

The amount of moisture held in soil between field capacity, or about one-third atmosphere of tension, and the wilting coefficient, or about 15 atmospheres of tension.

Mottled. Irregularly marked with spots of different colors that vary in number and size. Mottling in soils usually indicates poor aeration and lack of drainage. Descriptive terms are as follows: Abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are these: *fine*, less than 5 millimeters (about 0.2 inch) in diameter along the greatest dimension; *medium*, ranging from 5 millimeters to 15 millimeters (about 0.2 to 0.6 inch) in diameter along the greatest dimension; and *coarse*, more than 15 millimeters (about 0.6 inch) in diameter along the greatest dimension.

Native vegetation. The vegetation under which the soil formed.
Nurse crop. A companion crop grown to protect some other crop sown with it, as small grain is sometimes seeded with clover.

Permeability, soil. The quality of a soil that enables water or air to move through it. Terms used to describe permeability are as follows: *Very slow*, *slow*, *moderately slow*, *moderate*, *moderately rapid*, *rapid*, and *very rapid*.

pH. See Reaction, soil.

Reaction, soil. The degree of acidity or alkalinity of a soil expressed in pH values. A soil that tests to pH 7.0 is precisely neutral in reaction, because it is neither acid nor alkaline. Degrees of acidity or alkalinity are expressed as follows:

	pH
Extremely acid -----	Below 4.5
Very strongly acid -----	4.5 to 5.0
Strongly acid -----	5.1 to 5.5
Medium acid -----	5.6 to 6.0
Slightly acid -----	6.1 to 6.5
Neutral -----	6.6 to 7.3
Mildly alkaline -----	7.4 to 7.8
Moderately alkaline -----	7.9 to 8.4
Strongly alkaline -----	8.5 to 9.0
Very strongly alkaline -----	9.1 and higher

Sand. As a soil separate, individual rock or mineral fragments ranging from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz, but sand may be of any mineral composition. As a textural class, any soil that contains 85 percent or more sand and not more than 10 percent clay.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Solum, soil. The upper part of a soil profile, above the parent material, in which the processes of soil formation are active. The solum in mature soil includes the A and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the underlying parent material. The living roots and other plant and animal life characteristic of the soil are largely confined to the solum.

Structure, soil. The arrangement of primary soil particles into compound particles or clusters that are separated from adjoining aggregates and have properties unlike those of an equal mass of unaggregated primary soil particles. The principal forms of soil structure are *platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are (1) *single grain* (each grain by itself, as in dune sand) or (2) *massive* (the particles adhering together without any regular cleavage, as in many claypans and hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the profile below plow depth.

Substratum. Any layer beneath the solum or true soil; the C or R horizon.

Surface layer. A term used in nontechnical soil descriptions for one or more layers above the subsoil. It includes the A horizon and part of the B horizon; has no depth limit.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. (See also Clay, Sand, and Silt.) The basic textural classes, in order of increasing proportions of fine particles, are as follows: sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay. The sand, loamy sand, and sandy loam classes may be further divided into coarse, fine, or very fine.

Tilth, soil. The condition of the soil, especially the structure, in relation to the growth of plants. Good tilth refers to the friable state and is associated with high noncapillary porosity and stable, granular structure. A soil in poor tilth is nonfriable, hard, nonaggregated, and difficult to till.

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PARADISE LAKE LAKE MANAGEMENT PLAN



Matanuska-Susitna Borough
Department of Planning and Land Use



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1 Introduction

1.1 Purpose

This lake management plan presents goals and objectives to balance the physical and social demands of those that live or recreate on Paradise Lake with the need to maintain a healthy and productive lake ecosystem. The lake management plan process was established by the Matanuska-Susitna Borough to provide a means to reduce user conflicts, balance various environmental and recreational demands placed upon a lake, and protect the health, safety and welfare of its residents and lake users.

1.2 Scope

Lake management plans provide guidance for how the surface of the lake is used and makes recommendations concerning public access and education of lake users to meet the goals of the plan. Certain aspects of the plan can be implemented as enforceable regulations through MSB Title 17.59. The borough assembly adopted guidelines for appropriate regulations for different sizes of lakes as follows:

LAKES HAVING A SURFACE OF 75 ACRES OR LESS

May recommend the following guidelines:

- ✓ No wake zone - 100 feet from shoreline
- ✓ Quiet hours - 10 p.m. to 8 a.m.
- ✓ Personal watercraft restriction
- ✓ 10 horse power limit*
- ✓ No wake speed zone on lake*

* These options *may* be recommended on a daily time share basis.

LAKES MORE THAN 75 SURFACE ACRES TO 200 SURFACE ACRES

May recommend the following guidelines:

- ✓ No wake zone - 100 feet from shoreline
- ✓ Quiet hours - 10 p.m. to 8 a.m.
- ✓ Personal watercraft restriction
- ✓ 10 horse power limit**
- ✓ No wake speed zone on lake**

**These options *must* be on a daily time share basis.

LAKES MORE THAN 200 SURFACE ACRES

May recommend the following options:

- ✓ No wake zone - 150 feet from shoreline
- ✓ Quiet hours - 11 p.m. to 8 a.m.

FOR ALL LAKES

- ✓ Access recommendations will be consistent with traditional use and current level of access development.
- ✓ Quiet hours apply to repetitive recreational activities such as water skiing and racing or high speed activities NOT to moderate speed point to point transportation.
- ✓ No wake is defined as the slowest speed a boat or personal water craft can go and still maintain safe operation and maneuverability.
- ✓ Time share means restrictions do not apply on Thursday, Friday, Saturday, and all three day weekends mandated by federal holiday (Memorial Day, Fourth of July, and Labor Day).
- ✓ Ice house means a structure utilized for ice fishing and left on the frozen surface of a lake for more than 24 hours.
- ✓ Motor vehicles means automotive vehicles with rubber tires for use on highways.
- ✓ Motorized watercraft use means the operation of watercraft powered or propelled by a force other than human muscle power, gravity, or wind. This definition does not include airplanes as motorized watercraft when landing, taking off, or taxiing on a water body.
- ✓ Personal watercraft includes vehicles such as jet skis, wave runners, and similar acrobatic or stunt equipment.
- ✓ A wake is the track in the water left after the passage of watercraft or other vehicle.
- ✓ A special permit is a permit approved by the planning director for a special purpose and is limited to a specific time to conduct an event that would otherwise involve activities in violation of MSB 17.59.

These guidelines may be varied due to lake configuration, lake depth, or other considerations through the adoption of individual lake management plans.

According to MSB GIS information, Paradise Lake is approximately 25 surface acres in size, and therefore, falls within the guidelines for lakes less than 75 surface acres.

1.3 Process

Lake management plans are initiated by local residents or property owners. The initiators circulate a petition to get the required number of signatures on the petition required by code.

Once a valid petition has been filed with the department, a ballot is mailed to all property owners within 600 upland feet of the affected lake. This ballot serves as

notice of the receipt of a valid petition and requests a vote to begin the lake management process. The borough begins a lake management plan if the majority of property owners responding to the mailed ballot vote in favor of developing a lake management plan.

Borough Planning staff collect background information on the lake and encourage adjacent property owners and users to participate in the planning process. Borough staff, lake users, lake residents, and property owners identify issues and concerns and establish goals and objectives that are incorporated into the draft plan.

The draft plan is reviewed by the public and community council and by the borough Planning Commission. The Commission considers all oral and written comments received in a public hearing and either recommends to the Assembly adoption of the plan as is, or with modifications, or recommends Assembly disapproval of the plan. The Assembly either adopts the plan as is or with modifications, or votes down the plan.

1.4 Enforceable Code Restriction

Most of the lake property owners and residents in attendance at the meetings expressed a preference for enforceable restrictions on:

- Quiet hours - 9 p.m. to 9 a.m.
- Electric motors only
- Personal watercraft restriction

These restrictions will protect the quiet enjoyment of the properties and allow continued use of the lake by residents and visitors in keeping with traditional practices. The plan will also help future lake users to boat or recreate in a manner that protects neighborhood values.

2. Inventory of Existing Conditions

2.1 Location

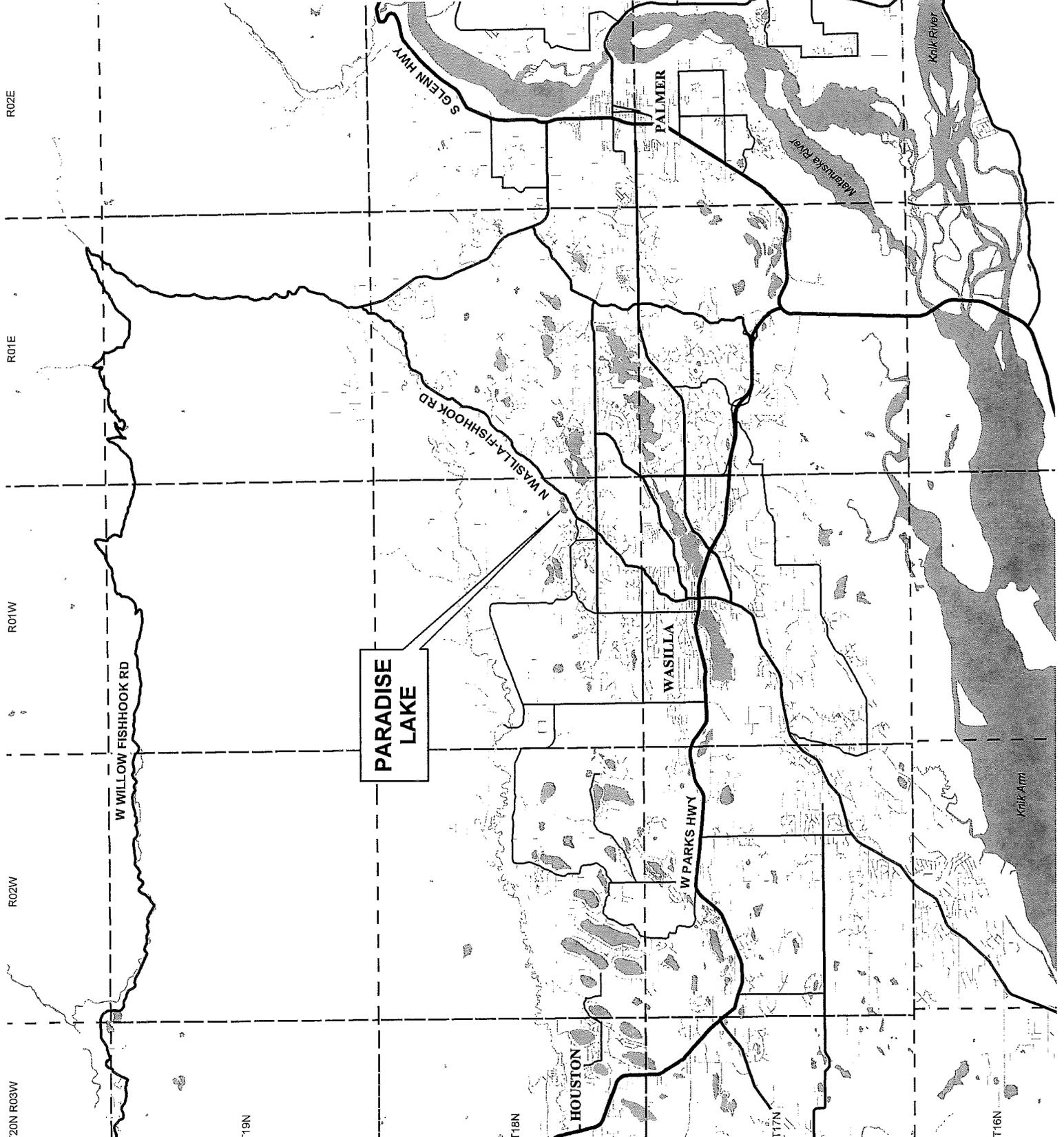
Paradise Lake is not located in a community council, but is within the Core Area comprehensive planning area. It is located west of approximately mile 4 of the Wasilla Fishhook Road. (See figure 1).

The lots along the south shore of Paradise Lake are primarily accessed from Wasilla Fishhook Road. Lots along the north shore are accessed via E. Paradise Lane. There is no developed public access to the lake; and all properties surrounding the lake are in private ownership. .

Figure 2 PARADISE LAKE MANAGEMENT PLAN

Location Map

City Boundary



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2.2 Physical Characteristics of the Lake

The surrounding topography of Paradise Lake is relatively flat, with most properties having about 2-3 feet elevation from the lake surface. Much of the shore line is in its natural condition.

Overall, the lake is relatively shallow near the shoreline (3-5 feet), with the center of the lake only reaching a maximum depth of approximately 20 feet (based on input from local residents and property owners). There are seasonal inlet and outlet creeks serving Paradise Lake, most evident during years of high rainfall. The inlet originates at the northwest corner and is generally spring fed, and the outlet creek leaves the lake at the eastern shore and travels to nearby Kings Lake. Marshy areas are found near the western and northeastern shores. According to the borough's GIS map information, it is approximately ¼ mile wide (although the shoreline is not symmetrical). Property owners and residents also indicate there is a small island near the northeastern portion of the lake, which does not show on borough tax maps, but is visible on aerial photos.

Paradise Lake is not currently stocked by the Alaska Department of Fish and Game. Water quality problems have not been reported.

Table 1: Paradise Lake Physical Characteristics

Surface Acres	25
Volume	Unknown
Maximum Depth	20 feet
Mean Depth	5-10 feet
Approximate width	-¼ mile
Approximate length	+¼ mile

Source: MSB GIS Information, and local knowledge

2.3 Land Use and Land Ownership

The property around the lake is entirely in private ownership. The parcels along the southern shore were originally part of a homestead parcel, and have since been divided by the waiver process. The lots along the north shore are part of Paradise Lake Subdivision, created in 1971. In 1975, Lot 3 of the subdivision was further split into six lots. The plat creating that subdivision provided for an “*Easement, twelve (12) feet in width, dedicated for use of owners of lots delineated hereon.*” The borough has no record of any recorded covenants for any subdivisions around Paradise Lake. The owner of the large un-subdivided, vacant parcel on the northwestern shore (A5) has been granted preliminary approval for a 33 lot subdivision, with most of the parcels varying in size from 1 to 2 acres. Additionally, preliminary approval has been granted to the owner of Lot 6 Paradise Lake, creating an additional 7 lots, ranging in size from 1 to 2 acres. There are no “to” and “along” easements along the shoreline of the lake.

Approximately half of the existing lots immediately adjacent to the lake are developed for residential or recreational use.

2.4 Social/Demographic – Usage

The present human use of Paradise Lake may be characterized as being primarily quiet and residential. The lots are large, and the potential for increased residential density and lake usage is of concern to residents. The lake management plan was initiated by lake residents as a result of the subdivision request on large lot A5 at the northwest corner of the lake, and the subdivision request on Lot 6 Paradise Lake. They desire to protect the quiet residential atmosphere of the lake, and ensure protection of water quality and nesting birds. The borough has no record of recorded covenants on any of the subdivisions around the lake. In order to effectively manage lake usage and protect water quality, future residential plans need to be identified. If these two pending subdivision requests are finalized, this lake management plan could provide the guidance necessary to ensure the increased lake usage occurs in a manner that protects the lake and the quality of life that current residents enjoy.

As stated previously, there is no public access point to the lake. However, residents recognize that future subdivisions could potentially provide public access. In order to ensure protection of the lake and quality of life, residents recommend that if any public access is provided, it be developed as walk-in only.

The lake is not stocked by ADF&G, and it is not anticipated that the public interest to use the lake will increase, as there are other more readily accessible and larger lakes in the vicinity.

2.5 Existing Plans and Lake Monitoring Programs

State

The State plan affecting the Paradise Lake area is the Willow Sub-Basin Area Plan. The Willow Sub-Basin Area Plan, adopted in October 1982, contains management intent for State and Borough lands within the Willow Sub-Basin, an area of approximately 970,000 acres. Paradise Lake is within the Wasilla Management Unit, which recommends the following uses on public lands:

- Settlement
- Small Farm Agriculture
- Commercial Agriculture
- Recreation
- Forestry
- Parks Highway Scenic Areas

Paradise Lake is not located within the boundaries of the Matanuska-Susitna Borough Coastal District (District), as defined within the Matanuska-Susitna Borough Coastal Management Plan.

Borough

Borough plans that address Paradise Lake in some manner include the Borough-wide Comprehensive Plan, adopted in 1971, the Borough-wide Long Range

Transportation Plan, Public Facilities Plan, the MSB Recreational Trails Plan and the Core Area Comprehensive Plan.

The Borough-wide comprehensive plan does not make specific recommendations for Paradise Lake. Rather, the 1971 plan makes a series of general recommendations for the Willow area, which do not reflect the current social, economic or development realities.

The Borough Public Facilities Plan makes recommendations on a regional basis for the provisions of public services including the development of public facilities necessary to the provision of those services. Services included in the plan are public safety (fire protection, emergency medical services, and emergency preparedness); library; historical preservation; governmental administration; education; parks, recreation and open space; trails; and utilities.

The 1997 Long Range Transportation Plan (LRTP) recommends future road improvements for a road network that will meet the stated goal and objective for the year 2015. The plan is currently being updated.

Lake Monitoring Program

The borough coordinates a lake monitoring program to monitor water quality, identify problems that degrade water quality, monitor the biological and hydraulic functions of the lake, and establish baseline trends to assist planning. The program depends on local volunteers to gather information and take samples for further testing. In addition, lake monitors identify fish and wildlife habitat and report environmental impacts of natural or man-made origin. Residents showed interest in participating in the Lake Monitoring Program.

2.6 Existing Regulations

This section describes the principle regulations affecting use and development in the Paradise Lake area.

Federal

Any work which results in the dredging or placing of structures or fills in tidal (ocean) waters, streams, lakes or wetlands requires a 404 permit from the U.S. Army Corps of Engineers.

Migratory birds, which include loons and grebes, are protected by the Migratory Bird Treaty Act. The Act, among other things, prohibits the “taking” of migratory birds. Destruction of nest sites, eggs, or the birds themselves are a violation of the Act.

Operation of aircraft, both private and commercial, is regulated by the Federal Aviation Administration.

State

The Alaska Department of Environmental Conservation (DEC) provides regulations

for wastewater disposal. DEC wastewater/septic regulations [18 AAC 72.015(f)] state that no holding tank, septic tank, soil absorption system, seepage pit, privy, or other waste water collection, treatment, or disposal system may be within 100 feet, measured horizontally, of the mean annual high water level of a lake, stream, spring, slough, or the mean higher high water level of coastal waters.

In addition to the U.S. Army Corps of Engineers 404 permit requirements; any activity within streams and certain work within lakes require a Title 41 permit from the Alaska Department of Natural Resources (DNR), Office of Habitat Management and Permitting (OHMP). Since 1994, the Alaska Department of Fish & Game, Habitat and Restoration Division issued a general permit, renewed annually, allowing vehicle movement on frozen water surfaces in south-central Alaska. DNR, OHMP currently issues these permits (Appendix A). Finally, the general ADF&G fishing regulations apply to Paradise Lake.

A navigable or public waterbody includes water suitable for public use and utility including boating, landing and take-off of aircraft, hunting, fishing, and trapping, or other public recreational purposes. Paradise Lake meets the definition of public waterbody.

Land that has been or is currently owned by the State of Alaska, and is adjacent to a navigable or public waterbody has special access requirements. Alaska Statute (AS 38.05.127) requires access to and along the surface waters of navigable and public waterways. An "along" easement, is generally reserved as a 50-foot wide public use easement along the ordinary high-water mark. These easements are created when the State conveys land to a Borough or a private individual and the easement stays with the property in perpetuity unless vacated through a public review process. State lands conveyed prior to the passage of AS 38.05.127 may not be subject to the "to" and "along" easements. A review of the conveyance document and in some cases, court documents is required to determine the presence or absence of these easements. Lands patented by the federal government are not usually subject to "to and along" easements. The borough did not identify any "to" and "along" easements around Paradise Lake.

Borough

Several Borough-wide ordinances address the development and use of land adjacent to Paradise Lake. The regulations are contained within the Borough's planning (Title 15), subdivision (Title 16), zoning (Title 17), and real property management (Title 23) ordinances.

Title 15 establishes and describes the general functions of the Planning Commission (both planning and zoning functions) and the Board of Adjustment and Appeals. Title 15 also describes the comprehensive plan and purposes. Once adopted, the Paradise Lake, Lake Management Plan will become an instrument of Borough policy similar to the other plans adopted by the Borough Assembly.

Title 16 provides the subdivision development standards within the Borough and establishes the Platting Board. Two of Title 16's requirements that are of special note to the development at Paradise Lake include a minimum lot size of 40,000 square feet, and a minimum lot width when measured at the lake's water line of one hundred twenty-five feet (Figure 3). If community septic system is provided, then the minimum lot size is 20,000 square feet and minimum width may be eighty-five feet.

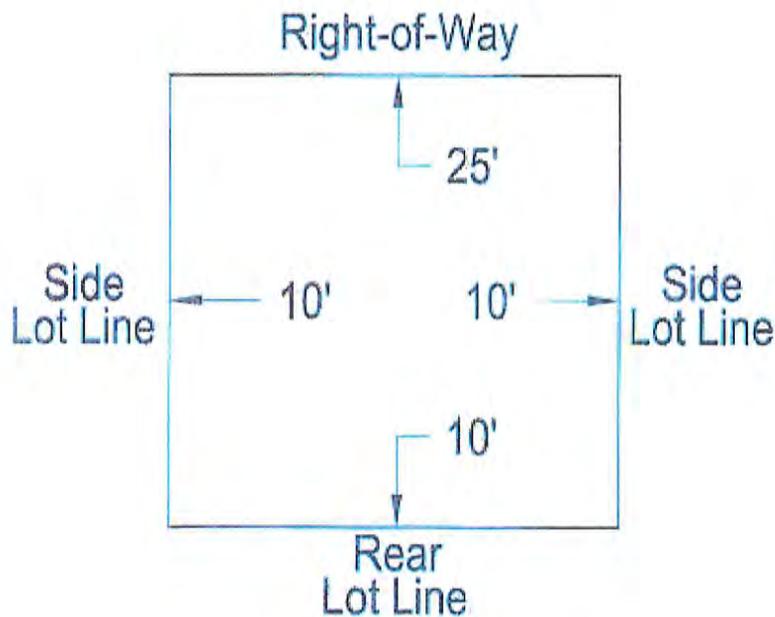
Zoning regulations (Title 17) that are of special note to development activities at Paradise Lake include setback requirements and a petition process to limit or eliminate motorized use of lakes and conditional use permits. Presently, all structures must be a minimum of twenty-five feet from the right-of-way and ten feet from side and rear lot lines. In addition, the voters of the borough approved, by initiative, a requirement that all habitable structures and garages must be located at least seventy-five feet from the ordinary high water mark of any waterbed or water course (Figure 3). The Borough also requires that any development which seeks to establish or operate certain uses that may impact surrounding properties must first obtain a conditional use permit.

Paradise Lake is not located within the boundaries of any community council, or special land use district. It is, however, located within the Core Planning Area, and is subject to the recommendations in the Core Area comprehensive plan.

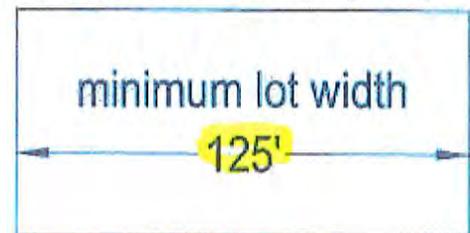
Private

Private regulations which exist in the Paradise Lake area would be in the form of subdivision covenants. The borough files do not contain copies of any recorded covenants for parcels around Paradise Lake. For current information about covenants, the reader is referred to the State of Alaska Recorders Office.

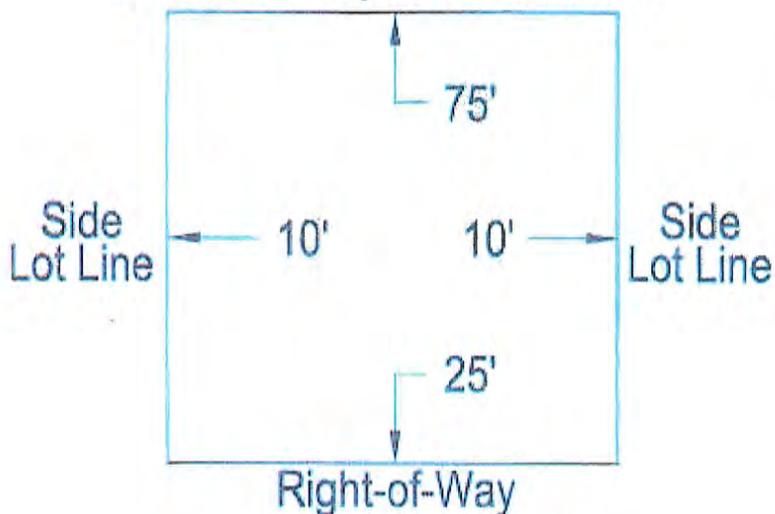
General Setback Requirements and Lot Size* Requirements



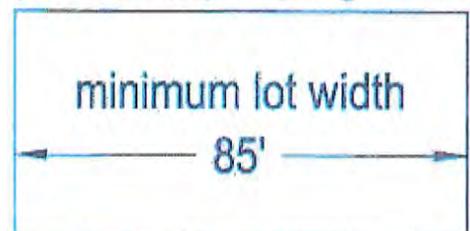
Ordinary High Water Line
of Lake (no community septage)



Ordinary High Water Line
of Water Body or Watercourse



Ordinary High Water Line of
Lake (community septage available)



*All lots must be a minimum of 40,000 sq. ft.

3. Issues and Concerns

The issues and concerns identified by residents include:

- Protection of wetlands, nesting waterfowl and wildlife habitat
- Protection of quiet residential nature of the lake
- Reduce potential for conflicts between motorized and non-motorized uses (safety)
- Noise
- Protect groundwater quality and quantity
- Maintain lake water quality

A majority of those attending the meetings said that the quiet, residential character of the lake should be protected. The present state of the lake is characterized as a residential development having a quiet quality. The historical use of Paradise Lake has not included high powered motorized or personal watercraft. Some property owners are concerned about winter snowmachine usage and the associated noise and trespass issues. While snow machines are a generally allowed use on all state land (including frozen waterbodies), the plan can make recommendations about winter trails leading to the lake, posting public information, and enforcement of quiet hours. Subdivision of the large parcels of undeveloped land and homebuilding on vacant lots may also result in greater impacts of noise and wakes degrading the shoreline, increasing the potential for damage to wildlife and/or waterfowl on the island, and impacting the quiet residential quality of the lake.

4.0 Goals

Goals describe the future expectations of residents, property owners, and users of a lake. The following goals reflect the aspirations of Paradise Lake residents, property owners, and users and address their principle concerns: quality of experience, recreational character of the area, wildlife and water quality. The goals are not shown in priority order as they are interdependent.

4.1 Water Quality and Wildlife Protection

Paradise Lake is a significant natural resource. It is the desire of property owners, residents, and users of Paradise Lake to maintain or improve the lake's water quality and to ensure that recreational uses of the lake are compatible with wildlife and habitat. The limited seasonal inlet and outlet on the lake increases the desire to ensure responsible use and good water quality.

4.2 Preservation of Quiet Recreational and Residential Character

It is the desire of property owners, residents, and users of Paradise Lake to preserve the quiet and peaceful residential character of the lake, while allowing some low impact recreational uses for residents.

4.3 Maintenance of Public Access

Currently there is no public access to the lake. If a public or private access is developed as a result of a future subdivision, it is recommended that it be designated as walk-in only.

4.4 Educate Residents and Visitors

It is the desire of property owners and residents of Paradise Lake to utilize public education as a means by which to accomplish many of the other goals of the lake management plan, and to encourage responsible development on properties surrounding the lake.

5.0 **Recommendations**

5.1 Maintain Water Quality and Protect Wildlife

Certain uses, such as high powered motorized watercraft and personal watercraft (a.k.a. jet skis), can create wakes that contribute to shoreline erosion and disturb nesting waterfowl. Wake action may cause loon and grebe mortality by swamping nests or by separating parents from chicks. Noise caused by large motors may also disturb waterfowl. Those in attendance at the meeting agreed that personal watercraft should be prohibited on Paradise Lake to reduce wakes and manage noise. Most of those in attendance at the meeting were in agreement with the recommendation of electric motors only.

Maintaining a natural shoreline habitat is one of the best ways to protect water quality. Natural shoreline vegetation provides erosion control, filtering of surface runoff, and habitat for fish and wildlife. It is recommended that lakeshore property owners follow Matanuska-Susitna Borough "*Voluntary Best Management Practices for Development Around Waterbodies.*"

In order to determine baseline water quality conditions on Paradise Lake, volunteers are encouraged to participate in the Borough's Lake Monitoring Program.

5.2 Preserve Quiet Recreational and Residential Character

Residents and property owners of the area initiated the lake management planning process to protect the quiet recreational and residential use of the lake. The majority of those attending the meetings support limitations for watercraft motors as a means of reducing noise and promoting safety. It is recommended that electric motors only be allowed on Paradise Lake.

The use of personal watercraft, a.k.a. jetskis, is not a traditional use of Paradise Lake. It is incompatible with the quiet residential uses of the lake. Furthermore, personal watercraft pose a safety hazard for swimmers and boaters. All property owners who attended the public meeting support a ban of personal watercraft. It is recommended that personal watercraft be prohibited on Paradise Lake.

The establishment of quiet hours, between 9 p.m. and 9 a.m., Sunday through Saturday, is recommended to maintain the existing quiet nature and residential quality of the lake during all seasons.

5.3 Maintain Current Access

There is currently no public access to the lake. Those in attendance at the meetings recognize that a future subdivision could provide public or private access. It is recommended that if public or private access is identified, it be designated as walk-in only.

5.4 Educate Residents and Visitors

It is recommended that the following methods be used to educate residents and visitors to Paradise Lake about use restrictions and best management practices:

- Mail or deliver notices to inform property owners and residents about code restrictions, and enclose information about non-code recommendations.
- Post lake restrictions along with any “Property for Sale” signs to inform potential buyers that lake restrictions are in place.
- Inform residents about the process for reporting violations to the Borough Code Compliance Division.

6.0 **Implementation**

Lake management plans are implemented through a combination of regulations, public information, and best management practices. MSB 17.59 Lake Management Plan Implementation, implements adopted lake management plans, using the borough’s citation authority. Specific recommendations of the lake management plans that are implemented through MSB 17.59 are: quiet hours, no wake zones, motorized water craft use, special permits, winter motor vehicles, and ice house registration. When the Paradise Lake, Lake Management Plan is adopted, MSB 17.59 will be amended to include the recommendations of the plan. Those recommendations of the plan that are not included in MSB 17.59 will be implemented through public information and best management practices.

Personal Watercraft Ban

To preserve the quiet residential and recreational uses of the lake, prevent shoreline disturbance, and protect nesting waterfowl, personal watercraft are prohibited from Paradise Lake. Personal watercraft includes vehicles such as jet skis, wave runners, and similar acrobatic or stunt equipment.

Quiet Hours

To maintain the existing quiet nature, residential quality and low impact use of the lake, quiet hours are established between the hours of 9 p.m. and 9 a.m. Sunday through Saturday. Quiet hours apply to repetitive recreational activities such as water skiing and racing or high speed activities (both in winter and summer) and NOT to moderate speed point to point transportation.

Electric motors only

To protect nesting loons and grebes and other migratory waterfowl from disturbance from wakes caused by watercraft with large horsepower engines, to reduce shoreline

erosion, and to reduce the potential for conflicts between swimmers and boaters, a restriction for use of electric motors only is established for Paradise Lake.

Maintain current limited access

There is currently no public access to Paradise Lake. Residents desire that no public access point should be developed, however, if it is, it should be maintained as walk-in only.



BLM ALASKA PUBLIC INFORMATION CENTER



DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ALASKA STATE OFFICE
222 W. 7TH AVE., #13
Anchorage, AK 99513-7599



fax: 907-271-3684
Phone: 907-271-5960



Date: 2/26

To: Thomas Bowers N 2248 m @ FWA ONLINE.NET

Organization: _____

From: KAMON

Subject: SIFN 1W Sec 25 lot 204

Number of pages to follow: _____

Comments: _____

LET me know you GOT IT

RGARCIA@BLM.GOV



Subdivision of T. 18 N. R. 1. W.

chains Thence I run
 S. 89° 51' W., on a true line bet. secs. 25 and 36.
 Over level land.
 Through heavy spruce, birch and cottonwood timber, and dense
 undergrowth.

9.40 Leave level land. Ascend rolling land.

10.40 Top of ascent, bears N. and S. Thence over level land.

40.01 Set an iron post size, 1, 24 ins. in the ground for $\frac{1}{4}$ sec. cor.
 marked on cap;

$\frac{1}{4}$ S 25 From which
 S 36 A spruce, 8 ins. dia., bears N. 8° 17' E., 32 lks. di
 1914 dist., marked $\frac{1}{4}$ S 25 B T.
 A spruce, 8 ins. dia., bears S. 16° 52' W., 36 lks. dist., marked
 $\frac{1}{4}$ S 36 B T.

45.00 Leave heavy timber, enter scattering timber, bears N. and S.

60.00 Leave scattering timber, enter heavy timber, bears N. and S.

80.02 The cor. secs. 25, 26, 35 and 36.
 Land level and rolling.
 Soil, moss covered, vegetable mold and sandy loam, 2nd rate.
 Timber, birch, spruce and cottonwood 65.02 chs.
 Dense undergrowth, alders and willows 80.02 chs.

N. 0° 2' W., bet. secs. 25 and 26.
 Over rolling moss covered land.
 Through heavy, spruce, birch and cottonwood timber, and
 dense undergrowth.

18.60 Leave heavy timber, enter clearing, of gov't. wagon road,
 right of way, bears N. 30° E. and S. 30° W.

19.30 Center wagon road, leads from Knik to Willow creek mines.

20.00 Leave clearing for wagon road, enter heavy timber.

40.00 Set an iron post size 1, 24 ins. in the ground for $\frac{1}{4}$ sec. cor.
 marked on cap;

$\frac{1}{4}$ S 26 S 25 From which
 1914 A spruce, 7 ins. dia., bears S. 41° E., 19 lks.
 dist., marked $\frac{1}{4}$ S 25 B T.

Subdivision of T.18 N.R.I.W.

- 44.00 A spruce, 6 ins., dia., bears S. 64° 05' W., 28 1/2 lks. dist., marked S. 26 B T. June 9, 1914.
Descend.
- 45.80 Foot of descent, bears E. and W. Leave heavy timber, enter wet boggy lake bed, covered with grass.
- 47.70 Leave boggy land, enter heavy timber, bears E. and W. Ascend.
- 49.30 Top of ascent, bears E. and W. Thence over nearly level land.
- 80.00 Set an iron post, size 2, 24 ins. in the ground for cor secs. 23, 24, 25 and 26, marked on cap;
T 18 N R I W From which
S 23 S 24 A spruce, 6 ins. dia., bears N. 29° 19' E., 735 lks. dist., marked T. 18 N R I W S 24 B T.
S 26 S 25 1914 A birch, 14 ins. dia., bears S. 55° 12' E., 30 lks. dist., marked T. 18 N R I W S 25 B T.
A spruce, 12 ins. dia., bears S. 55° 00' W., 21 lks. dist., marked T 18 N R I W S 26 B T.
A birch, 8 ins. dia., bears N. 63° 25' W., 51 lks. dist., marked T 18 N R I W S 23 B T.
Land level and rolling.
Soil covered with moss 6 ins. deep, vegetable mold, sandy loam, 18 ins. deep, gravel subsoil, 2nd rate.
Timber, birch, spruce and cottonwood 78.10 chs.
Dense undergrowth alders, and willows 78.10 chs.

- 40.00 N. 89° 51' E. on a random line bet. secs. 24 and 25.
Set temp. 1/2 sec. cor.
- 79.94 Intersect Seward Meridian and East bdy. of Tp. 5, lks., N. of the cor. secs. 19, 24, 25 and 30, which is an iron post size 3, firmly set and witnessed as described in the field notes of the survey thereof.
Thence I run S. 89° 53' W. on a true line bet. secs. 24 and 25.
Over level land.
Through heavy, spruce, birch and cottonwood timber, and dense undergrowth.
- 21.50 Leave timber, enter clearing of right of way Govt. wagon road, bears NE. and SW.

chains

- 11.70 Wagon road bears N.30°E. and S.30°W. leads from Khik to Willow creek mines,
 12.00 Leave clearing for wagon road, enter heavy timber.
 22.00 Thence over rolling land.
 32.00 Leave rolling land, bears NE. and SW. Thence over level land.
 39.97 Set an iron post size 1, 3/4 ins. in the ground for 1/4 sec. cor. marked on cap;

1/4 S 24 From which

S 25 A birch, 12 ins. dia., bears N.23°12'E., 25 lks. dist., marked 1/4 S 24 B T.

A spruce, 8 ins. dia., bears S.17°35'E., 40 lks. dist., marked

1/4 S 25 B T.

- 51.20 **Creek, 2 lks. wide, 6 ins. deep course S.**
 53.00 Leave level land, bears NE. and SW. Thence over rolling land.

79.94 The cor. secs. 23, 24, 25 and 26.

Land rolling and level.

Soil, covered with 6 ins. moss, vegetable mold, and sandy loam, 18 ins. deep, gravel subsoil, 2nd rate.

Timber, birch, spruce and cottonwood 79.44 chs.

Dense undergrowth, alders, willows and cranberries 79.44 chs.

June 10, 1914.

N.0°2'W. bet. secs. 23 and 24.

Over, rolling land.

Through, heavy spruce, birch and cottonwood timber, and dense undergrowth.

7.50 Leave timber, enter open swamp, bears E. and W.

10.50 Leave swamp, enter heavy timber, bears E. and W.

40.00 Set an iron post, size 1, 3/4 ins. in the ground for 1/4 sec. cor. marked on cap;

1/4 S 23 | S 24 From which

1914 A birch, 7 ins. dia., bears N.77°10'E., 24 1/2 lks. dist., marked 1/4 S 24 B T.

A spruce, 12 ins. dia., bears S.63°41'W., 16 lks. dist., marked

1/4 S 23 B T.

Subdivision of T.18 N.R.I W.

chains.

59.00 Foot of descent, bears E. and W. Thence over level swampy land, leave heavy timber, enter scrub spruce timber.

80.02 The cor. secs. 1, 2, 11 and 12.

Land level and S. slope.

Soil, 1st 59.00 chs. vegetable mold and sandy loam, 18 ins. deep, gravel subsoil, 2nd rate. Remainder swampy and tundra.

Timber, birch, spruce and cottonwood 59.00 chs.

Heavy growth scrub spruce 21.02 chs.

Dense undergrowth, alders, willows and high bush cranberries 80.02 chs.

June 29, 1914.

Go to page 14 — July 7, 1914, the cor. of secs 2-3-34 and 35

Paradise Lake, a body of deep water, more than 25 acres in extent, not drainable or likely to dry up, situated about the middle of sec. 25, I prepare to meander, as follows;

From the 1/4 sec. cor. bet. secs. 24 and 25, I run S. 0° 2' E. bet. the E. and W. halves of sec. 25.

Over level land.

Through heavy spruce, birch and cottonwood timber and dense undergrowth.

13.26 Bank of lake.

Set an iron post size 1.24 ins. in the ground for ^{special} meander

cor. of E. and W. halves of sec. 25, marked on cap T 18 N R I W

S 25 From which

S M C A birch, 6 ins. dia., bears N. 47° 47' W., 55 lks. dist. 1914 marked T 18 N R I W S 25 S M C B T.

A birch, 10 ins. dia., bears N. 2° 57' E., 50 lks. dist., marked T 18 N R I W S 25 S M C B T.

Land level and slightly rolling.

Soil vegetable mold and sandy loam 2nd rate.

Timber, birch, spruce and cottonwood 13.26 chs.

Dense undergrowth alders and willows 13.26 chs.

see next page

Meanders of T.15. N.R. I W.

Meanders of Paradise Lake in sec.25.

I commence at the special meander cor. bet. the E. and W. halves of sec.25, on the N. side of lake.

Thence I run with meanders in W. 1/2 sec.25

Over rolling land, through timber and dense undergrowth

S.44°30'W. 3.10 chs. Banks 2 ft. high. Through heavy spruce, and birch timber and dense undergrowth.

S.74°45'W. 2.70 "

S.77°15'W. 1.90 "

N.75°30'W. 8.10 "

S.67°00'W. 6.50 "

S.34°00'W. 6.80 "

S.49°45'E. 3.10 "

S.39°30'E. 5.50 "

N.57°00'E. 16.20 "

S.38°45'E. 2.90 "

S.78°00'E. 3.10. " To the special meander cor. bet. E. and W. halves of sec.25 on S. side of lake.

Land rolling.

Soil, vegetable mold, black and sandy loam, 2ft. deep, clay subsoil, 2nd rats.

Timber, birch, spruce, and scattering cottonwood.

Thence in E. half of sec.25

Over rolling land.

Through heavy spruce, and birch timber, and dense undergrowth

N.77°45'E. 5.60 chs. banks 2 ft. high.

N.53°15'E. 5.10 " From end of this course Log road house known as "Paradise house bears S.83°45'E. 4.18 chs. dist. also Tent bunk house 12 x 14 ft., E. of road house 20 lks. dist.; stable tent 14 x 16 ft.

Linda Fisch

From: Mccabe, Gene C (DEC) <gene.mccabe@alaska.gov>
Sent: Friday, April 01, 2016 11:01 AM
To: Linda Fisch
Subject: RE: about 50 feet from Septic now!

Linda,

Mr. Holler, PE, did not depict a stream or creek on the site plan for Paradise Park Lot 7 Block 3.

We are reviewing all of the information you provide, yes.

I hope to have more information to you next week on potential courses of action available to you through the Department. As soon as Department of Law completes their review, I will let you know.

Thanks!

Gene

Gene McCabe

Section Manager
 Department of Environmental Conservation
 Division of Water
 Wastewater Engineering Support & Plan Review Section
 555 Cordova Street
 Anchorage, AK 99501
gene.mccabe@alaska.gov
 (907) 269-7692

From: Linda Fisch [<mailto:akfish@mtaonline.net>]
Sent: Friday, April 01, 2016 10:21 AM
To: Mccabe, Gene C (DEC) <gene.mccabe@alaska.gov>
Subject: about 50 feet from Septic now!

Where on Curtis Hollers certificate did he mention a creek?

Linda Fisch

This is not right He is making a mosquito pond and we greatly object to this. This catching the water should be illegal. Are you taking notice??

Linda Fisch

I am going to report it to the Newspaper how the Borough has allowed this to happen when it was not supposed to do this. No one has done their job

Linda Fisch

12

Septic Certification

Linda Fisch

From: Linda Fisch <akfish@mtaonline.net>
Sent: Friday, May 06, 2016 10:31 AM
To: akfish@mtaonline.net
Subject: FW: [EXTERNAL] Your Opinion

-----Original Message-----

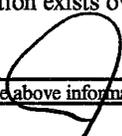
From: Hewitt, Jack J POA [<mailto:Jack.J.Hewitt@usace.army.mil>]
Sent: Friday, May 06, 2016 5:31 AM
To: akfish@mtaonline.net
Subject: RE: [EXTERNAL] Your Opinion

I do not have that data Linda, but if memory serves - Mr. Rolston may have said they hit water at 18'.

Jack

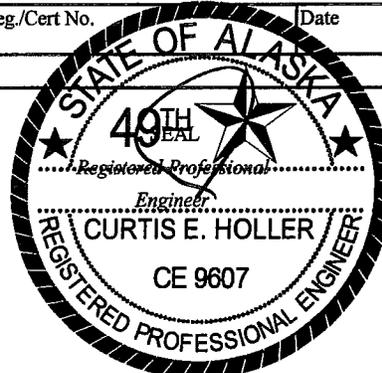
III. WASTEWATER DISPOSAL		Legal Description: Lot 7 Block 3 Paradise Park	
<input checked="" type="checkbox"/> Septic Tank/Absorption System		<input type="checkbox"/> Package Treatment (Specify Brand Name or Process)	
<input type="checkbox"/> Holding Tank - Specify	Capacity of Tank	Where Waste is Disposed	Frequency of Pumping
<input checked="" type="checkbox"/> Septic Tank Outfall Discharged To: Subsurface drain field		<input type="checkbox"/> Other (Specify): (Outhouse, Incinerator, etc.)	

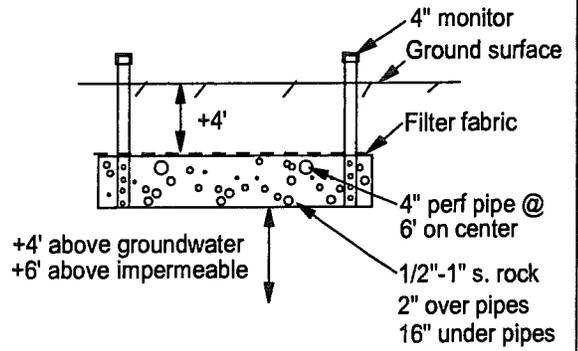
NEW SYSTEM

Name of Installer Mike Rolston		Date Installed 01/13/16	
<input type="checkbox"/> Owner/Builder	<input type="checkbox"/> Certified Installer	<input checked="" type="checkbox"/> Other: No. _____ contractor	Septic Tank Type/Manufacturer Steel/Anchorage Tank
Septic Tank Size (Gallons) 1000	Number of Compartments 2	Soil Type and Rating SP-GP (150)	
Type Soil Absorption System Absorption Bed	Dimensions/Size Soil Absorption System 12' x 38' w/16" under pipes	Type/Quantity Backfill Material Used for Soil Absorption System 1/2"-1" rock, 31 cyd	
Percolation Test Results (Attach Copy of Report) N/A (Visual)		Percolation Test by: (Name) N/A	
Minimum Ground Cover over Absorption Area +4 Feet	Minimum Ground Cover over Septic Tank 2" Insul and 4 Feet	Cleanout Pipes/Caps Installed on Septic Tank <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cleanout Pipes/Caps Installed on Absorp. System <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Separation Distance To: N/A Feet	Water Supply Source on Lot Adjacent Lot +100 Feet	Nearest Water Supply Source on Adjacent Lot +100 Feet	Water Table/Bedrock +4/+6 Feet
Lot Line Feet			
Comments/Recommendations 1. Holler Engineering logged a test hole, designed and inspected construction of this new septic system. 2. 2" Insulation exists over sewer lines and septic tank.			
I certify that the above information, and that provided in Section IV, is correct:			
Signature 		Typed/Printed Name Curtis Holler, PE	Title, Reg./Cert No., Inst. No. CE 9607
			Date 02/25/16
NOTE: Must be signed by a Certified Installer, Professional Engineer, DEC staff, or approved Owner/Builder			

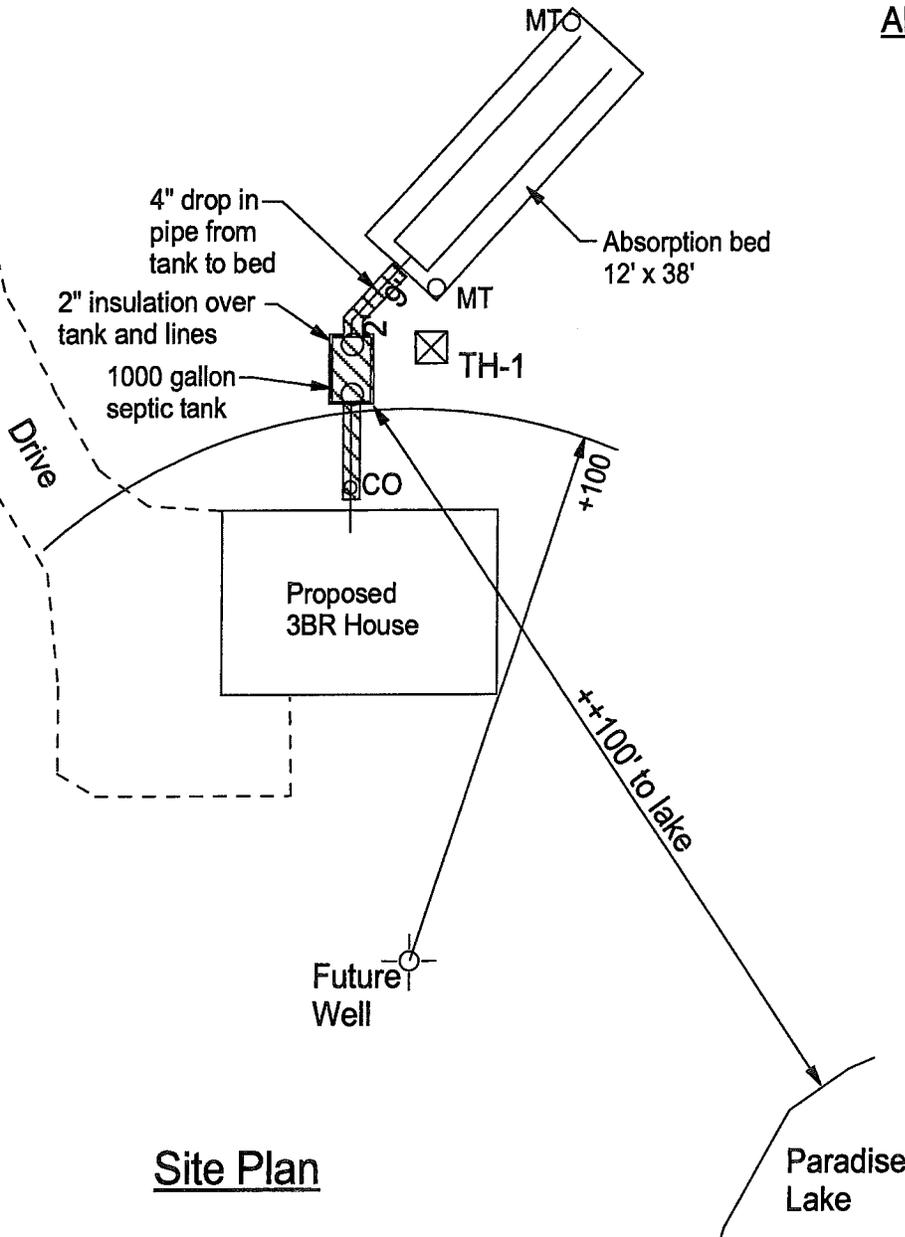
EXISTING SYSTEM

Name of Installer		Date Installed	
<input type="checkbox"/> Owner/Builder	<input type="checkbox"/> Certified Installer	<input type="checkbox"/> Other: No. _____	Septic Tank Type/Manufacturer
Septic Tank Size (Gallons)	Number of Compartments	Soil Type and Rating	
Type Soil Absorption System	Dimensions/Size Soil Absorption System	Type/Quantity Backfill Material Used for	
Adequacy Test Results (Attach Copy of Report) <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Adequacy Test Performed by: (Name)	
Date Septic Tank Pumped (Attach Copy of Receipt)			
Minimum Ground Cover over Absorption Area Feet	Minimum Ground Cover over Septic Tank Feet	Cleanout Pipes/Caps Installed on Septic Tank <input type="checkbox"/> Yes <input type="checkbox"/> No	Cleanout Pipes/Caps Installed on Absorp. System <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Separation Distance To: Feet	Water Supply Source on Lot Adjacent Lot Feet	Nearest Water Supply Source on Adjacent Lot Feet	Nearest Body of Water Feet
Water Table/Bedrock Feet		Lot Line Feet	
Comments/Recommendations			
I certify that the above information, and that provided in Section IV, is correct:			
Signature		Typed/Printed Name	Title, Reg./Cert No.
			Date
NOTE: Must be signed by a Professional Engineer.			

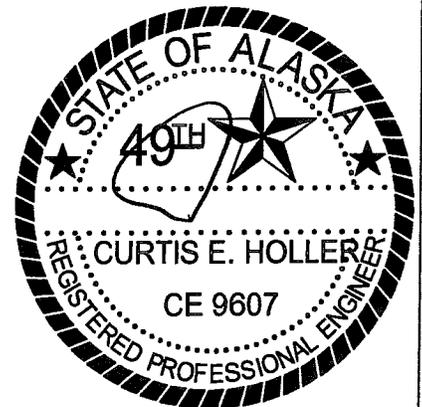




Absorption Bed Detail



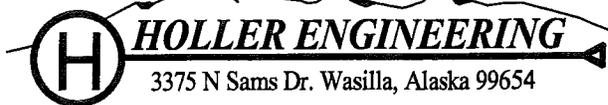
Site Plan



Notes

1. This septic system does not lie within the protective radius of any known well.
2. No survey staking provided - lotlines/easements are owner's/developer's responsibility.
3. Septic tank, and lines have 2" insulation.

Lot 7 Block 3 Paradise Park
Wastewater System Asbuilt



Job # 16001

no scale

02/25/16

49916 ST
ATGA**WARRANTY DEED**

A.S. 34.15.030

The Grantor,

PARADISE PROPERTIES, LLC, an Alaska limited liability company, whose address is PO Box 872181, Wasilla, AK 99687, for and in consideration of Ten Dollars (\$10.00), and other good and valuable consideration, in hand paid, the receipt of which is hereby acknowledged, conveys and warrants to the Grantee,

THOMAS ROLSTON and DEBORAH ROLSTON, husband and wife, whose address is

3060 N. Lazy Eight Ct, Ste 2, PMB 475 Wasilla AK 99654,
the following described real property:

Lot 7, Block 3, Paradise Park Subdivision Phase 1, according to the official plat thereof filed under Plat No. 2013-33, in the records of the Palmer Recording District, Third Judicial District, State of Alaska.

Subject to:

Reservations and exceptions as contained in the U.S. Patent No. 1125747, and/or in Acts authorizing the issuance thereof, recorded June 10, 1949, at Book 7, Page 353.

Any questions that may arise due to shifting or change of the high water mark or high water line of unnamed creek and Paradise Lake.

Any prohibition or limitation on the use, occupancy or improvements of the land resulting from the right of the public or riparian owners to use any waters which may cover the land or to use any portion of the land which is now or may formerly have been covered by water.

Any adverse claim based upon the assertion that some portion of said land is tide or submerged lands, or has been created by artificial means or has accreted to such portion so created.

Rights of the public and governmental entities in and to that portion of said land lying below the high water mark of unnamed creek and Paradise Lake.

Reservation of all oil, gas and mineral rights, as reserved in an instrument, recorded June 28, 1963, Book 46 Page 252. The Oil, Gas and Mineral rights were transferred to Betty J. Wahlen by Quit Claim Deed recorded April 30, 2012, as Instrument No. 2012-008658-0. The Oil, Gas and Mineral rights

were transferred to Betty J. Wahlen, trustee of the Betty J. Wahlen Family Trust, dated August 10, 2005, by Quit Claim Deed recorded April 30, 2012, as Instrument No. 2012-008659-0.

Blanket Right of Way Easement, including terms and provisions thereof, granted to Matanuska Electric Association, Inc., and its assigns and/or successors in interest, to construct, operate and maintain an electric transmission and/or telephone distribution line or system by instrument recorded October 20, 2006, as Instrument No. 2006-030415-0.

Transfer of Ownership Rights of Paradise Properties LLC, including the terms and provisions thereof, recorded June 1, 2012, as Instrument No. 2012-011431-0.

Notes as recited on Plat(s) of said Subdivision.

Easements as shown on the Plat(s) of said Subdivision.

Covenants, conditions, restrictions and easements, including the terms and provisions thereof, as set forth in an instrument recorded July 19, 2012, as Instrument No. 2012-015166-0.

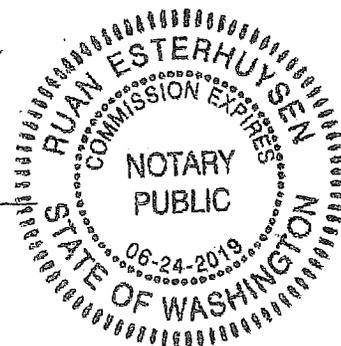
Blanket Right of Way Easement, including terms and provisions thereof, granted to Matanuska Electric Association, Inc., and its assigns and/or successors in interest, to construct, operate and maintain an electric transmission and/or telephone distribution line or system by instrument recorded April 12, 2013, as Instrument No. 2013-007754-0.

Further subject to reservations and exceptions in U.S. and/or State of Alaska Patents and in Acts authorizing the issuance thereof; easements, rights-of-way, covenants, conditions, reservations, notes on plat, by-laws, and all other restrictions of record, if any.

Date: 12/28/2015, 2015

GRANTOR: PARADISE PROPERTIES, LLC

By: [Signature]
KURT LEPPING, Managing Partner



STATE OF Washington)
) ss.
Snohomish COUNTY)

The foregoing instrument was acknowledged before me on December 28, 2015, by KURT LEPPING, Managing Partner of PARADISE PROPERTIES, LLC, an Alaska limited liability company, on behalf of the company.

[Signature] Ruan Esterhuysen
Notary Public in and for Wells Fargo Lake Stevens
My Commission Expires: 06/24/2019



Biologist m

From: **Chris&Jen Hoffman** choffman@mtaonline.net
 Subject: development issues
 Date: March 28, 2006 at 10:12 PM
 To: Linda Fisch akfish@mtaonline.net, Alaska Dupuis' dupuis@mtaonline.net

*Septic RUN-OFF
to lake*

CH

Linda,

Thanks for the link; I recognize most of the places in the photos. I have some recent ones of the same areas that I will send you.

Here's my take on your situation; please excuse me if I over-explain things. I don't mean to insult your intelligence, but if someone questions you on my terms I want to make sure you have my interpretation of the terms:

1. Although there is not reliable access to the lake for anadromous fish (i.e. salmon coming from salt water to spawn or rear) the lake is nonetheless part of the watershed. Development in the lowlands near your house would likely do a couple of things.

- A) Impede the flow of water through the channel (this is called an ephemeral channel since it only carries water periodically) causing it to go elsewhere (possibly where you don't want it such as overtopping your road or ponding on your property)
- B) and/or prevent water from going where it is supposed to go (into the lake).

This could lower the level of the lake which is naturally prone to large variations in water level based on annual or longer term trends in local hydrology (rain, snow, temp. timing of breakup, etc). In a worst case scenario (if they were to fill the lowlands and not allow for stream flow) you would still get the water but it may not make it to the lake at all. For your property this could result in flooding since you're the last stop before development. You would probably not have a problem with a dry well since you would retain the water on your property for a longer period (with negative effects of flooding) but the other people on the lake could feel the negative impacts of a lowered water table.

Additional effects to birds and fish should be obvious if the lake were to be severely lowered beyond the range of natural variation or be lowered to low levels more often than natural (since low years are a normal part of the cycle).

- 2) **Septic runoff from the properties could** (and likely would) enter the lake if the development proceeds as planned. This could result in a few things:

- A. Increased risk of eutrophication (nutrient loading) in the lake. Septic waste influx results in increased nitrogen loading and thus algal blooms which depress dissolved oxygen levels. Adequate dissolved oxygen levels are necessary for native plant species, invertebrates (snails, water bugs, etc) and fish. The fish eat the invertebrates (some invertebrates rely on the native plants) and birds will eat the invertebrates, the fish, or the plants, depending on the species of birds. Duck may eat inverts and plants, grebes eat fish, and so on.
- B. Risk of bacteria infections, such as E. coli. This eutrophication may contribute to a larger problem in the area if there is already eutrophication or bacterial problems from the nearby farm. This is a common problem with livestock areas near lakes due to fecal runoff and adding your lake to list could compound the problem. I have to stress that I don't know if there are any problems from the farm, so this may not be an issue at all.
- C. Doing these aforementioned things to the lake may be a larger issue than the effects to fish and wildlife since you get your water from the local groundwater. You'd have to talk to a hydrologist to figure out if eutrophication/bacterial infection in the lake could impact the quality of your water supply. I suspect it would depend on the location of your well (and the location of other peoples well) and the direction of the groundwater flow. This is out of my area...

My trip to Sand Point is delayed to Saturday due to severe weather, so feel free to contact me with any questions. I know this is brief, but I hope it helps somewhat.

Chris

357-8970

-----Original Message-----

From: Linda Fisch [mailto:akfish@mtaonline.net]
Sent: Tuesday, March 28, 2006 7:47 PM
To: choffman@mtaonline.net; alaska@marykay.com; israel@mtaonline.net
Subject: Frank Alois Pitelka.htm

DE NOBLE LAW OFFICES LLC

11517 Old Glenn Highway, Suite 202
Eagle River, Alaska 99577
Phone: 907.694.4345
Fax: 907.694.4346
Email: bdenoble@alaska.net

VIA HAND DELIVERY

April 1, 2016

Nicholas Spiropoulos and John Aschenbrenner
Matanuska-Susitna Borough
350 East Dahlia Street
Palmer, Alaska 99645

Re: Lot 7, Block 3, Paradise Park Subdivision Phase 1
My File No. 438.001

Dear Mr. Spiropoulos and Mr. Aschenbrenner:

I have been retained by Linda Fisch and Thomas Bouwens concerning the construction activities occurring on Lot 7, Block 3, Paradise Park Subdivision Phase 1, which abuts their property and home located at 2700 East Paradise Lane, Wasilla, Alaska. As you may or may not be aware, Thomas and Deborah Rolston purchased Lot 7 and are currently in the process of constructing a house thereon. The Rolstons recently installed a septic tank within 100 feet of the creek delineated on the plat in direct violation of the recorded plat and the MSB Code. Although my clients informed the MSB of this violation, the MSB has responded that it does not have the resources to enforce all plat violations and that it could not request relocation of the Rolstons' septic tank because it could not find a violation of the MSB Code. However, with all due respect, not only are the Rolstons in violation of the MSB Code and their violation a serious one considering the potential devastating effects therefrom, but the MSB is obligated to require the Rolstons to relocate their septic tank and enforce the MSB Code. Furthermore, by determining the Rolstons had not violated the MSB Code and thus the creek delineated on the plat is not actually a creek, the MSB has essentially, without any notice or process, re-written the plat and eliminated protections relied upon by other purchasers of properties, neighboring landowners, and the public that had been approved by the MSB and required to be followed by the MSB Code. Accordingly, we respectfully request that the MSB reconsider this matter and require that the Rolstons relocate their septic tank in accordance with the plat and more than 100 feet from the creek and restore the damage they have caused to the surrounding area. Given that harm from the Rolstons' activities is compounding every day, time is of the essence.

Background

Paradise Lake is a 25 acre lake that is located near mile 4 of the Wasilla Fishhook Road.¹

¹ Exhibit 1, Paradise Lake Lake Management Plan, pp. 3-5 (the full plan as well as all other exhibits have been copied to the zip drive provided herewith).

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“There are seasonal inlet and outlet creeks serving Paradise Lake, most evident during years of high rainfall. The inlet originates at the northwest corner and is generally spring fed and the outlook creek leaves the lake at the eastern shore and travels to nearby Kings Lake.² This creek has been repeatedly identified in the records, dating at least as far back as 1914 when it was noted and measured as part of the U.S. Surveyor’s field notes of a BLM survey³ and during a Matanuska Valley soil survey in 1968.⁴ The soil survey map not only depicts the creek but it also indicates the soil type, “Sa” for Salamatoff peat, which is found in and near small streams.⁵ More recently, the Environmental Protection Agency acknowledged the existence of the creek during its review of the proposed development of the Paradise Park Subdivision, stating that “[t]here is a small intermittent stream which flows through the southeastern portion of the proposed subdivision. This stream enters Paradise Lake via a small emergent wetland.”⁶ The EPA warned that “any disturbance or interference with surface water flows to the lake could have significant impact on lake levels and water quality.”⁷

The developer of the subdivision also acknowledged the existence of the stream or creek. When responding the EPA’s comment concerning the stream flowing through the southeastern part of the subdivision, the developer’s engineer stated that

“[t]he stream and the proximity to the lake are not part of the construction of the subdivision, including roads and ditches. No discharge is into any water of the U.S. If an independent owner later decides to develop near the lake, it will be their responsibility to pursue the proper permitting, but at this time, nor permits or review are required with specific attention to this area and are not part of the subdivision process.”⁸

As the EPA pointed out in their response to his comments, Mr. Nardini did not dispute the existence of the stream or wetlands but instead simply asserted that development concerns regarding the lots affected thereby were irrelevant to the MSB’s review of the drainage plan for the subdivision.⁹ Once again, when given the opportunity to respond to the EPA’s additional comments, Mr. Nardini did not dispute the existence of the stream.¹⁰ Rather, Mr. Nardini stated:

² *Id.* at p. 5.

³ Exhibit 2, May 12, 1914 Field Notes of the Survey of the Subdivision and Meander Lines of Township 18 North, Range No. 1 West, p.6 (the full field notes have been copied to the zip drive provided herewith).

⁴ Exhibit 3, Soils Map published with the June 1968 Soil Survey of the Matanuska Valley Area Alaska by the U.S. Department of Agriculture (the full survey has been copied to the zip drive provided herewith).

⁵ *Id.*

⁶ Exhibit 4, May 15, 2006 Steve Duncan letter to the Murph O’Brien, p. 1. At the time of the proposed development of this subdivision, neighboring landowners opposed the subdivision in part because “the inlet to the lake is right on the proposed subdivision frontage.” See http://www.frontiersman.com/news/paradise-lost/article_6847a8ab-7e50-5652-9dec-9ccc0774f952.html.

⁷ *Id.* at p. 2.

⁸ Exhibit 5, March 5, 2008 Matthew Nardini letter to Paul Hulbert and Bill Klebesadel, p. 1.

⁹ Exhibit 6, March 12, 2008 Matthew LaCroix letter to Paul Hulbert, p. 2. The EPA actually recommended the stream and wetland area be established as a separate tract and retained in its natural vegetated condition. *Id.* at pp. 6-7.

¹⁰ Exhibit 7, March 14, 2008 Matthew Nardini letter to Paul Hulbert and Bill Klebesadel, pp. 1-2.

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[t]he Stream and Wetlands (non-delineated) on the Southeast portion of the subdivision are not applicable to the subdivision process in regards to regulations and restrictions that must be followed in the MSB subdivision process. There is no road development or housing development for those specific areas as part of this subdivision, therefore **every possible development plan for those areas for the future cannot be regulated here**. The development of those areas will be handled in specific detail when specific plans are made, and will be regulated under the MSB Land Use Permit and any associated permits, such as a Corp. of Engineers 404 Dredge/Fill permit. These permits are to be handled at time of development of these areas, that is why there is no objection from the COE at this time (emphasis in original).¹¹

Subsequently, the developer submitted a plat for Paradise Park Subdivision Phase 1 that clearly delineates the creek running through my clients' property, crossing Lot 8, Lot 7 and Lot 6, and draining into Paradise Lake.¹² The plat also contains a note that states that there is a "100' SEWER SETBACK FROM WATER BODY" and points to the creek.¹³ This plat was subsequently amended later that year and again in 2013, both amendments continuing to depict the creek and containing the 100 foot sewer setback restriction therefrom.¹⁴

The Rolstons thereafter purchased Lot 7, Block 3, Paradise Park Subdivision Phase 1. As set forth in the warranty deed conveying the lot from the subdivision developer to them, the Rolstons took the property subject to "[n]otes as recited on Plat(s) of said Subdivision."¹⁵ Despite the plat restriction and objection from my clients, the Rolstons have installed a septic tank which, as depicted in the site plan submitted with their Documentation of System Installation, clearly violates the 100 foot setback requirement from the creek.¹⁶ The Rolstons' engineer did not acknowledge the creek and instead only measured the distance from the septic tank to Paradise Lake.¹⁷ The MSB apparently investigated but, according to Alex Strawn, MSB Compliance Officer Sumner found, using a handheld GPS, "that the septic tank is approximately 100' from the drainage swale."¹⁸ Accordingly, Mr. Sumner did not find a setback violation pursuant to the MSB Code 17.55.¹⁹ Apparently, based upon Mr. Sumner's measurement to a drainage swale using a hand held GPS, the MSB has decided it is not going to pursue this matter due to the lack of resources and that it could not substantiate a violation of the MSB Code.²⁰

Discussion

¹¹ *Id.*

¹² Exhibit 8. Plat No. 2012-48.

¹³ *Id.*

¹⁴ Exhibit 9, Plat No. 2012-116 and 2013-33.

¹⁵ Exhibit 10, Rolston Warranty Deed dated December 28, 2015.

¹⁶ Exhibit 11, Documentation of System Installation.

¹⁷ *Id.*

¹⁸ Exhibit 12, March 9, 2016 Alex Strawn e-mail to Linda Fisch. Upon information and belief, the "drainage swale" Mr. Sumner measured to was created by the Rolstons. Moreover, handheld GPS units are not accurate or reliable and therefore are unacceptable for use in surveys or similar measurements such as this.

¹⁹ *Id.*

²⁰ Exhibit 13, March 15, 2016 Eileen Probasco letter to Linda Fisch. p. 2.

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It is imperative that the MSB reconsider its decision as expressed in Ms. Probasco's letter, enforce the plat restriction, enforce the MSB Code, and require the Rolstons to relocate their septic tank. This water body is a creek and it has been recognized as such for over 100 years! It has been recognized as a creek or stream by the developer (the plat and writings of its engineer), the MSB itself (Paradise Lake Lake Management Plan), the U.S. Department of Agriculture (1960 soil survey), the Bureau of Land Management (1914 subdivision survey), and the Environmental Protection Agency (2006, 2008 letters). Simply because water was not present when the MSB visited the property weeks ago during the winter, it does not mean that a creek or stream does not exist. It is well-established at law that the existence of a waterbody does not require the continuous presence of water and that water bodies can be intermittent.²¹ Indeed, the MSB Code itself defines "water bodies" as "permanent or temporary areas of standing or flowing water."²² The MSB Code elsewhere defines "water body" to be a discrete and significant element of surface water, including all or part of lakes, reservoirs, streams, rivers, canals, and coastal waters" and "watercourses" as a depression formed by water moving over the earth, any natural or artificial channel through which water flows perennially or intermittently."²³ It is equally as well-established that a well-defined stream bed is not required given that streams often are "not strong enough to create a bed and banks," that bed and banks "can be slight, imperceptible, or absent in some circumstances," and that a "stream may spread out over land."²⁴ Consequently, simply because water was not present at the time of the MSB's site visit a month ago in the winter, it does not mean that the MSB can effectively re-write or amend the plat and remove the recorded plat protections and conditions relied upon by the public and approved/required by the MSB when the subdivision was being proposed. This should be especially true when local, state and federal agencies have acknowledged for over 100 years the existence of the creek including the MSB itself. As my clients had informed the MSB, this is a creek and the water runs through these properties as depicted on the plat every year, as demonstrated by the photographs attached hereto that were taken in the last couple of days.²⁵

Consequently, as the foregoing demonstrates, the waterbody is a creek or a stream and the plat prohibits septic tanks within 100 feet thereof. As the plat and the Rolston's site plan for their septic tank clearly depict, the Rolstons have violated the plat restrictions and MSB Code 43.15.052 and 17.55.020(A).²⁶ Accordingly, the MSB should enforce the plat note restriction and the MSB Code and require the Rolstons to relocate their septic tank. Further, given that this creek is the only one that feeds Paradise Lake, it is necessary for the MSB to enforce the plat restrictions and the MSB Code as it could have disastrous and devastating effects on the lake. Indeed, as is easily seen from the photographs taken yesterday and today, the Rolstons' activities have significantly impeded and diverted the creek and causing significant harm.²⁷

²¹ 78Am.Jur. 2d *Waters* §91 (2013)("The current of water need not be continuous and the stream may be dry for long periods of time.")(additional citations omitted).

²² MSB Code 17.125.010.

²³ MSB Code 43.05.005.

²⁴ 78Am.Jur. 2d *Waters* §86, 89 (2013).

²⁵ Exhibit 14, March 30, 2016 photographs taken by Linda Fisch.

²⁶ It is well-established that plat notes and restrictions thereon are enforceable. The current MSB Code and its predecessors all provided for and allowed plat notes and provided they were effective unless inconsistent with local land use regulations. Since the plat restriction is entirely consistent with local land use regulations, it is enforceable.

²⁷ Exhibit 15, March 31 and April 1, 2016 photographs taken by Linda Fisch.

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Moreover, not only should the MSB enforce the plat restrictions and the MSB Code and that it is necessary for the MSB to do so, the MSB must do so. The plat, approved by the MSB and recorded, delineates a creek and prohibits septic tanks from being within one hundred feet thereof. By the Rolstons ignoring the plat and the delineated creek and installing the septic tank where it has and the MSB choosing not to enforce the plat note, the MSB has effectively allowed the Rolstons to amend the plat without having to go through the process required by the MSB Code.²⁸ Regardless of whether the Rolstons or the MSB for that matter believe the creek is not a creek, the plat states that it is and contains a restriction thereon. If the Rolstons or the MSB want to change the plat note and/or disregard it, an application to the platting board must be submitted.²⁹ The MSB Code prohibits the Platting Board from acting on a plat note amendment before holding a public hearing.³⁰ Moreover, Platting Board decisions are subject to appeal.³¹ Consequently, the MSB must either require the Rolstons to relocate their septic tank or submit an application to amend the plat note. Without more, my clients and the public's MSB Code rights and constitutional due process rights are being violated.

In conclusion, we respectfully request that the MSB perform its obligations, enforce the plat note and the MSB Code, and require the Rolstons to relocate their septic tank. We further request that the MSB order the Rolstons to restore the area where they have installed their septic tank. The Rolstons have been allowed to make a mockery of their obligations under the deed, the plat, and the MSB Code while significantly jeopardizing the health and well-being of Paradise Lake. Given that the Rolstons are actively working on their property and appear to be installing a foundation in the disputed area, time is of the essence. Please review as expeditiously as you can. If there is any additional information or you would like to discuss any of the foregoing, please contact me at your earliest convenience.

I look forward to hearing from you soon. Thank you for your time and consideration.

Very truly yours,



Brad D. De Noble

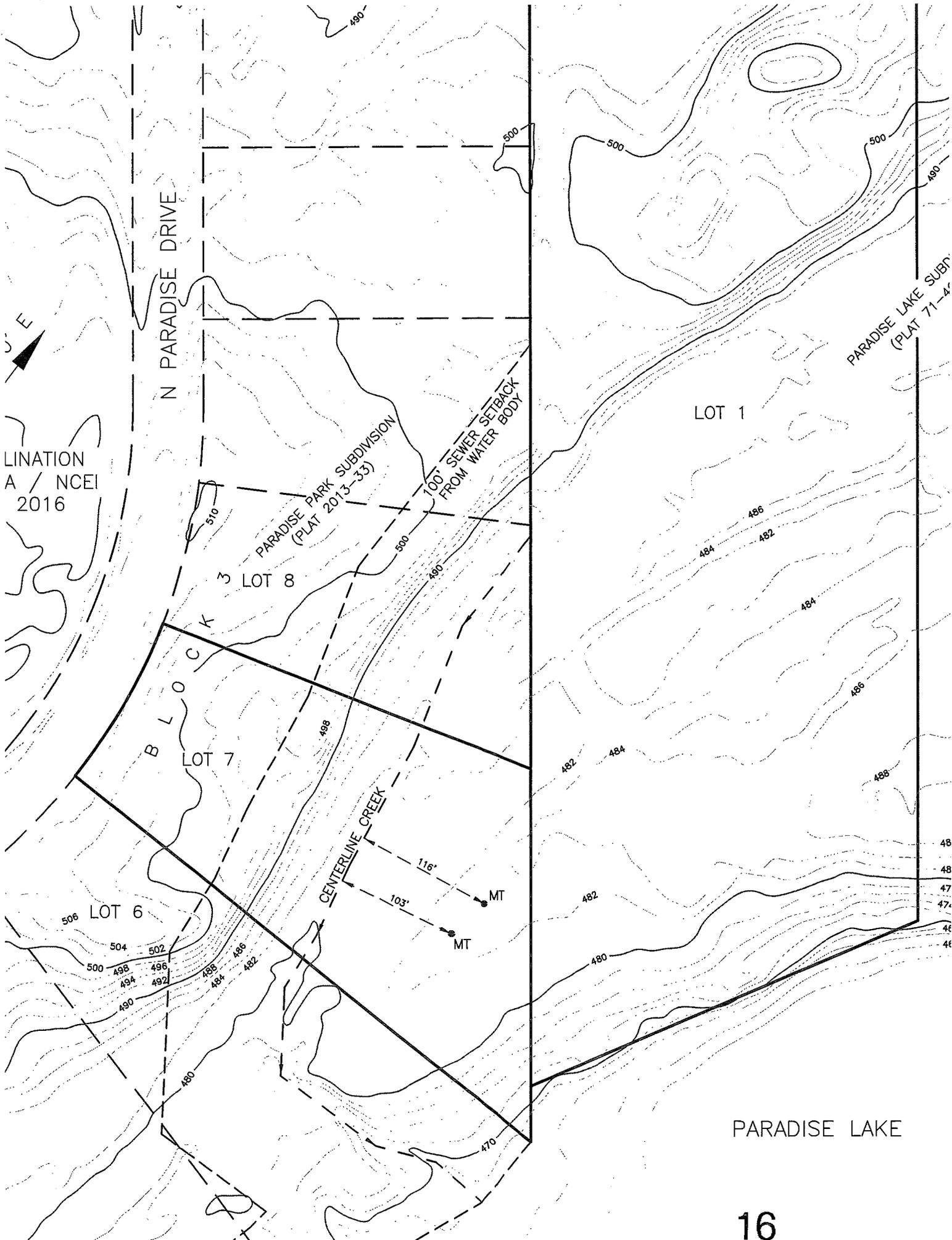
enc.
cc. Clients

²⁸ Additionally, by not recognizing the creek and taking an accurate measure therefrom, the MSB is allowing the Rolstons to bypass the requirement for the mandatory land use permit if they choose to locate their house near their septic. Since the stream historically runs through that area, the Rolstons must get a land use permit. However, if the MSB does not recognize the creek, no such permit would be required unless the Rolstons want to build within 75 feet of Paradise Lake.

²⁹ MSB Code 43.10.060; 43.15.005.

³⁰ MSB Code 43.10.060

³¹ MSB Code 43.35.015.



LINATION
A / NCEI
2016

N PARADISE DRIVE

PARADISE PARK SUBDIVISION
(PLAT 2013-33)

100' SEWER SETBACK
FROM WATER BODY

PARADISE LAKE SUBDIVISION
(PLAT 71-4)

B
L
O
C
K

LOT 8

LOT 7

LOT 6

LOT 1

CENTERLINE CREEK

116'
103'
MT
MT

PARADISE LAKE

From: n3248m@mtaonline.net [✉](#)
Subject:
Date: May 27, 2016 at 10:08 AM
To: Linda Fisch [akfish@miaonline.net](#)

Sent via the Samsung GALAXY S@4, an AT&T 4G LTE smartphone



From: n3248m@mtaonline.net [✉](#)
Subject:
Date: May 27, 2016 at 10:10 AM
To: Linda Fisch [akfish@mtaonline.net](#)

Sent via the Samsung GALAXY S®4, an AT&T 4G LTE smartphone



Filing Grievance against Holler Engineering

John Savage

Investigator

State of Alaska

550 w. 7th Avenue, Suite 1500

Anchorage, Alaska 99501-3567

907 269-8176

Dear Mr. Savage

I am sending this letter to you to document our concerns of the recent development in the drainage for Paradise Lake.

The new owners of lot 7 Paradise Lake subdivision have shown disregard for this area even though the plat shows this area to be a flood hazard zone.

My husband and I have owned our property for over 20 years and have lived on the lake for over 18 years. During this time we have seen the lake level fluctuate over 10 feet. When there is a low snow pack year in the Talkeetnas behind us, or several low snow pack years, the lake level drops as this is the main water source for our little lake. The creek that crosses Paradise Lane and runs through our property to feed the lake, does not run all year long but runs and often floods in the spring from snow melt and from fall rain events. In the spring of 2013 the creek flooded for over 3 weeks from mountain run-off. It brought the lake up over 10 feet and actually caused a flush effect that revitalized the water in the lake. To my knowledge this is the only ingress point on the lake. The egress creek is on the opposite side of the lake and crosses under the Wasilla Fishhook Road.

Below I have bulleted several responses by State employees, which frankly are alarming. Is there no avenue anymore for a concerned citizen trying to protect what they believe is an important watershed?

Our concern is that if this creek and watershed area is disturbed, altered or destroyed it could have devastating effects on our lake and if it is a septic system being installed the middle of this drainage; what would that mean for our lake? If the clearing and dirt work that is being done

goes much farther the damage may be irreparable. Our lake may be small and insignificant to many but for us it's "Paradise".

Your investigation and action on this issue will be greatly appreciated.

Best regards,

Wallis Brockert-Hoff

Steven Hoff

Paradise Lake Lot 2

Paradise Lake RSB L/3 Lot 5

Paradise Lake RSB L/3 Lot 4

907-357-4679

- *You also asked why our program had no knowledge of previous denials of property development for the Lot. The establishment of platted subdivisions is a local government function. In 1998, the State Legislature repealed all regulations which related to the department reviewing and approving subdivisions. Since the repeal, the department has no role in the development of property. Our primary mission is to assure wastewater systems are protective of public health and the environment. It is every property owner's responsibility to develop and improve their property in accordance with local, state and federal requirements.*
- *We use to do subdivision reviews years ago (prior to 1990) and put on plat restrictions on development such as well and septic systems. However, developers didn't like this and lobbied us out of the business and now its "buyer beware."*
- *If the plat has a recorded restriction, the restriction needs to be followed unless replatting removes the restriction. However, regardless of the plat note under state regulations septic's need to be 100 ft. from a water body (18 AAC 72.020(b)).*

From: Linda Fisch akfish@mtaonline.net
Subject: Fwd: Curtis Holler Engineer Wasilla AK
Date: May 5, 2016 at 9:40 AM
To:

Begin forwarded message:

From: Linda Fisch <akfish@mtaonline.net>
Subject: Re: Curtis Holler Engineer Wasilla AK
Date: January 14, 2016 at 10:03:20 AM AKST
To: "Savage, John R (CED)" <john.savage@alaska.gov>

Thank you very much

Linda Fisch
P.O. Box 876286
Wasilla AK 99687

907 376-2055
907 376-2056 fax

I just faxed a written complaint can you please keep it for your file anyway

Thank you so much

Also I cannot find the license for a DEC Employee Oren Wooley and Engineer
Is there anyway that you can give me his license number as I want to file a complaint against him too.

Sincerely

Linda Fisch

STATE OF ALASKA
Department of Commerce, Community,
and Economic Development



John Savage
Investigator

**Division of Corporations, Business,
and Professional Licensing**

550 W. 7th Avenue, Suite 1500
Anchorage, Alaska 99501-3567

Phone: (907) 269-8176
TTY: (907) 465-5437
john.savage@alaska.gov



HOLLER ENGINEERING

Water, Wastewater & Soils Consulting

3375 N Sams Dr. Wasilla, Alaska 99654 • 376-0410

November 20, 2013

Paul Hulbert
MSB Platting Officer
350 East Dahlia Avenue
Palmer, Alaska 99645

Re: *The Creek* Useable Areas; HE#10030

Dear Mr. Hulbert:

At the request of Ted Stinson, we have performed a soils investigation and related preliminary design work for the referenced proposed subdivision. The project will create 2 lots from an existing 8 acre tract. Our soils evaluation included 7 new testholes, monitoring groundwater levels, review of the provided topography information and our other observations at the site. See the attached testhole location, drainage and topography map for details.

Topography. Much of the parent parcel is a wide, nearly level area along Cottonwood Creek, with an average grade of less than 1%. The northwest corner rises 20' to 25' with minor areas having slopes over 25% according to the topo map. Field checking the steep area proved grades to be more favorable; the approximate limits of the steep areas are shown on the attached map. Grades are generally directed southeast or south. The total elevation differential from the provided map is approximately 38'.

Soils & Vegetation. Portions of the parcel have been developed with a single home site and related outbuildings on proposed Lot 1. A clearing exists on Lot 2. Undeveloped areas are wooded with moderate density mature birch and spruce trees, and lesser brush. Soils logged in the 5 testholes along the creek typically had shallow groundwater, with a 1' to 3' thick layer of topsoils and soft loess silt over a base of silty or clayey sands and gravels. The soils encountered in the higher ground at the northwest corner have similar topsoils over a base of relatively clean sand and gravels. The soils we logged are consistent with our prior experiences in this area. Copies of the 2 pertinent testholes and a location/topography map are attached.

Groundwater. Groundwater was initially encountered in 6 of the 7 testholes, and eventually rose within a monitor pipe in the 7th hole. The holes were dug to depths varying from 6' to 12'. Levels were monitored over a portion of the high water table season, including June and July. Based on the available information and provided topography, a delineation of the approximate limit of area with 8' to groundwater is shown on the map.

Useable Areas. The proposed lots have a few limitations on areas defined by MSB code as *useable septic area* or *useable building area*. Useable septic areas will be limited by lotlines, setbacks to a water well and surface water, and by groundwater. For building areas, lotlines, utility easements and ROW/PUE setbacks will be limiting factors. However, each proposed lot contains adequate unencumbered area to meet the useable area requirements.

Based on the available soils & water table information, topography, MSB Title 43 Code definitions, and our observations at the site, *proposed lots 1 & 2 will each contain over 10,000 square feet of contiguous useable septic area, and an additional 10,000 square feet of useable building area.*

Drainage Plan. As no road construction is proposed, no drainage plan is required. However, we have shown general drainage patterns on the attached map. No significant changes are expected due to this project.

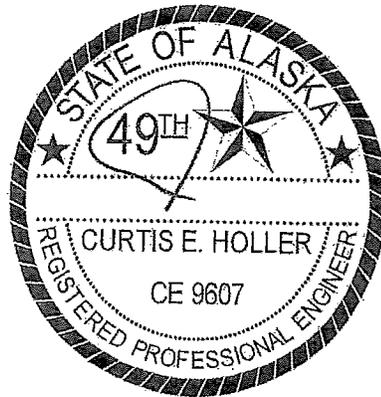
Thank you for your assistance, and please feel free to call with any questions you may have.

Sincerely,



Curtis E. Holler, P.E.

c: T. Stinson, w/attachments



February 13, 2016

Linda Fisch
P.O. Box 876286
Wasilla AK 99687

907 376-2055

Dear Mr. Savage

I have researched a similar situation on a lot that has a creek flowing through it calling it a Flood -Hazard. Curtis Holler was the Engineer of that Lot. I found on page 2 that Mr. Holler acknowledged the rules of the Mat-Su borough as far as " Plat Notes, Set-Backs from any body of water being ground water creeks, Flood Hazard etc.

He states the 100-foot distance that must be adhered to.

I should say that this should be the same rules for Lot 7 that has a Flood-Hazard designation on the South -East part of the lot. As far as I can tell the Septic which Mr. Holler told me was 150 feet from the lake, but he did not acknowledge the creek wetland flood hazard that the Rolston's installed approx. 30 feet from the creek.

I would imagine that if the rule applies to one lot, it should equally apply to another lot.

Sincerely

Linda Fisch

Borough Docs on Subdivision

18



Olympus Engineering

Matthew J. Nardini, P.E.
PO Box 876901
Wasilla AK 99654

email: matt@olympusengineering.com
Phone: 907-373-6289
Fax: 815-642-0719

March 5, 2008

Mr. Paul Hulbert
Mr. Bill Klebesadel
Matanuska Susitna Borough

COPY

Re: Paradise Park Drainage Plan,

To Whom it May Concern:

I am writing this letter in response to the comments received from Matt LaCroix of the Environmental Protection Agency, dated 2/26/08.

I feel many of the comments Mr. LaCroix made regarding this project were based on inappropriate and incorrect assumptions and were not in light of the scope of the current project, subdividing for development. I will address these comments in a direct list below, referencing the words from the comments submitted from EPA, with a summary to follow the specific comment issues.

Wording from the Mr. LaCroix's comments will be smaller, and *italicized* for easier distinguishment, while my responses will be in **bold**.

Please see below:

The proposed Paradise Park Subdivision is located in the northwest ¼ of Section 25, Township 18 N., Range 1 W., Seward Meridian, adjacent to the northwest portion of Paradise Lake. The proposed subdivision consists of thirty-three lots in three blocks on 39.71 acres of land. There is a small stream which flows through the southeastern portion of the proposed subdivision and enters Paradise Lake via an emergent wellland.

The stream and the proximity to the lake are not part of the construction of the subdivision, including roads and ditches. No discharge is into any water of the US. If an independent owner later decides to develop near the lake, it will be their responsibility to pursue the proper permitting, but at this time, no permits or review are required with specific attention to this area and are not part of the subdivision process.

We will begin by reiterating a statement from our earlier comments, namely that pursuant to the National Storm Water Pollution Discharge provisions of Section 402 of the Clean Water Act the developer must address handling of the project's storm water runoff both during and after construction. This is true if at any time the development activities result in the cumulative disturbance of an area greater than one acre in size. We do not know if the project has in fact resulted in the disturbance of more than an acre, but if so, the required Storm Water Pollution Prevention Plan would be an appropriate submittal to be evaluated during this review.

3/5/2008

development, with Engineered Controls to mitigate runoff and other factors. This drainage easement is one of those engineering controls, and has addressed the worst anticipated conditions.

The Drainage Plan indicates that an eighteen-inch diameter culvert will be installed within Road C if that road is extended to connect with an extended East Paradise Lane. The water storage area of the swale would be reduced by the area of the road footprint; and a culvert of this size has the potential to impound water in the swale. This could potentially raise the water level and expand the lateral extent of the inundated area, as well as potentially cause problems for onsite sewage treatment systems on lots 6, 1, 9, 10, and 15.

The very drainage easement itself would require MSB approval of any development within the easement, including the extension of the road. If at that time, the MSB would like to require a 24" culvert, or even several culverts to allow for flow and adequate water volumes, that may be stipulated as part of the MSB's approval, possibly in a driveway permit. Water levels (if ever there is any standing water level in the swale) will not be increased by any level if adequate culverts are required at that time.

Remember that the depth of 1.5' assumes that the entire lot has been filled EXCEPT for the drainage easement centered on the swale, and any less development will only allow for even more water containment than that calculated for the retention within the drainage easement.

The drainage easement will not allow any septic system to be installed within its area, therefore there will be no impact to Septic Treatment Systems if they were installed according to ADEC's 18AAC72 (Wastewater Disposal) as required by state law.

It is unclear how these lots: lot 6 in Block 1, and lots 1, 9, 10, and 15 in Block 2, could be considered as buildable. Lots 1, 9, and 10, in particular, are bisected by the swale. If placed on the southern portions of the lots, structures and septic systems would be in the flow path of runoff. Placing them on the northern portions of the lots would require bridging the swale unless access was from East Paradise Lane.

As stated above, development within the drainage Swale, including driveways bridging this easement must be approved by the MSB. As per previous conversations with Mr. Bill Klebesadel during the Review and Revisions of the drainage plan (and verified via telephone today), he stated that the MSB just want the Drainage Easement so that they can insure that any development in the swale would allow for adequate drainage of the subdivision. He stated that would allow the MSB to insure that proper culverts were installed, or some other acceptable method, to allow for drainage. The intent of this easement was not to ELIMINATE all development in the easement, but to insure that it was compatible with the proposed drainage of the subdivision.

Our recommendation is for the necessary swale widths to be re-calculated using the additional drainage areas and the actual swale contours. Also for the areas north of the drainage easement within lots 6, 1, 9, 10, and 15 to be placed in a common tract to avoid any need to bridge the swale. The southern portions of lots 1, 9, and 10 could be combined with lots 2, 8, and 11.

This comment and recommendation is in-appropriate. The lots and subdivision drainage have been thought out with the objective of development as per the appropriate owner's wishes. Provisions have been put in place to allow this development, while allowing the MSB to maintain control of the easement to allow adequate drainage. The above recommendation is based on a "non-development" view. If a project can be developed with proper engineered control measures to allow adequate drainage, there should be no reason to disallow this development or these areas. It is the

constructed in this area. Wells can be placed adjacent to the lake and within the 100' setback for Septic Systems. Buildable area extends to within 75' of the lake for structures. Under Title 16, a total of 20,000 sf is required. Under title 27, a total of 10,000 sf is required for septic systems, and 10,000 sf is required for building area. These lots meet those requirements, as the setbacks are from water bodies, not the shaded areas shown on the platt. This was investigated specifically for each lot when the soils investigation and usable area study was conducted.

This was again based upon On-Site observation, not just from a review of paper platt and topography. Mr. LaCroix has not visited the site; Mr. Klebesadel and I have visited the site many times, and are satisfied with the proposed development and drainage plan.

Presuming that the lots are large enough to meet Borough standards, we would like to re-emphasize an issue raised in our 2006 comments.

In those earlier comments, we identified that the Natural Resource Conservation Service, July 2000, Soil Survey for the Matanuska-Susitna Valley Area, identifies the soil in the proposed subdivision as a Knik Silt Loam. This soil has a number of building site development limitations including rapid permeability of the substratum which may allow sewage effluent from individual sewage disposal systems in moderate or high density housing to pollute the water table.

The soil classification referenced in this comment is a generalized classification for a VERY Large area, and is not site specific. It is made to reference general sections of the MSB. The hills and topography of the MSB are mainly caused by Gravel deposits from glaciers. Site specific soil investigations were performed on each lot, and the soils were found to be suitable for a septic system and without concern to migration of effluent to the lake.

The ADEC has established guidelines for the installation of Onsite Septic systems which allow for proper treatment of subsurface effluent before it can enter into surface water. That is why there is a 100' separation distance between septic components and wells and surface water. This development is in not a moderate density development, with a density of approximately one residence per 40,000 sf; while maintain the separation distances as required by the ADEC.

As a professional engineer, having conducted the soils investigation, I do not see any risk to the water table due to subsurface disposal of wastewater as long as the requirements of 18AAC72 are maintained in the installation of the septic system.

To strengthen this argument further, it should be noted that the gradient for only 9 lots are even in the direction of the lake and stream, the rest have a gradient away from the lake.

Considering that EPA recommendations for septic system densities have been as low as one system per seven acres in cases with highly permeable soils and shallow, unconfined aquifers, we believe that this subdivision represents at least moderate density. We believe the potential for impacts to this stream, wetland and Paradise Lake to be real.

As an Engineer, not as a Biologist, I respectfully disagree. The density of development is not moderate, and is low. Possibly development of one residence per ½ acre might be considered moderate, with city development and multi-family dwellings grouped together may make up high density. The aquifers of the area for drinking water are below the level of the lake, and if someone does takes water from aquifers less than 40', they have to treat their water as Surface Water, with additional treatment and testing as per the regulations of

We do not know how the Flood Hazard Area shown on the plat was developed, although we suspect that Rational Formula or Normal Depth calculations may have been used. The Rational Formula uses much of the same data as the runoff calculations. Because we have not seen how the flood discharge was calculated or converted to a cross-sectional area and projected on the landscape, we cannot know whether the identified Flood Hazard Area should more correctly include all of the land within lots 7, 8, and 9 (Block 3) lying below the 480-foot contour. The Flood Hazard Area appears to reflect a combination of base Flood Elevations from both the stream and Paradise Lake, which may explain why the elevation varies from approximately 480 feet within lot 5 to less than 475 feet in lot 8.

This information was certified by the surveyor. It is his professional seal that guarantees this level. It is inappropriate, unprofessional, and baseless for Mr. LaCroix to accuse the surveyor of being incorrect in his calculations. If Mr. Hoffman supports his information, Mr. LaCroix should at least have actually information saying that Mr. Hoffman is incorrect before he accuses him of being wrong.

SUMMARY:

It is my opinion that these comments are for the most part inapplicable to the subdivision process, due to the obvious lack of understanding in devising development plans with engineering controls, and site specific information.

I have above addressed all of the issues of Mr. LaCroix's comments. Both myself, and Mr. Bill Klebesadel agree in principal on most all of the comments I have included above. If I am wrong in this statement, I respectfully extend the opportunity to M. Klebesadel to comment back to me so that we can insure we are still on the same line with this project. In the past, Bill has approved this drainage plan, and all of his concerns, and the concerns of the MSB's Department of Public Works have been addressed.

Upon addressing all of the EPA's comments, I hope the Platting Board will find for accepting the drainage plan as it was last submitted to the DPW. Extensive time and effort have been extended by both myself, Mr. Klebesadel, and Mr. Hulbert with regards to the drainage of this project. Paradise Park has been held to a much higher standard than the typical subdivision in the MSB. This has not been a half-hazard process, and the Professional Engineers working on this project have continually been second guessed, accused of wrong doing, and basic incompetence throughout the subdivision process. This is ridiculous.

I have very little to add to the drainage and development of this project. All the engineering has been completed to myself and to Mr. Klebesadel satisfaction. Further requirements for justification by non-professionals in the development field amount to issues that are not engineering, but rather political.

Bill and myself have spent years educating ourselves and gaining experience in this field, as well as in the process of engineered development. To be told we are incorrect and accused of incompetence by nonqualified personnel and outright objectors to the project, and then to have substantial weight given to these objections based not on professional principals, by the reviewing authority take the precise engineering out of the process. It then becomes a process of political dodging and weaving of issues to be used as a perversion of the public process.

2. The platting Board erred by approving the drainage plan prior to the applicants receipt of all necessary permits and approvals.
3. The platting board erred by approving a drainage plan that:
 - a. will flood, contaminate and damage adjacent properties
 - b. will flood, contaminate and damage the stream feeding Paradise Lake, the lake itself, and wildlife dependent thereon
 - c. will contaminate and damage adjacent properties' well water, and
 - d. violates the subdivision construction manual

(EXHIBIT B)

January 9, 2008- The board and adjustment and appeals Final Order concluded that in part 3 of 3 *"The developer failed to comply with the Conclusions and order of the BOAA by not submitting a drainage plan which conforms to the Borough Construction Manual so as to preclude meaningful review by appropriate agencies, including the E.P.A."* and issued an **ORDER** *"The developer is required, as a condition of plat approval, to prepare a drainage plan for dissemination to appropriate agencies which shall set forth five-foot contour topography lines with elevations, drainage swales, and proposed drainage routing with the necessary draining easements to show positive drainage as well as any changes that may affect adjacent property, along with drainage ditch information as required by the Borough Subdivision Construction Manual Section D."*

"Following an appropriate time period for comment, the Platting Board shall reassess the drainage plan in light of agency, staff, and public comment, if any. The Platting Board shall issue its findings regarding the drainage plan in light of comments received from the various agencies and the public."

(EXHIBIT C)

**SUBDIVISION CONSTRUCTION MANUAL DRAINAGE SECTION D
(EXHIBIT D)**

February 13, 2008: A proposed Paradise Subdivision Drainage Plan and Runoff Areas was submitted by the developer's engineer Mathew Nardini CE. The drainage plan showed the current topography, including labeling all the 5' contour lines and two types of drainage arrows, Natural Drainage and Directed Drainage. The Plan also depicts the drainage area within the subdivision and the center of the swale that runs east to west across Lots 15, 10, 9 and 1 Block 2 and Lot 6 Block 1.

The plan added the existing roads and is showing proposed 18" culvert (must have DPW approval) and 24" culvert. The plan also takes into consideration the Platting Board's requirement that the western street be extended to Paradise Lane.

The developer's surveyor, Bob Hoffman PLS, submitted a modified Master Plan that also shows the current topography, the Flood Hazard Area, the small creek that lies within the Flood Hazard Area, 5' labeled contour lines, the existing gravel road, utility easements and a 25' drainage easement centered on the drainage swale that runs east to west across

Lots 15, 10, 9 and 1 Block 2 and Lot 1 Block 1. The plat also extends Road C to Paradise Lane and shows the reconfigured lots required for the right-of-way extension.

February 14, 2008: The Platting Division noticed the following agencies and borough departments with the revised master plan, drainage plan, engineer's runoff calculations, and vicinity map.

Public hearing notices were sent February 14, 2008 as required by code.

(Return comments are in BOLD print)

MSB Fire Service Area #130 Wasilla Lakes
No comments received as of this date

MSB #28 Gold Trail Road Service Area
No comment received this date

MSB Department of Public Works

Please note the preceding response from Mr. Lepping's surveyor regarding topo lines vs. rough-in roads.

Based on this response, and DPW's review of the current Paradise Park drainage plan, we find no deficiencies. In fact, if other subdivisions performed to the level we see in this subdivision, the public would be well served.

(EXHIBIT E)

MSB Code Compliance

- **Not located in a mapped Special Flood Hazard Area**
- **The appropriate flood hazard information is shown on the plat**
- **Activity in the Coastal Management Area**
- **Activity allowed in this location**
- **Requires a flood hazard development permit when activity within the FHA**

(EXHIBIT F)

MSB Community Development:

Verify E. Paradise Lane drainage system can handle the drainage from Paradise Park

(EXHIBIT G)

MSB Planning:

Not located in the Coastal Management Boundary and no objection

(EXHIBIT H)

MSB Cultural Resources:

No response received

AK DNR Mining, Land and Water
No response received

AK DNR Habitat & Permitting

- Paradise Lake has not been specified as being important for the spawning, rearing, or migration of anadromous fish, however it does host a variety of residential fish.
- Proposed activity does not appear as if it will affect waters under the jurisdiction of AS 41.14.870 or AS 41.14.840. As a result no permit from OHMP is required for this activity
- Recommends that the revised drainage plan be reviewed by the Department of Environmental Conservation for compliance with existing surface discharge regulations.

(EXHIBIT I)

AK Dept of Fish and Game

ADF&G has reviewed the revised drainage plan of Paradise Park Master Plan, located in Section 25, T. 18 N., R. 1 W., S.M. Alaska. There do not appear to be any actions that would block public access to public lands or water. ADF&G has no objection to the plan as proposed. Thank you for the opportunity to review and comment on this proposal. If you have questions or would like to discuss this further, please feel free to call or email me. I've attached comments received from DNR-OHMP

(EXHIBIT J)

US Army Corps of Engineers

No comments received

U.S. Environmental Protection Agency

(EXHIBIT K)

MEA

No comments received

MTA

No objections

(EXHIBIT L)

ENSTAR

No comments received

GCI

No comments received

Public comments

Linda Fisch "It seems very ironic and favorable to the developer that after appealing an opposing this type of development for 2 years that the platting board has no sent out the revised drainage plan that least the appellants citing any code would have given us a heads up"
(EXHIBIT M)

Rev. Israel Nelson
(EXHIBIT N)

CONCLUSION:

The comments received from U.S. E.P.A. raises concerns and objections to the drainage plan and the run-off calculations prepared by the developer's engineer to the level that staff cannot recommend approval to the platting board. Staff encouraged the developer Mr. Lepping to request a continuance to allow time for his engineer and EPA to exchange data however he is not willing to do so. This places platting in a difficult situation in that the BOAA required that US EPA be notified and they in turn responded and are not supportive of the drainage plan.

RECOMMENDATIONS:

Staff recommends the Platting Board deny the drainage plan submitted February 13, 2008 for Paradise Park Master Plan

FINDINGS:

1. The BOAA required that US EPA be notified and they in turn responded and are not supportive of the drainage plan submitted February 13, 2008
2. Public objections have been received.

From: Duncan Steve@epamail.epa.gov
Subject: Re: Information
Date: June 30, 2006 at 2:07 PM
To: Linda Fisch akfish@mtaonline.net
Cc: duncan.steve@epamail.epa.gov

Linda,

Our concerns for the proposed Paradise Park Subdivision are primarily related to **water quality issues**. As stated in our letter of May 15, 2006, Section 404 of the Clean Water Act requires the developer to obtain a Department of the Army permit prior to discharging dredged or fill material into waters of the United States including streams, lakes and wetlands. Mechanized land clearing in wetlands or other waters constitutes a discharge of dredge or fill material. In addition the developer must address handling of the project's storm water runoff both during and after construction. The National Storm Water Pollution Discharge (NPDES) provisions of Section 402 of the Clean Water Act require developers to prepare and submit a Notice of Intent (NOI) along with copies of construction plans and a Storm Water Pollution Prevention Plan (SWPPP) to the EPA and the State Department of Environmental Conservation prior to beginning land disturbing activities on projects over one acre in size. We have recommended that adequate engineering studies, including soils and drainage studies, be conducted prior to any construction activities to determine the potential impact on water quality and quantity in the vicinity of the project and that appropriate mitigating measures be included in development plans. We also recommended that a minimum 75 foot undisturbed vegetated buffer be retained adjacent to the stream and wetlands as well as along the shoreline of Paradise Lake itself. We further recommended that full consideration be given to all the NRCS listed building site limitations and management practices, especially those pertaining to wastewater disposal, and that all necessary steps be taken to minimize any potential impact to water quality. As of this date I have not received anything from the developer indicating that our concerns have been addressed.

Steve

Linda Fisch
<akfish@mtaonline.net>
To: Steve Duncan/R10/USEPA/US@EPA
06/27/2006 09:57 AM
cc
Subject: Information

Hi Steve

I am faxing you the written argument that Leppings Attorney has written on behalf of the appeal of Paradise Park. In that I have noted some misconceptions as far as complete satisfaction of the EPA requirements.

I would like your comments on it to the Appeals board as of this date if you have received anything or any communication from Leppings

From: **Linda Fisch** akfish@mtaonline.net
Subject: Emailing - File 11.pdf
Date: April 15, 2016 at 10:34 PM
To:

15

potential storm water pollution issues both during and after construction. Additional information can be found at the following website; <http://efpub.epa.gov/npdes/stormwater/const.cfm>.

It appears that Paradise Lake is fed primarily by surface water runoff, the small intermittent stream mentioned above, and by springs upwelling from confined aquifers. As such, any disturbance or interference with surface water flows to the lake could have significant impact on lake levels and water quality.

According to the Alaska Department of Natural Resources (ADNR), the geology of the area around the proposed subdivision is very complex. The surface or shallow groundwater aquifers are variable and unreliable. Residents of the area have reported problems with decreased production of their wells as well as discoloration and sediments in their water which they attribute to nearby well drilling activity. The new Shaw Elementary School which is located near this area has a very low producing well which requires treatment and a separate wastewater disposal system to handle post treatment wastes. We recommend that any wells developed in conjunction with the proposed new subdivision be drilled to a depth of 160 feet or greater and that closed casings rather than perforated casings be used to preclude disrupting groundwater flow in shallow aquifers which may feed Paradise Lake and water supplies to nearby homes.

Information has been received that indicates the proposed developer may wish to dredge a portion of Paradise lake in conjunction with the proposed development. According to the ADNR, such actions could cause unexpected changes to the lake water levels, especially if the lake is perched above a confining layer and the layer is breached.

The Natural Resource Conservation Service (NRCS), July 2000, Soil Survey for the Mataruska-Susitna Valley Area, shows the soil in the proposed subdivision is a Knik Silt Loam. This soil has a number of building site development limitations including rapid permeability of the substratum which may allow sewage effluent from individual sewage disposal systems in moderate or high density housing to pollute the water table".

We recommend that adequate engineering studies, including soils and drainage studies, be conducted prior to any construction activities to determine the potential impact on water quality and quantity in the vicinity of the project and that appropriate mitigating measures be included in development plans. We also recommend that a minimum 75 foot undisturbed vegetated buffer be retained adjacent to the above referenced stream and wetlands as well as along the shoreline of Paradise Lake itself. We further recommend that full consideration be given to all the NRCS listed building site limitations and management practices, especially those pertaining to wastewater disposal, and that all necessary steps be taken to minimize any potential impact to water quality.

In conclusion we recommend that the Borough and the developer carefully weigh the issues associated with the proposed development and insure that the proposed development is conducted in such a way as to protect water quality and quantity in the newly proposed subdivision as well as on adjacent properties.

Michele Hale
Water Director ADEC

We appreciate the opportunity to express our concerns regarding the development in the water shed for Paradise Lake.

First of all our main concern is the health of our lake. My husband and I have owned property and lived on this lake for over 20 years and not only consider this a true paradise but also a substantial investment. During this time we have seen the lake fluctuate over ten feet. Spring thaw and significant rain events can cause significant flooding in this water shed, which is what ultimately returns our lake to normal levels. This development and diverting of the ingress creek in the water shed from its original path to where it now drops into a hole could have devastating effects on our lake.

During a site visit from the Army Corps of Engineers, I expressed my concerns regarding the septic in the water shed. Mr. Jack Hewitt stated that the developer hit water at 18 feet. From prior experience excavating we have seen significant changes in the water table. The septic was installed during winter months after a dry summer and winter which would certainly lend to a drop in the water table.

We have a lake management plan created by Eileen Probasco of the Mat-Su Borough who called this area a creek and the subdivision plans that were originally not approved because this area required more protection have final platting that protects this area but sadly no one cares to enforce their own laws and it seems each agency has passed the buck around so no one has any responsibility for the protection of our lake.

Your investigation and action on this issue will be greatly appreciated.

Sincerely,

Wallis Brockert-Hoff
Steven Hoff
Paradise Lake Lot 2
907-357-4679

Linda Fisch

From: Linda Fisch <akfish@mtaonline.net>
Sent: Tuesday, June 14, 2016 7:49 AM
To: 'Linda Fisch'
Subject: FW: Location of septic standpipes in relation to existing creek of Lot 7 of Paradise Park Subdivision in Section 25 T18N R1W S.M. Alaska.
Attachments: Mat Borough MA06 Plat.pdf; txWA06-plot W Par Pk3 .pdf; Paradise Park.pdf

From: Terry, Reed [<mailto:Reed.Terry@asrcenergy.com>]
Sent: Tuesday, June 14, 2016 12:48 AM
To: akfish@mtaonline.net
Subject: Location of septic standpipes in relation to existing creek of Lot 7 of Paradise Park Subdivision in Section 25 T18N R1W S.M. Alaska.

The septic stand pipes were survey located using recovered corner monuments on the west boundary of Lot 1 Paradise Lake Subdivision in 25 T18N R1W S.M. Alaska. The original creek is no longer recoverable since the area has been totally reconfigured by the present developers. The Paradise Park Subdivision plat dated 11/16/2012 Identifies the center line of the creek before the area was altered.

To show where the septic sand pipes are in relation to area before the ground was reconfigured portion of the Paradise Park Subdivision plat was overlaid on the Matanuska-Susitna Borough tax map that can be obtained in an AutoCAD file format. The depiction created is based on State Plane Coordinate Feet, Alaska Zone 4 using North American Datum of 1983. Coordinates were obtained from the Borough plat and applied to the recovered physical boundary monuments for lot 1 of Paradise Lake Subdivision. Dimension on the plate agree with what was recovered in the field. The depiction of the stand pipes is accurate within a foot circle.

The Paradise Park Subdivision plat is only four years old and there creek location as plotted by Bull Moose Surveying would be correct for what existed at that time.

Refer to attachments.

Reed Terry
Alaska Professional Surveyor
LS-4138S

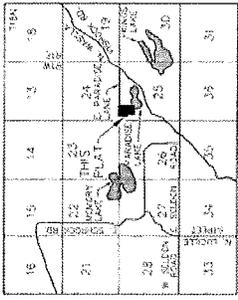
Reed Terry

Project Engineer | HCC
ASRC Energy Services-Houston Contracting Company, Inc.
3900 C Street, Suite 602
Anchorage, AK 99503
Desk: 907-339-6430 | Cell: (907) 350-4013

One Crew, One Journey
Honoring the values of our founders as we develop the future.



ASRC ENERGY SERVICES
a subsidiary of Arctic Slope Regional Corporation



OWNERSHIP CERTIFICATE AND DEDICATION
 I HEREBY PLACE IN THE CARE OF THE ALASKA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION, BY THE ACT OF THE BOARD OF SUPERVISORS, THE LAND DESCRIBED IN THIS INSTRUMENT AND THE RIGHTS OF THE LAND DESCRIBED IN THIS INSTRUMENT TO BE USED AS A PARK AND RECREATION AREA FOR THE BENEFIT OF THE PEOPLE OF THE STATE OF ALASKA.

NOTARY ACKNOWLEDGEMENT
 I, **KURT M. LEPPING**, Notary Public for the State of Alaska, do hereby certify that the foregoing instrument was signed and acknowledged before me on this **11th** day of **August**, 2012, by **KURT M. LEPPING**, Owner, **PARADISE PARK PROPERTIES, LLC**, a limited liability company organized under the laws of the State of Alaska.

PLANNING & LAND USE SUPERVISOR'S CERTIFICATE
 I, **STEVEN S. HOFFMAN**, Planning and Land Use Supervisor for the State of Alaska, do hereby certify that the proposed subdivision complies with the requirements of the Alaska Uniform Subdivision Act, AS 10.06.010, and the rules and regulations of the Department of Natural Resources and Conservation, AS 10.06.010. I have reviewed the subdivision map and the information provided to me and I find that the subdivision complies with the requirements of the Act and the rules and regulations.

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AMENDED PLAT
PARADISE PARK SUBDIVISION
PHASE 1
TRACT A, PARADISE PARK - PHASE 2
PLAT #2012-48
 LOCATED WITHIN:
 SECTION 25 T18N, R1W, S.M., ALASKA
 CONTAINING 25.2 ACRES MORE OR LESS
 PALMER RECORDING DISTRICT
 STATE OF ALASKA
BULL MOOSE SURVEYING
 1000 W. 11TH AVENUE, SUITE 100
 ANCHORAGE, ALASKA 99501
 PHONE: (907) 562-4897
 FAX: (907) 562-4897
 DRAWN BY: REN
 DRAWING SCALE: 1"=100'
 DATE: 11/16/2012
 CHECKED BY: KML
 JOB NAME: LEPPING/PARADISE
 SHEET: 1 OF 1

LEGEND:
 + FOUND MONUMENT AS NOTED
 D FOUND 1/4" GALVANIZED IRON PIPE
 --- 2" D.I.P. 30' DEPTH / PLASTIC CAP
 --- (BY SCALE) 15' DEPTH / PLASTIC CAP
 (P) RECORDED VALUE PER PLAT OF VICINITY (SEE ESTATES - UNIT 1)
 (PT) RECORDED VALUE PER PLAT OF PARADISE LAKE SUBDIVISION
 (N) MEASURED VALUE THIS SURVEY

LOT TABLE

LOT	ACRES	AREA	PERCENT	AREA	PERCENT
LOT 1	0.989	43,000	17.0	43,000	17.0
LOT 2	0.989	43,000	17.0	43,000	17.0
LOT 3	0.989	43,000	17.0	43,000	17.0
LOT 4	0.989	43,000	17.0	43,000	17.0
LOT 5	0.989	43,000	17.0	43,000	17.0
LOT 6	0.989	43,000	17.0	43,000	17.0
LOT 7	0.989	43,000	17.0	43,000	17.0
LOT 8	0.989	43,000	17.0	43,000	17.0
LOT 9	0.989	43,000	17.0	43,000	17.0
LOT 10	0.989	43,000	17.0	43,000	17.0
LOT 11	0.989	43,000	17.0	43,000	17.0
LOT 12	0.989	43,000	17.0	43,000	17.0
LOT 13	0.989	43,000	17.0	43,000	17.0
LOT 14	0.989	43,000	17.0	43,000	17.0
LOT 15	0.989	43,000	17.0	43,000	17.0
LOT 16	0.989	43,000	17.0	43,000	17.0
LOT 17	0.989	43,000	17.0	43,000	17.0
LOT 18	0.989	43,000	17.0	43,000	17.0
LOT 19	0.989	43,000	17.0	43,000	17.0
LOT 20	0.989	43,000	17.0	43,000	17.0
LOT 21	0.989	43,000	17.0	43,000	17.0
LOT 22	0.989	43,000	17.0	43,000	17.0
LOT 23	0.989	43,000	17.0	43,000	17.0
LOT 24	0.989	43,000	17.0	43,000	17.0
LOT 25	0.989	43,000	17.0	43,000	17.0
LOT 26	0.989	43,000	17.0	43,000	17.0
LOT 27	0.989	43,000	17.0	43,000	17.0
LOT 28	0.989	43,000	17.0	43,000	17.0
LOT 29	0.989	43,000	17.0	43,000	17.0
LOT 30	0.989	43,000	17.0	43,000	17.0
LOT 31	0.989	43,000	17.0	43,000	17.0

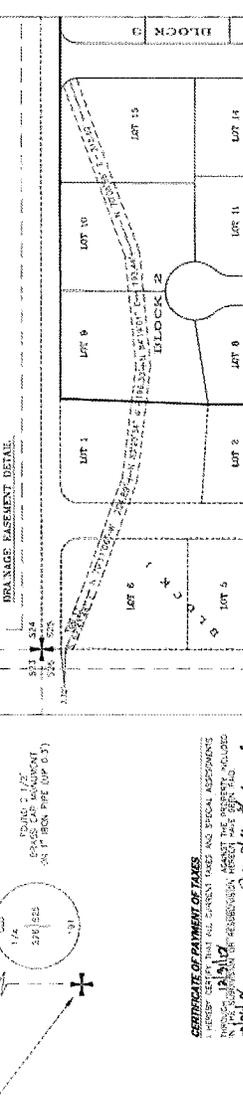
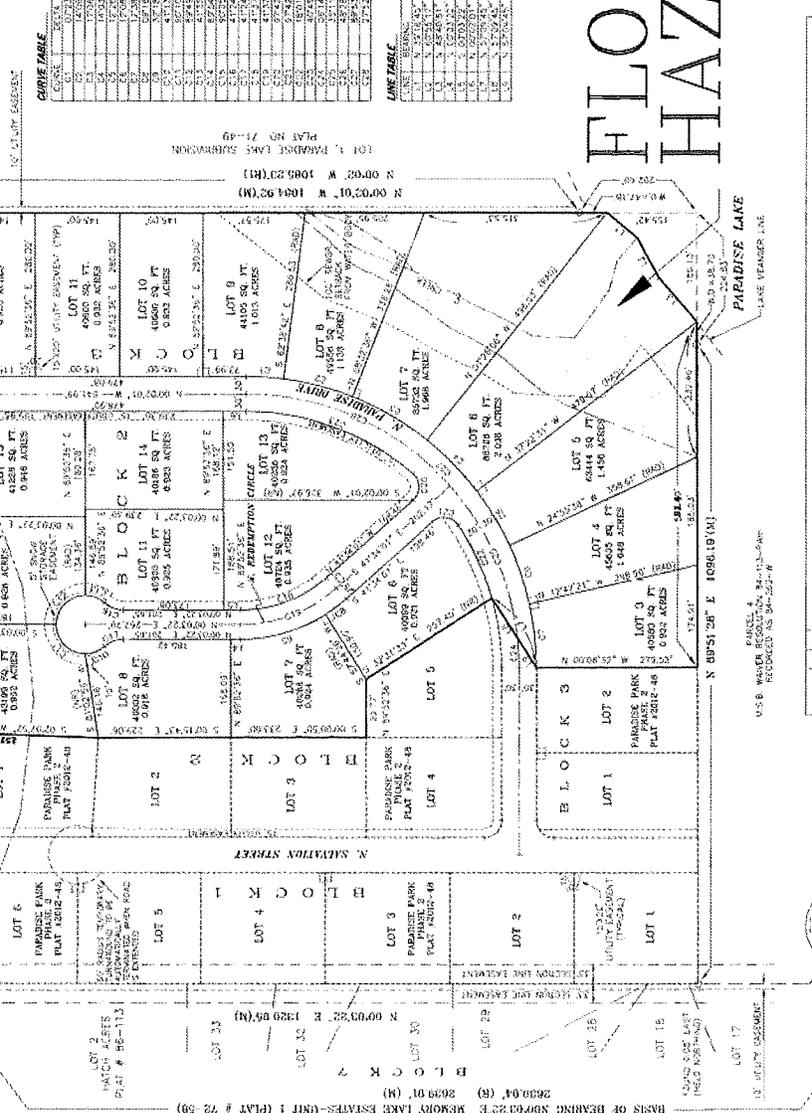
LINE TABLE

LINE	ACRES	AREA	PERCENT	AREA	PERCENT
LINE 1	0.989	43,000	17.0	43,000	17.0
LINE 2	0.989	43,000	17.0	43,000	17.0
LINE 3	0.989	43,000	17.0	43,000	17.0
LINE 4	0.989	43,000	17.0	43,000	17.0
LINE 5	0.989	43,000	17.0	43,000	17.0
LINE 6	0.989	43,000	17.0	43,000	17.0
LINE 7	0.989	43,000	17.0	43,000	17.0
LINE 8	0.989	43,000	17.0	43,000	17.0
LINE 9	0.989	43,000	17.0	43,000	17.0
LINE 10	0.989	43,000	17.0	43,000	17.0
LINE 11	0.989	43,000	17.0	43,000	17.0
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 ANCHORAGE, ALASKA 99501
 PHONE: (907) 562-4897
 FAX: (907) 562-4897
 DRAWN BY: REN
 DRAWING SCALE: 1"=100'
 DATE: 11/16/2012
 CHECKED BY: KML
 JOB NAME: LEPPING/PARADISE
 SHEET: 1 OF 1



NOTES:
 1. THERE MAY BE FEDERAL, STATE AND LOCAL REQUIREMENTS IN CONNECTION WITH THE DEVELOPMENT OF THIS PROJECT WHICH ARE NOT SHOWN ON THIS PLAT.
 2. NO INDIVIDUAL WATER SUPPLY SYSTEM OR SEWER COLLECTION SYSTEM SHALL BE INSTALLED ON THIS PLAT WITHOUT THE APPROVAL OF THE PALMER RECORDING DISTRICT.
 3. THERE IS LESS THAN A ONE PERCENT CHANCE THAT ANY PART OF BLOCK 2 OR LOT 14 AND LOT 15 WILL BE AFFECTED BY THE FLOODING OF PARADISE LAKE IN ANY YEAR, AND THAT PORTIONS OF LOT 15 WILL BE AFFECTED BY THE FLOODING OF PARADISE LAKE IN ANY YEAR EXCEPT ON 0.5 PERCENT OF THE YEARS. THE FLOODING OF PARADISE LAKE IS A RARE EVENT THAT WOULD OCCUR ONCE EVERY 200 YEARS.
 4. NO ADJACENT OWNERS OR OTHER INTERESTS ARE AFFECTED BY THIS PLAT.
 5. ANY OTHER EGRESS ROUTES WHICH MAY BE NECESSARY FOR THE DEVELOPMENT OF THIS PLAT SHALL BE APPROVED BY THE PALMER RECORDING DISTRICT.
 6. SURVEY ELEMENTS QUANTIFIED IN METERS SHALL BE CONSIDERED AS APPROXIMATE.
 7. LOT LINES ARE NON-BEARING UNLESS OTHERWISE NOTED.
 8. SURVEYING AND PLANNING SERVICES PROVIDED BY BULL MOOSE SURVEYING, INC.
 9. RECORDING DISTRICT NO. 2012-0318-0
 10. AS PER PLAT NO. 2012-0318-0

CERTIFICATE OF PAYMENT OF TAXES
 I, **STEVEN S. HOFFMAN**, Planning and Land Use Supervisor for the State of Alaska, do hereby certify that all current taxes and special assessments have been paid in full for the property described in this instrument.

PLANNING & LAND USE SUPERVISOR'S CERTIFICATE
 I, **STEVEN S. HOFFMAN**, Planning and Land Use Supervisor for the State of Alaska, do hereby certify that the proposed subdivision complies with the requirements of the Alaska Uniform Subdivision Act, AS 10.06.010, and the rules and regulations of the Department of Natural Resources and Conservation, AS 10.06.010. I have reviewed the subdivision map and the information provided to me and I find that the subdivision complies with the requirements of the Act and the rules and regulations.

~ Woods Land Surveys ~

529 W. Edinborough Dr., Palmer, Alaska 99645-6511
907.745.6366 (Office) ~ 907.232.7512 (Mobile) ~ woodslandsurveys@gmail.com

14 June, 2016

Subject: Letter of Support on behalf of Ms. Linda Fisch, homeowner of Lot 1, Paradise Lake Subdivision, Plat 71-49, Palmer Recording District, Third Judicial District, Alaska

To whom it may concern,

This letter is being prepared in support of numerous claims by Ms. Fisch in her attempts to provide a level of environmental protection to her lakefront property and protection of the water quality of Paradise Lake to include its inlet drainages across her own land as well as surrounding uplands and adjoining properties.

The primary concern of Ms. Fisch is the development of the adjoining lot along the southwesterly boundary of her own lot and being more specifically Lot 7, Block 3, Paradise Park Subdivision, Phase 1, Plat 2013-33, Palmer Recording District, Third Judicial District, Alaska.

I was contacted by Ms. Fisch in late March regarding this matter and was asked to review the documentation amassed by her to support her concerns over the land clearing and septic system installation activities on Lot 7, Block 3, Paradise Park Subdv. I immediately pulled the recorded plats for both subdivisions including the restrictive covenants for Paradise Park.

Claim 1: There was some confusion over the existence of an actual creek or drainage which feeds into Paradise Lake at (or near) the southwest corner of Ms. Fisch's property. This creek (drainage) does exist and is recognized: in the original Township Survey by the U.S. General Land Office (1915); a Soils Survey (1960) and most recently by Mr. Robert Hoffman, PLS, who conducted the subdivision survey and platting for Paradise Park. The latter clearly defines the course of a "creek" and includes a 100' setback line, north of the creek. Ms. Fisch has sent me numerous photographs of the creek during spring run-off season where it is full-to-overflowing it's banks (consequently feeding into Paradise Lake).

Claim 2: There are two possible septic monitor tubes located approximately 30' west of Ms. Fisch's common property line with Lot 7, Block 3 which raised concerns over the septic system being installed south of the creek. This would not be possible without providing a septic leach-field line which

~ Woods Land Surveys ~

529 Edinborough Dr.

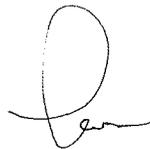
Palmer, Alaska 99645-6511

would have to cross the creek to reach the leach field. It is noted that these two PVC pipes are in excess of 103' from the creek but on the south side as shown on the attached diagram.

Claim 3: There are restrictive covenants which regulate the development of lots within the Paradise Park Subdivision which were intended to protect the environment and aesthetic quality of the subdivision for the enjoyment and harmony of all lot owners within the subdivision. These covenants restrict the amount of clearing which can be conducted on any given lot to include manipulation of natural run-off drainage. Ms. Fisch claims that clearing and slope-shaping on Lot 7 has re-routed the natural drainage pattern of the creek and created a potential mosquito pond.

It is my opinion that Ms. Fisch is trying in earnest to help protect the integrity of Paradise Lake and work her way through the system. My part has been little more than a review of public record and the lending of an ear. This letter is a basic summary of my review of all related documents as provided by Ms. Fisch.

With all due respects,



Karl D. Woods, PLS (Alaska AEL #10950)

907-232-7512

Cc

Linda Fisch

Attachments:

Contour Map and Septic Monitor Tube Diagram



LOCATION
A / NCEI
2016

N PARADISE DRIVE

B L O C K

PARADISE PARK SUBDIVISION
(PLAT 2013-33)

100' SEWER SETBACK
FROM WATER BODY

PARADISE LAKE SUBDY
(PLAT 71-40)

LOT 8

LOT 7

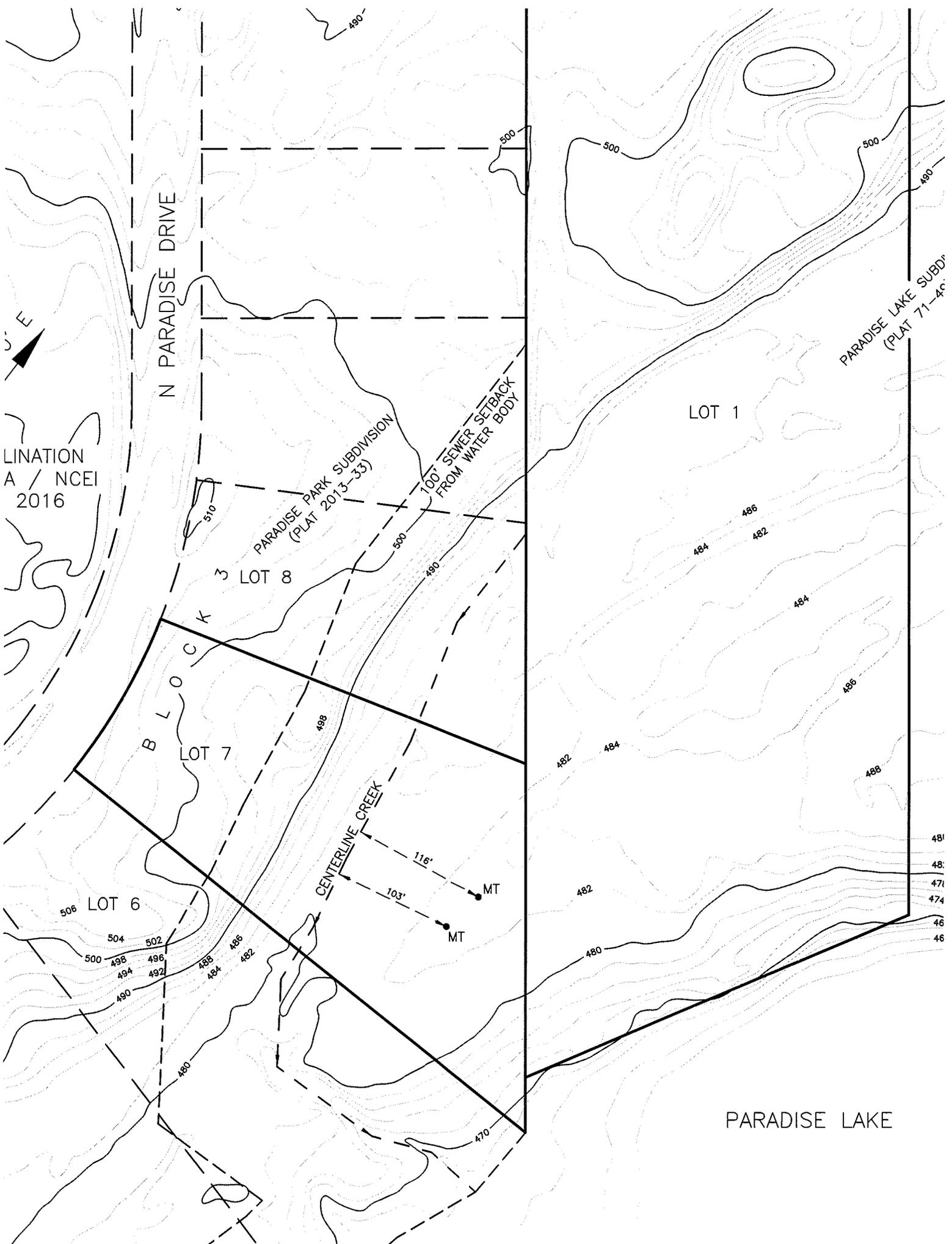
LOT 6

LOT 1

CENTERLINE CREEK

116'
103'
MT
MT

PARADISE LAKE



20

http://www.frontiersman.com/news/paradise-lost/article__6847a8ab-7e50-5652-9dec-9ccc0774f952.html

Paradise lost?

May 12, 2006

May 12, 2006

By DAWN DE BUSK

Frontiersman

WASILLA - Mike Betts' father homesteaded Paradise Lake in 1946, and Betts still resides next to the 22-square-acre, spring-fed lake in the home he built in 1979.

He said he anticipates seeing again the beauty of the lake once the ice melts, the trees bud, the nesting birds return and the water takes on its blue hue.

But Betts is worried about the future of Paradise Lake, in addition to the area's water supply, if a plan goes through to subdivide 40 acres into 33 lots with homes and new wells.

"The neighbors behind that 40 acres (in Memory Lakes Estates) are having wells go

dry, and dealing with those issues. This lake is spring fed to a certain degree. The inlet to the lake is right on the proposed subdivision frontage," Betts said.

On May 4, the Mat-Su Borough platting board voted 3-3 to reject a move to reconsider the Paradise Park plat proposal, which meant the final go-ahead for subdivision construction fell on the shoulders of Mat-Su Borough Planning Director Murph O'Brien.

On Monday, developers David Green of eastern Washington and Valley contractor Kurt Lepping warned the borough via e-mail that if a rehearing were scheduled, they would build site condominiums instead of the proposed 33 lots on the land just northwest of Paradise Lake.

The borough doesn't review site condos, which are allowed under Alaska State Statute Title 34, according to Mat-Su Borough Platting Officer Paul Hulbert. The developers would hire an attorney to draw up the condo association document, and depending on the extent of the plan, a condo plat might be filed with it, Hulbert said.

"We hear rumbling of reconsiderations and, or, appeals," the e-mail from Lepping and Greeno said. "We have all intentions of building our subdivision ASAP! Time is of the essence for us so we can be built out this building season and start selling lots.

"We have no problems with going through the motions of normal procedures, but any delays in us being able to proceed with getting under way will force us to change directions and go with the site-condo option."

On Tuesday, O'Brien filed to appeal the board's decision, and the Paradise Park proposal will go before the Board of Adjustments and Appeals as soon as it can be scheduled, he said.

O'Brien cited the developer's late submittal of the drainage plan, which he said didn't give members sufficient time for review.

There also was the issue of using a pedestrian easement instead of a road to break up the block length, he said.

The borough platting board does not make decisions based on preserving the natural environment or protecting individual wells. The board only can follow state and borough codes on subdividing lands, leaving easements and public rights of ways, he said.

Betts accepts that continued private-residence development will occur in the Valley, even in his own back yard. He said he's not against building more homes, but he'd like the borough to put in place some codes to protect water levels for current and future homeowners.

“It's not just tree hugger versus bulldozer operator anymore. The very people who build these subdivisions make money making something someone wants to live in, not just a gravel pit,” Betts said.

About 10 homes encircle Paradise Lake, Betts said, and some of those residents have been concerned that, with unchecked development, the aquifers that supply their water will run low or dry up. He said Paradise Lake itself could be jeopardized if the developers were to dredge the lake to create access for prospective buyers - something Betts has heard mentioned.

Israel Nelson, whose water rights came with the deed to his home, serves as president of Memory Lakes Estates Homeowners Association.

“Many people have experienced a drying up of wells. I bought my property in 2003, and it already has a second well. The first was 80 feet deep. My major concern is that our water might be compromised,” Nelson said. “I would urge that the properties in Paradise Park be larger like 2 acres or 5 acres.”

Deanne Short, a Memory Lakes Estates resident, has been hauling water for four weeks.

On April 14, Pioneer Pacific drilled a 210-foot well on the single-family residence next to her property, she said. On April 15, Short's water turned dirt-black - forcing her to run through multiple filters as well as showering and doing laundry at a friend's house.

Roy Ireland, a hydrologist with the Alaska Department of Natural Resources, Division of Mining, Land and Water, wrote a letter to the borough, recommending that wells in the Paradise and Memory lakes area be drilled 160 feet or more.

“Well owners are justified in being concerned about additional development upgradient (to the northeast). The project developer should be made aware that water conflicts may arise and that deeper wells are recommended,” Ireland wrote in the March 28 correspondence.

Ireland explained that his analysis was based on well logs for areas that have been developed already. He admitted the information was partial, because not all drilling companies are forthcoming with information, and there isn't much history of development in the Paradise Lake area.

Alteration to the shoreline and/or bed of the lake could cause unexpected changes to the lake, especially if the lake is perched.

Loss of water could become an issue if any confining layer of the lake bed is breached,” Ireland wrote.

A perched lake, which is common, is when the body of water sits above the confined layers of clay and sand that prevent underground aquifers from moving up or down, according to DNR's Chief Water Resources Gary Prokosch.

Betts and his neighbor Linda Fische, who lives on an 8-acre parcel with her property line next to the proposed Paradise Park parcel, have suggested the developer offer new residents access to the lake without destroying the wetlands.

They suggested creating a gravel walkway to the lake, in addition to a raised platform over the wetlands and a dock for bird-watching, sunset viewing, swimming or canoeing.

It would be a boardwalk like Potter's March - a beautiful focal point. It would channel people to the lake versus people dragging coolers over the marsh to find a camp spot. We have been lucky to enjoy a low-key place to loop the canoe around. I want my new neighbors to be able to do the same,” Betts said.

A little lake outside homes is a lot more sellable than a dried-up mud hole.”

Contact Dawn De Busk at 352-2252, or dawn.debusk@ frontiersman.com.

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