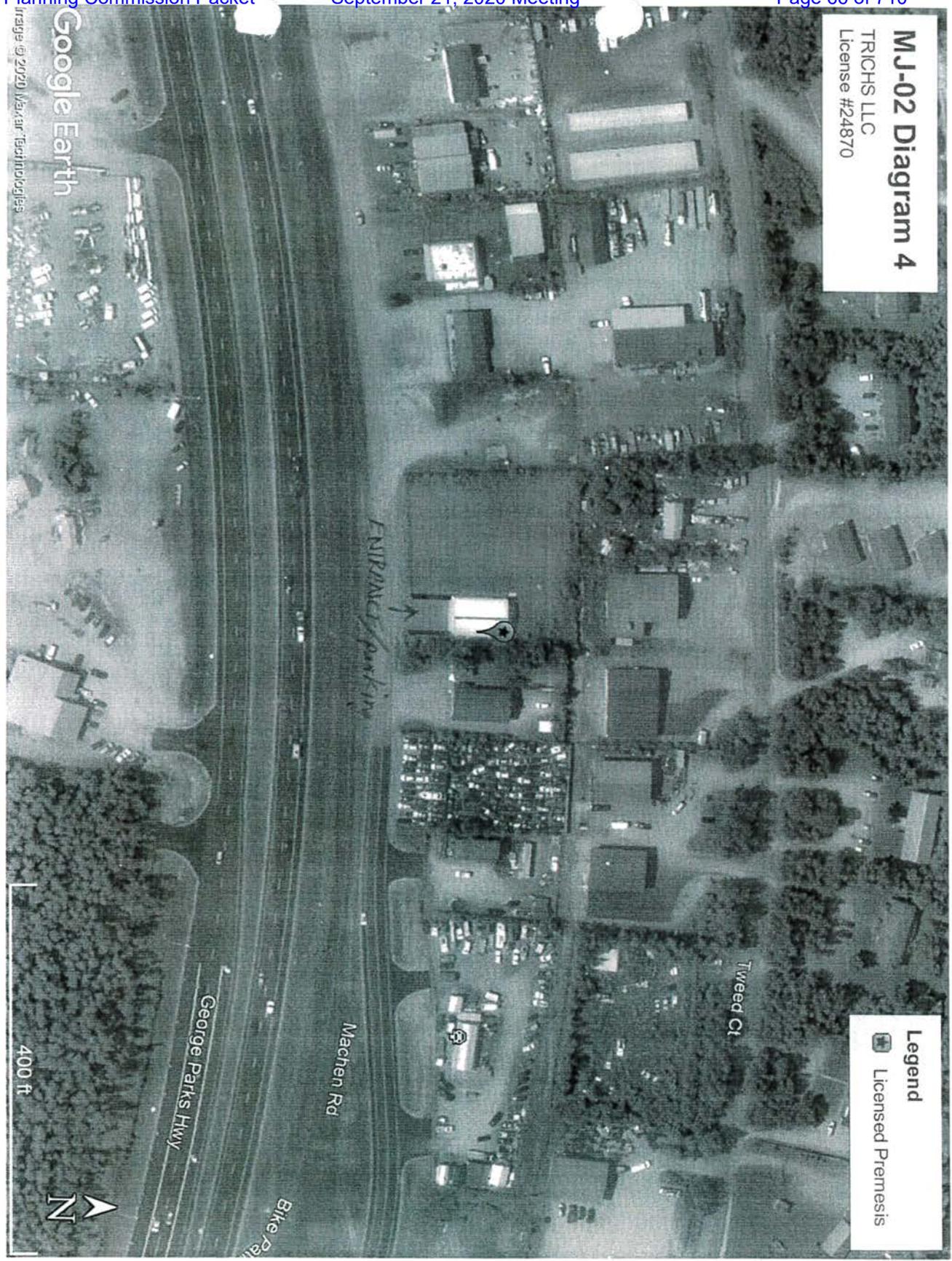
Sufficient setbacks exist from all sides. The parking area is accessed directly from West Machen Road. West Machen Road is dominated by commercial and industrial property. The subject lot is bordered on 3 sides (North, East and West)

by existing commercial property. The subject lot perimeter is enclosed with 8-foot high galvanized fence.

The installation of a charcoal filter 8-inch fan will create a negative pressure atmosphere inside the store eliminating possible odor escapement. The store is a small walk-in street level storefront with minimal display cases and shelving, ample parking with good visibility. Traffic noise from entering and exiting the parking area will be minimal. All other conditional use permit requirements of MSB chapter 17.60 are met.

The AMCO marijuana retail store application is queued and pending review by the AMCO board. The MAT-SU Fire Department application will be submitted 5/19/2020 to the Fire Marshall Central MAT-SU.

MJ-02 Diagram 4
TRICHS LLC
License #24870



Legend

-  Licensed Premises

400 ft

N

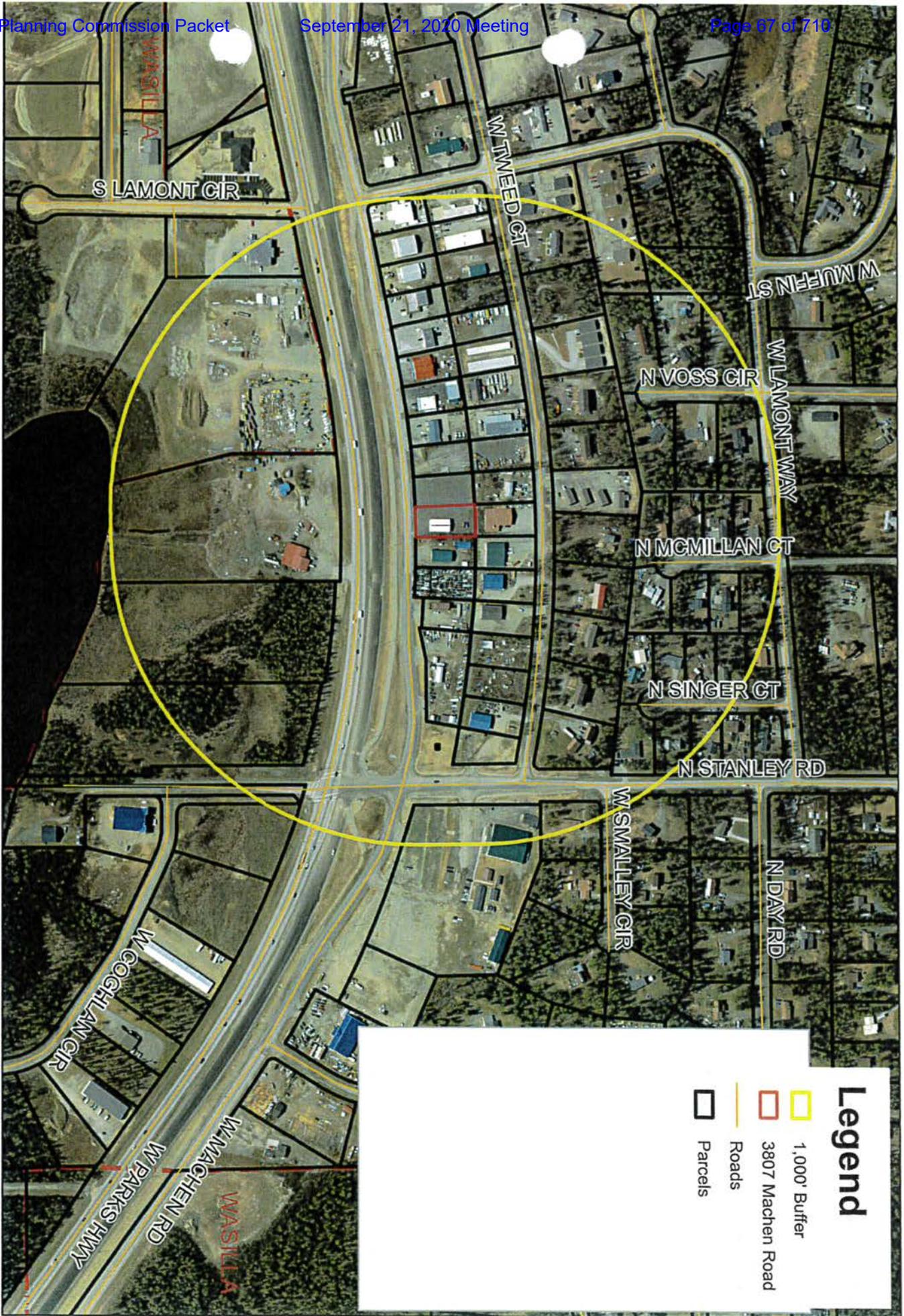
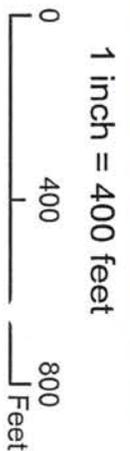
EXHIBIT # 2



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Municipality of Wasilla Borough GIS Division at 907-981-7801.

Date: 6/5/2018

EXHIBIT # 3



Legend

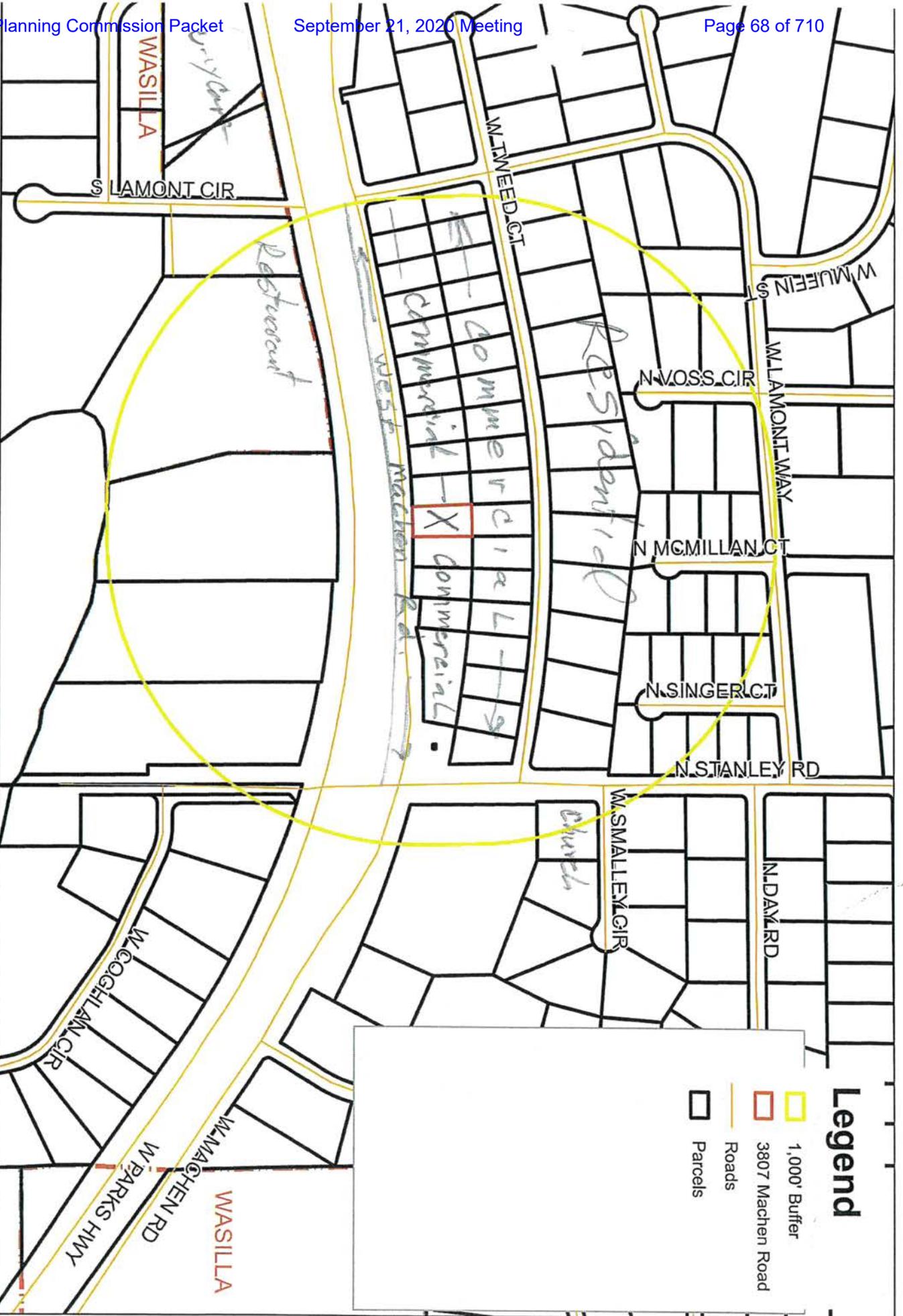
-  1,000' Buffer
-  3807 Machen Road
-  Roads
-  Parcels



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular use beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Information Systems Borough GIS Division at 907-681-7801.

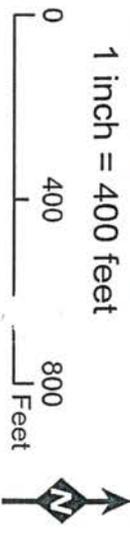
Date: 6/5/2018

EXHIBIT # 4



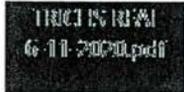
Legend

- 1,000' Buffer
- 3807 Machen Road
- Roads
- Parcels



Joseph Metzger

From: Joseph Metzger
Sent: Thursday, June 11, 2020 1:48 PM
To: 'miller.greg@live.com'
Subject: RFAI Trichs, LLC 6-11-2020



Hi Greg,

It was good to speak with you about your application. Attached, please find a letter requesting additional information for your conditional use request to operate a marijuana retail facility.

If you have any questions, or need clarification on anything, don't hesitate to contact me.

Respectfully,

Joe Metzger
MSB Planner
907-861-7862



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

www.matsugov.us

June 11, 2020

Greg Miller
On behalf of, TRICHS LLC
1125 W. Gail Drive
Wasilla, AK 99654

SUBJECT: Conditional Use Permit Application – Request for Required Information
LOCATION: 3807 West Machen Road (Tax ID: 1111B01L011)

Dear Mr. Miller,

Borough staff has reviewed the application material and the site plan(s) submitted on May 19, 2020 for a Conditional Use Permit to operate a marijuana retail facility under MSB 17.60 on the above referenced property. It has been determined that the following information needs to be provided and/or clarified in order to process this request:

1. Written authorization by the owner of the property must be included in the application for an agent or contact person. Provide written authorization by the owner of the property as indicated on page three of the application.
2. The application material refers to multiple pages from Trichs State of Alaska application. While Staff is confident there is pertinent information contained within these State of Alaska application pages, the State application and Borough application are completely separate processes. Submit site plans and a narrative that addresses the specific Borough standards and details how the use will satisfy the requirements of page two and page three of the application.
3. Some of the images and pages of the application material are hard to decipher and lack detail. Please ensure that all images and pages contained within the application are legible and decipherable.
4. Once acquired, provide documentation that the use is in compliance with the applicable fire code as per MSB 17.60.150(D)(2).
5. Do you have a Borough driveway permit to access W. Machen Road? If so, please provide, if not, you should acquire one.

6. What is your current license status with the State of Alaska? Do you have a hearing date?

Once an application has been determined to be complete, staff will begin the public notice process. Should you have any questions or require additional information, please feel free to contact me at the above mailing address, phone: 861-7862, or email: joseph.metzger@matsugov.us. Thank you for your time and consideration on this matter.

Respectfully,



Joe Metzger
MSB Planner II
907-861-7862

From: [Joseph Metzger](#)
To: "greg miller"
Subject: RE: TRICHS LLC Conditional Use Permit Application supplement 8.16.20
Date: Tuesday, August 18, 2020 6:57:00 AM

Received, thank you Greg. I will review this additional information and let you know if anything else is needed. Have a great day.

Respectfully,

Joe Metzger
MSB Planner
907-861-7862

From: greg miller <miller.greg@live.com>
Sent: Monday, August 17, 2020 7:19 PM
To: Joseph Metzger <Joseph.Metzger@matsugov.us>
Subject: Fw: TRICHS LLC Conditional Use Permit Application supplement 8.16.20

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

From: Laura Elekdag <elekdag@gmail.com>
Sent: Monday, August 17, 2020 4:21 PM
To: greg miller <miller.greg@live.com>
Subject: TRICHS LLC Conditional Use Permit Application supplement 8.16.20

Laura

Joseph Metzger

From: Joseph Metzger
Sent: Wednesday, August 19, 2020 12:56 PM
To: 'greg miller'
Subject: TRICHS RFAI 8-19-20



Good Afternoon Greg,

Attached, please find a letter requesting additional information on your request for a CUP to operate a marijuana retail facility at 3807 W. Machen Road. Please contact me if you have questions or need clarification on anything. Thank you.

Respectfully,

Joe Metzger
MSB Planner
907-861-7862



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department
Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

www.matsugov.us

August 19, 2020

Greg Miller
On behalf of, Trichs LLC
1125 W. Gail Drive
Wasilla, AK 99654

SUBJECT: Conditional Use Permit Application – Request for Required Information
LOCATION: 3807 West Machen Road (Tax ID: 1111B01L011)

Dear Mr. Miller,

Borough staff has reviewed the additional application material and the site plan(s) received on August 18, 2020 for a Conditional Use Permit to operate a marijuana retail facility under MSB 17.60 on the above referenced property. It has been determined that the following information needs to be provided and/or clarified in order to process this request:

1. The site plans that have been submitted do not show the distance to all lot lines. Please submit a site plan that shows the dimensions and locations of the existing and proposed structures on the site in relationship to all property lines.
2. Please indicate on the site plan the location of any exterior site lighting.

Once an application has been determined to be complete, staff will begin the public notice process. Should you have any questions or require additional information, please feel free to contact me at the above mailing address, phone: 861-7862, or email: joseph.metzger@matsugov.us. Thank you for your time and consideration on this matter.

Respectfully,

Joe Metzger
MSB Planner II
907-861-7862



Greg Miller
TRICHS, LLC
1125 W. Gail Drive
Wasilla, AK 99654

August 17, 2020

Joe Metzger, MSB Planner II
Matanuska-Susitna Borough
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue
Palmer, AK 99645

Subject: Conditional Use Permit Application - Supplemental information
Location: 3807 West Machen Road (Tax ID: 1111B01L011)

Dear Mr. Metzger,

In response to the letter sent on June 11, 2020. Please find the attached information.

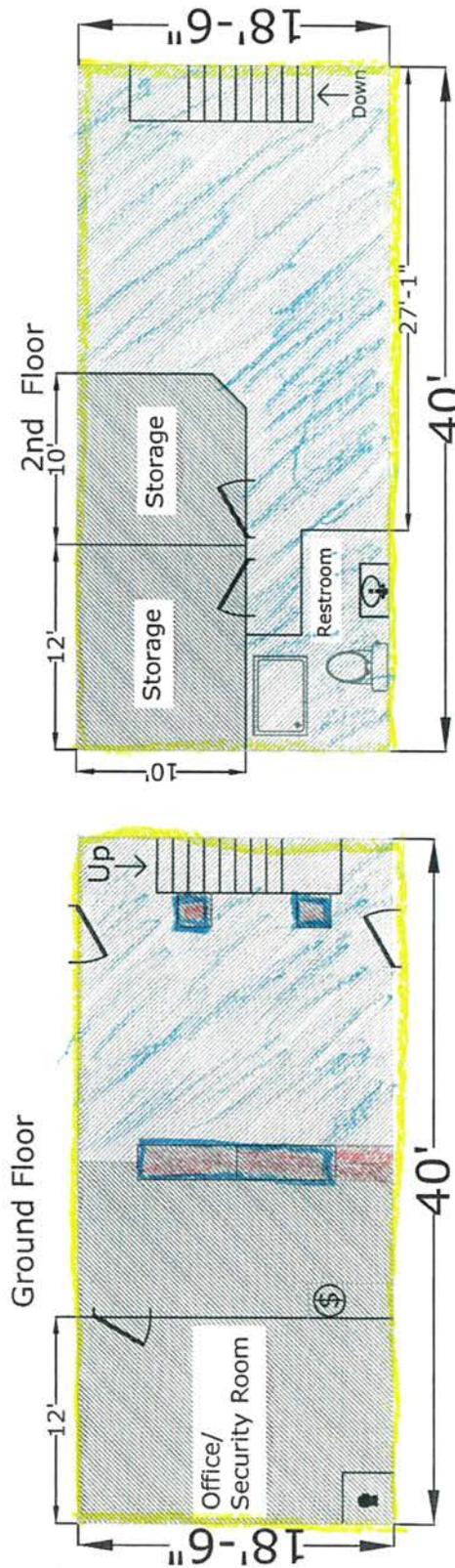
1. Written authorization by the owner of the property is included in the lease agreement (item #9).
2. Site plans and narrative addressing specific Borough standards and details.
 - 2.1. Signage: Two signs will be used. One attached to the Southwest exterior side of the building and one attached to the south exterior end of the building. Each sign will not exceed the maximum 4800 square inches allowed. The signage will depict company name, address, phone number and logo. All signage existing and proposed will meet state requirements as listed under 3 AAC 306.360.
 - 2.2. Exterior site lighting: Commercial type exterior lighting will be used at all facility entrances and exits, as well as on all sides of the building. Lighting will be used with security cameras. The cameras field of view will cover the approach to each exterior door.
 - 2.3. Public Health, safety, convenience and welfare: Public access will be directly off of West Machen Road. West Machen Road is a well established commercial roadway with two access points to Parks Highway, North Zak Lake Place and North Stanley Road. The store entrance faces the West Machen Road bike path and Parks Highway. Traffic to and from the store will not negatively impact the surrounding businesses or the residential area on the north side of the store. The entire property is chainlink fenced with the exception of the parking area directly off West Machen Road. Loitering will not be allowed on the property. Exterior lighting will

illuminate the entire building grounds area without casting bright light to surrounding businesses and residential area. The building access doors and framework are steel and will be reinforced with deadbolts and security bars. The windows will have interior bars installed and shades to block view from the exterior.

- 2.3.1. An alarm system will be installed which will include: fire, emergency, and hold-up silent alarm, multiple interior cameras and sensors. A security company will be employed to monitor the system outside of business hours. A video system will record 24 hours per day, seven days per week with day date and time stamp. Motion detectors are integrated into the video system allowing surveillance on-site as well as remotely from an external source. Diversion of marijuana products will not be allowed or tolerated. Video cameras throughout the store will capture all activities and recordings will be stored for a minimum of 40 days.
- 2.3.2. All employees are licensed and will have the required marijuana handlers card. Employees will be present during all transfers of marijuana products. All products will be logged and tracked in accordance with Franwell/Metric System from seed to sale. Routine audits will be conducted periodically. Marijuana inventory will be tracked and discrepancies will be investigated. In the event of a discrepancy, AMCO and local law enforcement will be notified within 24 hours of the diversion discovery. All employees will be trained in recognition of valid and acceptable identification per SOA regulations governing acceptable forms of identification.
- 2.3.3. Signs will be posted outside the building clearly forbidding trespassing, loitering, and entrance on store property if under the age of 21 years old.
- 2.4. Address 3807 West Machen Road has a driveway permit on file with the Mat-Su Borough.
- 2.5. Plans for remodeling the facility have been approved by the Central Mat-Su Fire Department Station 51 (attached plan review number 2020-140). After completion of construction, a certificate of occupancy inspection will be scheduled with the Mat-Su Fire Marshall prior to opening.
- 2.6. The AMCO Board license application is complete and scheduled for review during the August 19, 2020 meeting.

Respectfully,

Greg Miller



Key

- Safe
- Ⓢ Point of Sale
- ▨ Restricted
- ▨ Access Area
- ▨ Licensed, Not Restricted
- ▨ Display Case/Showcase
- ▨ Countertop/Table
- ▨ Proposed Licensed Premises

MJ-02 Diagram 1

TRICHS LLC

LIC# 24870





Alaska Marijuana Control Board

Form MJ-01: Marijuana Establishment Operating Plan

Section 2 – Control Plan for Persons Under the Age of 21

2.1. Describe how the marijuana establishment will prevent persons under the age of 21 from gaining access to any portion of the licensed premises and marijuana items:

This is a marijuana retail store. Once legal Id's are checked at the main door, persons 21 years of age and older will be admitted. Upon admittance, they will review the menus with available selections, approach and place their order. Their order will be filled, point of sale system utilized for the sale and the product subsequently given to them in packaging as required. No tours or leisure visits are permitted within the licensed premises areas or any portion of this licensed facility including restricted areas. Any visitor to this part of the licensed premises will have to be able to prove: over 21 years of age via valid ID: State or federal, drivers license, passport etc., and a need to be escorted into any restricted access area. If a need is determined, visitor's identification will be screened, and the visitors log will be filled out. Visitor will wear an identification tag at all times while in the facility. No more than 5 visitors per employee or agent will be permitted in the facility at a time, in accordance with applicable laws and AMCO regulations. All other means of ingress and egress doors to this facility and building will remain locked at all times. No handling of the marijuana will occur except by the licensee, his employees or agents and not by and visitors or customers. All marijuana will be kept in restricted areas where no customers have access to it. Video surveillance will record all entries, exits, points of sale and rooms within this licensed facility with the exception of the rest room which is part of the licensed facility but not a restricted access area.

Section 3 – Security

Restricted Access Areas (3 AAC 306.710):

3.1. Describe how you will prevent unescorted members of the public from entering restricted access areas:

The Applicant requires all visitors to call ahead and establish an appointment at the facility before they arrive. Upon arrival, an employee escort who will request identification from the visitor, complete the visitor's log, and issue a visitor's badge shall greet visitors. Valid forms of identification include an unexpired, unaltered passport; a driver's license or permit; or an identification card of any U.S. state or province or territory of Canada. Anyone without identification and/or under the age of 21 may not enter the retail facility. The designated employee shall record the information pertaining to the visit on a visitor's log and issue a visitor's identification badge before entering the restricted area. Information on the visitor's log includes name, date of birth, current date, time in/out, email address or phone number, and the employee escort's name. The visitor shall wear the badge while on premises. The employee escort is required to remain with the visitor and is responsible for noting the time the visitor leaves and retrieving the visitor's badge. The Visitor Policy shall apply to all facility visitors including, but not limited to, contractors and delivery/transportation drivers. No more than five visitors per escort. All restricted access areas will be clearly marked and remain locked and closed.

3.2. Describe your recordkeeping and processes for admitting visitors into and escorting them through restricted access areas:

A logbook to record the persons full name, date of visit, time of entry and departure and nature/purpose of visit will be maintained. Visitor's I.D. numbered badges will also be required to be worn at all times while upon the premises. Badges will be returned at the end of said visit and they will be accounted for at the end of each visit as well. The Applicant requires all visitors to call ahead and establish an appointment at the facility before they arrive. Upon arrival, an employee escort who will request identification from the visitor, complete the visitor's log, and issue a visitor's badge shall greet visitors. Valid forms of identification include an unexpired, unaltered passport; a driver's license or permit; or an identification card of any U.S. state or province or territory of Canada. Anyone without identification and/or under the age of 21 may not enter the retail facility. The designated employee shall record the information pertaining to the visit on a visitor's log and issue a visitor's identification badge before entering the restricted area. Information on the visitor's log includes name, date of birth, current date, time in/out, email address or phone number, and the employee escort's name. The visitor shall wear the badge while on premises. The employee escort is required to remain with the visitor and is responsible for noting the time the visitor leaves and retrieving the visitor's badge. The Visitor Policy shall apply to all facility visitors including, but not limited to, contractors and delivery/transportation drivers. No more than five visitors per escort. All restricted access areas will be clearly marked and remain locked and closed until a need for them to be opened is determined.



Alaska Marijuana Control Board

Form MJ-01: Marijuana Establishment Operating Plan

3.5. An alarm system is required for all license types that must be activated on all exterior doors and windows when the licensed premises is closed for business. Describe the security alarm system for the proposed premises, explain how it will meet all regulatory requirements, and outline your policies and procedures regarding the actions to be taken by a licensee, employee, or agent when the alarm system alerts of an unauthorized breach:

The alarm system that will be in use at the proposed facility will be provided and monitored by, Alarm.com or similar company. The system will be comprised of a main control panels with panic functions for fire, emergency and medical. Hold up alarms (silent alarms), multiple interior motion sensors, door and window sensors for all doors and windows. Motion detectors in all rooms and covering all doors and windows. Internal and external siren. All to be monitored at all times when activated during closed hours. Alarm system controls will be wall-mounted. Any time the facility is left unattended, the alarm system shall be "active". All windows and exits will be monitored 24 hours a day, 7 days a week. The video system will record 24 hours per day, seven days per week, 24 hours per day in excess of 40 days with day, date and time stamps. Motion Detectors are integrated into the security system. In the event of a motion related alarm, Licensee or designated agent will view the camera feed from inside the proposed facility or other location to determine if any further action is necessary. The panic audible alarm button will be used in the event of any perceived security breach as well as silent alarm buttons/switches to be activated in case of hold up or other emergency that may arise. Procedures for a notification of security breach: If facility is staffed, assess situation and take appropriate action. Call 911 if necessary. If the situation allows, remain at facility to assist law enforcement. If facility is vacant. Licensee or authorized agent are to return to facility to assist law enforcement once the area is made safe by law enforcement. Law enforcement will be notified immediately by the alarm monitoring company should the alarm be set-off or for fire or other emergency. They will then respond. All employees, agents of licensee and licensee will cooperate with members of law enforcement. We will notify the Department of Commerce, Community, and Economic Development, Alcohol and Marijuana Control Office as soon as reasonably practical and in any case not more than 24 hours after any unauthorized access to the premises or the establishment's knowledge of evidence or circumstances that reasonably indicate theft, diversion, or unexplained disappearance of marijuana, marijuana products, or money from the licensed premises.

3.6. Describe your policies and procedures for preventing diversion of marijuana or marijuana product, including by employees:

All marijuana product on premises will only be handled by licensee, employees or agents designated by licensee. All will have the required marijuana handler's card. Licensee, employee or agent will be present at transfers of marijuana product to ensure integrity of shipment. All marijuana product on premises will be logged in and tracked in accordance with Franwell/METRC system from seed to sale. Routine internal audits will be conducted periodically. Video cameras will run 24 hours per day, 365 days per year both indoors and outside as previously designated and will be stored for a minimum of 40 days. Should any diversion occur, a review of the video surveillance tapes both from the inside and outside will help to catch any perpetrator and proper action may be taken. Furthermore, the tracking system and recorded weights of marijuana product will detect any change to our marijuana supplies, so that action may immediately be taken which includes notification to AMCO and local law enforcement. All employees including their bags, backpacks, purses etc. will be subject to search as a part of their condition of employment upon suspicion of diversion. Furthermore, employees will have to place all personal belongings into a separate locker when coming to work or lock them within their vehicle or leave them at home. If diversion is determined to have occurred, AMCO enforcement will be notified immediately and no more than 24 hours after the diversion, theft or loss etc. is discovered.

3.7. Describe your policies and procedures for preventing loitering:

Signs will be posted stating a clear message that "No Trespassing" or "No Loitering" is permitted, and that area is video monitored 24/7. Video surveillance of the exterior areas will be available to employees inside the facility. Standard policy is to notify law enforcement of any violation these regulations or of any suspicious activity. There will be no loiterers or trespassers: None.

You must be able to certify the statement below. Read the following and then sign your initials in the box to the right: Initials

3.8. I certify that if any additional security devices are used, such as a motion detector, pressure switch, and duress, panic, or hold-up alarm, to enhance security of the licensed premises, I will have written policies and procedures describing their use.



Alaska Marijuana Control Board

Form MJ-01: Marijuana Establishment Operating Plan

Video Surveillance (3 AAC 306.720):

You must be able to certify each statement below. Read the following and then sign your initials in the corresponding box: Initials

3.9. The video surveillance and camera recording system for the licensed premises covers each restricted access area, and both the interior and exterior of each entrance to the facility. GMM

3.10. Each video surveillance recording: is preserved for a minimum of 40 days, in a format that can be easily accessed for viewing (consistent with the Alcohol & Marijuana Control Office's approved format list); clearly and accurately displays the time and date; and is archived in a format that does not permit alteration of the recorded image. GMM

3.11. The surveillance room or area is clearly defined on the Form MJ-02: Premises Diagram that is submitted with this application. GMM

3.12. Surveillance recording equipment and video surveillance records are housed in a designated, locked, and secure area or in a lock box, cabinet, closet or other secure area where access is limited to the licensee(s), an authorized employee, and law enforcement personnel (including an agent of the Marijuana Control Board). GMM

3.13. Describe how the video cameras will be placed to produce a clear view adequate to identify any individual inside the licensed premises, or within 20 feet of each entrance to the licensed premises:

Entrances/exits to and from the facility will have cameras (within 20 feet of each entrance/exit) trained on them from the interior in such a way that faces are easily identified. Facility entrances/exits will also have exterior cameras (within 20 feet of each entrance/exit) to monitor areas around exits to provide a view of the approach to the entrances/exits. All rooms will have cameras as well covering all portions of each room. All cameras will be high definition, mounted at a height sufficient for clear video footage with infrared/night vision capabilities for night viewing and recording.

3.14. Describe the locked and secure area where video surveillance recording equipment and original copies of surveillance records will be housed and stored, and how you will ensure the area is accessible only to authorized personnel, law enforcement, or an agent of the Marijuana Control Board. If you will be using an offsite monitoring service and offsite storage of video surveillance records, your response must include how the offsite facility will meet these security requirements:

All video surveillance will be stored in a digital format on a local device and backed up on a hard drive. Storage will be sized appropriately to maintain at a minimum 40 days of recording, and a digital back-up of all data. Server rack will consist of a wall mountable, lockable cabinet sized appropriately to contain all necessary computer components. The rack will be located within a secure locked room within the proposed facility, ensuring that only authorized personnel are able to access the video surveillance equipment. Its' accessibility will be via password protection and only the licensee, or designated employee will have access to it. It maintains storage for over 40 days and will be accessible to AMCO enforcement and/or law enforcement as well upon request. It is not accessible to the general public.



Alaska Marijuana Control Board
Form MJ-01: Marijuana Establishment Operating Plan

Section 7 – Health and Safety Standards

Review the requirements under 3 AAC 306.735.

You must be able to certify each statement below. Read the following and then sign your initials in the corresponding box: Initials:

- 7.1. I understand that a marijuana establishment is subject to inspection by the local fire department, building inspector, or code enforcement officer to confirm that health or safety concerns are not present. GM
- 7.2. I have policies regarding health and safety standards (including: ensuring a person with an illness or infection does not come into contact with marijuana or marijuana product; good hygienic practices; cleaning and maintenance of equipment and the premises; pest deterrence; chemical storage; sanitation principles; and proper handling of marijuana and marijuana product) and will take all reasonable measures and precautions to ensure that they are met or exceeded. GM
- 7.3. I have policies to ensure that any marijuana or marijuana product that has been stored beyond its usable life, or was stored improperly, is not salvaged and returned to the marketplace. GM
- 7.4. I have policies to ensure that in the event information about the age or storage conditions of marijuana or marijuana product is unreliable, the marijuana or marijuana product will be handled in accordance with 3 AAC 306.735(d). GM

Answer "Yes" or "No" to each of the following questions:

Yes No

- 7.5. Adequate and readily accessible toilet facilities that are maintained and in good repair and sanitary condition are clearly indicated on my Form MJ-02: Premises Diagram.
- 7.6. Convenient handwashing facilities with running water at a suitable temperature are clearly indicated on my Form MJ-02: Premises Diagram.

7.7. If you answered "No" to either 7.5 or 7.6 above, describe how toilet and/or handwashing facilities are made accessible, as required by 3 AAC 306.735(b)(2):

Section 8 – Transportation and Delivery of Marijuana and Marijuana Products

Review the requirements under 3 AAC 306.750.

8.1. Describe how marijuana or marijuana product will be prepared, packaged, and secured for shipment. Include a description of the type of locked, safe, and secure storage compartments to be used in vehicles transporting marijuana or marijuana product:

Marijuana or a marijuana product may only be transported to a licensed marijuana establishment by a licensee or an agent or employee of a licensee. Bulk batch packs of up to 5 pounds may be received. Once received and entered in to METRC, the marijuana will be packaged (if not purchased prepackaged) in a variety of ways. Batches of 1.0 gram packs may be produced as well as 1/8 oz, 1/4oz and 1 ounce packages: cannot exceed 1 ounce. All labeling on all packaging will meet the standards as required for retailers. See attached. All marijuana slated to leave the facility will be placed into a durable, tamper-evident METRC packaging prior to transport. The shipment will be accompanied by the appropriate manifest, and will be verified by the licensee or designated agent before the shipment is permitted to leave. A marijuana establishment shall keep records of all marijuana or marijuana products shipped from or received at that marijuana establishment as required under 3 AAC 306. 755. See cont'd response.



Alaska Marijuana Control Board

Form MJ-03: Retail Marijuana Store Operating Plan Supplemental

Section 7 - Security

Review the requirements under 3 AAC 306.350 and 3 AAC 306.720.

7.1. Describe the retail marijuana store's procedures for ensuring a form of valid photographic identification has been produced before selling marijuana or marijuana product to a person, as required by 3 AAC 306.350(a):

All employees will be trained in the recognition of valid and acceptable identification per SOA regulations governing acceptable forms of identification. See 3 AAC 306.350(a)&(b). Employees will take the following steps to ensure valid identification has been produced prior to any entry into the retail store as follows: Make certain ID has not expired and person is over 21 years of age; request ID be removed from wallet or purse or anything with a cover over it; take physical control of the ID; check the date of birth; ensure ID has not been tampered with; look for any material changes to ID. See continued response.

You must be able to certify the statement below. Read the following and then sign your initials in the box to the right: Initials

7.2. The video surveillance and camera recording system for the licensed premises covers each point-of-sale area.

[Handwritten initials]

Section 8 - Waste Disposal

Review the requirements under 3 AAC 306.740.

8.1. Describe how you will store, manage, and dispose of any marijuana waste, including expired marijuana or marijuana products, in compliance with any applicable laws. Include details about the material(s) you will mix with ground marijuana waste and the processes that you will use to make the marijuana waste unusable for any purpose for which it was grown or produced:

Prior to deeming marijuana as waste, we will notify the AMCO 3 days in advance in writing. Once the MCB has been notified, product awaiting disposal will be separated and stored in our secure waste storage area. Our secure waste storage is secured and monitored in compliance to 3 AAC 306. 715 and 3 AAC 306. 720, utilizing commercial steel-doors with key code/fingerprint locking mechanisms and high definition surveillance cameras. Upon approval, any marijuana waste, including expired marijuana products will be ground and mixed with organic material consisting of household waste, paper, food, coffee grounds, leaves, grass clippings etc. to produce a final waste product that is no more than 50% marijuana product. Once marijuana product is reconciled to be unusable for any and all intended purposes, we will transfer the waste to our on-site secured dumpster to await final disposal. Upon final disposal, we will record the final destination of said waste, in accordance with 3 AAC 306.740(c)(2), and store these records in our secure office in compliance with 3 AAC 306.755.

You must be able to certify the statement below. Read the following and then sign your initials in the box to the right: Initials

8.2. The retail marijuana store shall give the board at least three days written notice required under 3 AAC 306.740(c) before making marijuana waste unusable and disposing of it.

[Handwritten initials]

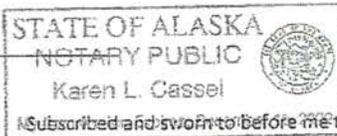
I declare under penalty of unsworn falsification that this form, including all accompanying schedules and statements, is true, correct, and complete.

[Handwritten signature of Greg Miller]

Signature of licensee

Greg Miller

Printed name of licensee



[Handwritten signature of Notary Public]

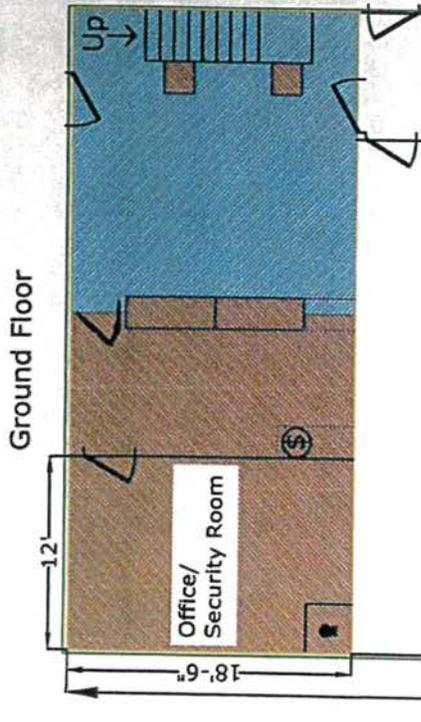
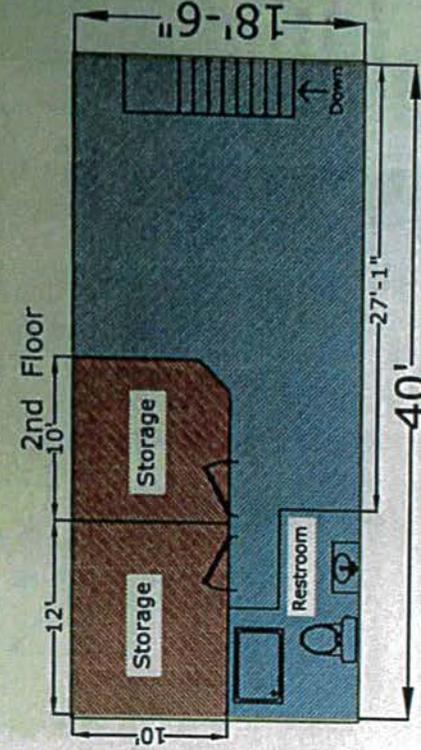
Notary Public in and for the State of Alaska

My commission expires: 12/15/2022

Subscribed and sworn to before me this 6 day of May, 2020

RECEIVED
AUG 18 2021

MATANUSKA-SUSITRA BROTHER
DEVELOPMENT SERVICES



Key

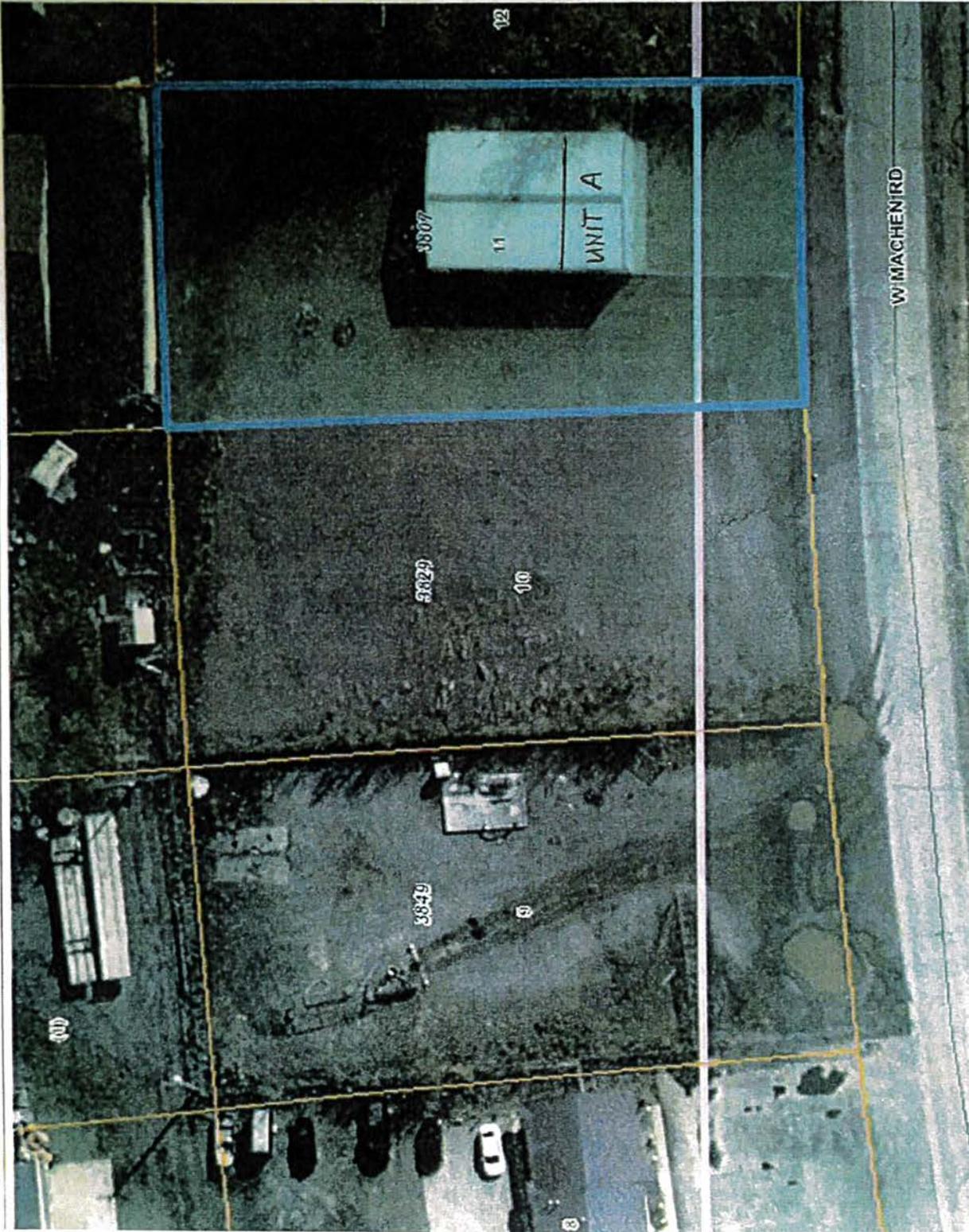
- Safe
- Ⓢ Point of Sale
- Restricted Access Area
- Licensed, Not Restricted
- Display Case/ Showcase
- Countertop/Table
- Proposed Licensed Premises
- Licensee's Right to Possession

MJ-02 Diagram 2 & 5
TRICHS LLC
LIC# 24870



* These rooms have open ceilings, and no upper floor.

Matanuska-Susitna Borough



- Legend**
- Road Mileposts
 - Roads**
 - Highway
 - Major Road
 - Medium Road
 - Minor Road
 - - Primitive Road
 - - Private Road
 - Alaska Railroad
 - ▣ Mat-Su Borough Boundary
 - ▣ Incorporated Cities
 - ▣ Government Lot Lines
 - ▣ Parcels
 - ▣ Lakes and Rivers
 - ▣ Streams
 - ▣ Section Lines
 - ▣ Flood Zone

RECEIVED
AUG 18 2020
 MATANUSKA-SUSITNA BOROUGH
 DEVELOPMENT SERVICES

1:1,128

Notes

This map was automatically generated using Geocortex Essentials.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

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0.02

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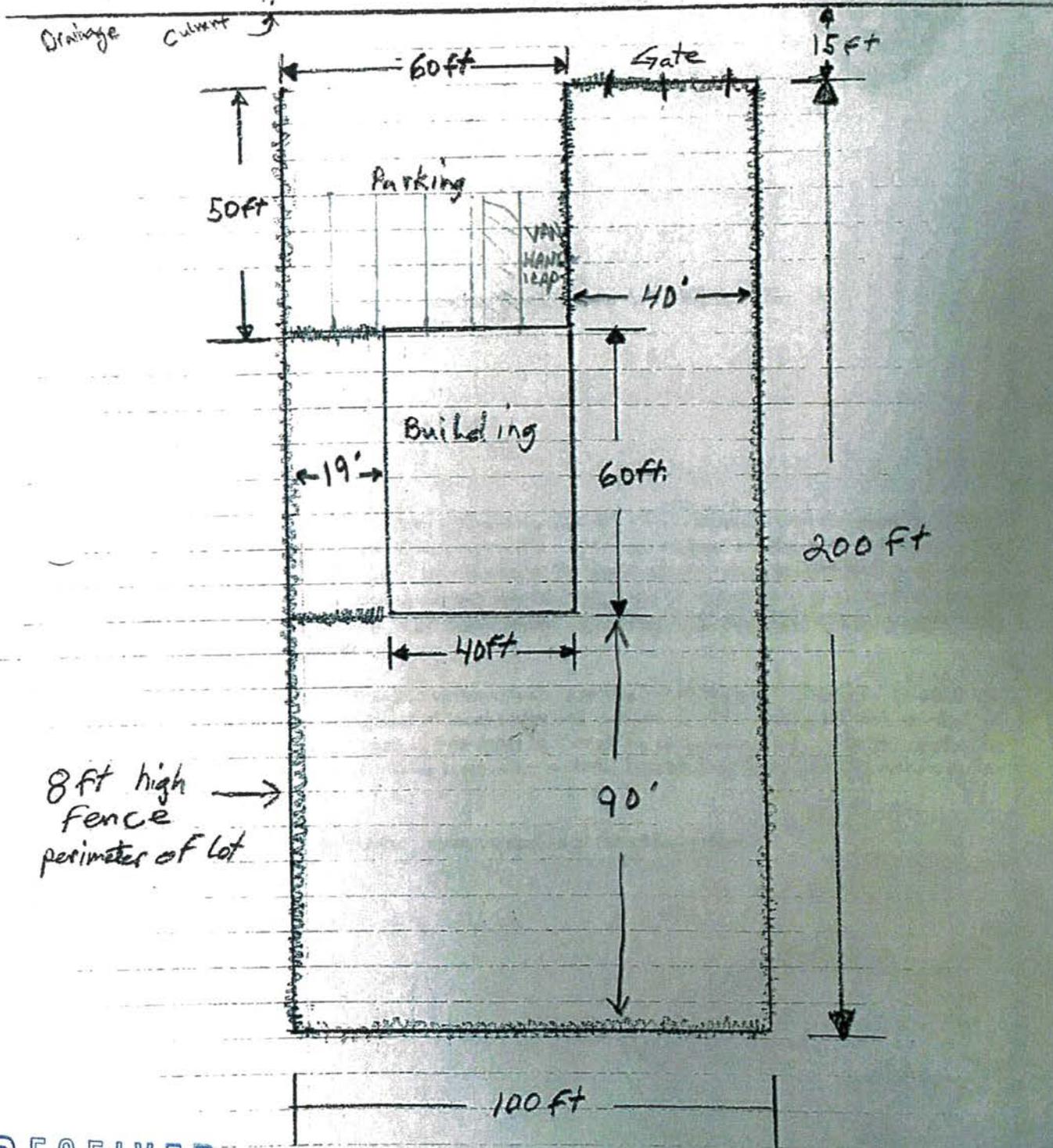
Reported on 12/19/2019 02:34 PM

1:1,128 Web_Mercator_Auxiliary_Sphere Matanuska-Susitna Borough

1 in. = 1 Foot



← WEST MACHEN RD →



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AUG 18 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES

EXHIBIT # 1

8-16-20

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AUG 21 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES

1 INCH = 30 Feet



WEST MACHEN ROAD

Property Line

REBAR POST

64 1/2'

65 1/2'

19 1/2'

40'

140 1/2'

Building 60'

18 1/2'

141 1/2'

Property Line

Property Line

90 1/2'

89 1/2'

REBAR Post

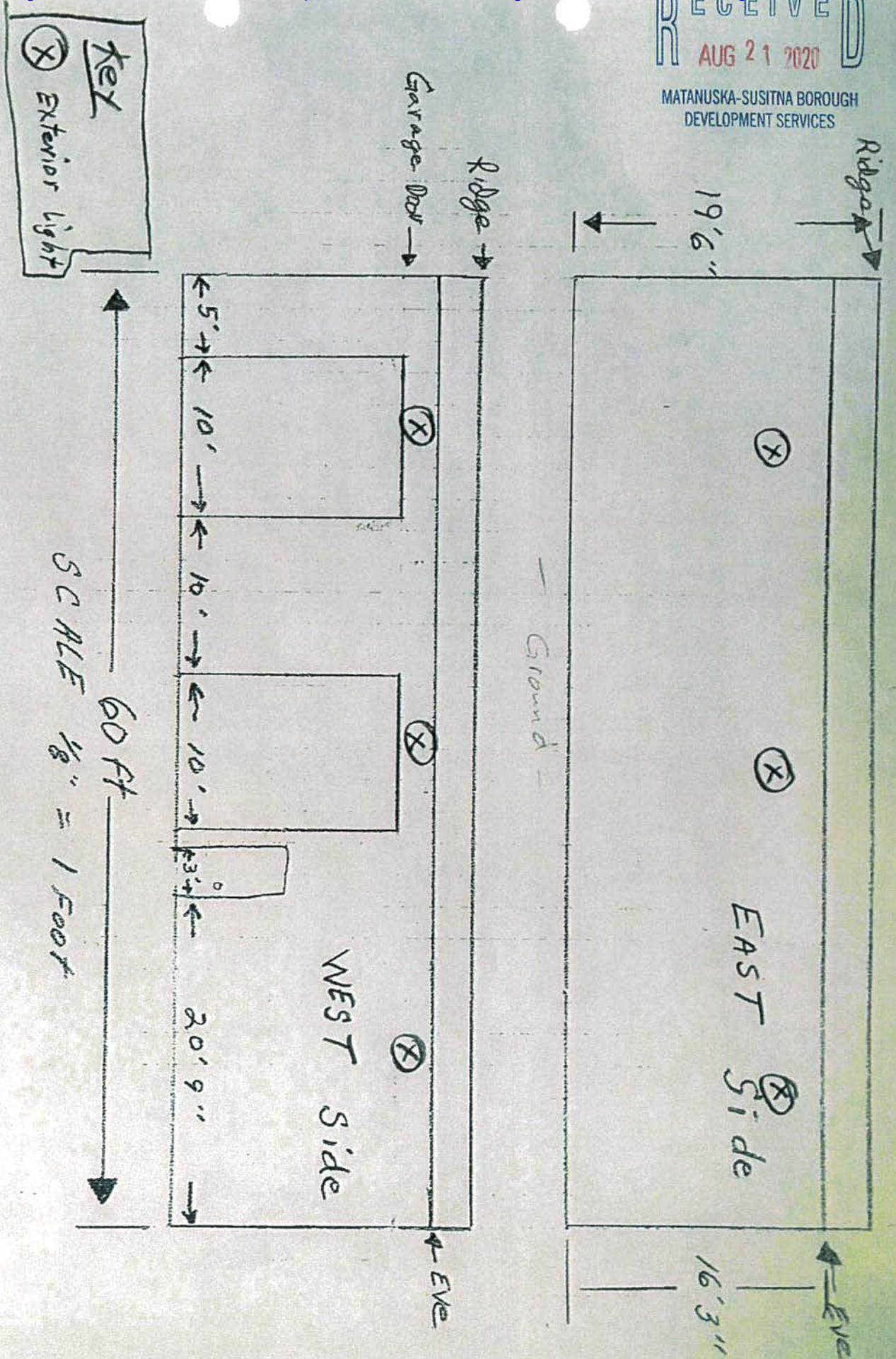
Lot 25 corner
HUB-ZTE
6726-

Property Line

South East corner
Lot 28

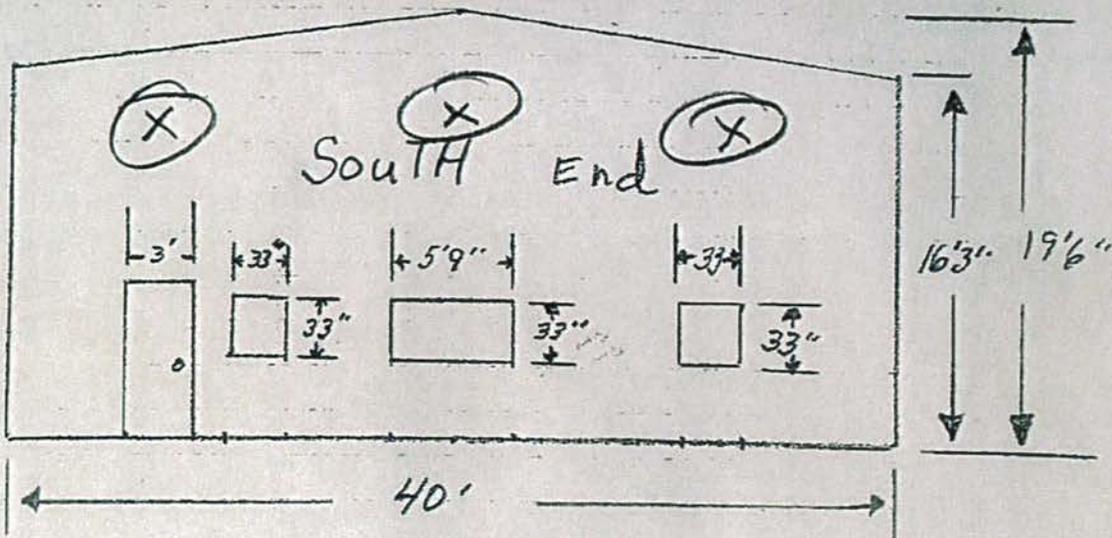
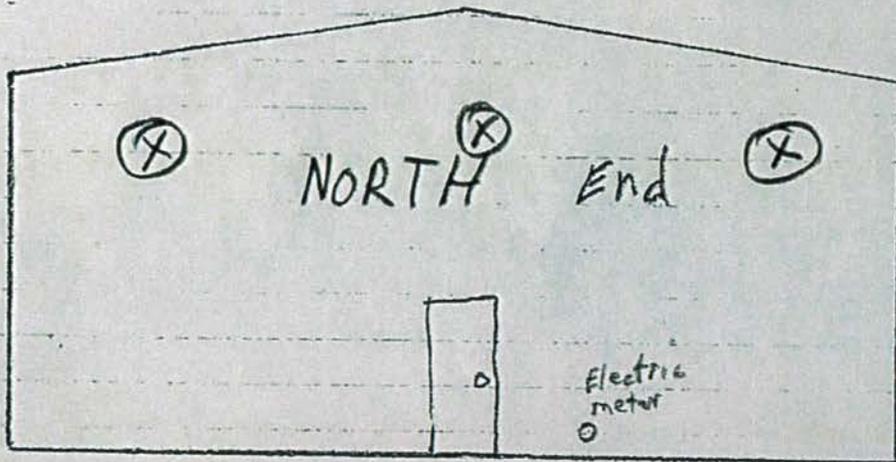
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AUG 21 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



RECEIVED
AUG 21 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



SCALE

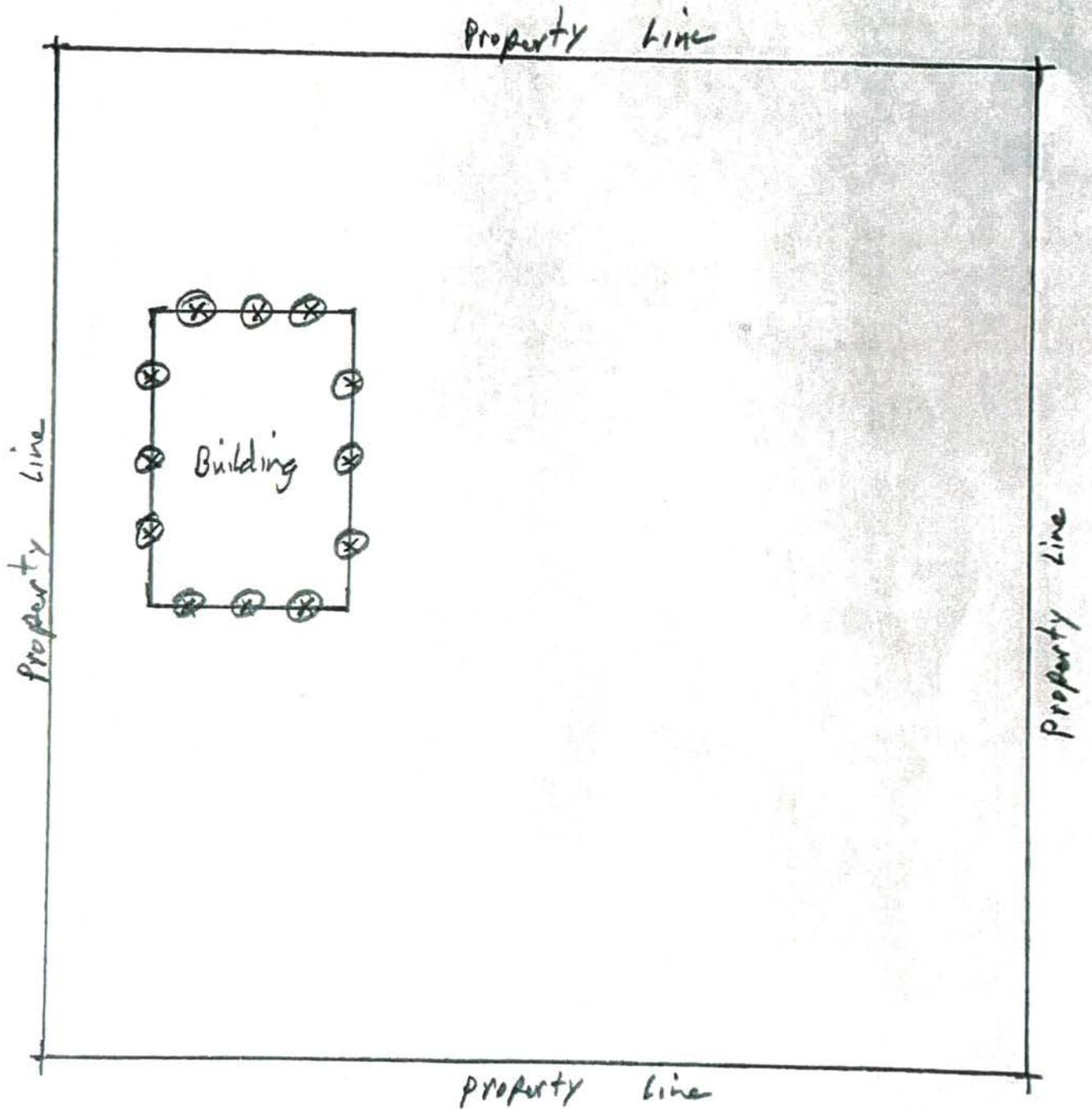
1/8" = 1 Foot

Key

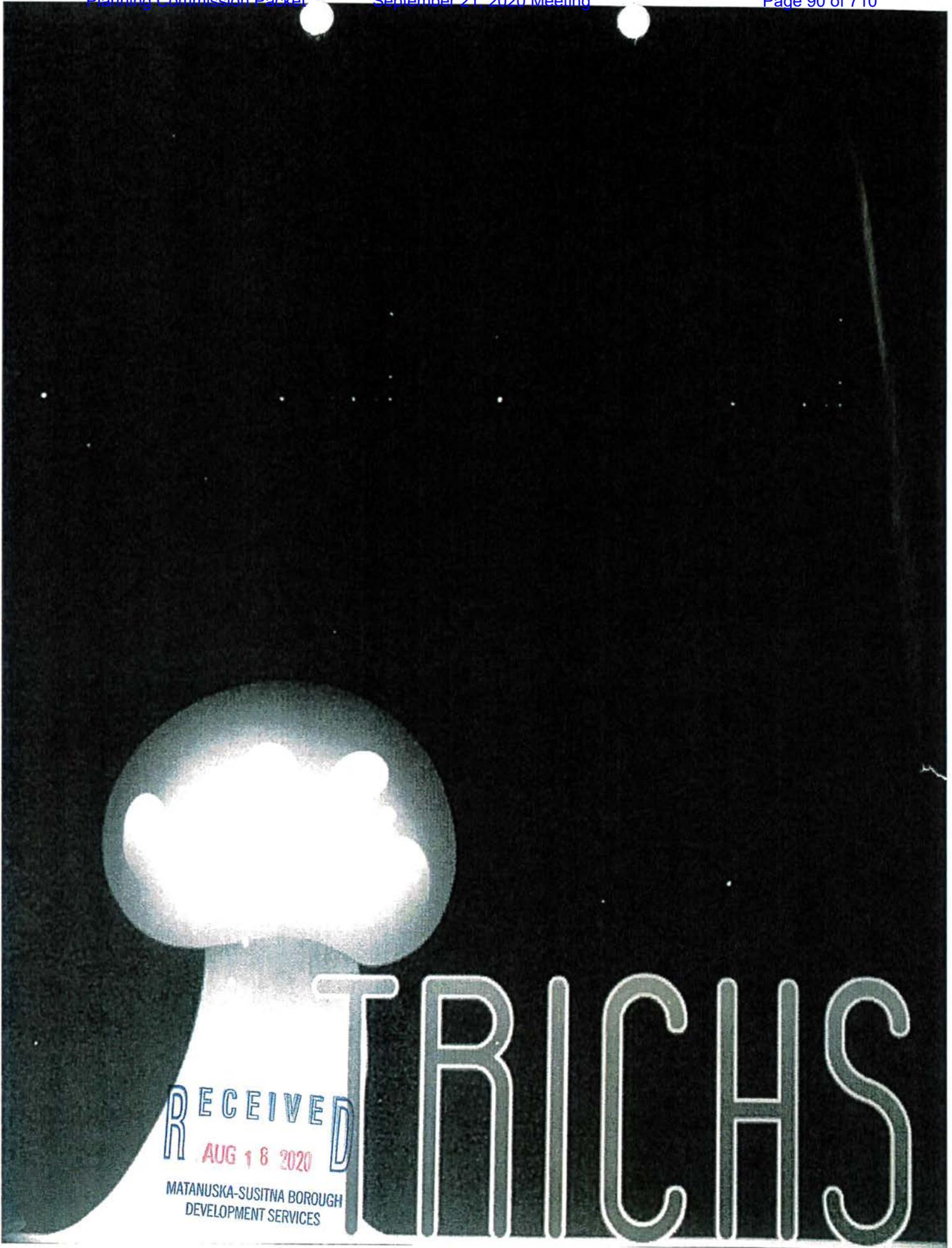
(X) Exterior Light

RECEIVED
AUG 21 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



Key
⊗ Exterior light



RECEIVED
AUG 18 2020

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES

TRICKS



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 1111B01L011

Site Information

Account Number	1111B01L011	Subdivision	WASILLA WEST
Parcel ID	54581	City	None
TRS	S17N02W01	Map HO09	Tax Map
Abbreviated Description (Not for Conveyance)	WASILLA WEST BLOCK 1 LOT 11		
Site Address	3807 W MACHEN RD		

Ownership

Owners	WILKERSON JULIAN BRESSER JOEY B	Buyers	
Primary Owner's Address	3523 ANTELOPE CREEK LN KATY TX 77494-1591	Primary Buyer's Address	

Appraisal Information

Assessment				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2019	\$50,300.00	\$54,500.00	\$104,800.00	2019	\$50,300.00	\$54,500.00	\$104,800.00
2018	\$50,300.00	\$56,100.00	\$106,400.00	2018	\$50,300.00	\$56,100.00	\$106,400.00
2017	\$50,300.00	\$58,600.00	\$108,900.00	2017	\$50,300.00	\$58,600.00	\$108,900.00

Building Information

Structure 1 of 1			
Business Use	None	Residential Units	0
Design	Other Retail Trade	Condition	Standard
Construction Type	Metal	Basement	None
Grade	None	Year Built	2000
Building Appraisal	\$54500	Foundation	Slab on Grade
Septic	Septic - 1 - Septic Tank	Well	Well C - Community Water

Building Item Details

Building Number	Description	Area	Percent Complete	
2019	Yes	0037	16.589	\$1738.52
2018	Yes	0037	16.509	\$1756.56
2017	Yes	0037	16.51	\$1797.94

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
4/16/1999	WARRANTY DEED (ALL TYPES)	Palmer Bk: 1008 Pg: 98
10/30/1995	WARRANTY DEED (ALL TYPES)	Palmer Bk: 826 Pg: 39

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
PLEASE CALL	\$6,199.05	\$0.00	\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.46	0.46	Assembly District 004	10-050	130 Central Mat-Su	027 Meadow Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.

Last Updated: 12/19/2019 12:00:19 AM

Property Location: 1111 BOILLOI

Applicant: Joey Breeser / Greg Miller

USE PERMITS {100.000.000.341.300}		Fee
<input type="checkbox"/>	8.35 Public Display of Fireworks	\$25.00
<input type="checkbox"/>	8.40.010 Liquor License - Alcohol & Marijuana Control Office (AMCO) Referrals for Matanuska Susitna Borough Review of Issuance, renewal or transfer (location, owner)	\$100.00
<input type="checkbox"/>	8.41.010 Marijuana License - Alcohol & Marijuana Control Office (AMCO) Referrals for Matanuska Susitna Borough Review of Issuance, renewal or transfer (location, owner)	\$100.00
<input type="checkbox"/>	8.52 Temporary Noise Permit	\$500.00
<input type="checkbox"/>	8.55 Special Events Permit 500 – 1000 Attendees	\$500.00
<input type="checkbox"/>	1000+ Attendees	\$1,000.00
<input type="checkbox"/>	8.55 Special Events Permit Site Monitor Fee / Per Day	\$300.00
<input type="checkbox"/>	17.02 Mandatory Land Use Permits - Residential Non-habitable	\$25.00
<input type="checkbox"/>		\$150.00
<input type="checkbox"/>	1	\$1,000.00
<input type="checkbox"/>	1	\$500.00
<input type="checkbox"/>	1	\$1000.00
<input type="checkbox"/>	17.27 Sutton Special Land Use District CUP	\$1000.00
<input type="checkbox"/>	17.29 Flood Damage Prevention Development Permit	\$100.00
<input type="checkbox"/>	17.29 Flood Damage Prevention Development Permit –Variance	\$500.00
<input type="checkbox"/>	17.30.040 Earth Materials Extraction Admin. Permit	\$500.00
<input type="checkbox"/>	17.30.050 Earth Materials Extraction CUP	\$1000.00
<input type="checkbox"/>	17.36 Residential Planned Unit Development Application – Concept Plan – up to 50 Lots	\$500.00
<input type="checkbox"/>	Additional Lots or tracts being created – Per Lot	\$100.00
<input type="checkbox"/>	17.48 Mobile Home Park Permit Application	\$500.00
<input type="checkbox"/>	17.52 Residential Land Use District App (Rezone)	\$1,000.00
<input type="checkbox"/>	17.52 Conditional Use Permit Application CUP	\$1,000.00
<input type="checkbox"/>	17.55 Shoreline Setback Exception Application	\$300.00
<input checked="" type="checkbox"/>	17.60 Conditional Use Permit Application	\$1000.00

Matanuska Susitna Borough
 Payment Date Thursday, May 21, 2020
 Deposit Number 40812
 Operator hoff0401
 Real 2020 (Total) \$0.00
 MCR (Planning/Platting) \$1,000.00
 Permit Rec
 Fee Map # 1MISC
 Bank Paid \$1,000.00
 Check # \$1,000.00
 Change \$0.00
 Receipt Number MSB91405097
 5/20/20 2:30:09 PM
 Printed by MILLER GREG & MARCIA
 Receipter id. hoff0401

ERMIT CENTER – FEE RECEIPT FO

Property Location: 1111 BOILLOU

Applicant: Joey Breeser / Greg Miller

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 Amount Due \$1,000.00
 Change \$0.00
 Receipt Number MSB91405097
 Accepted 2020 2:30:09 PM
 Accepted by MILLER GREG & MARCIA
 Operator Id. hoff0401

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**INTRODUCTION FOR PUBLIC HEARING
LEGISLATIVE**

Resolution No. PC 20-33

Outdoor Shooting Facilities (MSB 17.68)

(Pages 95 - 374)

INTRODUCTION FOR PUBLIC HEARING

By: Patricia Chesbro
Introduced: September 21, 2020
Public Hearing: October 5, 2020
Action:

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. PC 20-33**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING APPROVAL OF AN ORDINANCE ADOPTING MSB 17.68 OUTDOOR SHOOTING FACILITIES IN ORDER TO ESTABLISH STANDARDS FOR COMMERCIAL, EDUCATIONAL, AND NONPROFIT OUTDOOR SHOOTING FACILITIES.

WHEREAS, Alaska Statute 29.35.145 provides that the authority to regulate firearms and knives is reserved to the state, except as specifically provided by statute, and a municipality may not enact or enforce an ordinance regulating the possession, ownership, sale, transfer, use, carrying, transportation, licensing, taxation, or registration of firearms or knives; and

WHEREAS, Alaska Statute 29.35.145(b)(2) allows municipalities to enact and enforce ordinances restricting the discharge of firearms in any portion of their respective jurisdictions where there is a reasonable likelihood that people, domestic animals, or property will be jeopardized, not abridging the right of the individual guaranteed by Art. I, sec. 19 of the Alaska Constitution to bear arms in defense of self or others; and

WHEREAS, Alaska Statute 34.75.030 specifically allows municipalities to regulate the noise level produced by outdoor shooting facilities; and

WHEREAS, Alaska Statute 29.35.210(B)(4) specifically gives second class boroughs the authority to provide for water pollution control on an Areawide basis; and

WHEREAS, Alaska Statute 29.35.180 requires second class boroughs to provide for land use regulation; and

WHEREAS, commercial outdoor shooting ranges have the potential to generate stray bullets, lead contamination, and harmful levels of noise; and

WHEREAS, in September 2019 the Matanuska-Susitna Borough Assembly directed Borough staff to "develop a conditional use permit process for commercial, educational, and nonprofit outdoor shooting facilities ot be reviewed by the Planning Commission and adopted by the Assembly";and

WHEREAS, on August 3, 2020 the Planning Commission held a public hearing on this matter.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby recommends approval of Ordinance Serial N. 20-25.

ADOPTED by the Matanuska-Susitna Borough Planning Commission
this 5th day of October, 2020.

COLLEEN VAGUE, Chair

ATTEST

KAROL RIESE, Planning Clerk

(SEAL)

YES:

NO:

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COMMENTS RECEIVED

Karol Riese

From: jerry hupp <huppjerry@gmail.com>
Sent: Monday, August 24, 2020 8:24 AM
To: Planning Commission
Subject: shooting range ordinance

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

To: Members of the Mat-Su Borough Planning Commission

I was very disappointed that the Planning Commission did not support a proposed ordinance that established common sense regulations for commercial shooting ranges in the Valley. As a landowner on Lazy Mountain, I'm troubled that one of my neighbors could open a shooting range, greatly alter the character of our neighborhood, and potentially put the safety of my family at risk due to the lack of any standards governing design of the range. And, that I would have no opportunity to comment on such a development.

I would appreciate it if the Planning Commission would again consider forwarding the proposed ordinance to the Borough Assembly with a recommendation for passage. My preference is that the original ordinance be amended so that shooting ranges are governed under a conditional use permit, thus allowing landowners to rightfully have some say on such developments in their neighborhoods. However, even if governed under an administrative permit, some regulation of shooting ranges is better than none.

I am a long-time recreational shooter and hunter. I have no concerns that regulation of shooting ranges poses a threat to Second Amendment rights. This is strictly a land-use issue governing a business that can greatly affect noise levels and safety in neighborhoods.

Thank you.

Jerry Hupp

Mailing address:
PO Box 1529
Palmer, AK 99645

Residence:
15755 E. Jupiter Ave.
Palmer, AK

Karol Riese

From: Alex Strawn
Sent: Monday, August 31, 2020 8:59 PM
To: Karol Riese
Subject: FW: Gun Range Ordinance
Attachments: Seth Gun Range Rules 08-03-2020.docx; Seth Gun Range Rules1-31-2020.docx; Seth Gun Range Rules 02-18-2020.docx; Seth Gun Range 08-08-2020.docx

From: seth shacklett <gunsmith.4.u@gmail.com>
Sent: Saturday, August 8, 2020 9:57 PM
To: Alex Strawn <Alex.Strawn@matsugov.us>
Subject: Gun Range Ordinance

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

hello Mr Strawn, i am Seth Shacklett, you may recall i spoke at the last planning commission meeting regarding the gun range rules. and i have been trying to see how to get a hold of someone at the planning commission to render my experience and knowledge for several months.

i have attached some documents which dictate my stance, even if at the very beginning was very heavy handed. i did so with a purpose. and since you have admitted to changing much of the ordinance to deal with that, i suspect that it served it's purpose. the dates in the document reflect the time frame of said stance. i would appreciate if you would read them, especially the one dated 08-08-2020 as that's the one that is going off of the latest information that i have access to.

as such i would extend an offer for anyone who wanted to know to take them out to the old Site Bay missile site to show them what people are doing back there. or any formal range on this list for that matter. as a rule i don't go to Zero Lake Road or Jonesville anymore because quite frankly it's dangerous. and i say that as an Iraq War Veteran.

if you need any further information or have any requests or questions please feel free to contact me

Gunsmith.4.u@gmail.com
Seth.Shacklett.87@gmail.com
907-414-2647

03/Aug/2020

Gunsmith, Veteran, Range Safety Officer.

Still Ignores the original Complaint, goes after an innocent 3rd party, and creates secondary problems I warned you all about. And will do nothing to address the problems.

People at Jonesville/Coal Hills want that place shut down now more than ever per KTVA Channel 11 News as of 3 days ago, which I warned about back in February.

Maud Road Range busier than ever, which I warned about.

Upper Susitna Shooters Range busier than ever, which I warned about. (I would assume the other ranges in the Valley have seen a similar uptick in use)

Site Bay increase in shooting use(Bring in Brass), which I warned you about.

Past 10 years there have been no less than 4 Range proposals that have been shot down by the Mat Su Borough Council that I am aware of, including the U-Haul deal.

In Switzerland there are at least two ranges that I know of that shoot across major highways. Would you be willing to entertain such an idea since there is verifiable proof that it has been done and works?

Assemblymen McKee : address the random gunfire in the neighborhood during the day, a notable increase has occurred since this debacle has started.

I have been shooting since I was 9. 5 years Military, and 9 years as a Gunsmith (Hobby and Business) for a total of 37 Years of combined firearms experience as part of the Military, as a Consumer, and as part of the Industry.

My grievances with the proposed range ordinances draft for the conditional use permit for firing ranges are as follows and as of 18/Feb/2020 the current draft, any changes between that date and the time of this being used could affect my grievances.

Ordinance Serial Number 20-025, scheduled for February 18th 2020.

Section 17.68.010 " INTENT"

Is there a reason, outlined in this subsection for there to be regulations? What police reports, studies, news articles, statistics, etc are there that show that this is needed under this section? If it's not a problem or there is nothing to show that this is required, it needs to be removed. Unless you can show the entire public that these requirements are not currently being met, or are currently needed for publicly available shooting ranges, and not Ad Hoc Ranges or Private Property being used to private firearms use.

Section 17.68.020 " DEFINITIONS"

Outdoor Shoot Facility : it's so vague I almost know what you are talking about. By that metric the entire State of Alaska could be Real Property based on this definition alone. Commercial? Non Commercial ? Zoned? Un-zoned? Residential ? which one of those is " Real Property" more importantly, if there is "Real Property" does that mean there is " Fake" or " False" Property?

Firing Position/Point: okay points for the not so vague definition, but what are the measurements to be used for that "Specified Width and Depth" ? and where did you get them? If people have to show their work in math, then you who are attempting this bill need to show your work as well.

Firing Lane: the one thing so far that doesn't have some incredibly vague or hidden value behind it.

Firing Line: the second thing so far that doesn't have some incredibly vague or hidden value behind it.

Surface Danger Zone: where in the wild wild world of sports did you even find this ? Also this is impossible to achieve for a few reasons : Ricochet's are almost mathematically impossible to predict. They also require a hard surface like pavement, a rock, or steel sheet/plating in order to happen. "based on projectiles fired" makes this truly impossible as the humble .22LR and 5.45x18 won't have the energy to do much of anything. By contrast calibers like .338 Lapua Magnum, .50 BMG, 12.7x108mm, and 14.5x114mm have incredible range and power and could ricochet and travel an obscene distance in any direction. In one video taped incident .50 BMG ricocheted and bounced straight back at the shooter and took his earmuffs off his head with no injury that I am aware of. The cause of this is assumed to be an improperly angled target.

17.68.030 " Applicability"

Section A: why must the most restrictive conditions apply? Why so much hatred? Are the people whining about people using private property for shooting and trying to force the issue onto the public again like last time?

Section B: why do they not apply withing the city limits of Houston, Palmer and Wasilla?

Section C:

why doesn't it apply to Archery or Airguns ? as stated before Airguns can be almost as loud as firearms, and Bows, Cross Bows and Airguns are often used for hunting, and can be just as " dangerous" as firearms at fairly similar distances. Airguns tend to be on the less noisy side of the firearms spectrum, but are just as loud as some firearms. Bows and Crossbows actually have better sectional density/inertia and thus better penetrating power and can do a great deal of damage.

As far as I am aware there are no shooting facilities in the Mat Su that are used regularly by the Military or Police for Official purposes, that would be Birchwood and the ranges at JBER

respectively. Which means this point is utterly useless at best. And secondly that which is legal for the government, but not legal for the average citizen is often a sign of Tyranny or a Dictatorship.

A "Fully Enclosed Facility" is no longer an Outdoor Shooting Facility, and is instead an Indoor Shooting Facility. So why the double speak here?

Section D: if the main complaint is because of people shooting on private property, and there are no complaints, statistics, reports, orders, or otherwise any evidence that public shooting ranges are the problem, then why are you specifically exempting the private use of firearms on private property (the source of the complaint and the very reason why this "ordinance" proposal is a thing) and instead going after public ranges that A aren't the problem and B aren't an issue and C have no evidence of being said issue?

17.68.040 " Application Procedures"

Section A, Subsection 1 : why is there a fee and what is the amount of said fee?

Section A, Subsection 2 : why the need for a certified site plan ? how much would that cost? Unless that cost is going to come from the Borough, as in it comes out of the Pension or Salary of the Borough Assembly Members, it needs to go away. Also where are the definitions for: Backstop, Target Area, Side Berm and Baffles?

Why the need for identification of all buildings within 1000 feet?

why the need for us to provide the dimensions/composition of backstops, baffles, firing lanes and side-berms? Why aren't you providing the required dimensions based on what is currently being used at the various ranges currently in existence in the Mat Su? Why is this being hidden?

why the requirement for a maximum caliber of firearm? I don't see many people running around with PTRS-41 or Barret M82 or M107 rifles outside of ranges with the Distance to be able to accommodate them. Even then the cost of ownership and high cost of use is very prohibitive towards the use of said firearms to begin with, why are you making it harder?

why the requirement for a civil engineer to certify this? How much is that going to cost? Is the borough going to pay for this? How about the individual members who approve of this ordinance? If the answer is " no" to the last two, then A it's too expensive and B needs to go. This part seems to aim to make it financially prohibitive as possible to even try to start a range and will make anyone attempting to build a public use range go into bankruptcy or keep it from happening altogether.

why the EPA management issues again? Where is there a cited issue from Alaska, where there was an issue with this at public ranges? Where has this ever been reported as an issue?

who can possibly accurately predict a surface danger zone for something that is mathematically impossible to calculate? And once again, another engineer/professional that needs to be paid for this, it's almost as if you are trying your best to make sure public use ranges cannot be built and thus make sure people continue to use Ad Hoc Ranges or Private Property, thus exacerbating the original complaint and having an overall cooling affect on people using their rights.

Section B: seems both extremely specific and oddly vague, especially since without providing all sources for all dimensions/compositions, and all dimensions/compositions and all definitions how can one even know if they are deficient?

Section C : ½ mile is approximately 4 times smaller than the nearest range to the primary two complainants property in this issue. Soo there's that fun little tidbit.

Section D: how can anyone approve this is not all of the definitions and specifications are not met? More importantly unless it's treated like Alaska's Concealed Carry Permit and automatically approved this needs to go as well.

17.68.050 General Standards:

where did these standards come from? NRA? NSSF? FPC? Can the other ranges in the Mat Su currently in existence pass these standards or no? citation is needed badly.

why are shotguns exempt? Various Slug/Solid Shot types can do the same things any rifle or pistol caliber can do at very similar distances, Buckshot maintains lethality at a surprising distance, and Birdshot isn't immune to being understated either but far less so than buckshot or shotguns in general.

where are waterbodies or wetlands an issue with shooting ranges up here? What past or present ranges or range proposals have had this issue ?

The Natural Topographic Features is the only sections/subsection of this particular portion that makes any sense what so ever, however it needs to be expanded to include dense woodland as well.

17.68.060 " Operating Standards"

Section A: actually makes sense for a public range, so for a grand total of 4 individual subsections so far that actually have some merit, make some sense, or are defined properly enough to not need anything further.

Section B: this again. 90 Decibels is quite frankly ridiculous and impossible. Even with a suppressor a .22 Caliber firearm is still at 116 Decibels and that is the absolute quietest possible for a firearm. By contrast, Air guns range from 116-134 decibels. Meaning even Air guns wouldn't pass this qualification. And some are used to hunt Hogs and other small/medium game in various places.

Also for future reference since you don't seem to understand how Sound works in terms of Decibels. It's not linear. $1+1 \neq 2$ Decibels. It's a logarithmic scale that means in terms of "Decibel" to "Power Ratio" that $1=1$, $10=10$, but $20=100$, $90= 1000000000$ and $100= 10000000000$.

This rule/restriction is physically impossible especially since it's now no longer " at the neighboring property" but even closer at the boundaries which could easily vary based on A where the shooting positions are in relation and B where the projectiles travel or how far they stay supersonic as there are 2 noises a firearm will make on discharge. The muzzle report and the ballistic crack, which is essentially a sonic boom because any projectile travelling over roughly 1000 feet per second . Especially since a motorcycle at 25 feet or a common power mower are at about 90 decibels.

note any time sound changes directions, or hits a soft object, it losses power exponentially as well, that's how suppressors work, that's why sound gets absorbed by woods/forest, sounds coming from up or down wind can get softer or louder depending, and why echoes get much quieter every time they " bounce back".

17.68.070 " Appeals"

this needs to be worded a lot more specifically and should be only appeal-able by the owner of the range or needs a preponderance of evidence in order to appeal an approval. In other words it needs to require proof in order to not approve and it should require even more proof to appeal an approval.

17.68.080. Termination of Permit.

if you do not provide all of the information required to comply with the permit, then this entire section needs to go, period, full stop, do not go any further. And that would include citing your sources as well. Including the sources that say any of this needs to be addressed as an issue.

since when has a shooting range up here stopped for more than the time that passes between closing time one day and the next day that the range is open? Honestly this is absurd and the only range I know of that closes for any length of time is the Upper Susitna Shooting range during the colder months, and it only closes for the General Public, you can still schedule events/classes at said range.

17.68.090 Transfer of Permit

wow, one whole code that makes sense. This is the only complete code that makes any sense,

although I believe it should be purely automatic, one again like the CHL license. Basically unless you are legally prohibited from running a firearms range, it should be automatically granted.

17.68.100 Non Conforming Uses

this entire code is backward. If anything the current proposed ordinance code should be modified to follow what already exists in the Mat Su Valley. In other words, if the current ranges have X dimensions and measurements and compositions, then those are what should become law. Since apparently they seem to work, otherwise you would have provided some evidence or proof that they in fact do not work and are found wanting. Since I have seen none, nor am I aware of any complaints, issues, lawsuits, or other legal issues involving current firearms ranges purely because they are firearms ranges due to the liabilities listed through this ordinance.

17.68.110 Violations, Enforcements and Penalties

if there are a method of filing for complaints, then if upon inspection those claims are proven to be false, IE someone is falsely complaining about a range that does in fact meet the requirements, the Mat Su Borough should be required to fine the person falsely complaining. That goes for any false allegations against a firearms range. If there is a method to file them, there needs to be a method to address false allegations. and any claims of violations should require a preponderance of evidence.

even the ATFE needs to provide 24 hours prior notice to inspection an FFL's business property, so unless you are prepared to adopt the ATFE's rules on providing notice for inspection, that needs to go.

the effective date should be never. Because this ordinance proposal shouldn't even exist.

Considering this Proposal seems to be based on complaints against people using firearms on their private property and not from concerns surrounding a public range, then why is this proposal even here? It doesn't address the issue, and in fact will only make it worse as publicly available ranges will not be able to expand or be built as needed to cope with any possible expansion, which will drive people to shoot on their own property and make use of other "ad hoc" ranges mentioned later on.

all in all, to me. Personally, this seems to be a bill that has nothing but bad intentions and is either aiming to kill gun ranges by making it financially prohibitive or making it impossible to comply with, especially when the various required information isn't provided, and making it easy to shut down ranges with no way to re-address those grievances, but will also have an extreme cooling effect on any further construction or expansion of shooting ranges, even as more and more people move to the Mat Su Valley. Which will in turn mean current ranges cannot expand, which will artificially restrict someone using their firearms in a personal, legal manner.

It WILL drive more people to places like Jonesville/Coal Hills, where drunken teens burning tires and shooting guns can often be found around summer solstice destroying whatever vehicle they showed up with in some manner or another. Or Jim Creek and undo all the work that people like the Mat Su Trails Committee and various Off Road/4x4 groups have put into cleaning the place up. Or even out to the old abandoned Site Bay NIKE Nuclear SAM station at the end of KGB Road, further destroying history and actually putting people at risk via shooting at solid concrete/steel structures or shooting off into the woods where people may be off roading. Or up Zero Lake road by Houston where people hunt and sled dog and snow machine and go off roading? Which has been a continual problem for those living on Zero Lake Road. Which Off roading being so popular up here will be a serious risk if people are driven to use the 4 above mentioned "ad hoc" ranges, some of which were shooting is prohibited.

it WILL prevent more shooting ranges from being built, even if they were to pass standards set forth by the NRA, or NSSF or even the FBI/ATFE purely due to the cost and arbitrary nature of the current regulations. The Mat Su Valley has been extremely reluctant to provide or allow for shooting ranges despite A more people moving to the Mat Su Valley for years and thus increasing the demand for said ranges and B Alaska being the state with the least amount of firearms restrictions in the USA. I know people who have moved up here PURELY for the freedom of firearms ownership Alaska presents. We can hunt with suppressors or pretty much any semi auto firearm, we can own anything

we want so long as we abide by the ATFE/FBI's application process for NFA items like suppressors, full autos, destructive devices, AOW, short barreled rifles, and short barreled shotguns.

there is a reason that the Kenny and Patti Barber Range at Maud Road was built, not enough safe legal places to shoot publicly. There is a reason that the Upper Susitna Range, Birchwood, Matanuska Valley Sportsman's that I am aware of have expanded greatly in the past few years. I am sure there are more ranges that have expanded: because they are busy enough to need and be able to expand. And this during what is commonly referred to as a "firearms friendly" Presidential Term, which is both unusual and rare for anything pro firearm to expand during times like that. (although that is also debatable, it is often cited)

I know of several proposed ranges that have been shot down, including the U Haul debacle in Palmer.

https://www.frontiersman.com/.../article_c4c5f4b8-8793-11e7-b...

<https://www.alaskapublic.org/.../borough-board-upholds-sutto.../>

https://www.frontiersman.com/.../article_25fdbbfd-415f-5210-b...

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So, we lost 4 pretty decent "Ad Hoc" ranges because of trash and vandalism, with some safety concerns and neighbor concerns, and in return 1 Public Use Range was built. The Maud Road/Kenny and Patti Barber Shooting Range. In a community that is growing steadily. That is a picture-perfect example of artificial restriction, especially when you add into the 4 Ranges that were planned or proposed to be built, got shot down.

If the Mat Su Borough doesn't provide, or allow for people to provide, for safe places to shoot, people will go to places like Zero Lake, Coal Hills/Jonesville, Jim Creek and Site Bay. And they will leave a mess and do general property damage OR they will use their own private property OR they won't go shooting at all due to distance and weather problems.

this bill would ensure that both inappropriate or illegal "ad hoc" shooting ranges will continue to be used and in greater frequency, and people will stop going shooting or not go shooting as often.

Alaska is a very firearms friendly state, and for some very good reasons besides personal liberty. We do share our environment with wildlife that can be at times lethal, or just downright ornery. Due to us being so remote and "unknown" we tend to attract our fair share of "undesirables" who wish to do harm and continue to do so without fear of being caught. Preventing people from practicing their firearms use will mean people will no longer improve skills that are absolutely needed to ensure that they can defend themselves. If you don't allow for or provide for that, you may as well say you don't support it.

I am aware of a sort of proposal to clean up Jonesville and establish a decent range there as part of the Jonesville Public Use Area proposals, and there are several great locations there for it, but it is now, where Jim Creek Was in 2006.

Also, I know of 3 Ranges whose owners, sponsors or caretakers are not happy about these range restrictions. Upper Susitna Shooting Range, Matanuska Valley Sportsmen's, and Kenny and Patty Barber Range. When you have the three biggest competitors all saying that a proposal is bad, and the proposal being written into law would give 2 out of 3 of them a huge advantage financially due to near monopoly of customers, you know it's a bad idea. I can't speak for those folks, but I am very interested in what they have to say.

if you don't like firearms, why are you even in Alaska? We've done everything from go Constitutional Carry to Stand Your Ground/Castle Doctrine to the Alaska Firearms Freedom Act in the past 20 years. The only thing Alaska could do to expand people's right to self-defense with firearms would be to kick out every Federal Agent in Alaska, which isn't going to happen, nor do I advocate for it.

I have been shooting since I was 9. 5 years Military, and 9 years as a Gunsmith (Hobby and Business) for a total of 37 Years of combined firearms experience as part of the Military, as a Consumer, and as part of the Industry.

My grievances with the proposed range ordinances draft for the conditional use permit for firing ranges are as follows and as of 26/Jan/2020 the current draft, any changes between that date and the time of this being used could affect my grievances.

Section 2:

- define "Real Property" as most of the Mat Su Borough that I am aware of is not zoned as Commercial or Residential. My shop off Fairview Loop Road near Walmart is unzoned.
- "real property" seems to be very vague and could very easily contradict the statements made on social media, in the draft itself, and is exceptionally vague.
- it addresses virtually all types of legal firearms use even from firearms that the ATFE itself doesn't consider "firearms" by legal definition (black powder firearms)
- what are the specifications or definitions for "Real Property", "Firing Position/Point" and "Firing Lane" as only their rather vague definitions are present.

Section 3:

subsection (6)

Paragraph A, lines 1-3: it excepts air guns/archery, which is meh at best. But excepts Military and Police which isn't sound at all. For several reasons.

- A most military or police in the Mat Su Valley go to the ranges in the Mat Su mostly for their private firearms use. Most of the public ranges in the Mat Su aren't used for official training. Birchwood, in Chugiak/Eagle River is.
 - B you should study the effect the Archery Range had on Lorretta French Horse park in Chugiak/Eagle River, as well as the illegal Gravel/Rap hauling that was done there. I can personally attest to finding Arrows in places that would have injured people or horses had someone been present at said Horse Park at the time of the arrow's impact.
 - C this bill would regulate the expansion of the only range that I am aware of that is fully enclosed in the Mat Su Valley. Which is almost always busy and makes it rather difficult for people to go shooting during inclement weather without it being able to expand so long as it has an outdoor element.
 - D it is self-contradicting by stating "it doesn't affect OUTDOOR RANGES" that are "EXCLUSIVELY FULLY ENCLOSED", which to me means INDOOR Range. After all, if it's Fully Enclosed, it's not Longer Outdoor.
 - E the current "U Haul" in Palmer had a proposal for being an Indoor Range, but that never came to pass, thus artificially restricting inclement weather use of Indoor Ranges.
- Paragraph B: is contradicted by Section 2, what is the different between REAL Property and Private Property? What if Private Property is used for Educational use for teaching friends? Or even customers? Or just as a show and tell for a group like Johnny Appleseed and thus being both educational and Non-Profit? How does this affect the

Kenny and Patti Barber shooting range out at Maud road? How would this affect a gun store with a small test fire range for their gunsmith? How would this affect a one-man gunsmith shop that needs a small test fire facility? What about "Unzoned" property?

Section 4:

Sub Section A, Paragraph 1

where EXACTLY did these parameters for Firing Positions/Points come from? What if these rules are completely unmanageable or completely impossible?

Paragraph 2

where EXACTLY did these Parameters come from for Projectile Containment? Has anyone taken the cost of said Kenny and Patti Barber Range for that range as an example of a small outdoor range? How about the cost of Birchwood and their construction and expansion? How about the measurements they used for construction of said berms? Or the construction and expansion of Upper Susitna Shooters Range? Or their measurements for their berms?

Paragraph 3

hours of operation are the only thing that have actually made sense so far.

75 Decibels is quite frankly ridiculous and impossible. Even with a suppressor a .22 Caliber firearm is still at 116 Decibels and that is the absolute quietest possible for a firearm. By contrast, Air guns range from 116-134 decibels. Meaning even Air guns wouldn't pass this qualification. And some are used to hunt Hogs and other small/medium game in various places.

Paragraph 4

what are these standards and where EXACTLY did they come from? And what brought them about? Why so concerned with lead without showing any proof of any issues at shooting ranges in Alaska?

Paragraph 5

this makes some sense, but where did the distance requirement come from? Exactly where?

Considering this Proposal seems to be based on complaints against people using firearms on their private property and not from concerns surrounding a public range, then why is this proposal even here? It doesn't address the issue, and in fact will only make it worse as publicly available ranges will not be able to expand or be built as needed to cope with any possible expansion, which will drive people to shoot on their own property and make use of other "ad hoc" ranges mentioned later on.

all in all, to me. Personally, this seems to be a bill that even with good intentions (which is debatable) but will have an extreme cooling effect on any further construction or expansion of shooting ranges, even as more and more people move to the Mat Su Valley. Which will in turn mean current ranges cannot expand, which will artificially restrict someone using their firearms in a personal, legal manner.

It WILL drive more people to places like Jonesville/Coal Hills, where drunken teens burning tires and shooting guns can often be found around summer solstice destroying whatever vehicle they showed up with in some manner or another. Or Jim Creek and undo all the work that people like the Mat Su Trails Committee and various Off Road/4x4 groups have put into cleaning the place up. Or even out to the old abandoned Site Bay NIKE Nuclear SAM station at the end of KGB Road, further destroying history and actually putting people at risk via shooting at solid concrete/steel structures or shooting off into the woods where people may be off roading. Or up Zero Lake road by Houston where people hunt and sled dog and snow machine and go off roading? Which has been a continual problem for those living on Zero Lake Road. Which Off roading being so popular up here will be a serious risk if people are driven to use the 4 above mentioned "ad hoc" ranges, some of which were shooting is prohibited.

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The " Gun Range Problem"

there are currently three different types of places that we Alaskan's, specifically in the Mat Su Borough can go shooting.

in our backyards AKA private property/private ranges that are not open to the public.

Public Ranges, of which there are 5-6 in the Mat Su Borough , with one of them being closed for the moment and they are:

Upper Susitna Shooters Association (Open seasonally)

Grouse Ridge Shooting Club (Closed Temporarily)

Kenny And Patti Barber Shooting Range AKA Maud Road (Open Year Round)

Matanuska Valley Sportsman's (Only indoor range in Mat Su, indoor open Year round outdoor is seasonal)

Pioneer Tactical (I don't know much about this range it could be a requirement to be in a class to shoot here)

Alaska Tactical (is labelled as a Private Shooting Range, you may have to be signed up for a class to shoot here)

and what I call " Ad Hoc" Ranges, or Improvised Ranges. Which in reality are nothing more than a patch of dirt that many people have widely accepted as a place to go shooting and little else. These are not formal ranges, and most are places that end up getting trashed or causing a problem for their neighbors/neighborhoods or some combination of the above. Here is a list of Ad Hoc Ranges I've used in my lifetime.

Reflections Lake (Shut down due to getting trashed)

Jim Creek (Shut Down partially due to getting trashed, my father is on the Mat Su Trails Committee and has been very helpful in getting that place cleaned up)

Jonesville/Coalhills/Slipper Lake (causing enough problems to get the local community to want to shut it down due to it being a warzone with the locals going as far as to make home-made spike strips and laying them in the road to deter traffic)

Zero Lake road (causing enough problems for the locals to dig trenches along side the road in order to stop it)

Site Bay Nike-Hercules Nuclear Missile Silos (technically "closed" but people have carved enough of a trail to make it easy to get to in a bone stock 1998 Jeep Cherokee, it's almost a highway to get back there

in the last Planning Council Meeting on 03 August 2020 a few points were brought up that I wanted to address, but I had already spoke and even though I did wait for everyone else to speak, didn't get a chance to re-address these points.

with my mentioning Assemblymen McKee's neighborhood, where my shop is located, that day in the morning and right after I left to attend the meeting there were several instances of gunfire in the neighborhood. Much more so than normal.

it has come to my attention that the current ranges would be grandfathered in because they wouldn't meet the standards. But if this range ordinance is about safety then why would they be allowed to operate below the safety requirements? Or conversely why not take the measurements of the existing ranges and make them the standard? (I'll get to why later)

as for noise: as mentioned in the other documents, it's a logarithmic scale, not linear, so it has to be calculated differently. At the Assembly Meetings in January and February about the ranges the noise level of the meeting routinely hit 90 decibels. We had people there with sound metering devices.

secondly for noise firearms generate noise in two distinct ways. The actual muzzle report which makes noise and light (many names for this) and if the projectile is super-sonic, or above the speed of sound (some calibers are, some aren't, some can be loaded both ways) then that round will generate a sonic boom, or sonic crack. and that sound will follow the projectile all the way to when the projectile stops, OR slows down enough to no longer be super sonic.

much was touted of the EPA standards/use book, but yet much like the NRA manual, the first page of said manual stated "this manual is intended to provide useful general information to shooting range owner/operators. The United States Environmental Protection Agency does not certify or approve ranges, range design or lead management practices. While every effort has been made to provide up to date technical information, this manual is not to be used as a substitute for consultation with scientists, engineers, attorneys and other appropriate professionals who should be called upon to make specific recommendations for individual range design and lead management" to the best of my knowledge I am unaware of lead ever being a serious problem in Alaska as far as gun ranges go.

Commissioner Glashan stated something to the effect of " when I first heard of this I was surprised to find out that we had no ordinance or regulations for this sort of things" which tells me this hasn't been an issue with Public Ranges. It's been such a non-issue that members of the board for this very purposed aren't even aware of it not having any rules.

Commissioner Vague stated something to the effect of " we are a regulatory body and we only regulate when people step out of line" and yet you are drafting an ordinance that goes after a non-existent problem.

and here's the " I'll get to why later" part, which stems from both Commissioner's verbal remarks on August 3rd, 2020. To date, to my knowledge, none of the actual ranges have had any real complaints formal or otherwise, outside of a few noise complaints. Yet this regulation is aimed squarely at them even though none of them have stepped out of line or caused a problem to the best of my knowledge.

people have been complaining about shooting on private property (backyards, the first category I mentioned) which between the year that is 2020 and this ordinance, has seen a dramatic increase in instances.

people have been very vocally complaining about the "ad hoc" ranges. Even to the point of improvised

traps and other mobility obstacles like trenches to try and prevent the use and movement of people trying to use said Ad Hoc Ranges. To the point of begging for said places to be shut down. (Jonesville and Zero Lake) and have shut down shooting at two of such places to shoot that I know of (Reflections Lake, Jim Creek)

IF safety is paramount for this ordinance I have one final question : why are the existing ranges grandfathered instead of making the ordinance based on the existing ranges?

secondly this ordinance has already had the affect of driving people to shoot on their own property or go to an Ad Hoc range even more. Which is driving the complaints even more.

thirdly the year that is 2020 has seen a Dramatic increase in range use, to the point were sometimes you don't have a choice but to use your own property or go to an ad hoc range. Which will only further drive up complaints (see Jonesville)

if anything should be done, if there absolutely HAS to be a range ordinance, it should be based off of what's been done up here because of the unique everything we have to deal with in Alaska. Something that works in the lower 48 tends to not work so well up here for a variety of reasons. And there should be a major push to provide more ranges, oddly enough a great place for one would be at Site Bay due to it's distance from the majority of the population, it's current state of abandonment, and it already has berms (not the concrete bunkers) that will stop pretty much anything short of a Sabot from a Abrams Tank, and it has existing infrastructure that can be repaired and reused.

RESOLUTION 20-12 PACKET



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

Email: PermitCenter@matsugov.us

STAFF MEMORANDUM

DATE: July 20, 2020

TO: Planning Commission

FROM: Alex Strawn, Development Services Manager 

THRU: Eileen Probasco, Planning & Land Use Director 

RE: **PC Resolution 20-12.** A resolution of the Matanuska-Susitna Borough planning commission recommending assembly approval an ordinance adopting MSB 17.68 Outdoor Shooting Facilities in order to establish standards for commercial, educational, and nonprofit outdoor shooting facilities.

In September 2019, the Matanuska-Susitna Borough Assembly adopted resolution 19-083 directing staff to develop a conditional use permit process for commercial, educational, and nonprofit outdoor shooting facilities to be reviewed by the Planning Commission and adopted by the Assembly.

In November 2019 staff released a draft of an ordinance that set basic standards and a conditional use permit process for outdoor shooting facilities. Staff received approximately 250 comments regarding the draft ordinance. While most of the comments consisted of blanket opposition to any ordinance regulating shooting, many of the comments contained valuable information and suggested edits.

A new draft of the ordinance was developed and presented to the Assembly for referral in February 2020. The ordinance was referred to the Planning Commission for review for 90 days, but the timeframe was extended due to the outbreak of COVID-19. The ordinance will go back before the Assembly on October 6, 2020.

Providing Outstanding Borough Services to the Matanuska-Susitna Community.

By: Assemblymember Boeve
Adopted: 09/17/19

**MATANUSKA-SUSITNA BOROUGH
RESOLUTION SERIAL NO. 19-083**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY REQUESTING THAT STAFF DEVELOP A CONDITIONAL USE PERMIT PROCESS FOR COMMERCIAL, EDUCATIONAL, AND NONPROFIT OUTDOOR SHOOTING FACILITIES

WHEREAS, Alaska Statute 29.35.145 provides that the authority to regulate firearms and knives is reserved to the state, except as specifically provided by statute, and a municipality may not enact or enforce an ordinance regulating the possession, ownership, sale, transfer, use, carrying, transportation, licensing, taxation, or registration of firearms or knives; and

WHEREAS, Alaska Statute 29.35.145(b)(2) allows municipalities to enact and enforce ordinances restricting the discharge of firearms in any portion of their respective jurisdictions where there is a reasonable likelihood that people, domestic animals, or property will be jeopardized, not abridging the right of the individual guaranteed by Art. I, sec. 19 of the Alaska Constitution to bear arms in defense of self or others; and

WHEREAS, Alaska Statute 29.40.010(a) requires that a second class borough provide for land use regulation as a mandatory areawide power; and

WHEREAS, Alaska Statute 29.35.145 does not preempt second-class boroughs from regulating land use concerning,

commercial, educational, or nonprofit outdoor shooting facilities (hereafter "shooting facilities"); and

WHEREAS, MSB 15.04.010 establishes the Planning Commission to perform the areawide function of planning, platting, and zoning in the Borough; and

WHEREAS, MSB 15.04.015 provides that the Planning Commission shall recommend to the Assembly a zoning ordinance to implement the comprehensive plan; and

WHEREAS, the Borough has experienced a substantial increase in population density in areas proximate to existing shooting facilities and therefore has a substantial interest in ensuring the compatibility of shooting facilities with surrounding land uses and in minimizing potential safety hazards created by the operation of shooting facilities; and

WHEREAS, public concerns have been raised over the safety and land use compatibility of shooting facilities located in increasingly populated areas; and

WHEREAS, shooting facilities benefit the Borough by providing its residents the opportunity to learn firearm safety, to practice shooting, and to participate in recreational firearm sports in a safe, controlled setting; and

WHEREAS, the Borough finds that it is in the public interest to protect and preserve the continued viability of shooting

facilities in the Borough in the face of increasing population pressure and conflicting land uses; and

WHEREAS, uniform provisions for the establishment and operation of shooting facilities within the Borough, in the form of a conditional use permit process, would provide assurance of the safe conduct of shooting facilities, provided these provisions: (1) promote safety by establishing a permitting procedure and rules for the siting, design, and operation of shooting facilities that safeguard participants, spectators, neighboring properties and the public; (2) do not abridge the right of the individual guaranteed by art. I, sec. 19, Constitution of the state of Alaska, to bear arms in defense of self or others; (3) involve measures designed to make the discharge of firearms safe; (4) protect from lead contamination; (5) ensure compatibility with neighboring land use; and (6) promote the continued availability of shooting facilities.

NOW, THEREFORE, BE IT RESOLVED, that the Assembly requests that staff develop a conditional use permit process for commercial, educational, and nonprofit outdoor shooting facilities to be reviewed by the Planning Commission and adopted by the Assembly.

ADOPTED by the Matanuska-Susitna Borough Assembly this 17 day
of September, 2019.


VERN HALTER, Borough Mayor

ATTEST:


LONNIE R. McKECHNIE, CMC, Borough Clerk

(SEAL)



YES: Sykes, Beck, Mayfield, and Boeve

NO: McKee, Leonard, and Sumner

MATANUSKA-SUSITNA BOROUGH INFORMATION MEMORANDUM IM No. 20-047

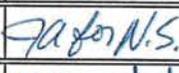
SUBJECT: AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY ADOPTING MSB 17.68 OUTDOOR SHOOTING FACILITIES IN ORDER TO ESTABLISH STANDARDS FOR COMMERCIAL, EDUCATIONAL, AND NONPROFIT OUTDOOR SHOOTING FACILITIES.

AGENDA OF: February 18, 2020

ASSEMBLY ACTION:

MANAGER RECOMMENDATION: Refer to Planning Commission.

APPROVED  **JOHN MOOSEY, BOROUGH MANAGER:** 

Route To:	Department/Individual	Initials	Remarks
	Originator - A. Strawn		
	Planning and Land Use Director		
	Borough Attorney		<i>form only.</i>
	Borough Clerk		

ATTACHMENT (S): Fiscal Note: YES ___ NO X
 Planning Commission Resolution PC 20- (__pp)
 EPA Best Management Practices for Lead at Outdoor Shooting Ranges (2005) (103 pp)
 U.S. Department of Energy Range Design Criteria (2012) (58 pp)
 Rutgers University Community Noise Enforcement Handbook (2012) (31 pp)
 Excerpt from National Rifle Association Range Source Book (2012) (1 page)
 Occupation Safety and Health Administration Noise Exposure Standard 1910.95 (13 pp)
 Ordinance Serial No. 20-25 (12 pp)

SUMMARY STATEMENT:
 In September 2019 the Matanuska-Susitna Borough Assembly adopted Resolution 19-083, directing the Planning Department to "develop a conditional use permit process for commercial, educational, and nonprofit outdoor shooting facilities to be reviewed by the Planning Commission and adopted by the Assembly."

In November 2019 staff released a draft of an ordinance that set basic standards and a conditional use permit process for outdoor shooting facilities. Staff received approximately 250 comments regarding the draft ordinance. While most of the comments consisted of blanket opposition to any ordinance regulating shooting, many of the comments contained valuable information and suggested edits.

In development of this ordinance staff was very cognizant of state restrictions on municipalities' ability to regulate firearms. Accordingly, some modifications were made to ensure that the ordinance does not violate state law. In pertinent part, AS 29.35.145 provides for regulation of firearms and knives as follows:

(a) The authority to regulate firearms and knives is reserved to the state, and, except as specifically provided by statute, a municipality may not enact or enforce an ordinance regulating the possession, ownership, sale, transfer, use, carrying, transportation, licensing, taxation, or registration of firearms or knives.

There are several provisions within Alaska Statute specifically granting municipalities the power to regulate this type of facility. AS 29.35.145(b) is one such provision:

(b) Municipalities may enact and enforce ordinances

(1) that are identical to state law and that have the same penalty as provided for by state law;

(2) restricting the discharge of firearms in any portion of their respective jurisdictions where there is a reasonable likelihood that people, domestic animals, or property will be jeopardized; ordinances enacted or enforced under this paragraph may not abridge the right of the individual guaranteed by art. I, sec. 19, Constitution of the State of Alaska, to bear arms in defense of self or others;

After careful evaluation of this law and how it pertains to the original draft ordinance, staff decided to remove the proposed regulations from MSB 17.60: Conditional Uses because it contains general standards that go beyond restrictions which pose a likelihood of jeopardy to people, domestic animals, or property. Particularly problematic are standards such as MSB 17.60.100(A)(1) which reads:

(1) the conditional use will preserve or not detract

from the value, character, and integrity of the surrounding area;

Another specific power granted to municipalities within state law includes the power to regulate noise associated with shooting ranges under AS 34.75.030 which provides:

AS 34.75.030 State and municipal regulation

(a) Notwithstanding AS 02.15.020 and AS 02.25.020, the state or a municipality may not regulate the outdoor level of noise at a facility if the facility is exempt from a criminal or civil action under AS 34.75.010(a).

(b) Except as otherwise provided in this chapter, a municipality may regulate the noise level produced by a facility.

Finally, AS 29.35.210(b)(4) specifically gives second class authority to provide for water pollution control on an areawide basis. Alaska Statutes also mandate municipalities provide for Land Use Regulations under AS 29.35.180 Land Use Regulation.

With state law in mind, all of the standards within the ordinance address inherent issues associated with outdoor shooting facilities that the borough has specifically been given the authority to regulate. Specifically, the ordinance addresses lead contamination, stray bullets, and harmful levels of noise.

Lead contamination - According to Environmental Protection Agency (EPA) Manual on Best Management Practices for Lead at Outdoor Shooting Ranges (Rev. 2005), lead from improperly managed shooting ranges can be dissolved or carried by stormwater, can migrate through soil, and can be carried long distances in solution by groundwater. Exposure to very low concentrations of lead can have dangerous effects to infants and children. The ordinance addresses lead contamination by requiring new ranges to submit and follow a lead stewardship plan in accordance with EPA Best Management Practices.

Stray Bullets - Stray bullets are an obvious safety concern for outdoor shooting facilities if they are not designed to capture stray bullets. This ordinance ensures that ranges are designed to capture stray bullets and prevent unwanted ricochet.

Harmful levels of noise - According to Rutgers University Noise Technical Assistance Center, excessive noise can cause an assortment of impacts on human health including physiological impacts such as elevated blood pressure, faster heart rates,

increased neuroendocrine hormone levels. Noise can also effect the quantity and quality of sleep. The threshold of 90 dB(a) was chosen because any exposure beyond 90 dB(a) for greater than eight hours in a workplace would exceed Occupational Safety and Health Administration (OSHA) standards for the workplace. Additionally, the NRA Range Source Book (2012) lists exceedance of 90 dB(a) for 1 hour out of 24 as "unacceptable."

A major change from the original draft ordinance is the permit type has been changed from a conditional use permit to an administrative permit. Administrative permits do not require as much judgment in the decision to grant or deny the permit. They are decided by the Planning & Land Use Director instead of the Planning Commission and typically do not require judgement on highly subjective standards such as whether or not a development meets the "character and integrity" of a surrounding area.

Finally, a common criticism of the original draft ordinance was that it was not clear what types of shooting ranges the ordinance applied to. The language has not been modified from the original draft because staff believes that the language is clear and does not need modification. A couple of examples mentioned were: a person teaching a group of boy scouts how to fire weapons on private property; and a gunsmith sighting in or testing, on a private range, firearms that he repaired. Neither of these examples are intended to be regulated under this chapter. MSB 17.68.030(D) provides:

(D) This chapter does not regulate the discharge of firearms on private property where the property is not open to the public on a commercial, education, nonprofit, or membership basis.

In both of these scenarios the range is not open to the public and is therefore not regulated under this chapter.

Comprehensive Plan

This ordinance implements several goals and policies of the Comprehensive Plan.

Goal (LU-1): Protect and enhance the public safety, health, and welfare of Borough residents.

Goal (LU-4): Protect and enhance the Borough's natural resources including watersheds, groundwater supplies and air quality.

Policy LU4-1: Identify, monitor, protect, and enhance the quantity and quality of the Borough's watersheds, groundwater aquifers, and clean air resources.

Goal (CQ-1): Protect natural systems and features from the potentially negative impacts of human activities, including, but not limited to, land development.

Policy CQ1-2: Manage activities affecting air, vegetation, water, and the land to maintain or improve environmental quality, to preserve fish and wildlife habitat, to prevent degradation or loss of natural features and functions, and to minimize risks to life and property.

Goal (CQ-2): Manage the natural and built environments to achieve minimal loss of the functions and values of all drainage basins; and, where possible, enhance and restore functions, values, and features. Retain lakes, ponds, wetlands, streams, and rivers and their corridors substantially in their natural condition.

Policy CQ2-2: Comprehensively manage activities that may adversely impact surface and ground water quality or quantity.

Goal (LU-2): Protect residential neighborhoods and associated property values.

Policy LU2-1: Develop and implement regulations that protect residential development by separating incompatible uses, while encouraging uses that support such residential uses including office, commercial and other mixed-use developments that are shown to have positive cumulative impacts to the neighborhood.

Goal (LU-3): Encourage commercial and industrial development that is compatible with residential development and local community desires

Policy LU3-1: Develop and implement regulations that provide for non-residential development.

RECOMMENDATION OF ADMINISTRATION:

Staff respectfully recommends the Assembly consider adoption of this ordinance.



EPA-902-B-01-001
Revised June 2005
Region 2

Best Management Practices for Lead at Outdoor Shooting Ranges



For additional copies of this manual, please contact:

United States Environmental Protection Agency
Division of Enforcement and Compliance Assistance
RCRA Compliance Branch
290 Broadway, 22nd Fl.
New York, New York 10007-1866

Tel: 212-637-4145

Fax: 212-637-4949

Copies of this manual along with any additions or updates can also be obtained on-line at:
<http://www.epa.gov/region2/waste/leadshot>

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Fourth Printing, June 2005

Best Management Practices for Lead at Outdoor Shooting Ranges

Notice

This manual is intended to provide useful general information to shooting range owners/operators. The United States Environmental Protection Agency (EPA) does not certify or approve ranges, range design or lead management practices. While every effort has been made to provide up-to-date technical information, this manual is not to be used as a substitute for consultation with scientists, engineers, attorneys, and other appropriate professionals who should be called upon to make specific recommendations for individual range design and lead management.

Any variation between applicable regulations and the summaries contained in this guidance document are unintentional, and, in the case of such variations, the requirements of the regulations govern.

This guidance was developed by EPA Region 2 in cooperation with a few states as well as many EPA offices. In addition, EPA, with the assistance of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) provided all 50 states with an opportunity to review the RCRA regulatory portion of the guidance. At the time of printing, about 40 states had contacted the EPA and given their support and concurrence. EPA is continuing to get the agreement of the remaining states. Therefore, it appears that most, if not all, states will share the same view as to how lead shot is regulated.

Following the steps set forth in this guidance should result in compliance with applicable regulations. EPA does not make any guarantee or assume any liability with respect to the use of any information or recommendations contained in this document.

This guidance does not constitute rulemaking by the EPA and may not be relied on to create a substantive or procedural right or benefit enforceable, at law or in equity, by any person.

Acknowledgements

The USEPA would like to acknowledge the support of:

- The National Rifle Association of America
- The National Shooting Sports Foundation
- The Wildlife Management Institute
- Mark Begley of the Massachusetts Department of Environmental Protection
- Mr. Dick Peddicord of Dick Peddicord and Company, Inc.

These participants provided valuable information and assistance as peer reviewers in the development of the manual and their efforts are truly appreciated. EPA also wishes to give special thanks to Dr. Charles W. Sever of Okie Environmental Consulting, L.L.C., Inc., Mr. Mike Warminsky of Brice Environmental Services Corp., and Mr. Victor Ordija of Sporting Goods Properties. The EPA also wishes to acknowledge and thank the many others who provided important comments and insight, and especially those individuals who took the time to meet with us in person or on the phone.

Cover photo by: Mr. Jack Hoyt, EPA Region 2

Statement of Goals

The goals of this manual are:

- to inform shooting ranges :
 - that the United States Environmental Protection Agency's (EPA) purpose in developing and distributing this manual is to assist range owners and operators to operate in an environmentally protective manner.

- to promote an understanding of:
 - why lead is an environmental, public and regulatory concern,
 - what laws and regulations apply,
 - the benefits of applying good management practices,
 - what can be done to successfully manage lead,
 - why implementing lead best management practices is an integral part of environmental stewardship,
 - how to minimize litigation risk.

- to promote action by ranges to:
 - adopt and implement best management practices for managing lead,
 - recycle a finite natural resource,
 - become a model for other ranges through proper lead management,
 - advocate environmental stewardship.

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BMP for Lead at Outdoor Shooting Ranges

EPA Statement on National Guidance



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 10 2001

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: National Guidance on Best Management Practices for Lead at Outdoor Shooting Ranges

FROM: 
Elizabeth J. Cotsworth, Director
Office of Solid Waste

TO: RCRA Senior Policy Advisors

The purpose of this memo is to transmit a Region 2 document entitled "Best Management Practices for Lead at Outdoor Shooting Ranges," EPA-902-B-01-001, January 2001. This report is a technical information manual to assist range owners and operators in managing lead at shooting ranges. The report covers the environmental concerns, applicable laws and regulations, and current best management practices. This document was developed collaboratively with a number of stakeholders and is considered by my office to be the national guidance on this subject.

Background

Lead at some shooting ranges can be a significant environmental concern depending on location (e.g., proximity to wetlands) and hydrogeologic setting, as evidenced by a number of cases where lead pellets and shot have been taken in by fish and fowl at ranges over wetlands, and at some ranges where streams in acid lead-leaching environments have picked up lead contamination. Recognizing these problems, Region 2 in collaboration with EPA HQ, States, shooting range associations, and other shooting range experts, developed the enclosed technical guidance to identify the problems and solutions for preventing and controlling these problems. We commend this guidance to you as an information source for your use in working with range owners and operators to identify and address these concerns at specific ranges. Copies of this manual have been sent to all 50 States, with the help of ASTSWMO, and at least 40 States have responded with concurrence and support for this guidance.

Also enclosed for your information is a list of references "Summary of Shooting Range Lead Management Guidance" prepared by various shooting range-interested associations, and a copy of an NPDES permit for the Naperville, IL Sportsman's Park shooting range.

BMP for Lead at Outdoor Shooting Ranges

If you have any questions regarding lead at shooting ranges, please contact George Meyer (Chief, RCRA Compliance Branch, Region 2) at 212-637-4144, Meyer.George@epa.gov, or Ken Shuster in the Office of Solid Waste at 703-308-8759, shuster.kenneth@epa.gov.

It is my hope that wide distribution of these documents will help encourage greater cooperation and coordination on shooting range issues among RCRA, Superfund, and Water staff in the regions and states. To this end, it would be helpful if you would send the name of a point of contact in your region to Ken Shuster and George Meyer.

For additional copies of the Region 2 guidance, please contact George Meyer. It is also available at www.epa.gov/region2/waste/leadshot.

Enclosures

cc: George Meyer, Region 2
Elaine Davies, OERR
Michael Cook, OW
Eric Schaeffer, ORE, OECA
Craig Hooks, FFEO, OECA
Bob Byrne, Wildlife Management Institute
Barbara Simcoe, ASTSWMO
Regional Superfund Division Directors w/o Region 2 enclosure
Regional Water Division Directors w/o Region 2 enclosure
Regional RCRA Enforcement Section Chiefs w/o Region 2 enclosure

Best Management Practices for Lead at Outdoor Shooting Ranges

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BMP for Lead at Outdoor Shooting Ranges

Introduction

This manual provides owners and operators of outdoor rifle, pistol, trap, skeet and sporting clay ranges with information on lead management at their ranges. This manual serves as a reference guide and presents best management practices (BMPs) available to the shooting range community. The practices have been proven to effectively reduce or eliminate lead contamination and may also be economically beneficial to the range owner/operator. Since each range is unique in both the type of shooting activity and its environmental setting, specific solutions are not provided in this manual. Rather, a range owner or operator may use this manual to identify and select the most appropriate BMP(s) for their facility. Other information on environmental aspects of management at outdoor shooting ranges can be found in the National Shooting Sports Foundation's *Environmental Aspects of Construction and Management of Outdoor Shooting Ranges*.

The manual does not address range layout or design to meet range safety or competition requirements. For information on range safety and competition requirements, range owners/operators are directed to other comprehensive reference materials available on that subject, such as the National Rifle Association's *Range Source Book*, and the National Association of Shooting Range's website (www.rangeinfo.org).

Owners/operators of ranges may want to assign the use of this BMP Manual to a specific team or committee. Delegating this responsibility to a specific team or group helps to assure that the BMP's are identified and implemented.

The manual is organized as follows:

- Chapter I provides the background on why lead is of concern to human health and the environment. It includes a discussion of how environmental laws impact shooting ranges

and the importance of an integrated BMP program to manage lead.

- Chapter II discusses physical and operational characteristics to be considered when selecting a successful BMP program.
- Chapter III addresses best management techniques for rifle/pistol ranges, skeet and trap ranges, and sporting clay ranges. In this chapter, the manual explores possible solutions to prevent, reduce and/or remove lead contamination for each type of range.
- The Appendices provide current (as of June 2005) contacts for lead reclamation and recycling companies, vendors that provide prevention and/or remediation techniques and shooting organizations that have additional information on the lead issue. Additionally, the Appendices provide information on alternatives to lead, diagrams of bullet trap designs, summaries of regulatory requirements and interpretations, and a sample Environmental Stewardship Plan.

EPA is very interested in any suggestions you have about practices included in this manual which have proven effective in controlling lead contamination or recycling lead bullets/shot. Please send such information to the address below. Also, for additional information, or to be added to the list of lead reclaimers or remediation contractors, contact the National Rifle Association (NRA), the National Shooting Sports Foundation (NSSF) or:

Lead Shot Coordinator
RCRA Compliance Branch
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866
Telephone: (212)637-4145
E-Mail: Leadshot.Region2@epa.gov

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Chapter I: Environmental and Regulatory Concerns at the Shooting Range

1.0 Background

Outdoor shooting ranges provide recreational facilities for millions of shooting sports enthusiasts in the United States. Recently, there has been a growing public concern about the potential negative environmental and health effects of range operations. In particular, the public is concerned about potential risks associated with the historical and continued use of lead shot and bullets at outdoor ranges.

This concern is not unfounded. An estimated 9,000 non-military outdoor ranges exist in the United States, collectively shooting millions of pounds of lead annually. Some ranges have operated for as long as several generations. Historical operations at ranges involved leaving expended lead bullets and shot uncollected on ranges. Many of these ranges continue to operate in the same manner as in the past.

It is estimated that approximately four percent (4%) (80,000 tons/year) of all the lead produced in the United States in the late 1990's (about 2 million tons/year), is made into bullets and shot. Taking into account rounds used off-range, and rounds used at indoor ranges, it is clear that much of this 160,000,000 pounds of lead shot/bullets finds its way into the environment at ranges.

Since the mid-1980's, citizen groups have brought several lawsuits against range owners and have urged federal and state agencies to take action against owners and operators of outdoor shooting ranges. The citizen groups argued that range owners improperly managed discharged lead bullets and shot. Federal courts have supported parts of these suits, requiring range owners/operators to clean up lead-contaminated areas. Concurrent with the increased citizen suit activity, the federal EPA, the Centers for Disease Control and Prevention

(CDCP), and a large number of states have identified human exposure to all forms of lead as a major health concern in the United States.

Lead management practices at ranges across the United States remain inconsistent. Some range owners/operators have examined the impact of range operations on human health and the environment and have implemented procedures to manage and/or remove accumulated lead from ranges. Other range owners/operators are just beginning to characterize and investigate their ranges in order to design an environmental risk prevention and/or remediation program(s) specific to their sites. A third group of ranges has adopted a "wait and see" policy – taking no action until specifically required to do so by law or clear guidance is in place. Finally, a fourth, small, but important group of range owners/operators remain unaware of lead's potential to harm human health and the environment, and of existing federal and state laws.

To manage lead, many owners and operators have successfully implemented Best Management Practices (BMPs) at their ranges. These range owners and operators have realized many benefits from sound lead management including:

- stewardship of the environment, natural resources and wildlife,
- improved community relations,
- improved aesthetics of the range/good business practices,
- increased profitability through recovery/recycling lead, a valuable and finite resource, and
- reduced public scrutiny.

Shooting sports organizations [e.g., National Rifle Association (NRA) and the National Shooting Sports Foundation (NSSF)] promote lead management throughout the United States. These organizations have researched different methods to effectively address potential and actual lead mobility and exposure without detracting from the enjoyment of the sport. The NRA, NSSF, and a number of other shooting sports organizations strongly encourage range

BMP for Lead at Outdoor Shooting Ranges

owners/operators to develop a BMP program that contains elements discussed later in this manual. Contact the NRA and NSSF for additional guidance materials available on lead management practices.

By implementing appropriate lead management at outdoor shooting ranges, range owners and operators can reduce the environmental and health risks associated with lead deposition, meet legal requirements and realize quantifiable benefits.

1.1 Lead Contamination’s Impact on Human Health and the Environment

Exposure Routes

Historically, the three major sources for human exposure to lead are lead-based paint, lead in dust and soil and lead in drinking water. Typically, human exposure occurs through ingestion, which is the consumption of lead or lead-contaminated materials, or by inhalation. The main human exposure to lead associated with shooting ranges is through lead-contaminated soil. However, other pathways are discussed below, along with lead’s detrimental effects on humans and animals.

Lead can be introduced into the environment at shooting ranges in one or more of the following ways. Each of these pathways is site-specific and may or may not occur at each individual range:

- Lead oxidizes when exposed to air and dissolves when exposed to acidic water or soil.
- Lead bullets, bullet particles, or dissolved lead can be moved by storm water runoff.
- Dissolved lead can migrate through soils to groundwater.

Lead oxidizes when exposed to air and dissolves when exposed to acidic water or soil

When lead is exposed to acidic water and/or

soil, it breaks down by weathering into lead oxides, carbonates, and other soluble compounds. With each rainfall, these compounds may be dissolved, and the lead may move in solution in the storm runoff waters. Decreases in water acidity (i.e., increases in its pH) will cause dissolved lead to precipitate out of solution. Lead concentrations in solution are reduced by this precipitation. At pHs above 7.5, very little lead remains in solution. Increased time of contact between lead and acidic water generally results in an increase in the amount of dissolved lead in the storm runoff water. The five factors which most influence the dissolving of lead in water are summarized below:

Annual Precipitation Rate - The higher the annual precipitation rate, the faster the lead weathers. Also, during prolonged rains, the contact time between water and lead is increased. In general, the higher the precipitation rate, the higher the potential risk of lead migration off-site in solution.

pH of Rain and Surface Water - The acidity of the rainwater decreases as basic (alkaline) minerals in the soil are dissolved. If sufficient minerals such as calcium, magnesium, and iron are present in local soils, then the lead may quickly precipitate out of solution entirely as these other minerals are dissolved. The pH of shallow surface water is an indicator of the presence or absence of basic minerals in the local soil and in gravel within the stream beds through which the water has moved. The water in deeper streams and lakes is more likely to be composed of acidic rainwater that is not neutralized.

Contact Time - The contact time between acidic surface water and lead is a factor in the amount of lead that is dissolved. For example, lead shot deposited directly into a lake has a longer contact time than lead shot deposited in upland areas.

Soil Cover - Organic material will absorb lead and remove it from a water solution. The thicker the organic leaf and peat cover on the soil, the lower the lead content in solution in water leaving the shot area. Organic material has a strong

 BMP for Lead at Outdoor Shooting Ranges

ability to extract lead out of solution in water.

pH of Groundwater - During periods of no rainfall, the water flowing within most streams comes from groundwater discharging into the stream channel. Therefore, the acidity of the groundwater affects the acidity of the surface water, and hence, affects the solubility of any lead particles carried into the stream during storm runoff.

Lead bullets, bullet particles or dissolved lead can be moved by storm water runoff

The ability of water to transport lead is influenced by two factors: velocity of the water and weight or size of the lead fragment. Water's capacity to carry small particles is proportional to the square of the water's velocity. Clear water moving at a velocity of 100 feet per minute can carry a lead particle 10,000 times heavier than water moving at a velocity of 10 feet per minute. Muddy water can carry even larger particles. The five factors that most influence velocity of runoff are described below:

Rainfall Intensity - The greater the volume of rainfall during a short period of time, the faster the velocity created to carry the rainfall off-site. The higher the annual rainfall, the greater the number of periods of heavy rainfall.

Topographic Slope - Generally, the steeper the topographic slope, the faster the velocity of stormwater runoff.

Soil Type - More rainfall will soak into sandy soils than into clay soils. Hence, for a given rainfall intensity, the volume of runoff will be greater from areas underlain by clays or other low permeable soils than from permeable sandy soil.

Velocity - Velocity tends to decrease as stream width increases. Merging streams, eddy currents, and curves in streams are other factors that may reduce the velocity. Generally, the shorter the distance from the lead deposit to the property line, the more likely it is that the lead fragments in suspension will be transported off-site.

Vegetative Cover and Man-made Structures - Structures such as dams and dikes reduce the water's velocity and greatly reduce the size and weight of the lead particles the water can carry. Since lead particles are heavy compared to the other suspended particles of similar size, they are more likely to be deposited under the influence of anything that reduces velocity of the storm runoff. Grass and other vegetation reduce runoff velocity and act as a filter to remove suspended solids from the water.

Dissolved lead can migrate through soils to groundwater

Acidic rainwater may dissolve weathered lead compounds. A portion of the lead may be transported in solution in groundwater beneath land surfaces. Groundwater may transport lead in solution from the higher topographic areas to the lower areas such as valleys, where it is discharged and becomes part of the surface water flow. If the water flowing underground passes through rocks containing calcium, magnesium, iron, or other minerals more soluble than lead, or through minerals that raise the pH of the water, then the lead in solution may be replaced (removed) from the solution by these other metals. However, if the soil is a clean silica sand and gravel, fractured granite, or similar type material, then the lead may move long distances in solution. The factors most likely to affect the amount of lead carried by the groundwater in solution are discussed below:

Annual Precipitation - Generally, high precipitation rates result in heavy dew, more frequent rainfall, numerous streams, shallow depth to groundwater, shorter distance of travel, and more rapid rates of groundwater flow. Also, the greater volumes of rainfall over geologic time probably have reduced the amount of calcium and other soluble basic minerals that could raise the water pH and cause lead to precipitate (settle) out of solution from the groundwater.

Soil Types - Clays have a high ionic lead bonding capacity and more surface area to which the lead can bond. Also, groundwater movement in clay is very slow, which increases the contact time for lead to bond to the clay.

BMP for Lead at Outdoor Shooting Ranges

Low permeability reduces the amount of historical leaching and increases the probability of the presence of basic (pH-increasing) minerals that can precipitate out of solution in groundwater or cause the lead to bond to the clay. All of the basic calcium and related minerals generally will have been removed from the clean silica sand and gravel soils, so the lead in solution in groundwater in these type soils can move long distances (miles) through the ground relatively unchanged.

Soil Chemistry - The more basic minerals like calcium and magnesium that are present in soils along the pathways through which the groundwater moves, the greater the lead precipitation (removal) rate. Lead should move in solution only a short distance (a few feet) through a sand composed of calcium shell fragments, but could move in solution long distances (miles) through clean quartz sand.

Depth to Groundwater - In areas of groundwater discharge such as river flood plains and most flat areas, the groundwater surface is often a few feet below the surface. Remember, the shorter the distance traveled, the greater the risk that the lead will migrate into the environment. Shallow depth to groundwater is indicative of higher risk for lead to reach the water.

pH of Groundwater - Although other factors influence solubility of lead in water, a good rule of thumb is that lead will precipitate out of solution when the pH or alkalinity of water is greater than about 7.5. But, lead dissolved in acid groundwater may travel many miles without change.

Health Effects of Lead Exposure on Ranges

Lead poisoning is a serious health risk. At higher concentrations, it is dangerous to people of all ages, leading to convulsions, coma and even death. At even very low concentrations, it is dangerous to infants and young children, damaging the developing brain and resulting in both learning and behavioral problems. Figure 1-1 describes the effects of exposure to lead on children and adults.

Federal, state and local actions, including bans on lead in gasoline, paint, solder and many other lead-containing products, have resulted in significant reductions in average blood-lead levels. Despite these advances, the number of lead-poisoned children remains alarmingly high. Children living in older homes may be exposed to lead in peeling paint or paint dust. Children can also come in contact with lead in soil and with lead dust carried home on the clothing of parents.

On ranges, inhalation is one pathway for lead exposure since shooters are exposed to lead dust during the firing of their guns. Because wind is unlikely to move heavy lead particles very far, airborne dust is generally considered a potential threat only when there are significant structures that block air flow on the firing line. Under such conditions, the hygiene and other practices proposed by the NRA for indoor shooting ranges in their "Source Book" are applicable to outdoor ranges.

Range workers may also be exposed to lead dust while performing routine maintenance operations, such as raking or cleaning out bullet traps. Owners/operators may want to protect these workers by requiring them to wear the proper protective equipment or dampening the soil prior to work.

Another exposure route for lead at outdoor ranges is ingestion by direct contact with lead or lead particles. For example, lead particles generated by the discharge of a firearm can collect on the hands of a shooter. These particles can be ingested if a shooter eats or smokes prior to washing his/her hands after shooting. **The relative risk of lead exposure to people in a well managed facility is low.**

Detrimental effects due to elevated lead levels can also be found in animals. Excessive exposure to lead, primarily from ingestion, can cause increased mortality rates in cattle, sheep and waterfowl. For example, waterfowl and other birds can ingest the shot, mistaking it for food or grit. Waterfowl, in particular, are highly susceptible to lead ingestion. This is a concern at ranges where shooting occurs into or over

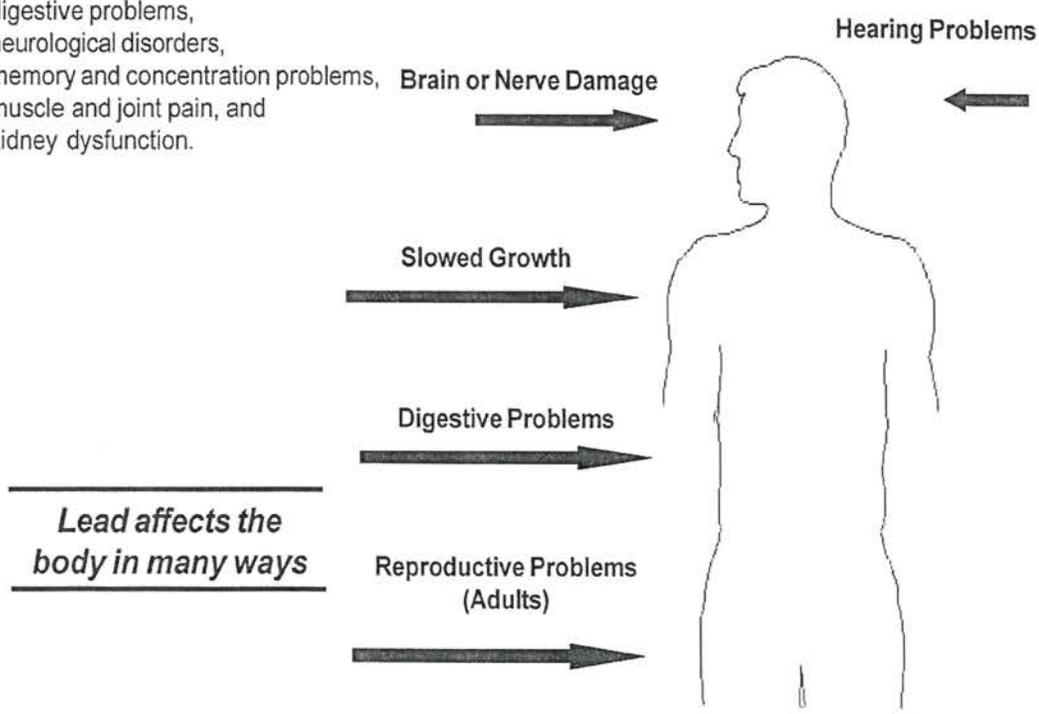
Effects on the Human Body from Excessive Exposure to Lead

If not detected early, **children** with relatively low levels of lead (as low as 10 microgram/deciliter for children) in their bodies can suffer from:

- damage to the brain and nervous system,
- behavior and learning problems (such as hyperactivity and aggressiveness),
- slowed growth,
- hearing problems,
- headaches, and
- impairment of vision and motor skills.

Adults can suffer from:

- difficulties during pregnancy,
- reproductive problems in both men and women (such as low birth weight, birth defects and decreased fertility),
- high blood pressure,
- digestive problems,
- neurological disorders,
- memory and concentration problems,
- muscle and joint pain, and
- kidney dysfunction.



Lead affects the body in many ways

Figure 1-1: Effects on the Human Body from Excessive Exposure to Lead

BMP for Lead at Outdoor Shooting Ranges

water. Many of the legal and government actions that have been brought against ranges are based on elevated levels of lead and increased mortality in waterfowl. For example, in one case, an upland area of a range became a temporary pond after a thunderstorm. Waterfowl used the pond to feed and shortly thereafter, there was a waterfowl die-off (increase in bird mortality), apparently from lead ingestion.

1.2 Legal Requirements & Court Rulings

To date, most litigation concerns have been at shotgun ranges where the shotfall zone impacts water or wetland areas. The potential environmental and human health risks are greater at these ranges. However, all ranges, including those not located near water bodies, may be subject to legal and government action if proper range management programs are not implemented. Range owners/operators should expect greater scrutiny as ranges become more visible to regulators, environmental groups and the general public.

Citizen groups have been the driving force behind most legal actions taken against outdoor ranges. These groups have sued range owners/operators under federal environmental laws. Two of EPA's most comprehensive environmental laws, the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA), specifically provide citizens with the right to sue in cases in which the environment and human health are threatened. These citizen suits have been highly effective in changing the way ranges operate, even when out-of-court settlements have been reached. The decisions of the United States Court of Appeals for the Second Circuit in *Remington Arms* and *New York Athletic Club* set a legal precedent in the application of RCRA and/or the CWA to outdoor ranges. Lead management programs at outdoor ranges must comply with both laws. Actions have also been taken under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund. State and local statutes and regulations may also apply. To ensure environmental laws are being followed, range owners/operators must

understand the legal issues and requirements.

1.2.1 Resource Conservation and Recovery Act (RCRA)

RCRA provides the framework for the nation's solid and hazardous waste management program. Under RCRA, EPA developed a "cradle-to-grave" system to ensure the protection of human health and the environment when generating, transporting, storing, treating and disposing of hazardous waste. RCRA potentially applies to many phases of range operation because lead bullets/shot, if abandoned, may be a solid and/or a hazardous waste and may present an actual or potential imminent and substantial endangerment.

Connecticut Coastal Fishermen's Association v. Remington Arms Company, et al.

In the late 1980s, the Connecticut Coastal Fishermen's Association filed a lawsuit against Remington Arms Company as the owner of the Lordship Gun Club. The Lordship Gun Club (a.k.a. Remington Gun Club) is a 30-acre site in Stratford, Connecticut, located on the Long Island Sound at the mouth of the Housatonic River. In the mid-1960s, the Lordship Gun Club was reconstructed to its final configuration of 12 combined trap and skeet fields and one additional trap field. Over the years, the Lordship Gun Club became known as one of the premier shooting facilities on the East Coast.

The Connecticut Coastal Fishermen's Association filed a lawsuit, alleging that lead shot and clay targets are hazardous waste under RCRA. The Complaint alleged that because the lead shot and clay targets were hazardous wastes, the gun club was a hazardous waste storage and disposal facility subject to RCRA requirements. The plaintiff also sought civil penalties and attorney's fees.

Remington moved for a summary judgment dismissing the complaint, and the Connecticut Coastal Fisherman's Association cross-moved for a partial summary judgment on the issue of liability. On September 11, 1991, the United

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States District Court for the District of Connecticut ruled on the case.

Regarding the plaintiff's claims under RCRA, the District Court ruled in favor of the Connecticut Coastal Fishermen's Association, holding that the lead shot and clay targets were "discarded materials" and were "solid waste;" therefore, the materials were subject to regulation under RCRA. The court further stated that the discharged lead shot was a "hazardous waste," but declined to rule on whether the clay target fragments were also hazardous waste. Remington petitioned the United States Court of Appeals for the Second Circuit Court to review the lower court's ruling.

On June 11, 1992, both parties presented oral arguments before the court. Subsequent to oral arguments, the appellate court requested that EPA file an amicus brief "addressing whether lead shot and clay target debris deposited on land and in the water in the normal course of trap and skeet shooting is 'discarded material'... so as to constitute 'solid waste' under RCRA."

On March 29, 1993, the United States Court of Appeals for the Second Circuit reached its decision. With respect to RCRA, the court both reversed and affirmed the lower court's opinion in part.

Briefly, the decision affects currently operating and future gun clubs, and the following key points are of primary concern:

1. With respect to RCRA, the court agreed with EPA's amicus brief, which had argued that shooting at gun clubs is not subject to regulatory (as opposed to statutory) requirements. In other words, during routine operations, gun clubs are not viewed as facilities that manage hazardous wastes subject to RCRA regulations and, as such, do not require RCRA permits.

2. Another argument in the EPA's amicus brief with which the court agreed was the view that the RCRA statute allows citizen suits to be brought if a gun club's shooting activities pose an "imminent and substantial endangerment to health or the environment." Although gun clubs

are not subject to RCRA regulations, EPA or any state, municipality, or citizen group can take legal action under the statutory provisions of RCRA against gun clubs for actual or potential environmental damage occurring during, or even after, the operation of the club. Under RCRA, the plaintiff would be eligible to recover its legal fees as well.

3. The court concluded that lead shot and clay targets meet the statutory definition of solid waste because these materials were "discarded (i.e. abandoned)" and "left to accumulate long after they have served their intended purpose." Further, the court concluded that based upon toxicity testing and evidence of lead contamination, the lead shot was a hazardous waste subject to RCRA.

The important point to consider here is that if lead shot and clay target debris are discarded (i.e. abandoned), these materials are considered a solid waste as defined in the statute and the facility may be subject to governmental or citizen suits.

If, on the other hand, the discharged lead shot is recovered or reclaimed on a regular basis, no statutory solid waste (or hazardous waste) would be present and imminent hazard suits would be avoided.

Thus, the Remington Arms case is an important legal precedent. Even though regulations have not been issued regarding gun club operations and environmental protection, gun clubs are still at risk of legal action under RCRA if they fail to routinely recover and reclaim lead, do not take steps to minimize lead release or migration, or if they abandon lead in berms.

Gun clubs where there is shooting into water, wetlands, rivers, creeks, and other sensitive environments have the highest degree of litigation risk. Conversely, gun clubs that have the lowest risk of environmental litigation or government action are those clubs that do not shoot into water or wetlands and which have an active program to recover lead.

The following describes how RCRA may apply to outdoor shooting ranges.

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How is Lead Shot Regulated Under RCRA?

Lead shot is not considered a hazardous waste subject to RCRA at the time it is discharged from a firearm because it is used for its intended purpose. As such, shooting lead shot (or bullets) is not regulated nor is a RCRA permit required to operate a shooting range. However, spent lead shot (or bullets), left in the environment, is subject to the broader definition of solid waste written by Congress and used in sections 7002 and 7003 of the RCRA statute.

With reference to reclaiming and recycling lead shot, the following points should serve as guidance in understanding RCRA and how it applies to your range. (A more detailed discussion of the underlying RCRA rules applicable to lead shot removal at ranges is included in Appendix D)

- **Removal contractors or reclaimers should apply standard best management practices, mentioned in this manual, to separate the lead from soil. The soil, if then placed back on the range, is exempt from RCRA. However, if the soil is to be removed off-site, then it would require testing to determine if it is a RCRA hazardous waste.**
- **Lead, if recycled or reused, is considered a scrap metal and is, therefore, excluded from RCRA.**
- **Collected lead shot and bullets are excluded from RCRA regulation, and need not have a manifest, nor does a range need to obtain a RCRA generator number (i.e., the range is not a hazardous waste “generator”), provided that the lead is recycled or re-used. The reclaimer does not need to be a RCRA transporter. However, it is recommended that ranges retain records of shipments of lead to the receiving facilities in order to demonstrate that the lead was recycled. Records should also be kept whenever the lead is reused (as in reloading.) The range should be aware that it ultimately may be responsible for the lead sent for**

reclamation. Therefore, only reputable reclaimers should be utilized.

- Lead from ranges destined for recycling may be temporarily stored on range property after separation from soil if the lead is stored in closed, sealed containers, the containers are stored in a secure location and routinely inspected by range staff, and records of inspections are maintained.
- Sections 7002 and 7003 of the RCRA statute allow EPA, states or citizens to use civil lawsuits, to compel cleanup of or other action for “solid waste” (e.g., spent lead shot) posing actual or potential imminent and substantial endangerment. Such actions can be sought whether the range is in operation or closed, and is based solely on a determination that harm is being posed or may be posed by the range to public health and/or the environment. Since the risk of lead migrating increases with time, making ranges that have not removed lead more likely candidates for government action or citizen lawsuits under RCRA Section 7002 and 7003, ranges are advised to maintain a schedule of regular lead removal.
- With time, lead in soil can become less desirable to reclaimers and smelters, thereby potentially reducing or eliminating financial returns from lead removal. Moreover, such soil may be subject to more expensive treatment to separate the lead for recycling.
- Lead removal will allow the range to: avoid contamination of the site and potential impacts to human health and the environment; reduce liability with regard to potential government agency or citizen suit action; and, possibly, benefit economically from the recycling of lead. Additional guidance on reclaiming lead is provided in other parts of this manual.
- Soil from berms and shotfall zones may be moved to another area of the range for such reasons as addressing potential environmental impacts (e.g., runoff), altering the layout to address safety concerns or allowing different types of shooting activities, or adding or removing shooting positions. However, removal of lead prior to such

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movement of soil is normal practice and highly advised because it extends the usable life of the materials and reduces the possibility of release of lead into the environment. If lead is not first removed, it will be further dispersed and will be more difficult to remove in future reclamation. Written records of all such activity should be maintained indefinitely, as they will be necessary in subsequent construction or range closure.

- This RCRA summary applies to operating and non-operating ranges, and the use of BMPs at operating ranges is highly recommended. However, because of increased risk if lead is not actively managed, such application may not preclude the need for remediation, as appropriate and/or as required by states' regulations, when a range is permanently closed, on-site lead is abandoned, or the land use changes. Introductory guidance for remediation can be found at www.epa.gov/epaoswer/osw or www.epa.gov/superfund. Look under the sections "Cleanup" or "Resources," or use the Search function.

1.2.2 - Clean Water Act

The goal of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The most common allegation against ranges by the EPA and citizen groups, is that they violate the CWA if they do not have permits that allow spent ammunition to be discharged into water. The CWA prohibits "the discharge of any pollutant by any person" into the waters of the United States without a National Pollution Discharge and Elimination System (NPDES) permit. There have been two court cases that have applied the provisions of the CWA to civilian shooting ranges. To understand how the CWA can apply to shooting ranges, a summary of the cases follows. Also see Table 1-1.

To understand the application of the CWA to outdoor ranges, one must know the definitions of key terms and how they have been applied to shooting activities. See Table 1-1.

In the *Remington Arms* and the *New York Athletic Club* lawsuits, citizen groups argued that the defendants violated the CWA by discharging pollutants from point sources into the Long Island Sound without a NPDES permit. Application of the CWA requires the violations to be ongoing. Consequently, the court in *Remington Arms* dismissed the CWA charge against the range because it had ceased operating before the lawsuit was filed.

However, in the *New York Athletic Club* case, the club was still in operation during the time of litigation, but had switched to steel shot. EPA's opinion on this case also addressed the CWA violation. EPA argued that certain trap/skeet ranges can convey pollutants, via point sources, to water in violation of the CWA if a NPDES permit is not obtained. Although some shooting organizations have disagreed with the EPA position, the United States District Court for the Southern District of New York specifically found that:

- The mechanized target throwers, the concrete shooting platforms, and the shooting range itself are considered point sources as defined by the CWA;
- Expended shot and target debris, including non-toxic shot, such as steel shot, left in water, are pollutants as defined by the CWA.

Although the New York district court's decision in the *New York Athletic Club* case is not controlling in any other district, range owners and operators of outdoor ranges that shoot over or into wetlands or other navigable waters of the United States should be aware of it. Based on the court's decision in the *New York Athletic Club* case, any range whose shot, bullets or target debris enter the "waters of the United States" could be subject to permitting requirements as well as governmental or citizen suits. "Waters of the United States" or "navigable waters of the United States" are waters of the United States, including territorial seas that include any body of water that has any connection to, or impact on, interstate waters or commerce. The waters may include lakes,

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Table 1-1: Application of Key Terms to Outdoor Ranges

Key Term	Statutory Definition	Application to <i>New York Athletic Club</i>
Discharge of a Pollutant	<p>"any <i>addition</i> of any pollutant to navigable waters from any point source" (emphasis added)</p> <p>33 U.S.C. § 1362 (12)</p>	<p>Shooting into water (including wetlands) constitutes a discharge. In the <i>New York Athletic Club</i>, the range did not dispute that its shooting operations resulted in the deposition of spent shot and other debris into the waters of the United States.</p>
Point Source	<p>"any discernible, confined, and discrete conveyance... from which pollutants are or may be discharged" into the Nation's waters.</p> <p>33 U.S.C. § 1362 (14)</p>	<p>In <i>New York Athletic Club</i>, the court found that shooting ranges act to systematically channel pollutants into regulated waters and that mechanized target throwers convey pollutants directly into water. Specifically, it stated, "A trap shooting range... is an identifiable source from which spent shot and target fragments are conveyed into navigable waters of the United States." The court also determined that the concrete shooting platforms can be seen as separate "point sources" under the CWA or as one facet of the shooting range that systematically delivers pollutants (e.g. shot and wadding) into the water.</p>
Pollutant	<p>"dredged spoil, solid waste,... munitions... discharged into water"</p> <p>33 U.S.C. § 1362 (6)</p>	<p>In <i>New York Athletic Club</i>, shot and target residue constitute a form of "solid waste" subject to regulation under the CWA as a "pollutant." Based on these determinations, the court supported EPA's contention that the ranges were discharging pollutants from a point source without a permit, in violation of the CWA.</p>

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ponds, rivers, streams, wetlands, or even guts that are frequently dry, which may not be obvious to range owners/operators. These ranges may be required to remediate contaminated sediments and soils, which could be both difficult and expensive, and to cease operations over waters and wetlands. **It is essential that these ranges change the direction of shooting, to avoid shooting over or into wetlands or other navigable waters of the United States, and initiate lead removal and recycling activities, where feasible.**

In addition, these ranges can cause a substantial impact on wildlife and wetlands, which range owners/operators may be required to restore under other federal laws (e.g., CERCLA, discussed below). Lead shot entering a water body substantially increases the potential risk of contaminating surface and groundwater which, in turn, threatens human health and the environment. Finally, as *New York Athletic Club, Remington Arms* and similar cases show, neighbors have the most leverage when range activity affects wetlands and waterways.

For ranges located away from coastal areas or whose operating areas are situated wholly over land, compliance with the CWA can be achieved by obtaining a NPDES permit for piped or¹ channeled runoff from the range into water.

Shooting ranges impacting wetland areas may be subject to other regulations found in Section 404 of the CWA. This section is the principal federal regulatory program protecting the Nation's remaining wetland resources. Any plan by range owners/operators to dredge and/or fill wetlands may require a permit and will come under close scrutiny by federal, state and local governments and citizen groups. Owners and operators must comply with the CWA for range design, redesign, construction, reclamation or remediation occurring in wetland areas.

¹ The term "land" in this instance refers specifically to terrain recognized as "non-wetland" areas.

1.2.3 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), imposes liability on past and present owners or operators of properties where a release of a hazardous substance into the environment exists. CERCLA is used to ensure that an owner/operator cleans a contaminated site or to seek reimbursement from past owners/operators or disposers (potentially responsible parties or PRPs) when a party, either the government or private party, has cleaned up the contamination. Under CERCLA, lead is considered a hazardous substance.

EPA has the authority to order a PRP to clean up a site or conduct the cleanup and recover its costs from the PRP under CERCLA. Responsible parties may be held liable for all cleanup costs, which can be substantial. Under CERCLA, shooting ranges may be liable for government costs incurred during the cleanup of ranges, natural resources damages, and health assessments and/or health effects studies. The following two examples illustrate how shooting ranges (including one operated by the federal government) can be affected by CERCLA.

Southern Lakes Trap and Skeet Club Site, Lake Geneva, Wisconsin, et al.

In 1992, the US Fish and Wildlife Service (USFWS) began an investigation to determine the cause of death of over 200 Canada geese. The geese died as a result of acute lead poisoning after ingesting lead shot, which research indicated came from the Southern Lakes Trap and Skeet Club. The USFWS, in its role as Natural Resource Trustee, took action to recover the cost of damage to the natural resources (i.e., migratory geese) under CERCLA. In addition, EPA pursued a separate action under the Agency's CERCLA response authority. The club had leased the property from the property owners to operate a shooting range. Shortly after EPA sent out the notice of potential liability to the current and former owners and

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operators of the club site, the club closed permanently.

In 1994, EPA issued an Administrative Order on Consent (AOC) against one current and one former owner of the property where the now closed Southern Lakes Trap and Skeet Club was located. The AOC required the owners to perform a site assessment, which included an evaluation of the costs to restore the wetlands. In 1998, EPA completed activities to clean up the site and restore some of the natural resources and wetlands. In a negotiated settlement, EPA recovered \$1 million of the cost of the cleanup.

Walter L. Kamb v. United States Coast Guard, et al.

In another CERCLA action, Mr. Kamb (court appointed property guardian) sued the U.S. Coast Guard, California Highway Patrol, City of Fort Bragg, and the County of Mendocino (the defendants) for recovery of cleanup costs under CERCLA. Mr. Kamb had been appointed by the Mendocino County Superior Court to sell the property on behalf of the property owners. The property was formerly used by defendants as a rifle, pistol and trap range. Soil analysis indicated the presence of lead in the form of leadshot, bullets, pellets, and dust. The court found the defendants were "responsible parties" (liable for cleanup costs) under CERCLA. No apportionment of liability was made and the final determination of each parties' pro rata share of the response cost was deferred.

This case shows that range activity need not affect a water body to trigger CERCLA liability. CERCLA is a powerful statutory authority that can greatly impact current and former range owners/operators. The statute allows for recovery of damages to natural resources, the cost of any health assessment studies and all cleanup costs. Liability may extend to past owners and operators long after a range ceases operation.

1.2.4 Additional Laws and Regulations

Shooting ranges may also be subject to state and local laws and regulations. Many states

have adopted their own environmental laws, which are based on federal laws. Specifically, these states have laws and regulations that mirror the CWA and RCRA program laws. EPA-approved state program laws must be as stringent as the federal laws and may be more stringent. Activities at shooting ranges may also be subject to local laws, ordinances and regulations addressing issues such as noise, zoning, traffic, wetlands and nuisance. Often, citizens or neighbors of outdoor shooting ranges can initiate noise nuisance claims against range owners/operators. Because many states have passed legislation protecting ranges from noise nuisance lawsuits, these may turn into claims of environmental violations under the laws discussed above due to the presence of lead and other products at ranges.

1.3 Benefits of Minimizing Lead's Environmental Impact

All ranges will benefit from proactively implementing successful BMPs. Even if range activities currently do not cause adverse public health and environmental impacts, by developing and promoting active lead management programs, ranges will benefit in the following ways:

- **Through a sound lead management program, shooting sports enthusiasts can reduce the potential of lead exposure and contamination to humans, animals and the environment.**
- **A lead management program will result in improved public relations for the range and the shooting sports.** Ranges can promote and publicize their successful BMP programs to improve their public image. Since many of the legal and governmental actions begin with or are due to citizen groups, an active lead management program may improve the public image of the range with these citizen groups.
- **The removal of spent lead from the range presents a clean, well maintained facility, which will increase customer satisfaction.**

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- **Lead is a recyclable and finite resource and can be recovered from the active portion of ranges and sold to lead reclaimers.** Frequently, reclaimers do not charge range owners/operators to recover lead from ranges, and owners and operators may receive a percentage of the profit from the sale of reclaimed lead. This factor drives recycling efforts at many ranges.
- **By reducing or eliminating a potential source of lead migration in soil, surface water and groundwater, range owners/operators may avoid costly and lengthy future remediation activities.**
- **Finally, implementing a BMP program for lead may eliminate or greatly reduce the risk of citizen lawsuits and the legal costs associated with these lawsuits.** Through management and removal practices, lead may no longer represent a threat upon which citizen lawsuits are based.

Range owners/operators may question whether the benefits of a regular and timely BMP program outweigh the efforts of implementing and maintaining a program. The questions may arise especially for ranges at which shooting activities involve waterways, since national attention has focused on ranges located adjacent to water (e.g., *Remington Arms* and the *New York Athletic Club*). However, all outdoor ranges may be subject to legal actions under RCRA and CERCLA authority. All of the benefits for adopting best management practices are available and worthwhile for every range owner and operator.

The following sections provide information that will assist the range owner or operator in implementing a BMP program for recovery and recycling of lead shots and bullets.

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Chapter II: Range Characteristics & Activities to Consider When Implementing Best Management Practices (BMP)

2.0 Background

Since each firing range site is unique, BMPs for lead must be selected to meet site-specific conditions in order to achieve maximum success. A range's physical characteristics and the operational aspects (e.g., volume of shooting, shooting patterns and operating schedules) will effect which BMPs may apply and how they will be implemented. Accordingly, whether designing a new outdoor range or operating an existing range, it is important that BMPs incorporate techniques appropriate for the range's individual characteristics.

Section 2.1 of this chapter identifies the physical characteristics that must be considered when evaluating your range. A summary of common physical characteristics at ranges is also presented in Table 2-1. These factors include:

- Range Size (primarily for shotgun ranges)
- Soil Characteristics
- Topography/Runoff Direction
- Annual Precipitation
- Ground and Surface Water
- Vegetation
- Accessibility

Section 2.2 discusses the operational aspects that must be considered. These factors include:

- Lead Volume
- Size of Shot/Bullets
- Operating Schedule
- Shooting Direction and Pattern
- Range Life Expectancy

In addition, Section 2.3 discusses issues that are specific to implementing BMPs when planning a new range.

2.1 Physical Characteristics

Physical characteristics of ranges, relative to lead management issues, are discussed below.

Range Size

Shotgun range design and type affects the ease of lead shot collection. Larger ranges typically tend to have lead shot that is dispersed over a wider area, while smaller ranges tend to concentrate lead shot in a smaller area. Reducing the area of the shotfall zone will concentrate the shot within a smaller area, allowing for easier cleanup and reclamation. BMP techniques for reducing the shotfall zone at trap and skeet ranges, as well as sporting clay ranges, are discussed in Chapter III.

Soil Characteristics

Spent lead bullets and shot are most often deposited directly on and into soil during shooting. When lead is exposed to air and water, it may oxidize and form one of several compounds. The specific compounds created, and their rate of migration, are greatly influenced by soil characteristics, such as pH and soil types. **Knowing the soil characteristics of an existing range site is a key component to developing an effective lead management plan.**

Soil pH

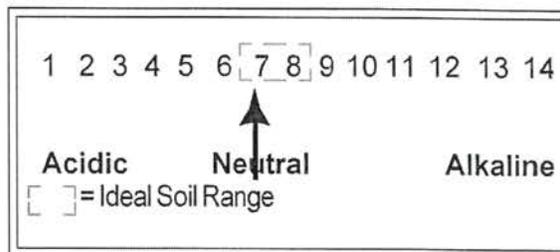


Figure 2-1 – pH scale

Soil acidity is measured as pH on a scale (illustrated as Figure 2-1) between 1 (most acidic) and 14 (most alkaline, or basic), where 7 is termed neutral. Ideal soil pH for shooting ranges is 6.5 to 8.5.¹

¹ National Shooting Sports Foundation, "Environmental Aspects of Construction and Management of Outdoor Shooting Ranges," June 1997.

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Lead reacts more readily and may become more mobile under acidic (pH < 6) or higher alkaline (pH > 8) conditions. This means that spent lead shot left in or on such soils may eventually break down and contaminate underlying soil. In moderately alkaline soils (pH 7 - 8.5), the lead precipitates out of solution and binds to the soil. This "binding" effect prevents the lead from migrating to the subsurface. In general, soils in the eastern part of the United States tend to be acidic, whereas western soils tend to be more alkaline.

Soil Physical Characteristics

The migration rate of specific lead compounds is affected by the physical characteristics of soil. For example, dense soils, consisting of heavy clays, will prevent the lead compound from moving quickly through the subsurface. Any "free" lead ions become attached to clay particles, with this bond helping to prevent migration. However, with denser soils, the amount of surface runoff increases.

Although clay soils inhibit migration, lead reclamation by contemporary removal machinery tends to be more difficult in clayey conditions. Clayey soils tend to clog the screens and "bind" with shot and bullets. This situation may require additional traditional screening, or perhaps screening using water to enhance separation.

In contrast, sandy soils or gravel may not impede migration because the open pores of these soils allow lead compounds to percolate quickly. Fortunately, lead reclamation activities are more easily conducted in sandy soils. With this in mind, ranges located in sandy soils should remove lead more frequently.

Annual Precipitation

One of the most important factors that influences lead degradation (i.e., chemical reactions) and migration is precipitation. Water, most often in the form of rain, provides the means by which lead is transported. In general, ranges located in areas with high annual/seasonal rainfall² have a higher risk of lead migration than those located in

arid regions. This is especially true of outdoor ranges using "Steel Bullet Traps."

Steel bullet traps build up a layer of lead residue; these particles are extremely small and more easily transported by rain/water. Also, the smaller the particle, the quicker it will degrade. A bullet trap needs to have a means to collect contact water, or be covered to prevent water from reaching it, and to minimize releases and degradation.

Topography/Runoff Directions

The topography of your range impacts both the ease of lead reclamation and the mobility of the lead. For example, lead reclamation is more successful at ranges where the shotfall zone is relatively flat, since many lead reclamation companies use heavy machinery that cannot operate on slopes or steep hills.

Another important characteristic is the direction in which your range topography slopes. During and after periods of rain, stormwater runoff may wash lead particles or lead compounds off the range. If there are surface water bodies such as lakes, rivers, or wetlands downgradient, the potential for lead to adversely affect the surrounding environment is even greater. Therefore, it is important to identify and control the direction of surface water runoff at your range. BMPs for modifying and controlling runoff are described in detail in Chapter III.

Groundwater

Groundwater depth should be considered when developing a lead management plan since the closer the groundwater is to the surface, the greater the potential for dissolved lead to reach it.

Vegetation

Vegetative ground covers can impact the mobility of lead and lead compounds. Vegetation absorbs rainwater, thereby reducing

² Heavy annual rainfall is anything in excess of the average annual rainfall, which for the northeast United States (e.g. New York, New Jersey) is between 40 and 45 inches.

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Table 2-1 – Common Physical Characteristics at Ranges – Potential Risks and Benefits Associated with Range Operations

Physical Characteristics	Potential Risk to Environment	Potential Benefits in Preventing/Managing Contamination
Clay, acidic soils	Acidic soils contribute to lead dissolution – increasing the potential for lead contamination – may increase run-off Difficult to reclaim lead via sifting/raking	May impede percolation of water through contaminated soil Binds "free" lead ions May benefit growth of vegetative covers
Sandy, alkaline soils	Contaminated rainwater can easily percolate through soil and groundwater Extremely alkaline soil will not support vegetation	Alkaline soils may inhibit lead dissolution Easier to reclaim lead via sifting/raking
Sandy, acidic soils	Acidic soils contribute to lead dissolution – increasing the potential for lead contamination Contaminated rainwater percolates quickly through sandy soils	Easier to reclaim lead via sifting/raking
Steep Rolling Terrain	May promote off-site drainage or drainage to on-site surface water bodies Can impede reclamation of expended shot via raking	None
Flat Terrain	Rainwater may "pond" in areas, promoting lead dissolution and contamination	Expended shot easily recovered Off-site drainage minimized
Wooded areas	May impede lead reclamation activities making equipment difficult to maneuver May provide habitat for wildlife - increasing exposure to lead	None
On-site or contiguous surface water bodies	VERY high potential for contamination when shot fall zone is located over or adjacent to water; increased wildlife exposure; increased lead dissolution. This is NOT an option for successful range location and may be more likely subject to litigation and/or governmental action if lead is deposited into water bodies	None
Vegetation	Lead may be absorbed into grasses, other wildlife food sources	Ground covers slow down surface water run-on and run-off Some vegetation can extract lead ions from the soils

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the time that the lead is in contact with water. Vegetation also slows down surface water runoff, preventing the lead from migrating off-site. However, excessively wooded areas (such as those often used for sporting clay ranges) inhibit lead reclamation by making the soils inaccessible to some large, lead-removal machinery. Understanding the type, concentration and variety of vegetation on your range is necessary for developing your lead management program and implementing BMPs at your range.

Accessibility

Accessibility to shotfall zones and backstops is extremely important for lead reclamation activities. A range that is not accessible to reclamation equipment will have difficulty implementing lead reclamation practices.

2.2 Operational Aspects

Operating practices can have a great affect on the volume and dispersion of lead at your range.

Lead Volume

Keeping records of the number of rounds fired over time at your range is important. The number of rounds fired provides a realistic estimate of the quantity of lead available for reclamation. This information helps to determine when reclamation is necessary in order to prevent accumulation of excess amounts of lead, thereby decreasing the potential for the lead to migrate off-site.

Size of Shot/Bullets

Knowledge of the size shot/bullets used on your range may be helpful. Lead reclamation companies generally use physical screening techniques to separate lead shot and bullets from soil. These screens come in a variety of sizes. Knowing what size shot/bullets have been used at your range will allow the reclaimer to maximize the yield of lead shot/bullets at your range.

Shooting Direction and Patterns

Shooting directions and patterns are important to consider when determining the effectiveness of bullet containment devices. For example, many bullet traps are effective in containing bullets fired from specific directions. It is vital that you utilize bullet containment devices that match your range's specific shooting patterns and manufacturers specifications. Understanding the shooting direction and patterns will also help to correctly identify the shotfall zone at trap and skeet ranges.

Shooting into Water Bodies

Shooting into water bodies or wetlands should not occur. Besides the environmental impacts discussed previously, the introduction of lead to surface water bodies will likely cause a range to be susceptible to litigation and/or governmental action. Shooting into water bodies or wetlands is NOT an option for ranges that want to survive in the future.

Range Life Expectancy and Closure

The life span of your range may be impacted by many factors, including financial and environmental issues, noise, and encroachment on residential areas. If your range is slated for closure, contact your local state or EPA representatives for guidance.

2.3 Planning a New Range

As discussed in the previous sections, site characteristics and operational aspects affect lead migration, degradation and reclamation activities at ranges. **If you are planning on opening a new range, you should select and/or design a site in consideration of the factors discussed in this manual.** This will allow you to minimize the potential of lead impacting your site or adjacent properties. A new range owner has the advantage of being able to design a successful lead management program in full consideration of the site characteristics and recommended BMPs. This advanced understanding of operational aspects

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and requirements will allow you to minimize the potential for lead migration prior to opening.

The most important site selection criteria to consider when selecting a new range location include: topography; surface water flow patterns; and depth to groundwater. If possible, ranges should be developed on flat terrain, as it facilitates reclamation and reduces the chance of off-site migration due to surface water runoff as compared with highly sloped terrain. When considering a prospective location for a range, ask yourself: What is the direction of surface water runoff? Does the site drain to surface water (e.g., streams, rivers) on-site? Off-site? Can the range design be modified to minimize potential runoff? Is reclamation equipment accessible to the area to clean the range?

By selecting an appropriate location and designing a lead management program in consideration of site characteristics, new shooting ranges can be developed to minimize the potential for lead contamination. Other important site characteristics can be modified. For example, a new shotgun range can be designed to concentrate the shotfall area, vegetation can be added or altered, and the most advantageous shooting direction can be selected. These modifications are BMPs, and are discussed in further detail in Chapter III.

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Chapter III: Best Management Practices (BMPs) For Outdoor Ranges

3.0 Background

To operate an outdoor range that is environmentally protective requires implementing an integrated lead management program, which incorporates a variety of appropriate BMPs. These BMPs create a four step approach to lead management:

- ▶ Step 1 - Control and contain lead bullets and bullet fragments
- ▶ Step 2 - Prevent migration of lead to the subsurface and surrounding surface water bodies
- ▶ Step 3 - Remove the lead from the range and recycle
- ▶ Step 4 - Documenting activities and keeping records

An effective lead management program requires implementing and evaluating BMPs from each of the four steps identified above and illustrated as Figure 3-1. The BMPs discussed in Sections 3.1 and 3.2 should not be considered alternatives to lead reclamation, but rather

practices that should be followed between lead reclamation events.

It is important to note that the cost and complexity of these BMPs vary significantly. **It is your range's individual characteristics that will determine which BMPs should be implemented.** The specific BMPs are described more fully below.

3.1 Bullet and Shot Containment Techniques (Step 1)

3.1.1 Bullet Containment

Knowing where spent lead is allows the appropriate BMP to be used. The single most effective BMP for managing lead in these areas is by bullet containment. Owners/operators should employ a containment system that allows for the maximum containment of lead on-site. The containment systems mentioned in this section are for reference only. Each containment design for a range is site specific. Each owner/operator must look at the various factors in determining which containment system is best for his or her range. Some factors include: overhead, cost of installation, maintenance (e.g., creation of lead dust from steel containment systems). Range owner/operators should consult with various contractors to determine which containment system is best for their range.

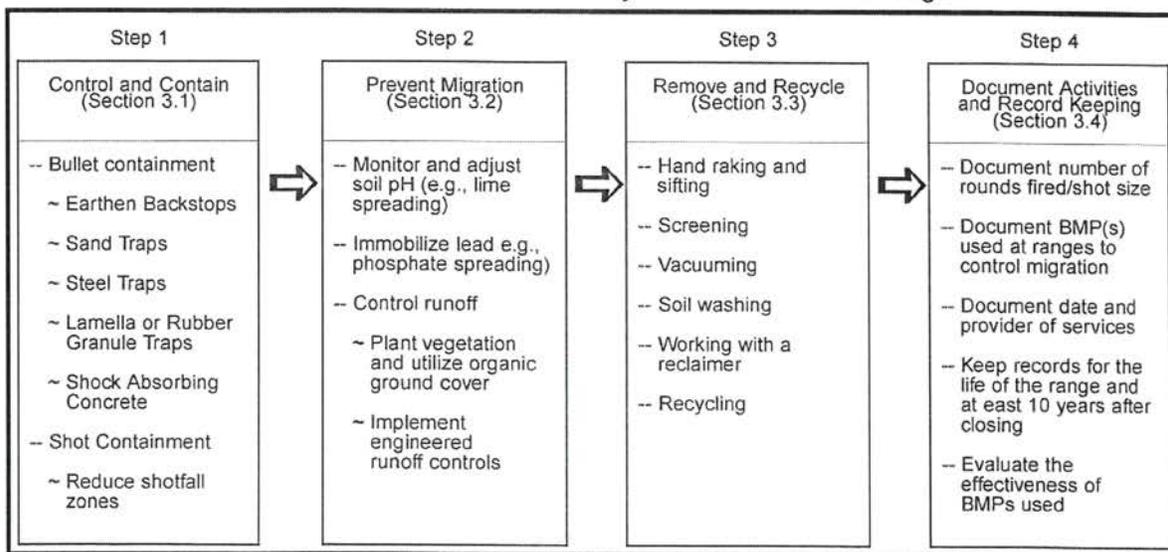


Figure 3-1 – 4 Steps to Build a Successful Lead Management Program Utilizing a Variety of BMPs

 BMP for Lead at Outdoor Shooting Ranges

This section discusses BMPs for controlling spent lead bullets and fragments in a "controlled" and well-defined area behind the target area. Containing bullets and bullet fragments is critical to successfully managing lead.

There are a variety of containment device options available that serve as BMPs to control lead. The principle behind all of them is trapping and containing the actual bullet. They include:

- ▶ Earthen Berms and Backstops
- ▶ Sand Traps
- ▶ Steel Traps
- ▶ Lamella or Rubber Granule Traps
- ▶ Shock Absorbing Concrete

For each type of trap, design variations have been developed to fit the specific needs of an individual range. Below are discussions of each general category of trap. Some bullet containment devices are so comprehensive that they virtually eliminate lead's contact with the environment.

However, it is important to discuss all types of bullet containment devices because they are part of comprehensive BMPs for managing lead at rifle and pistol ranges.

EPA does not endorse any bullet containment design as being "better" than another. Different containment designs attempt to eliminate lead's contact with the environment, however, additional BMPs may be required for lead management.

EPA recommends that you discuss your range's bullet containment needs with a variety of vendors before deciding what type of containment device to use. This manual does identify the possible advantages and disadvantages associated with each containment device in Table 3-1, at the back of this chapter.

Earthen Berms and Backstops

Perhaps the most common bullet containment system at rifle and pistol ranges is the earthen

backstop (earthen material, i.e., sand, soil, etc., which is located directly behind the targets). The earthen backstop is generally between 15 and 20 feet high with a recommended slope as steep as possible¹. In many instances, backstops may be naturally occurring hillsides. When using an earthen berm or backstop, ensure that the uppermost layer (to a depth of one to two feet) exposed to the shooting activity is free of large rocks and other debris. These materials tend to increase ricochet and bullet fragmentation, which will, in turn, make lead reclamation activities more difficult, not to mention possible safety issues.

Removal of lead from earthen backstops may require lengthy reclamation (see Section 3.3) of the soil to remove the lead. Continued use of the backstop without removing the lead may result in increased ricochet of bullets and fragments. In addition, the backstop may lose its slope integrity because of "impact pockets" that develop. Once the lead has been removed from the earthen backstop, the soil can be placed back on the range and used again. Adding lime and phosphate during the rebuilding process is recommended as appropriate (see Section 3.2). However, other bullet containment techniques, including those listed below, should be considered prior to reestablishing an earthen backstop.

Sand Traps

A variation of the earthen backstop is the sand trap. Sand traps range from those that are simply mounds of sand or soil located directly behind the bullet targets, which serve as backstops to a sand trap that employs a system designed to contain, collect and control lead and contact water. This sand trap uses a grade of sand that is ballistically acceptable. Regular maintenance must be performed to remove larger particles (bullets) from the impact area. These traps are placed so that bullets fired across the range pass through the targets and become embedded in the sand. These traps are typically 15 to 20 feet high with a slope as

1. National Rifle Association, "The NRA Range Source Book: A Guide to Planning and Construction," June 1998

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steep as possible. The most important design criterion for these traps is that the uppermost layer (to a depth of 1 to 2 feet) be free of large rocks and other debris to reduce ricochet and bullet fragmentation, and to facilitate reclamation efforts. There may also be an impermeable layer (e.g., clay or liner) under the sand to prevent lead from contacting the soil underlying the trap.

Sand traps come in various designs and levels of complexity. The sand trap may be ballistic grade sand contained in a high backstop, or a more complex "Pit and Plate" system. The Pit and Plate system uses an angled, steel deflection plate cover that helps to direct bullets and bullet fragments to the top layer of sand only. Some of the more sophisticated sand traps incorporate lead recovery devices. However, the Pit and Plate may increase the surface-to-mass ratio of the bullet splatter and, therefore, may increase environmental risk of lead migration.

Regardless of the type of sand trap that is used, the traps become saturated with bullets/bullet fragments. Once this happens, the sand must be sifted (see Section 3.3) to remove the bullets. The recovered bullets can then be sold to a lead recycler (this is discussed in more detail later in the chapter). After sifting, the sand can be returned to the trap. Continued use of the trap, without removing the lead, may result in an increased risk of ricocheting off the backstop and thus creating an increased safety hazard. Furthermore, the sand trap will become unstable over time. Sand traps may be located over an impermeable liner, to prevent lead from contacting soil underlying the trap. This will provide additional protection to soil and groundwater.

Steel Traps

Steel traps are located directly behind the targets so that expended bullets, along with bullet particles, are directed into some form of deceleration chamber. Once inside the chamber, the bullets decelerate until the bullets/bullet particles fall into collection trays at the bottom of the deceleration chamber. When the

trap is full, or on a more frequent basis, the spent lead can easily be reclaimed for recycling.

With some steel traps, expended lead bullets may not come in direct contact with soils, thereby possibly minimizing lead's contact with the environment. Consequently, the need for other BMPs (e.g., lime spreading, and/or engineering controls), such as those required at ranges with unlined earthen backstops or unlined sand traps, may be avoided if this trap design is selected for the range's bullet containment device. In addition, bullet removal is somewhat easier than from a sand trap, and may only require emptying the bucket or tray containing the bullets and/or bullet fragments. However, an increase of lead dust and fragmented lead may be an additional environmental concern. Therefore, understanding the amount of lead dust and fragments is important to a successful lead management program. Also, some steel trap designs are not intended for shooting at different angles, therefore limiting the shooter to shooting straight on (no action shooting).

As with sand traps, steel traps vary in design and complexity. For example, the Escalator Trap has an upward sloping deflection plate that directs bullets into a spiral containment area at the top. The Vertical Swirl Trap is a modular, free standing trap with four steel plates that funnel the bullets into a vertical aperture in which they spin, decelerate, and become trapped in a bullet collection container. The Wet Passive Bullet Trap is equipped with steel deflection plates that slope both upward and downward. The upwardly sloped deflection plate is covered with an oil/water mixture to help reduce the occurrence of ricochet and bullet fragmentation. The bullet follows its own path in the round deceleration chamber for bullet recycling.

Lamella and Rubber Granule Traps

The Lamella Trap uses tightly-hanging, vertical strips of rubber with a steel backing to stop bullets. This trap is located directly behind the targets and, in many cases, the targets may actually be mounted to the trap. Lead removal

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requires mining the bullets from the rubber. The Rubber Granule Trap uses shredded rubber granules, housed between a solid rubber front and a steel backing, to stop bullets once they pass through the target. For both traps, the bullets remain intact, thus eliminating lead dust and preventing lead and jacket back splatter. Depending on the design of the rubber trap, the bullet either remains embedded in the rubber strip or falls to the bottom of the trap, from which the bullets are removed for recycling.

These traps, when properly installed, are intended to increase safety by decreasing the occurrence of back splatter and eliminating the introduction of the lead dust into the air and ground. However, there are several concerns over their use, since they may:

- ▶ require additional maintenance;
- ▶ in some cases, present a fire threat under extremely high volume use (due to heat from friction created upon bullet impact);
- ▶ not withstand weather elements over the long term; and
- ▶ cause the rubber particles to melt to the lead bullets, making reclamation more difficult.

With the availability of fire-resistant rubber and gels (see Appendix A), these issues are becoming less of a concern than in earlier models.

Shock Absorbing Concrete

In addition to the bullet containment devices discussed above, there are new designs and innovations continually being developed. One of these innovative bullet containment devices is Shock Absorbing Concrete (SACON). SACON, which has been used as a bullet containment device since the 1980s and was extensively field tested by the military, has become commercially available in the past several years as a backstop material for small arms ranges. For conventional rifle and pistol ranges, SACON may provide a means to easily reclaim lead. Additionally, crushed, lead-free SACON can be recycled (recasted) after bullet fragments have been removed by adding it to other concrete mixtures for use as sidewalks, curbs, etc.

3.1.2 Shot Containment

Reducing the Shotfall Zone

Unlike rifle and pistol ranges, the area impacted by lead shot fired at trap, skeet and sporting clays ranges is spread out and remains primarily on the surface. **Knowing where spent lead is allows the appropriate BMP to be used. The single most effective BMP for managing lead in these areas is reducing shotfall zones.**

Concentrating the lead shot in a smaller area by modifying the shooting direction facilitates lead management by providing a smaller and more dense area of lead to both manage in-place and reclaim, thereby making the management and reclamation process simpler and more effective.

Sporting Clays Courses

Technologies have been developed to assist in reducing the range size of trap and skeet, and sporting clays facilities. The National Sporting Clays Association (NSCA) supports and promotes the Five-Stand Sporting Clays compact course design for shooting sporting clay targets, invented by Raymond Forman of Clay-Sport International, Cochrane, Alberta, Canada. The targets are directed over a smaller area than in English Style Sporting Clays (conventional sporting clays). It was originally designed to be overlaid on a conventional trap or skeet field and to be an alternative to earlier designs, which cover a much larger area. Another design, known as the National Rifle Association (NRA) Clays, is a portable target throwing unit which concentrates 15 rail-mounted machines on a two-story flatbed trailer. The NRA has also developed "compact sporting," which is specifically for sporting clay facilities. This practice alters the angle that the target is thrown to concentrate the shotfall zone.

Skeet Fields

The typical single skeet field has a shotfall zone that is fan-shaped. For skeet fields with multiple stands side-by-side, the shotfall zones would overlap creating a shotfall zone that has a concentration of shot near the center of the fan.

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Trap Fields

One way to reduce the shotfall zone at trap fields is to build the fields at an angle to one another. This will make the shape of the shooting dispersal pattern smaller and more concentrated. However, if you do decide to choose this option, be aware of safety issues when designing the overlapping shotfall zones.

For a range with only one trap field, one way to minimize the shotfall zone is to keep trap machines set in as few holes as possible (e.g., the number two or three hole setting). This reduces the area of lead concentration by limiting the angles for pigeon throwing, and therefore the area for lead shot fall. However, when two or more trap fields are positioned side by side, the shotfall zone will be continuous regardless of the "hole" setting.

Shot Curtains

Another method to consider for concentrating lead shot is the use of a shot curtain. This device is emerging as a potentially effective tool to keep lead shot out of selected areas of the range and, thereby, reduce the size of the shotfall zone and corresponding cost of reclamation. Different designs and material have been utilized in shot curtains and a number are in operation. The effectiveness of shot curtains is site specific and their long term viability and expense have yet to be fully determined.

3.2 BMPs to Prevent Lead Migration (Step 2)

This section discusses BMPs for preventing lead migration. These BMPs include:

- ▶ **Monitoring and adjusting soil pH**
- ▶ **Immobilizing lead**
- ▶ **Controlling runoff**

These BMPs are important for all outdoor ranges.

3.2.1 Monitoring and Adjusting Soil pH and Binding Lead

Lime Addition

The BMP for monitoring and adjusting soil pH is an important range program that can effect lead migration. Of particular concern are soils with low pH values (i.e., acidic conditions), because lead mobility increases in acidic conditions since the acid of the soils contributes to the lead break down. **The ideal soil pH value for shooting ranges is between 6.5 and 8.5.** This BMP is important because many soils in the eastern United States have pH values lower than 6.²

To determine the pH of your soil, purchase a pH meter at a lawn and garden center. The pH meters are relatively inexpensive but valuable tools in the management of lead at your range. If the soil pH is determined to be below 6, the pH should be raised by spreading lime. **It is recommended that the pH be checked annually.**

One way to control lead migration is by spreading lime around the earthen backstops, sand traps, trap and skeet shotfall zones, sporting clays courses and any other areas where the bullets/shots or lead fragments/dust accumulate. For example, lead mobilized in rainwater from the lead that spatters in front of backstops after bullet impacts can be effectively controlled by extending a limestone sand layer out about 15 feet in front of the backstop. Likewise, spreading lime over the shotfall zone will help to raise the pH of the very top soil layer to a pH closer to ideal levels and reduce the migration potential of lead. This is an easy, low cost method. Spreading lime neutralizes the acidic soils, thus minimizing the potential for the lead to degrade. Lime can be easily spread by using a lawn fertilizer drop spreader available at any lawn and garden center.

Smaller forms of limestone (powdered, pelletized, and granular) are better suited

² National Shooting Sports Foundation, "Environmental Aspects of Construction and Management of Outdoor Shooting Ranges," June 1997

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because they dissolve and enter the soil more quickly than larger forms. However, the smaller forms of lime must be replenished more often. Conversely, limestone rock dissolves more slowly but does not need to be replenished as often. The larger rock form is better suited for drainage ditches, where it can decrease lead mobility by raising the pH of the storm water runoff.

Another way to control lead migration in earthen backstops is to break the capillarity within the base of the backstop. Most porosity in the soil material used in backstop is of capillary size, and, as a result, water is pulled upward into a capillary fringe within the base of the backstop. The height to which the water will rise in an earthen backstop depends on the soil material in the backstop. Water will rise more than 6 feet in clay, 3.3 feet in silt, 1.3 feet in fine sand, 5 inches in coarse sand, and only 2 inches in gravel.

Because of capillarity, the spent bullets may be in contact with acidic rainwater for a longer period of time, hence more lead is dissolved. Breaking the capillarity by adding a layer of limestone or gravel to the base of the backstop should reduce the rate of deterioration of spent bullets, the erosion of the backstop, and the amount of lead going into solution in the water in the backstop. Also, any lead dissolved should precipitate out of solution as the acids are neutralized and the pH raised from the water passing through and reacting with the limestone.

Lime spreading is an especially important method for implementing this BMP at sporting clays ranges where heavily wooded areas are

less accessible to conventional lead removal equipment. These types of ranges also tend to have more detritus (e.g., leaves, twigs, etc.) on the ground, which can increase soil acidity as they decompose. **In these areas, semiannual monitoring of the soil pH levels is suggested.**

Spreading bags of 50 pounds (at ranges with sandy soils) or 100 pounds (at ranges with clayey soils) per 1,000 square feet of range will raise the pH approximately one pH unit for a period of between one and four years, respectively. The market price of lime in either the granular or pelletized form commonly ranges from approximately \$2.00 to \$4.00 per fifty pound bag.

Table 3-2 provides information for raising pH levels of clay soils in temperate climates (i.e., Mid-Atlantic/Northeast). Additional information on the amount of lime to apply may also be found on the bags of the purchased lime and/or from the local lawn and garden center. It should be noted that if the soil pH is below 4.5, the addition of lime may only raise the soil pH to approximately 5. In this situation, other BMPs should be used as well. If the soil pH is above the ideal range upper value (8.5), do not add lime. Adding lime to a soil of this pH could result in mobilization of the lead. Lime spreading may be done at anytime during the year, except when the ground is frozen.

Additionally, it is important to remember to monitor the soil pH annually, as the effectiveness of the lime decreases over time. Additional routine applications will be necessary throughout the life span of most ranges.

Table 3-2 – Calculating Weight of Lime to Increase Soil pH Values*

		Current pH							
		4.0	4.3	4.5	4.8	5.0	5.5	6.0	6.5
Desired pH	5.0-6.0	14	11	8	5	3	-	-	-
	6.5-8.5	-	-	-	20	17	11	7	-

* Lime requirements stated as pounds of lime/100 square foot of problem area for clay soils in temperate climates (i.e., Mid-Atlantic/Northeast US).

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Phosphate Addition

In addition to lime spreading, another way to control lead migration is phosphate spreading. This method is recommended where lead is widely dispersed in range soils, a range is closing, or there is a high potential for vertical lead transport to groundwater (e.g., low soil pH, shallow water table). Under these circumstances, range soils may benefit from phosphate treatment. Unlike lime spreading, the main purpose of phosphate spreading is not to adjust soil pH but to bind the lead particles. This process also decreases the potential amount of lead that can migrate off-site or into the subsurface. Phosphate spreading can be done either separately or in conjunction with lime spreading. Generally, 15 to 20 pounds of phosphate per 1,000 square feet will effectively control the lead.

Phosphate spreading is especially recommended for sporting clays ranges and those parts of ranges not easily accessible by reclamation equipment. Phosphate spreading should be repeated frequently during the range's lifetime. See pilot testing under "Other Ways to Bind Lead" below for proper frequency for replacing phosphate.

You can purchase phosphate either in its pure form, as phosphate rock, or as lawn fertilizer. The average lawn fertilizer costs approximately \$7.00 per 40 pound bag. If you purchase lawn fertilizer, remember to check the bag for the actual percentage of phosphate. Most fertilizers contain 25% phosphate, so that if you purchase a 40 pound bag of fertilizer that contains 25% phosphate (i.e., 10 pounds of phosphate) you will need to spread 80 pounds of fertilizer per 1,000 square feet of the backstop. A typical fertilizer drop spreader can be used for distributing the phosphate. Like lime, phosphate should not be spread when the ground is frozen. In addition, it is not advised to use phosphate near water bodies since it contributes to algal blooms. Rock phosphate is a better choice if water is nearby.

Other Ways to Bind Lead

Although it may be possible to minimize lead's mobility by spreading fertilizers that contain phosphate at impacted areas of the range, a more comprehensive procedure for immobilizing leachable lead in soils, by using pure phosphate in rock form or a ground phosphate rock [Triple Super Phosphate (TSP)], was developed and patented by the U.S. EPA/Ohio State University Research Foundation and RHEOX, Inc. This procedure used a three step approach to minimize lead's mobility. The first step was to identify the boundaries of the area of the range to be treated. This included not only determining the length and width of the range area, but also the depth of lead within the area.

Depth was determined by taking sample cores of the area, which also identified "hot spots" where lead accumulation was greatest. Once the area was identified, the second step was to treat the area with TSP. Pure phosphate rock was used rather than fertilizers, as this phosphate is insoluble in water and will not cause an increase in phosphate runoff.

In this step, pilot testing was conducted. Here, various amounts (in increasing percentages by weight) of TSP were added to the affected soil areas, then the area was tested according to an EPA test method that identified the amount of leachable lead in a given soil sample. This test is called the Toxicity Characteristic Leaching Procedure, or TCLP. Separate TCLP testing of the range's hot spots was conducted.

Upon completion of the pilot testing, which determined the amount of TSP needed at the range, the third step was to begin actual treatment of the range. Where the depth of the lead accumulation was shallow (less than two feet), then standard yard equipment, such as tillers, seed/fertilizer spreaders, and plows were used to mix TSP with the affected soil. Where the affected area's lead accumulation was deeper than two feet, an auger was required to mix the TSP with the affected soil. Random testing of the range ensured the effectiveness of the treatment level.

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3.2.2 Controlling Runoff

The BMPs for controlling soil erosion and surface water runoff are important to preventing lead from migrating off-site. There are two factors that influence the amount of lead transported off-site by surface water runoff: the amount of lead fragments left on the range and the velocity of the runoff.

The velocity of the water can successfully be controlled at outdoor ranges by: (1) using vegetative, organic, removable and/or permanent ground covers; and (2) implementing engineered controls which slow down surface water runoff and prevent or minimize the chances of lead migrating off-site. Bear in mind that safety considerations and potential ricochets need to be considered when implementing any engineered controls.

Vegetative Ground Cover

Planting vegetative ground cover (such as grass) is an important and easy erosion control method. Vegetation provides several benefits by minimizing the amount of lead that will run off the land surface during heavy rainfall. It is important to use a mixture of grass seeds to ensure that the cover will last into the future (i.e., annual rye grass lasts one year and dies and perennial rye grass lasts three to four years, then dies off). Fescue grasses form useful mats that are effective in controlling erosion.

Ground cover absorbs rainwater, which reduces the amount of water the lead is in contact with, as well as the time that the lead is in contact with the water. Furthermore, the ground cover will divert and slow down surface water runoff, thus helping to prevent lead from migrating off-site.

Grasses yield the greatest benefit at rifle and pistol ranges where the bullet impact areas are sloped, and water runoff and soil erosion may be more likely. Specific recommendations are to:

- ▶ Utilize quick growing turf grass (such as fescue and rye grass) for the grass covering

of backstops, which can be removed prior to reclamation and replanted thereafter;

- ▶ Avoid vegetation that attracts birds and other wildlife to prevent potential ingestion of lead by wildlife; and
- ▶ Use grass to direct surface water drainage away from the target area (e.g., planting them at the top of the backstop or sand trap). This will minimize the water's contact with lead bullet fragments, minimizing the potential for lead migration.

Grass is not impermeable; however, it does slow down the rate of flow and reduce the amount of lead entering the soil via rainwater. Remember, grass requires periodic maintenance (i.e., mowing) to maintain its effectiveness as well as for aesthetic reasons.

Mulches and Compost

Mulches and composts can reduce the amount of water that comes in contact with the lead fragments. In addition, mulches and compost contain humic acid, which is a natural lead chelating agent that actually sorbs lead out of solution and reduces its mobility. At a minimum, the material should be two inches thick. These materials can be spread over any impacted area and/or low lying areas where runoff and lead may accumulate. Like vegetative covers, organic surface covers are not impermeable. In addition, the organic material needs periodic replacement to maintain effectiveness and aesthetic integrity. Furthermore, these materials should be removed prior to any lead removal event, as they may impede sifting or screening. **Note that these materials tend to be acidic (especially during decomposition), so, if low pH is a concern at your range, this option may not be appropriate. Again, however, lime may be used to control pH (see Section 3.1.1)**

Surface Covers

Removable Surface Covers

Removable surface covers may be effective at outdoor trap and skeet ranges. In this case, impermeable materials (e.g., plastic liners) are

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placed over the shotfall zone during non-use periods. This provides the range with two benefits during periods of rainfall: (1) the shotfall zone is protected from erosion; and (2) the spent lead shot is contained in the shotfall zone and does not come in contact with rainwater.

Permanent Surface Covers

For outdoor rifle and pistol ranges, impact backstops and target areas can also be covered with roofed covers or other permanent covers to prevent rainwater from contacting berms. However, this method may be less desirable because of the cost to install the roof, which must be carefully designed to avoid safety issues with ricochets, etc.

For shotgun and other ranges, synthetic liners (e.g., asphalt, AstroTurf™, rubber, other synthetic liners) can also be used beneath the shotfall zone to effectively prevent rainwater or runoff from filtering through lead and lead contaminated soil. Synthetic liners will generate increased runoff, which must be managed, however. No single type of liner is suitable for all situations based on site characteristics. Therefore, liners must be chosen on a site-specific basis, bearing in mind the site's unique characteristics, such as soil type, pH level, rainfall intensity, organic content of soil, and surface water drainage patterns.

Engineered Runoff Controls

Runoff control may be of greatest concern when a range is located in an area of heavy annual rainfall because of an increased risk of lead migration due to heavy rainfall events. A "hard" engineered runoff control may be needed in this situation. A heavy rainfall event is defined as rainfall that occurs at such a rate that it cannot be absorbed into the ground and causes an increase in the volume and velocity of surface runoff. The impacts of rainfall are greater in rolling or sloped terrain (increases velocity of runoff) or where surface water bodies are located on, or immediately adjacent to, the range.

Examples of "hard" controls include:

- ▶ Filter beds
- ▶ Containment Traps and Detention Ponds
- ▶ Dams and Dikes
- ▶ Ground Contouring.

Designing and implementing these "hard" engineering controls may require the assistance of a licensed professional civil engineer. They are included in this manual to offer the reader a general understanding of these BMP options. However, this manual does not offer specific instructions for construction and operation of these controls. For information about designing and implementing any of these controls, or assistance with other range design questions, contact a licensed professional civil engineer having applicable experience or the NRA Range Department, at (800) 672-3888, ext. 1417. The National Sports Shooting Foundation (NSSF) may be contacted at (203) 426-1320 for specific references regarding the use and design of these controls.

Filter Beds

Filter beds are engineering controls built into an outdoor range to collect and filter surface water runoff from the target range. The collected runoff water is routed to a filtering system, which screens out larger lead particles, raises the pH of the water (thus reducing the potential for further lead dissolution), and drains the water from the range area. This technique may not completely prevent lead from entering the subsurface, since lead bullets, fragments and large particles may still remain on the range.

Filter beds should be established at the base of the backstop (see Figure 3-2). In addition to mitigating off-site migration, the filter beds work to raise the pH of the rainwater, which has fallen on the target range, to reduce lead dissolution, and to strain small lead particles out of the rainwater. The filters typically consist of two layers: a fine-grained sand bed underlain by limestone gravel or other neutralization material. By design, the backstops and berms direct the runoff so that it drains from the range to the filters. The collected water then soaks through the top sand layer into the neutralization material,

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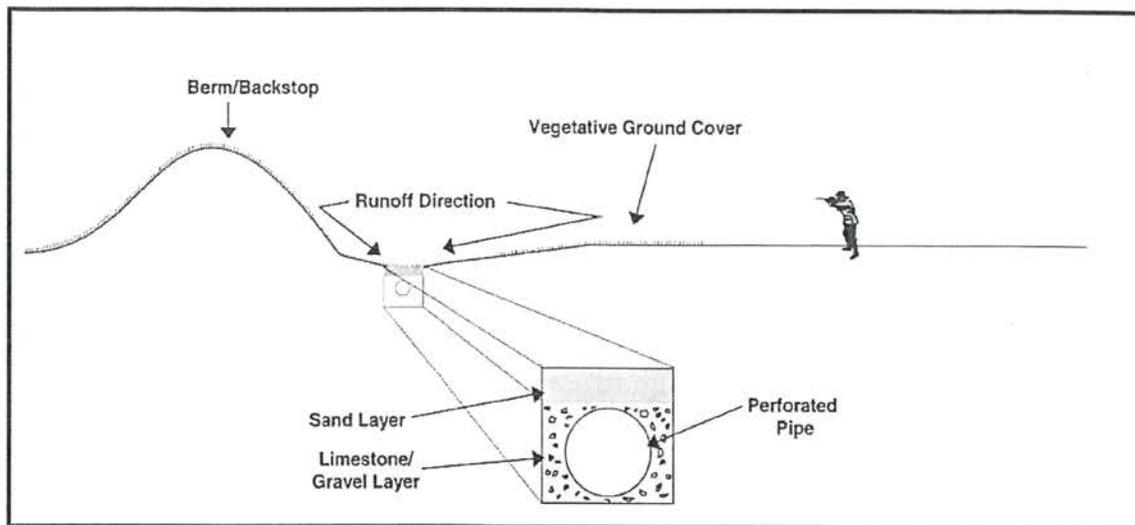


Figure 3-2 – Sample Filter Bed System (Adapted from Proceedings for National Shooting, Range Symposium, October 17-19, 1993, North American Hunting Club and Wildlife Forever)

which raises the pH of the filtrate. The lead particles in the rainwater are collected on the sand, while the pH-adjusted water drains through the filter to a perforated drainage pipe located within the limestone gravel.

of containment traps and ponds by further reducing the velocity of runoff and allowing for more lead fragments to settle from the runoff. It is important to regularly collect the lead and send this lead to a recycler.

Filter beds are designed to capture fine particles of lead transported in surface water runoff. They are not designed to capture bullets. The operation and maintenance requirements of filter beds are minimal. Maintenance activity is limited to periodic removal of debris (such as litter, leaves, etc.) and occasional replenishment of the limestone.

Dams and Dikes

At shotgun ranges, dams and dikes can also be used to reduce the velocity of surface water runoff. Dams and dikes must be positioned perpendicular to the direction of runoff to slow the flow of surface water runoff. To accomplish this, determine the direction of the range's surface water runoff. This will be particularly obvious at ranges with sloped terrain. The dams or dikes should be constructed using mounds of dirt that are approximately a foot high. These mounds should transect the entire range perpendicular to the stormwater runoff direction.

The use of filter beds is most effective on sites with open, rolling terrain where surface water runoff is directed to them. At existing rifle and pistol ranges, a limited system of trenches and filters can be installed at the base of natural soil backstops or at natural drainage depressions.

Containment Traps and Detention Ponds

Containment traps and detention ponds are designed to settle out lead particles during heavy rainfall. Typically, they are depressions or holes in the range's drainage paths. Here, the lead-containing runoff passes through the trap or pond, allowing the lead bullet fragments to settle out. Vegetative cover can be placed in the drainage path to increase the effectiveness

These runoff controls are most important at ranges at which off-site runoff is a potential problem, such as ranges where the lead accumulation areas are located upgradient of a surface water body or an adjacent property. Since lead particles are heavier than most other suspended particles, slowing the velocity of surface water runoff can reduce the amount of lead transported in runoff.

BMP for Lead at Outdoor Shooting Ranges

Ground Contouring

Another mechanism to slow runoff and prevent lead from being transported off site is ground contouring. By altering drainage patterns, the velocity of the runoff can be reduced. Furthermore, in areas where pH is high (resulting in a lower potential for lead dissolution), the soil can be graded or aerated to increase the infiltration rate of precipitation, so that rainwater is more easily absorbed into the soil. This slows down or prevents surface water runoff and off-site migration. It should be pointed out that this design, in effect, collects lead in the surface soils. Therefore, range operation and maintenance plans should include lead reclamation as well as adjusting the pH, and adding phosphate.

reclamation program will allow you to avoid expensive remediation and potential litigation costs. Ranges in regions with high precipitation and/or with acidic soil conditions may require more frequent lead recovery since the potential for lead migration is greater. In regions with little precipitation and/or where the soil is somewhat alkaline, spent bullets may be allowed to accumulate on the soil for a longer time between reclamation events. It should be noted that to ensure that lead is not considered “discarded” or “abandoned” on your range within the meaning of the RCRA statute (i.e., a hazardous waste), periodic lead removal activities should be planned for and conducted. This typically requires one or more of the following:

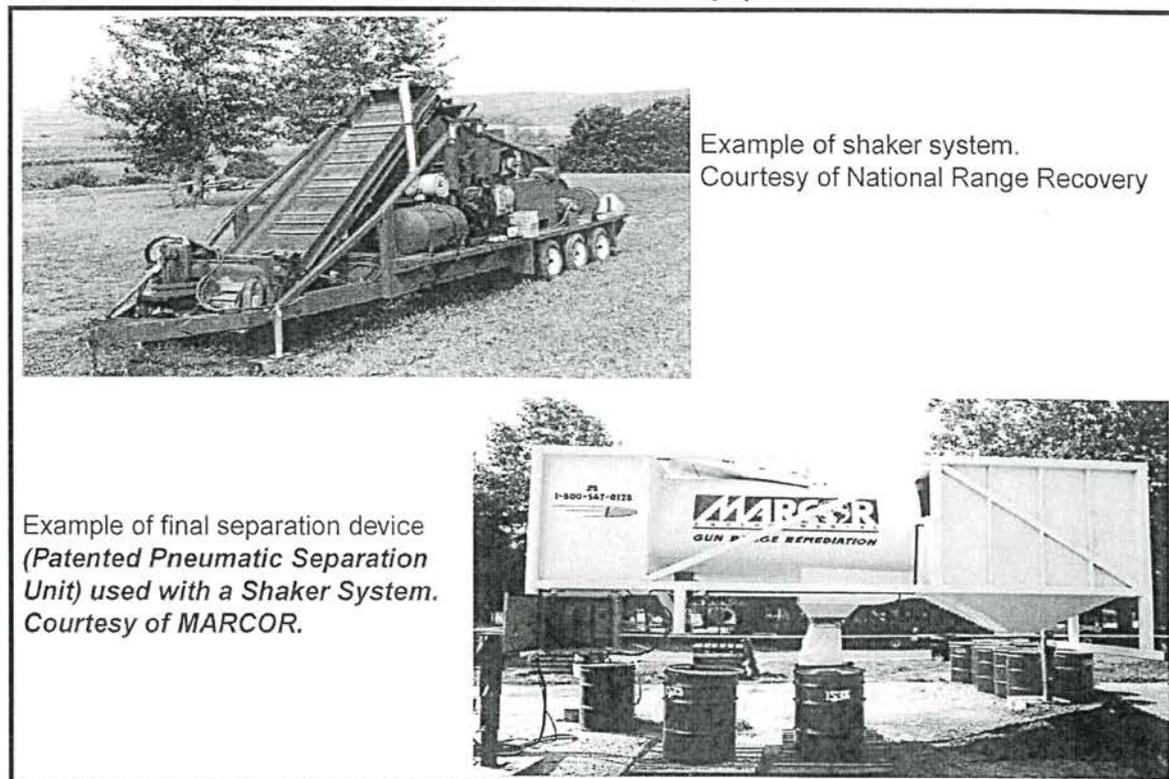
3.3 Lead Removal and Recycling (Step 3)

- ▶ Hand Raking and Sifting
- ▶ Screening
- ▶ Vacuuming
- ▶ Soil Washing (Wet Screening, Gravity Separation, Pneumatic Separation)

To successfully minimize lead migration, the most important BMP for lead management is lead reclamation. Implementing a regular

These methods are discussed in detail below. Figure 3-3 provides examples of common lead reclamation equipment.

Figure 3-3 – Examples of Common Lead Reclamation Equipment



Example of shaker system. Courtesy of National Range Recovery

Example of final separation device (Patented Pneumatic Separation Unit) used with a Shaker System. Courtesy of MARCOR.

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Also, it is important to be aware that state regulations may require that the material being sent for recycling have a minimum lead content in order to qualify as a scrap metal that can be shipped under a bill of lading (i.e., exempt from RCRA).

3.3.1 Hand Raking and Sifting

A simple BMP that can be done by club members, particularly at small ranges, is raking and/or sifting bullet fragments from the soil. Sifting and raking activities should be concentrated at the surface layer. This is a low-technology and low-cost management alternative for lead reclamation. Once collected, the lead must be taken to a recycler or reused. Arrangement with a recycler should be made prior to collecting any spent lead to avoid having to store the lead and avoid potential health, safety and regulatory concerns associated with storing lead.

At trap and skeet ranges, conducting sifting and raking activities in the shot fall zone (approximately 125 - 150 yards from the shooting stations) will yield the most lead. For sporting clay ranges, these activities should be conducted around tree bases, where lead shot tends to collect. Basically, the process consists of raking with a yard rake the topsoil in the shot fall areas into piles, as if you were raking leaves, removing any large debris (e.g., rocks, twigs, leaves, etc.), and then sifting the soil using screens.

Once the soil has been raked and collected, pass it through a standard 3/16 inch screen to remove the large particles. This process will allow the lead shot sized particles to pass through the screen. The sifted material (those not captured by the 3/16 inch screen) should be passed through a 5/100 inch screen to capture the lead and lead fragments. This process will also allow sand and other small sediment to pass through the screen. Screens can be purchased at many local hardware stores. The screens should be mounted on a frame for support. The frame size will vary based on the technique used by each range. For example, if

one person is holding the framed screen, it may be better to use a smaller frame (2 feet by 2 feet) whereas, if several people are holding the framed screen, it can be larger.

Raking and sifting can be performed by club members on a volunteer basis. Some clubs provide incentives, such as reduced fees, to members who assist with the lead removal process. Other clubs have hired college students during the summer. A number of small clubs have found that reloaders will volunteer to rake in exchange for collected shot. Hand sifting and raking are cost effective lead removal techniques for small ranges, or low shooting volume ranges. However, these techniques may not be appropriate for situations in which there is a large volume of lead on the range. In this instance, reclamation machinery may be more appropriate.

Note: Those conducting the hand raking and sifting reclamation at ranges should protect themselves from exposure to lead. Proper protective gear and breathing apparatus should be worn. The Occupational Safety and Health Administration (OSHA) or an appropriate health professional should be contacted to learn about proper protection.

3.3.2 Purchasing/Renting Mechanical Separation Machinery

Reclamation equipment may be rented from local equipment rental services. One type of machine that it may be possible to rent for lead shot reclamation is known as a screening machine (also referred to as a mobile shaker, gravel sizer, or potato sizer). This device uses a series of stacked vibrating screens (usually two screens) of different mesh sizes and allows the user to sift the lead shot-containing soil [gathered by hand raking, sweeping, or vacuuming (discussed above)]. The uppermost screen (approximately 3/16 inch mesh) collects larger than lead shot particles, and allows the smaller particles to pass through to the second screen. The second screen (approximately 5/100 inch mesh) captures lead shot, while allowing smaller particles to pass through to the ground. The lead shot is then conveyed to a

BMP for Lead at Outdoor Shooting Ranges

container such as a five gallon bucket. In the Northeastern United States, the typical rental cost for this equipment is between \$500 and \$4,500 a week, depending on the size shaker desired. It may be possible to get more information on rentals for this type of equipment from heavy equipment rental companies.

Another possible option is to rent a vacuum system that will collect the lead shot-containing soil from the range. Here, vacuuming takes the place of hand raking or sweeping. A vacuum machine is used to collect the lead shot-containing soil. Once collected, the lead shot-containing soil must be sifted through a screening system (either a rental screening machine, or a series of home made framed screen sets). You may be able to obtain more information about renting vacuums or vacuuming services (e.g., it may include a person to operate the machinery) from heavy equipment rental companies.

Some clubs have found that performing their own lead reclamation to be very time consuming. Part of the reason these reclamations took so long is that the soils were wet. Reclamation is much easier under dry soil conditions. For example, one club reclaimed lead from their range using equipment they modified themselves. Twenty-five tons of lead were collected but the reclamation took over two years. Another club took a year to reclaim 10 tons of lead. A more preferable option may be to hire a reclamation company.

3.3.3 Hiring a Professional Reclamation Company

Another option for lead removal is to hire a professional reclaimer. Lead reclamation companies claim to recover 75%-95% of the lead in the soils. Generally, with reclamation companies there is no minimum range size requirement for lead reclamation. Concentration of lead is more important than quantity spread over a field, especially if it is a difficult range for reclamation (e.g., hilly, rocky, a lot of clay in the soil).

Please note that reclamation companies tend to be in high demand — it may take over a year for the company to start at your club. Therefore, it is wise to plan ahead and make the call to the reclamation company as early as possible.

Some reclamation companies require a site visit to view the topography, the soil composition, and amount of lead observed on the ground. During the visit, some companies may even do a site analysis to determine whether or not it is feasible to reclaim. This analysis identifies the location of lead, the expected recovery amount, and the depth lead reaches into the soils.

3.3.4 Reclamation Activities

Using machinery to reclaim lead usually requires that the area be clear of scrub vegetation. Grass, mulch, or compost is generally removed or destroyed during the reclamation process. Some reclamation companies have no problem beginning reclamation on a grassy field. Other reclamation companies will remove grass before or during reclamation (by burning it, if allowed locally, leaving behind the lead shot), and still others require that all vegetation be removed before they arrive at the range. Some companies will re-seed the area once the reclamation is completed.

Since sporting clay ranges generally have many trees, removal of vegetation as discussed above may not directly apply to existing sporting clay ranges. At these ranges, the focus is on removing vegetative debris (i.e., fallen limbs, tree bark, etc.) prior to reclamation. This may include removing some trees to gain better access with the reclamation machinery. Of course, when designing a new sporting clay range, steps to facilitate lead reclamation should be taken into account. For example, less and more widely spaced trees will facilitate lead reclamation.

Reclamation companies use several types of machinery to reclaim lead. Some companies drive their separation machinery over the site. The lead-laden soil is picked up, processed and then returned to the ground after most of the lead

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is removed. Other companies scrape off the top several inches of soil from the ground, using a front-end loader to bring the soil/lead to stationary reclamation machines, and then return the soil to the field after reclamation. Many companies till the top two to five inches of soil and grass immediately prior to reclamation to facilitate the process (some companies may require this to be done prior to arrival on the range).

Regardless of how it is collected, the actual reclamation of the lead follows the same general pattern. Most often, it is sifted through a series of shaking screens. The lead and soil pass through shaking screens (usually at least two screens) of decreasing mesh (hole) size, with the topmost screen having the largest mesh. This part of the reclamation machinery is usually adapted from machinery used for potato or gravel sizing.

Any soil/debris automatically screened out as being too big or too small is either returned to the field or re-screened to ensure no lead is caught in the debris. This procedure is why moist, clay soils are more difficult to reclaim. The moist, clay soils can bind together into shot-sized pellets producing more "product" for the second part of the reclamation. The wet soils can also clog the screens.

For some reclamation companies, their process ends after sifting the soil and returning it to the ground. However, some companies take reclamation one step further. After screening, the resulting lead, soil, and other lead-sized particles enter a blowing system. Here the lead shot is easily separated from the soil and other debris by the blowing air. The lead is much more dense than the soil and other lead-sized debris so that it falls out first. Figure 3-3 depicts examples of actual lead reclamation machinery.

Some lead reclamation companies will perform the reclamation during club off-hours so that club activities are not interrupted. Additionally, some perform the reclamation on a field-by-field basis, to minimize any disruptions to club activities. However, others companies require the club to shut down during the reclamation.

Reclamation time varies depending on weather, site accessibility, range size, and number of personnel assigned to perform the reclamation.

Reclamation activities may generate dust, especially in drier western locations. To prevent or minimize dust from traveling off the range and causing complaints from neighbors, reclamation activities generating dust should only be conducted during periods of no wind. In addition, such activities should be completed as quickly as possible.

Vacuumping

For ranges that are located on hilly, rocky, and/or densely vegetated terrain, several reclamation companies employ a vacuum system that collects the lead shot (and soil and other detritus). The resulting mix is then placed into the reclamation machinery discussed above. This method is especially effective for sporting clay ranges where lead shot tends to pile up around tree bases.

Vacuumping has traditionally been used for removal of lead shot from trap, skeet and sporting clay ranges. Another way to apply this method involves removing the top layer of an earthen backstop or sand trap with shovels. It is then spread thinly over an impermeable material such as plywood. A vacuumping device is then used to collect the materials that are lighter than lead (e.g., sand or soil), while leaving behind the heavier materials (i.e., lead bullets/shots and fragments). The soil can then be returned to the range. This process is most efficient for dry, sandy soils without a lot of organic material. A more recent innovation is the use of a high suction vacuum. This vacuum itself does not have to be moved about, since a very long hose (up to 600 feet) is used to move in and around trees during the collection of lead shot at trap and skeet ranges.

Soil Washing (Physical and Gravity Separation)

Soil washing is a proven technology and another lead reclamation method used by some reclaimers to separate the lead particles from

 BMP for Lead at Outdoor Shooting Ranges

the soils. Soil washing is the separation of soils into its constituent particles of gravel, sand, silt and clay. Because of the much higher surface area and surface binding properties of clay, most lead contaminants tend to adhere to the clay particles.

Soil washing, therefore, attempts to generate a clean sand and gravel fraction by removing any fines adhering to the larger soil particles and, if necessary, to transfer contaminants bound to the surface of the larger particles to the smaller soil particles. Typically, the soils are first excavated from the range and then mixed into a water-based wash solution. The wet soil is then separated using either wet screening or gravity separation techniques. One benefit of this system of reclamation is that it does not require that soils be dry.

In addition, soil washing may be able to recover all or almost all lead particles through a combination of wet screen sizing and density separation. This technique is an option for remediation of a range being closed and may compare favorably from an economic standpoint with the disposal option.

Soils treated using this method have been shown to be below 5 mg/L TCLP and to have up to 99% of particulate lead removed. Treatment costs are site specific, but can range from less than \$40 per ton (1999 levels) for simple physical/gravity separation up to about \$100 per ton for processes involving leaching. Credits for recycled lead help offset the treatment cost and the cost of recycling any treatment sludges and concentrated soil fines. Water used in soil washing is from a closed loop system and should only be disposed at completion of cleanup. Experience shows the water to not be a RCRA regulated hazardous waste, therefore probably allowing disposal to a local wastewater treatment plant.

Wet Screening

With this method, particles larger and smaller than the surrounding soils are passed through a series of large-mesh to small-mesh screens. Each time the mixture passes through a screen,

the volume of the soil mixture is reduced. Large particles such as lead shot/bullets and fragments are screened out of the soil/wash mixture early in the process and can be taken off-site for recycling - allowing the soil to be placed back on-site.

Gravity Separation

This technique can be used in cases where the lead particles are the same size as surrounding soil particles. The wet soil/wash mixture is passed through equipment, which allows the more dense materials (i.e., lead materials) to settle to the bottom of unit and separate out of the soil/wash mixture.

Pneumatic Separation

Pneumatic separation (see figure 3-3) is an effective means to enhance the traditional screening results. Traditional screening cannot separate shot and bullets from other shot and bullet sized material, i.e., rocks, stones, roots, and various debris. A recycling facility considers non-lead items as "contaminants" which drastically reduces the value of the recycled lead. Pneumatic separation utilizes an air stream, and specific density analysis, to effectively separate the shot/bullets from the other shot/bullet sized material.

3.3.5 BMPs to Assist Lead Reclamation and Recycling

There are several operational activities that should be conducted throughout the year to facilitate reclamation. The following is a discussion of these activities.

Frequency of Lead Removal

It is important to perform lead removal at a frequency appropriate for your site. The frequency is dependent on several factors. These include:

- ▶ Number of rounds fired
- ▶ Soil pH
- ▶ Annual precipitation
- ▶ Soil Type
- ▶ Depth to groundwater.

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Lead quantity, as estimated by the number of rounds fired, is a factor in determining the appropriate frequency of reclamation at ranges. It also assists in determining the cost of reclamation. One reclamation company indicated that reclamation was most cost effective when it contains at least 20 pounds of lead per square foot of backstop. Another source indicated that a minimum of 100,000 rounds per firing lane should be allowed before lead reclamation occurs. This would ensure good range operation and maintenance, while minimizing the cost per quantity of lead recovered.

For shotgun ranges, tracking the number of targets thrown can help indicate when the lead shot should be reclaimed. For example, considering environmental issues, the market for scrap lead and common cleanup methods, one source indicated that when a range has thrown at least 250,000 to 1,000,000 targets, depending on the shooting area, reclamation of the lead shot is encouraged. Another reclaimer indicated that if at least two pounds of lead per square foot have accumulated on the range, reclamation is recommended.

Because the number of rounds fired is important to know, establishing record keeping procedures to monitor the number of rounds fired is recommended. This can be accomplished by maintaining logbooks and asking shooters to list the number of rounds shot and the type/size of shot/bullets they use. This should be done by lane and by stand.

There are many ranges at which lead removal has not occurred for many years. Many of these ranges are used extensively. Such ranges are especially good candidates for lead removal and recycling. Subsequent removal frequency depends on range use and environmental factors. The NRA recommends a frequency of one to five years for lead cleanup, even on ranges with minimal use⁴. One possible approach to reducing the cost of reclamation

more cost effective is for a number of ranges in the same geographical area to work together in organizing coordinated removals at their ranges. This will reduce the reclaimer travel and mobilization cost for each range.

Minimization of Vegetation

As discussed previously, vegetation is useful both for controlling the amount of runoff and erosion from the range and inhibiting lead mobility. **However, excessive or unmaintained vegetative cover can interfere with reclamation activities.** For example, large amounts of vegetation impedes the screening and sifting processes used by many reclamation companies. Therefore, prior to reclamation activities, it is best to remove, reduce, or mow excessive vegetation from the area. Once the reclamation has been conducted, quick-growing vegetation such as a rye/fescue grass mix should be replanted. This process should be repeated for each reclamation event. In addition, heavily wooded areas may inhibit lead reclamation because they are less accessible by heavy reclamation machinery. For ranges that are heavily wooded, it is recommended that you minimize the vegetation or modify the range design to allow lead reclamation equipment access to the range. Access to the impact area should be developed to facilitate reclamation. **Make sure that the pathways do not present a safety risk.**

Innovative Landscaping

Some new ranges are landscaping their ranges to include a sand track (an area the size of the shotfall zone that is only sand) located behind some aesthetically pleasing shrubs. This allows the spent shot to concentrate on the sand, making it very easy to perform reclamation because there is no interference by vegetation.

Selecting a Lead Reclaimer

In ensuring that the reclamation is conducted appropriately, selecting a reclaimer that is right for your range is extremely important. Some lead reclamation companies will travel to your range and assess the range prior to conducting

4. National Rifle Association, "Metallic "Bullets" lead Deposits on Outdoor and Indoor Firing Ranges" 1991

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lead collection activities. This assessment trip allows the reclamation company to confirm information gained during initial discussions, as well as to assist in appropriately estimating costs, time required, and the estimated volume of lead at the range. Conducting this pre-assessment also allows you to determine which reclaimer is right for your situation.

Questions Commonly asked by the Reclaimer

When you contact a reclamation company, it is likely that the reclaimer will ask several general questions. Typical questions include:

- ▶ When was the last reclamation conducted?
- ▶ How many rounds have been shot since that last reclamation?
- ▶ What is the use frequency of the range?
- ▶ What are the site characteristics and soil types?
- ▶ What type of bullet containment device is used at the range?

Answering these questions will be a lot easier if you have maintained good records, as is suggested above.

Questions to ask the reclaimer

When choosing a reclaimer be sure to ask the general questions about prior cleanups (past projects), insurance to cover company and cleanup (general liability insurance, pollution insurance, bonding, etc.), and site plans to ensure health and safety of workers and range personnel. Other questions you may want to ask the reclaimer include:

- ▶ Can the reclamation take place outside normal hours of range operation?
- ▶ What costs are involved?
- ▶ How long will the reclamation take?
- ▶ Does vegetation at the range need to be removed?

Economic Considerations

Lead removal costs may vary dramatically depending upon the type and volume of soil or sediments, topography, amount of lead, location,

and reclamation company and technique used. Because the economics vary due to many factors, this manual does not provide specific estimates. However, it is important to understand that lead reclamation will generally require an expenditure by the range, even when considering any monetary returns from selling reclaimed lead. By tracking the range use and using the criteria discussed earlier (see Frequency of Lead Removal), the reclamation costs per quantity of lead can be optimized. For long term range management, routine lead removal will help future cost avoidance by minimizing the need for costly site remediation

Some reclaimers bid the lowest flat fee with all the lead provided to the range for selling. The range owners/operators must then consider the transportation costs and recycling fee associated with sending the reclaimed shot and bullets to a recycling company. Alternatively, the reclaimer will use the economic return of lead sold for recycling, based on the volume reclaimed and the current value of lead, to reduce the total cost of reclamation and recycling. Although the value of lead varies, the scrap value of reclaimed lead typically falls between \$.06 and \$.25 per pound, **excluding transportation cost**. See the appendix for contact information regarding lead reclamation companies that specialize in lead removal at outdoor ranges.

3.4 Documenting Activities and Record Keeping (Step 4)

Documenting activities and keeping good records is of paramount importance for an effective lead management program at a range. Owners/operators should document all activities done at the range with respect to BMPs and recycling of lead. Records should be kept on when services were provided and who provided them.

Owners/operators may want to document what type of BMP(s) were implemented to control lead migration, the date of service, and who did the services. The records should be kept for the life of the range. Records may be used to show that owners/operators are doing their part to

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help prevent lead migration off-site and show that they are doing their part to be stewards of the environment.

3.5 Additional Economic Considerations

Not all BMPs need to be implemented at once. Many can be phased in over time. However, it is important to begin implementing BMPs, especially lead reclamation and recycling, as soon as possible. Implementing the most appropriate BMPs for your range requires consideration of your range characteristics and costs associated with implementing the BMPs. This manual provides a large selection of BMPs that vary in both cost and sophistication. In selecting BMPs for your range, it is important to look at all costs and all the benefits (or potential problems) associated with each BMP.

3.6 Summary of Key BMPs for Shooting Ranges

There are several BMPs that are highly recommended to be implemented, if applicable to your range. Table 3-1 identifies the advantages and disadvantages of all BMPs discussed in this chapter. This table serves as a quick reference guide for potential BMPs. Readers should refer back to the detailed discussions above for further information regarding these BMPs.

3.7 Certificate of Recognition

EPA has established a voluntary process whereby a shooting range may apply for a "Certificate of Recognition." The Certificate is intended to be awarded to ranges that have certified that they have prepared and intend to implement, or have implemented, a written Environmental Stewardship Plan that is consistent with the EPA *Best Management Practices for Lead at Outdoor Shooting Ranges* manual. To assist in this process, Appendix E contains a template for an Environmental Stewardship Plan, an electronic copy of which is available on EPA's shooting range website (<http://www.epa.gov/region2/leadshot>) in several

formats. This template, combined with information provided throughout this manual, other resources and guidance, and site-specific factors, will help in guiding the process of evaluating relevant information about your facility and determining which BMP(s) might be appropriate for your ranges. EPA's template was adapted from Appendix C of the National Shooting Sports Foundation's manual, *Environmental Aspects of Construction and Management of Outdoor Shooting Ranges* (the NSSF manual.) Accordingly, use of that template would also be acceptable for use in EPA's Certificate of Recognition program.

In order to request this certificate, a range must submit a notice to the Lead Shot Coordinator in EPA Region 2 stating that they have completed an Environmental Stewardship Plan as indicated above and are intending to implement it within six months. The certificate is intended to convey, to all that may see it, that the range has declared its intention to properly manage lead shot and bullets. However, it must be noted that a certificate is not a permit to operate and provides no additional operational approval, implied or otherwise.

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Table 3-1 – Summary of Key BMPs

BMPs for Preventing Lead Migration		
Monitoring and Adjusting pH		
BMP Option	Advantages	Disadvantages
Lime Spreading	<ol style="list-style-type: none"> 1. Easy 2. Inexpensive 3. Effective 	<ol style="list-style-type: none"> 1. Does not offer a permanent solution 2. Will not work in extremely acidic conditions
Immobilizing Lead		
BMP Option	Advantages	Disadvantages
Phosphate Spreading	<ol style="list-style-type: none"> 1. Easy 2. Inexpensive 3. Effective 	<ol style="list-style-type: none"> 1. Does not offer a permanent solution
Controlling Runoff		
BMP Option	Advantages	Disadvantages
Vegetative Ground Cover (e.g., grass, etc.)	<ol style="list-style-type: none"> 1. Easy 2. Aesthetically pleasing 3. Relatively inexpensive 4. Effectively slows and can redirect runoff 5. Some may "bioabsorb" lead 	<ol style="list-style-type: none"> 1. Requires periodic maintenance 2. Must be removed or reduced prior to reclamation 3. Excessive vegetation will interfere with reclamation
Organic Surface Cover (e.g., mulch and compost)	<ol style="list-style-type: none"> 1. Easy 2. Aesthetically pleasing 3. Relatively inexpensive 4. Effectively slows and can redirect runoff 	<ol style="list-style-type: none"> 1. Requires periodic maintenance 2. Must be removed prior to reclamation 3. May not be suitable at ranges with acidic soil conditions
Filter Beds	<ol style="list-style-type: none"> 1. Diverts and treats lead contaminated runoff 2. Low maintenance 3. Assists with range drainage 	<ol style="list-style-type: none"> 1. May require hiring a licensed engineer 2. Higher initial setup cost

BMP for Lead at Outdoor Shooting Ranges

Table 3-1 – Continued

Controlling Runoff (cont.)		
BMP Option	Advantages	Disadvantages
Water/Sediment Traps	1. Low maintenance 2. Assists with range drainage	1. May require hiring a licensed engineer 2. Higher initial setup cost
Dams and Dikes	1. Low maintenance 2. Assists with range drainage	2. Higher initial setup cost
Ground Contouring	1. Lower initial setup cost 2. Assists with range drainage	1. May require hiring a licensed engineer
Controlling and Containing Bullets		
Bullet Containment Devices		
BMP Option	Advantages	Disadvantages
Earthen Backstop	1. Minimal (if any) initial setup cost 2. Accepts firing from various guns and directions	1. Build up of bullets increases chances of ricochet and fragmentation problems 2. Lead removal requires mining 3. Potential decreased value of lead because it is less clean than lead reclaimed from other trap systems 4. Does not eliminate lead's introduction into the environment
Sand Trap	1. Low initial setup cost 2. Ease of maintenance 3. Accepts firing from various guns and directions	1. Build up of bullets increases chances of ricochet and fragmentation problems 2. Lead removal requires mining
Pit and Plate Trap (Sand)	1. Low initial setup cost 2. Simple installation 3. Lead removal and recycling requires less extensive mining	1. Lead builds up on top layer of sand causing ricochet problems 2. Increased bullet fragmentation 3. Higher level of maintenance than sand traps

¹ Much of this information was obtained from Action Target's Bullet Containment Trap Technologies video. Reference to various pros and cons of individual bullet containment devices is included in this manual for informational purposes only. The USEPA does not endorse any particular bullet containment device, design, or product.

BMP for Lead at Outdoor Shooting Ranges

Table 3-1 – Continued

Controlling and Containing Bullets (Cont.)		
Bullet Containment Devices (cont.)		
BMP Option	Advantages	Disadvantages
Escalator Trap (Steel)	<ol style="list-style-type: none"> 1. Can be used indoors and outdoors 	<ol style="list-style-type: none"> 1. Deflection plates require regular oiling. The oil used is hazardous and can easily migrate at outdoor ranges 2. Relatively high maintenance 3. Poor lead collection because the bullets may become clogged at the spiral collection area at the top of the deflection plate 4. Increased bullet fragmentation 5. May require rubber curtains to be placed in front of the trap to slow bullets 6. More noise 7. Possible creation of lead dust
Vertical Swirl (Steel)	<ol style="list-style-type: none"> 1. Can be used indoors or outdoors 2. Bullets are captured in pure form in containers, thus removal and recycling is easy 	<ol style="list-style-type: none"> 1. Does not accept shooting from all directions 2. Corners where each unit meet can cause ricochet and fragmentation problems 3. More noise 4. May create lead dust
Wet Passive Bullet Trap (Steel)	<ol style="list-style-type: none"> 1. Can be used indoors and outdoors 2. Excellent results (i.e., low ricochet, low fragmentation, ease of removal) 3. Bullets are captured in containers, thus removal and recycling is easy 	<ol style="list-style-type: none"> 1. Expensive 2. Oil and water mixture is hazardous 3. More noise
Lamella Trap	<ol style="list-style-type: none"> 1. Can be used indoors or outdoors 2. Reduction of lead dust 	<ol style="list-style-type: none"> 1. Rubber strips quickly become destroyed and must be replaced 2. Potential fire hazard 3. High maintenance 4. Scattered lead fragments mixed with rubber can migrate; lead contaminated granules are hazardous and require special handling

BMP for Lead at Outdoor Shooting Ranges

Table 3-1 – Continued

Controlling and Containing Bullets (Cont)		
Bullet Containment Devices (cont.)		
BMP Option	Advantages	Disadvantages
Rubber Granule	<ol style="list-style-type: none"> 1. Can be used indoors or outdoors 2. Reduction of lead dust 3. Minimizes fragmentation, compared with some backstops 	<ol style="list-style-type: none"> 1. Rubber strips can quickly become destroyed and must be replaced 2. Some pose potential fire hazard, although fire-retardant/resistant materials are available in some designs 3. High maintenance 4. Scattered lead fragments mixed with rubber can migrate; lead contaminated granules are hazardous and require special handling
Shock Absorbing Concrete	<ol style="list-style-type: none"> 1. Adaptable/can be formed in any shape 2. Can be used to reduce erosion in soil berms/target emplacements 3. Crushed concrete can potentially be recast after fragments removed 	<ol style="list-style-type: none"> 1. Mechanical lifting and handling equipment must be used during installation and maintenance 2. High maintenance (replacement) costs
Removal and Recycling of Lead		
Hand Raking and Sifting	<ol style="list-style-type: none"> 1. Easily done by club members 2. Inexpensive 3. Can be done outside operating hours 4. Relatively effective 	<ol style="list-style-type: none"> 1. May be more time consuming at large ranges 2. Weather sensitive (i.e., works best under dry conditions) 3. Exposure to lead and lead dust possible
Screening	<ol style="list-style-type: none"> 1. Effective 2. Potential economic returns 	<ol style="list-style-type: none"> 1. Vegetation must be removed 2. Weather sensitive (i.e., works best under dry conditions)
Vacuuuming	<ol style="list-style-type: none"> 1. Effective 2. Can be used at least accessible ranges 3. Less vegetation needs to be removed 	<ol style="list-style-type: none"> 1. Weather sensitive (i.e., works best under dry conditions)
Soil Washing	<ol style="list-style-type: none"> 1. Effective at cleaning the soil to remove the lead particles so one is left with non-lead soil 	<ol style="list-style-type: none"> 1. Vegetation must be removed

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Appendix A: Resources

This manual provides contacts for lead reclamation companies, lead recycling companies, bullet trap manufacturers, and organizations that provide prevention and/or remediation techniques to assist clubs and firing ranges in implementing Best Management Practices for shooting ranges. The list was updated for the June 2005 printing. Vendors who are interested in being added to the list of lead reclaimers or remediation contractors should contact:

Lead Shot Coordinator
RCRA Compliance Branch
US EPA Region 2
290 Broadway
New York, NY 10007-1866
Telephone: (212)637-4145
E-mail: Leadshot.Region2@epa.gov



BMP for Lead at Outdoor Shooting Ranges

Lead Recycling Companies

Below is a list of recycling companies for lead in soils and spent lead shot/bullets that were contacted during the writing of this manual. Lead recycling companies smelt lead. It is not inclusive and is included for informational purposes only. Local scrap metal recyclers may also accept spent lead shot or spent bullets. Mention of these companies does not serve as an endorsement by the EPA.

<p>The Doe Run Company Resource Recycling Division HC1 Box 1395 Boss, MO 65440</p> <p>800-633-8566 573-626-3476 Lou Magdits l.magdits@doerun.com</p>	<p>East Penn Manufacturing Company, Inc. P.O. Box 147 Lyon Station, PA 19536 610-682-6361 Rick Leiby</p> <p>Web Site: http://www.eastpenn-deka.com</p>
<p>Exide Spring Valley & Nolan Streets Reading, PA 19612 800-437-8495 Robert Jordan, Maritza Rojas-Suarez</p> <p>Web site: http://www.exide.com</p>	<p>Gopher Smelting and Refining 3385 Highway 149 South Eagan, MN 55121 651-454-3310 800-354-7451 Mark Kutoff</p> <p>Web Site: http://www.gopherresource.com/</p>
<p>Gulf Coast Recycling 1901 N. 66th St Tampa, FL 33619 813-626-6151 William Weston</p>	<p>Kinsbursky Brothers, Inc. 1314 N. Anaheim Blvd Anaheim, CA 92801 714-738-8516 Paul Schneider</p> <p>Web Site: http://www.kinsbursky.com</p>
<p>Reserve Trading Corp. P.O. Box 302 Medina, OH 44258 330-723-3228</p>	

BMP for Lead at Outdoor Shooting Ranges

Lead Reclamation Companies

Below is a list of reclamation companies for lead in soils and spent lead shot/bullets that were contacted during the writing of this manual. Lead reclamation companies reclaim lead from ranges. It is not inclusive and is included for informational purposes only. Mention of these companies does not serve as an endorsement by the EPA.

<p>Brice Environmental 3200 Shell St, P.O. Box 73520, Fairbanks, AK 99707 Craig Jones 907-456-1955 www.briceinc.com</p> <p>Reclaims primarily from earthen backstops and sand traps.</p>	<p>En-Range, Inc. 3326 NW 29th St. Miami, FL 33142-6310 Thomas M. Taylor 305-999-9965 Fax 305-635-8645 Email: enrange1@yahoo.com www.en-range.com</p> <p>Provides lead reclamation and other environmental and maintenance services.</p>	<p>Entact 1010 Executive Court Suite 280 Westmont, IL 60559 630-986-2900 www.entact.com</p> <p>Performs physical removal of the lead from backstops, chemical treatment of soils and returns soil to the backstop.</p>
<p>Karl & Associates, Inc. 20 Lauck Road Mohnton, PA 19540 Edmund Karl III 610-856-7700</p> <p>Works primarily in the the mid-Atlantic area. Lead-containing soil is physically removed and sent to licensed disposal sites or licensed recycling facilities.</p>	<p>MARCOR 246 Cockeysville Road Hunt Valley, MD 21030 Dave Jungers 410-785-0001 www.marcor.com</p> <p>Uses a pneumatic separation unit to remove lead from contaminated soil and treats soil to pass TCLP.</p>	<p>Metals Treatment Technologies, LLC (MT²) 12441 West 49th Avenue Suite 3 Wheat Ridge, CO 80033 Jim Barthel 303-456-6977 www.metalstt.com</p> <p>Removes lead from soil and treats soils at all types of ranges.</p>
<p>Sears Trucking Company P.O. Box 38 El Reno, OK 73036 Garland Sears 800-522-3314 Fax 405-262-2811</p> <p>Physically removes lead from soils at trap and skeet ranges.</p>	<p>Solucorp Industries, Ltd. 250 West Nyack Road West Nyack, NY 10994 Mike DeLuca 845-623-2333 Fax 845-623-4987 Email: solucorpmbs@aol.com www.solucorpltd.com</p> <p>Removes and treats soil using their Molecular Bonding System (MBS) soil stabilization technology.</p>	<p>Southern Lead Removal P.O. Box 2645 Daytona Beach, FL 32115 Kevin Gilchrist 386-763-0115 Fax 386-761-6991</p> <p>Removes lead from indoor and outdoor pistol ranges only.</p>
<p>Sport Shooting Services P.O. Box 667 Crawfordville, FL 32326 Ed Tyer 850-926-7375 Cellphone 850-294-0132 Email: enviorange@aol.com</p> <p>Removes lead from earthen berms, uses a shaker and screen system to separate lead from soils, rents screening equipment, and consults on range design, primarily in Florida.</p>	<p>Terra Resources, Ltd. HC4 Box 9311 Palmer, AK 99645 Larry Wood 907-746-4981 Cellphone: (907) 232-5059 Fax: 907-746-4980 www.terrawash.com</p> <p>Uses gravimetric process to separate lead and TerraWash™ soil washing technology.</p>	<p>Waste Recycling Solutions, Inc. 1850 Route 112 Medford, NY 11763 Tommy Arabia, President 631-654-3811</p> <p>Uses a vacuum system to remove lead from trap and skeet ranges.</p>

BMP for Lead at Outdoor Shooting Ranges

Other Resources

Below is a list of additional phone numbers that may be of use if you have general questions including questions on range construction, design, and implementing BMPs.

<p>U.S. Fish and Wildlife Service 4401 North Fairfax Arlington, VA 22203 703/358-2156</p> <p>Web site: http://www.fws.gov/</p>	<p>Institute of Scrap Recycling Industries, Inc. 1325 G Street, NW, Suite 1000 Washington, DC 20005-3104 202/737-1770</p> <p>Web site: http://www.isri.org/</p>
<p>Lead Industries Association, Inc. 13 Main Street Sparta, NJ 07871 973/726-LEAD (973/726-5323) fax: 973/726-4484</p> <p>Web site: http://www.leadinfo.com</p>	<p>National Rifle Association of America 11250 Waples Mills Road Fairfax, VA 22030 800/NRA-3888</p> <p>Web site: http://www.nra.org</p>
<p>National Shooting Sports Foundation and National Association of Shooting Ranges 11 Mile Hill Road Newtown, CT 06470 203/426-1320</p> <p>NSSF web site: http://www.nssf.org NASR web site: http://www.rangeinfo.org</p>	<p>Sporting Arms and Ammunition Manufacturers' Institute, Inc. Flintlock Ridge Office Center 11 Mile Hill Road Newtown, CT 06470-2359 203/426-4358</p> <p>Web site: http://www.saami.org</p>
<p>Wildlife Management Institute 1101 14th Street, N.W. Suite 801 Washington, DC 20005 202/371-1808</p> <p>Web site: http://www.wildlifemanagementinstitute.org</p>	

BMP for Lead at Outdoor Shooting Ranges

Web Resources

Useful Web Sites	
Description	Web Address
<i>Federal Government Sites</i>	
U.S. EPA's Outdoor Shooting Range Home Page	http://www.epa.gov/region2/waste/leadshot/
U.S. EPA – Military Munitions Rule	http://www.epa.gov/epaoswer/hazwaste/military/ http://www.epa.gov/tribalmsw/thirds/remunition.htm
U.S. Occupational Safety and Health Administration (OSHA)	http://www.osha.gov/
National Institute for Occupational Safety and Health (NIOSH)	http://www.cdc.gov/niosh/
<i>State Government Sites</i>	
Florida: BMPs for Shooting Ranges	http://www.dep.state.fl.us/waste/categories/shooting_range/
Massachusetts : Lead Shot in the Environment	http://www.state.ma.us/dep/files/pbshot/pb_shot.htm
Minnesota: Poster for "Firing Range Hazards"	http://www.cdc.gov/niosh/mnables.html
Ohio: Lead Shot Reclaimers list	http://www.epa.ohio.gov/dhwm/leadrecy.htm
Wyoming: Lead Recyclers List	http://deq.state.wy.us/outreach/lead.htm
<i>Court Decisions</i>	
Connecticut Coastal Fishermen's Association v. Remington Arms	http://www.duedall.fit.edu/summer/rcra.htm
Long Island Soundkeeper Fund and NY Coastal Fishermen's Assoc. v. New York Athletic Club	http://www.epa.gov/region02/waste/leadshot/lisfnyac.htm
<i>Articles and Research</i>	
USAF - Lead Contamination in Soils at Military Small Arms Firing Ranges	http://www.afcee.brooks.af.mil/pro-act/fact/june98a.asp
U.S. Army Env. Center (AEC) – Small Arms Range Technology	http://aec.army.mil/usaec/range/operations03.html http://aec.army.mil/usaec/technology/rangexxi03.html http://aec.army.mil/usaec/publicaffairs/update/win97/range.htm
AEC – Green Bullets	http://aec.army.mil/usaec/publicaffairs/publicity02.html http://aec.army.mil/usaec/technology/rangexxi00a.html http://aec.army.mil/usaec/publicaffairs/update/spr97/bullets.htm
AEC - Recycling of Firing Range Scrap	http://aec.army.mil/usaec/publicaffairs/update/spr99/spr9911.htm
Florida Center for Solid and Hazardous Waste Management	http://www.floridacenter.org/
National Association of Shooting Ranges' Reference Library	http://www.rangeinfo.org/resource_library/facility_mngmnt/

BMP for Lead at Outdoor Shooting Ranges

Bullet Trap Manufacturers¹

Bullet Trap Manufacturer	Designs Available	Estimated Cost of Trap	Price Includes	Not Included in Price	Usage of Trap	Description	General Comments
Action Target (801) 377-8033 Contact: John Curtis, CEO actiontarget.com	Total Containment Trap (TCT)	\$1,600 to \$1,800 /linear foot (dependent on features selected)	Purchase of Equipment Installation Delivery (Freight included)		Rifle Pistol Armor - piercing* *depends on type of armor-piercing	The TCT is a funnel-style trap that uses steel plates mounted at low angles to direct bullets into a deceleration chamber. The low angles prevent break up of the bullets until they reach the chamber, where the bullets lose energy and drop into removable storage containers. An optional dust collection unit uses a powerful vacuum to remove lead dust and other fine particles from the collection chamber.	The TCT is designed for both indoor and outdoor applications. It may be used safely with handguns, shotguns, and high-powered rifles, and has been successfully tested and used with 50-caliber fire.
Action Target (Cont.) see details above	Rubber Berm Trap (RBT)	\$1100/linear foot	Installation and Delivery		Rifle or Pistol. Armor-piercing. Cannot use incendiary rounds.	The RBT is very similar in form and function to a traditional sand or earthen berm trap, with the obvious difference being the use of chopped rubber instead of sand as a collection medium. Bullets fired into the trap are absorbed by the rubber and remain there until reclamation through mining of lead from the trap.	Because rubber is a softer collection medium, bullets can be captured with less break-up and fragmentation. The resulting reduction in lead dust levels is especially beneficial in indoor ranges. This benefit is decreased as more rounds accumulate in the trap, causing newly fired bullets to impact bullets already in the trap.

¹ EPA does not endorse any particular bullet containment device or product. Information on this table is offered to readers for a general understanding of some common bullet trap options and is based on vendor marketing literature.

BMP for Lead at Outdoor Shooting Ranges

Bullet Trap Manufacturers Con't.¹

Bullet Trap Manufacturer	Designs Available	Estimated Cost of Trap	Price Includes	Not Included in Price	Usage of Trap	Description	General Comments
Copius Consultants (516) 783-7489 Contact: Craig Copius	Containment/ Recovery System	Ranges from \$600/linear foot to \$1,000/linear foot (Price varies with specific design selected)	Purchase of Equipment	Shipping	Rifle Pistol Machine gun Shotgun	This is a modification of the sand backstop. Sizes vary depending on the needs and characteristics of the range; however, average height is 10' - 12' and average width is 12' - 14'. The trap utilizes ballistic grade sand to trap bullets and bullet fragments in a sealed system. The system contains collection and filtration systems to ease reclamation and eliminate off-site migration of lead.	Specific recommended bullet trap is based on the following: 1) Type of usage, quantity of usage, etc. 2) Location in country 3) Environmental issues (e.g., location near a waterbody) Price will depend on the design adopted. One unique feature is that shooting can occur at any angle.
Meggitt Defense Systems Caswell (612) 706-6201 Contact: Brian Danielson	Granular Rubber Bullet Traps	\$940 to \$1,300/linear foot (dependent on type of trap and other features selected)	Purchase of Equipment Installation Delivery (Freight included)		Pistol Rifle Armor- Piercing Shotgun Machine gun Tracers (Speak to Sales Rep.)	The trap absorbs bullets fired from any angle or distance. No exposed steel surfaces; bullets are not fragmented. The granulated material used in the trap can be turned over quickly to recover the spent rounds.	Suitable for indoor and outdoor ranges. Eight types of traps available. Custom builds traps. Provides site-specific design, if requested. Reclamation is recommended after approximately 90,000 rounds have been fired (depending on trap type.)

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BMP for Lead at Outdoor Shooting Ranges

Bullet Trap Manufacturers Con't.¹

Bullet Trap Manufacturer	Designs Available	Estimated Cost of Trap	Price Includes	Not Included in Price	Usage of Trap	Description	General Comments
Range Systems (888) 999-1217 (763) 533-9200 Contact: Steve Thomas range-systems.com	Encasulator Bloc Trap™ Encasulator Granular Trap™	\$800-\$1,250/linear ft (Price varies with design criteria and product selection)	Purchase of Equipment Installation	Freight	Pistol Rifle Shotgun (shot and slugs)	The bullet traps are constructed for maximum bullet retention with minimum space and cost. The bullet traps virtually eliminate ricochet and airborne lead.	Full service shooting range provider from design and engineering to construction and maintenance. Custom-built traps with exclusive patented rubber technology.
Savage Range Systems (413) 568-7001 Contact: Joan Drucker snailtraps.com	The SNAIL™ Trap	Two types of traps: Pistol Wet: \$2,250/linear ft Pistol Dry: \$2,150/linear ft Rifle Wet: \$2,400/linear ft Rifle Dry: \$2,300/linear ft	Purchase of Equipment	Shipping Installation	Rifle (up to .50 cal BMG) Pistol	The SNAIL trap is designed with low angle entrance ramps to guide the bullet into the circular deceleration chamber without scarring the plate. The bullet loses all of its energy in the chamber and drops into a collection system. The use of water and synthetic oil contains the lead particulates and dust, and minimizes friction on the plates.	Usage for indoor and outdoor ranges. Can also be provided with a conveyance system that drops the bullet to a single collection point (e.g., 55-gallon drum) for recycling. Low-maintenance system

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BMP for Lead at Outdoor Shooting Ranges

Bullet Trap Manufacturers Con't.¹

Bullet Trap Manufacturer	Designs Available	Estimated Cost of Trap	Price Includes	Not Included in Price	Usage of Trap	Description	General Comments
Stapp EBC, Incorporated (703) 239-9223 Contact: Matt Ciskowski, P.E. 8101 Ox Road Fairfax Station, VA 22039 Fax: (703) 239-9224 bulletcatcher.com	STAPP Bullet Catcher	Varies by specific design (measured by square foot)	Purchase of Equipment Installation Delivery (Freight)		Pistol & Rifle (best for calibers up to 12mm) Can handle jacketed rounds and tracers	The STAPP bullet catcher (consisting of a bottom rubber liner, drainpipe reservoir, rubber granule fill, and cover layer of rubber) collects lead and any infiltrating water without runoff. The system is constructed over an earthen berm and can be modified to any range configuration. Projectiles are completely collected by the bullet catcher with minimal fragmentation. The surrounding structure is ricochet-proof even under the most extreme temperatures.	Designs are site adapted. Reclamation can be performed by Stapp EBC or by range personnel. Email: mciskowski-trc@verizon.net

¹ EPA does not endorse any particular bullet containment device or product. Information on this table is offered to readers for a general understanding of some common bullet trap options and is based on vendor marketing literature.

BMP for Lead at Outdoor Shooting Ranges

Bullet Trap Manufacturers Con't.¹

Bullet Trap Manufacturer	Designs Available	Estimated Cost of Trap	Price Includes	Not Included in Price	Usage of Trap	Description	General Comments
<p>Super Trap Inc. (951) 736-9440 Contact: Art Fransen, Retired, L.A.S.D. 1601 Commerce St Corona, CA 92880 Fax: (951)736-9450 Email: info@supertrap.com supertrap.com</p>	<p>Gel-Cor™ Class A, Fire-Rated Rubber Bullet Traps ELIxiR™ Tactical Shooting Ranges Super Trap® Range Backstops SACON® Perimeter Facilities, Walls, Blocks & Tiles</p>	<p>Approx \$520 to \$1,600 per linear foot Varies by design, including: - indoor - outdoor - foundation - width of trap</p>	<p>Purchase of Equipment Installation Training</p>	<p>Shipping (Price will depend on destination)</p>	<p>Rifle & Pistol (up to and including .50 cal) Machine Gun Armor Piercing Tracer & Incendiary Ammunition <i>Also:</i> Frangible & Tungsten Traditional & Tactical Shooting</p>	<p>STI specializes in tactical shooting ranges. The firing range system captures and contains bullets whole, using a treated, granular ballistic media of recycled pure SBR (styrene-butadiene rubber), free of all steel and fiber contaminants that could normally allow fires to ignite. The infrastructure is 10 gauge galvanized steel and the hopper/deflection baffle is 3/8" AR 500 steel rifle rated (indoor and outdoor.) Outdoor Ranges: The backstop base typically lies on a graded berm at the appropriate angle determined by the user and STI staff. SACON® can absorb bullets and prevent lead contamination, replacing railroad ties, logs, brick walls and concrete enclosures on firing ranges.</p>	<p>STI's bullet trap systems eliminates hazardous materials contamination (TCLP tests below 1ppm), in addition to preventing ricochets and lead splash-back. Reclamation is recommended after approximately 100,000 to 130,000 rounds per 4 ft lane, based on type of shooter position and layout of targetry (static vs. dynamic.) Lead reclamation is performed using a vacuum air density separator system and rubber media is continuously reused. Use of recycled rubber media in the trap may qualify the range improvement for grant funding. Contact regional recycling associations for more information. STI offers more than six versions of Tactical Shooting Ranges, as well as custom built traps.</p>

¹ EPA does not endorse any particular bullet containment device or product. Information on this table is offered to readers for a general understanding of some common bullet trap options and is based on vendor marketing literature.

Appendix B: Lead Shot Alternatives

Another method of preventing lead contamination at pistol, rifle, trap, skeet, or sporting clays ranges is to use less toxic or non-lead ammunition.

Much progress has been made in the development of alternatives to lead shot for hunting uses. Information gathered since 1976 on lead poisoning of endangered and non-endangered migratory birds due to lead shot ingestion led the United States Fish and Wildlife Service (USFWS) to consider several alternatives to eliminate lead poisoning among migratory waterfowl birds. A ban on lead shot for water fowl hunting was phased in beginning in 1986 and finalized in 1991. Lead shot is also now banned for shotgun hunting occurring near wetlands in national wildlife refuges. Starting in the fall of 1998, the USFWS banned the use of lead shot in waterfowl production areas. Additionally, many state-managed hunting areas require non-toxic shot for upland/small game hunting.

There are several alternatives to lead shot on the market today and still more alternatives are being developed. Before being used for waterfowl hunting, these alternatives must be approved by the USFWS. Bismuth, steel, tungsten/iron, and tungsten/polymer shots have been approved by the USFWS and additional alternative shot materials are in the USFWS approval process. Most of the ammunition manufacturers in the United States, as well as the military, have developed non-toxic alternatives to lead. Research in Europe may also result in additional non-toxic shot alternatives from which U.S. shooters may choose in the future. The following pages compare lead shot to non-toxic, alternative shot.

BMP for Lead at Outdoor Shooting Ranges

Summary of Lead Shot Alternatives†

Shot Material	Approximate Cost per 25 Round Box ¹	Ballistic Performance	Availability	Comments
Lead	\$5.00/box \$3.00 - \$4.00/box of reloaded shells	Standard to which all alternatives are compared	Readily available	Lead is heavy and malleable
Bismuth* 97% Bismuth/ 3% tin	Bismuth shells are packed in 10 round boxes @ \$15.00 - \$25.00/ 10 round box	Similar to lead	Limited world supply of bismuth	Bismuth is a byproduct of lead and gold mining. There are currently many uses, including: medicine (Pepto-Bismol), cosmetics, pigments, and shotgun shot. The addition of tin makes bismuth more malleable and reduces fragility. Bismuth shot is safe to use in older firearms.

† Product reference within this table is not an endorsement by EPA.

* Approved by USFWS for migratory waterfowl hunting.

¹ Costs will vary from store to store and were valid at the time of manual development.

BMP for Lead at Outdoor Shooting Ranges

Summary of Lead Shot Alternatives – Continued†

Shot Material	Approximate Cost per 25 Round Box ¹	Ballistic Performance	Availability	Comments
Steel [†]	\$8.00 - \$12.95/box \$6.00/box of reloaded shells \$15.00/box (copper-plated)	In test performance by the Cooperative North American Shotgun Education Program (CONSEP) in hunting situations, no significant differences were found between lead and steel shot at reasonable distances. Lead is more effective at longer ranges.	Readily available from both domestic and imported sources.	Steel shot is about 33% lighter than lead. Therefore, the initial velocity must be increased so that downrange pellet energy remains similar. In hunting situations, larger, and therefore heavier, steel shot is used. Few shooting competitions allow steel shot at this point, but the number is increasing. While steel target loads are available, shooter perception that steel will adversely affect guns and scoring seems to be the limiting factor in acceptance of steel shot for target shooting. Steel shot will not damage newer guns, but may cause ring bulge in older guns if a very tight choke is used. This problem has been resolved in the newer guns with the use of screw-in chokes.

† Product reference within this table is not an endorsement by EPA.

* Approved by USFWS for migratory waterfowl hunting.

¹ Costs will vary from store to store and were valid at the time of manual development.

BMP for Lead at Outdoor Shooting Ranges

Summary of Lead Shot Alternatives – Continued†

Shot Material	Approximate Cost per 25 Round Box ¹	Ballistic Performance	Availability	Comments
Steel* (cont.)				<p>Another concern with steel shot is safety. Because steel is much less malleable than lead, steel shot is likely to ricochet if it strikes something hard. Lead shot, on the other hand, will deform and flatten. In Europe, steel shot is banned for hunting because it can become embedded in trees. The steel shot in trees cut for lumber can cause damage to sawmill equipment and raise concerns about worker safety.</p> <p>Although steel shot can be reloaded, components are not readily available.</p>
Tungsten/iron* 40% tungsten/ 60% iron	\$62.50/box (tungsten/iron shots are packed in 10 round boxes @ \$25.00/10 round box)	Preliminary reports indicate that tungsten/iron shot is as effective as lead shot. However, the amount of shot in each cartridge is significantly less than in typical lead cartridges or even steel cartridges. The density of tungsten/iron is 94% that of lead.	Readily available	The tungsten/iron shot currently available is harder than steel. It would, therefore, cause similar damage to older guns.

† Product reference within this table is not an endorsement by EPA.

* Approved by USFWS for migratory waterfowl hunting.

¹ Costs will vary from store to store and were valid at the time of manual development.

BMP for Lead at Outdoor Shooting Ranges

Summary of Lead Shot Alternatives – Continued†

Shot Material	Approximate Cost per 25 Round Box ¹	Ballistic Performance	Availability	Comments
<p>Tungsten/polymer[†] Various manufacturers have received final approval from the USFWS to market this type of shot.</p>	<p>Not available yet</p>	<p>Comparable to tungsten/iron</p>	<p>Currently not available</p>	<p>Two ammunition manufacturers are currently producing tungsten/polymer shot. This shot is more malleable than the tungsten/iron alloy and would, therefore, be less damaging to shotguns.</p> <p>A research and development company has developed a tungsten/polymer material as a substitute for lead in all its uses. According to this company, its tungsten/polymer can be formulated to be flexible or stiff, depending on the application. This material has been tested by the US Army in projectiles, but has not been used to manufacture shot. However, the company has initiated the process of applying to the USFWS for approval of this material as non-toxic shot.</p>

† Product reference within this table is not an endorsement by EPA.

¹ Costs will vary from store to store and were valid at the time of manual development.

BMP for Lead at Outdoor Shooting Ranges

Summary of Lead Shot Alternatives – Continued†

Shot Material	Approximate Cost per 25 Round Box ¹	Ballistic Performance	Availability	Comments
Tungsten/steel Same as tungsten/iron				
Tin USFWS granted temporary approval for 1999-2000 hunting season	Not available yet	Since tin is just being developed as an alternative to lead, performance information is not yet available. However, since the density of tin is less than steel, performance may be less effective than steel.	Currently not available	This material is just being developed as a lead shot alternative. However, it has similar problems as steel in that it is lighter than lead. The International Tin Research Institute in England is developing this product.

Other materials that are currently being experimented with as alternatives to lead are molybdenum and zinc. Not enough information is available to have included these alternatives in the above table.

† Product reference within this table is not an endorsement by EPA.

Summary of Lead Shot Alternatives - Conclusions

The table clearly illustrates that a number of non-toxic alternatives to lead shot exist such as steel and tungsten as well as alloys and synthetic polymers. As demand for shot from these metals increases from migratory waterfowl hunters, it is anticipated that the costs will come down. However, alternatives currently cost approximately two to twenty times more than lead shot.

The ban on lead shot in hunting situations impacts target shooting. The alternatives to lead shot that are now being developed for or are already approved by the USFWS for migratory bird hunting could be considered for use by target shooters.

Although alternatives to lead shot are now being used by hunters, it is rare that the alternatives are used by target shooters. The limiting factors appear to be the expense and performance. All the alternatives to lead are much more expensive, some prohibitively. Unfortunately, the least expensive alternative, steel, is also perceived to be less effective.

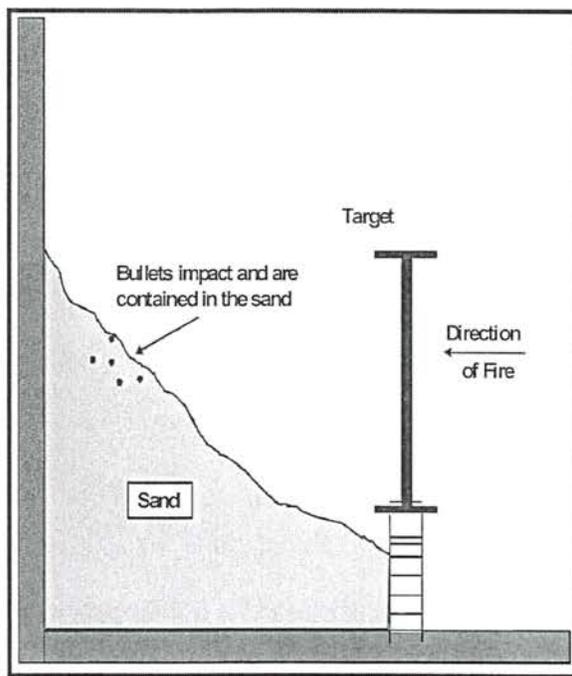
To encourage use of lead shot alternatives, some ranges sponsor shooting competitions using lead-free ammunition, but these are rare. The use of steel or other alternative shot is a recommended BMP in established sporting clays areas at which reclamation of lead shot is difficult to impossible.

Note: Switching to non-toxic shot may create additional issues. For instance, steel has an increased risk of ricochet. Switching to steel may require additional safety features and/or operating procedures.

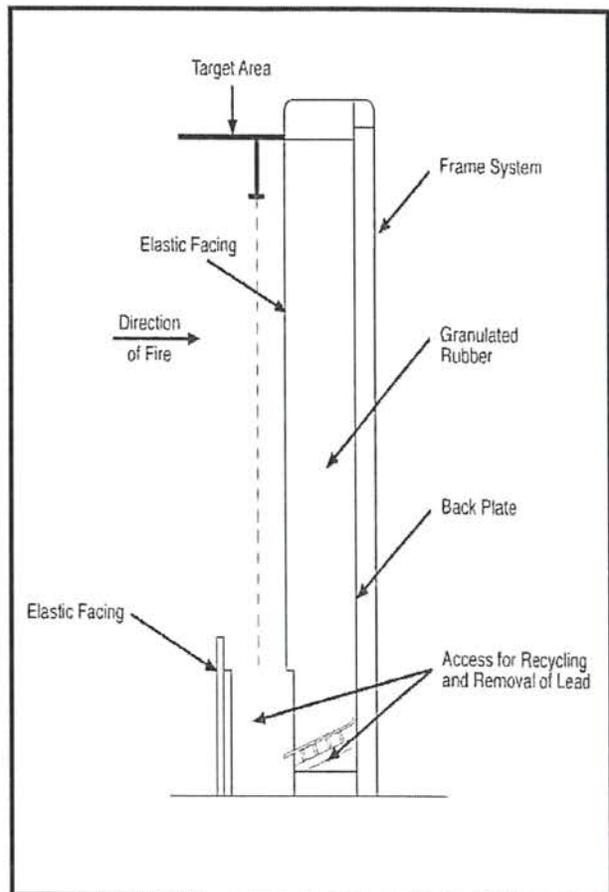
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Appendix C: Sample Bullet Containment Devices

The bullet containment designs in this appendix are sample designs for the containment systems mentioned in this manual. Design systems may vary from different manufacturers. Reference to various individual bullet containment devices is included in this manual for informational purposes only. EPA does not endorse any particular bullet containment device, design, or product.

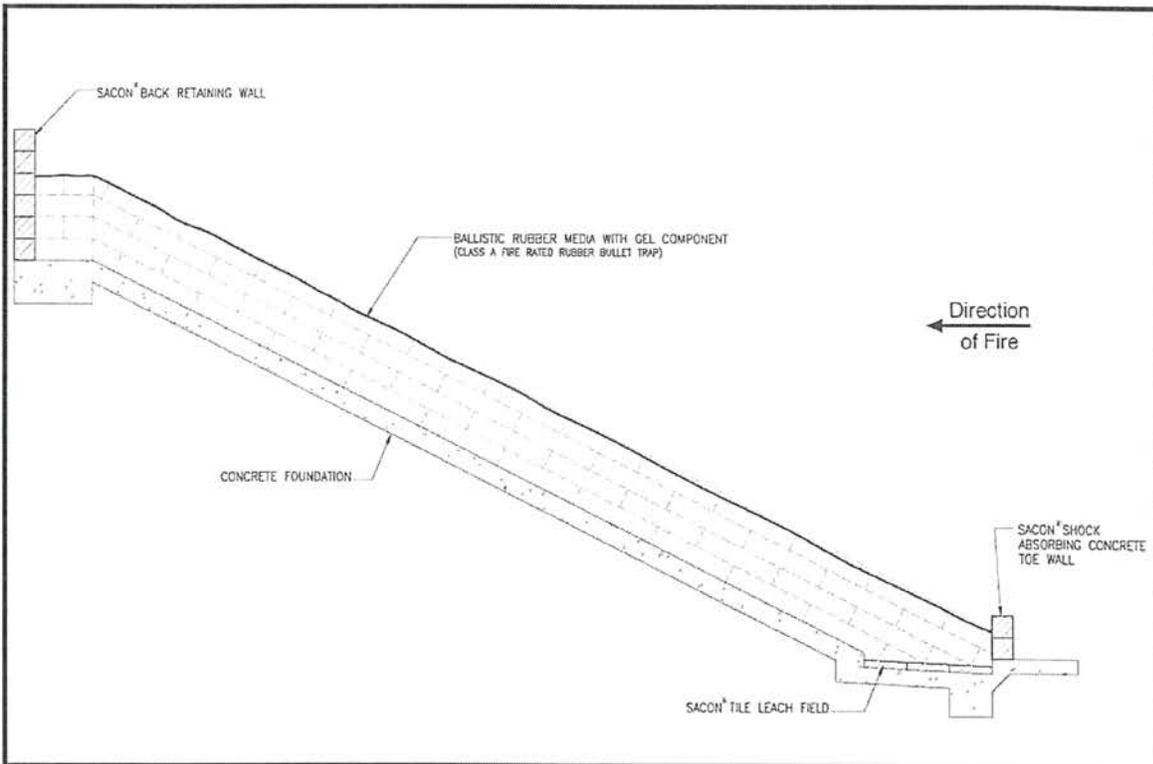


Sand Trap

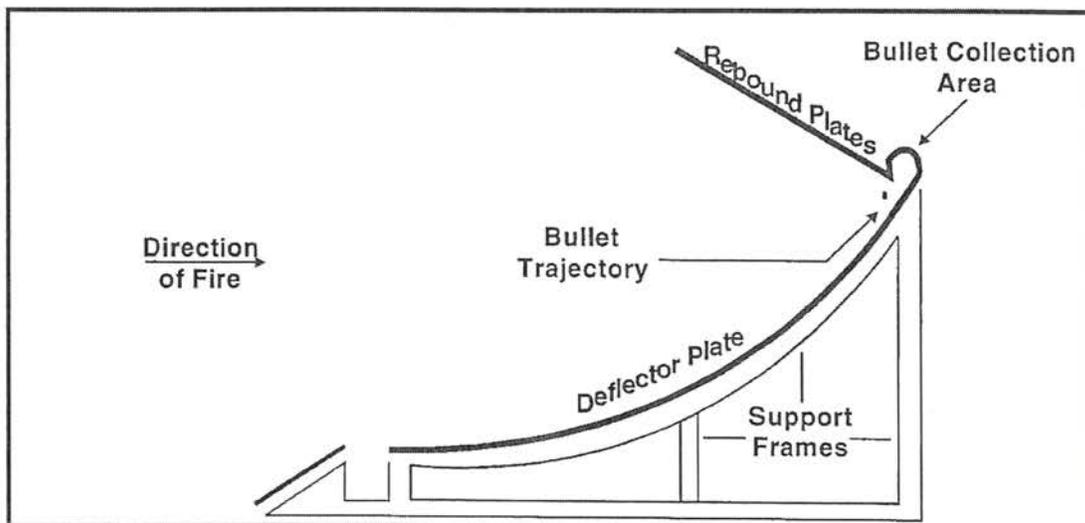


Rubber Granule Trap (Adapted from: *Bullet Trap Feasibility Assessment and Implementation Plan: Technology Identification Final Report*, U.S. Army Environmental Center, March 1996)

BMP for Lead at Outdoor Shooting Ranges

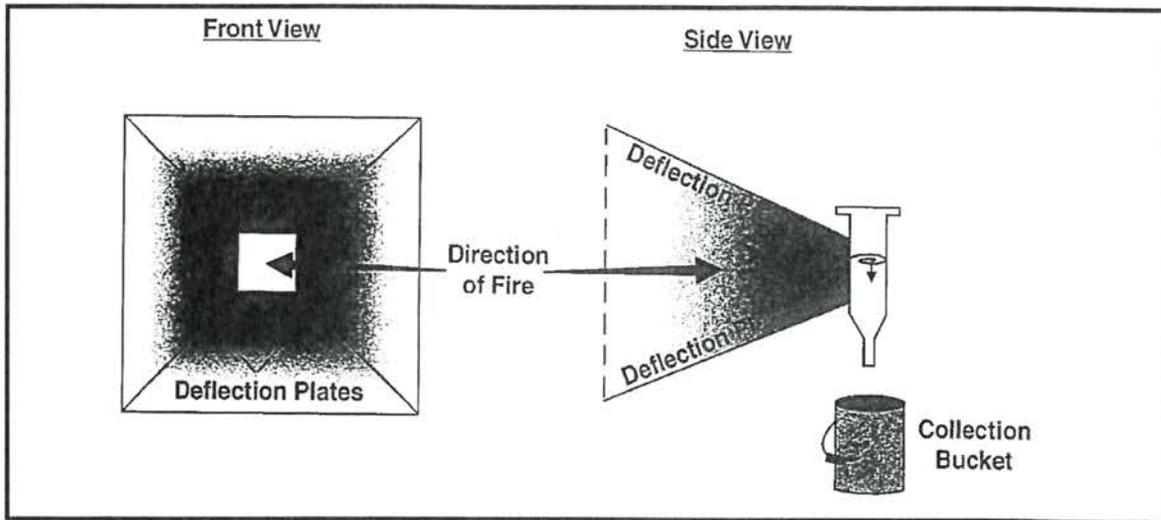


Gel-Cor Bullet Trap™ (Provided by Super Trap, Inc.)

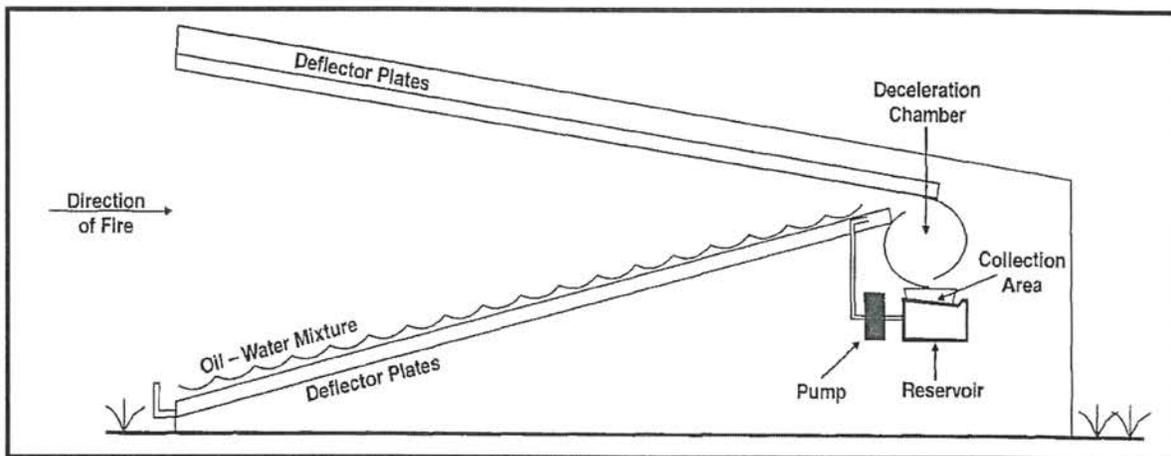


Escalator Trap (Adapted from: *Bullet Trap Technologies*, Action Target Educational Video Series)

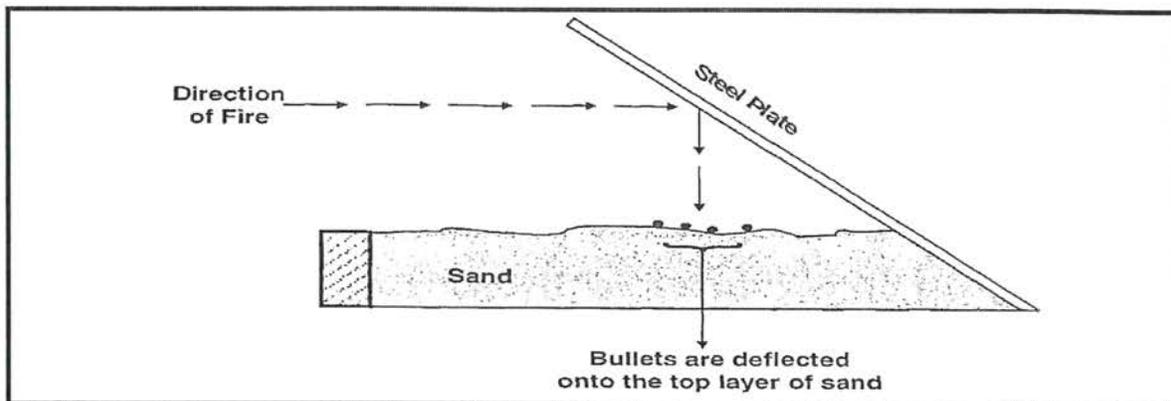
BMP for Lead at Outdoor Shooting Ranges



Vertical Swirl Trap (Adapted from: *Bullet Trap Feasibility Assessment and Implementation Plan: Technology Identification Final Report*, U.S. Army Environmental Center, March 1996)

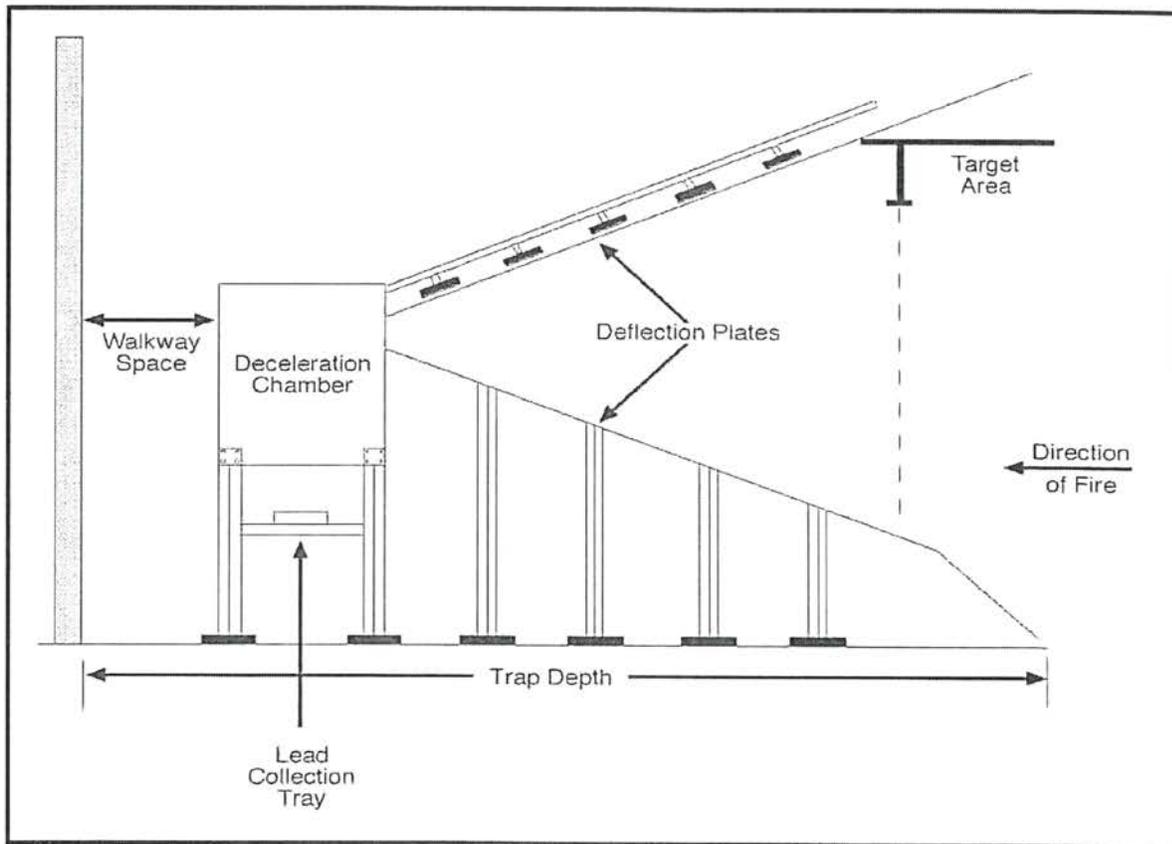


Wet Passive Trap (Adapted from: *Bullet Trap Feasibility Assessment and Implementation Plan: Technology Identification Final Report*, U.S. Army Environmental Center, March 1996)

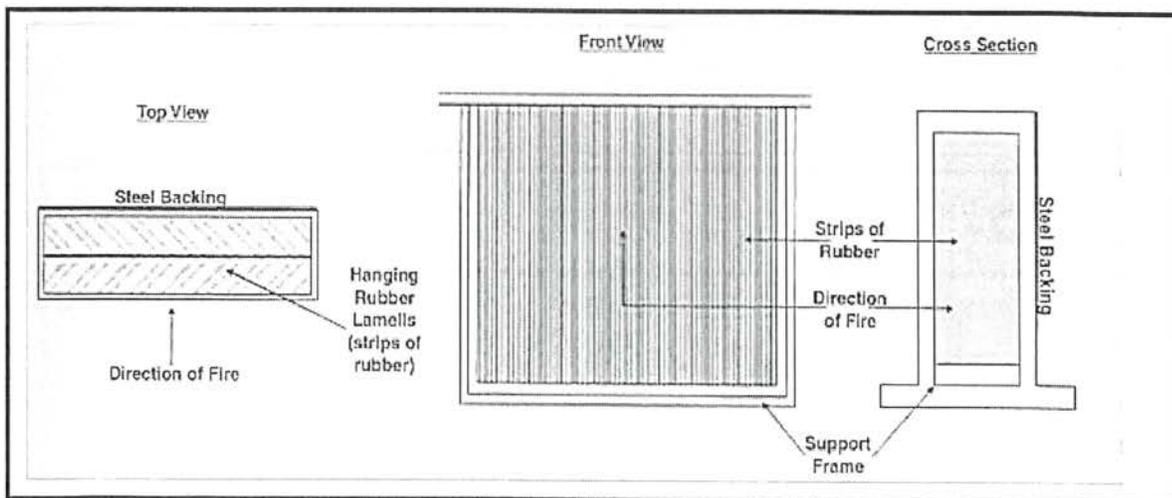


Pitt and Plate (Adapted from: *Bullet Trap Feasibility Assessment and Implementation Plan: Technology Identification Final Report*, U.S. Army Environmental Center, March 1996)

BMP for Lead at Outdoor Shooting Ranges



Steel Bullet Trap (Adapted from: *Bullet Trap Technologies*, Action Target Educational Video Series)



Lamella Trap (Adapted from: *Bullet Trap Feasibility Assessment and Implementation Plan: Technology Identification Final Report*, U.S. Army Environmental Center, March 1996)

Appendix D: RCRA Regulatory Requirements and Interpretations

Timely separation of lead shot and bullets from soil at active ranges, recycling of the lead, and subsequent redeposition of the soil on the active range is exempt from RCRA regulation.

1. Reclaiming and Recycling Lead Shot

EPA's Office of Solid Waste issued guidance in 1997 indicating that lead shot, when recycled, is considered a scrap metal and is therefore exempt from RCRA regulation. A copy of the March 17, 1997 letter with this guidance is attached. Under the RCRA Subtitle C hazardous waste management regulations, lead shot would be considered scrap metal, which is exempt from hazardous waste regulations if it is recycled (see 40 CFR 261.6(a)(3)(ii)). Although storage of scrap metal being recycled is not affected by specific time limits such as the speculative accumulation provision (40 CFR 261.1(b)(8)), the scrap metal must legitimately be recycled to remain exempt under this provision. It should also be noted that lead shot may be subject to the authority of RCRA 7003, which addresses imminent hazards. However, use of best management practices is likely to prevent situations which would present an imminent hazard. Using such practices, together with following a clear, written policy governing the facility's recycling efforts, should also assist in assuring that the facility's practices can be demonstrated to be legitimate recycling.

2. Storage of Lead on Shooting Ranges Prior to Recycling

Some ranges have indicated that it may be desirable to store recovered lead shot and bullets on the range property for some periods of time prior to sale for recycling.

Provided that best management practices are followed in terms of storing and recycling the sorted lead, a range that follows such practices, and engages in legitimate recycling, should be able to store such material prior to recycling without RCRA regulatory controls (see discussion below). Best practices would suggest that the sorted lead, at a minimum, should not be exposed to the elements and should be managed so as to prevent releases to the environment. Best practices also indicate that the sorted lead should be stored in containers in good condition, regular inspections of the container condition should be conducted, and the records of inspections should be maintained and be readily available. Further, best practices also suggest that the sorted lead should be recycled in a timely manner and storage times should not exceed the time-frames or goals articulated in a clear, written policy.

3. Placement of Soil After Removal of Lead

For soil placed back on an active range after a BMP has been applied to remove the lead, the following regulatory approach has been followed. On February 12, 1997, EPA published the RCRA Subtitle C Military Munitions Rule in the Federal Register (62 Fed. Reg. 6621). The Military Munitions Rule considers range management to be a necessary part of the safe use of munitions for their intended purpose. Thus, the range clearance activity (recovery of lead shot and bullets) is an intrinsic part of the range operation. Therefore, the rule excludes range clearance activities (including the placement of soil back on the range) from RCRA Subtitle C regulation. Although the Military Munitions Rule did not apply to non-military ranges, EPA, in its response to comments on the proposed rule, clearly stated that "it felt that the 'range clearance' interpretation in the final Military Munitions Rule is consistent with the EPA's interpretations for non-military ranges." In addition, the EPA's Director of the Office of Solid Waste sent the New York State Department of Environmental Conservation a letter dated April 29, 1997, confirming that the Military Munitions Rule range clearance principles apply equally to non-military ranges. A copy of the letter is attached.

4. Relocation of Backstop and Shotfall Zone Soil

Some ranges have indicated to the EPA that it may be desirable to transport and/or relocate a backstop in order to reorient or modify their range. This may occur when there is a need to reorient the range due to environmental concerns (e.g., shooting over water (wetland, stream, pond) or excessive runoff), alter the layout to improve shooter safety, or redesign to modify shooting conditions (e.g., adjusting number of shooting positions, increasing or decreasing target distance.) In some cases backstop material would not be moved off the range property, but to another area on the range property.

EPA's position is that range backstop materials are part of the range and are not wastes when they are moved or relocated, as long as the range continues to be used as a range and the backstop materials continue to be used as backstop materials. Hence, backstop materials that are still in use are not subject to the RCRA hazardous waste management regulations and need not be tested for hazardous waste characteristics. However, removal of lead from backstop materials that are to be relocated or moved is a normal practice of good range management in that it extends the usable life of the materials and reduces the possibility of releases of lead into the environment. If lead removal does not occur before moving the backstop material, the lead will become more dispersed throughout the material during movement and will thus be more difficult to recover in future reclamation events.

As a range management practice, it is environmentally preferable to use soil that may already contain lead and is on an active portion of the range, which will therefore undergo regular lead reclamation in the future, than to leave such soil in place and construct a new backstop with lead-free soil. Records of all movements of berm and shotfall zone soils, along with corresponding site plans, should be maintained indefinitely, as they will be necessary in evaluating cleanup needs during subsequent construction or range closure.

BMP for Lead at Outdoor Shooting Ranges

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
March 17, 1997

Mr. Duncan Campbell
Environmental Protection Agency, Region V
RCRA Enforcement
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Dear Mr. Campbell:

Enclosed please find a memorandum on the regulatory status of lead shot, which includes a general discussion on the regulatory status of lead shot as scrap metal. I hope that this information is sufficient to address your specific concerns as they relate to the pile of lead shot at the Saxon Metals facility.

If you have any questions or would like to discuss this matter further, please contact me at (703) 308-8826.

Sincerely,
Jeffery S. Hannapel
Office of Solid Waste

Enclosure

To: Duncan Campbell, EPA Region V
From: Jeff Hannapel, EPA Office of Solid Waste
Date: March 13, 1997
Re: Regulatory Status of Lead Shot

Based on our conversations, it is my understanding that Saxon Metals received for recycling a shipment of approximately 30,000 pounds of lead shot from a commercial indoor shooting range. Smokeless gun powder is, presumably, commingled with the lead shot. The mixture appears to exhibit the ignitability characteristic of hazardous waste (as evidenced by the incident in which the material ignited when Saxon Metals was attempting to load it into the furnace with a front-end loader). You have asked our office to provide you with guidance on the regulatory status of the lead shot portion of the mixture, specifically whether it is considered a spent material or scrap metal.

The Agency has taken the position that the discharge of ammunition or lead shot does not constitute hazardous waste disposal because the Agency does not consider the rounds from the weapons to be "discarded." As you know, discard is a necessary criterion to be met

BMP for Lead at Outdoor Shooting Ranges

before a material can be considered a solid waste and subsequently a hazardous waste. (40 CFR §261.2(a).) The Agency's interpretation regarding discard is based on the fact that shooting is in the normal and expected use pattern of the manufactured product, i.e., the lead shot. Enclosed for your information is a September 6, 1988 letter from EPA to IDEM on this particular point.

In the federal regulations, the term, "scrap metal," is defined as "bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled." (40 C.F.R. §261.1.) In the Federal Register preamble for the final regulations on the definition of solid waste, EPA indicated that "scrap metal is defined as products made of metal that become worn out (or are off-specification) and are recycled to recover their metal content, or metal pieces that are generated from machine operations (i.e., turnings, stampings, etc.) which are recycled to recover metal." (50 Fed. Reg. 614, 624 (1985).) The lead shot portion of the Saxon Metals pile would be considered scrap metal pursuant to the regulatory definition of scrap metal.

EPA provided further clarification on the regulatory status of scrap metal in the Federal Register preamble to the definition of solid waste final regulations:

[a]t proposal, scrap metal that was generated as a result of use by consumers (copper wire scrap, for example) was defined as a spent material. (This type of scrap is usually referred to as "obsolete scrap.") Scrap from metal processing, on the other hand (such as turnings from machining operations) was defined as a by-product. (It is usually called "prompt scrap.") Yet the scrap metal in both cases is physically identical (i.e., the composition and hazard of both by-product and spent scrap is essentially the same) and, when recycled is recycled in the same way - by being utilized for metal recovery (generally in a secondary smelting operation). In light of the physical similarity and identical means of recycling of prompt scrap and obsolete scrap, the Agency has determined that all scrap metal should be classified the same way for regulatory purposes. Rather than squeeze scrap metal into either the spent material or by-product category, we have placed it in its own category.

(50 Fed. Reg. at p. 624) Based on these regulatory passages, the lead shot portion of the pile would be considered scrap metal, and not a spent material. The lead shot is a product that is made of metal that can be recycled to recover metal content. Furthermore, the lead shot has not been "discarded" by virtue of its discharge at the shooting range, because the discharge is within the normal and expected use pattern of the manufactured product. Accordingly, lead shot would be considered scrap metal for regulatory purposes. Scrap metal is a solid waste, but it is exempt from the regulatory requirements of Subtitle C when it is recycled. (40 C.F.R. §261.6(a)(3)(ii).) As part of the Phase IV land disposal restrictions supplemental rulemaking (which was proposed January 25, 1996 and is expected to be finalized in April 1997), processed scrap metal and two categories of unprocessed scrap metal that is being recycled would be excluded from RCRA jurisdiction.

BMP for Lead at Outdoor Shooting Ranges

Please note that this discussion of the regulatory status is limited to the lead shot portion of the pile as you requested. To the extent that the entire pile exhibits the ignitability or reactive characteristic of hazardous waste, the mixture of materials would be considered hazardous waste and not scrap metal. The scrap metal designation for the lead shot would be applicable only to the extent that the lead shot could be segregated from the other materials in the pile.

I hope that this guidance on the regulatory status of lead shot recovered from shooting ranges provides you with the clarification that you needed. If you have any questions or would like to discuss this matter further, please contact me.

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BMP for Lead at Outdoor Shooting Ranges

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
APR 29 1997

Mr. John P. Cahill
Acting Commissioner
State of New York
Department of Environmental Conservation
Albany, New York 12233-1010

Dear Mr. Cahill:

Thank you for your letter of April 3, 1997 to Administrator Browner requesting a clarification of the Environmental Protection Agency (EPA) Final Military Munitions Rule regarding the extension of its range clearance principles to non-military ranges. Although the final rule addresses only military ranges, we agree with your view that the range clearance principles apply equally to non-military ranges [see comment no. 5 on page 36 of the enclosed excerpt from the Military Munitions Final Rule Response to Comments Background Document].

We are aware of the State of New York's active leadership role in the clean-up of private firing ranges. We appreciate your writing in support of the range clearance aspects of the final Military Munitions Rule and we will consider your suggestions that we issue broader guidance on the applicability of its principles to non-military ranges.

Sincerely yours,

Elizabeth Cotsworth, Acting Director
Office of Solid Waste

Enclosure

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**Appendix E:
Template for an Environmental
Stewardship Plan for Management
of Lead Shot/Bullets**

Instructions

EPA encourages outdoor shooting ranges to adopt and implement the Best Management Practices (BMPs) found in this manual. To this end, it is recommended that ranges first prepare an Environmental Stewardship Plan (ESP or Plan), which gathers information about, and guides evaluation of, site specific conditions of each range. As such, the ESP assists in selection of appropriate BMPs.

This document serves as a template that may be used by sportsmen's clubs and shooting ranges in their preparation of an ESP. This template was adapted from Appendix C of the National Shooting Sports Foundation's manual, *Environmental Aspects of Construction and Management of Outdoor Shooting Ranges* (the NSSF manual.) This template is only a tool to assist in making ESP preparation easier and can, and in some cases should, be modified to incorporate specific information relative to your club and its ranges. It is intended to be used in conjunction with a full understanding of the NSSF, U.S. Environmental Protection Agency (EPA) and, for ranges in Florida, Florida Department of Environmental Protection (DEP) manuals for the safe management of lead at outdoor shooting ranges. This template is intended to encourage ranges to prepare ESPs and submit them to EPA or NSSF to obtain a Certificate of Recognition from EPA. In this regard, either the following template or the NSSF template is recommended for use in conjunction with EPA's Certificate of Recognition program.

An electronic copy of this template is available on EPA's shooting range website (<http://www.epa.gov/region2/leadshot>) in several formats.

Disclaimer: This template does not serve as a substitute for understanding the concepts and techniques discussed in the EPA manual or other manuals. This template is not to be used as a substitute for consultation with scientists, engineers, attorneys, other professionals, or U.S. EPA.

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Environmental Stewardship Plan for Management of Lead/Bullets at Outdoor Shooting Ranges

Club Name

Address

City/Town, State & Zip Code

Phone #:

Date

Table of Contents

- **Introduction**
 - Mission Statement
 - Purpose
 - Goal
 - Delete

- **Site Assessment**
 - Description of Ranges and Support Facilities
 - Existing Environmental Conditions
 - Trap and Skeet Fields
 - Sporting Clays Course
 - Rifle and Black Powder Range(s)
 - Outdoor Handgun Range(s)

- **Trap and Skeet Fields**
 - Action Plan
 - Potential Management Options
 - Selection of Management Options to be Implemented
 - Options Selected
 - a) Management Actions
 - b) Operational Actions
 - c) Construction Actions
 - Plan Implementation
 - Schedule for Implementation
 - Responsibilities

- **Rifle, Black Powder, and Outdoor Handgun Ranges**
 - Action Plan
 - Potential Management Options.....
 - Selection of Management Options to be Implemented.....
 - Options Selected.....
 - a) Management Actions.....
 - b) Operational Actions.....
 - c) Construction Actions.....
 - Plan Implementation.....
 - Schedule for Implementation.....
 - Responsibilities.....

BMP for Lead at Outdoor Shooting Ranges

Table of Contents (continued)

- **Sporting Clays Course**.....
 - Action Plan.....
 - Potential Management Options.....
 - Selection of Management Options to be Implemented.....
 - Options Selected.....
 - a) Management Actions.....
 - b) Operational Actions.....
 - c) Construction Actions.....
 - Plan Implementation.....
 - Schedule for Implementation.....
 - Responsibilities.....

- **Measuring Success**.....
 - Vegetation.....
 - Soil and Runoff pH.....
 - Erosion.....

- **Plan Review and Revisions**.....

Figures

- Figure 1: Site Location Map
- Figure 2: Facilities Diagram
- (Additional figures, as appropriate)

Tables

- Table 1:
- Table 2:

Appendices

- Appendix A:
- Appendix B:
- (Additional Appendices, as appropriate)

BMP for Lead at Outdoor Shooting Ranges

Introduction

The XYZ Club, Inc. is located at 123 X Road in Anytown, USA...

Mission Statement

The XYZ Club, Inc. is committed to...

- *Purpose:*

The Purpose of this Environmental Stewardship Plan (i.e., the Plan) is to:

- Identify potential environmental concerns that may exist;
- Identify, evaluate, and prioritize appropriate actions to manage lead shot and bullets safely, as well as identifying and addressing environmental concerns;
- List short- and long-term steps needed for implementation;
- Develop an implementation schedule;
- Identify ways to measure the Plan's success;
- Evaluate annual progress made towards achieving environmental stewardship goals;
- etc.

- *Goal* – To minimize the release of lead into the environment.

Activities to Reach Goal:

Examples include:

- ▷ Avoid shooting over and into water and wetlands.
- ▷ Prevent off-site migration of lead through groundwater and surface water runoff.
- ▷ Conduct lead recovery.
- ▷ Discourage ingestion of lead by wildlife.
- ▷ Maintain soil pH between 6.5 and 8.5 in the shotfall zone.

Site Assessment

Description of Ranges and Support Facilities

The XYZ Club has an x position Trap Range, a y position Skeet Range, a z position Sporting Clays Course, and a q position Small Arms Range. These ranges are located in a rural setting and are oriented away from residential areas and surface water bodies.

[Briefly describe each range, its dimensions, orientation, vegetative cover, numbers of shooters and targets used per year, wildlife usage, etc.]

Existing Environmental Conditions

[Describe any known environmental conditions associated with the ranges. This might include type of soil, depth to groundwater, soil pH, drainage to surface water, unique animal or bird populations, etc. Refer to figures, tables, the results of surveys, inspections, professional opinions, etc.]

 BMP for Lead at Outdoor Shooting Ranges

- *Trap and Skeet Fields*
- *Sporting Clays Course*
- *Rifle and Black Powder Range(s)*
- *Outdoor Handgun Range(s)*

Trap and Skeet Fields

Action Plan

[Briefly describe the management options selected.]

- *Potentially Applicable Management Options*

[See EPA or NSSF guidance manual for full listing of options]

Examples include:

- Vegetate sparse grass area of trap/skeet field.
- Reorient trap field to avoid lead shot entering wetlands.
- Reorient sporting clays stations to maximize the overlap of falling shot into the open field where it can be more easily recovered for recycling.
- Limit use of the trap/skeet range to only those stations that do not have wetland area within the shotfall zone.
- Apply lime to shotfall zones if soil test results indicate this would be beneficial.
- Prepare fields for lead reclamation.
- Get bids for lead reclamation project.
- Conduct lead reclamation within the trap/skeet shotfall zones.
- Change mowing frequency to closely mow grass in shotfall zones.
- Construct lean-tos at backstop berms.
- Construct a lime lined drainage swale for stormwater management.
- List additional Best Management Practices that may be appropriate to your club.

In addition to appropriate site-specific management options, the list should always include conducting lead reclamation within the berm for rifle and pistol ranges and conducting lead reclamation within the trap, skeet, and sporting clays shotfall zones.

- *Selection of Management Options to be Implemented*

Option x:

Option y:

Option z:

[Describe why the above options were selected and the general roles of club officers, the membership, and outside consultants, as applicable, in implementation.]

BMP for Lead at Outdoor Shooting Ranges

In order to implement the options selected, the following actions are necessary.

- a) Management Actions: [Examples include: assign personnel responsible for initiating, conducting, and completing the alternatives selected above.]
- b) Operational Actions: [Examples include: collect soil samples for pH analysis, consult with USDA's Natural Resources Conservation Service and/or the county Cooperative Extension Service regarding best suited vegetative management recommendations.]
- c) Construction Actions: [Examples include: do site preparation work, get bids, institute mowing and vegetative management recommendations, reorient shooting position as appropriate.]

Plan Implementation

- Schedule for Implementation

Winter/Spring: [Examples include: pH survey, contact local officials for vegetation management recommendations, reorient shooting positions as appropriate, realign shooting positions as appropriate.]

Summer/Fall: [Examples include: prepare site for reclamation project, apply lime/fertilizer/seed, get bids for berm lean-tos/reclamation. As a rule of thumb, 50 pounds of lime per 1,000 square feet should raise soil pH by 1 once the residual acidity is overcome.]

- Responsibilities

[Specific duties (i.e., the trap/skeet chairman/chairmen will..., The club treasurer will..., The membership will provide the labor to...)]

Rifle, Black Powder, and Outdoor Handgun Range(s)

Action Plan

[Briefly describe the management options selected.]

Potentially Applicable Management Options

[See EPA or NSSF guidance manual for full listing of options]

Examples include:

- Culvert the stream through the shooting ranges.
- Vegetate the backstop berm(s) to minimize erosion.
- Construct a lime lined drainage swale for stormwater management.
- Apply lime to the berm and foreground if pH test determines it is necessary.
- Begin planning a lead reclamation project.
- Construct lean-tos at berms.
- List additional Best Management Practices that may be appropriate to your club.

BMP for Lead at Outdoor Shooting Ranges

Selection of Management Options to be Implemented

- Option x:
- Option y:
- Option z:

[Describe why the above options were selected and the general roles of club officers, the membership, and outside consultants, as applicable, in implementation.]

In order to implement the options selected, the following actions are necessary.

- a) Management Actions: [examples include: assign personnel responsible for initiating, conducting, and completing the alternatives selected above.]
- b) Operational Actions: [examples include: collect soil samples for pH analysis, consult with USDA's Natural Resources Conservation Service and/or the county Service Forester regarding best suited vegetative management recommendations.]
- c) Construction Actions: [examples include: do site preparation work, get bids, institute mowing and vegetative management recommendations, reorient shooting position as appropriate.]

Plan Implementation

- *Schedule for Implementation*

Winter/Spring: [examples include: pH survey, contact local officials for vegetation management recommendations, reorient shooting positions as appropriate, realign shooting positions as appropriate.]

Summer/Fall: [examples include: prepare site for reclamation project, apply lime/fertilizer/seed, get bids for berm lean-tos/reclamation.]

- *Responsibilities*

[Specific duties (i.e.: the small arms range chairman/chairmen will..., The club treasurer will..., The membership will provide the labor to...)]

Sporting Clays Course

Action Plan

- *Potentially Applicable Management Options*

[See EPA or NSSF guidance manual for full listing of options]

- *Selection of Management Options to be Implemented*

- *Options Selected*

BMP for Lead at Outdoor Shooting Ranges

Plan Implementation

- *Schedule for Implementation*
- *Responsibilities*

Measuring Success

By monitoring the success of the Plan, the club is best prepared to make whatever changes may be necessary to reinforce success and make the most of environmental stewardship efforts. Below are some examples of areas to monitor:

Lead Recovery

[Document the quantity (pounds) of lead recovered and recycled, along with the cost of conducting the activities.]

Vegetation

[The density of vegetation growth should be measured throughout the growing season, especially in areas of sparse growth where steps have been taken to increase the vegetative cover. This is can be done by taking periodic photographs (e.g., once a month) from the same places to document the impact of the Plan.]

Wildlife

[Keep a log of visual observations made regarding the frequency of range usage by the variety of species in your area.]

Soil and Runoff pH

[Track soil and runoff pH through semiannual monitoring and adjust the amount of lime applied to different areas of the range to maintain a pH level that will prevent lead from dissolving (i.e., a pH of 6.5-8.5).]

Erosion

[Again, keeping a photographic record of problem areas best prepares your club to document achievements and adjust the Plan as appropriate.]

Plan Review and Revisions

Review the Plan on an annual basis. Update the Plan as needed and schedule activities for subsequent years. Make recommendations for future club officers to consider when updating the Plan and designating future activities to be conducted (tell them what worked, what didn't work, and what still needs to be done.)

FIGURES

Figure 1
Facility diagrams

Figure 2
Resource maps (USGS topographic map, wetlands maps, soil survey maps, FEMA floodplain map, etc.)

Figure 3 (Optional)
Site photographs

Figure 4 (Optional)
Aerial photo of range and surrounding area

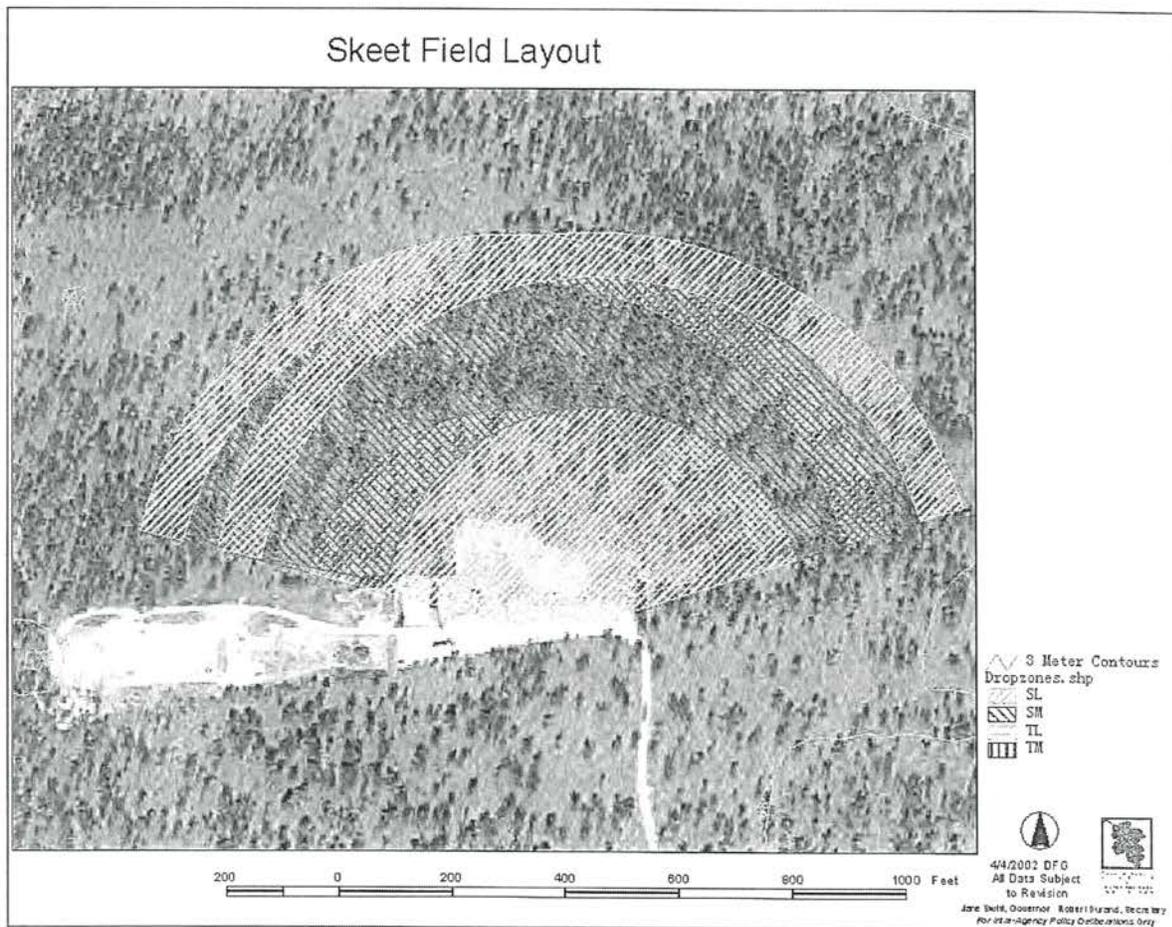
Appendix A
(Optional)

Appendix B
(Optional)

[Insert other figures as necessary to support the text]

Other figures may include an aerial photograph, and sketches of the Club property in general and/or specific ranges in particular.

Example:



BMP for Lead at Outdoor Shooting Ranges

[Insert Site Location Map Here]

Typically, a Site Location Map is cut from a USGS Topographic Map of you Club's area. The Club should be centered on the map. Indicate the property boundaries and layout of the range.

Appendix A

Information from USDA, Natural Resources Conservation Service [and/or county Cooperative Extension Service]

[concerning soil and vegetation management recommendations]

Appendix B (etc.)
[For other supporting documentation as needed.]



U.S. Environmental
Protection Agency
Region 2

United States Environmental Protection Agency
290 Broadway
New York, NY 10007-1866
Official Business
Penalty for Private Use \$300
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Correction Requested

EPA-902-B-01-001
Revised June 2005

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RANGE DESIGN CRITERIA



U.S. DEPARTMENT OF ENERGY Office of Health, Safety and Security

AVAILABLE ONLINE AT:
<http://www.hss.energy.gov>

INITIATED BY:
Office of Health, Safety and Security

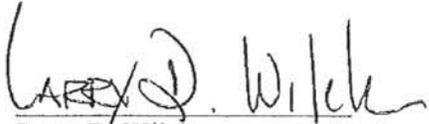
Notices

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Local DOE management is responsible for the proper execution of firearms-related programs for DOE entities. Implementation of this document's provisions constitutes only one segment of a comprehensive firearms safety, training, and qualification program designed to ensure that armed DOE protective force personnel are able to discharge their duties safely, effectively, and professionally. Because firearms-related activities are inherently dangerous, proper use of any equipment, procedures, or techniques etc., identified herein can only reduce, not entirely eliminate, all risk. A complete safety analysis that accounts for all conditions associated with intended applications is required prior to the contents of this document being put into practice.

CERTIFICATION

This document contains the currently-approved firearms "Range Design Criteria" referred to in DOE O 473.3, *Protection Program Operations*.



Larry D. Wilcher
Director
Office of Security
Office of Health, Safety and Security

6/4/2022
Date

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ATTACHMENT 1 -- RANGE DESIGN FIGURESAttachment 1-1

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RANGE DESIGN CRITERIA

1. PURPOSE. This document contains design criteria for U.S. Department of Energy (DOE) live-fire ranges for use in planning new facilities and major rehabilitation of existing facilities. This document will be approved and maintained by the Office of Security, Office of Health, Safety and Security (HSS) as a stand-alone document on the HSS website: <http://www.hss.doe.gov/SecPolicy/pfs.html>.
2. PLANNING FACTORS. All applicable local, State, Federal, U.S. Environmental Protection Agency, Occupational Health and Safety Administration (OSHA), and National Environmental Policy Act requirements should be addressed and be reviewed annually (at least every 12 months) by the site to incorporate any requirements and/or changes that occur.
3. PLANNING OVERVIEW.
 - a. General Considerations.
 - (1) Live-fire range design should: (a) promote safe, efficient operation; (b) include provisions for ease of maintenance; and (c) be affordable to construct and maintain.
 - (2) Live-fire ranges should be designed to prevent injury to personnel and to prevent property damage outside the range from misdirected or accidental firing and ricochets. They should also be designed to direct ricochets away from the firing line inside the range.
 - (3) An open range may be established provided that enough distance and land area available to allow for surface danger zones (SDZs) appropriate for the weapons to be used. Lack of SDZs may require baffled ranges. Extreme weather conditions may necessitate indoor ranges.
 - b. Type of Range.
 - (1) Range requirements should be considered when determining the type and size of the range and the material to be used.
 - (2) The range should be suitable for training and qualifications for all courses of fire used on the site as set forth in the HSS-approved Firearms Qualification Courses.
 - (3) The range should be designed for shooting day and reduced-lighting DOE firearms courses, moving targets, multiple targets, and advanced shooting courses/activities (e.g., shooting at steel targets) that may be required by the site.

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- (4) When determining whether the facility will be an indoor, open outdoor, partially baffled, or fully baffled range, the decision-making process should include site weather conditions, available land, available funding, and environmental, safety, and health considerations. The following additional factors should be considered.
 - (a) How many shooters must be accommodated?
 - (b) Will emphasis be on training or competitive activities?
 - (c) What types of firearms and range of ammunition will be used? (See Table 1.)
 - (d) Will the facility be used exclusively by DOE or will it be open to other organizations?
 - (e) What special uses will be made of the facility; e.g., advanced training, special weapons, or explosives?
 - (f) What lighting will be required, and what lighting is desired?
 - (g) What administrative space will be needed?
 - (h) What types of target mechanisms will be used?
 - (i) Will spectator safety areas be needed?
 - (j) What types of acoustics will be needed?
 - (k) How will lead contamination be controlled?
 - (l) Where will bullet traps be needed?
 - (m) Where will firearms cleaning and maintenance be performed?
- c. Site Selection Preparation. The site selected should accommodate the required facility. It should meet acceptable standards for safety and have sufficient space, access, and acceptable zoning and construction costs. Land acquisition costs, future land values, and possible restrictions should also be examined. To ensure the project is feasible the following data should be considered.
 - (1) Documents. Copies of specific site, environmental, and construction criteria; applicable mandated regulations from Federal, State, county, and local authorities; copies of ordinances, zoning regulations, soil conservation standards, health department requirements, and any other regulations that may pertain to the project should be obtained.

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- (2) Alternate Sites. Identify alternate sites, because one or more of the potential sites may be unsuitable or construction costs may be prohibitive.
 - (3) Technical Data. Gather technical data relevant to each site including zoning maps, aerial photographs, topographic maps, and onsite ground and aerial information.
- d. Considerations. The criteria to be considered in this process are:
- (1) environmental restrictions; e.g., Endangered Species Act, Wilderness Act, and air and water pollution criteria;
 - (2) access; e.g., is it adequate or should a roadway be constructed to the site;
 - (3) construction cost; e.g., berms, baffles, barriers, earth moving;
 - (4) other restrictive Federal or State statutes and local ordinances; and
 - (5) community growth, especially in areas where urban growth is rapid. Escalating property values may make it unwise to construct in a particular area.
- e. Preliminary Design Stage.
- (1) Prepare:
 - (a) a preliminary layout sketch of each site;
 - (b) a draft document, which should include specifications for applicable zoning, building codes, environmental, safety, and health considerations, and other pertinent restrictions;
 - (c) alternative preliminary site plans showing different range layouts;
 - (d) a planning cost estimate; and
 - (e) a risk analysis report.
 - (2) Submit all environmental, zoning and building permit applications for approval. Be prepared, via the draft document, to present and, if necessary, defend the proposal at public hearings before zoning boards, health officials, and other governmental bodies involved in issuing permits.
- f. Final Design Stage.
- (1) The preliminary site plans include a layout of the proposed range with its accompanying safety fan in a cross section and top view.

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- (2) The range master/manager, training manager, safety manager, industrial hygienist, appropriate operating personnel and public works engineer should review and approve the design requirements during the planning phase, before the construction drawings are started, and during the construction phase.

4. OUTDOOR RANGE DESIGN.

a. Site Selection.

- (1) Outdoor range sites should be remote from other activities but accessible by road. SDZs should not extend across traveled roads, navigable waterways, railroads, or other areas.
- (2) To protect against unauthorized access, SDZs should be controlled while firearms are being discharged. To prevent future encroachment, SDZs should be recorded on site maps.
- (3) If other methods to control access to SDZs are not effective, then the zones should be fenced in. Natural barriers around the site; e.g., rivers, hills or a large drainage channel may be used to prevent encroachment and will ensure privacy. The best site is one with a natural backstop for projectiles to reduce the cost of constructing earth impact berms and to provide natural sound abatement.
- (4) Outdoor ranges should be oriented to eliminate firing into the sun. The range should be oriented to the north or slightly to the northeast. The ideal direction is between due north and 25° northeast.

b. Range Planning.

- (1) Firing into upward sloping land and land with natural backstops of hills or mountains is recommended.
- (2) Firing platforms, access roads, and targets should be elevated above the flood level.
- (3) The line of fire in rough terrain should be perpendicular to high ground. The line of fire on flat terrain should be free of knolls, ridges, and trees that reduce visibility.
- (4) Known distance ranges should be as flat or evenly graded as possible. If the grade between the firing points and target does not exceed 2 percent, then the firing points may be below the target.
- (5) Roads used for setting and servicing targets in impact areas and for maintenance of earth berm may be graded pathways. Roads in areas not subject to disturbance; e.g., vehicle parking areas, and roadways behind

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- firing lines or out of range of weapons, should be designed for anticipated vehicle weight and usage.
- (6) The ground between the targets and firing line should be free of any hardened surface (smooth-surfaced walkways excepted) such as rocks or other ricochet-producing material.
 - (7) The surface may be sodded or planted with low-growing ground cover.
 - (8) The surface should be smooth, firm, and graded to drain away from the targets. A slight side-to-side grade of 1 percent to 2 percent should be provided for storm water runoff. For baffled ranges, the lateral slope should not exceed 2 percent because of the geometry of the baffle system.
 - (9) The overall size will be governed by the range distance and number of firing positions.
 - (10) Range distances from the firing line to the target are determined by the approved DOE qualification courses of fire for all weapons available for use by Protective Force (PF) personnel and by site-specific training courses of fire. The distances from the firing line to the target should be accurate to ± 0.1 percent. It is important that any inaccuracy in the firing line-to-target distance is a greater, rather than lesser, distance (e.g., 101 yards for a 100-yard range instead of 99 yards).
 - (11) Shooters should have secure footing.
- c. Surface Danger Zones. SDZs should be established to contain all projectiles and debris caused by firing ammunition and explosives (see Table 1). SDZ dimensions are dictated by the types of ammunition, types of targets, and types of firing activities allowed on the range. A basic SDZ consists of three parts: impact area, ricochet area, and secondary danger area (Figure 1). Figures 2 through 6 illustrate the application of the basic parts in the design of SDZs for various kinds of range activities.
- (1) The primary danger area established for the impact of all rounds extends 5° to either side of the left and right limits of fire and downrange to the maximum range of any ammunition to be used on the range.
 - (2) The ricochet area is 5° to either side of the impact area and extends downrange to the maximum range of any ammunition to be used on the range.
 - (3) The secondary danger area is that area paralleling, and 100 yards outside of, the outermost limits of the ricochet area and extending downrange to the maximum range of any ammunition to be used on the range.

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- (4) Boundaries of SDZs must be posted with permanent signs warning persons of the danger of the live-fire range and prohibiting trespassing. The signs must be posted in a way that will ensure a person cannot enter the SDZ without seeing at least one legible sign (i.e., usually 200 yards distant or less).
 - (5) Limit of fire markers, both external and internal, must be placed to denote right and left limits of fire. Where cross firing is to be conducted, internal limit markers must be emplaced to denote internal right or left limits of fire from specific firing positions.
 - (6) Ranges may be located parallel to one another if in compliance with Figure 19 for separation.
 - (7) When there is insufficient distance to lay out a new range with the required SDZ or utilize other ammunition with a maximum range that does not exceed the SDZ, engineered or administrative controls can be used to control firing on that range. Permission to deviate from established SDZ requirements must be granted by the DOE cognizant security authority and supported by a safety risk analysis.
 - (8) Administrative controls such as use of the low-ready position or engineered controls such as muzzle traverse/elevation limiters can be used to control the firearm. Natural terrain such as a mountain or a hill provides an excellent backstop for firing. The terrain should be high enough to capture rounds fired at up to a maximum 15° muzzle elevation.
 - (9) To change the size and shape of an SDZ, baffles may be installed. Partial and full baffle systems consist of the following components: overhead baffles, a canopy shield over firing points, bullet impact berm, and side berms, sidewalls, or side baffles. A fully baffled range must be constructed so all direct fire can be contained within the range (see Figures 7 and 8).
- d. Support Facilities. Range planners should consider the site-specific need for the following range support facilities.
- (1) Targets.
 - (2) Target storage.
 - (3) Bunkers, trenches, and protective barriers for personnel protection.
 - (4) Range control towers.
 - (5) Toilets.
 - (6) Range poles, banners, markers, and signs.

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- (7) Communication systems.
- (8) Access and range roads.
- (9) Parking areas.
- (10) Potable water.
- (11) Target maintenance.
- (12) Ammunition storage.
- (13) Power.
- (14) Sewer.
- (15) All other necessary utilities.

Table 1. Maximum Range of Small Arms Ammunition

Maximum Range of Small Arms Ammunition	
Caliber	Maximum range of small arms ammunition (distance in meters/yards)
.22 long rifle	1400/1531
.38 revolver	
Ball, M41	1600/1749
Ball PGU-12/8	1900/2077
.40 pistol	
Ball	1783/1950
JHP	1908/2086
Frangible	1000/1093
.45 pistol	1500/1640
.45 submachine gun	1600/1749
.357 magnum	2160/2362
9mm pistol	1740/1902
9mm submachine gun	1920/2099
.44 magnum	2290/2504
.50 machine gun	
Ball, M33	6500/7108
AP, M26	6100/6671
12 gauge shotgun, riot 00 buckshot	600/656
.30 rifle and machine gun	
Ball, M23	3100/3390
AP, M2	4400/4811
.30 carbine	2300/2515
5.56mm rifle	
Ball, M193	3100/3390
7.62mm rifle and machine gun	
Ball, M80	4100/4483
Match, M118	4800/5249
40mm	
M79	400/437
Mk-19 40mm	2200/2406

e. Design Criteria.(1) Firing Line Items. Provide the following components:

- (a) Floor Surface. The surface should be smooth, firm, and graded to drain away from the targets. A slight side-to-side grade of 1 percent to 2 percent should be provided for storm water runoff. Transverse firing line grading should match target line transverse grading. The distance between the firing line(s) must be sufficient to support the type of training conducted. Firing lanes must be clearly marked on the surface to match the targets. Depending on the number of personnel to be supported and the funds available, the following surfaces should be considered:
- 1 ground firmly compacted with mown grass;
 - 2 sand or fine gravel;
 - 3 wood decking of sufficient thickness and support to prevent movement; and
 - 4 concrete topped with appropriate cushioning material.
- (b) Overhead Containment. On partially and fully baffled ranges, a ballistic canopy (see Figure 9) should be provided over all locations where a weapon may be expected to be discharged (firing line, by definition). Figure 9 represents one construction approach, but the canopy must contain the direct fire effects of the most energetic round fired on the range. This canopy should begin at least 3 feet behind the firing line. General structural requirements may dictate more distance. The canopy should extend forward a minimum distance of 13 feet minimum, which will work geometrically with the first overhead baffle to prevent a weapon from firing directly out of the range (see Figures 16 and 17). The canopy should be constructed of ballistic material with sacrificial cladding as described below. Sound reduction ceiling waffles should be considered. Weather roofing is required above the ballistic material and it must slope sufficiently to drain.

(2) Firing Point. The depth of the firing point is determined by the shooting activity; e.g., rifle firing requires more depth than pistol firing.

- (a) The minimum depth of the firing point is the area required for the shooter, shooter's equipment, scorers, and range officers. For example, a pistol range might have a firing line approximately 6 to 10 feet deep, while a rifle range would have a firing line up to 20 feet deep. This variation is based on available space, type of

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shooting, size of target frames and carriers, and the spacing of target frames or carriers.

- (b) For rifle ranges, each firing point should be 9 feet wide (see Figure 10). Firing lanes for pistols and shotguns should be 5 feet center to center (see Figure 11).
- (3) Ballistic Material. The purpose of this material is to absorb, deflect, or fragment projectiles. Material for baffles on partially and fully baffled ranges is shown in Figures 12 and 18. Wood that is used should be of middle grade exterior timber or plywood. Timber in contact with the ground must be pressure-treated for this purpose. Avoid exposed connectors if possible. Refer to Table 2, Thickness of Material for Positive Protection Against the Caliber of Ammunition Listed, for the thickness of various materials.
- (4) Sacrificial Cladding. Provide ¾-inch thick plywood with a ¾-inch air gap on any surfaces (baffles, wing walls, metal connectors, etc.) that are within 11 yards of the firing line to prevent back splatter.
- (5) Firing Line Cover Material. The firing line should be covered to protect the shooter and allow activities to be held regardless of the weather. On ranges with several firing lines, the cover is generally installed at the longest firing distance. The firing line covers described below are for shelter only and should not be confused with the ballistic firing line canopies required on baffled ranges. Material that can be used for firing line covers includes wood, concrete, steel, and plastic. Most covers are constructed from wood products and are a shed or gable roof design. In some cases, corrugated metal or fiberglass roofing material can actually increase sound levels at the firing line and in areas around the range. Therefore, to reduce noise, corrugated metal or fiberglass roofing material should not be used unless it is acoustically treated. The structure should be designed to include the following:
 - (a) The shed roof should have a 6-inch cavity filled with fiberglass insulation (or equivalent) and be enclosed on the bottom with ¾-inch plywood or insulation board. Although this will not provide a completely effective sound barrier, sound waves will strike and penetrate the inside layer of plywood, and the sound will be reduced;
 - (b) A plywood shed roof should have a 6-inch hollow core enclosed with a small grid mesh screen and a six-mil polymer barrier to retain the insulation. The intervening space should be filled with blown-in insulation to trap sound waves and reduce the drum effect of an open roof; and

- (c) A gable roof has a large hollow area above the joists; however, additional sound damping materials should be installed to reduce the drum effect and the sound pressure level as they are reflected onto the firing line area. The underside of the roof surface will require a minimum of 4 inches of insulation to fill in between the rafters and a minimum of 3 inches of insulation above the ceiling and between the joists. This will reduce the drum effect caused when sound waves strike surface material (e.g., corrugated metal) and will absorb a portion of the reflected sound waves.
- (6) Surface Material. Positions should be hard-surfaced (e.g., concrete, gravel, wood, asphalt, or sod).
 - (a) For ranges where prone shooting is conducted, gravel or similar materials may cause difficulty for the shooter. When the surface material is concrete or asphalt, shooting mats or padding will be required when the kneeling or prone positions are used.
 - (b) For ranges with multiple firing lines, hard-surfaced firing lines located downrange of another firing line should be recessed or shielded from bullet impact to avoid ricochets off exposed edges.
- (7) Landscaping. The site should be landscaped to provide for erosion control, noise abatement, maintenance, appearance, fire protection, and safety.

NOTE: Any landscaping will complicate the removal of lead in the berms, especially on impact surfaces, and will create higher maintenance costs.

- (a) Berms should be planted with grass to prevent erosion. Ground cover is acceptable on existing berms that have been maintained and where erosion is not a problem.
- (b) When grass is selected as a ground cover, it should be appropriate for the geographic area and should readily grow and provide good coverage. The degree of shading caused by overhead baffles will determine the type of grass for the range floor. Use grasses and cover for earth berms that will not be accessed by moving equipment so that natural growth heights will be acceptable. In areas where the soil is poor or extremely sandy, plants such as Bermuda grass, ice plant, or vine root can be used to control soil erosion.
- (c) Heavy landscaping may be used to cut down on noise transmission. Plants and trees may be planted behind the firing position shelters to alleviate noise transmission problems.

Soundproofing the firing line structures should be considered in problem areas. Trees should be kept away from firing lines to allow range control officers to see all shooters.

- (d) For windbreaks, trees may be planted along the length of the range with partial side berms or wing walls where strong prevailing crosswinds are problems to shooting accuracy.
 - (e) Densely planted rows of fast-growing, compact, and thorny shrubs may be planted below the trees at ranges with partial berms or wing walls to abate noise, prevent encroachment, and alleviate crosswind problems.
- (8) Target Line and Mechanisms. Components must be as follows:
- (a) The target line should be a minimum of 30 feet from the toe of the impact berm. The distance between targets must be the same as the distance between firing positions.
 - (b) Target line bases must match grading with the firing line. Mechanical target support bases must be protected from the direct line of fire. They may be buried flush with the ground or placed behind a protective wall. Note that a small raised earth berm at this location generates significant ricochet. The complexity of the mechanism will dictate the protection requirement. See Figure 13 for wall or trench protection of high cost target line mechanisms.
 - (c) Target supports can be made of steel angles and channels, PVC pipe or wood. Do not use metal parts within 33 feet of the firing line where direct fire strikes are anticipated. Discharging weapons close to metal surfaces is extremely dangerous. Present the smallest surface area that is structurally sound to the line of fire to minimize ricochet. Design the target holders for easy and inexpensive replacement. Portable, self-supporting 2- by 4-inch wood frames or 2-inch by 2-inch wood plank placed into buried PVC pipe work well on simple ranges. The full face of the target must be visible to the shooter.
 - (d) Turning targets and the display time are at the discretion of the user. Commercially available, electrically motorized target carrier and electronic scoring systems should be considered where economically feasible.
 - (e) On open ranges, a single target line with multiple firing lines is preferred. On partially or fully baffled ranges, in most instances, a single firing line with multiple target lines will produce the most cost-effective range because of the firing line canopy. An

extremely advanced target mechanism may be significantly more expensive than multiple canopies.

- (9) Impact Structures. The structure varies depending on the type of range. Natural terrain such as a mountain, cliff, or steep hill may be incorporated into impact structures provided the completed structure complies with the minimum design requirements. Acceptable structures by range type are listed below.
- (a) For open ranges, the top elevation of the earth impact berm should be 26 feet above the range surface for ranges 100 yards long or longer and 16 feet above the range surface for ranges 50 yards long or less. The impact berm should extend 50 yards beyond where the target line ends for 100-yard-long ranges or until joining with the side containment, if provided for ranges 50 yards long or less.
 - (b) The suggested elevation may be met by designing a combination of earth berm and vertical baffle (see Figure 14). The earth berm portion should have a top elevation of 16 feet above the surface of the range. The vertical baffle should be constructed of ballistic material and designed to withstand local seismic and wind loads. This combination arrangement would reduce the footprint and the amount of material in the earth berm.
 - (c) The preferred slope of the impact berm face is 1 to 1 or steeper. The steeper the slope, the more likely the berm is to absorb projectiles. The top should be 10 feet wide. The impact slope should be constructed with a 3-foot layer of easily filtered soil (to reclaim the lead projectiles) free of boulders, trees, rocks, stones, or other material that will cause ricochet. The rear slope should be appropriate to the native soil and maintenance requirements.
 - (d) For partially and fully baffled ranges, the top elevation of the impact structure will vary depending on the overhead baffle and impact structure arrangement. The impact structure for a partially baffled range can be: standard impact berm, bullet trap, or hybrid. For fully baffled ranges, the impact structure must be a bullet trap. In all instances, the impact structure must connect to the side containment. The top of the berm should be at an elevation 5 feet above the point where the highest line of direct fire can strike the berm.
 - (e) Outdoor baffled bullet stops can be constructed by placing the last vertical overhead baffle over the last target line and placing a sloped baffle to connect from the top of the earth berm to the back of the last vertical baffle. The bottom of this lower-sloped overhead baffle should be 2 feet above the highest point on the

berm where direct fire might strike. See Figure 15 for material and construction details. Rainfall runoff from the sloped baffle onto the berm must be considered. (See “Use of Bullet Traps and Steel Targets” for Shoot House bullet trap information.)

- (10) Side Containment. For partially and fully baffled ranges (Figures 7 and 8), the top elevation of the side containment must geometrically mate with the overhead baffles to be high enough to prevent any direct fire from exiting the range. Full-side height containment should extend 3 feet to the rear of the firing line. Locate the side containment at least 10 feet outside of the centerline of the outermost firing lane. Construction may be in the following forms.
 - (a) Earth Berm. Construct earth berms to an inside slope of 1 to 1.5. If native soil characteristics will not produce a stable slope at this angle, provide geotechnical fabric reinforcement in the fill. The top width of the berm should be at least 10 feet. No rocks are permitted in the top 3 feet of the inside surface. Generally, earth berms cannot be used on partially or fully baffled ranges; however, earth berms are permissible if the firing range is small and the overhead baffle and berm geometry intercept ricochets.
 - (b) Continuous Walls. Construct continuous walls of ballistic material to withstand local wind and seismic loads. Provide sacrificial cladding to 13 feet forward of the firing line and 3 feet behind the firing line. Continuous walls are preferred for fully baffled ranges.

Table 2. Thickness of Material for Positive Protection Against the Caliber of Ammunition Listed

Cover material	Caliber and thickness required to stop penetration		
	5.56 mm	7.62 mm and Cal. 30	Cal. 50
Concrete (5,000 lbf/in ²)	5 inches	7 inches	12 inches
Gravel-filled concrete masonry units	8 inches	12 inches	24 inches
Broken stone	14 inches	20 inches	30 inches
Dry sand	16 inches	24 inches	32 inches
Wet sand	25 inches	36 inches	48 inches
Oak logs (wired)	28 inches	40 inches	56 inches
Earth			
Packed or tamped	32 inches	48 inches	60 inches
Undisturbed compact	35 inches	52 inches	66 inches
Freshly turned	38 inches	56 inches	72 inches
Plastic clay	44 inches	65 inches	100 inches

NOTE: Figures are based on new material. Degradation may occur over time.

- (c) Wing Walls. Wing walls (side baffles) are discontinuous side protection set at 45° to the line of fire. Locate the wing walls so that they are overlapped by 6 inches based on any line of fire that may strike them. Construct the wing walls of ballistic material to

withstand wind and seismic loads. Additionally, provide sacrificial cladding on wing walls closer than 30 feet to the firing line.

- (d) End Walls. End walls may be constructed at the firing lane edge on the firing line in lieu of extending side containment 3 feet behind the firing line. Walls should be long enough to close off any line of sight between the end of the side containment and the rear 3 feet mark. The end walls should be constructed of ballistic material with sacrificial cladding extending from the canopy to the firing line surface.
- (11) Overhead Baffles. Overhead baffles must be located so that no direct fire can exit the range from any firing position. The first overhead baffle must be geometrically coordinated with the firing line ballistic canopy (see Figure 9). The elevation of the top of each succeeding baffle should be 6 inches higher than a line of fire that just clears beneath each preceding baffle (see Figure 16). Overhead baffles should be the same height and spaced apart down range to achieve the required geometry (see Figure 17). The last baffle should be placed so the line of fire will strike the impact structure no higher than 5 feet below the top elevation of the structure. On a fully baffled range, the last overhead baffle must be over the last target line.
- (a) On partially baffled ranges, overhead baffles must extend laterally to within 1 foot of the side containment. On fully baffled ranges, the overhead baffle must tie into the side containment.
 - (b) The vertical dimension of an overhead baffle when it is vertical varies with the number and spacing of the baffles. Normally, the height is between 5 and 8 feet when considering structural support size and costs.
 - (c) The baffles must be constructed of ballistic material. Baffles within 11 yards of the firing line should be covered with sacrificial cladding. See Figures 12 and 18 for possible configurations.
 - (d) Space the structural columns as far apart laterally as possible to open firing lanes. If possible, do not construct columns within the range. Design columns or beams to withstand local wind and seismic loads, and provide protective steel plate on the faces of the columns exposed to the firing line in accordance with Figures 12 and 18. Provide sacrificial cladding if the column is within 10 yards of the firing line. Overhead baffles may be placed on a flatter slope and overlapped to function as firing line canopies if multiple firing lines are to be used (see Figure 17). This arrangement is cost-effective for baffled combat lanes.

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5. INDOOR RANGE DESIGN.

a. Use of Indoor Ranges.

- (1) Indoor ranges must be designed so projectiles cannot penetrate the walls, floor or ceiling, and ricochets or back splatter cannot harm range users. Considerations should be made for cleaning of all surfaces and handling of hazardous wastes.
- (2) Lead exposure requirements must be reviewed for applicability.

b. Site Selection.

- (1) Walls and Partitions. Indoor ranges must incorporate walls and partitions capable of stopping all projectiles fired on the range by containing or redirecting bullets to the backstop.
- (2) Existing Buildings. If there are existing drawings of the facility, copies should be obtained from the original owner, architect, engineer, builder, or building permit. If original drawings of the building are not available, a sketch can be made of each floor of the building with a special emphasis on the load-bearing walls. The following considerations should be used when making the initial evaluation of an existing building.
 - (a) General Construction. Buildings constructed of wood products should be avoided. Modifications to reinforce the structure to support metal backstops or to reduce fire hazards may not be cost-effective.
 - (b) Exterior Walls. The type of exterior wall construction (e.g., masonry, wood, concrete, metal, combination, other) should be identified. Masonry buildings should be given primary consideration, especially those constructed on concrete slabs.
 - (c) Floors, Walls, and Ceilings. Floors, walls, and ceilings must be able to contain the sound in addition to the bullet fired.
 - 1 The ideal wall is made of poured concrete a minimum of 6 inches thick.
 - 2 To aid in range cleaning, concrete floors should be finished so they have a nonporous surface.
 - 3 Ceilings should be 8 feet high and enclosed to reduce air turbulence created by ventilation systems.
 - 4 Evaluate the structural support designs of older buildings for their ability to withstand new loading. Original design

considerations usually do not allow for installing heavy backstops and other range equipment.

- 5 To decide if modifications are necessary, slab buildings must be analyzed carefully to determine the capacity for floor loading. If there are no floor drains and it is economically feasible, modifications should also include adding one or more floor drains.
 - 6 Ceiling joists may require strengthening to support baffles and shielding material.
- (d) Electrical. Electrical needs may require the installation of heavy-duty wiring both internally and externally to accommodate the added power needs of range ventilation, heating, lighting, and target-carrier mechanisms.
- (e) Plumbing. Plumbing does not usually require major modifications; however, heavy metals may be prohibited from area wastewater treatment collection systems. Therefore, an approved filtration system may be necessary for disposal of hazardous waste material; e.g., lead.
- (3) Precast Buildings.
- (a) Precast concrete companies can provide complete precast buildings (job site-delivered) if engineering specifications for steel placement are provided on a set of plans (drawings) for the proposed building.
 - (b) Precast assembly allows for installation of a roof design more suitable for an indoor range. Gabled or hip roof designs should not be used.
 - (c) Hollow, precast concrete panels provide an option to bar joists, eliminating bullet ricochet or splatter. A flat bar joist design is the recommended alternative to hollow, precast concrete panels.
 - (d) The flat roof design also provides support for heating, ventilating, and air conditioning (HVAC) equipment outside of the range, which saves space and reduces cost.
- (4) New Construction. New indoor construction projects require the same guidelines as existing buildings; however, they offer the advantage of building a structure specifically for use as an indoor shooting range.

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- c. Range Planning. Design work for ventilation, wall structures, floors, ceiling, acoustics, backstops, and lighting will depend on how the range will be used.
- (1) A determination for the type of building required includes the following considerations.
 - (a) Can the range be built in an existing building or is a new one required?
 - (b) How large should it be?
 - (c) How many shooters will it be expected to serve?
 - (d) Will it be used for competition?
 - (e) Should space be allowed for classrooms?
 - (f) How much will the facility cost?
 - (2) The planning process should include:
 - (a) obtaining ordinances, zoning regulations, building codes, soil conservation regulations and other information pertaining to legal requirements;
 - (b) for evaluation, identifying a site for a new building or several existing buildings that may have the suitable design characteristics; and
 - (c) gathering other technical information relevant to the project. This information includes zoning requirements, onsite information, and range design criteria. Local zoning codes or health department regulations normally will provide answers or solutions on how the project is to be handled.
- d. Design Criteria. Based on the site selected, type of shooting, number of users, and site layout, the next step is to design the facility by preparing detailed drawings showing specifications and necessary dimensions. The four main considerations for indoor ranges are shooter needs, type of shooting activity, number of firing points, and number of users. Special consideration should be given to ventilation, lighting, safety baffles, and backstop design. The following standard and optional features for indoor ranges should be considered.
- (1) Backstops and Outdoor Baffled Bullet Stops. See “Use of Bullet Traps and Steel Targets” for Shoot House bullet trap information.

- (a) The design of a backstop or baffled bullet stop is a contributing factor to the service life of the unit. Steel should be installed according to the type of ammunition to be used and to proven angle configurations.
- (b) The design criteria should be based on the planned use of the facility. Metal plates selected for use in a backstop or baffled bullet stops must resist repeated stress according to the degree of stress applied. Necessary characteristics are resistance to abrasion, resistance to penetration, surface hardness, thickness, and alloyed strength to resist metal fatigue.
- (c) The main backstop is generally a fabricated steel plate or series of plates used to stop bullets fired on a range. Backstop configurations and plate thickness will change according to type of shooting activity.
- (d) Steel backstops with sand or water pits are common; however, a few indoor ranges use earthen or sand backstops.

CAUTION: Earthen or sand-filled backstops are not recommended because they can create health hazards for maintenance workers from silica and lead dust. They also cause excessive wear on ventilation fans.

- (e) Backstops must extend from side to side and from ceiling to floor to protect the end of the range completely from penetration by direct bullet strike and prevent ricochets, back splatter, and splatter erosion of side walls.
- (f) Four basic backstop designs are used for indoor ranges: Venetian blind, escalator, Lead-a-lator[®], and the angled backstop (45°) back plate. Other backstop designs exist and should be researched for applicable use.

1 Venetian Blind Backstop. Requires less space, but without proper installation and regular maintenance it can cause back splatter problems from exposed edges of each main segment of the backstop. Keeping the exposed edges ground to original specifications is time-consuming, difficult, and requires skilled personnel.

- a To control back splatter, a curtain should be hung in front of the backstop. Tests have been conducted on materials including canvas, burlap, cardboard, insulation board, and synthetic rubber. Properly installed, these materials effectively stop back

splatter. Walls using insulation board or a synthetic rubber curtain are best.

- b The main advantage of the venetian blind backstop is minimal space requirements. While an angled plate or an escalator will use 14 feet of space, the venetian blind uses only 5 feet.

2 Escalator Backstop. Sets up with flat steel plates laid out on a framework sloping away from the shooter. Between each series of plates, an offset allows a bullet sliding down the facing surface to drop into a hidden tray for easy cleanup. At the top or back of the backstop, a swirl chamber is provided to trap the bullets or bullet fragments as they exit the backstop surface. Once the bullet's flight ends in a spin-out chamber, the bullet or pieces fall into a cleanup tray.

3 Lead-a-lator[®]. A variation of the escalator-type backstop that uses a curved instead of flat piece of steel. The surface is concave and operates so that a bullet will follow the contour of the surface into a dry lead spinout chamber where it is trapped.

4 Angled Backstop (or 45° Inclined Plates). Uses a sand or water trap and has been the traditional alternative for indoor ranges.

- a The angle of the plate should never exceed 45° from the ground. The 45° plate and pit backstop is relatively inexpensive, but there are several disadvantages. Sand traps require frequent cleaning to remove bullet fragments. Cleaning operations require workers to wear high-efficiency particulate air (HEPA) filter masks if material is removed dry. It is best to dampen the sand trap material before and during cleaning operations to eliminate dust. To maintain a healthier internal environment, frequent removal, disposal, and replacement of lead-laden sand is required. The surface should be continually raked to keep the sand level and to guard against splatter as lead buildup occurs.

- b The cleaning operations are easier when a water trap is used. However, a water trap requires chlorine and other chemicals to retard algae growth and antifreeze in colder months to prevent freezing.

Installing a water pit requires a different approach to foundations and footings, especially in areas affected by earthquakes or freezing.

- (2) General Range Cleaning. Both dry and wet methods can be used to clean the range. The method selected depends on the frequency of use. The wet method is preferred when floor drains are available, and keeping materials wet during cleaning operations reduces or eliminates release of microscopic dust particles. When dry methods must be used, workers must use the appropriate personal protective equipment (PPE) that has been established by local industrial hygiene personnel. After cleaning operations are complete, workers must shower and have work clothing laundered.
- (3) Backstop Steel Plate Specifications.
 - (a) Steel plates supported by concrete or masonry should be anchored by expansion bolts or toggle bolts, as suitable for construction, with flush countersunk heads not more than 12 inches on center of all edges of each plate. Joints and edge lines should be backed with continuous ½-inch thick plate no less than 4 inches wide. Bolts should pierce both the facing and back plates. Expansion bolts should penetrate concrete not less than 2 inches. Steel plates must have milled edges at all joints.
 - (b) Joints must be butted flush and smooth. After the plates are erected, they must not have any buckles or waves. Exposed edges must be beveled at 42° to a fillet approximately ½-inch thick. There must be no horizontal joints in any steel plate work.
 - (c) Welding must meet the American Welding Society code for welding in building construction. Steel plates joined at, and supported on, structural steel supports must be spot-welded to steel supports not more than 6 inches on center.
- (4) Baffles, Deflectors, and Shields. Baffles on indoor ranges protect lighting fixtures, HVAC ducts, ceilings, and target carrier apparatus. Baffles are designed to protect against the occasional errant bullet but not for repeated bullet strikes.
 - (a) To cover or protect vulnerable ceiling areas or range fixtures, baffles must extend the entire width of the range and downward. Spacing of baffles on a 50 to 75 feet range depends on the ceiling design. Range distance (firing line to target line) and height are factors. Ceilings must be impenetrable.

- (b) Baffles or deflector plates must be used when modifying an existing building, especially in a building constructed of wood. This will prevent bullets from escaping or penetrating. Baffles should be a minimum of 10-gauge steel covered with a minimum of 1 inch of soft wood to prevent back splatter. The wood traps the projectile, whereas bare steel redirects it downward into the range area. A wood surface must be applied to overhead baffles, because ranges with untreated baffles usually show significant damage to concrete floors and often complete penetration through wood floors.
- (c) Baffles should be installed at a 25° angle as measured from the horizontal plane of the ceiling. The baffle size and placement depends on what surface areas require protection. For example, ceiling baffles are wider than side baffles.
- (d) Unlike baffles, deflectors are installed vertically and horizontally to redirect wide-angle shots into the backstop area. Deflector shields protect pilasters, leading edges of sand traps, bottom edges of backstops, doorways, windows, ventilation registers along the wall, etc. Deflectors are not covered with wood generally, but may be. These devices are also installed at a 25° angle either to the wall surface or floor.
- (e) To protect ceiling areas, special impenetrable shields are installed above the firing line, especially in wood frame buildings.
 - 1 Shields should extend the entire width of the range and 12 feet forward of the firing line. Floor shields may be required on wood floors.
 - 2 Shields must be constructed from metal sheets according to planned use. For example, 10-gauge steel covered with a minimum of 1 inch of soft wood is effective in stopping most pistol calibers.
- (5) Floors, Walls, and Ceilings. Indoor range facility floors, walls, and ceilings must be impenetrable; therefore, an existing building must have a structural analysis to determine loading factors that may exceed original design specifications. Wooden buildings may require modifications to support the increased weight. Specifications for new construction call for either poured-in-place concrete, pre-cast concrete, or dense masonry block. Solid cinder block should be used in place of hollow-core block. Specifications for modifying existing buildings call for adding additional materials to prevent bullet escape, which can be done with wood and steel laminated shields. Laminated shields can be constructed onsite by placing sheet-steel or steel plates between two sheets of ¾-inch plywood. While

this method is more expensive than the extended booth design, it allows for an open firing line and better visibility for the range officer. Walls should be treated beginning 3 feet to the rear of, and extending forward of, the firing line until all vulnerable surfaces are protected. Acoustical material should be applied to the surfaces to aid in sound control.

- (a) Floors. The range floor should be constructed by using a single pour and a fine, uniform-aggregate mix of concrete. Reinforcement should be No. 4 steel rods placed 12 inches on center along with 6- by 6-inch 8/8-gauge welded wire fabric. This may vary according to soil conditions. Very large floor areas may require two or more pours with expansion joints between each slab.
- 1 The floor should be designed to slope down toward the target line, beginning at the firing line, ¼-inch per foot.
 - 2 The floor should be no less than 4 inches thick.
 - 3 Floor size is governed by design. Larger size will result in higher costs for ventilation, lighting, heating, and overall building design. The decisions should be based on expected number of users versus overall cost.
- (b) Floor Guards. Floor guards are provided to protect leading edges or protrusions; e.g., drains, traps or other protrusions from the floor area. Floor guards are designed to redirect errant bullets into the backstop area, which minimizes range damage.
- 1 Floor guards are constructed from 10-gauge steel and may be covered with wood.
 - 2 Floor guards are installed horizontally along the floor surface parallel to the firing line.
 - 3 Floor guards typically slope away from the firing line at a 25° angle to the horizontal.
 - 4 Floor guards should extend only as high as necessary to protect exposed surfaces.
- (c) Floor Drains. Floor drains should be constructed of cast iron soil pipe. The drain pipe should be attached to a lateral drain located 1 foot forward of the backstop floor guard. The drain pipe must lead to a filtration system approved by the cognizant environmental, safety, and health organization on the site.

- (d) Walls. Poured concrete or masonry is preferred for wall construction, but wood may be used. Wall thickness must conform to acceptable engineering standards and comply with Federal, State, county and local zoning codes. Usually, no less than 3-inch thick, reinforced walls should be constructed to prevent the exit of any projectiles.
- NOTE: This specification usually requires the use of steel or similar material where wooden walls are used. The size depends on building design, geological conditions, and climate. Size includes the height, thickness, and length of the running wall.
- (e) Ceiling. Ceiling material should reduce sound, protect lighting devices, reflect light and be impenetrable. Typically, ceilings include 10-gauge steel baffles, 2- by 4-foot white acoustic panels, and clear-light panels.
- 1 The ceiling should be a minimum of 8 feet above the floor level and have an acoustically treated, smooth surface to allow for positive air movement downrange.
 - 2 Baffles to protect adjoining areas should be above a false ceiling or designed into the roof/ceiling structure.
- (6) Shooting Booths. Commercial or locally built shooting booths may be desirable on pistol ranges; however, they are not recommended for rifle ranges. Shooting booth panels can provide an impenetrable barrier between shooters, reduce sound levels, restrict the travel of brass, and act as a spray shield when revolvers are used.
- (a) Shooting booths should be omitted for ranges that use only rifles.
 - (b) A shooting booth should never extend more than 18 inches behind the firing line because greater extension may obstruct the range control officer's visibility.
 - (c) Bullets fired from any firearm used on the range must not be able to penetrate booth panels. The booth panel must be able to withstand the impact of a bullet fired at any angle to the surface and at point-blank range.
 - (d) Design criteria for the construction of booth panels are as follows:
 - 1 Cover the 10-gauge steel plate with a nominal 2 inches of soft wood. In a series of tests using 10-gauge steel plate, firing all lead bullets at right angles, the plate covered with a nominal 2 inches of soft wood withstood direct hits from

- all standard pistol calibers up to, and including, .44 caliber magnum;
- 2 Use special acoustical materials to ensure that panels reduce muzzle blast effects on all shooters and range personnel;
 - 3 Ensure that panels do not restrict airflow;
 - 4 Ensure that panels do not restrict the range officer's visibility of the firing line; and
 - 5 Construct panels so they extend from the floor to a minimum height of 6 feet. Panels should be ceiling height.
- (7) Target Carriers and Turning Mechanisms. An indoor range can be operated more efficiently and safely by installing a target transport system. This system may be a simple, hand-made device or a completely automatic, electrically powered system. Either one will enhance safety by eliminating the need to walk downrange to replace targets. Target carrier systems speed up range operations. A turning target mechanism is available that faces the target parallel to the line of sight and then turns the target 90° to the line of sight to begin the stated time period. The target carriers should position the targets in the approximate center of the backstop.
- (8) Control Booth. Range control booths must allow for maximum visibility and provide for easy access into and out of the range and ready area. The control booth should provide seclusion from and immediate access to the range environment. This design protects the range officer from frequent exposure to high sound levels and lead emissions.
- (9) Communications. A communications system capable of relaying range commands distinct and separate from the sounds generated by shooting activities is required. Communications systems must account for shooters who wear two pairs of hearing protectors and persons who have substantial hearing loss.
- (10) Ventilation and Filtering Systems. This section deals with the design or redesign of ventilation systems for indoor firing ranges. Administrative or engineering controls must be instituted to prevent shooters from being exposed to airborne lead levels exceeding acceptable limits. Administrative controls are used either when engineering controls fail to reduce exposure or when range use exceeds HVAC system specifications. Administrative controls are especially applicable to reducing risks on existing ranges.

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- (a) Administrative controls used to reduce exposure levels on an indoor range must be rigidly followed and enforced, and compliance must be recorded in a log book for purposes of analysis and reference.
 - (b) The following administrative controls are provided and must be used where individuals are frequently exposed to airborne lead.
 - 1 Provide range maintenance personnel with appropriate PPE; e.g., safety glasses and respirators.
 - 2 Provide proper HEPA filter cleaning equipment. The equipment must be able to remove accumulated lead dust from floors, walls, and ledges and must include attachments capable of removing lead-laden sand from the backstop area.
 - (c) A ventilation system must be installed that will provide clean air in the user's breathing zone to reduce exposure to potentially dangerous materials to safe levels.
 - (d) Adopt administrative controls that monitor and control exposure time for a given user and/or assigned range personnel.
- (11) Lighting.
- (a) A visually safe facility should be free of excessive glare and major differences in light levels. Therefore, floors and ceilings should be designed to provide light reflection. In the event of a power outage, battery-powered emergency lighting must be provided for emergency exits.
 - (b) Rheostat-controlled lighting fixtures, which can reproduce near-daylight and low-light conditions, are best suited for indoor ranges. Range lighting involves three systems: general lighting, local lighting, and semi-direct lighting.
 - 1 General lighting provides uniform light levels over the entire range area and adjoining areas and is usually installed in a symmetrical arrangement to blend with the architecture.
 - 2 Local lighting supplements general lighting along the firing line to provide better visibility for those tasks associated with the loading and firing of firearms.
 - 3 Semi-direct lighting distribution directs 60 to 90 percent of the lighting on the target with a small upward component to

reflect from the ceiling and walls to soften shadows and generally improve range brightness. When ceilings are white, lighting fixtures mounted too close together create excessive glare.

- (c) Lamp specifications for general lighting must be adjustable to provide 0.2 to 50 foot-candles of luminance measured at a point 7 yards from the target line. Local lighting should produce 0.2 to 60 foot-candles of luminance on the firing line. Semi-direct lighting on the targets should achieve 0.2 to 100 foot-candles of luminance. Glare should be reduced or eliminated by incorporating pastel colors in the interior design.
 - (d) Lighting designs should also seek to balance the color of light emissions. For example, most fluorescent fixtures produce high levels of blue, which alone are not suitable for indoor ranges. If fluorescent fixtures are used, green tubes or other light sources should be installed to balance the colors.
- (12) Plumbing. Plumbing requirements specify that there must be a fresh water supply for personal hygiene and for range cleaning chores. There also must be a waste removal system for normal waste material and material removed from the range. An approved filtration system must be provided for range cleaning waste. Floor drains should be connected to this alternate waste system. Restrooms, showers, and sinks should be connected to a regular sewer system.
- (13) Sound Control. Sound control on indoor ranges includes two distinct components: airborne and structure-borne sound. For airborne sound, all leaks into outer areas should be sealed, which includes airtight insulation around doors, windows, HVAC ducts, walls, and ceilings. Structure-borne sound reduction is necessary to protect adjoining, occupied rooms. Acoustical material should be applied to walls, HVAC ducts, floor, and ceiling areas.
- (14) Range Control. Range control provides rules and supervision that encourage safe and proper use of a range. Safety devices control the physical use of an indoor range and may include warning lights, alarm bells, switch locations, etc. For example, an indoor range with a door in the downrange area should be equipped with an alarm. The door could also be secured by a mortise lock or barred from within but must remain a fire exit. Fire codes generally prohibit bars on doors that would delay escape from a building. Emergency personnel must be able to access the doors. Any door that can be accessed from the outside must be marked with warning devices to indicate when the range is in use. When installing doors on indoor ranges, refer to Life Safety Code National Fire Protection Association (NFPA) 101.

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- (15) Target Carriers. Target carriers are used for the convenience of shooters to allow them to continue shooting without delay when target changes are necessary. For health considerations, target carriers keep shooters out of the high lead concentration areas and safely behind the firing line.
- (16) Heaters. Protected heating units should be installed behind and above the firing position to provide a comfort zone for shooters.
- (17) Gun Racks. Gun racks should be mounted behind the firing positions as an additional safety feature to reduce gun handling and to keep the range areas orderly. Appropriate material should be used to construct the gun racks, and the design must correspond to the weapons being used.

6. LIVE FIRE SHOOT HOUSE.

a. Introduction.

- (1) A live fire shoot house (LFSH) is intended for use in advanced tactical training for Security Police Officers. Use of this facility includes individual tactics or Special Response Team force option training. All LFSHs must have an elevated observation control platform (EOCP). The following sections illustrate recognized construction methods for LFSHs. However, they do not eliminate the requirement for sound professional engineering design and validation.
- (2) Administrative controls not directly related to design and construction must be in place during facility use. The administrative controls and engineering design allow for a reduction in physical barriers that prevent rounds from escaping the facility. Designed barriers must prevent a round fired with a vertical upward error of 15° from escaping the facility.

b. Site Selection.

- (1) Site selection for an LFSH is similar to that for any range facility. Terrain features, noise, and availability of utilities and access roads must be considered, as already discussed in previous sections for indoor and outdoor ranges. The LFSH should be placed adjacent to other range facilities whenever possible so that it may utilize the same support facilities, access roads, etc.
- (2) Facility design, target and shooter placement, and other administrative controls minimize the possibility of rounds being fired over the top of the walls and leaving the structure and mitigate the need for an SDZ outside the confines of the LFSH proper.

c. Design and Layout.

- (1) The interior layout of the facility is based on the mission and training requirements of the site. Facility design should incorporate a wide variety of room configurations. Some of the room configurations that should be considered are: multiple floors, an L-shaped room, stairwells, rooms within a room, hallways, and closets.
- (2) The floor plan design should accommodate the movement of target systems, bullet traps, and other equipment into and out of the LFSH.
- (3) Exposure to airborne contaminants for a fully enclosed LFSH must be controlled by adequate ventilation. The lighting requirements are similar to those for indoor ranges.

d. Wall Construction.

- (1) Wall Height. Exterior walls of the LFSH must be designed to absorb the most energetic projectile identified for use within the facility. Wall height must be a minimum of 8 feet. The wall height should allow a maximum error angle of 15° from horizontal standing shooting distance from the target and still enable a projectile to be contained by the wall, which can be described by the following equation: Wall Height is equal to the muzzle height plus 0.27 (tangent 15°) times the target distance. The following table assumes a muzzle height of 5 feet.

<u>Distance from Muzzle to Ballistic Wall (Feet)</u>	<u>Wall Height (Feet)</u>
11' 1"	8' 0"
13' 3"	8' 6"
14' 10"	9' 0"
17' 0"	9' 6"
18' 6"	10' 0"
20' 9"	10' 6"
22' 2"	11' 0"
24' 5"	11' 6"
25' 11"	12' 0"

If the distance from muzzle to ballistic wall exceeds the required wall height, other administrative, engineering or natural ballistic wall controls must be administered or considered such as shooter-to-instructor ratio, canopies, baffles, natural terrain, existing SDZ, standard operating procedures, and training.

- (2) Ballistic Walls. Ballistic interior walls are the preferred method of construction. Where non-ballistic interior walls are used, additional administrative controls must be applied to target placement and team

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choreography. Ballistic walls are required in all cases where containment of the round and protection of personnel is paramount.

- (a) Footings. Footings must be designed using the engineering criteria that best ensures structural integrity and stability of wall construction.
- (b) Composite Walls.
 - 1 A combination of $\frac{3}{4}$ -inch exterior grade plywood and steel is effective. Minimum thickness will be $\frac{1}{4}$ -inch mild steel with an exterior-grade plywood separated by a minimum of $\frac{3}{4}$ inch with a maximum of $1\frac{1}{2}$ inches from the steel surface.
 - 2 Other combinations are possible. The main criterion is that the wall must stop any round fired and contain bullet fragments.
- (3) Non-Ballistic Walls. These walls are constructed of materials that offer no protection to personnel or equipment in adjoining rooms. Material used for these walls must not contribute to or enhance ricochet or splatter. Additional administrative controls must be applied such as target placement and team choreography.
- e. Doors. All doors must be constructed of wood with no glass. Additionally, at least a portion of the rooms must have working doors, some opening inward, some opening outward, and doors opening left and right.

NOTE: All devices in the LFSH, such as brackets and hangers, used to secure walls to floors or secure doors must be covered or protected to mitigate any tripping or ricochet hazards.
- f. Ceiling or Roofs. Ceilings or roofs can be of value when the shoot house is required for year-round use in areas with severe weather conditions. Exposure to airborne contaminants must be controlled by adequate ventilation. The lighting requirements for fully enclosed shoot houses are similar to those for indoor ranges. When training exercises require target placement above the wall design, the ceiling or roof must be protected unless firing into an approved SDZ.
- g. Floors.
 - (1) Floor construction must be selected for its ability to absorb direct fire, minimize ricochets, and provide a walking surface free of slipping/tripping hazards. Floors should provide the same ricochet protection as walls. Options include:

- (a) exterior-grade plywood floor constructed in accordance with American Plywood Association guidelines over smooth finished concrete;
 - (b) concrete with brushed surface that minimizes slip and tripping hazards;
 - (c) asphalt;
 - (d) exterior-grade plywood;
 - (e) shredded bias-ply tires; and
 - (f) earth, free of rocks and debris that could cause ricochet.
 - (2) Construction joints between walls and floors must be designed to contain projectiles within the LFSH.
- h. Bullet Traps.
 - (1) General Information.
 - (a) Targets used in LFSHs must be placed so that fire is directed into a bullet trap designed to capture the rounds.
 - (b) Bullet traps must be constructed to contain the most energetic projectile to be fired into them without dimpling/pitting the steel and contain splatter and fragments in all directions. The size and shape of a bullet trap may be altered, but materials may not be substituted.
 - (2) Specifications for construction. See “Use of Bullet Traps and Steel Targets” for Shoot House bullet trap information.
- i. Elevated Observation Control Platform (EOCP).
 - (1) EOCPs enhance the ability to observe and control LFSH operations. Administrative controls must be considered when constructing the EOCP. Platform construction and location is based on the training to be conducted. EOCPs must be constructed in accordance with all applicable regulations for elevated work platforms.
 - (2) EOCPs must be constructed to:
 - (a) maximize instructors’ observation and control of the entry team fire and movement;

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- (b) facilitate communication between instructors on the EOCP and the floor;
- (c) position the lowest point of the horizontal walking surface higher than the 15° vertical error for any target engaged;
- (d) provide ready access;
- (e) integrate instructors' movement with team flow;
- (f) maximize instructors' ability to see shooters clearly at all times;
and
- (g) have supporting structures placed so that they pose no additional hazards such as tripping, ricochet, splatter, etc.

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Attachment 1
Attachment 1-1

ATTACHMENT 1 -- RANGE DESIGN FIGURES

- Figure 1. Surface Danger Zone for Small Arms Firing at Fixed Ground Targets
- Figure 2. SDZ for Small Arms Weapons Firing at Moving Ground Targets
- Figure 3. SDZ for Small Arms Firing at Fixed Ground Targets with Rocky Soil or Targets Causing Ricochet
- Figure 4. SDZ for Firing M79, M203, and M19 40mm Grenade Launchers
- Figure 5. SDZ with Impact Berm for Small Arms Firing at Fixed Ground Targets
- Figure 6. Open Range with Impact Berm and Side Protection SDZ for Small Arms Firing at Fixed Ground Targets
- Figure 7. SDZ for Partially Baffled Range (Small Arms Firing at Fixed Ground Targets)
- Figure 8. SDZ for Fully Baffled Range (Small Arms Firing at Fixed Ground Targets)
- Figure 9. Ballistic Overhead Canopy
- Figure 10. Outdoor Rifle Range Layout
- Figure 11. Pistol Range Layout
- Figure 12. Ballistic Material
- Figure 13. Ballistic Protection of Target Mechanism
- Figure 14. Impact Berm for Open and Partially Baffled Ranges
- Figure 15. Outdoor Baffled Bullet Stop
- Figure 16. Baffled Range Profile
- Figure 17. Baffled System Geometry
- Figure 18. Overhead Baffle Ballistic Designs
- Figure 19. Parallel Ranges

Attachment I
Attachment I-2

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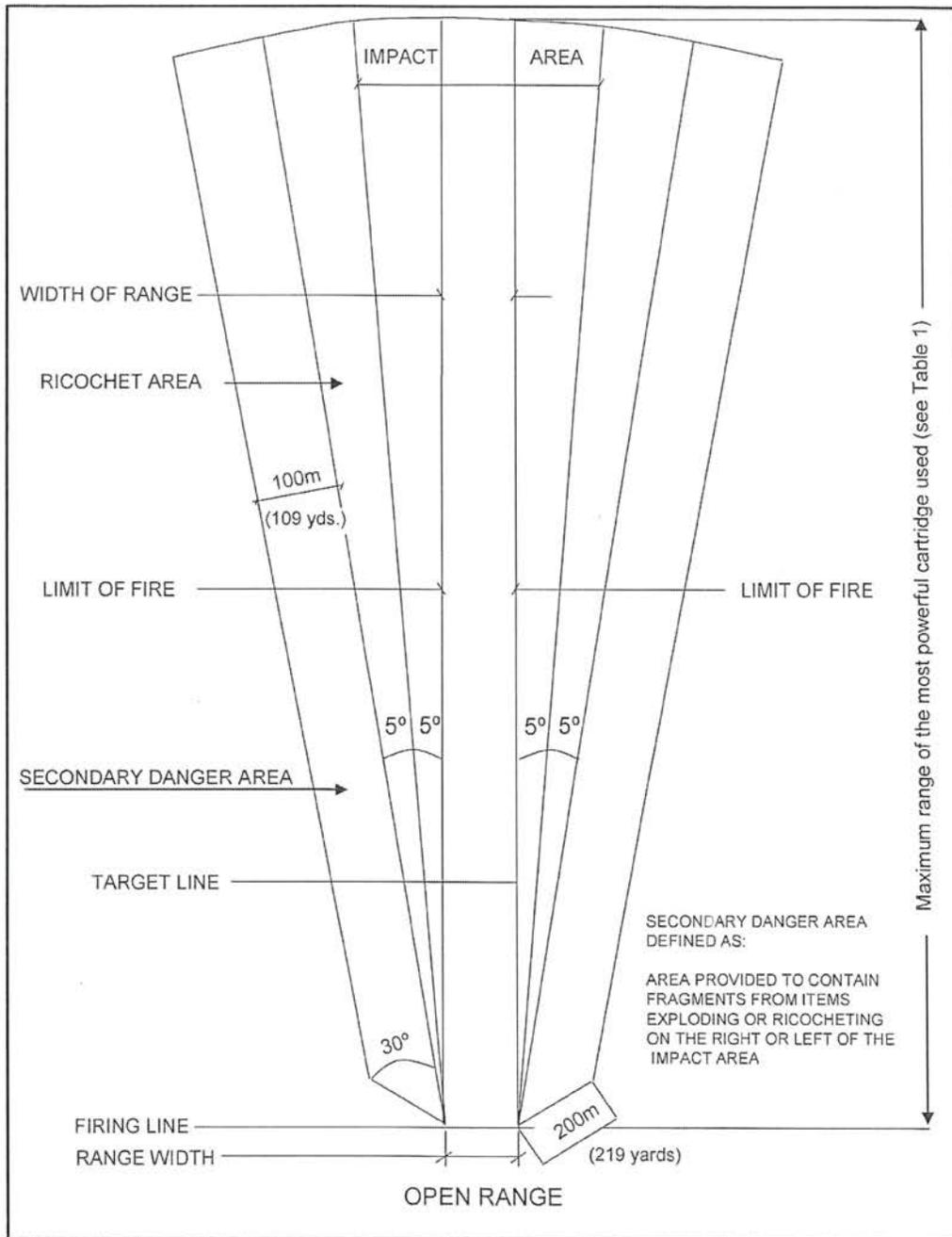


Figure 1
Surface Danger Zone for Small Arms
Firing at Fixed Ground Targets

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Attachment 1
Attachment 1-3

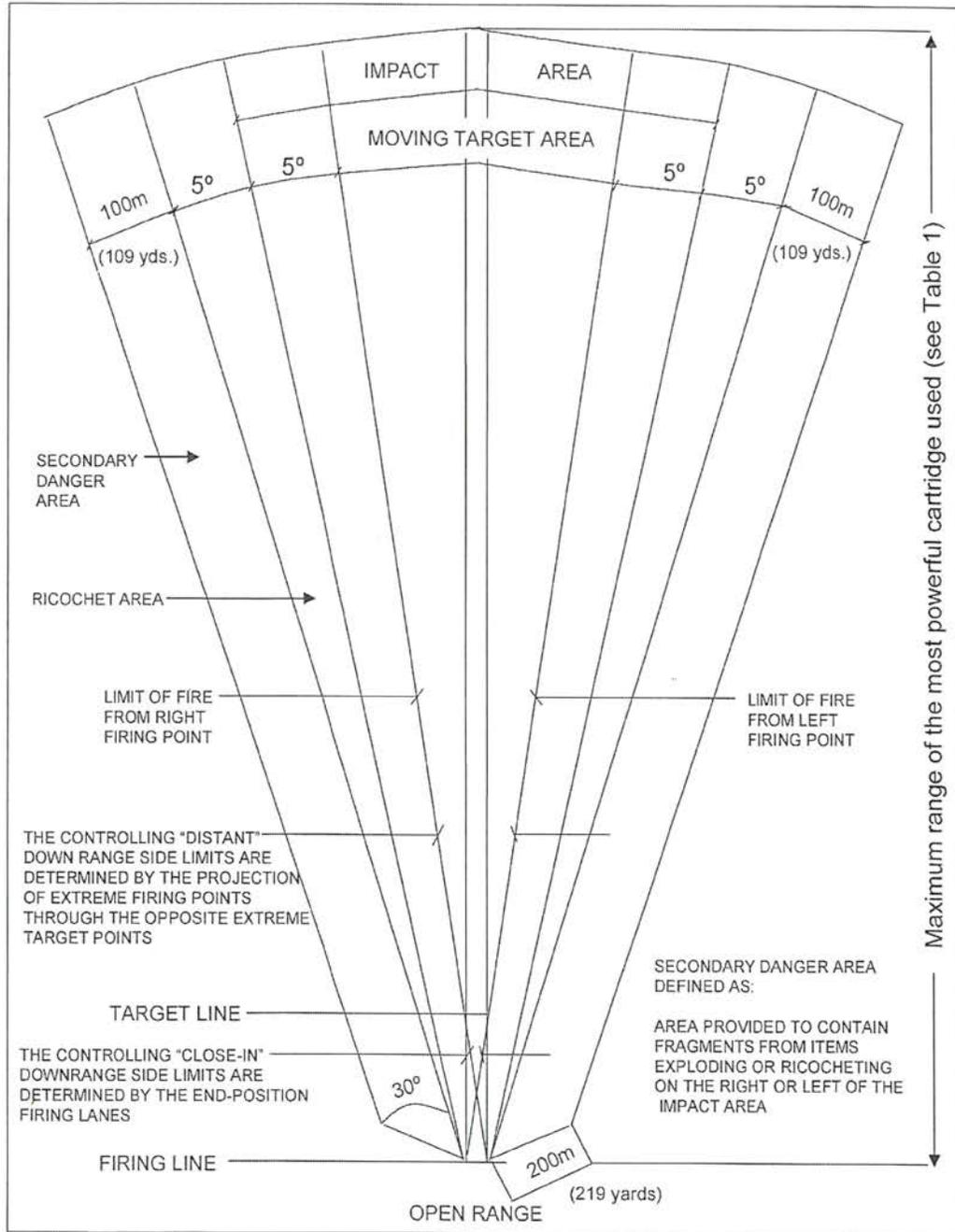


Figure 2
Surface Danger Zone for Small Arms Weapons
Firing at Moving Ground Targets

Attachment 1
Attachment 1-4

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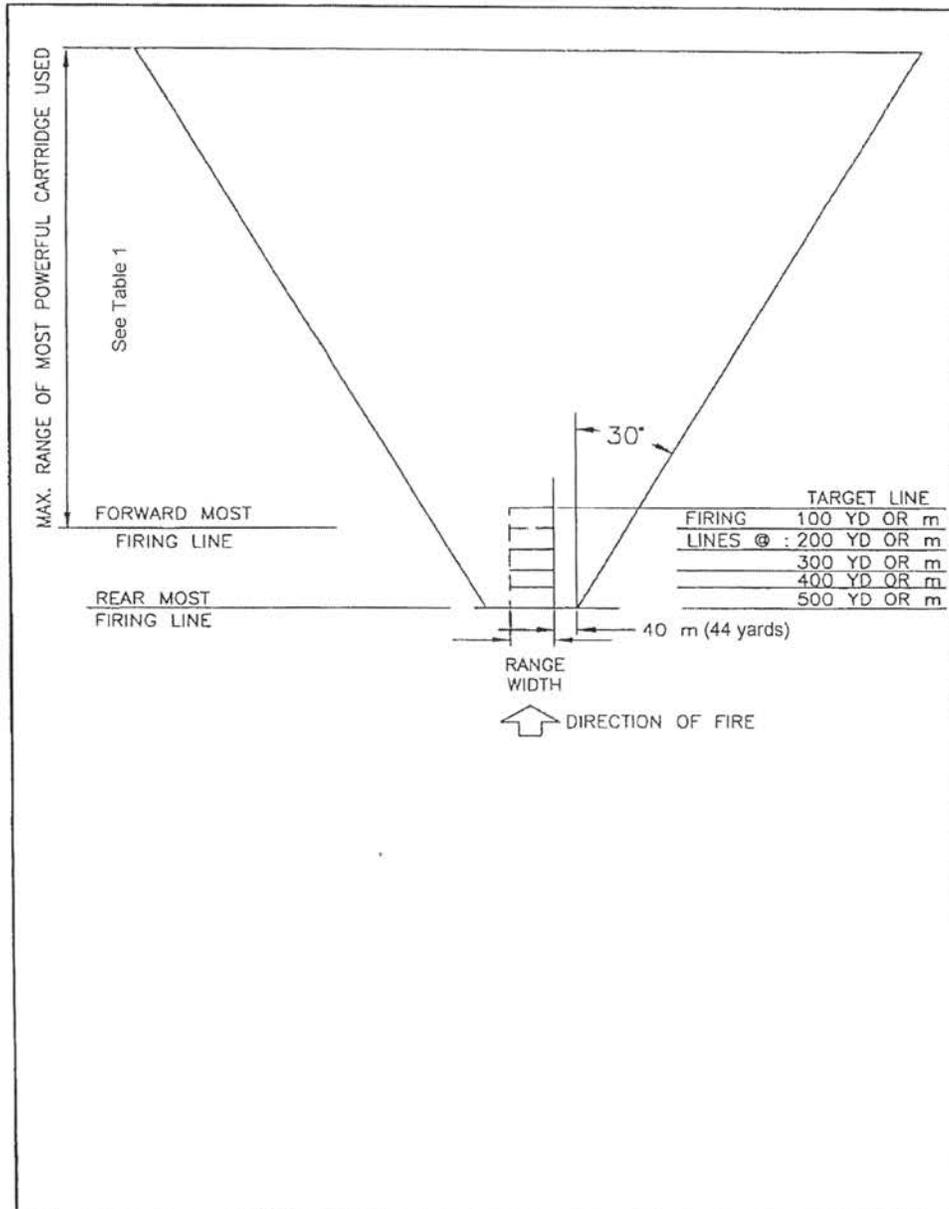


Figure 3
Surface Danger Zone for Small Arms Firing
At Fixed Ground Targets with Rocky Soil
Or Targets Causing Ricochet

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Attachment I
Attachment I-5

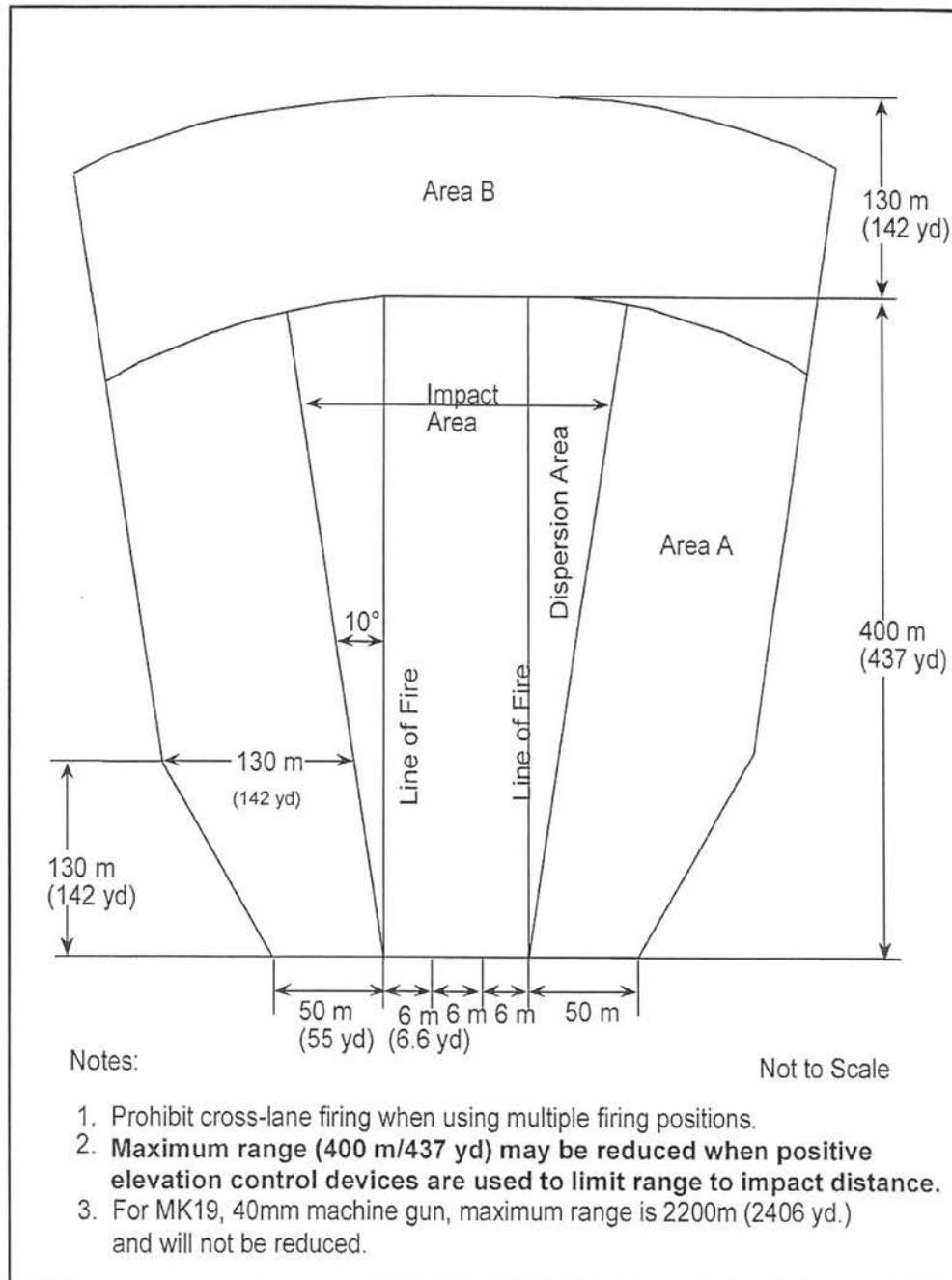


Figure 4
Surface Danger Zone for Firing
M79, M203, and M19 40mm Grenade Launchers

Attachment 1
Attachment 1-6

Range Design Criteria
June 2012

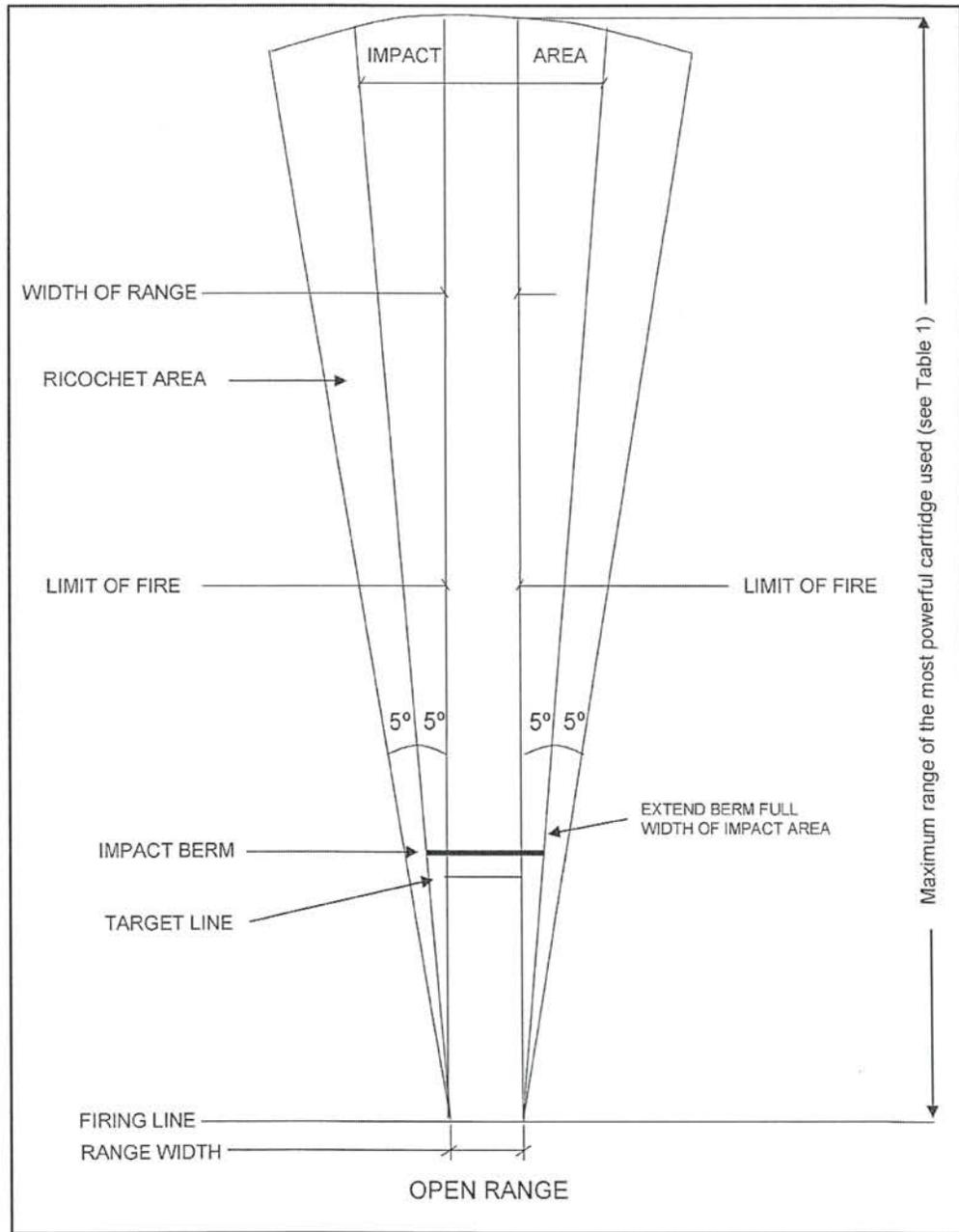


Figure 5
Surface Danger Zone with Impact Berm
for Small Arms Firing at Fixed Ground Targets

Range Design Criteria
June 2012

Attachment 1
Attachment 1-7

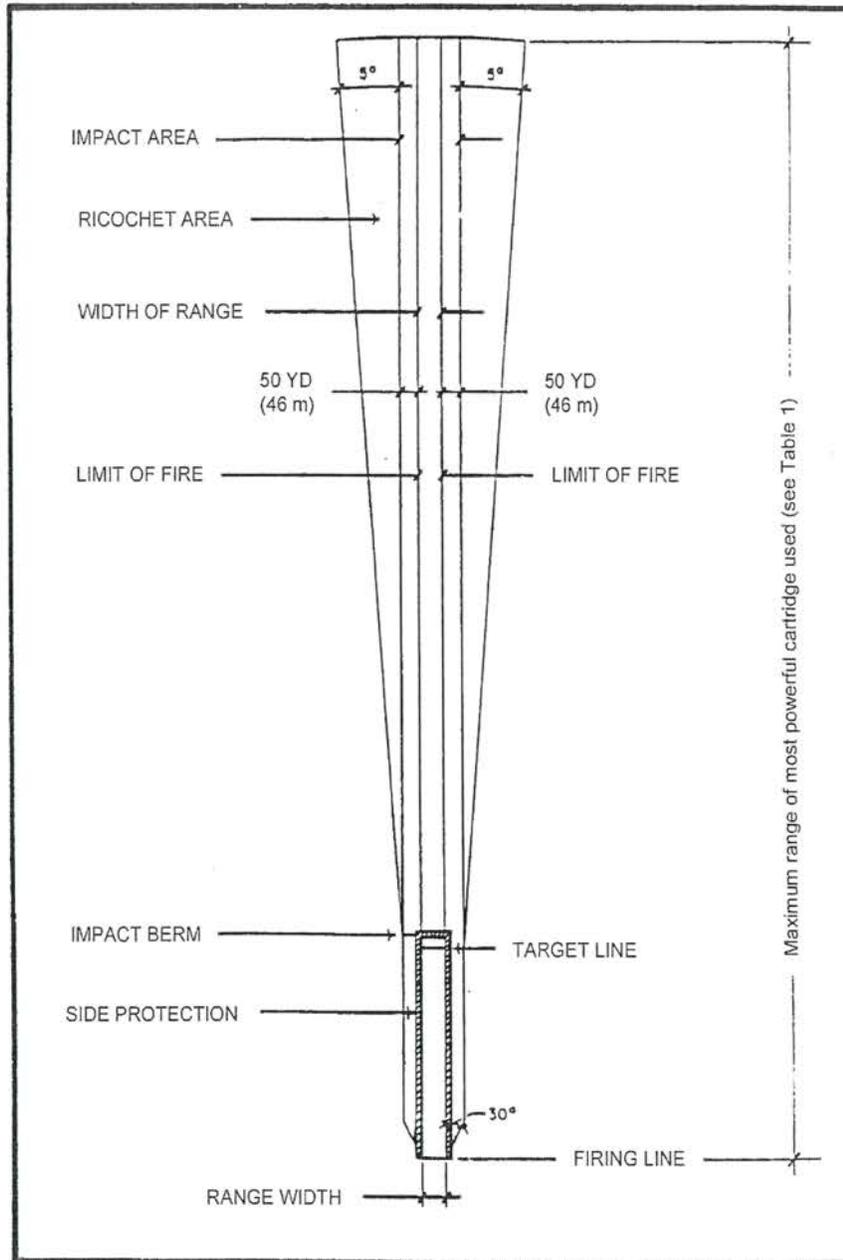


Figure 6

Open Range with Impact Berm and Side
Protection Surface Danger Zone for Small Arms
Firing at Fixed Ground Targets

Attachment 1
Attachment 1-8

Range Design Criteria
June 2012

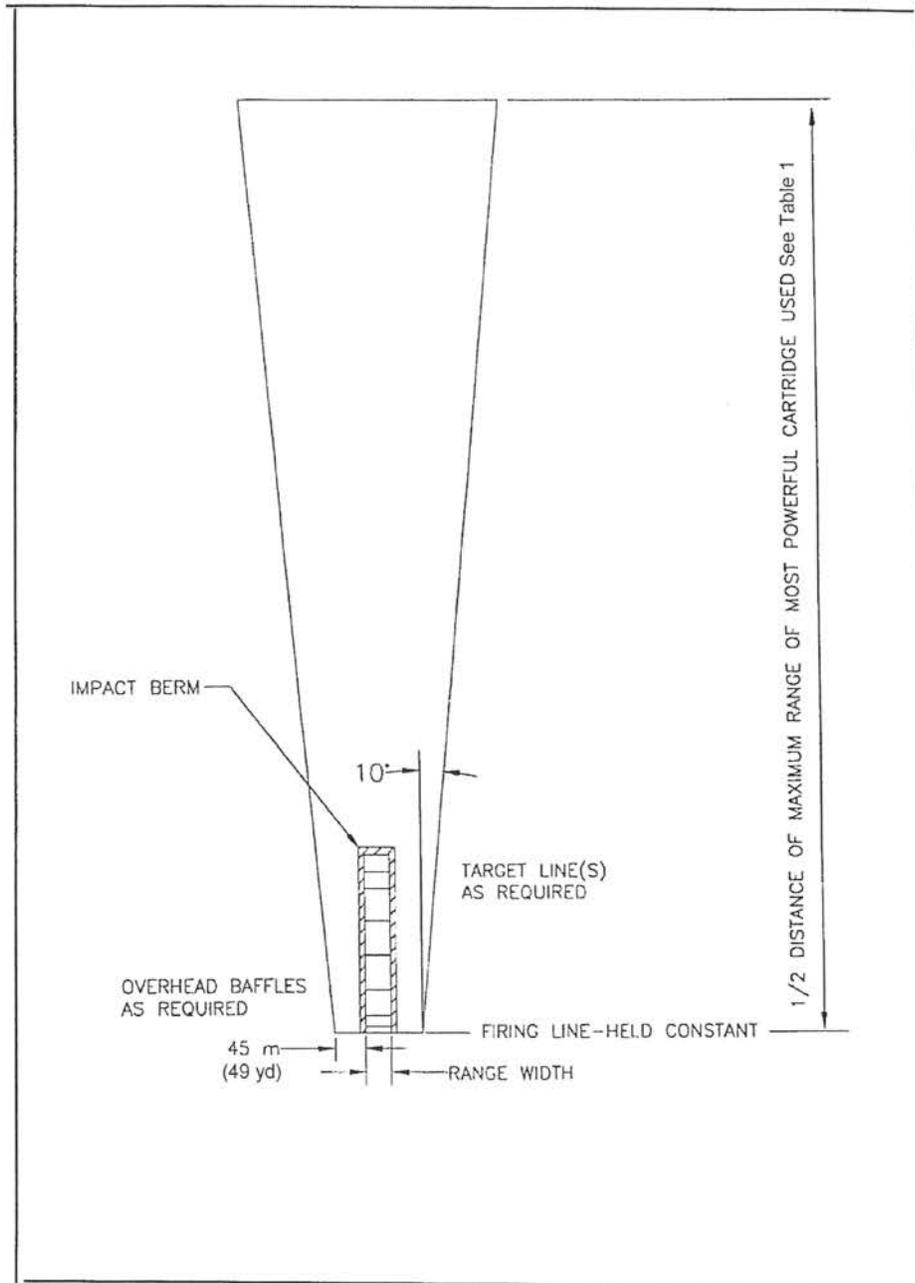


Figure 7
Surface Danger Zone for Partially Baffled Range
(Small Arms Firing at Fixed Ground Targets)

Range Design Criteria
June 2012

Attachment 1
Attachment 1-9

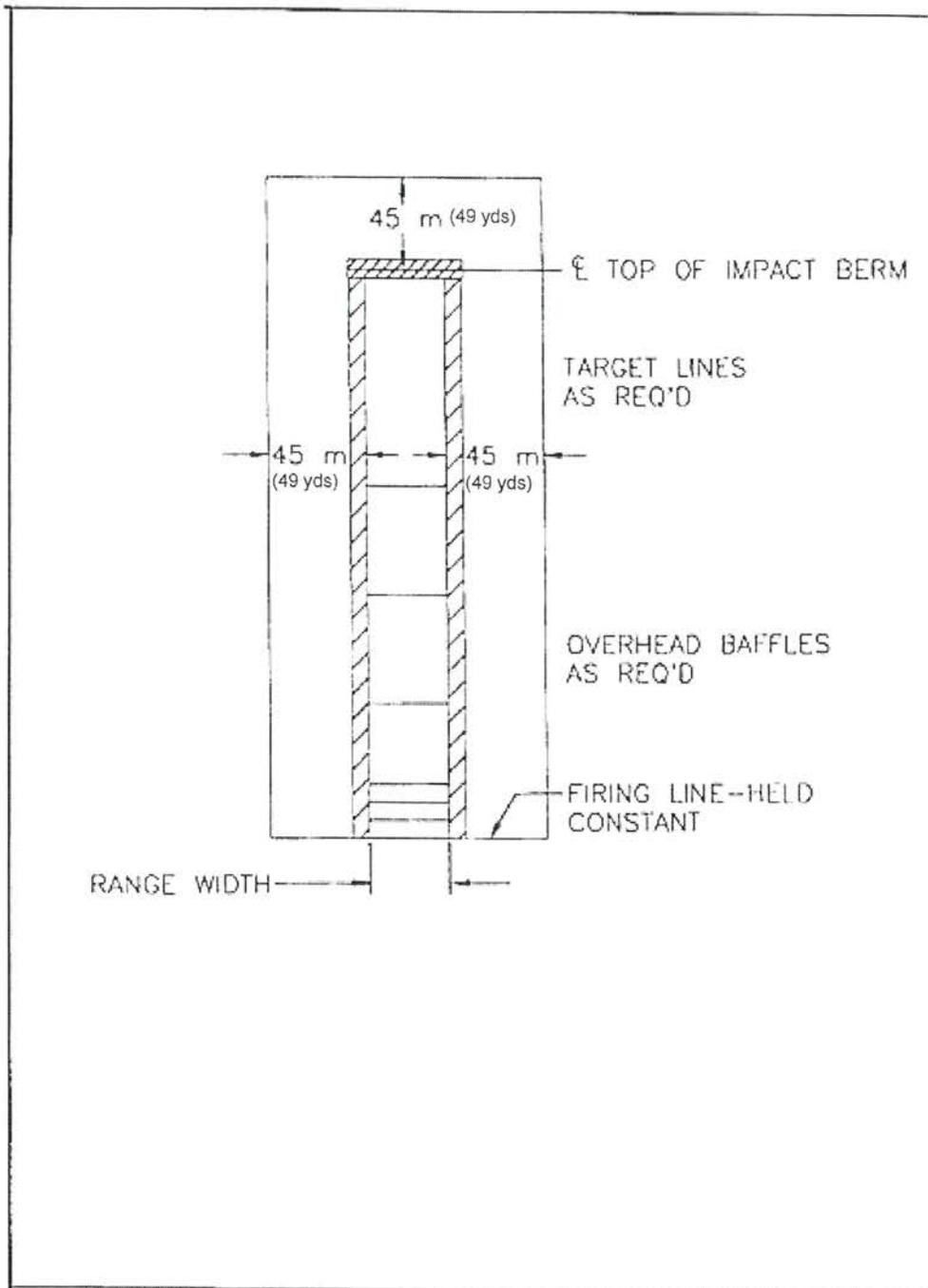


Figure 8
Surface Danger Zone for Fully Baffled Range
(Small Arms Firing at Fixed Ground Targets)

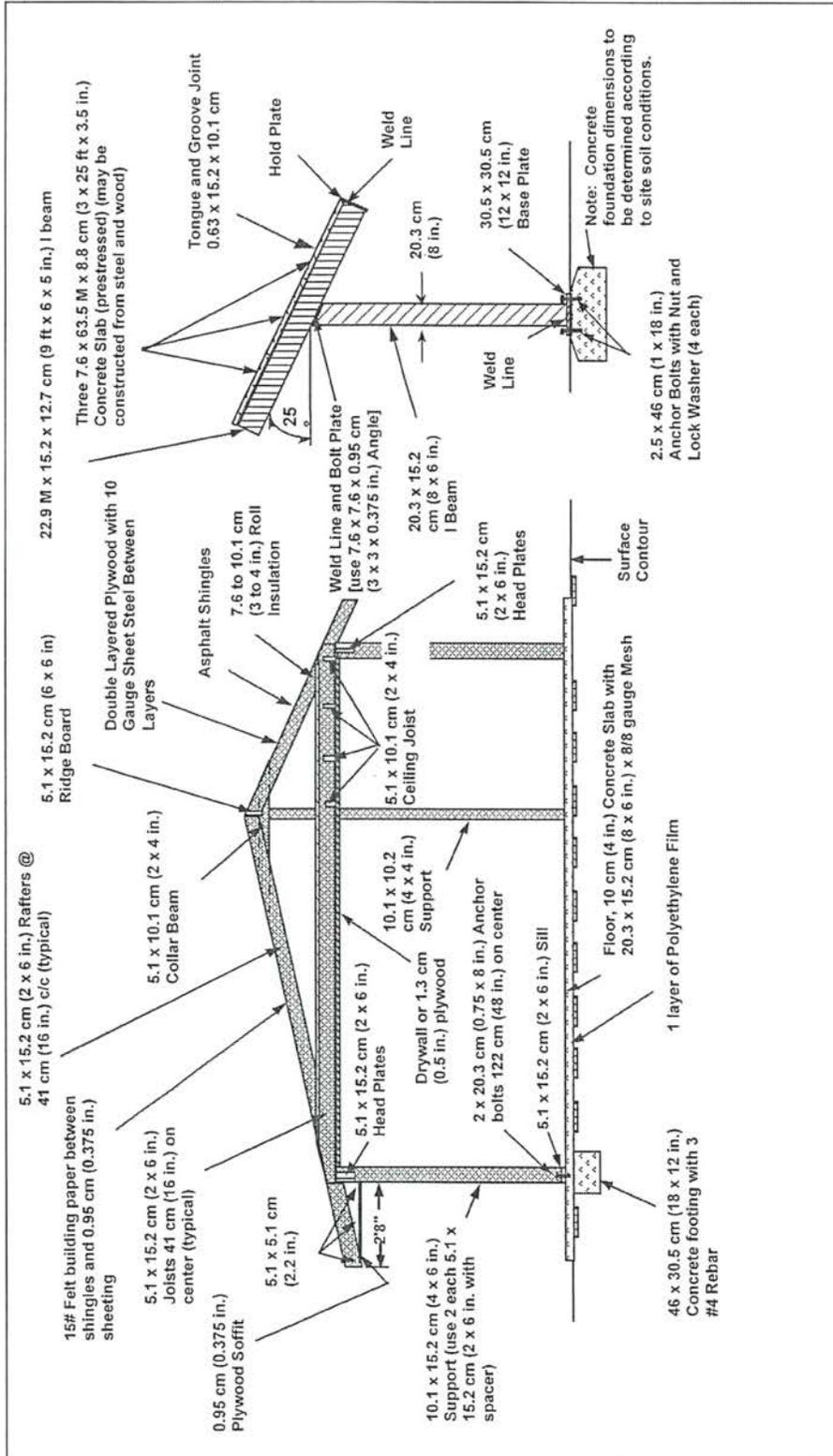


Figure 9
Ballistic Overhead Canopy

Range Design Criteria
June 2012

Attachment I
Attachment I-11

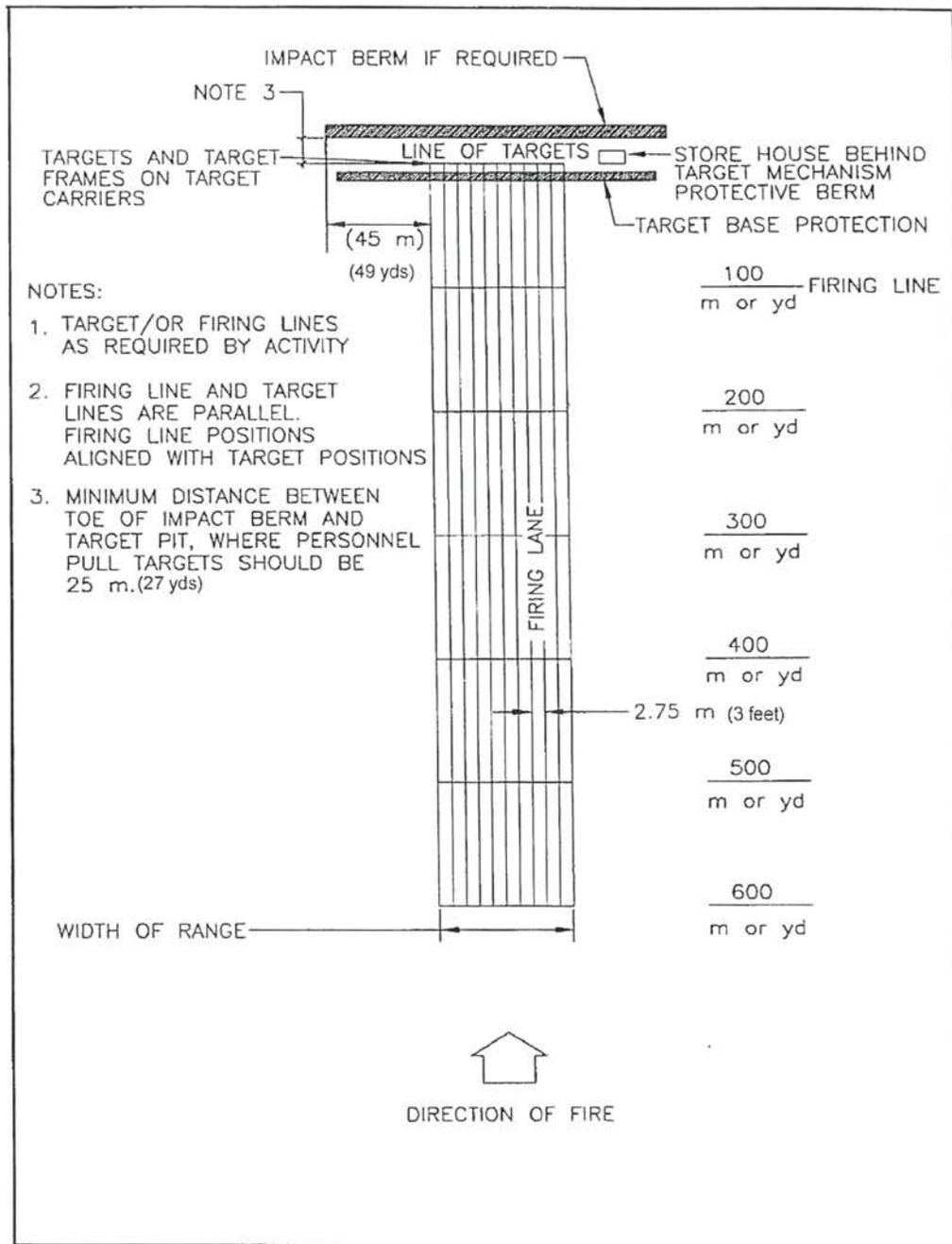


Figure 10
Outdoor Rifle Range Layout

Attachment 1
Attachment 1-12

Range Design Criteria
June 2012

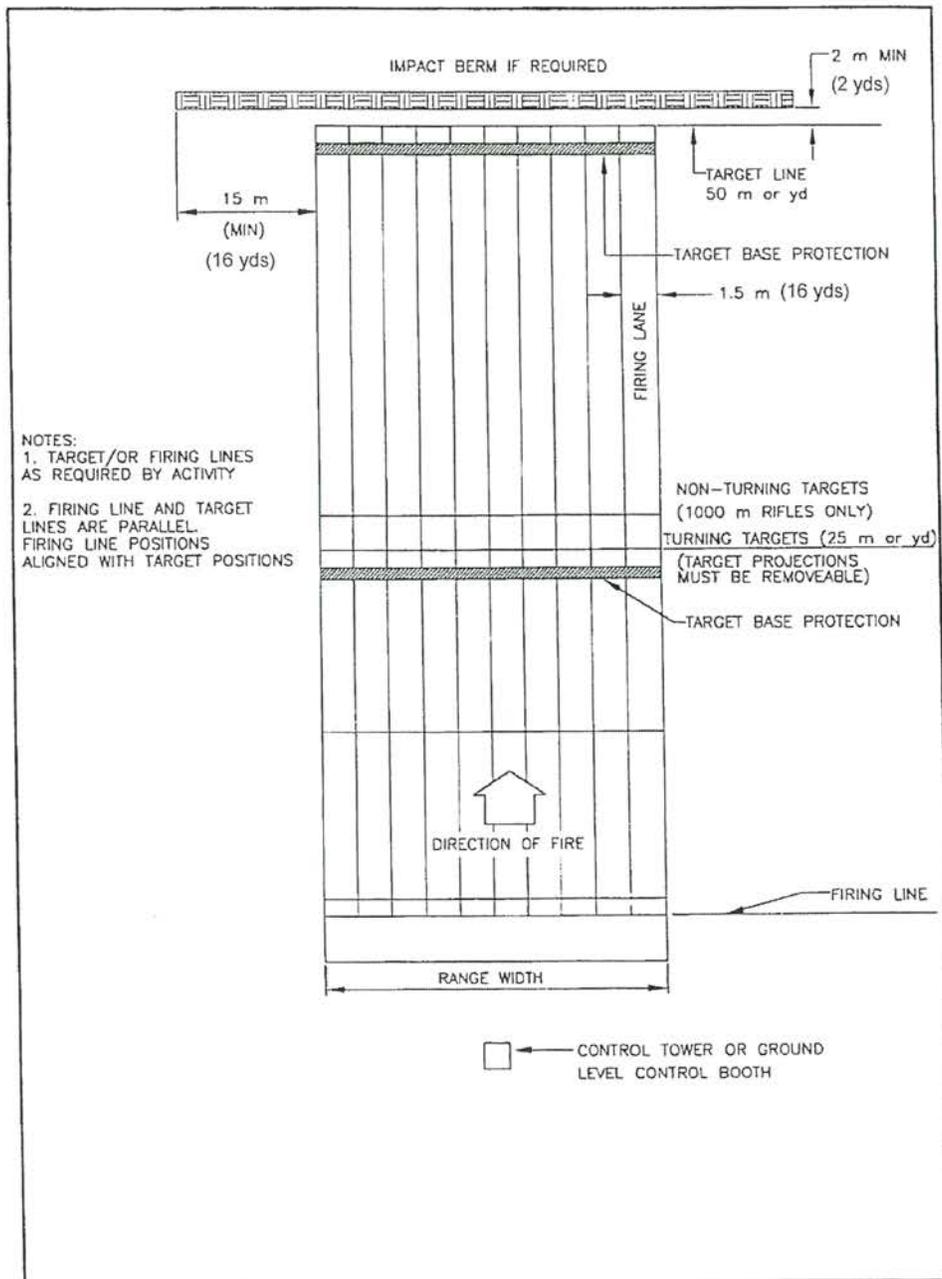


Figure 11
Pistol Range Layout

Range Design Criteria
June 2012

Attachment 1
Attachment 1-13

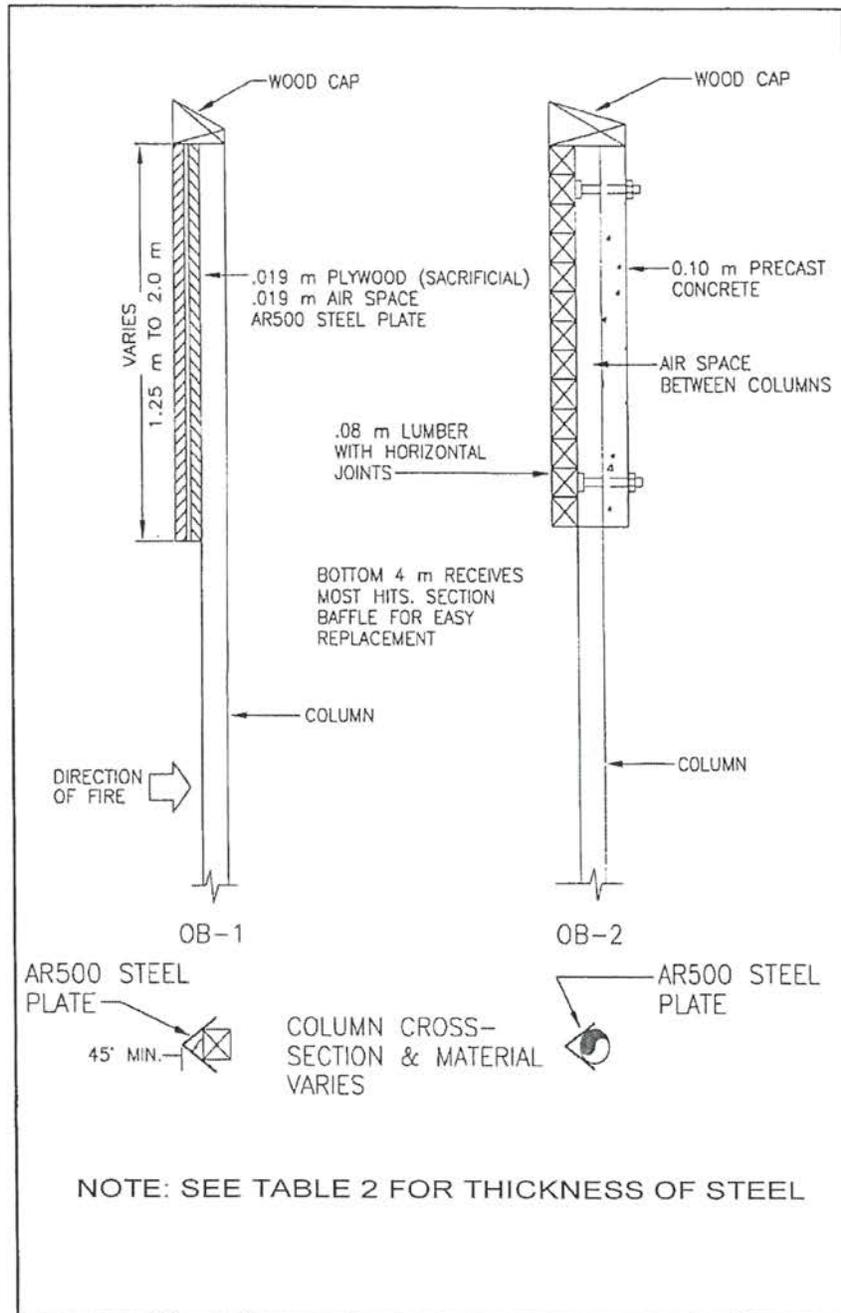


Figure 12
Ballistic Material

Attachment 1
Attachment 1-14

Range Design Criteria
June 2012

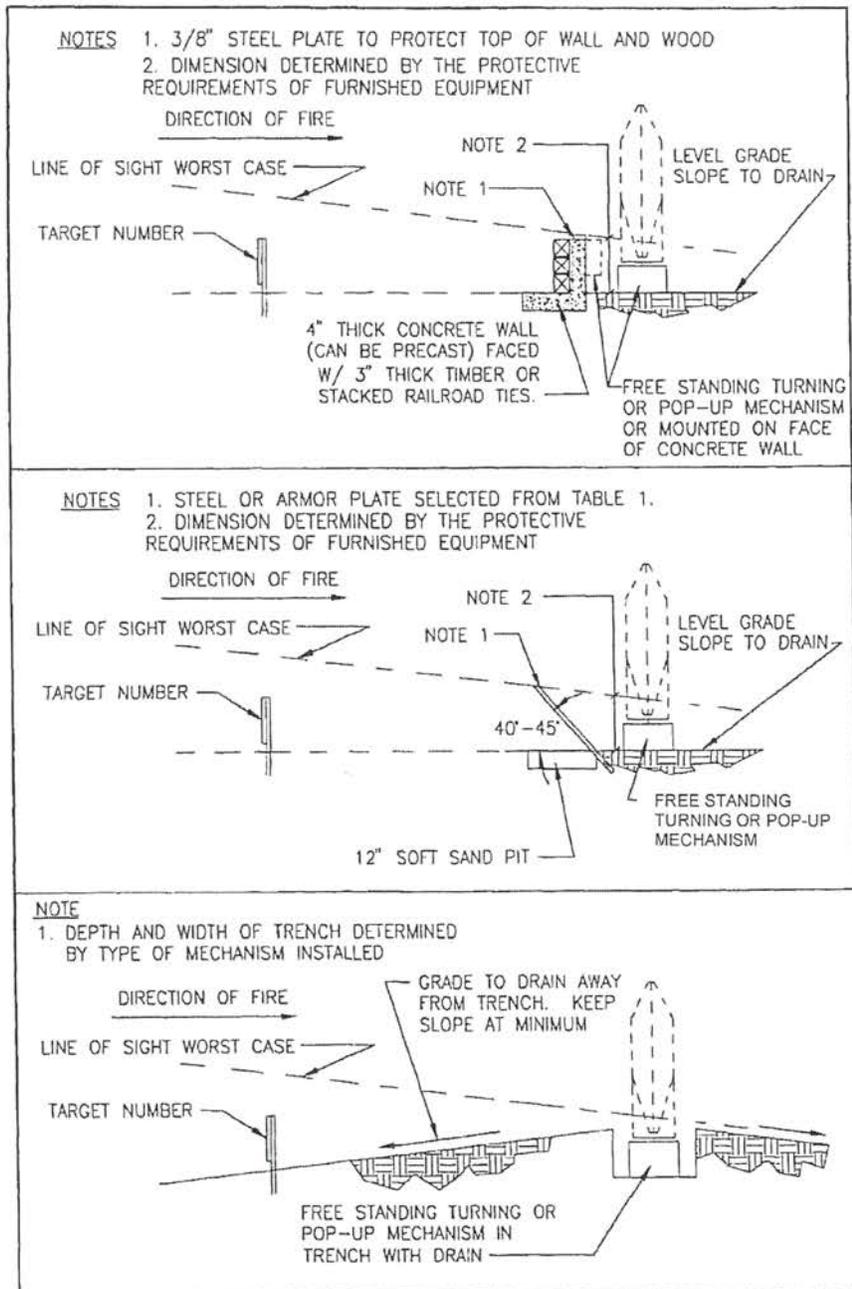


Figure 13
Ballistic Protection of Target Mechanism

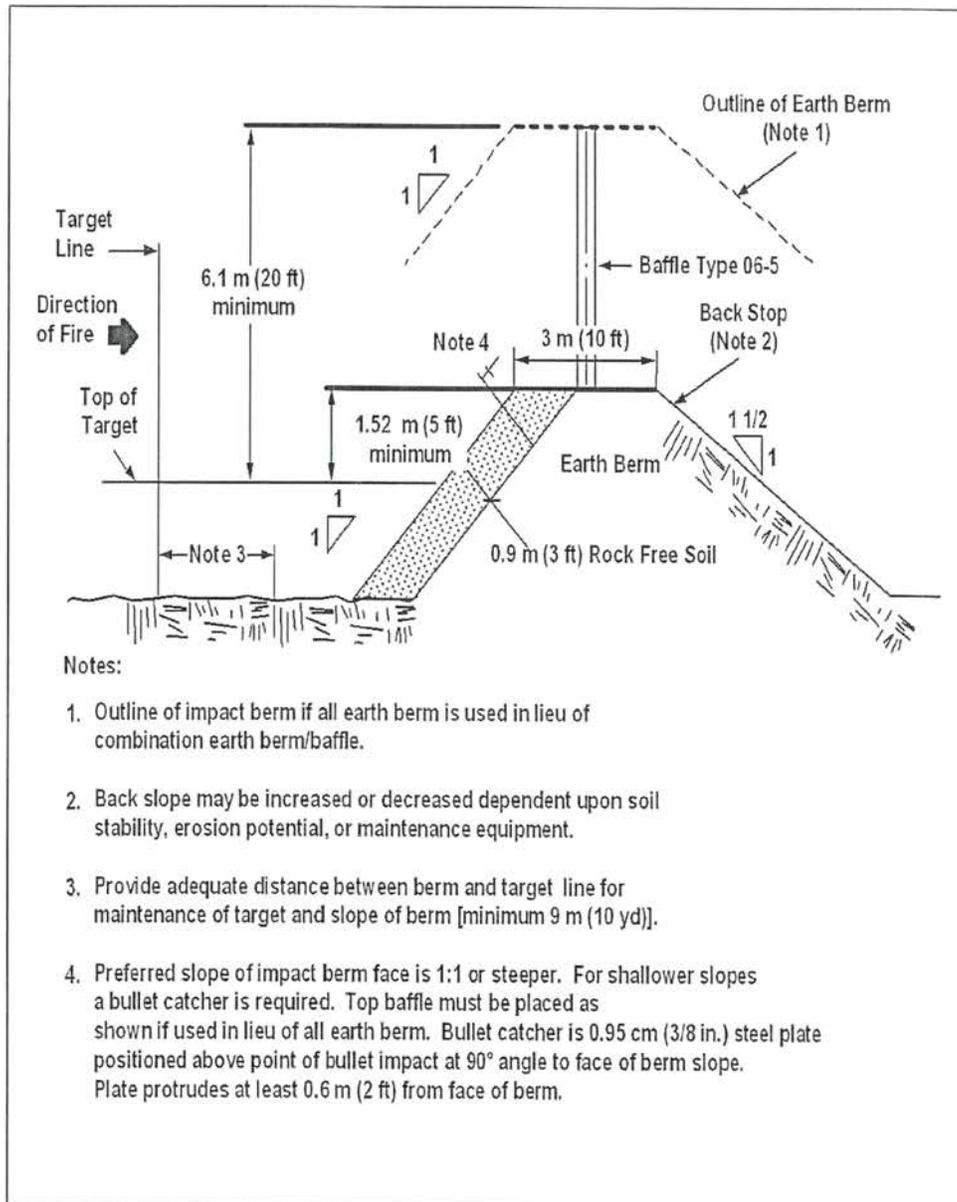


Figure 14
Impact Berm for Open and
Partially Baffled Ranges

Range Design Criteria
June 2012

Attachment I
Attachment I-17

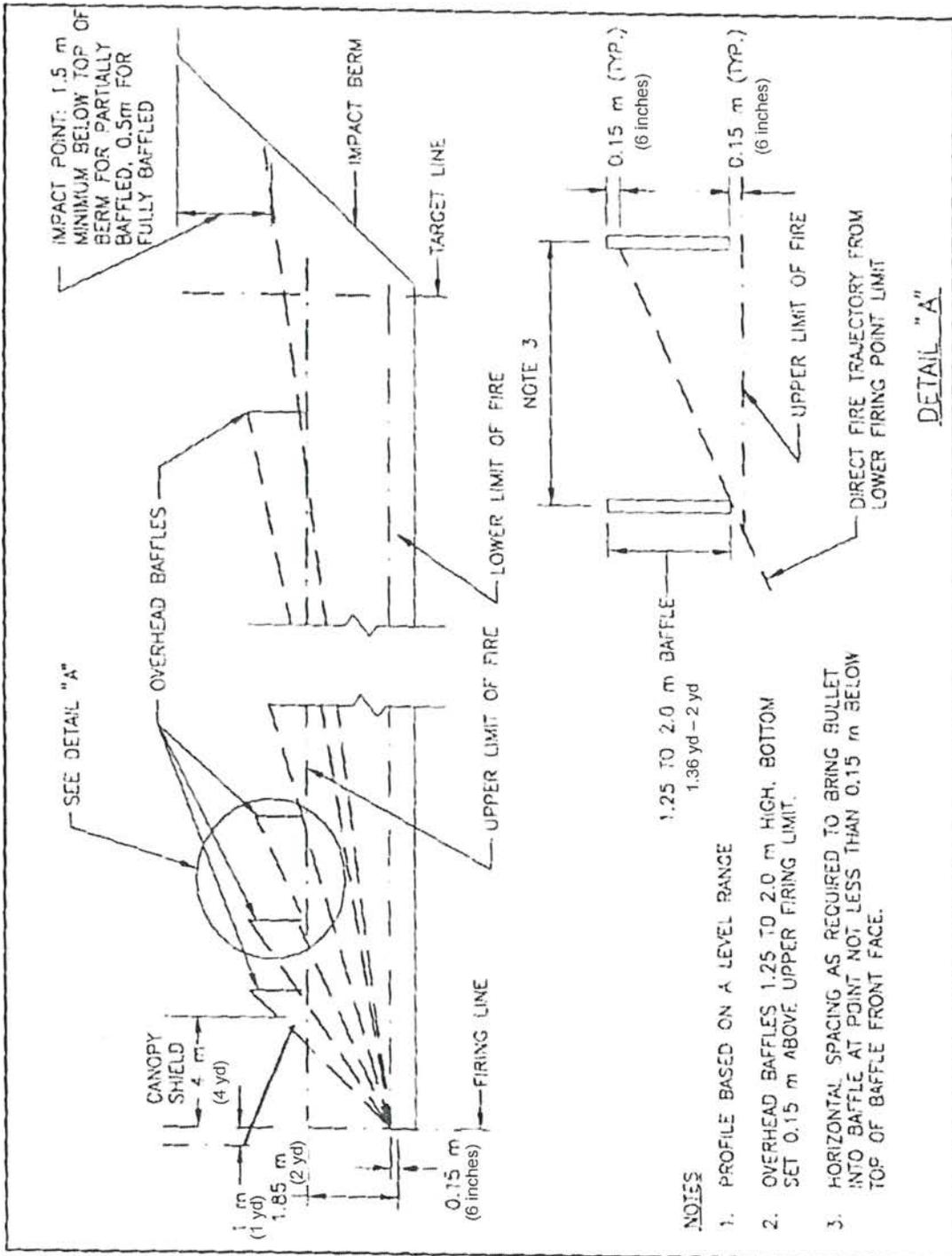


Figure 16
Baffled Range Profile

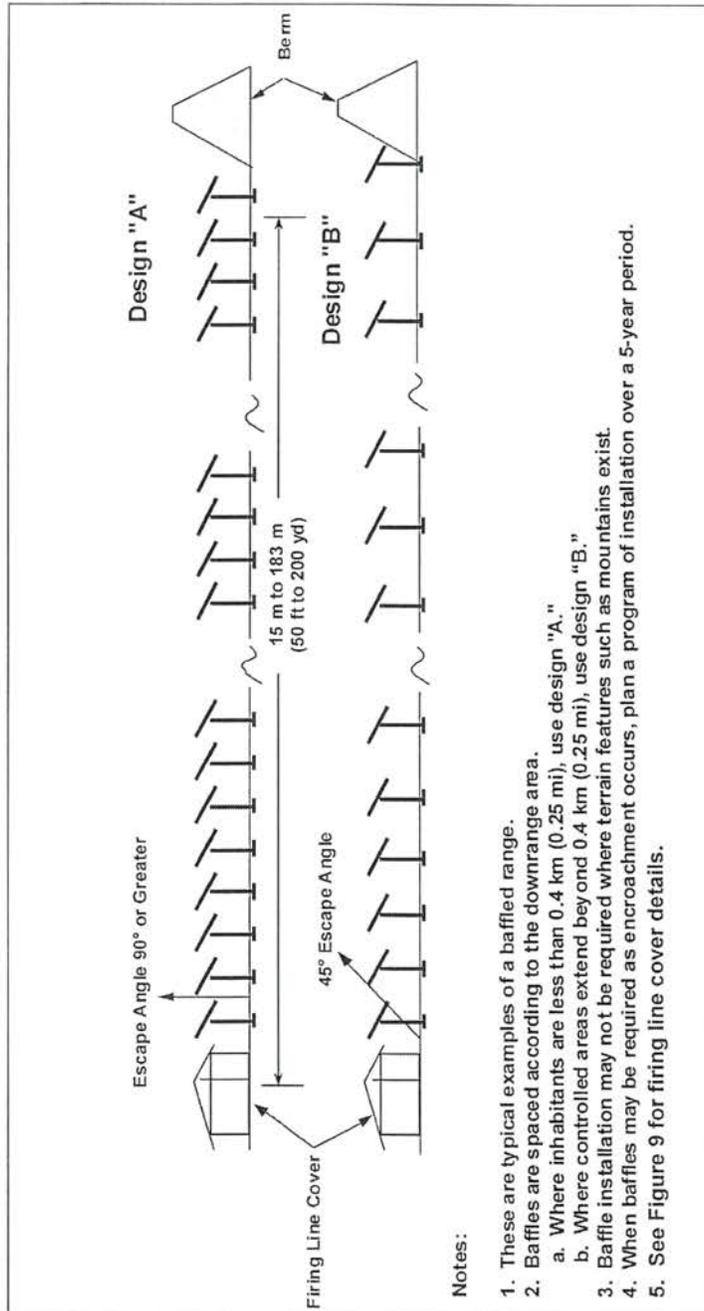


Figure 17
Baffle System Geometry

Range Design Criteria
June 2012

Attachment 1
Attachment 1-19

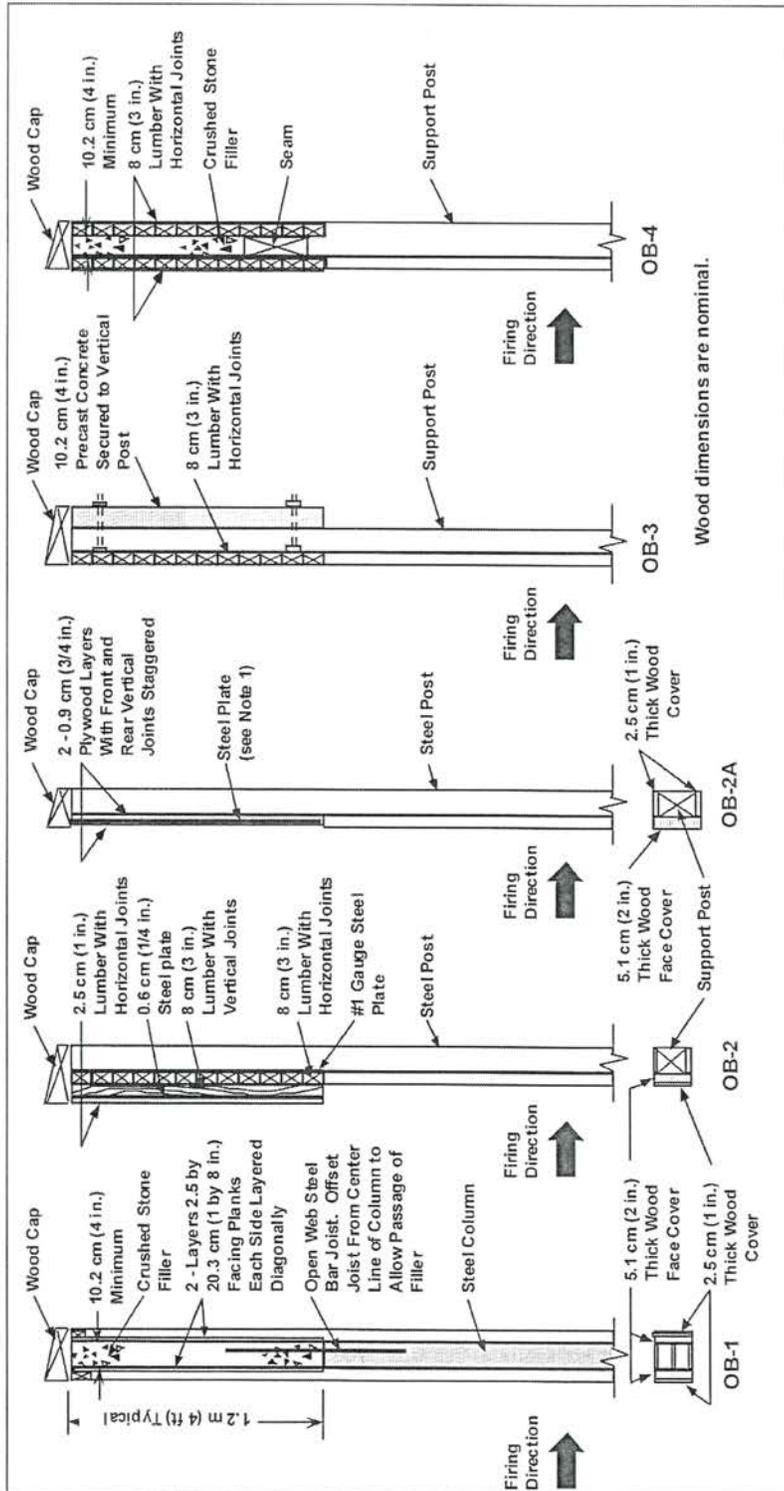


Figure 18
Overhead Baffle Ballistic Designs

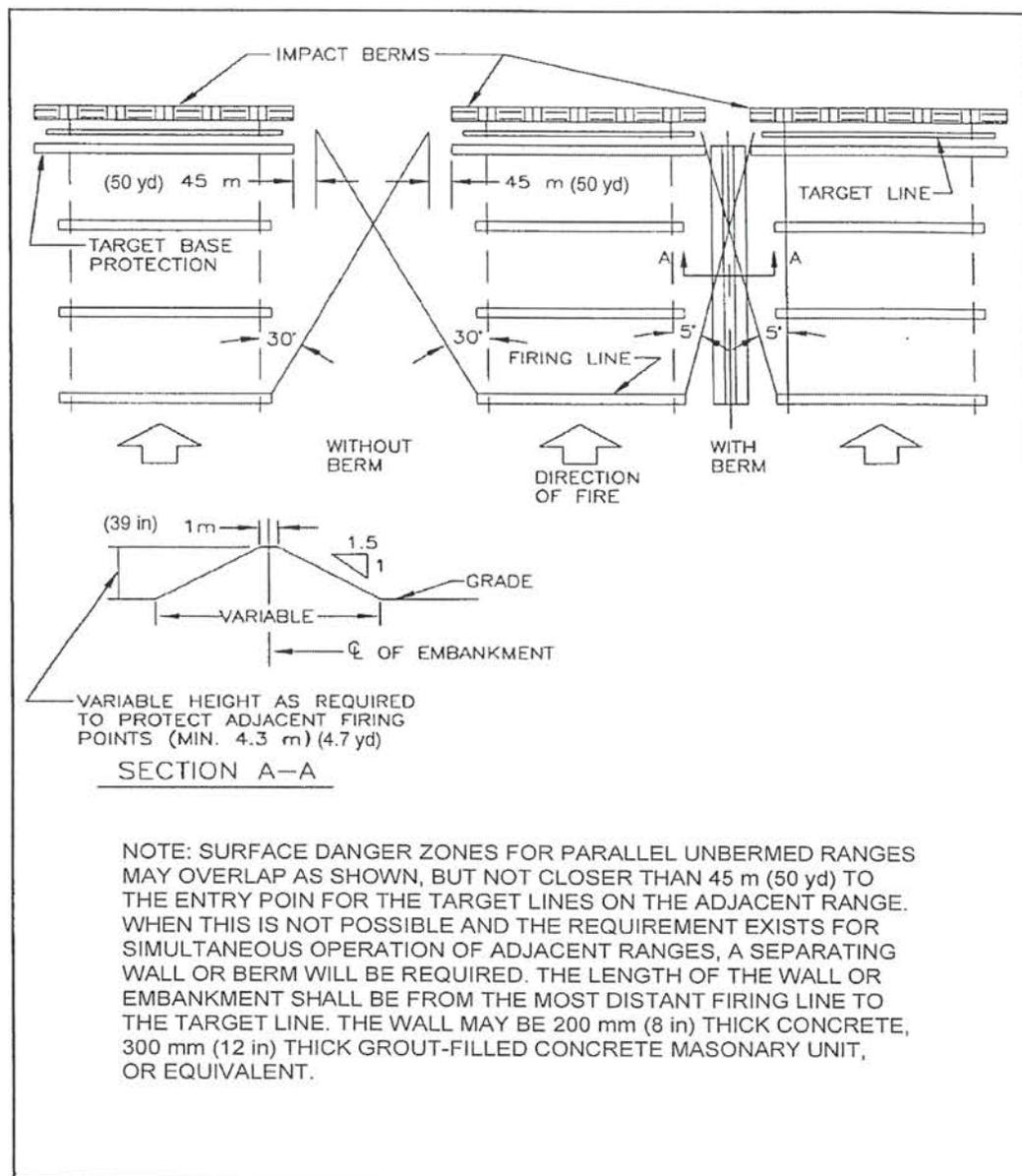
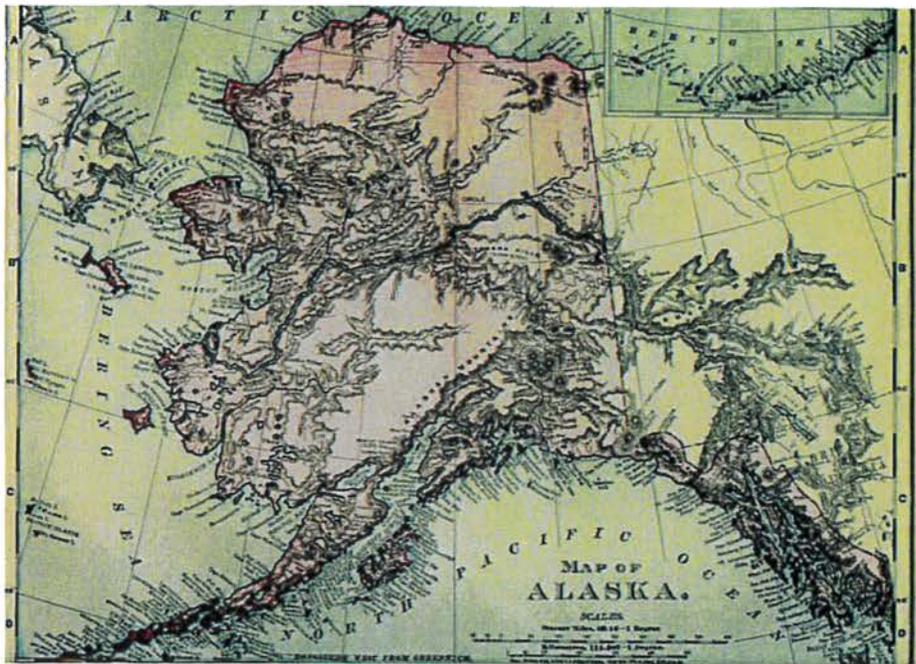


Figure 19
Parallel Ranges

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COMMUNITY NOISE ENFORCEMENT



June 2012

RUTGERS

THE STATE UNIVERSITY
OF NEW JERSEY

NOISE TECHNICAL ASSISTANCE CENTER
DEPARTMENT OF ENVIRONMENTAL SCIENCES

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COMMUNITY NOISE ENFORCEMENT

A manual to accompany the certification course: "Community Noise Enforcement." The certification conferred by this course is recognized in jurisdictions throughout the United States and internationally

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State of Alaska
June 2012

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4

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Introduction

Unregulated sources of noise can have impacts far beyond the obvious transitory nuisance, and complainants may be enduring more than simple annoyance. Exposure to loud noise has been shown to result in uncontrollable stress which can result in alterations in mood as well as hormonal and nervous system changes in healthy subjects (Brier, 1987; Babish, 2003). A lack of control over noise results in a variety of neurobiological and behavioral alterations, a phenomenon known as "learned helplessness" (Brier, 1987). It has been demonstrated that blood pressure is reproducibly elevated in response to intermittent loud noise (Sawada, 1993). The noxious stimulus of noise has been used as a laboratory model for producing stress because it results in the same biological and physiological responses as other stressors (Suter, 1992). Noise has been clearly implicated in sleep disturbance (Lukas, 1977), resulting in a cascade of negative effects (WHO, 2009). The stress, tension and fatigue associated with long-term exposure to noise has destroyed marriages, cost people their jobs and forced other people to sell their houses at significant losses (RNTAC, 1991-2012).

In 1974, the United States Environmental Protection Agency estimated that nearly 100 million Americans lived in areas where the daily average noise levels exceeded its identified safe L_{dn} (Day Night Level) of 55 dB (EPA, 1974). In 1990, that estimate had risen to 138 million people (Eldred, 1990). In a 2003 study, 23% of the population of the Netherlands, a densely populated jurisdiction similar to the urban and suburban areas of Anchorage and Wasilla, described themselves as "highly disturbed by noise during sleep," as compared to five years earlier when that number was 19% (WHO, 2009).

While most enforcement officers may have no jurisdiction over noise sources such as aircraft, road noise and railroads, we can still improve the quality of life for complainants who are exposed to a whole range of noise sources. It is equally as important to educate the regulated community as to what their legal responsibilities are. Once it has been demonstrated that a noise source is not in compliance with the applicable ordinance, there exists significant leverage to gain compliance.

The course "Community Noise Enforcement," and this manual by the same name, have been designed to aid enforcement officers, the regulated community and noise consultants to gain a clear understanding of applicable noise ordinance, and the requirements for their proper enforcement. They are both geared towards real-world enforcement situations, and the possible tactics that might be used to challenge the validity of an enforcement action. Attention to detail is vital.

The certification conferred by this course is required of all enforcement officers in the State of New Jersey, and is also recognized in jurisdictions across the entire United States and beyond.

We sincerely appreciate this opportunity to assist you in bringing a better quality of life to the residents of the State of Alaska.

Eric M. Zwerling, M.S., INCE, ASA
Director, Rutgers Noise Technical Assistance Center

Babisch, W. 2003. Stress hormones in the research on cardiovascular effects of noise. *Noise & Health*, 5 (18):1-11

Breier, A., A. Margot, D. Pickar, et al. 1987. Controllable and Uncontrollable Stress in Humans: Alterations in Mood and Neuroendocrine and Psychophysiological Function. *Am. J. Psychiatry* 144:1419-1425.

Eldred, K. M. 1990. Noise at the Year 2000. In: Berglund, B. and Lindvall, T., eds. *Noise as a Public Health Problem*, Vol 5, Swedish Council for Building Research, Stockholm.

EPA, 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. EPA 550/9-74-004, U.S. EPA, Washington, D.C.

Lukas, J. 1977. Measures of Noise Level: Their Relative Accuracy in Predicting Objective and Subjective Responses to Noise During Sleep. USEPA Report No. 600/1-77-010. February 1977.

Rutgers Noise Technical Assistance Center (RNTAC) 1991-2012. Personal communications received between 1991-2007 at the Rutgers Noise Technical Assistance Center.

Sawada, Yukihiko. 1993. Reproducible increases in blood pressure during intermittent noise exposure: underlying haemodynamic mechanisms specific to passive coping. *Eur. J. Appl. Physiol.* 67:367-374.

Suter, A. 1992. Noise Sources and Effects. *Sound and Vibration*. V.26. Jan., 18-38.

World Health Organization. 2009. Night Noise Guidelines for Europe. Copenhagen, Denmark.

ASSORTED NOISE IMPACTS

NOISE PRODUCES ELEVATED BLOOD PRESSURE, FASTER HEART RATES
AND INCREASED NEUROENDOCRINE HORMONE LEVELS

NOISE HAS BEEN USED BY THE PHARMACEUTICAL INDUSTRY
TO INDUCE STRESS FOR DRUG TRIALS

NOISE CAN CAUSE REGULAR AND PREDICTABLE STRESS
ON THE HUMAN BODY

PERCEIVED LACK OF CONTROL - THE "LEARNED HELPLESSNESS"
SYNDROME

PEOPLE DO NOT GET USED TO NOISE - THE BODY CONTINUES TO REACT

NOISE EFFECTS THE QUANTITY AND QUALITY OF SLEEP

WHEN SLEEP IS DISTURBED, WORK EFFICIENCY AND HEALTH MAY SUFFER

NOISE MAY AGGRAVATE EXISTING DISEASE

THE SICK AND ELDERLY ARE MORE SENSITIVE TO DISRUPTIVE NOISE

THE FETUS IS NOT FULLY PROTECTED FROM NOISE

NOISE DISRUPTS THE EDUCATIONAL PROCESS
& HINDERS LANGUAGE DEVELOPMENT

NOISE CAN OBSCURE WARNING SIGNALS, CAUSING ACCIDENTS TO HAPPEN

NOISE INTERFERES WITH CONVERSATION AND SOCIAL INTERACTION

NOISE DISRUPTS THE PEACEABLE ENJOYMENT
OF ONE'S PRIVATE PROPERTY

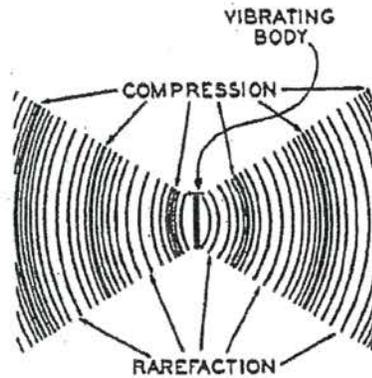
NOISE CAN CAUSE EXTREME EMOTIONS AND BEHAVIOR

ANTI-SOCIAL BEHAVIOR CAUSED BY NOISE
MAY BE MORE PREVALENT THAN IS REALIZED

*THERE ARE DOCUMENTED CASES OF NOISE-INDUCED
ARSON - ASSAULT - MURDER - SUICIDE*

SOUND

Sound waves are a series of compressions and rarefactions within a medium



Propagation of a sound wave due to a vibrating body

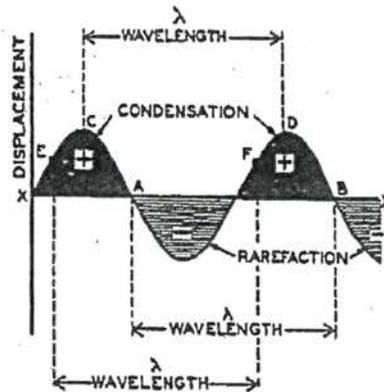
NOISE

Occurs when these sound waves reach a sensitized receptor

... noise is any unwanted sound



PROPERTIES OF SOUND



Displacement-time graph of a sound wave

INTENSITY

The bigger the compression,
the larger the amplitude,
the more the energy,
the 'louder' it is.

dB- Decibel

The unit of measure and reporting.

The decibel scale is logarithmic,
3 dB = a doubling of intensity.

However,

10 dB = a doubling of perceived loudness
(6 dB at the lowest frequencies).

$$\text{SPL (dB)} = 20 \log_{10} \frac{P_{\text{Measured}}}{P_{\text{Reference}}}$$

The average threshold of human perception
is 20 micropascals (μPa) or 0.0002 microbar
-this is set as the reference number-

Therefore,

0 (zero) decibels is the average threshold of human hearing,
not the absence of sound pressure.

0 dB threshold of hearing --- 130,140 dB threshold of pain

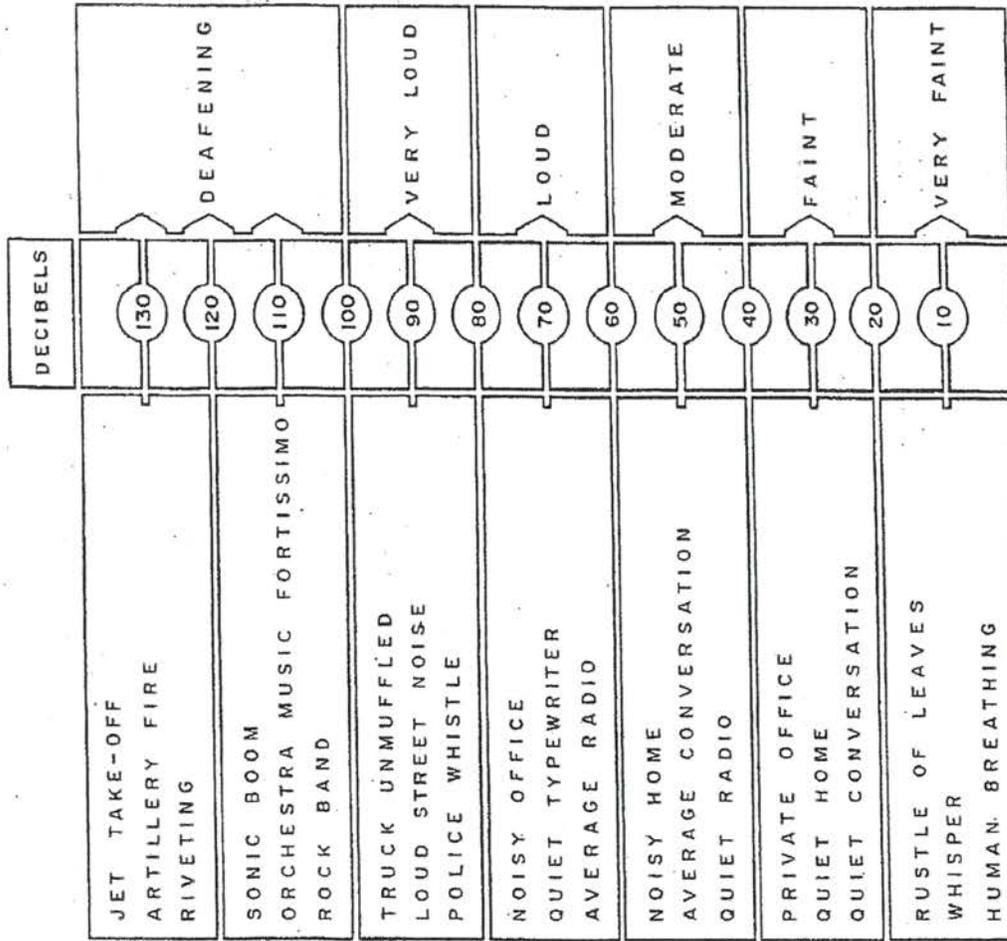


Fig. 3.5 Sound pressure levels of representative sounds and noises.

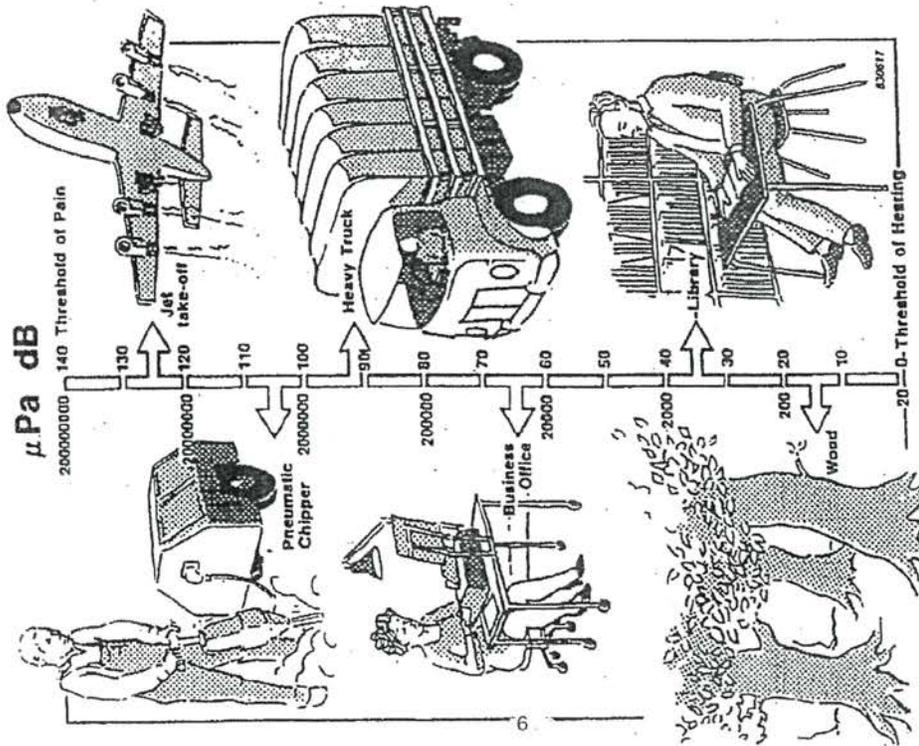


Fig. 5-3. Examples of some typical sound levels, expressed in micropascals on the left side of the scale and decibels on the right. (From Bruel & Kjaer, 1984, reproduced with permission.)

PROPERTIES OF SOUND FREQUENCY (PITCH)

Unit of Measure
Hertz (Hz) – cycles per second

Range of Human Hearing – 20 Hz to 20,000 Hz

Humans are most sensitive to 1000 Hz to 4000 Hz

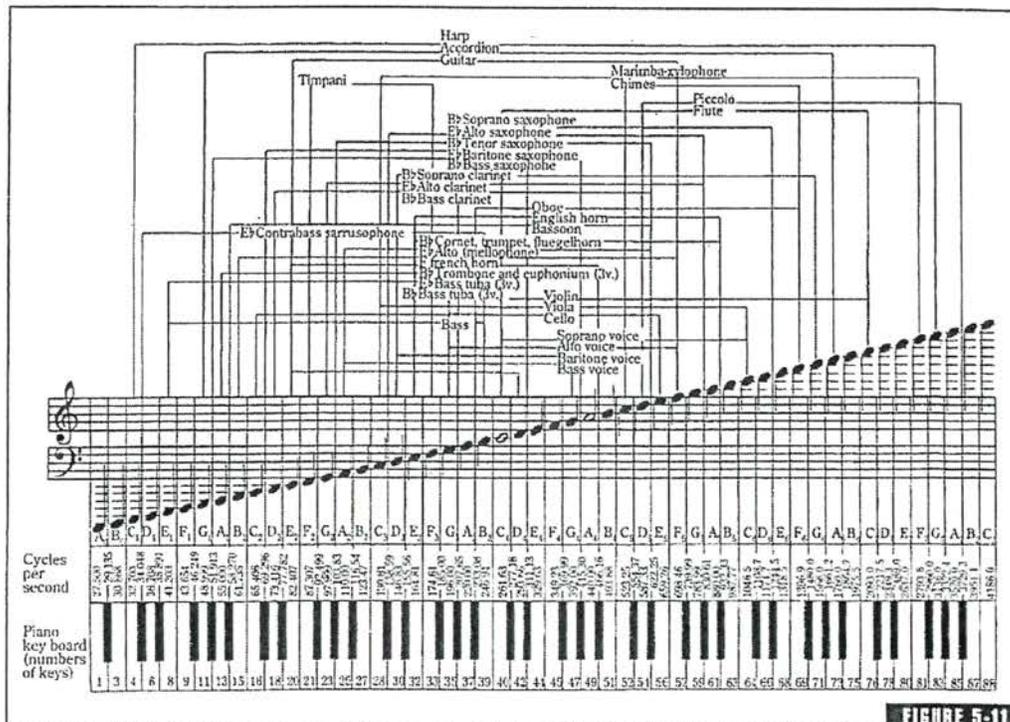
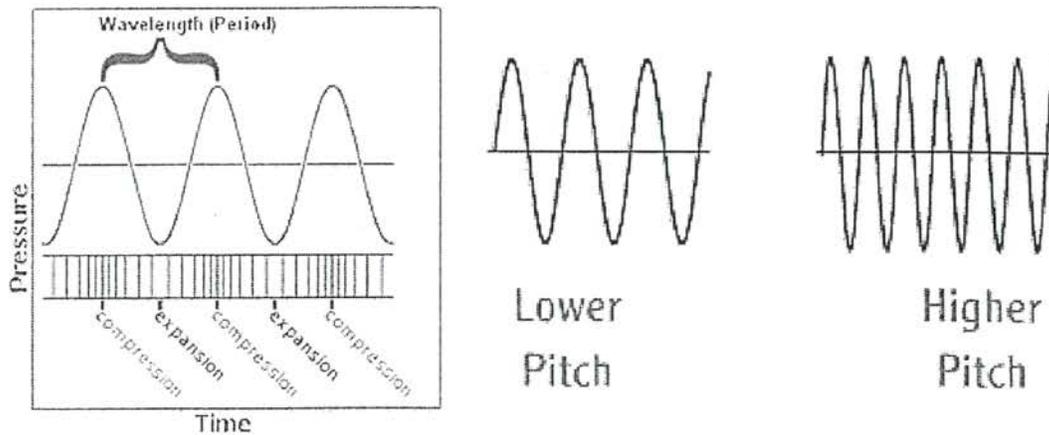
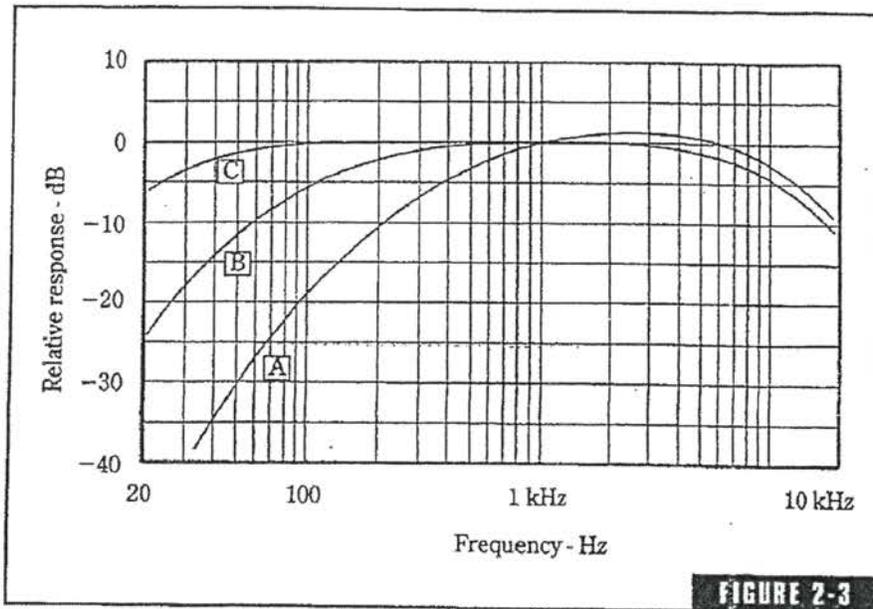


FIGURE 5-11

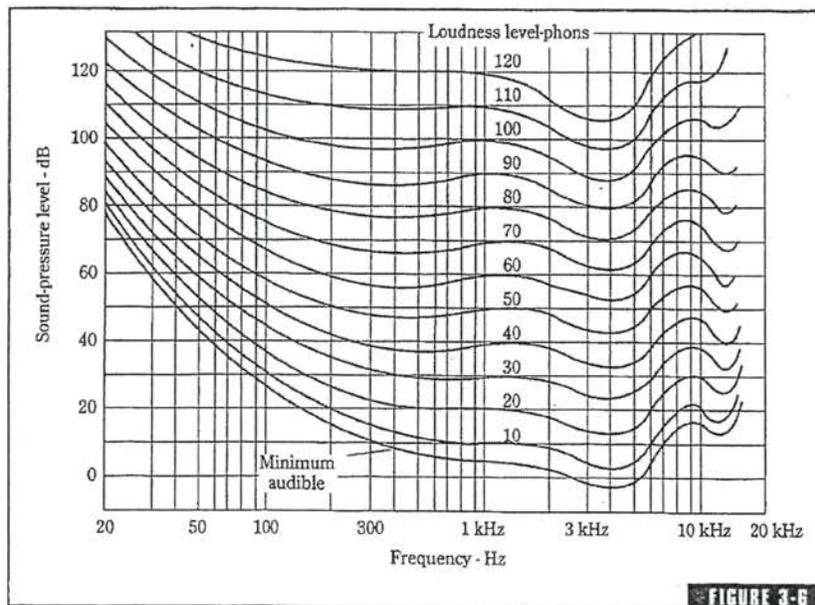
The audible frequency range of various musical instruments and voices. Only the fundamental tones are included; the partials go much higher. The very low piano and organ notes are perceived largely through their partials. Not shown are the many high-frequency incidental noises produced by the instruments. C. G. Conn, Ltd., Oak Brook, Illinois.

From: Master Handbook of Acoustics. F. A. Everest. McGraw Hill 2001.

FREQUENCIES, HUMAN RESPONSE AND WEIGHTING SCALES



A, B, and C weighting response characteristics for sound level meters. (ANSI S1 .4-1971.)



Equal-loudness contours of the human ear. These contours reveal the relative lack of sensitivity of the ear to bass tones, especially at lower sound levels. Inverting these curves give the frequency response of the ear in terms of loudness level. (After Robinson and Dadson.)

From: Master Handbook of Acoustics. F.A. Everest. McGraw-Hill. 2001.

The A-scale (dBA) is a weighting system which approximates human perception to sounds of moderate intensity. The A-scale discriminates against low frequencies. While humans are relatively insensitive to low frequency sound at low intensities, we are much more sensitive to those same low frequencies at higher intensities – when they are highly amplified.

Conversion of Sound Levels from Unweighted Sound Pressure (flat or Z-scale response)
to A- and C-scale Weighting

1/3 and 1/1 Octave Bands

Frequency (Hz)	A Weighting (dB)	C Weighting (dB)
10	-70.4	-14.3
12.5	-63.4	-11.2
16*	-56.7	-8.5
20	-50.5	-6.2
25	-44.7	-4.4
31.5	-39.4	-3.0
40	-34.6	-2.0
50	-30.2	-1.3
63	-26.2	-0.8
80	-22.5	-0.5
100	-19.1	-0.3
125	-16.1	-0.2
160	-13.4	-0.1
200	-10.9	0
250	-8.6	0
315	-6.6	0
400	-4.8	0
500	-3.2	0
630	-1.9	0
800	-0.8	0
1,000	0	0
1,250	+ 0.6	0
1,600	+ 1.0	-0.1
2,000	+ 1.2	-0.2
2,500	+ 1.3	-0.3
3,150	+ 1.2	-0.5
4,000	+ 1.0	-0.8
5,000	+ 0.5	-1.3
6,300	-0.1	-2.0
8,000	-1.1	-3.0
10,000	-2.5	-4.4
12,500	-4.3	-6.3
16,000	-6.6	-8.5
20,000	-9.3	-11.2

*Note: Center frequencies of 1/1 octave bands appear in bold.

After: The Science and Applications of Acoustics. Daniel R Raichel. Springer. 2000.

METER AND WEATHER REQUIREMENTS

A. General Instrumentation Requirements:

1. **Sound Level Meter**
 - Must meet the specifications of ANSI S1.4-1983 or its successor
 - Type II (General Purpose) or Type I (Precision)
2. **Sound Level Calibrator**
 - Must meet the recommendation of the sound level meter manufacturer
3. **Windscreen**
 - Must meet the recommendation of the sound level meter manufacturer
 - May be spherical or cylindrical
 - Made of foamed polyvinyl, open-celled polyurethane or silk covered grid.
 - Should not distort microphone frequency response by more than:
 - +/- 1.0 dBA Frequency: 20-4,000 Hz
 - +/- 1.5 dBA Frequency: 4,000-10,000 Hz
4. **Wind Speed Indicator**
 - Pressure tube or rotating vane anemometer
 - Manufacturer must provide accuracy rating in MPH or percent
 - There are relatively inexpensive handheld weather meters available (ex. "Kestrel 3000 Wind Meter," [no endorsement implied]) which can quickly determine wind speed, temperature and relative humidity in the field.

B. Weather Conditions:

1. **Wind**
 - Always use windscreen. A sound level meter can misread wind pressure as sound pressure and introduce significant error. A windscreen can also provide some protection to the microphone from dust and accidental impacts.
 - Windspeed must be measured at the time and place of sound level measurements.
 - Do not take sound level measurements when the windspeed exceeds the manufacturer's recommendations for the meter and the specific windscreen employed. Generally, the limit is 12 MPH. Some manufacturers offer windscreens that can be used up to 25 MPH.
2. **Temperature**
 - At high temperatures the sensitivity of the meter can be permanently altered.
 - Low temperatures affect batteries and other electrical components
 - The meter should be calibrated when its internal temperature is close to the ambient temperature at which it will be used.
 - The ANSI standard states that measurements may not be taken when the ambient temperature is below 14°F or above 122°F.

17

3. **Humidity**
 - Most sound level meters can be operated up to 90-95% relative humidity.
 - Condensation can cause arcing which results in false readings. The error is not subtle, and will be obvious.
4. **Precipitation**
 - Measurements should not be taken under any condition which allows the meter to become wet, such as rain, snow or condensation, unless specifically equipped to do so.
 - Even if your jurisdiction's code does not prohibit measurements during precipitation, do not use the meter beyond the parameters recommended by the manufacturer (fog, rain, snow). If these parameters are met, readings may be taken while protecting the meter and the microphone. All readings must be taken in a similar manner.
 - Instruments are not waterproof. Waterproof housings are available for some units from the manufacturer for the meter and the microphone.
 - The ambient sound levels are significantly higher when it's raining down on horizontal sheet metal surfaces such as automobiles and air conditioners.
 - Wet pavement can cause higher sound level readings (tires, etc.).
5. **Electromagnetic Fields**
 - Do not take readings immediately next to electrical transformers, radio or television transmission towers, or power lines, unless the manufacturer states that the meter is properly shielded. These may contribute to internal electrical noise of the sound level meter.

**KNOW YOUR METER.
READ YOUR MANUAL.**

ALWAYS ASSUME THAT COUNSEL FOR THE DEFENSE HAS.

1. **Is a warm-up period required for the meter and the calibrator?**
 - Older meters may require a warm-up period of up to 30 seconds.
 - Newer meters usually require at most a five second warm-up.
2. **What scale must you employ for calibration?**
 - Newer meters generally specify calibration on the A-scale.
3. **At what angle should you hold the microphone with relationship to the sound source?**
 - The angle is specific to the microphone, and some meters can be supplied with a range of microphones.
4. **What is the stated accuracy of your meter?**
 - ANSI S1.4-1983 specifies that a Type I meter should have an accuracy of +/- 1 dB or better, and a Type II meter should have an accuracy of +/-2 dB or better.
 - Newer meters often exceed ANSI standards.
 - Know that in court it may be assumed that the meter is reading high, at the maximum of the accuracy range. Take this into consideration when determining whether to proceed to prosecution.
5. **Octave Band Analysis**
 - Does your meter automatically reset to "linear," "flat," or "Z-scale" when you engage the octave filter? Some do not, and if you do not manually select unweighted measurements, you may be taking A-weighted octave band sound pressure level measurements. These measurements can not then be used for enforcement purposes, without correction.
 - Conversely, if necessary, make sure to reset your meter for A-weighting when returning to broadband measurements. Otherwise, you will be taking unweighted broadband measurements which will be unusable for enforcement purposes.

CALCULATING SOURCE SOUND LEVELS

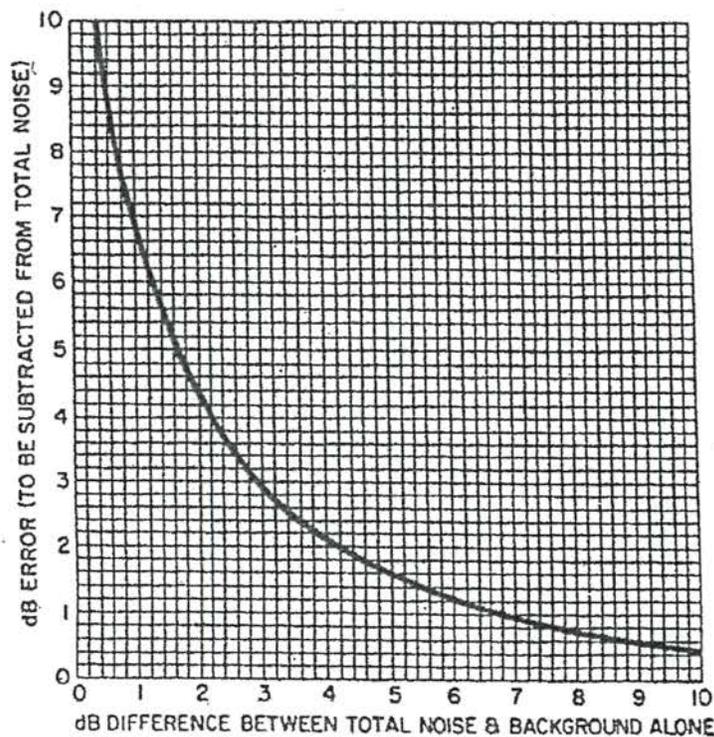
How do you subtract out the ambient (background) sound?

Table 1
Correction for Ambient Sound Levels (ASL) in Decibels
Determining the Corrected Source Level (CSL) to Report on Form

Difference Between Total Sound Level and Ambient Sound Level (in dB)	Correction Factor to Be Subtracted From Total Sound Level (TSL) to Calculate Corrected Source Level (CSL)	Action
0-2	Source < Ambient, therefore unenforceable	Write "UE"
3	3 (but source would equal ASL)	Write "UE"
4,5	2	Do math
6-9	1	Do Math
10 or more	0	Report TSL as CSL

Adapted from:

Handbook of Environmental Acoustics. James P. Cowan, 1994.
 Van Nostrand Reinhold, New York. ISBN 0-442-01644-1



From: Handbook of Noise Measurement. Arnold P.G. Peterson. 1980. GenRad, Concord, MA.

CALCULATING SOURCE SOUND LEVELS
FROM BACKGROUND AND TOTAL MEASUREMENTS
 -or- *SUBTRACTION OF SOUND LEVELS*

When you're in the field, you take two types of measurements: *ambient* and *total*. From these measurements you have to *calculate* the source sound level. The potential violation is based solely on the level of noise being emitted from a specific activity; you can't fine someone because they're operating in a noisy neighborhood. Yet, you can't directly measure the sound level from the activity in question. That's why you have to subtract the ambient from the total to determine the source sound level.

Here's how it's done:

1. Subtract the ambient level from the total noise level. (total - background = "X").
2. Using Table I on the previous page, find "X" in the left hand column.
3. Match "X" to a number in the right hand column.
4. Subtract the number in the right hand column from the total noise level.
5. The number you now have is called the *CORRECTED (SOURCE) LEVEL*, and this is the number that you record on the Noise Report Form.

Example A

1. You have a total sound level of 69 dBA, and a ambient level of 63 dBA.
2. $69 \text{ dBA} - 63 \text{ dBA} = 6 \text{ dB}$. This is "X", the number you look for in Table I, left column.
3. 6 dB in the left column gives you 1 dB in the right column.
4. Subtract 1.0 dB from the TOTAL SOUND LEVEL to get the CORRECTED SOURCE SOUND LEVEL.

$$69 \text{ dBA} - 1 \text{ dB} = 68 \text{ dBA} \quad \text{**the CORRECTED SOURCE LEVEL **}$$

Example B

1. After measuring the ambient sound level decide which sample set or range you want to use as your ambient. A source-off measurement is always used if possible.

Example: 52 - 56 dBA
 51 - 55 dBA
 54 - 57 dBA **CHOOSE THIS ONE**

(Continued)

CALCULATING SOURCE SOUND LEVELS

(Continued)

Now, remember - you must use the higher number in an ambient set, so the number that you'll use for all further calculations is 57 dBA

AMBIENT = 57 dBA

2. You will have a series of total sound measurements taken while the sound source is on, at the point of the complaint. Let's say one set of readings gives you a total range of 61 - 64 dBA.

3. To determine the corrected source level, perform the subtraction: 64 dBA - 57 dBA = 7 dB. Look at Table I, and you'll see that 7 dBA in the left column gives you 1 dBA in the right column.

64 dBA - 1 dBA = 63 dBA THIS IS THE CORRECTED SOURCE LEVEL

This is what is reported on the Noise Measurement Report, and compared to the permissible limits.

Example C:

Ambient 62 dBA
 64 You choose this Ambient, the highest, then apply it to ALL of the Totals below.
 63

Total		CORRECTED SOURCE SOUND LEVEL (dBA)
69 dBA	69-64 = 5	69 - 2 = 67
71	71-64 = 7	71 - 1 = 70
77	77-64 = 13	77
67	67-64 = 3	-- (Unenforceable)

IMPORTANT NOTES:

- 1) If "X" is 10 dB or greater, THEN NO CORRECTION IS NECESSARY. TOTAL = SOURCE.
- 2) If "X" is less than 3 dB, it means that the source sound level is at or below the background level. Many jurisdictions simply write "U.E." (unenforceable), or "--", or simply leave it blank.
- 3) *Do not include* your calculations to find "X" on your report form [it just clutters it up].. *Do include* any calculations, if necessary, for arriving at the corrected source.

SEE SAMPLE REPORT FORM

DETERMINATION OF AMBIENT SOUND LEVELS

There are two critical reasons you need to accurately determine the Ambient Sound Levels (ASL).

- Some provisions set the Permissible Sound Level Limit (PSL) relative to the ASL.
- You must determine the Source Sound Level of the source under investigation and almost every sound source you will investigate occurs within a complex acoustical environment.

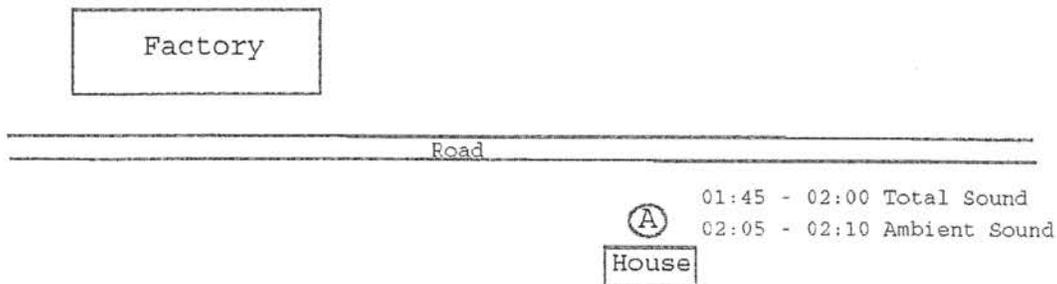
Your goal is to isolate and quantify the sound levels of that sound source, alone. In order to accomplish that, you must accurately assess and measure the ASL. The ASL is the sound level of all the sound sources that are relatively constant when observed from the location on the complainant's property from which the investigation will be conducted. These sound levels exclude sound from the source under investigation, as well as extraneous sounds which are relatively intense and of short duration (such as airplanes, unmuffled vehicles, etc.).

While taking your measurements, you have to note which sounds constitute the ASL, and which are to be classified as extraneous. Remember, the only ASL sounds that matter are those impacting on the precise location at which you are measuring the source sound level (Total Sound Levels) (TSL). It doesn't matter whether there's an active cement plant three blocks over if you can't hear it on the complainant's property.

OUTDOORS

Source-Off measurements are obviously the truest measure of the ASL. The approach is simple: you take a measurement of the sound levels when the sound source under investigation is not operating, at the same location on the complainant's property at which the TSL measurements were conducted.

If the hours of operation are known:

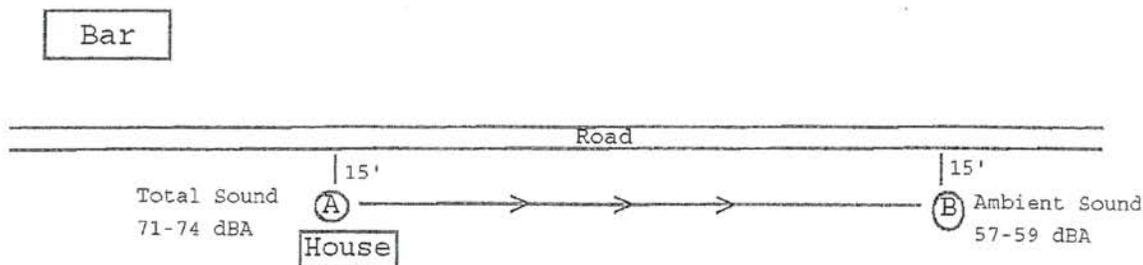


Source-off (SO) measurements are always preferable to any other method. Many strategies can be employed to collect such data:

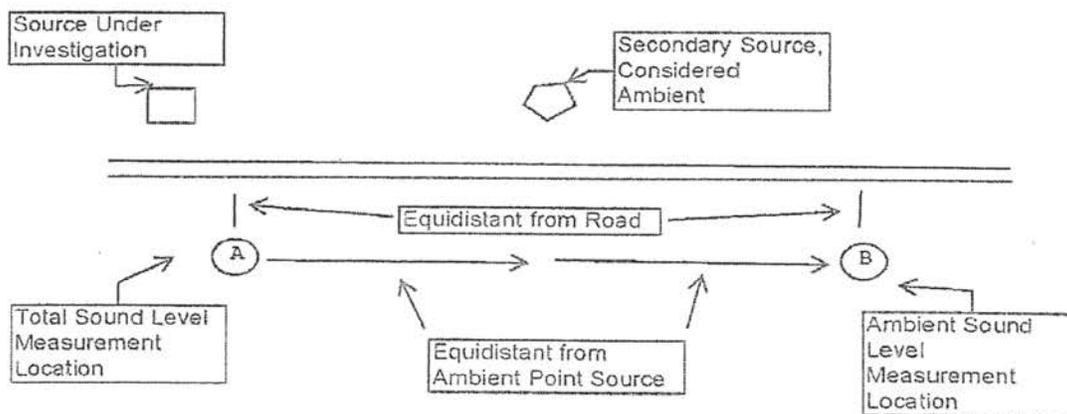
- Very simply, ask the source to terminate operations for a few minutes. If they can, they have to

- If you know the hours of operation of the source, schedule the measurements so that you can take SO measurements prior to operations or after they terminate for the day (see illustration, previous page).
- If you can discern a duty cycle for the equipment, then take ASL measurements during a low- or off-cycle period. Air compressors turn off after re-pressurizing the tank. HVAC and refrigeration equipment is often controlled by a thermostat. Once demand is satisfied, the unit throttles down or off, affording an opportunity to measure ASL. Some equipment is completely demand operated, such as a garage door opener. If possible, position yourself where you can observe the location from where the demand will arise (in this case, a view of the driveway), and be prepared to conduct your ASL and TSL measurements based upon your observations.
- If the duty cycle of a device is demand driven, it may be weather dependent, and thus more predictable. Any device that provides chilling or cooling may be forced to operate non-stop when the temperature and humidity are high, precluding the collection of SO data. Conversely, if the temperature and humidity are lower, the unit may occasionally cycle off providing an opportunity to collect SO data. If the investigation can wait, scheduling it based upon weather reports may well increase the possibility of SO measurements.
- A useful strategy is to ask the complainant to keep a log of their observations of the sound source and its emissions. Explain that the log will aid you, increasing the possibility of a fruitful investigation and that you need an opportunity to measure the source when it is operating at full load, and also the ambient levels when it is off. If the source is only intermittent in its operation, their records will increase the possibility that you will be there to measure it. Conversely, if the source tends to run relatively constantly, their log may allow you to predict a time when you will be able to collect SO measurements. Their records should include: their subjective evaluation of the relative sound level; day of the week; time of the day; weather conditions; and, any other conditions that they think may be relevant. These records may also assist in establishing a pattern for the purposes of prosecution.
- Sources which emit fluctuating sound levels, such as music, will usually offer short periods of time when the sound levels drop considerably. This may occur: between sets; when a song is winding down; or, a relatively quiet vocal passage in an otherwise loud instrumental piece. Remain aware and vigilant for such an opportunity and jump on it when it presents itself.
- Source sound levels may increase significantly when a door is opened regularly, or a thermostatically-controlled fan opens louvers. You may find this at facilities such as a distribution center, bar, workshop, or garage. Even if the sound source inside is audible or loud when the building is closed, the sound levels may increase by more than the permissible limit when the door opens. If, every time they open the door, the sound levels jump by 15 dBA, then it is essentially irrelevant what the 'true' ASL is; the facility is in violation. Note how often the door is opened and for how long the sound level remains elevated.

Walk Away measurements are one of the methods that can be used when the sound source under investigation can not be turned off. If the primary source of ambient sound is steady traffic on the immediately adjacent road, you simply walk along the sidewalk, away from the source under investigation, remaining equidistant to the road (see illustration). Walk away, noting the drop in the sound level as the influence of the source sound emissions wane. Record the meter reading when it levels off. If you walk towards a new sound source of significant intensity that was not present at the location of the TSL measurements, then these measurements should not be used.



What do you do when there's a point source of ambient sound, such as a second bar or a chiller on a nearby building? It is critical that the ASL measurement location is the same distance from that (cont'd)

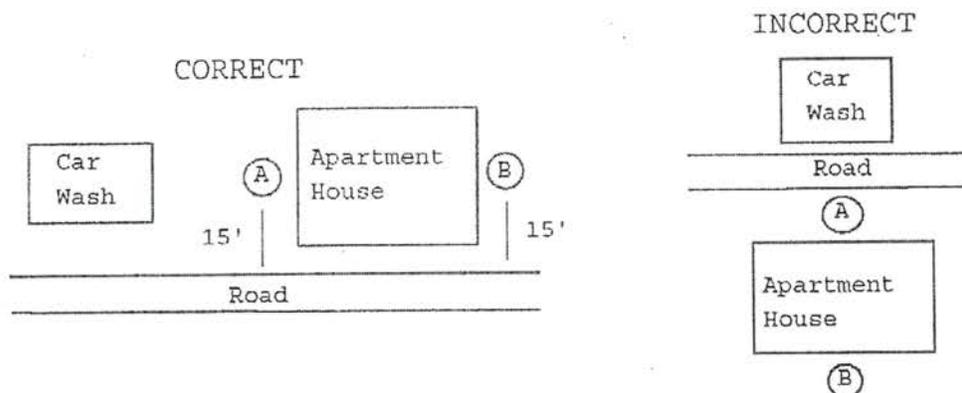


point source of ambient sound as was the location at which you conducted your TSL measurements. In the illustration above, the TSL measurements include the following sound sources: 1) the source under investigation; 2) the steady traffic on the roadway – an ambient source; and, 3) some point source of ambient sound, such as a nearby chiller. The ASL at this location consists of #2 and #3, and you must properly measure them. If you can't get a source-off measurement, then a walk-away can serve the purpose well. Walk away from the source under investigation, along the sidewalk, until you are perpendicular from the point source of ambient sound, and then walk the same distance beyond that source. Make sure that you are the same distance from the road, and this is the location from which the ASL measurements can be taken. Show the detail on your Report Form, and be prepared to articulate how this location for ASL measurement properly represented the ambient sounds impacting on the location at which you conducted your TSL measurements.

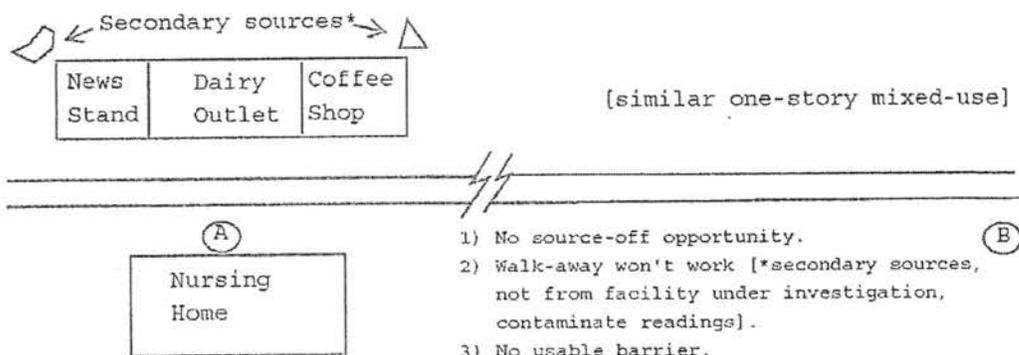
What if there's no road, only some point source of ambient sound? Simply take your ASL measurements on the 'other' side of the ambient point source; at the same distance you were when

you conducted your TSL measurements. Always think: “equidistance - - am I at the same distance from the ambient source?” Be prepared to articulate this in court.

Behind Barrier measurements work when the barrier blocks your line of sight to the source under investigation, but not to the primary source of ambient sound.



Similar Neighborhood measurements may be taken if all other methods are unsuccessful. You must make sure that you remain equidistant from the primary source of ambient sound (such as two blocks from a major road), and in an area where the makeup of the buildings is the same as in the location at the complainant’s property.



INDOORS

The same basic requirements apply to ASL measurements conducted indoors as do to outdoor measurements.

- *Source-off measurements are always preferable to any other method.*
- The sound from the source under investigation should have as little influence as possible on measurements of ASL. That does not mean, however, that the source under investigation must be completely inaudible.
- The measurement of ASL must include all ambient sounds that were present when the measurements of Total Sound were conducted. For example, if the measurements of Total Sound included traffic outside or air handling inside, then the measurements of ASL must

contain these, as well. Thus, you can't use ASL measurements taken in a sheltered interior hallway if Total Sound measurements were taken in a bedroom whose single-pane windows overlook a busy street, filling the room with traffic noise.

- If a SO measurement is not possible, carefully consider what alternative location will yield acoustical conditions that are substantially the same as those at the location at which you measure the Total Sound Levels.

If forced to choose between two poor choices – ASL measurements in a location which is too sheltered, or, ASL measurements in a location which is somewhat contaminated with sound from the source – choose the latter. You must err to the benefit of the potential violator. A higher ASL is to their benefit. That said, don't 'give away the store'.

REMEMBER - accurate measurement of the Ambient Sound Level is absolutely critical to assessing the sound levels emanating from the sound source under investigation, and determining the Permissible Sound Level Limit.

**PROCEDURE
FOR THE COMPLETION OF
A NOISE MEASUREMENT REPORT**

Alaska¹

NOTE: The procedures outlined within this section should all be performed during an investigation, but they do not necessarily have to be performed in any given order. It is important for you to know what data must be collected for a valid investigation, and then gather that data in the order in which it presents itself during the flow of the investigation.

1. While not necessarily required to complete the field form, make sure you know what provision within your code applies to the source you're investigating. This is almost certain to influence your data collection in such critical areas such as: the measurement metric (dBA, dBC, Lmax, "plainly audible", etc.); the duration of the measurements; and, the location of regulatory compliance measurements.
2. Survey the site on foot to confirm that the suspected source is the actual source (a walk-around), and to determine the best locations from which to measure neighborhood residual and background sound levels. If the suspected source is proven to be the source, draw a map of the site on the back of the report form, including the path of the walk-around, the source and the exact points of measurement.
3. Record the name and address of the property from which the sound is being emitted, including street number if possible. If the source is not a fixed property, attempt to describe it with identifying characteristics, such as license plate number, and vehicle make and model.
4. Fill in day and date of measurement
5. Fill in your name and agency
6. List the name and title of any responsible party who has been notified of the investigation. Attempt to notify a representative of the management of the facility.
7. Describe the noise sources under investigation, including the location of the noise source, the operation of the facility or noise source, and if this measurement represents the normal operation of the noise source. Note whether the sound emissions are continuous or non-continuous, and whether they arise from an amplified source or not. If amplified, is the source commercial or non-commercial? Is the source an extended hours liquor establishment? Do the source and the receptor share a common wall? **These factors may influence the required measurement methods and permissible limits** (see your code).
8. Describe any ambient sounds which are fairly constant, including their location. Once you have categorized a specific sound as being background (or ambient) you must be careful to include it in all of your measurements.

¹ As this course is attended by two jurisdictions with distinctly different noise codes, it is not possible for these guidelines to be specific to any one code. Please make certain to follow the requirements of your code.

9. Describe any extraneous sound which are intermittent, intense and of short duration. These sounds are noted but are specifically excluded or ignored when taking either total or background sound level measurements.

10. Provide a description of the sound level measurement equipment being used including manufacturer, model number, serial number, and the date of last calibration.

11. Conduct and report the times of field calibration and battery checks, which must be before, after and at least as often as required by the jurisdiction's code. In general, it is best to calibrate every hour.

Such field calibration checks are absolutely required for a valid noise measurement form.

12. Report whether there was precipitation or if the ground is wet. Measure and report wind velocity, with the time.

13. Measure and report ambient sound levels. The ambient sound levels may be measured by one of the following methods:

- **Source off - the preferred method**
- Walk away
- Behind barrier
- Similar neighborhood

Ambient sound level is measured as follows:

Ambient sound level measurements shall be conducted while the source under investigation is not operating, at the same location at which source sound level measurements are made. If this is not possible, ambient sound level measurements may be taken at an alternative location which should be as close as feasible to the location where the source sound levels are measured, but so located that the sound from the source has as little effect on the background sound level measurements as possible. The primary source of ambient sound must be equidistant to the location of the source sound level measurements and any alternate location for ambient sound level measurements. Any ambient sound level measurements must be made prior to or following any set of source sound level measurements.

- Determine the appropriate settings for the meter:
 - measurement scale (dBA, dBC, etc.)
- Take a sound level measurement using one of the above methods.
- Note which ambient measurement method was used.
- Record the reading for the measurement (ex. 51.7 dBA Lmax).
- Note the location of the measurement and any relevant comments.
- Record finish time.
- Determine which ambient measurement is to be used for the purposes of correction based on the following criteria:
 - **Source off is always to be used, if it is available.** Use the highest source off, being careful to exclude measurements that may include extraneous sounds.
 - All other ambient measurement methods are equivalent, and the highest is used, again, excluding any that may contain extraneous sounds.
- Circle the ambient level used for correction purposes on the form.

14. Measure and report the Total Noise levels.

- Determine the appropriate settings for the meter:
 - measurement scale (dBA, dBC, etc.)
- Record starting time.
- **Make certain that you are measuring sound levels that represent the normal and usual operations of the source under investigation.** Do not include accidental impacts or the like. Be fair.
- Take several sound level measurements at the location that is appropriate for your specific investigation, as required by your code. Generally, this is at or within the property of a complainant.
- Record the specific location of the measurement (on the site map) and any relevant comments (on the form).
- Record the sound level for the measurement (ex. 71 dBC), and the specific times of the reading.
- Record finish time, and the duration of the measurement. Make sure the total duration of your measurements are sufficient to determine compliance with the specific provision of the code
- At each location, subtract (using the decibel subtraction technique) the maximum ambient level from the total noise level to obtain the corrected (source) level, as dictated by the provision you are enforcing.
 - You may only 'correct' A-scale total measurements with A-scale background measurements, and you may only 'correct' C-scale total measurements with C-scale background measurements.
- This calculated number is the source sound level and should be compared to the permissible limits in the ordinance being enforced, to determine if a violation exists.
- **IMPORTANT NOTE:** If the provision you are enforcing specifies a limit that sound source may not raise the Total Sound Level, or Ambient Sound Level, then you may not have to calculate the Corrected Source Level. You may only have to calculate the increase of sound levels between when the source is on and when it is off (i.e., simple subtraction). We will discuss this point extensively in the course.

15. Report your findings, specifically noting whether there was a violation of the code, and what provision was violated. Note whether the permissible limit was adjusted due to some characteristic of the sound such as duration.

A statement of impact may have value here, such as: "the sound was not only loud, the bass line of the music could be felt"; "the sound actually startled me when the unit kicked into operation"; "pedestrians crossed the street to avoid the noise"; "the sound level inside the bedroom exceeded the permissible limit, and not only could it have disrupted sleep, it even made conversation difficult" etc. Speak to the reasonableness of the noise, if you can

16. Sign form

17. Submit form for review and approval (if necessary), and enforcement action if appropriate.

**The better prepared you are to go to court, the less likely it is to happen.
A well executed and documented investigation can prove very
intimidating.**

NOISE MEASUREMENT REPORT

Name/Address of Sound Source
LAKEVIEW LOUNGE & MARINA
732 LAKE ST
WASILLA, AK

Date of Measurement 2/3/13 Day of Week SAT
 Investigator JIMMY DECIBEL
 Name and Title of Responsible Party if Advised of Complaint:
MR. LOUDEN O'S MURKSHUS, OWNER

Description and Location of Sound Sources to be Measured. Including Operation of Facility, and if this Represents the Normal Operation of the Facility:

BAR WITH AMPLIFIED MUSIC ON OUTDOOR OPEN DECK. COMPLAINANT STATES
RECORDED MUSIC STARTS AT 7:00 PM, BANDS START AT 10:00 PM. OPEN MUSIC
CONTINUES UNTIL 2:30 AM

Description and Location of Neighborhood Residual Sounds. Fairly Constant in Nature (included in all measurements):

STEADY TRAFFIC ON PARKS HWY.

Description and Location of Extraneous Sounds. Intermittent in Nature. Not from Source Facility (excluded from all measurements):

UNMUFFLED VEHICLES ON PARKS HWY. ALL LOCAL TRAFFIC ON LAKE ST,
S. WILLOW ST, PARK AVE, SUSITNA AVE. AIRCRAFT, BARKING DOG, TRAIN

Description of Instrumentation:

	Make, Model#, ANSI Type	Serial #	Last Certified
Sound Level Meter	<u>AZME 247 TYPE II</u>	<u>3734</u>	<u>11/14/12</u>
Sound Level Calibrator	<u>AZMECAL 62</u>	<u>11596</u>	<u>11/14/12</u>
Wind Screen (yes/no)	<u>Y</u>	Wind Meter (y/n) <u>Y</u>	Other <u>-</u>
Time of Calibration/Battery Checks (Before, After, Every Hour) <u>01:16</u>			

Weather Conditions: Precipitation (y/n) N Ground Wet (y/n) N Temperature: 65° °F
 Wind Velocity, With Time Taken 1-4-2-3 MPH 01:17 2-4-3-6 MPH 01:48

Measurement of Ambient Sound:

Time	Level (dB) C	Type of Residual (source off, etc.)	Location of Measurement/Comments
<u>01:21</u>	<u>60</u>	<u>SOURCE OFF</u>	<u>A BETWEEN SONETS</u>
<u>01:25</u>	<u>59</u>	<u>" "</u>	<u>A " "</u>
<u>01:30</u>	<u>61</u>	<u>" "</u>	<u>A " "</u>

Measurement of Total Sound:

Time	Level (dB) C	Corrected (Source) Level	Δ ABOVE AMBIENT	Location of Measurement /Comments
<u>01:18</u>	<u>66</u>	<u>66-1=65</u>	<u>4</u>	<u>A</u>
<u>01:19</u>	<u>69</u>	<u>69-1=68</u>	<u>7</u>	<u>A</u>
<u>01:20</u>	<u>65</u>	<u>65-2=63</u>	<u>2</u>	<u>A</u>
<u>01:22</u>	<u>72</u>	<u>72</u>	<u>11</u>	<u>A LOUD PASSAGE</u>
<u>01:24</u>	<u>74</u>	<u>74</u>	<u>13</u>	<u>A " "</u>
<u>01:27</u>	<u>65</u>	<u>65-2=63</u>	<u>2</u>	<u>A QUIET SONG</u>
<u>01:28</u>	<u>64</u>	<u>-</u>	<u>-</u>	<u>A QUIET SONG</u>

Findings MUSIC WAS IN VIOLATION OF 8-52.015(D). LIMIT IS 3dB(C)
ABOVE AMBIENT AT THIS TIME OF NIGHT LEVELS OF AS MUCH AS
11,13 ABOVE AMBIENT WERE DOCUMENTED

Case Disposition _____

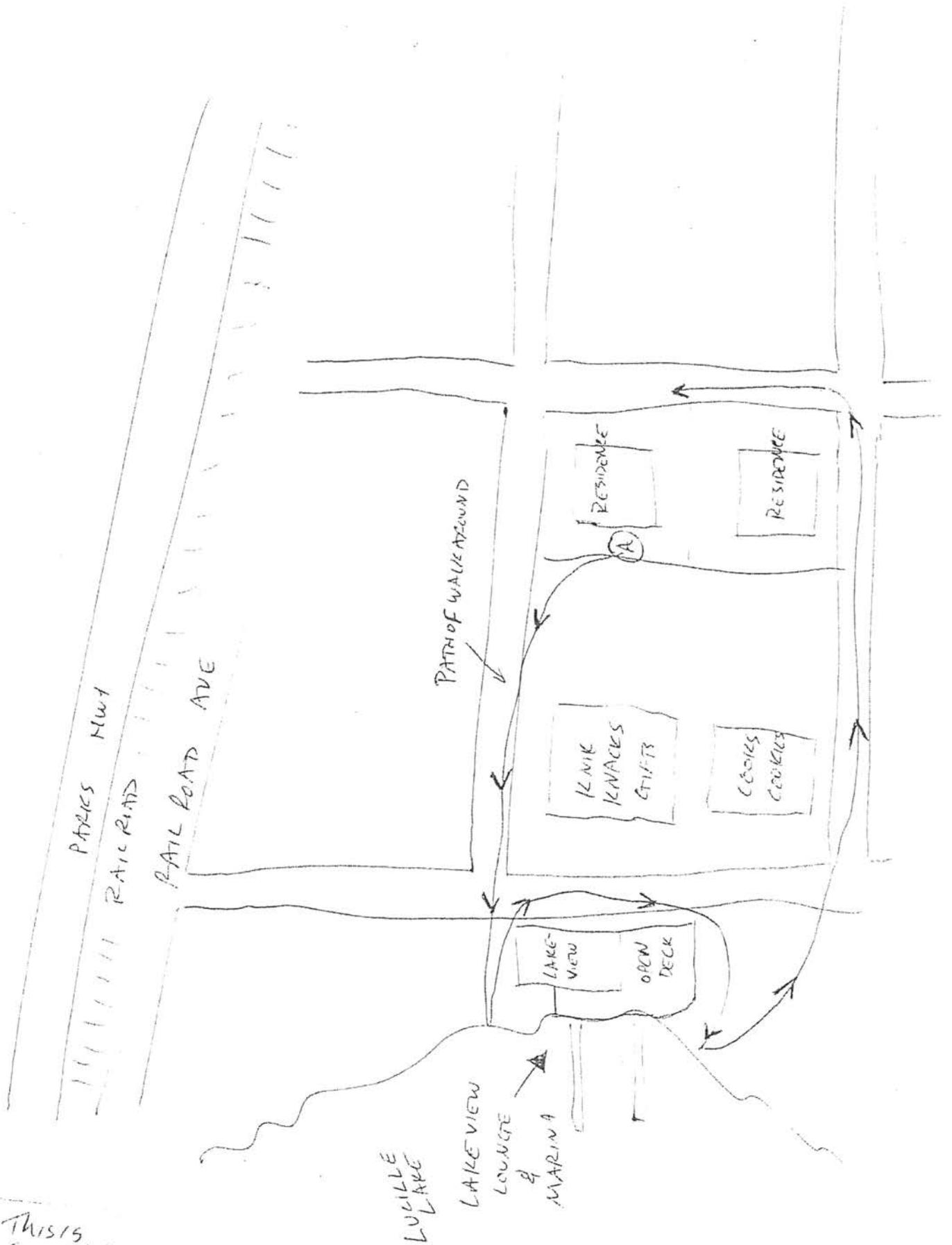
Sound Measured By:

Jimmy Decibel

Report Reviewed and Approved By (If Necessary):

Bobby Beylars

INCLUDE SITE SKETCH ON REVERSE (with source, walk-around route, and exact measurement locations)



This is completely fictitious!

NOISE MEASUREMENT REPORT

Name/Address of Sound Source
WEST MEADOW
IDITA PARK
500 W. NELSON AVE
WASILLA

Date of Measurement 7/27/13 Day of Week SAT
 Investigator SALLY QUIET
 Name and Title of Responsible Party if Advised of Complaint:
ROBERT REDLINE, OWNER

Description and Location of Sound Sources to be Measured, Including Operation of Facility, and if this Represents the Normal Operation of the Facility:

RADIO CONTROLLED MODEL CAR RACING LAPS IN OPEN MEADOW
COMPLAINTS RECEIVED FROM PEOPLE AT WUNDERLAND, CHILDRENS
STORE TERRACE, AND AT THE POND NEXT TO WEBER DRIVE. MODEL CAR
IS LOUD AND WHINNY, LIKE AN ANGRY WEED WACKER

Description and Location of Neighborhood Residual Sounds, Fairly Constant in Nature (included in all measurements):

GENERAL BUZZ OF PEOPLE TALKING LAUGHING, ETC. STEADY TRAFFIC
ON NELSON. LEAVES RUSTLING IN STEADY LIGHT WIND

Description and Location of Extraneous Sounds, Intermittent in Nature, Not from Source Facility (excluded from all measurements):

ESPECIALLY LOUD PEOPLE, UNMUFFLED VEHICLES ON NELSON, ALL TRAFFIC
ON WEBER. SEACHELLS

Description of Instrumentation:	Make	Model#	ANSI Type	Serial #	Last Certified
Sound Level Meter	NASH	1530	TYPE 1	737475	6/11/12
Sound Level Calibrator	NASH	CL		42751	6/11/12
Wind Screen (yes/no)	Y	Wind Meter (y/n)	Y	Other	
Time of Calibration/Battery Checks (Before, After, Every Hour) <u>1:32 PM</u>					
Weather Conditions: Precipitation (y/n) <u>N</u> Ground Wet (y/n) <u>N</u> Temperature: <u>78</u> °F					
Wind Velocity, With Time Taken <u>7-7 MPH 1:33 PM</u>					

Measurement of Ambient Sound:

Time	Level (dBA)	Type of Residual (source off, etc.)	Location of Measurement/Comments
1:45	57	SOURCE OFF	A STOPS RACING
1:52	55	SOURCE OFF	B FOR SAME REASON
1:58	56	SOURCE OFF	C

Measurement of Total Sound:

Time	Level (dBA)	Increase of Ambient Corrected (Source) Level	Location of Measurement /Comments
1:43	68	68-57= 11	A
1:44	71	71-57= 14	A
1:49	63	63-55= 8	B
1:50	62	62-55= 7	B
1:54	62	62-56= 6	C
1:55	64	64-56= 8	C

Findings MODEL CAR IN VIOLATION OF 5:52.015(L) LIMITING INCREASE
IN AMBIENT LEVELS OF 5 (dBA) EXCEEDANCES OF THIS LIMIT
FOUND AT ALL LOCATIONS MEASURED. PEOPLE IN PARK CAME UP TO ME
TO COMMENT & COMPLAIN ABOUT RC MODELS IN PARK

Case Disposition _____

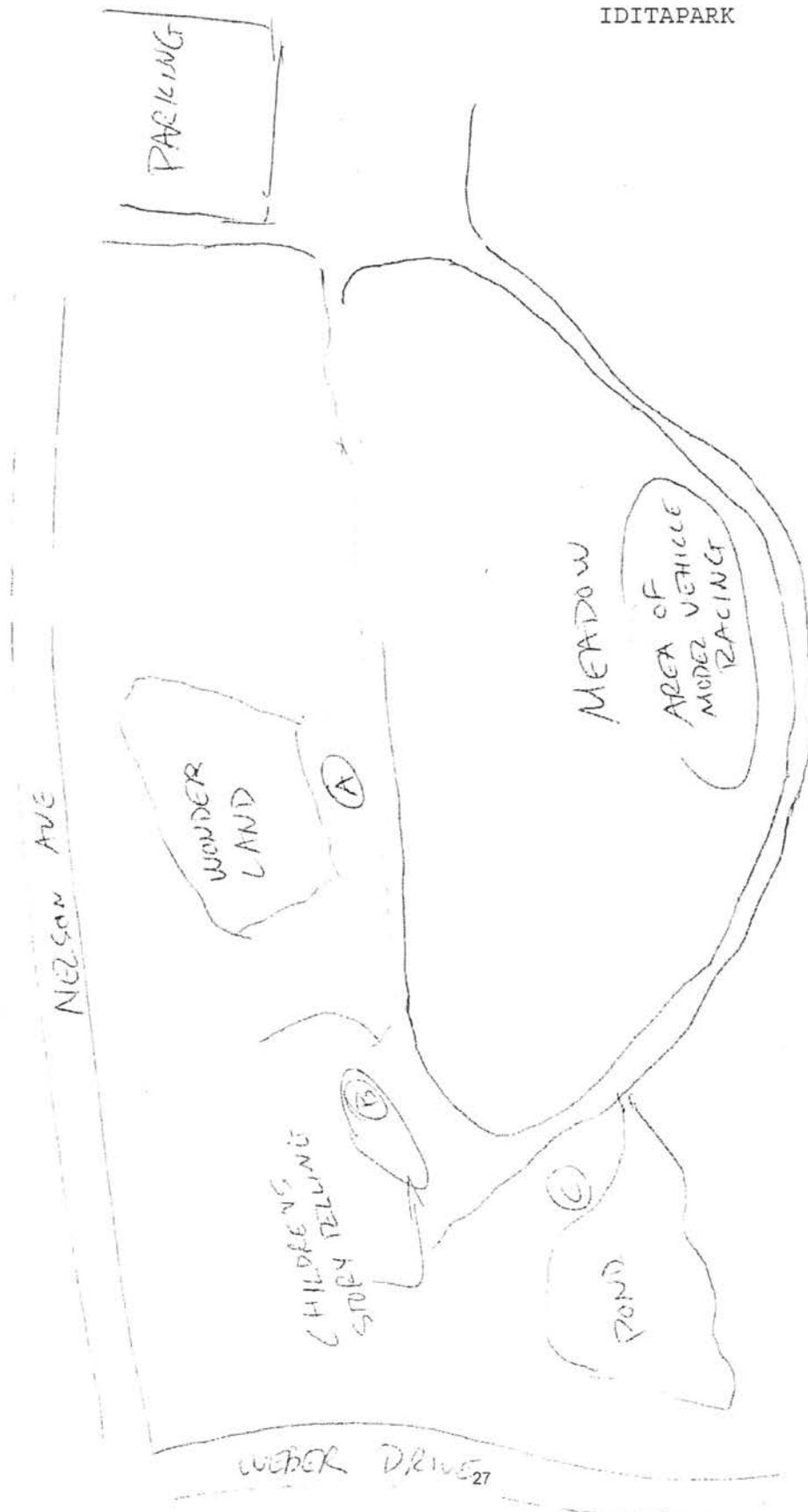
Sound Measured By:

Sally Quiet

Report Reviewed and Approved By (If Necessary):

Art Carney

INCLUDE SITE SKETCH ON REVERSE (with source, walk-around route, and exact measurement locations)



NOISE MEASUREMENT REPORT

Name/Address of Sound Source
MUDF ATS MOTOR WASH
1702 LAKE OTIS PKWY
ANDOVER MA

Date of Measurement 9/3/12 Day of Week WED
 Investigator ROBERT METERMAN
 Name and Title of Responsible Party if Advised of Complaint:
DON DELOISE MANAGER

Description and Location of Sound Sources to be Measured, Including Operation of Facility, and if this Represents the Normal Operation of the Facility:

CAR WASH WITH WATER JETS, FANS, BLOWERS AND SELF-SERVE VACUUMS.

Description and Location of Neighborhood Residual Sounds, Fairly Constant in Nature (included in all measurements):

STEADY TRAFFIC ON LAKE OTIS PKWY AND C 36TH AVE IN DISTANCE. (R.O.W.)
NOISE FROM WATER POLO GAME ON LAKE OTIS. HVAC ON NORTHERN LIGHTS.

Description and Location of Extraneous Sounds, Intermittent in Nature. Not from Source Facility (excluded from all measurements):

UNMUFFLED VEHICLES ON LOCAL ROADS ALL TRAFFIC ON STANFORD DRIVE
GROUND YELLING AT SCORING IN POLO GAME ON LAKE OTIS. BARKING DOG

Description of Instrumentation:

Make	Model#	ANSI Type	Serial #	Last Certified
Sound Level Meter	ANDERSON LX	TYPE I	115495	3/2/12
Sound Level Calibrator	ANDERSON		74748	3/2/12
Wind Screen (yes/no)	Y	Wind Meter (y/n)	Y	Other
Time of Calibration Battery Checks (Before, After, Every Hour)		2:45 AM	3:05 PM	

Weather Conditions: Precipitation (y/n) N Ground Wet (y/n) N Temperature: 57 °F
 Wind Velocity, With Time Taken <2 MPH 2:46 PM <2 MPH 3:07 PM

Measurement of Ambient Sound:

Time	Level (dB) A	Type of Residual (source off, etc.)	Location of Measurement/Comments
2:50	61	SOURCE OFF	A NO ACTIVITY
2:51	62	" "	A " "
2:56	63	" "	A " "

Measurement of Total Sound:

Time	Level (dB) A	Corrected (Source) Level	Location of Measurement /Comments
2:46	68	68-2=66	A
2:47	69	69-1=68	A
2:48	67	67-2=65	A
2:52	74	74	SELF SERVE VACUUM
2:53	76	76	" " " "
2:54	60	60	" " " "
2:59	64		LOW LEVEL ACTIVITY
3:00	62	62	BLOWER

Findings CAR WASH IN VIOLATION OF 15.70.030(A) PERMISSIBLE LIMIT IS
65 dBA, COMMERCIAL SOURCE - RESIDENTIAL RECEPTOR

Case Disposition

Sound Measured By:

Report Reviewed and Approved By (If Necessary):

Robert Meterman

James T. Ruiz

INCLUDE SITE SKETCH ON REVERSE (with source, walk-around route, and exact measurement locations)

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LAKE OTIS ELEMENTARY SCHOOL

LAKE OTIS PKWY

NORTHERN LIGHTING

PATH OF WALKAROUND

MUDCATS MOTORWASH

SEWARDS SECT SAUSAGES

DUKE DRIVE

STANFORD DRIVE

A

RESIDENCE

RESIDENCE

This is completely fictitious

NOISE MEASUREMENT REPORT

Name/Address of Sound Source
TUDOR CLEANERS
712 E TUDOR RD
ANCIENNETE

Date of Measurement 8/12/12 Day of Week WED
 Investigator NANCY NOISESTRAFER
 Name and Title of Responsible Party if Advised of Complaint:
IMA RUCKUS OWNER

Description and Location of Sound Sources to be Measured, Including Operation of Facility, and if this Represents the Normal Operation of the Facility:

DRY CLEANER WITH EXHAUST DIRECTED AT APARTMENT COMPLEX.
SOUNDS LIKE STEAM ESCAPING WITH LOUD HISSING.

Description and Location of Neighborhood Residual Sounds, Fairly Constant in Nature (included in all measurements):

STEADY TRAFFIC ON E. TUDOR RD. HUM OF ACTIVITY IN SACRAMENTO
SUPERMARKET PARKING LOT. HVAC ON ROOF OF SACRAMENTO

Description and Location of Extraneous Sounds, Intermittent in Nature, Not from Source Facility (excluded from all measurements):

TRUCKS WITH ENGINE COMPRESSION BRAKES (JAKE BRAKES) CAR
DOORS SLAMMING IN APT PARKING LOT

Description of Instrumentation:	Make	Model#	ANSI Type	Serial #	Last Certified
Sound Level Meter	KOHAKU	1650	II	4278932A	6/10/12
Sound Level Calibrator	KOHAKU	125		429315A	6/10/12
Wind Screen (yes/no)	Y	Wind Meter (y/n)	Y	Other	
Time of Calibration/Battery Checks (Before, After, Every Hour) <u>6:35 PM</u>					
Weather Conditions: Precipitation (y/n) <u>N</u> Ground Wet (y/n) <u>N</u> Temperature: <u>67</u> °F					
Wind Velocity, With Time Taken <u>6:43 PM 2-4 MPH</u>					

Measurement of Ambient Sound:

Time	Level (dB)	Type of Residual (source off, etc.)	Location of Measurement/Comments
<u>6:54</u>	<u>69</u>	<u>BEHIND BARRIER</u>	<u>B</u>
<u>6:55</u>	<u>69</u>	<u>" "</u>	<u>B</u>
<u>7:01</u>	<u>(63)</u>	<u>SOURCE OFF</u>	<u>A CLEANER CLOSED</u> <u>AT 7:00 PM</u>

Measurement of Total Sound:

Time	Level (dB)	Corrected (Source) Level	Location of Measurement /Comments
<u>6:46</u>	<u>72</u>	<u>72-1 = 71</u>	<u>A</u>
<u>6:48</u>	<u>72</u>	<u>72-1 = 71</u>	<u>A</u>
<u>6:49</u>	<u>72</u>	<u>72-1 = 71</u>	<u>A</u>
<u>6:59</u>	<u>72</u>	<u>72-1 = 71</u>	<u>A</u>

Findings CLEANER IN VIOLATION OF 15.70.030 (A). PERMISSIBLE
LIMIT IS 65.0 (B/A) FOR RESIDENTIAL RECEPTOR FROM COMMERCIAL SOURCE.

Case Disposition

Sound Measured By:

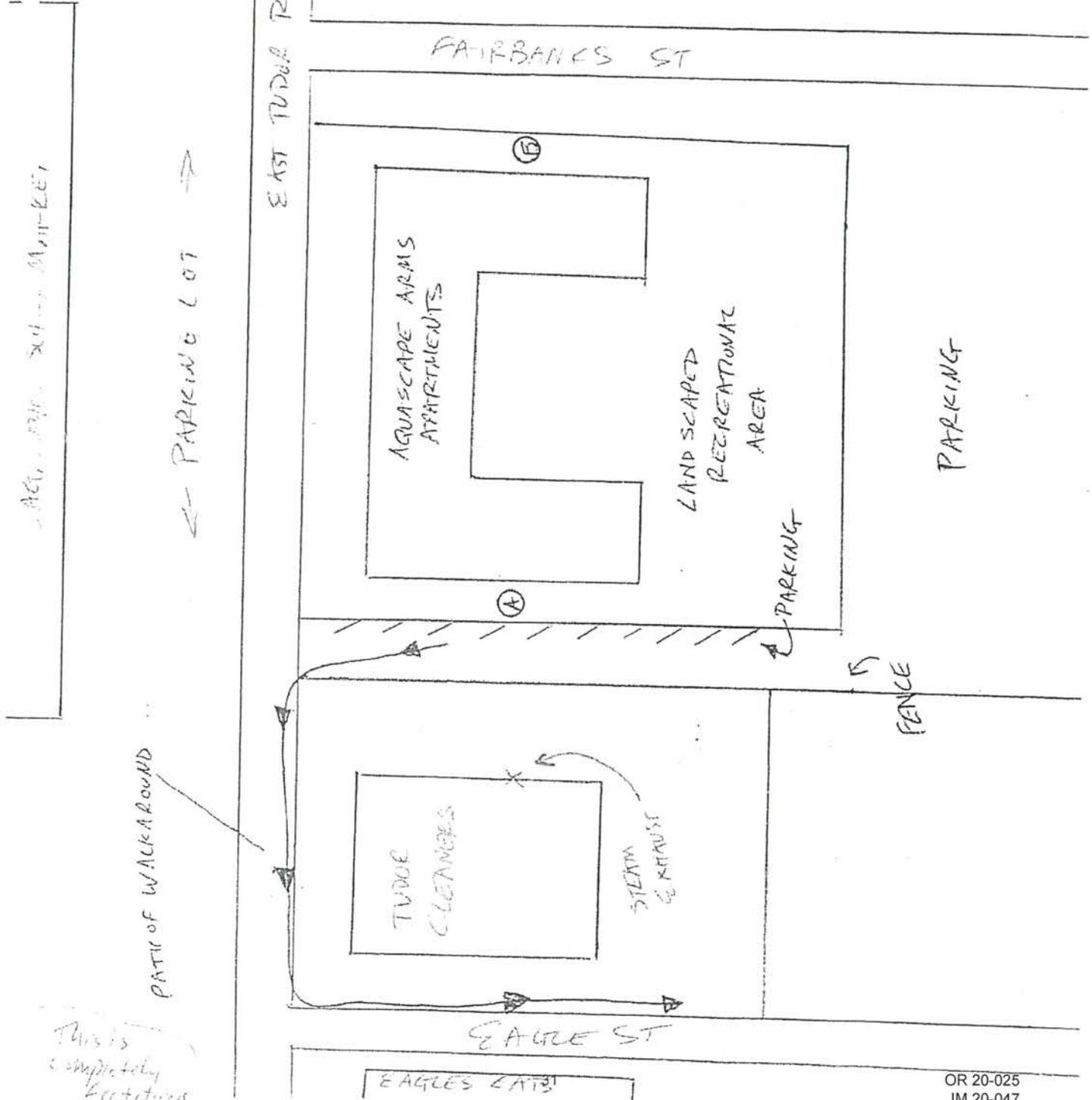
Report Reviewed and Approved By (If Necessary):

Nancy Noiestrafer

J R Ewing

INCLUDE SITE SKETCH ON REVERSE (with source, walk-around route, and exact measurement locations)

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knowledge of the presence of a range, adjoining parcels have been rezoned for new housing developments, giving little, if any, forethought to future consequences.

3.03.1.2 One of the primary yet often overlooked considerations in developing a range project is the economic impact the facility will have on the community. How it affects the community should it locate nearby, or if it is forced to move to another site are critical issues. Local economies are important. Even though shooting is a recreational activity, the range becomes part of the local business community. Outside activities, such as tournaments, bring outside money into the economy thereby playing an important political role in the local community.

3.03.2 Existing Conditions

3.03.2.1 What are the existing conditions at the proposed or existing site? Study the environment to determine what impact is occurring. This is the reason an environmental analysis (EA) is necessary. Conducting an EA requires a thorough review to determine if there is any reason to implement a major and costly sound abatement program. It requires a complete description of what may or may not occur if the range is built. (See Section I, Chap. 3, paragraph 2.14 for guidance and procedures for conducting an environmental analysis.)

3.03.3 Future Conditions

3.03.3.1 As a general guide, the following categories were developed by the NRA based on field and text book work:

- (1) Unacceptable: If the sound level exceeds 90 dB(A) for 1 hour out of 24 or exceeds 85 dB(A) for 8 hours out of 24 and the receiver is less than 1/4 mile from the sound source.
- (2) Discretionary: Normally Acceptable, if the level exceeds 80 dB(A) for 8 hours out of 24 or if there are "loud" impulsive sounds (referring to sonic booms, artillery, etc.) on site and the distance from the property boundary and the receiver is one mile or more.
- (3) Discretionary: Normally acceptable if the level does not exceed 75 dB(A) at the property boundary more than 6 hours out of 24 hours and distance from the boundary line and the receiver is over 1/2 mile.
- (4) Acceptable: If the sound levels at the receiver do not exceed 65 dB(A) more than 8 hours out of 24 or activities do not extend into the nighttime hours of 10 p.m. through 7 a.m.

Active shooting is to take place during the daytime hours of 7 a.m. to 10 p.m., with curtailed, but not necessarily discontinued activities during evening hours of 7 p.m. to 10 p.m. Shooting activities should not continue into nighttime hours, between 10 p.m. and 7 a.m. unless needed for mandatory low light training by law enforcement personnel.

3.03.4 Regulatory Controls

3.03.4.1 Governmental planning organizations offer services to local agencies to assist them in developing goals and policies for community "noise" control. They also provide general land use, environmental protection and open space recommendations. In July 1981, the U.S. Environmental Protection Agency developed a Community Noise Assessment Program designed to assist communities to assess, control and improve their noise environment. Even though this document focuses on larger more densely populated areas, it does provide some valuable tips for the range planner.

3.03.4.2 A number of states have laws relating to noise. Most of these noise laws are concerned with motor vehicle, snowmobile, or boating sounds. A few, such as Connecticut, Illinois, and New

By Standard Number / 1910.95 - Occupational noise exposure.

- **Part Number:** 1910
- **Part Number Title:** Occupational Safety and Health Standards
- **Subpart:** 1910 Subpart G
- **Subpart Title:** Occupational Health and Environmental Control
- **Standard Number:** 1910.95
- **Title:** Occupational noise exposure.
- **Appendix:** A; B; C; D; E; F; G; H; I
- **GPO Source:** e-CFR

1910.95(a)

Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in Table G-16 when measured on the A scale of a standard sound level meter at slow response. When noise levels are determined by octave band analysis, the equivalent A-weighted sound level may be determined as follows:

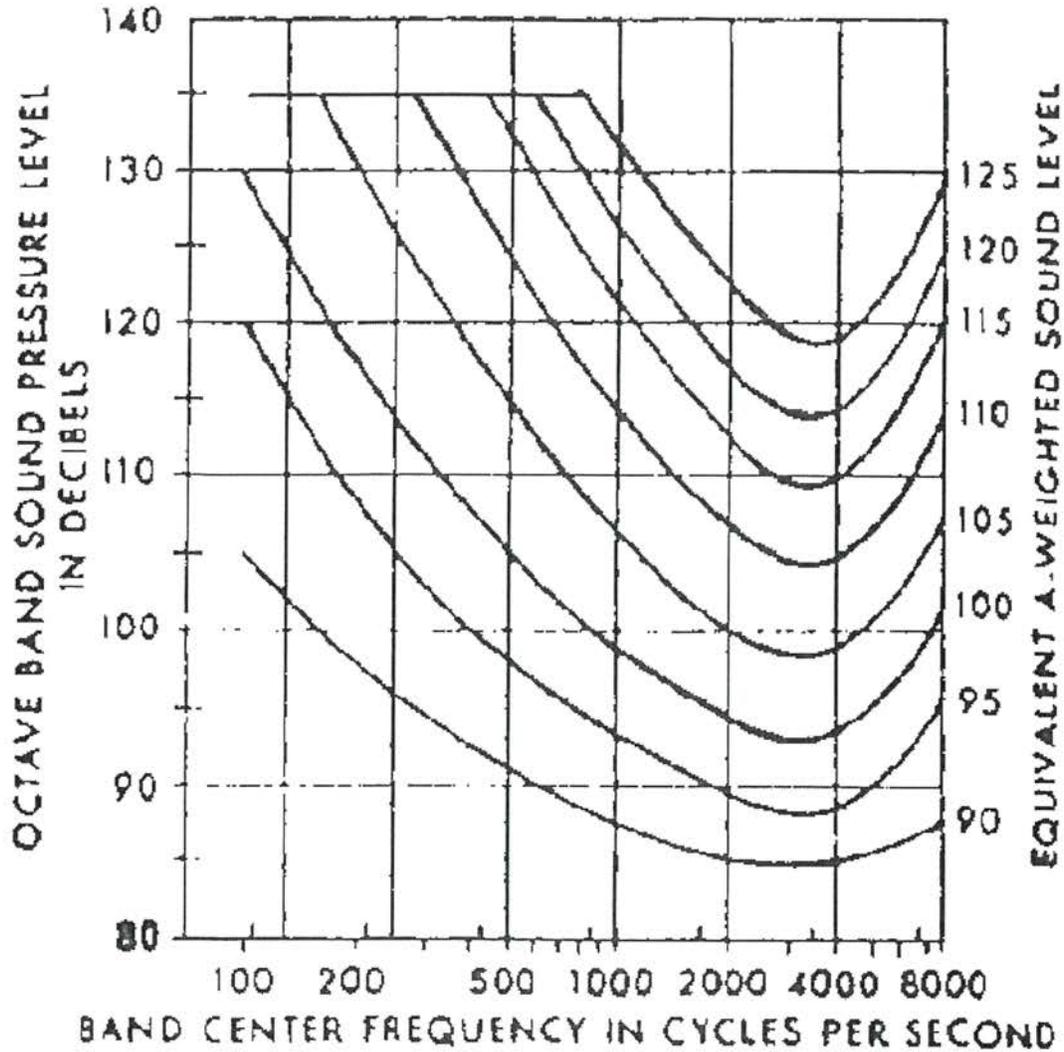


FIGURE G-9

Equivalent sound level contours. Octave band sound pressure levels may be converted to the equivalent A-weighted sound level by plotting them on this graph and noting the A-weighted sound level corresponding to the point of highest penetration into the sound level contours. This equivalent A-weighted sound level, which may differ from the actual A-weighted sound level of the noise, is used to determine exposure limits from Table 1.G-16.

1910.95(b)(1)

When employees are subjected to sound exceeding those listed in Table G-16, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of Table G-16, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table.

1910.95(b)(2)

If the variations in noise level involve maxima at intervals of 1 second or less, it is to be considered continuous.

TABLE G-16 - PERMISSIBLE NOISE EXPOSURES (1)

Duration per day, hours	Sound level dBA slow response
8.....	90
6.....	92
4.....	95
3.....	97
2.....	100
1 1/2	102
1.....	105
1/2	110
1/4 or less.....	115

Footnote(1) When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each. If the sum of the following fractions: $C(1)/T(1) + C(2)/T(2) + \dots + C(n)/T(n)$ exceeds unity, then, the mixed exposure should be considered to exceed the limit value. Cn indicates the total time of exposure at a specified noise level, and Tn indicates the total time of exposure permitted at that level. Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

1910.95(c)

"Hearing conservation program."

1910.95(c)(1)

The employer shall administer a continuing, effective hearing conservation program, as described in paragraphs (c) through (o) of this section, whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent. For purposes of the hearing conservation program, employee noise exposures shall be computed in accordance with appendix A and Table G-16a, and without regard to any attenuation provided by the use of personal protective equipment.

1910.95(c)(2)

For purposes of paragraphs (c) through (n) of this section, an 8-hour time-weighted average of 85 decibels or a dose of fifty percent shall also be referred to as the action level.

1910.95(d)

"Monitoring."

1910.95(d)(1)

When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the employer shall develop and implement a monitoring program.

1910.95(d)(1)(i)

The sampling strategy shall be designed to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors.

1910.95(d)(1)(ii)

Where circumstances such as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, the employer shall use representative personal sampling to comply with the monitoring requirements of this paragraph unless the employer can show that area sampling produces equivalent results.

1910.95(d)(2)(i)

All continuous, intermittent and impulsive sound levels from 80 decibels to 130 decibels shall be integrated into the noise measurements.

1910.95(d)(2)(ii)

Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

1910.95(d)(3)

Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures to the extent that:

1910.95(d)(3)(i)

Additional employees may be exposed at or above the action level; or

1910.95(d)(3)(ii)

The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements of paragraph (j) of this section.

1910.95(e)

"Employee notification." The employer shall notify each employee exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring.

1910.95(f)

"Observation of monitoring." The employer shall provide affected employees or their representatives with an opportunity to observe any noise measurements conducted pursuant to this section.

1910.95(g)

"Audiometric testing program."

1910.95(g)(1)

The employer shall establish and maintain an audiometric testing program as provided in this paragraph by making audiometric testing available to all employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels.

1910.95(g)(2)

The program shall be provided at no cost to employees.

1910.95(g)(3)

Audiometric tests shall be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining and checking calibration and proper functioning of the audiometers being used. A technician who operates microprocessor audiometers does not need to be certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

1910.95(g)(4)

All audiograms obtained pursuant to this section shall meet the requirements of Appendix C: "Audiometric Measuring Instruments."

1910.95(g)(5)

"Baseline audiogram."

1910.95(g)(5)(i)

Within 6 months of an employee's first exposure at or above the action level, the employer shall establish a valid baseline audiogram against which subsequent audiograms can be compared.

1910.95(g)(5)(ii)

"Mobile test van exception." Where mobile test vans are used to meet the audiometric testing obligation, the employer shall obtain a valid baseline audiogram within 1 year of an employee's first exposure at or above the action level. Where baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees shall wear hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

1910.95(g)(5)(iii)

Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

1910.95(g)(5)(iv)

The employer shall notify employees of the need to avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

1910.95(g)(6)

"Annual audiogram." At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels.

1910.95(g)(7)

"Evaluation of audiogram."

1910.95(g)(7)(i)

Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift as defined in paragraph (g)(10) of this section has occurred. This comparison may be done by a technician.

1910.95(g)(7)(ii)

If the annual audiogram shows that an employee has suffered a standard threshold shift, the employer may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.

1910.95(g)(7)(iii)

The audiologist, otolaryngologist, or physician shall review problem audiograms and shall determine whether there is a need for further evaluation. The employer shall provide to the person performing this evaluation the following information:

1910.95(g)(7)(iii)(A)

A copy of the requirements for hearing conservation as set forth in paragraphs (c) through (n) of this section;

1910.95(g)(7)(iii)(B)

The baseline audiogram and most recent audiogram of the employee to be evaluated;

1910.95(g)(7)(iii)(C)

Measurements of background sound pressure levels in the audiometric test room as required in Appendix D: Audiometric Test Rooms.

1910.95(g)(7)(iii)(D)

Records of audiometer calibrations required by paragraph (h)(5) of this section.

1910.95(g)(8)

"Follow-up procedures."

1910.95(g)(8)(i)

If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift as defined in paragraph (g)(10) of this section has occurred, the employee shall be informed of this fact in writing, within 21 days of the determination.

1910.95(g)(8)(ii)

Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the employer shall ensure that the following steps are taken when a standard threshold shift occurs:

1910.95(g)(8)(ii)(A)

Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.

1910.95(g)(8)(ii)(B)

Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.

1910.95(g)(8)(ii)(C)

The employee shall be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the employer suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.

1910.95(g)(8)(ii)(D)

The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

1910.95(g)(8)(iii)

If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA of 90 decibels indicates that a standard threshold shift is not persistent, the employer:

1910.95(g)(8)(iii)(A)

Shall inform the employee of the new audiometric interpretation; and

1910.95(g)(8)(iii)(B)

May discontinue the required use of hearing protectors for that employee.

1910.95(g)(9)

"Revised baseline." An annual audiogram may be substituted for the baseline audiogram when, in the judgment of the audiologist, otolaryngologist or physician who is evaluating the audiogram:

1910.95(g)(9)(i)

The standard threshold shift revealed by the audiogram is persistent; or

1910.95(g)(9)(ii)

The hearing threshold shown in the annual audiogram indicates significant improvement over the baseline audiogram.

1910.95(g)(10)

"Standard threshold shift."

1910.95(g)(10)(i)

As used in this section, a standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

1910.95(g)(10)(ii)

In determining whether a standard threshold shift has occurred, allowance may be made for the contribution of aging (presbycusis) to the change in hearing level by correcting the annual audiogram according to the procedure described in Appendix F: "Calculation and Application of Age Correction to Audiograms."

1910.95(h)

"Audiometric test requirements."

1910.95(h)(1)

Audiometric tests shall be pure tone, air conduction, hearing threshold examinations, with test frequencies including as a minimum 500, 1000, 2000, 3000, 4000, and 6000 Hz. Tests at each frequency shall be taken

separately for each ear.

1910.95(h)(2)

Audiometric tests shall be conducted with audiometers (including microprocessor audiometers) that meet the specifications of, and are maintained and used in accordance with, American National Standard Specification for Audiometers, S3.6-1969, which is incorporated by reference as specified in Sec. 1910.6.

1910.95(h)(3)

Pulsed-tone and self-recording audiometers, if used, shall meet the requirements specified in Appendix C: "Audiometric Measuring Instruments."

1910.95(h)(4)

Audiometric examinations shall be administered in a room meeting the requirements listed in Appendix D: "Audiometric Test Rooms."

1910.95(h)(5)

"Audiometer calibration."

1910.95(h)(5)(i)

The functional operation of the audiometer shall be checked before each day's use by testing a person with known, stable hearing thresholds, and by listening to the audiometer's output to make sure that the output is free from distorted or unwanted sounds. Deviations of 10 decibels or greater require an acoustic calibration.

1910.95(h)(5)(ii)

Audiometer calibration shall be checked acoustically at least annually in accordance with Appendix E: "Acoustic Calibration of Audiometers." Test frequencies below 500 Hz and above 6000 Hz may be omitted from this check. Deviations of 15 decibels or greater require an exhaustive calibration.

1910.95(h)(5)(iii)

An exhaustive calibration shall be performed at least every two years in accordance with sections 4.1.2; 4.1.3.; 4.1.4.3; 4.2; 4.4.1; 4.4.2; 4.4.3; and 4.5 of the American National Standard Specification for Audiometers, S3.6-1969. Test frequencies below 500 Hz and above 6000 Hz may be omitted from this calibration.

1910.95(i)

"Hearing protectors."

1910.95(i)(1)

Employers shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.

1910.95(i)(2)

Employers shall ensure that hearing protectors are worn:

1910.95(i)(2)(i)

By an employee who is required by paragraph (b)(1) of this section to wear personal protective equipment; and

1910.95(i)(2)(ii)

By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater, and who:

1910.95(i)(2)(ii)(A)

Has not yet had a baseline audiogram established pursuant to paragraph (g)(5)(ii); or

1910.95(i)(2)(ii)(B)

Has experienced a standard threshold shift.

1910.95(i)(3)

Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer.

1910.95(i)(4)

The employer shall provide training in the use and care of all hearing protectors provided to employees.

1910.95(i)(5)

The employer shall ensure proper initial fitting and supervise the correct use of all hearing protectors.

1910.95(j)

"Hearing protector attenuation."

1910.95(j)(1)

The employer shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The employer shall use one of the evaluation methods described in Appendix B: "Methods for Estimating the Adequacy of Hearing Protection Attenuation."

1910.95(j)(2)

Hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted average of 90 decibels as required by paragraph (b) of this section.

1910.95(j)(3)

For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposure to an 8-hour time-weighted average of 85 decibels or below.

1910.95(j)(4)

The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. The employer shall provide more effective hearing protectors where necessary.

1910.95(k)

"Training program."

1910.95(k)(1)

The employer shall train each employee who is exposed to noise at or above an 8-hour time weighted average of 85 decibels in accordance with the requirements of this section. The employer shall institute a training program and ensure employee participation in the program.

1910.95(k)(2)

The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.

1910.95(k)(3)

The employer shall ensure that each employee is informed of the following:

1910.95(k)(3)(i)

The effects of noise on hearing;

1910.95(k)(3)(ii)

The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and

1910.95(k)(3)(iii)

The purpose of audiometric testing, and an explanation of the test procedures.

1910.95(l)

"Access to information and training materials."

1910.95(l)(1)

The employer shall make available to affected employees or their representatives copies of this standard and shall also post a copy in the workplace.

1910.95(l)(2)

The employer shall provide to affected employees any informational materials pertaining to the standard that are supplied to the employer by the Assistant Secretary.

1910.95(l)(3)

The employer shall provide, upon request, all materials related to the employer's training and education program pertaining to this standard to the Assistant Secretary and the Director.

1910.95(m)

"Recordkeeping" -

1910.95(m)(1)

"Exposure measurements." The employer shall maintain an accurate record of all employee exposure measurements required by paragraph (d) of this section.

1910.95(m)(2)

"Audiometric tests."

1910.95(m)(2)(i)

The employer shall retain all employee audiometric test records obtained pursuant to paragraph (g) of this section:

1910.95(m)(2)(ii)

This record shall include:

1910.95(m)(2)(ii)(A)

Name and job classification of the employee;

1910.95(m)(2)(ii)(B)

Date of the audiogram;

1910.95(m)(2)(ii)(C)

The examiner's name;

1910.95(m)(2)(ii)(D)

Date of the last acoustic or exhaustive calibration of the audiometer; and

1910.95(m)(2)(ii)(E)

Employee's most recent noise exposure assessment.

1910.95(m)(2)(ii)(F)

The employer shall maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms.

1910.95(m)(3)

"Record retention." The employer shall retain records required in this paragraph (m) for at least the following periods.

1910.95(m)(3)(i)

Noise exposure measurement records shall be retained for two years.

1910.95(m)(3)(ii)

Audiometric test records shall be retained for the duration of the affected employee's employment.

1910.95(m)(4)

"Access to records." All records required by this section shall be provided upon request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary. The provisions of 29 CFR 1910.1020 (a)-(e) and (g)-(i) apply to access to records under this section.

1910.95(m)(5)

"Transfer of records." If the employer ceases to do business, the employer shall transfer to the successor employer all records required to be maintained by this section, and the successor employer shall retain them for the remainder of the period prescribed in paragraph (m)(3) of this section.

1910.95(n)

"Appendices."

1910.95(n)(1)

Appendices A, B, C, D, and E to this section are incorporated as part of this section and the contents of these appendices are mandatory.

1910.95(n)(2)

Appendices F and G to this section are informational and are not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

1910.95(o)

"Exemptions." Paragraphs (c) through (n) of this section shall not apply to employers engaged in oil and gas well drilling and servicing operations.

[39 FR 23502, June 27, 1974, as amended at 46 FR 4161, Jan. 16, 1981; 46 FR 62845, Dec. 29, 1981; 48 FR 9776, Mar. 8, 1983; 48 FR 29687, June 28, 1983; 54 FR 24333, June 7, 1989; 61 FR 5507, Feb. 13, 1996; 61 FR 9227, March 7, 1996; 71 FR 16672, April, 3, 2006; 73 FR 75584, Dec. 12, 2008]

UNITED STATES DEPARTMENT OF LABOR

Occupational Safety & Health Administration
200 Constitution Ave NW
Washington, DC 20210
☎ 800-321-6742 (OSHA)
TTY
www.OSHA.gov

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CODE ORDINANCE

Sponsored by:
Introduced:
Public Hearing:
Action:

**MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 20-025**

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY ADOPTING MSB 17.68 OUTDOOR SHOOTING FACILITIES IN ORDER TO ESTABLISH STANDARDS FOR COMMERCIAL, EDUCATIONAL, AND NONPROFIT OUTDOOR SHOOTING FACILITIES.

WHEREAS, the rationale and intent of this ordinance are found in IM NO. 20-047 which accompanies this ordinance.

BE IT ENACTED:

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

Section 2. Adoption of Chapter. MSB 17.68 is hereby adopted as follows:

17.68 OUTDOOR SHOOTING FACILITIES

17.68.010 INTENT

17.68.020 DEFINITIONS

17.68.030 APPLICABILITY

17.68.040 APPLICATION PROCEDURES

17.68.050 GENERAL STANDARDS

17.68.060 OPERATING STANDARDS

17.68.070 APPEALS

17.68.080 TERMINATION OF PERMIT

17.68.090 TRANSFER OF PERMIT

17.68.100 NONCONFORMING USES

17.68.110 VIOLATIONS, ENFORCEMENTS, AND PENALTIES

17.68.010 INTENT

(A) It is the intent of this chapter to allow outdoor shooting facilities to operate within the Borough while minimizing the likelihood that people, domestic animals, or properties will be jeopardized.

17.68.020 DEFINITIONS

(A) For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

"Outdoor Shooting Facility" means real property used for commercial, educational, or non-profit shooting activities, typically involving rifles, shotguns, pistols, silhouettes, skeet, trap or black powder.

"Firing Position (Point)" means an area where firearms are discharged, having a specified width and depth that is occupied by a shooter, their equipment and, if appropriate, an instructor.

"Firing Lane" means the expected path of gunfire from the firing position to the target.

"Firing Line" means a line parallel to the targets behind which firearms are discharged.

"Surface Danger Zone (SDZ)" means a depiction of the mathematically predicted area a projectile will return to earth either by direct fire or by ricochet. The SDZ is the area extending from a firing point to a distance downrange based on the projectiles fired.

17.68.030 APPLICABILITY

(A) This chapter applies in all areas of the Borough including special land use districts and residential land use districts. Where this chapter is in conflict with the conditions of a special land use district or residential land use district, the most restrictive conditions shall apply.

(B) This chapter does not apply within the cities of Houston, Palmer, or Wasilla.

(C) This chapter applies to all outdoor shooting facilities except outdoor shooting facilities that are used exclusively for:

(a) archery or air guns;

(b) law enforcement or United States Military

purposes; or

(c) fully enclosed facilities designed to offer a completely controlled shooting environment.

(D) This chapter does not regulate the discharge of firearms on private property where the property is not open to the public on a commercial, education, nonprofit, or membership basis.

17.68.040 APPLICATION PROCEDURES

(A) An application for an outdoor shooting facility permit may be initiated by a property owner or the owner's authorized agent and shall be filed on a form provided by the Borough.

(1) The application for an outdoor shooting facility permit shall be accompanied by an appropriate filing fee as established by the assembly, payable to the Borough.

(2) The application shall include the following:

(a) a certified site plan drawn to scale showing a complete layout of the range including location of backstops, firing lanes, firing positions, firing lines, side berms, target areas, and baffles;

(b) identification of all buildings within 1,000 feet of the firing positions;

(c) dimensions and construction materials of all backstops, baffles, firing lanes, and side berms; and

(d) maximum caliber of firearm to be allowed at the range, if any.

(e) certification by a professional civil engineer or other qualified professional registered in the state of Alaska under AS 08.48 that the facility is designed to meet the requirements of 17.68.050(A)(2)-(3).

(f) A site-specific environmental stewardship plan for managing shooting-associated materials, in accordance with EPA Best Management Practices.

(g) Surface danger zones as determined by a professional engineer registered in the state of Alaska under AS 08.48.

(B) The director or designated staff shall determine whether an application for an outdoor shooting facility is complete. The director shall provide the

applicant with a written explanation of application deficiencies within 10 working days of the date the application is received.

(C) Notification for outdoor shooting facilities shall be in accordance with MSB 17.03, public notification, except that the notification area will be one-half mile.

(D) Within 45 calendar days of receipt of a complete application the director shall approve the permit upon determination that the standards of this chapter have been met.

17.68.050 GENERAL STANDARDS

(A) In granting a permit under this chapter, the director shall make findings that all of the following standards have been met:

(1) Firing positions are located at least one thousand feet from all habitable buildings which are not on the same parcel.

(a) This standard only applies to buildings which were in existence at the time that application was made for the outdoor shooting facility.

(2) There are no habitable buildings within the surface danger zone.

(3) The proposed backstops are a minimum of twenty feet in height and are constructed behind all targets. The backstops shall be:

(a) impenetrable to all calibers used at the facility;

(b) designed to contain all projectiles within the designated shooting area;

(c) constructed of material that does not cause unintended ricochet of projectiles; and

(d) connected to each side berm.

(4) The proposed side berms shall:

(a) be constructed parallel to firing lanes:

(b) extend the length of the firing lanes, from the backstop to the firing line;

(c) be a minimum of eight feet in height;

(d) be designed to contain all projectiles within the designated shooting area;

(e) be impenetrable to all calibers used at the facility;

(f) be constructed of material that does not cause unintended ricochet of projectiles.

(5) The director may waive the requirement for side berms if it is determined they are not necessary because of natural topographic features.

(6) Shotgun-only ranges are exempt from paragraphs (3) through (5) of this subsection.

(7) Outdoor shooting facilities may not be designed in a manner that directs projectiles into or over waterbodies or wetlands.

17.68.060 OPERATING STANDARDS

(A) Hours of operation shall not to exceed 8:00 AM - 9:00 PM.

(B) No sound resulting from the outdoor shooting facility is allowed to exceed 90 dB(a) as measured at or within the boundary of the property of the receiving land.

17.68.070 APPEALS

(A) Appeals from a decision of the director granting or denying a permit under this chapter shall be filed and conducted in accordance with MSB 15.39.

17.68.080 TERMINATION OF PERMIT

(A) Except as otherwise specified by code, a permit issued under this chapter will become null and void under the following conditions:

(1) notification of termination of the permit for failure to comply with an order to correct violations of a permit;

(2) failure to initiate the use for which the permit was issued within five years of the date of the permit issuance;

(3) cessation of the use for which the permit was issued for a period exceeding five consecutive years.

17.68.090 TRANSFER OF PERMIT

(A) Except as otherwise specified by code, the privileges and requirements of a permit issued under this chapter shall run with the land.

(B) Within 90 days of recording the transfer of ownership of the subject land, the new owner must provide written notification and a signed acknowledgment that the new owner assumes responsibility for compliance with the requirements of the permit.

17.68.100 NONCONFORMING USES

(A) Within the borough there may be outdoor shooting facilities that have commenced actual construction or are in existence as of the effective date of this chapter. Such facilities which were lawful before the effective date of this chapter, but which would otherwise be prohibited, regulated or restricted under this chapter, are allowed to continue but shall not be expanded except as provided in this chapter.

(B) No nonconforming use shall be constructed or operated except in accordance with these regulations, except to the extent it was in existence or under actual construction as of the effective date of the ordinance codified herein or amendment thereto.

17.68.110 VIOLATIONS, ENFORCEMENTS, AND PENALTIES

(A) Remedies, enforcement actions, and penalties shall be consistent with the terms and provisions of MSB

1.45.

(B) In addition to other applicable penalties, failure to correct the violation of code, after reasonable notice, may result in revocation of the permit.

(C) Complaints received by the Borough of violations of state or federal law will be forwarded to the appropriate agency for enforcement.

(D) Authorized representatives of the borough shall be allowed to inspect the site and related records at reasonable times for the purpose of monitoring compliance with all permit conditions.

(E) The permittee shall assist and cooperate with authorized inspections upon reasonable notice from the borough.

Section 3. Effective date. This ordinance shall take effect upon adoption.

ADOPTED by the Matanuska-Susitna Borough Assembly this - day of -, 2020.

VERN HALTER, Borough Mayor

ATTEST:

LONNIE R. McKECHNIE, CMC, Borough Clerk

(SEAL)

Public Comments

Mary Brodigan

From: Jason Ortiz <jason.ortiz.district2@gmail.com>
Sent: Monday, March 16, 2020 10:21 AM
To: Mary Brodigan
Subject: Fwd: Common sense gun range rules

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Mary,

I received this correspondence from an individual person. I let him know that I forwarded his correspondence to you so it would be included for the public to see. There was no other conversation.

Thank you,
Jason

----- Forwarded message -----

From: NORM STOUT <stoutnw@mtaonline.net>
Date: Fri, Mar 13, 2020 at 8:46 AM
Subject: Common sense gun range rules
To: <msbpcdl@gmail.com>, <Jason.Ortiz.District2@gmail.com>, <chesbro@mtaonline.net>, <cjvague@gmail.com>, <celder357@gmail.com>
Cc: <Vern.Halter@matsugov.us>, <TimHaleDistrict1@gmail.com>, <StephanieNowersDistrict2@gmail.com>, <george.mckee@matsugov.us>, <tedleonarddistrict4@gmail.com>, <dan.mayfield@matsugov.us>, <jessesumnerdistrict6@gmail.com>, <tamboevedistrict7@gmail.com>, <john.moosey@matsugov.us>

Planning Commission Members,

My name is Norm Stout. I have lived up off of Edgerton Parks Road for 30 years and enjoy the peace and quiet up there next to the Government Peak Recreation Area. As some of you might know, a commercial shooting range started to develop in our neighborhood a while ago and our neighborhood and community council membership soundly rejected the plan. To our dismay, there are no rules in the Borough regulating the development of shooting ranges. Our neighborhood was bombarded by rapid fire, large caliber semi-automatic gunfire from multiple guns fired simultaneously by patrons of a gun store that was allowing the testing of weapons they were selling. A business was making money at the expense of my neighborhood's peace and quiet and our loss of property values. Imagine living in your quiet community for 30 years, ready to retire and live out your life there and you wake up to daily non-stop shooting by a business that makes money doing it?! This happened to us, and it can happen to you. Neighborhoods need reasonable protections from this unbelievable intrusion. We regulate barking dogs and amplified music and how your driveway joins a borough road, but we have nothing to protect us from a much worse plague upon a neighborhood: incredibly loud and intrusive gun fire noise. Neighborhoods have the right to 'quiet enjoyment'. Gunfire noise does not stop at a property line, and therefore the activity from a range dramatically affects others property, others lives and others property values. Recognize that the silent majority here, literally, are the tens of thousands of homeowners who value their quiet enjoyment and property values and their safety far more than they value a gun range, which, even if they own guns and enjoy shooting, they may use only once a year.

Consider the following when planning for common sense gun range rules.

1. Given that there are no rules currently, there obviously would be far more ranges in the Borough if the demand for them was out there. The hype created by the opposition to gun range rules is from the gun store that makes money selling guns and was recently responsible for the unbelievable noise in my neighborhood.
2. Gun ranges should be at least 5 miles from any residential community unless they are indoors, or able to completely isolate the noise created. Large caliber gunfire noise travels more than 5 miles if no noise mitigation exists. As an example, the Grouse Range that was formerly operating on Tex Al Drive was a constant scourge of noise which I endured for years at a distance of more than 3 miles from my house. This, despite the extensive natural earth embankments that were supposed to mitigate the noise. In fact, the sound from that range was often worse in our neighborhood miles away than in the local area secondary to the guns (shot guns) being fired upward at flying clay targets which directed the noise at an angle towards the community on the hillside of Government Peak. The commercial gun range that suddenly arose in our neighborhood was situated on 40 acres, which the owner thought was more than adequate. Gun range noise travels more than 5 miles which would necessitate more than 40 square miles to naturally mitigate the noise if a range was centered on a parcel.
3. Neighborhoods and homeowners have a right to 'quiet enjoyment'. We all tolerate reasonable noise intrusions by one another because we all partake in one thing or another that is marginally impossible to limit to our own property. Take for instance mowing your lawn. Gun fire noise, especially that which emanates from a range which is a business making money is not something that benefits a neighborhood and therefore should absolutely be regulated.
4. Gun range safety concerns must be addressed. Bullets can travel great distances if not controlled in a way that is literally 'bullet proof'. Neighborhoods should not have to worry that a stray or ricocheted bullet will fly into their house or endanger their family. Safeguards must be required to assure no danger to any person can exist from a gun range bullet.
5. There should be a gunfire frequency limit on all shooting in the valley, even on private property and non-profit. We all might sight in our hunting rifle now and then which would necessitate maybe 6 or eight judiciously fired shots on private property. As neighbors in communities with large parcels, we tolerate this because the noise emanates from various spots, the noise is infrequent, it is done with discretion and consideration of neighbors, it is done infrequently; maybe once every other year, and no one person is making a profit from this activity which has downside and upside to neighborhoods that is balanced. When one individual does not use good discretion and has a disregard for his or her neighbors and opts to shoot regularly and or at times which are a nuisance to a neighborhood, there becomes a limit to reasonableness and there needs to be some common sense guidelines. For instance, a limit of 20 shots fired per day from a single property should be imposed to protect neighborhoods from those that rapid fire a semi-automatic weapon in a senseless manner.
6. There needs to be a consideration to the high concentrations of poisonous elements that may be found at gun ranges. Frequent gun fire depositing uncontrolled lead bullets into the ground may affect not only the said property, but also neighbors property and therefore should be controlled.

Thanks for listening,

Norm Stout

10130 N Waldo Reed Rd
Palmer, Ak 99645
907-863-6938

Mary Brodigan

From: Mary Anderson <msbpcd1@gmail.com>
Sent: Tuesday, March 17, 2020 12:37 PM
To: Mary Brodigan
Subject: Fwd: Regulation of Shooting Ranges

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]
Received email today. Did not read.

Mary

----- Forwarded message -----

From: LYNNE WOODS <aklynn@mtaonline.net>
Date: Tue, Mar 17, 2020 at 11:03 AM
Subject: Regulation of Shooting Ranges
To: <cjvague@gmail.com>, <msbpcd1@gmail.com>
CC: <Jason.Ortiz.District2@gmail.com>, <celder357@gmail.com>, <chesbro@mtaonline.net>, <sjg@shanhill.com>, <msbsassan@gmail.com>

The issue of shooting guns and other weapons in the Mat-Su Borough has become a major nuisance to many residents. I have lived my entire life in the Matanuska Valley and have never have had to hear so many gun shots as we now have to endure. I believe it is mandatory that we require the discharge of weapons to be done in properly constructed areas to mitigate noise, environmental hazards and refuse. Requiring CUPs is one way to accomplish this goal.

Local governments have the right to regulate the discharge of weapons. This is not about the second amendment. No one is trying to remove lawful guns from anyone by requiring their discharge to be in appropriate, established areas. For our safety and reasonable right for peace and quiet, the Planning Commission must take action. Residents who do not live in cities are subjected to a daily contact barrage of gunfire. When does a gun shot make anyone feel safe? To experience this nuisance constantly for days should not continue.

Reasonable actions are needed to address gunfire at all shooting ranges:

- Construction requirements to mitigate noise with strict limits on decibels
- Mandatory adherence to hours of operation as well as days of closure
- Protection of the soils and water to mitigate pollution
- Safe distancing from residential homes

These basic requirements, at the very least, should be a part of the permit. I personally wish they all had to have silencers!

Lynne Woods

--

Mary P. Anderson
MSB Planning Commissioner
District #1

Mary Brodigan

From: Alex Strawn
Sent: Thursday, March 19, 2020 4:01 PM
To: Mary Brodigan
Subject: FW: PC 20-12 , MSB 17.68 Outdoor shooting facilities

Alex Strawn
Development Services Manager
Matanuska-Susitna Borough
350 E. Dahlia
Palmer, AK 99645
(907) 861-7854

-----Original Message-----

From: Permit Center <Permit.Center@matsugov.us>
Sent: Friday, March 13, 2020 2:36 PM
To: Alex Strawn <Alex.Strawn@matsugov.us>; Adam Bradway <Adam.Bradway@matsugov.us>; Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>
Subject: FW: PC 20-12 , MSB 17.68 Outdoor shooting facilities

-----Original Message-----

From: Mark Troutman <trout@mtaonline.net>
Sent: Wednesday, March 11, 2020 7:01 PM
To: Permit Center <Permit.Center@matsugov.us>
Subject: PC 20-12 , MSB 17.68 Outdoor shooting facilities

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

I am in favor of a CUP for outdoor shooting facilities. I oppose 17.68.100 as existing facilities may be unsafe for neighboring properties and cause unreasonable risks.
I would rather have 6 or 7 reasonable people making decisions on gun ranges than 1 person who may or may not be partisan.

Thank you for allowing the public process to continue.

I am a Gun Owner and support the 2nd Amendment. No where does the 2A give a person the right to discharge a firearm where and when they want.

The word Freedom is not in the Constitution and only appears in the First Amendment.

Thanks again

Mark Troutman
8470 N. Russet Rd.
Palmer, Ak. 99645
Sent from my iPad

Alex Strawn

From: Permit Center
Sent: Monday, March 2, 2020 1:17 PM
To: Alex Strawn; Adam Bradway; Mark Whisenhunt
Subject: FW: Outdoor Shooting Facilities CUP

From: Troy Henley <troychenley@yahoo.com>
Sent: Sunday, March 1, 2020 10:08 AM
To: Permit Center <Permit.Center@matsugov.us>; Dan Mayfield <Dan.Mayfield@matsugov.us>
Subject: Outdoor Shooting Facilities CUP

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

I wish to reiterate my opposition to this ordinance. Based on the article in the Frontiersman ([Outdoor shooting range ordinance passes Mat-Su Borough Assembly 4-3, referred to Planning Commission](#)) it is clear that what constitutes a commercial shooting range in the eyes of the Borough (testing guns on private property by Mr. Howard) is far from what I or others would consider a commercial shooting range. Also, I do not believe the Borough has the expertise to regulate or inspect any ranges. As a result, the normal response will most likely be to simply deny the permit. This will also impact current ranges by denying them the ability to expand. Overall, this is a piece of legislation that is contrary to my expectations of living in the Valley.

How exactly will the Borough inspect the ranges? Where will they get the expertise? What liability will the Borough assume if they do allow a range and there is an accident there?

Again, I reiterate I am opposed to this ordinance.

Troy Henley
Big Lake, AK

**Borough Assembly 4-3, ref...**

Tim Rockey Frontiersman.com

PALMER — To the dismay of many in a massive agitated group of residents who had gathered at the Mat-Su Borough A...

Alex Strawn

From: Permit Center
Sent: Friday, February 21, 2020 2:07 PM
To: Alex Strawn; Adam Bradway; Mark Whisenhunt
Subject: FW: Outdoor Shooting Facility Ordinance

From: E H <aehuddleston@outlook.com>
Sent: Thursday, February 20, 2020 10:26 AM
To: Permit Center <Permit.Center@matsugov.us>
Subject: Outdoor Shooting Facility Ordinance

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

The Shooting Facility Ordinance will end future shooting ranges in the Mat Su Borough. It's already difficult to develop a shooting range without an Ordinance. The Youth Shooting group has been trying to find land since 2015, for a place to train for youth shooting sports. No one will develop a shooting range, knowing that the Mat-Su Borough has the power to pull the shooting facility permit at anytime. By implementing an Outdoor Shooting Facility Ordinance will only create more problems in the Mat Su Borough. Shooting Facilities provide a safe environment and education, please do not take this away by creating the Outdoor Shooting Facility Ordinance.

Sincerely yours,

Esther Huddleston
aehuddleston@outlook.com

Alex Strawn

From: Permit Center
Sent: Friday, March 13, 2020 2:36 PM
To: Alex Strawn; Adam Bradway; Mark Whisenhunt
Subject: FW: PC 20-12 , MSB 17.68 Outdoor shooting facilities

-----Original Message-----

From: Mark Troutman <trout@mtaonline.net>
Sent: Wednesday, March 11, 2020 7:01 PM
To: Permit Center <Permit.Center@matsugov.us>
Subject: PC 20-12 , MSB 17.68 Outdoor shooting facilities

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

I am in favor of a CUP for outdoor shooting facilities. I oppose 17.68.100 as existing facilities may be unsafe for neighboring properties and cause unreasonable risks.

I would rather have 6 or 7 reasonable people making decisions on gun ranges than 1 person who may or may not be partisan.

Thank you for allowing the public process to continue.

I am a Gun Owner and support the 2nd Amendment. No where does the 2A give a person the right to discharge a firearm where and when they want.

The word Freedom is not in the Constitution and only appears in the First Amendment.

Thanks again

Mark Troutman
8470 N. Russet Rd.
Palmer, Ak. 99645
Sent from my iPad

Alex Strawn

From: Adam Bradway
Sent: Friday, March 6, 2020 9:10 AM
To: Alex Strawn
Subject: FW: public input re Shooting Ranges

From: Ellen VV <evvisse@gmail.com>
Sent: Thursday, March 5, 2020 8:04 PM
To: Legislative Comments <Legislative.Comments@matsugov.us>
Cc: Kim Sollien <Kim.Sollien@matsugov.us>; Christopher Cole <Christopher.Cole@matsugov.us>; Theodore Eischeid <Ted.Eischeid@matsugov.us>; Karol Riese <Karol.Riese@matsugov.us>; Pam Graham <Pam.Graham@matsugov.us>; Adam Bradway <Adam.Bradway@matsugov.us>
Subject: public input re Shooting Ranges

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Date: March 4, 2020
To: Members of the Mat-Su Borough
From: Ellen Vande Visse, Mat-Su resident
Re: Shooting Ranges

Hard-working Assembly Members,
(and cc to Planning Commission),

I write to each of you regarding the public comments and consideration of shooting ranges.

This is a follow up to the evening public comment session on Feb 18, and I wish I could have written to you a bit sooner.

I am very sorry that you as assembly members and as individuals were treated with such brash disrespect. You work hard to study issues and do the best for us, and certainly intimidating attacks do not feel good. You show up to listen and consider. You think about the best for our diverse population. Thank you for being present through difficult and unappreciated situations!

If I were from Outer Space and not vested in any particular group or viewpoint, but just looking in at the emotional tone of that public meeting, I would see that

1. There was a small group of people, bunched together. They were very loud, disrespectful, highly opinionated, highly fearful people who did not come together to listen, reason, or consider what are the problems and possibilities. Rather, they came to out-shout, intimidate, and shut down discussion. When asked twice to behave respectfully and not cheer, clap, etc., they continued with rebellious disdain for decorum. Does rude, disruptive, uncivil behavior count as democratic public input?
2. There was another group of people, sprinkled around the room. They were quiet, respectful, had concerns to express, and were open to finding solutions. They did not use juvenile tactics of cheering, clapping, and intimidating.

I'm wondering which you listen to. I'm wondering which you think you have to accommodate. I'm wondering if this contentiousness makes you want to avoid and dismiss the issues. I'm wondering what you consider your responsibility for good leadership for the highest good of all. I'm praying that you are not caught in My Side-Your Side traps. I'm hoping you are wanting to find mature solutions to very real problems.

So I add my thoughts.

Yes, I understand that you referred a draft gun range ordinance to the Planning Commission for its input. Thank you. These comments are for you AND please pass my comments on to Planning Commission members as well.

CITIZEN CONCERNS

As a Mat-Su resident since 1985, I ask that you take it seriously when some 200+ Valley residents sign a petition. These folks are simply asking for some regulating of commercial gun ranges. Who wants their property values, peace & quiet ruined forever by seeing a shooting range plunk down next door, with no recourse for moderating noise, hours, safety, structures, and neighborhood disruption?

SAFETY

There are places, such as Sutton/Jonesville area, that are not safe. I do not dare venture in to enjoy our great outdoors when I live in dread of a stray bullet, and can't enjoy nature when it sounds like a war zone. The lands are badly degraded by shooters and torn up land from ORV's, , trash, junk vehicles, abused land.

So a gun range would help take the pressure off these shoot-em-up areas. A shooting range would help if built with public safety in mind.

GOV'T OVERREACH?

No, that is the reason why we have government. We come together to figure out the best for the most.

Thus you can drive an auto, but you need training and a license. You need to follow speed limits for the safety of all.

You can mine gravel, but not under homes, not at 2am, not harming our shared ecosystem.

You can do construction, but not in a way that leaves untrustworthy foundations & roofs. Not in a way that leaves owners unsafe.

This is the job of government, not "over-reach".

The days of complete selfishness "to do what I want & the heck with others" is over in a Borough that is now full of residents -- 110,000 of them and growing.

SECOND AMENDMENT RIGHTS

Since when is a RIGHT to shoot anywhere at any time and not be responsible for your bullets? That normally is called irresponsible use of a firearm. It could also be called murder, if your stray bullet hits a person.

A gun range, with reasonable rules of operation, is a freedom. It protects the public safety. It protects our investment in a home or business. This is about land use and property values.

Land use regulations have NOTHING TO DO with the right to bear arms.

No one is proposing taking away anybody's gun. Bear all the arms you want.

In this beautiful Borough that we share, I am looking for reasonable consideration of my rights to walk, hike, ski, without fear of being shot.

Thank you all for putting real heart and thoughtfulness into workable solutions for:

1. a safety dilemma of wanton shooting and
2. a property tax payer dilemma of losing resale value (financial) and sanity by unregulated gun range potentials.

Give us some basic protections.

Thank you,
concerned citizen E. VandeVisse

By: Alex Strawn
Introduced:
Public Hearing:
Action:

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. PC 20-12**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING APPROVAL OF AN ORDINANCE ADOPTING MSB 17.68 OUTDOOR SHOOTING FACILITIES IN ORDER TO ESTABLISH STANDARDS FOR COMMERCIAL, EDUCATIONAL, AND NONPROFIT OUTDOOR SHOOTING FACILITIES.

WHEREAS, Alaska Statute 29.35.145 provides that the authority to regulate firearms and knives is reserved to the state, except as specifically provided by statute, and a municipality may not enact or enforce an ordinance regulating the possession, ownership, sale, transfer, use, carrying, transportation, licensing, taxation, or registration of firearms or knives; and

WHEREAS, Alaska Statute 29.35.145(b)(2) allows municipalities to enact and enforce ordinances restricting the discharge of firearms in any portion of their respective jurisdictions where there is a reasonable likelihood that people, domestic animals, or property will be jeopardized, not abridging the right of the individual guaranteed by Art. I, sec. 19 of the Alaska Constitution to bear arms in defense of self or others; and

WHEREAS, Alaska Statute 34.75.030 specifically allows municipalities to regulate the noise level produced by outdoor shooting facilities; and

WHEREAS, Alaska Statute 29.35.210(B)(4) specifically gives second class boroughs the authority to provide for water pollution control on an Areawide basis; and

WHEREAS, Alaska Statute 29.35.180 requires second class boroughs to provide for land use regulation; and

WHEREAS, commercial outdoor shooting ranges have the potential to generate stray bullets, lead contamination, and harmful levels of noise; and

WHEREAS, in September 2019 the Matanuska-Susitna Borough Assembly directed Borough staff to "develop a conditional use permit process for commercial, educational, and nonprofit outdoor shooting facilities to be reviewed by the Planning Commission and adopted by the Assembly"; and

WHEREAS, on July 20, 2020 the Planning Commission held a public hearing on this matter.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby recommends approval of Ordinance Serial N. 20-25.

ADOPTED by the Matanuska-Susitna Borough Planning Commission
this ___ day of ___, 2020.

COLLEEN VAGUE, Chair

ATTEST

KAROL RIESE, Planning Clerk

(SEAL)

YES:

NO:

DRAFT

By: Patricia Chesbro
Introduced: September 21, 2020
Public Hearing: October 5, 2020
Action:

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. PC 20-33**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING APPROVAL OF AN ORDINANCE ADOPTING MSB 17.68 OUTDOOR SHOOTING FACILITIES IN ORDER TO ESTABLISH STANDARDS FOR COMMERCIAL, EDUCATIONAL, AND NONPROFIT OUTDOOR SHOOTING FACILITIES.

WHEREAS, Alaska Statute 29.35.145 provides that the authority to regulate firearms and knives is reserved to the state, except as specifically provided by statute, and a municipality may not enact or enforce an ordinance regulating the possession, ownership, sale, transfer, use, carrying, transportation, licensing, taxation, or registration of firearms or knives; and

WHEREAS, Alaska Statute 29.35.145(b)(2) allows municipalities to enact and enforce ordinances restricting the discharge of firearms in any portion of their respective jurisdictions where there is a reasonable likelihood that people, domestic animals, or property will be jeopardized, not abridging the right of the individual guaranteed by Art. I, sec. 19 of the Alaska Constitution to bear arms in defense of self or others; and

WHEREAS, Alaska Statute 34.75.030 specifically allows municipalities to regulate the noise level produced by outdoor shooting facilities; and

WHEREAS, Alaska Statute 29.35.210(B)(4) specifically gives second class boroughs the authority to provide for water pollution control on an Areawide basis; and

WHEREAS, Alaska Statute 29.35.180 requires second class boroughs to provide for land use regulation; and

WHEREAS, commercial outdoor shooting ranges have the potential to generate stray bullets, lead contamination, and harmful levels of noise; and

WHEREAS, in September 2019 the Matanuska-Susitna Borough Assembly directed Borough staff to "develop a conditional use permit process for commercial, educational, and nonprofit outdoor shooting facilities ot be reviewed by the Planning Commission and adopted by the Assembly";and

WHEREAS, on August 3, 2020 the Planning Commission held a public hearing on this matter.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby recommends approval of Ordinance Serial N. 20-25.

ADOPTED by the Matanuska-Susitna Borough Planning Commission
this 5th day of October, 2020.

COLLEEN VAGUE, Chair

ATTEST

KAROL RIESE, Planning Clerk

(SEAL)

YES:

NO:

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**INTRODUCTION FOR PUBLIC HEARING
LEGISLATIVE**

Resolution No. PC 20-37

Cultivation Facilities (MSB 17.60 - Ordinance 20-071)

(Pages 375 - 388)

INTRODUCTION FOR PUBLIC HEARING

CODE ORDINANCE

Sponsored by:
Introduced:
Public Hearing:
Action:

**MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 20-071**

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY AMENDING MSB 17.60 TO CHANGE THE APPLICABILITY AND STANDARDS FOR CULTIVATION FACILITIES AND ADDRESS ON-SITE CONSUMPTION OF MARIJUANA.

BE IT ENACTED:

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

Section 2. Amendment of title. The title of MSB 17.60 is hereby amended as follows:

Chapter 17.60: [CONDITIONAL USES] Junkyards, Correctional Community Residential Centers, and Marijuana Related Facilities

Section 3. Amendment of subsection. MSB 17.60.010(A) is hereby amended as follows:

- "marijuana consumption area" means a designated area where marijuana and marijuana products may be consumed within the licensed premises of a marijuana retail facility that holds a valid onsite consumption endorsement in accordance with 3 AAC 306.

- ["RECREATION OR YOUTH CENTER" MEANS A BUILDING, STRUCTURE, ATHLETIC PLAYING FIELD, OR PLAYGROUND WHICH IS: (A) RUN OR CREATED BY A LOCAL GOVERNMENT OR THE STATE

TO PROVIDE ATHLETIC, RECREATIONAL, OR LEISURE ACTIVITIES FOR MINORS; OR (B) OPERATED BY A PUBLIC OR PRIVATE ORGANIZATION LICENSED TO PROVIDE SHELTER, TRAINING, OR GUIDANCE FOR PERSONS UNDER 21 YEARS OF AGE.]

Section 4. Amendment of section. MSB 17.60.030 is hereby amended as follows:

(A) The following land uses are declared to be potentially damaging to the property values and usefulness of adjacent properties, or potentially harmful to the public health, safety, and welfare:

(1) junkyards and refuse areas;

(2) correctional community residential centers; **and**

(3) [Repealed by Ord. 16-003(SUB), § 3, 2016]

(4) marijuana retail facility as licensed under 3 AAC 306.[005; AND]

[(5) MARIJUANA CULTIVATION FACILITY LICENSED UNDER 3 AAC 306.005.

(A) A SINGLE CULTIVATION FACILITY WITH LESS THAN 500 SQUARE FEET UNDER CULTIVATION ON ANY ONE PARCEL IS EXEMPT UNDER THIS CHAPTER].

(B) [SUCH USES] **Uses under (A) of this section** are permitted only upon the issuance of a conditional use

permit, as provided in this chapter. Unless such uses are maintained under and in accordance with a lawfully issued permit, such uses are declared to be public nuisances. Maintenance of such a land use without a permit is prohibited.

(C) Prior to operating, marijuana cultivation facilities licensed under 3 AAC 306 require an administrative permit as approved by the director.

Section 5. Amendment of section. MSB 17.60.040 is hereby adopted to read as follows:

(A) *General.* An application [TO THE PLANNING COMMISSION FOR A CONDITIONAL USE] **for a permit** or modification of an existing [CONDITIONAL USE] **permit under this chapter** may be initiated by a property owner or the owners' authorized agent. An application for a **permit** [CONDITIONAL USE] shall be filed with the planning director on a form provided by the planning department.

(1) The application for a [CONDITIONAL USE] permit shall be accompanied by an appropriate filing fee as established by the assembly, payable to the borough.

(B) *Site plan* **for conditional use permits.** [A] **for a conditional use permit, a detailed site plan, drawn to scale,** showing the proposed location of all buildings

and structures on the site, access points, buffering, drainage, vehicular and pedestrian circulation patterns, parking areas, and the specific location of the use or uses to be made of the development shall be submitted with the application.

(C) Administrative permits.

(1) The director or designated staff shall determine whether an application for a marijuana cultivation facility is complete. The director shall provide the applicant with a written explanation of application deficiencies within 10 working days of the date the application is received;

(2) Public notification shall be in accordance with MSB 17.03; and

(3) The application shall include an as-built drawing stamped by a professional land surveyor registered with the State of Alaska under A.S. 08.48. showing all structures associated with the proposed development shall be submitted with the application.

(4) Within 30 calendar days of receipt of a complete application the director shall approve the permit upon determination that the standards of MSB 17.60.150 and MSB 17.60.160 have been met.

([C]D) *Action by planning commission.*

(1) The planning commission shall hear any interested parties and shall render a decision on the application for a conditional use permit within 30 calendar days from the date of public hearing. In recommending the granting of a conditional use, the planning commission shall state in writing the conditions of approval of the permit which it finds necessary to carry out the intent of this chapter. These conditions may increase the required lot size, control the location and number of vehicular access points to the property, require screening and land filling where necessary to reduce noise and glare, and may require the reclamation of property to a character in keeping with surrounding lands. The commission may impose other conditions and safeguards designed to ensure the compatibility of the conditional use with other lawful uses.

(2) The planning director shall incorporate any conditions or requirements stipulated by the commission in the conditional use permit.

Section 6. Amendment of section. MSB 17.60.150 is hereby amended as follows:

[(A) IN ADDITION TO THE STANDARDS SET FORTH BY MSB 17.60.100, THE PLANNING COMMISSION SHALL WEIGH FACTORS WHICH CONTRIBUTE OR DETRACT FROM THE DEVELOPMENT OF A SAFE, CONVENIENT, AND ATTRACTIVE COMMUNITY, INCLUDING, BUT NOT LIMITED TO:

[(1) ANY POTENTIAL NEGATIVE EFFECT UPON OTHER PROPERTIES IN THE AREA DUE TO SUCH FACTORS AS NOISE AND ODOR.

(2) THE EFFECTIVENESS OF MEASURES TO REDUCE NEGATIVE EFFECTS UPON ADJACENT PROPERTIES BY:

(A) INCREASED PROPERTY LINE AND RIGHT-OF-WAY BUFFERS;

(B) PLANTED BERMS AND LANDSCAPING;

(C) SITE AND BUILDING DESIGN FEATURES WHICH CONTRIBUTE TO THE CHARACTER OF THE SURROUNDING AREA.

(3) WHETHER THE USE IS COMPATIBLE WITH THE CHARACTER OF THE SURROUNDING AREA.]

(B) At the time of their establishment, marijuana related facilities [CONDITIONAL USES] shall meet the following requirements and not be located within:

(1) one thousand feet of school grounds;

(C) Separation distances referenced in subsection (B) of this section are measured in a direct line between the

closest point of the facility within which the marijuana facility is located, and the closest point on the lot or parcel of land upon which any of the above itemized uses are located.

(D) Prior to final approval of the permit the applicant shall provide written documentation demonstrating that:

(1) all applicable licenses and endorsements have been obtained as required by 3 AAC 306.[005.]

(2) from the fire marshal having jurisdiction, that the proposed facility [CONDITIONAL USE] is in full compliance with applicable fire code, including but not limited to AS 18.70.010 through 18.70.160, Fire Protection, and 13 AAC 50.025 through 50.080, Fire Code.

Section 7. Amendment of Section. MSB 17.60.170 is hereby amended as follows:

(A) Marijuana retail facilities shall only be approved upon finding by the commission that the proposed facility is located on a parcel that is appropriate for commercial use. At a minimum, the commission shall consider:

(1) proximity of the proposed use to existing businesses;

(2) proximity to parcels developed for residential

use; and

(3) whether roads associated with the proposed use have been, or will be, appropriate for commercial use.

(B) In addition to the standards set forth by MSB 17.60.100, the planning commission shall weigh factors which contribute or detract from the development of a safe, convenient, and attractive community, including, but not limited to:

(1) any potential negative effect upon other properties in the area due to such factors as noise and odor.

(2) the effectiveness of measures to reduce negative effects upon adjacent properties by:

(a) increased property line and right-of-way buffers;

(b) planted berms and landscaping;

(c) site and building design features which contribute to the character of the surrounding area.

([B]C) [THE MINIMUM NUMBER OF PARKING SPACES FOR RETAIL FACILITIES SHALL BE ONE SPACE PER 350 SQUARE FEET OF NET FLOOR AREA. EACH p]Parking space shall be at least[:] 20 feet in length, ten feet wide, and have a vertical clearance of at least seven feet. The number of required

parking spaces shall be calculated as follows:

(1) one parking space per 350 square foot for areas that are not designated for marijuana consumption; and

(2) one parking space per 50 square foot for areas designated for marijuana consumption.

([C]D) Parking spaces shall be provided to comply with current Americans with Disabilities Act guidelines.

(E) Marijuana retail facilities shall not be open to the public between 12:00 a.m. and 8:00 a.m. unless otherwise specified by the Planning Commission.

(F) The applicant shall provide a security plan that includes policies to manage outdoor loitering and consumption of marijuana in unauthorized places.

(G) Setbacks for outdoor marijuana consumption areas shall be at least 100 feet from all property lines and public rights-of-way.

Section 7. Amendment of Section. MSB 17.60.180 is hereby amended as follows:

7.60.180 TRANSFER OF A [CONDITIONAL USE] PERMIT

(A) Except as otherwise specified by code, the privileges and requirements of a [CONDITIONAL USE] permit shall run with the land, subject to the following requirements:

(1) Within 90 days of recording the transfer of ownership of the subject land, the new owner must provide written notification and a signed acknowledgment that the new owner assumes responsibility for compliance with the requirements of the permit.

(2) The commission may limit the term of a conditional use permit or place conditions upon the transfer of ownership of a conditional use permit.

(3) For junkyard/refuse area permits issued under this chapter, the commission shall hold a public hearing to review the suitability of the transferee(s) to operate the existing conditional use.

(a) The commission's review of suitability shall be in accordance with MSB 17.60.110(C).

Section 8. Amendment of subsection. MSB 17.60.190(A) is hereby amended as follows:

(A) Except as otherwise specified by code, a [CONDITIONAL USE] permit issued under this chapter will become null and void under the following conditions:

(1) notification of termination of the permit for failure to comply with an order to correct violations of a [CONDITIONAL USE] permit;

(2) failure to initiate the use for which the [CONDITIONAL USE] permit was issued within five years of the date of the permit issuance;

(3) cessation of the use for which the [CONDITIONAL] use was issued for a period exceeding five consecutive years.

Section 9. Adoption of subsection. MSB 17.60.200(E) is hereby adopted as follows:

(E) Marijuana cultivation facilities that exist or have initiated a license application with the State of Alaska in accordance with 3 AAC 306 on or before December 1, 2020, shall have pre-existing legal nonconforming status. Notwithstanding (C) of this section, such facilities are not required to obtain a permit or administrative determination of legal nonconforming status under this chapter. However, an administrative determination of pre-existing legal nonconforming status may be issued upon request by the licensee.

(1) Any expansion or modification to a pre-existing marijuana cultivation facility shall require a permit under this chapter.

Section 10. Amendment of section. MSB 17.60.220 is hereby amended as follows:

Appeals from a decision of the manager or the manager's authorized representative [OF AN ENFORCEMENT ACTION] or a decision of the commission granting or denying a permit under this chapter shall be filed and conducted in accordance with MSB 15.39.

Section 9. Effective date. This ordinance shall take effect upon adoption.

ADOPTED by the Matanuska-Susitna Borough Assembly this - day of -, 2020.

VERN HALTER, Borough Mayor

ATTEST:

LONNIE R. McKECHNIE, CMC, Borough Clerk

(SEAL)

**PUBLIC HEARING
QUASI-JUDICIAL**

Resolution No. PC 20-30

**DEWAYNE CREECH FOR
CREECH'S JUNKYARD**

(Pages 389 - 596)

PUBLIC HEARING



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

www.matsugov.us

MEMORANDUM

DATE: September 10, 2020

TO: Planning Commission

THROUGH: Alex Strawn, Planning & Land Use Director 

FROM: Mark Whisenhunt, Planner II 

SUBJECT: Dewayne Creech (dba DC Auto Repair) Remand Hearing

Background

On December 17, 2018 the Matanuska-Susitna Borough Planning Commission held a public hearing for Mr. Creech's (applicant) request for Conditional Use Permit to operate a junkyard/refuse area. The Planning Commission adopted Planning Commission Resolution 18-33 supporting the denial of the request. In January 2019 the Applicant appealed this decision to the Board of Adjustment and Appeals (BOAA). In March 2019, the BOAA affirmed the Planning Commission's decision. The Applicant appealed this decision to the Superior Court for the State of Alaska. The Superior Court issued a decision on March 19, 2020. The Superior Court said it was harmless error to apply the new ordinance. In applying the new ordinance it was improper that the Planning Commission relied on information beyond the five year lookback period. The decision vacated the Planning Commission's decision expressed through the adoption of Planning Commission Resolution 18-33, and remanded it back to the Planning Commission for proceedings consistent with the Court's decision.

Staff began communicating with the applicant and his legal representation regarding the Court decision. We received confirmation that September 21, 2020 was suitable for the applicant to come before the Planning Commission for a new hearing, but did not receive any additional information.

An inspection by Code Compliance staff on October 16, 2019 indicates some vehicles were still within the public right-of-way, along with the applicant's dumpster. Another inspection by Code Compliance staff on April 2, 2020 showed the vehicles were no longer within the public right-of-way, but the dumpster remained.

On September 8, 2020, staff conducted another site visit. Staff found that the applicant had installed the 8-foot tall metal-panel fence as shown in the application material site plan. There were no items associated with the operation within the public right-of-way. The two 55-gallon drums

referenced in the original staff report were no longer in the driveway and are now within the shop. The primary driveway next to the shop, was muddy and was graded recently. As such, staff was unable to observe any spills or contamination. The remainder of the lot and operation has largely stayed the same. The applicant noted that he had customer parking in the second driveway, which appeared to be able to accommodate two vehicles if they parked one behind the other. The applicant also noted that there was a narrow drivable loop along the exterior of the operation, which we walked. The vehicles not abutting this loop and the driveway are only accessible by foot through narrow gaps, as previously described. The subject property is effectively full and at maximum storage capacity.

MSB 17.03 – Public Notification

On September 4, 2020 notices for this remand hearing were mailed to all property owners within a 600-foot radius of the property, as well as to the Meadow Lakes Community Council. A total of 20 notices were mailed. The permit application notification was published in the September 4, 2020 issue of the Frontiersman. The application material was posted on the Borough web site for public review on September 4, 2020. The public notice and link to the application material was emailed to the Meadow Lakes Community Council on September 4, 2020.

Review Consistent with the Courts Decision on Appeal

To be consistent with the Court's decision, the review of the Applicant's request shall be limited to the follow standards:

- MSB 17.60.100;
- MSB 17.60.110(A) and (B); and
- Alaska Statute 08.60.070.

Staff Recommendation

After reviewing the record with consideration of the Applicant's request and compliance issues related to the property, staff still recommends denial of this request and makes the findings of facts and conclusions of law below.

Finding of Fact:

1. A 10-acre parcel with a residential home abuts the subject parcel to the east. An undeveloped 40-acre parcel abuts the subject parcel to the south. Parcels to the west, northwest, and north of the subject parcel, range from one to 2.3 acres in size and are developed with residential homes.
2. A total of 23 lots, excluding the subject lot, are within the notice area. Of which, 5 lots are undeveloped and 16 lots are used for residential purposes. The remaining two have a residential home and store commercial vehicles on site.
3. The vast majority of the area is used for residential purposes.
4. Per MSB 17.60.040(B) operating a junkyard/refuse area without a permit is declared a public nuisance.
5. The Borough Development Services Division received a complaint about the subject property and proposed use on September 12, 2016.

6. Between November 2016 and September 2018, a Borough Code Compliance Officer conducted nine site visits at the property. Eight of which revealed the applicant was storing junk vehicles within the public right-of-way, on West Sunrise Drive.
7. A photograph dated June 20, 2018, taken by a Borough Code Compliance Officer shows at least six junk vehicles and the applicant's two tow trucks being stored within the public right-of-way, on West Sunrise Drive.
8. During a site visit on November 16, 2018, staff found the subject property to be full. As a result, the applicant was still storing one junk vehicle within the public right-of-way.
9. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
10. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
11. During a site visit on October 16, 2019, a Borough Code Compliance Officer found that some vehicles and the applicant's dumpster were within the public right-of-way.
12. During a site visit on April 2, 2020, a Borough Code Compliance Officer found that the applicant's dumpster was still within the public right-of-way.
13. During a site visit on September 8, 2020, staff found the applicant installed a narrow drivable loop along the exterior of the operation and that vehicles not abutting this loop and the driveway are only accessible by foot through narrow gaps.
14. During a site visit on September 8, 2020, staff found the subject property to be effectively full and at maximum storage capacity.
15. Topographical information for the area shows the property slopes down from the northwest to the southeast.
16. Wetlands and a creek about the property's southeast corner.
17. Per MSB 11.10 – Encroachment Permits, the storage of objects, such as junk vehicles, within the public right-of-way requires an Encroachment Permit.
18. Junk vehicles stored within the public right-of-way without an Encroachment Permit are deemed unauthorized encroachments.
19. Per MSB 11.10.030(C), unauthorized encroachments shall be deemed a public nuisance.
20. During a site visit on November 16, 2018, staff found that there was no space for customers to park on site.
21. During a site visit on November 16, 2018, staff found all three driveways and the area on the site plan labeled as “customer parking” were completely occupied by junk vehicles and personal vehicles used by the applicant and his two employees.
22. MSB 17.55 – Setbacks and Screening Easements, requires buildings to be placed at least 25 feet from a public right of way.

23. According to the application material, the connex structures located within the center driveway are approximately 10 feet from the public right-of-way. This is a violation of the minimum setback requirements of MSB 17.55.
24. In November 2016, a Borough Code Compliance Officer issued Written Warning #0717 to the applicant for: 1) Operating a junkyard without a permit per MSB 17.60 – Conditional Uses, 2) Causing a public nuisance per MSB 8.50 – Junk and Trash, and 3) Unauthorized Encroachment by storing junk vehicles within the public right-of-way per MSB 11.10 – Encroachment Permits.
25. In July 2017, a Borough Code Compliance Officer issued Citation #P00444057 to the applicant for operating a junkyard without a permit per MSB 17.60 – Conditional Uses.
26. According to the State of Alaska records, the applicant entered a “no contest” plea on October 4, 2017 for Citation #P00444057, operating a junkyard without a permit per MSB 17.60 – Conditional Uses.
27. As a part of this application, the applicant notes he has a conditional use permit (17602003-0001) for a separate junkyard operation on Machen Road.
28. The narrative also notes a lack of incident at the Machen site, other than being told by the Borough to construct a fence and a “few cars were too close to the road,” which were removed “immediately.”
29. In March 2017 while inspecting the applicant’s junkyard operation on Machen Road, a Borough Code Compliance Officer found that junk vehicles were viewable from and within the public right-of-way. The applicant resolved these issues by May 2017.
30. In July 2017 while inspecting the applicant’s junkyard operation on Machen Road, a Borough Code Compliance Officer again found that junk vehicles were viewable from and within the public right-of-way.
31. In August 2017, a Borough Code Compliance Officer found the junk vehicles were still within the public right-of-way and tagged 14 vehicles with impound notices. The applicant removed the vehicles which were tagged for impound within two days.
32. In October 2017, a Borough Code Compliance Officer again found the applicant to be storing junk vehicles within the public right-of-way. This time the issue wasn’t resolved until November 2017.
33. Between March 2017 and November 2017, a Borough Code Compliance Officer conducted six site visits at the Machen Road property. Four of which revealed the applicant was storing junk vehicles within the public right-of-way on Machen Road which is a violation of conditional use permit #17602003-0001.
34. Since March 2016, Borough staff has observed the applicant violating Borough code 15 times. Eleven of which were at the proposed use on West Sunrise Drive, and four of which were at the applicant’s junkyard operation on Machen Road.

Conclusions of Law:

1. The proposed use will detract from the value, character and integrity of the surrounding area (MSB 17.60.100(B)(1)).

2. The proposed use will be harmful to the public health, safety, convenience and welfare (MSB 17.60.100(B)(2)).
3. Sufficient setbacks, lot area, buffers and other safeguards are not being provided (MSB 17.60.100(B)(3)).
4. The application material has met all of the requirements of this chapter (MSB 17.60.100(B)(4)).
5. The applicant is not suitable to establish, maintain, or operate the proposed use under the requirements of Alaska Statute 08.60.070.

2019 Imagery

-  Roads
-  6405000L006
-  Parcels

N THEODORE DR

W SUNRISE DR



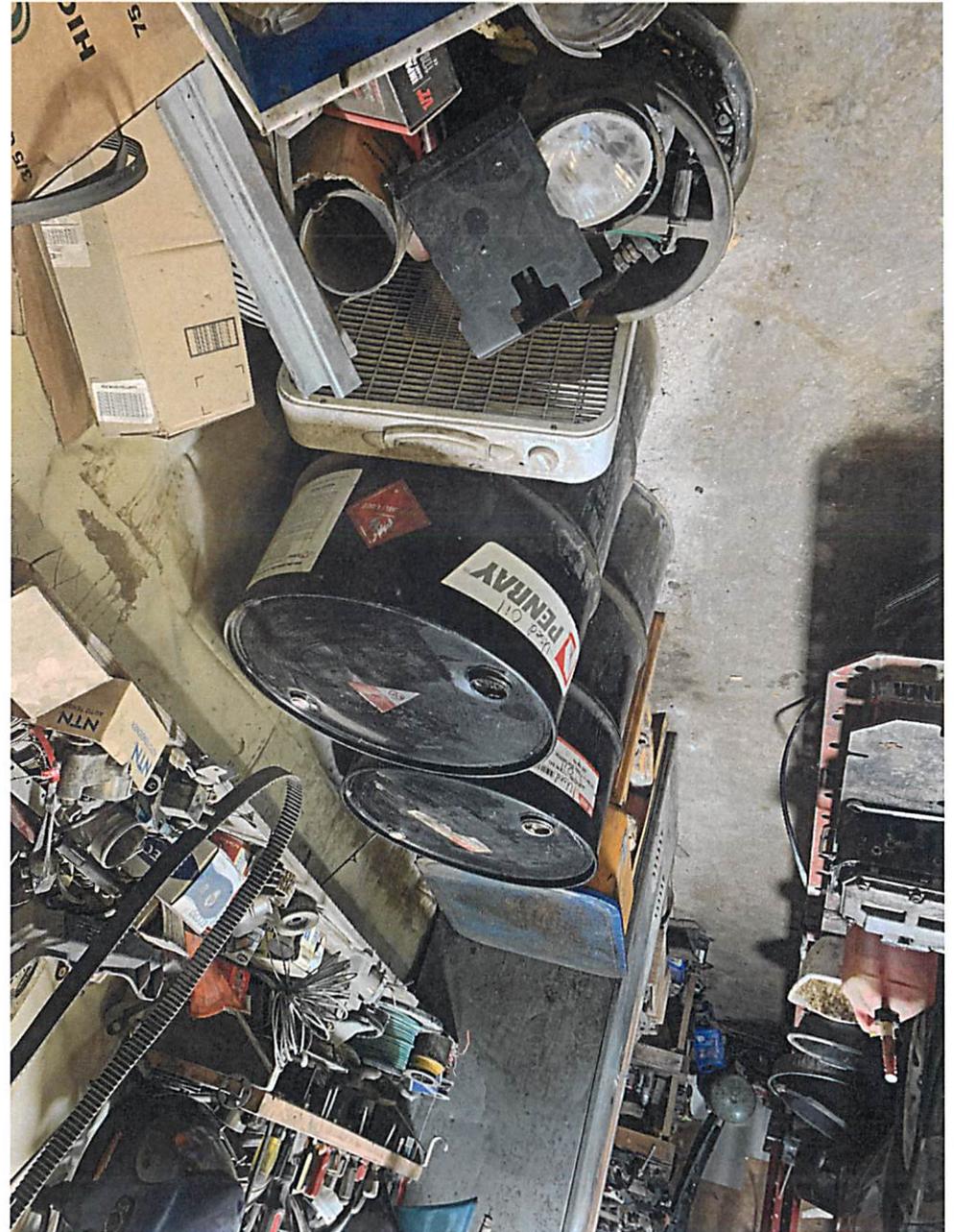
This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7801.

Date: 9/10/2020
MSB Development Services

1 inch = 100 feet





















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Matanuska-Susitna Borough

www.matsugov.us

ASSEMBLY AGENDA ASSEMBLY CHAMBERS

350 EAST DAHLIA AVENUE, PALMER

JOINT ASSEMBLY/SCHOOL BOARD MEETING 6:00 PM TUESDAY, SEPTEMBER 8, 2020

20-097 Ways you can participate in the Assembly meeting:

IN PERSON: Should you wish to attend in person, please adhere to a 6-foot distance between yourself and others; Masks are not required but are encouraged.

IN WRITING: You can submit written comments to leg.com@matsugov.us

TELEPHONIC TESTIMONY:

- Dial 1-855-225-2326; You will hear "Joining conference" when you are admitted to the meeting.
- You will be automatically muted and able to listen to the meeting.
- When the Mayor announces audience participation, press '3; you will hear "Your hand has been raised."
- When it is your turn to testify you will hear "Your line has been unmuted."
- State your name for the record, spell your last name, and provide your testimony.

Those who wish to observe the meeting may do so by the live stream video at Matanuska.Legistar.Com/Calendar.

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF AGENDA

IV. PLEDGE OF ALLEGIANCE

V. AUDIENCE PARTICIPATION

VI. JOINT ITEMS OF BUSINESS

- A. Building Construction Progress (MSB 2.12.075(A))
- B. Review Capital Construction Plan (MSB 2.12.075(A))
- C. Restructuring Operational Funding of Schools (Requested by Mayor Halter)
- D. School Year Start Up (Requested by the School Board)
- E. Houston Middle School Retrofit Resolution (Requested by the School Board)

20-121 School Board Resolution Regarding Houston Middle School Retrofit

Attachments: [School Board Resolution No. 20 - 001](#)

VII. INTRODUCTION (For Public Hearing on 09/15/20)

OR 20-089 An Ordinance To Condemn Houston Middle School As A Fire And Health Hazard.

Attachments: [OR 20 - 089](#)
[IM 20 - 174](#)

VIII. MAYOR, ASSEMBLY, SCHOOL BOARD, AND STAFF COMMENT

IX. ADJOURNMENT

Disabled Persons Needing Reasonable Accommodation In Order To Participate At An Assembly Meeting Should Contact The Borough ADA Coordinator At 861-8432 At Least One Week In Advance Of The Meeting.

Publish Date: September 4, 2020

09-03-20

FY21 WINTER TRAIL GROOMING GRANTS

The Borough Assembly has approved funds in the FY21 Capital Projects budget for distribution to organizations, individuals, or businesses that can show they will provide winter trail grooming and trail maintenance for the public benefit. The funding may be used to groom trails for dog mushers, Nordic skiers, and other winter trail uses.

The funds will be awarded to those organizations, individuals, or businesses that can show they will provide the most public benefit, and have the available resources to accomplish the most with the funding. **This grant will require documented 50% match, which can include in-kind volunteer hours, value of snow machine rental, cost of maintenance items, etc.**

The grant will be available to pay for the cost of fuel, oil, and maintenance for equipment, plowing trailhead parking lots, grooming labor, or pre-season maintenance on the trails, i.e., rental of brush hog or related equipment. Requests for maintenance reimbursements must be justified.

Prior grant compliance will be one consideration during the evaluation process.

The application is available at <https://www.matsugov.us/publicnotice>.

Please mail or email the completed and signed application to 350 E. Dahlia, Palmer, AK 99645 or Imb@matsugov.us, by September 18, 2020, to be considered for funding.

Publish Date: September 4, 2020

08-23-20

MAT-SU ANIMAL CARE & REGULATION

Did you know...?

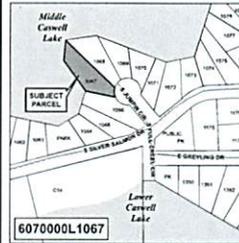
Within the borough, no person shall own any dog or cat over the age of six months without registering each dog or cat. (MSB 24.10.010)

The Borough animal care and shelter can register your dog or cat for \$15 if the animal is spayed/neutered, or for \$30 if the animal is not spayed/neutered. The registration is good for three years.

If you have any questions please call 907-746-5500 or email: animal.care@matsugov.us



PUBLIC HEARING



The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the following application for a request for a variance to the minimum shoreline setback requirements of MSB 17.55, on Monday **September 21, 2020**, at 6:00 p.m. in the Borough Assembly Chambers* located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

This notice is to correct an error in the original description of the request. The original description of the request indicated the variance would allow for the construction of a 26' x 24' single-family residence with deck to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The amended description is listed below and is as follows: The variance would allow for the construction of a 38' x 24' single-family residence to be placed, at its closest location, approximately 21 feet from the shorelands of Middle Caswell Lake.

***Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough website prior to attending the public hearing for any changes to the meeting schedule or method.**

In Person Participation: Should you wish to attend in person, please adhere to a 6-foot distance between yourself and others; Masks are not required but are encouraged. **Telephonic Testimony:** Dial 1-855-225-1887; You will hear "Joining Conference" when you are admitted to the meeting. You will be muted and able to listen to the meeting. When the Chairperson announces audience participation or a public hearing you would like to speak to, press '3; you will hear "Your hand has been raised." When it is your turn to testify you will hear "Your line has been unmuted." State your name for the record, spell your last name, and provide your testimony.

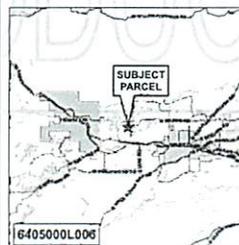
An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 38' x 24' single-family residence, to be placed at its closest location, approximately 21 feet from the shorelands of Middle Caswell Lake. The location of the request is 49572 S. Jumpin Circle, (Tax ID# 607000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. For additional information, you may contact Joseph Metzger, Planner II, at 861-7862 or email: Joseph.Metzger@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an "interested party". See MSB 15.39.010 for the definition of "interested party". The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Publish Date: September 4, 2020

09-05-30

PUBLIC HEARING



The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the following application for a conditional use permit on Monday, **September 21, 2020**, at 6:00 p.m. in the Borough Assembly Chambers* located at 350 E. Dahlia Avenue in Palmer. This application was originally heard by the Planning Commission in December 2018. The Superior Court of Alaska has remanded this application back to the Planning Commission for a new public hearing. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted by Dewayne Creech (dba DC Auto Repair) for the operation of a Junkyard/Refuse Area, located at 7430 West Sunrise Drive (Tax ID# 640500L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian.

***Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough website prior to attending the public hearing for any changes to the meeting schedule or method.**

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Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. For additional information, you may contact Mark Whisenhunt, Planner II, at 861-8527 or email: mark.whisenhunt@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an "interested party". See MSB 15.39.010 for the definition of "interested party". The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Publish Date: September 4, 2020

09-05-30



Vern Halter, Mayor
861-8682
vern.halter@matsugov.us

Tim Hale, #1
590-9243
TimHaleDistrict1@gmail.com

Stephanie Nowers, #2
831-6239
StephanieNowersDistrict2@gmail.com

George McKee, #3
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georgemckee@matsugov.us

Ted Leonard, #4
373-2860
tedleonarddistrict4@gmail.com

Dan Mayfield, #5
892-7406
dan.mayfield@matsugov.us

Jesse Sumner, #6
715-7388
jessesumnerdistrict6@gmail.com

Tamara Boeve, #7
354-6744
tamboevedistrict7@gmail.com



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2431 N THEODORE DR
WASILLA AK 99623

53502000L004B 2
BROTHERS DONALD S
PO BOX 4258
PALMER AK 99645-4258

56405000L006 3
CREECH DEWAYNE E
PMB 372
7362 W PARKS HWY
WASILLA, AK 99654-9132

56442B02L013 4
ERICKSON ELIZABETH GINA
#299
7362 W PARKS HWY
WASILLA AK 99623

218N02W33A005 5
GARLOW RAYBURN J & REBECCA J
APT 1201
501 S 44TH ST W
BILLINGS MT 59106-3913

56405000L005 6
HALDEMAN SEAN R
PO BOX 298936
WASILLA AK 99629-8936

56442B01L004 7
HOLLINGSWORTH JAMES A
STE 6 PMB 101
12110 BUSINESS BLVD
EAGLE RIVER AK 99577

56405000L008 8
KEETER CHARLES & MARY
2501 N THEODORE DR
WASILLA AK 99623-1802

56442B01L006 9
LANZ KAY F
PMB 273
7362 W PARKS HWY
WASILLA AK 99623-9308

53502000L004A 10
MORRISSEY DAN'L M
3015 MADISON WAY
ANCHORAGE AK 99508-4416

218N02W33A016 11
NOLAND DANNY LOUIS II
NOLAND SHERI BREE
PMB 792
7362 W PARKS HWY
WASILLA AK 99623

56442B03L003 12
PLUMB MARK A
2231 N CARRIAGE LN
WASILLA AK 99623-0611

56442B02L016 13
REHARD TRAVIS
763
7362 W PARKS HWY
WASILLA AK 99623

56442B03L001 14
SCHUROSKY CHAS W & LUCY
PO BOX 298681
WASILLA AK 99629-8681

56442B02L014 15
STUMP JACKSON LAWRENCE
5328 JOHN THOMAS NE
ALBUQUERQUE NM 87111

56442B03L001 16
U S BANK NAT'L ASSN TRE
SECURITY NAT'L MTG LOANTR
323 FIFTH ST
EUREKA, CA 95501

56442B01L008 17
WATTS CAMILLE C
1165 W WINTER AVE
WASILLA AK 99654

56442B03L002 18
WHISMAN MICHAEL J
2291 N CARRIAGE LN
WASILLA, AK 99654

56442B01L007 19
WHITAKER SIDNEY & HOLLY
PMB 325
7362 W PARKS HWY
WASILLA AK 99623-9300

20
MEADOW LAKES COMMUNITY COUNCIL
1210 N KIM DRIVE, SUITE B
WASILLA, AK 99623-1921

tara0609
20
9/3/2020 9:58:09 AM

tara0609
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9/3/2020 9:58:09 AM

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

Applicant: Dewayne Creech (dba DC Auto Repair)
Location: 7430 West Sunrise Drive (Tax ID# 6405000L006);
within Township 18 North, Range 2 West, Section 33, Seward Meridian
Request: An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted for the operation of a Junkyard/Refuse Area at the above address.

The Planning Commission will conduct a public hearing concerning the following application for a variance on Monday, **September 21, 2020** at 6:00 p.m. in the Borough Assembly Chambers*, 350 E. Dahlia Avenue, in Palmer. This application was originally heard by the Planning Commission in December 2018. The Superior Court of Alaska has remanded this application back to the Planning Commission for a new public hearing. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

***Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough Website prior to attending the public hearing for any changes to the meeting schedule or method.**

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Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” Application material may also be reviewed at the Borough Permit Center. For additional information, you may contact Mark Whisenhunt, Planner II, at 861-8527 or email: mark.whisenhunt@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an “interested party”. See MSB 15.39.010 for the definition of “interested party”. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk’s office, and at various libraries within the borough.

Note: Vicinity Map Located on Reverse Side

Inspection Records

Complaint ID: 10838

Inspection Number:	Inspection Date: 4/2/2020 7:44:46 PM	Inspector: Michael Johnson
Status:	Properties Affected:	Other Affected:
Contact Date:	Letter Date:	Closed Date:

Inspector Notes: SV. As requested I visited this site to take photos. As compared to last visits photo the fence has been completed along Sunrise. A frame structure, work truck and an area where the snow has been compacted is visible on the north side of the lot. It appears as they will finish the Conner and begin fencing along the E-W border. The fence is clean, neat and obstructs the view into the lot. NOTE: Observed a flat bed truck with to more Subaru's on it. Unsure if they are loading or off-loading. Parked in the northern entrance. I have included photos from the lot also owned by Mr Creech off Machen RD. There are approx 28 Subarus and one RV parked in the lot in front of the fence. They appear to be right on the ROW line but it does not appear to have hindered snow removal at this point.



















Inspection Number:	Inspection Date: 6/25/2020 8:43:47 PM	Inspector: Michael Johnson
Status:	Properties Affected:	Other Affected:
Contact Date:	Letter Date:	Closed Date:

Inspector Notes: SV. Picture is from the north edge of the property. As one can see the fence along Sunrise is complete and in fine condition. The support structure is in the earth for the remaining northern edge of the fence. Great progress has been made and those around did rejoice. I will check back at the end of summer to confirm completion.



Inspection Number:	Inspection Date: 7/13/2020 9:52:56 PM	Inspector: Michael Johnson
Status:	Properties Affected:	Other Affected:
Contact Date:	Letter Date:	Closed Date:

Inspector Notes: SV. INSPECT. No change on the fence. No vehicles are parked on the ROW in front of the fence.

Inspection Number:

Inspection Date: 9/1/2020 9:09:01 PM

Inspector: Michael Johnson

Status:

Properties Affected:

Other Affected:

Contact Date:

Letter Date:

Closed Date:

Inspector Notes: SV. INSPECT. The green fence is complete around the north side. Investigate if he is operating a junk yard.



Inspection Number:

Inspection Date: 1/21/2020 8:45:59 PM

Inspector: Michael Johnson

Status:

Properties Affected:

Other Affected:

Contact Date:

Letter Date:

Closed Date:

Inspector Notes: SV. Some progress on the fence. Slowing down in winter. The rail structure extends from the road down the lot line on both sides.



PLANNING COMMISSION RESOLUTION

By: Mark Whisenhunt
Introduced: August 17, 2020
Public Hearing: September 21, 2020
Action:

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. 20-30**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION ADOPTING FINDINGS OF FACT AND CONCLUSIONS OF LAW TO SUPPORT DENIAL OF RESOLUTION 18-30.

WHEREAS, Resolution 18-30 was for approval of a conditional use permit to allow the operation of a junkyard/refuse area, located at 7430 West Sunrise Drive (Tax ID#: 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian; and

Whereas, the planning commission originally conducted a public hearing on December 17, 2018 on this matter; and

Whereas, the Planning Commission's vote on the motion failed to garner a majority vote on December 17, 2018; and

Whereas, the Decision on Appeal issued by the Superior Court of Alaska on March 19, 2020, required a new hearing on this matter; and

Whereas, the planning commission conducted a new public hearing on September 21, 2020 on this matter; and

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission denied the conditional use permit for the operation of a junkyard/refuse area located at 7430 West Sunrise Drive (Tax ID#: 6405000L006); within Township 18 North,

Range 2 West, Section 33, Seward Meridian, based on the following findings of fact and conclusions of law:

1. A 10-acre parcel with a residential home abuts the subject parcel to the east. An undeveloped 40-acre parcel abuts the subject parcel to the south. Parcels to the west, northwest, and north of the subject parcel, range from one to 2.3 acres in size and are developed with residential homes.
2. A total of 23 lots, excluding the subject lot, are within the notice area. Of which, 5 lots are undeveloped and 16 lots are used for residential purposes. The remaining two have a residential home and store commercial vehicles on site.
3. The vast majority of the area is used for residential purposes.
4. Per MSB 17.60.040(B) operating a junkyard/refuse area without a permit is declared a public nuisance.
5. The Borough Development Services Division received a complaint about the subject property and proposed use on September 12, 2016.
6. Between November 2016 and September 2018, a Borough Code Compliance Officer conducted nine site visits at the property. Eight of which revealed the applicant was

storing junk vehicles within the public right-of-way, on West Sunrise Drive.

7. A photograph dated June 20, 2018, taken by a Borough Code Compliance Officer shows at least six junk vehicles and the applicant's two tow trucks being stored within the public right-of-way, on West Sunrise Drive.
8. During a site visit on November 16, 2018, staff found the subject property to be full. As a result, the applicant was still storing one junk vehicle within the public right-of-way.
9. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
10. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
11. During a site visit on October 16, 2019, a Borough Code Compliance Officer found that some vehicles and the applicant's dumpster were within the public right-of-way.

12. During a site visit on April 2, 2020, a Borough Code Compliance Officer found that the applicant's dumpster was still within the public right-of-way.
13. During a site visit on September 8, 2020, staff found the applicant installed a narrow drivable loop along the exterior of the operation and that vehicles not abutting this loop and the driveway are only accessible by foot through narrow gaps.
14. During a site visit on September 8, 2020, staff found the subject property to be effectively full and at maximum storage capacity.
15. Topographical information for the area shows the property slopes down from the northwest to the southeast.
16. Wetlands and a creek abut the property's southeast corner.
17. Per MSB 11.10 - Encroachment Permits, the storage of objects, such as junk vehicles, within the public right-of-way requires an Encroachment Permit.
18. Junk vehicles stored within the public right-of-way without an Encroachment Permit are deemed unauthorized encroachments.
19. Per MSB 11.10.030(C), unauthorized encroachments shall be deemed a public nuisance.

20. During a site visit on November 16, 2018, staff found that there was no space for customers to park on site.
21. During a site visit on November 16, 2018, staff found all three driveways and the area on the site plan labeled as "customer parking" were completely occupied by junk vehicles and personal vehicles used by the applicant and his two employees.
22. MSB 17.55 - Setbacks and Screening Easements, requires buildings to be placed at least 25 feet from a public right of way.
23. According to the application material, the connex structures located within the center driveway are approximately 10 feet from the public right-of-way. This is a violation of the minimum setback requirements of MSB 17.55.
24. In November 2016, a Borough Code Compliance Officer issued Written Warning #0717 to the applicant for: 1) Operating a junkyard without a permit per MSB 17.60 - Conditional Uses, 2) Causing a public nuisance per MSB 8.50 - Junk and Trash, and 3) Unauthorized Encroachment by storing junk vehicles within the public right-of-way per MSB 11.10 - Encroachment Permits.
25. In July 2017, a Borough Code Compliance Officer issued Citation #P00444057 to the applicant for operating a

junkyard without a permit per MSB 17.60 - Conditional Uses.

26. According to the State of Alaska records, the applicant entered a "no contest" plea on October 4, 2017 for Citation #P00444057, operating a junkyard without a permit per MSB 17.60 - Conditional Uses.
27. As a part of this application, the applicant notes he has a conditional use permit (17602003-0001) for a separate junkyard operation on Machen Road.
28. The narrative also notes a lack of incident at the Machen site, other than being told by the Borough to construct a fence and a "few cars were too close to the road," which were removed "immediately."
29. In March 2017 while inspecting the applicant's junkyard operation on Machen Road, a Borough Code Compliance Officer found that junk vehicles were viewable from and within the public right-of-way. The applicant resolved these issues by May 2017.
30. In July 2017 while inspecting the applicant's junkyard operation on Machen Road, a Borough Code Compliance Officer again found that junk vehicles were viewable from and within the public right-of-way.
31. In August 2017, a Borough Code Compliance Officer found the junk vehicles were still within the public right-

of-way and tagged 14 vehicles with impound notices. The applicant removed the vehicles which were tagged for impound within two days.

32. In October 2017, a Borough Code Compliance Officer again found the applicant to be storing junk vehicles within the public right-of-way. This time the issue wasn't resolved until November 2017.
33. Between March 2017 and November 2017, a Borough Code Compliance Officer conducted six site visits at the Machen Road property. Four of which revealed the applicant was storing junk vehicles within the public right-of-way on Machen Road which is a violation of conditional use permit #17602003-0001.
34. Since March 2016, Borough staff has observed the applicant violating Borough code 15 times. Eleven of which were at the proposed use on West Sunrise Drive, and four of which were at the applicant's junkyard operation on Machen Road.
35. The proposed use will detract from the value, character and integrity of the surrounding area (MSB 17.60.100(B)(1)).
36. The proposed use will be harmful to the public health, safety, convenience and welfare (MSB 17.60.100(B)(2)).

37. Sufficient setbacks, lot area, buffers and other safeguards are not being provided (MSB 17.60.100(B)(3)).

38. The application material has met all of the requirements of this chapter (MSB 17.60.100(B)(4)).

39. The applicant is not suitable to establish, maintain, or operate the proposed use under the requirements of Alaska Statute 08.60.070.

ADOPTED by the Matanuska-Susitna Borough Planning Commission this ___ day of _____, 2020.

COLLEEN VAGUE, Chair

ATTEST

KAROL RIESE, Planning Clerk

(SEAL)

YES:

NO:

**INTRODUCTION FOR PUBLIC HEARING
QUASI-JUDICIAL**

Creech's Junkyard

INTRODUCTION FOR PUBLIC HEARING

**Superior Court for the
State of Alaska
Decision on Appeal**

IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
THIRD JUDICIAL DISTRICT AT PALMER

DEWAYNE CREECH,

Appellant,

v.

MATANUSKA-SUSITNA BOROUGH,

Appellee.

Case No. 3PA-19-1472 CI

DECISION ON APPEAL

I. PROCEDURAL HISTORY AND FACTS

On April 10, 2019, Mr. Creech filed a *Notice of Appeal* relating to a decision by the Matanuska-Susitna Borough Board of Adjustment and Appeals, which affirmed the denial of a conditional use permit by the Borough’s Planning Commission. The Matanuska-Susitna Borough filed its *Brief of Appellee* on August 31, 2019.

Mr. Creech owns approximately 9.5 acres of land in an unincorporated area of the Matanuska-Susitna Borough on which he both resides and has operated a vehicle repair and storage yard since 2004. In 2016 a complaint was filed against Mr. Creech, which initiated an investigation and a series of site visits by planning commission staff. As a result of these interactions with the Borough, Mr. Creech filed an application for a conditional use permit in September of 2017, and was then governed by MSB 17.60.110. As Mr. Creech was working on completing his application and submitting evidence in support of it, the Borough adopted Matanuska-Susitna Borough Assembly Ordinance Serial Number 18-030, which made changes to MSB 17.60.110 and affected the standards under which applications for a CUP were to be assessed. On December 17, 2018, the Matanuska-Susitna Planning Commission held a public hearing on Mr. Creech’s application, during which the newly enacted version of the Borough ordinance

was referenced repeatedly. At the end of the hearing, the commissioners voted to deny Mr. Creech's application. Mr. Creech timely appealed the decision, and the Matanuska-Susitna Board of Appeals and Adjustments denied the appeal after a hearing in March 2019.

II. ISSUES ON APPEAL

- (1) Whether the Borough violated Mr. Creech's due process rights by changing the legal standard under which his application for a conditional use permit was being evaluated after the review process had already begun.
- (2) Whether the Borough erred in evaluating Mr. Creech's "suitability" for the conditional use permit by considering evidence that was more than five years old.

III. STANDARD OF REVIEW

There are four standards of review that govern the review of administrative decisions by the courts. The "substantial evidence" test is applied to questions of fact; the "reasonable basis" test is applied to questions of law involving agency expertise; the "substitution of judgement" is applied to questions of law that require no agency expertise; and the "reasonable and not arbitrary" test is applied to review of agency regulations.¹ The constitutional arguments raised are evaluated de novo.²

¹ *Handley v. State Dep't. of Revenue*, 838 P2d 1231,1233 (Alaska 1992).

² *State Dep't. Nat. Resources v. Greenpeace Inc.*, 96 P3d 1056, 1061 (Alaska 2004).

IV. DISCUSSION

A. While It Was Incorrect To Apply The Newly Adopted Borough Ordinance To Mr. Creech's Application, The Error Was Harmless.

Appellant argues that the change in regulation governing the evaluation of his permit application was a violation of his due process rights. He argues that the language of AS 08.60.070, the state law the Borough cited as being incorporated into municipal regulation, covers only a "certificate of location" and a "certificate of approval for the location" and specifically applies to the Borough Assembly and not the Planning Commission or the Board of Adjustment and Appeals.³ According to the Appellant, this resulted in Mr. Creech not having proper notice that the statute's requirements also covered his application.⁴

Appellee argues that consideration of suitability was already part of both the Matanuska-Susitna Borough regulations applying to a permit review, codified in MSB 17.60.100 (A)&(B), and applicable state law in AS 08.60.070 at the time the Borough's Planning Commission reviewed Mr. Creech's permit application.

The court finds Appellee's argument persuasive. While it was incorrect to apply the newly adopted Borough ordinance to Mr. Creech's application, the error was harmless as the standards were already applicable to him through binding state law, in place at the time of his application. Appellant has provided no compelling reason that the statute should not apply to Mr. Creech's business. MSB Code 17.60.010 (A) defines "junkyard" as "a location which is commercially used for the purpose of the outdoor storage, handling, dismantling, wrecking, keeping or sale of used, discarded, wrecked or abandoned airplanes, appliances, vehicles, boats, building and building materials, machinery, equipment, or parts thereof, including but not limited to, scrap metals, wood, lumber, plastic, fiber, or other tangible materials." From the briefings and record, the

³ Appellant's Brief at 9.

⁴ *Id.* at 10.

description of Mr. Creech's business includes the outside storage of automobiles which are no longer functional or in drivable condition on the property at issue in this case. Mr. Creech then disassembles them for parts, which he uses to repair other vehicles. While there is an added service provided by his operation in the form of refurbishing and selling some of the vehicles, this appears insufficient to negate the applicability of a "junkyard" regulation on its face. The Appellant therefore had proper notice of the applicability of the Code to his operation.

Any error committed by the Borough in applying the newly adopted ordinance is harmless.

B. The Planning Commission's decision was significantly colored by Mr. Creech's activity well beyond the five year lookback period.

The Appellant argues that in the course of its suitability evaluation, the Borough impermissibly considered evidence of Mr. Creech's conduct that is more than five years in the past. He cites MSB 17.60.110 (C) (2) stating "[r]eview for suitability shall be limited to no more than five years preceding the application." He provides quotes from record of the Planning Commission meeting, which show that the commissioners did in fact make statements about Mr. Creech's actions in the past and complaints filed against him dating from over five years ago.

The Appellee cites *Fields v. Kodiak City Council*⁵ to support its argument that the resolution adopted by the Planning Commission, adopted in its Findings of Fact and Conclusions of Law, is the relevant factor for this determination, rather than statements by commissioners during the public hearing. Appellant goes on to note the dates in the Planning Commission's findings, highlighting the fact that all of them are within the five year range.

In *Fields*, the Supreme Court addresses the sufficiency of the record in that case. It makes no mention, as Appellee argues, of the review being limited to those observations

⁵ *Fields v. Kodiak City Council*, 628 P.2d 927 (Alaska 2001).

of fact which were reduced to writing. The court therefore declines to follow the Appellee's argument that any oral statements by commissioners at the hearing are irrelevant, as long as the written decision only includes dates within the permitted time range. It appears clear from the record that the commissioners considered Mr. Creech's past history of non-compliance and what appears to be a certain level of frustration in the community about it. Some of their statements reflect an evaluation of Mr. Creech's suitability that goes back for more than a decade, and is short of any positive memories. The court finds it impossible to separate these statements and their extensive temporal lookbacks from the written findings, which properly adhere to the statutorily required timeframe.

The transcript from the December 17, 2018, public hearing before the Matanuska-Susitna Borough Planning Commission reflects that the Appellant has correctly identified instances in which the commissioners debated evidence from over five years ago.⁶ The court further notes that in the course of the commissioner's deliberation, they raised and discussed issues not related to suitability at all, namely the costs and effect of leniency and a collaborative approach to help Mr. Creech get into compliance with a certain timeframe. The commissioners express concerns about how this would affect resources and staffing,⁷ and how a favorable decision in this case would affect future decision on conditional use permit applications.⁸

The record also reflects that Mr. Creech was contacted by Borough staff several times within the relevant five year range and notified of non-compliance in written notices and citations.⁹ In his statements before the Planning Commission, Mr. Creech stated that he had not been aware of the importance of compliance,¹⁰ saying "I had no idea that the – it was that critical of an aspect, you know, that might risk me getting a

⁶ Appellant's Brief at 15-16.

⁷ MSB Planning Commission Public Hearing Transcript, p. 61 [*hereinafter* MSB Hearing Transcript].

⁸ *Id.* at 68 ("I also have great heartburn over do we modify our CUP program and policies and procedures and rules to accommodate one person, and what can of worms does that open going down the road.")

⁹ MSB Hearing Transcript at 144; Appellee's Brief at 21-23 (citing the Planning Commission's Findings of Fact).

¹⁰ MSB Hearing Transcript at 21, 22, 27.

permit.”¹¹ The court notes that Mr. Creech also stated that he had hired a survey company in order to produce the proper documentation in support of his application,¹² had hired “a couple of contractors to come in and help me clean the place up,”¹³ and that he had built “an additional stall” in order to clear the open spaces on the property faster.¹⁴ Further, Mr. Creech states, “I wish you had a picture in front of you. It’s just that photographs weren’t taken after that. It was just done last summer.”¹⁵ He also described a new road that has been added to the property, which is not shown on pictures or the survey, and provides an access to the back of the property in order to be able to move older inventory out and add space to move the vehicles off the public right-of-way.¹⁶

These statements contrast descriptions by Borough staff noting that the situation at the property was still far from compliance in 2018, when visit were conducted in February, June and September.¹⁷ The record also shows Mr. Creech receiving citations, and vehicles being impounded as late as October 2018.¹⁸ According to Borough staff, photos were taken showing “that there was still an issue out there,” and proving that there were still vehicles in the right-of-way.¹⁹ In addition, the record shows several more instances within the five year review period which found Mr. Creech to be out of compliance, to which he failed to respond satisfactorily.

The court is now tasked with judging the suitability of Mr. Creech to run his business based on this inconsistent evidence. While it appears that Mr. Creech took serious steps such as hiring contractors and building an additional driveway to eliminate overflow from his property into the public right-of-way, he was still considered in violation of the requirements in November of 2018,²⁰ the month before the hearing. The

¹¹ *Id.* at 31-32.

¹² *Id.* at 34.

¹³ *Id.* at 35.

¹⁴ *Id.* at 39.

¹⁵ *Id.*

¹⁶ *Id.* at 30, 39.

¹⁷ *Id.* at 7.

¹⁸ MSB, Board of Adjustment and Appeals, Record on Appeal at 140.

¹⁹ *Id.* at 7.

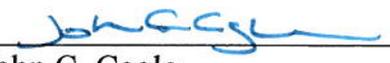
²⁰ MSB, Board of Adjustment and Appeals, Notice of Right to Appeal and Final Decision, para 8.

court does note that the site visits show a pattern of decrease in the number of vehicles parked in the public right-of-way, and further finds that Mr. Creech outlined a credible and satisfactory plan to bring his property into compliance during the public hearing.²¹ Regardless, it is clear to the court that the Planning Commission’s decision was significantly colored by Mr. Creech’s activity well beyond the five year lookback period.

V. CONCLUSION

Because it was improper for the Planning Commission to rely on information that was beyond the proper lookback period, the court hereby VACATES the Planning Commission’s Resolution and REMANDS for further proceedings consistent with this decision.

Dated the 19th day of March, 2020.


John C. Cagle
Superior Court Judge

I certify that on 3/20/20
a copy of this document was sent to
 CSDD Attorney(s) of record Naugle
 Plaintiff Defendant Other Bodolay
At the address(es) of record
Rec'd Jnl
Deputy Clerk (R)

²¹ MSB Hearing Transcript at 22, 39.

Recent Correspondence

From: [Mark Whisenhunt](#)
To: "Linda Travers-Inglima"
Cc: paulj.nangle@acsalaska.net; DC; Shannon Bodolay
Subject: RE: Creech vs. MSB; 3PA-19-01472CI
Date: Wednesday, July 8, 2020 7:34:00 AM

Good Morning Linda,

If there is to be any additional information for Mr. Creech's request for Conditional Use Permit, please provide it on or before July 28, 2020. This will allow our office to begin our public notice process appropriately. Please let me know if you have any questions. Thank you for your time on this matter.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
mark.whisenhunt@matsugov.us

From: Linda Travers-Inglima <pjn@acsalaska.net>
Sent: Wednesday, June 24, 2020 1:00 PM
To: Shannon Bodolay <Shannon.Bodolay@matsugov.us>
Cc: paulj.nangle@acsalaska.net; DC <dcsubar@yahoo.com>; Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>
Subject: Creech vs. MSB; 3PA-19-01472CI

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Dear Shannon:

We have discussed a September 21, 2020 date, which is acceptable to me. And we have not yet retained an expert which we are looking for now.

Thank you.

Linda Travers-Inglima, Legal Secretary

Paul J. Nangle & Associates

101 Christensen Drive
Anchorage, Alaska 99501

Phone: (907) 274-8866

Fax: (907) 279-1794

Email: pjn@acsalaska.net

**** CONFIDENTIALITY NOTICE ****

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information is **not** the intended recipient, or the employee or agent responsible for delivery of this information to the intended recipient, you are hereby notified that this is not a waiver of privilege and any dissemination, distribution or copying of this information is strictly prohibited. If you have received this information in error, please notify the sender immediately by telephone and return the original information to the sender, by return email or by U.S. Mail, at the above address.

From: [Mark Whisenhunt](#)
To: [DC](#)
Cc: paulj.nangle@acsalaska.net
Subject: RE: Planning Commission hearing: DC Auto Repair Junkyard
Date: Friday, May 29, 2020 9:06:00 AM
Importance: High

Good Morning Mr. Creech,

The August 17, 2020 Planning Commission meeting agenda is full, as such, we are unable to schedule your item on that date. The next available meeting is September 21, 2020. I need your confirmation to actually schedule your request. I also need to know if you plan on submitting information as I mentioned in the below email. Please let me know if the September date works. Thank you.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
mark.whisenhunt@matsugov.us

From: Mark Whisenhunt
Sent: Thursday, April 30, 2020 1:09 PM
To: 'DC' <dcsubar@yahoo.com>
Cc: 'paulj.nangle@acsalaska.net' <paulj.nangle@acsalaska.net>
Subject: Planning Commission hearing: DC Auto Repair Junkyard

Mr. Creech,

We have received the Superior Court decision (attached), which remands your application for Conditional Use Permit back to the Planning Commission. The earliest we can get your application back to the Planning Commission for a hearing is August 17, 2020.

Communication from your attorney, Mr. Paul Nangle, indicated that you have updated application information. If you do, please provide that information on or before June 15, 2020. Please let me know if you intend on providing updated information.

The Superior Court decision requires our office to make a recommendation to the Planning Commission based on the MSB Code that was in affect when you first submitted an application. The Borough is required by State law to use specific standards with considering junkyard application. To comply with State statute, our office will be using the following MSB code and Alaska statute to make a recommendation to the Planning Commission on your request for Conditional Use Permit:

MSB 17.60.100 GENERAL STANDARDS.

(A) A conditional use may be approved only if it meets with the requirements of this

section in addition to any other standards required by this chapter.

(B) In granting a conditional use permit, the planning commission must make the following findings:

- (1) the conditional use will preserve or not detract from the value, character, and integrity of the surrounding area;
- (2) that granting the conditional use permit will not be harmful to the public health, safety, convenience, and welfare;
- (3) that sufficient setback, lot area, buffers, or other safeguards are being provided to meet the conditions listed in subsections (B)(1) through (3) of this section; and
- (4) the conditional use fulfills all other requirements of this chapter pertaining to the conditional use in this section.

MSB 17.60.110 JUNKYARDS AND REFUSE AREA STANDARDS.

(A) No junkyard or auto wrecking yard shall be established or operated unless the wrecking yard is completely obscured from the view of any traveled or public right-of-way. The permit may require the junkyard or auto wrecking yard not within a building to be contained within a continuous solid fence no less than eight feet in height, if such requirement is necessary to prevent the unsightly display of the yard or for public safety purposes. Fencing may be of one or a combination of the following:

- (1) conventional solid wood or metal fencing;
 - (2) evergreen or other natural planting sufficient to provide year-round screening;
- and
- (3) earthen berm or topography.

(B) In all cases, fencing provided shall be continuous and of sufficient density to provide visual screening required by this chapter on a year-round basis.

Alaska Statute 08.60.070

(7) the suitability of the applicant to establish, maintain, or operate the business under AS 08.60.050 - 08.60.100.

Please let me know if you have any questions. Thank you for your time on this matter.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
mark.whisenhunt@matsugov.us

Chapter 60. Junk Dealers and Junk Yards

Article 1. Junk Dealer and Metal Scrapper Licensing

Section

- 08.60.010. License required; violation of section a misdemeanor.
- 08.60.020. Renumbered.
- 08.60.030. Repealed.

Article 2. Regulation of Junk Yards

- 08.60.050. General prohibition.
- 08.60.060. Certificate of location.
- 08.60.070. Standards for location and regulation.
- 08.60.080. Authorization to impose conditions for establishment, operation, and maintenance.
- 08.60.090. Penalty.
- 08.60.100. Definitions.

ARTICLE 1. JUNK DEALER AND METAL SCRAPER LICENSING

§ 08.60.010. License required; violation of section a misdemeanor

A person may not engage in the business of junk dealer or metal scrapper in this state without obtaining an annual license from the Department of Revenue. A person who violates this section is guilty of a misdemeanor, and upon conviction is punishable by a fine of not more than \$100 or imprisonment for not more than 90 days.

Prior Codifications: ACLA 1949, §§ 35-2-171, 35-2-174.

Cross References

- Attempt, classification of offenses, see § 11.31.100.
- Classification of offenses, see § 11.81.250.
- Fines, see § 12.55.035.
- Legal accountability based upon the conduct of another, see §§ 11.16.110 and 11.16.120.
- Misdemeanors, sentences of imprisonment, see § 12.55.135.
- Offenses defined by statute, see § 11.81.220.
- Prior convictions, effect on sentencing, see § 12.55.145.
- Restitution and compensation, see § 12.55.045.
- Victims of crimes, rights, see § 12.61.010 et seq.

Library References

- Licenses ⇨16(11), 40.
- Westlaw Key Number Searches: 238k16(11); 238k40.

§ 08.60.020. Renumbered as § 08.60.010

§ 08.60.030. Repealed

JUNK DEALERS & JUNK YARD

ARTICLE 2.

§ 08.60.050. General prohi

A person may not establish, o yard without a certificate of lo SLA 1962, ch. 26, § 1.

Licenses ⇨16(11).
Westlaw Key Number Search: 238k1

§ 08.60.060. Certificate of l

A person using or proposing t yard shall obtain a certificate o a city of any class, the certifica designee. If the location is out an organized borough, the cert the organized borough or its de ed city or borough, the certi commissioner of public safety. SLA 1962, ch. 26, § 2; SLA 1965, c

Licenses ⇨16(11).
Westlaw Key Number Search: 238k1

§ 08.60.070. Standards for

The commissioner of public s assembly, in considering applic

- (1) the nature and developr
 - (2) the need to protect the motoring public from econor tions;
 - (3) the proximity of churchl ation areas, or other places of
 - (4) the sufficiency in numl the vicinity;
 - (5) the adequacy of fences unsightly display of a junk yar
 - (6) the health, safety, and g
 - (7) the suitability of the aj business under AS 08.60.050 -
- SLA 1962, ch. 26, § 3; SLA 1965, cl

JUNK DEALERS & JUNK YARDS

§ 08.60.070

ARTICLE 2. REGULATION OF JUNK YARDS

§ 08.60.050. General prohibition

A person may not establish, operate, or maintain a commercial or public junk yard without a certificate of location prescribed by AS 08.60.050 – 08.60.100. SLA 1962, ch. 26, § 1.

Library References

Licenses ⇨16(11).
Westlaw Key Number Search: 238k16(11).

§ 08.60.060. Certificate of location

A person using or proposing to use a location for a commercial or public junk yard shall obtain a certificate of approval for the location. If the location is in a city of any class, the certificate shall be procured from the city council or its designee. If the location is outside the city limits but within the boundaries of an organized borough, the certificate shall be procured from the assembly of the organized borough or its designee. If the location is outside an incorporated city or borough, the certificate of location shall be obtained from the commissioner of public safety.

SLA 1962, ch. 26, § 2; SLA 1965, ch. 10, § 1.

Library References

Licenses ⇨16(11).
Westlaw Key Number Search: 238k16(11).

§ 08.60.070. Standards for location and regulation

The commissioner of public safety, the city council, and organized borough assembly, in considering applications and regulations, shall take into account

- (1) the nature and development of surrounding property;
- (2) the need to protect the local economy, adjacent land owners, and the motoring public from economically depressing and unsightly roadside locations;
- (3) the proximity of churches, schools, hospitals, public buildings, recreation areas, or other places of public gathering;
- (4) the sufficiency in number of other similar business establishments in the vicinity;
- (5) the adequacy of fences and other types of enclosures to prevent the unsightly display of a junk yard;
- (6) the health, safety, and general welfare of the public;
- (7) the suitability of the applicant to establish, maintain, or operate the business under AS 08.60.050 – 08.60.100.

SLA 1962, ch. 26, § 3; SLA 1965, ch. 10, § 2.

and Junk Yards

Scrapper Licensing

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AL SCRAPPER LICENSING

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§§ 11.16.110 and 11.16.120.

§ 08.60.070

BUSINESS & PROFESSIONS

Library References

Licenses ⇨16(11).
Westlaw Key Number Search: 238k16(11).

§ 08.60.080. Authorization to impose conditions for establishment, operation, and maintenance

The commissioner of public safety or the cities or organized boroughs shall examine the location or proposed location of a junk yard and adopt reasonable regulations concerning the establishment, operation, and maintenance of businesses under the standards set out in AS 08.60.070. The regulations may require the erection, location, and size of fences or other structures surrounding the junk yard. Regulations pertaining to junk yards are subject to the provisions of AS 44.62 (Administrative Procedure Act).

SLA 1962, ch. 26, § 4; SLA 1965, ch. 10, § 3; SLA 1968, ch. 143, § 3.

Library References

Licenses ⇨16(11).
Westlaw Key Number Search: 238k16(11).

§ 08.60.090. Penalty

A person who operates, establishes, or maintains a junk yard in any location without procuring a certificate of approval is guilty of a misdemeanor and upon conviction is punishable by a fine of not more than \$500, or by imprisonment for a term of not more than one year, or by both.

SLA 1962, ch. 26, § 5.

Cross References

Attempt, classification of offenses, see § 11.31.100.
Classification of offenses, see § 11.81.250.
Fines, see § 12.55.035.
Legal accountability based upon the conduct of another, see §§ 11.16.110 and 11.16.120.
Misdemeanors, sentences of imprisonment, see § 12.55.135.
Offenses defined by statute, see § 11.81.220.
Prior convictions, effect on sentencing, see § 12.55.145.
Restitution and compensation, see § 12.55.045.
Victims of crimes, rights, see § 12.61.010 et seq.

Library References

Licenses ⇨40.
Westlaw Key Number Search: 238k40.

§ 08.60.100. Definitions

In AS 08.60.050 – 08.60.100,

(1) "junk" means any secondhand and used machinery, scrap iron, copper, lead, zinc, aluminum, or other metals; it also includes wrecked automobiles, tools, implements, rags, used building materials, rubber, and paper;

(2) "junk yard" means a location where junk is gathered together and stored for a commercial or public purpose;

BUSINESS & PROFESSIONS

JUNK DEALERS & JUNK YARDS

§ 08.60.100

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§ 11.16.110 and 11.16.120.

machinery, scrap iron, copper,
includes wrecked automobiles,
s, rubber, and paper;
junk is gathered together and

(3) "person" means an individual and, where consistent with collective capacity, a committee, firm, partnership, company, corporation, club, governmental agency, organization, association, or other combination of individuals.

SLA 1962, ch. 26, § 6.

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PUBLIC HEARING
QUASI-JUDICIAL

Resolution No. 18-30

DC Auto Repair
Junkyard/Refuse Area CUP

PUBLIC HEARING

STAFF REPORT



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-8158

www.matsugov.us

DEVELOPMENT SERVICES DIVISION STAFF REPORT

Date: December 7, 2018

File Number: 176020170024

**Applicant/
Property Owner:** Dewayne Creech (dba DC Auto Repair)

Request: Planning Commission Resolution 18-30
Conditional Use Permit for the operation of a junkyard/refuse area in accordance with MSB Chapter 17.60 – Conditional Uses

Location: 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian

Size of Property: 9.56 Acres

Size of Operation Site: 9.56 Acres

Reviewed By: Alex Strawn, Development Services Manager 

Staff: Mark Whisenhunt, Planner II 

Staff Recommendation: Denial

EXECUTIVE SUMMARY

A conditional use permit application has been submitted for the operation of a junkyard/refuse area which includes the repairing of damaged vehicles, outdoor storage and parting-out of inoperable vehicles.

Per MSB 17.60.030, junkyards and refuse areas are declared to be potentially damaging to the property values and usefulness of adjacent properties or potentially harmful to the public health, safety, and welfare and are permitted only upon the issuance of a conditional use permit. Unless

such uses are maintained under and in accordance with a lawfully issued permit, such uses are declared to be public nuisances. Maintenance of such a land use without a permit is prohibited.

The subject property is located within the Meadow Lakes Community Council boundary and within Assembly District 7.

BACKGROUND

The property was originally developed in 1974 with a residential home. The single family residential home was the sole use of the property until the applicant purchased the property in June of 2003. Shortly after purchasing the property the applicant began building the shop/garage associated with the junkyard operation. According to the applicant he began operating at the property shortly after he purchased the property. He estimates beginning the operation in 2004.

In 2005, a second foundation was constructed on the west side of the property. In 2011 a building was constructed on the foundation. According to the applicant, this building was intended to be a home for his sibling, however, that never came to fruition. While it currently sits empty, the applicant indicated to staff that he intends to operate a children's daycare in the structure.

While reviewing the Borough's records for the subject property, staff found the Borough received its first of six complaints/cases in August 2003. The second complaint was made in September 2003. These two cases were consolidated for administrative purposes. Four citations were issued for a violation of the Borough junk and trash code (MSB 8.50). Three of the citations were ultimately dropped when the applicant came into compliance in September 2006. One citation shows as a "no contest" plea from the applicant.

Three additional complaints were filed pertaining to junk vehicles on the property in 2008, 2009, and 2010. The applicant began storing the junk vehicles in a location where they were not visible from the public right-of-way and ultimately built a fence to screen the junk vehicles. Each of these complaints were closed when the vehicles were completely screened from the view of the public right-of-way.

The latest complaint came in September 2016. This complaint was for junk vehicles being stored in the public right-of-way. In November 2016, a site visit was conducted by a Borough Code Compliance Officer (CCO). It was at this time the CCO realized the applicant was actually running a junkyard operation at the property. The Borough Code Compliance Officer issued Written Warning #0717 to the applicant for: 1) Operating a junkyard without a permit per MSB 17.60 – Conditional Uses, 2) Causing a public nuisance per MSB 8.50 – Junk and Trash, and 3) Unauthorized Encroachment by storing junk vehicles within the public right-of-way per MSB 11.10 – Encroachment Permits. Follow up site visits in March and July 2017 by the CCO showed the applicant was still storing junk vehicles within the right-of-way and was stilling operating without a permit. A citation was issued in July 2017 for operating a junkyard/refuse area without a conditional use permit. According to State of Alaska Court records, the applicant entered a "no contest" plea on October 4, 2017. Additional site visits by the CCO in August and September 2017 showed the violations has not been abated at the site.

Mr. Creech submitted an application for conditional use permit on September 20, 2017. A site visit by the CCO revealed the vehicles were removed from the right-of-way in October 2017. However,

during follow up site visits in February, June, and September 2018 the applicant was again using the public right-of-way to store junk vehicles. During the September site visit, the CCO placed six impound notices on vehicles the applicant had in the public right-of-way.

As a part of this application, the applicant notes he has a conditional use permit (17602003-0001) for a separate junkyard operation on Machen Road. The narrative also notes a lack of violations at the Machen site, other than being told by the Borough to construct a fence and a “few cars were too close to the road,” which were removed “immediately.”

After reviewing the Borough file for conditional use permit (CUP) #17602003-0001, staff found the first of four complaints/cases was opened in January 2009. In the 2009 case, a CCO found that the applicant had yet to comply with three CUP conditions and that the final permit document had not been issued. In January 2009, the Planning Director signed and issued the permit. The applicant obtained compliance by January 2010. In December 2010, a CCO found more violations at the site which were having junk vehicles viewable from and within the public right-of-way. These issues were resolved by January 2011.

In March 2017, a CCO found that more junk vehicles viewable from and within the public right-of-way at the Machen Road site. The applicant resolved these issues by May 2017, only to be found in violation again in July 2017. In August 2017, the CCO found the junk vehicles were still within the public right-of-way and tagged 14 vehicles with impound notices. The applicant removed the vehicles which were tagged for impound within two days. In October 2017, the applicant was again found to be storing junk vehicles within the public right-of-way. This time the issue wasn't resolved until November 2017.

LAND USE

Existing Land Use:

The subject parcel is approximately 9.56 acres in size. The applicant currently lives on site and operates a junkyard/refuse area without a conditional use permit. There is a second residential structure onsite which is unoccupied and unfinished. The applicant estimates there to be approximately 500 junk vehicles on the property.

Staff conducted a site visit at the subject property on November 16, 2018. While on site staff observed one of the applicant's junk vehicles was being stored within the public right-of-way. The applicant also keeps his garbage dumpster within the public right-of-way. During the site visit, it became apparent that the applicant operates the site well beyond its capacity. With the exception of the structures and a small fenced in yard adjacent to the applicant's residence, all areas on the property cleared of vegetation are packed full of junk vehicles. Almost all of the junk vehicles are inaccessible, except by foot through very narrow gaps between the vehicles. The unfinished building which the applicant noted he would like to use for a children's daycare center was completely surrounded by junk vehicles and only accessible by foot through very narrow gaps between the vehicles. Areas on the site plan identified as “existing driveways” and “customer parking” were also fully occupied by junk vehicles and personal vehicles used by the applicant and his two employees.

Also during the site visit, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor

oil was apparent while walking down the driveway. Two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.

Topographical information for the area shows the property slopes down from the northwest to the southeast. Wetlands and a creek abut the property's southeast corner as shown on the attached map titled as Wetlands.

Surrounding Land Uses:

The subject parcel sits on the south side of West Sunrise Drive, approximately 600 feet west of North Pittman Road. A 10-acre parcel with a residential home abuts the subject parcel to the east. An undeveloped 40-acre parcel abuts the subject parcel to the south. Parcels to the west, northwest, and north of the subject parcel, range from one to 2.3 acres in size and are mostly developed with residential homes. Two parcels to the northeast have residential homes and are used to park commercial vehicles.

REVIEW OF APPLICABLE CRITERIA AND FINDINGS

MSB 17.03 – Public Notification

On October 26, 2018 notices were mailed to all property owners within a 600-foot radius of the property, as well as to the Meadow Lakes Community Council. A total of 24 notices were mailed. The permit application notification was published in the October 26, 2018 issue of the Frontiersman. The application material was posted on the Borough web site for public review on October 26, 2018. The public notice, application material, and a request for comments were emailed to the Meadow Lakes Community Council on October 26, 2018. Staff did not receive any comments from the community council. Staff received four comments from the public. All were in opposition of the proposed use. The comments and concerns in general are:

- a history of unsightly junk vehicles at the site
- the use of the public right-of-way by the applicant to load/unload junk vehicles
- storing junk vehicles in the public right-of-way
- at times the operation completely blocks the roadway
- the potential to negatively impact residential property values with the continued public nuisance
- potential to contaminate the ground water, surface water, and fish habitat
- a history of disregarding local laws (operating without a permit)
- damaging the road with the use of heavy trucks

Section 17.60.100 General Standards

(A) A conditional use may be approved only if it meets the requirements of this section in addition to any other standards required by this chapter.

(B) In granting a conditional use permit, the planning commission must make the following findings:

- (1) the conditional use will preserve or not detract from the value, character, and integrity of the surrounding area;*

Findings of Fact:

1. The property was originally developed in 1974 with a residential home, which was the sole use of the property until the applicant purchased the property in June of 2003.
2. The subject parcel sits on the south side of West Sunrise Drive, approximately 600 feet west of North Pittman Road.
3. A 10-acre parcel with a residential home abuts the subject parcel to the east. An undeveloped 40-acre parcel abuts the subject parcel to the south. Parcels to the west, northwest, and north of the subject parcel, range from one to 2.3 acres in size and are developed with residential homes.
4. Two parcels to the northeast have residential homes and are used to park commercial vehicles.
5. A total of 23 lots, excluding the subject lot, are within the notice area. Of which, 5 lots are undeveloped and 16 lots are used for residential purposes. The remaining two have a residential home and store commercial vehicles on site.
6. The vast majority of the area is used for residential purposes.
7. A 6-foot tall wood-plank fence is constructed along the east half of the northern property line. There is currently approximately 300 feet of fencing.
8. According to the application material, the applicant proposes to construct an 8-foot tall wood-plank fence the full length of the northern property line, and along the north half of both the east and west side lot lines. The applicant proposes using existing vegetation to visually screen the remaining portions of the side lot lines and the entire length of the southern property line.
9. According to the application material, the operation gets approximately one to three customers a day.
10. According to the applicant, he has been operating a junkyard/refuse area at this location since approximately 2004.
11. Per MSB 17.60.040(B) operating a junkyard/refuse area without a permit is declared a public nuisance.

Conclusion of Law: Based on the above findings, the proposed use will detract from the value, character and integrity of the surrounding area (MSB 17.60.100(B)(1)).

(2) that granting the conditional use permit will not be harmful to the public health, safety, convenience, and welfare;

Findings of Fact:

1. The Borough Development Services Division received a complaint about the subject property and proposed use on September 12, 2016.
2. Between November 2016 and September 2018, a Borough Code Compliance Officer conducted nine site visits at the property. Eight of which revealed the applicant was storing junk vehicles within the public right-of-way, on West Sunrise Drive.

3. A photograph dated June 20, 2018, taken by a Borough Code Compliance Officer shows at least six junk vehicles and the applicant's two tow trucks being stored within the public right-of-way, on West Sunrise Drive.
4. During a site visit on November 16, 2018, staff found the subject property to be full. As a result, the applicant was still storing one junk vehicle within the public right-of-way.
5. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
6. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
7. According to the application material, work and storage involving fluids will be done within the shop on concrete floor, protected from the elements and containment will be achieved with drip pans and an absorption product known as "floor dry."
8. A 6-foot tall wood-plank fence is constructed along the east half of the northern property line. There is currently approximately 300 feet of fencing.
9. According to the application material, the applicant proposes to construct an 8-foot tall wood-plank fence the full length of the northern property line, and along the north half of both the east and west side lot lines. The applicant proposes using existing vegetation to visually screen the remaining portions of the side lot lines and the entire length of the southern property line.
10. Per MSB 11.10 – Encroachment Permits, the storage of objects, such as junk vehicles, within the public right-of-way requires an Encroachment Permit.
11. Junk vehicles stored within the public right-of-way without an Encroachment Permit are deemed unauthorized encroachments.
12. Per MSB 11.10.030(C), unauthorized encroachments shall be deemed a public nuisance.
13. According to the application material, the operation gets approximately one to three customers a day.
14. During a site visit on November 16, 2018, staff found that there was no space for customers to park on site.
15. During a site visit on November 16, 2018, staff found all three driveways and the area on the site plan labeled as "customer parking" were completely occupied by junk vehicles and personal vehicles used by the applicant and his two employees.
16. According to the applicant, he has been operating a junkyard/refuse area at this location since approximately 2004.
17. Per MSB 17.60.040(B) operating a junkyard/refuse area without a permit is declared a public nuisance.

Discussion: The applicant has described his current junkyard operation within the narrative as clean, careful, and compliant. However, after conducting a site visit and reviewing the Borough complaint file for this operation, it appears the operation does not operate in the manner which is described in the narrative.

Conclusion of Law: Based on the above findings, the proposed use will be harmful to the public health, safety, convenience and welfare (MSB 17.60.100(B)(2)).

(3) that sufficient setback, lot area, buffers, or other safeguards are being provided to meet the conditions listed in subsections (B)(1) through (3) of this section; and

Findings of Fact:

1. The subject parcel is approximately 9.56 acres in size.
2. According to the application material, work and storage involving fluids will be done within the shop on concrete floor, protected from the elements and containment will be achieved with drip pans and an absorption product known as “floor dry.”
3. A 6-foot tall wood-plank fence is constructed along the east half of the northern property line. There is currently approximately 300 feet of fencing.
4. According to the application material, the applicant proposes to construct an 8-foot tall wood-plank fence the full length of the northern property line, and along the north half of both the east and west side lot lines. The applicant proposes using existing vegetation to visually screen the remaining portions of the side lot lines and the entire length of the southern property line.
5. During a site visit on November 16, 2018, staff found the subject property to be full. As a result, the applicant was still storing one junk vehicle within the public right-of-way.
6. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
7. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
8. There are three driveways which access West Sunrise Drive from the subject property. According to Borough records, there are no applications or permits on file for any of the three driveways.
9. Between November 2016 and September 2018, a Borough Code Compliance Officer conducted nine site visits at the property. Eight of which revealed the applicant was storing junk vehicles within the public right-of-way, on West Sunrise Drive.
10. A photograph dated June 20, 2018, taken by a Borough Code Compliance Officer shows at least six junk vehicles and the applicant’s two tow trucks being stored within the public right-of-way, on West Sunrise Drive.
11. Per MSB 11.10 – Encroachment Permits, the storage of objects, such as junk vehicles, within the public right-of-way requires an Encroachment Permit.
12. Per MSB 11.10 – Encroachment Permits, constructing a driveway within the public right-of-way without an Encroachment Permit is deemed an unauthorized encroachment.
13. Junk vehicles stored within the public right-of-way without an Encroachment Permit are deemed unauthorized encroachments.

14. Per MSB 11.10.030(C), unauthorized encroachments shall be deemed a public nuisance.
15. MSB 17.55 – Setbacks and Screening Easements, requires buildings to be placed at least 25 feet from a public right of way.
16. According to the application material, the connex structures located within the center driveway are approximately 10 feet from the public right-of-way. This is a violation of the minimum setback requirements of MSB 17.55.

Conclusion of Law: Based on the above findings, sufficient setbacks, lot area, buffers and other safeguards are not being provided (MSB 17.60.100(B)(3)).

(4) the conditional use fulfills all other requirements of this chapter pertaining to the conditional use in this section.

Finding of Fact:

1. All of the required site plans and operational information have been provided by the applicant.

Conclusion of Law: The application material has met all of the requirements of this chapter (MSB 17.60.100(B)(4)).

Section 17.60.110 Junkyards and Refuse Area Standards

(A) No junkyard or auto wrecking yard shall be established or operated unless the wrecking yard is completely obscured from the view of any traveled or public right-of-way. The permit may require the junkyard or auto wrecking yard not within a building to be contained within a continuous solid fence no less than eight feet in height, if such requirement is necessary to prevent the unsightly display of the yard or for public safety purposes. Fencing may be of one or a combination of the following:

- (1) conventional solid wood or metal fencing;*
- (2) evergreen or other natural planting sufficient to provide year-round screening; and*
- (3) earthen berm or topography.*

(B) In all cases, fencing provided shall be continuous and of sufficient density to provide visual screening required by this chapter on a year-round basis.

Findings of Fact:

1. A 6-foot tall wood-plank fence is constructed along the east half of the northern property line. There is currently approximately 300 feet of fencing.
2. According to the application material, the applicant proposes to construct an 8-foot tall wood-plank fence the full length of the northern property line, and along the north half of both the east and west side lot lines. The applicant proposes using existing vegetation to visually screen the remaining portions of the side lot lines and the entire length of the southern property line.
3. The existing vegetation intended for screening the proposed use is composed of both deciduous and evergreen trees and is approximately 100 feet in or more in width.

Conclusion of Law: Based on the above findings, the proposed fencing and existing vegetation would obscure the view of the site from any traveled or public right-of-way on a year-round basis (MSB 17.60.110(A-B)).

(C) The commission shall evaluate whether the applicant is suitable to establish, maintain, or operate the proposed use under the requirements of this chapter.

(1) Suitability of the applicant shall be based upon the applicant's history of compliance with relevant local, state, and federal laws.

(2) Review for suitability shall be limited to no more than five years preceding the application.

Findings of Fact:

1. The Borough Development Services Division received a complaint about the subject property and proposed use on September 12, 2016.
2. In November 2016, a Borough Code Compliance Officer issued Written Warning #0717 to the applicant for: 1) Operating a junkyard without a permit per MSB 17.60 – Conditional Uses, 2) Causing a public nuisance per MSB 8.50 – Junk and Trash, and 3) Unauthorized Encroachment by storing junk vehicles within the public right-of-way per MSB 11.10 – Encroachment Permits.
3. In July 2017, a Borough Code Compliance Officer issued Citation #P00444057 to the applicant for operating a junkyard without a permit per MSB 17.60 – Conditional Uses.
4. According to the State of Alaska records, the applicant entered a “no contest” plea on October 4, 2017 for Citation #P00444057, operating a junkyard without a permit per MSB 17.60 – Conditional Uses.
5. Between November 2016 and September 2018, a Borough Code Compliance Officer conducted nine site visits at the property. Eight of which revealed the applicant was storing junk vehicles within the public right-of-way, on West Sunrise Drive.
6. A photograph dated June 20, 2018, taken by a Borough Code Compliance Officer shows at least six junk vehicles and the applicant's two tow trucks being stored within the public right-or-way, on West Sunrise Drive.
7. During a site visit on November 16, 2018, staff found the subject property to be full. As a result, the applicant was still storing one junk vehicle within the public right-of-way.
8. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
9. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
10. There are three driveways which access West Sunrise Drive from the subject property. According to Borough records, there are no applications or permits on file for any of the three driveways.
11. Per MSB 11.10 – Encroachment Permits, the storage of objects, such as junk vehicles, within the public right-of-way requires an Encroachment Permit.

12. Per MSB 11.10 – Encroachment Permits, constructing a driveway within the public right-of-way without an Encroachment Permit is deemed an unauthorized encroachment.
13. Junk vehicles stored within the public right-of-way without an Encroachment Permit are deemed unauthorized encroachments.
14. Per MSB 11.10.030(C), unauthorized encroachments shall be deemed a public nuisance.
15. MSB 17.55 – Setbacks and Screening Easements, requires buildings to be placed at least 25 feet from a public right of way.
16. According to the application material, the connex structures located within the center driveway are approximately 10 feet from the public right-of-way. This is a violation of the minimum setback requirements of MSB 17.55.
17. During a site visit on November 16, 2018, staff found that there was no space for customers to park on site.
18. During a site visit on November 16, 2018, staff found all three driveways and the area on the site plan labeled as “customer parking” were completely occupied by junk vehicles and personal vehicles used by the applicant and his two employees.
19. According to the applicant, he has been operating a junkyard/refuse area at this location since approximately 2004.
20. Per MSB 17.60.040(B) operating a junkyard/refuse area without a permit is declared a public nuisance.
21. As a part of this application, the applicant notes he has a conditional use permit (17602003-0001) for a separate junkyard operation on Machen Road.
22. The narrative also notes a lack of incident at the Machen site, other than being told by the Borough to construct a fence and a “few cars were too close to the road,” which were removed “immediately.”
23. In March 2017 while inspecting the applicant’s junkyard operation on Machen Road, a Borough Code Compliance Officer found that junk vehicles were viewable from and within the public right-of-way. The applicant resolved these issues by May 2017.
24. In July 2017 while inspecting the applicant’s junkyard operation on Machen Road, a Borough Code Compliance Officer again found that junk vehicles were viewable from and within the public right-of-way.
25. In August 2017, a Borough Code Compliance Officer found the junk vehicles were still within the public right-of-way and tagged 14 vehicles with impound notices. The applicant removed the vehicles which were tagged for impound within two days.
26. In October 2017, a Borough Code Compliance Officer again found the applicant to be storing junk vehicles within the public right-of-way. This time the issue wasn’t resolved until November 2017.
27. Between March 2017 and November 2017, a Borough Code Compliance Officer conducted six site visits at the Machen Road property. Four of which revealed the applicant was storing junk vehicles within the public right-of-way on Machen Road which is a violation of conditional use permit #17602003-0001.

28. Since March 2016, Borough staff has observed the applicant violating Borough code 13 times. Nine of which were at the proposed use on West Sunrise Drive, and four of which were at the applicant's junkyard operation on Machen Road.

Conclusion of Law: Based on the above findings, the applicant is not suitable to establish, maintain, or operate the proposed use under the requirements of this chapter (MSB 17.60.110(C)).

(D) The commission shall consider whether adequate controls are in place to prevent contamination of soil, surface water and groundwater.

Finding of Fact:

1. According to the application material, work and storage involving fluids will be done within the shop on concrete floor, protected from the elements and containment will be achieved with drip pans and an absorption product known as "floor dry."
2. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
3. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
4. Topographical information for the area shows the property slopes down from the northwest to the southeast.
5. Wetlands and a creek about the property's southeast corner.

Discussion: The applicant has described his current junkyard operation within the narrative as clean, careful, and compliant. However, after conducting a site visit and reviewing the Borough complaint file for this operation, it appears the operation does not operate in the manner which is described in the narrative.

Conclusion of Law: Based on the above findings, there are not adequate controls in place to prevent contamination of soil, surface water and groundwater (MSB 17.60.110(D)).

STAFF RECOMMENDATIONS

Staff recommends denial of the conditional use permit to operate a junkyard/refuse area, at 7430 West Sunrise Drive (Tax ID# 6405000L006). The proposed use does not meet all of the standards set forth in MSB 17.60.100 and 17.60.110.

If the Planning Commission chooses to approve this permit, findings for approval must be prepared by the Commission.

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Mark Whisenhunt

From: Mark Whisenhunt
Sent: Friday, November 30, 2018 11:31 AM
To: 'DC'
Subject: Comments Received
Attachments: Scan_20181130_112409.pdf

I have attached all of the comments we received. If you would like to respond to them. Please do so in writing, **by noon on Tuesday December 4, 2018.**

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

Mark Whisenhunt

From: Mark Whisenhunt
Sent: Friday, October 5, 2018 3:30 PM
To: 'dcsubar@yahoo.com'
Subject: Creech CUP application - Additional Standards

Importance: High

Good Afternoon Mr. Creech,

On August 21, 2018 the Borough Assembly adopted additional regulations related to junkyard operations. I wanted to give you an opportunity to update your narrative by addressing the new standards noted below:

17.60.110 (C) The commission shall evaluate whether the applicant is suitable to establish, maintain, or operate the proposed use under the requirements of this chapter.

(1) Suitability of the applicant shall be based upon the applicant's history of compliance with relevant local, state, and federal laws.

(2) Review for suitability shall be limited to no more than five years preceding the application.

17.60.110 (D) The commission shall consider whether adequate controls are in place to prevent contamination of soil, surface water and groundwater.

If you would like to provide a response pertaining to your operation and the newly adopted standards, please do so on or before **October 15, 2018**. We will be moving forward with your application on October 16, 2018.

Thank you.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

Mark Whisenhunt

From: Mark Whisenhunt
Sent: Friday, October 26, 2018 9:39 AM
To: 'info@mlccak.org'; 'tim.swezey@mlccak.org'
Subject: Request for comments: Dewayne Creech Junkyard/Refuse Area CUP
Attachments: 6405000L006 Main Layout.pdf

Importance: High

Dear Meadow Lakes Community Council:

According to the Borough's public meeting calendar, your next council meeting will be held on November 7, 2018. As detailed below, a community member within your council boundaries is proposing to operate a Junkyard/Refuse Area, which requires a conditional use permit. Our office would like to encourage your participation in this process.

As noted below, if you would like to submit comments, please do so by November 26, 2018. If you cannot meet this submittal deadline, please contact me to discuss further options.

DATE: October 26, 2018
TO: Various Governmental Agencies
FROM: Mark Whisenhunt, Planner II
SUBJECT: Request for Review and Comments Governmental Agencies
PROJECT: Conditional Use Permit for the operation of a Junkyard/Refuse Area
LOCATION: 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian
APPLICANT: Dewayne Creech

An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted by Dewayne Creech for the operation of a Junkyard/Refuse Area. The Planning Commission will conduct a public hearing on this request on December 17, 2018.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. A direct link to the application material is here:

<https://www.matsugov.us/publicnotice/dewayne-creech-conditional-use-permit>

Comments are due on or before **November 26, 2018** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

Total 24

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

- Application:** Conditional Use Permit for a Junkyard/Refuse Area
- MSB Code Section:** MSB 17.60 – Conditional Uses
- Applicant:** Dewayne Creech (dba DC Auto Repair)
- Location:** 7430 West Sunrise Drive (Tax ID# 6405000L006);
within Township 18 North, Range 2 West, Section 33, Seward Meridian
- Request:** An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted for the operation of a Junkyard/Refuse Area at the above address.

The Planning Commission will conduct a public hearing concerning the following application for a conditional use permit on Monday, **December 17, 2018 at 6:00 p.m.** in the Borough Assembly Chambers, 350 E. Dahlia Avenue, in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend. The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request for more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be viewed at the Borough Permit Center. For additional information, you may contact Mark Whisenhunt, Planner II, at 861-8527. Written comments can be mailed to: MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645. You may fax comments to 861-8158 or e-mail to mwhisenhunt@matsugov.us. In order to be eligible to file an appeal for a decision of the Planning Commission, a person must be designated an "interested party." See MSB 15.39.010 for the definition of "interested party." The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before **November 26, 2018** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Name: _____ **Mailing Address:** _____

Location/Legal Description of your property: _____

Comments: _____

Note: Vicinity Map Located on Reverse Side



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See Reverse for Instructions

6405000L006 1
CREECH DEWAYNE E
PMB 372
7362 W PARKS HWY
WASILLA, AK 99654-9132

6442B03L001 2
U S BANK NAT'L ASSN TRE
SECURITY NAT'L MTG LOANTR
323 FIFTH ST
EUREKA, CA 95501

6442B03L002 3
WHISMAN MICHAEL J
2291 N CARRIAGE LN
WASILLA, AK 99654

6405000L007 4
BRADLEY SEAN D
2431 N THEODORE DR
WASILLA AK 99623

6405000L005 5
HALDEMAN SEAN R
PO BOX 298936
WASILLA AK 99629-8936

18N02W33A005 6
GARLOW RAYBURN J & REBECCA J
APT 1
12468 S KNIK GOOSE BAY RD
WASILLA AK 99623

6442B03L003 7
PLUMB MARK A
2231 N CARRIAGE LN
WASILLA AK 99623-0611

6442B01L008 8
WATTS CAMILLE C
1165 W WINTER AVE
WASILLA AK 99654

3502000L004B 9
DENNISTON DENNIS W & P H
PMB 761
7362 W PARKS HWY
WASILLA, AK 99654-9132

6442B02L014 10
STUMP ALICE ANN
2711 LAKEWOOD PL
WESTLAKE VLG, CA 91361-3310

18N02W33A016 11
NOLAND DANNY LOUIS II
NOLAND SHERI BREE
PMB 792
7362 W PARKS HWY
WASILLA AK 99623

6405000L008 12
SHORES HEATHER R
PO BOX 872716
WASILLA AK 99687-2716

6442B03L004 13
REHARD TRAVIS
PO BOX 871550
WASILLA AK 99687-1550

6442B01L007 14
WHITAKER SIDNEY & HOLLY
251 S KLEVIN ST
ANCHORAGE, AK 99508

3502000L004A 15
MORRISSEY DAN'L M
3015 MADISON WAY
ANCHORAGE AK 99508-4416

6442B02L015 16
REHARD TRAVIS
PO BOX 871550
WASILLA AK 99687-1550

18N02W33D002 17
VALLEY REAL ESTATE LLC
PO BOX 875067
WASILLA AK 99687

6442B03L005 18
REHARD TRAVIS
PO BOX 871550
WASILLA AK 99687-1550

18N02W33A015 19
NOLAND DANNY LOUIS II
NOLAND SHERI BREE
PMB 792
7362 W PARKS HWY
WASILLA AK 99623

6442B01L003 20
HOLLINGSWORTH JAS ANDREW
PO BOX 879373
WASILLA AK 99687-9373

6442B02L013 21
BURRIS JOSEPH D JR & RACHEL E
PO BOX 871588
WASILLA, AK 99687-1588

6442B01L004 22
HOLLINGSWORTH JAS ANDREW
PO BOX 879373
WASILLA AK 99687-9373

6442B01L006 23
LANZ BUEL W & KAY F
PMB 273
7362 W PARKS HWY
WASILLA AK 99623-9300

6442B02L016 24
REHARD TRAVIS
PO BOX 871550
WASILLA AK 99687-1550

Frontiersman

5751 E. MAYFLOWER CT.
Wasilla, AK 99654

405249

(907) 352-2264 ph
(907) 352-2277 fax

AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA, STATE OF ALASKA, THIRD DIVISION

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC, THIS DAY

PERSONALLY APPEARED BEFORE **JULLIE ZOOK** WHO, BEING

FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT SHE IS THE

LEGAL AD CLERK OF THE **FRONTIERSMAN**

PUBLISHED IN WASILLA AND CIRCULATED THROUGH OUT THE MAT-SU VALLEY,

IN SAID DIVISION THREE AND STATE OF ALASKA

AND THAT THE ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE

COPY, WAS PUBLISHED ON THE FOLLOWING DAYS:

OCTOBER 26, 2018

AND THAT THE RATE CHARGED THEREIN IS NOT IN EXCESS OF

THE RATE CHARGED PRIVATE INDIVIDUALS.


SUBSCRIBED AND SWORN TO BEFORE ME
THIS 26TH DAY OF OCTOBER 2018.

NANCY E DOWNS
Notary Public, State of Alaska
My Commission Expires
August 25, 2019

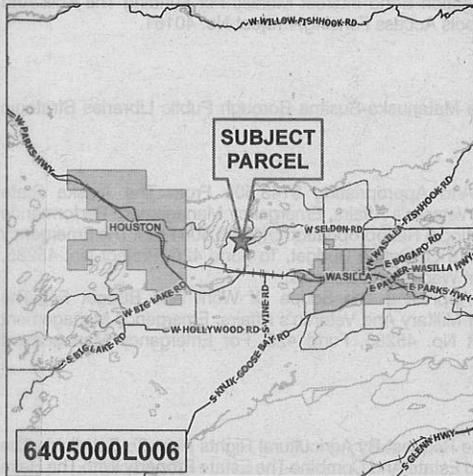

NOTARY PUBLIC FOR STATE OF ALASKA

MATANUSKA SUSITNA BOROUGH PAGE

PUBLIC HEARING

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the following application for a conditional use permit on Monday, **December 17, 2018**, at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted by Dewayne Creech (dba DC Auto Repair) for the operation of a Junkyard/Refuse Area, located at 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian.



The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request for more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be viewed at the Borough Permit Center. For additional information, you may contact Mark Whisenhunt, Planner II, at 861-8527. Written comments can be mailed to: MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645. You may fax comments to 861-8158 or e-mail to mwhisenhunt@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an "interested party." See MSB 15.39.010 for the definition of "interested party." The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before **November 26, 2018** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

MATANUSKA-SUSITNA BOROUGH DIRECTORY OF ORGANIZATIONS

Community Council - Meadow Lakes

Board Expiration

<input type="text" value="Meadow Lakes Comm"/>	<input type="text"/>	<input type="text"/>	Board Position	<input type="text" value="Correspondence - Meadow Lakes CC"/>
Company Representing	<input type="text"/>			Term <input type="text"/> to <input type="text"/>
<input type="text" value="1210 N. Kim Drive, Suite B"/>				Type of Term <input type="text"/> <input type="text"/>
<input type="text" value="Wasilla"/>	<input type="text" value="AK"/>	<input type="text" value="99623-1921"/>	Member Title	<input type="text"/>
Home <input type="text" value="(907) 232-2845"/>	Work <input type="text"/>	Cell <input type="text"/>	E-mail	<input type="text" value="info@mlccak.org"/>

<input type="text" value="Fisher"/>	<input type="text" value="Patricia"/>	<input type="text"/>	Board Position	<input type="text" value="Member 1 - MLCC - President"/>
Company Representing	<input type="text"/>			Term <input type="text"/> to <input type="text"/>
<input type="text" value="7362 W Parks Hwy, #154"/>				Type of Term <input type="text"/> <input type="text"/>
<input type="text" value="Wasilla"/>	<input type="text" value="AK"/>	<input type="text" value="99623"/>	Member Title	<input type="text"/>
Home <input type="text" value="(907) 357-8616"/>	Work <input type="text"/>	Cell <input type="text"/>	E-mail	<input type="text" value="psfisher@gci.net"/>

<input type="text" value="Harris"/>	<input type="text" value="Lacey"/>	<input type="text"/>	Board Position	<input type="text" value="Member 10 - MLCC - Membership"/>
Company Representing	<input type="text"/>			Term <input type="text"/> to <input type="text"/>
<input type="text" value="4981 W Beverly Lake Rd"/>				Type of Term <input type="text"/> <input type="text"/>
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Home <input type="text"/>	Work <input type="text"/>	Cell <input type="text"/>	E-mail	<input type="text" value="arcticharris@hotmail.com"/>

<input type="text" value="Cannon"/>	<input type="text" value="Ariel"/>	<input type="text"/>	Board Position	<input type="text" value="Member 11 - MLCC - Gaming"/>
Company Representing	<input type="text"/>			Term <input type="text"/> to <input type="text"/>
<input type="text" value="3009 N Kalmbach Lake Dr"/>				Type of Term <input type="text"/> <input type="text"/>
<input type="text" value="Wasilla"/>	<input type="text" value="AK"/>	<input type="text" value="99623"/>	Member Title	<input type="text"/>
Home <input type="text" value="(907) 357-5187"/>	Work <input type="text"/>	Cell <input type="text"/>	E-mail	<input type="text" value="abcannon123@live.com"/>

<input type="text" value="Boyle"/>	<input type="text" value="Terry"/>	<input type="text"/>	Board Position	<input type="text" value="Member 15 - MLCC - By Laws"/>
Company Representing	<input type="text"/>			Term <input type="text"/> to <input type="text"/>
<input type="text" value="PO Box 870311"/>				Type of Term <input type="text"/> <input type="text"/>
<input type="text" value="Wasilla"/>	<input type="text" value="AK"/>	<input type="text" value="99687"/>	Member Title	<input type="text"/>
Home <input type="text" value="(907) 355-7393"/>	Work <input type="text"/>	Cell <input type="text"/>	E-mail	<input type="text" value="tcbhunter@gmail.com"/>

MATANUSKA-SUSITNA BOROUGH DIRECTORY OF ORGANIZATIONS

Community Council - Meadow Lakes

Board Expiration

<input type="text" value="Conover"/>	<input type="text" value="Linda"/>	<input type="text"/>	Board Position	<input type="text" value="Member 2 - MLCC - Vice President"/>
Company Representing			Term	<input type="text"/> to <input type="text"/>
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<input type="text" value="Wasilla"/>	<input type="text" value="AK"/>	<input type="text" value="99632"/>	Member Title	<input type="text"/>
Home	<input type="text" value="(907) 376-5622"/>	Work	<input type="text"/>	Cell <input type="text"/>
			E-mail	<input type="text" value="conover@mtaonline.net"/>

<input type="text" value="Leader"/>	<input type="text" value="Cally"/>	<input type="text"/>	Board Position	<input type="text" value="Member 3 - MLCC - Education"/>
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<input type="text" value="Wasilla"/>	<input type="text" value="9962"/>	<input type="text"/>	Member Title	<input type="text"/>
Home	<input type="text"/>	Work	<input type="text"/>	Cell <input type="text"/>
			E-mail	<input type="text" value="seahorse@mtaonline.net"/>

<input type="text" value="Michaelson"/>	<input type="text" value="Cindy"/>	<input type="text"/>	Board Position	<input type="text" value="Member 4 - MLCC - Treasurer"/>
Company Representing			Term	<input type="text"/> to <input type="text"/>
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<input type="text" value="Big Lake"/>	<input type="text" value="AK"/>	<input type="text" value="99652"/>	Member Title	<input type="text"/>
Home	<input type="text" value="(907) 353-2280"/>	Work	<input type="text"/>	Cell <input type="text"/>
			E-mail	<input type="text" value="cmich@mtaonline.net"/>

<input type="text" value="Yehle"/>	<input type="text" value="Camden"/>	<input type="text"/>	Board Position	<input type="text" value="Member 5 - MLCC - Community Coordination"/>
Company Representing			Term	<input type="text"/> to <input type="text"/>
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<input type="text"/>	<input type="text"/>	<input type="text"/>	Member Title	<input type="text"/>
Home	<input type="text" value="(907) 346-0506"/>	Work	<input type="text"/>	Cell <input type="text"/>
			E-mail	<input type="text" value="camdenyehle@gmail.com"/>

<input type="text" value="Henkel"/>	<input type="text" value="Janet"/>	<input type="text"/>	Board Position	<input type="text" value="Member 6 - MLCC - Secretary"/>
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<input type="text" value="Palmer"/>	<input type="text" value="AK"/>	<input type="text" value="99645"/>	Member Title	<input type="text"/>
Home	<input type="text" value="(907) 982-6348"/>	Work	<input type="text"/>	Cell <input type="text"/>
			E-mail	<input type="text" value="gravel@mtaonline.net"/>

MATANUSKA-SUSITNA BOROUGH DIRECTORY OF ORGANIZATIONS

Community Council - Meadow Lakes

Board Expiration

<input type="text" value="Swezey"/>	<input type="text" value="Tim"/>	<input type="text"/>	Board Position	<input type="text" value="Member 7 - MLCC - CIP"/>
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Home	<input type="text" value="(907) 232-2845"/>	Work	<input type="text"/>	Cell <input type="text"/>
				E-mail <input type="text" value="tim.swezey@mlccak.org"/>

<input type="text" value="Benner-Hanson"/>	<input type="text" value="Lori"/>	<input type="text"/>	Board Position	<input type="text" value="Member 8 - MLCC - Parks, Rec & Trails"/>
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<input type="text" value="Wasilla"/>	<input type="text" value="AK"/>	<input type="text" value="99687"/>	Member Title	<input type="text"/>
Home	<input type="text" value="(907) 376-5549"/>	Work	<input type="text"/>	Cell <input type="text"/>
				E-mail <input type="text" value="jazzchance@gmail.com"/>

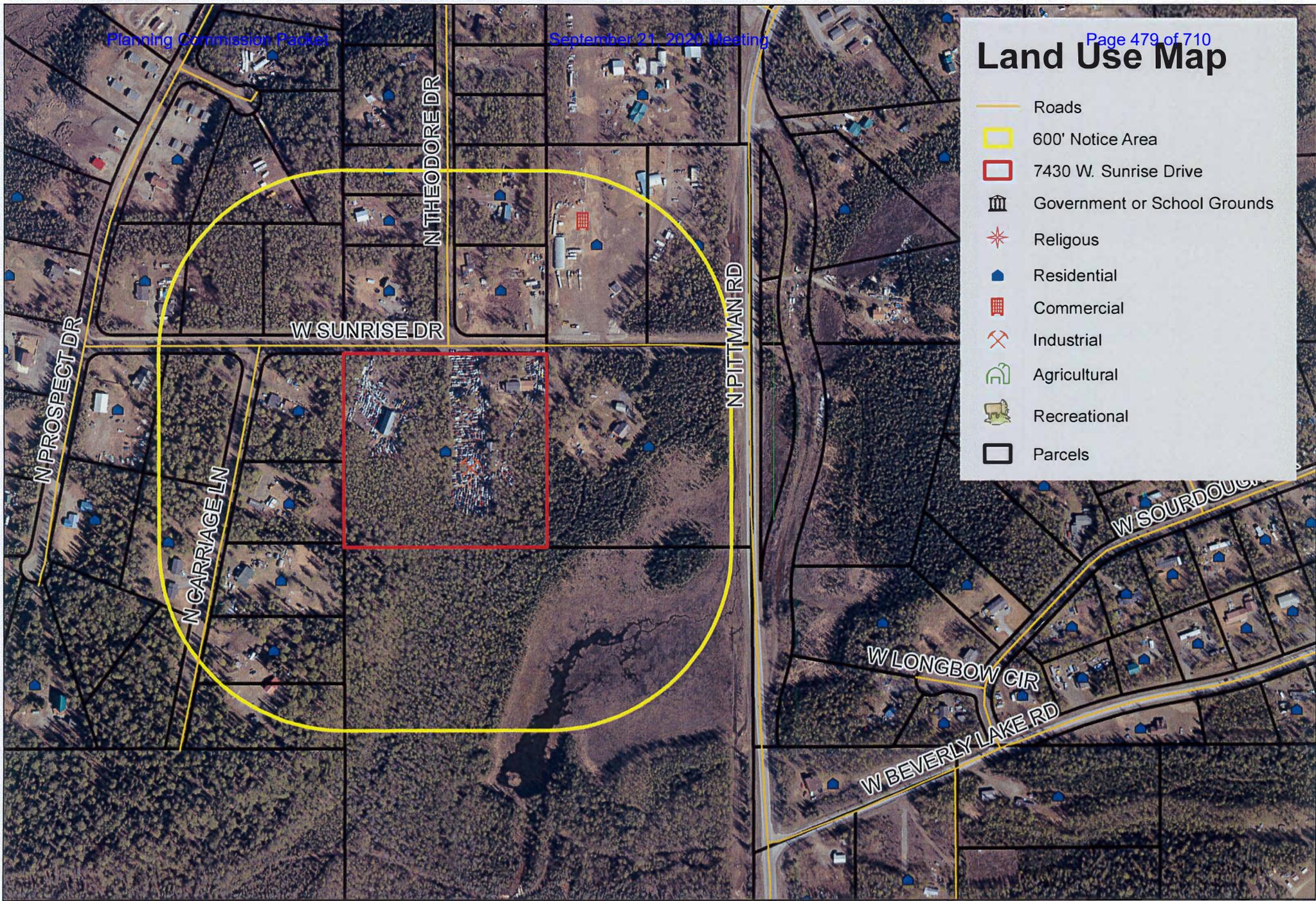
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Company Representing			Term	<input type="text"/> to <input type="text"/>
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Home	<input type="text" value="(907) 353-2280"/>	Work	<input type="text"/>	Cell <input type="text"/>
				E-mail <input type="text" value="cmich@mtaonline.net"/>

Information Contact	<input type="text" value="www.mlccak.org"/>
Total Board Members	<input type="text" value="12 Members"/>
Meeting Schedule	<input type="text" value="2nd Wednesday of each month at 7 p.m. (Please check the Notice of Public Meetings schedule at: www.matsugov.us/publicmeetings for meeting information.)"/>
Meeting Location	<input type="text" value="Birch Creek Villas (Meadow Lakes Senior Housing Complex)"/>
Board Notes	<input type="text" value="Established by RS 82-68"/>

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Land Use Map

-  Roads
-  600' Notice Area
-  7430 W. Sunrise Drive
-  Government or School Grounds
-  Religious
-  Residential
-  Commercial
-  Industrial
-  Agricultural
-  Recreational
-  Parcels



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7801.

Date: 12/4/2018

1 inch = 400 feet



Wetlands

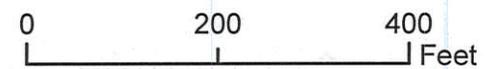
-  Roads
-  7430 W. Sunrise Drive
-  Creeks
-  Wetlands



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Date: 12/7/2018

1 inch = 200 feet





1985 Imagery

Roads

7430 W. Sunrise Drive

Parcels



W SUNRISE DR

1 inch = 100 feet



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Date: 12/4/2018





2004/2005 Imagery

Roads



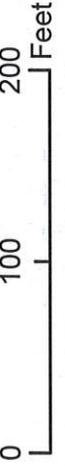
7430 W. Sunrise Drive



Parcels

W SUNRISE DR

1 inch = 100 feet



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Date: 12/4/2018



2011 Imagery

Roads



7430 W. Sunrise Drive



Parcels

W SUNRISE DR



1 inch = 100 feet



Date: 12/4/2018

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2016 Imagery



Roads



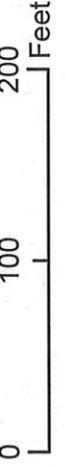
7430 W. Sunrise Drive



Parcels

W SUNRISE DR

1 inch = 100 feet



Date: 12/4/2018

This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanustka-Susitna Borough GIS Division at 907-861-7801.



2017 Imagery



Roads

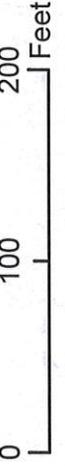
7430 W. Sunrise Drive

Parcels



W SUNRISE DR

1 inch = 100 feet



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matamoras-Sisitha Borough GIS Division at 907-961-7801.

Date: 12/4/2018



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Photographs taken by
Mark Whisenhunt, Planner II during the
November 16, 2018 site visit

























Alaska Business License #

1005035

Alaska Department of Commerce, Community, and Economic Development

Division of Corporations, Business and Professional Licensing
P.O. Box 110806, Juneau, Alaska 99811-0806

This is to certify that

D.C. AUTO SALES

7362 W PARKS HWY #372 WASILLA AK 99623

owned by

DEWAYNE CREECH

is licensed by the department to conduct business for the period

January 02, 2018 through December 31, 2018
for the following line of business:

42 - Trade



This license shall not be taken as permission to do business in the state without having complied with the other requirements of the laws of the State or of the United States.

This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.

Mike Navarre



Matanuska-Susitna Borough Business License #: 17033

350 E. Dahlia Ave, Palmer, Alaska 99645

Effective Date: DEC 31 2016

Expiration Date: DEC 31 2018

**This license must be prominently displayed.
It is not transferable or assignable.**

This license shall not be taken as permission to do business in the State without having complied with the other requirements of the laws of the State of Alaska or the United States.

DEPARTMENT OF FINANCE

D.C. AUTO REPAIR
CREECH DEWAYNE
7362 W PARKS HWY #372
WASILLA, AK 99654-0000

Business Location(s): 7430 SUNRISE

This is to certify that the licensee named above holds a Matanuska-Susitna Borough business license covering the period listed above.

Detach Here

D.C. AUTO REPAIR
CREECH DEWAYNE
7362 W PARKS HWY #372
WASILLA, AK 99654-0000

Fee Paid: \$100

License No.: MBL **17033**

Effective: DEC 31 2016 To DEC 31 2018

The above business has been licensed to conduct business in the Matanuska-Susitna Borough. The borough business license must be prominently displayed. When a business has more than one location, the original license shall be displayed at the main location and a copy of the license shall be displayed at each branch location. If the business is continued at the same location but there is a change in its form of organization, such as from a single proprietorship to a partnership or a corporation, the admission or withdrawal of a partner, or any other change, the seller making the change shall surrender his old borough business license to the borough for cancellation. When there is a change of location for the sellers place of business, the new business license is required showing the new address. Application for renewal of license shall be made before February 1 of the license year.



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Planning Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 745-9833 • Fax (907) 745-9876

Email: planning@matsugov.us

**MATANUSKA-SUSITNA BOROUGH
CREECH SALVAGE YARD
CONDITIONAL USE PERMIT# CUP 03-0001**

Pursuant to MSB 17.60, the Planning Commission of the Matanuska-Susitna Borough granted this permit on October 6, 2003 by approval of Planning Commission Resolution No. 03-42(AM).

THIS PERMIT IS ISSUED TO:

Dewayne Creech

This permit recognizes the right of the permittee or his lawful successor-in-interest to operate and use the following described premises:

SUBDIVISION: Wasilla West, Block 1, Lot 13 (1111B01L013)

T.R.S.M: Township 17 North, Range 2 West, Section 1, Seward Meridian

For the following use:

The outdoor storage of wrecked vehicles, in conformance with the approved application and site plan, a copy of which is attached hereto, and the conditions specific to Resolution No. 03-42(AM).

This permit grants no additional rights to the holders of the permit other than the identification of use which has been determined by the Borough to be authorized under MSB 17.60.

The violation of any condition of approval of this permit or of Federal, State, or Matanuska-Susitna Borough laws governing the permitted use may constitute grounds for revoking this permit or for other actions or penalties authorized by law. No use is permitted by this permit other than as specifically described, including all conditions and terms of this permit.

This decision may be appealed in accordance with MSB 15.39 Board of Adjustment and Appeals.

Mark Mayo
Mark Mayo, Director
Planning and Land Use Department

11/23/09
Date of Issuance

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MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION 03-42(AM)

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION APPROVING A CONDITIONAL USE PERMIT FOR THE OUTDOOR STORAGE OF WRECKED VEHICLES ON BLOCK 1, LOT 13, WASILLA WEST SUBDIVISION, OFF MILE 46 OF THE PARKS HIGHWAY, WITHIN TOWNSHIP 17 NORTH, RANGE 2 WEST, SECTION 1, SEWARD MERIDIAN.

WHEREAS, a conditional use permit application has been received from Dewayne Creek for the outdoor storage of wrecked vehicles, under the requirements of MSB 17.60; and

WHEREAS, the planning commission has reviewed the application with request to standards set forth in MSB 17.60.100 and 17.60.110; and

WHEREAS, the conditional use will not detract from the value, character and integrity of the surrounding areas as existing commercial uses surround this site and the covenants for Wasilla West Subdivision state that all lots within Block One are to be used for commercial purposes; and

WHEREAS, the granting of the conditional use permit will not be harmful to the public health, safety, convenience and welfare as the applicant will be fencing the storage yard with an eight foot high sight obscuring fence, which will insure that the proposed use does not detract from the value of the surrounding area; and

WHEREAS, hazardous material can be minimized, and pollution of ground and water resources can be prevented if proper precautions, procedures, and development design is implemented and maintained; and

WHEREAS, sufficient setbacks, lot area, buffers and other safeguards are being provided as the proposed shop building is shown in compliance with the setback requirements on the site plan and the storage yard will be gated and enclosed by an eight foot high sight obscuring fence; and

WHEREAS, the applicant is proposing to erect an eight foot high sight obscuring fence and the wrecked vehicles within the fenced area will not be visible; and

WHEREAS, vehicle dismantling and rebuilding may only occur in the shop building; and

WHEREAS, there are no churches, schools, hospitals, recreational areas, or public buildings in the surrounding area; and

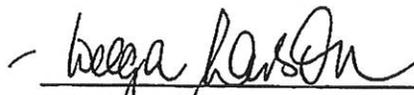
WHEREAS, the nearest permitted junkyard is over 2.5 miles to the west of this site.

NOW, THEREFORE, BE IT RESOLVED that the Matanuska-Susitna Borough Planning Commission does hereby approve the conditional use permit for Dewayne Creech for the outdoor storage of wrecked vehicles under MSB 17.60, subject to the following conditions:

1. Comply with all applicable federal, state and borough laws, statutes, regulations, and ordinances.
2. The eight foot high sight obscuring fence must be maintained in good repair.
3. The eight foot high sight obscuring fence will be erected prior to any wrecked vehicles being stored on the lot.
4. Obtain a driveway permit from the Borough Public Works Department.
5. Obtain a Borough business license.
6. The gate to the storage yard will remain locked when the site is not occupied.
7. All required parking and loading spaces conducted at the business shall be on site. There shall be one parking space onsite plus one parking space for each worker.
8. No dismantling or repair of vehicles to occur outdoors. Dismantling and repair of vehicles may occur within the shop building.
9. An impermeable surface with drainage management system shall be provided and used for draining, handling, processing and storage of all fluids, batteries, and hazardous materials. All such uses shall be in compliance with state and federal rules.

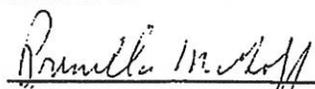
10. Discharges of hazardous substances are required to be reported to the Alaska Department of Environmental Conservation.
11. Prior to the abandonment of the conditional use permit, the owner shall remove all inoperable vehicles, vehicle parts, machine parts, and similar equipment stored outside and brought to the site in the course of operating this business.
12. Within sixty days of the issuance of the conditional use permit, the applicant shall submit a plan describing plans for hazardous waste handling and disposal measures as necessary to meet local, state, or federal standards. Operations will not begin until this plan has been approved by the Borough.
13. The conditional use permit is not valid until the Director of Planning and Land Use certifies that conditions 3, 4, 5, and 13 have been met.

ADOPTED by the Matanuska-Susitna Borough Planning Commission this 6th day of October 2003.



HELGA LARSON, Chair

ATTEST:



PRISCILLA M. GOFF, Planning Clerk

Inspections Link:

Inspection ID: **31899**

Inspection Date: **3/3/2017**

Status: c

Inspector: **KENDRA JOHNSON**

Check Out:

Letter Date: 04/05/2017

Contact Date: 04/10/2017

Notes:

3/3/2017 SV Photos taken; there are three vehicles meeting the definition of junk and trash - and some car parts.

Opening case for junk vehicles visible from public right of way.

4/5/2017 Notice of Violation letter to property owner notifying of the violation. klj

kj04506 - 4/5/2017 3:22:31 PM

4/10/2017 Received call from owner Dewayne Creech - he will have the vehicles

moved/removed/placed in the fencing by the end of this week. Will conduct a follow up site visit next week to confirm. klj

kj04506 - 4/10/2017 2:59:29 PM

Inspection ID: **32092**

Inspection Date: **5/12/2017**

Status: c

Inspector: **KENDRA JOHNSON**

Check Out:

Voluntary Compliance: 05/12/2017

Notes:

5/12/2017 SV Photos taken; Mr. Creech removed the 3 vehicles defined as junk and trash from in front of the fence; he added more vehicles, but none meet the definition of junk and trash. PROPERTY in compliance at this time. CLOSE CASE klj

kj04506 - 5/18/2017 4:11:46 PM

Inspections Link:

Inspection ID: **33030** Status: c
Inspection Date: **7/16/2017**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 7/16/2017 SV Photos taken; per the complainant - messages on the vehicles state they are inoperable and meet the definition of junk and trash; confirmed there are more than 3 inoperable vehicles parked outside the fencing area- screening them from public view.
 Opening case klj
 kj04506 - 8/19/2017 11:31:55 AM

Inspection ID: **33034** Status: c
Inspection Date: **8/16/2017**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photos taken - there were 14 subaru vehicles lining the MSB Right of Way of Machen Drive - all from the property owned by Mr. Creech. A worker of Mr. Creech showed up and said they 'do this all the time" Officer Ness and myself said this can not continue - it is blocking the MSB right of way and No matter if they move them during the same day - they can not use the MSB ROW as their parking. TAgged all 14 vehicles with Impound Notices to track the work done. klj
 IMPOUND NOTICE IN:0011 tagged on Subaru Imprza Vin JF1GF63528H.... rest was blocked klj
 kj04506 - 8/21/2017 2:11:33 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0011
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33035** Status: c
Inspection Date: **No Date Assigned**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV - Subaru Outback - Green & Gray VIN 4S3B06854X7603624 Tagged in ROW of Machen Road.
 kj04506 - 8/21/2017 2:21:33 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0012
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33036** Status: c
Inspection Date: **No Date Assigned**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Tagged Imound Notice IN:0013 on Subaru Forester (Silver) Plate DMW962 for being in MSB ROW
 kj04506 - 8/21/2017 2:26:11 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0013
 Served: 08/16/2017
 To Court:

EO Date:
SOA #:

EO #:

Inspection ID: **33037**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **KENDRA JOHNSON**

Check Out:

Notes:

8/16/2017 SV Photos taken; Impound Notice IN:0014 tagged on Subaru Outback/legacy Green VIN 4S3BG6858W7659886 for being in MSB ROW
kj04506 - 8/21/2017 2:27:35 PM

Citation Status:

Date: 08/16/2017
Served: 08/16/2017
To Court:
EO Date:
SOA #:

Number: IN:0014

EO #:

Inspection ID: **33039**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **KENDRA JOHNSON**

Check Out:

Notes:

8/16/2017 SV Photo taken; Tagged Impound Notice IN:0015 on Subaru Outback (Yellow) Vin # 4S3BG6859W7631482 for blocking/parking in MSB ROW klj
kj04506 - 8/21/2017 2:32:20 PM

Citation Status:

Date: 08/16/2017
Served: 08/16/2017
To Court:
EO Date:
SOA #:

Number: IN:0015

EO #:

Inspection ID: **33040**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **KENDRA JOHNSON**

Check Out:

Notes:

8/16/2017 SV Photo taken; Impound Notice IN:0016 tagged on Subaru Impreza RS - Blue VIN # 1F1GM6758XG401021 for blocking/parking in MSB ROW
kj04506 - 8/21/2017 2:35:41 PM

Citation Status:

Date: 08/16/2017
Served: 08/16/2017
To Court:
EO Date:
SOA #:

Number: IN:0016

EO #:

Inspection ID: **33043**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **KENDRA JOHNSON**

Check Out:

Notes:

8/16/2017 SV Photo taken; impound NOTcie IN:0017 tagged on Subaru outback Green VIN # 4S3BK435XV7320152 for being parked/blocking MSB ROW
kj04506 - 8/21/2017 2:41:47 PM

Citation Status:

Date: 08/16/2017

Number: IN:0017

Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33044**
Inspection Date: **No Date Assigned** Status: c
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0018 tagged on Subaru Legacy Outback - Red Vin # 4S3BG6855W6632568 for being parked/blocking MSB ROW
 kj04506 - 8/21/2017 2:43:08 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0018
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33045**
Inspection Date: **No Date Assigned** Status: c
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0019 tagged on Subaru Outback White Plate # DWU677 for blocking/parked in MSB Right of Way. klj
 kj04506 - 8/21/2017 2:44:10 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0019
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33046**
Inspection Date: **No Date Assigned** Status: c
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0020 tagged on Subaru Outback Green/Gray VIN # 4S3BH6456Y7310652 for parking/blocking MSB ROW
 kj04506 - 8/21/2017 2:46:11 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0020
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33047**
Inspection Date: **No Date Assigned** Status: c
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0021 tagged on Subaru Legacy LS (Periwinkle/mauve) Plate GUL312 for being parked/blocking MSB ROW. klj
 kj04506 - 8/21/2017 2:47:33 PM

Citation Status:

Date: 08/16/2017 Number: IN:0021
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33048** Status: c
Inspection Date: **No Date Assigned**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0022 tagged on Subaru Outback Champaign/tan plate GXZ315 for being parked/blocking MSB ROW
 kj04506 - 8/21/2017 2:48:37 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0022
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33049** Status: c
Inspection Date: **No Date Assigned**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0023 tagged on Subaru Forester White - Plate # DWK927 for being parked/blocking MSB ROW. klj
 kj04506 - 8/21/2017 2:50:05 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0023
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33050** Status: c
Inspection Date: **No Date Assigned**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0024 tagged on Subaru Outback Navy/Gray Vin # 4S3BG6854W6621108 for being parked/blocking MSB ROW
 kj04506 - 8/21/2017 2:51:08 PM

Citation Status:
 Date: 08/16/2017 Number: IN:0024
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33051** Status: c
Inspection Date: **No Date Assigned**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/16/2017 SV Photo taken; Impound Notice IN:0025 tagged on Subaru Outback- White Vin # 4S3BG6851T7377410 for being parked/blocking MSB ROW
 kj04506 - 8/21/2017 2:52:49 PM

Citation Status:

Date: 08/16/2017 Number: IN:0025
 Served: 08/16/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **33052** Status: c
Inspection Date: **8/18/2017**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 8/18/2017 SV Photos taken; all 14 vehicles (subarus) tagged with impound notices on 8/16/2017 have been removed from MSB ROW and placed back on property. klj
 kj04506 - 8/21/2017 2:54:45 PM

Inspection ID: **34087** Status: c
Inspection Date: **10/31/2017**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 10/31/2017 SV Photos taken;
 10/31/2017 IMPOUND NOTICE IN:0218 put on Green Subaru Outback w/Gray bottom VIN # 4S3BH665817645348 tires barely off the pavement and in the MSB Right of Way constituting a hazard w/sweeper and if needed sanders/plows. klj
 kj04506 - 11/1/2017 1:59:55 PM

Citation Status:

Date: 10/31/2017 Number: IN:0218
 Served: 10/31/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **34088** Status: c
Inspection Date: **10/31/2017**
 Inspector: **KENDRA JOHNSON** Check Out:

Notes:
 10/31/2017 IMPOUND Notice IN:0217 prepared and placed on Black Pontiac for being in MSB ROW/ Parked blocking if sanding/plowing or sweeping needs done in MSB Right of Way.

kj04506 - 11/1/2017 2:03:14 PM

Citation Status:

Date: 10/31/2017 Number: IN:0217
 Served: 10/31/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **34392** Status: c
Inspection Date: **11/3/2017**
 Inspector: **KENDRA JOHNSON** Check Out:

Voluntary Compliance: 11/03/2017

Notes:
 11/3/2017 SV Photos taken; the two vehicles were removed from MSB Right of way and placed back onto property klj
 kj04506 - 11/27/2017 11:55:24 AM
 Close Case klj
 kj04506 - 11/27/2017 12:10:54 PM

J20170018 5/12/2017
Photo By CCO Kendra Johnson



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Matanuska-Susitna Borough
350 E. Dahlia Ave, Palmer, Alaska 99645
Code Compliance
Case Summary

J20160162

General Information:

Parcel #: 56405000L006

Owner: CREECH DEWAYNE E
PMB 372
7362 W PARKS HWY
WASILLA, AK 99654-9132
CREECH DEWAYNE E
PMB 372
7362 W PARKS HWY
Site Address: 736 W SUNRISE DR
WASILLA, AK 99654-9132
CREECH DEWAYNE E
PMB 372
7362 W PARKS HWY
WASILLA, AK 99654-9132

Request Date: 9/12/2016 12:00:00AM
Start Date:
Expiration Date:
Closed Date:
Reporting By:

Linked Names:

Applicant: CREECH DEWAYNE E
Owner: CREECH DEWAYNE E
Code Comp Officer: PAMELA NESS

Linked Parcels:

56405000L006

Notes and Responses:

JUNK CARS OFF PROPERTY PARKED ALONG AND INTO THE ROW Operating a Junk/Refuse area without a CUP

mo04424 - 9/12/2016 3:31:15 PM
pn04478 - 11/14/2016 2:58:53 PM

Forms Tab Information:

TRS: Tax ID: MSB Code: 8.50

Inspections Link:

Inspection ID: **30558**
Inspection Date: **11/9/2016** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit 12 photos. Vehicles out along the road in the ROW. Property being used to store junk vehicles and junk. No CUP. Warning citation issued.
 pn04478 - 11/14/2016 3:00:58 PM

Citation Status:
 Date: 11/09/2016 Number: WN0717
 Served: 11/09/2016
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **30941**
Inspection Date: **12/7/2016** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Mr. Creech came in and spoke with Mark Whisenhunt regarding a CUP for Junk Refuse Area. He will be submitting the permit when he has all the attachments and other documentation needed.
 pn04478 - 12/7/2016 9:59:40 AM

Inspection ID: **31879**
Inspection Date: **3/21/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit photos taken. No change. Citation to be issued next site visit.
 pn04478 - 3/24/2017 2:17:17 PM

Inspection ID: **32650**
Inspection Date: **7/10/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. No change. Citation issued.
 pn04478 - 7/11/2017 12:00:20 PM

Citation Status:
 Date: 07/10/2017 Number: MSBZP00444057
 Served: 07/11/2017
 To Court:
 EO Date: EO #:
 SOA #:

Inspection ID: **32879**
Inspection Date: **7/12/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit to serve citation.
 pn04478 - 8/3/2017 3:07:09 PM

Inspection ID: **33307**
Inspection Date: **8/4/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. Vehicles still being parked in the ROW. Will call the owner to ask him to move them.
 pn04478 - 9/6/2017 12:52:08 PM

Inspection ID: **33542**
Inspection Date: **9/15/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. Vehicles still being parked in the ROW. Citation next site visit.
 pn04478 - 9/26/2017 10:47:36 AM

Inspection ID: **33543**
Inspection Date: **9/20/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. Spoke with the property owner and informed him he could not park his vehicles in the ROW.
 Site visit in the afternoon revealed most of the vehicle had been removed from the ROW.
 pn04478 - 9/26/2017 10:48:41 AM

Inspection ID: **33945**
Inspection Date: **10/10/2017** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. No vehicles being parked in the ROW. All vehicles are on the property now. Vehicles moved
 away from other entrances and it appears gates will be installed.
 pn04478 - 10/24/2017 4:45:59 PM

Inspection ID: **34985**
Inspection Date: **2/1/2018** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. New cars being brought on site. No cars parked along the road but some of the vehicles are
 parked so part of the vehicle is in the ROW. I will continue to monitor the property.
 pn04478 - 2/15/2018 4:14:50 PM

Inspection ID: **36193**
Inspection Date: **6/20/2018** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. Cars parked along the ROW. Mr. Creech talked to on site and said the vehicles would be
 moved back on the lot that day. They were just placed on the road to facilitate moving vehicles around
 on the lot.
 ness0607 - 10/10/2018 10:55:52 AM

Inspection ID: **36194**
Inspection Date: **9/13/2018** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:
 Site visit. Vehicle found in the ROW again. Vehicles tagged for impound.
 ness0607 - 10/10/2018 10:57:39 AM

Citation Status:

Date:	09/13/2018	Number:	IN0036
Served:	09/13/2018		
To Court:			
EO Date:		EO #:	
SOA #:			

Inspection ID: **36195**
Inspection Date: **No Date Assigned** Status: c
 Inspector: **PAMELA NESS** Check Out:

Notes:

Vehicle tagged for impound.
ness0607 - 10/10/2018 10:58:45 AM

Citation Status:

Date: 09/13/2018 Number: IN0057
Served: 09/13/2018
To Court:
EO Date: EO #:
SOA #:

Inspection ID: **36196**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **PAMELA NESS**

Check Out:

Notes:

Vehicle tagged for impound.
ness0607 - 10/10/2018 10:59:46 AM

Citation Status:

Date: 09/13/2018 Number: IN0039
Served: 09/13/2018
To Court:
EO Date: EO #:
SOA #:

Inspection ID: **36197**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **PAMELA NESS**

Check Out:

Notes:

Vehicle tagged for impound.
ness0607 - 10/10/2018 11:00:41 AM

Citation Status:

Date: 09/13/2018 Number: IN0038
Served: 09/13/2018
To Court:
EO Date: EO #:
SOA #:

Inspection ID: **36198**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **PAMELA NESS**

Check Out:

Notes:

Vehicle tagged for impound.
ness0607 - 10/10/2018 11:01:47 AM

Citation Status:

Date: 09/13/2018 Number: IN0037
Served: 09/13/2018
To Court:
EO Date: EO #:
SOA #:

Inspection ID: **36199**

Inspection Date: **No Date Assigned**

Status: c

Inspector: **PAMELA NESS**

Check Out:

Notes:

Vehicle tagged for impound.
ness0607 - 10/10/2018 11:02:39 AM

Citation Status:

Date: 09/13/2018
Served: 09/13/2018
To Court:
EO Date:
SOA #:

Number: IN0056

EO #:

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WARNING NOTICE
MATANUSKA-SUSITNA BOROUGH
VIOLATION OF CODE - COMPLIANCE REQUIRED

WN 0717

NO. 120160162 DATE: ^{AN} 11/9/16
(CASE NUMBER)

Issued To: CREECH DEWAYNE E.
LAST FIRST MIDDLE

Physical Address: 7430 W. SUNRISE DRIVE, WASILLA

Mailing Address: PMB 372 7362 W. PARKS HWY

City: WASILLA State: AK Zip: 99654-9132

On 11/9/16 the following violations of MSB Code appear to have occurred.

- Public Nuisance - Junk and Trash MSB 8.50.020
- Encroachment Permits MSB 11.10 _____
- Lake Management Plan Limitations MSB 17.59 _____
- Motorized Uses on Lakes & Waterways MSB 17.58 _____
- Fireworks MSB 8.35 _____
- Littering / Solid Waste Disposal MSB 8.05 _____
- Unauthorized Use of Borough Owned Real Property MSB 23.05.050 _____
- Other CONDITIONAL USES MSB 17.60.030(A)(1)
PERMIT REQUIRED

Located Upon: PROPERTY TRS 18NOV133
Subdivision: PHILLIPS UNIT #2 Block - Lot 6
MSB Tax ID #: 6405000L006

If these violation(s) are not corrected as required, further enforcement (per MSB 1.45) may occur, including fines and other penalties.

COMPLIANCE REQUIRED: Within 30 days from the date of receipt of this notice the following actions are required:

REMOVE ALL VEHICLES ALONG ROAD/ROW
SUBMIT APPLICATION FOR CUP FOR
JUNK/REFUSE AREA TO BE ALLOWED TO STORE
PERSONAL SERVICES ON SITE.

Other Delivery: Posting Certified Mail (Cert No. _____)

ISSUED BY: OFFICER NESS 11/9/16
(Print) (Date)

Signature: [Signature] 907.861.8562
(Borough Representative) (Phone Contact)

(MSB COPY)

Defendant

CREECH, DeWAYNE E

Agency ID MSBP

P 00444057

Plaintiff

MATANUSKA-SUSITNA BOROUGH Agency CODE COMPLIANCE

Agency case # J20160162

CITATION FOR [X] MINOR OFFENSE [] CRIMINAL OFFENSE [] UNDER 21 REFUSAL/DRIVING OFFENSE

F&G Offense charged as strict liability violation [] Yes [X] No

District Court at PALMER

Judicial District: 3rd

Court Case#

DEFENDANT

DOB 4/25/68 Age 49 Driver's Lic _____ State _____ Class _____ APSIN ID _____

Hair _____ Eyes _____ Race _____ Sex _____ Ht _____ Wt _____ Ph _____ Wk Ph 3769832

Res Addr 7430 W. SUNRISE DR., WASILLA, AK 99654

Mail Addr Same PMB 372 7362 W. PARKS HWY, WASILLA Employer SELF EMPLOYED

VEHICLE

Lic/Reg _____ St _____ Expires _____ Yr _____ Make _____ Model _____ Color _____ ADF&G _____

Commercial: Over 10,000 lbs Over 26,000 lbs Over 15 psngr HazMat DOT INSP# _____ USDOT# _____

OFFENSE

Date 7/10/17 Time 16:04hrs ATN _____ CTN _____ Code _____

Location 7430 W. SUNRISE DR. Loc. Code _____ Hwy Work Zone Safety Corridor

Statute Regulation Ordinance Adopted by reference Section MSB 17.60.030(A)(1)

Offense: OPERATING WITHOUT A CONDITIONAL USE PERMIT 1ST OFFENSE

Over Limit _____ MPH in a _____ MPH Zone Damage Only Injury Fatality Commercial Fishing

STORING HUNDREDS OF CARS ON THE PROPERTY AND USING THE PROPERTY AS A JUNK REFUSE OPERATION WITHOUT A CONDITIONAL USE PERMIT

Item(s) Seized that can be forfeited per AS 16.05.190, AS 04.16.205 or other statute/ordinance (list other statute/ordinance: _____):

Game Restitution amount for _____ taken illegally: \$ _____ AS 16.05.925(b) for mandatory appearance offense only.

PENALTY Driver License Points _____ Bail/Fine* \$ 150⁰⁰ Surcharge \$ 10⁰⁰ Total Due \$ 160⁰⁰

*Fine must include base amount plus additional per item amounts per bail forfeiture schedule.

I have probable cause to believe defendant committed the above offense. I certify under penalty of perjury that the above information is true and that

- I personally handed it to defendant on the date shown below.
- I left it on property that is the subject of the offense on the date shown below.
- this citation will be served by a Civil Rule 4 method of service that requires a separate proof of service at filing.

[Signature] PAMELA NESS RPLND 7/12/2017

Officer's Signature Officer's Printed Name ID Date

REQUIRED RESPONSE

MANDATORY COURT APPEARANCE. For criminal or under 21 refusal/driving offenses you must appear on _____ at _____ AM/PM. If you fail to appear, a warrant will be issued for your arrest.

For a minor offense, you must appear on _____ at _____ AM/PM or request a trial date. If you fail to appear and did not request a trial date, a default judgment will be entered against you as explained on the back of this citation. Court's physical address: _____

CORRECTABLE. This citation will be dismissed if, within 30 days, you:

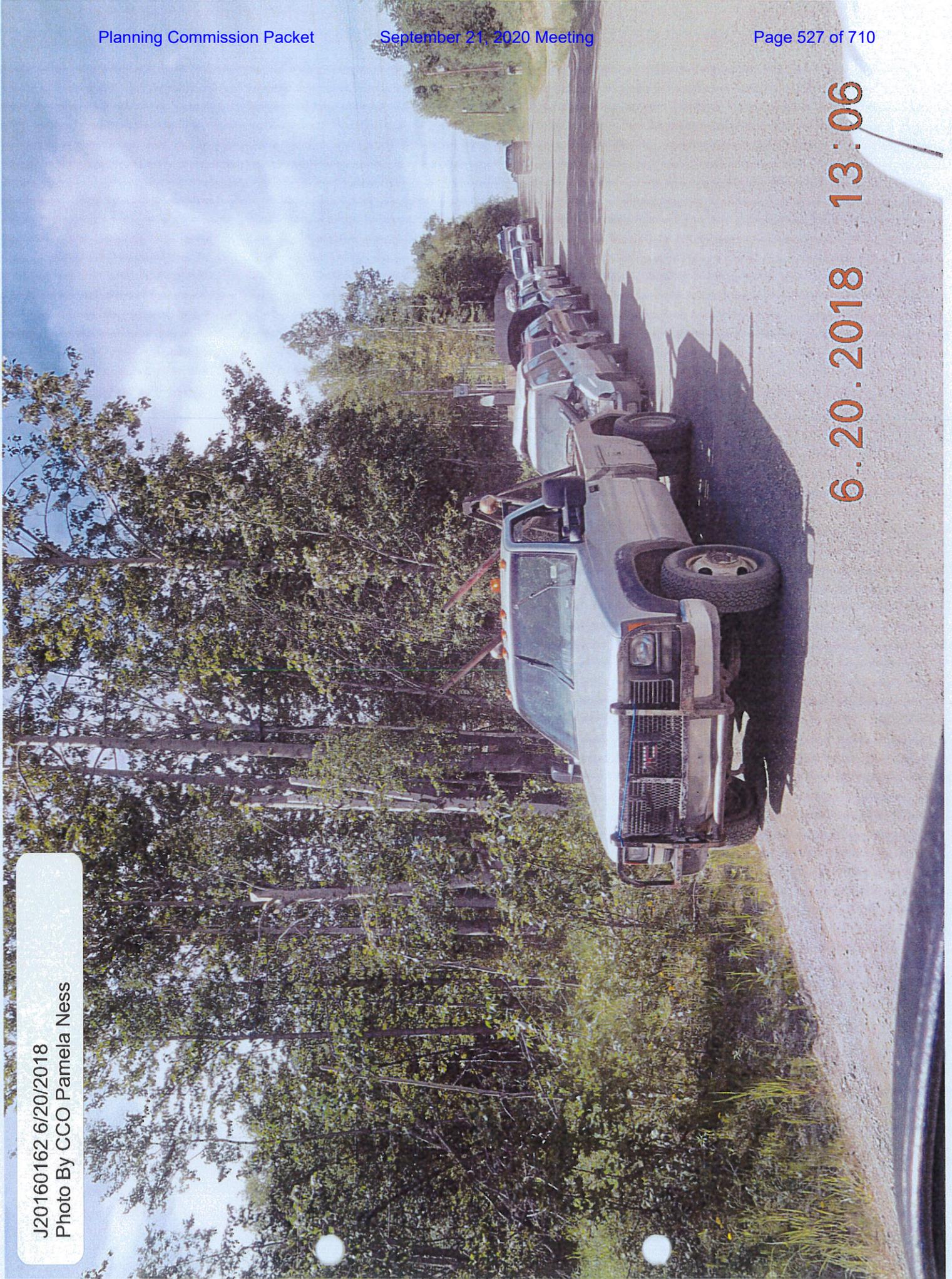
- Correct the defect and present the vehicle for inspection
- Show proof that you had a license or insurance that was valid when this citation was issued at any Alaska State Trooper Post or _____

If you do not, you must pay online or fill out the back of this form and mail it **within 30 days** to: (court or city) _____

OPTIONAL COURT APPEARANCE. Within 30 days you must pay online or fill out the back of this form and mail it to: (court or city mailing address) 435 S. DENALI WAY, PALMER, AK 99645

If you come to court, bring this citation with you. If you are under 18, you must bring your parent or legal guardian.

J20160162 6/20/2018
Photo By CCO Pamela Ness



6.20.2018 13:06

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3PA-17-05696MO Matanuska-Susitna Borough vs. Creech, Dewayne E

- Case Type:
- Minor Offense (3PA)
- Case Status:
- Closed
- File Date:
- 07/14/2017
- Case Judge:
- Traffic Magistrate Judge- Palmer

[All Information](#) |
 [Party](#) |
 [Charge](#) |
 [Ticket/Citation #](#) |
 [Event](#) |
 [Docket](#) |
 [Financial](#) |
 [Receipt](#) |
 [Financial Dockets](#)

Party Information

Creech, Dewayne E

- DOB
- 04/25/1968
-
-

Matanuska-Susitna Borough

- DOB
-
-

Party Charge Information

Creech, Dewayne E

- - Defendant
- Charge # 1 :
- **MSB1760030-V1 - Infraction (Non-Criminal)** MSB17.60.030: Operating w/o a Conditional Use Perm

- | | |
|--|--|
| <ul style="list-style-type: none"> • Original Charge • MSB1760030-V1 MSB17.60.030: Operating w/o a Conditional Use Perm (Infraction (Non-Criminal)) • Indicted Charge • Amended Charge • DV Related? • Modifiers • Stage Date • 07/18/2017 | <ul style="list-style-type: none"> • Ticket # • MSBPP00444057 • Tracking # • Offense Location • Date of Offense • 07/10/2017 |
|--|--|

Party Charge Disposition

Disposition Date
 Disposition
 10/04/2017
 Conviction After No Contest Plea

Ticket/Citation

Citation # : MSBPP00444057 - Matanuska-Susitna Borough

- Offense Date
- 07/10/2017
- Agency

Events

<u>Date/Time</u>	<u>Location</u>	<u>Type</u>	<u>Result</u>	<u>Event Judge</u>
10/04/2017 02:30 PM	Courtroom 1, Palmer Courthouse	Arraignment: Minor Offense (3PA)	Case Disposed	Condie, Craig S

Docket Information

<u>Date</u>	<u>Docket Text</u>	<u>Amount Owed</u>	<u>Amount Due</u>
07/14/2017	Minor Offense Citation or Other Charging Document Filed		
07/14/2017	Fine Due Charge #1: Originating - MSB17.60.030: Operating w/o a Conditional Use Permit-1st Offense Receipt: 1447686 Date: 10/04/2017	\$150.00	\$0.00
07/14/2017	Police Training Surcharge Charge #1: Originating - MSB17.60.030: Operating w/o a Conditional Use Permit-1st Offense Receipt: 1447686 Date: 10/04/2017	\$10.00	\$0.00
08/23/2017	Warning Notice for Failure to Respond to Citation Sent to Defendant		
10/04/2017	Judgment is entered against the defendant as follows: Fine: The amount of fine listed in the Fine docket Surcharge: A police training surcharge required by AS 12.55.039, if the fine is \$30 or more. Costs: If the fine is transferred for collection to the State or Municipal Collections Unit, a \$25 collection cost fee will be imposed Forfeitures: All items listed on the citation which are authorized by statute or ordinance to be forfeited are ordered forfeited. For all other orders, refer to the official judgment. In a minor offense case, the official judgment is the electronic record in the case management system. Minor Offense Rule 20(a). Charge #1: Originating - MSB17.60.030: Operating w/o a Conditional Use Permit-1st Offense		
10/04/2017	Case Closed		

Financial Summary

<u>Cost Type</u>	<u>Amount Owed</u>	<u>Amount Paid</u>	<u>Amount Adjusted</u>	<u>Amount Outstanding</u>
Fine	\$150.00	\$150.00	\$0.00	\$0.00
Surcharge	\$10.00	\$10.00	\$0.00	\$0.00
Total	Total	Total	Total	Total
	\$160.00	\$160.00	\$0.00	\$0.00

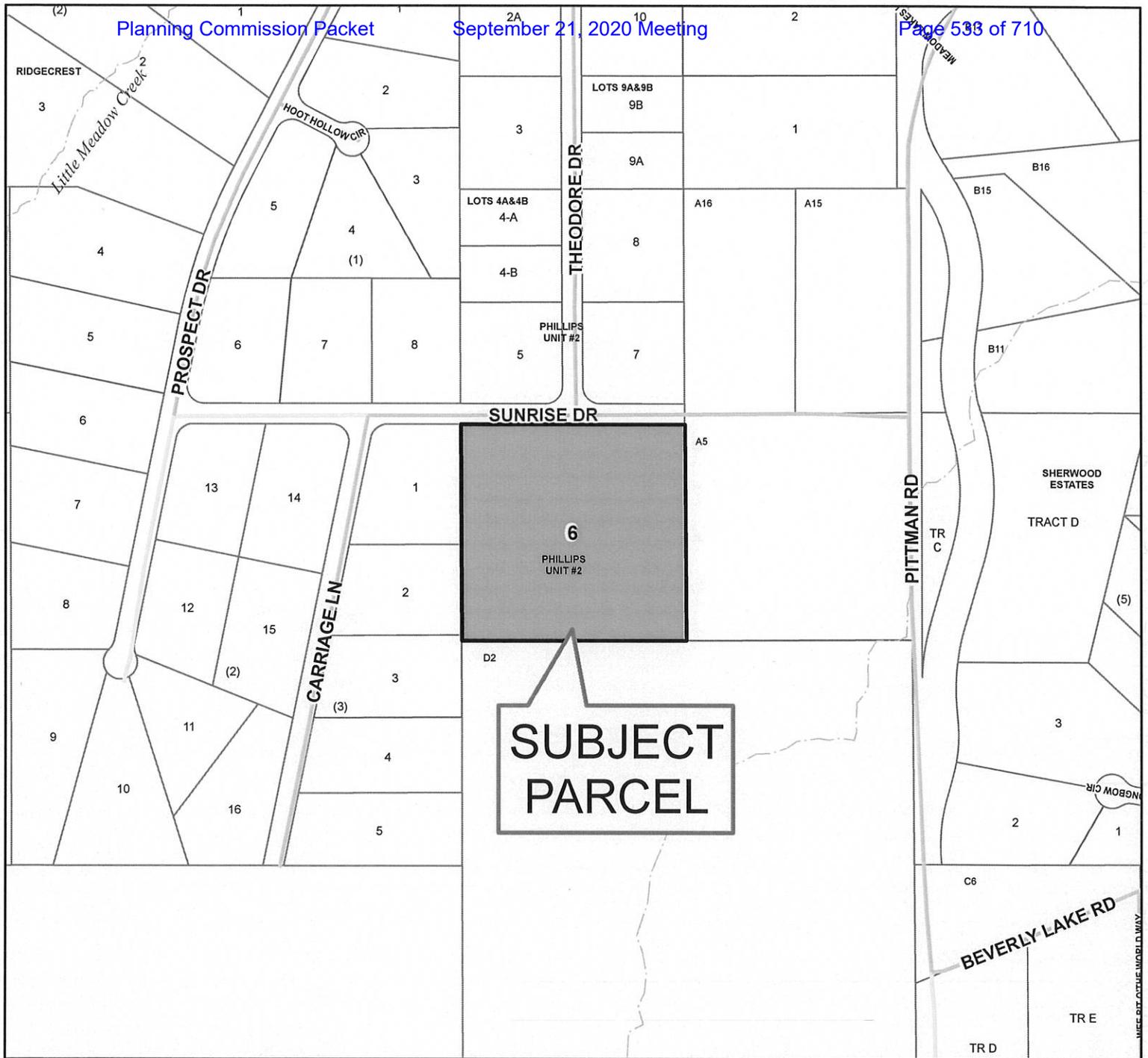
Receipts

<u>Receipt Number</u>	<u>Receipt Date</u>	<u>Payment Amount</u>
1447686	10/04/2017	\$160.00
Total	Total	Total
		\$160.00

Financial Docket Information

<u>Date</u>	<u>Description</u>	<u>Owed</u>	<u>Adjusted</u>	<u>Paid</u>	<u>Due</u>	<u>Due Date</u>
07/14/2017	Fine Due	\$150.00	\$0.00	\$150.00	\$0.00	
07/14/2017	Police Training Surcharge	\$10.00	\$0.00	\$10.00	\$0.00	
Total	Total	Total	Total	Total	Total	Total
		\$160.00	\$0.00	\$160.00	\$0.00	

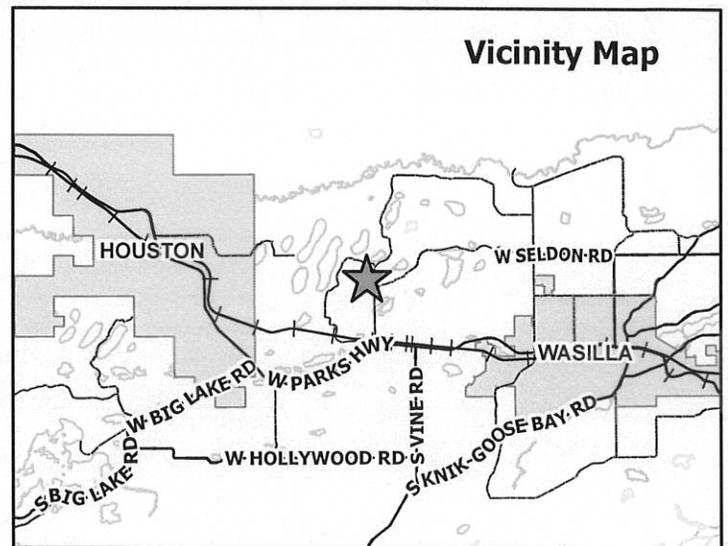
VICINITY MAP



6405000L006



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7801.



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SITE PLAN



HANSON SURVEYING & MAPPING LLC
305 E. FIREWEED AVE.
PALMER, ALASKA 99645
(907) 746-7738

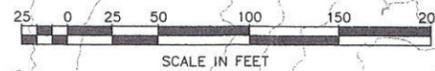
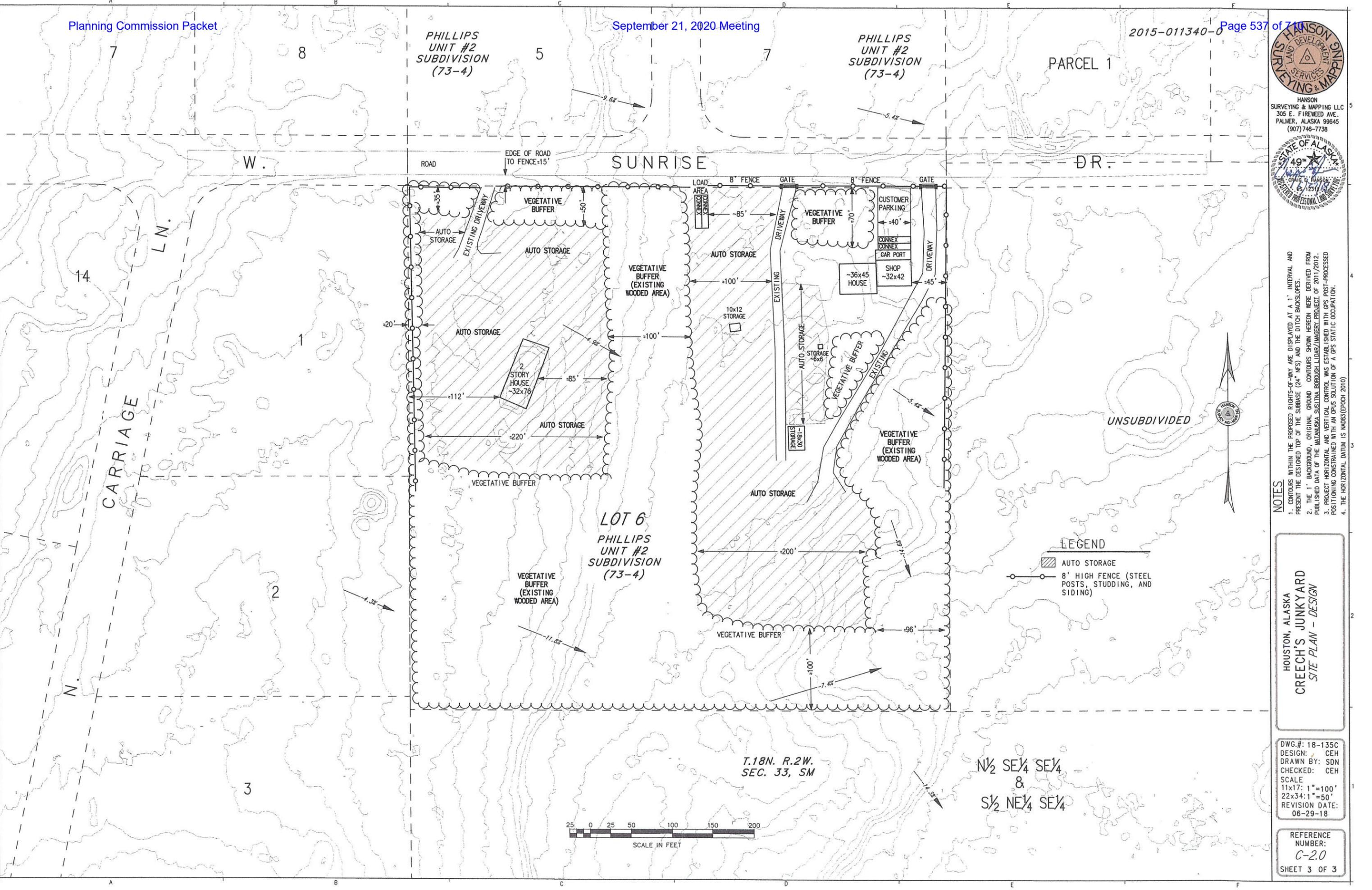


- NOTES**
1. CONTOURS WITHIN THE PROPOSED RIGHTS-OF-WAY ARE DISPLAYED AT A 1' INTERVAL AND PRESENT THE DESIGNED TOP OF THE SUBBASE (24" NFS) AND THE DITCH BACKSLOPES.
 2. THE 1' BACKGROUND, ORIGINAL GROUND CONTOURS SHOWN HEREON WERE DERIVED FROM PUBLISHED DATA OF THE MATANUSKA SUSTAINABLE BOROUGH LIDAR/IMAGERY PROJECT OF 2011/2012.
 3. PROJECT HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED WITH GPS POST-PROCESSED POSITIONING CONSTRAINED WITH AN OPUS SOLUTION OF A GPS STATIC OCCUPATION.
 4. THE HORIZONTAL DATUM IS NAD83(EPOCH 2010).

HOUSTON, ALASKA
CREECH'S JUNKYARD
SITE PLAN - DESIGN

DWG.#: 18-135C
DESIGN: CEH
DRAWN BY: SDN
CHECKED: CEH
SCALE
11x17: 1"=100'
22x34: 1"=50'
REVISION DATE:
06-29-18

REFERENCE NUMBER:
C-20
SHEET 3 OF 3



LEGEND

- AUTO STORAGE
- 8' HIGH FENCE (STEEL POSTS, STUDDING, AND SIDING)

LOT 6
PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

T.18N. R.2W.
SEC. 33, SM

N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$
&
S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

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APPLICATION MATERIAL



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-7876

Email: permitcenter@matsugov.us

APPLICATION FOR A JUNKYARD CONDITIONAL USE PERMIT – MSB 17.60

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

RECEIVED
SEP 20 2017
PERMIT CENTER

Application fee must be attached:

\$1,000 for Junkyard Conditional Use Permit

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made prior to the application presentation before the Borough Planning Commission.

Subject Property Township: 18N, Range: 2W, Section: 33, Meridian S

MSB Account # 64050002006

SUBDIVISION: Phillips BLOCK(S): Unit 2, LOT(S): 6

STREET ADDRESS: 7430W. Sunrise Dr. Wasilla, AK 99623

(US Survey, Aliquot Part, Lat. /Long. etc) Plat# 73-4

Ownership A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached? Yes No N/A

Name of Property Owner

Name of Agent/ Contact for application

Dewayne Creech

Address: 7362 W. Parks Hwy #372
Wasilla, AK 99623

Phne: Hm _____ Fax _____

Wk _____ Cell 229-9832

E-mail dcsubam@yahoo.com

In order to grant a conditional use permit under MSB 17.60, the Planning Commission must find that each of the following requirements have been met. Explain the following in detail:	Attached
1. Is the conditional use compatible with and will it preserve or not materially detract from the value, character and integrity of the surrounding area?	✓
2. Will the granting of the conditional use permit be harmful to the public health, safety, convenience and welfare?	✓
3. Are sufficient setbacks, lot area, buffers and other safeguards being provided?	✓
4. Does the conditional use fulfill all other requirements of MSB Chapter 17.60 pertaining to the conditional use in this section?	✓

OWNER'S STATEMENT: I am owner of the following property:

MSB Tax parcel ID #(s) 6405000L006 and, I hereby apply for approval a junkyard conditional use permit on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.60 and with all other applicable borough, state or federal laws.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit and zoning status may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to the buyer when I sell the land.

I understand that changes from the approved conditional use permit may require further authorization by the Borough Planning Commission. I understand that failure to provide applicable documentation of compliance with approved requirements, or violation of such requirements will nullify legal status, and may result in penalties.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Dwayne Creech Dwayne Creech 7-13-17
Signature: Property Owner Printed Name Date

Signature: Agent Printed Name Date

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To Matsu Borough

From Dewayne Creech
Conditional Use Permit Applicant

I have been licensed to perform auto repair at this location since aprox 2004. I am applying for a conditional use permit, due to borough requirements. I am not licensed as a wrecking yard at this property, because that was not my intention. I was using the property to store cars, which falls under part of the definition of a wrecking yard.

I have lived at this location since 2003. At that time there were no obvious commercial businesses. Since then, the entire block, with one exception has been turned into commercial use. This subdivision has no conveniences that restrict business use. It is unzoned.

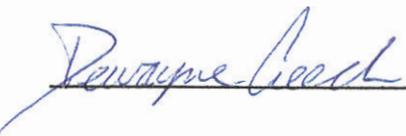
I have agreed to have an 8' tall sight obscuring fence erected in the place of the already existing 6' fence which extends aprox. 300' across the front facing portion of the property. The fence was erected on my own behalf, without any requirements from the borough at the time. This was out of consideration to the neighborhood. The set back on the fence is also 15' from the edge of the road, which meets borough requirements. In addition, I have proposed that more fencing be erected aprox. 300' down the sides of the property.

There has been no damage to the road by the use of my trucks, any more than other traffic. I do not use the mail box access for parking. There has been times, mostly during the summer, when vehicles are being taken to the car crusher. That I've used the side of the road to temporarily park cars on, to be able to get others out. Since I've talked to the borough about this, I have been very diligent about avoiding this.

Automotive work that involves oils or fluids, is performed inside a shop, with concrete floors. Fluids are contained and stored in 2 containers, less than 50 gallons and are then recycled.

Since I live and work here, with young children and animals, I'm very cautious with how fluids are handled. In the last two years, I've acquired 4 connexs to store misc car parts in, rather than keeping the whole cars. This is my ongoing plan. During this process, there has been a lot of moving around and organizing of cars, to reduce the number of cars on the property. By the end of next summer, I plan to remove at least an additional 100 cars from the property. I have contracted help to assist in the work.

I would like to be a valued member in my neighborhood. I am willing to comply with whatever standards are put into place to be able to continue business without adversely impacting my neighbors.


Date 12-3-18Matanuska - Susitna Borough
Development Services

DEC 03 2018

Received

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Untitled

Matanuska - Susitna Borough
Development Services

JUL 12 2018

Received

D.C. Subaru
Salvage Yard Permit Information

1. General

- a. Is the conditional use compatible with and will it preserve or not materially detract from the value, character and integrity of the surrounding area?

The property will be used in a way that will not detract from the value, character and integrity of the surrounding area. Making it compatible.

- b. Will the granting of the conditional use permit be harmful to the public health, safety, convenience and welfare.

The proposed used shows no indication that it would be harmful to the public's health, safety, convenience or welfare.

- c. Are sufficient setbacks, lot area, buffer and other safeguards being provided?

As illustrated in the site plan, all existing structures comply with borough setback requirements. Sufficient buffering has been achieved in some areas and will be modified as necessary to ensure compliance. Proposed buffering by the means of an 8 foot tall solid metal fence in green so as to blend with natures foliage. To be erected aprox. 1/2 way back from pittman rd on the east and west sides of the site. Additional same type of fencing to be erected across the pittman road side, in areas where the existing wooden fence does not extend. Three gates will be chain link and slatted. One of which already is on the east side. A gate will be erected on the east end by pittman road. The other existing gate between the two gates is already up and will be fitted with slats.

- d. Does the conditional use fulfill all other requirements of MSB chapter 17.60 pertaining to the conditional use of this section?

The conditional use fullfills all requirements established by chapter 17.60 of the code.

2. Supplemental Information:

- a. Number of employees proposed to work on largest work shift

Normal amount of employees is 1., being the applicant applying fo the permit.

- b. Hours of operation

Hours of operation are 8a - 7p, mon-sat

- c. Noise mitigation measures

The proposed fencing will provide some noise mitigation. There will be no heavy equipment used on site. On occasion, a regular 1 ton tow truck and a 1 ton roll back tow truck, will be used for bringing cars to site, moving cars into or out of shop and around site. Automotive air tools and air compressor are used inside shop and create low sound levels.

Untitled

d. How will contaminated materials be handled and disposed of at this site?

As a low volume shop, having only one worker, materials are minimal. What materials are present to be handled are drained and collected in proper containers until removed from site to be recycled, before exceeding established storage limits. All hazardous material will be disposed of in accordance with applicable federal and state laws.

e. Total square footage or acreage of this property

The property is approximately 9.6 acres

f. Total square footage or acreage for this use on this site

The proposed operation requiring conditional use permit is approximately 5 acres. The existing auto repair and existing activities will be .5 acre.

g. Are there any other existing proposed uses on this site?

There is an existing permitted use of auto repair on this site. There are also 4 connexs use for storage, as well as two buildings. There is an unoccupied building on the west side of the site, not being used. The auto repair shop is on the east side. There is also a residence attached to the shop, where permittee resides.

h. Type of equipment to be used at this site

1- Boom truck/tow truck and 1 roll back tow truck will be used on site. No heavy equipment will be used. No crushing of cars will be done on site. They will be taken off site to a local recycler.

i. What type of containment systems will be in place at this site?

All dismantling involving fluids is performed inside a shop with concrete floors. Containment is achieved by the use of drip pans and floor dry. All accumulated fluids are stored in proper containers, protected from the elements. They are then transported to a recycling facility. Note: Permittee resides on site with children and pets, so containment of fluids is essential.

j. What type of non-permeable surface will be in place at this site?

Impermeable surfaces will be limited to shop floors.

k. What will the daily traffic generation be for this site?

The majority of work performed on site, is the repair of vehicles owned by permittee for resale. Traffic is estimated from 1-3 vehicles per day.

i. Attach a written description of buffering to be used

Untitled

Visual buffering is achieved by dense trees on the rear 1/2 of the east and west and the whole south border.

Additional fencing is to be erected in the front 1/2 of the east and west sides of the lot. Facing pittman rd,

whole there will be more fencing to meet borough requirements. Fencing will be 8' in height and cover the

north side facing pittman.

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Mark Whisenhunt

From: DC <dcsubar@yahoo.com>
Sent: Friday, October 19, 2018 8:14 AM
To: Mark Whisenhunt
Subject: Re: Creech CUP application - Additional Standards

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

I should have added that my existing salvage yard permit off of Machen rd, has existed since 2005, I believe. As far as history of lack of incident. I was told that a fence needed to be put up, I did. I haven't had any issues besides a few cars too close to the road, which I moved immediately.

On Oct 16, 2018, at 3:55 PM, Mark Whisenhunt <Mark.Whisenhunt@matsugov.us> wrote:

Good Afternoon Mr. Creech,

We are going to move forward with your application as-is. Thank you.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

From: Mark Whisenhunt
Sent: Friday, October 5, 2018 3:49 PM
To: 'DC' <dcsubar@yahoo.com>
Subject: RE: Creech CUP application - Additional Standards

Feel free to update the narrative with any information you feel is applicable to the standards.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

From: DC [<mailto:dcsubar@yahoo.com>]
Sent: Friday, October 5, 2018 3:40 PM
To: Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>
Subject: Re: Creech CUP application - Additional Standards

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

What kind of documentation are they wanting?

On Oct 5, 2018, at 3:29 PM, Mark Whisenhunt <Mark.Whisenhunt@matsugov.us> wrote:

Good Afternoon Mr. Creech,

On August 21, 2018 the Borough Assembly adopted additional regulations related to junkyard operations. I wanted to give you an opportunity to update your narrative by addressing the new standards noted below:

17.60.110 (C) The commission shall evaluate whether the applicant is suitable to establish, maintain, or operate the proposed use under the requirements of this chapter.

(1) Suitability of the applicant shall be based upon the applicant's history of compliance with relevant local, state, and federal laws.

(2) Review for suitability shall be limited to no more than five years preceding the application.

17.60.110 (D) The commission shall consider whether adequate controls are in place to prevent contamination of soil, surface water and groundwater.

If you would like to provide a response pertaining to your operation and the newly adopted standards, please do so on or before **October 15, 2018**. We will be moving forward with your application on October 16, 2018.

Thank you.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

Mark Whisenhunt

From: DC <dcsubar@yahoo.com>
Sent: Friday, April 27, 2018 10:00 AM
To: Mark Whisenhunt
Subject: Re: Meeting DC Auto

Refuse company and septic company pics . They are across the street from me.

















On Apr 27, 2018, at 9:49 AM, Mark Whisenhunt <Mark.Whisenhunt@matsugov.us> wrote:

Nothing was attached.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

From: DC [<mailto:dcsubar@yahoo.com>]
Sent: Friday, April 27, 2018 9:49 AM
To: Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>
Subject: Re: Meeting DC Auto

Here are some pics of the refuse company and septic company across the street from me. The whole block is used for commercial use.

On Apr 27, 2018, at 8:05 AM, Mark Whisenhunt <Mark.Whisenhunt@matsugov.us> wrote:

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

From: DC [<mailto:dcsubar@yahoo.com>]
Sent: Friday, April 27, 2018 8:05 AM
To: Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>
Subject: Re: Meeting DC Auto

Still on for 10am today?

On Apr 13, 2018, at 10:39 AM, Mark Whisenhunt <Mark.Whisenhunt@matsugov.us> wrote:

Friday April 27, 2018 at 10AM.

Please let me know if this meeting time will work for you. Thanks.

Respectfully,

Mark Whisenhunt
Planner II
Matanuska-Susitna Borough
Office: (907) 861-8527
Fax: (907) 861-8158
mark.whisenhunt@matsugov.us

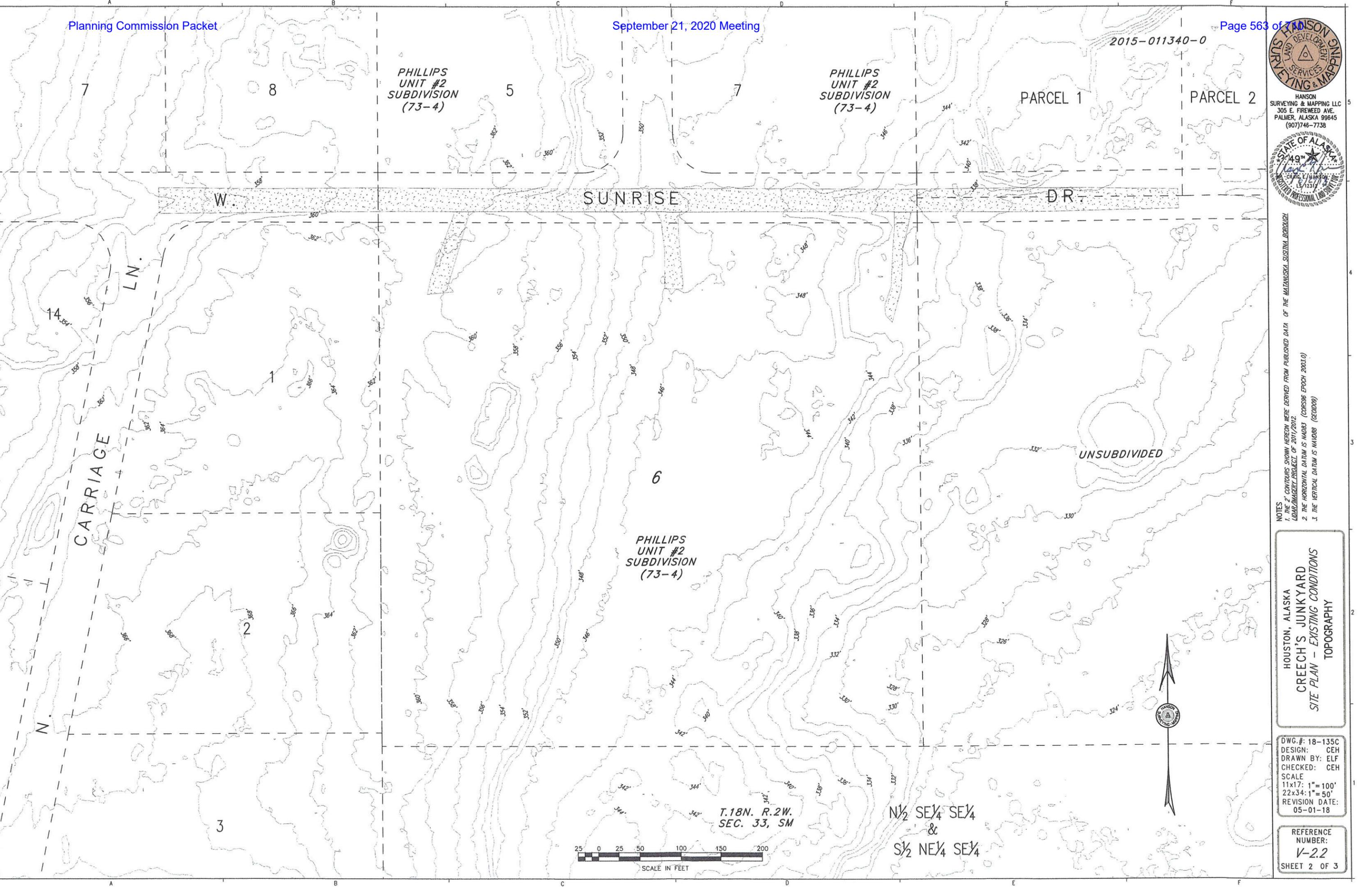
2015-011340-0



HANSON SURVEYING & MAPPING LLC
305 E. FIREWEED AVE.
PALMER, ALASKA 99645
(907)746-7738



NOTES
1. THE 2' CONTOURS SHOWN HEREON WERE DERIVED FROM PUBLISHED DATA OF THE MATANUSKA SUSTAINAL ABOROUGH
LAND/MANAGEMENT PROJECT OF 2011/2012.
2. THE HORIZONTAL DATUM IS NAD83 (CORSS96 EPOCH 2003.0)
3. THE VERTICAL DATUM IS MAD88 (GEOID08)



PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

PARCEL 1

PARCEL 2

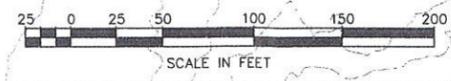
SUNRISE DR

CARRIAGE LN

UNSUBDIVIDED

T.18N. R.2W.
SEC. 33, SM

N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$
&
S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$



HOUSTON, ALASKA
CREECH'S JUNKYARD
SITE PLAN - EXISTING CONDITIONS
TOPOGRAPHY

DWG. #: 18-135C
DESIGN: CEH
DRAWN BY: ELF
CHECKED: CEH
SCALE
11x17: 1"=100'
22x34: 1"=50'
REVISION DATE:
05-01-18

REFERENCE
NUMBER:
V-2.2
SHEET 2 OF 3



HANSON SURVEYING & MAPPING LLC
305 E. FIREWEED AVE.
PALMER, ALASKA 99645
(907)746-7738

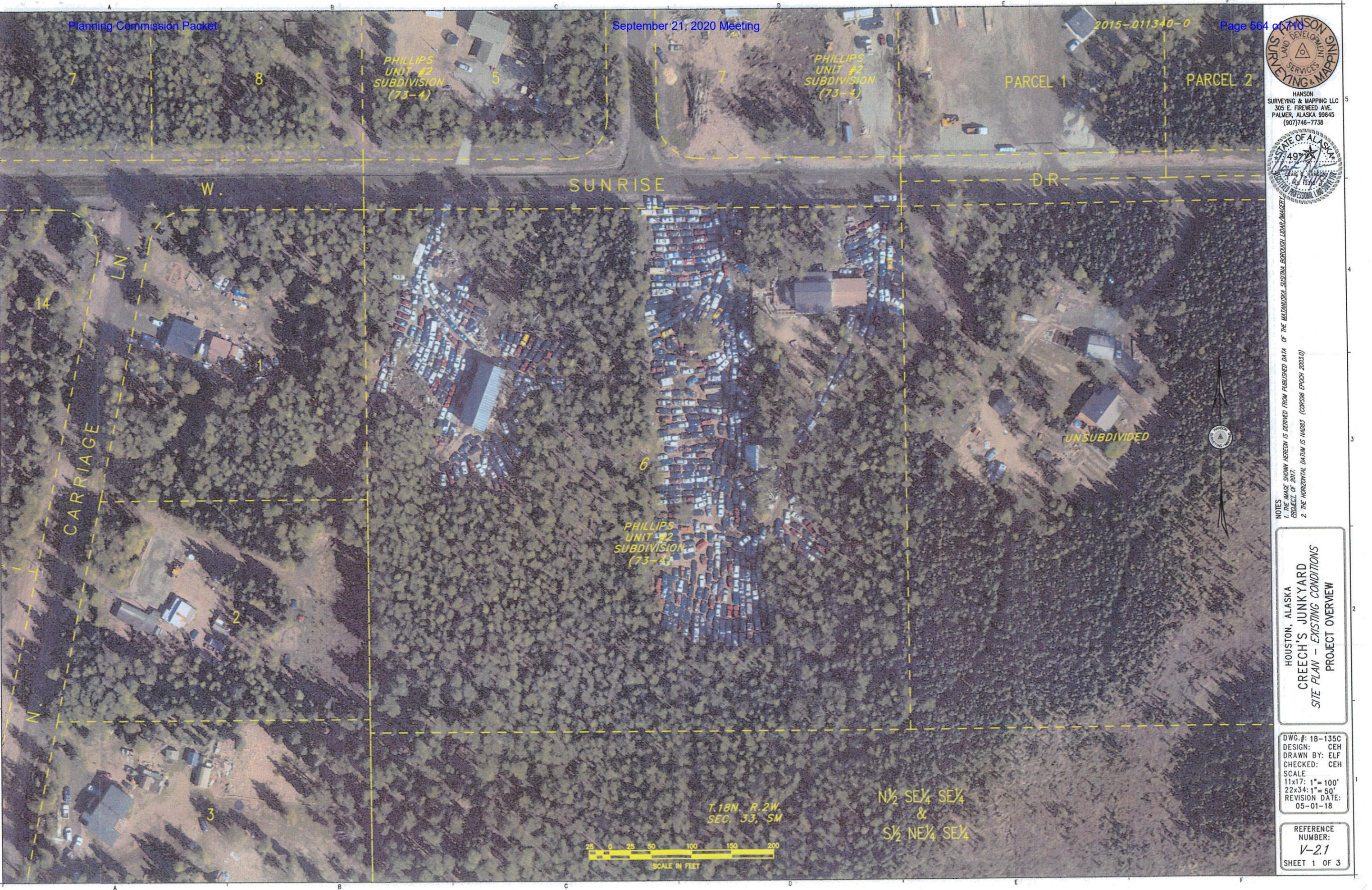


NOTES
1. THE IMAGE SHOWN HEREON IS DERIVED FROM PUBLISHED DATA OF THE MATANUSKA-SUSTINA BOROUGH LOCAL/ALASKA GEOIDCEL OF 2011.
2. THE HORIZONTAL DATUM IS NAD83 (GORS96 EPOCH 2003.0)

HOUSTON, ALASKA
CREECH'S JUNKYARD
SITE PLAN - EXISTING CONDITIONS
PROJECT OVERVIEW

DWG.#: 18-135C
DESIGN: CEH
DRAWN BY: ELF
CHECKED: CEH
SCALE
11x17: 1"=100'
22x34: 1"=50'
REVISION DATE:
05-01-18

REFERENCE NUMBER:
V-2.1
SHEET 1 OF 3



PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

PARCEL 1

PARCEL 2

SUNRISE
DR.

W.

DR.

LN.

CARRIAGE

UNSUBDIVIDED

PHILLIPS
UNIT #2
SUBDIVISION
(73-4)

T.18N. R.2W.
SEC. 33, SM

N½ SE¼ SE¼
&
S½ NE¼ SE¼



COMMENTS

Agency Comments



ENSTAR Natural Gas Company
A DIVISION OF SEMCO ENERGY
Engineering Department
Right of Way Section
401 E. International Airport Road
P. O. Box 190288
Anchorage, Alaska 99519-0288
(907) 277-5551
FAX (907) 334-7798

November 1, 2018

Mark Whisenhunt, Planner II
Matanuska-Susitna Borough
Planning & Land Use Department
350 East Dahlia Avenue
Palmer, Alaska 99645-6488

Subject: Conditional Use Permit For the Operation of a Junkyard/Refuse Area
for 7430 West Sunrise Drive, located within Township 18 North, Range 2 West,
Section 33, Seward Meridian.

Dear Mr. Whisenhunt:

ENSTAR Natural Gas Company has reviewed the application for the Subject Conditional Use Permit.

We have no comments or concerns related to this activity.

If you have any questions, please feel free to contact me at 907-334-7944 or by email at cassie.acres@enstarnaturalgas.com.

Sincerely,

A handwritten signature in black ink that reads "Cassie Acres".

Cassie Acres
Right-of-Way and Compliance Technician
ENSTAR Natural Gas Company

Mark Whisenhunt

From: Theresa Taranto
Sent: Friday, October 26, 2018 11:19 AM
To: Mark Whisenhunt
Subject: RE: Request for Comments: Dewayne Creech Junkyard/Refuse Area CUP

FIRM 8045, X Zone.
Open case J20160162 since 9/12/16. CCO Pam Ness.

Thank you,

From: Mark Whisenhunt
Sent: Friday, October 26, 2018 9:24 AM
To: allen.kemplen@alaska.gov; melanie.nichols@alaska.gov; usswcd@mtaonline.net; mearow@matanuska.com; rglenn@mta-telco.com; jthompson@mta-telco.com; reow@enstarnaturalgas.com; ospdesign@gci.com; Eric Phillips <Eric.Phillips@matsugov.us>; Jill Irsik <Jill.Irsik@matsugov.us>; regpagemaster@usace.army.mil; Jude Bilafer <Jude.Bilafer@matsugov.us>; Cindy Corey <Cindy.Corey@matsugov.us>; Terry Dolan <Terry.Dolan@matsugov.us>; Jim Jenson <James.Jenson@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Karol Riese <Karol.Riese@matsugov.us>; Theresa Taranto <Theresa.Taranto@matsugov.us>; Andy Dean <Andy.Dean@matsugov.us>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; tim.swezey@mlccak.org; info@mlccak.org
Cc: tamboevedistrict7@gmail.com
Subject: Request for Comments: Dewayne Creech Junkyard/Refuse Area CUP

DATE: October 26, 2018
TO: Various Governmental Agencies
FROM: Mark Whisenhunt, Planner II
SUBJECT: Request for Review and Comments Governmental Agencies
PROJECT: Conditional Use Permit for the operation of a Junkyard/Refuse Area
LOCATION: 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian
APPLICANT: Dewayne Creech

An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted by Dewayne Creech for the operation of a Junkyard/Refuse Area. The Planning Commission will conduct a public hearing on this request on December 17, 2018.

Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” Application material may also be reviewed at the Borough Permit Center. A direct link to the application material is here:

<https://www.matsugov.us/publicnotice/dewayne-creech-conditional-use-permit>

Comments are due on or before **November 26, 2018** and will be included in the Planning Commission packet for the Commissioner’s review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Mark Whisenhunt

From: OSP Design Group <ospdesign@gci.com>
Sent: Friday, October 26, 2018 10:42 AM
To: Mark Whisenhunt
Subject: RE: Request for Comments: Dewayne Creech Junkyard/Refuse Area CUP
Attachments: 20181026104427588.pdf

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Mr. Whisenhunt:

GCI has no objections to this application. Attached is our approval.

Respectfully,

Judy Rousselle

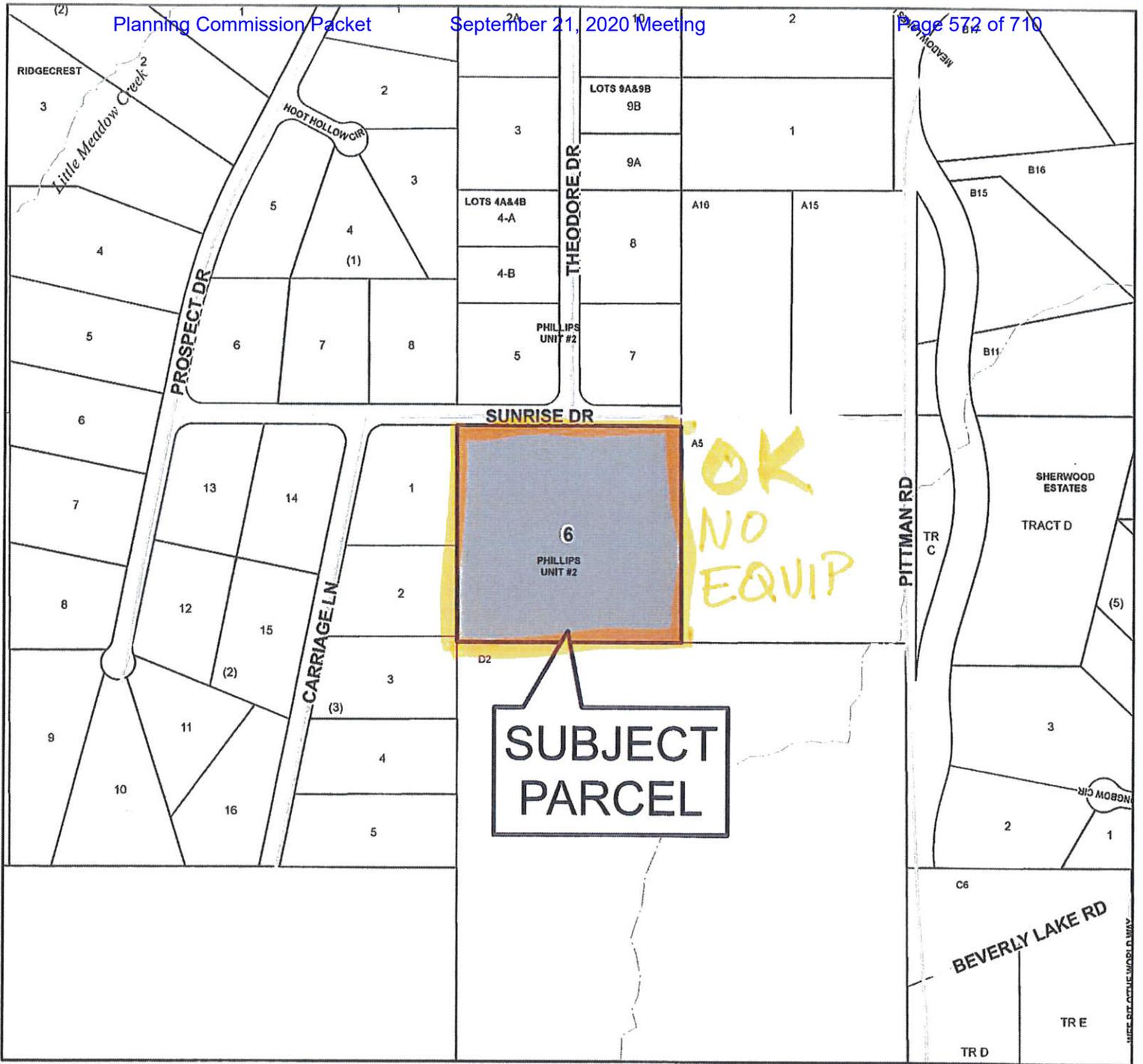
From: Mark Whisenhunt [mailto:Mark.Whisenhunt@matsugov.us]
Sent: Friday, October 26, 2018 9:24 AM
To: allen.kemplen@alaska.gov; melanie.nichols@alaska.gov; usswcd@mtaonline.net; mearow@matanuska.com; rglenn@mta-telco.com; jthompson@mta-telco.com; reow@enstarnaturalgas.com; OSP Design Group <ospdesign@gci.com>; Eric Phillips <Eric.Phillips@matsugov.us>; Jill Irsik <Jill.Irsik@matsugov.us>; regpagemaster@usace.army.mil; Jude Bilafer <Jude.Bilafer@matsugov.us>; Cindy Corey <Cindy.Corey@matsugov.us>; Terry Dolan <Terry.Dolan@matsugov.us>; Jim Jenson <James.Jenson@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Karol Riese <Karol.Riese@matsugov.us>; Theresa Taranto <Theresa.Taranto@matsugov.us>; Andy Dean <Andy.Dean@matsugov.us>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; tim.swezey@mlccak.org; info@mlccak.org
Cc: tamboevedistrict7@gmail.com
Subject: Request for Comments: Dewayne Creech Junkyard/Refuse Area CUP

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

DATE: October 26, 2018
TO: Various Governmental Agencies
FROM: Mark Whisenhunt, Planner II
SUBJECT: Request for Review and Comments Governmental Agencies
PROJECT: Conditional Use Permit for the operation of a Junkyard/Refuse Area
LOCATION: 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian
APPLICANT: Dewayne Creech

An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted by Dewayne Creech for the operation of a Junkyard/Refuse Area. The Planning Commission will conduct a public hearing on this request on December 17, 2018.

Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” Application material may also be reviewed at the Borough Permit Center. A direct link to the application material is here:



6405000L006

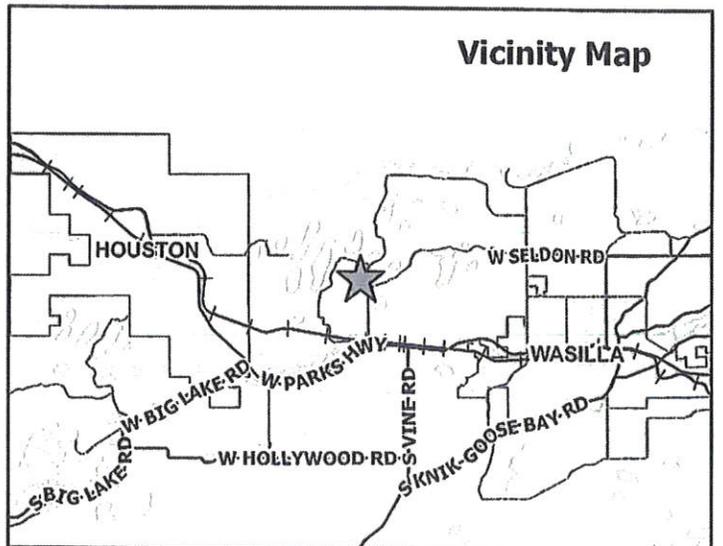


APPROVED AS: SHOWN CORRECTED

J. Monsselle 10-26-18

SIGN: **ENGINEERING & DESIGN GROUP, INC.**

This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7801.



Mark Whisenhunt

From: Patricia Fisher <psfisher@gci.net>
Sent: Friday, October 26, 2018 11:15 AM
To: Mark Whisenhunt
Cc: Camden Yehle; Tim Swezey; Linda Conover
Subject: Request for comments: Dewayne Creech Junkyard/Refuse Area CUP

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Mark, our council meeting is November 14, the second Wednesday, not the 7th.

I will send this info out to our membership shortly.

Patti Fisher

----- Original Message -----

From: "Mark Whisenhunt" <Mark.Whisenhunt@matsugov.us>
To: "info@mlccak.org" <info@mlccak.org>, "tim.swezey@mlccak.org" <tim.swezey@mlccak.org>
Cc:
Sent: Fri, 26 Oct 2018 17:38:19 +0000
Subject: Request for comments: Dewayne Creech Junkyard/Refuse Area CUP

Dear Meadow Lakes Community Council:

According to the Borough's public meeting calendar, your next council meeting will be held on November 7, 2018. As detailed below, a community member within your council boundaries is proposing to operate a Junkyard/Refuse Area, which requires a conditional use permit. Our office would like to encourage your participation in this process.

As noted below, if you would like to submit comments, please do so by November 26, 2018. If you cannot meet this submittal deadline, please contact me to discuss further options.

DATE: October 26, 2018
TO: Various Governmental Agencies
FROM: Mark Whisenhunt, Planner II

SUBJECT: Request for Review and Comments Governmental Agencies

PROJECT: Conditional Use Permit for the operation of a Junkyard/Refuse Area

LOCATION: 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian

APPLICANT: Dewayne Creech

An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted by Dewayne Creech for the operation of a Junkyard/Refuse Area. The Planning Commission will conduct a public hearing on this request on December 17, 2018.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. A direct link to the application material is here:

<https://www.matsugov.us/publicnotice/dewayne-creech-conditional-use-permit>

Comments are due on or before **November 26, 2018** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission. Thank you for your review

Respectfully,

Mark Whisenhunt

Planner II

Matanuska-Susitna Borough

Office: (907) 861-8527

Fax: (907) 861-8158

mark.whisenhunt@matsugov.us

Public Comments

Mark Plumb
6442B03L003
Ridgecrest Block 3 Lot 3
2231 N Carriage LN
Wasilla, AK 99623
907-373-0930
907-775-1930

November 26, 2018

MSB Development Services Division
350 E Dahlia Ave.
Palmer, AK 99645

Matanuska - Susitna Borough
Development Services

NOV 26 2018

Received

Mr. Mark Whisenhunt:

I am adamantly opposed to the borough issuing a conditional use permit to Dewayne Creech for the following reasons.

My property line directly adjoins this property in question and its use has a substantial impact on me. I have lived at this same address since 1998. Allowing this property to be used as a salvage yard on the only access to my property as well as 29 additional residential properties will drastically adversely affect property values and resale options.

Mr. Creech DBA DC Auto already owns and operates their fenced commercial Storage/Sale lot located at 3765 W Machen Rd in the Wasilla West subdivision where they store parks vehicles and vehicles for purchase.

Mr. Creech has been operating pseudo salvage yard outside the rules without regard to his neighbors or the area for 10+ years. When required to put up a fence on his property he did so without properly surveying the front and that fence is in the original road right-of-way.

There are currently hundreds of junk, wrecked, dilapidated, and unusable vehicles jammed onto his property. There are so many vehicles already piled on site he must park vehicles in the road right-of-way. There is absolutely no way to access either of the two residential structures by vehicle in the event of an emergency.

They currently use Sunrise, the Borough maintained road, as their loading and unloading area for their wreckers, dragging immobile vehicles in and out of the property twisting and turning causing incredible damage to the gravel roadbed directly in front of their property. Sometimes temporarily blocking the entire road, leaving vehicles parked throughout the day and over the weekend on the narrow gravel road that is the only access to 30 residential lots and nearly 40 single family residences. They are constantly using the mailbox easement across the street as a parking lot for visitors and workers.

The sheer number of junk vehicles currently on the property is an ecological disaster waiting to happen. Hundreds of old lead acid batteries. Broken, damaged, and immobile vehicles likely leaking oil, and other fluids into the ground with hardpan soils and bedrock only 8-10' below the surface and groundwater carrying those contaminants who knows where. There are multiple private water wells on the Creech property as well as on adjoining properties less than 100' away. The adjoining 40-acre

property contiguous to this property, addressed as 1314 N Pittman Rd, Valley Real Estate, LLC, Has an active salmon breeding stream and pond on it only a stone's throw from Mr. Creech's property. I have personally observed salmon spawning in those waters. Part of why the ballot measure 1 on our most recent voting ballot was defeated is because, we Alaskans, feel we are adept at protecting our own waters and fish habitat without outside influences. Allowing a junk yard already overflowing with leaking Subaru's so close to fragile habitat is not good husbandry of our natural resources.

In Summary, the Borough **should not** issue a conditional use permit to Mr. Creech for the following reasons:

1. The active use of this property as a junk yard will negatively affect at least 30 residential properties by vastly diminishing their resale appeal thereby reducing their appraised value hurting all the nearby property owners.
2. Dewayne Creech already owns an additional lot he currently uses for this purpose.
3. Mr. Creech has shown he lacks the ability to follow the rules by operating the property without the required permissions and by not following procedures when building on the property.
4. The property is currently a fire and emergency hazard without access to the residential buildings on the property.
5. The use of heavy truck and equipment by Mr. Creech on the gravel road is already damaging and will be exacerbated with more traffic.
6. There are grave concerns to the environment, to ground water, surface water, and fish habitat to allow this property to continue to operate as a junk collection facility.

Thank you for your time and the opportunity to voice my concerns over this ongoing unresolved issue. If you have any additional questions, feel free to call or write at any time.

Best Regards,

Mark Plumb

Matanuska - Susitna Borough
Development Services

NOV 19 2018

Received

11-16-18

Dear Mat-su-Borough,

I want to thank you for this opportunity to speak on this matter. This guy has been a eye sore since day one. Ever since he moved in he brought in 1 to 2 hundred cars with him. He's been operating a commercial business in a residential zoned area for about 10 years! He use's the street for his own loading and off loading zone for year's now. Because he's got so many cars and junk jamed on his own property you can't even get in there. Sometimes he'll have 10 or more cars out on the street and we have to wait on him to get in and out of the subdivision. Which is a safety concern. ~~It~~ Not only that its a fire hazard concern. If he was to have 1 miss hap with fire you can't even get into the place to put it out! So I wish you could send a Borough official out here to look at this matter and have him down size and clean up this mess. So at this time we feel that he dosen't

need a permit to operate because he's already doing it. We feel that he needs to comply with the Borough to clean up this mess or get a fine for operating a junkyard with No permit!

I have lived here and payed taxes here for the passed 35 years and plan to retire and build my dream home here. He's put my dreams on hold, Why build next to a junkyard? I thought thats why we pay taxes so the Borough would protect us from guys like this. So please help us with this problem.

Thank you for your time

Mike Whisman

Name: Kay Fi Hanz Mailing Address: 7369 W. Pank's Hwy # 273

Location/Legal Description of your property: 2431 N. Prospect Dr ^{Westland MI 48093} Blacki Hotel

Comments: The Business in question, Pank's there, wrecked cars
out in the road, so we cannot get by.
The road was made for 2 lanes, so we
that live here can go and come to get our
stuff down to the Pank's Hwy.

Note: Vicinity Map Located on Reverse Side



6442B01L007 14
WHITAKER SIDNEY & HOLLY
251 S KLEVIN ST
ANCHORAGE, AK 99508

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

- Application:** Conditional Use Permit for a Junkyard/Refuse Area
- MSB Code Section:** MSB 17.60 – Conditional Uses
- Applicant:** Dewayne Creech (dba DC Auto Repair)
- Location:** 7430 West Sunrise Drive (Tax ID# 6405000L006);
within Township 18 North, Range 2 West, Section 33, Seward Meridian
- Request:** An application for a conditional use permit under MSB 17.60 – Conditional Uses, has been submitted for the operation of a Junkyard/Refuse Area at the above address.

The Planning Commission will conduct a public hearing concerning the following application for a conditional use permit on Monday, **December 17, 2018 at 6:00 p.m.** in the Borough Assembly Chambers, 350 E. Dahlia Avenue, in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend. The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request for more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be viewed at the Borough Permit Center. For additional information, you may contact Mark Whisenhunt, Planner II, at 861-8527. Written comments can be mailed to: MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645. You may fax comments to 861-8158 or e-mail to mwhisenhunt@matsugov.us. In order to be eligible to file an appeal for a decision of the Planning Commission, a person must be designated an "interested party." See MSB 15.39.010 for the definition of "interested party." The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before **November 26, 2018** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Name: Sidney & Holly Whitaker **Mailing Address:** 251 Klevin St. Anch., AK 99508

Location/Legal Description of your property: 7591 W. Sunrise Dr. Wasilla 99623

Comments: We bought our property 20 years ago and at that time there wasn't a junkyard there. We will be building a new house on our property in the Spring and feel that a junkyard would negatively influence our property value. Also, we are concerned about toxic substances being leached into the ground water.

Note: Vicinity Map Located on Reverse Side

**PLANNING COMMISSION
RESOLUTION**

By: Mark Whisenhunt
Introduced: December 3, 2018
Public Hearing: December 17, 2018
Action: Failed

MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. 18-30

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION APPROVING A CONDITIONAL USE PERMIT IN ACCORDANCE WITH MSB 17.60 - CONDITIONAL USES; ALLOWING THE OPERATION OF A JUNKYARD/REFUSE AREA, LOCATED AT 7430 WEST SUNRISE DRIVE (TAX ID# 6405000L006); WITHIN TOWNSHIP 18 NORTH, RANGE 2 WEST, SECTION 33, SEWARD MERIDIAN.

WHEREAS, an application for a conditional use permit under MSB 17.60 - Conditional Uses has been received from Dewayne Creech (dba DC Auto Repair) for the operation of a junkyard/refuse area at 7430 West Sunrise Drive (Tax ID# 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian; and

WHEREAS, MSB 17.60.030(A)(1) requires a conditional use permit for the operation of a junkyard/refuse area; and

WHEREAS, unless this type of use is maintained under and in accordance with a lawfully issued permit, junkyards and refuse areas are declared to be a public nuisance; and

WHEREAS, the property was originally developed in 1974 with a residential home, which was the sole use of the property until the applicant purchased the property in June of 2003; and

WHEREAS, the subject parcel sits on the south side of West Sunrise Drive, approximately 600 feet west of North Pittman Road; and

WHEREAS, a 6-foot tall wood-plank fence is constructed along the east half of the northern property line. There is currently approximately 300 feet of fencing; and

WHEREAS, according to the application material, the applicant proposes to construct an 8-foot tall wood-plank fence the full length of the northern property line, and along the north half of both the east and west side lot lines. The applicant proposes using existing vegetation to visually screen the remaining portions of the side lot lines and the entire length of the southern property line; and

WHEREAS, according to the application material, the operation gets approximately one to three customers a day; and

WHEREAS, according to the application material, work and storage involving fluids will be done within the shop on concrete floor, protected from the elements and containment will be achieved with drip pans and an absorption product known as "floor dry"; and

WHEREAS, the subject parcel is approximately 9.56 acres in size; and

WHEREAS, all of the required site plans and operational information have been provided by the applicant; and

WHEREAS, the existing vegetation intended for screening the proposed use is composed of both deciduous and evergreen trees and is approximately 100 feet in or more in width; and

WHEREAS, as a part of this application, the applicant notes he has a conditional use permit (17602003-0001) for a separate junkyard operation on Machen Road; and

WHEREAS, the Planning Commission reviewed this application, associated materials, and the staff report, with respect to the applicable standards set forth in MSB 17.60 - Conditional Uses; and

WHEREAS, the Planning Commission conducted a public hearing on December 17, 2018 on this matter.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby finds this application does meet the standards of MSB 17.60.100 and 17.60.110 and does hereby approve the Conditional Use Permit for the operation of a junkyard/refuse area.

ADOPTED by the Matanuska-Susitna Borough Planning Commission this 17th day of December, 2018.

COLLEEN VAGUE, Chair

ATTEST

MARY BRODIGAN, Planning Clerk

(SEAL)

FAILED UNANIMOUSLY: Vague, Anderson, Patterson, Chesbro, Elder, Glashan, and Mossanen

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By: Mark Whisenhunt
Introduced: December 3, 2018
Public Hearing: December 17, 2018
Action: Approved

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. 18-33**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION ADOPTING FINDINGS OF FACT AND CONCLUSIONS OF LAW TO SUPPORT DENIAL OF RESOLUTION 18-30.

WHEREAS, Resolution 18-30 was for approval of a conditional use permit to allow the operation of a junkyard/refuse area, located at 7430 West Sunrise Drive (Tax ID#: 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian; and

Whereas, the planning commission conducted a public hearing on December 17, 2018 on this matter; and

Whereas, the Planning Commission's vote on the motion failed to garner a majority vote on December 17, 2018; and

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission denied the conditional use permit for the operation of a junkyard/refuse area located at 7430 West Sunrise Drive (Tax ID#: 6405000L006); within Township 18 North, Range 2 West, Section 33, Seward Meridian, based on the following findings of fact and conclusions of law:

1. A 10-acre parcel with a residential home abuts the subject parcel to the east. An undeveloped 40-acre parcel abuts the subject parcel to the south. Parcels to the west, northwest, and north of the subject parcel,

range from one to 2.3 acres in size and are developed with residential homes.

2. A total of 23 lots, excluding the subject lot, are within the notice area. Of which, 5 lots are undeveloped and 16 lots are used for residential purposes. The remaining two have a residential home and store commercial vehicles on site.
3. The vast majority of the area is used for residential purposes.
4. According to the applicant, he has been operating a junkyard/refuse area at this location since approximately 2004.
5. Per MSB 17.60.040(B) operating a junkyard/refuse area without a permit is declared a public nuisance.
6. The Borough Development Services Division received a complaint about the subject property and proposed use on September 12, 2016.
7. Between November 2016 and September 2018, a Borough Code Compliance Officer conducted nine site visits at the property. Eight of which revealed the applicant was storing junk vehicles within the public right-of-way, on West Sunrise Drive.
8. A photograph dated June 20, 2018, taken by a Borough Code Compliance Officer shows at least six junk vehicles

and the applicant's two tow trucks being stored within the public right-of-way, on West Sunrise Drive.

9. During a site visit on November 16, 2018, staff found the subject property to be full. As a result, the applicant was still storing one junk vehicle within the public right-of-way.
10. During a site visit on November 16, 2018, staff found that all three driveways were littered with oil and grease spills. The driveway near the shop was the most contaminated. So much so, that the odor of motor oil was apparent while walking down the driveway.
11. During a site visit on November 16, 2018, staff found that two 55-gallon drums which the applicant stated were used for the collection of used oil were sitting on the gravel driveway about 20 feet from the shop facility.
12. Topographical information for the area shows the property slopes down from the northwest to the southeast.
13. Wetlands and a creek abut the property's southeast corner.
14. Per MSB 11.10 - Encroachment Permits, the storage of objects, such as junk vehicles, within the public right-of-way requires an Encroachment Permit.

15. Junk vehicles stored within the public right-of-way without an Encroachment Permit are deemed unauthorized encroachments.
16. Per MSB 11.10.030(C), unauthorized encroachments shall be deemed a public nuisance.
17. During a site visit on November 16, 2018, staff found that there was no space for customers to park on site.
18. During a site visit on November 16, 2018, staff found all three driveways and the area on the site plan labeled as "customer parking" were completely occupied by junk vehicles and personal vehicles used by the applicant and his two employees.
19. There are three driveways which access West Sunrise Drive from the subject property. According to Borough records, there are no applications or permits on file for any of the three driveways.
20. Per MSB 11.10 - Encroachment Permits, constructing a driveway within the public right-of-way without an Encroachment Permit is deemed an unauthorized encroachment.
21. MSB 17.55 - Setbacks and Screening Easements, requires structures to be placed at least 25 feet from a public right of way.

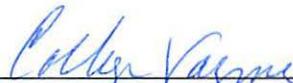
22. According to the application material, the connex structures located within the center driveway are approximately 10 feet from the public right-of-way. This is a violation of the minimum setback requirements of MSB 17.55.
23. In November 2016, a Borough Code Compliance Officer issued Written Warning #0717 to the applicant for: 1) Operating a junkyard without a permit per MSB 17.60 - Conditional Uses, 2) Causing a public nuisance per MSB 8.50 - Junk and Trash, and 3) Unauthorized Encroachment by storing junk vehicles within the public right-of-way per MSB 11.10 - Encroachment Permits.
24. In July 2017, a Borough Code Compliance Officer issued Citation #P00444057 to the applicant for operating a junkyard without a permit per MSB 17.60 - Conditional Uses.
25. According to the State of Alaska records, the applicant entered a "no contest" plea on October 4, 2017 for Citation #P00444057, operating a junkyard without a permit per MSB 17.60 - Conditional Uses.
26. As a part of this application, the applicant notes he has a conditional use permit (17602003-0001) for a separate junkyard operation on Machen Road.

27. The narrative also notes a lack of incident at the Machen site, other than being told by the Borough to construct a fence and a "few cars were too close to the road," which were removed "immediately."
28. In March 2017 while inspecting the applicant's junkyard operation on Machen Road, a Borough Code Compliance Officer found that junk vehicles were viewable from and within the public right-of-way. The applicant resolved these issues by May 2017.
29. In July 2017 while inspecting the applicant's junkyard operation on Machen Road, a Borough Code Compliance Officer again found that junk vehicles were viewable from and within the public right-of-way.
30. In August 2017, a Borough Code Compliance Officer found the junk vehicles were still within the public right-of-way and tagged 14 vehicles with impound notices. The applicant removed the vehicles which were tagged for impound within two days.
31. In October 2017, a Borough Code Compliance Officer again found the applicant to be storing junk vehicles within the public right-of-way. This time the issue wasn't resolved until November 2017.
32. Between March 2017 and November 2017, a Borough Code Compliance Officer conducted six site visits at the

Machen Road property. Four of which revealed the applicant was storing junk vehicles within the public right-of-way on Machen Road which is a violation of conditional use permit #17602003-0001.

33. Since March 2016, Borough staff has observed the applicant violating Borough code 13 times. Nine of which were at the proposed use on West Sunrise Drive, and four of which were at the applicant's junkyard operation on Machen Road.
34. The proposed use will detract from the value, character and integrity of the surrounding area (MSB 17.60.100(B)(1)).
35. The proposed use will be harmful to the public health, safety, convenience and welfare (MSB 17.60.100(B)(2)).
36. Sufficient setbacks, lot area, buffers and other safeguards are not being provided (MSB 17.60.100(B)(3)).
37. The application material has met all of the requirements of this chapter (MSB 17.60.100(B)(4)).
38. The applicant is not suitable to establish, maintain, or operate the proposed use under the requirements of this chapter (MSB 17.60.110(C)).
39. There are not adequate controls in place to prevent contamination of soil, surface water and groundwater (MSB 17.60.110(D)).

ADOPTED by the Matanuska-Susitna Borough Planning Commission
this 17th day of December, 2018.



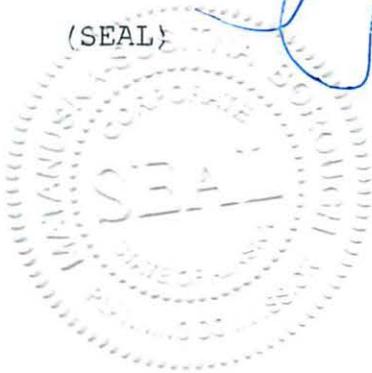
COLLEEN VAGUE, Chair

ATTEST



MARY BRODIGAN, Planning Clerk

(SEAL)



APPROVED UNANIMOUSLY: Vague, Anderson, Patterson, Chesbro,
Elder, Glashan, and Mossanen

**PUBLIC HEARING
QUASI-JUDICIAL**

Resolution No. PC 20-32

Jason Nixa

(Pages 597 - 702)

PUBLIC HEARING

STAFF REPORT



MATANUSKA-SUSITNA BOROUGH

**Planning and Land Use Department
Development Services Division**

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822

www.matsugov.us

DEVELOPMENT SERVICES DIVISION STAFF REPORT

Date: September 9, 2020

File Number: 176520200003

Applicant: Jason Nixa

Property Owner: Jason Nixa

Resolution No.: Planning Commission Resolution 20-32

Request: Setback variance from MSB 17.55

Location: 49572 South Jumpin Circle (Tax ID#6070000L1067)

Size of Property: .49 acres

Reviewed By: Alex Strawn, Planning & Land Use Director 
Mark Whisenhunt, Acting Development Services Manager 

Staff: Joe Metzger, MSB Planner 

Staff Recommendation: Approval

EXECUTIVE SUMMARY

A setback variance application has been submitted requesting to construct a single-family residence approximately 38' x 24' in size. The structure, at its closest location, would be set back approximately 30 feet from the shorelands of Middle Caswell Lake, approximately 13 feet from the nearest side lot line and approximately 180 feet from the closest right-of-way. As established in MSB 17.55, structures must be setback 75 feet from the ordinary high water mark of a body of water, shall not be placed within 25 feet of a public right-of-way, and must be 10 feet from a side or rear lot line. In order to grant a variance, the Planning Commission must find that each of the requirements of MSB 17.65.020(A) have been met.

LAND USE

Existing Land Use:

The subject parcel was created in 1967 and is part of the Caswell Lakes subdivision. Currently, there are no structures on the lot and there is no record that the parcel has been developed with any type of building in the past. The parcel has a drilled water well on the northern tip of the property and an existing gravel driveway that starts on the eastern boundary of the parcel and runs to the middle of the property. Access to the property is made from South Jumpin Circle. Middle Caswell Lake abuts the subject property to the west and northwest, there are privately owned parcels to the northeast and south, and the South Jumpin Circle right-of-way is to the east. The parcel is .49 acres in size and contains over 240 feet of shoreline on Middle Caswell Lake. This amount of shoreline is considerably more than most parcels in the surrounding area.

According to a useable area analysis conducted by Borough Staff which takes into account the shoreline setback, the right-of-way setback, and the side lot line setbacks, the subject parcel contains approximately 2,831 square feet of buildable area that satisfies the Borough setback requirements per MSB 17.55. The applicant is proposing to build a structure that is 984 square feet in size with 624 square feet of living space on the main floor and a 360 square foot loft in the upstairs. Due to the odd shape of the buildable area, the proposed 984 square structure cannot be placed in the 2,831 square feet of buildable area without encroaching on a setback requirement.

Surrounding Land Uses:

The subject lot is located in the Caswell Lakes subdivision. This subdivision is very large and consists of several hundreds of lots, most of which are smaller than one-half acre. Development in the subdivision is sporadic and many of the lots are not currently developed. Lots that have frontage on one of the multiple lakes in the subdivision are more apt to have some fashion of development like a cabin or residence. Within a quarter-mile of the subject lot, development ranges in size from approximately 100 square foot structures to structures that exceed 2,000 square feet. Some lots have multiple structures, while others contain no development. The majority of the lots are used for recreational purposes, however, there are full time residential homes in the subdivision.

REVIEW OF APPLICABLE CRITERIA AND FINDINGS

MSB 17.03 – Public Notification

On August 3, 2020 notices were mailed to all property owners within a 600-foot radius of the use. A total of 23 notices were mailed. The permit application notification was published in the July 31, 2020 issue of the Frontiersman. The application material was posted on the Borough web site for public review on August 3, 2020. The proposed use is within the Susitna Community Council and a notice was sent to the Council on August 3, 2020. Staff received two (2) comments from the public related to the proposed use, one of which was in opposition and one of which was in support of the variance.

Due to an inaccuracy in the original mailing and to properly reflect the description of the request, on September 4, 2020 a second notice was mailed to all property owners within a 600-foot radius of the use. The permit application notification was published in the September 4, 2020 edition of the Frontiersman and the application material was updated on the Borough website on September 3, 2020.

Section 17.65.020 Requirements for Granting a Variance

(A) In order to grant a variance to the regulations of MSB title 17, the planning commission must find that each of the following requirements has been met:

(1) There are unusual conditions or circumstances that apply to the property for which the variance is sought.

Findings of Fact:

1. The subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage.
2. According to a useable area analysis conducted by Borough Staff, the subject parcel has approximately 2,831 square feet of buildable space that conforms to the setback standards established in MSB 17.55.
3. The odd shape of the buildable space that conforms to the Borough setback standards significantly reduces the size, shape, and type of structure that could be built on the parcel.
4. The subject lot is part of the Caswell Lakes subdivision and was originally platted in 1967.
5. The Caswell Lakes subdivision and subject lot were created prior to the establishment of Borough setback requirements.
6. The subject parcel does not conform to the current Borough subdivision standards.
7. The application material indicates that the proposed single-family residence would be approximately 38' x 24' in size.
8. The application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet.
9. According to an as-built survey prepared by Frederic W. Wagner, PLS, and dated March 26, 2020, at its closest point, the proposed structure would be approximately 30 feet from the shorelands of Middle Caswell Lake, approximately 13 feet from the closest side lot line and approximately 180 feet to the South Jumpin Circle right-of-way.
10. Middle Caswell Lake abuts the subject parcel to the west and northwest, there is a private lot to the north and northeast, South Jumpin Circle right-of-way is to the east, and there is a private lot to the south.
11. According to the application material, the shoreline setback, right-of-way setback and side lot line setback severely limit the buildable area of the lot.
12. Approximately 92.5% of the subject parcel is encumbered by setback requirements.
13. The proposed structure will not fit in the buildable space on the subject parcel that conforms to the Borough setback standards.
14. The subject parcel contains approximately 240 feet of shoreline, which is a considerable amount more than most lots in the subdivision and means more of the subject parcel is encumbered with the 75' shoreline setback requirement than other lots in the surrounding area.

Conclusion of Law: Based on the above findings, a small parcel .49 acres in size, with multiple setback requirements, and an oddly shaped buildable space that is approximately 2,831 square feet in size, is an unusual condition (MSB 17.65.020(A)(1)).

(2) The strict application of the provisions of this title would deprive the applicant of rights commonly enjoyed by other properties under the terms of this title.

Findings of Fact:

1. The application material indicates that the proposed single-family residence would be approximately 38'x 24' in size.
2. The application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet.
3. The subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage.
4. According to a useable area analysis conducted by Borough Staff, the subject parcel has approximately 2,831 square feet of buildable space that conforms to the setback standards established in MSB 17.55.
5. According to an as-built survey prepared by Frederic W. Wagner, PLS, and dated March 26, 2020, at its closest point, the proposed structure would be approximately 30 feet from the shorelands of Middle Caswell Lake, approximately 13 feet from the closest side lot line and approximately 180 feet to the South Jumpin Circle right-of-way.
6. The buildable space of the parcel that conforms to the Borough setback standards is an odd shape and significantly reduces the size, shape, and type of structure that could be built on the parcel.
7. Approximately 92.5% of the subject parcel is encumbered by setback requirements.
8. The proposed structure would not fit in the buildable space on the subject parcel that conforms to the Borough setback standards.
9. The subject lot is part of the Caswell Lakes subdivision and was originally platted in 1967.
10. The Caswell Lakes subdivision and subject lot were created prior to the establishment of Borough setback requirements.
11. The subject parcel does not conform to the current Borough subdivision standards.
12. The Caswell Lakes subdivision has several hundreds of lots. Structures on the lots that contain development vary greatly in size, condition, and date of construction.
13. Structures within a quarter-mile of the subject parcel range in size from approximately 100 square feet to over 2,000 square feet.
14. Middle Caswell Lake abuts the subject parcel to the west and northwest, there is a private lot to the north and northeast, South Jumpin Circle right-of-way is to the east, and there is a private lot to the south.
15. According to the application material, the shoreline setback, right-of-way setback and side lot line setback severely limit the buildable area of the lot.

16. The subject parcel contains approximately 240 feet of shoreline, which is a considerable amount more than most lots in the subdivision and means more of the subject parcel is encumbered with the 75' shoreline setback requirement than other lots in the surrounding area.

Discussion: Staff has included a sample of the MSB Real Property cards for lots within a quarter-mile of the surrounding area. These documents indicate the types and size of structures in the surrounding area as they are currently assessed by the MSB Assessment Office. The real property cards indicate that structures in the area range in size from 126 square feet to over 2,000 square feet. During a site visit on August 28, 2020 staff did observe structures within one quarter-mile of the subject property that are not currently assessed by the MSB. Some of these structures appeared to be well over 2,000 square feet and some lots contained multiple structures that are not reflected in the current assessment records. In correspondence with the MSB Assessment office, it was determined that there are structures in the surrounding area that are not currently assessed. This is due in part to the general remoteness of the area, the ongoing rapid growth within the MSB, as well as understaffing and limited budget. It is staff's opinion that the construction of a 984 square foot structure on the subject parcel is a use that is commonly enjoyed by other properties in the surrounding area.

Conclusion of Law: Based on the above findings, the strict application of the provisions of this title would deprive the applicants of rights commonly enjoyed by others (MSB 17.75.020(A)(2)).

(1) The granting of the variance will not be injurious to nearby property, nor harmful to the public welfare.

Findings of Fact:

1. According to an as-built survey prepared by Frederic W. Wagner, PLS, and dated March 26, 2020, at its closest point, the proposed structure would be approximately 30 feet from the shorelands of Middle Caswell Lake, approximately 13 feet from the closest side lot line and approximately 180 feet to the South Jumpin Circle right-of-way.
2. The subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage.
3. Middle Caswell Lake abuts the subject parcel to the west and northwest, there is a private lot to the north and northeast, South Jumpin Circle right-of-way is to the east, and there is a private lot to the south.
4. The application material indicates that the proposed single-family residence would be approximately 38'x 24' in size.
5. The application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet.
6. There is no objection to the variance request from any government agencies.
7. There is one objection to the variance request from a member of the public, that opposition is general in nature.

8. The construction and placement of a 38' x 24' structure approximately 13' from the closest side lot line, approximately 30' from the shorelands of Middle Caswell Lake and approximately 180' from the South Jumpin Circle right-of-way, should not be harmful to the public welfare.

Conclusion of Law: Based on the above findings, granting the variance will not be injurious to nearby property, nor harmful to the public welfare (MSB 17.65.020(A)(3)).

(4) The granting of the variance will be in harmony with the objectives of this title and any applicable comprehensive plans

COMPREHENSIVE PLAN

The Matanuska-Susitna Borough Comprehensive Plan (2005 Update) as well as the Susitna (Formerly Y) Community Comprehensive Plan pertain to this property. Two of the plan's land use goals state:

Goal (LU-1): *Protect and enhance the public safety, health, and welfare of Borough residents.*

Policy LU-1: *Provide for consistent, compatible, effective and efficient development within the borough.*

Goal (LU-2): *Protect residential neighborhoods and associated property values.*

Policy LU2-1: *Develop and implement regulations that protect residential development by separating incompatible uses, while encouraging uses that support such residential uses including office, commercial and other mixed-use developments that are shown to have positive cumulative impacts to the neighborhood.*

Findings of Fact:

1. MSB Chapter 17.65 – Variances, was written to grant relief to property owners whose lots are impacted by existing land use regulations thereby making the lot undevelopable.
2. The application material indicates that the proposed single-family residence would be approximately 38'x 24' in size.
3. The application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet.
4. The subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage.
5. Middle Caswell Lake abuts the subject parcel to the west and northwest, there is a private lot to the north and northeast, South Jumpin Circle right-of-way is to the east, and there is a private lot to the south.
6. The buildable space of the parcel that conforms to the Borough setback standards is an odd shape and significantly reduces the size, shape, and type of structure that could be built on the parcel.
7. The proposed structure will not fit in the buildable space on the subject parcel that conforms to the Borough setback standards.

8. The subject lot is part of the Caswell Lakes subdivision and was originally platted in 1967.
9. The Caswell Lakes subdivision and subject lot were created prior to the establishment of Borough setback requirements.
10. The subject parcel does not conform to the current Borough subdivision standards.
11. The Caswell Lakes subdivision has several hundreds of lots. Structures on the lots that contain development vary greatly in size, condition, and date of construction.
12. Structures within a quarter-mile of the subject parcel range in size from approximately 100 square feet to over 2,000 square feet.
13. The construction of a 38' x 24' residential structure is compatible with the surrounding area and is consistent with the development found in the subdivision.

Conclusion of Law: Based on the above findings, the proposed variance is consistent with the applicable comprehensive plans and does meet the intent of MSB 17.65 (MSB 17.65.020(A)(4)).

(5) The deviation from the requirement of this title that is permitted by the variance will be no more than is necessary to permit a reasonable use of the property.

Findings of Fact:

1. The application material indicates that the proposed single-family residence would be approximately 38' x 24' in size.
2. The application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet.
3. The subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage.
4. Approximately 92.5% of the subject parcel is encumbered by setback requirements.
5. According to a useable area analysis conducted by Borough Staff, the subject parcel has approximately 2,831 square feet of buildable space that conforms to the setback standards established in MSB 17.55.
6. According to an as-built survey prepared by Frederic W. Wagner, PLS, and dated March 26, 2020, at its closest point, the proposed structure would be approximately 30 feet from the shorelands of Middle Caswell Lake, approximately 13 feet from the closest side lot line and approximately 180 feet to the South Jumpin Circle right-of-way.
7. The buildable space of the parcel that conforms to the Borough setback standards is an odd shape and significantly reduces the size, shape, and type of structure that could be built on the parcel.
8. The proposed structure would not fit in the buildable space on the subject parcel that conforms to the Borough setback standards.
9. A residential structure that is 984 square feet is modest in size.
10. The construction of a 38' x 24' residential structure would be compatible with the surrounding area and is consistent with the development found in the subdivision.

11. The subject lot is part of the Caswell Lakes subdivision and was originally platted in 1967.
12. The Caswell Lakes subdivision and subject lot were created prior to the establishment of Borough setback requirements.
13. The Caswell Lakes subdivision has several hundreds of lots. Structures on the lots that contain development vary greatly in size, condition, and date of construction.
14. Structures within a quarter-mile of the subject parcel range in size from approximately 100 square feet to over 2,000 square feet.

Conclusion of Law: Based on the above findings, granting a variance will be no more than is necessary to permit a reasonable use of the property (MSB 17.65.030(A)(1)).

Section 17.65.030 Cases Where Variance is Illegal

(A) A variance from this title may not be granted if:

- (1) Special conditions that require the variance are caused by the person seeking the variance.*

Findings of Fact:

1. The subject lot is part of the Caswell Lakes subdivision and was originally platted in 1967.
2. The Caswell Lakes subdivision and subject lot were created prior to the establishment of Borough setback requirements.
3. The subject parcel does not conform to the current Borough subdivision standards.
4. The applicant purchased the property in 2014.
5. The subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage.
6. According to a useable area analysis conducted by Borough Staff, the subject parcel has approximately 2,831 square feet of buildable space that conforms to the setback standards established in MSB 17.55.
7. The buildable space of the parcel that conforms to the Borough setback standards is an odd shape and significantly reduces the size, shape, and type of structure that could be built on the parcel.
8. The proposed structure would not fit in the buildable space on the subject parcel that conforms to the Borough setback standards.
9. The subject parcel contains approximately 240 feet of shoreline, which is a considerable amount more than most lots in the subdivision and means more of the subject parcel is encumbered with the 75' shoreline setback requirement than other lots in the surrounding area.

Conclusion of Law: Based on the above findings, the person seeking the variance did not cause the need for the variance (MSB 17.65.030(A)(1)).

- (2) The variance will permit a land use in a district in which that use is prohibited.*

Findings of Fact:

1. The subject parcel is not in a special land use district.
2. Residential structures are allowed on this property.

Conclusion of Law: Based on the above findings, the variance, if granted, will not allow a land use in a district in which that use is prohibited, as residential structures are allowed on this site (MSB 17.65.030(A)(2)).

(3) *The variance is sought solely to relieve pecuniary hardship or inconvenience*

Finding of Fact:

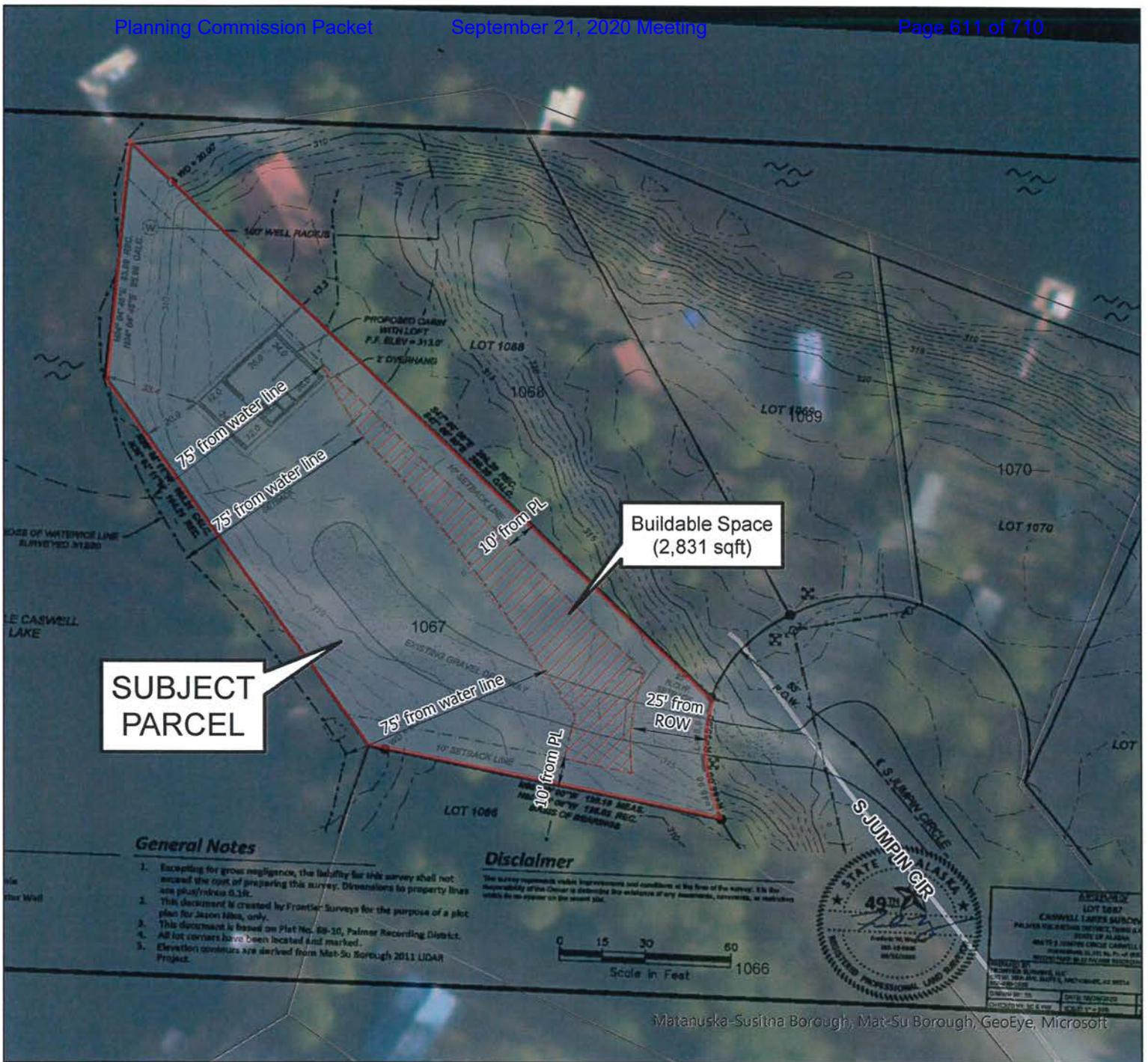
1. According to the application material, the shoreline setback, right-of-way setback and side lot line setback severely limit the buildable area of the lot.
2. The applicant purchased the property in 2014.
3. The application material indicates that the proposed single-family residence would be approximately 38' x 24' in size.
4. The application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet.

Conclusion of Law: Based on the above findings, the variance is not solely being sought to relieve pecuniary hardship or inconvenience (MSB 17.65.030(A)(3)).

STAFF RECOMMENDATIONS

Staff recommends approval of this variance request to allow the proposed 38' x 24' single-family residence to be constructed at 49572 South Jumpin Circle (Tax ID# 6070000L1067).

Useable area analysis conducted by MSB Staff



SUBJECT PARCEL

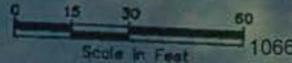
Buildable Space (2,831 sqft)

General Notes

1. Excepting for gross negligence, the liability for this survey shall not exceed the cost of preparing this survey. Dimensions to property lines are plus/minus 0.3ft.
2. This document is created by Frontier Surveys for the purpose of a plot plan for Jason Misa, only.
3. This document is based on Plat No. 69-20, Palmer Recording District.
4. All lot corners have been located and marked.
5. Elevation contours are derived from Mat-Su Borough 2011 LIDAR Project.

Disclaimer

The survey represents visible improvements and conditions as they appear on the day of the survey. It is the responsibility of the Owner to determine the existence of any easements, covenants, or restrictions which do not appear on the record plat.



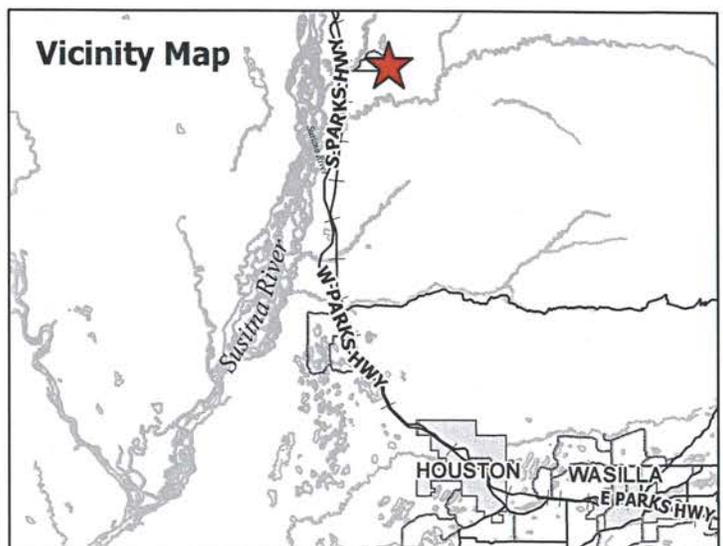
APPROVED	LOT 1067
CORRECTION	LOT 1067
PLAT NO. 69-20	PALMER RECORDING DISTRICT, PALMER & S. JUMPIN CIR
DATE	APR 15, 2020
BY	JASON MISA
FOR	JASON MISA
SCALE	AS SHOWN

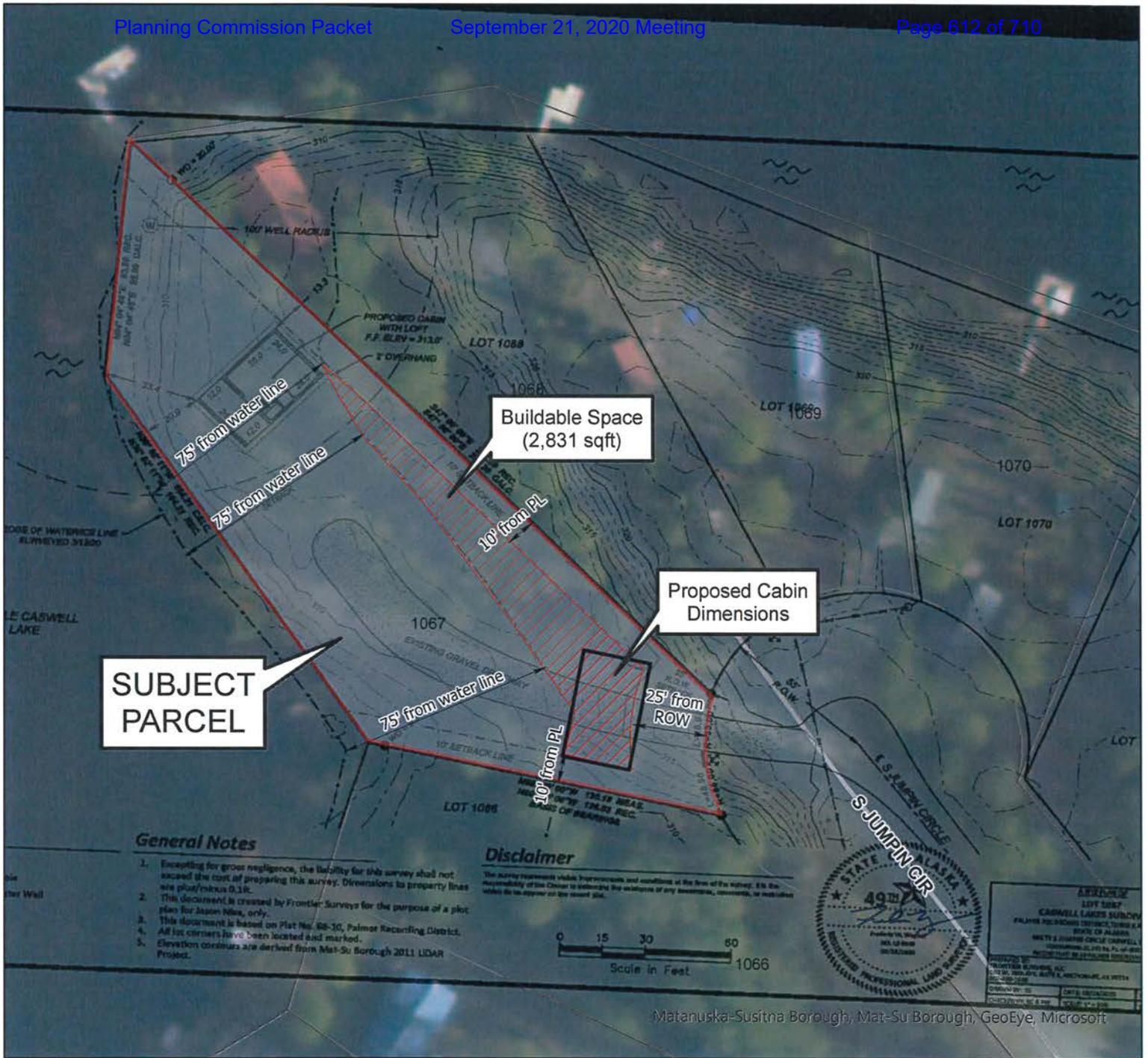
Matanuska-Susitna Borough, Mat-Su Borough, GeoEye, Microsoft

6070000L1067

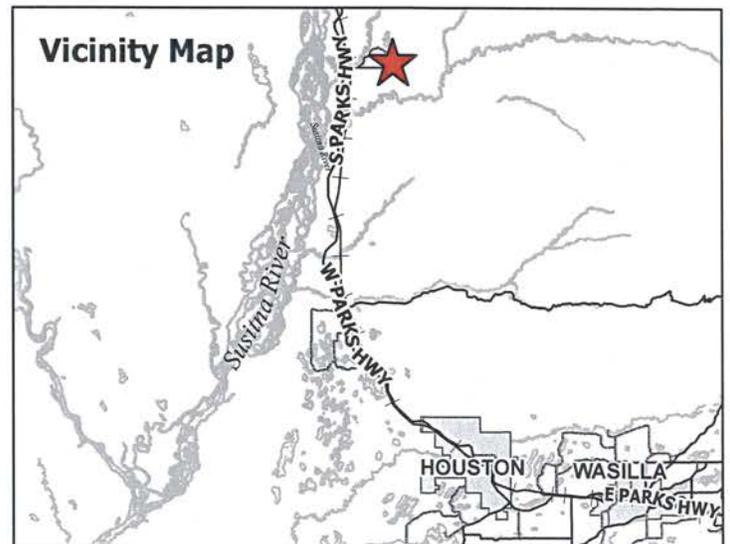


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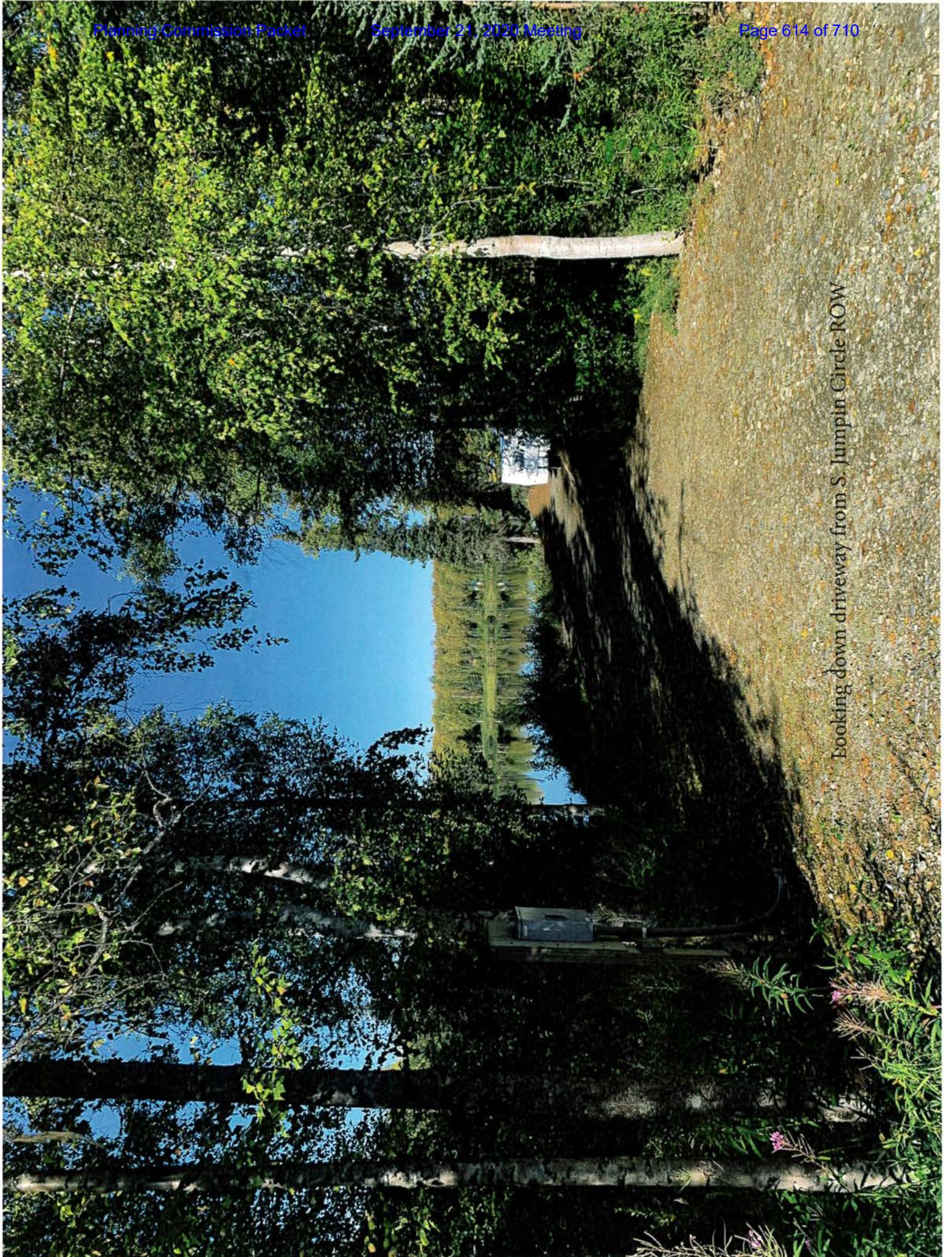
6070000L1067



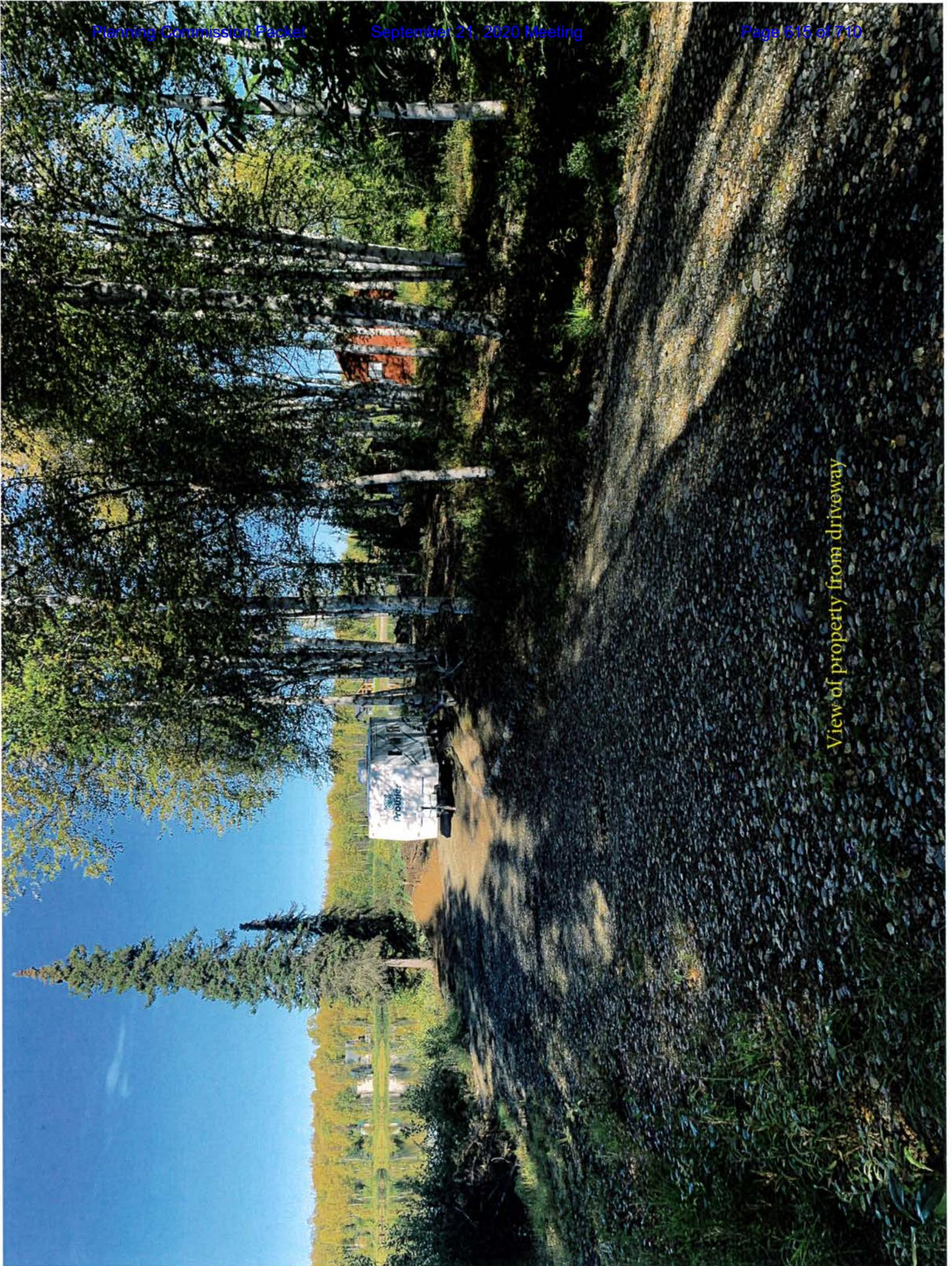
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Photo's taken during a site visit on August
28, 2020 by MSB Planner Joe Metzger



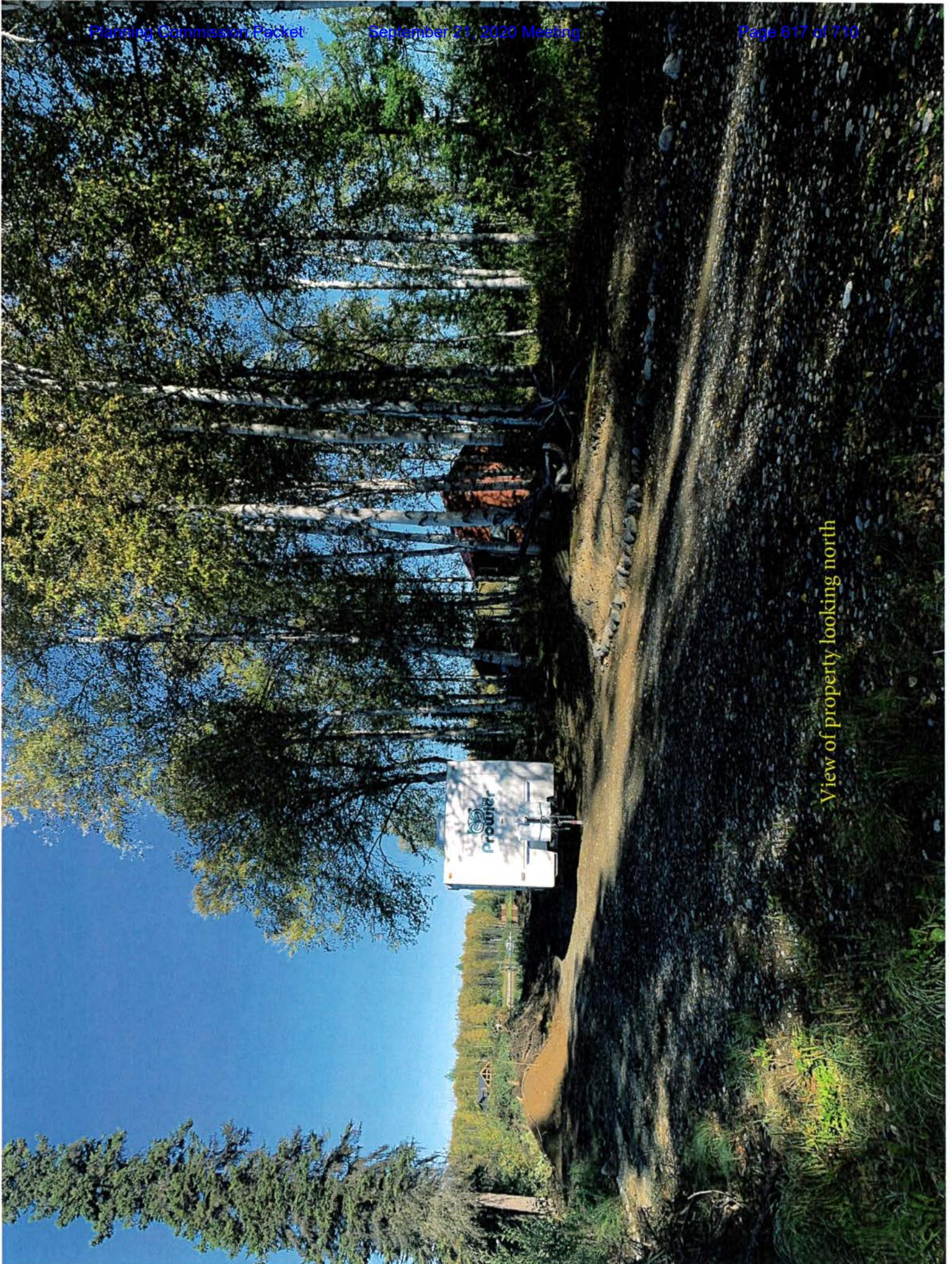
Looking down driveway from S. Jumpin Circle ROW



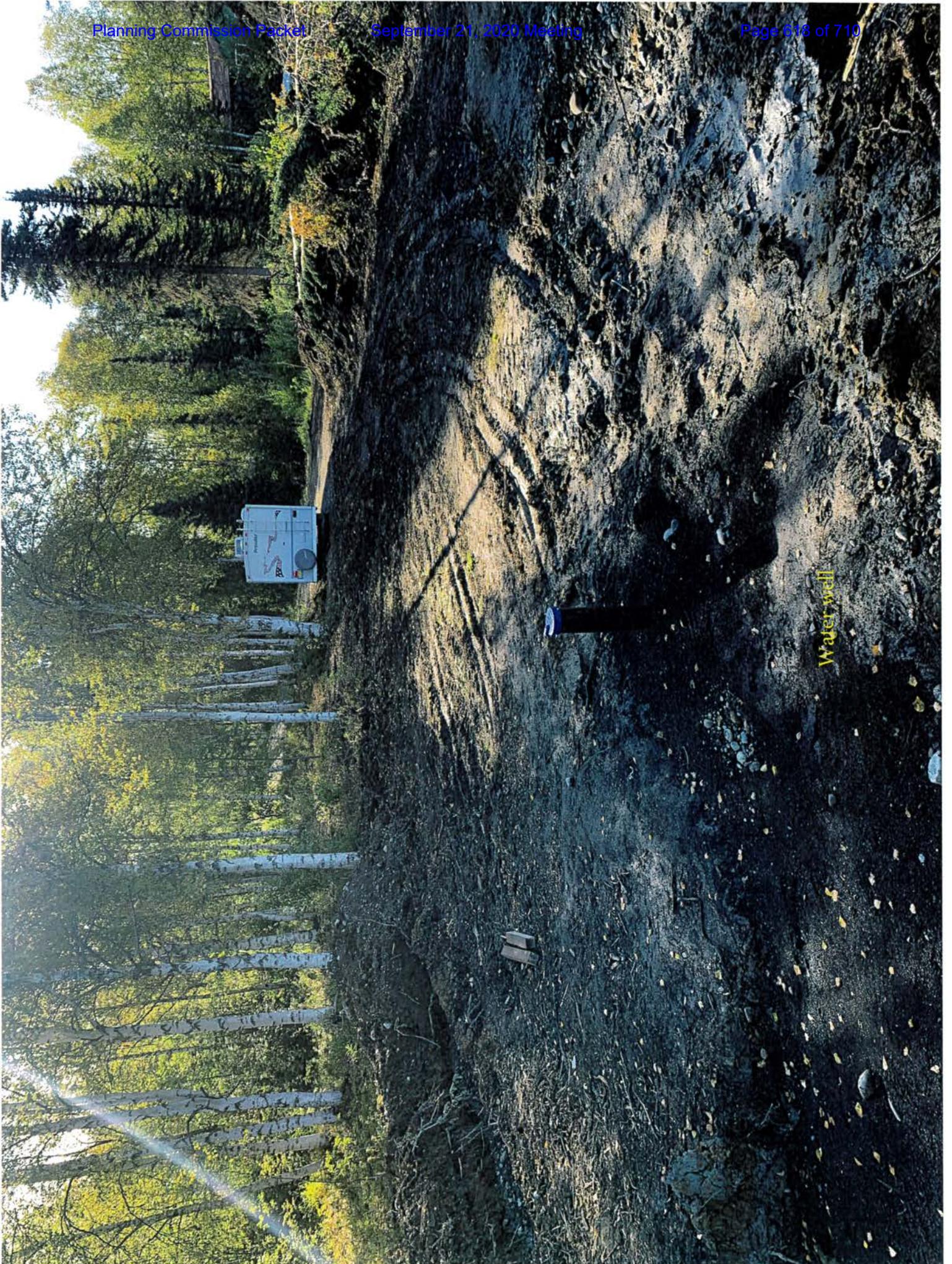
View of property from driveway



Southern property contact

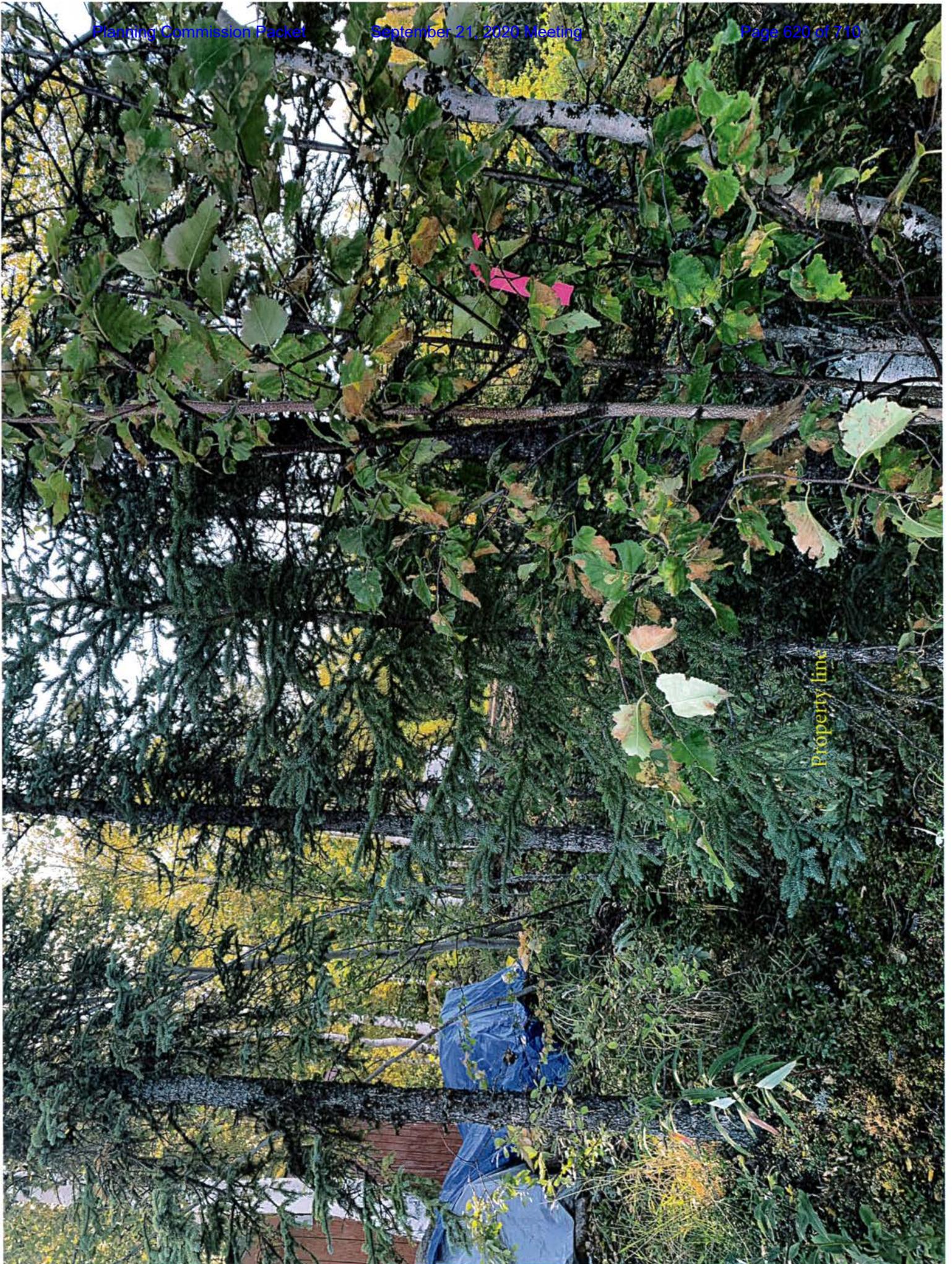


View of property looking north





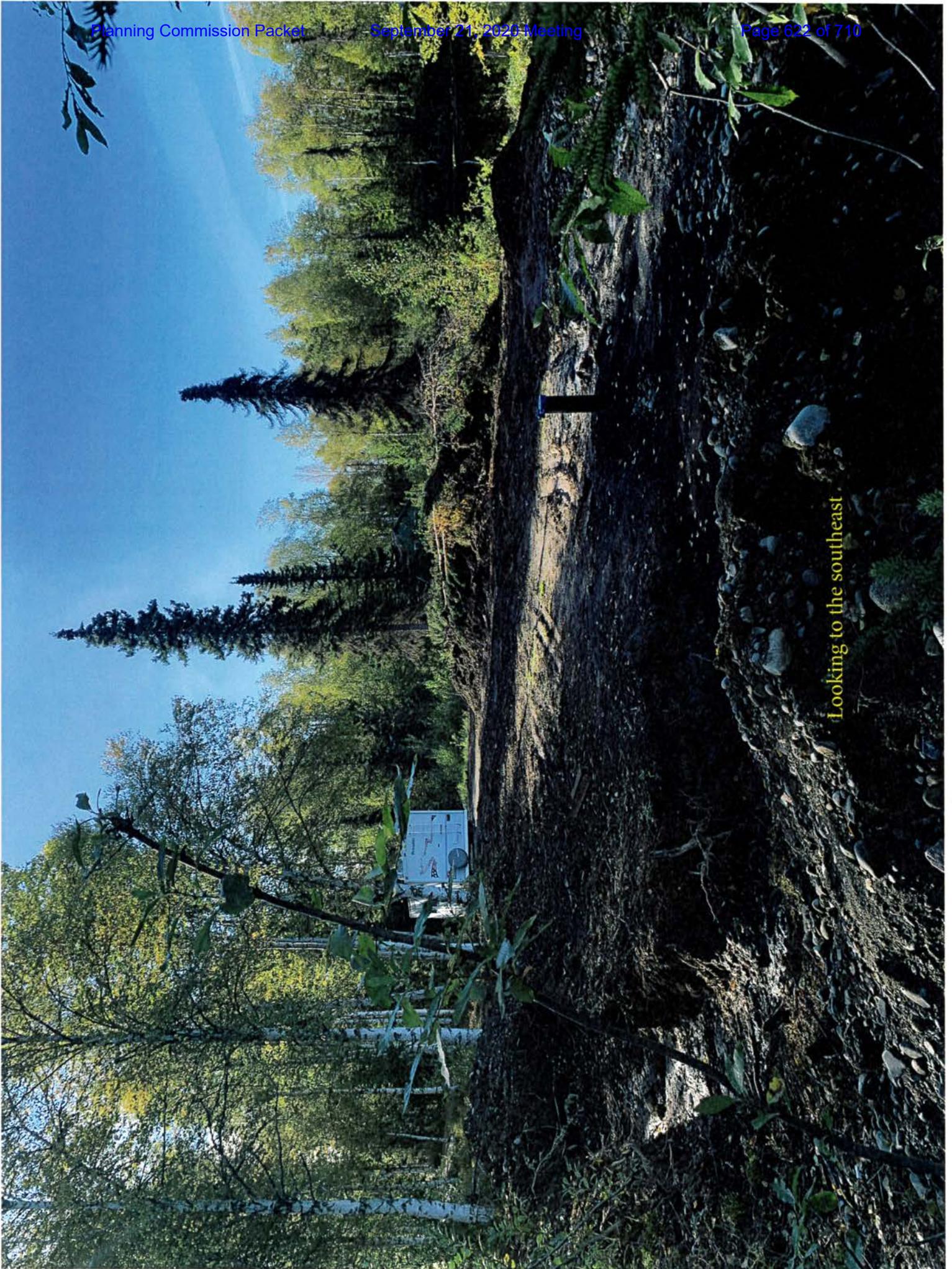
Looking to the south



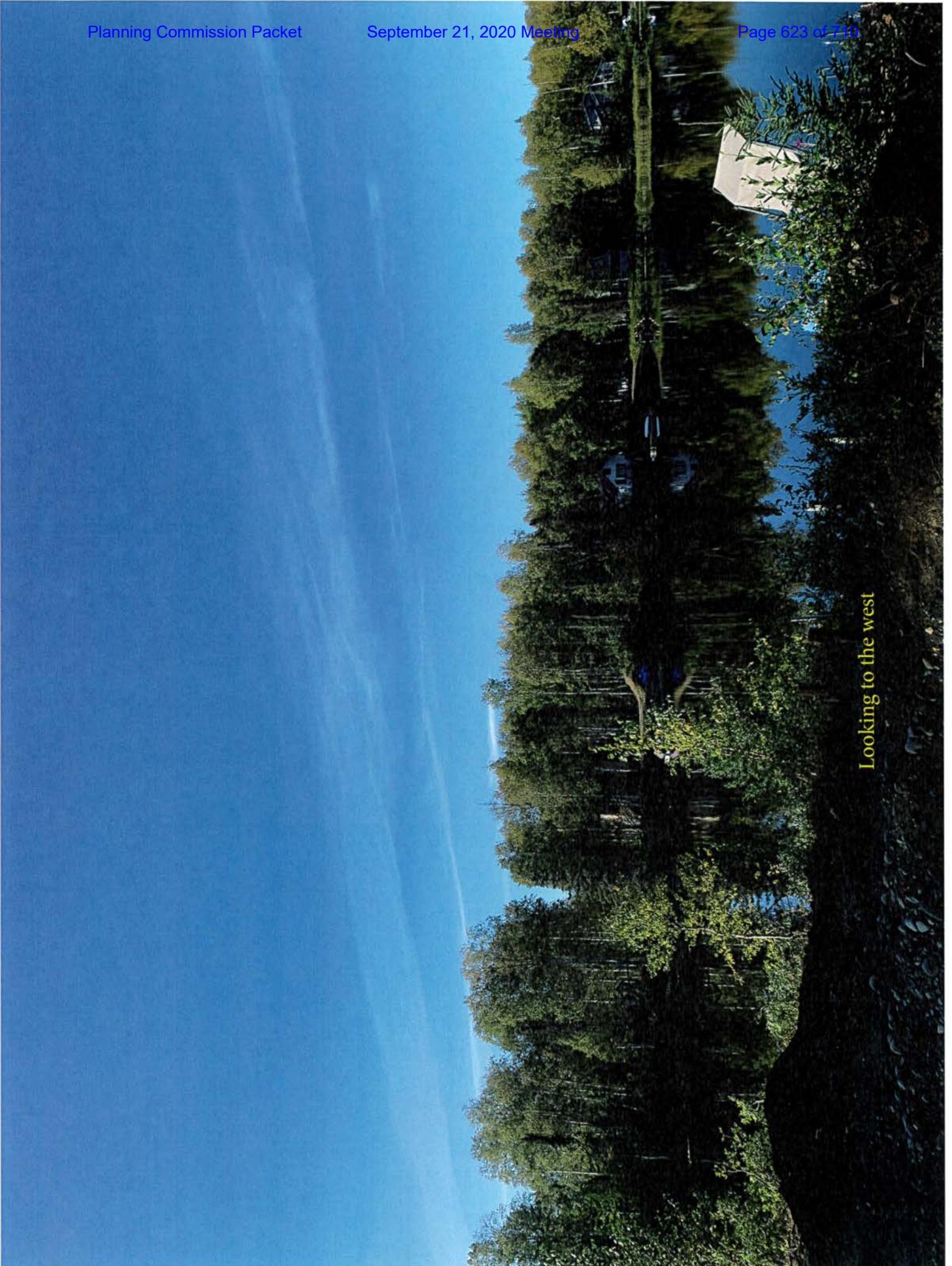
Property line



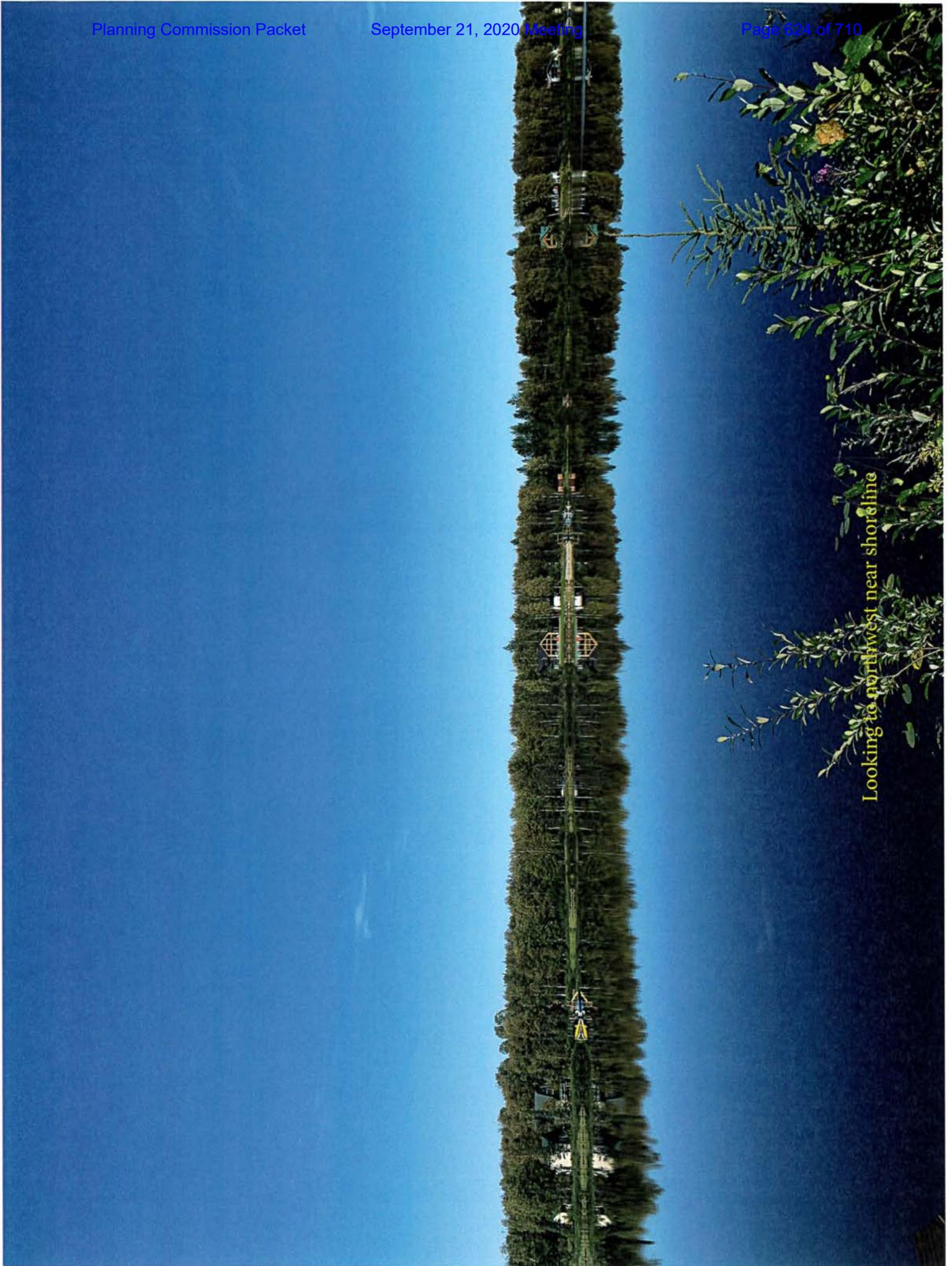
Northern property corner



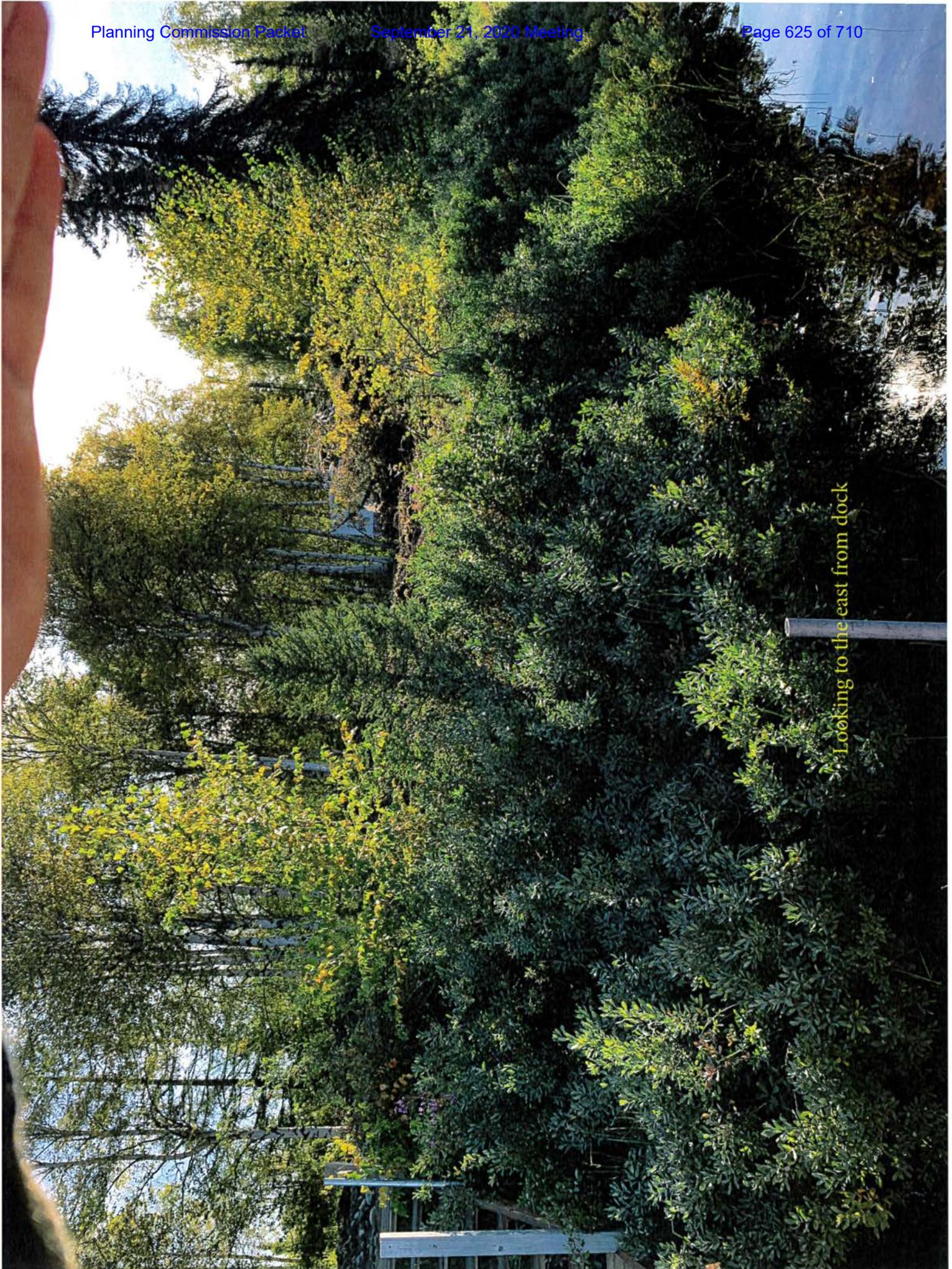
Looking to the southeast.



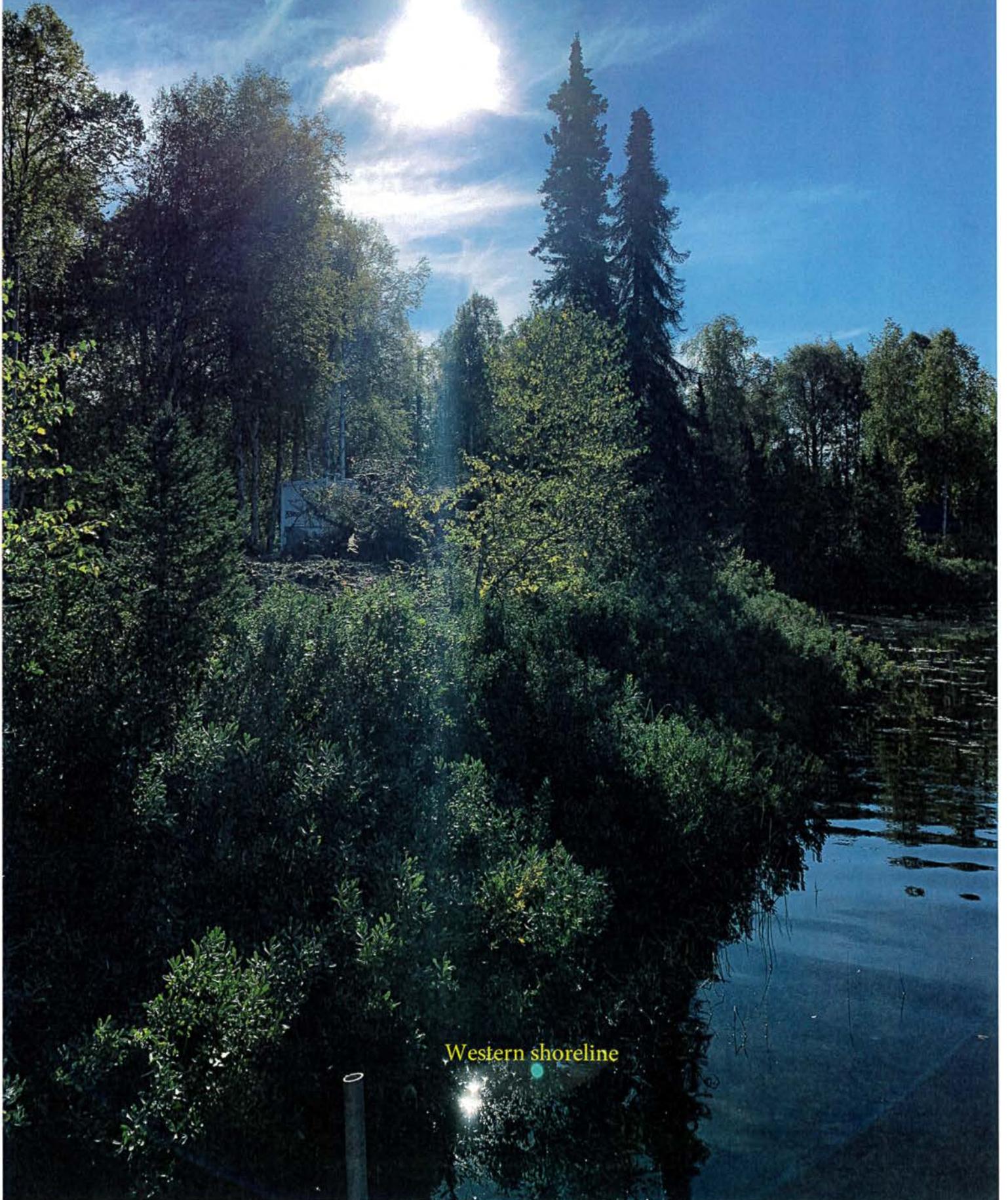
Looking to the west



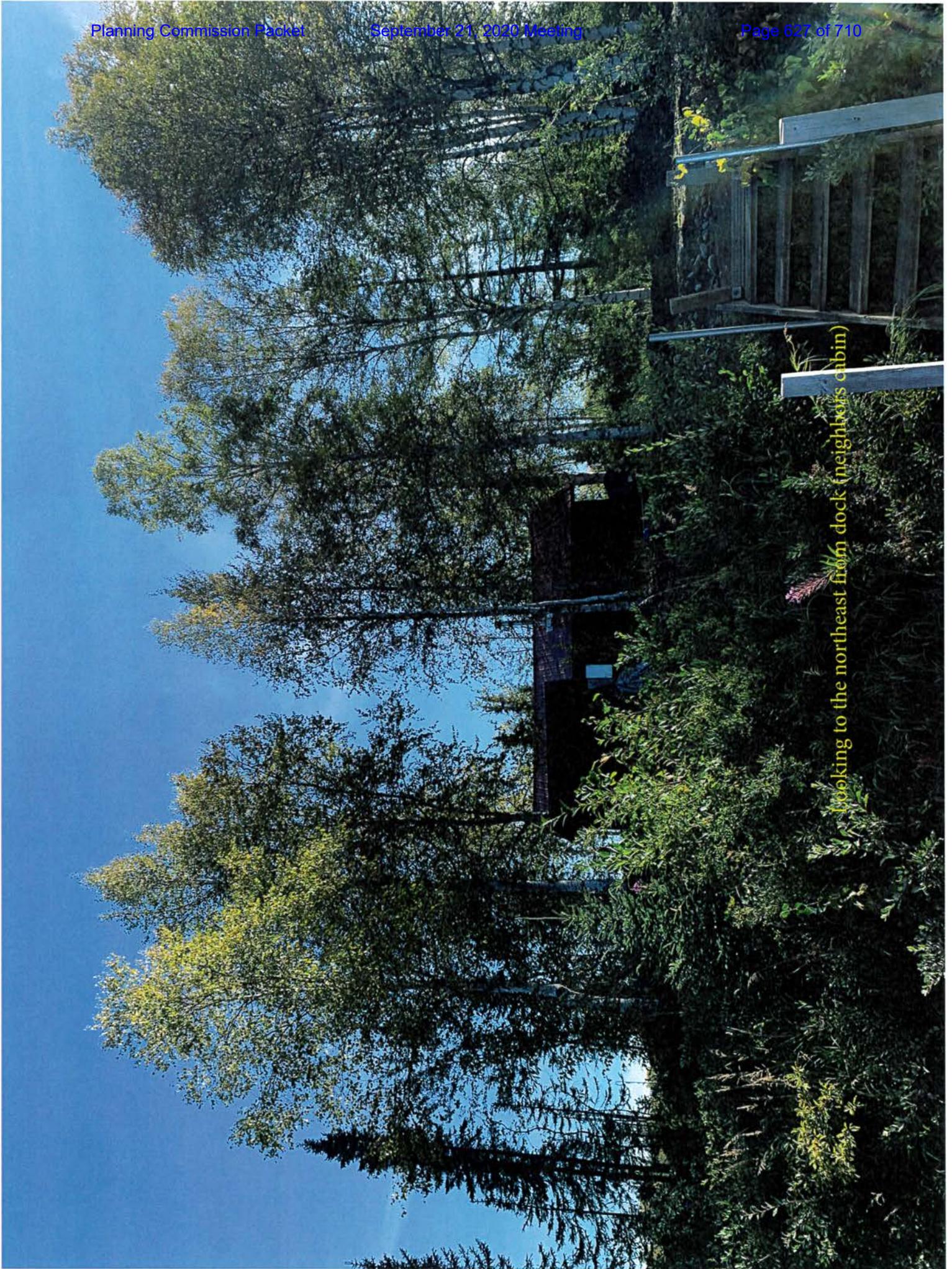
Looking to northwest near shoreline



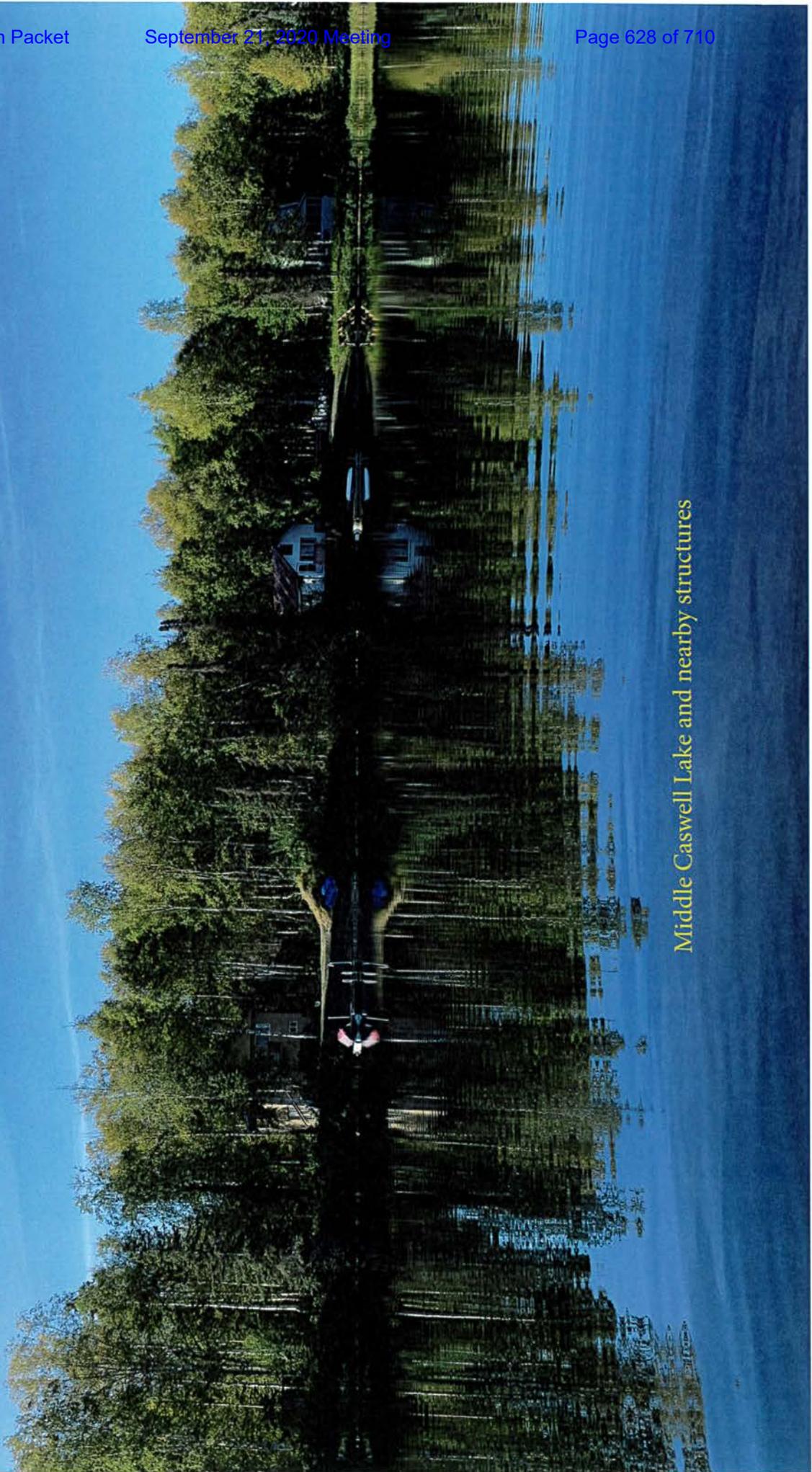
Looking to the east from dock



Western shoreline



Looking to the northeast from dock (neighbors cabin)



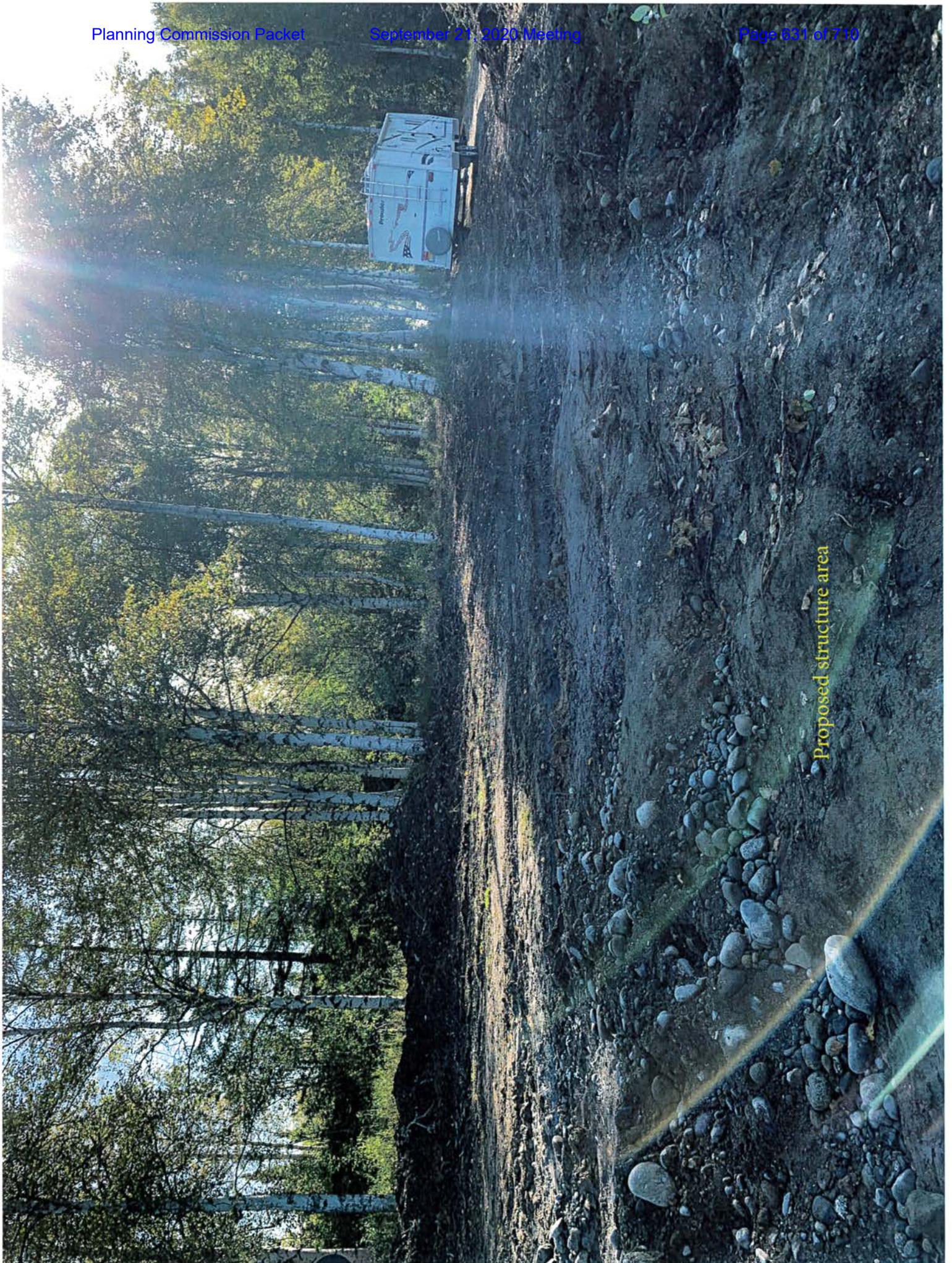
Middle Caswell Lake and nearby structures



Western shoreline and nearby structure



Looking to the north from shoreline



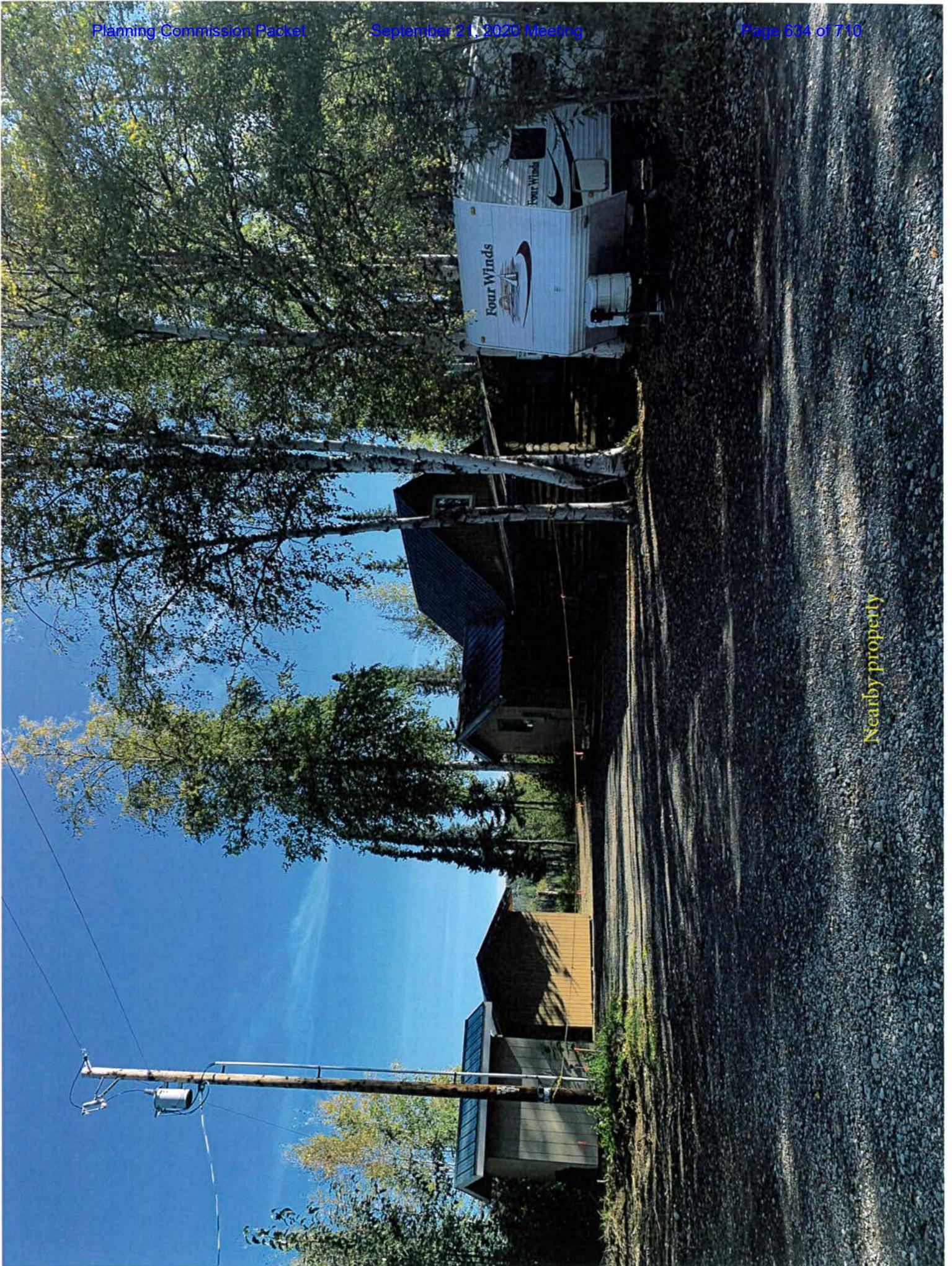
Proposed structure area



Eastern property line



Looking down eastern property line



Nearby property

Sample of MSB Real Property Detail for Lots
Within $\frac{1}{4}$ Mile of Subject Parcel.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1351

Site Information
 Account Number 6070000L1351 Subdivision CASWELL LKS
 Parcel ID 39109 City None
 TRS S22N04W14 Map CA01 Tax Map
 Abbreviated Description CASWELL LKS LOT 1351
 (Not for Conveyance)

Site Address 19530 E GREYLING DR
Ownership
 Owners KIM KEVIN W Buyers
 Primary Owner's Address 2719 TURNAGAIN PKY ANCHORAGE AK Primary Buyer's Address
 99517

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$15,000.00	\$78,700.00	\$93,700.00	2020	\$15,000.00	\$78,700.00	\$93,700.00
2019	\$15,000.00	\$75,100.00	\$90,100.00	2019	\$15,000.00	\$75,100.00	\$90,100.00
2018	\$15,000.00	\$72,100.00	\$87,100.00	2018	\$15,000.00	\$72,100.00	\$87,100.00

Building Information
 Structure 0 of 2
 Residential Units 0 Use Residential Garage
 Condition Standard Design Other
 Basement None Construction Type Frame
 Year Built 2002 Grade None
 Foundation Wood Posts Building Appraisal \$1800
 Well Septic
 Structure 1 of 2
 Residential Units 1 Use Residential Building
 Condition Standard Design Two Story
 Basement Full Construction Type Frame
 Year Built 2002 Grade 03.8
 Foundation Poured Concrete Building Appraisal \$76900
 Well Well 1 - Drilled Well Septic Septic - 1 - Septic Tank

Building Number	Description	Area	Percent Complete
1	Garage (10.3) Area - 11M	270 Sq. Ft.	44 %
1	First Story	896 Sq. Ft.	63 %
1	Second Story	256 Sq. Ft.	63 %
1	Oil Heat	1 Sq. Ft.	100%
1	Unfinished Basement - 2A	896 Sq. Ft.	100%

Tax/Billing Information				Recorded Documents		Recording Info (offsite link to DNR)	
Year	Certified	Zone Mill	Tax Billed	Date	Type		
2020	Yes	0110	18,143	\$1700.00	9/12/2011	QUITCLAIM DEED (ALL TYPE)	Palmer 2011-017437-0
2019	Yes	0110	18,269	\$1646.04			
2018	Yes	0110	18,189	\$1584.26			

Tax Account Status ²		Farm		Senior		Total	LID Exists
Status	Tax Balance	Disabled Veteran	Senior	Total	LID Exists		
Current	\$849.99	\$0.00	\$0.00	\$0.00	\$0.00No		

Land and Miscellaneous
 Gross Acreage 0.37 Taxable Acreage 0.37 Assembly District 007
 Precinct 10-030 Fire Service Area 135 CASWELL FSA
 Road Service Area 015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances. Last Updated: 9/2/2020 12:00:18 AM
² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1020

Site Information

Account Number	6070000L1020	Subdivision	CASWELL LKS
Parcel ID	34992	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1020		

Site Address 49529 S SILVER SALMON DR

Ownership

Owners	CROPPER REV TR CROPPER RYAN D & JILL M T RES	Buyers	
Primary Owner's Address	%RYAN CROPPER 1730 E DOWLING RD ANCHORAGE AK 99507	Primary Buyer's Address	

Appraisal Information

Year	Appraisal			Assessment Year	Assessment		
	Land Appraised	Bldg. Appraised	Total Appraised		Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$15,100.00	\$27,600.00	\$42,700.00	2020	\$15,100.00	\$27,600.00	\$42,700.00
2019	\$15,100.00	\$28,600.00	\$43,700.00	2019	\$15,100.00	\$28,600.00	\$43,700.00
2018	\$15,100.00	\$29,800.00	\$44,900.00	2018	\$15,100.00	\$29,800.00	\$44,900.00

Building Information

Structure 1 of 2

Residential Units	1	Use	Residential Building
Condition	Standard	Design	Cabin
Basement	None	Construction Type	Frame
Year Built		1982 Grade	1225 - Cabin
Foundation	Wood Posts	Building Appraisal	\$16800
Well		Septic	

Structure 2 of 2

Residential Units	0	Use	Residential Garage
Condition	Standard	Design	Other
Basement	None	Construction Type	Frame
Year Built		2009 Grade	None
Foundation	Poured Concrete	Building Appraisal	\$10800
Well		Septic	

Building Item Details

Building Number	Description	Area	Percent Complete
1	Propane Heat		1 Sq. Ft. 100%
1	Barrel Stove - 8S		1 Sq. Ft. 100%
1	First Story		384 Sq. Ft. 100%
1	Second Story		192 Sq. Ft. 100%
2	Garage (10.2) - 11G		576 Sq. Ft. 100%

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed
2020	Yes	0110	18.143	\$774.71
2019	Yes	0110	18.269	\$798.36
2018	Yes	0110	18.189	\$816.69

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
12/28/2018	WARRANTY DEED (ALL TYPES)	Palmer 2018-027241-0
5/18/2005	WARRANTY DEED (ALL TYPES)	Palmer 2005-012287-0
11/24/1993	WARRANTY DEED (ALL TYPES)	Palmer Bk: 742 Pg: 561

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$387.34		\$0.00	\$0.00	\$0.00	\$0.00 No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.22	0.22	Assembly District 007	10-030	135 CASWELL FSA	015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferments, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1074

Site Information

Account Number	6070000L1074	Subdivision	CASWELL LKS
Parcel ID	23319	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1074		

Site Address 50405 S SILVER SALMON DR

Ownership

Owners	KELLY JASON D	Buyers	
Primary Owner's Address	2110 E 72ND AVE ANCHORAGE AK 99507-2704	Primary Buyer's Address	

Appraisal Information

Year	Appraisal			Assessment			
	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$14,900.00	\$5,400.00	\$20,300.00	2020	\$14,900.00	\$5,400.00	\$20,300.00
2019	\$14,900.00	\$5,500.00	\$20,400.00	2019	\$14,900.00	\$5,500.00	\$20,400.00
2018	\$14,900.00	\$5,600.00	\$20,500.00	2018	\$14,900.00	\$5,600.00	\$20,500.00

Building Information

Structure 0 of 1			
Residential Units	1	Use	Residential Building
Condition	Standard	Design	Cabin
Basement	None	Construction Type	Frame
Year Built		2013 Grade	1215 - Cabin
Foundation	Wood Posts	Building Appraisal	\$5400
Well		Septic	

Building Item Details

Building Number	Description	Area	Percent Complete
0	First Story		126 Sq. Ft. 100%

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed
2020	Yes	0110	18.143	\$368.30
2019	Yes	0110	18.269	\$372.68
2018	Yes	0110	18.189	\$372.88

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
10/5/2015	QUITCLAIM DEED (ALL TYPE)	Palmer 2015-021361-0
9/17/2010	QUITCLAIM DEED (ALL TYPE)	Palmer 2010-018409-0
9/17/2010	QUITCLAIM DEED (ALL TYPE)	Palmer 2010-018408-0

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.26	0.26	Assembly District 007	<u>10-030</u>	135 CASWELL FSA	015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.

Last Updated: 9/1/2020 12:00:16 AM



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1066

Site Information

Account Number	6070000L1066	Subdivision	CASWELL LKS
Parcel ID	49714	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1066		

Ownership

Owners	HANSTEN JANET E FAMILY TR	Buyers	
Primary Owner's Address	2155 DAWNLIGHT CT ANCHORAGE AK 99501	Primary Buyer's Address	

Appraisal Information

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$13,400.00	\$0.00	\$13,400.00	2020	\$13,400.00	\$0.00	\$13,400.00
2019	\$13,400.00	\$0.00	\$13,400.00	2019	\$13,400.00	\$0.00	\$13,400.00
2018	\$13,400.00	\$0.00	\$13,400.00	2018	\$13,400.00	\$0.00	\$13,400.00

Building Information

Building Item Details			
Building Number	Description	Area	Percent Complete

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed	Date	Type	Recording Info (offsite link to DNR)
2020	Yes	0110	18.143	\$243.11	12/16/2015	WARRANTY DEED (ALL TYPES)	Palmer 2015-027092-0
2019	Yes	0110	18.269	\$244.80	2/8/2010	WARRANTY DEED (ALL TYPES)	Palmer 2010-002167-0
2018	Yes	0110	18.189	\$243.73	6/7/2007	WARRANTY DEED (ALL TYPES)	Palmer 2007-013978-0

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00 No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.40	0.40	Assembly District 007	10-030	135 CASWELL FSA	015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.

Last Updated: 9/1/2020 12:00:16 AM



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1065

Site Information
 Account Number 6070000L1065 Subdivision CASWELL LKS
 Parcel ID 25420 City None
 TRS S22N04W14 Map CA01 Tax Map
 Abbreviated Description (Not for Conveyance) CASWELL LKS LOT 1065

Site Address 50293 S SILVER SALMON DR
 Ownership
 Owners HANSTEN JANET E FAMILY TR Buyers
 Primary Owner's Address 2155 DAWNLIGHT CT ANCHORAGE AK 99501 Primary Buyer's Address

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$13,100.00	\$28,200.00	\$41,300.00	2020	\$13,100.00	\$28,200.00	\$41,300.00
2019	\$13,100.00	\$29,000.00	\$42,100.00	2019	\$13,100.00	\$29,000.00	\$42,100.00
2018	\$13,100.00	\$29,900.00	\$43,000.00	2018	\$13,100.00	\$29,900.00	\$43,000.00

Building Information
 Structure 1 of 1
 Residential Units 1 Use Residential Building
 Condition Standard Design Cabin
 Basement None Construction Type Frame
 Year Built 1995 Grade 1220 - Cabin
 Foundation Other Building Appraisal \$28200
 Well Septic

Building Item Details		Area	Percent Complete
Building Number	Description		
1	First Story	480 Sq. Ft.	100%
1	Second Story	192 Sq. Ft.	100%

Tax/Billing Information					Recorded Documents		Recording Info (offsite link to DNR)
Year	Certified	Zone	Mill	Tax Billed	Date	Type	
2020	Yes	0110	18.143	\$749.30	12/16/2015	WARRANTY DEED (ALL TYPES)	Palmer 2015-027092-0
2019	Yes	0110	18.269	\$769.12	10/30/2007	WARRANTY DEED (ALL TYPES)	Palmer 2007-027956-0
2018	Yes	0110	18.189	\$782.12	8/1/1991	WARRANTY DEED (ALL TYPES)	Palmer Bk: 657 Pg: 843

Tax Account Status ²		Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Status	Current	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 No

Land and Miscellaneous
 Gross Acreage 0.33 Taxable Acreage 0.33 Assembly District 007
 Precinct 10-030 Fire Service Area 135 CASWELL FSA
 Road Service Area 015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

Last Updated: 9/1/2020 12:00:16 AM

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1064

Site Information

Account Number	6070000L1064	Subdivision	CASWELL LKS
Parcel ID	29818	City	None
TRS	S22N04W14	Map CA01	
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1064		Tax Map

Site Address 50267 S SILVER SALMON DR

Ownership

Owners	FORD CHRISTOPHER R	Buyers	
Primary Owner's Address	2931 PELICAN DR ANCHORAGE AK 99502-1664	Primary Buyer's Address	

Appraisal Information

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$13,300.00	\$11,150.00	\$24,450.00	2020	\$13,300.00	\$11,150.00	\$24,450.00
2019	\$13,300.00	\$11,850.00	\$25,150.00	2019	\$13,300.00	\$11,850.00	\$25,150.00
2018	\$13,300.00	\$12,550.00	\$25,850.00	2018	\$13,300.00	\$12,550.00	\$25,850.00

Building Information

Structure 1 of 1							
Residential Units	1	Use	Residential Building				
Condition	Standard	Design	Cabin				
Basement	None	Construction Type	Frame				
Year Built	1974	Grade	1220 - Cabin				
Foundation	Wood Posts	Building Appraisal	\$11150				
Well		Septic					

Building Item Details

Building Number	Description	Area	Percent Complete
1	Wood Stove - 8Y		1 Sq. Ft. 100%
1	First Story		576 Sq. Ft. 100%

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed
2020	Yes	0110	18.143	\$443.59
2019	Yes	0110	18.269	\$459.47
2018	Yes	0110	18.189	\$470.20

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
10/30/2017	QUITCLAIM DEED (ALL TYPE)	Palmer 2017-025441-0
7/9/2010	WARRANTY DEED (ALL TYPES)	Palmer 2010-013119-0
7/21/1995	WARRANTY DEED (ALL TYPES)	Palmer Bk: 812 Pg: 704

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
PLEASE CALL	\$1,008.28		\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.26	0.26	Assembly District 007	10-030	135 CASWELL FSA	015 Caswell Lakes RSA

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Last Updated: 9/1/2020 12:00:16 AM

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1068

Site Information

Account Number	6070000L1068	Subdivision	CASWELL LKS
Parcel ID	14071	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1068		

Site Address 49573 S JUMPIN CIR

Ownership

Owners	MARLOW MARK & BRENDA FAM	Buyers	
Primary Owner's Address	7960 UPPER O'MALLEY RD ANCHORAGE AK 99507-6221	Primary Buyer's Address	

Appraisal Information

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$23,800.00	\$28,000.00	\$51,800.00	2020	\$23,800.00	\$28,000.00	\$51,800.00
2019	\$23,800.00	\$29,100.00	\$52,900.00	2019	\$23,800.00	\$29,100.00	\$52,900.00
2018	\$23,800.00	\$30,000.00	\$53,800.00	2018	\$23,800.00	\$30,000.00	\$53,800.00

Building Information

Structure 1 of 1			
Residential Units	1	Use	Residential Building
Condition	Standard	Design	Cabin
Basement	None	Construction Type	Frame
Year Built	1984	Grade	1225 - Cabin
Foundation	Wood Posts	Building Appraisal	\$28000
Well	Well 3 - Dug Well	Septic	Septic - 1 - Septic Tank

Building Item Details

Building Number	Description	Area	Percent Complete
1	Wood Stove - 8Y		1 Sq. Ft. 100%
1	First Story		520 Sq. Ft. 100%

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed
2020	Yes	0110	18.143	\$939.81
2019	Yes	0110	18.269	\$966.43
2018	Yes	0110	18.189	\$978.57

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
8/31/2015	WARRANTY DEED (ALL TYPES)	Palmer 2015-018509-0
8/1/2008	WARRANTY DEED (ALL TYPES)	Palmer 2008-017398-0
8/1/2000	QUITCLAIM DEED (ALL TYPE)	Palmer Bk: 1082 Pg: 277

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$469.91		\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	0.42	Taxable Acreage	0.42	Assembly District	007	Precinct	10-030	Fire Service Area	135 CASWELL FSA	Road Service Area	015 Caswell Lakes RSA
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Last Updated: 9/1/2020 12:00:16 AM

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1069

Site Information

Account Number	6070000L1069	Subdivision	CASWELL LKS
Parcel ID	26592	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1069		

Site Address 49577 S JUMPIN CIR

Ownership

Owners	MCKNIGHT JEAN	Buyers	
Primary Owner's Address	9501 ALBATROSS DR ANCHORAGE AK 99502	Primary Buyer's Address	

Appraisal Information

Year	Appraisal			Assessment Year	Assessment		
	Land Appraised	Bldg. Appraised	Total Appraised		Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$23,700.00	\$0.00	\$23,700.00	2020	\$23,700.00	\$0.00	\$23,700.00
2019	\$23,700.00	\$0.00	\$23,700.00	2019	\$23,700.00	\$0.00	\$23,700.00
2018	\$23,700.00	\$0.00	\$23,700.00	2018	\$23,700.00	\$0.00	\$23,700.00

Building Information

Building Item Details

Building Number	Description	Area	Percent Complete
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Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed	Date	Type	Recording Info (offsite link to DNR)
2020	Yes	0110	18.143	\$429.99	7/6/2005	WARRANTY DEED (ALL TYPES)	Palmer 2005-017425-0
2019	Yes	0110	18.269	\$432.98	7/29/1999	WARRANTY DEED (ALL TYPES)	Palmer Bk: 1026 Pg: 853
2018	Yes	0110	18.189	\$431.08	1/18/1996	WARRANTY DEED (ALL TYPES)	Palmer Bk: 834 Pg: 615

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$0.00		\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.27	0.27	Assembly District 007	10-030	135 CASWELL FSA	015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.

Last Updated: 9/1/2020 12:00:16 AM



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1070

Site Information
 Account Number 6070000L1070 Subdivision CASWELL LKS
 Parcel ID 7730 City None
 TRS S22N04W14 Map CA01 Tax Map
 Abbreviated Description CASWELL LKS LOT 1070
 (Not for Conveyance)

Site Address 49583 S JUMPIN CIR
Ownership
 Owners ZEILER ROGER L NIXA MICHAEL V Buyers
 Primary Owner's Address 10820 ANVIK CIR EAGLE RIVER AK 99577-8279 Primary Buyer's Address

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$21,500.00	\$17,400.00	\$38,900.00	2020	\$21,500.00	\$17,400.00	\$38,900.00
2019	\$21,500.00	\$17,400.00	\$38,900.00	2019	\$21,500.00	\$17,400.00	\$38,900.00
2018	\$21,500.00	\$18,300.00	\$39,800.00	2018	\$21,500.00	\$18,300.00	\$39,800.00

Building Information
 Structure 1 of 1
 Residential Units 1 Use Residential Building
 Condition Standard Design Cabin
 Basement None Construction Type Log
 Year Built 1974 Grade 1220 - Cabin
 Foundation Wood Posts Building Appraisal \$17400
 Well Well 1 - Drilled Well Septic

Building Item Details		Area	Percent Complete
Building Number	Description		
1	Wood Stove w/Fin-8Z		2 Sq. Ft. 100%
1	First Story		517 Sq. Ft. 100%
1	Second Story		120 Sq. Ft. 100%

Tax/Billing Information				Recorded Documents		Recording Info (offsite link to DNR)
Year	Certified	Zone	Mill	Date	Type	
2020	Yes	0110	18.143	7/17/2014	QUITCLAIM DEED (ALL TYPE)	Palmer 2014-013484-0
2019	Yes	0110	18.269	9/6/2001	WARRANTY DEED (ALL TYPES)	Palmer Bk: 1161 Pg: 666
2018	Yes	0110	18.189	8/16/2001	TRUSTEES DEED	Palmer Bk: 1156 Pg: 636

Tax Account Status ²
 Status Tax Balance Farm Disabled Veteran Senior Total LID Exists
 PLEASE CALL \$705.77 \$0.00 \$0.00 \$0.00 \$0.00 No

Land and Miscellaneous
 Gross Acreage 0.23 Taxable Acreage 0.23 Assembly District 007 Precinct 10-030 Fire Service Area 135 CASWELL FSA Road Service Area 015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

Last Updated: 9/1/2020 12:00:16 AM

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1176

Site Information

Account Number 6070000L1176 Subdivision CASWELL LKS
 Parcel ID 23151 City None
 TRS S22N04W14 Map CA01 Tax Map
 Abbreviated Description CASWELL LKS LOT 1176
 (Not for Conveyance)

Site Address 50398 S SILVER SALMON DR

Ownership

Owners NIXON JERRY D & BARBARA Buyers
 Primary Owner's Address HC 89 BOX 1453 WILLOWAK 99688-9604 Primary Buyer's Address

Appraisal Information

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed'
2020	\$5,000.00	\$86,200.00	\$91,200.00	2020	\$0.00	\$0.00	\$0.00
2019	\$5,000.00	\$87,200.00	\$92,200.00	2019	\$0.00	\$0.00	\$0.00
2018	\$5,000.00	\$89,300.00	\$94,300.00	2018	\$0.00	\$0.00	\$0.00

Building Information

Structure 1 of 1
 Residential Units 1 Use Residential Building
 Condition Standard Design Cabin
 Basement None Construction Type Frame
 Year Built 1998 Grade 1225 - Cabin
 Foundation Poured Concrete Building Appraisal \$85200
 Well Well 1 - Drilled Well Septic Septic - 1 - Septic Tank

Building Item Details

Building Number	Description	Area	Percent Complete
1	Propane Heat		1 Sq. Ft. 100%
1	First Story		936 Sq. Ft. 80 %
1	Second Story		560 Sq. Ft. 100%

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed
2020	Yes	0110	18.143	\$0.00
2019	Yes	0110	18.269	\$0.00
2018	Yes	0110	18.189	\$0.00

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
4/17/2002	WARRANTY DEED (ALL TYPES)	Palmer 2002-007661-0
4/24/1997	WARRANTY DEED (ALL TYPES)	Palmer Bk: 890 Pg: 525
4/7/1997	QUITCLAIM DEED (ALL TYPE)	Palmer Bk: 888 Pg: 248

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$0.00		\$0.00	\$0.00	\$91,200.00	No

Land and Miscellaneous

Gross Acreage 0.47 Taxable Acreage 0.47 Assembly District 007 Precinct 10-030 Fire Service Area 135 CASWELL FSA Road Service Area 015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1058

Site Information

Account Number	6070000L1058	Subdivision	CASWELL LKS
Parcel ID	62667	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1058		

Site Address 50067 S SILVER SALMON DR

Ownership

Owners	CROCKER ANN M	Buyers	
Primary Owner's Address	9320 SHORECREST DR ANCHORAGE AK 99502-1336	Primary Buyer's Address	

Appraisal Information

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$13,700.00	\$46,300.00	\$60,000.00	2020	\$13,700.00	\$46,300.00	\$60,000.00
2019	\$13,700.00	\$47,300.00	\$61,000.00	2019	\$13,700.00	\$47,300.00	\$61,000.00
2018	\$13,700.00	\$48,600.00	\$62,300.00	2018	\$13,700.00	\$48,600.00	\$62,300.00

Building Information

Structure 1 of 1			
Residential Units	1	Use	Residential Building
Condition	Standard	Design	Cabin
Basement	None	Construction Type	Frame
Year Built		1996 Grade	1225 - Cabin
Foundation	Wood Posts	Building Appraisal	\$46300
Well	Well 1 - Drilled Well	Septic	Septic - 1 - Septic Tank

Building Item Details

Building Number	Description	Area	Percent Complete
1	Propane Heat		1 Sq. Ft. 100%
1	Wood Stove w/Fin-8Z		1 Sq. Ft. 100%
1	First Story		480 Sq. Ft. 100%
1	Second Story		240 Sq. Ft. 100%

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed	Date	Type	Recording Info (offsite link to DNR)
2020	Yes	0110	18.143	\$1088.58	7/27/2012	QUITCLAIM DEED (ALL TYPE)	Palmer 2012-015879-0
2019	Yes	0110	18.269	\$1114.41	2/16/2012	QUITCLAIM DEED (ALL TYPE)	Palmer 2012-002930-0
2018	Yes	0110	18.189	\$1133.17	5/9/2006	QUITCLAIM DEED (ALL TYPE)	Palmer 2006-012228-0

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00 No

Land and Miscellaneous

Gross Acreage	0.43	Taxable Acreage	0.43	Assembly District	007	Precinct	10-030	Fire Service Area	135 CASWELL FSA	Road Service Area	015 Caswell Lakes RSA
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¹ Total Assessed is net of exemptions and deferrals, penalties, and other charges posted after Last Update Date are not reflected in balances.

² If account is in foreclosure, payment must be in certified funds.



MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1055

Site Information

Account Number	6070000L1055	Subdivision	CASWELL LKS
Parcel ID	22874	City	None
TRS	S22N04W14	Map CA01	Tax Map
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1055		

Site Address

49595 S LURE CIR

Ownership

Owners	KNOWLES RICHARD L	Buyers	
Primary Owner's Address	5240 E 41ST AVE ANCHORAGE AK 99508	Primary Buyer's Address	

Appraisal Information

Appraisal Information				Assessment			
Year	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$13,800.00	\$137,800.00	\$151,600.00	2020	\$13,800.00	\$137,800.00	\$151,600.00
2019	\$13,800.00	\$133,100.00	\$146,900.00	2019	\$13,800.00	\$133,100.00	\$146,900.00
2018	\$13,800.00	\$132,100.00	\$145,900.00	2018	\$13,800.00	\$132,100.00	\$145,900.00

Building Information

Structure 1 of 1			
Residential Units	1	Use	Residential Building
Condition	Standard	Design	1.5 Story
Basement	None	Construction Type	Frame
Year Built		2005 Grade	04.5
Foundation	Poured Concrete	Building Appraisal	\$137800
Well	Well 1 - Drilled Well	Septic	Septic - 1 - Septic Tank

Building Item Details

Building Number	Description	Area	Percent Complete
1	Propane Heat		0 Sq. Ft. 100%
1	Fireplace Heatilator - 8N		0 Sq. Ft. 100%
1	First Story		720 Sq. Ft. 100%
1	Second Story		288 Sq. Ft. 100%

Tax/Billing Information

Year Certified	Zone	Mill	Tax Billed
2020 Yes	0110	18.143	\$2750.49
2019 Yes	0110	18.269	\$2683.71
2018 Yes	0110	18.189	\$2653.77

Recorded Documents

Date	Type	Recording Info (offsite link to DNR)
5/2/2005	QUITCLAIM DEED (ALL TYPE)	Palmer 2005-010748-0

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
PLEASE CALL	\$2,750.49		\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
	0.21	0.21 Assembly District 007	10-030	135 CASWELL FSA	015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

Last Updated: 9/1/2020 12:00:16 AM

² If account is in foreclosure, payment must be in certified funds.

Frontiersman

Growing with the Valley since 1947.

5751 E. MAYFLOWER CT.
Wasilla, AK 99654

(907) 352-2250 ph
(907) 352-2277 fax

AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA, STATE OF ALASKA, THIRD DIVISION
BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC, THIS DAY
PERSONALLY APPEARED BEFORE **BENJAMIN BORG** WHO, BEING
FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT HE IS THE
LEGAL AD CLERK OF THE **FRONTIERSMAN**
PUBLISHED AT WASILLA AND CIRCULATED THROUGH OUT MATANUSKA
SUSITNA BOROUGH, IN SAID DIVISION THREE AND STATE OF ALASKA
AND THAT THE ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE
COPY, WAS PUBLISHED ON THE FOLLOWING DAYS:

07/31/2020

AND THAT THE RATE CHARGED THEREIN IS NOT IN EXCESS OF
THE RATE CHARGED PRIVATE INDIVIDUALS.


SUBSCRIBED AND SWORN TO BEFORE ME
THIS 31st DAY OF July, 2020.

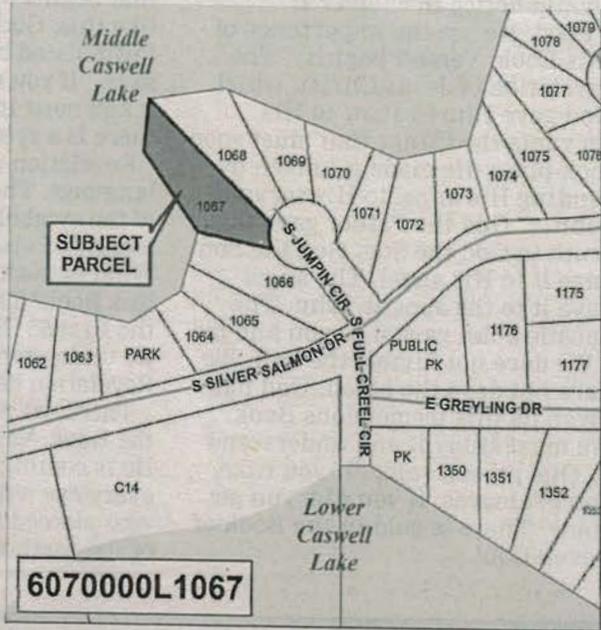

NOTARY PUBLIC FOR STATE OF ALASKA

NOTARY PUBLIC
NANCY E DOWNS
STATE OF ALASKA
MY COMMISSION EXPIRES AUG. 25, 2023

MAT-SU BOROUGH/PAGE
7.31
ACCOUNT NUMBER 405249

PUBLIC HEARING

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the following application for a request for a variance to the minimum shoreline setback requirements of MSB 17.55, on Monday **September 21, 2020**, at 6:00 p.m. in the Borough Assembly Chambers* located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.



***Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website.**

The public is encouraged to check the Borough website prior to attending the public hearing for any changes to the meeting schedule or method.

In Person Participation: Should you wish to attend in person, please adhere to a 6-foot distance between yourself and others; Masks are not required but are encouraged. **Telephonic Testimony:** Dial 1-855-225-1887; You will hear "Joining Conference" when you are admitted to the meeting. You will be muted and able to listen to the meeting. When the Chairperson announces audience participation or a public hearing you would like to speak to, press *3; you will hear "Your hand has been raised." When it is your turn to testify you will hear "Your line has been unmuted." State your name for the record, spell your last name, and provide your testimony.

An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 26' x 24' single-family residence with deck, to be placed approximately 33 feet from the shorelands of Middle Caswell Lake. The location of the request is 49572 S. Jumpin Circle, (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request for more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. For additional information, you may contact Joseph Metzger, Planner II, at 861-7862. Written comments can be mailed to: MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645, or e-mail comments to Joseph.Metzger@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an "interested party". See MSB 15.39.010 for the definition of "interested party". The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before **August 28, 2020** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.



Certificate of Bulk Mailing — Domestic

Fee for Certificate

Up to 1,000 pieces (1 certificate for total number)

For each additional 1,000 pieces, or fraction thereof

Duplicate Copy

Use Current Price List (Notice 123)

Postage: Mailers must affix meter, PC Postage®, or (uncanceled) postage stamps here in payment of total fee due.



U.S. POSTAGE PITNEY BOWES
ZIP 99645 \$008.55⁰
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0000368428 AUG 03 2020

Acceptance employee must cancel postage affixed (by round-date) at the time of mailing.

If payment of total fee due is being paid by Permit Imprint, include the PostalOrder® Transaction Number here: _____



Number of Identical Weight Pieces	Class of Mail	Postage for Each Mailpiece Paid	Number of Pieces to the Pound
23	1st		96
Total Number of Pounds	Total Postage Paid for Mailpieces	Fee Paid	
502	\$11.60	0.55	

Mailed For: MSW SEN Mailed By: SMALL R

Postmaster's Certification

It is hereby certified that the number of mailpieces presented and the associated postage and fee were verified. This certificate does not provide evidence that a piece was mailed to a particular address.

[Signature]
(Postmaster or Designee)

PS Form 3606-D, January 2016 PSN 7530-17-000-5548

See Reverse for Instructions

fje M. New Services

222N04W14C015 1
BOLTZ CHRIS
PINARD-JANISCH KRISTEN
PO BOX 671371
CHUGIAK AK 99567-1371

56070000L1054 2
BROWN ROBERT STEVEN
BROWN PATRICIA ANN
1700 W 104TH AVE
ANCHORAGE AK 99515-2590

56070000L00PR 3
CASWELL LAKES PARK
GENERAL DELIVERY
WILLOW, AK 99688-9999

56070000L1060 4
CROCKER CURTIS D & ANN M
9320 SHORECREST DR
ANCHORAGE, AK 99515

56070000L1064 5
FORD CHRISTOPHER R
2931 PELICAN DR
ANCHORAGE AK 99502-1664

56070000L1062 6
FRENCH ANTHONY P & TIFFINEY K
15151 OXFORD BLUFF CIR
ANCHORAGE AK 99516-4269

57066000L1052A 7
HANSEN WILLIAM D & LOIS A TRES
HANSEN LVG TR
10936 KATLIAN DR
EAGLE RIVER AK 99577-8123

56070000L1066 8
HANSTEN JANET E FAMILY TR
2155 DAWNLIGHT CT
ANCHORAGE AK 99501

56070000L1174 9
HAUGEN ROBERT J & PATRICIA E
INTER VIVOS TRUST TRES
4761 COLLINS WAY
OCEANSIDE, CA 92056

56070000L1073 10
HORMAN MONA S
PO BOX 2211
CODY, WY 82414-2211

56070000L1074 11
KELLY JASON D
2110 E 72ND AVE
ANCHORAGE AK 99507-2704

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2719 TURNAGAIN PKY
ANCHORAGE AK 99517

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KNOWLES RICHARD L
5240 E 41ST AVE
ANCHORAGE, AK 99508

56070000L1068 14
MARLOW MARK & BRENDA FAM TR
7960 UPPER O'MALLEY RD
ANCHORAGE AK 99507-6221

56070000L1069 15
MCKNIGHT JEAN
9501 ALBATROSS DR
ANCHORAGE, AK 99502

56070000L1067 16
NIXA JASON
PO BOX 671262
CHUGIAK AK 99567

56070000L1177 17
NIXON JERRY D & BARBARA
HC 89 BOX 1453
WILLOW AK 99688-9604

56070000L1075 18
POWELL BERNARD
POWELL TASHA
#1
8018 E 16TH AVE
ANCHORAGE AK 99504-2854

56070000L1076 19
POWELL BERNARD T
3350 MIDTOWN PL
ANCHORAGE AK 99503-4053

56070000L1072 20
SULLIVAN RODGER D&NORMA F
4520 MOUNTAIN VIEW DR
ANCHORAGE, AK 99508-1820

56070000L1077 21
WARD WALTER J & VIRGINIA
12020 OLD SEWARD JCT
ANCHORAGE AK 99515-3504

56070000L1071 22
WARNER FAMILY TRUST
WARNER D & NICHOLS-WARNER V TRES
3311 CHERRY ST
ANCHORAGE AK 99504

56070000L1070 23
ZEILER ROGER L
NIXA MICHAEL V
10820 ANVIK CIR
EAGLE RIVER AK 99577-8279

tara0609
23
8/3/2020 9:53:22 AM

tara0609
23
8/3/2020 9:53:22 AM

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

- MSB Code Section:** MSB 17.65 – Variances
- Applicant:** Jason Nixa
- Location:** 49572 S. Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.
- Request:** An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 26' x 24' single-family residence with deck, to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The Planning Commission will conduct a public hearing concerning the following application for a variance on Monday, September 21, 2020 at 6:00 p.m. in the Borough Assembly Chambers*, 350 E. Dahlia Avenue, in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend. The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

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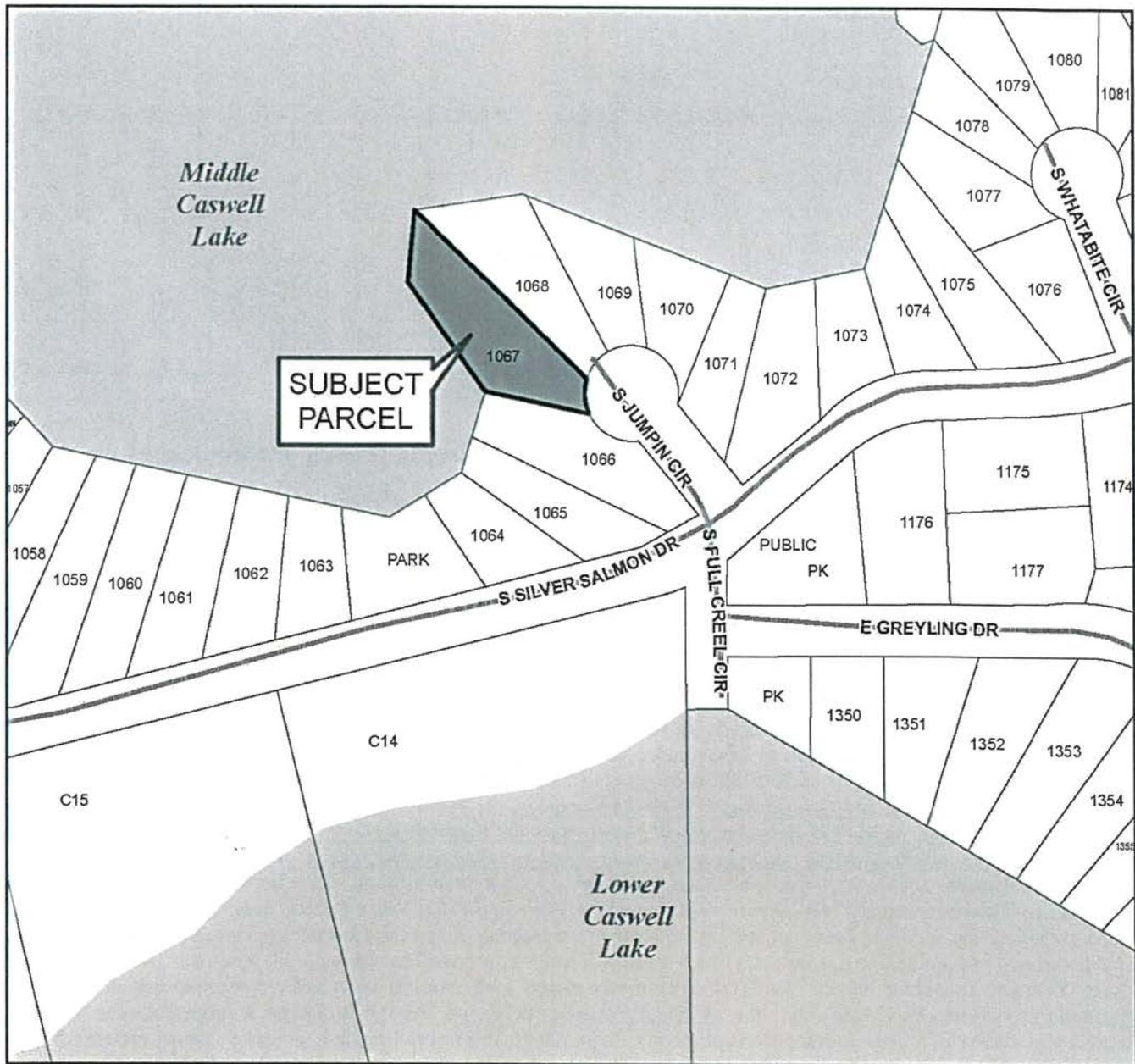
Comments are due on or before August 28, 2020 and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Name: _____ **Mailing Address:** _____

Location/Legal Description of your property: _____

Comments: _____

Note: Vicinity Map Located on Reverse Side

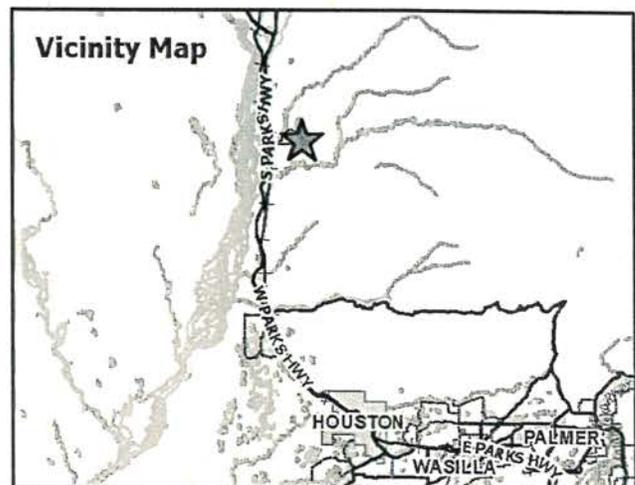


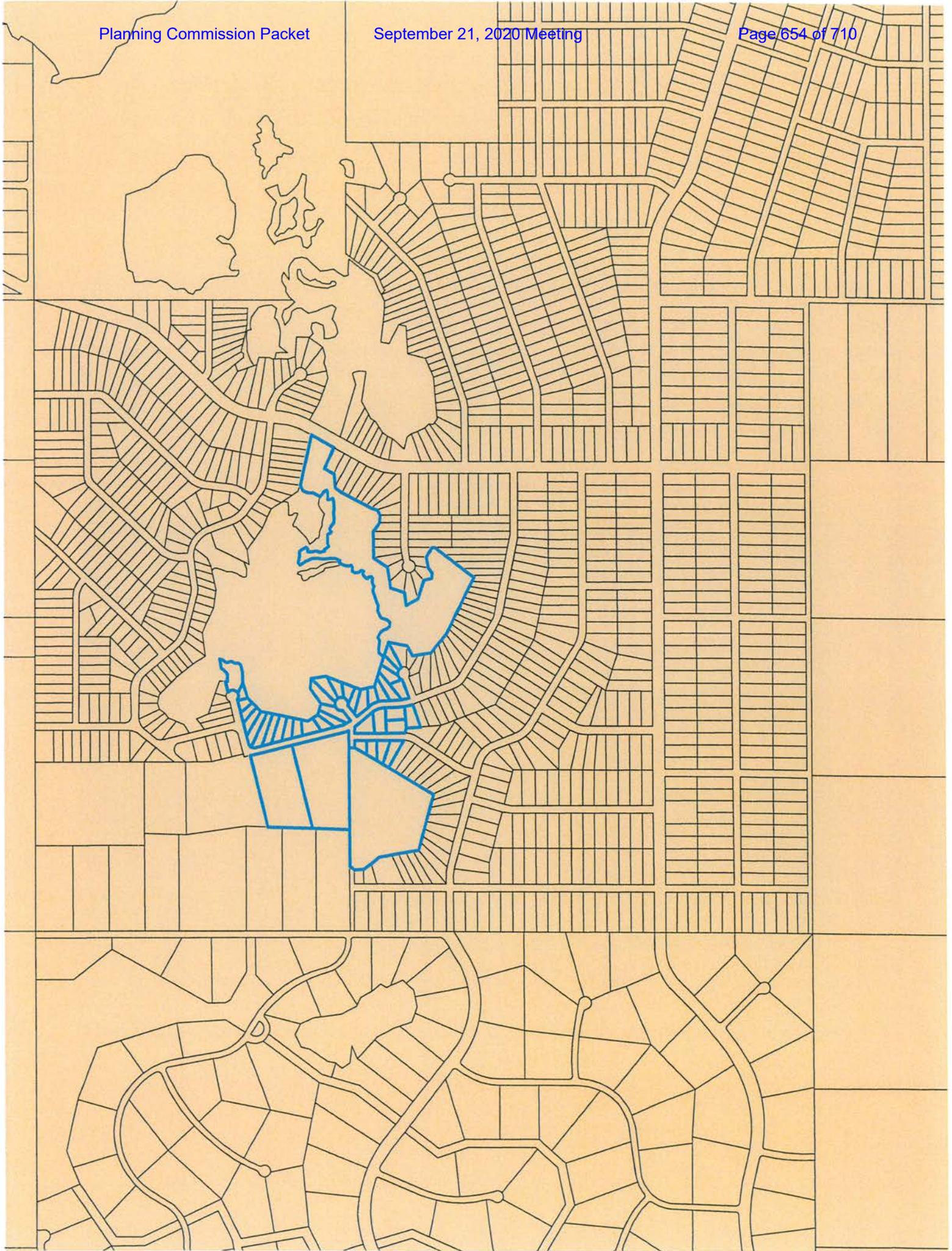
6070000L1067



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7858.

MSB Information Technology/GIS
July 22, 2020





222N04W14C015 1
 BOLTZ CHRIS
 PINARD-JANISCH KRISTEN
 PO BOX 671371
 CHUGIAK AK 99567-1371

56070000L1054 2
 BROWN ROBERT STEVEN
 BROWN PATRICIA ANN
 1700 W 104TH AVE
 ANCHORAGE AK 99515-2590

56070000L00PR 3
 CASWELL LAKES PARK
 GENERAL DELIVERY
 WILLOW, AK 99688-9999

56070000L1060 4
 CROCKER CURTIS D & ANN M
 9320 SHORECREST DR
 ANCHORAGE, AK 99515

56070000L1064 5
 FORD CHRISTOPHER R
 2931 PELICAN DR
 ANCHORAGE AK 99502-1664

56070000L1062 6
 FRENCH ANTHONY P & TIFFINEY K
 15151 OXFORD BLUFF CIR
 ANCHORAGE AK 99516-4269

57066000L1052A 7
 HANSEN WILLIAM D & LOIS A TRES
 HANSEN LVG TR
 10936 KATLIAN DR
 EAGLE RIVER AK 99577-8123

56070000L1066 8
 HANSTEN JANET E FAMILY TR
 2155 DAWNLIGHT CT
 ANCHORAGE AK 99501

56070000L1174 9
 HAUGEN ROBERT J & PATRICIA E
 INTER VIVOS TRUST TRES
 4761 COLLINS WAY
 OCEANSIDE, CA 92056

56070000L1073 10
 HORMAN MONA S
 PO BOX 2211
 CODY, WY 82414-2211

56070000L1074 11
 KELLY JASON D
 2110 E 72ND AVE
 ANCHORAGE AK 99507-2704

222N04W14C014 12
 KIM KEVIN W
 2719 TURNAGAIN PKY
 ANCHORAGE AK 99517

56070000L1056 13
 KNOWLES RICHARD L
 5240 E 41ST AVE
 ANCHORAGE, AK 99508

56070000L1068 14
 MARLOW MARK & BRENDA FAM TR
 7960 UPPER O'MALLEY RD
 ANCHORAGE AK 99507-6221

56070000L1069 15
 MCKNIGHT JEAN
 9501 ALBATROSS DR
 ANCHORAGE, AK 99502

56070000L1067 16
 NIXA JASON
 PO BOX 671262
 CHUGIAK AK 99567

56070000L1177 17
 NIXON JERRY D & BARBARA
 HC 89 BOX 1453
 WILLOW AK 99688-9604

56070000L1075 18
 POWELL BERNARD
 POWELL TASHA
 #1
 8018 E 16TH AVE
 ANCHORAGE AK 99504-2854

56070000L1076 19
 POWELL BERNARD T
 3350 MIDTOWN PL
 ANCHORAGE AK 99503-4053

56070000L1072 20
 SULLIVAN RODGER D&NORMA F
 4520 MOUNTAIN VIEW DR
 ANCHORAGE, AK 99508-1820

56070000L1077 21
 WARD WALTER J & VIRGINIA
 12020 OLD SEWARD JCT
 ANCHORAGE AK 99515-3504

56070000L1071 22
 WARNER FAMILY TRUST
 WARNER D & NICHOLS-WARNER V TRES
 3311 CHERRY ST
 ANCHORAGE AK 99504

56070000L1070 23
 ZEILER ROGER L
 NIXA MICHAEL V
 10820 ANVIK CIR
 EAGLE RIVER AK 99577-8279

tara0609
 23
 8/3/2020 9:53:22 AM



Certificate of Bulk Mailing — Domestic

Fee for Certificate
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 For each additional 1,000 pieces, or fraction thereof
 Duplicate Copy

Use Current Price List (Notice 123)

Number of Identical Weight Pieces: 84
 Class of Mail: 1st
 Postage for Each Mailpiece Paid: Verified
 Number of Pieces to the Pound: 90

Total Number of Pounds: 8.407.
 Total Postage Paid for Mailpieces: \$12.00
 Fee Paid: 8.55

Mailed For: Dev. Services
 Mailed By: Janet

Postmaster's Certification

It is hereby certified that the number of mailpieces presented and the associated postage and fee were verified. This certificate does not provide evidence that a piece was mailed to a particular address.

[Signature]
 (Postmaster or Designee)

PS Form 3606-D, January 2016 PSN 7530-17-000-5548

Postage: Mailers must affix meter, PC Postage®, or (uncanceled) postage stamps here in payment of total fee due.

Acceptance employee must cancel postage affixed (by round-date) at the time of mailing.
 If payment of total fee due is being paid by Permit-Imprint, include the Postal Order® Transaction Number here: _____



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 0000368428 SEP 04 2020

See Reverse for Instructions

222N04W14C015 1
BOLTZ CHRIS
PINARD-JANISCH KRISTEN
PO BOX 671371
CHUGIAK AK 99567-1371

56070000L1060 4
CROCKER CURTIS D & ANN M
9320 SHORECREST DR
ANCHORAGE, AK 99515

57066000L1052A 7
HANSEN WILLIAM D & LOIS A TRES
HANSEN LVG TR
10936 KATLIAN DR
EAGLE RIVER AK 99577-8123

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HORMAN MONA S
PO BOX 2211
CODY, WY 82414-2211

56070000L1056 13
KNOWLES RICHARD L
5240 E 41ST AVE
ANCHORAGE, AK 99508

56070000L1067 16
NIXA JASON
PO BOX 671262
CHUGIAK AK 99567

56070000L1076 19
POWELL BERNARD T
3350 MIDTOWN PL
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56070000L1071 22
WARNER FAMILY TRUST
WARNER D & NICHOLS-WARNER V TRES
3311 CHERRY ST
ANCHORAGE AK 99504

tara0609
23
8/3/2020 9:53:22 AM

56070000L1054 2
BROWN ROBERT STEVEN
BROWN PATRICIA ANN
1700 W 104TH AVE
ANCHORAGE AK 99515-2590

56070000L1064 5
FORD CHRISTOPHER R
2931 PELICAN DR
ANCHORAGE AK 99502-1664

56070000L1066 8
HANSTEN JANET E FAMILY TR
2155 DAWNLIGHT CT
ANCHORAGE AK 99501

56070000L1074 11
KELLY JASON D
2110 E 72ND AVE
ANCHORAGE AK 99507-2704

56070000L1068 14
MARLOW MARK & BRENDA FAM TR
7960 UPPER O'MALLEY RD
ANCHORAGE AK 99507-6221

56070000L1177 17
NIXON JERRY D & BARBARA
HC 89 BOX 1453
WILLOW AK 99688-9604

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SULLIVAN RODGER D&NORMA F
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EAGLE RIVER AK 99577-8279

56070000L00PR 3
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WILLOW, AK 99688-9999

56070000L1062 6
FRENCH ANTHONY P & TIFFINEY K
15151 OXFORD BLUFF CIR
ANCHORAGE AK 99516-4269

56070000L1174 9
HAUGEN ROBERT J & PATRICIA E
INTER VIVOS TRUST TRES
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222N04W14C014 12
KIM KEVIN W
2719 TURNAGAIN PKY
ANCHORAGE AK 99517

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MCKNIGHT JEAN
9501 ALBATROSS DR
ANCHORAGE, AK 99502

56070000L1075 18
POWELL BERNARD
POWELL TASHA
#1
8018 E 16TH AVE
ANCHORAGE AK 99504-2854
56070000L1077 21
WARD WALTER J & VIRGINIA
12020 OLD SEWARD JCT
ANCHORAGE AK 99515-3504

24
SUSITNA COMMUNITY COUNCIL
HC 89 BOX 8575
TALKEETNA, AK 99676

tara0609
23
8/3/2020 9:53:22 AM

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

MSB Code Section: MSB 17.65 – Variances

Applicant: Jason Nixa

Location: 49572 S. Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

Request: An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 38' x 24' single-family residence to be placed at its closest location, approximately 21 feet from the shorelands of Middle Caswell Lake.

This notice is to correct an error in the original description of the request. The original description of the request indicated the variance would allow for the construction of a 26' x 24' single-family residence with deck to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The amended description is listed above under "Request" and is as follows: The variance would allow for the construction of a 38' x 24' single-family residence to be placed, at its closest location, approximately 21 feet from the shorelands of Middle Caswell Lake.

The Planning Commission will conduct a public hearing concerning the following application for a variance on Monday, **September 21, 2020 at 6:00 p.m.** in the Borough Assembly Chambers*, 350 E. Dahlia Avenue, in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

***Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough Website prior to attending the public hearing for any changes to the meeting schedule or method.**

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Note: Vicinity Map Located on Reverse Side

222N04W14C015 1
 BOLTZ CHRIS
 PINARD-JANISCH KRISTEN
 PO BOX 671371
 CHUGIAK AK 99567-1371

56070000L1054 2
 BROWN ROBERT STEVEN
 BROWN PATRICIA ANN
 1700 W 104TH AVE
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56070000L00PR 3
 CASWELL LAKES PARK
 GENERAL DELIVERY
 WILLOW, AK 99688-9999

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 CROCKER CURTIS D & ANN M
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 HANSTEN JANET E FAMILY TR
 2155 DAWNLIGHT CT
 ANCHORAGE AK 99501

56070000L1174 9
 HAUGEN ROBERT J & PATRICIA E
 INTER VIVOS TRUST TRES
 4761 COLLINS WAY
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56070000L1073 10
 HORMAN MONA S
 PO BOX 2211
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56070000L1068 14
 MARLOW MARK & BRENDA FAM TR
 7960 UPPER O'MALLEY RD
 ANCHORAGE AK 99507-6221

56070000L1069 15
 MCKNIGHT JEAN
 9501 ALBATROSS DR
 ANCHORAGE, AK 99502

56070000L1067 16
 NIXA JASON
 PO BOX 671262
 CHUGIAK AK 99567

56070000L1177 17
 NIXON JERRY D & BARBARA
 HC 89 BOX 1453
 WILLOW AK 99688-9604

56070000L1075 18
 POWELL BERNARD
 POWELL TASHA
 #1
 8018 E 16TH AVE
 ANCHORAGE AK 99504-2854

56070000L1076 19
 POWELL BERNARD T
 3350 MIDTOWN PL
 ANCHORAGE AK 99503-4053

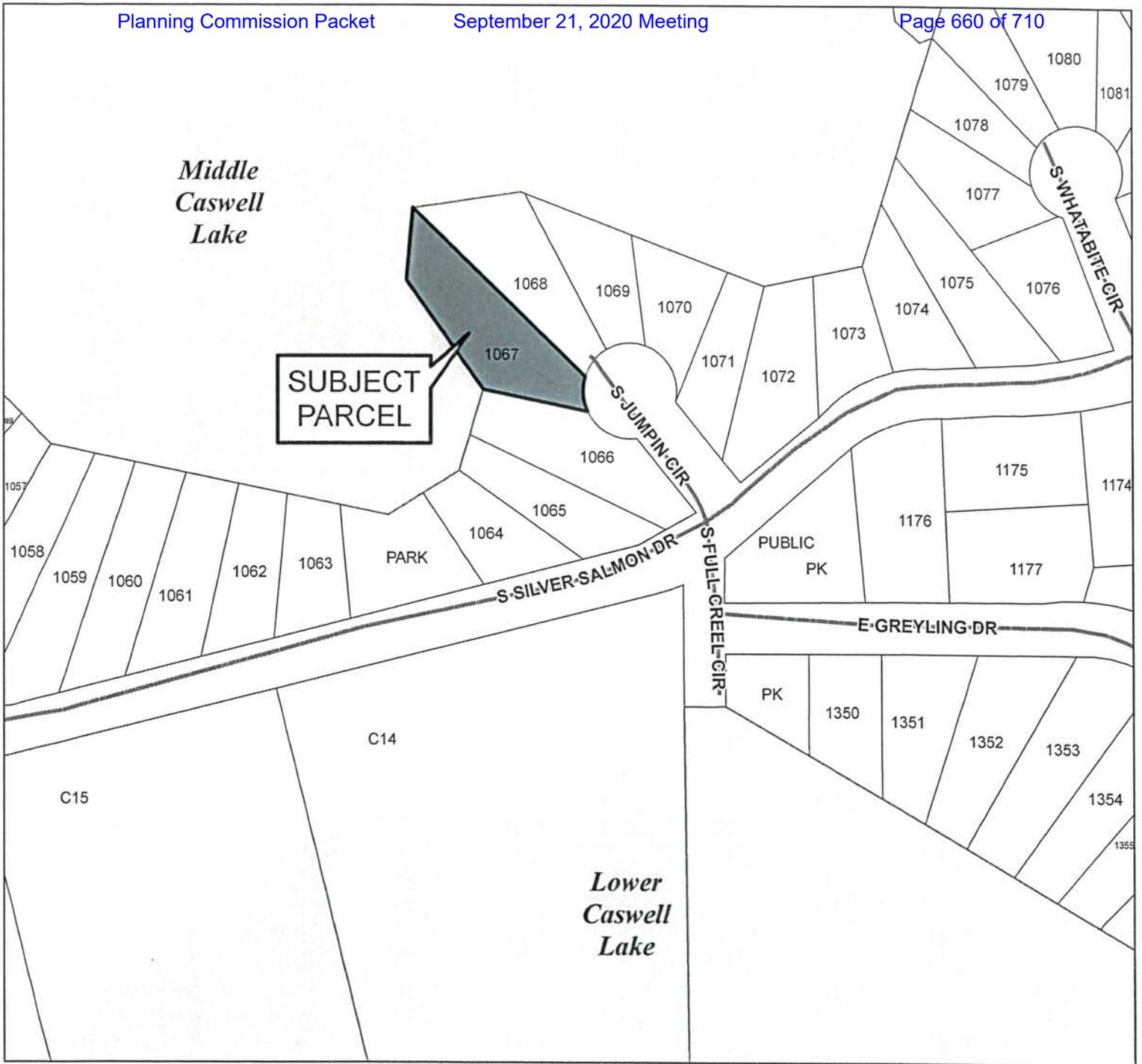
56070000L1072 20
 SULLIVAN RODGER D&NORMA F
 4520 MOUNTAIN VIEW DR
 ANCHORAGE, AK 99508-1820

56070000L1077 21
 WARD WALTER J & VIRGINIA
 12020 OLD SEWARD JCT
 ANCHORAGE AK 99515-3504

56070000L1071 22
 WARNER FAMILY TRUST
 WARNER D & NICHOLS-WARNER V TRES
 3311 CHERRY ST
 ANCHORAGE AK 99504

56070000L1070 23
 ZEILER ROGER L
 NIXA MICHAEL V
 10820 ANVIK CIR
 EAGLE RIVER AK 99577-8279

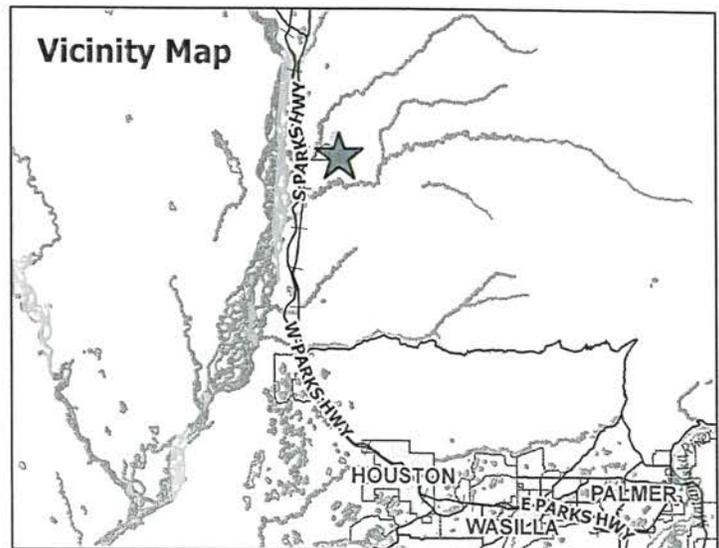
24
 SUSITNA COMMUNITY COUNCIL
 HC 89 BOX 8575
 TALKEETNA, AK 99676



6070000L1067



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PUBLIC HEARING

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the following application for a request for a variance to the minimum shoreline setback requirements of MSB 17.55, on Monday September 21, 2020, at 6:00 p.m. in the Borough Assembly Chambers* located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

This notice is to correct an error in the original description of the request. The original description of the request indicated the variance would allow for the construction of a 26' x 24' single-family residence with deck to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The amended description is listed below and is as follows: The variance would allow for the construction of a 38' x 24' single-family residence to be placed, at its closest location, approximately 21 feet from the shorelands of Middle Caswell Lake.

***Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough website prior to attending the public hearing for any changes to the meeting schedule or method.**

In Person Participation: Should you wish to attend in person, please adhere to a 6-foot distance between yourself and others; Masks are not required but are encouraged. **Telephonic Testimony:** Dial 1-855-225-1887; You will hear "Joining Conference" when you are admitted to the meeting. You will be muted and able to listen to the meeting. When the Chairperson announces audience participation or a public hearing you would like to speak to, press *3; you will hear "Your hand has been raised." When it is your turn to testify you will hear "Your line has been unmuted." State your name for the record, spell your last name, and provide your testimony.

An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 38' x 24' single-family residence, to be placed at its closest location, approximately 21 feet from the shorelands of Middle Caswell Lake. The location of the request is 49572 S. Jumpin Circle, (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. For additional information, you may contact Joseph Metzger, Planner II, at 861-7862 or email: Joseph.Metzger@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an "interested party". See MSB 15.39.010 for the definition of "interested party". The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough

home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Nixa – Variance request to MSB 17.55

An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 26' x 24' single-family residence with deck, to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

Location: The location of the request is 49572 S. Jumpin Circle, (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

Applicant: Jason Nixa

Public Hearing: The Planning Commission will conduct a public hearing concerning this application on Monday, September 21, 2020, at 6:00 p.m. in the Borough Assembly Chambers* located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

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The application material may also be viewed at the Borough Permit Center. If you have questions or want to submit comments, please contact Joe Metzger at 861-7862 or mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645, or email: joseph.metzger@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an “interested party.” See MSB 15.39.010 for the definition of “interested party.” The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk’s office, and at various libraries within the borough.

Comments are due on or before August 28, 2020 and will be included in the Planning Commission packet for the Commissioner’s review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Nixa – Variance request to MSB 17.55

An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 38' x 24' single-family residence, to be placed approximately 21 feet from the shorelands of Middle Caswell Lake.

Location: The location of the request is 49572 S. Jumpin Circle, (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

Applicant: Jason Nixa

Public Hearing: The Planning Commission will conduct a public hearing concerning this application on Monday, September 21, 2020, at 6:00 p.m. in the Borough Assembly Chambers* located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend.

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Comments are due on or before August 28, 2020 and will be included in the Planning Commission packet for the Commissioner’s review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Joseph Metzger

From: Joseph Metzger
Sent: Monday, August 3, 2020 4:58 PM
To: 'allen.kemplen@alaska.gov'; 'tucker.hurn@alaska.gov'; 'melanie.nichols@alaska.gov'; 'kyler.hylton@alaska.gov'; 'sarah.wilber@alaska.gov'; 'mearow@matanuska.com'; 'rglenn@mta-telco.com'; 'jthompson@mta-telco.com'; 'row@enstarnaturalgas.com'; 'ospdesign@gci.com'; Eric Phillips; Jude Bilafer; Cindy Corey; Terry Dolan; Jim Jenson; Jamie Taylor; Nicole Wilkins; Karol Riese; Taunnie Boothby; Theresa Taranto; John Aschenbrenner; John Aschenbrenner; Jill Irsik; Michelle Wagner; Cheryl Scott; 'Tam Boeve'; 'info@susitnacc.org'
Subject: RFC- Nixa Variance Request - due August 28

MEMORANDUM

Date: August 3, 2020
To: Various Governmental Agencies
From: Joseph Metzger, Planner II
Subject: Request for Review and Comments Governmental Agencies
Project: Variance to shoreline setback requirements of MSB 17.55
Location: 49572 S. Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.
Applicant: Jason Nixa

An application under MSB 17.65 – Variances, has been submitted for a variance to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 26' x 24' single-family residence with deck, to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The Planning Commission will conduct a public hearing on this request on **September 21, 2020**.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material may also be reviewed at the Borough Permit Center. A direct link to the application material is here:

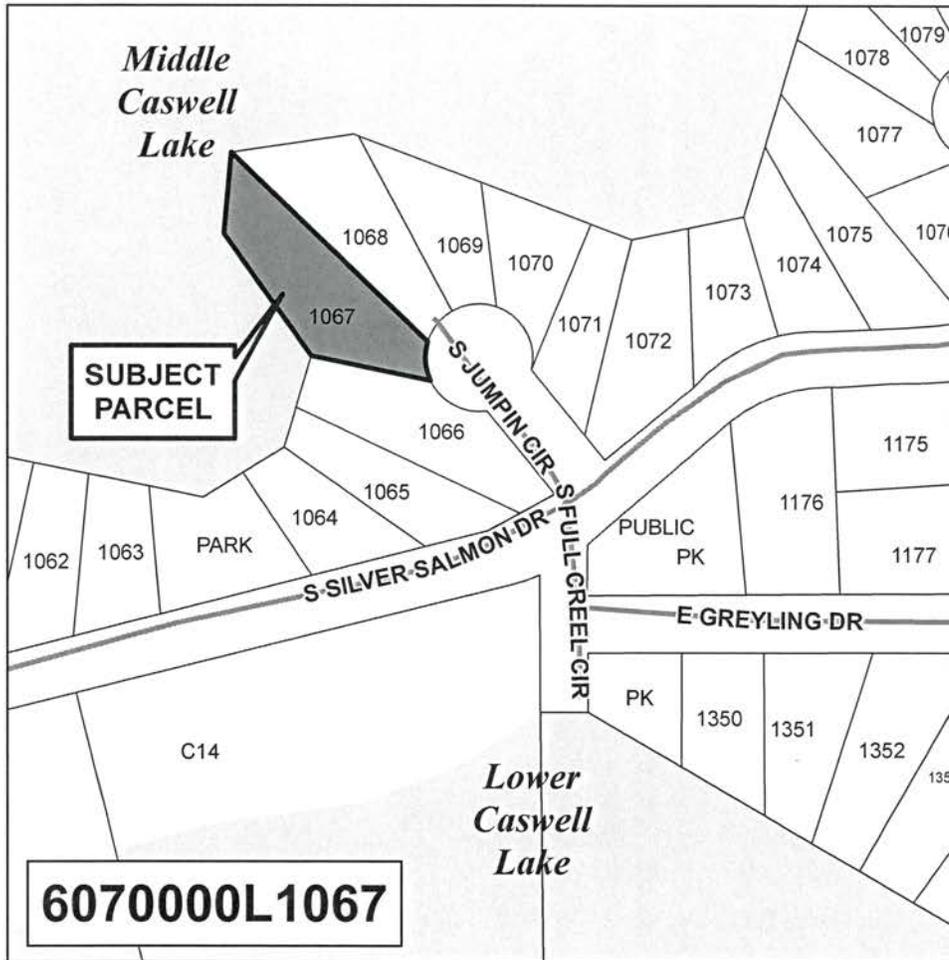
<https://www.matsugov.us/publicnotice/nixa-variance-request-to-msb-17-55>

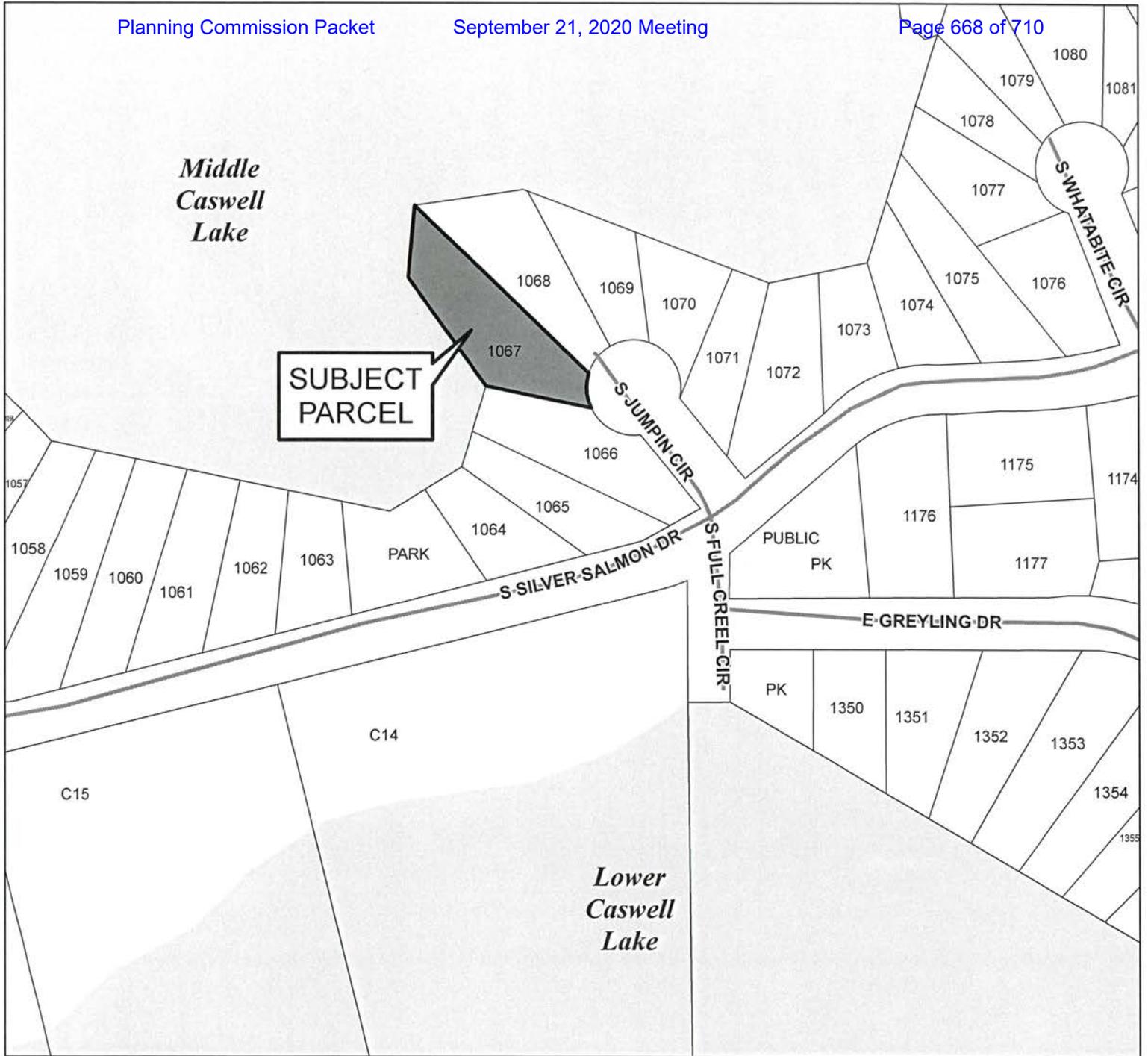
Comments are due on or before **August 28, 2020** and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Respectfully,

Joe Metzger
MSB Planner
907-861-7862

VICINITY MAP

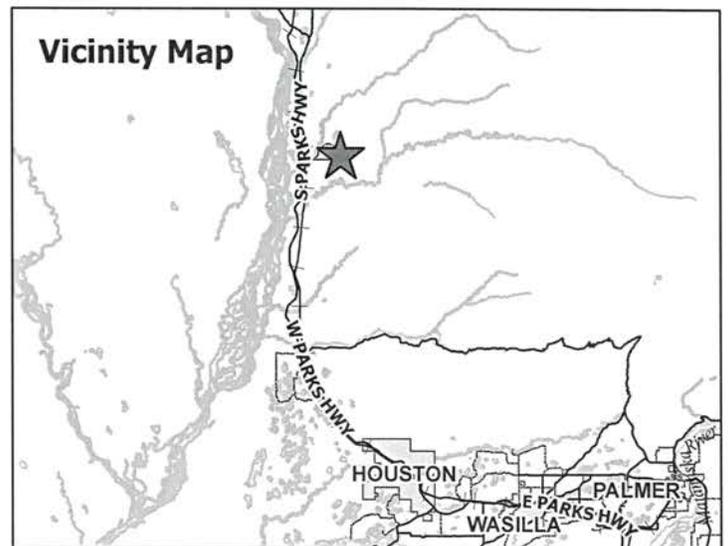




6070000L1067



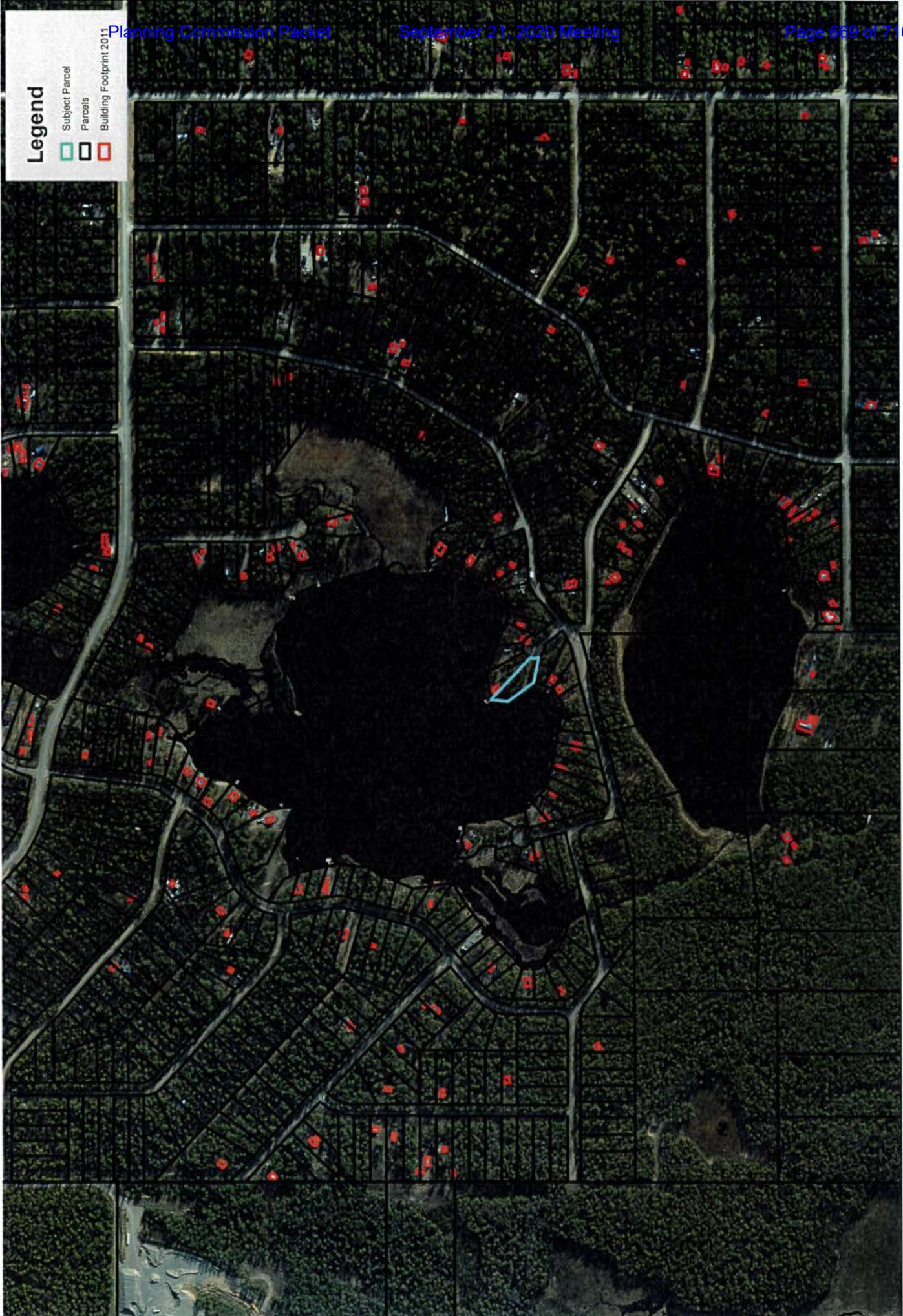
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Legend

- Subject Parcel
- Parcels
- Building Footprint 2011



1 inch = 600 feet



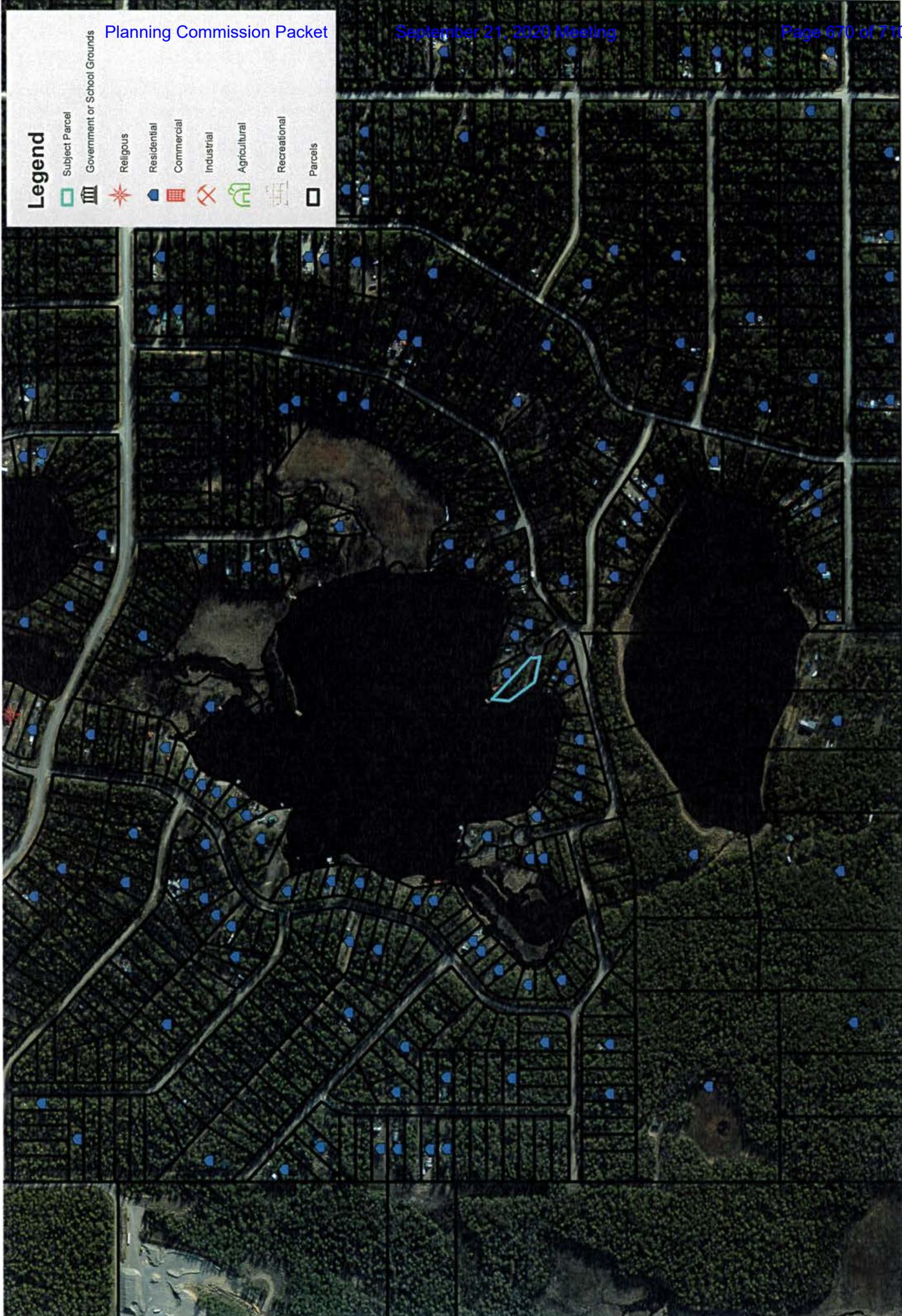
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Date: 9/3/2020



Legend

-  Subject Parcel
-  Government or School Grounds
-  Religious
-  Residential
-  Commercial
-  Industrial
-  Agricultural
-  Recreational
-  Parcels



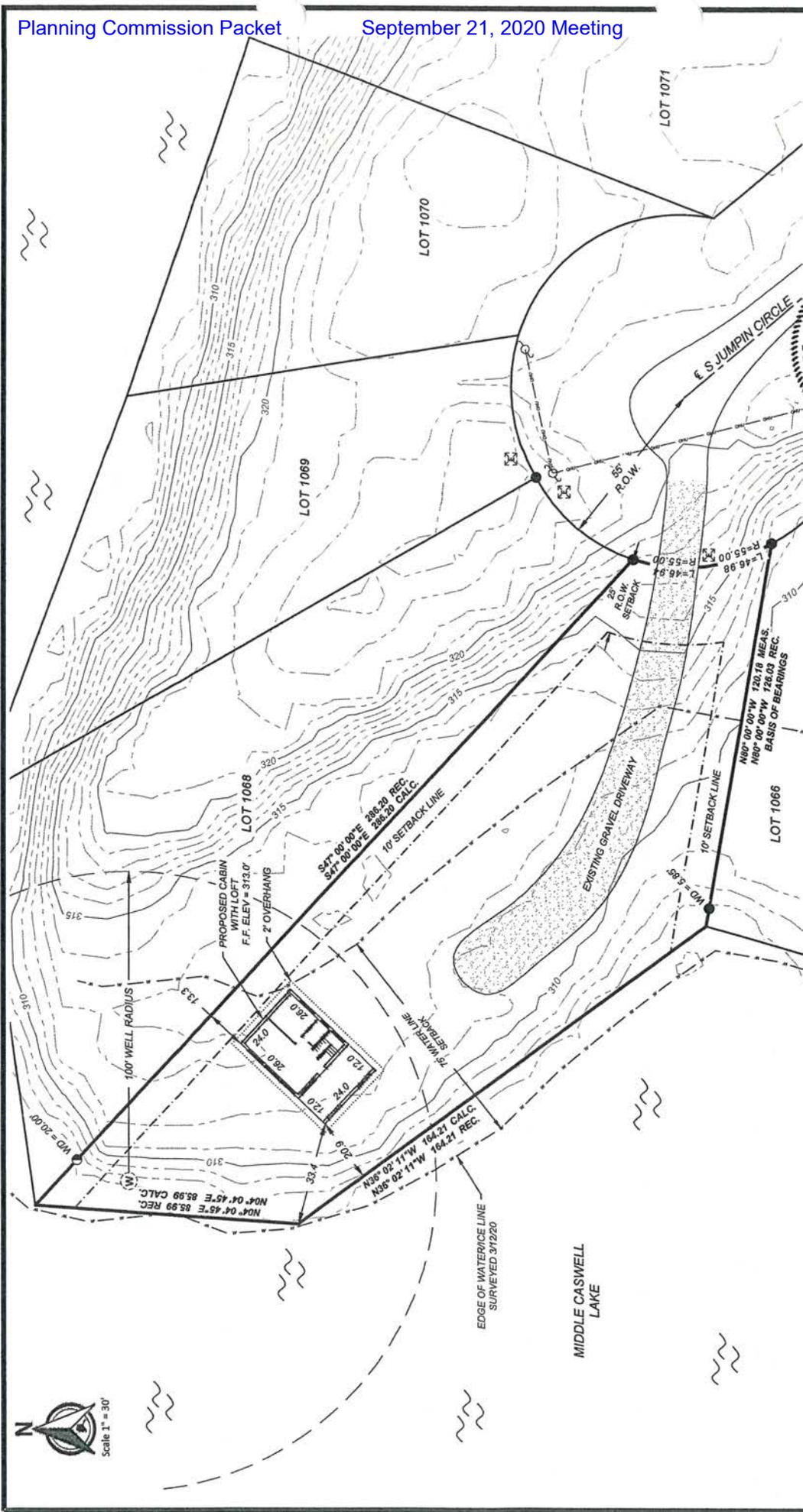
1 inch = 600 feet



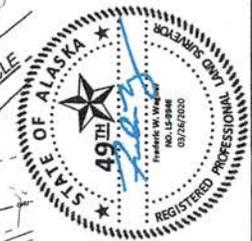
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Date: 9/3/2020

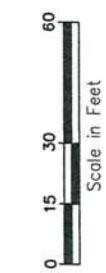
SITE PLAN



A SITE PLAN OF
LOT 1067
CASWELL LAKES SUBDIVISION
 PALMER RECORDING DISTRICT, THIRD JUDICIAL DISTRICT
 48572.5 JUMPIN CIRCLE CASWELL LAKES, AK
 CONTAINING 31.761 SQ. P. +/- (RECORD)
 RECORDED IN RECORD BOOK 88-37 PALMER RECORDING DISTRICT
 FRONTIER SURVEYS, LLC
 600 W. 5TH AVE. SUITE E, ANCHORAGE, AK 99518
 LICENSE NO. 1000000000
 DRAWN BY: JS
 DATE: 02/26/2020
 CHECKED BY: UC E RW
 SCALE: 1" = 30'
 SHEET 1 of 1



Disclaimer
 The survey represents visible improvements and conditions at the time of the survey. It is the responsibility of the Client to verify the existence of any easements, covenants, or restrictions which do not appear on the record plat.



- General Notes**
1. Excepting for gross negligence, the liability for this survey shall not exceed the cost of preparing this survey. Dimensions to property lines are plus/minus 0.1ft.
 2. This document is created by Frontier Surveys for the purpose of a plot plan for Jason Nibea, only.
 3. This document is based on Plat No. 68-10, Palmer Recording District.
 4. All lot corners have been located and marked.
 5. Elevation contours are derived from Mat-Su Borough 2011 LIDAR Project.

- Legend**
- Found 1 1/2" Angle Iron
 - Water Line
 - ⊙ Telephone Pole
 - ⊙ Electric Meter
 - ⊙ Proposed Water Well
 - ⊙ Set 5/8" Rebar w/ YPC

APPLICATION MATERIAL



MATANUSKA-SUSITNA BOROUGH

**Planning and Land Use Department
Development Services Division**

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-7876

Email: PermitCenter@matsugov.net Matanuska-Susitna Borough
Permit Center

APPLICATION FOR A VARIANCE – MSB 17.65

JUN 12 2020

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed. **Received**

Application fee must be attached:

 \$1,000 for Variance

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made **prior** to the application presentation before the Borough Planning Commission.

Subject Property Township: 22N, Range: 4W, Section: 14, Meridian Seward
MSB Tax Acct # 6070000L1067 (Parcel ID = 67194)
SUBDIVISION: Caswell Lakes BLOCK(S): N/A, LOT(S): 1067
STREET ADDRESS: 49572 S Jumpin Circle
(US Survey, Aliquot Part, Lat. /Long. etc) N/A

Ownership A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached? Yes No N/A

Name of Property Owner	Name of Agent/ Contact for application
<u>Jason Nixa</u>	_____
Address: <u>P.O. Box 671267</u>	Address: _____
<u>Chugiak, Ak 99567</u>	_____
Phne: Hm _____ Fax _____	Phne: Hm _____ Fax _____
Wk _____ Cell <u>907-830-1422</u>	Wk _____ Cell _____
E-mail <u>Jasonnixa@outlook.com</u>	E-mail _____

Description	Attached
A variance from MSB 17. _____ is being applied for and is specifically described.	
Provide a detailed written description as to why the variance is required.	

Drawings	Attached
A boundary survey and site plan of the proposed and/or existing development, of the particular parcel or parcels affected. (See attached survey standards checklist). The survey must be submitted under the seal of an Alaska registered professional land surveyor.	✓
Structural elevation drawing(s) for the purpose of indicating the proposed height and bulk, view and other dimensions of the subject structure.	✓

In order to grant a variance from MSB Title 17, the Planning Commission must find that each of the following requirements has been met (17.65.020). Explain how the request meets each requirement. Include information such as physical surroundings, shape or topographical conditions of the property which would support the granting of a variance.	Attached
1. What unusual conditions or circumstances apply to the property for which the variance is sought?	
2. How the strict application of the provisions of this title will deprive you of the rights commonly enjoyed by other properties under the terms of this title.	
3. Why the granting of the variance will not be injurious to nearby property, nor harmful to the public welfare.	
4. How will the granting of the variance be in harmony with the objectives of this title and any applicable comprehensive plans?	
5. How the deviation from the requirements of this title as permitted by the variance will be no more than is necessary to permit a reasonable use of the property.	

A variance may <u>not</u> be granted if any of the conditions listed below are true. Explain why each condition is <u>not</u> applicable to this application.	Attached
1. The special conditions that require the variance are caused by the person seeking the variance.	
2. The variance will permit a land use in a district in which that use is prohibited.	
3. The variance is sought solely to relieve pecuniary hardship or inconvenience.	

OWNER'S STATEMENT: I am owner of the following property:

MSB Tax parcel ID #(s) 6070000L1067 (Parcel Id = 67194) and, I hereby apply for approval a setback variance on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.55 and MSB 17.65 and with all other applicable borough, state or federal laws.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit and zoning status may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to the buyer when I sell the land.

I understand that changes from the approved variance may require further authorization by the Borough Planning Commission. I understand that failure to provide applicable documentation of compliance with approved requirements, or violation of such requirements will nullify legal status, and may result in penalties.

**Variance Application
MSB 17.65**

**Matanuska-Susitna Borough
Minimum Survey Drawing Standards**

For Matanuska-Susitna Borough (MSB) 17.60 Conditional Uses, 17.65 Variances, MSB 17.80 Legal Nonconforming Structures, and any site plan or survey required to be provided under the seal of a registered surveyor. Additional data may be required. For more information contact the MSB Code Compliance Division at (907) 745-9853, E-mail: ccb@matsugov.us

CHECK LIST

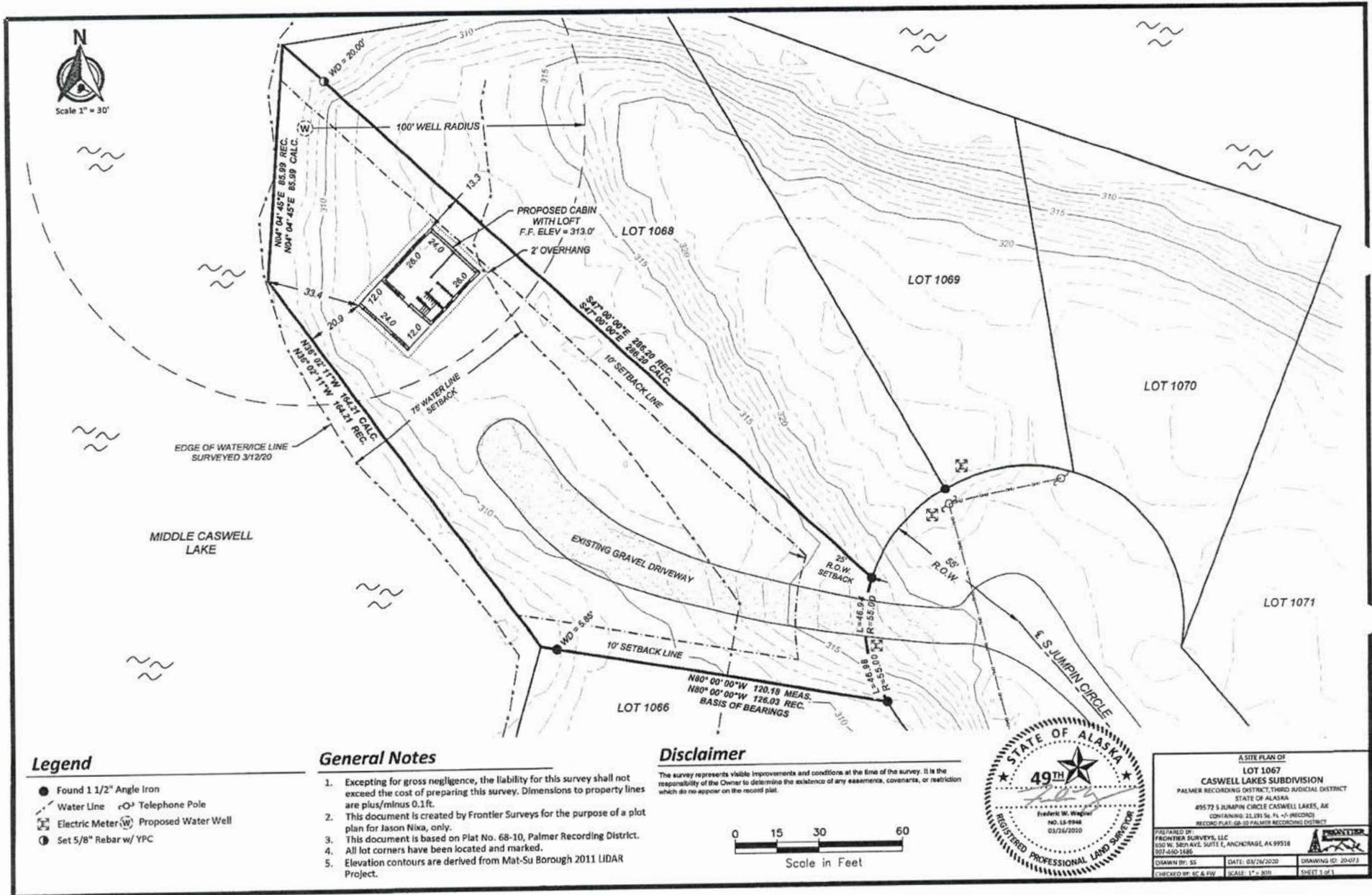
- 1) Critical Lot Line(s)
 - a. corners in
 - b. record & measured distances shown
 - c. new corners set

- 2) Setback Shown:
 - a. furthestmost protruding part of structure(s) including attached eaves, decks, cantilevers, etc. (at closest points of separation)
 - b. dimensioned to 0.1 foot, with no +/-
 - c. other dimensions required by applicable code.

- 3) Easements/Rights of Way
 - a. all dedicated public easements on lot (identify by type); adjacent public rights of way (with name)
 - b. verify section line easement (SLE)

- 4) Survey for MSB used is not a mortgage survey:
 - a. no exclusion of use note
 - b. no copyright
 - c. north arrow
 - d. scale
 - e. show control used
 - f. Basis of Bearing
 - g. type and size of all monuments found or set
 - h. legal description
 - i. date of field survey
 - j. seal, sign
 - k. surveyor's printed name and address

- 5) Other specific information relevant to the application
 - a. specific dimensions of structures, development
 - b. dates of construction, additions
 - c. identification of relevant decks, eaves, additions, "phases" of construction, use areas, areas where heights are different, etc.
 - d. water bodies onsite, adjacent to lot, or within 75 feet of a structure on the lot
 - e. other information required by the applicable MSB ordinance or required to administer the applicable code. Check relevant codes and instruction sheets for additional information.
 - f. topography



NIXA VARIANCE REQUEST

1. What unusual conditions or circumstances apply to the property for which the variance is sought?

This property, lot 1067, is situated between Middle Caswell Lake to the west, lot 1068 and S. Jumpin Circle to the northeast, and Lot 1066 to the south. The required side setbacks from the neighboring lots are 10' each, South Jumpin Circle has a 25' right of way setback, and the lake has a setback of 75'.

These setbacks and easements restrict the possible building area.

When the ROW easement, the ROW set back, the lake set back, and side setbacks are subtracted, the buildable area is reduced to a sliver of land, unreasonable in size to build a cabin/home commensurate with the neighboring cabins/homes.

What makes this lot unusual is it is almost entirely consumed by setbacks.
(See attached as-built.)

2. How the strict application of the provisions of this title will deprive you of the rights commonly enjoyed by other properties under the terms of this title.

Strict application of this title would limit the size, shape and location of the cabin that would be nonconforming to the neighboring cabins or homes. The proposed cabin is similar in size, shape and proximity to the lake as other cabins or homes in the area.

Strict application of this title would essentially prohibit any new construction because it is bound by the ROW set back to the south and the lake set back to the northwest. Strictly following this title would require me to inhabit a 10 ft. wide cabin.

3. Why the granting of the variance will not be injurious to nearby property, nor harmful to the public welfare.

As mentioned above, I did my best to conform to neighboring properties so as not to use more or less of the property than adjacent property owners. The variance will not be injurious to nearby properties because the proposed cabin is located in a residential area and is situated similarly on the lot in comparison to the neighbors' lots, thereby giving the neighborhood a cohesive feel. It also adheres to the ROW set back so as not to interfere with any borough expansion that may take place in the future.

NIXA VARIANCE REQUEST

4. How will the granting of the variance be in harmony with the objectives of this title and any applicable comprehensive plans?

Setbacks are in place to restrict homeowners from encroaching into each other's property and to restrict permanent structures in areas needed for utilities and other borough needs. By being aware of these restrictions and to not overbuild, I am demonstrating that I am mindful of the surroundings and tried to keep the cabin comparable to other cabins or homes in the neighborhood. I am faced with building the cabin in the lake set back or the ROW set back as no other options are reasonable. I am proposing to adhere to the 10' lot set back and build a cabin similar in size, shape, style and position on the lot to conform to the standards set in the neighborhood.

5. How the deviation from the requirements of this title as permitted by the variance will be no more than is necessary to permit a reasonable use of the property.

This is a proposed cabin in a community that is built around a legacy of families spending time together enjoying all of the summer and winter recreational benefits Middle Caswell Lake has to offer. This variance would allow me to connect with other families in similar ways and to share those connections with future generations.

Granting this variance will allow me to enjoy the same benefits of living near the lake that many other families enjoy. Not deviating from this title would allow no one to build on this particular lot, as it is wholly covered in setbacks, and would essentially leave an undesirable lot, for my use or for anyone in the future.

NIXA VARIANCE REQUEST

Conditions not applicable:

- 1. The special conditions that require the variance are caused by the person seeking the variance.**

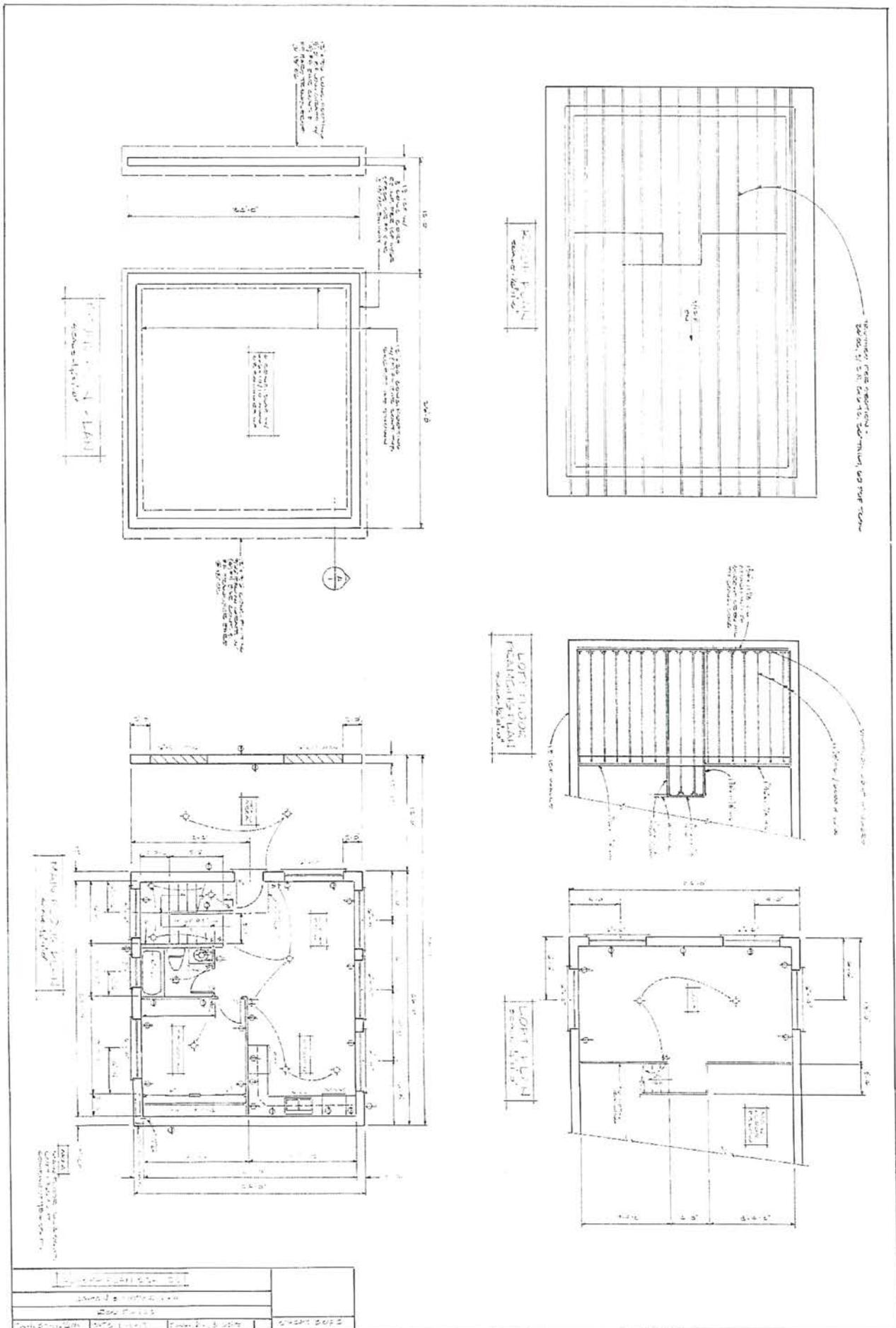
This condition is not applicable since I did not cause the right of way setbacks that restrict the buildable area on the lot.

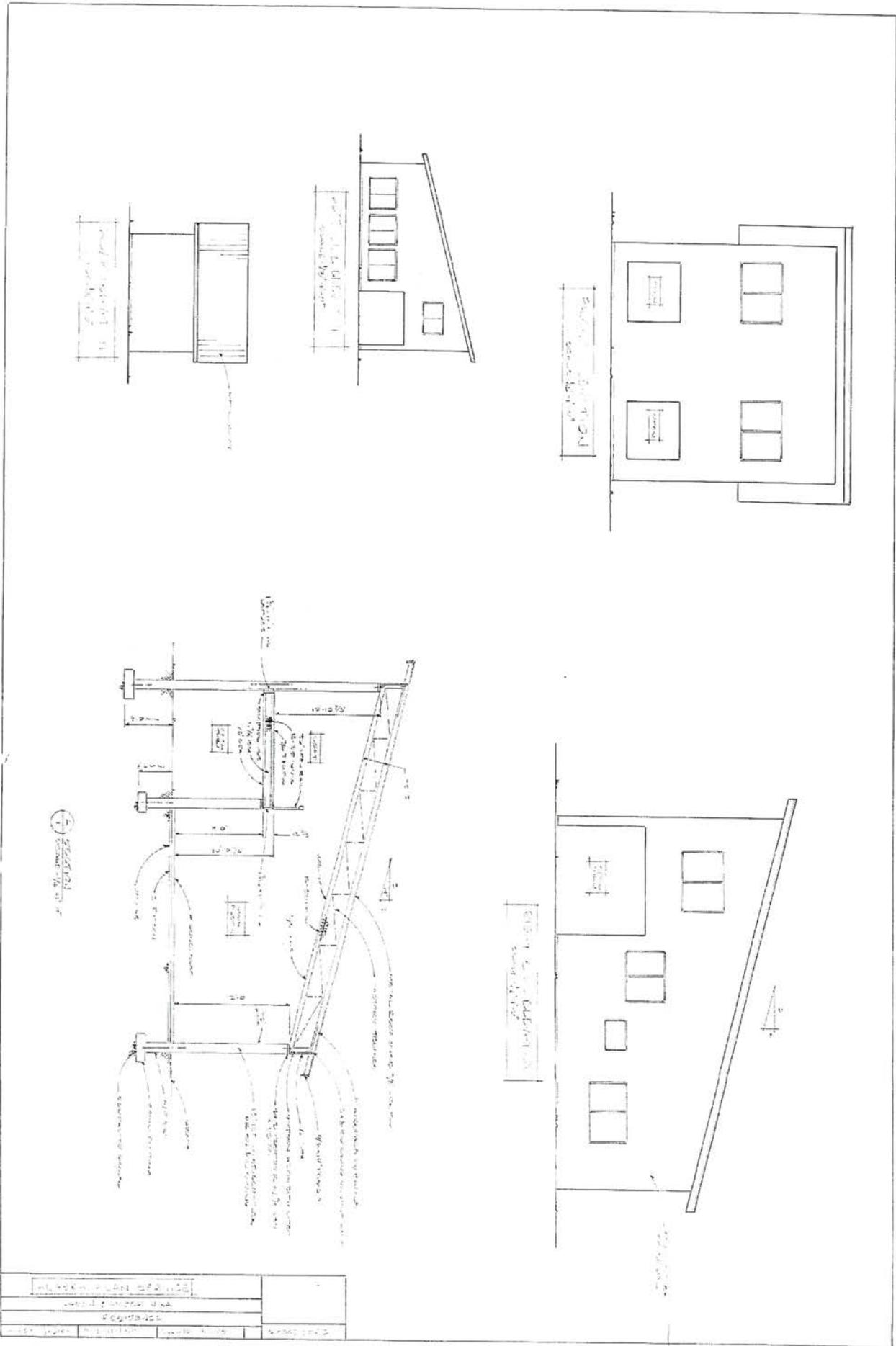
- 2. The variance will permit a land use in a district in which that use is prohibited.**

This condition is not applicable since I propose to build a cabin on a single-family lot in a single-family neighborhood.

- 3. The variance is sought solely to relieve pecuniary hardship or inconvenience.**

This condition is not applicable since I am under no financial hardships nor am I building this cabin as a contractor to resell.













MATANUSKA-SUSITNA BOROUGH

Real Property Detail for Account: 6070000L1067

Site Information

Account Number	6070000L1067	Subdivision	CASWELL LKS
Parcel ID	67194	City	None
TRS	S22N04W14	Map CA01	
Abbreviated Description (Not for Conveyance)	CASWELL LKS LOT 1067		Tax Map

Site Address 49572 S JUMPIN CIR

Ownership

Owners	NIXA JASON	Buyers	
Primary Owner's Address	PO BOX 671262 CHUGIAK AK 99567	Primary Buyer's Address	

Appraisal Information

Year	Appraisal			Assessment			
	Land Appraised	Bldg. Appraised	Total Appraised	Year	Land Assessed	Bldg. Assessed	Total Assessed ¹
2020	\$20,600.00	\$0.00	\$20,600.00	2020	\$20,600.00	\$0.00	\$20,600.00
2019	\$20,600.00	\$0.00	\$20,600.00	2019	\$20,600.00	\$0.00	\$20,600.00
2018	\$20,600.00	\$0.00	\$20,600.00	2018	\$20,600.00	\$0.00	\$20,600.00

Building Information

Building Item Details

Building Number	Description	Area	Percent Complete
-----------------	-------------	------	------------------

Tax/Billing Information

Year	Certified	Zone	Mill	Tax Billed	Date	Type	Recording Info (offsite link to DNR)
2020	Yes	0110	18.143	\$373.75	11/7/2014	WARRANTY DEED (ALL TYPES)	Palmer 2014-022540-0
2019	Yes	0110	18.269	\$376.34	11/7/2014	QUITCLAIM DEED (ALL TYPE)	Palmer 2014-022539-0
2018	Yes	0110	18.189	\$374.70	4/30/2014	QUITCLAIM DEED (ALL TYPE)	Palmer 2014-007576-0

Tax Account Status ²

Status	Tax Balance	Farm	Disabled Veteran	Senior	Total	LID Exists
Current	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	No

Land and Miscellaneous

Gross Acreage	Taxable Acreage	Assembly District	Precinct	Fire Service Area	Road Service Area
0.49	0.49	Assembly District 007	10-030	135 CASWELL FSA	015 Caswell Lakes RSA

¹ Total Assessed is net of exemptions and deferrals, rest, penalties, and other charges posted after Last Update Date are not reflected in balances.

Last Updated: 8/1/2020 12:00:34 AM

² If account is in foreclosure, payment must be in certified funds.

PERMIT CENTER – FEE RECEIPT FORM

Property Location: 6070 000L 1067

Applicant: Jason Nixa

	USE PERMITS {100.000.000.341.300}	Fee
<input type="checkbox"/>	8.35 Public Display of Fireworks	\$25.00
<input type="checkbox"/>	8.40.010 Liquor License - Alcohol & Marijuana Control Office (AMCO) Referrals for Matanuska Susitna Borough Review of Issuance, renewal or transfer (location, owner)	\$100.00
<input type="checkbox"/>	8.41.010 Marijuana License - Alcohol & Marijuana Control Office (AMCO) Referrals for Matanuska Susitna Borough Review of Issuance, renewal or transfer (location, owner)	\$100.00
<input type="checkbox"/>	8.52 Temporary Noise Permit	\$500.00
<input type="checkbox"/>	8.55 Special Events Permit 500 – 1000 Attendees	\$500.00
<input type="checkbox"/>	1000+ Attendees	\$1,000.00
<input type="checkbox"/>	8.55 Special Events Permit Site Monitor Fee / Per Day	\$300.00

Matanuska Susitna Borough
 Payment Date Monday, June 15, 2020
 Deposit Number 40997
 Operator Lach0415
 Real 2020 (Total) \$0.00
 MCR (100.000.000.341.300) \$1,000.00
 Misc Rec
 Tax Map # 2MISC
 Total Paid \$1,000.00
 Check \$1,000.00
 Change \$0.00
 Receipt Number MSB91406144
 6/12/2020 11:27:17 AM
 Paid By NIXA JASON /CASHIERCK 0001621
 Cashier Id. LACH0415

<input type="checkbox"/>	17.27 Sutton Special Land Use District CUP	\$1000.00
<input type="checkbox"/>	17.29 Flood Damage Prevention Development Permit	\$100.00
<input type="checkbox"/>	17.29 Flood Damage Prevention Development Permit –Variance	\$500.00
<input type="checkbox"/>	17.30.040 Earth Materials Extraction Admin. Permit	\$500.00
<input type="checkbox"/>	17.30.050 Earth Materials Extraction CUP	\$1000.00
	17.36 Residential Planned Unit Development Application – Concept Plan – up to 50 Lots	\$500.00
	Additional Lots or tracts being created – Per Lot	\$100.00
<input type="checkbox"/>	17.48 Mobile Home Park Permit Application	\$500.00
<input type="checkbox"/>	17.52 Residential Land Use District App (Rezone)	\$1,000.00
<input type="checkbox"/>	17.52 Conditional Use Permit Application CUP	\$1,000.00
<input type="checkbox"/>	17.55 Shoreline Setback Exception Application	\$300.00
<input type="checkbox"/>	17.60 Conditional Use Permit Application	\$1000.00

COMMENTS

Agency Comments

Joseph Metzger

From: Joseph Metzger
Sent: Tuesday, August 25, 2020 12:58 PM
To: Taunnie Boothby; Karol Riese; Kim Sollien
Subject: RE: RFC Nixa Variance Request - Middle Caswell Lake 22N04W14 6070000L1067
Due: August 28, 2020

Received, thank you for your comments.

Respectfully,

Joe Metzger
MSB Planner II
907-861-7862

From: Taunnie Boothby <Taunnie.Boothby@matsugov.us>
Sent: Tuesday, August 25, 2020 12:56 PM
To: Karol Riese <Karol.Riese@matsugov.us>; Kim Sollien <Kim.Sollien@matsugov.us>; Joseph Metzger <Joseph.Metzger@matsugov.us>
Subject: RE: RFC Nixa Variance Request - Middle Caswell Lake 22N04W14 6070000L1067 Due: August 28, 2020

This area has no FEMA mapped Special Flood Hazard Area however, it is recommended that you build with best practice information so that if it were to be mapped in the future the impact to the property or the surrounding property is minimized and meets the reasonably safe from flooding standards.

Wetlands are present on the property per the wetland mapping. Please consult with the USACE for development in the wetlands.

Taunnie L. Boothby, CFM, Planner II
Matanuska-Susitna Borough
Planning Department
907-861-8526
taunnie.boothby@matsugov.us

-----Original Appointment-----

From: Karol Riese <Karol.Riese@matsugov.us>
Sent: Tuesday, August 4, 2020 10:29 AM
To: Karol Riese; Kim Sollien; Taunnie Boothby
Subject: RFC Nixa Variance Request - Middle Caswell Lake 22N04W14 6070000L1067 Due: August 28, 2020
When: Wednesday, August 26, 2020 12:00 AM to Thursday, August 27, 2020 12:00 AM (UTC-09:00) Alaska.
Where:

Joseph Metzger

From: Theresa Taranto
Sent: Tuesday, August 4, 2020 11:34 AM
To: Joseph Metzger
Subject: RE: RFC- Nixa Variance Request - due August 28

Not a mapped area.
No other comments.

Thank you,

Theresa Taranto

Mat-Su Borough
Development Services
Administrative Specialist

350 E Dahlia Ave.
Palmer, Alaska 99645
907-861-8574
www.matsugov.us

From: Joseph Metzger <Joseph.Metzger@matsugov.us>
Sent: Monday, August 3, 2020 4:58 PM
To: 'allen.kemplen@alaska.gov' <allen.kemplen@alaska.gov>; 'tucker.hurn@alaska.gov' <tucker.hurn@alaska.gov>; 'melanie.nichols@alaska.gov' <melanie.nichols@alaska.gov>; 'kyler.hylton@alaska.gov' <kyler.hylton@alaska.gov>; 'sarah.wilber@alaska.gov' <sarah.wilber@alaska.gov>; 'mearow@matanuska.com' <mearow@matanuska.com>; 'rglenn@mta-telco.com' <rglenn@mta-telco.com>; 'jthompson@mta-telco.com' <jthompson@mta-telco.com>; 'row@enstarnaturalgas.com' <row@enstarnaturalgas.com>; 'ospdesign@gci.com' <ospdesign@gci.com>; Eric Phillips <Eric.Phillips@matsugov.us>; Jude Bilafer <Jude.Bilafer@matsugov.us>; Cindy Corey <Cindy.Corey@matsugov.us>; Terry Dolan <Terry.Dolan@matsugov.us>; Jim Jenson <James.Jenson@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Nicole Wilkins <Nicole.Wilkins@matsugov.us>; Karol Riese <Karol.Riese@matsugov.us>; Taunnie Boothby <Taunnie.Boothby@matsugov.us>; Theresa Taranto <Theresa.Taranto@matsugov.us>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Jill Irsik <Jill.Irsik@matsugov.us>; Michelle Wagner <Michelle.Wagner@matsugov.us>; Cheryl Scott <Cheryl.Scott@matsugov.us>; Tam Boeve <Tamboevedistrict7@gmail.com>; info@susitnacc.org
Subject: RFC- Nixa Variance Request - due August 28

MEMORANDUM

Date: August 3, 2020
To: Various Governmental Agencies
From: Joseph Metzger, Planner II
Subject: Request for Review and Comments Governmental Agencies
Project: Variance to shoreline setback requirements of MSB 17.55
Location: 49572 S. Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.

Public Comments

Matanuska-Susitna Borough
Development Services

AUG 13 2020

Received

56070000L1056 13
KNOWLES RICHARD L
5240 E 41ST AVE
ANCHORAGE, AK 99508

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

MSB Code Section: MSB 17.65 – Variances
Applicant: Jason Nixa
Location: 49572 S. Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.
Request: An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 26' x 24' single-family residence with deck, to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The Planning Commission will conduct a public hearing concerning the following application for a variance on Monday, September 21, 2020 at 6:00 p.m. in the Borough Assembly Chambers*, 350 E. Dahlia Avenue, in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend. The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

*Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough Website prior to attending the public hearing for any changes to the meeting schedule or method.

In Person Participation: Should you wish to attend in person, please adhere to a 6-foot distance between yourself and others; Masks are not required but are encouraged. **Telephonic Testimony:** Dial 1-855-225-1887; You will hear "Joining Conference" when you are admitted to the meeting. You will be muted and able to listen to the meeting. When the Chairperson announces audience participation or a public hearing you would like to speak to, press *3; you will hear "Your hand has been raised." When it is your turn to testify you will hear "Your line has been unmuted." State your name for the record, spell your last name, and provide your testimony.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material is also available for review at the Borough Permit Center. For additional information, you may contact Joe Metzger, Planner II, at 861-7862. Written comments can be mailed to the MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645. You may e-mail comments to Joseph.Metzger@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated as an "interested party." See MSB 15.39.010 for definition of "interested party." The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, or at various libraries within the borough.

Comments are due on or before August 28, 2020 and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Name: Richard Knowles Mailing Address: 5240 E 41st Ave Anchorage AK 99508

Location/Legal Description of your property: 1056 & 1055

Comments: Planning Commission should be consistent and enforce the codes as written! When I build my house in 2024, no variances were approved! Does it depend on who's sitting on the board? No variances on shoreline setback - period! They were aware when they purchase the property that they had no room for a house! They have been using mobile trailers - as it should be! Next they will want a variance for sewer & water separation!

Note: Vicinity Map Located on Reverse Side

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

Matanuska-Susitna Borough
Development Services

AUG 06 2020

Received

56070000L1077 21
WARD WALTER J & VIRGINIA
12020 OLD SEWARD JCT
ANCHORAGE AK 99515-3504

The Planning Commission of the Matanuska-Susitna Borough will consider the following:

MSB Code Section: MSB 17.65 – Variances
Applicant: Jason Nixa
Location: 49572 S. Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian.
Request: An application under MSB 17.65 – Variances, has been submitted for a variance, to the minimum 75-foot shoreline setback requirement under MSB 17.55. The variance would allow for the construction of a 26' x 24' single-family residence with deck, to be placed approximately 33 feet from the shorelands of Middle Caswell Lake.

The Planning Commission will conduct a public hearing concerning the following application for a variance on Monday, September 21, 2020 at 6:00 p.m. in the Borough Assembly Chambers*, 350 E. Dahlia Avenue, in Palmer. This may be the only presentation of this item before the Planning Commission and you are invited to attend. The Planning Commission members may submit questions to the Planning Commission Clerk concerning the matter or request more information from the applicant at the time of introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing. Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

*Please Note: Due to the ongoing Coronavirus/COVID-19 Pandemic, the method in which this meeting is being conducted may change. If a change to the meeting is necessary, it will be posted on the Borough Website. The public is encouraged to check the Borough Website prior to attending the public hearing for any changes to the meeting schedule or method.

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Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." Application material is also available for review at the Borough Permit Center. For additional information, you may contact Joe Metzger, Planner II, at 861-7862. Written comments can be mailed to the MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645. You may e-mail comments to Joseph.Metzger@matsugov.us. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated as an "interested party." See MSB 15.39.010 for definition of "interested party." The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, or at various libraries within the borough.

Comments are due on or before August 28, 2020 and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission.

Name: WALTER WARD **Mailing Address:** 12020 OLD SEWARD
Location/Legal Description of your property: LOT 1077, 1078 1079 CASWELL
Comments: PLEASE GIVE THE APPLICANT THE VARIANCE

PLANNING COMMISSION RESOLUTION

By: Joe Metzger
Introduced: August 17, 2020
Public Hearing: September 21, 2020
Action:

**MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. 20-32**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION APPROVING A VARIANCE TO MSB 17.55 FOR THE CONSTRUCTION OF A SINGLE-FAMILY RESIDENCE TO BE PLACED APPROXIMATELY 30 FEET FROM THE SHORELANDS OF MIDDLE CASWELL LAKE AT 49572 SOUTH JUMPIN CIRCLE (TAX ID# 6070000L1067); WITHIN TOWNSHIP 22 NORTH, RANGE 4 WEST, SECTION 14, SEWARD MERIDIAN.

WHEREAS, an application has been submitted for a variance to MSB 17.55, requesting to construct a single-family residence approximately 30 feet from the shorelands of Middle Caswell Lake at 49572 South Jumpin Circle (Tax ID# 6070000L1067); within Township 22 North, Range 4 West, Section 14, Seward Meridian; and

WHEREAS, in order to grant a variance, the Planning Commission must find that each requirement of 17.65.020(A) have been met; and

WHEREAS, the subject lot is .49 acres in size and has approximately 21,344 square feet of taxable acreage; and

WHEREAS, according to a useable area analysis conducted by Borough Staff, the subject parcel has approximately 2,831 square feet of buildable space that conforms to the setback standards established in MSB 17.55; and

WHEREAS, the odd shape of the buildable space that conforms to the Borough setback standards significantly reduces the size,

shape, and type of structure that could be built on the parcel;
and

WHEREAS, the subject lot is part of the Caswell Lakes subdivision and was originally platted in 1967; and

WHEREAS, the Caswell Lakes subdivision and subject lot were created prior to the establishment of Borough setback requirements; and

WHEREAS, the subject parcel does not conform to the current Borough subdivision standards; and

WHEREAS, the application material indicates that the proposed single-family residence would be approximately 38' x 24' in size; and

WHEREAS, the application material indicates that the proposed structure will have 624 square feet of living space on the main floor and 360 square feet in the upstairs loft, for a combined total of 984 square feet; and

WHEREAS, according to an as-built survey prepared by Frederic W. Wagner, PLS, and dated March 26, 2020, at its closest point, the proposed structure would be approximately 30 feet from the shorelands of Middle Caswell Lake, approximately 13 feet from the closest side lot line and approximately 180 feet to the South Jumpin Circle right-of-way; and

WHEREAS, Middle Caswell Lake abuts the subject parcel to the west and northwest, there is a private lot to the north and

northeast, South Jumpin Circle right-of-way is to the east, and there is a private lot to the south; and

WHEREAS, according to the application material, the shoreline setback, right-of-way setback and side lot line setback severely limit the buildable area of the lot; and

WHEREAS, approximately 92.5% of the subject parcel is encumbered by setback requirements; and

WHEREAS, the proposed structure will not fit in the buildable space on the subject parcel that conforms to the Borough setback standards; and

WHEREAS, the subject parcel contains approximately 240 feet of shoreline, which is a considerable amount more than most lots in the subdivision and means more of the subject parcel is encumbered with the 75' shoreline setback requirement than other lots in the surrounding area; and

WHEREAS, the Caswell Lakes subdivision has several hundreds of lots. Structures on the lots that contain development vary greatly in size, condition, and date of construction; and

WHEREAS, structures within a quarter-mile of the subject parcel range in size from approximately 100 square feet to over 2,000 square feet; and

WHEREAS, there is no objection to the variance request from any government agencies; and

WHEREAS, the construction and placement of a 38' x 24' structure approximately 13' from the closest side lot line, approximately 30' from the shorelands of Middle Caswell Lake and approximately 180 from the South Jumpin Circle right-of-way, should not be harmful to the public welfare; and

WHEREAS, MSB Chapter 17.65 - Variances, was written to grant relief to property owners whose lots are impacted by existing land use regulations thereby making the lot undevelopable; and

WHEREAS, the construction of a 38' x 24' residential structure is compatible with the surrounding area and is consistent with the development found in the subdivision; and

WHEREAS, the applicant purchased the property in 2014; and

WHEREAS, a residential structure that is 984 square feet is modest in size; and

WHEREAS, the subject parcel is not in a special land use district; and

WHEREAS, residential structures are allowed on this property; and

WHEREAS, the Planning Commission has reviewed this application with respect to standards set forth in MSB 17.65; and

WHEREAS, the Planning Commission conducted a public hearing on September 21, 2020 on this matter.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby adopts the aforementioned

findings of fact and makes the following conclusions of law supporting approval of Planning Commission Resolution 20-32:

1. A small parcel .49 acres in size, with multiple setback requirements, and an oddly shaped buildable space that is approximately 2,831 square feet in size, is an unusual condition (MSB 17.65.020(A)(1)).
2. Strict application of the provisions of this title would deprive the applicants of rights commonly enjoyed by others (MSB 17.75.020(A)(2)).
3. Granting the variance will not be injurious to nearby property, nor harmful to the public welfare (MSB 17.65.020(A)(3)).
4. The proposed variance is consistent with the applicable comprehensive plans and does meet the intent of MSB 17.65 (MSB 17.65.020(A)(4)).
5. Granting a variance will be no more than is necessary to permit a reasonable use of the property (MSB 17.65.030(A)(1)).
6. The person seeking the variance did not cause the need for the variance (MSB 17.65.030(A)(1)).
7. The variance is not solely being sought to relieve pecuniary hardship or inconvenience (MSB 17.65.030(A)(3)).

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby approves the setback variance to construct a 38' x 24' single-family residence at 49572 South Jumpin Circle (Tax ID# 6070000L1067).

ADOPTED by the Matanuska-Susitna Borough Planning Commission this ___ day of _____, 2020.

COLLEEN VAGUE, Chair

ATTEST

KAROL RIESE, Planning Clerk

(SEAL)

YES:

NO:

COMMISSION BUSINESS
Upcoming PC Agenda Items

(Pages 703-710)

COMMISSION BUSINESS



MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
 350 East Dahlia Avenue • Palmer, AK 99645
 Phone (907) 861-7822
 Email: planning@matsugov.us

MEMORANDUM

DATE: September 11, 2020

TO: Planning Commissioners

FROM: Alex Strawn, Director of Planning and Land Use

SUBJECT: Items tentatively scheduled for future PC Meetings or Administrative Actions and Updates on PC items sent to the Assembly

October 5, 2020 (*MSB Assembly Chambers*)

Introduction for Public Hearing Quasi-Judicial
 (*None*)

Introduction for Public Hearing Legislative
 (*None*)

Agency/Staff Reports
 (*None*)

Land Use Classifications
 (*None*)

Public Hearing Quasi-Judicial

- **Resolution PC 20-35**, a Conditional Use Permit in accordance with MSB 17.30-Earth Materials Extraction has been submitted for the extraction of approximately 2 million cubic yards of earth material, on 19 acres of the 19.34 acre subject parcel. The request has no street address and is located adjacent to the Kashwitna Interim Materials District, near Mile 78 Parks Highway; Tax ID #20N04W06B007; within Township 20 North, Range 4 West, Section 6, Seward Meridian (*Applicant: Emily McDonald, on behalf of COLASKA dba QAP; Staff: Joe Metzger*).
- **Resolution PC 20-36**, a Conditional Use Permit in accordance with MSB 17.60-Conditional Uses; has been submitted for the operation of a marijuana retail facility, located at 3807 West Machen Road, Unit A Tax ID #1111B01L011; within Township 17 North, Range 2 West, Section 1, Seward Meridian (*Applicant: Greg Miller, on behalf of TRICHS, LLC; Staff: Joe Metzger*).

Public Hearing Legislative

- **Resolution PC 20-33**, a Resolution of the Matanuska-Susitna Borough Planning Commission recommending approval of an Ordinance adopting MSB 17.68

Outdoor Shooting Facilities in Order to Establish Standards for Commercial, Educational, and Nonprofit Outdoor Shooting Facilities. Public Hearing: October 5, 2020 (*Sponsored by: Planning Commissioner Patricia Chesbro*).

- **Resolution PC 20-37**, a Resolution of the Matanuska-Susitna Borough Planning Commission recommending approval of an ordinance amending MSB 17.60 to change the applicability and standards for Cultivation Facilities and Address on-site Consumption of Marijuana (*Staff: Mark Whisenhunt*).

Unfinished Business

(None)

New Business

(None)

Commission Business

- Adjudicatory (*if needed*)
- Upcoming Planning Commission Agenda Items (*Staff: Mark Whisenhunt*)

November 16, 2020 (*MSB Assembly Chambers*)**Introduction for Public Hearing Quasi-Judicial**

(None)

Introduction for Public Hearing Legislative

(None)

Agency/Staff Reports

(None)

Land Use Classifications

(None)

Public Hearing Quasi-Judicial

(None)

Public Hearing Legislative

(None)

Unfinished Business

(None)

New Business

(None)

Commission Business

- Adjudicatory (*if needed*)
- Upcoming Planning Commission Agenda Items (*Staff: Mark Whisenhunt*)

December 7, 2020 (*MSB Assembly Chambers*)

Introduction for Public Hearing Quasi-Judicial

(None)

Introduction for Public Hearing Legislative

(None)

Agency/Staff Reports

(None)

Land Use Classifications

(None)

Public Hearing Quasi-Judicial

(None)

Public Hearing Legislative

(None)

Unfinished Business

(None)

New Business

(None)

Commission Business

- Adjudicatory *(if needed)*
- Upcoming Planning Commission Agenda Items *(Staff: Mark Whisenhunt)*

December 21, 2020 *(MSB Assembly Chambers)*

Introduction for Public Hearing Quasi-Judicial

(None)

Introduction for Public Hearing Legislative

(None)

Agency/Staff Reports

(None)

Land Use Classifications

(None)

Public Hearing Quasi-Judicial

(None)

Public Hearing Legislative

(None)

Unfinished Business

New Business

(None)

Commission Business

- Adjudicatory (*if needed*)
- Upcoming Planning Commission Agenda Items (*Staff: Mark Whisenhunt*)

January 4, 2021 (MSB Assembly Chambers)

Introduction for Public Hearing Quasi-Judicial

(None)

Introduction for Public Hearing Legislative

(None)

Agency/Staff Reports

(None)

Land Use Classifications

(None)

Public Hearing Quasi-Judicial

(None)

Public Hearing Legislative

(None)

Unfinished Business

(None)

New Business

(None)

Commission Business

- Adjudicatory (*if needed*)
- Upcoming Planning Commission Agenda Items (*Staff: Mark Whisenhunt*)

Upcoming PC Actions

Quasi-Judicial

- D&S Alaskan Trail Rides, Inc. – Denali SpUD, 29N05W33D012 and 29N05W33D0028 (*Staff: Joe Metzger*).
- Nu Aspen LLC – Talkeetna SpUD, 5352B12L014A (*Staff: Joe Metzger*).
- Nu Aspen LLC – Regulation of Alcoholic Beverages, 5352B12L014A (*Staff: Joe Metzger*).

- Faded Moose Farms, LLC – Marijuana Cultivation Facility, 5902000L001 (*Staff: Mark Whisenhunt*).
- Northern Alliance – Marijuana Cultivation Facility, 17N04W25D005 (*Staff: Mark Whisenhunt*).
- Hatchers Grass – Marijuana Retail Facility, 6381000L001 (*Staff: Joe Metzger*).
- Midnight Sun Distributors – Marijuana Retail Facility, 1780B01L001 (*Staff: Joe Metzger*).
- R1 Corporation dba The Office – Regulation of Alcoholic Beverages, 9057000L002 (*Staff: Joe Metzger*).

Legislative

- **Resolution 20-23** a Resolution recommending Assembly approval of an ordinance amending MSB 15.24.030(C), The Matanuska-Susitna Borough Lake Management Plan, adopting MSB 17.59.063 Adoption and Amendment of Regulations on Lakes; and MSB 17.59.065 Regulations on Lakes; and repealing MSB 15.24.031 Initiating and Amending Lake Management Plans, MSB 17.58 Motorized Uses on Lakes and Waterways, and MSB 17.59.060 Limitation of Uses in their entirety (*Staff: Kim Sollien*). Planning Commission to revisit in January 2021.

Other Upcoming Administrative Actions (Not going to the PC)

- Aldeman – Multifamily Permit; 17N01W18B011 (*Staff: Joe Metzger*).
- Birdsell #1 – Nonconforming Structures, 6040B03L016 (*Staff: Joe Metzger*).
- Hinderman - Nonconforming Structures, 6043B01L006 (*Staff: Joe Metzger*).
- Bridgeway Community – Multifamily Development Permit, 17N02W11B005 (*Staff: Joe Metzger*).
- Woodland Park – Nonconforming Structures (amnesty), 3037B01L027 (*Staff: Joe Metzger*).
- Frontier Dream – Administrative Permit for Earth Materials Extraction, 5745000L002 (*Staff: Mark Whisenhunt*).
- Midnight Landing Lot 2 – Multifamily Permit, 7702000L002 (*Staff: Mark Whisenhunt*).

PC Decisions Currently Under Appeal

- **Resolution PC 19-17**, a Conditional Use Permit in Accordance with MSB 17.60 – Conditional Uses; allowing for the operation of a marijuana retail facility, located at 1204 N. Hyer Spur (Tax ID# 7775000L002); within Township 17 North, Range 1 East, Section 4, Seward Meridian. Appealed to the BOAA. Planning Commission decision upheld by BOAA on September 11, 2019. Appealed to Alaska Superior Court (*Applicant: Teri Zell, on behalf of Higher by Bad Gramm3r, LLC; Staff: Joe Metzger*). **This was heard before Superior Court on August 24, 2020 – no decision yet.**
- **Resolution PC 20-29**, a resolution of the Matanuska-Susitna Borough Planning Commission adopting findings of fact and conclusions of law supporting the denial of PC Resolution 20-18 concerning a request for a variance from MSB 17.55 to allow an existing single-family residence to encroach into the required 75-foot waterbody setback at 5782 S. Big Lake Road (Tax ID# 6142000L006); within Township 17 North, Range 3 West, Section 29, Seward Meridian. (*Applicant: Dennelle Seetomona on behalf of Janice Ellsworth, Staff: Joe Metzger*).

Updates on PC items going to the Assembly (Pending)

- **Resolution PC 20-12**, recommending Assembly adoption of MSB 17.68, Outdoor Shooting Facilities, in order to establish standards for commercial, educational, and nonprofit outdoor shooting facilities. Introduction: September 15, 2020 Public Hearing: October 6, 2020 (*Staff: Alex Strawn*).
- **Resolution PC 20-25**, recommending Assembly approval of an ordinance adopting MSB 11.12 Driveway Standards in order to ensure driveways within borough right-of-ways minimize negative impact to drainage, maintenance, and safety of the traveling public. Introduction: September 15, 2020; Public Hearing: October 6, 2020 (*Staff: Alex Strawn*).

Updates on PC items that went to the Assembly (Complete)

Planning Commission		Assembly	
Reso		ORD/Reso #	IM
Resolution PC 20-24 , recommending Assembly approval of an ordinance amending MSB 43.05.015(B)(3) to adopt the 2020 Subdivision Construction Manual.		ORD # 20-015	IM 20-024
Actions:	07/06/20 – PC Introduction 07/20/20 – PC Public Hearing – Amended/Approved 08/04/20 – Assembly Introduction 08/18/20 – Assembly Pubic Hearing – Adopted		