MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE

Vern Halter, Mayor

Michael Brown, Borough Manager

Thomas Bergey (School Board) – Chair
Kristine Adamczak (Community At Large) – Vice Chair
Vacant (Community At Large)
Jesse Sumner (Assembly)
Robert Yundt (Assembly)
Mary Anderson (Planning Commission)
Patricia Chesbro (Planning Commission Alt)
Ole Larson (School Board)
James Hart (School Board Alt)
Brandt Bowen (Birchtree Charter)
Susan McCauley (Birchtree Charter)
Becky Huggins (American Charter)
Stephanie Maynard (American Charter)

PLANNING & LAND USE DEPARTMENT Alex Strawn, Planning & Land Use Director Kim Sollien, Planning Services Manager Vacant, Development Services Manager Fred Wagner, Platting Officer

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

Adam Bradway - Staff

August 4, 2021 REGULAR MEETING 2:00 pm – 4:00 pm

Ways to participate in the Borough Area Schools Site Selection Committee meetings:

IN PERSON. Should you wish to testify in person, please adhere to the 6-foot distance between yourself and others. It is required to wear a mask for anyone entering or attending meetings in MSB facilities.

TELEPHONIC TESTIMONY:

- Click here to join the meeting
- Dial 1-907-890-7880; Conference ID # 973 148 543#
- State your name for the record, spell your last name, and provide your testimony.
- I. CALL TO ORDER
- II. ROLL CALL DETERMINATION OF QUORUM
- III. APPROVAL OF AGENDA
- IV. APPROVAL OF MINUTES
 - A. April 14, 2021, Regular Meeting Minutes
- V. AUDIENCE PARTICIPATION (three minutes per person, for items not scheduled for public hearing)

VI. STAFF/AGENCY REPORTS & PRESENTATIONS

- A. Correspondence Mat-Su Central School
- B. HDL rough-order-of-magnitude cost estimates Stringfield R. & Seldon-Church

VII. UNFINISHED BUSINESS

A. A resolution of the Matanuska-Susitna Borough Area Schools Site Selection Committee recommending a permanent site for Mat-Su Central School

VIII. NEW BUSINESS

- A. A resolution of the Matanuska-Susitna Borough Area Schools Site Selection Committee recommending a permanent site for American Charter Academy
- B. A resolution of the Matanuska-Susitna Borough Area Schools Site Selection Committee recommending a permanent site for Birchtree Charter School

IX. STAFF/MEMBER COMMENTS

X. ADJOURNMENT

Disabled persons needing reasonable accommodation in order to participate at a MSB Fish and Wildlife Commission Meeting should contact the borough ADA Coordinator at 861-8432 at least one week in advance of the meeting.

MATANUSKA-SUSITNA BOROUGH Borough Area Schools Site Selection Committee

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

Adam Bradway - Staff

April 14, 2021 REGULAR MEETING 2:00 p.m.

DRAFT MINUTES

I. CALL TO ORDER

Meeting was called to order at 2:06 pm by Charperson Bergey

II. ROLL CALL – DETERMINATION OF QUORUM

Members Present: Mr. Bergey, Ms. Adamczak, Ms. Anderson, Mr. Sumner

Charter School Representatives Present: Ms. McCauley, Ms. Huggins, Ms. Maynard

Mat-Su Central Representative: Mr. Brown School District Representative: Mr. Everett

Staff Present: Mr. Bradway, Ms. Borys, Mr. Aschenbrenner, Mr. Campfield, Ms. Cameron

III. APPROVAL OF AGENDA

Motion: Ms. Anderson moved to approve the agenda, Mr Sumner, 2nd. All in favor.

IV. APPROVAL OF MIUTES

A. February 18, 2021, Regular Meeting Minutes

Motion: Ms. Anderson moved to approve the minutes as written, Mr. Sumner, 2nd. All in favor.

V. OLD BUSINESS

A. Potential Mat-Su Central Site – Stringfield Road

i. 2018 HDL Site Evaluation – Stringfield Road & Seldon-Church

Mr. Everett and Mr. Campfield both spoke about the suitability and Mat-Su Central's preference for the Stringfield Road property. Multiple Board members questioned the cost of developing the site for a school. Multiple Board members requested further site evaluation be done to determine

cost estimates for developing any of the sites being considered.

B. A resolution of the Matanuska-Susitna Borough Area Schools Site Selection Committee recommending a permanent site for Mat-Su Central School

Ms. Adamczak voiced her concern over committing to the Stringfield Road property for Mat-Su Central prior to evaluating and determining the best sites for Birchtree Charter and American Charter.

Ms Anderson commented that this resolution had the support of all the stakeholders (the School District, Mat-Su Central and Borough staff) and that we should heavily weigh their opinion.

Mr. Sumner requested a more thorough report on the cost of development of the site. Motion: Mr. Sumner moved to table the resolution until the next meeting, Ms. Adamczak, 2nd. All in favor.

VI. ITEMS FOR INFORMATION

A. Potential school sites – American Charter Academy

Motion: Ms. Anderson moved to direct staff to draft a resolution to site American Charter Academy on the Seldon-Church property, Ms. Adamczak, 2nd. All in Favor.

B. Potential school sites – Birchtree Charter

Motion: Ms. Anderson moved to direct staff to draft a resolution considering Site 4 – Shaw Elementary as a potential future location for Birchtree Charter, Mr. Sumner, 2nd. Ms. Anderson, Mr. Sumner, Mr. Bergey and Ms. McCauley in favor, Ms. Adamczak against. Motion passes.

Motion: Ms. Anderson moved to extend the meeting to 4:30 pm, Ms. Adamczak, 2nd. All in favor.

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

Mr. Eugene Habermen commented on the need for a larger timer for the public participation section of the meeting and about several things that were not relevant to the School Site Selection Committee meeting.

VIII. STAFF COMMENTS

Mr. Bradway thanked the Board for coming and asking good questions. Mr. Bradway thanked the Board for directing staff to draft the two additional resolutions. Mr. Bradway reiterated that this Board is advisory in nature and that staff are producing as much information as possible to help the Board in making a good decision. Mr. Bradway noted that he would continue to work with Public Works with the intention of gathering as much additional information as possible under the constraints of time and budget.

IX. MEMBER COMMENTS

Ms. Adamczak agreed with Mr. Sumner that the Board wants more information on the development costs of the sites. Ms. Adamczak expressed the concern that the convening of the Board was long overdue and that it was important to work through and process all the information given by staff and stakeholders.

Mr. Sumner would like to see a cost comparision between the Seldon-Church property and the Stringfield Road property as it pertains to development costs. He stressed the importance of not making a decision soley based on the location of the site.

Mr. Bergey thanked staff for their work.

X. NEXT MEETING DATE:

To be set for a date and time within the first week of June 2021.

XI. ADJOURNMENT

Motion: Mr. Sumner moved to adjourn the meeting at 4:10 pm, Ms. Adamczak, 2^{nd} . All in favor.







P (907) 352-7450 F (907) 352-7480

To the Mat-Su Borough Site Selection Committee:

May 5, 2021

My name is John Brown and for the past 12 years, I've served as the principal of Mat-Su Central, representing our school community, parent advisory board, and our 2,800 K-12 grade students. We are asking for your support in recommending to the Borough Assembly the site at 1959 N. Stringfield Road for Mat-Su Central School, a location that has support from Mat-Su Central School's Parent Advisory Council and the Mat-Su Borough School Board.

Beginning in 2016, we advocated for a permanent site and corresponding school design to meet the needs of our students and families who enroll in our hybrid homeschool program. Since the founding of the Correspondence Study School (our former school title) in 1972, our students have never had a permanent school home or location.

The Stringfield location allows for the consolidation of current leases at both Mat-Su Central campuses, (Palmer and Wasilla) with a termination date at the end of June, 2024. The Stringfield parcel is located between the cities of Palmer and Wasilla making it centrally located for the majority of the district's student population. This location meets the current and future MSC student geographical cloud attendance area which includes the Glenn Highway corridor from Anchorage to the Mat-Su.

Superior roadway access from major arterial transportation corridors along Trunk/Palmer Fishhook as well as the Palmer-Wasilla Highway supports diverse campus users including high school students, parents, grandparents, student activity and shuttle busses, and bike riders.

This spot is adjacent to Mat-Su College and would support the popular use of dual high school/college credit classes for our high school population of 900 students. Additionally, this site provides equitable access to course share opportunities amongst all core area district high schools.

Central site location supports parents who drop students off for onsite classes, workshops, advisor meetings, etc. Families are then able to contribute to both the Palmer and Wasilla economies; this helps both cities and businesses rather than favoring one over the other. The central location is ideal for both Palmer and Wasilla residents in utilizing Mat-Su Central facilitates for community wide use. Our robust field trip and workshop program would benefit from a central location. This would be a huge asset for coordinating those types of experiential learning activities whether on or off campus.

Furthermore, Mat-Su Central School has 300 community instructional partners who would benefit from a centralized campus to offer services to students attending campus programming; it's important to note that our active vendor list continues to grow.

Site Specific: Stringfield Road

*source: Tony Weese, MSBSD

- The site scored as one of the highest in the assessment conducted by MSB staff.
- 27 acres available, MSC campus would require 10-12 acres.
 - This would allow for avoidance of higher ground water concerns.
- Utilities in close proximity; gas, telecom/data, and 3 phase power.
- High groundwater can be alleviated by building up the site with existing onsite gravel.
- Addressing septic concerns:
 - Pioneer Peak's existing system has been in place on this site since 1984 and does not have a lift station but is built up on a raised bed.
 - Additional development may be needed for the septic system if placed in an area of high ground water. A raised bed and pressurized leach field will likely be needed to meet current DEC regulations.
 - MSBSD sites have lift stations, raised beds, and/or pressurized leach fields for their septic's include: Su Valley, Machentanz, CTHS, HHS (new), Shaw, Knik, Reddington, Meadow Lakes, Larson, Snowshoe
- Birchtree Charter has expressed interest in Shaw site #4. American Academy is supportive of Site #2 at Church and Seldon.

*source: HDL Preliminary Campus Site Evaluation Study

- Viable option for development
- Readily available utilities
- Access to arterial roadways and developable land area
- Relatively flat to rolling terrain and both
- Onsite soil may be utilized in development
- Wetlands could be avoided or mitigated

Thank you for your ongoing service to the families that live and thrive in our Mat-Su Borough. Sincerely, Parent Representative, Jennifer Bashor Parent Representative, Christine Greco Parent Representative, Zach Layman Parent Representative, Rachel Harrison Parent Representative, Siyen Emmert Parent Representative, Tanya Bell MSCS Principal, John Brown MSCS Assistant Principal, Stacey McIntosh MSCS Advisory Staff, Gena Chastain MSCS Student Advisory, Rainey Spurlock

MSCS Advisory Staff, Magy Helle

MSCS Advisory Staff, Laura Porter

MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE RESOLUTION SERIAL NO. 21-01

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE RECOMMENDING A SITE FOR MAT-SU CENTRAL SCHOOL.

WHEREAS, the Matanuska-Susitna Borough School District is seeking to identify a site for the permanent location of Mat-Su Central School; and

WHEREAS, the current lease agreement for Mat-Su Central School is set to expire on June 30, 2024 with the option for an additional extension; and

WHEREAS, the Mat-Su Borough Area Schools Site Selection Committee (the Committee) received a request from the Matanuska-Susitna School District to identify a suitable location for this school; and

WHEREAS, Matanuska-Susitna Borough Code 19.08.020 provides that the Committee make recommendations to the Assembly on requested school sites; and

WHEREAS, there is currently no funding allocated to school site procurement, thus, only Matanuska-Susitna Borough owned property was considered for selection; and

WHEREAS, Matanuska-Susitna Borough owned property within the area of Mat-Su Central's families was reviewed for school site

suitability, using criteria outlined in Matanuska-Susitna Borough Code and represented through a site suitability criteria scoring matrix; and

WHEREAS, the review of Matanuska-Susitna Borough property, returned "Stringfield Subdivision" as the potential preferred location; and

WHEREAS, the preferred location is legally described as Lot 1, Stringfield Subdivision, Plat No. 2020-96, located in Section 34, Township 18 North, Range 1 East, S.M., AK., Palmer Recording District, Third Judicial District, State of Alaska; and

WHEREAS, a professional engineering firm performed a geotechnical analysis to verify useable areas and identify soils useful for development, with acceptable findings.

NOW THEREFORE BE IT RESOLVED that the Matanuska-Susitna Borough Area Schools Site Selection Committee does hereby recommend to the Matanuska-Susitna Borough School Board, Planning Commission, and Assembly that Lot 1, Stringfield Subdivision be identified as the preferred location of a permanent facility for Mat-Su Central School.

ADOPTED by the Matanuska-Susitna Borough Area Schools Site Selection Committee this 24th day of June, 2021.

Thomas	Bergey,	Chairperson

Attest:

Adam Bradway, Planner II

MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE RESOLUTION SERIAL NO. 21-02

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE RECOMMENDING A SITE FOR AMERICAN CHARTER ACADEMY.

WHEREAS, the Matanuska-Susitna Borough School District is seeking to identify a site for the permanent location of American Charter Academy; and

WHEREAS, Matanuska-Susitna Borough 19.08.020(F) provides that charter schools existing five years or more may request a permanent facility; and

WHEREAS, American Charter Academy has leased business suites and playground property in and around the Meadow Lakes Community Center for over 8 years; and

WHEREAS, the Mat-Su Borough Area Schools Site Selection Committee (the Committee) received a request from the Matanuska-Susitna School District to identify a suitable location for this school; and

WHEREAS, Matanuska-Susitna Borough 19.08.020(B) provides that the Committee make recommendations to the Assembly on requested school sites; and

WHEREAS, there is currently no funding allocated to school site procurement, thus, only Matanuska-Susitna Borough owned property was considered for selection; and

WHEREAS, Matanuska-Susitna Borough owned property within the area of American Charter Academy's families was reviewed for school site suitability, using criteria outlined in Matanuska-Susitna Borough code and represented through a site suitability criteria scoring matrix; and

WHEREAS, the review of Matanuska-Susitna Borough property, returned "Seldon-Church" the potential preferred location; and

WHEREAS, the preferred location is legally described as Tract A of Alaska State Land Survey No. 2004-18, Plat No. 2007-167, Palmer Recording District, Third Judicial District, State of Alaska.(Tax ID 6757000T00A); and

WHEREAS, only a portion of Tract A, comprising twenty acres or less is needed for developing this school site; and

WHEREAS, a professional engineering firm performed a preliminary site evaluation and rough cost estimate for development, with acceptable findings.

NOW THEREFORE BE IT RESOLVED that the Matanuska-Susitna Borough Area Schools Site Selection Committee does hereby recommend to the Matanuska-Susitna Borough School Board, Planning Commission, and Assembly that a portion of Tract A, twenty acres or less, be identified as the preferred location of a permanent facility for American Charter Academy.

ADOPTED by the Matanuska-Susitna Borough Area Schools Site Selection Committee this 24th day of June, 2021.

		Thomas Bergey, Chairperson
Attest:		
Adam Bradway,	Planner II	_

MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE RESOLUTION SERIAL NO. 21-03

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH AREA SCHOOLS SITE SELECTION COMMITTEE RECOMMENDING A SITE FOR BIRCHTREE CHARTER SCHOOL.

WHEREAS, the Matanuska-Susitna Borough School District is seeking to identify a site for the permanent location of Birchtree Charter School; and

WHEREAS, Matanuska-Susitna Borough 19.08.020(F) provides that charter schools existing five years or more may request a permanent facility; and

WHEREAS, Birchtree Charter School has leased a commercial building and property located near Trunk Road and the Palmer-Wasilla Highway from a private entity for 10 years; and

WHEREAS, the Mat-Su Borough Area Schools Site Selection Committee (the Committee) received a request from the Matanuska-Susitna School District to identify a suitable location for this school; and

WHEREAS, Matanuska-Susitna Borough 19.08.020(B) provides that the Committee make recommendations to the Assembly on requested school sites; and

WHEREAS, there is currently no funding allocated to school site procurement, thus, only Matanuska-Susitna Borough owned property was considered for selection; and

WHEREAS, Matanuska-Susitna Borough owned property within the area of Birchtree Charter School's families was reviewed for school site suitability, using criteria outlined in Matanuska-Susitna Borough code and represented through a site suitability criteria scoring matrix; and

WHEREAS, the review of Matanuska-Susitna Borough property, returned the "Shaw Elementary" site as a potential preferred location; and

WHEREAS, the preferred location is legally described as Government Lot 1 and the NE1/4NW1/4, Section 30, Township 18 North, Range 1 East, S.M., Palmer Recording District, Third Judicial District, State of Alaska.(Tax ID 18N01E30B002).

NOW THEREFORE BE IT RESOLVED that the Matanuska-Susitna Borough Area Schools Site Selection Committee does hereby recommend to the Matanuska-Susitna Borough School Board, Planning Commission, and Assembly that Government Lot 1 and the NE1/4NW1/4 be identified as a preferred location of a permanent facility for Birchtree Charter School.

ADOPTED by the Matanuska-Susitna Borough Area Schools Site Selection Committee this 24th day of June, 2021.

Thomas	Bergev,	Chairperson	

Attest:

Adam Bradway, Planner II

PRIOR MEETING DOCUMENTATION FOR REFERENCE



OFFICE OF THE SCHOOL BOARD

MATANUSKA-SUSITNA BOROUGH SCHOOL BOARD **RESOLUTION 20-009**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH SCHOOL BOARD SUPPORTING INTIATION OF THE FORMAL PROCESS TO IDENTIFY THE LOCATION OF A PERMANENT FACILITY FOR MAT-SU CENTRAL SCHOOL AT 1959 N. STRINGFIELD ROAD TO BE KNOWN AS "STRINGFIELD SUBDVISION."

WHEREAS, the Matanuska-Susitna Borough School District has leased Mat-Su Central School building and property from a private entity for over 20 years for the purpose of a correspondence school; and

WHEREAS, the current lease agreement for Mat-Su Central School is set to expire on June 30, 2021 with the option for an additional extension; and

WHEREAS, Mat-Su Central School needs a permanent facility to support its growing student population and innovative programs; and

WHEREAS, in cooperation with the Mat-Su Borough, the District has identified 1959 N. Stringfield Road to be known as "Stringfield Subdivision" (Appendix A) as a possible location for Mat-Su Central School; and

WHEREAS, MSB 19.08.020 provides for a School Site Selection Committee which shall make recommendations to the Assembly on the needs for school sites.

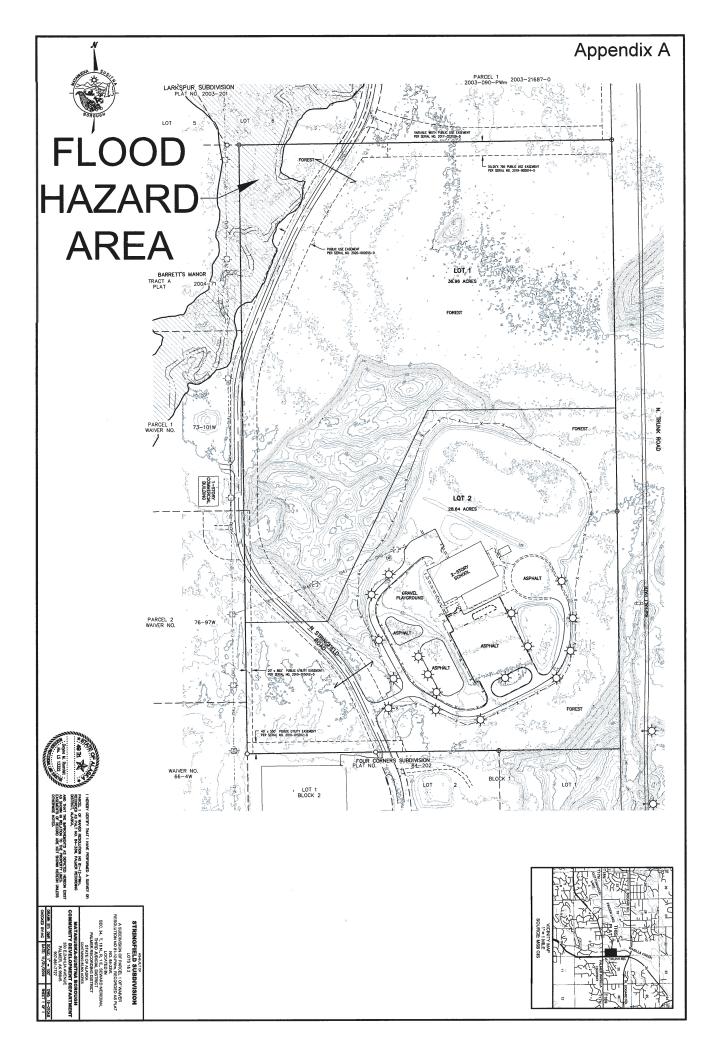
NOW, THEREFORE BE IT RESOLVED that the Matanuska-Susitna Borough School Board supports the initiation of the formal process to identify the location of a permanent facility for Mat-Su Central School at 1959 N. Stringfield Road to be known as "Stringfield Subdivision."

APPROVED by the Matanuska-Susitna Borough School Board this 5th day of February, 2020.

Thomas Bergey, Board Preside

ATTEST:

Escobedo, Board Secretary





OFFICE OF THE SCHOOL BOARD

MATANUSKA-SUSITNA BOROUGH SCHOOL BOARD RESOLUTION 20-005

W. F. M.

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH SCHOOL DISTRICT SCHOOL BOARD IN SUPPORT OF THE INTIATION OF THE FORMAL PROCESS TO IDENTIFY THE LOCATION, IDENTIFY THE FUNDING AND BUILD A SCHOOL BUILDING FOR AMERICAN CHARTER ACADEMY.

WHEREAS, American Charter Academy, Matanuska-Susitna Borough School District has leased business suites and playground property in and around the Meadow Lakes Community Center from a private entity for over 8 years for the purpose of a public charter school; and

WHEREAS, American Charter Academy has continued to excel and grow in academics whether it be MAPs, PEAKS, AimsWeb, national competitions or regular classwork; and

WHEREAS, American Charter Academy is a proven entity that is here to stay highlighted by its loyal and Pro-AMC parents/families as well as its trend of increase in enrollment; and

WHEREAS, American Charter Academy and its families are looking at least expensive building options while meeting the needs of AMC student for future success; and

WHEREAS, the location for American Charter Academy's future site needs to be in line with the least expensive pertaining to road access, land suitability, within the area of its families; and

WHEREAS, Matanuska-Susitna Borough has an Area School Site Selection Committee to ensure selection criteria is in place and addressed; and

WHEREAS, Funding sources and building types for American Charter Academy to move forward require location, road and land specifics; and

NOW, THEREFORE BE IT RESOLVED that the Mat-Su School Board support the initiation of the MSB and MSBSD Formal New Construction Site Selection and Development Process for American Charter Academy.

APPROVED by the Mat-Su School Board this 2nd day of October, 2019.

Dr. Donna Dearman, Board President

Dr. Monica Goyette, Superintendent

ATTEST:

Stacy Escobedo, Board Secretary



OFFICE OF THE SCHOOL BOARD

MATANUSKA-SUSITNA BOROUGH SCHOOL BOARD RESOLUTION 20-007

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH SCHOOL DISTRICT SCHOOL BOARD IN SUPPORT OF THE INTIATION OF THE FORMAL PROCESS TO IDENTIFY THE LOCATION, FUNDING, AND BUILDING OF A PERMANENT FACILITY FOR BIRCHTREE CHARTER SCHOOL.

WHEREAS, Birchtree Charter School and the Matanuska-Susitna Borough School District have leased a commercial building and property located near Trunk Road and the Palmer-Wasilla Highway from a private entity for 10 years for the purpose of a public charter school; and

WHEREAS, Birchtree Charter School continues to bring a unique and highly desired educational program to many families across the District, serving around 400 students annually; and

WHEREAS, Birchtree Charter School and its families are looking for the least expensive building options while meeting the needs of Birchtree's students through a Waldorf driven philosophy; and

WHEREAS, the location for Birchtree Charter School's future site needs to be centrally located between Wasilla and Palmer to provide a location allowing accessibility to our families throughout the District; and

WHEREAS, the Matanuska Borough has an Area School Site Selection Committee to ensure selection criteria are in place and addressed; and

WHEREAS, funding sources and building types for Birchtree Charter School to move forward require a location, road, and land specifics; and

NOW, THEREFORE BE IT RESOLVED that the Mat-Su School Board support the initiation of the formal process to identify the location, funding, and building of a permanent facility for Birchtree Charter School.

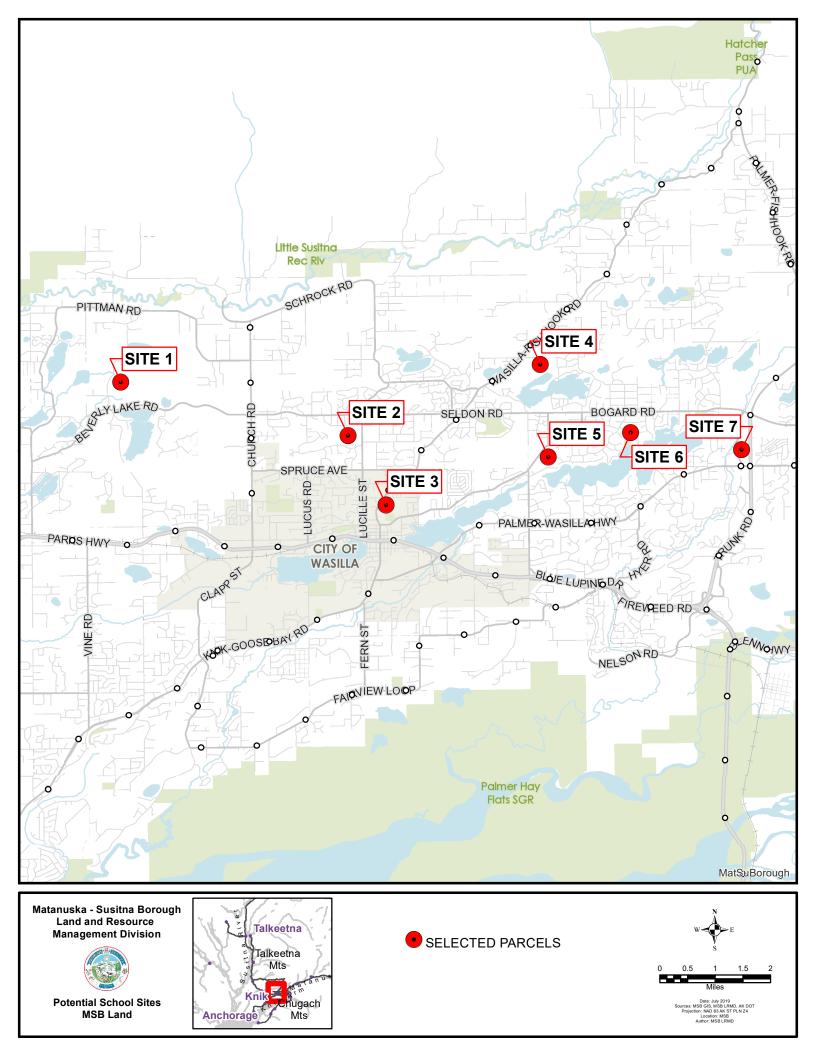
APPROVED by the Mat-Su School Board this 5th day of February, 2020.

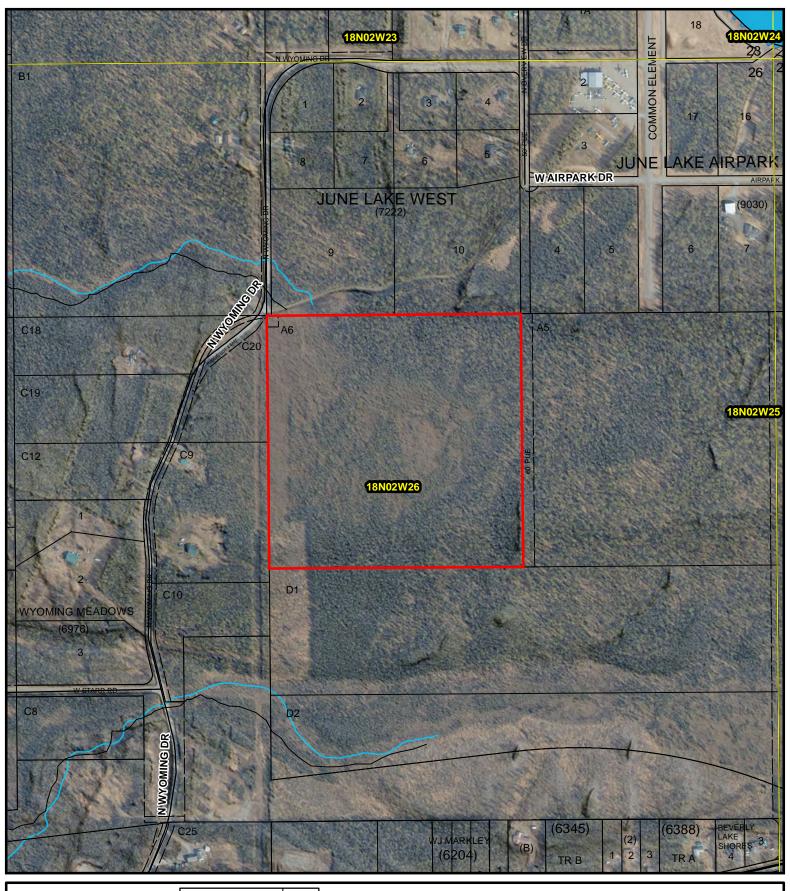
Mr. Thomas Bergey, Board President

Dr. Monica Goyette, Superintendent

ATTEST:

Stacy Escopedo, Board Secretary





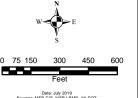


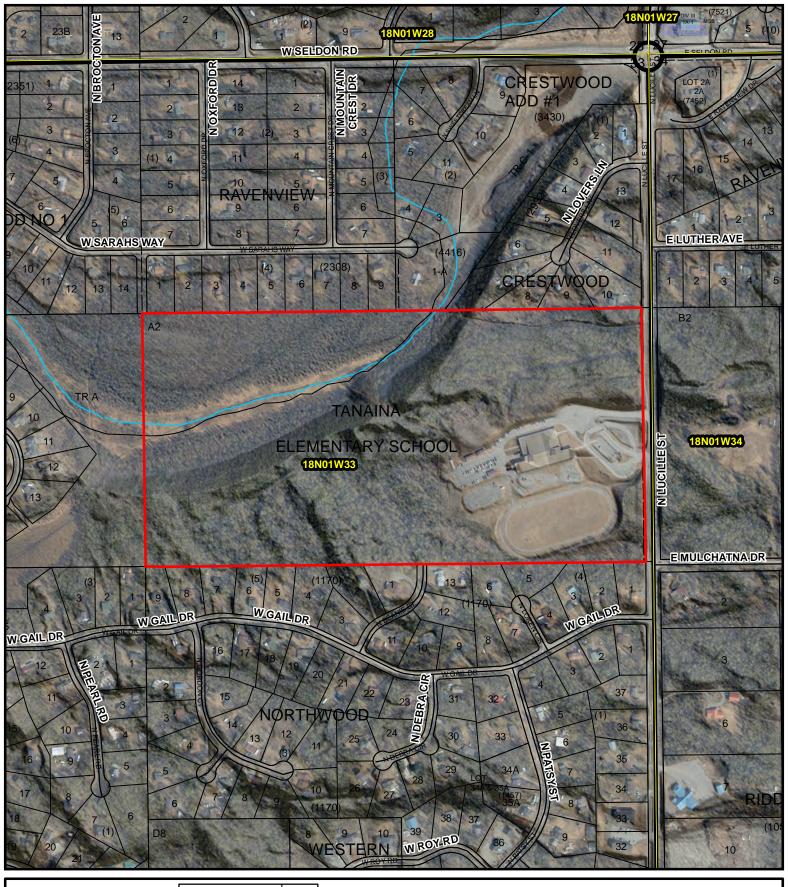




□ SELECTED PARCEL

SITE 1 18N02W26A006 39.92 ACRES





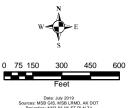






□ SELECTED PARCEL

SITE 2 18N01W33A002 80 ACRES SCHOOL/TANAINA ELEM





Matanuska - Susitna Borough Land and Resource Management Division

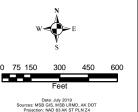


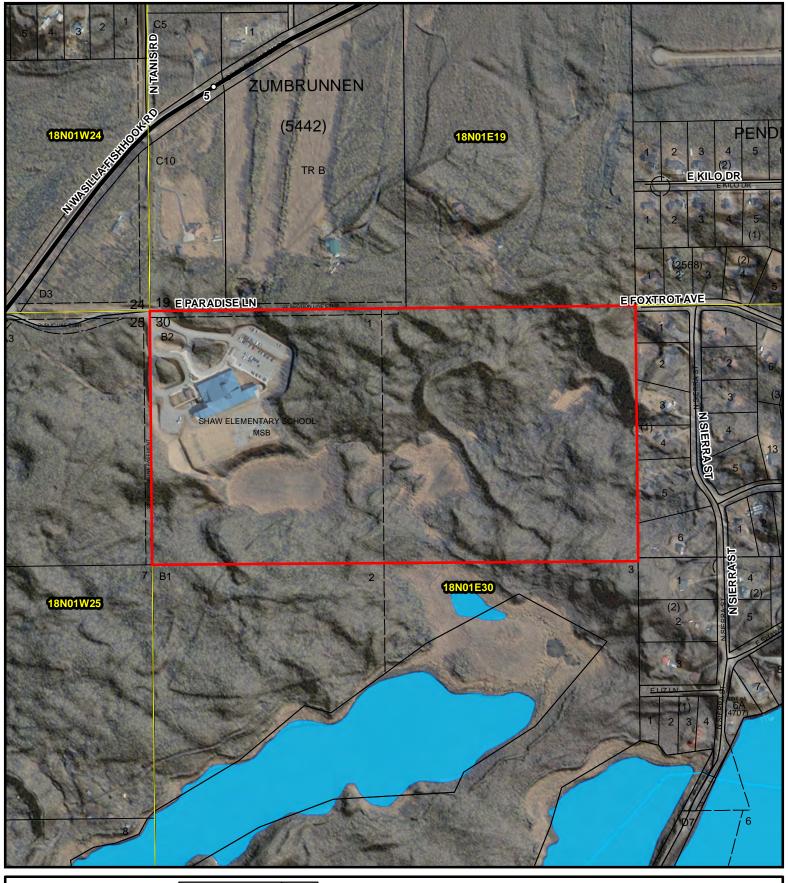
Potential School Sites MSB Land



□ SELECTED PARCEL

SITE 3 7390000L001 20.37 ACRES SCHOOL/IDITAROD ELEMENTARY





Matanuska - Susitna Borough Land and Resource Management Division

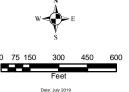


Potential School Sites MSB Land

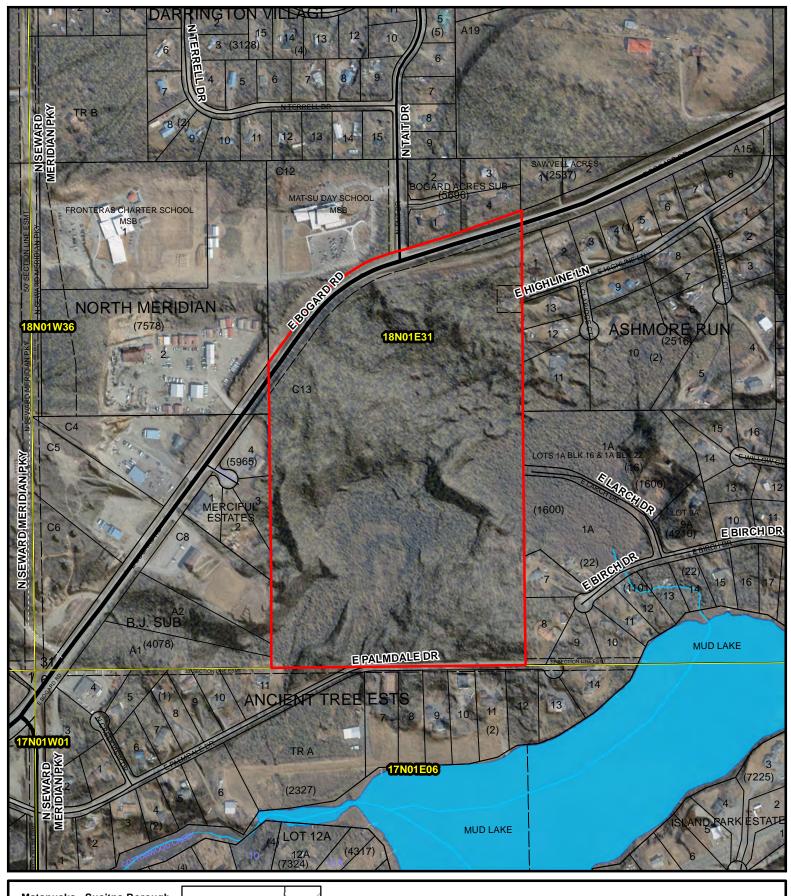


□ SELECTED PARCEL

SITE 4 18N01E30B002 76.81 ACRES SCHOOL/ SHAW ELEMENTARY



ources: MSB GIS, MSB LRMD, AK DOT Projection: NAD 83 AK ST PLN Z4 Location: SITE 4MSB



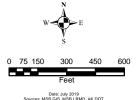


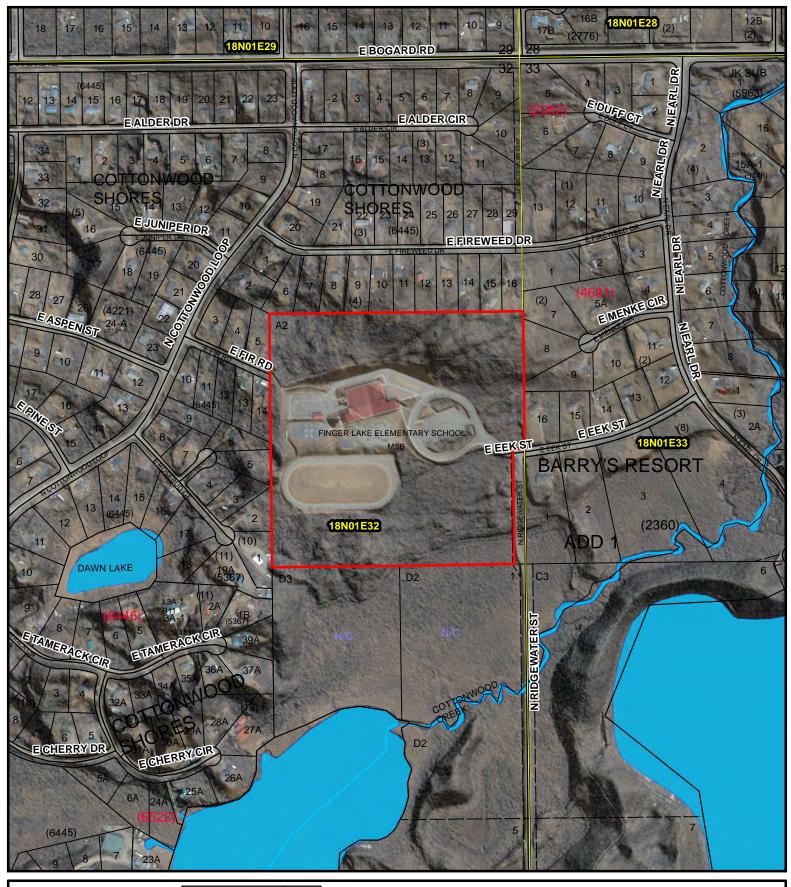




□ SELECTED PARCEL

SITE 5 18N01E31C013 55.92 ACRES





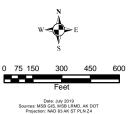


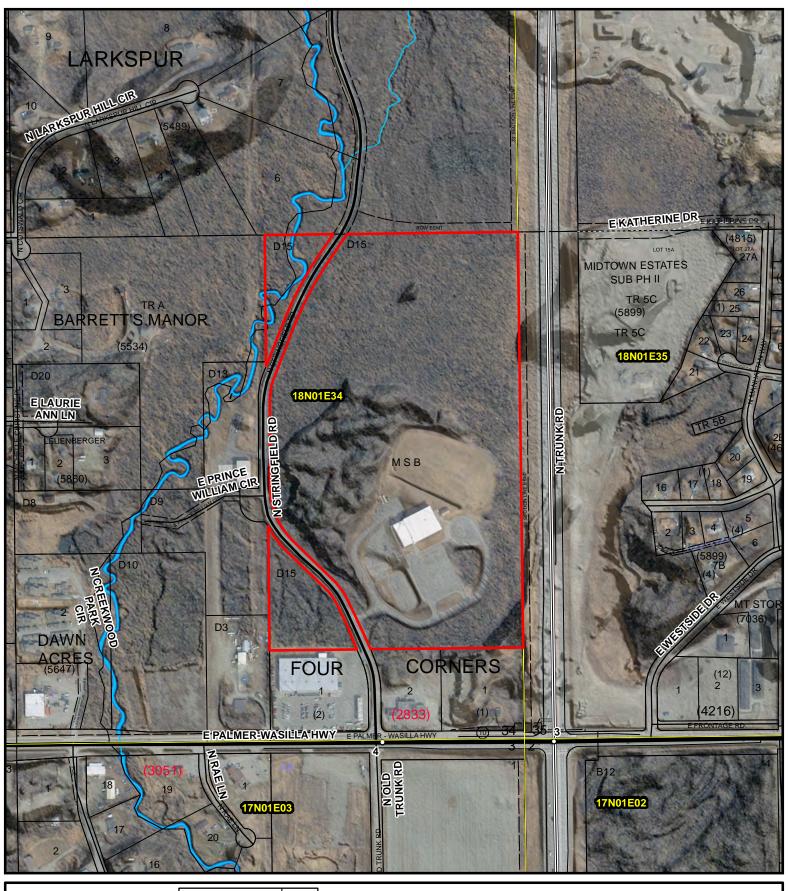




□ SELECTED PARCEL

SITE 6 18N01E32A002 39 ACRES SCHOOL/FINGER LAKE ELEM





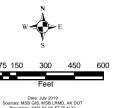






□ SELECTED PARCEL

SITE 7 18N01E34D015 63.94 ACRES SCHOOL/PIONEER PEAK ELEM



Highest and Best Use ranking, site overview, recommendation, (Total Matrix Score)

#1

Site 7.Stringfield (80/100)

HDL Engineering report states dual use of this property is feasible. Katherine Street connecting to Trunk Road is on the current CIP list for funding and may be able to be moved to the forefront if needed.

Possible Co-location of Mat-Su Central and Birchtree recommended.

#2

Site 8.Church-Seldon (90/100)

Subdivision of parent parcel will be required for school site. Recommendation is for potential 10-acre site to access from Church Road due to topographic constraints along Seldon.

Possible location for American Academy and/or Birchtree.

#3

Site 4.Shaw Elementary (80/100)

Access onto Wasilla-Fishhook and through subdivision to the east. Some topographic constraints which can be overcome, but will certainly add cost to development.

Possible location for American Academy or Birchtree.

#4

Site 5.Bogard-Tait (86/100)

Only the north portion has limited uplands. Access onto either major corridor of Bogard or Seward Meridian presents challenges and adds cost to development. Parcel currently classified as Public Recreation with access to Cottonwood Creek. Public will weigh in heavily on use of this parcel and additional traffic therefrom.

Possible location for American Academy or Birchtree.

#5

Site 3.Iditarod Elementary (82/100)

Only available ground is 3-acre +/- within north portion of parcel. There is a platted 60' wide PUE accessing Wasilla-Fishhook which may require DOT approval onto the state ROW. Additional acreage may be possible to acquire from adjacent private land owner – cost unknown.

Possible location for American Academy or Birchtree.

#6

Site 2. Tanaina Elementary (71/100)

Access from Lucille will may require additional improvements to the ROW. Significant topographic constraints exist within west portion of parcel.

Possible location for American Academy or Birchtree.

Not Recommended

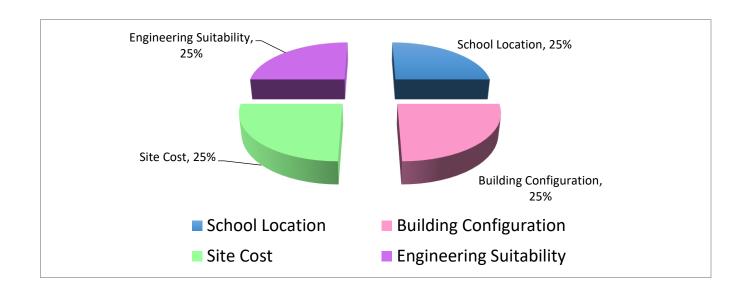
Site 1. Wyoming Drive (84/100)

While utilities and road accessibility exists, not centrally located and mostly wet. Access into the parcel and development will be challenging with added expense.

Site 6.Finger Lake Elementary (77/100)

Access may require upgrade to Eek Street. Little to no land available on school grounds for additional facilities, and property to the south is utilized for trails and access to Finger Lake. Contains areas of low-lying ground.

Shaw Elementary Site Suitability Criteria - Scored 3.31.21



Category	School Location	Building Configuration	Site Cost	Engineering Suitability
Category Score	25%	25%	25%	25%
10-Point Criteria	Center of Existing Student "Cloud"	Size ES=10Ac+1Ac/100Stu MS=20Ac+1Ac/100Stu HS=30Ac+1Ac/100Stu	Available	Access to Urban Infrastructure - Water, Sewer, Electrical
5-Point Criteria	Center of Existing Staff "Cloud"	Adjacency to Appropriate Road Classification ES=Collector MS=Minor Arterial HS=Minor Arterial	Road Construction Costs	Acceptable Soils / Building Foundation Conditions
3-Point Criteria	Proximity to Fire Response Equipment	Ease of Year-Round Access	Natural Gas Availability Cost	Avoids Natural Hazards - Flooding, Erosion
2-Point Criteria	Proximity to Future Growth	Acceptable Topography	Broadband Access Cost	Acceptable Seismic Conditions
1-Point Criteria	Proximity to Other Community Facilities	Positive Solar Orientation Possible	Grading Costs	Acceptable Drainage
1-Point Criteria	Separation from Social Hazards	Acceptable Protection from Elements (Wind)	Water Development Costs	Acceptable Permafrost Stability
1-Point Criteria	Separation from Hazardous Materials Conduits	Nominal Demolition / Excavation Needs	Sewage Development Costs	Not Susceptible to Forest Fire (Avoidance of Spruce Beetle Infestations)
1-Point Criteria	Access to Outdoor Recreation / Learning Opportunities	Joint Development Opportunities	Electric Development Costs	All Permiting Viable
1-Point Criteria	Access to Cultural Resources	Access to Pedestrian Facilities	Telephone Development Costs	Acceptable Zoning

<u>School Location Issues - 25 Points Possible</u> <u>Shaw Elementary</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>	
	Site is less than 10 percent of the distance away from the centroid of the students to be served by the school using the distance from the centroid of the "student cloud" to the edge of the cloud.	10 Points	
	Site is less than 20 percent of the distance away from the centroid of the students to be served.	8 Points	
Center of Existing	Site is less than 30 percent of the distance away from the centroid of the students to be served.	6 Points	
Student "Cloud"	Site is less than 40 percent of the distance away from the centroid of the students to be served.	4 Points	4
	Site is less than 50 percent of the distance away from the centroid of the students to be served.	2 Points	
	Site is more than 50 percent of the distance away from the centroid of the students to be served.	0 Points	
	Site is between 10-30 percent of the distance away from the centroid of the staff to be served.	3 Points	
Center of	Site is between 31-50 percent of the distance away from the centroid of the staff to be served.	2 Points	2
Existing Staff "Cloud"	Site is less than 50-75 percent of the distance away from the centroid of the staff to be served.	1 Point	
	Site is more than 75 percent of the distance away from the centroid of the staff to be served.	0 Points	
	Site is within municipal boundary of Palmer or Wasilla	3 Points	
Proximity to	Site is within seven minute fire response service time.	2 Points	
Fire Response Equipment	Site is within eight to fifteen minute fire response service time.	1 Point	1
_4	Site is beyond fifteen minute fire response service time.	0 Points	
	Service area for site includes actively developing subdivisions and vacant residential land amounting to 40% of the land area of the school zone.	3 Points	3
Proximity to	Service area for site includes actively developing subdivisions and vacant residential land amounting to 20-39% of the land area of the school zone.	2 points	
Future Growth	Service area for site includes vacant residential land amounting to 20% of the land area of the school zone.	1 Point	
	Service area for site does not include actively developing subdivisions or vacant residential land.	0 Points	
Sonaration from	Site is not within 2,000 feet separation from a highway, railroad or pipeline transporting hazardous materials.	2 Point	2
Separation from Hazardous Materials	Site is not within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials	1 Point	
Conduits	Site is within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials.	0 Points	
Separation from	Site is not within 1,000 feet separation from an adult business, convenience store or other social hazard.	1 Point	1
Social Hazards	Site is within 1,000 feet separation from an adult business, convenience store or other social hazard.	0 Points	
Access to	Site is within a ten minute walk of Parks, Trails or Other Outdoor Recreation /	45]
Outdoor Recreation /	Learning Opportunities. Site is not within a ten minute walk of Parks, Trails or Other Outdoor Recreation /	1 Point	
Learning Opportunities	Learning Opportunities.	0 Points	0
Access to	Site is within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	1 Point	
Cultural Resources	Site is not within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	0 Points	0
Proximity to	Site is within ten minute walk of Parks, Libraries, or other Community Facilities.	1 Point	-
Other Community	Site is not within ten minute walk of Parks, Libraries, or other Community Facilities.	0 Points	0
Facilities	·		

<u>Building Configuration Issues - 25 Points Possible</u> <u>Shaw Elementary</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>	
	Site complies with size requirements	10 Points	10
Size	Site is within 98% of size requirements	8 Points	
ES=10Ac+1Ac/100Stu	Site is within 96% of size requirements	6 Points	
MS=20Ac+1Ac/100Stu	Site is within 94% of size requirements	4 Points	
HS=30Ac+1Ac/100Stu	Site is within 92% of size requirements	2 Points	
	Site is less than 92% of size requirements	0 Points	
	Site is immediately adjacent to the desired road category.	5 Points	5
Adjacency to	Site is within one land parcel of the desired road category.	4 Points	
Appropriate Road Classification	Site is within two land parcels of the desired road category.	3 Points	
ES=Collector MS=Minor Arterial	Site is adjacent to a different road category than desired, but still deemed acceptable by staff.	2 Points	
HS=Minor Arterial	Site is within three land parcels of the desired road category.	1 Point	
	Site does not meet requirements.	0 Points	
		•	
	Site is served by highways and major roads that have existing year-round maintenance.	2 Points	2
Ease of Year-Round Access	Site is served by highways and major roads that require slight adjustment of year-round maintenance patterns and schedules, but no extension of service.	1 Points	
	Site requires extension of maintenance service as determined by staff.	0 Point	
	Site requires no overlot grading to achieve desired grade.	2 Points	
Acceptable Topography	Site requires minor overlot grading to achieve desired grade as determined by staff and / or facility design.	1 Point	
тородгарну	Site requires major overlot grading or results in grades in excess of those desired for facility design as determined by staff.	0 Points	0
Access to Pedestrian Facilities	Site has immediate access to significant sidewalk network or pedestrian trail network.	2 Points	
racilities	Site does not have access to sidewalks or trails.	0 Points	0
Positive Solar	Site presents opportunity for facility orientation satisfying passive solar design goals as determined by staff.	1 Point	1
Orientation Possible	Site does not present opportunity for passive solar facility orientation.	0 Points	
	, , , , , , , , , , , , , , , , , , , ,		
Acceptable Protection	Site presents opportunity for facility orientation satisfying wind protection design goals as determined by staff.	1 Point	1
from Elements (Wind)	Site does not present opportunity for protection from wind.	0 Points	
	1		
Nominal Demolition /	Site does not include structures that require demolition or significant topographical irregularities.	1 Point	1
Excavation Needs	Site includes structures that require demolition or significant topographical irregularities requiring grading.	0 Points	
Joint Development	Site presents opportunity for joint development or use between MSB School District and Borough or other agency.	1 Point	1
Opportunities	No joint development opportunities.	0 Points	
	je development opportuniteor	0.0	

<u>Site Cost Issues - 25 Points Possible</u> <u>Shaw Elementary</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>	
	Site is owned by the Borough or can be donated.	10 Points	1
	Site is available within appraised value.	8 Points	
	Site is available within 105% of appraised value.	6 Points	
Available	Site is available within 110% of appraised value.	4 Points	
	• • • • • • • • • • • • • • • • • • • •	2 Points	
	Site is available within 115% of appraised value.		
	Site cost is in excess of 115% of appraised value.	0 Points	
	Site is adjacent to desired road category and requires only site access driveways.	5 Points	
	Site is two hundred feet away from desired road category and requires nominal road construction costs for access.	4 Points	
Road	Site is four hundred feet away from desired road category and requires reasonable road construction costs for access.	3 Points	
Construction Costs	Site is six hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	2 Points	
	Site is eight hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	1 Point	
	Site is one thousand or more feet away from desired road category and requires significant road construction costs.	0 Points	
	Site is adjacent to necessary ass lines and only requires normal		
	Site is adjacent to necessary gas lines and only requires normal tapping costs.	2 Points	
Natural Gas Availability Cost	Site is within four hundred feet of necessary gas lines and requires nominal line extension costs as deemed acceptable by staff.	1 Point	
	Site requires significant gas line extension costs as determined by staff or does not have gas available to the site.	0 Points	
	Grading costs are normal given construction expectations as		
	determined by staff.	2 Point	
Grading Costs	Grading costs are constrained by existing soil conditions given construction expectations determined by staff	1 point	
	Grading costs are excessive given construction expectations as determined by staff.	0 Points	
	Water development costs are normal given construction		
Water	expectations as determined by staff.	2 Point	
Development Costs	Water development costs are constrained by existing conditions given construction expectations determined by staff	1 point	
	Water development costs are excessive given construction expectations as determined by staff.	0 Points	
Sewage	Sewage development costs are normal given construction expectations as determined by staff.	1 Point	
Development Costs	Sewage development costs are excessive given construction expectations as determined by staff.	0 Points	
Electric Development	Electric development costs are normal given construction expectations as determined by staff.	1 Point	
Costs	Electric development costs are excessive given construction expectations as determined by staff.	0 Points	
	Talanhana davalanmant sasta ara narmal siver saraturetisa		
Telephone Development	Telephone development costs are normal given construction expectations as determined by staff.	1 Point	
Costs	Telephone development costs are excessive given construction expectations as determined by staff.	0 Points	
Broadband	Site is adjacent to broadband access lines and only requires nominal linkage costs.	1 Points	
Access Cost	Site is remote from broadband access lines and requires		

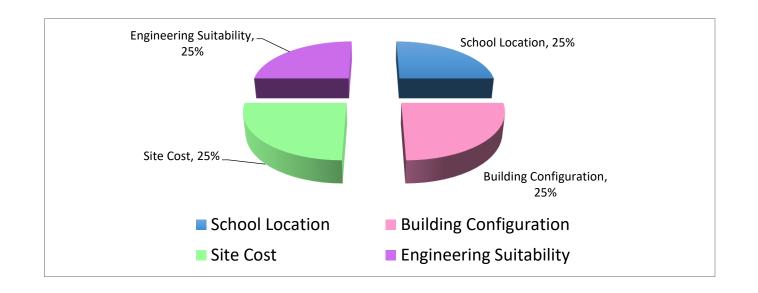
<u>Engineering Suitability Issues - 25 Points Possible</u> <u>Shaw Elementary</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>	
	Site is immediately adjacent to urban infrastructure.	10 Points	
	Site is within two hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	8 Points	8
Access to Urban Infrastructure -	Site is within four hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	6 Points	
Water, Sewer, Electrical	Site is within six hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	4 Points	
	Site is within eight hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	2 Points	
	Site requires unacceptable urban infrastructure extension costs.	0 Points	
	No soil / building foundation challenges exist. Site is completely		
	outside of identified problem soil zones.	5 Points	5
	Site may be slightly within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with nominal cost as determined by staff.	4 Points	
Acceptable Soils / Building Foundation	Site may be partially within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with reasonable cost as determined by staff.	3 Points	
Conditions	Site is well within problem soil zones. Soil / building foundation challenges exist, but can be addressed with acceptable cost as determined by staff.	2 Points	
	Site is predominantly within problem soil zones. Soil / building foundation challenges exist, further soil testing is warranted, but site remains viable as determined by staff.	1 Point	
	Site does not meet requirements.	0 Points	
			_
	No natural hazard, erosion, and flooding conditions exist.	3 Points	3
Avoids Natural Hazards -	Minor natural hazard conditions exist, but do not result in significant hazard or mitigation cost as determined by staff.	2 Points	
Flooding, Erosion	Natural hazard conditions exist. Further evaluation or study is required, but site remains viable as determined by staff.	1 Point	
	Site does not meet requirements.	0 Points	
Accontable	No seismic issues exist.	2 Points	2
Acceptable Seismic	Seismic conditions meet appropriate governmental requirements.	1 Point	_
Conditions	Site does not meet requirements.	0 Points	
Acceptable	Drainage conditions meet appropriate governmental requirements.	1 Point	1
Drainage	Site does not meet requirements.	0 Points	
Acceptable Permafrost	Permafrost stability conditions meet appropriate governmental requirements.	1 Point	1
Stability	Site does not meet requirements.	0 Points	
Not Susceptible to Forest Fire	Forest fire susceptibility conditions meet appropriate governmental requirements.	1 Point	1
(Avoidance of Spruce Beetle Infestations)	Site does not meet requirements.	0 Points	
All Permitting Viable	All permitting is viable and meets appropriate governmental requirements.	1 Point	1
VIGDIC	Site does not meet requirements.	0 Points	
Assautabl	Zoning issues of site most appropriate governmental requirements	1 Point	4
Acceptable Zoning	Zoning issues of site meet appropriate governmental requirements. Site does not meet requirements.	0 Points	1
_0,,,,,	Jite does not meet requirements.	O FOILIG	

ENGINEERING NOTES: TOTAL POINTS 23

ROADWAY ACCESS ALONG SECTION LINE FROM NEW SCHOOL TO WASILLA-FISHHOK RD. SHOULD BE CONSTRUCTED TO MSB MINOR COLLECTOR ROAD STANDARDS TO COMPLY WITH OSHP. NEW ROAD WILL ALSO CARRY TRAFFIC FOR SHAW AND IT SHOULD BE ASSUMED THAT A TURN LANE WILL BE REQUIRED BY DOT&PF ON WASILLA-FISHHOOK.

Stringfield Site Suitability Criteria - Scored 1.29.21



Category	School Location	Building Configuration	Site Cost	Engineering Suitability
Category Score	25%	25%	25%	25%
10-Point Criteria	Center of Existing Student "Cloud"	Size ES=10Ac+1Ac/100Stu MS=20Ac+1Ac/100Stu HS=30Ac+1Ac/100Stu	Available	Access to Urban Infrastructure - Water, Sewer, Electrical
5-Point Criteria	Center of Existing Staff "Cloud"	Adjacency to Appropriate Road Classification ES=Collector MS=Minor Arterial HS=Minor Arterial	Road Construction Costs	Acceptable Soils / Building Foundation Conditions
3-Point Criteria	Proximity to Fire Response Equipment	Ease of Year-Round Access	Natural Gas Availability Cost	Avoids Natural Hazards - Flooding, Erosion
2-Point Criteria	Proximity to Future Growth	Acceptable Topography	Broadband Access Cost	Acceptable Seismic Conditions
1-Point Criteria	Proximity to Other Community Facilities	Positive Solar Orientation Possible	Grading Costs	Acceptable Drainage
1-Point Criteria	Separation from Social Hazards	Acceptable Protection from Elements (Wind)	Water Development Costs	Acceptable Permafrost Stability
1-Point Criteria	Separation from Hazardous Materials Conduits	Nominal Demolition / Excavation Needs	Sewage Development Costs	Not Susceptible to Forest Fire (Avoidance of Spruce Beetle Infestations)
1-Point Criteria	Access to Outdoor Recreation / Learning Opportunities	Joint Development Opportunities	Electric Development Costs	All Permiting Viable
1-Point Criteria	Access to Cultural Resources	Access to Pedestrian Facilities	Telephone Development Costs	Acceptable Zoning

<u>School Location Issues - 25 Points Possible</u> <u>Stringfield</u>

<u>Criteria</u>	<u>Classification</u>	Possible Points	
	Site is less than 10 percent of the distance away from the centroid of the students to be served by the school using the distance from the centroid of the "student cloud" to the edge of the cloud.	10 Points	
	Site is less than 20 percent of the distance away from the centroid of the students to be served.	8 Points	8
Center of Existing	Site is less than 30 percent of the distance away from the centroid of the students to be served.	6 Points	
Student "Cloud"	Site is less than 40 percent of the distance away from the centroid of the students to be served.	4 Points	
	Site is less than 50 percent of the distance away from the centroid of the students to be served.	2 Points	
	Site is more than 50 percent of the distance away from the centroid of the students to be served.	0 Points	
	Site is between 10-30 percent of the distance away from the centroid of the staff to be served.	3 Points	
Center of	Site is between 31-50 percent of the distance away from the centroid of the staff to be served.	2 Points	2
Existing Staff "Cloud"	Site is less than 50-75 percent of the distance away from the centroid of the staff to be served.	1 Point	
	Site is more than 75 percent of the distance away from the centroid of the staff to be served.	0 Points	
	Site is within municipal boundary of Palmer or Wasilla	3 Points	3
Proximity to Fire Response	Site is within seven minute fire response service time.	2 Points	
Equipment	Site is within eight to fifteen minute fire response service time.	1 Point	
	Site is beyond fifteen minute fire response service time.	0 Points	
	Service area for site includes actively developing subdivisions and vacant residential land amounting to 40% of the land area of the school zone.	3 Points	3
Proximity to	Service area for site includes actively developing subdivisions and vacant residential land amounting to 20-39% of the land area of the school zone.	2 points	
Future Growth	Service area for site includes vacant residential land amounting to 20% of the land area of the school zone.	1 Point	
	Service area for site does not include actively developing subdivisions or vacant residential land.	0 Points	
	Site is not within 2,000 feet separation from a highway, railroad or pipeline]
Separation from	transporting hazardous materials.	2 Point	
Hazardous Materials	Site is not within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials	1 Point	
Conduits	Site is within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials.	0 Points	0
Separation from	Site is not within 1,000 feet separation from an adult business, convenience store or other social hazard.	1 Point	1
Social Hazards	Site is within 1,000 feet separation from an adult business, convenience store or other social hazard.	0 Points	
Access to Outdoor	Site is within a ten minute walk of Parks, Trails or Other Outdoor Recreation / Learning Opportunities.	1 Point	1
Recreation / Learning	Site is not within a ten minute walk of Parks, Trails or Other Outdoor Recreation / Learning Opportunities.	0 Points	
Opportunities		<u> </u>	j
Access to	Site is within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	1 Point	
Cultural Resources	Site is not within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	0 Points	0
Proximity to	Site is within ten minute walk of Parks, Libraries, or other Community Facilities.	1 Point	
Other Community Facilities	Site is not within ten minute walk of Parks, Libraries, or other Community Facilities.	0 Points	0
1 acilities		<u>I</u>	I

<u>Building Configuration Issues - 25 Points Possible</u> <u>Stringfield</u>

<u>Criteria</u>	<u>Classification</u>	Possible Points	
	Site complies with size requirements	10 Points	10
Size	Site is within 98% of size requirements	8 Points	
ES=10Ac+1Ac/100Stu	Site is within 96% of size requirements	6 Points	
MS=20Ac+1Ac/100Stu	Site is within 94% of size requirements	4 Points	
HS=30Ac+1Ac/100Stu	Site is within 92% of size requirements	2 Points	
	Site is less than 92% of size requirements	0 Points	
			_
A 45	Site is immediately adjacent to the desired road category.	5 Points	5
Adjacency to Appropriate Road	Site is within one land parcel of the desired road category.	4 Points	
Classification	Site is within two land parcels of the desired road category.	3 Points	
ES=Collector MS=Minor Arterial	Site is adjacent to a different road category than desired, but still deemed acceptable by staff.	2 Points	
HS=Minor Arterial	Site is within three land parcels of the desired road category.	1 Point	
	Site does not meet requirements.	0 Points	
	Site is served by highways and major roads that have existing year-round maintenance.	2 Points	2
Ease of Year-Round Access	Site is served by highways and major roads that require slight adjustment of year-round maintenance patterns and schedules, but no extension of service.	1 Points	
	Site requires extension of maintenance service as determined by staff.	0 Point	
	Site requires no overlot grading to achieve desired grade.	2 Points	
Acceptable Topography	Site requires minor overlot grading to achieve desired grade as determined by staff and / or facility design.	1 Point	
тородгарну	Site requires major overlot grading or results in grades in excess of those desired for facility design as determined by staff.	0 Points	0
Access to Pedestrian	Site has immediate access to significant sidewalk network or pedestrian trail network.	2 Points	
Facilities	Site does not have access to sidewalks or trails.	0 Points	0
Positive Solar	Site presents opportunity for facility orientation satisfying passive solar design goals as determined by staff.	1 Point	1
Orientation Possible	Site does not present opportunity for passive solar facility orientation.	0 Points	
	The state of the s		
	Site presents opportunity for facility orientation satisfying wind	4.5.4	
Acceptable Protection		1 Point	1
Acceptable Protection from Elements (Wind)	protection design goals as determined by staff. Site does not present opportunity for protection from wind.	1 Point 0 Points	1
	protection design goals as determined by staff.		1
	protection design goals as determined by staff.		
from Elements (Wind)	protection design goals as determined by staff. Site does not present opportunity for protection from wind. Site does not include structures that require demolition or significant	0 Points	
from Elements (Wind) Nominal Demolition /	protection design goals as determined by staff. Site does not present opportunity for protection from wind. Site does not include structures that require demolition or significant topographical irregularities. Site includes structures that require demolition or significant topographical irregularities requiring grading.	0 Points 1 Point	
from Elements (Wind) Nominal Demolition /	protection design goals as determined by staff. Site does not present opportunity for protection from wind. Site does not include structures that require demolition or significant topographical irregularities. Site includes structures that require demolition or significant	0 Points 1 Point	1

<u>Site Cost Issues - 25 Points Possible</u> <u>Stringfield</u>

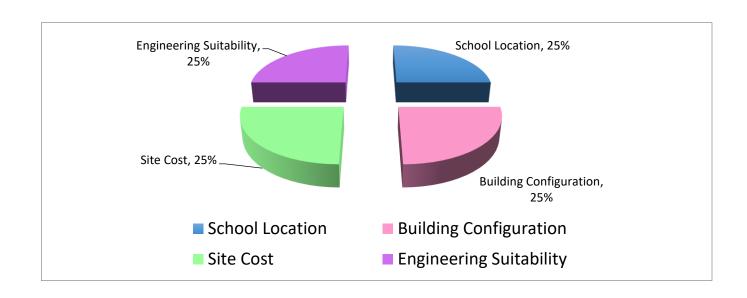
<u>Criteria</u>	<u>Classification</u>	Possible Points	
	Site is owned by the Borough or can be donated.	10 Points	•
	Site is available within appraised value.	8 Points	
A!I-!-!	Site is available within 105% of appraised value.	6 Points	
Available	Site is available within 110% of appraised value.	4 Points	
	Site is available within 115% of appraised value.	2 Points	
	Site cost is in excess of 115% of appraised value.	0 Points	
	Site is adjacent to desired road category and requires only site	5 Points	
	access driveways. Site is two hundred feet away from desired road category and requires nominal road construction costs for access.	4 Points	
	Site is four hundred feet away from desired road category and requires reasonable road construction costs for access.	3 Points	
Road Construction Costs	Site is six hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	2 Points	
	Site is eight hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	1 Point	
	Site is one thousand or more feet away from desired road category and requires significant road construction costs.	0 Points	
	Site is adjacent to necessary gas lines and only requires normal		
	tapping costs.	2 Points	
Natural Gas Availability Cost	Site is within four hundred feet of necessary gas lines and requires nominal line extension costs as deemed acceptable by staff.	1 Point	
	Site requires significant gas line extension costs as determined by staff or does not have gas available to the site.	0 Points	
	Grading costs are normal given construction expectations as determined by staff.	2 Point	
Grading Costs	Grading costs are constrained by existing soil conditions given construction expectations determined by staff	1 point	
	Grading costs are excessive given construction expectations as determined by staff.	0 Points	
	Water development costs are normal given construction		
	Water development costs are normal given construction expectations as determined by staff.	2 Point	
Water Development Costs	Water development costs are constrained by existing conditions given construction expectations determined by staff	1 point	
COSES	Water development costs are excessive given construction expectations as determined by staff.	0 Points	
			
Sewage Development	Sewage development costs are normal given construction expectations as determined by staff.	1 Point	
Costs	Sewage development costs are excessive given construction expectations as determined by staff.	0 Points	
	Electric development costs are normal given construction		
Electric Development	expectations as determined by staff.	1 Point	
Costs	Electric development costs are excessive given construction expectations as determined by staff.	0 Points	
	Telephone development costs are normal given construction		
Telephone Development	expectations as determined by staff.	1 Point	
Costs	Telephone development costs are excessive given construction expectations as determined by staff.	0 Points	
	Site is adjacent to broadband access lines and only requires	1 Points	
Broadband Access Cost	nominal linkage costs. Site is remote from broadband access lines and requires	0 Points	
	significant extension costs as determined by staff.	U PUIILS	

<u>Engineering Suitability Issues - 25 Points Possible</u> <u>Stringfield</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>
	Site is immediately adjacent to urban infrastructure.	10 Points
	Site is within two hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	8 Points
Access to Urban Infrastructure -	Site is within four hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	6 Points
Water, Sewer, Electrical	Site is within six hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	4 Points
	Site is within eight hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	2 Points
	Site requires unacceptable urban infrastructure extension costs.	0 Points
	No soil / building foundation challenges exist. Site is completely	5 Points
	outside of identified problem soil zones. Site may be slightly within problem soil zones. Minor soil / building	
	foundation challenges exist, but can be addressed with nominal cost as determined by staff.	4 Points
Acceptable Soils / Building Foundation	Site may be partially within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with reasonable cost as determined by staff.	3 Points
Conditions	Site is well within problem soil zones. Soil / building foundation challenges exist, but can be addressed with acceptable cost as determined by staff.	2 Points
	Site is predominantly within problem soil zones. Soil / building foundation challenges exist, further soil testing is warranted, but site remains viable as determined by staff.	1 Point
	Site does not meet requirements.	0 Points
	No natural hazard, erosion, and flooding conditions exist.	3 Points
Avoids Natural Hazards -	Minor natural hazard conditions exist, but do not result in significant hazard or mitigation cost as determined by staff.	2 Points
Flooding, Erosion	Natural hazard conditions exist. Further evaluation or study is required, but site remains viable as determined by staff.	1 Point
	Site does not meet requirements.	0 Points
Acceptable	No seismic issues exist.	2 Points
Seismic	Seismic conditions meet appropriate governmental requirements.	1 Point
Conditions	Site does not meet requirements.	0 Points
Acceptable	Drainage conditions meet appropriate governmental requirements.	1 Point
Drainage	Site does not meet requirements.	0 Points
	Downofuset stability and discourse to a section of the section of	
Acceptable Permafrost	Permafrost stability conditions meet appropriate governmental requirements.	1 Point
Stability	Site does not meet requirements.	0 Points
Not Susceptible to Forest Fire (Avoidance of	Forest fire susceptibility conditions meet appropriate governmental requirements.	1 Point
Spruce Beetle Infestations)	Site does not meet requirements.	0 Points
All Permitting	All permitting is viable and meets appropriate governmental requirements.	1 Point
Viable	Site does not meet requirements.	0 Points
Acceptable	Zoning issues of site meet appropriate governmental requirements.	1 Point
Zoning	Site does not meet requirements.	0 Points

SEE HDL REPORT TOTAL POINTS 20

Church-Seldon Site Suitability Criteria - Scored 3.31.21



Category	School Location	Building Configuration	Site Cost	Engineering Suitability
Category Score	25%	25%	25%	25%
10-Point Criteria	Center of Existing Student "Cloud"	Size ES=10Ac+1Ac/100Stu MS=20Ac+1Ac/100Stu HS=30Ac+1Ac/100Stu	Available	Access to Urban Infrastructure - Water, Sewer, Electrical
5-Point Criteria	Center of Existing Staff "Cloud"	Adjacency to Appropriate Road Classification ES=Collector MS=Minor Arterial HS=Minor Arterial	Road Construction Costs	Acceptable Soils / Building Foundation Conditions
3-Point Criteria	Proximity to Fire Response Equipment	Ease of Year-Round Access	Natural Gas Availability Cost	Avoids Natural Hazards - Flooding, Erosion
2-Point Criteria	Proximity to Future Growth	Acceptable Topography	Broadband Access Cost	Acceptable Seismic Conditions
1-Point Criteria	Proximity to Other Community Facilities	Positive Solar Orientation Possible	Grading Costs	Acceptable Drainage
1-Point Criteria	Separation from Social Hazards	Acceptable Protection from Elements (Wind)	Water Development Costs	Acceptable Permafrost Stability
1-Point Criteria	Separation from Hazardous Materials Conduits	Nominal Demolition / Excavation Needs	Sewage Development Costs	Not Susceptible to Forest Fire (Avoidance of Spruce Beetle Infestations)
1-Point Criteria	Access to Outdoor Recreation / Learning Opportunities	Joint Development Opportunities	Electric Development Costs	All Permiting Viable
1-Point Criteria	Access to Cultural Resources	Access to Pedestrian Facilities	Telephone Development Costs	Acceptable Zoning

<u>School Location Issues - 25 Points Possible</u> <u>Church-Seldon</u>

<u>Criteria</u>	<u>Classification</u>	Possible Points	
	Site is less than 10 percent of the distance away from the centroid of the students to be served by the school using the distance from the centroid of the "student cloud" to the edge of the cloud.	10 Points	
	Site is less than 20 percent of the distance away from the centroid of the students to be served.	8 Points	
Center of Existing	Site is less than 30 percent of the distance away from the centroid of the students to be served.	6 Points	6
Student "Cloud"	Site is less than 40 percent of the distance away from the centroid of the students to be served.	4 Points	
	Site is less than 50 percent of the distance away from the centroid of the students to be served.	2 Points	
	Site is more than 50 percent of the distance away from the centroid of the students to be served.	0 Points	
	Site is between 10-30 percent of the distance away from the centroid of the staff to be served.	3 Points	
Center of	Site is between 31-50 percent of the distance away from the centroid of the staff to be served.	2 Points	2
Existing Staff "Cloud"	Site is less than 50-75 percent of the distance away from the centroid of the staff to be served.	1 Point	
	Site is more than 75 percent of the distance away from the centroid of the staff to be served.	0 Points	
	Site is within municipal boundary of Palmer or Wasilla	3 Points	3
Proximity to	Site is within municipal boundary of Fairner of Washia Site is within seven minute fire response service time.	2 Points]
Fire Response Equipment	Site is within eight to fifteen minute fire response service time.	1 Point	
	Site is beyond fifteen minute fire response service time.	0 Points	I
	Service area for site includes actively developing subdivisions and vacant residential land amounting to 40% of the land area of the school zone.	3 Points	3
Proximity to	Service area for site includes actively developing subdivisions and vacant residential land amounting to 20-39% of the land area of the school zone.	2 points	
Future Growth	Service area for site includes vacant residential land amounting to 20% of the land area of the school zone.	1 Point	
	Service area for site does not include actively developing subdivisions or vacant residential land.	0 Points	
Separation from	Site is not within 2,000 feet separation from a highway, railroad or pipeline transporting hazardous materials.	2 Point	2
Hazardous Materials	Site is not within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials	1 Point	
Conduits	Site is within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials.	0 Points	
Separation from	Site is not within 1,000 feet separation from an adult business, convenience store or other social hazard.	1 Point	1
Social Hazards	Site is within 1,000 feet separation from an adult business, convenience store or other social hazard.	0 Points	
Access to Outdoor	Site is within a ten minute walk of Parks, Trails or Other Outdoor Recreation / Learning Opportunities.	1 Point	1
Recreation / Learning Opportunities	Site is not within a ten minute walk of Parks, Trails or Other Outdoor Recreation / Learning Opportunities.	0 Points	
	Site is within a ten minute walk of Museums, Cultural Centers or Other Cultural	15	
Access to Cultural	Resources.	1 Point	
Resources	Site is not within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	0 Points	0
Proximity to Other	Site is within ten minute walk of Parks, Libraries, or other Community Facilities.	1 Point	
Community Facilities	Site is not within ten minute walk of Parks, Libraries, or other Community Facilities.	0 Points	0

<u>Building Configuration Issues - 25 Points Possible</u> <u>Church-Seldon</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>	
	Site complies with size requirements	10 Points	10
Size	Site is within 98% of size requirements	8 Points	
ES=10Ac+1Ac/100Stu	Site is within 96% of size requirements	6 Points	
MS=20Ac+1Ac/100Stu	Site is within 94% of size requirements	4 Points	
HS=30Ac+1Ac/100Stu	Site is within 92% of size requirements	2 Points	
	Site is less than 92% of size requirements	0 Points	
	Site is immediately adjacent to the desired road category.	5 Points	5
Adjacency to	Site is within one land parcel of the desired road category.	4 Points	
Appropriate Road Classification	Site is within two land parcels of the desired road category.	3 Points	
ES=Collector MS=Minor Arterial	Site is adjacent to a different road category than desired, but still deemed acceptable by staff.	2 Points	
HS=Minor Arterial	Site is within three land parcels of the desired road category.	1 Point	
	Site does not meet requirements.	0 Points	
		_	
	Site is served by highways and major roads that have existing year-round maintenance.	2 Points	2
Ease of Year-Round Access	Site is served by highways and major roads that require slight adjustment of year-round maintenance patterns and schedules, but no extension of service.	1 Points	
	Site requires extension of maintenance service as determined by staff.	0 Point	
	Site requires no overlot grading to achieve desired grade.	2 Points	
Acceptable Topography	Site requires minor overlot grading to achieve desired grade as determined by staff and / or facility design.	1 Point	1
тородгарну	Site requires major overlot grading or results in grades in excess of those desired for facility design as determined by staff.	0 Points	
Access to Pedestrian	Site has immediate access to significant sidewalk network or pedestrian trail network.	2 Points	
Facilities	Site does not have access to sidewalks or trails.	0 Points	0
Positive Solar	Site presents opportunity for facility orientation satisfying passive solar design goals as determined by staff.	1 Point	1
Orientation Possible	Site does not present opportunity for passive solar facility orientation.	0 Points	
Acceptable Protection	Site presents opportunity for facility orientation satisfying wind protection design goals as determined by staff.	1 Point	1
from Elements (Wind)	Site does not present opportunity for protection from wind.	0 Points	
	, , , ,		
Nominal Demolition /	Site does not include structures that require demolition or significant topographical irregularities.	1 Point	1
Excavation Needs	Site includes structures that require demolition or significant topographical irregularities requiring grading.	0 Points	
Joint Development	Site presents opportunity for joint development or use between MSB School District and Borough or other agency.	1 Point	1
Opportunities	No joint development opportunities.	0 Points	

<u>Site Cost Issues - 25 Points Possible</u> <u>Church-Seldon</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>
	Site is owned by the Borough or can be donated.	10 Points
	Site is available within appraised value.	8 Points
A! -	Site is available within 105% of appraised value.	6 Points
Available	Site is available within 110% of appraised value.	4 Points
	Site is available within 115% of appraised value.	2 Points
	Site cost is in excess of 115% of appraised value.	0 Points
	Site is adjacent to desired road category and requires only site access driveways.	5 Points
	Site is two hundred feet away from desired road category and requires nominal road construction costs for access.	4 Points
Dood	Site is four hundred feet away from desired road category and requires reasonable road construction costs for access.	3 Points
Road Construction Costs	Site is six hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	2 Points
	Site is eight hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	1 Point
	Site is one thousand or more feet away from desired road category and requires significant road construction costs.	0 Points
	Site is adjacent to necessary gas lines and only requires normal tapping costs.	2 Points
Natural Gas Availability Cost	Site is within four hundred feet of necessary gas lines and requires nominal line extension costs as deemed acceptable by staff.	1 Point
	Site requires significant gas line extension costs as determined by staff or does not have gas available to the site.	0 Points
	Grading costs are normal given construction expectations as determined by staff.	2 Point
Grading Costs	Grading costs are constrained by existing soil conditions given construction expectations determined by staff	1 point
	Grading costs are excessive given construction expectations as determined by staff.	0 Points
Water	Water development costs are normal given construction expectations as determined by staff.	2 Point
Development Costs	Water development costs are constrained by existing conditions given construction expectations determined by staff	1 point
Costs	Water development costs are excessive given construction expectations as determined by staff.	0 Points
Sewage Development	Sewage development costs are normal given construction expectations as determined by staff.	1 Point
Costs	Sewage development costs are excessive given construction expectations as determined by staff.	0 Points
	Electric development costs are named siver as attriction	
Electric Development	Electric development costs are normal given construction expectations as determined by staff.	1 Point
Costs	Electric development costs are excessive given construction expectations as determined by staff.	0 Points
	Talankana davalannasit sasta sus usus di i	
Telephone	Telephone development costs are normal given construction expectations as determined by staff.	1 Point
Development Costs	Telephone development costs are excessive given construction expectations as determined by staff.	0 Points
	Site is adjacent to broadband access lines and only requires	1 Points
Broadband	nominal linkage costs.	

<u>Engineering Suitability Issues - 25 Points Possible</u> <u>Church-Seldon</u>

<u>Criteria</u>	<u>Classification</u>	<u>Possible</u> <u>Points</u>	
	Site is immediately adjacent to urban infrastructure.	10 Points	1
	Site is within two hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	8 Points	
Access to Urban Infrastructure -	Site is within four hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	6 Points	
Water, Sewer, Electrical	Site is within six hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	4 Points	
	Site is within eight hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	2 Points	
	Site requires unacceptable urban infrastructure extension costs.	0 Points	
	No soil / building foundation shallonges oviat. Cita is completely		
	No soil / building foundation challenges exist. Site is completely outside of identified problem soil zones.	5 Points	5
	Site may be slightly within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with nominal cost as determined by staff.	4 Points	
Acceptable Soils / Building Foundation	Site may be partially within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with reasonable cost as determined by staff.	3 Points	
Conditions	Site is well within problem soil zones. Soil / building foundation challenges exist, but can be addressed with acceptable cost as determined by staff.	2 Points	
	Site is predominantly within problem soil zones. Soil / building foundation challenges exist, further soil testing is warranted, but site remains viable as determined by staff.	1 Point	
	Site does not meet requirements.	0 Points	
	No natural hazard, erosion, and flooding conditions exist.	3 Points	3
Avoids Natural Hazards -	Minor natural hazard conditions exist, but do not result in significant hazard or mitigation cost as determined by staff.	2 Points	
Flooding, Erosion	Natural hazard conditions exist. Further evaluation or study is required, but site remains viable as determined by staff.	1 Point	
	Site does not meet requirements.	0 Points	
	No seismic issues exist.	2 Points	2
Acceptable Seismic	Seismic conditions meet appropriate governmental requirements.	1 Points	
Conditions	Site does not meet requirements.	0 Points	
	Site does not meet requirements.	o i onics	
Acceptable	Drainage conditions meet appropriate governmental requirements.	1 Point	1
Drainage	Site does not meet requirements.	0 Points	
Acceptable Permafrost	Permafrost stability conditions meet appropriate governmental requirements.	1 Point	1
Stability	Site does not meet requirements.	0 Points	
Not Susceptible to Forest Fire	Forest fire susceptibility conditions meet appropriate governmental requirements.	1 Point	-
(Avoidance of Spruce Beetle Infestations)	Site does not meet requirements.	0 Points	
All Permitting	All permitting is viable and meets appropriate governmental requirements.	1 Point	1
Viable	Site does not meet requirements.	0 Points	
Acceptable	Zoning issues of site meet appropriate governmental requirements.	1 Point	
Zoning	Site does not meet requirements.	0 Points	

ENGINEERING NOTES: TOTAL POINTS 25

ONSITE WELL/SEPTIC REQUIRED. VERY DENSE, SILTY SOILS WHICH MAY BE DIFFFICULT FOR SEPTIC SYSTEM. WETLANDS EXIST IN NE CORNER WITH SEASONAL GROUNDWATER SEPAGE (SURFACE/UNDERGROUND WATER EXPERIENCED BY STAFF). CHURCH RD IS A STATE-OWNED ROW AND WILL REQUIRE FLASHING AMBER SCHOOL ZONE LIGHTS AND TURN LANES.

MIXED-USE CAMPUS PRELIMINARY SITE EVALUATION STUDY

Prepared for:



Matanuska-Susitna Borough School District 501 North Gulkana Street Palmer, Alaska 99645

Prepared by:



HDL Engineering Consultants, LLC 202 West Elmwood Avenue Palmer, Alaska 99645

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1.0 Introduction

The Matanuska-Susitna Borough School District (District) has experienced increasing costs associated with the leasing of buildings for school facilities as well as increased student transportation costs directly related to the lack of competing bus maintenance facilities in the District area. In an effort to alleviate costs and meet future District growth, District staff tasked HDL Engineering Consultants, LLC, (HDL) with preparing a Mixed-Use Campus Preliminary Site Evaluation Study (Study) to analyze the suitability of two Matanuska Susitna Borough (Borough)-owned properties as possible sites for Mat-Su Central School, a charter school, and a District-owned bus maintenance facility.

For evaluation of the sites for the schools, the footprint of the existing Valley Pathways High School campus is used per District staff direction. The Valley Pathways High School existing campus provides a comparable template for approximate building size, outdoor space, and parking requirements. A template for a student transportation facility, including bus maintenance and parking, is based on the current, privately-owned student transportation facility located on Palmer-Wasilla Highway. Sizing for a new bus maintenance building is based on the *School Bus Maintenance Facility Planner* (Public Schools of North Carolina, February 2011) and the *Wyoming School Facilities Commission School Bus Maintenance and Parking Facility Design Guidelines* (OZ Architecture, Inc. and Engineering Economics, Inc. updated June 2013).

Both parcels have been evaluated based on existing conditions, utilities, soils, topography, environmental, zoning, setbacks, and surrounding area. Alternatives, including figures showing configurations of possible facilities located on both parcels, are presented at the end of the report.

1



2.0 Sites

2.1 PARCEL 'A'

2.1.1 Existing Conditions

Parcel 'A' is owned by the Borough and located at 1959 North Stringfield Road, Palmer, between Stringfield Road to the west and Trunk Road to the east, as shown in Figure 1. The parcel is located between the cities of Palmer and Wasilla making it centrally located for the majority of the District's student population. Palmer-Wasilla Highway, located within approximately one-third mile to the south, and Bogard Road, located approximately one-half mile to the north, are both major east-west travel corridors for the Borough core area. Trunk Road on the east side of the parcel is a north-south arterial.

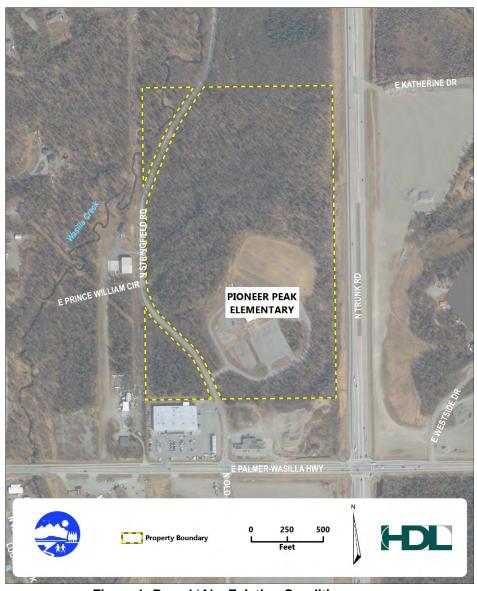


Figure 1: Parcel 'A' - Existing Conditions

Parcel 'A' consists of 65.59 acres, with Stringfield Road cutting diagonally across both the southwest and northwest corners of the property. Wasilla Creek also crosses the northwest corner of the parcel to the north of Stringfield Road.

Pioneer Peak Elementary is located on the southern portion of the parcel, leaving approximately 27 acres of land that could be utilized for new facilities on the northern portion. The northern portion is undeveloped and forested with a mix of spruce and birch trees.

Currently the only access to the parcel is the driveway to Pioneer Peak Elementary from Stringfield Road. However, Stringfield Road is in poor condition with minimal shoulders and is already congested before and after school hours. The Borough has plans to develop Katherine Drive (also known as Trunk Road Connector) along the north property line to connect Trunk Road and Stringfield Road, including a signalized intersection at Trunk Road. Once constructed, Katherine Drive would give any new facility on the parcel access to Trunk Road. It is unlikely the Alaska Department of Transportation and Public Facilities (DOT&PF) would allow a driveway from Parcel 'A' connecting directly to Trunk Road. Any new facility on the parcel would require access from Katherine Drive.

2.1.2 Utilities

A summary of utilities has been compiled using as-built information provided by Enstar Natural Gas (Enstar), Matanuska Electric Association (MEA), Matanuska Telephone Association (MTA), District, and the Alaska State Department of Natural Resources (DNR). The existing utility information is described below. Approximate utility locations are shown in Figure 2.

3



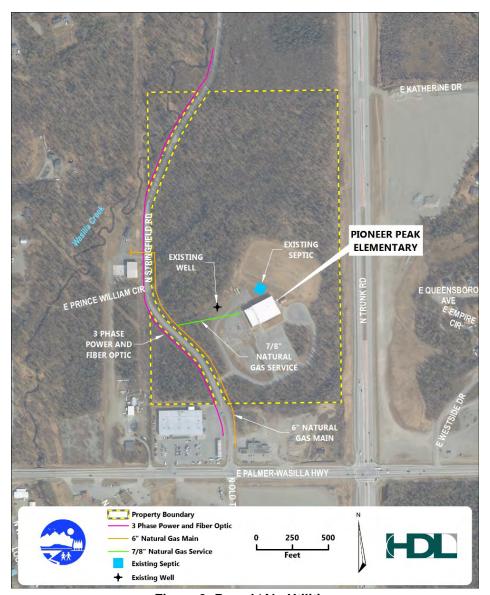


Figure 2: Parcel 'A' - Utilities

Water Service

There is no public water service in the area. Per DNR well records, Pioneer Peak Elementary utilizes a 118-foot-deep well located northwest of the school building. New development on Parcel 'A' would likely require development of a new well at the facility site in accordance with DNR and Borough regulations.

Sanitary Sewer Service

There is no public sanitary sewer service in the area. Pioneer Peak Elementary utilizes an on-site septic system to serve the school. The existing system is more shallow than a typical septic system, which might indicate shallow groundwater was encountered when the drainfield was constructed. New development on Parcel 'A' would require development of a new septic system



March 2018 4

at the site in accordance with Borough and DEC regulations. Ground water levels should be investigated and considered when designing the new system.

Electric

Three-phase power from MEA is available overhead along the west side of Stringfield Road. Currently there is one service to Parcel 'A' to supply power to Pioneer Peak Elementary.

Telecommunications

Fiber optic communications from MTA is available overhead along the west side of Stringfield Road. Currently there is one service to Parcel 'A' to supply telecommunication service to Pioneer Peak Elementary.

Natural Gas

Natural gas is available from Enstar along a portion of the east side of Stringfield Road. The 6-inch main starts at Palmer-Wasilla highway, and follows Stringfield Road to Prince William Circle where it turns west to serve Prince William Circle. Pioneer Peak Elementary is served by a 7/8-inch plastic gas service. New development on the northern portion of Parcel 'A' would require a new service from the natural gas main, and may require extending the existing 6-inch main north along Stringfield Road.

Drainage and Storm Water Run-off

There is no public storm water catchment system in the area. Currently storm water runoff infiltrates on site or flows generally to the west towards Wasilla Creek. Any development would have to consider run off direction and volume as well as best management practices for transport of sediments and contaminants in storm water.

2.1.3 **Soils**

According to the United States Geological Survey (USGS) Geology Map of Alaska, dated 2015, Parcel 'A' is located in an area of poorly consolidated Quaternary, Pleistocene, and uppermost Tertiary surficial deposits. These surficial deposits generally consist of alluvial and glacial deposits with intermittent lacustrine and eolian deposits. In general, surface organics overlie a mixture of fine and coarse-grained soils ranging from silt to gravel.

Nearby soil borings suggest that undisturbed portions of the parcel are likely to encounter an organic surface layer underlain by sand with silt and gravel. Nearby surface water, topography, and soil borings indicate the site will have areas with shallow groundwater.

A shallow, spread footing foundation system is typical for buildings in the area. To support the shallow foundation system, the organic surface soils are typically removed and replaced with an engineered fill. Geotextile separation fabric is sometimes used to separate the engineered fill from the underlying silty soils. If development takes place in higher elevation areas, groundwater is not expected to be encountered during excavations. If development takes place in low elevation areas, shallow groundwater should be anticipated and dewatering of excavation may be required.

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A subsurface evaluation is recommended to evaluate the subsurface conditions prior to design of any development. A typical subsurface evaluation would include geotechnical borings or test pits, along with temporary standpipe piezometers to determine groundwater elevations.

2.1.4 Topography

The most current Borough LiDAR topography for Parcel 'A' is shown in Figure 3. A topographic survey was not performed as a part of this report.

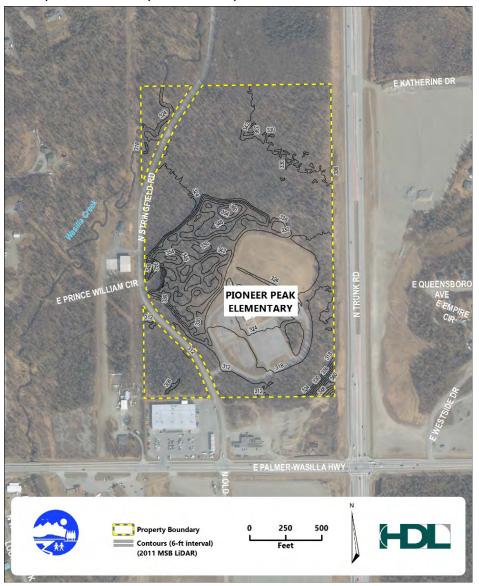


Figure 3: Parcel 'A' - Topography

Parcel 'A' has varying topographic relief across the property. There is rolling terrain northwest of the Pioneer Peak campus; however, the northern third of the parcel is relatively flat. Depending on the characteristics of the existing soil, the area directly northwest of Pioneer Peak could possibly be excavated, providing an onsite source of gravel for development, thereby reducing construction costs.

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Access from either Stringfield Road or the future Katherine Drive to the north could be accomplished without major grade changes.

2.1.5 Environmental

HDL conducted preliminary research using the most current available data from Borough, state, and federal agencies to identify environmental resources that may be affected by the proposed development. The purpose of the research was to identify permitting and regulatory requirements, and to ensure environmental considerations are adequately addressed during planning and design phases. The following resource categories have been identified within Parcel 'A'. Other environmental resources not described here may become present or applicable at a later time depending on changes to site conditions or changes to local, state, or federal regulations during the course of development of the parcel.

Anadromous/Resident Fish Habitat

According to the Alaska Department of Fish and Game's Anadromous Waters Catalog and Fish Resource Mapper, Wasilla Creek is known to support anadromous and resident fish. Wasilla Creek flows through the northwest corner of the parcel, but is separated from the developable portion of the property by Stringfield Road.

Floodplains

According to Federal Emergency Management Agency Flood Insurance Rate Map number 02170C8130E, Zone A flood zones overlap the southeast and northwest corner of Parcel 'A' as shown in Figure 4. The overlapping flood zone is not within the area considered for development.

Wetlands

A review of publicly available base wetlands mapping provided by the Borough and the US Fish and Wildlife Service National Wetlands Inventory indicates wetlands are present within Parcel 'A', as shown in Figure 4. Wetlands are located in the northwest corner of the property. A wetlands delineation completed by HDL in 2014 for the Borough's Trunk Road Connector Project mapped additional wetland areas in the northern portion of the property. In addition, a review of recent aerial imagery and elevation data provided by the Borough indicates the 2014 delineated wetlands are likely to extend southwest toward Stringfield Road.

Development in wetlands is regulated under Section 404 of the Clean Water Act (CWA), which requires a permit from the US Army Corps of Engineers (USACE) to discharge fill or dredged material within the boundaries of wetland areas deemed to be subject to Section 404 jurisdiction. To determine extent of wetland areas and whether the wetlands are subject to USACE's jurisdiction, it is recommended that a field-based wetlands delineation and preliminary jurisdictional determination report be completed prior to applying for a Section 404 permit from USACE for future development that may involve wetlands.



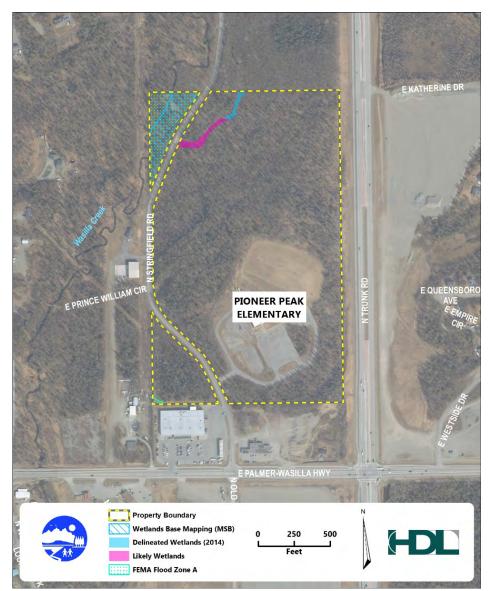


Figure 4: Parcel 'A' - Floodplains & Wetlands

2.1.6 Title Report

According to the Owner's Consultation Report MS204808 (or Title Report, Mat-Su Title, February 2018), Parcel 'A' is currently owned by the Borough. Easements and encumbrances exist on the property and are listed within the Report, which has been provided to District staff separately.

Parcel 'A' has a number of setbacks and easements specific to the property; however, there are no easements that affect the developable land area on the northern portion of the parcel.

2.1.7 Zoning

The Borough currently does not have zoning regulations in place that would affect development on Parcel 'A'. However, any new development would need to go through an approval process with the Alaska State Fire Marshal's Office.

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2.1.8 Setbacks

Matanuska-Susitna Borough Code, Chapter 17.55, Setbacks and Easements, provides general requirements for site development. Per Section 17.55.010, Setbacks, no structure or building may be placed within 25 feet from the right-of-way line of a public right-of-way, no furthermost protruding portion of the structure or building may be located nearer that 10 feet from any side or rear lot line, and eaves may project a maximum of 3 feet into required setback areas. Chapter 17.55.020, Setbacks for Shorelands, states that no structure or footing may be located closer than 75 feet from the ordinary high water mark of a body of water and eaves may project a maximum of 3 feet into the required setback area. Setbacks do not severely limit the buildable area of Parcel 'A'.

2.1.9 Surrounding Area

Parcel 'A' is surrounded by an airstrip to the west, an undeveloped large parcel to the north, Trunk Road to the east, additional undeveloped large parcels further east, and commercial developments and one residential development to the south. Additional commercial development in the area is likely, as the Palmer-Wasilla Highway corridor continues to grow. Both the Palmer-Wasilla Highway and Trunk Road will experience significantly increased amounts of traffic. Impacts from surrounding development and increasing traffic, such as loss of access, reduced green space buffers, and increased noise, should be considered for any facility placed on the site.

2.2 PARCEL 'B'

2.2.1 Existing Conditions

Parcel 'B' is a 156.41-acre site owned by the Borough and is located at 3262 North Church Road, Wasilla, at the northwest corner of the intersection of North Church Road and West Seldon Road as shown in Figure 5. The property lies northwest of the City of Wasilla. Church Road along the east side of the parcel connects directly to the Parks Highway to the south. Seldon Road, along the south side of the property, is a minor east-west arterial roadway.

Parcel 'B' consists of flat to rolling terrain forested with a mix of birch and spruce trees. While there are no permanent structures on the parcel, four cleared areas have been constructed. Three driveways provide access to the parcel; two gravel drives from Church Road and one very steep dirt drive from Seldon Road. Driveways are gated at this time. The cleared areas have been used to store log decks and are slightly overgrown with low brush. There is also an established four-wheel-drive trail diagonally crossing the northeast corner of the parcel.

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Figure 5: Parcel 'B' - Existing Conditions

2.2.2 Utilities

A summary of utilities has been compiled using as-built information provided by Enstar, MEA, MTA, and DNR. Approximate utility locations are shown in Figure 6.

Water Service

There is no public water service in the area and, per DNR, there is no record of a well on the property. New development on Parcel 'B' would require development of a new well at the facility site in accordance with Borough and DNR regulations.

Electric

Three-phase power from MEA is available overhead along the west side of Church Road.

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Figure 6: Parcel 'B' - Utilities

Telecommunications

Fiber optic communications from MTA is available overhead along the west side of Church Road.

Natural Gas

Natural gas is available from Enstar along the east side of Church Road. The 6-inch main runs along the entire east side of the property. New development on the parcel would require a new service from the natural gas main.

Drainage and Storm Water Run-off

There is no public storm water catchment system in the area. Currently storm water runoff infiltrates on site and flows generally to the northwest. Any development would have to consider

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run off direction and volume as well as best management practices for transport of sediments and contaminants in storm water.

2.2.3 Soils

According to the USGS Geology Map of Alaska, dated 2015, Parcel 'B' is located in an area of poorly consolidated Quaternary, Pleistocene, and uppermost Tertiary surficial deposits. These surficial deposits generally consist of alluvial and glacial deposits with intermittent lacustrine and eolian deposits. In general, surface organics overlie a mixture of fine and coarse-grained soils ranging from silt to gravel.

Nearby soil borings suggest that undisturbed portions of Parcel 'B' are generally underlain by sand and gravel with varying amounts of silt. The topography and vegetation in the area suggest that low-lying areas in the northern and eastern portions will generally encounter a layer of surface organics underlain by fine-grained soils. Groundwater is expected to be shallow across the parcel but will tend to be closer to the surface in the northern portion of the parcel.

A shallow, spread-footing foundation system for buildings is typical in the area. To support the shallow foundation system, the organic surface soils are typically removed and replaced with an engineered fill. Geotextile separation fabric is sometimes used to separate the engineered fill from the underlying silty soils. If development takes place in higher elevation areas, groundwater is not expected to be encountered during excavations. If development takes place in low elevation areas, shallow groundwater should be anticipated and dewatering of excavations may be required.

A subsurface evaluation is recommended to evaluate the subsurface conditions prior to design of any development. A typical subsurface evaluation would include geotechnical borings or test pits, along with temporary standpipe piezometers to determine groundwater elevations.

2.2.4 Topography

The most current Borough LiDAR topography for Parcel 'B' is shown in Figure 7. A topographic survey was not performed as a part of this report.

Parcel 'B' has varying topographic relief across the property. There is rolling terrain across the southern third of the property; however, the northern portion of the parcel is relatively flat. There is significant elevation change from Seldon Road to the parcel making access from Seldon Road challenging. The parcel currently has two existing driveways accessing Church Road, both without significant grade change.

Given the large size of the parcel and depending the characteristics of the existing soil, an onsite source of gravel could possibly be developed, thereby reducing construction costs.



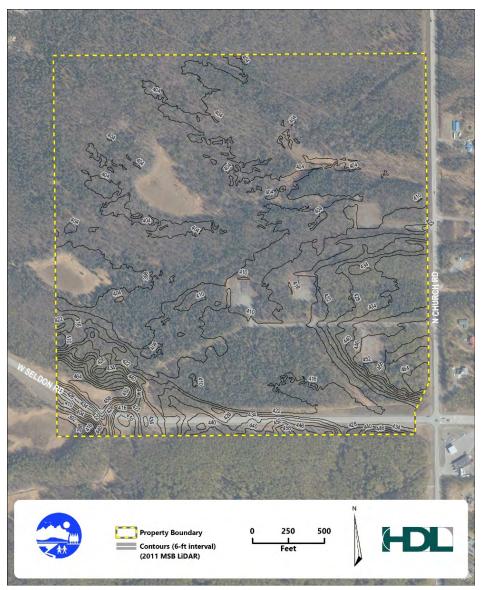


Figure 7: Parcel 'B' - Topography Study

2.2.5 Environmental

HDL conducted preliminary research using the most current available data from the Borough, state, and federal agencies to identify environmental resources that may be affected by the proposed development. The purpose of the research was to identify permitting and regulatory requirements, and to ensure environmental considerations are adequately addressed during the planning and design phases. The following resource categories have been identified within Parcel 'B'. Other environmental resources not described here may become present or applicable at a later time depending on changes to site conditions or changes to local, state, or federal regulations during the course of development of the project.

Anadromous/Resident Fish Habitat

There is no fish habitat present on Parcel 'B'

Floodplains

According to Federal Emergency Management Agency Flood Insurance Rate Map number 02170C8060E, no flood zones have been identified within the parcel.

Wetlands

A review of publicly available base wetlands mapping provided by the Borough and the US Fish and Wildlife Service National Wetlands Inventory indicates wetlands are present in Parcel 'B'. Within the parcel, Borough-mapped wetlands are present in the central, west, and northeast portions of the property, as shown in Figure 8.



Figure 8: Parcel 'B' - Wetlands



Development in wetlands is regulated under Section 404 of the Clean Water Act (CWA), which requires a permit from the US Army Corps of Engineers (USACE) to discharge fill or dredged material within the boundaries of wetland areas deemed to be subject to Section 404 jurisdiction. To determine extent of wetland areas on the parcel and whether the wetlands are subject to USACE's jurisdiction, it is recommended that a field-based wetlands delineation and preliminary jurisdictional determination report be completed prior to applying for a Section 404 permit from USACE for future development that may involve wetlands.

2.2.6 Title Report

According to the Owner's Consultation Report MS204807 (or Title Report, Mat-Su Title, February 2018), Parcel 'B' is currently owned by the Borough. Easements and encumbrances exist on the property and are listed within the Report, which has been provided to District staff separately.

Parcel 'B' has setbacks and easements specific to the property. Easements that affect developable land area are shown in Figure 5.

2.2.7 Zoning

The Borough currently does not have zoning regulations in place that would affect development on Parcel 'B'. However, any new development would need to go through an approval process with the Alaska State Fire Marshal's Office.

2.2.8 Setbacks

Matanuska-Susitna Borough Code, Chapter 17.55, Setbacks and Easements, provides general requirements for site development. Per Section 17.55.010, Setbacks, no structure or building may be placed within 25 feet from the right-of-way line of way public right-of-way, no furthermost protruding portion of the structure or building may be located nearer that 10 feet from any side or rear lot line, and eaves may project a maximum of 3 feet into required setback areas. Setbacks do not severely limit the buildable area of Parcel 'B'.

2.2.9 Surrounding Area

Parcel 'B' is more rurally located than Parcel 'A'. Surrounding parcels are generally large though residential subdivisions are located to the east and northwest of the parcel and there is a small commercial development to the southeast. Because the parcel is large, development can be sited such that impacts from onsite facilities upon the surrounding area can be reduced and factors such as noise and dust from the surrounding area can be minimized.



3.0 Proposed Facilities

3.1 MAT-SU CENTRAL SCHOOL

Mat-Su Central School is a K-12 alternative education school that supports home schooling and distance delivery education, and provides in-classroom teaching for its students. Mat-Su Central has been providing flexible programs for 40 years.

The main campus is located within the City of Wasilla, with a small, secondary campus in the City of Palmer. The school services students from across the Borough. There are 1,700 students currently enrolled, however, typically there are only about 240 students on campus at one time. Parents provide transportation when students need to visit campus for classes or appointments. Unlike traditional school, students do not tend to visit campus daily.

The Wasilla Mat-Su Central campus is leased from a private owner. The District leases 18,000 square feet in a larger, office-type building. There is no outdoor space for students, no gym, and no auditorium. Students can participate in sports through traditional schools. Therefore, while a gym or auditorium would be utilized in a new campus, outdoor sports fields would not be needed at a new location.

3.2 CHARTER SCHOOL

Some charter schools in the District lease their current facilities from private owners. Each one is unique in size and needs. Using the Valley Pathways High School facility as a template allows for evaluation of the space needs for relocation of an existing charter school or the addition of a future school.

3.3 STUDENT TRANSPORTATION

The Borough's population in 2016 was over 101,000, with an average population growth of 3.4% per year over the last 25 years. The District encompasses the entire Borough and serves children over a 25,000 square mile area. Roughly 17,000 students are currently eligible for student transportation, and the District provides transportation for approximately 12,850 students daily with a yearly ridership of 1,971,873, including special education buses, as of the 2016-2017 school year. At this time, the District has contracted services for a fleet of 200 buses with 170 active buses and 30 buses in reserve. That number will likely continue to increase as the Borough population grows.

The current, privately-owned, student transportation facility is located on the Palmer-Wasilla Highway between the cities of Palmer and Wasilla. This facility includes the only school bus maintenance building in the Borough core area. The facility is comprised of three parcels totaling 9.58 acres. There is one main building, consisting of seven maintenance bays and office space. A fueling facility is not located on site.

Determining the appropriate size of a future student transportation facility is beyond the scope of this study; however, for the purposes of evaluation, assumptions have been made to estimate the required overall size of a maintenance building. The *School Bus Maintenance Facility Planner* (Public Schools of North Carolina, February 2011) and the *Wyoming School Facilities*



Commission School Bus Maintenance and Parking Facility Design Guidelines (OZ Architecture, Inc. and Engineering Economics, Inc. updated June 2013) have rules of thumb for sizing bus maintenance buildings. The number of bays needed is determined by the number of mechanics, not including support staff, and how many buses they can maintain. Typically, one mechanic can maintain 20-30 buses, depending on bus age, level of maintenance, mileage per year, and other factors. Using the more conservative value of 20 buses per mechanic, to allow for future bus fleet growth, and using the current fleet size of 200 buses, a staff of ten mechanics is needed. Based on an industry standard 1.5 bays per mechanic for larger fleets, 15 maintenance bays are needed. A wash bay would add an additional bay to that total.

Maintenance bay size averages 22.5-feet by 55-feet per bay, or 1,237 square feet. Bay support space (tire maintenance, tire, parts, tool, and fluid storage, work/welding area, wash bay) are estimated at 50 percent of the bay size, or an additional 620 square feet per bay. Office area, including lockers, dispatch, offices, and restrooms, is also estimated at 50 percent of the bay size, or an additional 620 square feet per bay. Using these figures, a new building would have an approximate 38,000 square foot area.

Required bus parking/storage area would vary depending on configuration of the site and layout. A standard parking stall is 13-feet wide by up to 50-feet long depending on bus length, or 650 square feet and should preferably be drive-through stalls. Aisles should be a minimum of 130 feet wide for 90 degree parking. Area around the maintenance building, fueling facilities, turn areas, employee parking, and snow storage area would add to the required parking area size. The existing student transportation facility, at 9.58 acres, provides adequate parking area for the current fleet size; however, it does not allow for future expansion of the fleet, nor does it allow for a fuel facility or building expansion. It also requires "nose to tail" parking, requiring buses to back out of parking spaces, increasing the likelihood of accidents.

A new student transportation facility does not necessarily need to have onsite parking for all of the core area bus fleet. The District could develop, or require a contractor to develop, secure bus parking areas throughout the District for daily use, bringing buses to a main maintenance facility as needed. This would potentially decrease fuel usage, area road traffic, and daily mileage on buses. It would also potentially decrease the amount of noise, odor, and environmental impact a single, large facility would have on the surrounding area. Existing school parking lots might be utilized or expanded.

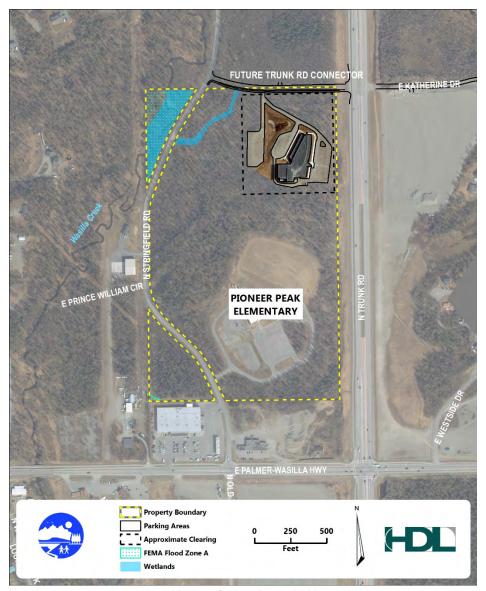
4.0 Alternatives

The following alternatives provide several conceptual layouts for developing the three proposed facilities on the two sites and can be combined in any order. For the schools, Valley Pathways High School, at approximately 46,000 square feet of building, is used as a comparable template for future school development and includes a gym within the school building area. This template includes parking but does not include outdoor sports fields. The school template covers approximately 9.5 acres.

The current, 9.48-acre privately-owned student transportation facility on Palmer-Wasilla Highway is used as basic template, although the student transportation facility area as shown covers approximately 11 acres. As discussed in the previous section, neither the maintenance building nor the parking area is optimal and may not meet current needs. The building used in the student transportation facility template is sized at 38,000 square feet in a single floor to show the scale of a building meeting current needs as estimated by industry standards. As the District grows, the number of buses in use will increase and larger parking and maintenance facilities will be required.

Both templates are used as reference only and to convey the possible scale and scope of future development on the parcels. The sizes are likely to change as further studies and planning processes are completed. Both types of facilities would need to be designed and constructed to meet the specific needs of the District and to fit each site. The final site development will not match the templates used in the Alternative figures.

4.1 ALTERNATIVE 1



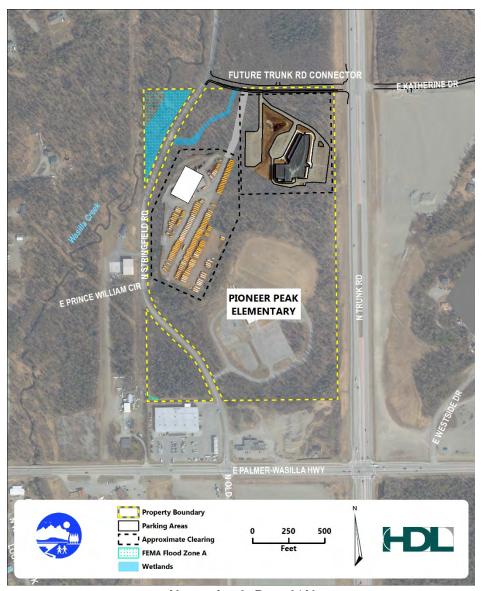
Alternative 1: Parcel 'A'

Alternative 1 locates one school facility on Parcel 'A'.

- Approximately 27 acres allows room for expansion or future development of sports fields.
- Excellent access to arterial roadways. Requires construction of Katherine Drive for access to Trunk Road.
- Utilities are in-place and available.
- Wetlands areas exist but can be avoided.

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4.2 ALTERNATIVE 2



Alternative 2: Parcel 'A'

Alternative 2 locates one school facility and a student transportation facility on Parcel 'A'.

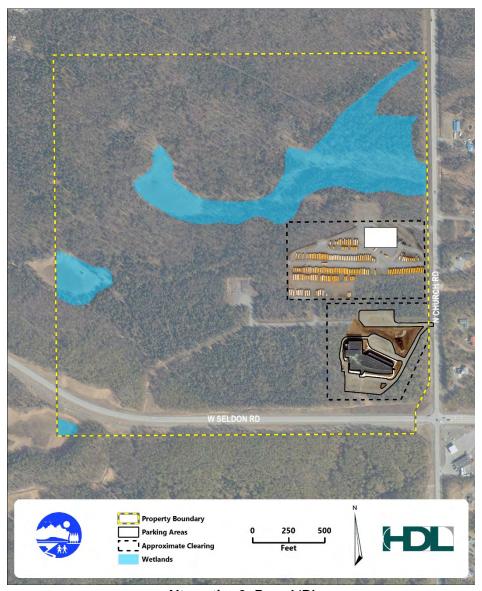
- Approximately 27 acres likely allows room for both a school and student transportation facility but leaves little room for future expansion or sports fields.
- Excellent access to arterial roadways. Requires construction of Katherine Drive for access to Trunk Road.
- Utilities are in-place and available.
- Access driveway and utilities could be shared between facilities, reducing costs.
- Increased developed area may require wetlands mitigation.

As an option to this alternative, a bus maintenance building could be developed at an alternative location, with a parking/bus storage area on Parcel 'A'. This would slightly reduce the needed onsite area for a student transportation facility, only removing building area. Conversely, only the

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bus maintenance building and a small parking area could be developed on Parcel 'A', with a bus parking facility at a different location, thereby significantly reducing the needed area on this site, and leaving room for development of sports fields.

4.3 ALTERNATIVE 3



Alternative 3: Parcel 'B'

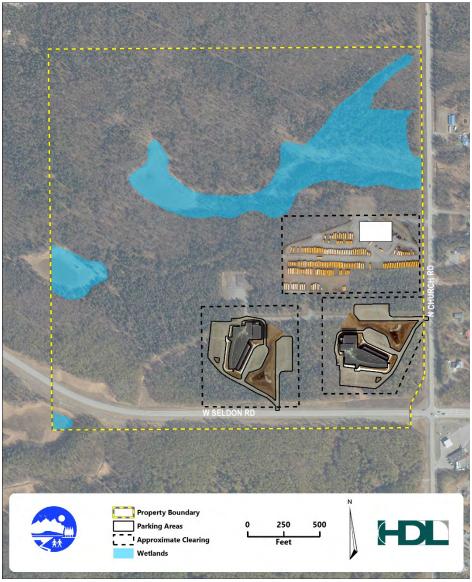
Alternative 3 locates one school and a student transportation facility on Parcel 'B'.

- Approximately 156 acres allows room for expansion or future development of sports fields and expansion of the student transportation facility.
- Direct access to a minor arterial roadway.
- Utilities are in-place and available.
- Wetlands areas could be avoided.
- Access driveway and utilities could be shared between facilities, reducing costs.

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4.4 ALTERNATIVE 4



Alternative 4: Parcel 'B'

Alternative 4 locates two schools and a student transportation facility on Parcel 'B'.

- Approximately 156 acres allows room for expansion or future development of sports fields for schools and expansion of the student transportation facility.
- Direct access to a minor arterial roadway.
- Utilities are in-place and available.
- · Wetlands area can be avoided.
- Access driveway and utilities could be shared between facilities, reducing costs.

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5.0 Conclusion

While Parcel 'A' is positioned in a centralized location between Palmer and Wasilla, its usable area is limited and District needs for future expansion of facilities must be taken into account for planning any facility constructed on the parcel. Parcel 'A' is also located in a rapidly developing area of the Borough. Commercial and residential development will only continue to grow and densify around Parcel 'A' as the Borough's population increases and may impact whatever facility is chosen for the site. This parcel's proximity to arterial roadways provides the District an opportunity to locate facilities on a site with ease of access to major roadways.

Parcel 'B' allows ample room for developing multiple facilities on site and provides a more rural environment, which could be desirable for some facilities. The parcel's size also allows room for future expansion of facilities located onsite as the District's student population grows. Seldon Road, while identified as a minor arterial at present, will continue to be developed to become a major east-west arterial, providing improved ease of access from the area to the site in the future.

Both Parcel 'A' and Parcel 'B' are viable options for development. Both have readily available utilities, access to arterial roadways, and developable land area. Terrain on both parcels is comparable; both include relatively flat to rolling terrain and both may allow onsite soil to be utilized in development, depending on results of future soils and groundwater investigations. While both sites include wetlands, those areas could be avoided or mitigated.

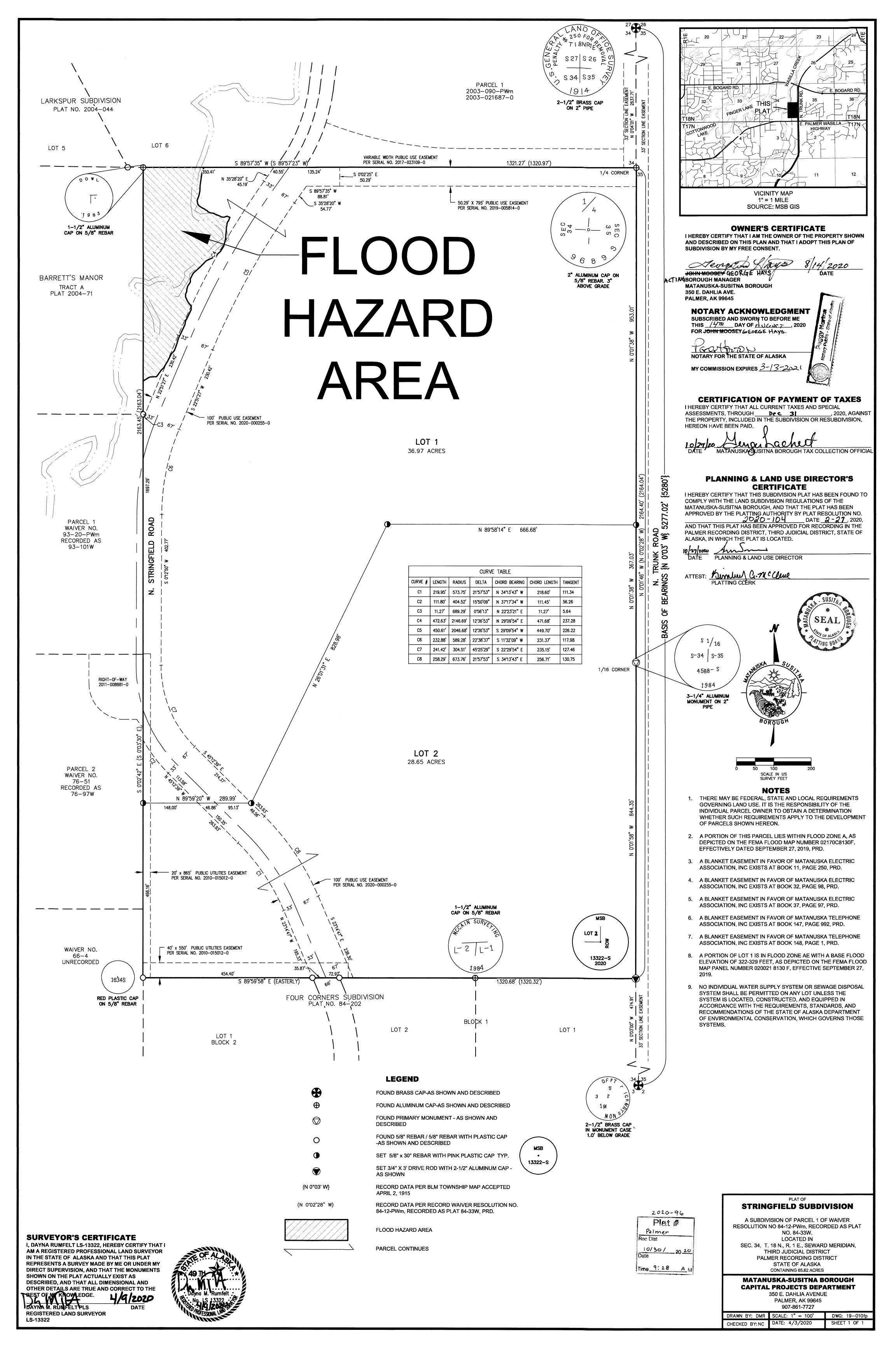
References

OZ Architecture, Inc. and Engineering Economics, Inc. 2013 Wyoming School Facilities Commission School Bus Maintenance and Parking Facility Design Guidelines. https://docs.google.com/file/d/0ByAJz33FLoSLMXFBSDd6TnBxTWM/edit.

Public Schools of North Carolina. 2011 *School Bus Maintenance Facility Planner.* www.schoolclearinghouse.org/pubs/BUS GARAGEXPNew2011.pdf

Mat-Su Title Agency, LLC. Owner's Consultation Report MS204807 dated February 8, 2018, as ordered by HDL Engineering Consultants, LLC.

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Stringfield Subdivision Palmer, Alaska

Geotechnical Investigation

January 2020

Location

The subject property is fronting Stringfield Road North of the Palmer Wasilla Highway about 4 miles west of Palmer, Alaska. It is Lot D15 of Section 34, Township 18 N, Range 1 E, Seward Meridian, Alaska.

Scope of Investigation

This investigation is to verify useable areas and identify soils useful for development. This is presently the site of Pioneer Peak Elementary School. The proposed subdivision divides one approximately 44-acre parcel into 2 parcels.

Findings

- 1. The soils observed in Test Pit #1 (in the flat area on the northern part of the site) consisted of peat and silt with gravel at depth. Ground water was 6' deep during excavation, but only 1.7 feet on 1/24/2020. We expect water depth to vary seasonally.
- 2. The soils in Test Pits #2 and #3 consisted of 4 to 5 feet of silt over gravel. After excavation and removal of the surficial silt, the gravel from the locations we tested would be suitable for high quality borrow such as DOT Selected Material Type A. No ground water was encountered in this area.
- 3. The gravel areas identified in Test Pits #2 and #3 would be suitable for building construction or on-site wastewater disposal, but may need some leveling to qualify as useable septic area due to the steepness of the terrain.
- 4. No bedrock or impermeable soil layer was encountered.

General Topography

Portions of the subdivision is relatively flat terrain. Others areas have low but steep undulating terrain. Vegetation consisting of birch, alders and spruce is relatively heavy.

Field Exploration

The investigation included three test pits. Exploration was conducted on Jan. 20, 2020 using a Komatsu 150 excavator, operated by Rob Cox of Earth Matters Excavating. Exploration was supervised and the test holes logged by Tyler Hansen.

The approximate test pit locations are shown on the attached location map. Test pits were located in the field using handheld GPS, The GPS coordinates are shown on the logs. Note that the locations by handheld GPS are not as precise as survey GPS.

Test pit Logs

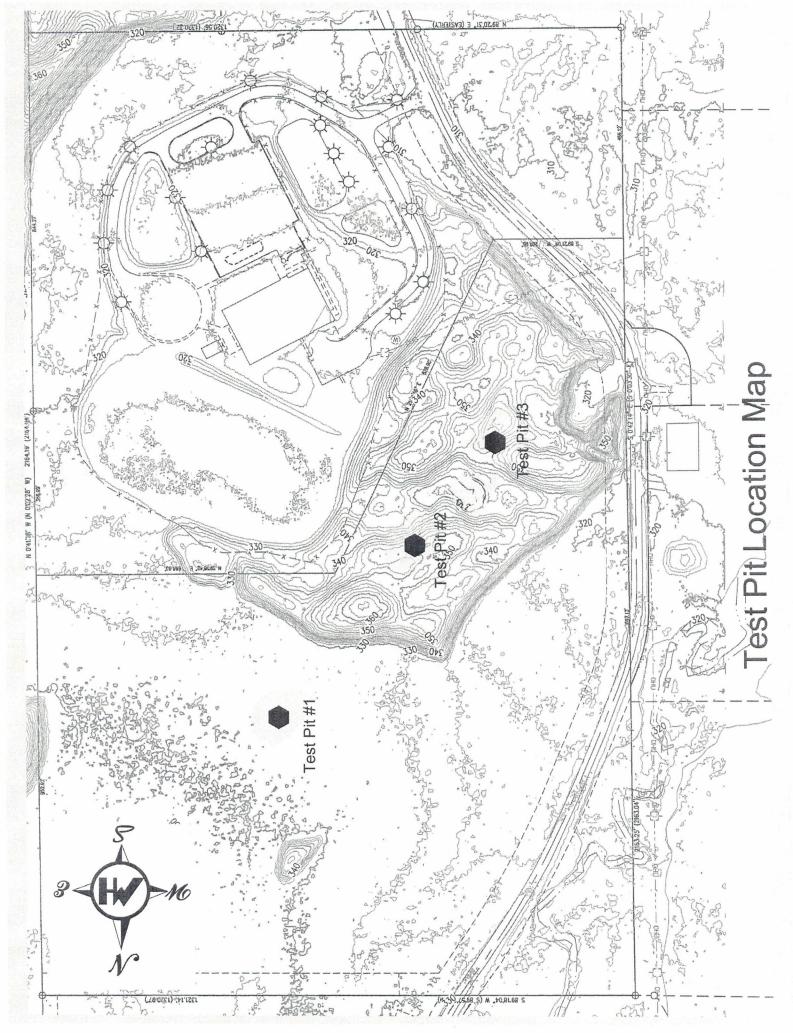
Descriptions of the soils encountered are recorded on the right side of the field logs. The moisture content, type and location of samples, and the general soil type are shown graphically on the left side.

Laboratory

In the laboratory, the samples were visually classified according to frost and unified classification and the moisture content determined. A sieve analysis was performed on selected samples. The results of these analyses are shown on the testing summary attached.



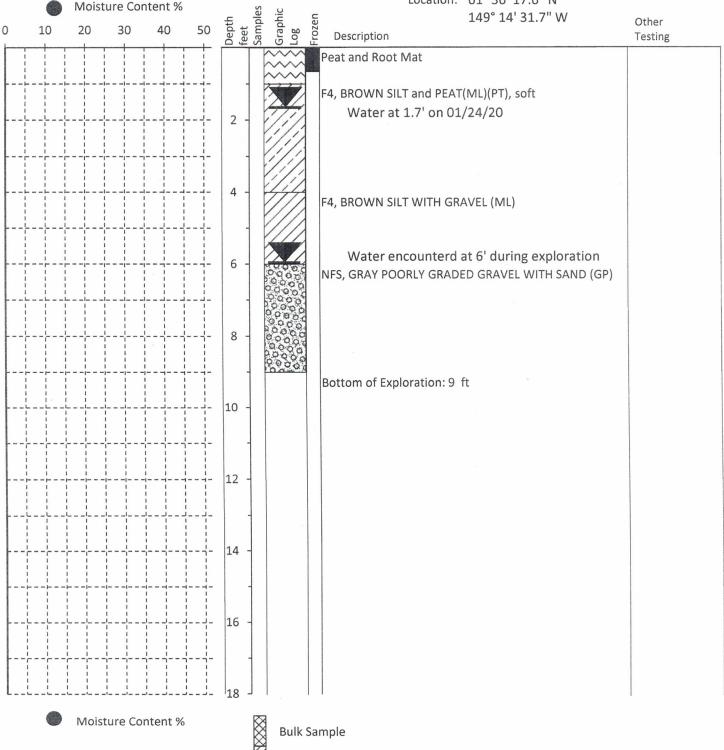
Vicinity Map



Log of Test Pit 1

Exploration: January 20, 2020 Equipment: Komatsu 150 Excavator

Location: 61° 36' 17.6" N





MARK

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e-mail: mhpe@mtaonline.net Phone:(907)745-4721

Job No.: 20001

Date: January 2020

Grab Sample

Log of Test Pit

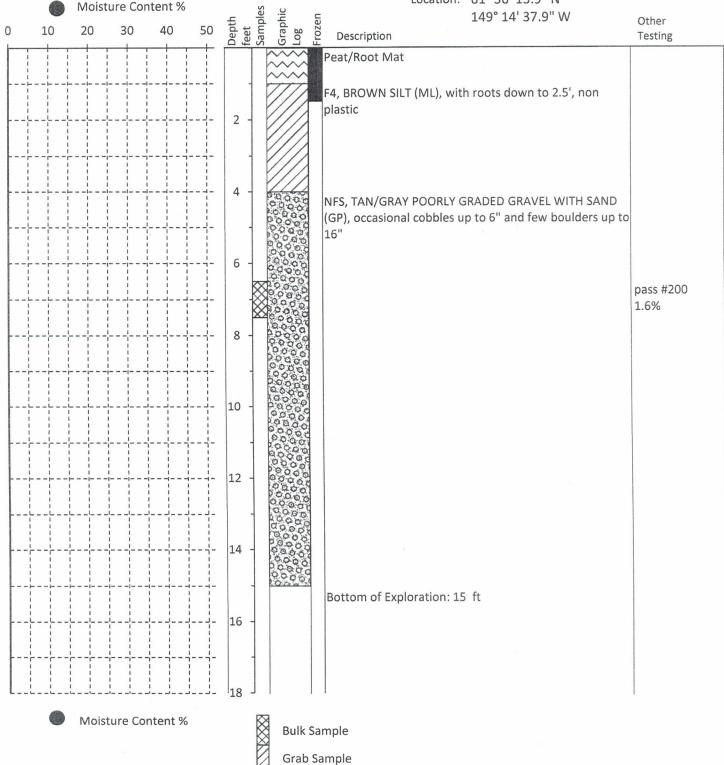
Stringfield Subdivision Matanuska-Susitna Borough 350 E Dahlia Ave Palmer, AK 99645

Plate

Log of Test Pit 2

Exploration: January 20, 2020 Equipment: Komatsu 150 Excavator

Location: 61° 36′ 13.9″ N





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Job No.: 20001

Date: January 2020

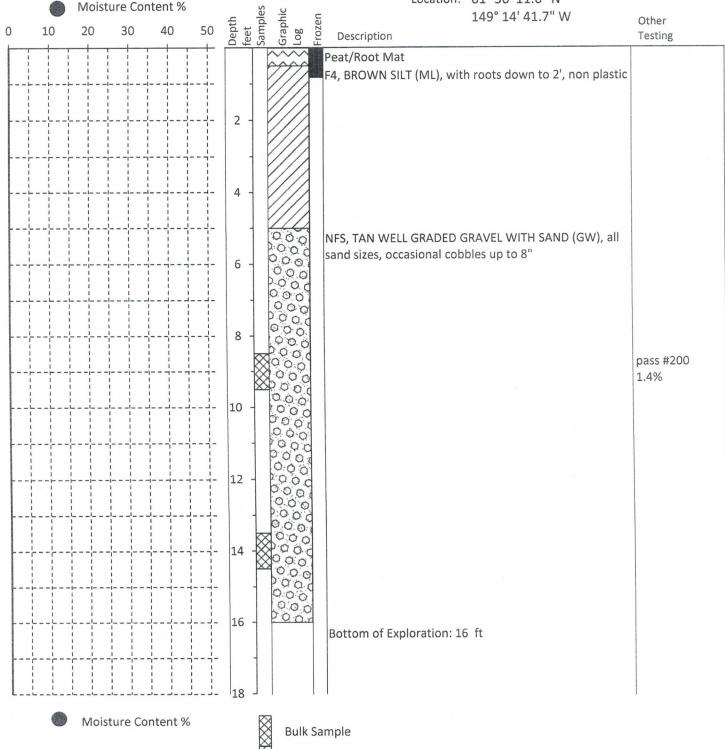
Log of Test Pit 2

Stringfield Subdivision Matanuska-Susitna Borough 350 E Dahlia Ave Palmer, AK 99645

Log of Test Pit 3

Exploration: January 20, 2020
Equipment: Komatsu 150 Excavator

Location: 61° 36′ 11.6″ N





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Job No.: 20001

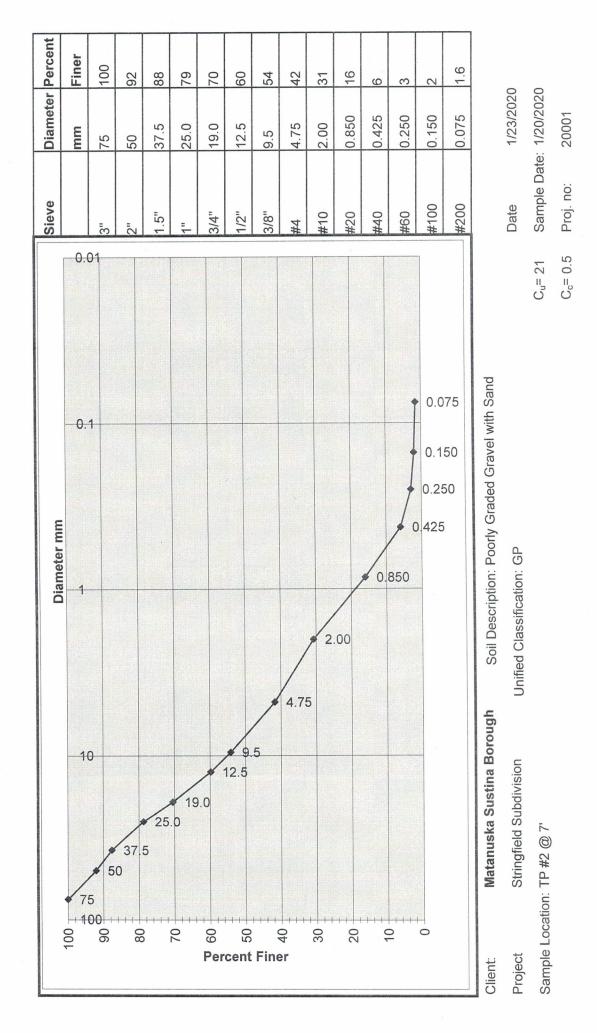
Date: January 2020

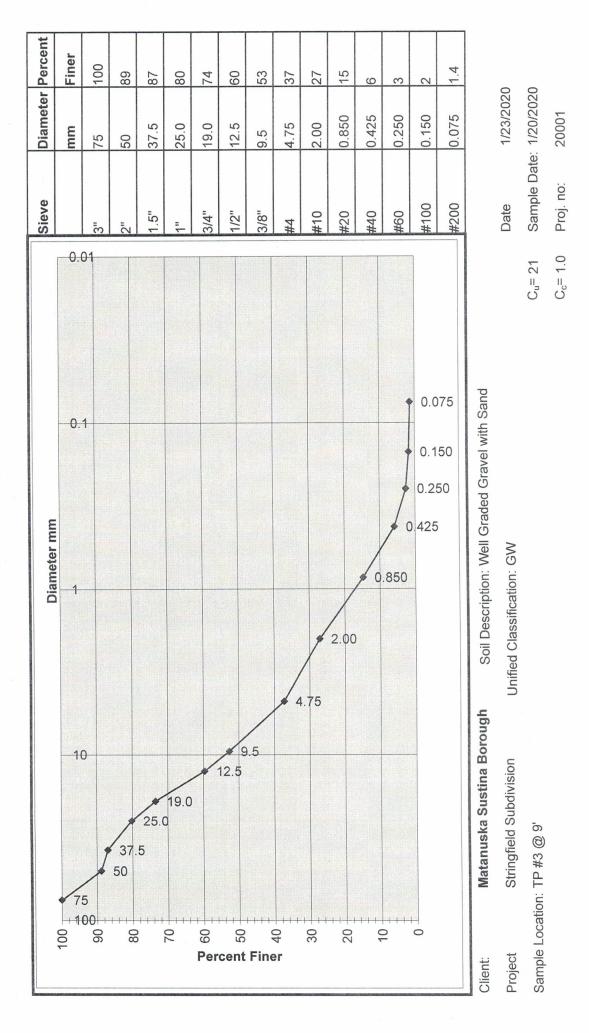
Grab Sample

Log of Test Pit 3

Stringfield Subdivision Matanuska-Susitna Borough 350 E Dahlia Ave Palmer, AK 99645

Plate 3





(H)

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GRAPHICS LOG KEY

GW	0000	WELL GRADED GRAVEL, SANDY GRAVEL
GP		POORLY GRADED GRAVEL, SANDY GRAVEL
GM		SILTY GRAVELS, SILT SAND GRAVEL MIXTURES
GC	000	CLAYEY GRAVELS, CLAY SAND GRAVEL MIXTURES
SW	A0A6	WELL GRADED SAND, GRAVELY SAND
SP		POORLY GRADED SAND , GRAVELLY SAND
SM		SILTY SAND, SILT GRAVEL SAND MIXTURES
SC		CLAYEY SAND, CLAY GRAVEL SAND MIXTURES
ML		INORGANIC SILT, VERY FINE SAND, ROCK FLOUR
CL		GRAVELLY AND SANDY CLAY, SILTY CLAY
OL		ORGANIC SILT AND CLAY OF LOW PLASTICITY
MH		ORGANIC SILT
СН		INORGANIC CLAY, FLAT CLAY
ОН		ORGANIC SILT, CLAY OF HIGH PLASTICITY
Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS
		ASPHALT CONCRETE PAVEMENT
		ROCK
	* * .	CONCRETE

ASTM Soil Classification Chart

				Soll C	Soil Classification
Criteria for assignin	Criteria for assigning Group Symbols and Group Names Using Laboratory Tests $^{\scriptscriptstyle{A}}$	Names Using Laboratory	Tests⁴	Group	
				Symbol	Group name ⁸
Coarse-Grained Soils	Gravels	Clean Gravels	Cu ≥ 4 and 1 ≤ Cc≤ 3 [€]	GW	Well graded gravel ^F
More than 50% retained on	More than 50% of coarse	Less than 5% fines $^{\circ}$	$Cu < 4$ and /or 1>Cc 3^{E}	GP	Poorly graded gravel ^F
No. 200 sieve	fraction retained on No.	Gravel with Fines More	Fines classify as ML or MH	GM	Silty gravel F.G.H.
	4 sieve.	than 12% fines $^{\rm c}$	Fines classify as CL or CH	GC	Clayey gravel F.G.H.
	Sands	Clean Sands	Cu \geq 6 and 1 \leq Cc \leq 3 ^{ε}	SW	Well graded sand
	50% or more of coarse	Less than 5% fines D	Cu < 6 and /or 1>Cc 3 [€]	SP	Poorly graded sand
	fraction passed No. 4	Sands with fines	Fines classify as ML or MH	SM	Silty sand 6,H,L
	sieve	more than 12% fines D	Fines classify as CL or CH	SC	Clayey sand 6,H,l
Fine-Grained Soils	Silts and Clays	Inorganic	PI > 7 and plots on or above "A"" line	CL	Lean Clay ^{K.L.M.}
50% or more passes the No.	Liquid limits less than 50		PI < 4 or plots below "A" line J	ML	Silt K.L.M.
200 Sieve		Organic	Liquid limit - oven dried < 0.75		Organic Clay K.L.M.N
			Liquid limit - not dried	OL	Organic silt ^{K,L,M,O}
	Silts and Clays	Inorganic	PI plots on or above "A" line	СН	Fat Clay
	Liquid limits 50 or more		PI plots below "A" line	MH	Elastic silt K.L.M.
		Organic	Liquid limit - oven dried < 0.75		Organic Clay K, L, M, P
			Liquid limit - not dried	ОН	Organic silt ^{K,L,M,Q}
Highly organic soils	Primarily organic r	Primarily organic matter, dark in color, and organic odor	organic odor	PT	Peat

- A Based on the material passing the 3-in. (75-mm) sieve.
- B If field sample contained cobbles or boulders, or
- both, add "with cobbles or boulders, or both" to group name
 - ^c Gravels with 5 to 12% fines require dual symbols
 - GW-GM well-graded gravel with silt
- GW-GC well-graded gravel with clay
- GP-GC poorly graded gravel with clay GP-GM poorly graded gravel with silt
- ^D Sands with 5 to 12X fines require dual symbols
 - SW-SM well-graded sand with silt
 - SP-SM poorly graded sand with silt SW-SC well-graded sand with clay
 - SP-SC poorly graded sand with clay $C_{c} = (D_{30})2$ E Cu = D_{60}/D_{10}
 - D₁₀ X D₆₀

- F If soil contains > 15 % sand, add "with sand" to group name
- If fines classify as CL-ML, use dual symbol GC-GM or SC-SM
 - " If fines are organic, add "with organic lines" to group name.
- Je Atterberg limits plot in hatched area, soil is a CL-ML, silty soil If soil contains r 15 % gravel, add "with gravel" to group name.
 - * If soil contains 15 to 29 % plus No, 200, add
- "with sand" or "with gravel," whichever is predominant.
 - ^L If soil contains L 30% plus No. 200, predominantly sand, add "sandy" to group name.
- [™] If soil contains ≥ 30 % plus No. 200, predominantly
 - ^N $PI \ge 4$ and plots on or above "A" line. gravel, add "gravelly" to group name.
 - o PI < 4 or plots below "A" line.</p>
- PI plots on or above "A" line.
- PI plots below "A" line.



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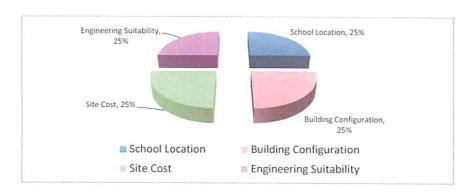
2605 N Old Glenn Hwy, Palmer, AK 99645 Phone: (907) 745-4721 e-mail: :mhpe@mtaonline.net

U.S. Corps of Engineers

Frost Design Soil Classification

Frost group	Soil Type	Percentage finer than 0.02mm, by weight	Typical soil types under Unified Soil Classification System
NFS	Sands and Gravelly soils	< 3	SP, SW, GP, GW
FI	Gravelly soils	3 to 10	GW, GP, GW-GM, GP-GM
F2	(a) Gravelly soils (b) Sands	10 to 20 3 to 15	GM, GW-GM, GP-GM SW, SP, SM, SW-SM, SP-SM
F3	(a) Gravelly soils(b) Sands, except very fine silty sands(c) Clays, PI >12	>20 >15 	GM, GC SM, SC CL, CH
F4	(a) All silts(b) Very fine silty sands(c) Clays, P1<12(d) Varved clays and fine-grained, banded sediments	>15 	ML, MH SM CL, CL-ML CL and ML CL, ML, and SM; CL, CH, and ML; CL, CH, ML, and SM

Stringfield School Site Suitability Criteria - Summary - 1/29/21



Category	School Location	Building Configuration	Site Cost	Engineering Suitability
Category Score	25%	25%	25%	25%
10-Point Criteria	Center of Existing Student "Cloud"	Size ES=10Ac+1Ac/100Stu MS=20Ac+1Ac/100Stu HS=30Ac+1Ac/100Stu	Available	Access to Urban Infrastructure - Water, Sewer, Electrical
5-Point Criteria	Center of Existing Staff "Cloud"	Adjacency to Appropriate Road Classification ES=Collector MS=Minor Arterial HS=Minor Arterial	Road Construction Costs	Acceptable Soils / Building Foundation Conditions
3-Point Criteria	Proximity to Fire Response Equipment	Ease of Year-Round Access	Natural Gas Availability Cost	Avoids Natural Hazards - Flooding, Erosion
2-Point Criteria	Proximity to Future Growth	Acceptable Topography	Broadband Access Cost	Acceptable Seismic Conditions
1-Point Criteria	Proximity to Other Community Facilities	Positive Solar Orientation Possible	Grading Costs	Acceptable Drainage
1-Point Criteria	Separation from Social Hazards	Acceptable Protection from Elements (Wind)	Water Development Costs	Acceptable Permafrost Stability
1-Point Criteria	Separation from Hazardous Materials Conduits	Nominal Demolition / Excavation Needs	Sewage Development Costs	Not Susceptible to Forest Fire (Avoidance of Spruce Beetle Infestations)
1-Point Criteria	Access to Outdoor Recreation / Learning Opportunities	Joint Development Opportunities	Electric Development Costs	All Permiting Viable
1-Point Criteria	Access to Cultural Resources	Access to Pedestrian Facilities	Telephone Development Costs	Acceptable Zoning

<u>School Location Issues - 25 Points Possible</u> Scorer Comment: This school serves the entire MSB and is centrally located.

Criteria	Classification	Possible Points	
	Site is less than 10 percent of the distance away from the centroid of the students to be served by the school using the distance from the centroid of the "student cloud" to the edge of the cloud.	10 Points	
	Site is less than 20 percent of the distance away from the centroid of the students to be served.	8 Points	8
Center of Existing	Site is less than 30 percent of the distance away from the centroid of the students to be served.	6 Points	
Student "Cloud"	Site is less than 40 percent of the distance away from the centroid of the students to be served.	4 Points	
	Site is less than 50 percent of the distance away from the centroid of the students to be served.	2 Points	
	Site is more than 50 percent of the distance away from the centroid of the students to be served.	0 Points	
	Site is between 10-30 percent of the distance away from the centroid of the staff to be served.	3 Points	
Center of	Site is between 31-50 percent of the distance away from the centroid of the staff to be served.	2 Points	2
Existing Staff "Cloud"	Site is less than 50-75 percent of the distance away from the centroid of the staff to be served.	1 Point	
	Site is more than 75 percent of the distance away from the centroid of the staff to be served.	0 Points	
Proximity to	Site is within municipal boundary of Palmer or Wasilla	3 Points	3
Fire Response	Site is within seven minute fire response service time.	2 Points	
Equipment	Site is within eight to fifteen minute fire response service time.	1 Point	
	Site is beyond fifteen minute fire response service time.	0 Points	
	Service area for site includes actively developing subdivisions and vacant residential land amounting to 40% of the land area of the school zone.	3 Points	3
Proximity to	Service area for site includes actively developing subdivisions and vacant residential land amounting to 20-39% of the land area of the school zone.	2 points	
Future Growth	Service area for site includes vacant residential land amounting to 20% of the land area of the school zone.	1 Point	
	Service area for site does not include actively developing subdivisions or vacant residential land.	0 Points	
	Site is not within 2,000 feet separation from a highway, railroad or pipeline		
Separation from	transporting hazardous materials.	2 Point	
Hazardous Materials	Site is not within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials	1 Point	
Conduits	Site is within 1,000 feet separation from a highway, railroad or pipeline transporting hazardous materials.	0 Points	0
	Site is not within 1,000 feet separation from an adult business, convenience store or	1 Point	1
Separation from Social Hazards	other social hazard. Site is within 1,000 feet separation from an adult business, convenience store or	0 Points	1
	other social hazard.		
Access to Outdoor	Site is within a ten minute walk of Parks, Trails or Other Outdoor Recreation / Learning Opportunities.	1 Point	1
Recreation / Learning Opportunities	Site is not within a ten minute walk of Parks, Trails or Other Outdoor Recreation / Learning Opportunities.	0 Points	
Access to	Site is within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	1 Point	
Cultural Resources	Site is not within a ten minute walk of Museums, Cultural Centers or Other Cultural Resources.	0 Points	0
Proximity to	Site is within ten minute walk of Parke Librarian or other Community Facilities	1 Delet	
Other	Site is within ten minute walk of Parks, Libraries, or other Community Facilities.	1 Point	
Community Facilities	Site is not within ten minute walk of Parks, Libraries, or other Community Facilities.	0 Points	0

<u>Building Configuration Issues - 25 Points Possible</u> Scorer Comment: Non-Traditional school. Minimum site requirements.

<u>Criteria</u>	Classification	Possible Points	
	Site complies with size requirements	10 Points	10
Size	Site is within 98% of size requirements	8 Points	
ES=10Ac+1Ac/100Stu	Site is within 96% of size requirements	6 Points	
MS=20Ac+1Ac/100Stu	Site is within 94% of size requirements	4 Points	
HS=30Ac+1Ac/100Stu	Site is within 92% of size requirements	2 Points	
	Site is less than 92% of size requirements	0 Points	
	Site is immediately adjacent to the desired road category.	5 Points	
Adjacency to	Site is within one land parcel of the desired road category.	4 Points	
Appropriate Road	Site is within two land parcels of the desired road category.	3 Points	
Classification ES=Collector MS=Minor Arterial	Site is adjacent to a different road category than desired, but still deemed acceptable by staff.	2 Points	
HS=Minor Arterial	Site is within three land parcels of the desired road category.	1 Point	
	Site does not meet requirements.	0 Points	
	Site is served by highways and major roads that have existing year- round maintenance.	2 Points	!
Ease of Year-Round Access	Site is served by highways and major roads that require slight adjustment of year-round maintenance patterns and schedules, but no extension of service.	1 Points	
	Site requires extension of maintenance service as determined by staff.	0 Point	
	Site requires no overlot grading to achieve desired grade.	2 Points	
Acceptable Topography	Site requires minor overlot grading to achieve desired grade as determined by staff and / or facility design.	1 Point	
Тородгариу	Site requires major overlot grading or results in grades in excess of those desired for facility design as determined by staff.	0 Points	
Access to Pedestrian Facilities	Site has immediate access to significant sidewalk network or pedestrian trail network.	2 Points	
racilities	Site does not have access to sidewalks or trails.	0 Points	
Positive Solar	Site presents opportunity for facility orientation satisfying passive solar design goals as determined by staff.	1 Point	
Orientation Possible	Site does not present opportunity for passive solar facility orientation.	0 Points	
Acceptable Protection	Site presents opportunity for facility orientation satisfying wind protection design goals as determined by staff.	1 Point	:
from Elements (Wind)	Site does not present opportunity for protection from wind.	0 Points	
	Cite does not include attractures that require domalist		
Nominal Demolition /	Site does not include structures that require demolition or significant topographical irregularities.	1 Point	
Excavation Needs	Site includes structures that require demolition or significant topographical irregularities requiring grading.	0 Points	
	Site presents opportunity for joint development or use between MSB		
Joint Development Opportunities	School District and Borough or other agency.	1 Point	
	No joint development opportunities.	0 Points	

Site Cost Issues - 25 Points Possible

Criteria	Classification	Possible Points
	Site is owned by the Borough or can be donated.	10 Points
	Site is available within appraised value.	8 Points
Available	Site is available within 105% of appraised value.	6 Points
Available	Site is available within 110% of appraised value.	4 Points
	Site is available within 115% of appraised value.	2 Points
	Site cost is in excess of 115% of appraised value.	0 Points
····	and describing excession 115 % of approximate value.	0 TOILLS
	Site is adjacent to desired road category and requires only site access driveways.	5 Points
Road Construction Costs	Site is two hundred feet away from desired road category and requires nominal road construction costs for access.	4 Points
	Site is four hundred feet away from desired road category and requires reasonable road construction costs for access.	3 Points
	Site is six hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	2 Points
	Site is eight hundred feet away from desired road category and requires road construction costs for access deemed acceptable by staff.	1 Point
	Site is one thousand or more feet away from desired road category and requires significant road construction costs.	0 Points
	Site is adjacent to necessary gas lines and only requires normal tapping costs.	2 Points
Natural Gas Availability Cost	Site is within four hundred feet of necessary gas lines and requires nominal line extension costs as deemed acceptable by staff.	1 Point
	Site requires significant gas line extension costs as determined by staff or does not have gas available to the site.	0 Points
	Grading costs are normal given construction expectations as determined by staff.	2 Point
Grading Costs	Grading costs are constrained by existing soil conditions given construction expectations determined by staff	1 point
·	Grading costs are excessive given construction expectations as determined by staff.	0 Points
	Wohan dayahan ah an	
Water	Water development costs are normal given construction expectations as determined by staff.	2 Point
Development Costs	Water development costs are constrained by existing conditions given construction expectations determined by staff	1 point
· · · · · ·	Water development costs are excessive given construction expectations as determined by staff.	0 Points
Sewage Development Costs	Sewage development costs are normal given construction expectations as determined by staff.	1 Point
	Sewage development costs are excessive given construction expectations as determined by staff.	0 Points
Electric Dovelenment	Electric development costs are normal given construction expectations as determined by staff.	1 Point
Development Costs	Electric development costs are excessive given construction expectations as determined by staff.	0 Points
Telephone Development	Telephone development costs are normal given construction expectations as determined by staff.	1 Point
Costs	Telephone development costs are excessive given construction expectations as determined by staff.	0 Points
Broadband	Site is adjacent to broadband access lines and only requires nominal linkage costs.	1 Points
Access Cost	Site is remote from broadband access lines and requires significant extension costs as determined by staff.	0 Points

Engineering Suitability Issues - 25 Points Possible

<u>Criteria</u>	Classification	Possible Points
	Site is immediately adjacent to urban infrastructure.	10 Points
	Site is within two hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	8 Points
Access to Urban Infrastructure -	Site is within four hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	6 Points
Water, Sewer, Electrical	Site is within six hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	4 Points
	Site is within eight hundred feet of urban infrastructure and requires acceptable extension costs as determined by staff.	2 Points
	Site requires unacceptable urban infrastructure extension costs.	0 Points
	No self (helld) - for all the deall - self-the self-the	
	No soil / building foundation challenges exist. Site is completely outside of identified problem soil zones.	5 Points
	Site may be slightly within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with nominal cost as determined by staff.	4 Points
Acceptable Soils / Building	Site may be partially within problem soil zones. Minor soil / building foundation challenges exist, but can be addressed with reasonable cost as determined by staff.	3 Points
Foundation Conditions	Site is well within problem soil zones. Soil / building foundation challenges exist, but can be addressed with acceptable cost as determined by staff.	2 Points
	Site is predominantly within problem soil zones. Soil / building foundation challenges exist, further soil testing is warranted, but site remains viable as determined by staff.	1 Point
	Site does not meet requirements.	0 Points
	P	
	No natural hazard, erosion, and flooding conditions exist.	3 Points
Avoids Natural Hazards -	Minor natural hazard conditions exist, but do not result in significant hazard or mitigation cost as determined by staff.	2 Points
Flooding, Erosion	Natural hazard conditions exist. Further evaluation or study is required, but site remains viable as determined by staff.	1 Point
Part of the State	Site does not meet requirements.	0 Points
	No establishment	2.0-1-1-
Acceptable	No seismic issues exist.	2 Points
Seismic Conditions	Seismic conditions meet appropriate governmental requirements.	1 Point
Conditions	Site does not meet requirements.	0 Points
Acceptable	Drainage conditions meet appropriate governmental requirements.	1 Point
Drainage	Site does not meet requirements.	0 Points
	one does not mode requirement.	0.10111110
Acceptable Permafrost	Permafrost stability conditions meet appropriate governmental requirements.	1 Point
Stability	Site does not meet requirements.	0 Points
Not Susceptible to Forest Fire	Forest fire susceptibility conditions meet appropriate governmental requirements.	1 Point
(Avoidance of Spruce Beetle Infestations)	Site does not meet requirements.	0 Points
All Permitting Viable	All permitting is viable and meets appropriate governmental requirements.	1 Point
Viable	Site does not meet requirements.	0 Points
Acceptable	Zoning issues of site meet appropriate governmental requirements.	1 Point
Zoning	Site does not meet requirements.	0 Points