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1.0 INTRODUCTION

1.1 Background
The Anchorage School District (ASD) Student Transportation Facility operates on a property near the southwest corner of Tudor and Elmore Roads. This facility will need to be relocated to allow for a mixed-use development planned on the site to be developed to its highest and best potential and as identified in the recently adopted Anchorage 2040 Land Use Plan (2040 LUP). The future Tudor-Elmore Development will include the new location for the Department of Health and Human Service (DHHS) facility, as well as proposed medical office buildings, a grocery store, hotel, retail, restaurant, and residential. The mixed-use development is required to provide at least 192 dwelling units. Development of the grocery store, which has been a priority of the community for several decades, and dwelling units are dependent on the relocation of the ASD Student Transportation Facility. The facility uses a considerable amount of area and its location on the site would prevent a commercial development from having adequate access, impeding its potential to be viable.

The ASD Student Transportation Facility serves East and Bartlett High Schools, and all East-Anchorage elementary and middle schools. This facility is the only ASD Student Transportation Facility that is not privately owned. The current location is owned by the MOA and is managed by the ASD under a management agreement. The current facility occupies approximately 9.5 acres of land which includes partially covered bus parking for 124 buses with electrical hook-ups, employee parking, specialized equipment parking, snow storage, a facility with seven maintenance bays, a drive-thru wash bay, and an administrative area for staff support and operation functions. In addition, it includes three portable classroom buildings used as additional administrative space and storage, separate storage containers and bus refueling and cleaning stations.

Public buildings or facilities, such as the ASD Student Transportation Facility, are subject to a Public Facility Site Selection Study under Anchorage Municipal Code (AMC) 21.03.140. The purpose of this study is to document the analysis of alternative sites evaluated for the relocation of the ASD Student Facility and to provide the MOA with the results of this analysis and a recommendation for suitable sites for its relocation.

1.2 New Site Criteria
The goal of this site selection study is to identify sites that can be efficiently developed to accommodate the ASD Student Transportation Facility while providing a high level of efficient service for East Anchorage schools and residents. The study also considers the cost effectiveness of potential sites in terms of acquisition and development costs. The following criteria were used in the initial analysis of potential sites.

- Location
- Size
- Zoning District
- Accessibility
- Environmental Sensitivity
• Soil and Drainage
• Availability of Utilities
• Acquisition and Development Cost

These evaluation criteria are described further below.

**Location**- The ASD Student Transportation Facility serves schools in East Anchorage. The initial study area looked at sites from Lake Otis Parkway, east to Muldoon Road, and Debarr Road, south to Tudor Road. Due to the abundance of publicly owned land south of Tudor Road and along Dr. Martin Luther King Junior Avenue, the boundary was extended south as depicted in Figure 1, Study Area. Due to the operations of the facility, proximity to a high-capacity road, such as an arterial or greater classification in the Official Streets and Highway Plan (OSHP), is desirable to create an efficient and effective route.

**Size**- The size desired is based on the required area of the ASD Student Transportation Facility to function, including: bus maneuvering; maintenance and cleaning; fueling; parking; and office space for ASD support staff. The current facility covers approximately 9.5 acres. Various conceptual site layouts were prepared that show the facility could work on 8 acres, which was determined to be the minimum size parcel acceptable for a new location. Parcel shape influences functionality.

**Zoning District** - The ASD Student Transportation Facility is permitted as an Outdoor Storage of Vehicles and/or Equipment associated with Community use in the Public Lands and Institutions (PLI) District. Alternatively, it is permitted in the Light Industrial (I-1) or Heavy Industrial (I-2) Districts as a storage yard. Sites that are zoned PLI, I-1, or I-2 District are preferred over those with other zoning designations. Rezoning a site would only be allowable if supported by the 2040 LUP and adopted land use plan map.

**Accessibility** - Accessibility considerations include the ease of ingress/egress from the property onto existing streets. Site proximity to arterial or collector roads is favored in the analysis, while use of residential streets for access is less favorable.

**Environmental Resource Sensitivity**- The environmental resource sensitivity criteria evaluates issues such as wetland functions and values, waterways, and upland habitats. High value wetlands and large areas of contiguous habitat are typically more cost prohibitive to develop. Sites that do not contain environmental resources are favored over sites that are encumbered.

**Soil and Drainage**- Soils, drainage, and groundwater characteristics are very important factors affecting development costs. In general, sites with engineered quality soils and good on-site drainage are less expensive to develop and are preferred.

**Availability of Utilities**- The ASD Student Transportation Facility requires water, sewer, storm drain, electric, gas, and telecommunications connection services. Sites with adequate utility access (proximity and capacity) are preferred to sites that lack some of these utilities. Sites requiring on-site wells and on-site septic systems require larger site sizes, as well as potentially higher operations and maintenance costs.
Acquisition and Development Cost - In general, municipally-owned property is preferable over privately-owned sites, as there is typically no direct cost associated with site acquisition. However, there is an opportunity cost associated with reserving municipal lands for a non-revenue-producing use. In addition, off-site development costs, such as constructing an access road or upgrading utility systems increase the overall cost to develop a site. Site characteristics, such as those mentioned above, are very important factors in development cost and can result in a no-cost site being more expensive in the end than a purchased site.

1.3 Site Selection Process
The site identification and evaluation process consisted of:

1. Determining search criteria and identifying desired parameters of the site.
2. Inventorying potentially available parcels.
3. Evaluating parcels against initial criteria and eliminating unsuitable sites.
4. Refining the inventory to only suitable parcels and expanding analysis on these sites.
5. Presenting the most suitable sites and documenting the merits and potential drawbacks for each.
6. Making a site recommendation based on the analysis.

A comprehensive list of potential sites was developed based on the following initial screening criteria:

- Location: Lake Otis Parkway, east to Muldoon Road, and Debarr Road, south to Dr. Martin Luther King Junior Avenue, including parcels directly abutting these streets (Figure 1 - Study Area).
- Size: The parcel must be at least 8 acres in size.

The initial site inventory included 83 potential parcels within the study area. The zoning designation of each site was evaluated and only sites zoned PLI, I-1, or 1-2 District were retained for further evaluation. This resulted in 44 suitable sites for further consideration (Figure 2 - Potential Sites for Analysis).

Of these 44 remaining sites, developed parcels, parcels with obvious environmental constraints (wetlands and/or lakes covering majority of site) (Figure 3 – Wetlands Map), or parcels not adjacent or in close proximity to an arterial or greater classified road were eliminated. This resulted in five sites to be evaluated against the remaining criteria.

1.4 Sites Selected for Further Analysis
The five sites selected for further analysis include Sites 13, 18, 21, 22, and 27 (Figure 2). Below is a brief overview of each site. A more detailed evaluation for each site is provided in Section 2 (Site Evaluations).

**Site 13:** Located at the northeast corner of Debarr Road and Patterson Street, the site is zoned I-1 District. The undeveloped parcel is approximately 12.8 acres and is currently under private ownership. There is a signalized intersection at Debarr Road and Patterson Street, providing good access. Access to Debarr Road provides good east/west connections to several major north/south corridors.
Site 18: Located near the southeast corner of East Tudor Road and Campbell Airstrip Road, the parcel is owned by the MOA and is zoned PLI District. The undeveloped parcel is 20 acres and has some wetlands on the site. Given the size of this parcel and the availability of adjacent undeveloped lands to the west (portion of site 15), there would likely be adequate area, not encumbered with wetlands, for at least an 8-acre development. The site enjoys good access from a signalized intersection at Tudor and Campbell Airstrip Roads, with Tudor Road providing east/west access to several major north/south corridors.

Site 21: Located south of Dr. Martin Luther King Junior Avenue and the Alaska State Crime Lab, this property is owned by the MOA and is zoned PLI District. This undeveloped parcel is 19.8 acres. The site has direct access onto Dr. Martin Luther King Junior Avenue which provides good east/west connections to several major north/south corridors.

Site 22: Located at the northeast corner of Muldoon Road and East 32nd Avenue, the site is adjacent to the Totem Theater. This parcel is zoned Two-Family Residential (R-2A) District, and is undeveloped. The parcel is approximately 24.8 acres and is owned by the Anchorage School District. The site has direct access onto Muldoon Road at a signalized intersection via East 32nd Avenue. Muldoon Road provides good north/south access to several major east/west corridors.

Site 27: Located near the northwest corner of Dr. Martin Luther King Junior Avenue and Tudor Centre Drive, the site is partially developed with the Anchorage Police Department. This parcel is zoned PLI District, and is approximately 25.7 acres, however the developable area is 9.6 acres. The site is positioned to potentially have direct access Dr. Martin Luther King Junior Avenue which provides good east/west connection, and Tudor Centre Drive, providing good north/south connections to several major corridors. There is a plat note restricting access to Tudor Centre Drive that can potentially be modified or removed to allow this connection.

1.5 Land Use Planning Considerations
The sites being considered for the relocation of the ASD Student Transportation Facility are subject to the provisions of the Anchorage Bowl Comprehensive Plan (Anchorage 2020), the 2040 LUP, East Anchorage District Plan (EADP), The UMED District Plan, and Anchorage Municipal Code (AMC) Title 21 land use regulations.

Anchorage 2020 does not specifically address development of these sites. The 2040 LUP designates site 13 as Town Center. Town Centers are intended to provide a focal point of activity for a group of neighborhoods and the regional area for major parts of the Anchorage Bowl and to serve as destinations for shopping, entertainment, and services in pedestrian-friendly settings. Sites 18, 21, and 22 are designated as Community Facility or Institution in the 2040 LUP. The Community Facility or Institution designation is intended for public or institutional facilities on public or institutional lands. The 2040 LUP designation supports the ASD Student Transportation Facility use.

Sites 13 and 22 are within the EADP area. The EADP land use map designates site 13 as Town Center, which, like the 2040 LUP, is intended to provide areas that serve as a focus of community activity including retail shopping and services, public facilities, and medium- to high-density housing. This
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designation does not support the ASD Student Transportation Facility use on site 13. Site 22 is designated as School and Community Institutional in the EADP land use plan map. The purpose of this designation is to provide small- to medium-scale institutions that provides a community service for the surrounding area. This designation supports the ASD Student Transportation Facility use.

Sites 21 and 27 are located within the 3500 Tudor Road Master Plan area. The purpose of this plan is to provide a framework for development of the area south of Tudor Road between Tozier Track and Boniface Parkway. The 3500 Tudor Road Master Plan Land Use Map designates site 21 as Recreation and Recreation-Related Public Purposes, which does not support the ASD Student Transportation Maintenance Facility use. The plan designates site 27 as Suitable for New Development for institutional uses, which does support the ASD Student Transportation Maintenance Facility use.

Under Title 21, the PLI District is intended to include “major public and quasi-public civic, administrative, and institutional uses and activities” (AMC 21.04.060). The ASD Student Transportation Facility is permitted as an Outdoor Vehicle and/or Equipment Storage associated with Community Use in the PLI District, subject to approval of a Major Site Plan Review.

The I-1 District is intended primarily for “public and private light and general manufacturing, processing, service, storage, wholesale, and distribution operations along with other uses that support and/or are compatible with industrial uses (AMC 21.04.050). The ASD Student Transportation Facility is a permitted use in the I-1 District.

2.0 SITE EVALUATIONS
The following provides a detailed discussion of the evaluation of the five sites. Existing condition maps, graphically summarizing each of the five sites, can be found in Appendix B.

2.1 Site 13 Evaluation
2.1.1 General Information/Size
Site 13 is located near the northeast corner of Debarr Road and Patterson street and can be found on MOA Grid SW1340. The site is privately owned and is just under 13 acres in size. The Parcel ID number is 006-411-19 and is legally described as Creekside Subdivision, Tract A, per plat 2012-065.

2.1.2 Zoning District
The site is zoned I-1 District. Under this designation, lots are required to be at least 50 feet wide, with a total area of 6,000 square feet or more. Front yards must be at least 10 feet deep, and side and rear yards must be 20 feet deep if adjacent to a residential district; otherwise 0 or at least 5 feet deep. There is a 50-foot height restriction for structures located within the I-1 District (AMC 21.06.020). While this parcel meets zoning requirements and the zoning designation supports the use, this site is designated as Town Center by the 2040 LUP and the East Anchorage District Plan, as noted in section 1.5. This designation does not support the use.
2.1.3 Accessibility
Access to this site as available via both Debarr Road and Patterson Street. Debarr Road is classified as a major arterial, which is preferred for this type of use. There is a signalized intersection at Debarr Road and Patterson Road which provides good multi-directional access to major corridors.

2.1.4 Environmental Resource Sensitivity
The site is not encumbered with any known wetlands, streams, or critical habitat. This site has been partially developed with fill and grade activities.

2.1.5 Soil and Drainage
The site is relatively level and drains to the northwest. Ground conditions generally consist of 20 to 35 feet of alluvial gravel with varying degrees of silt and sand overtop dense, glacial till. Pockets of loose silty soils are present across the site and fill up to several feet thick is present in some areas. Several feet of alluvial sand and gravel may have been mined in some areas and backfilled with inferior materials. Geotechnical reports from 2008 reference that the northern portion of the site appears to have been contaminated with petroleum hydrocarbons and chlorinated solvents and were in the process of being remediated.

2.1.6 Availability of Utilities
Water Supply
This site is serviced by AWWU from a water main located within the north side of Debarr Road, the east side of Patterson Street, and the north side of 10th Avenue. A water service extension would be required to connect into this water main.

Sewer
A sewer main is located within the east side of East 10th Avenue. A sewer mainline extension would be required to connect into this sewer main. This connection may require a bore under East 10th Avenue, which is a significant cost impact.

Storm Drain
The municipal storm system is available on the east portion of the site.

Electric
This property is within the Chugach Electric Association (CEA) service area. An electric main runs along the northern side of Debarr Road, the western side of Patterson Street, and the northern side of East 10th Avenue. An electric service with connect will be required to serve this site.

Gas
This property is within the ENSTAR service area. Gas is available on the south side of Debarr Road and the west side of Patterson Street.
Telecommunications
This property is within the Alaska Communications Service (ACS) service area. Telecommunications is available on the northern side of Debarr Road.

2.1.7 Acquisition/Site Development Cost
This site is privately owned and would need to be acquired. The site is currently not listed in the Alaska Multiple Listing Service (MLS) or otherwise advertised as being for sale. The 2018 MOA assessed value for the entire site is $5,581,000.

Earthwork for site grading may involve filling low areas or improving soft silty areas by over excavation and replacement. Conventional shallow foundations are feasible with the potential for additional over excavation if deeper fill is encountered.

2.2 Site 18 Evaluation
2.2.1 General Information/Size
Site 18 is located along the south side of Tudor Road, east of the Tudor Road and Campbell Airstrip Road intersection within MOA Grid SW1839. The site is owned by the MOA Heritage Land Bank and is 21.6 acres in size. The Parcel ID number is 007-162-01 and is legally described as T13N R3W SEC 35 N2NE4NE4. This site is subject to a US Department of Interior Bureau of Land Management Certificate of Approval (number 50-17) to transfer lands to the MOA to be used for public parks and recreation purposes, and other compatible public purposes only. The use of the ASD Student Transportation Facility is considered such a public purpose, and is consistent with development of adjacent land that is also affected by this Certificate of Approval. This site also includes a portion of Parcel ID 007-261-06, owned by the MOA School District, to provide adequate access to the site via Campbell Airstrip Road.

2.2.2 Zoning District
This site is zoned PLI District. Under this designation, lots are required to be at least 50 feet wide, with a total area of 6,000 square feet or more, with up to 45 percent maximum lot coverage. Front, rear, and side yard setbacks shall be 25 feet when abutting a DR, PR, PLI, or residential district; otherwise, no yard is required. The height restriction for structures located within the PLI District is 45 feet (AMC 21.06.020).

This parcel meets these requirements, and as noted in section 1.5, this site is designated as Community Facility or Institution by the 2040 LUP. This designation supports the use.

2.2.3 Accessibility
Access to this site as available via both Tudor Road and Campbell Airstrip Road. Tudor Road is classified as a major arterial by the OSHP, which is preferred for this type of use. Campbell Airstrip Road is not specifically classified in the OSHP and is therefore considered a local street, although it serves and is constructed as a collector. There is a signalized intersection at East Tudor Road and Campbell Airstrip Road, providing multi-directional access, with East Tudor Road providing good access to major corridors. There is potential for a secondary access point from the private drive that serves Benny Benson that would require a shared access agreement.
2.2.4 Environmental Resource Sensitivity
A portion of the property is encumbered with Class A wetlands. Class A wetlands have the highest resources values, and perform at least two significant wetland functions. Class A wetlands are not to be altered or otherwise disturbed in any manner. Any activity that includes placement of fill in a Class A wetland requires an Individual Section 404 permit from the Corps of Engineers prior to development. The site is large enough that it could likely be developed without disturbing any onsite wetlands.

2.2.5 Soil and Drainage
The southwestern portion of this site is a topographic high which supports the Municipality’s 5 million gallon (MG) and 10 MG water tanks. The east and southeastern parcel are delineated as Class A wetlands and likely contain significant peat and may be unsuitable for structures or pavement. The northern parcel (or half of the area) is primarily the hill or topographic high. Based on the geotechnical report for the water tank, the hill consists of 15 feet of loose silt or silty sand over dense, silty sand and gravel (till). The dense soil is suitable for conventional foundations for structures or pavement sections. Undeveloped areas may contain relic permafrost, due to the north facing slope aspect.

2.2.6 Availability of Utilities
Water Supply
The site is served by AWWU by a public water main line that runs along the northern property boundary.

Sewer
A sewer mainline is located within the north side of East Tudor Road. A sewer mainline extension would be required to connect to this sewer main.

Storm Drain
The municipal storm drain runs along the north side of Tudor Road.

Electric
This property is within the CEA service area. An electric main runs along north property boundary within the south side of Tudor Road.

Gas
This property is within the ENSTAR service area. Gas is available on the south side of Tudor Road.

Telecommunications
This property is within the ACS service area. Telecommunications is available on the south side of Tudor Road.

2.2.7 Ownership and Acquisition Cost
This site is owned by the MOA Heritage Land Bank, so there would be no cost associated with acquisition. This use would be subject to approval of a Major Site Plan Review, which would cost approximately $25-30K requires an approximate 4-month time-period for approval.
Earthwork considerations include significant grading to level the site, particularly the northern parcel. The silty soil may be difficult to compact due to the high fines content (30+ percent) for cut and fill although it is possible.Areas of fill supporting structures may require imported NFS fill to reduce frost heave movement for cold foundations.

2.3 Site 21 Evaluation

2.3.1 General Information/Size
Site 21 is located south of the intersection of Dr. Martin Luther King Junior Avenue and Tudor Centre Drive and can be found on MOA Grid SW1836. The site is owned by the MOA Heritage Land Bank and is just under 20 acres in size. The Parcel ID number is 008-121-08 and is legally described as Tudor Municipal Campus Subdivision, Tract 6, per plat 2009-16. This site is also subject to the US Department of Interior Bureau of Land Management Certificate of Approval (number 50-17) discussed above. The use of the ASD Student Transportation Facility is considered such public purpose, and is consistent with development of adjacent land that is also affected by this Certificate of Approval.

2.3.2 Zoning District
This site is zoned PLI District. Under this designation, lots are required to be at least 50 feet wide, with a total area of 6,000 square feet or more, with up to 45 percent maximum lot coverage. Front, rear, and side yard setbacks shall be 25 feet when abutting a DR, PR, PLI, or residential district; otherwise, no yard is required. The height restriction for structures located within the PLI District is 45 feet (AMC 21.06.020).

This parcel meets these requirements and as noted in section 1.5, this site is designated as Community Facility or Institution by the 2040 LUP. This designation supports the use. However, the applicable 3500 Tudor Road Master Plan Land Use Map designation of Recreation and Recreation-Related Public Purposes does not support the use.

2.3.3 Accessibility
Access to this site as available via Dr. Martin Luther King Junior Avenue, which is classified as a minor arterial by the OSHP. A road classification of arterial or greater is desired for the facility, and would satisfy that requirement. There is a signalized intersection at Dr. Martin Luther King Junior Avenue and Tudor Centre Drive and provides good access to major corridors.

2.3.4 Environmental Resource Sensitivity
This site is an isolated upland area surrounded by Class A wetlands

2.3.5 Soil and Drainage
Site 21 has geotechnical data nearby for the roadway and trail overpass. Peat from 1 to 6 feet deep was encountered overlying silt, silty sand and gravel, and sand to depths of 15 to 20 feet. Below this, very stiff, lean clay approximately 10 feet thick over silty gravel, silt, and sand to 60 feet. There is a local topographic high, with potentially 30 to 40 feet of site elevation change across the parcel. Drainage across the site is generally to the west with the area draining south towards Campbell Creek. Undeveloped areas may contain discontinuous permafrost.
2.3.6 Availability of Utilities

Water Supply
This site is served by AWWU from a water main located within the north side of Dr. Martin Luther King Junior Avenue. A water service extension would be required to connect into this water main. This connection will likely require a bore under Dr. Martin Luther King Junior Avenue, which is a significant cost impact.

Sewer
A sewer mainline is located within the east side of Elmore Road. A mainline extension would be required to connect to this sewer main. This connection will likely require a bore under Elmore Road and Dr. Martin Luther King Junior Avenue, which is a significant cost impact.

Storm Drain
The municipal storm drain is available within Dr. Martin Luther King Junior Avenue.

Electric
This property is within the CEA service area. Electric mains run along the east sides of Elmore Road and Tudor Centre Drive. An electric service connect will be required to serve this site.

Gas
This property is within the ENSTAR service area. Gas is available along the south side of Tudor Drive.

Telecommunications
This property is within the ACS service area. There are no telecommunications connections near the property, and will need to be developed to serve this site.

2.3.7 Ownership and Acquisition Cost
This site is owned by the MOA Heritage Land Bank, so there would be no cost associated with acquisition. This use would be subject to approval of a Major Site Plan Review, which would cost approximately $25-30K and requires an approximate 4-month time-period for approval.

Earthwork considerations include significant cut and fill to the level the parcel. The site appears generally suitable to support structures and pavement with up to 6 feet of peat observed in the area that will require over excavation and replacement.

2.4 Site 22 Evaluation
2.4.1 General Information/Size
Site 22 is located near the northeast corner of Muldoon Road and East 32nd Avenue and can be found on MOA Grid SW1641. This site is adjacent to Totem Theater. The site is owned by the MOA School District and is just under 25 acres in size. The Parcel ID number is 007-291-07 and is generally described as T13N R3W SEC 25 NW4NW4NE4&NE4NW4NE4 PTNS & E2NW4NE4&NW4NW4NE4 PTNS.
2.4.2 Zoning District
This site is zoned R-2A District, which does not allow outdoor storage associated with community uses as a permitted or conditional use. Under this designation, lots are required to be at least 50 feet wide, with a total area of 6,000 square feet or more, with up to 40 percent maximum lot coverage. Front yard setbacks must be 20 feet deep, side yards must be 5 feet deep, and rear yards must be 10 feet deep. The height restriction for primary structures located within the R-2A District is 30 feet (AMC 21.06.020). This site was acquired by the ASD for a possible middle school or elementary school. Following the development of Begich Middle School at another site, only an elementary school is required for this area. The site is large enough to accommodate a future elementary school and the ASD Student Transportation Facility.

The site would have to go through a zoning map amendment to rezone the parcel to PLI District, which is supported by the East Anchorage District Plan designation of School and Community Institution as well as the 2040 LUP designation of Community Facility or Institution, noted in section 1.5. This designation supports the use. However, the possible relocation for the ASD Student Transportation Facility at this location was presented to the Northeast Community Council on September 21, 2017. This was met by opposition by the community due to surrounding residential uses, and it was determined that a site selection process should be performed to determine if there were any other suitable sites that would not impact residential development.

2.4.3 Accessibility
Access to this site is available via Muldoon Road. Muldoon Road is classified as a major arterial by the OSHP, which is preferred for this type of use. There is a signalized intersection at Muldoon Road and East 32nd Avenue and Muldoon Road provides good access to several major transportation corridors.

2.4.4 Environmental Resource Sensitivity
A portion of the site, along the east property line, is encumbered with Class C wetlands. Given the size and shape of the parcel, it is likely that an 8-acre development would work on the site with minimal to no disturbance of the wetlands.

2.4.5 Soil and Drainage
Site 22 has multiple geotechnical studies which have been completed for private entities. The northwest area of the parcel appears to be primarily silty sand and gravel capable of supporting conventional shallow foundations or parking areas. This area is also the high topographical point with onsite drainage to the eastern portion. The eastern portion of the site is lower elevation and contains uncontrolled fill consisting of silty sand, silty gravel, and peat to depths of 23 feet overlying natural peat to depths up to 33 feet. Overall peat thickness is up to 25 feet thick in the deeper areas.

2.4.6 Availability of Utilities
Water Supply
This site is served by AWWU from a public water main line, which runs from East 32nd Avenue to East Northern Lights Boulevard.
Sewer
A public sewer main line runs along a portion of East 32nd Avenue, serving the adjacent Totem Theatre. A main line extension, bringing sewer to the site, would be required.

Storm Drain
A municipal storm drain runs along the south side of East 32nd Avenue and available to this site from its southern boundary.

Electric
This property is within the CEA service area. An electric main runs along eastern property boundary, and a portion of the northern property boundary. An electric service connect will be required to serve this site.

Gas
This property is within the ENSTAR service area. Gas is available on the south side of East 32nd Avenue.

Telecommunications
This property is within the ACS service area. Telecommunications is available on the northern side of East 32nd Avenue.

2.4.7 Ownership and Acquisition Cost
This site is owned by the MOA School District, so there would be no cost associated with acquisition. The site would need to be rezoned to PLI District which could cost between approximately $25-30K and would add 6-9 months to the development. This use would be subject to approval of a Major Site Plan Review, which would cost approximately $25-30K and requires an approximate 4-month time-period for approval.

Excavation and replacement of deep peat is typically not economical for parking or structures. The northwest portion of the site appears suitable for structures. The eastern portion could be surcharged to reduce settlement. Pavement or canopy structures are not recommended in the eastern portions of the site without surcharging the site due to the substantial peat thickness (up to 25 feet). Deep foundations such as driven piles are possible through the peat, but may require pile lengths more than 50 feet due to down drag forces or frost heave resistance.

2.5 Site 27 Evaluation
2.5.1 General Information/Size
Site 27 is located near the northwest corner of Dr. Marin Luther King Junior Avenue and Tudor Centre Drive, and can be found on MOA Grid SW1836. The site is owned by the MOA and is approximately 25.7 acres in size, however is partially developed with the Anchorage Police Department. The portion of this site that is developable is 9.4 acres, and may be developed further to the west on current Animal Control land, if additional space is required. The Parcel ID is 008-091-16 and is legally known as Tudor Municipal Campus, Tract 2, per plat 2009-016.
2.5.2 Zoning District
This site is zoned PLI District. Under this designation, lots are required to be at least 50 feet wide, with a total area of 6,000 square feet or more, with up to 45 percent maximum lot coverage. Front, rear, and side yard setbacks shall be 25 feet when abutting a DR, PR, PLI, or residential district; otherwise, no yard is required. The height restriction for structures located within the PLI District is 45 feet (21.06.020).

This parcel meets these requirements, and as noted in section 1.5, this site is designated as Community Facility or Institution by the 2040 LUP. This designation supports the use.

2.5.3 Accessibility
Access to this site as available via Dr. Martin Luther King Junior Avenue, which is classified as a minor arterial by the OSHP. A road classification of arterial or greater is desired for the facility, and would satisfy that requirement. There is a signalized intersection at Dr. Martin Luther King Junior Avenue and Tudor Centre Drive and provides good access to major corridors. Plat 2009-016 restricts direct access onto Tudor Centre Drive, which may be modified or removed if approved by the Platting Board to allow this access. There is potential for a secondary access point from the private drive that serves the Anchorage Police Department that would require a shared access agreement.

2.5.4 Environmental Resource Sensitivity
The 9.4 acre developable portion of this site is encumbered with Class B and C wetlands. Given the size and shape of the parcel, it is likely that development would work on the site with minimal disturbance of the Class C wetlands. Development of wetlands may be permitted following issuance of an Individual Section 404 Permit from the Corp of Engineers. This site was previously granted a Section 404 permit to the MOA, however a new permit would need to be obtained.

2.5.5 Soil and Drainage
Site 27 has geotechnical data that was obtained during development of the Anchorage Police Department Facilities. In general, 1 to 10 feet of peat overlay sand and gravel with silt, with sand being more prevalent than gravel. Existing geotechnical data is to a maximum depth of 30 feet. The water table is shallow, typically between 2 and 10 feet below ground surface. Topography is generally flat, with ridges 5 to 15 feet in height scattered over the site. These ridges are waste piles from gravel extraction in the area and contain organic material. Existing material below the peat is dense and would likely support conventional foundations for structures or pavement sections.

2.5.6 Availability of Utilities
Water Supply
The site is served by AWWU by a public water main line that runs along the southern property boundary.

Sewer
A sewer mainline is located to the west of this site, south of the Anchorage Police Department. A mainline extension would be required to connect to this sewer main.
Storm Drain
The municipal storm drain is available near the southern boundary of the site at Dr. Martin Luther King Jr. Avenue, and east of the property at Tudor Centre Drive.

Electric
This property is within the CEA service area. An electric main runs along west property boundary. An electric service extension may be required to enhance service to this site.

Gas
This property is within the ENSTAR service area. Gas is available on the south side of Tudor Drive, north of the property.

Telephone
This property is within the ACS service area. Telephone is available on the southern side of East Tudor Road, north of the property.

2.5.7 Ownership and Acquisition Cost
This site is owned by the MOA, with management authority to MOA Real Estate Services, so there would be no cost associated with acquisition. This use would be subject to approval of a Major Site Plan Review, which would cost approximately $25-30K requires an approximate 4-month time-period for approval. Section 404 permitting would add additional cost and potential development time for this site.

Earthwork considerations include significant grading to level the site particularly the northern parcel. The silty soil may be difficult to compact due to the high fines content (30+ percent) for cut and fill although it is possible. Areas of fill supporting structures may require imported NFS fill to reduce frost heave movement for cold foundations.

3.0 COMPARISON AND RECOMMENDATIONS
All five potential sites present challenges and benefits when considered for the potential of the ASD Student Transportation Facility relocation. However, Sites 18, 21, and 27 clearly are more desirable than Sites 13 and 22.

While site 13 is zoned I-1, the ASD Student Transportation Facility is not in line with the 2040 LUP or the EADP. There is access to utilities, however the soils are poor and likely has unknown materials placed on site and on-site contamination has been previously reported. Furthermore, the site it is under private ownership and based on the MOA’s assessed taxable value of $5,581,000, acquisition costs could be significant.

Site 18 is zoned PLI District and is designated Community Facility or Institution in the 2040 LUP, which both allow the ASD Student Transportation Facility. There is good access from a signalized intersection at Tudor and Campbell Airstrip Road. While the site is partially encumbered with wetlands, it is large enough to develop without disturbing them and soils suitable for development are present on the
remainder of the site. The site has sufficient access to utilities. This site is owned by the MOA, resulting in no direct acquisition costs.

Site 21 is zoned PLI District with a 2040 LUP designation of Community Facility and Institutions that support the ASD Student Transportation Facility, however the 3500 Tudor Road Land Use Plan designates this area for Recreation and Recreation-Related Public Purposes, which does not support this use, as it is inconsistent with previous commitments to agencies reflected by this plan. There is a signalized intersection at Dr. Martin Luther King Junior Avenue and Tudor Centre Drive, providing good access. While the site is owned by the MOA and the soils are likely suitable for development, development will likely include extensive cut and fill activities. Utility connections will likely require boring under Dr. Martin Luther King Junior Avenue, which could also result in significant costs.

Site 22 is zoned R-2A District with a 2040 LUP designation of Community Facility and Institutions, which supports the use and a potential rezone to PLI District. There is a signalized intersection at East 32nd Avenue and Muldoon Road, providing good access to the site. This site is owned by the MOA and has adequate access to utilities, but may be difficult to economically develop due to additional entitlements required to allow the use and mitigation measures associated with these entitlements.

Site 27 is zoned PLI District and has a 2040 LUP designation of Community Facility or Institution, which both allow the ASD Student Transportation Maintenance Facility. There is a signalized intersection at Dr. Martin Luther King Junior Avenue and Tudor Centre Drive, potentially providing good access to the site as the plat note currently restricts direct access to Tudor Centre Drive, which may be modified through a platting action; an additional access point from the private drive that serves the Anchorage Police Department provides secondary access to the site. The site is owned by the MOA, resulting in no direct acquisition costs. The site has adequate access to utilities. While the site is encumbered by Class B and C wetlands, a development permit for a portion of this site from the Corp of Engineers has been previously approved, and can likely be obtained in the future for the areas encumbered with Class C wetlands. Existing soils will likely support traditional foundation and development.

Based on the site selection analysis, Site 18 and 27 would maximize the service efficiency while having the least negative impact on the surrounding neighborhoods. Both sites are in close proximity to the existing facility, limiting the impact on standard operations, while maintaining distance from residential districts. Site 27 was previously planned for the Anchorage Police Department expansion for supporting facilities, however is not anticipated to be required in the near future following the recent acquisition and long-term lease of the LIO Building downtown, and the ASD Student Transportation Maintenance Facility use will continue to support a community and institutional use. Development costs of Site 18 would likely be equal to the cost of the other evaluated sites, and Site 27 may incur a slightly higher development cost due cost of permitting and mitigating on site wetlands. Both sites are undeveloped, owned by the MOA, zoned PLI, and the use is supported by the 2040 LUP. This report recommends Site 18 or 27 as the most suitable for the relocation of the ASD Student Transportation Maintenance Facility.