

Application for Conditional Use

Municipality of Anchorage
 Planning Department
 PO Box 196650
 Anchorage, AK 99519-6650



PETITIONER*		PETITIONER REPRESENTATIVE (if any)	
Name (last name first) Municipality of Anchorage		Name (last name first) Hickok, Tanya - The Boutet Company	
Mailing Address P.O. Box 196650		Mailing Address 601 E 57th Place, Suite 102	
Anchorage, AK 99519		Anchorage, AK 99518	
Contact Phone – Day 907-343-7536	Evening	Contact Phone – Day 907-270-6766	Evening
Fax		Fax 907-522-6779	
E-mail robin.ward@anchorageak.gov		E-mail thickok@tbcak.com	

*Report additional petitioners or disclose other co-owners on supplemental form. Failure to divulge other beneficial interest owners may delay processing of this application.

PROPERTY INFORMATION		
Property Tax # (000-000-00-000): 008-121-08-000		
Site Street Address: N/A		
Current legal description: (use additional sheet if necessary) Tudor Municipal Campus Tract 6		
Zoning: PLI	Acreage: 19.82	Grid #: SW1836

CONDITIONAL USE APPROVAL REQUESTED	
Use: General outdoor recreation, commercial - dog mushing tracks (21.05.050.D.4)	
<input checked="" type="checkbox"/> New conditional use	<input type="checkbox"/> Amendment to approved conditional use Original Case #:

I hereby certify that (I am)(I have been authorized to act for) owner of the property described above and that I petition for a conditional use permit in conformance with Title 21 of the Anchorage Municipal Code of Ordinances. I understand that payment of the application fee is nonrefundable and is to cover the costs associated with processing this application, and that it does not assure approval of the conditional use. I also understand that assigned hearing dates are tentative and may have to be postponed by Planning Department staff or the Planning and Zoning Commission for administrative reasons.

Signature Owner Representative *Tanya E. Hick* 04 / 05 / 2021
 (Representatives must provide written proof of authorization) Date

Tanya Hickok, P.E. - The Boutet Company

Print Name	Accepted by: <i>RJ</i>	Poster & Affidavit: <i>2+1</i>	Fee: <i>\$10,385</i>	Case Number: <i>2021-0062</i>	Requested Meeting Date: <i>P2C 06/14/2021</i>
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COMPREHENSIVE PLAN INFORMATION

Anchorage 2020 Urban/Rural Services: Urban Rural

Anchorage 2020 Major Elements – site is within or abuts:
 Major employment center Redevelopment/mixed use area Town center
 Neighborhood commercial center Industrial reserve
 Transit - supportive development corridor District/area plan area: Tudor Rd MP/Far North Bicentennial Park MP/Tudor Rd PLI Plan

Chugiak-Eagle River Land Use Classification:
 Commercial Industrial Parks/open space Public lands/institutions Town center
 Transportation/community facility Alpine/slope affected Special study area Development reserve
 Residential at _____ dwelling units per acre Environmentally sensitive area

Girdwood- Turnagain Arm Land Use Classification
 Commercial Industrial Parks/open space Public lands/institutions Resort
 Transportation/community facility Alpine/slope affected Special study area Reserve
 Residential at _____ dwelling units per acre Mixed use Rural homestead

ENVIRONMENTAL INFORMATION (All or portion of site affected)

Wetland Classification: None "C" "B" "A"
 Avalanche Zone: None Blue Zone Red Zone
 Floodplain: None 100 year 500 year
 Seismic Zone (Harding/Lawson): "1" "2" "3" "4" "5"

RECENT REGULATORY INFORMATION (Events that have occurred in last 5 years for all or portion of site)

Rezoning - Case Number:
 Preliminary Plat Final Plat - Case Number(s):
 Conditional Use - Case Number(s):
 Zoning variance - Case Number(s):
 Land Use Enforcement Action for
 Building or Land Use Permit for
 Wetland permit: Army Corp of Engineers Municipality of Anchorage

SUBMITTAL REQUIREMENTS (Only one copy of applicable items is required for initial submittal)

1 copy required: Signed application (original) Ownership and beneficial interest form
 Watershed sign off form Underlying plat
 Special limitations from the underlying zoning, if applicable

35 copies required: Signed application (copies)
 Map of area surrounding petition site within 500 feet, including zoning and existing uses
 Map of existing conditions, to scale, including:
 land uses structures utilities vegetation soils
 natural features drainage topography site access pedestrian facilities
 vehicle circulation and driveways easements and/or reservations

Project narrative explaining:
 the project planning objectives facility operations
 an analysis of how the proposal meets the standards on page 3 of this application
 construction and operation schedule final ownership
 gross and net density (PUDs only)

Site plan(s) to scale depicting, with dimensions:
 building footprints parking areas vehicle circulation and driveways
 pedestrian facilities lighting grading landscaping
 loading facilities fences drainage required open space
 snow storage area or alternative strategy trash receptacle location and screening detail
 easements significant natural features freestanding sign location(s)

Building plans to scale depicting, with dimensions:
 floor plans building elevations exterior colors and textures

Summary of community meeting(s)

(Additional information may be required.)

GENERAL CONDITIONAL USE STANDARDS (AMC 21.03.080D.)

The Planning and Zoning Commission may only approve the conditional use if the Commission finds that **all** of the approval criteria are satisfied. Each standard must have a response in as much detail as it takes to explain how your project satisfies the standard. The burden of proof rests with you.

1. The proposed use is consistent with the comprehensive plan and all applicable provisions of this title and applicable state and federal regulations;
2. The proposed use is consistent with the purpose and intent of the zoning district in which it is located, including any district-specific standards set forth in chapter 21.04;
3. The proposed use is consistent with any applicable use-specific standards set forth in chapter 21.05;
4. The site size, dimensions, shape, location, and topography are adequate for the needs of the proposed use and any mitigation needed to address potential impacts;
5. The proposed use will not alter the character of the surrounding area in a manner which substantially limits, impairs, or prevents the use of surrounding properties for the permitted uses listed in the underlying zoning district;
6. The proposed use is compatible with uses allowed on adjacent properties, in terms of its scale, site design, operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts);
7. Any significant adverse impacts anticipated to result from the use will be mitigated or offset to the maximum extent feasible;
8. The proposed use is appropriately located with respect to the transportation system, including but not limited to existing and/or planned street designations and improvements, street capacity, access to collectors or arterials, connectivity, off-site parking impacts, transit availability, impacts on pedestrian, bicycle, and transit circulation, and safety for all modes; and
9. The proposed use is appropriately located with respect to existing and/or planned water supply, fire and police protection, wastewater disposal, storm water disposal, and similar facilities and services.

SPECIFIC CONDITIONAL USE STANDARDS (AMC 21.05)

Certain conditional uses have detailed standards that relate only to that type of conditional use. When there are detailed standards, the Planning and Zoning Commission may only approve the conditional use if the Commission finds that **all** general standards listed in the previous section and detailed standards listed for that conditional use in AMC 21.05 are satisfied. Each detailed standard must have a response in as much detail as it takes to explain how your project satisfies the standard. The burden of proof rests with you.



Municipality of Anchorage

Austin Quinn-Davidson, Acting Mayor

- Real Estate Department -

February 2, 2021

Community Development Department
Planning Division
4700 Elmore Road
PO Box 196650
Anchorage, Alaska 99519-6650

Re: Application for Conditional Use Permit
Tract 6, Tudor Municipal Campus (Parcel No. 008-121-
08-000)

I hereby authorize The Boutet Company, Inc. (TBC) to act as Owner's Representative in the application for the Conditional Use Permit required for the above-described property.

Sincerely,

Robin E. Ward, Director
Real Estate Department
Municipality of Anchorage

TOZIER PARK DOG SLED RACING VENUE TUDOR MUNICIPAL CAMPUS TRACT 6 NARRATIVE

PROJECT LOCATION

The subject property is located south of Doctor Martin Luther King Junior (MLK) Avenue at Tudor Center Drive. The legal description of the property is Tudor Municipal Campus Tract 6, Grid SW 1836. The lot encompasses approximately 19.82 acres. The petitioner, The Municipality of Anchorage (MOA) Heritage Land Bank (HLB), is seeking to obtain a Conditional Use Permit to allow for “general outdoor recreation, commercial – dog mushing tracks” use as defined in AMC 21.05.050D.4. The immediately adjacent parcels on all sides are zoned Public Lands and Institutions (PLI). The parcels on the north side of MLK Avenue, house facilities for the Anchorage Police Department and the Alaska State Crime Lab, immediately to the west are the Chuck Albrecht ball fields, the parcel to the south is Far North Bicentennial Park and to the east is vacant land owned by the Heritage Land Bank. (Exhibit A).

PROJECT DESCRIPTION & OBJECTIVES

This application requests to permit the conditional use of “general outdoor recreation, commercial – dog mushing track” as defined in AMC 21.05.050.D.4. This site is currently under negotiations for an Exchange and Sale Agreement between the Municipality of Anchorage and the Alaskan Sled Dog Racing Association (ASDRA). The execution of this agreement is contingent upon the approval of this conditional use permit.

The site is currently vacant and vegetated, and the proposed project is to develop the site as dog mushing track and clubhouse that will be owned and operated by ASDRA. The proposed development includes an approximate 4,700 square feet (sq.ft). structure that will be used as a clubhouse and for vehicle maintenance and storage. Additionally, the plan includes an approximate 196 sq.ft elevated timing tower. The paved parking lot includes 30 standard parking spaces, including 2 ADA accessible spaces as required by AMC 21.07.090.E. The remainder of the site will be developed for the outdoor use as a dog mushing track and training facility. Improvements will include a gravel staging area and trails that traverse the site and connect directly to the existing off-site ASDRA trail system. (Exhibit B)

FACILITY OPERATIONS

The facility will ultimately be owned and operated by ASDRA. ASDRA is a non-profit club with the goal to promote and preserve the Alaskan tradition of dog mushing by providing education, training, and events. ASDRA is solely responsible for the maintenance and operation of the limited-use dog mushing trail system located in Far North Bicentennial Park. (Exhibit B). The development of this site will enable ASDRA to more effectively and efficiently serve its users, maintain its facilities, and fulfill its overall mission.

APPLICABLE REQUIREMENTS

The following documents and sections of the Anchorage Municipal Code (AMC) apply to this project. Each is discussed in the narrative that follows:

- AMC 21.01.080: Comprehensive Plan
- AMC 21.03.080: Conditional Uses
- AMC 21.04.060.E: PLI: Public Lands and Institutions District
- AMC 21.05.050.D.4: General Outdoor Recreation, Commercial – dog mushing track
- AMC 21.06: Dimensional Standards and Measurements
- AMC 21.07: Development and Design Standards

CONDITIONAL USE STANDARDS (AMC 21.03.080D)

- 1. The proposed use is consistent with the comprehensive plan and all applicable provisions of this title and applicable state and federal regulations.**

The Facility is consistent with the following Anchorage 2020 Comprehensive Plan policies:

- **Policy 7 – Avoid incompatible used adjoining one another.**

The parcels directly adjacent to this project are currently also used for outdoor recreation. The existing ASDRA trail system directly connects to this parcel. The proposed use is compatible with the adjacent parcels.

- **Policy 45 – Connect local activity centers, such as neighborhood schools and community center with parks, sports fields, greenbelts, and trails, where feasible.**

The proposed project will relocate the ASDRA facilities to an area that directly connects to the dog mushing trail system. The organization will be able to efficiently operate and maintain its trails and better serve the community with a new clubhouse and training facility.

- **Policy 50 – Healthy, mature trees and forested areas shall be retained as much as possible.**

The proposed project is located in a wooded area. The structures and trails will be designed and constructed to be compatible with this setting and have minimal impact to the surrounding forest.

The facility is consistent with the following Anchorage 2040 Land Use Plan goals:

- **Goal 7 – Compatible Land Use: Infill development is compatible with the valued characteristics of surround properties and neighborhoods.**

This project is a recreation facility and is therefore compatible with adjacent land uses.

- **Goal 8 – Open Space and Greenways: Anchorage maintains, improves, and strategically expands parks, greenbelts, riparian corridors, and trail corridors to enhance land values, public access, neighborhoods, and mixed-use centers.**

This project will be designed and constructed to be integrated into the forested setting and will preserve the natural characteristics of the area. It provides improved connectivity and maintenance to the existing ASDRA trail system in Far North Bicentennial Park.

The facility is consistent with the 3500 Tudor Road Master Plan:

- **This area is designated for Recreation and Recreation-Related Public Purposes: This area has uplands that are appropriate for more active recreational or recreation-related uses than the surrounding wetlands; however, its location requires that use of this area be recreation-related to assure compatibility with the adjacent park lands to the south.**

The proposed dog mushing track is a recreation facility that directly connects to the ASDRA trail system in Far North Bicentennial Park. The proposed project is consistent with the plan and is a compatible use.

- 2. The proposed use is consistent with the purpose and intent of the zoning district in which it is located, including any district-specific standards set forth in chapter 21.04.**

The current zoning of this parcel is PLI: Public Lands and Institutions. Per AMC 21.04.060 the PLI district is intended to include major public and quasi-public civic, administrative, and institutional uses and activities. The proposed conditional use is for general outdoor recreation, commercial – dog mushing tracks as defined in AMC 21.05.050D.4. The proposed facility will be used as quasi-public recreational activities and is therefore consistent with the purpose and intent of the PLI zoning district.

- 3. The proposed use is consistent with any applicable use-specific standards set forth in chapter 21.05.**

Per AMC 21.05.050D.4 the “use-specific” standard requires L2 buffer landscaping wherever this use is adjacent to a residential district. There are no adjacent residential districts, so this standard is not applicable.

- 4. The site size, dimensions, shape, location, and topography are adequate for the needs of the proposed use and any mitigation needed to address potential impacts.**

The site size, dimensions, shape, and location are adequate to meet the needs of the proposed facility. The structures and trails will be designed and constructed to conform to the natural topography of the site. Natural drainage patterns will not be significantly altered. The site contains no designated wetlands. Impacts to the natural environment will be minimal and adequately mitigated.

- 5. The proposed use will not alter the character of the surrounding area in a manner which substantially limits, impairs, or prevents the use of surrounding properties for the permitted uses listed in the underlying zoning district.**

The proposed project is located in a wooded area. The structures and trails will be designed and constructed to be compatible with this setting and have minimal impact to the forest. The new trail connections will greatly enhance and improve the use of the surrounding properties.

The Tour of Anchorage Trail, a.k.a the "Old Rony Trail", passes through this parcel on the west edge and will be preserved and/or relocated in a dedicated easement.

- 6. The proposed use is compatible with uses allowed on adjacent properties, in terms of its scale, site design, operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts).**

The adjacent property to the west is the Chuck Albrecht ballfield complex. In terms of scale, the ballfield complex has a larger overall footprint with more parking capacity. The site design characteristics are similar in that both provide user parking, common gathering areas, large outdoor areas for event staging and training, and direct connections to public trails and greenbelts.

The dog mushing track will primarily be used during the winter months, whereas the ballfield complex is primarily used during the summer/autumn months. This seasonal difference will serve to minimize user conflicts and traffic congestion in the area. Lighting will be adequate for operating the building and parking lot, but will not have negative impacts on the adjacent properties. Dog mushing is a non-motorized activity and generates no exhaust or dust and minimal noise. The snowmachines used for trail maintenance and grooming are sources of noise; however, since these activities are currently ongoing, this project will not increase noise impacts. In all likelihood, noise generation will decrease since this site is directly connected to the ASDRA trail system, decreasing the overall distance between ASDRA's staging area and the trails and the time required for trail maintenance and grooming.

- 7. Any significant adverse impacts anticipated to result from the use will be mitigated or offset to the maximum extent feasible.**

There are no significant adverse impacts anticipated from the proposed project. The structures and trails will be designed and constructed to conform to the topography and natural characteristics of the site. Natural drainage patterns will not be significantly altered. The site contains no designated wetlands. Impacts to the natural environment will be minimal and adequately mitigated.

- 8. The proposed use is appropriately located with respect to the transportation system, including but not limited to existing and/or planned street designations and improvements, street capacity, access to collectors or arterials, connectivity, off-site parking impacts, transit availability, impacts on pedestrian, bicycle, and transit circulation, and safety for all modes.**

The dog mushing track is not anticipated to generate a significant amount of traffic. The project is located along MLK Avenue, which is designated as a minor arterial and is adequate for handling the anticipated traffic volumes. The site plan includes an off-street paved parking lot with 30 spaces, including 2 ADA accessible spaces as required by AMC 21.07.090.E. Additional overflow parking will be provided in the gravel staging area west of the clubhouse. This site directly connects to the ASDRA trail system and pedestrian/bicycle trails and greenbelts. Site access is located and designed to conform with applicable design and safety standards.

- 9. The proposed use is appropriately located with respect to existing and/or planned water supply, fire and police protection, wastewater disposal, storm water disposal, and similar facilities and services.**

The proposed development will construct an on-site well to provide potable water to the facility and a septic system to receive the wastewater. Storm water will be managed on-site and will not require connections to the Municipal system. There are existing streetlights on both the north and south sides of MLK Avenue. Lighting will be provided on site in accordance with Municipal Code and will be adequate for safe operations. Exhibit C depicts the existing utilities in the area of the proposed project. The site is located within Municipal fire and police protection areas with adequate access to the property by emergency service vehicles. The nearest fire station is located at 4501 Campbell Airstrip Road, approximately 2 miles away.

CONFORMANCE WITH DEVELOPMENT AND DESIGN STANDARDS

The following requirements are based on AMC 21.04 *Zoning Districts*, 21.05 *Use Regulations*, 21.06 *Dimensional Standards and Measurements*, and 21.07 *Development and Design Standards*.

- 1. Lot Requirements: The minimum lot requirements in a PLI district are a width of 50 feet and an area of 6,000 square feet (Table 21.06-3)**

The site meets the minimum lot requirements. The width is approximately 970 feet and an area of 863,481 square feet (19.82 acres).

- 2. Maximum Lot Coverage: The maximum lot coverage allowed in a PLI district is 45% (Table 21.06-3)**

The proposed building footprint is approximately 2,400 square feet, which covers 0.28% of the lot. The maximum lot coverage requirement is met.

- 3. Yard Setbacks: In a PLI district Table 21.06-3 call for a 25-foot front, side and rear setbacks when the abutting district is PLI.**

The front, side, and rear yard setbacks are met for the proposed development.

- 4. Development Setbacks: According to AMC 21.06.030.C.7, no new structural or land development activity requiring a building or land use permit shall be permitted within the maximum setback from the existing or projected centerline of a street designated on the Official Streets and Highways Plan (OSHP).**

MLK Avenue is designated as a Minor Arterial II per the OSHP. Per the OSHP, the setback from the centerline of the road is 30 feet. The proposed development plan is in compliance with this requirement.

- 5. Landscaping: L1 Visual Enhancement landscaping is required along Dr. Martin Luther King Junior Avenue per Table 21.07-2.**

The proposed development aims to preserve as much native vegetation as possible, maintaining a minimum of 10' of landscaping on all sides of the property. This is in compliance with landscaping requirements.

- 6. Parking: Adequate off-street parking shall be provided as outlined in AMC 21.07.090.E.3 and Table 21.07-4 "Community Center".**

The stated requirement is 1 parking space per 5 persons in the principal assembly area plus 4 parking spaces for one service bay on the lower level. The occupant load of the event building is 95 occupants with tables and chairs. Therefore, the parking requirement is 19 plus 4, for a total of 23 parking spaces. The paved parking lot provides 30 spaces, 2 of which are designated ADA accessible. Additional overflow parking is provided at the gravel staging area west of the clubhouse.

- 7. Snow Storage: For non-residential uses, an area equal to at least five percent of the surface area on the site to be plowed for motorized vehicle parking and access shall be designated for snow storage.**

The paved parking lot has an approximate area of 14,000 square feet. Two snow storage areas of approximately 500 and 300 square feet each is designated at the north and south east corners of the lot, which is in compliance with this requirement.

**TOZIER PARK DOG SLED RACING VENUE
TUDOR MUNICIPAL CAMPUS TRACT 6 NARRATIVE**

- 8. Stormwater Management: MOA guidelines require that the first 0.52 inches of any rain event be treated by the use of green infrastructure. Beyond that, the 10-year, 24-hour storm event must be safely conveyed.**

The proposed development aims to maintain much of the natural vegetation and topography as possible. The natural drainage patterns will not be significantly altered. The drainage facilities will continue to be developed as part of the design process. It will comply with the MOA Stormwater Management and Design Criteria. A detailed report will be prepared along with the plans for review and approval as part of the building design and permitting process, as required

CONSTRUCTION AND OPERATION SCHEDULE

Upon approval of this application the "Exchange and Sale Agreement" will be fully executed the property will be in the ownership of ASDRA. At that time final design and permitting will commence, with the goal of construction in the summer of 2022.

FINAL OWNERSHIP

Upon approval of this application the "Exchange and Sale Agreement" between the Municipality of Anchorage and the Alaska Sled Dog Racing Association (ASDRA) will be fully executed the property will be in the ownership of ASDRA.

SUMMARY OF COMMUNITY MEETINGS

The project was presented on 18 March 2021 to the Campbell Park Community Council. This meeting summary is included as Appendix A.

APPENDIX A

Campbell Park Community Council

Meeting Summary

18 March 2021

- Meetings are underway between Municipal Parks and Rec and other interested parties/agencies on the size and location of the Tour of Anchorage trail easement.
- What is the plan for redeveloping the existing Tozier Tract on Tudor?
 - There are currently no redevelopment plans for the Tozier Track and will be up to the Next Mayor's Administration to develop.
 - However, the Land Exchange Agreement between the existing Tozier Track and Tract 6 will move forward with the approval of this Conditional Use Permit.

In summary, the proposed Conditional Use Permit application is planned for an April submittal for a tentative June Planning and Zoning Commission (PZC) public hearing.

Thank you for allowing us the opportunity to present the project, and don't hesitate to contact either Aimee Posanka, P.E. or myself if you have any questions.

Sincerely,



Tanya Hickok, P.E.
The Boutet Company

NAME	ADDRESS	CITY	STATE	ZIP
ALASKA NATIVE TRIBAL HEALTH CONSORTIUM	400 AMBASSADOR DR	ANCHORAGE	AK	99508
GREENBRIAR APARTMENTS LLC	9757 JUANITA DR NE #300	KIRKLAND	WA	98034-4291
MOA ADMIN DIVISION SUPPORT ANIMAL CARE & CONTROL	PO BOX 196650	ANCHORAGE	AK	99519-6650
MOA HERITAGE LAND BANK	PO BOX 196650	ANCHORAGE	AK	99519-6650
MOA REAL ESTATE SERVICES APD RESOURCE MANAGEMENT	PO BOX 196650	ANCHORAGE	AK	99519-6650
Resident	4954 E 43RD AVE APT A1	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT A2	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT A3	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT A4	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT A5	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT A6	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT B1	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT B2	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT B3	ANCHORAGE	AK	99508
Resident	4954 E 43RD AVE APT B4	ANCHORAGE	AK	99508
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Resident	4938 E 43RD AVE APT D3	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT A1	ANCHORAGE	AK	99508
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Resident	4924 E 43RD AVE APT B1	ANCHORAGE	AK	99508
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Resident	4924 E 43RD AVE APT B6	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT C1	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT C2	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT C3	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT C4	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT C5	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT C6	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT D1	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT D2	ANCHORAGE	AK	99508
Resident	4924 E 43RD AVE APT D3	ANCHORAGE	AK	99508
Resident	4908 E 43RD AVE APT A1	ANCHORAGE	AK	99508

NAME	ADDRESS	CITY	STATE	ZIP
Resident	4331 VANCE DR APT 2C	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 2D	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 3A	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 3B	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 3C	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 3D	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 4A	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 4B	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 4C	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 5A	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 5B	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 5C	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 6A	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 6B	ANCHORAGE	AK	99508
Resident	4331 VANCE DR APT 6C	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT A1	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT A2	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT A3	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT A4	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT A5	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT A6	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT B1	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT B2	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT B3	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT B4	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT B5	ANCHORAGE	AK	99508
Resident	4334 VANCE DR APT B6	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT A1	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT A2	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT A3	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT A4	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT A5	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT A6	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT B1	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT B2	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT B3	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT C1	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT C2	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT C3	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT C4	ANCHORAGE	AK	99508
Resident	4318 VANCE DR APT C5	ANCHORAGE	AK	99508
Resident	4500 DIPLOMACY DR STE 207	ANCHORAGE	AK	99508
Resident	4500 DIPLOMACY DR STE 405	ANCHORAGE	AK	99508
Resident	4500 DIPLOMACY DR STE 430	ANCHORAGE	AK	99508
Resident	4500 DIPLOMACY DR STE 515	ANCHORAGE	AK	99508
Resident	4500 DIPLOMACY DR STE 530	ANCHORAGE	AK	99508
Resident	4341 TUDOR CENTRE DR STE 320	ANCHORAGE	AK	99508
Resident	4320 DIPLOMACY DR	ANCHORAGE	AK	99508
Resident	4450 DIPLOMACY DR	ANCHORAGE	AK	99508
Resident	4600 E TUDOR RD	ANCHORAGE	AK	99507
Resident	4709 ELMORE RD	ANCHORAGE	AK	99507
Resident	4711 ELMORE RD	ANCHORAGE	AK	99507
Resident	4501 ELMORE RD	ANCHORAGE	AK	99507
Resident	4551 ELMORE RD	ANCHORAGE	AK	99507
Resident	5251 DOCTOR MARTIN LUTHER KING JUNIOR AVE	ANCHORAGE	AK	99507
Resident	5310 DOCTOR MARTIN LUTHER KING JUNIOR AVE	ANCHORAGE	AK	99507
Resident	5300 E TUDOR RD	ANCHORAGE	AK	99507
Resident	4805 DOCTOR MARTIN LUTHER KING JUNIOR AVE	ANCHORAGE	AK	99507
Resident	4781 ELMORE RD	ANCHORAGE	AK	99507
SOUTHCENTRAL FOUNDATION	4501 DIPLOMACY DRIVE #200	ANCHORAGE	AK	99508-5919
STATE OF ALASKA % SANDRA SINGER	550 W 7TH AVE #1050A	ANCHORAGE	AK	99501-3579
STATE OF ALASKA %DOTPF CENTRAL REGIONAL ADMIN OFFICE	PO BOX 196900	ANCHORAGE	AK	99519-6900
STATE OF ALASKA DNR	550 W 7TH AVE #1050A	ANCHORAGE	AK	99501-3579
TUDOR CENTRE TRUST % JACK WHITE PROPERTY MGMT	3801 CENTERPOINT DR SUITE 400	ANCHORAGE	AK	99504

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AECC 125

GEOTECHNICAL ENGINEERING REPORT
Proposed New Tozier Track Facility
ANCHORAGE, ALASKA

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Submitted To: Municipality of Anchorage
Department of Property and Facility Management
Facility Maintenance Division
3649 East Tudor Road, Warehouse No. 1
Anchorage, Alaska 99507
Attn: Jon Clark

Subject: GEOTECHNICAL ENGINEERING REPORT, PROPOSED NEW TOZIER
TRACK FACILITY, ANCHORAGE, ALASKA

Shannon & Wilson prepared this report and participated in this project as a subconsultant to the Municipality of Anchorage (MOA). Our scope of services was specified in Purchase Order Number 2019005012 with MOA dated October 23, 2019. This report presents the results of subsurface explorations, percolation testing, laboratory testing, and geotechnical engineering studies conducted by Shannon & Wilson, Inc. for the proposed relocation of Tozier Track in Anchorage, Alaska. This geotechnical engineering report was prepared by the undersigned.

We appreciate the opportunity to be of service to you on this project. If you have questions concerning this report, or we may be of further service, please contact us.

Sincerely,

SHANNON & WILSON, INC.

Stephanie Dow, EIT
Geotechnical Engineering Staff



Kyle Brennan, PE
Vice President

skd/KLB

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1 INTRODUCTION

The purpose of this geotechnical study was to explore subsurface conditions, including the drainage characteristics of the site soils, and provide geotechnical engineering recommendations needed to design and construct the proposed facilities. To accomplish this, four soil borings and one percolation test hole were advanced near the proposed new building and parking areas. Soil samples recovered from the borings were tested in our geotechnical laboratory. Presented in this report are descriptions of the site and project, subsurface explorations and laboratory test procedures, an interpretation of subsurface conditions, and conclusions and recommendations from our engineering studies.

This report documents subsurface geotechnical conditions, provides analyses and interpretation of anticipated site conditions at the project, and presents the results of our engineering analyses. This report is intended for use by the project design engineering staff, the MOA, and their representatives.

2 SITE AND PROJECT DESCRIPTION

The proposed new Tozier Track facility is located near the intersection of Doctor MLK Jr Avenue and Tudor Center Drive in Anchorage, Alaska. According to the MOA the property legal description is Tudor Municipal Campus Tract 6. A vicinity map is included as Figure 1. Access to the site is gained from Doctor MLK Jr Avenue.

At the time of our explorations, the lot was generally undeveloped and wooded, with several mushing trails crossing the central and southern portions of the lot. On average, the lot slopes downward to the west and the portion of the lot to be developed is a gently rolling topographic high. The ground surface in the area of the proposed building and parking area is generally mossy with numerous live and downed trees. The proposed septic system drain field is planned to be located to the west of the proposed building.

We understand that the new building will consist of an approximately 60-foot by 40-foot, relatively lightly loaded, steel or wood-framed structure that is one or two stories tall. We also understand that the new building will be supported on conventional shallow foundations and that the building may be tied into existing underground utilities. A septic system and well will also be constructed to service the new building. We assume that the new building will be heated continuously throughout the year.

3 SUBSURFACE EXPLORATIONS

Subsurface explorations consisted of advancing and sampling four borings, designated Borings B-1 and B-4, to depths ranging from 15.2 to 31.5 feet below the ground surface (bgs) to evaluate the subsurface conditions within the areas planned to be developed.

Additionally, Boring Perc-1 was drilled to a depth of approximately 7 feet bgs to facilitate percolation testing of the existing soils. Explorations for this project were conducted on November 8, 2019. Approximate boring locations are shown on the site plan included as Figure 2. The boring locations were selected in the field based on input from Sam Barber of Roger Hickel Contracting Inc.

3.1 Geotechnical Borings

Discovery Drilling of Anchorage, Alaska provided drilling services for this project using a track mounted Geoprobe 7822-DT drill rig. The borings were advanced with 3 1/4-inch inside diameter (ID), continuous flight, hollow-stem auger. An engineer from our firm was present continuously during drilling to locate the borings, observe drill action, collect soil samples, log subsurface conditions, and observe groundwater levels where appropriate.

As the borings were advanced, samples were generally recovered using Standard Penetration Test (SPT) methods at 2.5-foot intervals to 10 feet bgs and 5-foot intervals thereafter to the bottom of the boring. With the SPT method, samples are recovered by driving a 2-inch outer diameter (OD) split-spoon sampler into the bottom of the advancing hole with blows of a 140-pound hammer free falling 30 inches onto the drill rods. For each sample, the number of blows required to drive the sampler the final 12 inches of an 18-inch penetration into undisturbed soil is recorded. Where the sampler did not penetrate the full 18 inches, our log reports the blow count and corresponding penetration in inches. Blow counts are shown graphically on the boring log figure as "penetration resistance" and are displayed adjacent to sample depth. The penetration resistance values give a measure of the relative density (compactness) or consistency (stiffness) of cohesionless or cohesive soils, respectively.

The soil samples recovered during drilling were observed and described in the field in general accordance with the classification system described by ASTM International (ASTM) D2488. Selected samples recovered during drilling were tested in our laboratory to refine our soil descriptions in general accordance with the Unified Soil Classification System (USCS) described in Figure 3 (3 sheets). Frost classifications were also estimated for samples based on laboratory testing (sieve analyses) and are shown on the boring logs. The frost classification system is presented as Figure 4. Summary logs of the borings are presented as Figures 5 through 8.

Upon completion of Boring B-4, a 1-inch diameter, polyvinyl chloride (PVC) pipe with hand-slotted tips was installed to the bottom of the boring to facilitate future observations of groundwater levels. At the completion of Boring Perc-1, 4-inch PVC casing was installed to a depth of approximately 7 feet bgs to facilitate percolation testing. The bottom 12 inches of the 4-inch casing was perforated with eighteen ½-inch holes to allow water to penetrate into the sidewall of the boring. The 4-inch PVC casing was removed from the borehole at the completion of percolation testing. The annular space between the borehole wall and casing in Boring B-4 was backfilled with auger cuttings produced during drilling. The PVC well casing was allowed to stick up out of the ground approximately 3 to 4 feet. The remaining borings were completed by backfilling the hole with auger cuttings produced during drilling. Installation details for the observation well are shown on the corresponding boring log.

The boring locations shown on the site plan presented as Figure 2 were located using a handheld global positioning system (GPS) that is generally considered accurate to within 20 feet horizontally. It should be noted that GPS accuracy may be affected by tree canopies, geographic features, and other atmospheric anomalies. The surface elevations shown on the boring logs were estimated from topographic contours provided by the Municipality of Anchorage GIS department. Therefore, boring locations and elevations should be considered approximate.

3.2 Percolation Testing

Percolation testing was performed in general compliance with the Minnesota Pollution Control Agency (MPCA) methods described in Chapter Four of the 2017, Manual For Septic System Professionals in Minnesota.

Under these procedures, the soils are pre-soaked for a minimum of four hours prior to testing, except in granular soils. In granular soils, if a 12-inch column of water disappears within 10 minutes, then soaking is not required and the test may begin immediately. After the soaking period, water is poured into the casing so that the water level in the casing is 8 inches above the bottom of the casing. A reading is taken every thirty minutes, or whenever the water level falls 6 inches. Between each reading the water level is again adjusted to 8 inches above the bottom of the casing, and measurements are taken using a fixed reference point. We continued taking and recording the time for the water level drop measurements until three consecutive percolation rates varied by no more than ten percent. The percolation rate is calculated by dividing the time interval of the drop by the inches dropped. The results are reported in a rate measured in minutes per inch (min/in). Results from percolation testing are discussed in Section 5.2.

4 LABORATORY TESTING

Laboratory tests were performed on selected soil samples recovered from the borings to confirm our field classifications and to estimate the index properties of the typical materials encountered at the site. The laboratory testing was formulated with emphasis on determining gradation properties, natural water content, and frost characteristics.

Water content tests were performed in general accordance with ASTM D2216. The results of the water content measurements are presented graphically on the boring logs in Figures 5 through 8.

Grain size classification (gradation) testing was performed to estimate the particle size distribution of selected samples from the borings. The gradation testing generally followed the procedures described in ASTM C117/C136 and D422. The test results are presented in Figure 9 and summarized on the boring logs as percent gravel, percent sand, and percent fines. Percent fines on the boring logs are equal to the sum of the silt and clay fractions indicated by the percent passing the No. 200 sieve. Note that hydrometer testing indicates particle size only and visual classification under USCS designates the entire fraction of soil finer than the No. 200 sieve as silt. Plasticity characteristics (Atterberg Limits results) are required to differentiate between silt and clay soils under USCS.

5 SUBSURFACE CONDITIONS

5.1 Soil Conditions

The subsurface conditions encountered at the site are depicted graphically on the boring logs in Figures 5 through 8. In general, the borings encountered 1 to 2 inches of organic mat at the ground surface overlying silty sands and gravels to the base of the borings.

The native, granular soils generally consisted of medium dense to very dense silty sands and gravels. Penetration resistance values of the native soils ranged between 11 and more than 50 blows per foot (bpf). According to our laboratory tests, typical moisture contents within the native soils generally range from about 4 to 10 percent, with the moisture content in the surface samples ranging from approximately 11 to 24 percent. Gradation tests performed in the laboratory show estimated fines contents ranging between approximately 26 and 37 percent fines in the samples tested.

5.2 Percolation Testing

Percolation testing was conducted on December 3 and 4, 2019 in Boring Perc-1 at a depth of approximately 7 feet bgs. The presoak was initiated on December 3, 2019, while the percolation testing itself occurred on December 4, 2019. The percolation rate was measured over several iterations and the results indicate that the native, sandy soils near Boring Perc-1 percolated at a rate of approximately 2.6 min/in. This rate equates to approximately 0.4 inches per minute (in/min) or 23.4 inches per hour (in/hr). If layers of siltier soils are encountered within the infiltration areas, infiltration rates could be two to three orders of magnitude slower than those measured by our percolation test. We understand that this information will be used to design infiltration works at the site and that appropriate adjustment factors will be applied to the measured infiltration rate to account for long-term performance issues including siltation, biogenic impacts, etc.

5.3 Groundwater

Groundwater was observed in our two deeper borings during drilling at depths ranging from about 11 to 15 feet bgs. On December 5, 2019, the static groundwater level in Boring B-4 was observed in our observation well at a depth of 10.0 feet bgs. The observation well remains in place to facilitate groundwater level observations in the future. It should be noted that groundwater levels may fluctuate by several feet seasonally. We believe that typically anticipated seasonal fluctuations should not significantly change the geotechnical properties of the site.

6 SEISMIC CONDITIONS

Based on our explorations and local experience, the site class according to the 2012 International Building Code (IBC) will be D for a stiff soil profile based on the blow count (N) method with typical blow counts ranging between 15 and more than 50 blows per foot. We believe that the naturally occurring soils at this site have a low susceptibility to slope failure, liquefaction, and surface rupture. Therefore, we believe that a Site Class D will be the most representative of the site. Based on Section 1613.5 of IBC 2012, S_s and S_1 for the Maximum Considered Earthquake were estimated at 1.5 and 0.681 times the force of gravity (g), respectively. The site specific modifying coefficients for the spectral response accelerations are $F_a = 1.0$ and $F_v = 1.5$ for the short and long periods, respectively. The SMS and SM1 were calculated to be 1.5 and 1.021 g respectively. The computed SDS and SD1 are 1.0 and 0.681 g.

7 ENGINEERING RECOMMENDATIONS

The design of the foundations for support of the proposed buildings must consider the bearing capacity of the soils, expected settlements, lateral earth pressures, frost conditions within the subsurface soils, and constructability issues. Other geotechnical considerations associated with this project consist of developing pavements, controlling trench excavations, developing pipe bedding, addressing potential settlements, and trench backfill and compaction. Our explorations at the site encountered up to 2 feet of soil containing organics underlain by silty granular soils to the bottom of our explorations. Soils in the northeastern portion of the site, where the structure is proposed to be located were generally medium dense to very dense to the depth of our boring. Based on these soil conditions, conventional shallow foundations would, in our opinion, provide suitable support for the proposed new structure provided the site is prepared as outlined below in Section 7.1.

7.1 Site Preparation

The current ground surface of the site is near the grade of adjacent lots. The northcentral portion of the site is about 8 feet above the grade of the roadway. In order to prepare the site for building, vegetation should be cleared and organic material and soils containing organics should be grubbed before placing fill. The grubbed areas should extend a minimum of 5 feet from the outer edges of the building and edge of asphalt. According to our borings, organic soils and soils containing organics were generally encountered in the upper 0.1 to 2 feet of the ground surface. Organic material should not be re-used as fill beneath the pavement or building areas at the site and should be removed from the site or used as topsoil in landscaping. Note that some of the soils exposed at the bottom of sub-cut excavations may have elevated fines contents and may be sensitive to moisture and disturbance. If moisture sensitive materials are encountered, flat-nosed excavator buckets should be used. Additionally, equipment should not be operated on the exposed subgrade if the area is wet and moisture sensitive prior to fill placement.

Once the above site preparation is completed, the exposed ground surface should be proof rolled and then observed by an experienced geotechnical engineer to look for soft or loose zones. If loose or soft zones are discovered, they should be locally compacted or excavated and replaced with compacted, structural fill material. The resultant grade should be smooth, consistent, and unyielding.

Areas of the site may need to be raised after site preparation. If so, backfill material should consist of classified materials conforming to Municipality of Anchorage (MOA) gradation requirements for Type II structural fill. Fill placed and compacted for site grading should be done as described in Section 7.9. We recommend that a qualified laboratory be retained to

perform fill density testing during the grading process at the site. To reduce the risk of slope raveling or sloughing, finished side slopes should be graded no steeper than 2 horizontal (H) to 1 vertical (V). Exposed soils should be temporarily protected from erosion with straw mats or other measures and planted with a vegetative ground cover for long term protection.

7.2 Building Foundations

We recommend that the proposed new buildings be supported on spread or continuous strip footings bearing on firm native soils, or on Type II/IIA structural fill replacing loose soils. The recommended minimum footing width is 16 inches for continuous strip footings and 24 inches for spread footings. The base of exterior footings and unheated interior footings should be buried sufficiently to prevent structural damage resulting from frost action. We recommend that perimeter footings in heated buildings be placed a minimum of 42 inches below the ground surface. If portions of the proposed buildings are to be unheated, the minimum burial depth for footings should be increased to 60 inches bgs for frost protection.

Based on the expected footing dimensions, depths, and site preparation recommendations, we recommend that foundations for the proposed buildings be designed with an allowable soil bearing pressure of 3,000 pounds per square foot (psf). Localized loose or soft areas, whether resulting from existing conditions or disturbance during construction must be corrected prior to casting footings, or damaging differential settlements could occur. The above bearing value may be increased by one-third for short-term wind or seismic loading. A typical footing detail is included in Figure 10.

7.3 Floor Slab Support

Slab on grade construction is anticipated for this project. To provide an even, firm, unyielding base, we recommend that the exposed foundation soils be probed to locate materials that may be naturally loose or have become loosened or disturbed due to excavation and grading activities. If loose areas are encountered, we recommend that they be re-compacted or removed and replaced with compacted structural fill. The structural fill placed beneath the floor slab should be placed and compacted in accordance with the recommendations included in Section 7.9. Provided the recommendations discussed above are adhered to by the contractor, a subgrade reaction modulus of at least 150 pounds per square inch per inch (psi/in) should be attainable on the recommended support soils. In areas to receive floor coverings, we recommend installing a vapor retarder directly beneath the concrete slab.

7.4 Estimated Building Settlements

The magnitude of the settlements that will develop at the building site is dependent upon the applied loads and density of the support material. Assuming the site is prepared as recommended and the subgrade beneath footings is protected from moisture while exposed, we estimate that total maximum settlements will be about 1 inch or less with differential settlements being about 1/2 of the total settlements over the length of the structure. The greatest amount of settlement should occur during construction, essentially as fast as the building loads are applied, such that long term differential settlements of the building will be relatively small and well within tolerable limits. It should be noted that near surface soil density varied across the site from medium dense to very dense. If the building layout is moved, or if loose soils are encountered under the building footprint, the loose soils should be compacted to a dense state to avoid undesired differential movements.

7.5 Lateral Earth Pressures and Lateral Resistance

Building walls below ground that support earth fills and floor slabs should be designed to resist horizontal earth pressures. The magnitude of the pressure is dependent on the method of backfill placement, the type of backfill material, drainage provisions, and whether the wall is permitted to deflect after or during placement of backfill.

If the walls are allowed to deflect laterally or rotate an amount equal to about 0.001 times the height of the wall, an active earth pressure condition under static loading would prevail and an equivalent fluid weight of 35 pounds per cubic foot (pcf) is recommended for design of the walls. For rigid walls that are restrained from deflecting at the top, an at-rest earth pressure condition would prevail and an equivalent fluid weight of 55 pcf is recommended. To simulate seismic loading (from soils adjacent to the foundation) a rectangular pressure prism with a magnitude of 13 psf per foot of wall height should be applied to the below-grade walls. Note that these values reflect free-draining, compact, granular backfill with no hydrostatic forces acting on the wall, and also assume that the soils within the zone of frost penetration behind the wall (about 6 to 8 feet horizontal) are non-frost-susceptible. These values do not include a factor of safety.

Lateral forces from wind or seismic loading may be resisted by passive earth pressures against the sides of footings. These resisting pressures can be estimated using an equivalent fluid weight of 220 pcf. This value includes a factor of safety of 2 on the full passive earth pressure and assumes that backfill around the footings is densely compacted.

Lateral resistance may also be developed in friction against sliding along the base of foundations placed on grade such as footings or floor slabs. These forces may be computed using a coefficient of 0.4 between concrete and soil.

7.6 Drainage

Site drainage should be considered during design and construction. Groundwater was encountered in Borings B-3 and B-4 at approximately 15 and 11 feet bgs, respectively during drilling but was not encountered in our remaining borings at the site. Water was present at 10.0 feet bgs in the observation well placed in Boring B-4 on December 5, 2019. Therefore it is unlikely that groundwater will be encountered during construction, however it could be encountered during trenching for installation of deeper utilities. In general, excavation and backfill work should be closely coordinated such that seepage and surface runoff is not allowed to collect and stand in open excavations. Likewise, the ground surface around excavations should be contoured to drain away from the excavation and the excavation bottoms should be graded to drain to a sump or topographic low. If excavations remain open for an extended duration or during periods of high rainfall or rapid snow melting, shoring and/or dewatering with sumps and pumps in the excavation bottom may be necessary to maintain stable slope and bottom conditions.

We recommend that the site should be carefully graded such that surface water and roof run-off are directed away from the proposed structure, so that it cannot pond against or infiltrate the soils near the building walls. Positive drainage should be maintained for driveways and paved parking areas such that surface water is directed off the pavement surface away from the pavement structural section.

7.7 Excavation Slopes and Utility Trenches

Buried pipes and cables will be needed to tie the new developments into existing nearby utilities and to new onsite sewer and water utilities. Trenches excavated for installation of these new utilities should be generally constructed as presented in Figure 11. The bedding and structural fill material around the buried utility should be densely compacted to support and hold the pipe firmly in place.

The native soils in this area are typically granular and moist with high fines contents. Excavation slopes will tend to stand steeply at first, and then ravel over time to flatter slopes (i.e., to about 1.5 H to 1 V or shallower). The actual slope and excavation bottom conditions should be made the responsibility of the contractor, who will be present on a day to day basis and can adjust efforts to obtain the needed stability. The contractor should be prepared to use shoring or a trench box as necessary to protect their workers in accordance with state and federal safety regulations (including OSHA) which require slope protection for trenches deeper than 4 feet bgs.

Below areas that are receiving pavements or floor slabs, trench backfill should be placed in maximum 8-inch loose lifts and compacted to at least 95 percent of maximum density, as

discussed in Section 7.9. The lift thickness may be increased to up to 12 inches if it can be shown that the lift is adequately compacted at depth. In areas where no paving is planned, less compaction is required and material may be placed in thicker lifts (12 inches) and moderately compacted to achieve at least 90 percent compaction. The bedding and fill material around buried pipes should also be compacted to at least 95 percent of maximum density or per manufacturer recommendations to support and hold the pipe firmly in place. Utility trenches should be backfilled with existing inorganic soils as much as practicable between the top of the pipe bedding and the bottom of the pavement structural section or the original ground surface. This procedure limits the contrast between trench backfill and the surrounding soil conditions that can lead to adverse settlement or frost heave behavior. Bulking of backfill into trenches should be discouraged as this can cause voids and lead to large future surface settlements.

7.8 Asphalt Pavements

We understand that new asphalt driving surfaces will be constructed for driveways and a parking area. Pavement design in southcentral Alaska is typically based on estimated frost penetration and the frost classification of the subgrade materials rather than anticipated loading. Our borings indicate that site generally contains an up to 2 foot layer of soil containing organics at the ground surface. These soils should be removed from areas to be paved. In our opinion, the soils beneath the organic containing soils are generally competent to support the perceived traffic loads if careful attention is given to control of surface water and to frost design of the pavement section.

To prepare the subgrade to receive the pavement structural section fill, the area to receive fill should be excavated, as required, to the design elevation of the bottom of the structural section. The base of the excavation should then be proof rolled to identify loose subgrade materials. These spots should be re-compacted or removed and replaced with structural fill that is placed and compacted as described in Section 7.9. The goal of this process is to attain a relatively uniform, firm and unyielding subgrade upon which to construct the pavement system.

The performance of the pavement is controlled by the quality (gradation characteristics) of the materials imported to the site, placed, and compacted to develop the needed structural section, and the quality of the subgrade supporting the pavement structural section. We assume that the parking area pavement section will be relatively lightly loaded and that traffic will generally consist of personal vehicles. Therefore, we recommend that the asphalt pavement structural section consist of (in ascending order) at least 24 inches of compacted Type II/IIA structural fill, 4 inches of leveling course and 2 inches of asphalt. Our recommended structural section for asphalt pavements can also be applied to concrete

sidewalks. Note that these recommendations provide an asphalt pavement that may exhibit seasonal deflections. It is our opinion that seasonal frost will penetrate deeper than our recommended pavement structural section at the site; however, we believe that the seasonal surface deflections that may be associated with these materials will be small and gradual such that they can be reasonably tolerated. If frost heaving of the pavement cannot be tolerated for operations at this facility, a significantly thicker structural section, or a section including a layer of insulation should be considered. Typical "Limited Subgrade Frost Penetration" sections in this area require non-frost susceptible soils to extend approximately 8-10 feet below ground surface, insulated sections are typically contain 2 inches of "blueboard" insulation, and require non-frost susceptible soils to extend approximately 4-5 feet bgs.

7.9 Structural Fill and Compaction

Backfill will be required behind the foundation walls and under pavements, foundations and floor slabs. Structural fill that is placed should be clean, well-graded, granular soil to provide drainage and frost protection. Type II/IIA structural fill as defined by the MASS meets these requirements and may be placed in both wet and dry conditions. Gradation requirements for Type II/IIA structural fill are provided in Figure 12.

The existing granular materials encountered in our borings, and likely to be disturbed by construction activities, generally contained between 26 and 37 percent fines. These soils are not likely to meet the requirements for classified fill soils. These soils can be used as unclassified fill beneath pavement structural sections, utility trench backfill, under the foundation of the proposed structures where the soil will be protected from freezing (with the exception of the drainage layer), and in nonstructural areas. The existing high fines soils at the site may be moisture sensitive and special handling techniques (i.e. moisture control/protection, reduced traffic, etc.) may need to be implemented if they are to be re-used. Re-use will be dictated by the contractor's ability to place and compact the material with proper moisture density control. In addition, moisture sensitive materials that are exposed at the bottom of excavations during site preparation activities should be protected from excess moisture prior to construction.

Structural fills below pavements and beneath footings and floor slabs should be placed in lifts not to exceed 12 inches loose thickness, and compacted to 95 percent of the maximum density as determined by the Modified Proctor compaction procedure (ASTM D1557). Non-structural fills, including fills outside of the road prism or beneath landscape areas that are not subject to building or traffic loads, should be compacted to at least 90 percent of the Modified Proctor optimum dry density. Bulking of backfill into the trench should be discouraged as this can cause voids and lead to large future surface settlements. During fill

placement, we recommend that large cobbles or boulders with dimensions in excess of 8 inches be removed from any structural fills. We recommend that our services be retained to inspect the quality of fill compaction during construction.

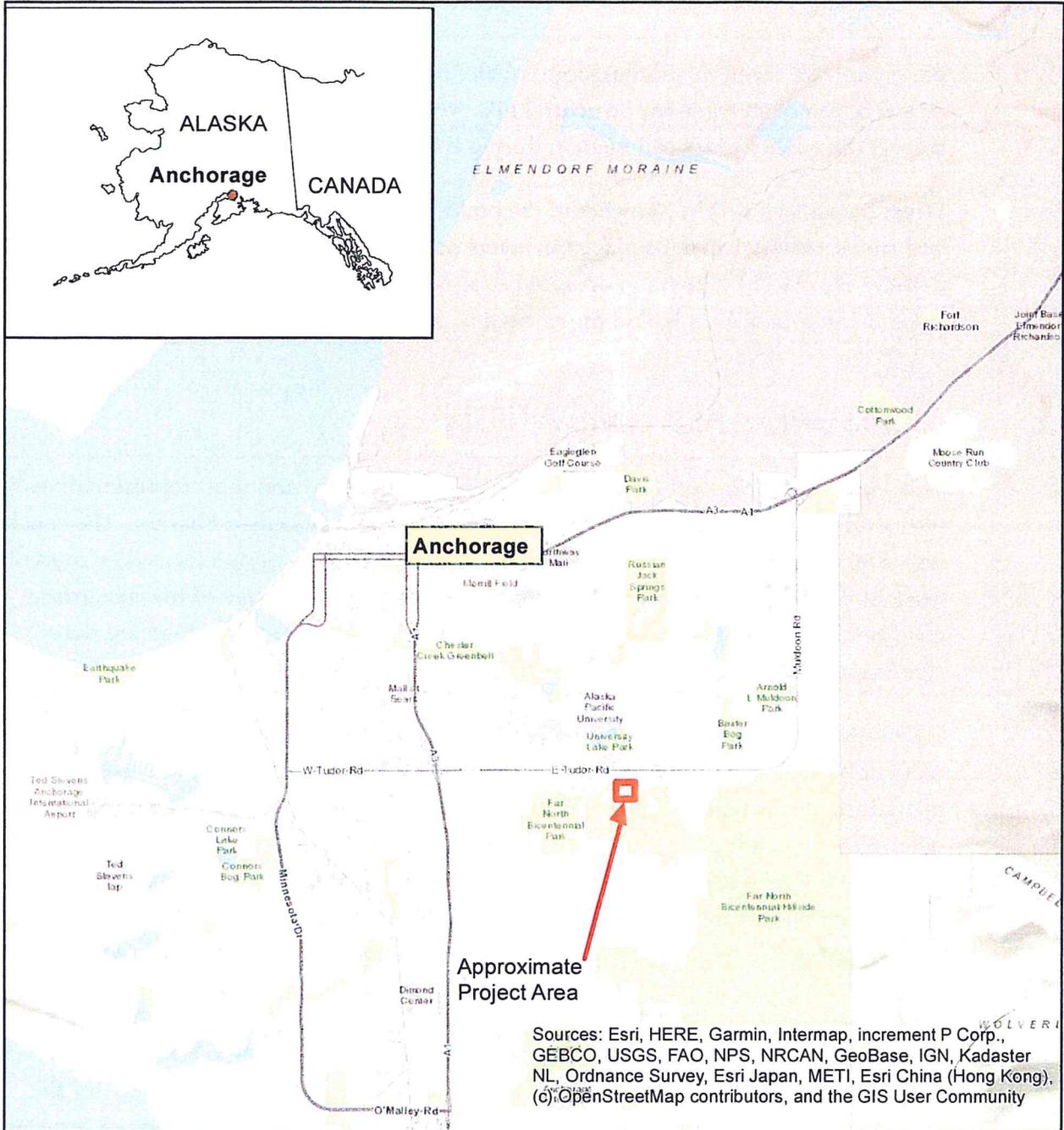
When backfilling within 18 inches of the building walls where the wall is not supported on both sides, material shall be placed in layers not to exceed 6 inches loose thickness and densely compacted with hand operated equipment. Heavy equipment shall not be used as it could cause increased lateral pressures and damage walls.

8 CLOSURE AND LIMITATIONS

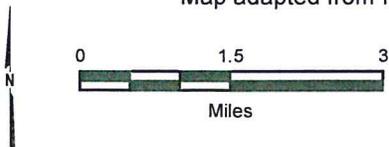
This report was prepared for the exclusive use of our client and their representatives for evaluating the site as it relates to the geotechnical aspects discussed herein. The conclusions and interpretation contained in this report are based on site conditions as they presently exist. It is assumed that the exploratory borings are representative of the subsurface conditions throughout the site, i.e., the subsurface conditions everywhere are not significantly different from those disclosed by the explorations.

If there is a substantial lapse of time between the submittal of this report and the start of work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, it is recommended that this report be reviewed to determine the applicability of the conclusions considering the changed conditions and time lapse. Unanticipated soil conditions are commonly encountered and cannot fully be determined by merely taking soil samples or advancing test holes. Please read the Important Information section at the back of this report to reduce your project risks.

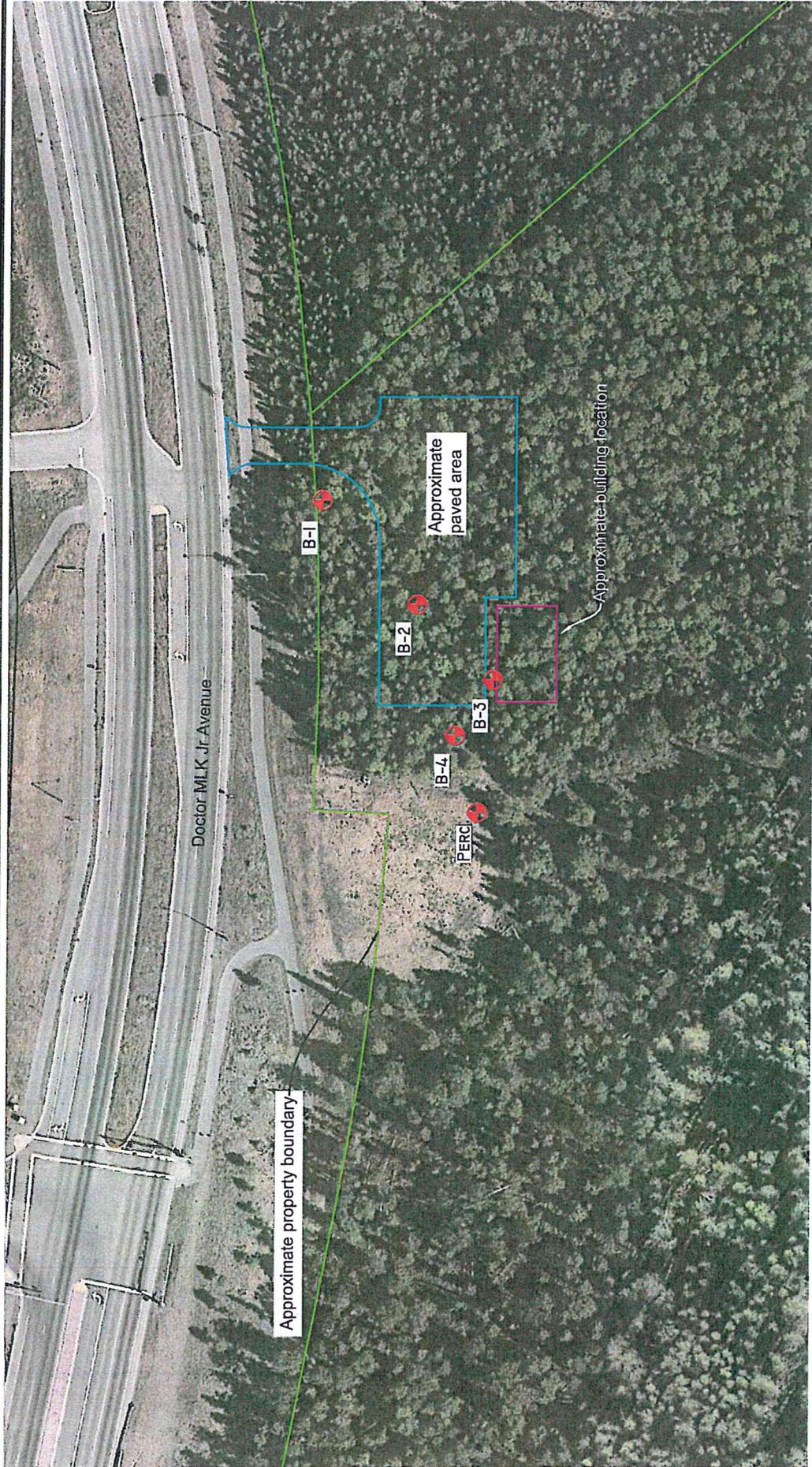
Copies of documents that may be relied upon by our client are limited to the printed copies (also known as hard copies) that are signed or sealed by Shannon & Wilson with a wet, blue ink signature. Files provided in electronic media format are furnished solely for the convenience of the client. Any conclusion or information obtained or derived from such electronic files shall be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, or you question the authenticity of the report please contact us.



Map adapted from files provided by the Alaska Department of Natural Resources



Proposed New Tozier Track Facility Anchorage, Alaska	
VICINITY MAP	
January 2020	104221-001
 SHANNON & WILSON, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS	FIG. 1

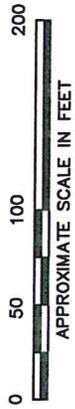


LEGEND

- B-1 + Approximate Location of Boring B-1, Advanced by Shannon & Wilson, November 2019

NOTES

1. Map adapted from aerial imagery provided by the Municipality of Anchorage. Image date: May 2015
2. Property boundaries provided by the Municipality of Anchorage.
3. Approximate building and paved areas from October 10, 2019 Preliminary Site Plan by Roger Hickel Contracting and Faulkenberry & Associates.



Proposed New Tozier Track Facility
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SITE PLAN

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FIG. 2

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SOIL DESCRIPTION AND LOG KEY

Proposed New Tozier Track Facility
 Anchorage, Alaska

Gravel, sand, and fines estimated by mass. Other constituents, such as organics, cobbles, and boulders, estimated by volume.
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Trace	< 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

PERCENTAGES TERMS^{1,2}

	Bentonite		Surface Cement Seal
	Bentonite Grout		Asphalt or Cap
	Bentonite Chips		Slough
	Silica Sand		Inclinometer or Non-perforated Casing
	Perforated or Screened Casing		Vibrating Wire Piezometer

WELL AND BACKFILL SYMBOLS

COHESIONLESS SOILS		COHESIVE SOILS	
N, SPT, RELATIVE DENSITY	RELATIVE DENSITY	N, SPT, RELATIVE BLOWS/FT.	RELATIVE BLOWS/FT. CONSISTENCY
< 4	Very loose	< 2	Very soft
4 - 10	Loose	2 - 4	Soft
10 - 30	Medium dense	4 - 8	Medium stiff
30 - 50	Dense	8 - 15	Stiff
> 50	Very dense	15 - 30	Very stiff
		> 30	Hard

RELATIVE DENSITY / CONSISTENCY

DESCRIPTION	SIEVE NUMBER AND/OR APPROXIMATE SIZE
FINES	< #200 (0.075 mm = 0.003 in.)
SAND	Fine
	Medium
GRAVEL	Coarse
	Fine
COBBLES	3 to 12 in. (76 to 305 mm)
BOULDERS	> 12 in. (305 mm)

PARTICLE SIZE DEFINITIONS

COARSE-GRAINED SOILS ¹	FINE-GRAINED SOILS ¹
(less than 50% fines) ¹	(50% or more fines)
Major	Minor
Modifying (Secondary)	Follows major constituent
Precedes major constituent	
15% to 30% coarse-grained; 5% to 12% fine-grained;	30% or more total coarse-grained and 15% or more of a second coarse-grained constituent;
with Sand or Silt or Clay ⁴	with Gravel ⁵

Shannon & Wilson, Inc. (S&W), uses a soil identification system modified from the Unified Soil Classification System (USCS), Elements of the USCS and other definitions are provided on this and the following pages. Soil descriptions are based on visual-manual procedures (ASTM D2488) and laboratory testing procedures (ASTM D2487), if performed.

All percentages are by weight of total specimen passing a 3-inch sieve.
 The order of terms is: *Modifying Major* with *Minor*.
¹Determined based on behavior.
²Determined based on which constituent comprises a larger percentage.
³Whichever is the lesser constituent.

Hammer:	140 pounds with a 30-inch free fall. Rope on 6- to 10-inch-diam. cathed. 2-1/4 rope turns, < 100 rpm
Sampler:	10 to 30 inches long Shoe I.D. = 1.375 inches Barrel I.D. = 1.5 inches Barrel O.D. = 2 inches
N-Value:	Sum blow counts for second and third 6-inch increments. Refusal: 50 blows for 6 inches or less; 10 blows for 0 inches.
NOTE:	Penetration resistances (N-values) shown on boring logs are as recorded in the field and have not been corrected for hammer efficiency, overburden, or other factors.

STANDARD PENETRATION TEST (SPT) SPECIFICATIONS

Dry	Absence of moisture, dusty, dry
Moist	Damp but no visible water
Wet	Visible free water, from below water table

MOISTURE CONTENT TERMS

Trace	> 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)
(Modified From USACE Tech Memo 3-357, ASTM D2487, and ASTM D2488)

MAJOR DIVISIONS			GROUP/GRAPHIC SYMBOL	TYPICAL IDENTIFICATIONS
COARSE-GRAINED SOILS <i>(more than 50% retained on No. 200 sieve)</i>	Gravels <i>(more than 50% of coarse fraction retained on No. 4 sieve)</i>	Gravel <i>(less than 5% fines)</i>	GW	Well-Graded Gravel; Well-Graded Gravel with Sand
			GP	Poorly Graded Gravel; Poorly Graded Gravel with Sand
		Silty or Clayey Gravel <i>(more than 12% fines)</i>	GM	Silty Gravel; Silty Gravel with Sand
			GC	Clayey Gravel; Clayey Gravel with Sand
	Sands <i>(50% or more of coarse fraction passes the No. 4 sieve)</i>	Sand <i>(less than 5% fines)</i>	SW	Well-Graded Sand; Well-Graded Sand with Gravel
			SP	Poorly Graded Sand; Poorly Graded Sand with Gravel
		Silty or Clayey Sand <i>(more than 12% fines)</i>	SM	Silty Sand; Silty Sand with Gravel
			SC	Clayey Sand; Clayey Sand with Gravel
FINE-GRAINED SOILS <i>(50% or more passes the No. 200 sieve)</i>	Silt and Clays <i>(liquid limit less than 50)</i>	Inorganic	ML	Silt; Silt with Sand or Gravel; Sandy or Gravelly Silt
			CL	Lean Clay; Lean Clay with Sand or Gravel; Sandy or Gravelly Lean Clay
		Organic	OL	Organic Silt or Clay; Organic Silt or Clay with Sand or Gravel; Sandy or Gravelly Organic Silt or Clay
	Silt and Clays <i>(liquid limit 50 or more)</i>	Inorganic	MH	Elastic Silt; Elastic Silt with Sand or Gravel; Sandy or Gravelly Elastic Silt
			CH	Fat Clay; Fat Clay with Sand or Gravel; Sandy or Gravelly Fat Clay
		Organic	OH	Organic Silt or Clay; Organic Silt or Clay with Sand or Gravel; Sandy or Gravelly Organic Silt or Clay
HIGHLY-ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor	PT	Peat or other highly organic soils (see ASTM D4427)	

NOTE: No. 4 size = 4.75 mm = 0.187 in.; No. 200 size = 0.075 mm = 0.003 in.

NOTES

- Dual symbols (*symbols separated by a hyphen, i.e., SP-SM, Sand with Silt*) are used for soils with between 5% and 12% fines or when the liquid limit and plasticity index values plot in the CL-ML area of the plasticity chart. Graphics shown on the logs for these soil types are a combination of the two graphic symbols (e.g., SP and SM).
- Borderline symbols (*symbols separated by a slash, i.e., CL/ML, Lean Clay to Silt; SP-SM/SM, Sand with Silt to Silty Sand*) indicate that the soil properties are close to the defining boundary between two groups.

Proposed New Tozier Track Facility
Anchorage, Alaska

**SOIL DESCRIPTION
AND LOG KEY**

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FIG. 3
Sheet 2 of 3

GRADATION TERMS

Poorly Graded	Narrow range of grain sizes present or, within the range of grain sizes present, one or more sizes are missing (Gap Graded). Meets criteria in ASTM D2487, if tested.
Well-Graded	Full range and even distribution of grain sizes present. Meets criteria in ASTM D2487, if tested.

CEMENTATION TERMS¹

Weak	Crumbles or breaks with handling or slight finger pressure
Moderate	Crumbles or breaks with considerable finger pressure
Strong	Will not crumble or break with finger pressure

PLASTICITY²

DESCRIPTION	VISUAL-MANUAL CRITERIA	APPROX. PLASTICITY INDEX RANGE
Nonplastic	A 1/8-in. thread cannot be rolled at any water content.	< 4
Low	A thread can barely be rolled and a lump cannot be formed when drier than the plastic limit.	4 to 10
Medium	A thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. A lump crumbles when drier than the plastic limit.	10 to 20
High	It take considerable time rolling and kneading to reach the plastic limit. A thread can be rerolled several times after reaching the plastic limit. A lump can be formed without crumbling when drier than the plastic limit.	> 20

ADDITIONAL TERMS

Mottled	Irregular patches of different colors.
Bioturbated	Soil disturbance or mixing by plants or animals.
Diamict	Nonsorted sediment; sand and gravel in silt and/or clay matrix.
Cuttings	Material brought to surface by drilling.
Slough	Material that caved from sides of borehole.
Sheared	Disturbed texture, mix of strengths.

PARTICLE ANGULARITY AND SHAPE TERMS³

Angular	Sharp edges and unpolished planar surfaces.
Subangular	Similar to angular, but with rounded edges.
Subrounded	Nearly planar sides with well-rounded edges.
Rounded	Smoothly curved sides with no edges.
Flat	Width/thickness ratio > 3.
Elongated	Length/width ratio > 3.

ACRONYMS AND ABBREVIATIONS

ATD	At Time of Drilling
Diam.	Diameter
Elev.	Elevation
ft.	Feet
FeO	Iron Oxide
gal.	Gallons
Horiz.	Horizontal
HSA	Hollow Stem Auger
I.D.	Inside Diameter
in.	Inches
lbs.	Pounds
MgO	Magnesium Oxide
mm	Millimeter
MnO	Manganese Oxide
NA	Not Applicable or Not Available
NP	Nonplastic
O.D.	Outside Diameter
OW	Observation Well
pcf	Pounds per Cubic Foot
PID	Photo-Ionization Detector
PMT	Pressuremeter Test
ppm	Parts per Million
psi	Pounds per Square Inch
PVC	Polyvinyl Chloride
rpm	Rotations per Minute
SPT	Standard Penetration Test
USCS	Unified Soil Classification System
q _u	Unconfined Compressive Strength
WWP	Vibrating Wire Piezometer
Vert.	Vertical
WOH	Weight of Hammer
WOR	Weight of Rods
Wt.	Weight

STRUCTURE TERMS¹

Interbedded	Alternating layers of varying material or color with layers at least 1/4-inch thick; singular: bed.
Laminated	Alternating layers of varying material or color with layers less than 1/4-inch thick; singular: lamination.
Fissured	Breaks along definite planes or fractures with little resistance.
Slickensided	Fracture planes appear polished or glossy; sometimes striated.
Blocky	Cohesive soil that can be broken down into small angular lumps that resist further breakdown.
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay.
Homogeneous	Same color and appearance throughout.

Proposed New Tozier Track Facility
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SOIL DESCRIPTION AND LOG KEY

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FIG. 3
Sheet 3 of 3

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FROST CLASSIFICATION
(after Municipality of Anchorage, 2007)

GROUP		0.02 Mil.	P-200*	USC SYSTEM (based on P-200 results)
NFS	Sandy Soils	0 to 3	0 to 6	SW, SP, SW-SM, SP-SM
	Gravelly Soils	0 to 3	0 to 6	GW, GP, GW-GM, GP-GM
F1	Gravelly Soils	3 to 10	6 to 13	GM, GW-GM, GP-GM
F2	Sandy Soils	3 to 15	6 to 19	SP-SM, SW-SM, SM
	Gravelly Soils	10 to 20	13 to 25	GM
F3	Sands, except very fine silty sands**	Over 15	Over 19	SM, SC
	Gravelly Soils	Over 20	Over 25	GM, GC
	Clays, PI>12			CL, CH
F4	All Silts			ML, MH
	Very fine silty sands**	Over 15	Over 19	SM, SC
	Clays, PI<12			CL, CL-ML
	Varved clays and other fined grained, banded sediments			CL and ML CL, ML, and SM; SL, SH, and ML; CL, CH, ML, and SM

PI = Plasticity Index

P-200 = Percent passing the number 200 sieve

0.02 Mil. = Percent material below 0.02 millimeter grain size

*Approximate P-200 value equivalent for frost classification.
Value range based on typical, well-graded soil curves.

** Very fine sand : greater than 50% of sand fraction passing the number 100 sieve

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FROST CLASSIFICATION LEGEND

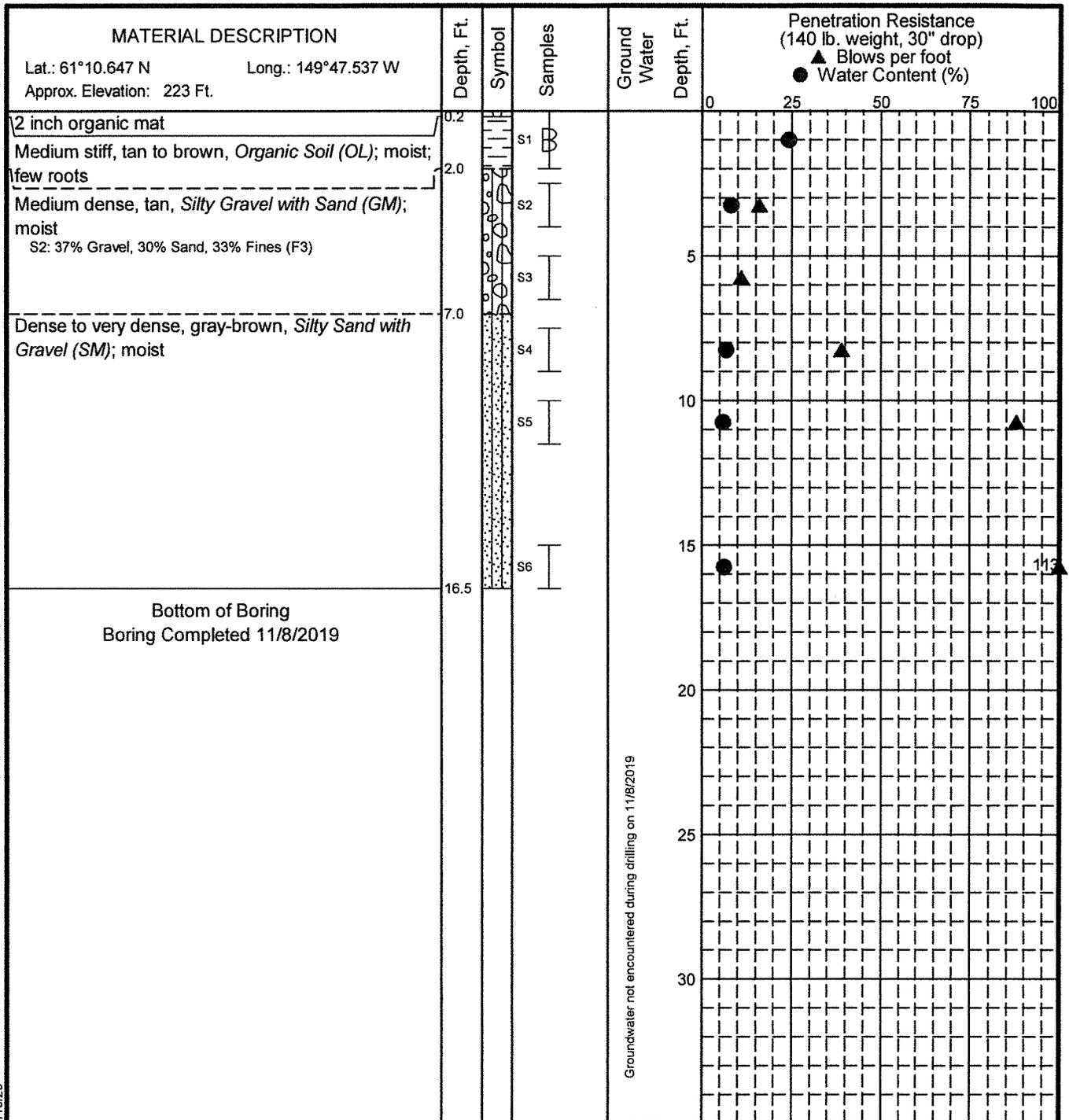
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FIG. 4



LEGEND

* Sample Not Recovered
 ▬ Grab Sample
 ┆ 2" O.D. Split Spoon Sample

● Water Content (%)
 Plastic Limit ┆ ● ┆ Liquid Limit
 Natural Water Content

NOTES

- The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
- The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
- Water level, if indicated above, is for the date specified and may vary.

Proposed New Tozier Track Facility
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LOG OF BORING B-1

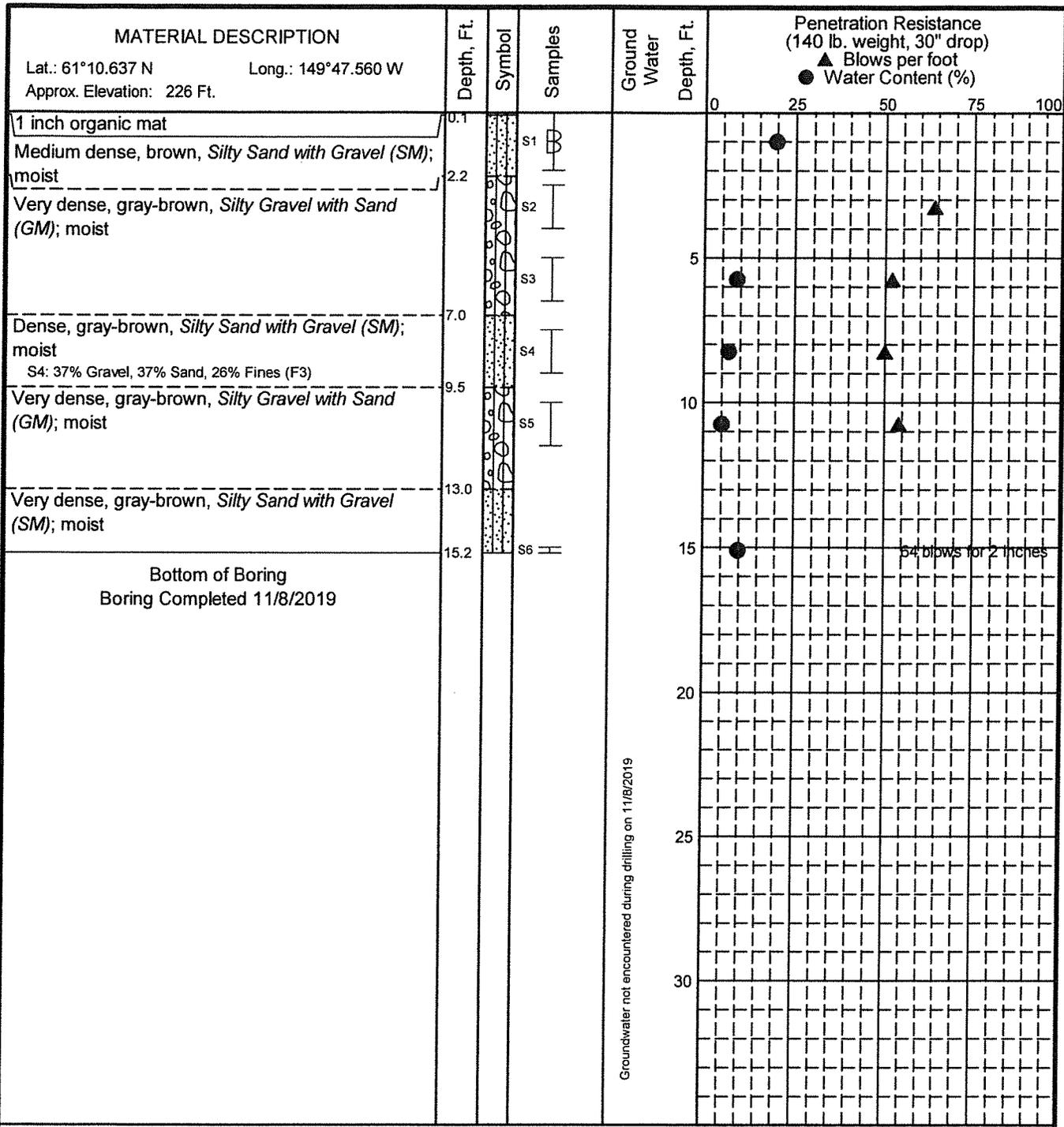
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FIG. 5

GEO-TECHNICAL LOG - GINT TEMPLATE7.GPJ S&W GEO1.GDT 1/10/20

GEO TECHNICAL LOG GINT TEMPLATE7.GPJ S&W GEO1.GDT 1/10/20



Groundwater not encountered during drilling on 11/8/2019

LEGEND

- * Sample Not Recovered
- ▬ Grab Sample
- ┆┆ 2" O.D. Split Spoon Sample

- Water Content (%)
- ▬ Plastic Limit
- ▬ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
3. Water level, if indicated above, is for the date specified and may vary.

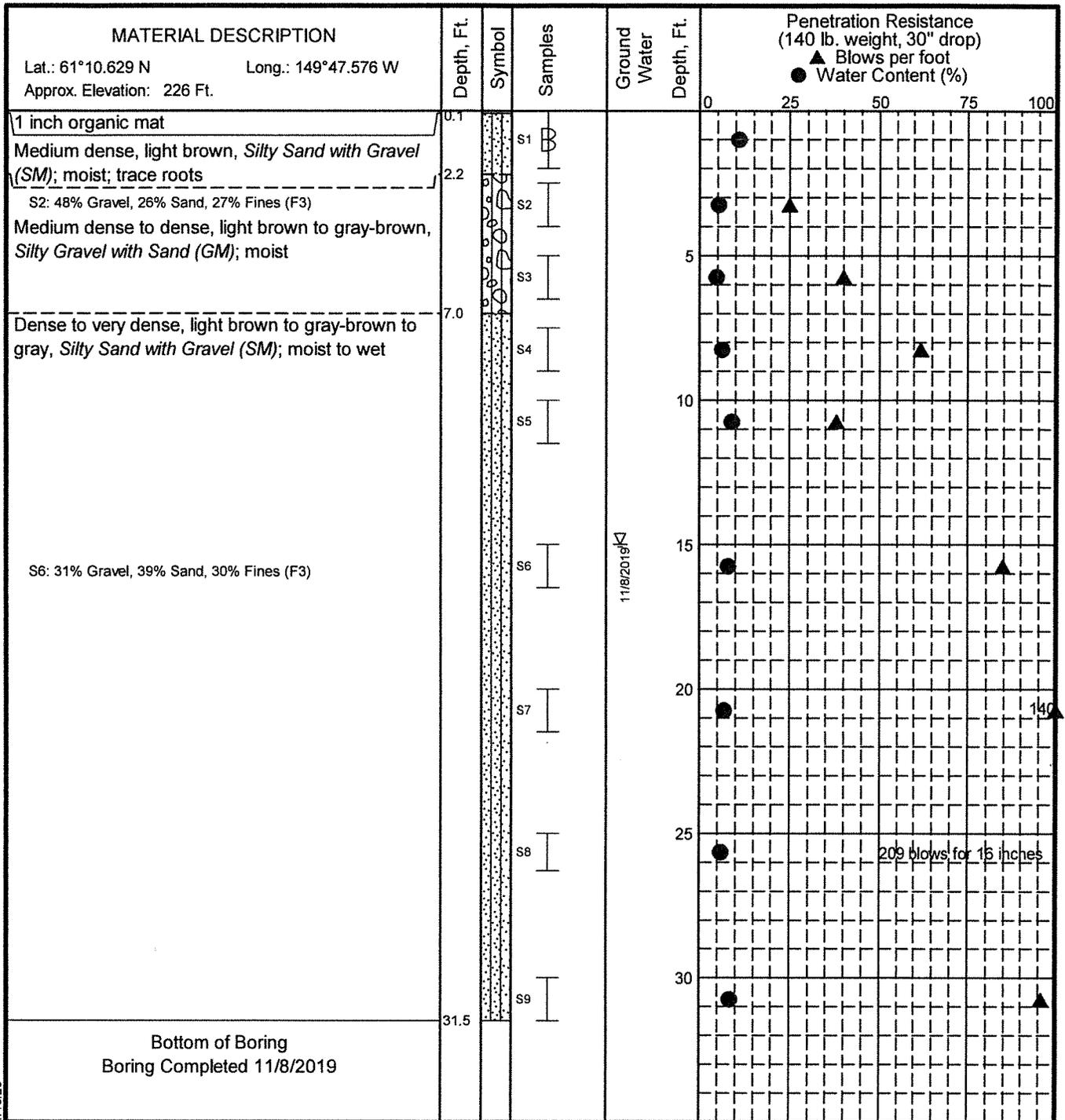
Proposed New Tozier Track Facility
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LOG OF BORING B-2

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FIG. 6



GEO-TECHNICAL LOG - GINT TEMPLATE7.GPJ S&W GEO1.GDT 1/10/20

LEGEND

- * Sample Not Recovered
- ▬ Grab Sample
- ┆ 2" O.D. Split Spoon Sample
- ∇ Ground Water Level At Time Of Drilling

- Water Content (%)
- Plastic Limit
- Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
3. Water level, if indicated above, is for the date specified and may vary.

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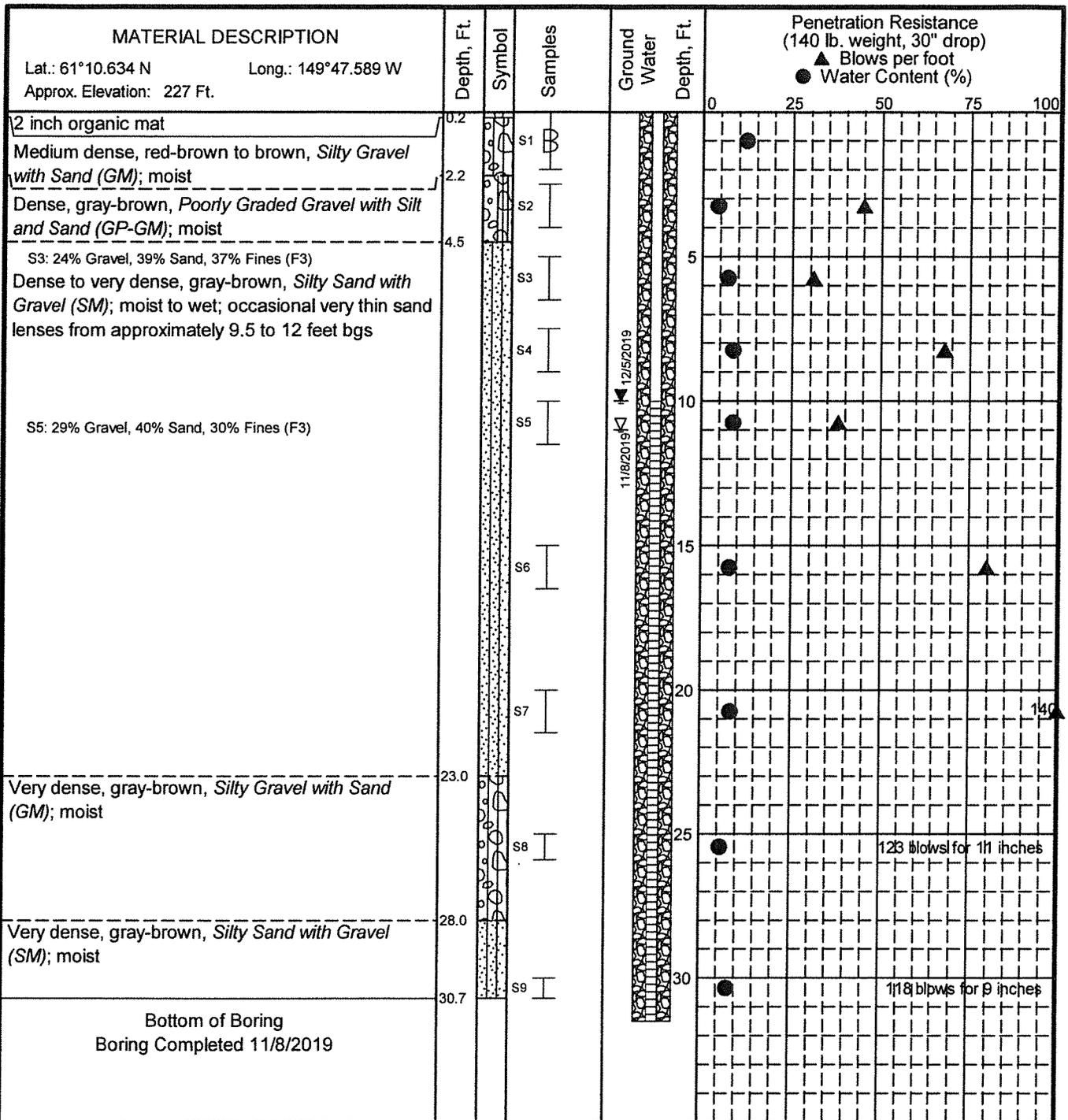
LOG OF BORING B-3

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FIG. 7



LEGEND

- * Sample Not Recovered
- ▣ Grab Sample
- ⊔ 2" O.D. Split Spoon Sample
- ▽ Ground Water Level At Time Of Drilling

- Water Content (%)
- Liquid Limit
- Plastic Limit
- Natural Water Content

NOTES

- The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
- The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
- Water level, if indicated above, is for the date specified and may vary.

Proposed New Tozier Track Facility
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LOG OF BORING B-4

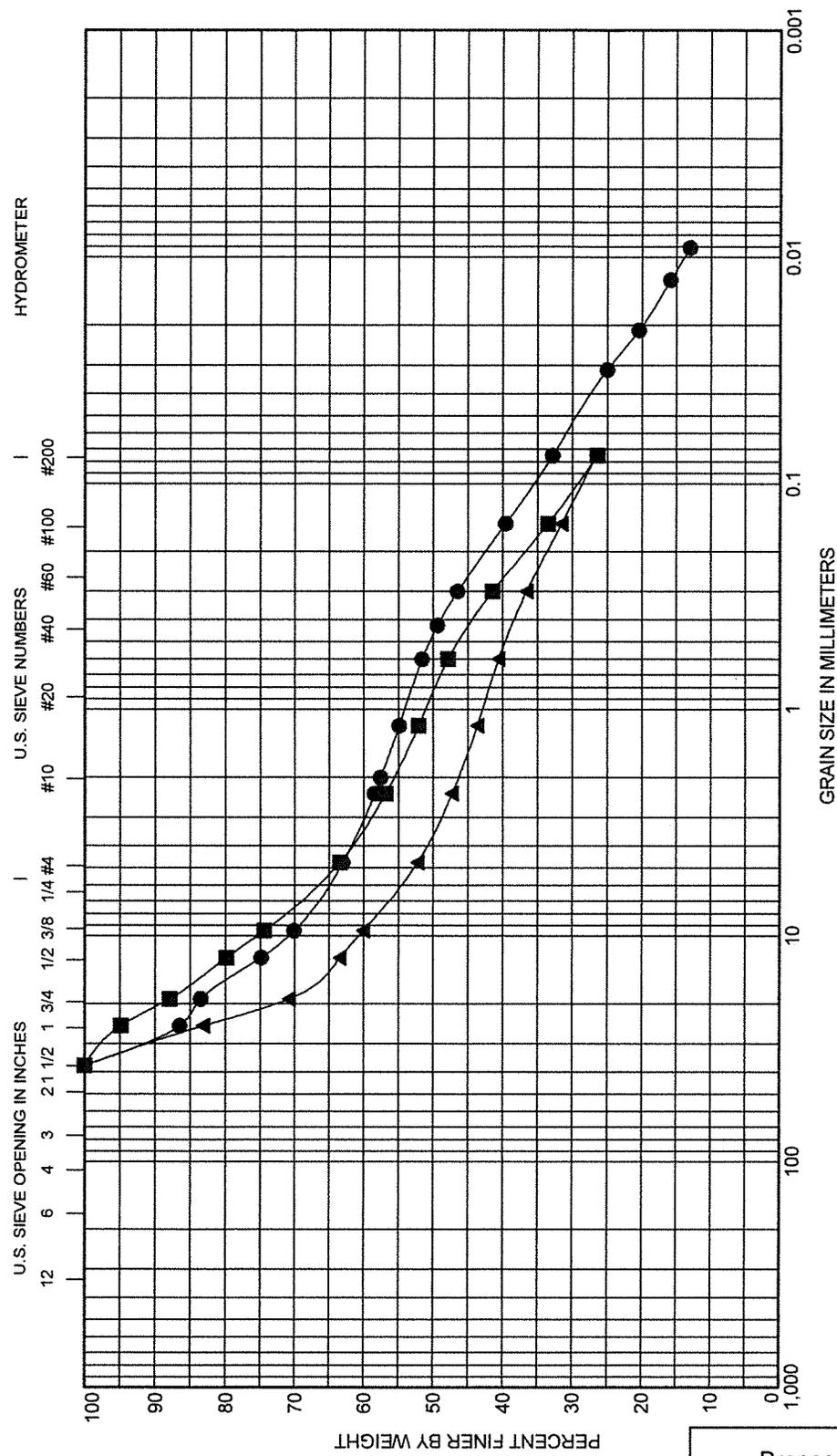
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FIG. 8

GEO TECHNICAL LOG - GINT TEMPLATE7.GPJ S&W GEO1.GDT 1/10/20



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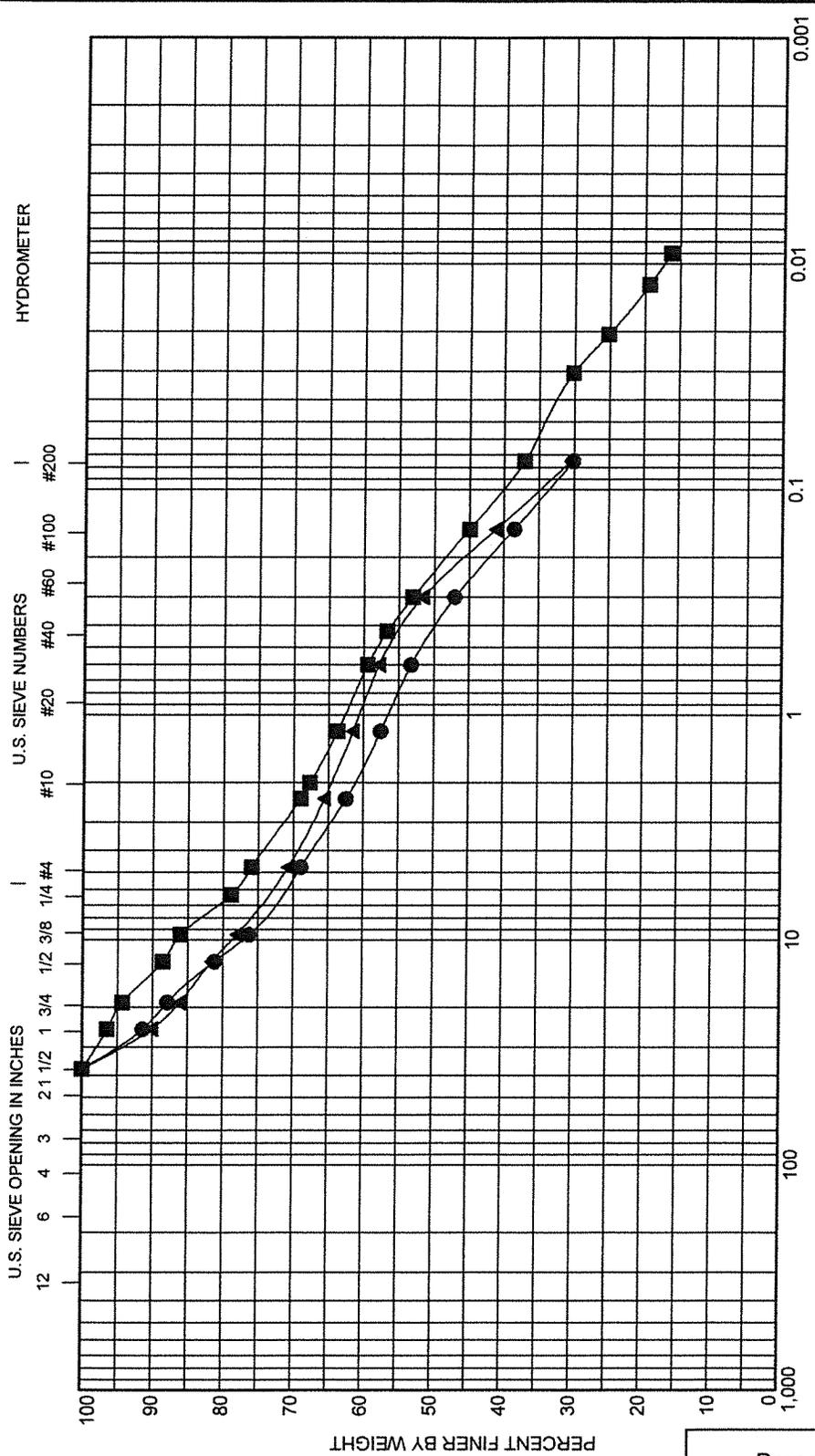
GRAIN SIZE CLASSIFICATION

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FIG. 9
Sheet 1 of 3



Sample	Depth, Ft	GRAVEL			SAND			SILT OR CLAY					
		coarse	fine		coarse	medium	fine	LL	PL	PI	Cc	Cu	
● B-3 S6	15.0 - 16.5	Silty Sand with Gravel (SM)											
■ B-4 S3	5.0 - 6.5	Silty Sand with Gravel (SM)											
▲ B-4 S5	10.0 - 11.5	Silty Sand with Gravel (SM)											
Sample	Depth, Ft	D100	D60	D30	D10	D60	D30	%Gravel	%Sand	%Silt	%Clay		
● B-3 S6	15.0 - 16.5	37.5	1.67					31	39		30		
■ B-4 S3	5.0 - 6.5	37.5	0.66	0.03				24	39		37		
▲ B-4 S5	10.0 - 11.5	37.5	0.9					29	40		30		

Proposed New Tozier Track Facility
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GRAIN SIZE CLASSIFICATION

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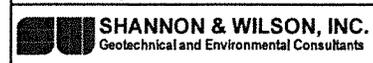
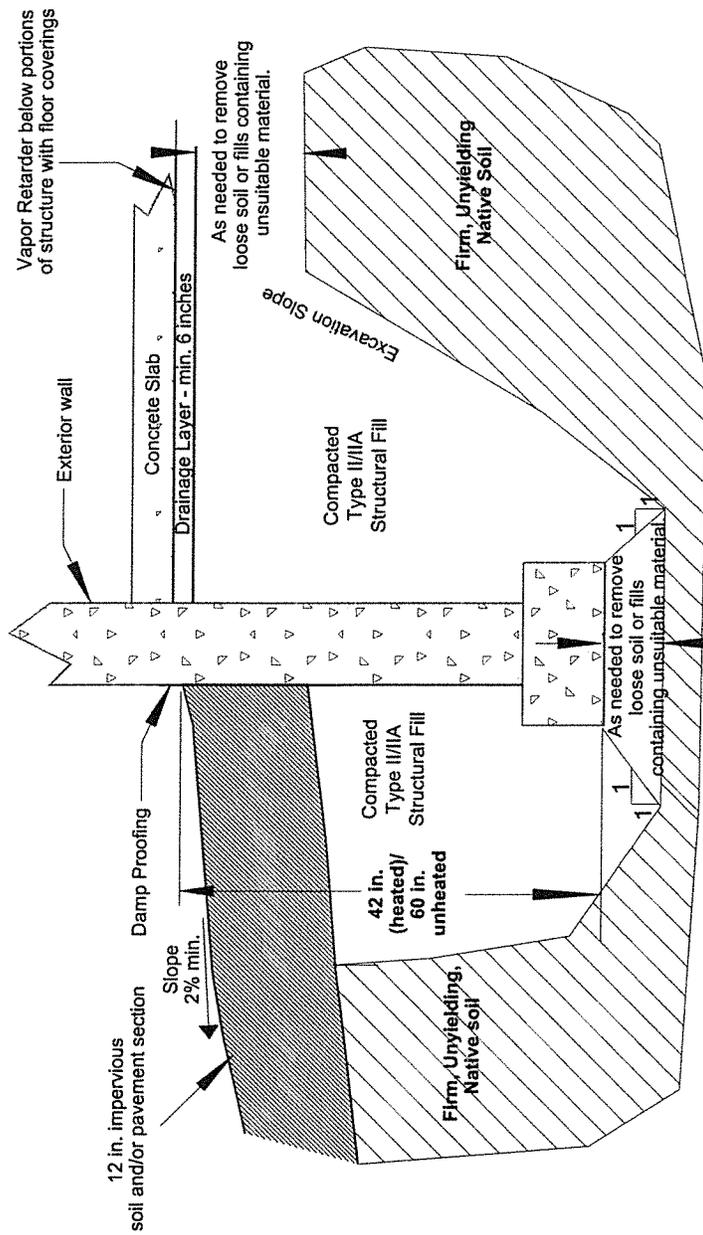


FIG. 9
Sheet 2 of 3



NOTES:

1. Backfill for the Drainage Layer zone shown above should consist of free-draining granular soil with not more than 6% (by weight based on minus 3/4" portion) passing No. 200 sieve (by wet sieving) with no plastic fines.
2. Backfill within 18 inches of the wall should be placed in layers not exceeding 6 inches and densely compacted with hand-operated equipment. Heavy equipment should not be used for backfill, as such equipment operated near the wall could increase lateral earth pressures and possibly damage the wall.
3. Backfill should be placed in layers not to exceed 10 to 12 inches loose thickness and densely compacted. Structural fill should be compacted to 95% minimum of ASTM D-1557.
4. OSHA requires slope protection and support for all trenches greater than 4 feet deep. Side slope requirements are variable depending upon soil type and the duration of time in which the trench remains open. The contractor should be made responsible or compliance to these regulations as he/she is at the project on a day to day basis and is aware of changing conditions.

Proposed New Tozier Track Facility
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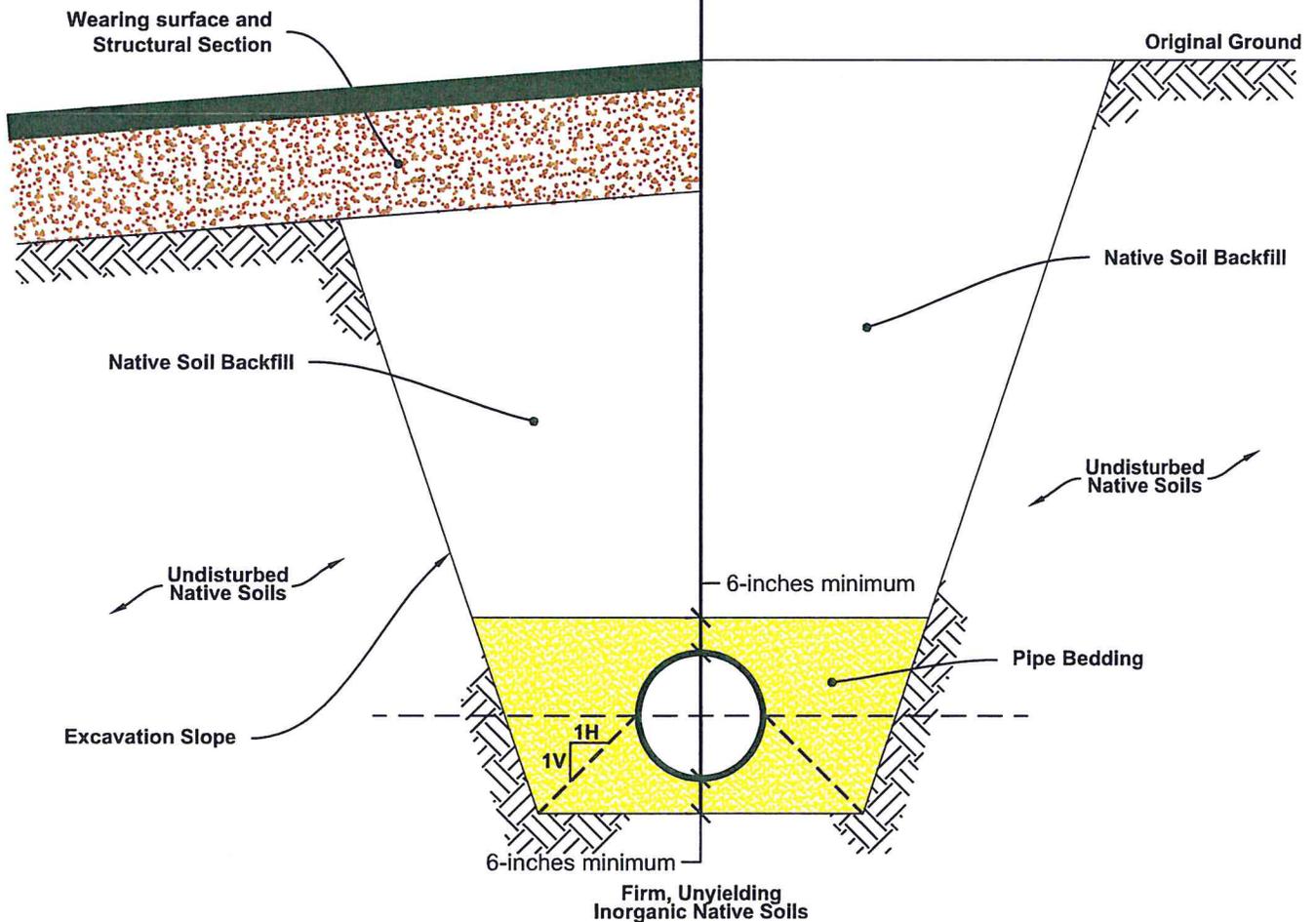
**FLOOR SLAB AND FOOTING
DETAIL**

January 2020

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Trench Under Paved Areas

Trench Under Non-Structural Areas



NOTES

1. Trench backfill under paved areas should be placed in loose lifts not to exceed 12 inches and compacted to at least 95 percent of its maximum dry density as determined by ASTM D-1557.
2. Trench backfill under non-structural areas should be placed in loose lifts not to exceed 18 inches and compacted to at least 90 percent of its maximum dry density as determined by ASTM D-1557.
3. Pipe bedding should conform to MOA Class C bedding material or as recommended by pipe manufacturer.
4. Pipe bedding and cover thickness shown above should be used absent pipe manufacturer requirements.
5. OSHA requires slope protection and support for all trenches greater than 4 feet deep. Side slope requirements are variable depending upon soil type and the duration of time in which the trench remains open. The contractor should be made responsible for compliance to these regulations as he/she is at the project on a day to day basis, is aware of the changing conditions, and has authority to direct work.

Proposed New Tozier Track Facility
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UTILITY TRENCH DETAIL

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FIG. 11

GRADATION REQUIREMENTS

(Adapted from Municipality of Anchorage Standard Specifications, 2015)

LEVELING COURSE

U.S. STANDARD SIEVE SIZE		PERCENT PASSING BY WEIGHT
English	Metric	
1 in.	25.0 mm	100
3/4 in.	19.0 mm	70 - 100
3/8 in.	9.5 mm	50 - 80
No. 4	4.75 mm	35 - 65
No. 8	2.36 mm	20 - 50
No. 50	0.30 mm	8 - 28
No. 200	0.075 mm	0 - 6*

TYPE II BACKFILL

U.S. STANDARD SIEVE SIZE		PERCENT PASSING BY WEIGHT
8 in.	-	
3 in.	75 mm	70 - 100
1-1/2 in.	37.5 mm	55 - 100
3/4 in.	19.0 mm	45 - 85
No. 4	4.75 mm	20 - 60
No. 10	2.00 mm	12 - 50
No. 40	0.425 mm	4 - 30
No. 200	0.075 mm	2 - 6**

TYPE IIA BACKFILL

U.S. STANDARD SIEVE SIZE		PERCENT PASSING BY WEIGHT
3 in.	75 mm	
3/4 in.	19.0 mm	50 - 100
No. 4	4.75 mm	25 - 60
No. 10	2.00 mm	15 - 50
No. 40	0.425 mm	4 - 30
No. 200	0.075 mm	2 - 6***

* The fraction passing the No. 200 sieve shall not exceed 75 percent of the fraction passing the No. 50 sieve.

** The fraction passing the No. 200 sieve shall not exceed 15 percent of the fraction passing the No. 4 sieve.

*** The fraction passing the No. 200 sieve shall not exceed 20 percent of the fraction passing the No. 4 sieve.

Proposed New Tozier Track Facility
Anchorage, Alaska

GRADATION REQUIREMENTS

January 2020

104221-001



SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. 12

Important Information

About Your Geotechnical/Environmental Report

IMPORTANT INFORMATION

CONSULTING SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

Consultants prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your consultant prepared your report expressly for you and expressly for the purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the consultant. No party should apply this report for any purpose other than that originally contemplated without first conferring with the consultant.

THE CONSULTANT'S REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

A geotechnical/environmental report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. Depending on the project, these may include the general nature of the structure and property involved; its size and configuration; its historical use and practice; the location of the structure on the site and its orientation; other improvements such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask the consultant to evaluate how any factors that change subsequent to the date of the report may affect the recommendations. Unless your consultant indicates otherwise, your report should not be used (1) when the nature of the proposed project is changed (for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one, or chemicals are discovered on or near the site); (2) when the size, elevation, or configuration of the proposed project is altered; (3) when the location or orientation of the proposed project is modified; (4) when there is a change of ownership; or (5) for application to an adjacent site. Consultants cannot accept responsibility for problems that may occur if they are not consulted after factors that were considered in the development of the report have changed.

SUBSURFACE CONDITIONS CAN CHANGE.

Subsurface conditions may be affected as a result of natural processes or human activity. Because a geotechnical/environmental report is based on conditions that existed at the time of subsurface exploration, construction decisions should not be based on a report whose adequacy may have been affected by time. Ask the consultant to advise if additional tests are desirable before construction starts; for example, groundwater conditions commonly vary seasonally.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes, or groundwater fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical/environmental report. The consultant should be kept apprised of any such events and should be consulted to determine if additional tests are necessary.

MOST RECOMMENDATIONS ARE PROFESSIONAL JUDGMENTS.

Site exploration and testing identifies actual surface and subsurface conditions only at those points where samples are taken. The data were extrapolated by your consultant, who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your consultant can work together to help reduce their impacts. Retaining

your consultant to observe subsurface construction operations can be particularly beneficial in this respect.

A REPORT'S CONCLUSIONS ARE PRELIMINARY.

The conclusions contained in your consultant's report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Actual subsurface conditions can be discerned only during earthwork; therefore, you should retain your consultant to observe actual conditions and to provide conclusions. Only the consultant who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations based on those conclusions are valid and whether or not the contractor is abiding by applicable recommendations. The consultant who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

THE CONSULTANT'S REPORT IS SUBJECT TO MISINTERPRETATION.

Costly problems can occur when other design professionals develop their plans based on misinterpretation of a geotechnical/environmental report. To help avoid these problems, the consultant should be retained to work with other project design professionals to explain relevant geotechnical, geological, hydrogeological, and environmental findings, and to review the adequacy of their plans and specifications relative to these issues.

BORING LOGS AND/OR MONITORING WELL DATA SHOULD NOT BE SEPARATED FROM THE REPORT.

Final boring logs developed by the consultant are based upon interpretation of field logs (assembled by site personnel), field test results, and laboratory and/or office evaluation of field samples and data. Only final boring logs and data are customarily included in geotechnical/environmental reports. These final logs should not, under any circumstances, be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process.

To reduce the likelihood of boring log or monitoring well misinterpretation, contractors should be given ready access to the complete geotechnical engineering/environmental report prepared or authorized for their use. If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared, and that developing construction cost estimates was not one of the specific purposes for which it was prepared. While a contractor may gain important knowledge from a report prepared for another party, the contractor should discuss the report with your consultant and perform the additional or alternative work believed necessary to obtain the data specifically appropriate for construction cost estimating purposes. Some clients hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes that aggravate them to a disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY.

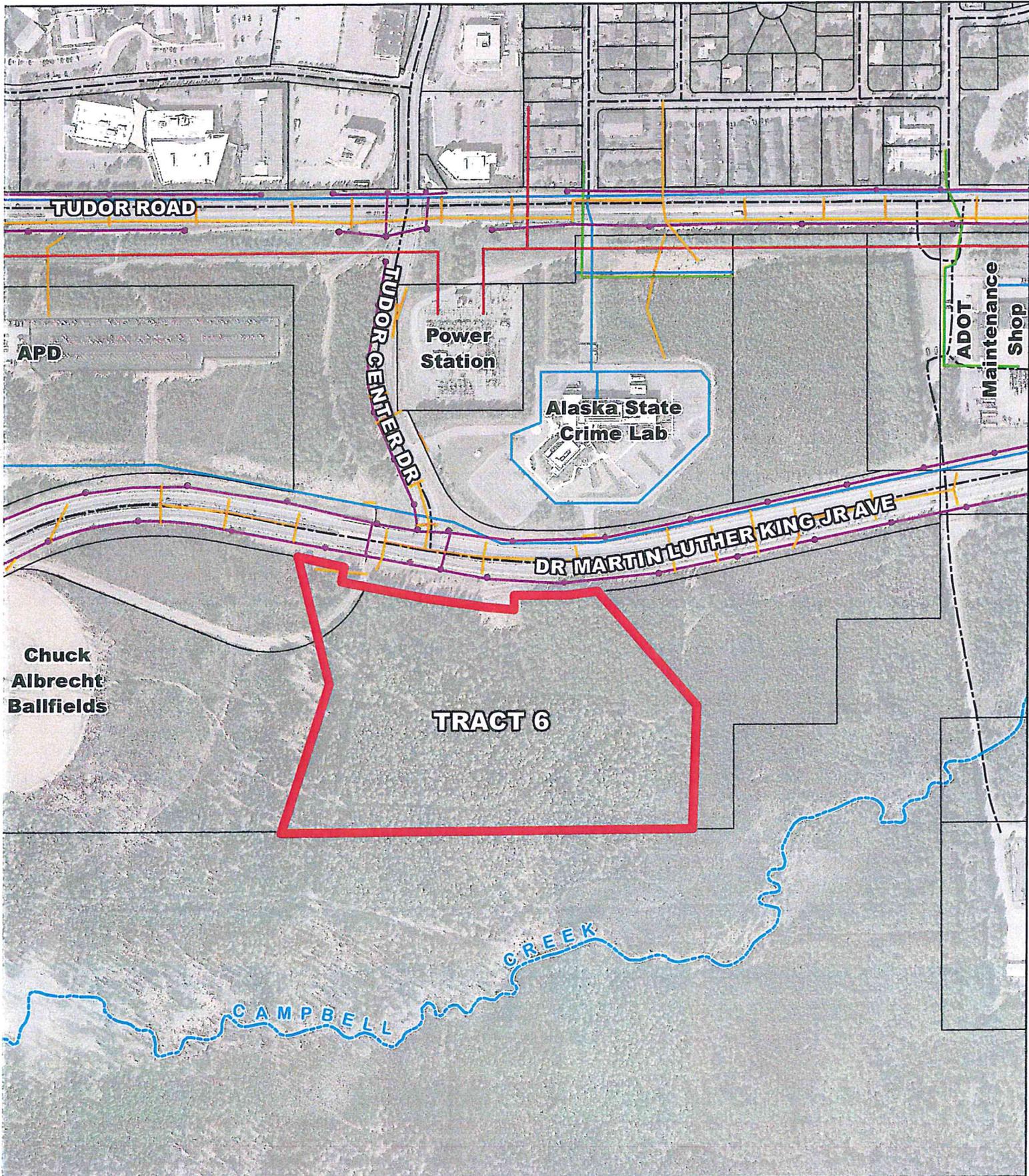
Because geotechnical/environmental engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims

being lodged against consultants. To help prevent this problem, consultants have developed a number of clauses for use in their contracts, reports, and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where the consultant's responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

The preceding paragraphs are based on information provided by the ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland



IMPORTANT INFORMATION



- Utilities
- Water
 - Sanitary Sewer
 - Storm Drain
 - Electric
 - Street Lights (UG)



PID: 008-121-08-000
Tract 6

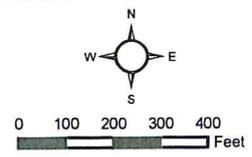


EXHIBIT C
Existing
Utilities
04/05/2021

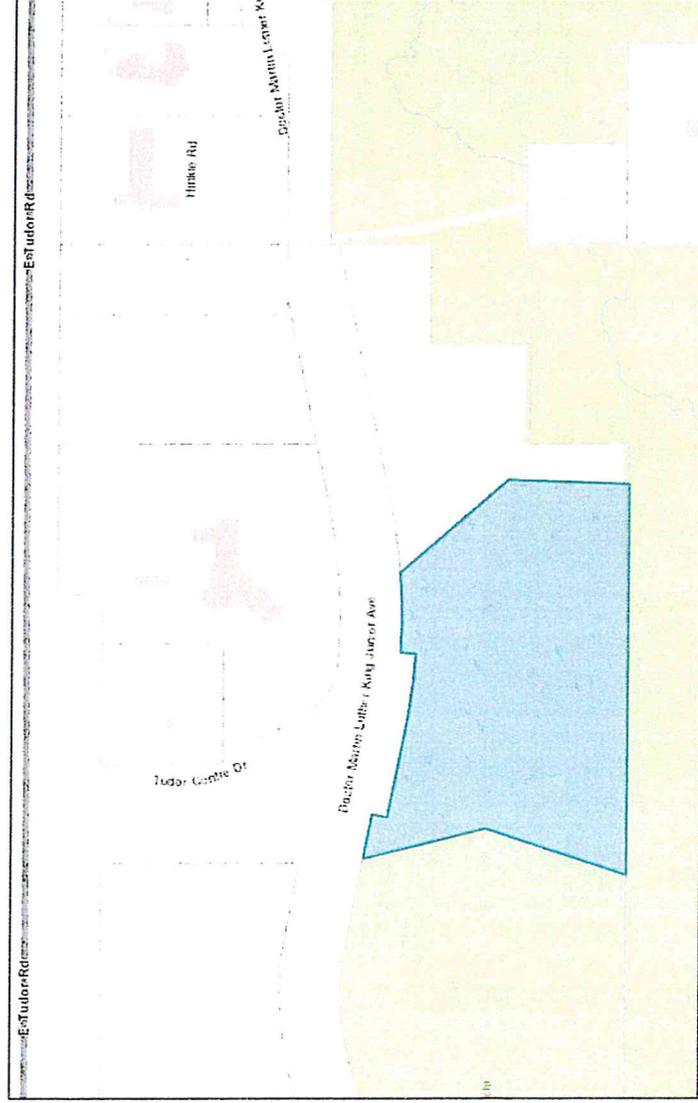


Property Summary Report - Municipality of Anchorage

Area of Interest (AOI) Information

Area : 863,846.61 ft²

Jan 21 2021 13:11:20 Alaska Standard Time



Property Information

Tudor Municipal Campus - Tract 6

Summary

Name	Count	Area(ft ²)	Length(ft)
Property Information	1	863,846.61	Not Applicable
Assembly District	1	863,846.70	Not Applicable
Community Council	1	863,846.70	Not Applicable
Zoning	1	863,846.70	Not Applicable
Tax Districts and Service Areas	1	863,846.70	Not Applicable
Comprehensive Plan Information	2	863,846.61	Not Applicable
Land Use Plans	4	3,440,439.17	Not Applicable
Wetland Classification	3	7,434.41	Not Applicable
FEMA Flood Zones	1	863,846.70	Not Applicable
Avalanche Zone	0	0	Not Applicable
Seismically Induced Ground-Failure Susceptibility	1	863,846.70	Not Applicable
Wind Zone for Building Design	1	863,846.70	Not Applicable
Building Safety Service Area	1	863,846.70	Not Applicable

Property Information

#	Property Tax #	Site Street Address	Current Legal Description	Grid #	Underlying Plat #	Lot Size (Sq Ft)	Area(ft ²)
1	008-121-08-000	No Data	TUDOR MUNICIPAL CAMPUS TR 6	SW1836	9-0016	863,481	863,846.61

Assembly District

#	Assembly Section	Area(ft²)
1	4	863,846.70

Community Council

#	Community Council	Area(ft²)
1	Campbell Park	863,846.70

Zoning

#	Zoning	Area(ft²)
1	PLI	863,846.70

Tax Districts and Service Areas

#	Tax District #	District Name	Police Service Area	Fire Service Area	Parks Service Area	Road Service Area	Street Light Service Area	Building Safety Service Area	Area(ft²)
1	3	Spenard	Anchorage Metropolitan Police SA	Anchorage Fire Service Area	Anchorage Parks & Recreation SA	Anchorage Roads and Drainage SA	Anchorage Roads and Drainage SA	Anchorage Building Safety Service Area (ABSSA)	863,846.70

Comprehensive Plan Information

#	Land Use Designation	Area(ft²)
1	Park_or_Natural_Area	863,743.52
2	Other_Open_Space	103.10

Land Use Plans

#	Plan Name	Plan Type	Plan URL	Area(ft ²)
1	Far North / Bicentennial Park Master Plan	Other Area	http://www.muni.org/Departments/OCPD/Planning/Publications/Documents/Updated%20Far%20North%20Bicentennial%20Plan-1985.pdf	863,846.70
2	3500 Tudor Road Master Plan	Other Area	http://www.muni.org/Departments/OCPD/Planning/Publications/Pages/Tudor_Road_Plan.aspx	863,846.70
3	Anchorage 2040 Land Use Plan	Comprehensive Plan	http://www.muni.org/Departments/OCPD/Planning/Publications/Pages/Anchorage2040LandUsePlan.aspx	863,846.70
4	Tudor Road Public Lands and Institutions Plan	Other Area	http://www.muni.org/Departments/OCPD/Planning	848,899.07

Wetland Classification

#	Watershed	Wetland Type	Wetland Designation	Area(ft ²)
1	CAMPBELL CREEK	freshwater	B - Moderate Valuation	7,302.81
2	CAMPBELL CREEK	freshwater	A - High Valuation	131.61

FEMA Flood Zones

#	Flood Zone	Area(ft ²)
1	None	863,846.70

Seismically Induced Ground-Failure Susceptibility

#	Seismic Type	Seismic Zone	Area(ft ²)
1	MODERATE-LOW	Zone 2 - Moderately-Low Ground Failure Susceptibility	863,846.70

Wind Zone for Building Design

#	Wind Zone	IBC_Risk_Cat_I_vult	IBC_Risk_Cat_II_vult	IBC_Risk_Cat_III_vult	IBC_Risk_Cat_IV_vult	IRC_vall	Downloadable PDF	Area(ft ²)
1	Zone III	145	155					863,846.70

Building Safety Service Area

#	EDITOR	HANSEN	PUBDATE	Shape_Area	Shape_Length	Area(ft ²)
1	APJPA	INSIDE	January 10, 2021	1525100568.296880	216783.552797	863,846.70

This information is meant purely as a resource and the Municipality does not guarantee the complete accuracy of this data. Always verify any information with the department that is responsible for the data.

Area (ft²) is an auto created field by the software and should not be used for any analysis or interpretation.



Home Residents Businesses Government Visitors Departments Public Safety

Departments > Finance > Property Appraisal > New Search > results

Back

Taxes

Find Parcel Number - - 000

Submit Search

Public Inquiry Parcel Details

[Show Parcel on Map](#)

PARCEL: 008-121-08-000 01/01 Commercial Apartment Vac/Land 01/13/21

MOA	TUDOR MUNICIPAL CAMPUS
HERITAGE LAND BANK	TR 6
PO Box 196650	
Anchorage	AK 99519 6650 Site

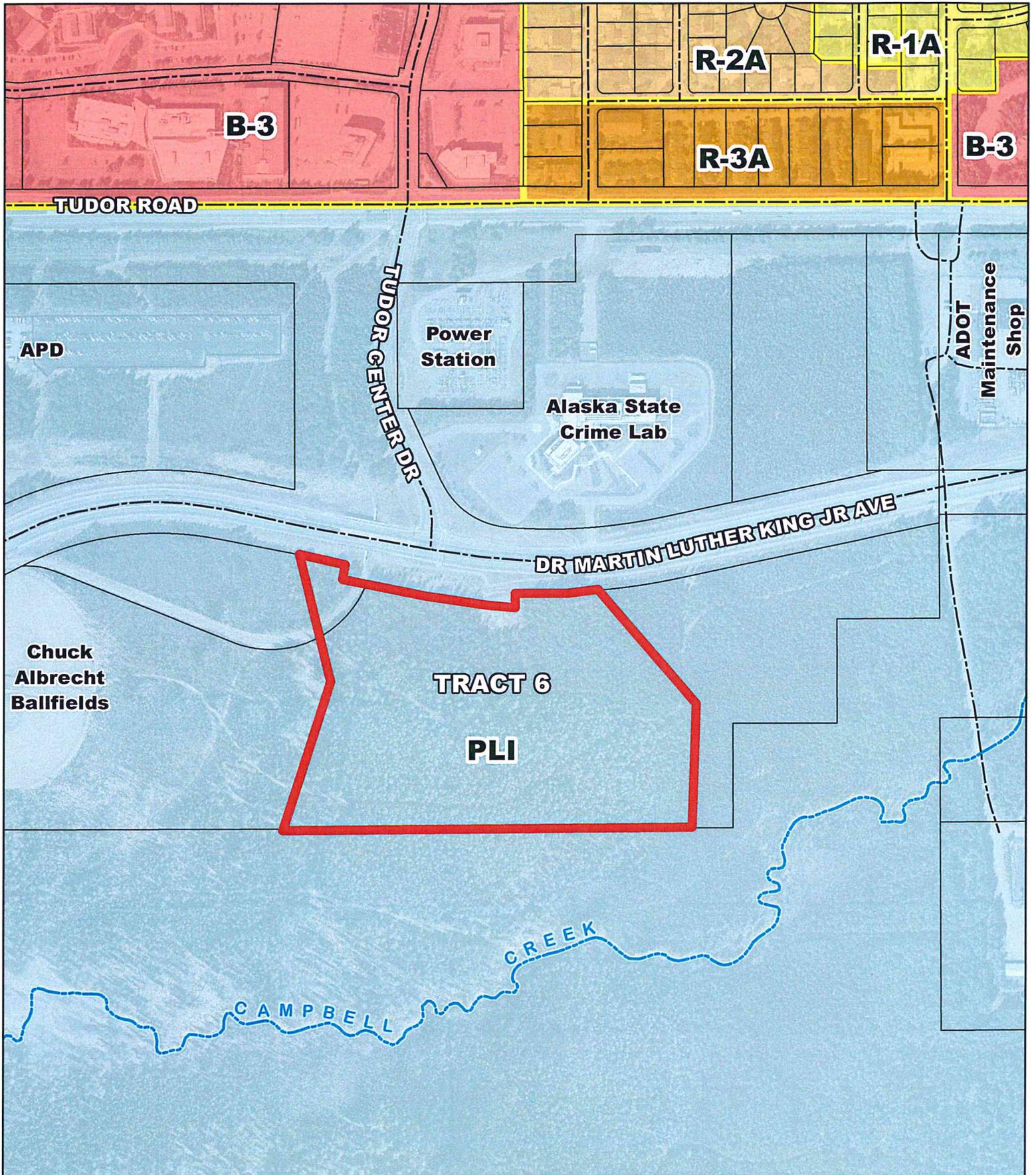
Lot Size: 863,481	---Date Changed---	----Deed Changed----	GRW: PIWt
Zone : PLI	Owner : 04/16/09	Stateid: 3049 0000856	
Tax Dist: 003	Address: 04/21/97	Date : 04/14/97	
Grid : SW1836	Hra # :	Plat : 090016	
GRW: PIWC		REF #: 04/16/09 008-091-14-000	

ASSESSMENT HISTORY

	---Land--	--Building-	---Total---	
Appraised Val 2019:	2,063,900	0	2,063,900	
Appraised Val 2020:	2,063,900	0	2,063,900	--Exemption--
Appraised Val 2021:	0	0	0	-----Type-----
Exempt Value 2021:	0	0	0	Municipal
State Exempt 2021:			0	
Resid Exempt 2021:			0	
Taxable Value 2021:			0	

Liv Units: 000 Common Area: Leasehold: Insp Dt: 07/18 Land Only
07/18 Quick Reinv
/

[Feedback E-mail: wwfipa@muni.org](mailto:wwfipa@muni.org)



Generalized Zoning Districts

- Commercial
- Single Family Residential
- Two Family Residential
- Multiple Family Residential
- Public Lands and Institutions

Zoning Boundaries



PID: 008-121-08-000
Tract 6

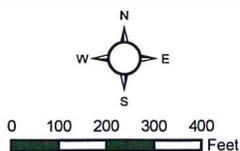


EXHIBIT A

Existing Zoning
Designation
04/05/2021

WMS WATERCOURSE MAPPING SUMMARY

Per the requirements for watercourse verification outlined in Project Management and Engineering Operating Policy and Procedure #8 and Planning Department Operating Policy and Procedure #1 (effective June 18, 2007), MOA Watershed Management Services has inspected the following location for the presence or absence of stream channels or other watercourses, as defined in Anchorage Municipal Code (21.35).

- Project Case Number or Subdivision Name: ASDRA Tozier Tack
- Project Location, Tax ID, or Legal Description: 008-121-08-000, Tudor Municipal Campus
Tract 6
- Project Area (if different from the entire parcel or subdivision): _____

In accordance with the requirements and methods identified, WMS verifies that this parcel, project area, or application:

X ^{KBC} DOES NOT contain stream channels and/or drainageways, as identified in WMS field or archival mapping information.*

_____ DOES contain stream channels and/or drainageways AND these are located and identified on submittal documents in general congruence with WMS field and archival mapping information.
*New or additional mapping IS NOT REQUIRED.**

_____ Contains stream channels and/or drainageways BUT one or more streams or other watercourses:

- are NOT shown on submittal documents, or
- are NOT depicted adequately on submittal documents for verification, or
- are NOT located or identified on submittal documents in general congruence with WMS field and archival mapping information.

*New or additional mapping IS REQUIRED and must be re-submitted for further review and verification.**

_____ Presence of stream channels and/or drainageways is unknown AND field verification is not possible at this time. WMS will verify as soon as conditions and prioritized resources allow.

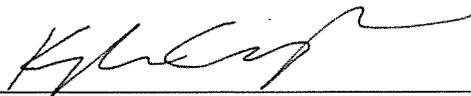
* Streams omitted in error by WMS or others remain subject to MOA Code and must be shown in new mapping upon identification of the error.

ADDITIONAL INFORMATION:

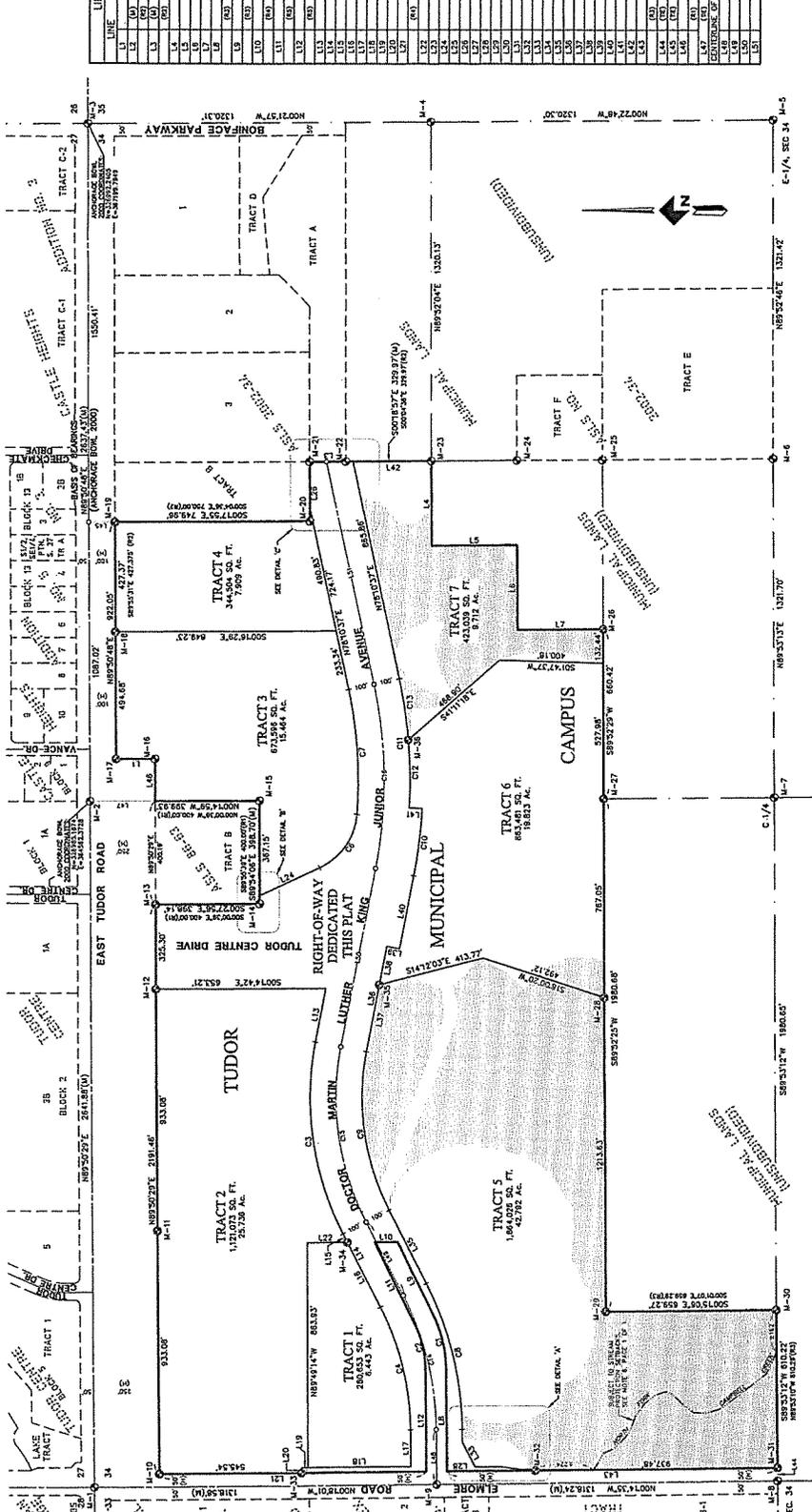
- Y N WMS written drainage recommendations are available. Preliminary Final
- Y N WMS written field inspection report or map is available. Preliminary Final
- Y N Field flagging and/or map-grade GPS data is available.

Inspection Certified By:

Date:



2/9/21



LINE DATA TABLE

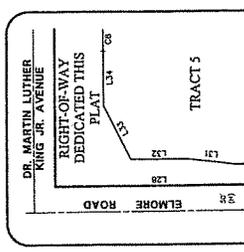
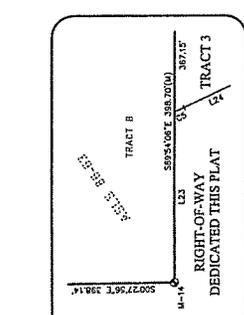
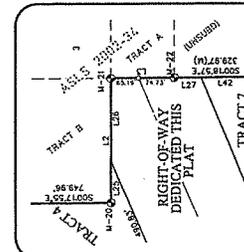
LINE	DESCRIPTION	LENGTH	BEARING
L1	S80°55'00"E	150.07	
L2	N89°55'00"W	150.07	
L3	S80°55'00"E	231.50	
L4	N89°55'00"W	231.50	
L5	S80°55'00"E	178.79	
L6	N89°55'00"W	178.79	
L7	S80°55'00"E	54.07	
L8	N89°55'00"W	54.07	
L9	S80°55'00"E	310.37	
L10	N89°55'00"W	310.37	
L11	S80°55'00"E	48.27	
L12	N89°55'00"W	48.27	
L13	S80°55'00"E	392.09	
L14	N89°55'00"W	392.09	
L15	S80°55'00"E	701.73	
L16	N89°55'00"W	701.73	
L17	S80°55'00"E	140.85	
L18	N89°55'00"W	140.85	
L19	S80°55'00"E	20.00	
L20	N89°55'00"W	20.00	
L21	S80°55'00"E	1028.07	
L22	N89°55'00"W	1028.07	
L23	S80°55'00"E	31.33	
L24	N89°55'00"W	31.33	
L25	S80°55'00"E	178.79	
L26	N89°55'00"W	178.79	
L27	S80°55'00"E	54.07	
L28	N89°55'00"W	54.07	
L29	S80°55'00"E	3.00	
L30	N89°55'00"W	3.00	
L31	S80°55'00"E	82.84	
L32	N89°55'00"W	82.84	
L33	S80°55'00"E	97.23	
L34	N89°55'00"W	97.23	
L35	S80°55'00"E	316.00	
L36	N89°55'00"W	316.00	
L37	S80°55'00"E	413.89	
L38	N89°55'00"W	413.89	
L39	S80°55'00"E	150.43	
L40	N89°55'00"W	150.43	
L41	S80°55'00"E	50.07	
L42	N89°55'00"W	50.07	
L43	S80°55'00"E	302.69	
L44	N89°55'00"W	302.69	
L45	S80°55'00"E	174.77	
L46	N89°55'00"W	174.77	
L47	S80°55'00"E	216.09	
L48	N89°55'00"W	216.09	
L49	S80°55'00"E	310.37	
L50	N89°55'00"W	310.37	
L51	S80°55'00"E	888.19	
L52	N89°55'00"W	888.19	

PLAT OF
TUDOR MUNICIPAL CAMPUS
 TRACTS 1-7
 (WITH EASEMENT/VACATION)
 A 191,970 ACRES RESUBDIVISION OF
 TRACT B, BIODIVERSITY PARK SUBDIVISION, PLAT 87-115,
 TRACT A, EAST ANCHORAGE BALDWIN SUBDIVISION, PLAT 89-402,
 TRACT C, ALASKA STATE LAND SURVEY NO. 2008-53, PLAT 2008-53,
 AND
 THE E/2 OF THE NW/4 OF THE NW/4 OF SECTION 34,
 THE W/2 OF THE NW/4 OF THE NW/4 EXCEPTING THEREFROM
 THE NW/4 OF THE NW/4 OF THE NW/4, AND
 THE NW/4 OF THE NW/4 OF THE NW/4, AND
 SECTION 34, SEWARD MEDIAN, ALASKA, DISTRICT 3, WEST,
 ANCHORAGE RECORDING DISTRICT,
 THIRD JUDICIAL DISTRICT, STATE OF ALASKA.

DDWL, HKM
 ANCHORAGE, ALASKA
 SURVEYORS
 DATE: 11-2007
 SCALE: 1"=200'
 DRAWN: FEB-08-2008
 SHEET: 2 OF 4

CURVE DATA TABLE

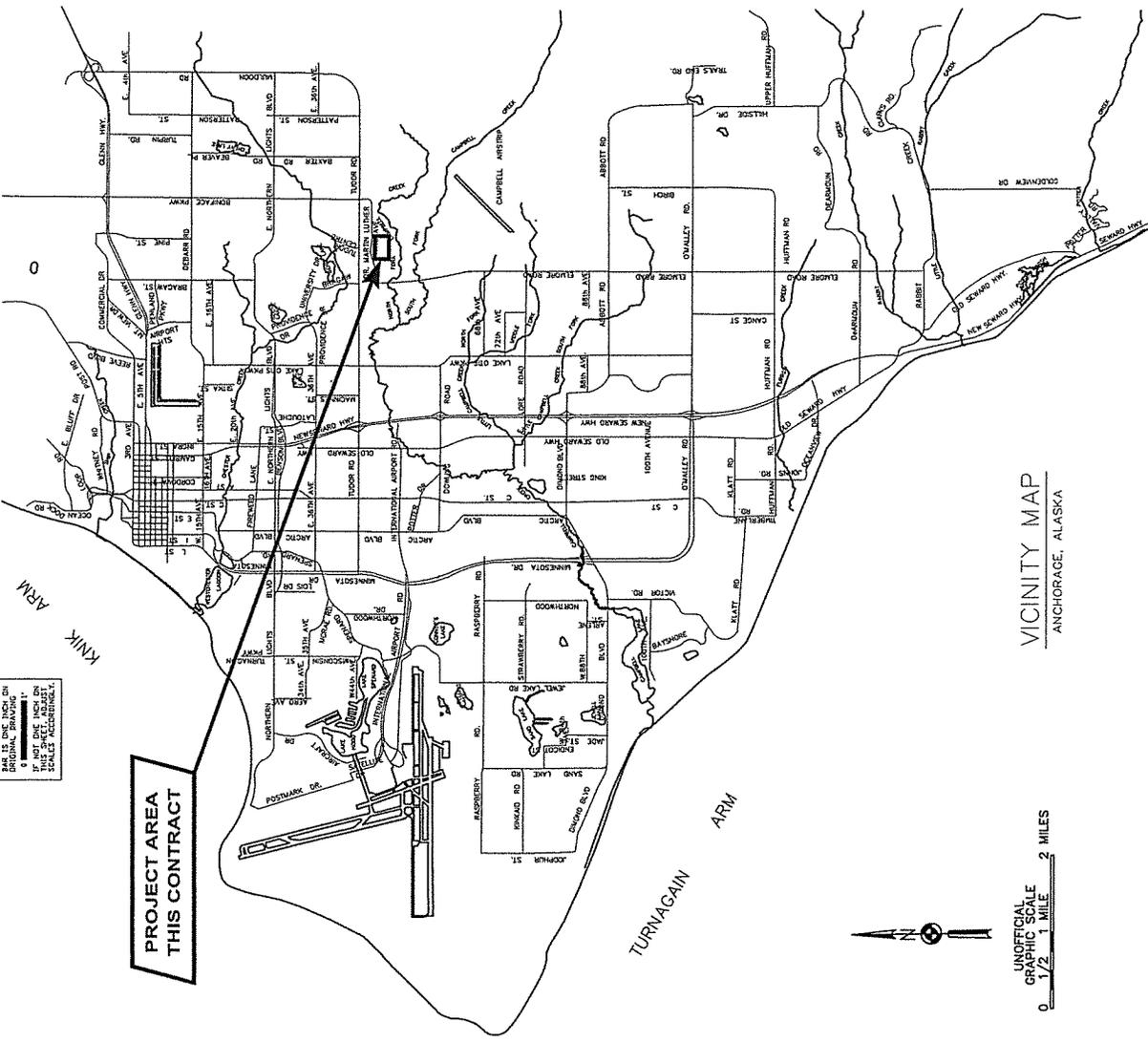
CURVE	DELTA	RADIUS	LENGTH	CHORD	BEARING
C1	235.11	484.89	216.2	217.89	N75°50'27"E
C2	235.11	484.89	183.84	182.07	N75°50'27"E
C3	329.44	661.87	484.56	484.84	S33°33'33"W
C4	329.44	661.87	484.56	484.84	N75°50'27"E
C5	329.44	661.87	484.56	484.84	S33°33'33"W
C6	329.44	661.87	484.56	484.84	N75°50'27"E
C7	329.44	661.87	484.56	484.84	S33°33'33"W
C8	329.44	661.87	484.56	484.84	N75°50'27"E
C9	329.44	661.87	484.56	484.84	S33°33'33"W
C10	329.44	661.87	484.56	484.84	N75°50'27"E
C11	329.44	661.87	484.56	484.84	S33°33'33"W
C12	329.44	661.87	484.56	484.84	N75°50'27"E
C13	329.44	661.87	484.56	484.84	S33°33'33"W
C14	329.44	661.87	484.56	484.84	N75°50'27"E
C15	329.44	661.87	484.56	484.84	S33°33'33"W
C16	329.44	661.87	484.56	484.84	N75°50'27"E
C17	329.44	661.87	484.56	484.84	S33°33'33"W
C18	329.44	661.87	484.56	484.84	N75°50'27"E
C19	329.44	661.87	484.56	484.84	S33°33'33"W
C20	329.44	661.87	484.56	484.84	N75°50'27"E



ANCHORAGE RECORDING DISTRICT PL 2009-116

VERIFY SCALES ON ORIGINAL DRAWING. THIS SCALE, INSET SCALE, ACCURACY.

**PROJECT AREA
THIS CONTRACT**



VICINITY MAP
ANCHORAGE, ALASKA

UNOFFICIAL GRAPHIC SCALE
0 1/2 1 MILE 2 MILES

TOZIER TRACK TUDOR MUNICIPAL CAMPUS SUBDIVISION, TRACT 6

CONDITIONAL USE PERMIT

OWNER INFORMATION:
MOA HERITAGE LAND BANK
PO BOX 196650
ANCHORAGE, AK 99519

SHEET NO.	SHEET INDEX SUBJECT
C1	COVER SHEET
C2	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
C3	EXISTING CONDITIONS
C4	SITE & GRADING
C5	SIGNING AND STRIPING PLAN
C6	DETAILS
L1	LANDSCAPE PLAN
L2	LANDSCAPE DETAILS
E1	SITE LIGHTING PLAN



The Bousett Company, Inc.
2000 Westchester Ave.
Anchorage, AK 99516
Ph. 907-522-6776
License No. AEC5957

65% PLANS - NOT FOR CONSTRUCTION

The Robert Company, Inc.
501 E. 27th Street, Suite 100
Anchorage, AK 99518
Ph. 907-523-8178
License No. AEC5957

Tozier Track
Tudor Municipal Campus
Dog Sleed Racing Venue
Tract 6
Tudor Martin Luther King Junior Avenue
Anchorage, AK 99507

PROJECT NO. 04-01-2011
DRAWN BY: [blank]
DATE: 04/01/2011

PROJECT NO. 04-01-2011
DRAWN BY: [blank]
DATE: 04/01/2011

PROJECT NO. 04-01-2011
DRAWN BY: [blank]
DATE: 04/01/2011

SHEET NAME: [blank]
SHEET NO.: [blank]

PROJECT NO. 04-01-2011
DRAWN BY: [blank]
DATE: 04/01/2011

65% PLANS

65% PLANS

The Buehler Company, Inc.
601 E. 51st Place #102
Anchorage, AK 99518
Tel. 907.522.4718
Fax. 907.522.4719
License No. AEC0957

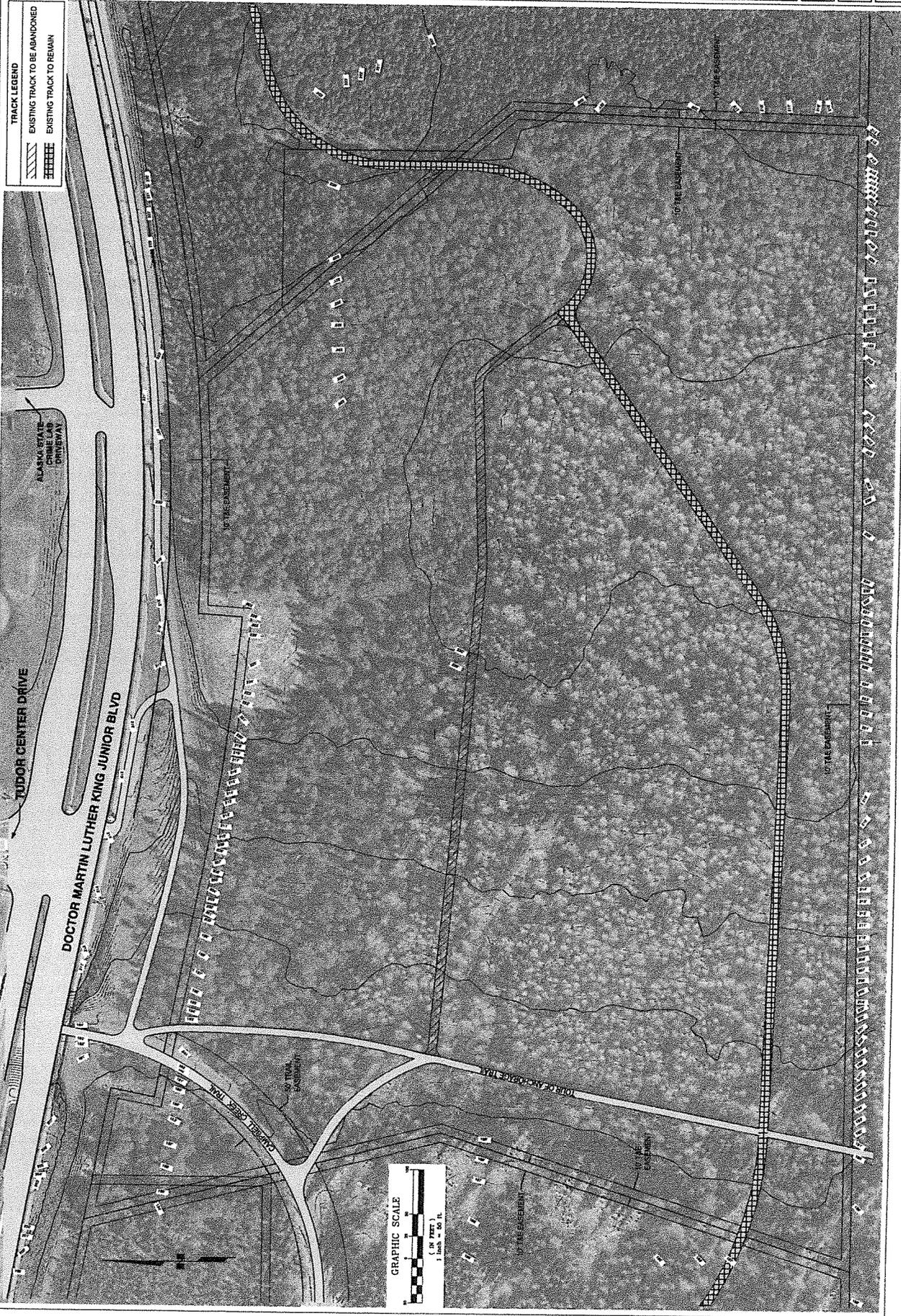


Tozier Track
Dog Sled Racing Venue
Tract 6
Tudor Municipal Campus
Street Address
Anchorage, AK 99507

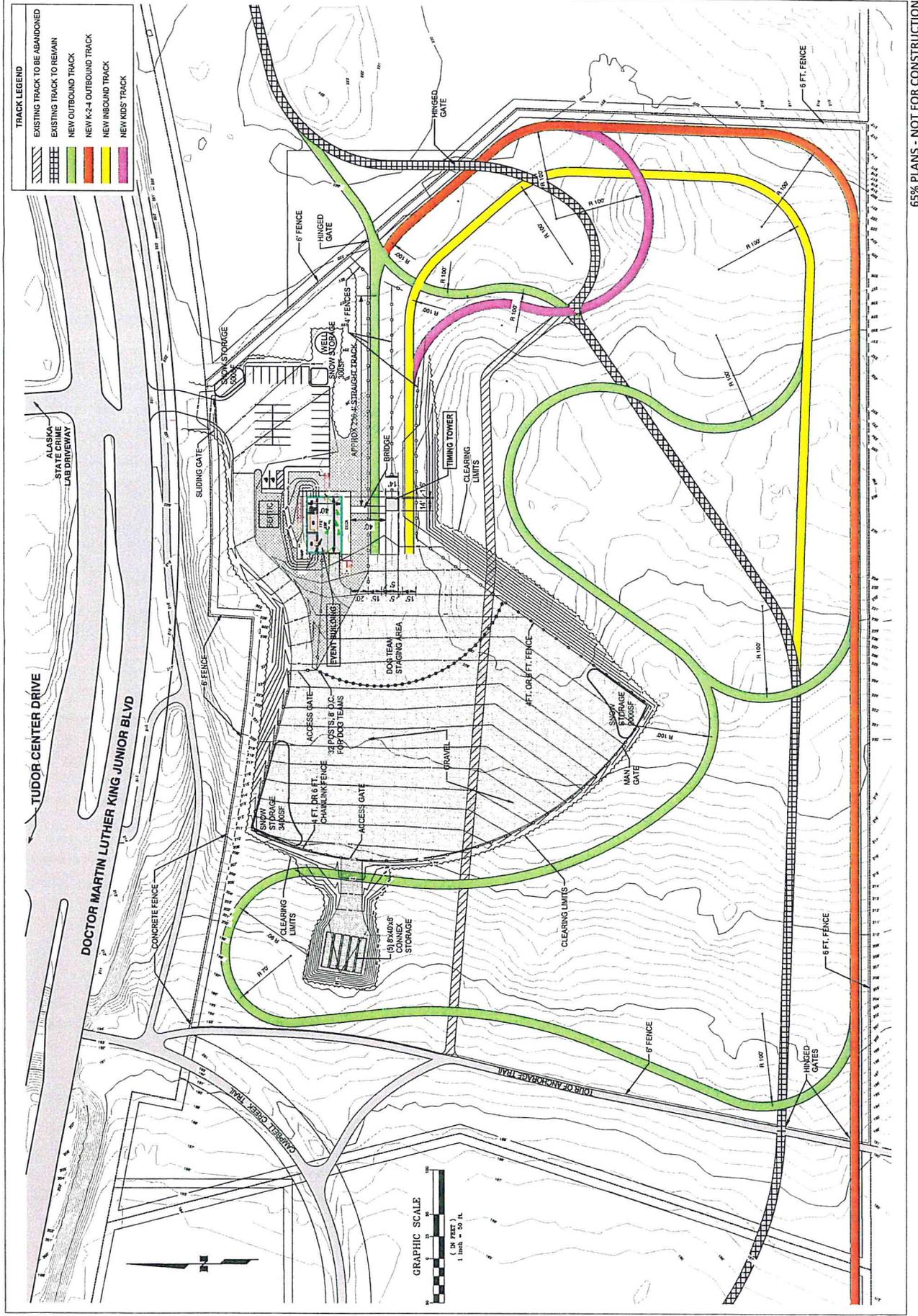
DATE	04-01-2021
BY	JL
REVIEWED	
EXISTING CONDITIONS	

SHEET NO
C3

NOT TO BE PRINTED AT 1:1

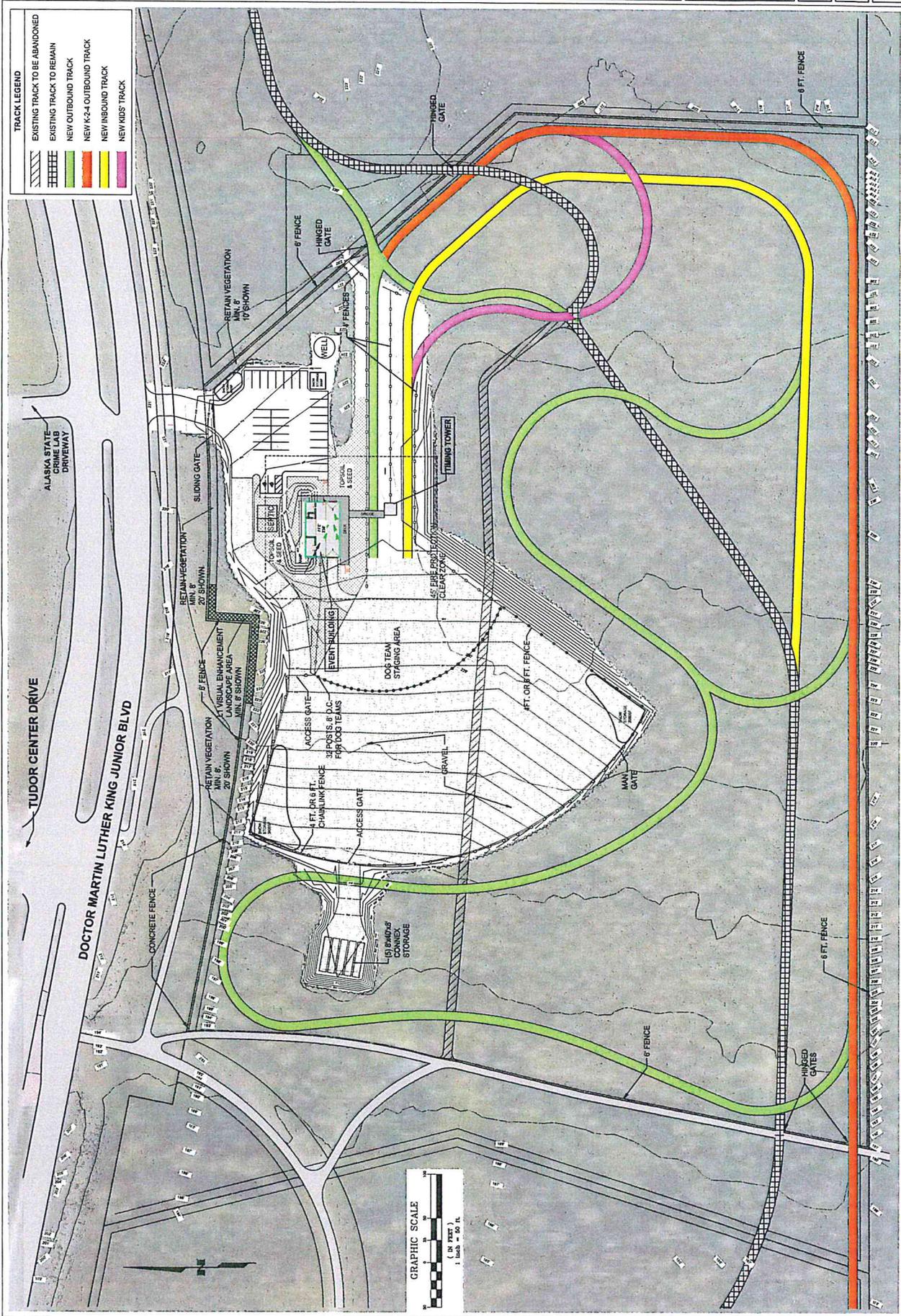


65% PLANS - NOT FOR CONSTRUCTION



TRACK LEGEND

	EXISTING TRACK TO BE ABANDONED
	EXISTING TRACK TO REMAIN
	NEW OUTBOUND TRACK
	NEW INBOUND TRACK
	NEW WIDE TRACK



TRACK LEGEND

- EXISTING TRACK TO BE ABANDONED
- EXISTING TRACK TO REMAIN
- NEW OUTBOUND TRACK
- NEW K-34 OUTBOUND TRACK
- NEW INBOUND TRACK
- NEW KIDS TRACK

ALASKA STATE CRIME LAB DRIVEWAY

TUDOR CENTER DRIVE

DOCTOR MARTIN LUTHER KING JUNIOR BLVD

TOZIER TRACK

Dog Sledding Venue

Tract 6

Tudor Municipal Campus

Street Address

Anchorage, AK 99507

THE BROWN COMPANY, INC.

License No. ACC0957

PA 807-522-8178

PH 907-522-8176

ANCHORAGE, AK 99518

601 E. 27th Place #102

CONCEPT DRAWING

DATE: 04-01-2014

DESIGNER: [Name]

REVIEWER: [Name]

SHEET NAME: LANDSCAPE PLAN

SCALE: 1" = 50'

PROJECT NO: [Number]

DATE: [Date]

REVISIONS: [Table]

DATE: 04-01-2014

DESIGNER: [Name]

REVIEWER: [Name]

SHEET NAME: LANDSCAPE PLAN

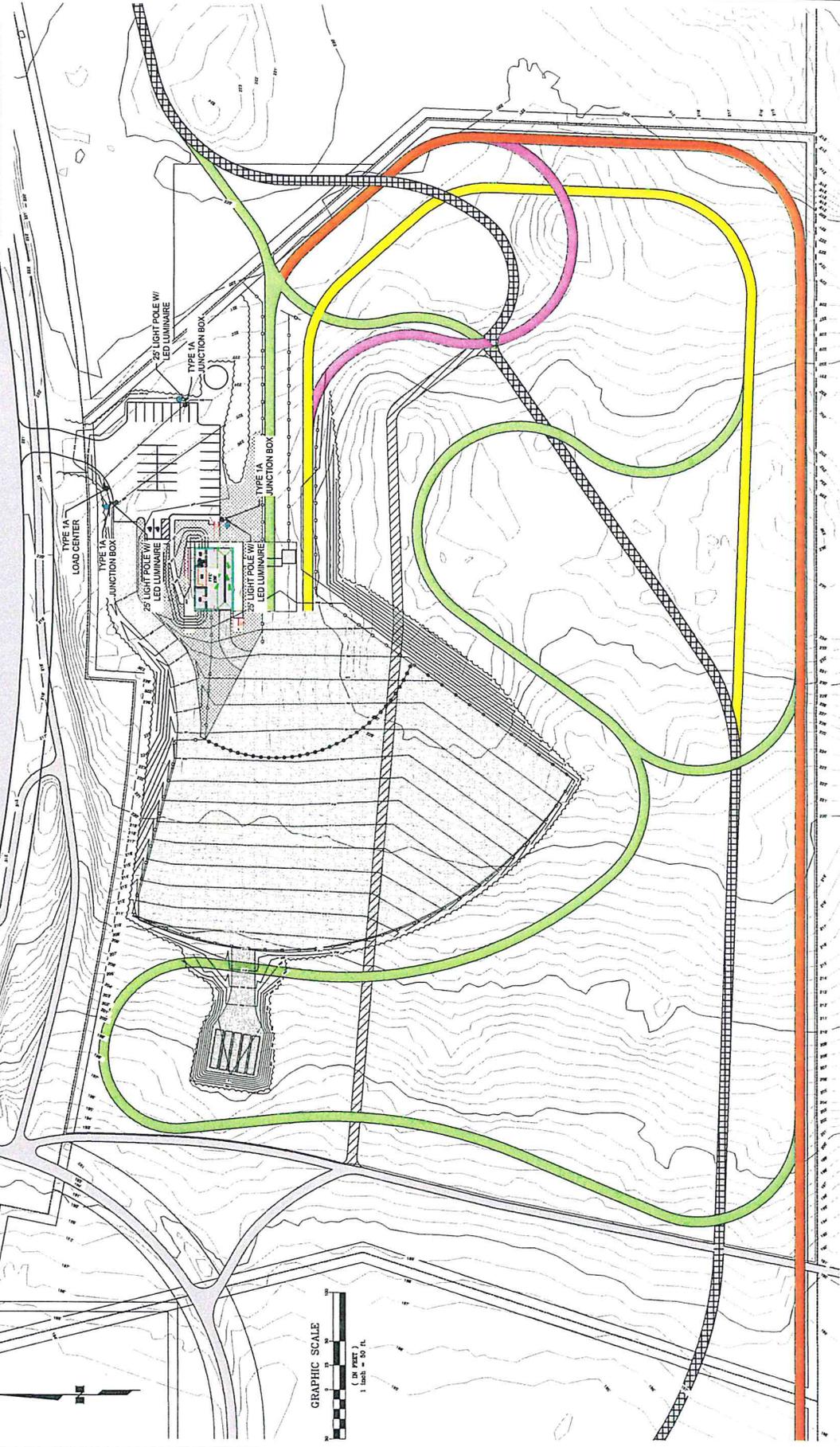
SCALE: 1" = 50'

PROJECT NO: [Number]

DATE: [Date]

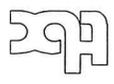
REVISIONS: [Table]

ELECTRICAL NOTES:
 LIGHTING SHALL MEET THE LEVEL OF ILLUMINATION, UNIFORMITY RATIOS, AND MINIMUM LUMEN INTENSITIES SPECIFIED IN THE ILLUMINATION GUIDELINES SET BY THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. THE LIGHTING SYSTEM SHALL BE DESIGNED TO PREVENT GLARE TO MOTORISTS ON PUBLIC STREETS AND LIGHT TRESPASS ONTO ADJOINING PROPERTY.



65% PLANS

The Right Company, Inc.
 Anchorage, AK 99518
 501 E. 57th Place #102
 Anchorage, AK 99518
 Ph: 907-522-8776
 Fax: 907-522-8778
 License No. ACC9357

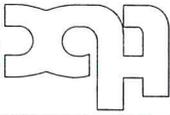


Tozier Track
Dog Sled Racing Venue
 Tract 6
 Tudor Municipal Campus
 Doctor Martin Luther King Junior Avenue
 Anchorage, AK 99507

PROJECT NO.	04-01-153
DATE	2/22/11
DESIGNED BY	SMAN
REVIEWED BY	THM
SHEET NAME	
SITE LIGHTING PLAN	
SHEET NO.	
E1	

FVA Project #:
2019_67
 Project Start Date:
 08-28-19
 Release Date: 04-03-202
 Released for:
 Exterior Perspectives

The Borket Company, Inc.
 601 E. 57th Place #102
 Anchorage, AK 99518
 Ph: 907-522-6776
 Fax: 907-522-6776
 License No. AEC0957



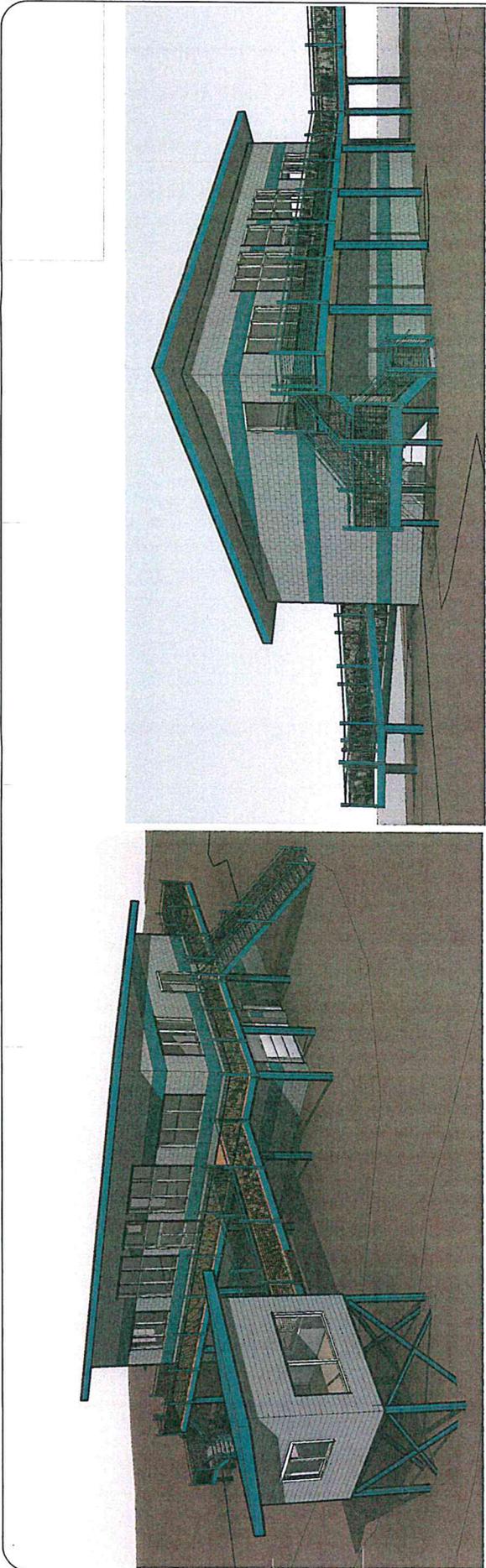
PRELIMINARY
 04/03/2020
 4:17:33 PM

**FAULKENBERRY
 & ASSOCIATES, INC.**
 Architects
 Alaska Authorization #728090
 P.O. Box 230083 - Anchorage, Alaska 99523-0083 - (907) 522-9199

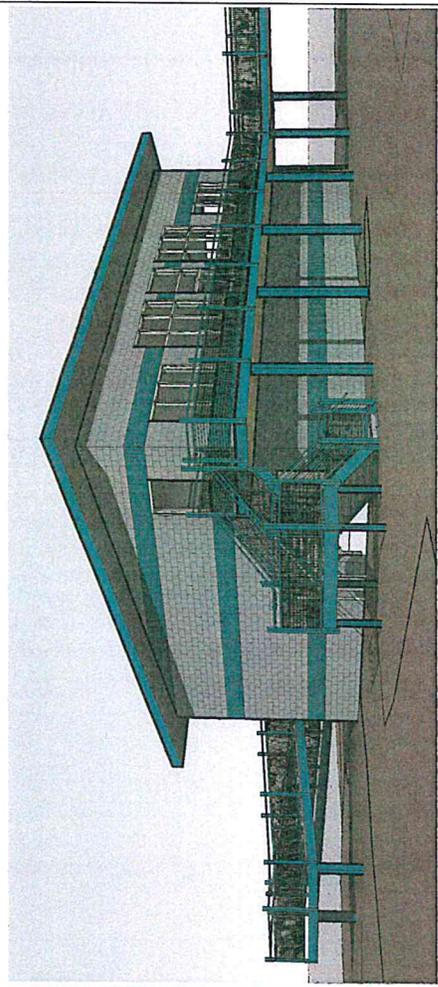


Permit #:
 Tozier Track
 Dog Sled
 Racing Venue
 Tador Municipal Campus
 180 - Doctor M.L.K. Jr. Avenue and Tador Center Drive
 Anchorage, AK 99507

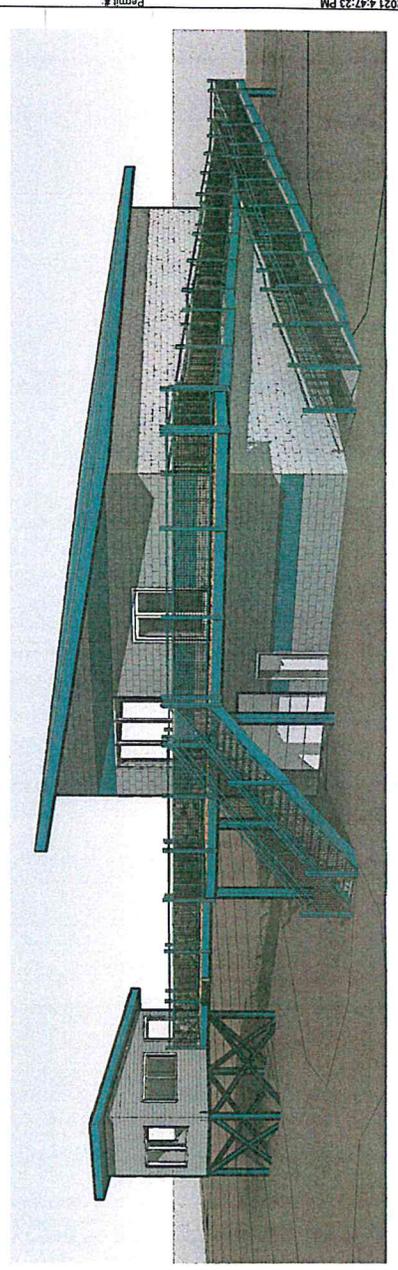
Event Bldg - Exterior
 Perspectives
A0.3A



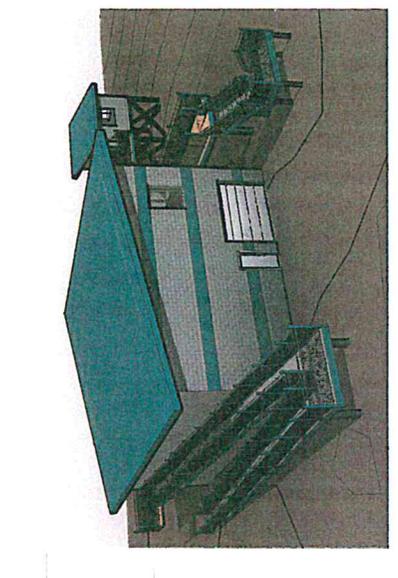
② Event Building - Exterior Perspective - South East



① Event Building - Exterior Perspective - South West



③ Event Building - Exterior Perspective - North West

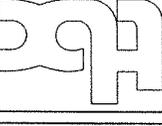


④ Event Building - Exterior Perspective - North East

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FAU Project #
2016_57
Project Start Date
08-28-19
Release Date: 03-18-2021
Released for:
Preliminary Set 06
(CUP)

The Rowlett Company, Inc.
601 E. 57th Place #102
Anchorage, AK 99518
Ph: 907-522-6778
Fax: 907-522-6778
License No. AEC0957



PRELIMINARY
DRAWING

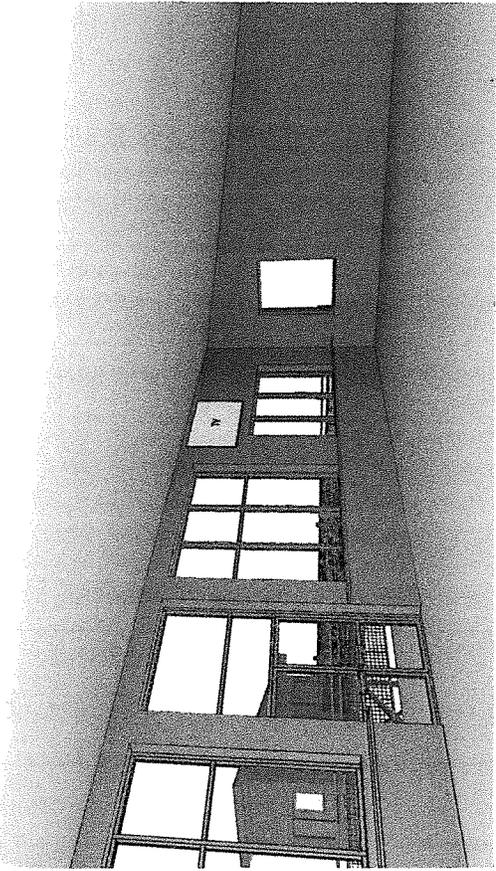
FAULKENBERRY
& ASSOCIATES, INC.
ARCHITECTS
1400A Anchorage #79500
P.O. Box 220893 - Anchorage, Alaska 99523-0893 - (907) 522-9193



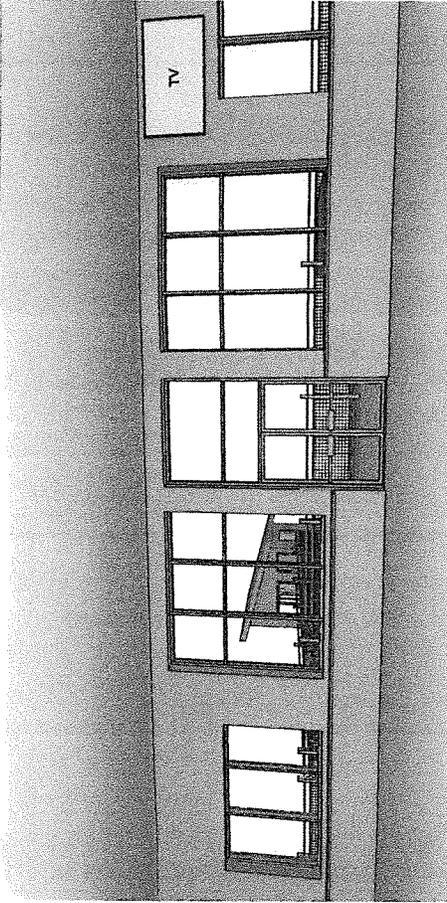
Permit #
Tosler Track
Dog Sleed
Racing Venue
Track 6
Tudor Municipal Campus
TED - Doctor M. K. Avenue and Tudor Center Drive
Anchorage, AK 99507

PROJECT TITLE
Event Bldg - Interior
Perspectives

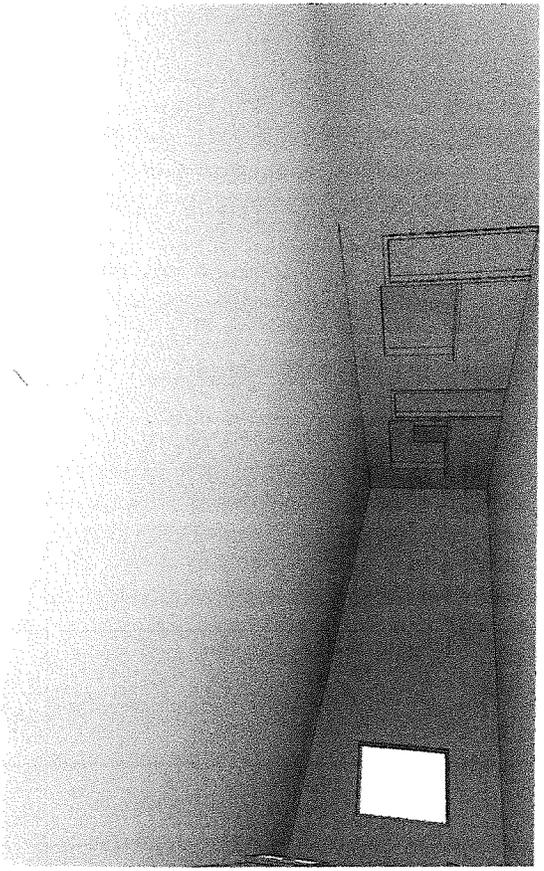
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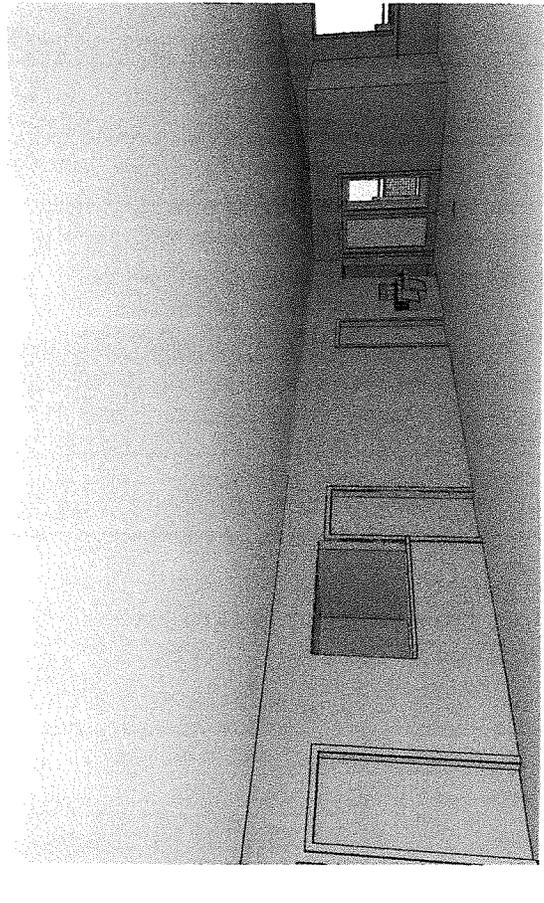
1 Event Building - Interior Perspective - Looking South West



2 Event Building - Interior Perspective - Looking South



3 Event Building - Interior Perspective - Looking North West



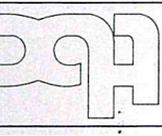
4 Event Building - Interior Perspective - Looking North East

DETAILED AT 1/4" = 1'-0" SCALE UNLESS INDICATED.

Printed on: 3/18/2021 12:09:43 PM

FVA Project #
2019_67
Project Start Date:
08-26-19
Release Date: 04-03-2021
Architect:
Exterior Perspectives

The Boulet Company, Inc.
601 E. 57th Place #102
Anchorage, AK 99518
Ph: 907-522-6776
Fax: 907-522-6779
License No. AEC0957



PRELIMINARY
04/03/2021

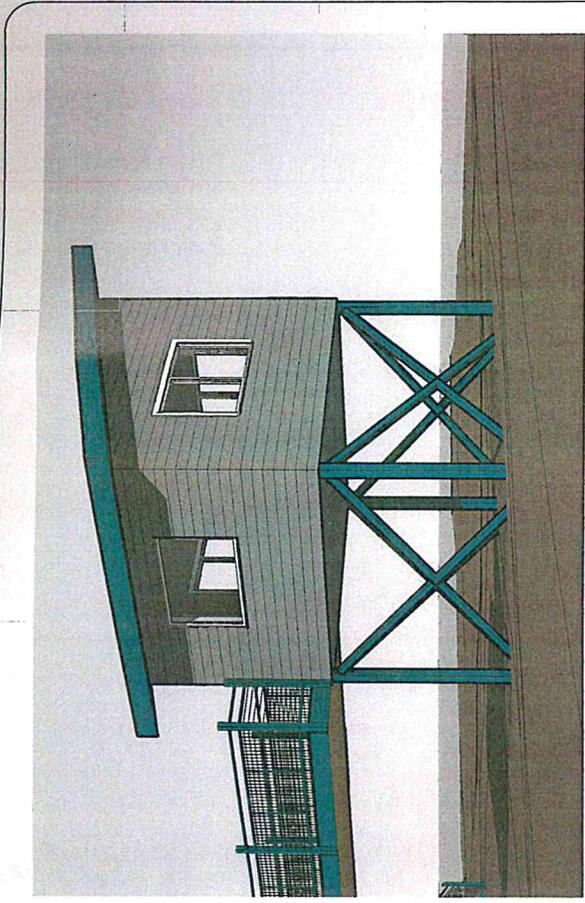
FAULKENBERRY
& ASSOCIATES, INC.
ARCHITECTS
Architects
P.O. Box 220083 - Anchorage, Alaska 99523-0083 - (907) 622-9193



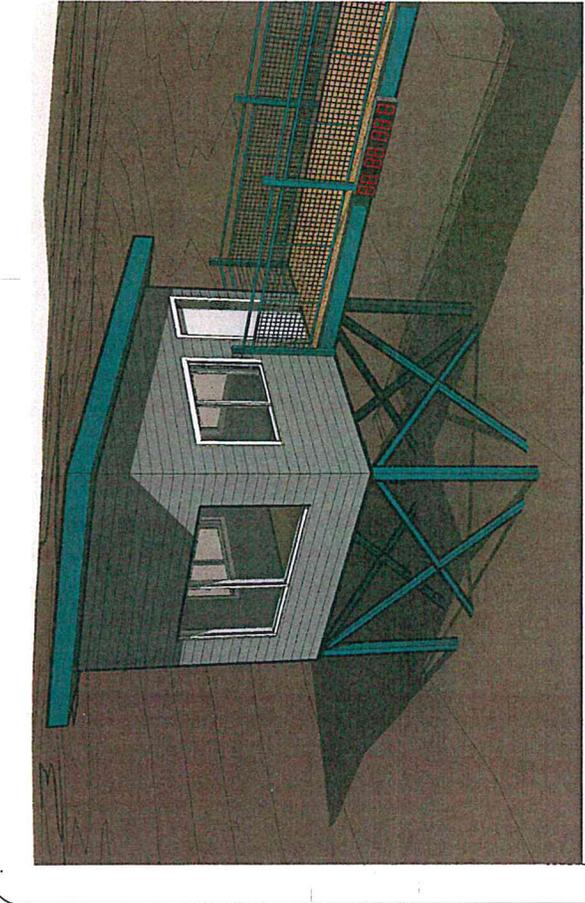
Permit #:

TOZLER TRACK
Dog Sled
Racing Venue
Track 6
Tudor Municipal Campus
Anchorage, AK 99507
TBD - Doctor M.K.H. Avenue and Tudor Center Drive
Architect:
Timing Tower -
Perspectives
04/03/2021

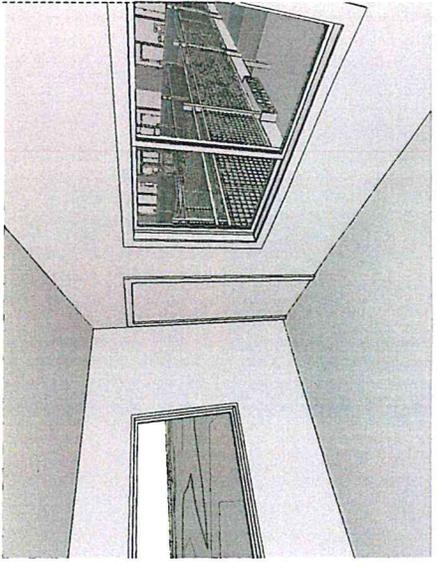
A0.3C



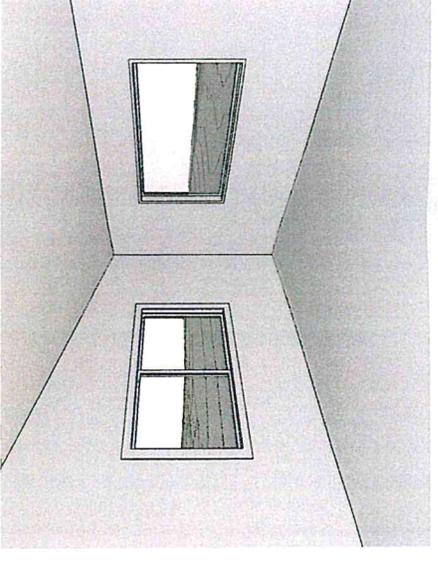
② Timing Tower - Exterior Perspective From South West



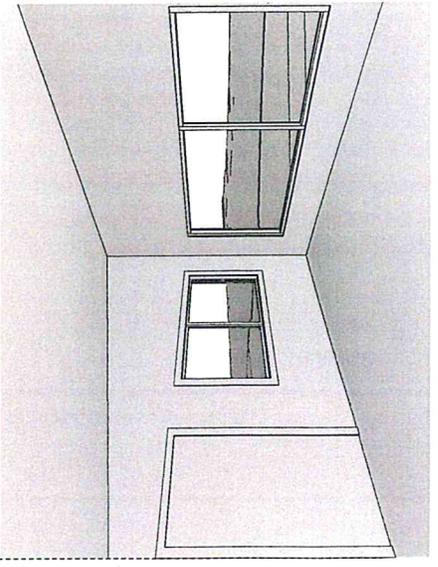
① Timing Tower - Exterior Perspective From North East



⑤ Timing Tower - Interior Perspective Looking North West



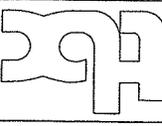
④ Timing Tower - Interior Perspective Looking South East



③ Timing Tower - Interior Perspective Looking North East

FVA Project # 2019-207
 Project Name: 08-28-19
 Revision Date: 03-18-2021
 Prepared for: Preliminary Set 06 (CUP)

The Boutel Company, Inc.
 80 E. 51st Place #102
 Anchorage, AK 99518
 Ph. 907-522-8778
 F. 907-522-8779
 License No. AEC0357

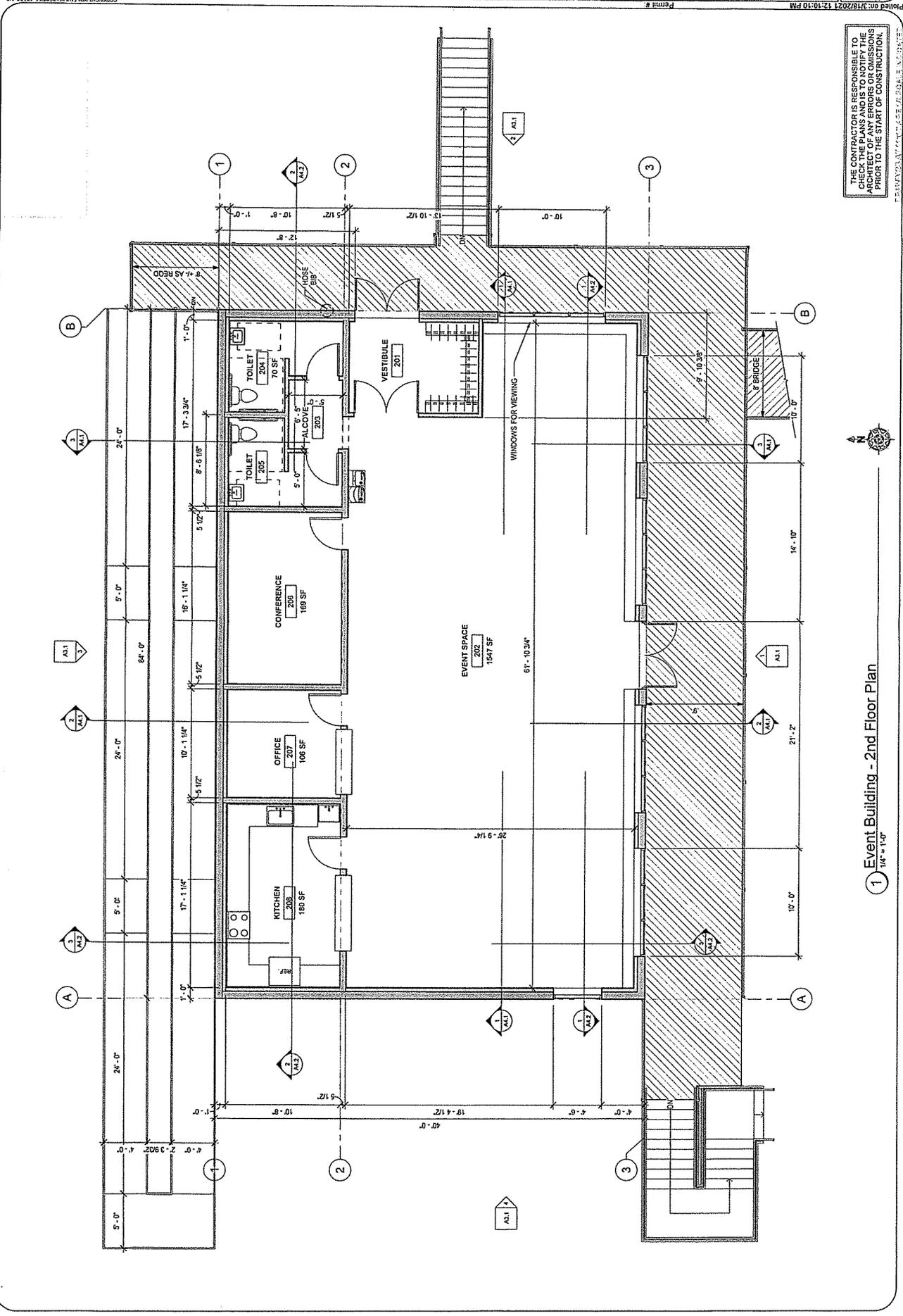


PRELIMINARY
 FVA PROJECT # 2019-207

FAULKENBERRY & ASSOCIATES, INC.
 ARCHITECTS
 Alaska Authorization #172580
 P.O. Box 220083 - Anchorage, Alaska 99523-0083 - (907)522-8593

Permit # _____
 Printed on: 3/18/2021 12:10:10 PM
 Tozier Track
 Dog Sted
 Racing Venue
 Event Bldg - 2nd Floor Plan
 A2.2

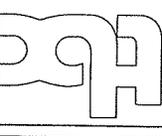
THE CONTRACTOR IS RESPONSIBLE TO CHECK THE PLANS AND IS TO NOTIFY THE ARCHITECT OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION.



1 Event Building - 2nd Floor Plan
 1/4" = 1'-0"

PLS Check #
 2019-07
 Project Start Date:
 08-26-19
 Release Date: 03-18-2021
 Released for:
 Preliminary Set 06
 (CUP)

The Boulet Company, Inc.
 601 E. 57th Place #102
 Anchorage, AK 99510
 P: 907-522-6776
 F: 907-522-6779
 License No. AEC0557



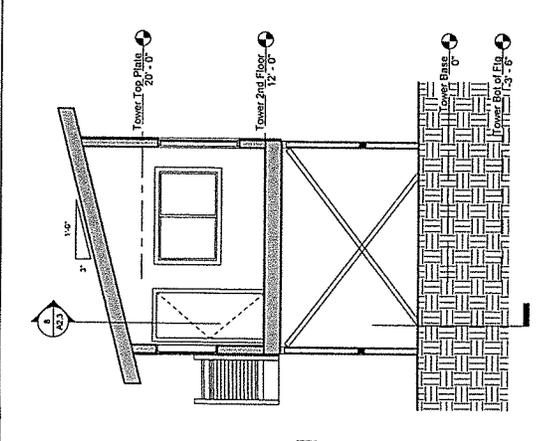
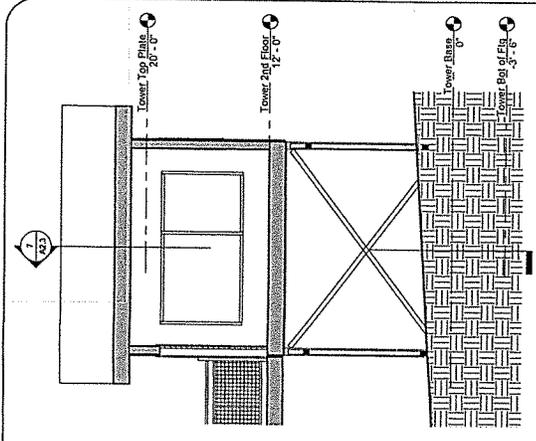
PRELIMINARY
 ARCHITECTURAL

FAULKENBERRY
 & ASSOCIATES, INC.
 ARCHITECTS
 P.O. Box 220083 - Anchorage, Alaska 99523-0083 - (907) 522-9191
 Alaska Architect #728920



Tozier Track
 Dog Sled
 Racing Venue
 Trail #
 T6
 T6D - Doctor M.K. Jr. Avenue and Tador Center Drive
 Anchorage, AK 99507

Drawing #
 Timing Tower Plans
 A2.3



1 Timing Tower - 1st Floor Plan
 1/4" = 1'-0"

2 Timing Tower - 2nd Floor Plan
 1/4" = 1'-0"

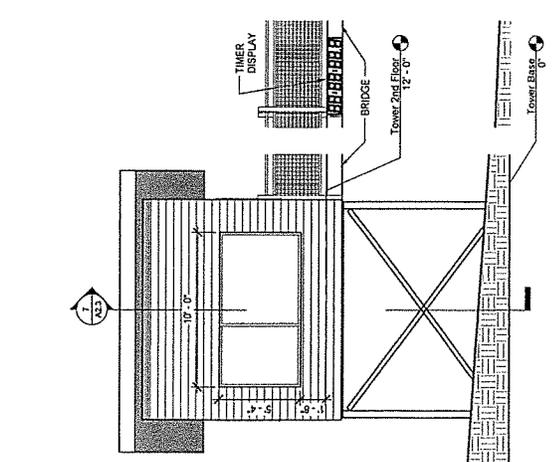
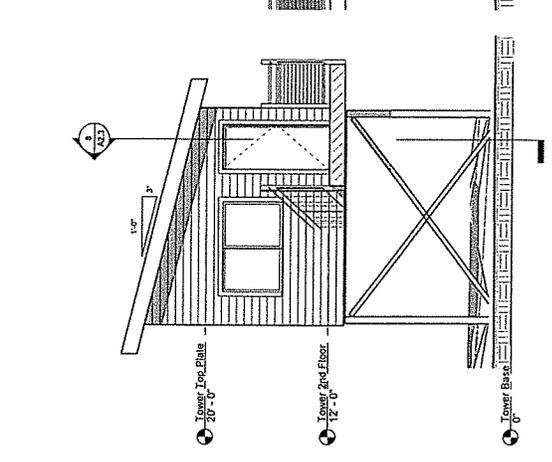
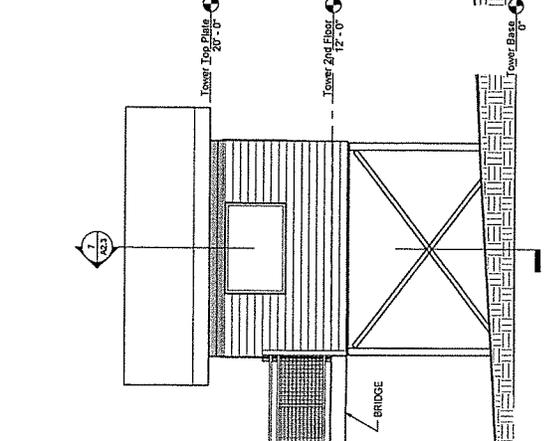
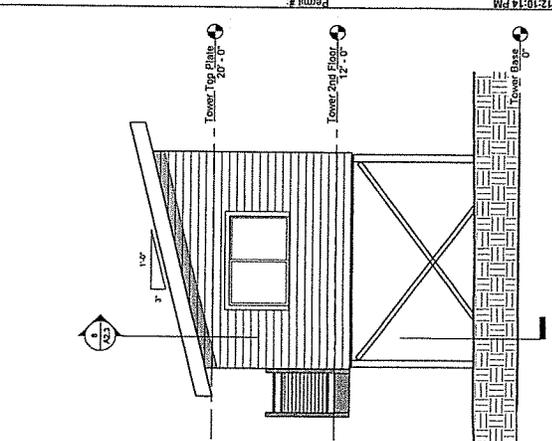


3 Timing Tower - East Elevation
 1/4" = 1'-0"

4 Timing Tower - North Elevation
 1/4" = 1'-0"

5 Timing Tower - West Elevation
 1/4" = 1'-0"

6 Timing Tower - South Elevation
 1/4" = 1'-0"



7 Tower - Building Section Looking North
 1/4" = 1'-0"

8 Tower - Section Looking East
 1/4" = 1'-0"



9 Timing Tower - North Elevation
 1/4" = 1'-0"

10 Timing Tower - East Elevation
 1/4" = 1'-0"

11 Timing Tower - West Elevation
 1/4" = 1'-0"

12 Timing Tower - South Elevation
 1/4" = 1'-0"

Printed on: 3/18/2021 12:10:14 PM
 Drawing #
 Timing Tower Plans
 A2.3

FMA Project #:
 Project Start Date:
 Project Stop Date:
 Released for:
 Preliminary Set 06
 (CUP)

Release Date: 03-16-2021
 Release Date: 03-16-2021
 Release Date: 03-16-2021
 Release Date: 03-16-2021
 Release Date: 03-16-2021

The Boulet Company, Inc.
 Architects, AK 99518
 801 E. 57th Place #102
 Anchorage, AK 99518
 F: 907-522-6779
 P: 907-522-6778
 License No. AEC0937

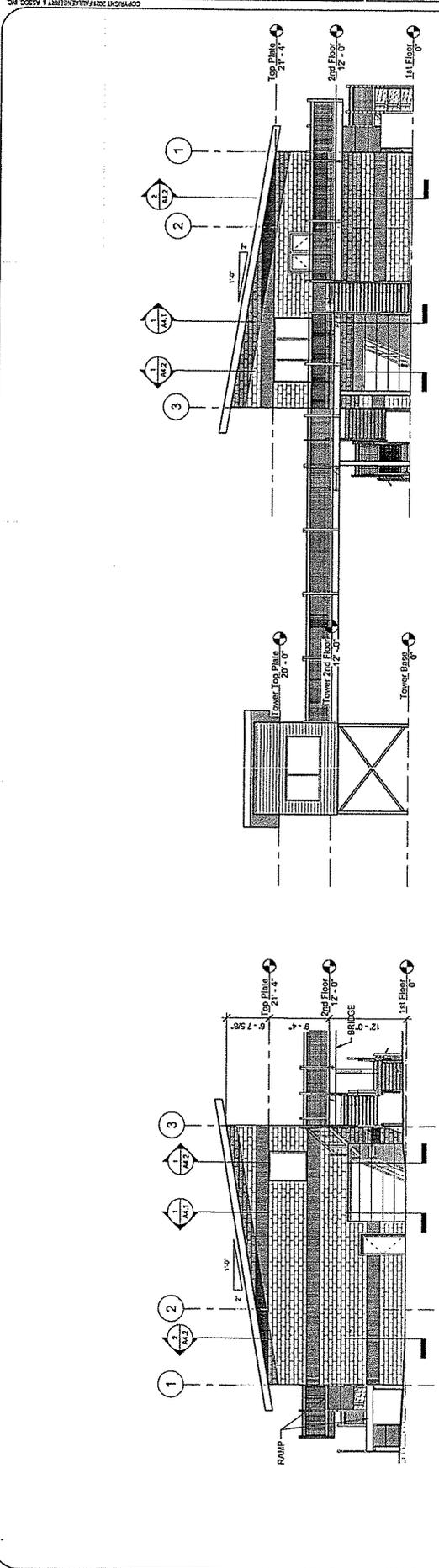
PRELIMINARY
 ARCHITECTS
 ARCHITECTS
 P.O. Box 230053 - Anchorage, Alaska 99523-0053 - (907)522-9193

PAULKENBERRY & ASSOCIATES, INC.
 ARCHITECTS
 Alaska Authorization #172090
 P.O. Box 230053 - Anchorage, Alaska 99523-0053 - (907)522-9193



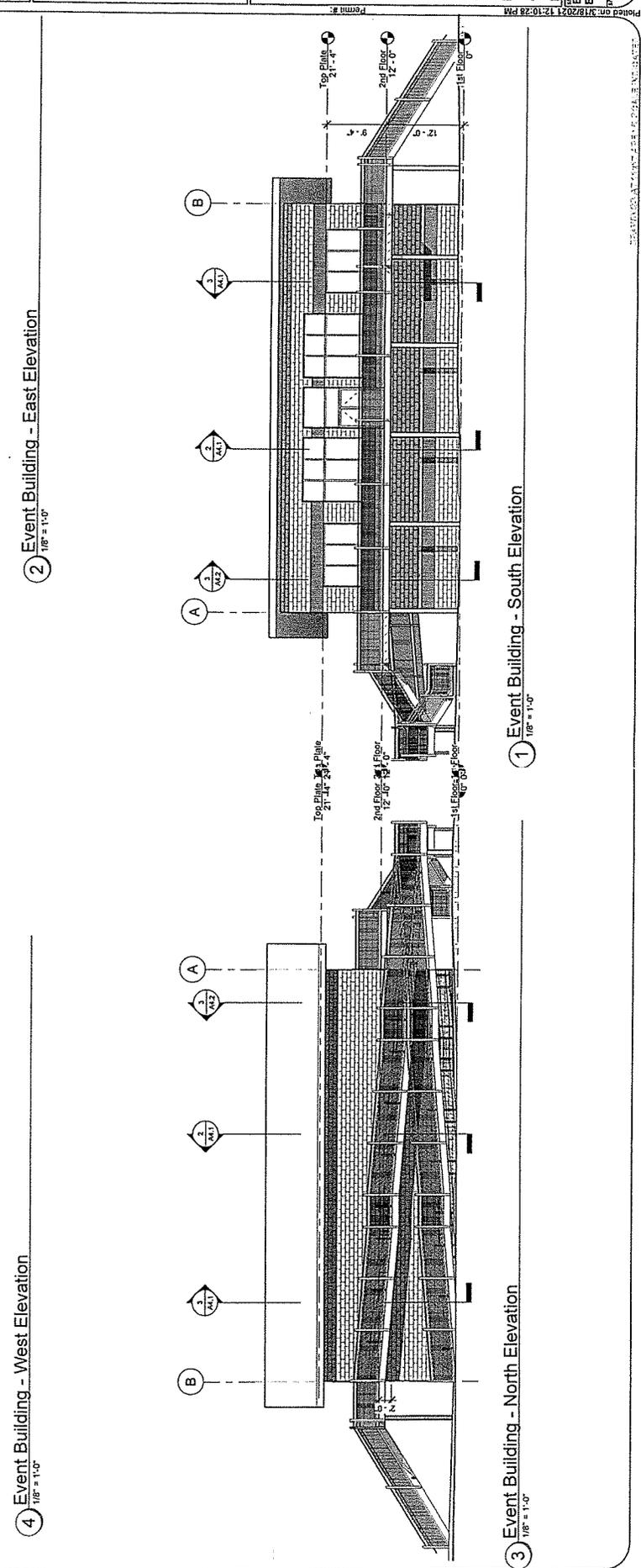
Tozier Track
 Dog Sleed
 Racing Venue
 Tract 6
 Tractor Municipal Campus
 180 - Doctor M.L.K. Jr. Avenue and Tudor Center Drive
 Anchorage, AK 99507

Exterior Elevations -
 Event Bldg
 A3.1



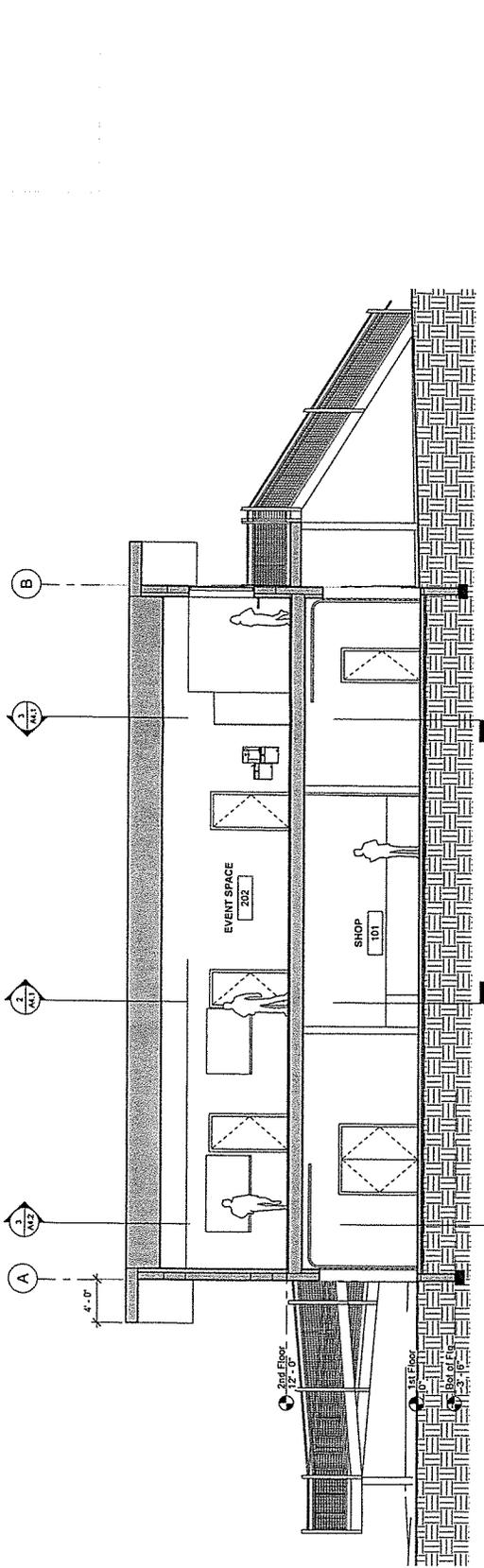
4) Event Building - West Elevation
1/8" = 1'-0"

2) Event Building - East Elevation
1/8" = 1'-0"

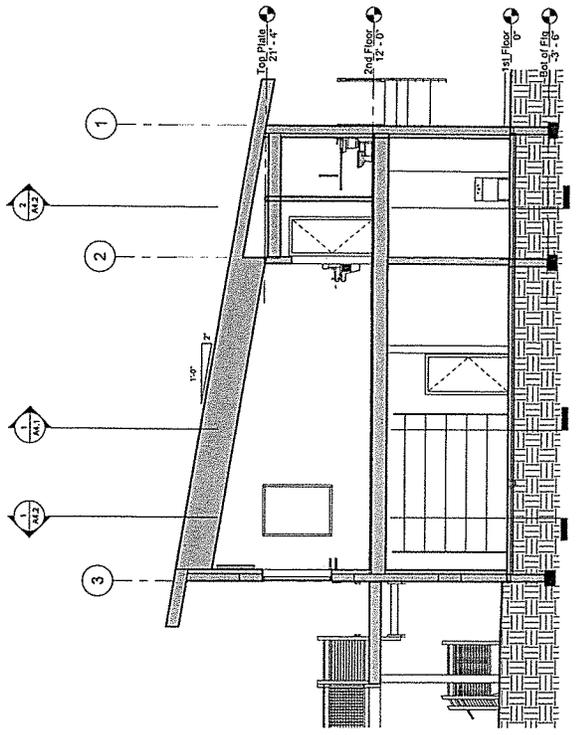


3) Event Building - North Elevation
1/8" = 1'-0"

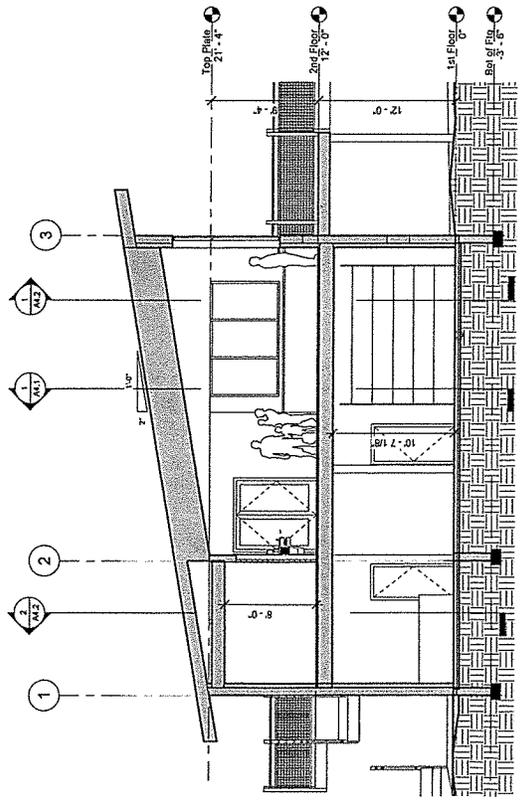
1) Event Building - South Elevation
1/8" = 1'-0"



① Event Building - Longitudinal Section Looking North
3/16" = 1'-0"



③ Event Building - Cross Section Through Toilet Looking West
3/16" = 1'-0"



② Event Building - Cross Section Through Kitchen Looking East
3/16" = 1'-0"

FVA Project #:
 Project Start Date:
 08-28-19
 Release Date: 03-18-2021
 Prepared for:
 Preliminary Set 06
 (CUP)
 The Boret Company, Inc.
 801 E. 57th Place #102
 Anchorage, AK 99518
 Ph. 907-522-8778
 Fax. 907-522-6779
 License No. AEC0957

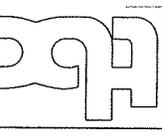
PRELIMINARY
 ARCHITECTS
 P.O. Box 22088 - Anchorage, Alaska 99512-0088 - (907) 522-9193

FAULKENBERRY & ASSOCIATES, INC.
 ARCHITECTS
 P.O. Box 22088 - Anchorage, Alaska 99512-0088 - (907) 522-9193

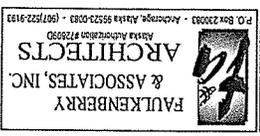
TOZLER TRACK
 Race Track
 Dog Stand
 Racing Venue
 Event Bldg
 Building Sections -
 Anchorage, AK 99507
 180 - Doctor M.L.K. Jr. Avenue and Tudor Center Drive
 Tudor Municipal Campus
 Trace 6
 Permit #:
 Project on 3/18/2021 12:10:44 PM
 A4.1

FVA Project #: 2019-67
 Project Start Date: 08-26-19
 Release Date: 03-18-2021
 Released for: Preliminary Set 06
 (03/17)

The Boulet Company, Inc.
 Anchorage, AK 99518
 P.O. Box 220283 - Anchorage, Alaska 99523-0283 - (907)522-9193
 Alaska Authorization #728250
ARCHITECTS & ASSOCIATES, INC.
 FAULKENBERRY

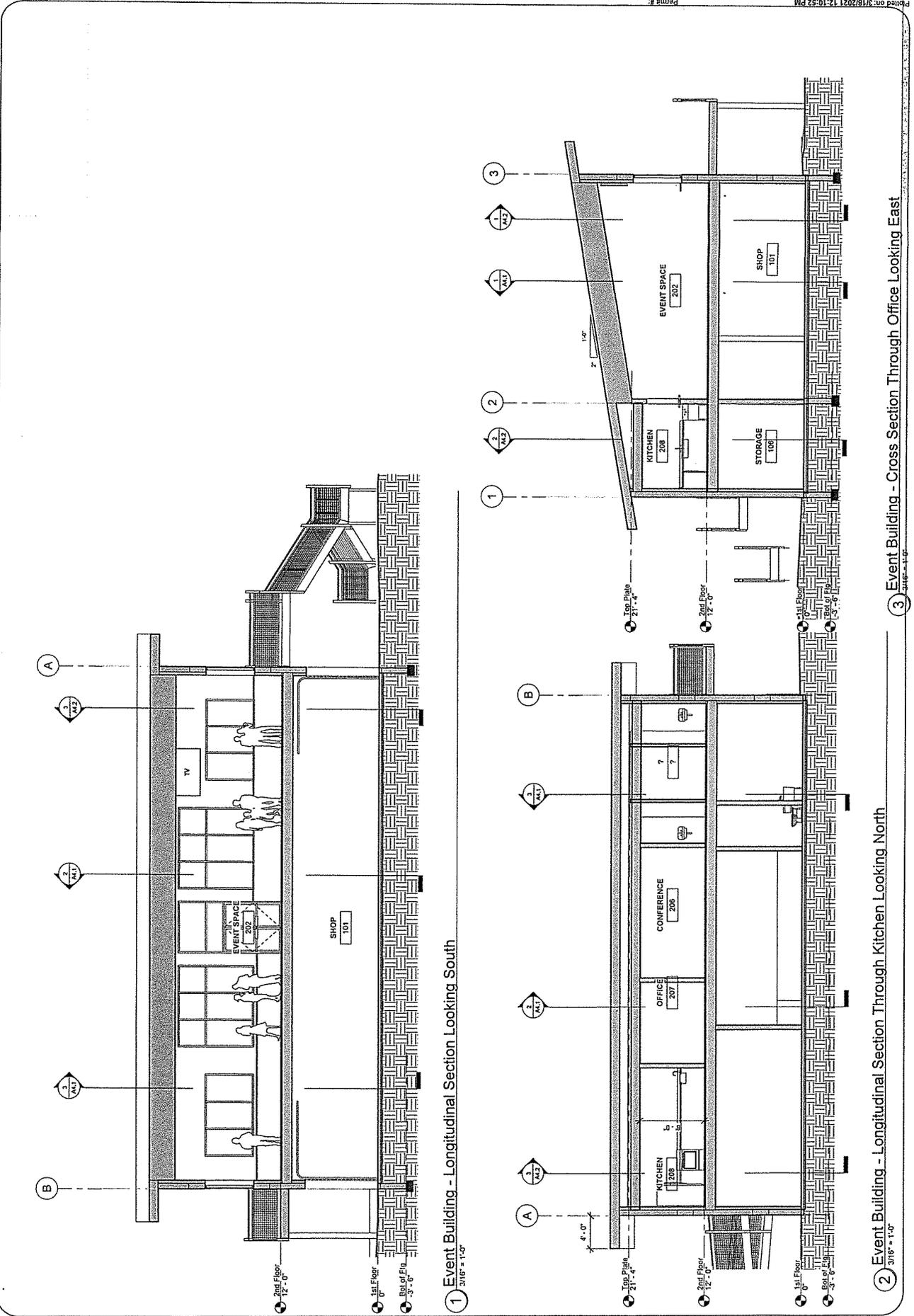


PRELIMINARY
 03/18/2021 12:18:52 PM



Permit #: _____
 Building Sections -
 Event Bldg
Totler Track
 Dog Sleed
 Racing Venue
 180 - Dock # M L K Jr. Avenue and Totler Center Drive
 Anchorage, AK 99507

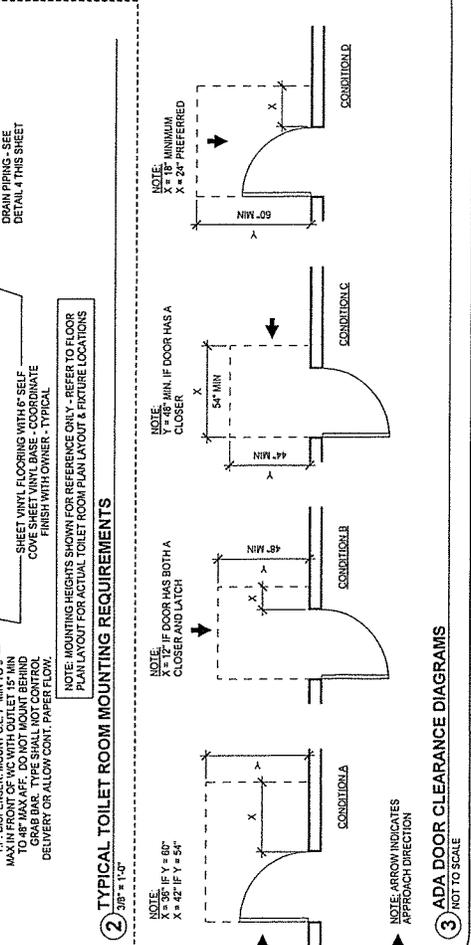
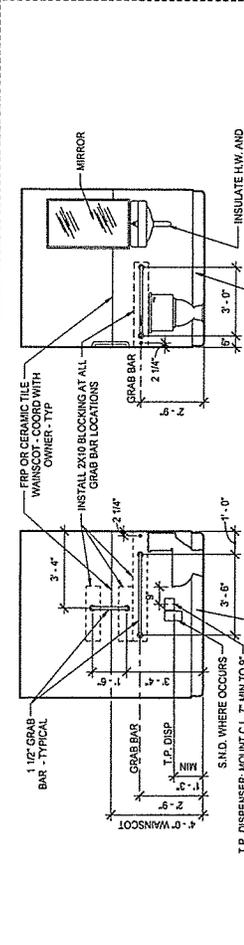
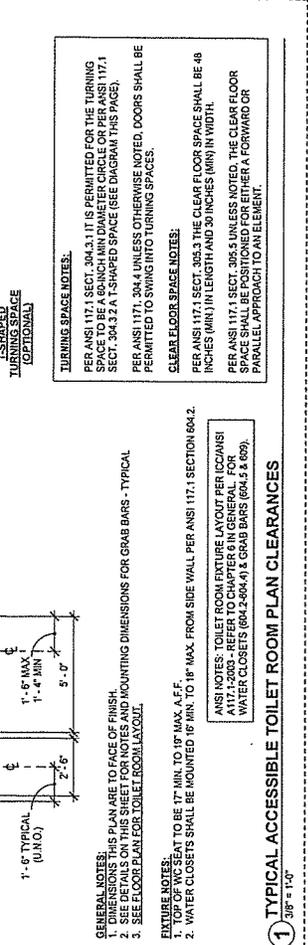
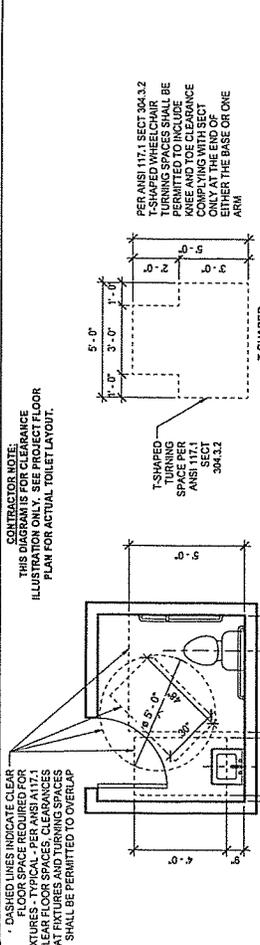
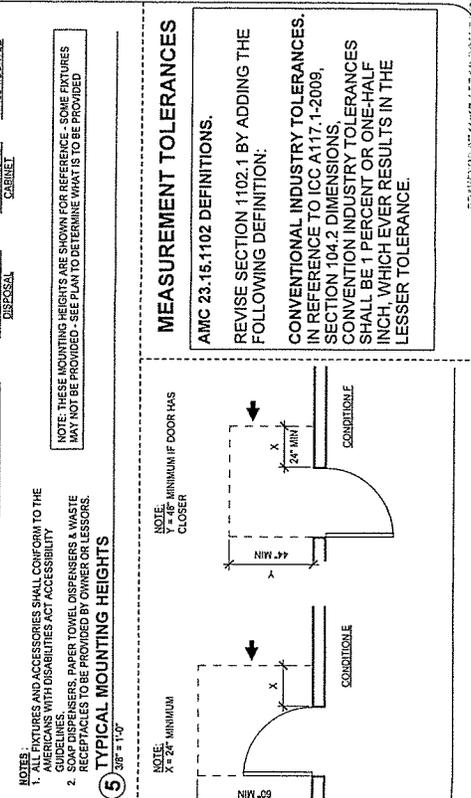
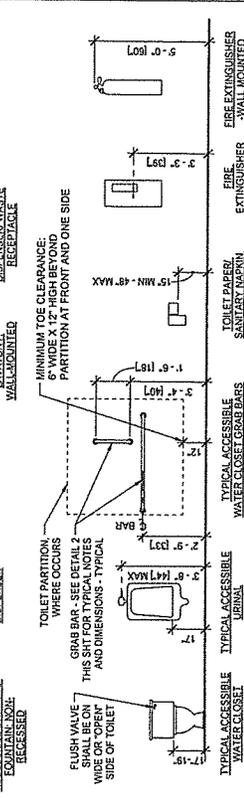
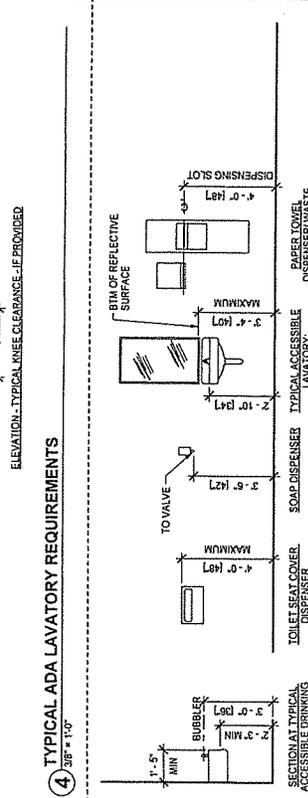
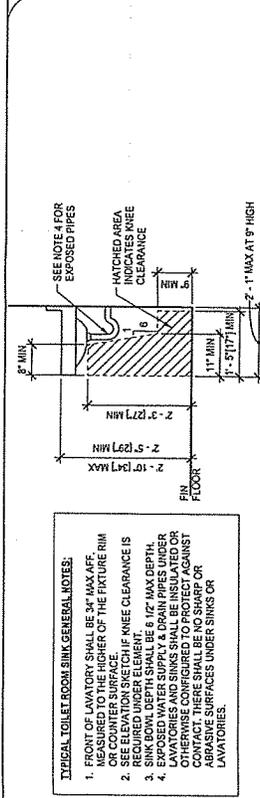
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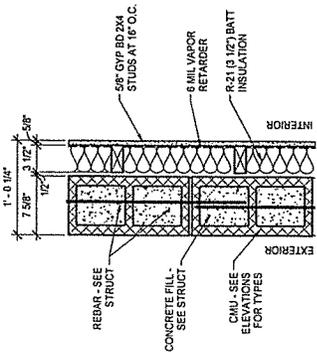
1 Event Building - Longitudinal Section Looking South
 3/16" = 1'-0"

2 Event Building - Longitudinal Section Through Kitchen Looking North
 3/16" = 1'-0"

3 Event Building - Cross Section Through Office Looking East
 3/16" = 1'-0"

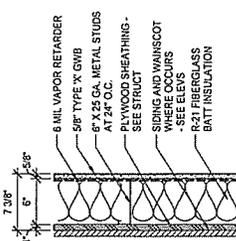


MASONRY WALLS



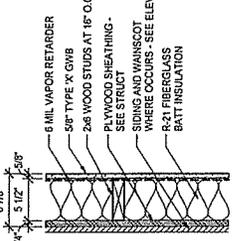
- [MBS] EXTERIOR WALL - CHU
- [MBT] INTERIOR WALL - CHU
- [MBS] SIMILAR TO TYPE "MBT"
- [MBS] OMIT GYP BD AND INSULATION

METAL STUD WALLS

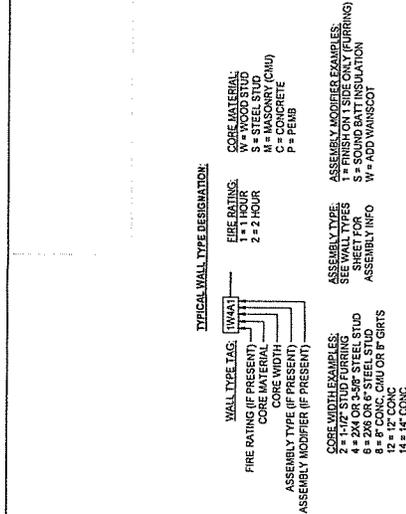


- [SEA] EXTERIOR WALL - LOADBEARING NON-FIRE RATED
- [SEA] - STC (N/A)
- [SEA] - SIM. TO GA. NO. (N/A)
- [SBA] INTERIOR WALL - NON-LOADBEARING NON-FIRE RATED
- [SBA] - STC 45-49
- [SBA] - SIM. TO GA. NO. WP 1072
- [SBB] SIM TO TYPE "SBB"
- [SBB] GYP BD ONE SIDE ONLY
- [SBB] ADD SOUND BATT INSULATION
- [SBB] INTERIOR WALL - NON-LOADBEARING NON-FIRE RATED
- [SBB] - STC 40-44
- [SBB] - SIM. TO GA. NO. WP 1206
- [SBA1] SIM TO TYPE "SBA"
- [SBA1] GYP BD ONE SIDE ONLY
- [SBA2] SIM TO TYPE "SBA"
- [SBA2] GYP BD ONE SIDE ONLY

WOOD STUD WALLS



- [WBA] EXTERIOR WALL - LOADBEARING NON-FIRE RATED
- [WBA] - STC (N/A)
- [WBA] - SIM. TO GA. NO. (N/A)
- [WBB] INTERIOR WALL - NON-LOADBEARING NON-FIRE RATED
- [WBB] - STC (N/A)
- [WBB] - SIM. TO GA. NO. WP 1072
- [WBB1] SIMILAR TO TYPE "WBB"
- [WBB1] GYP BOARD ON ONE SIDE ONLY
- [WBB2] SIMILAR TO TYPE "WBB"
- [WBB2] ADD SOUND BATT INSULATION



Wall Type Designation

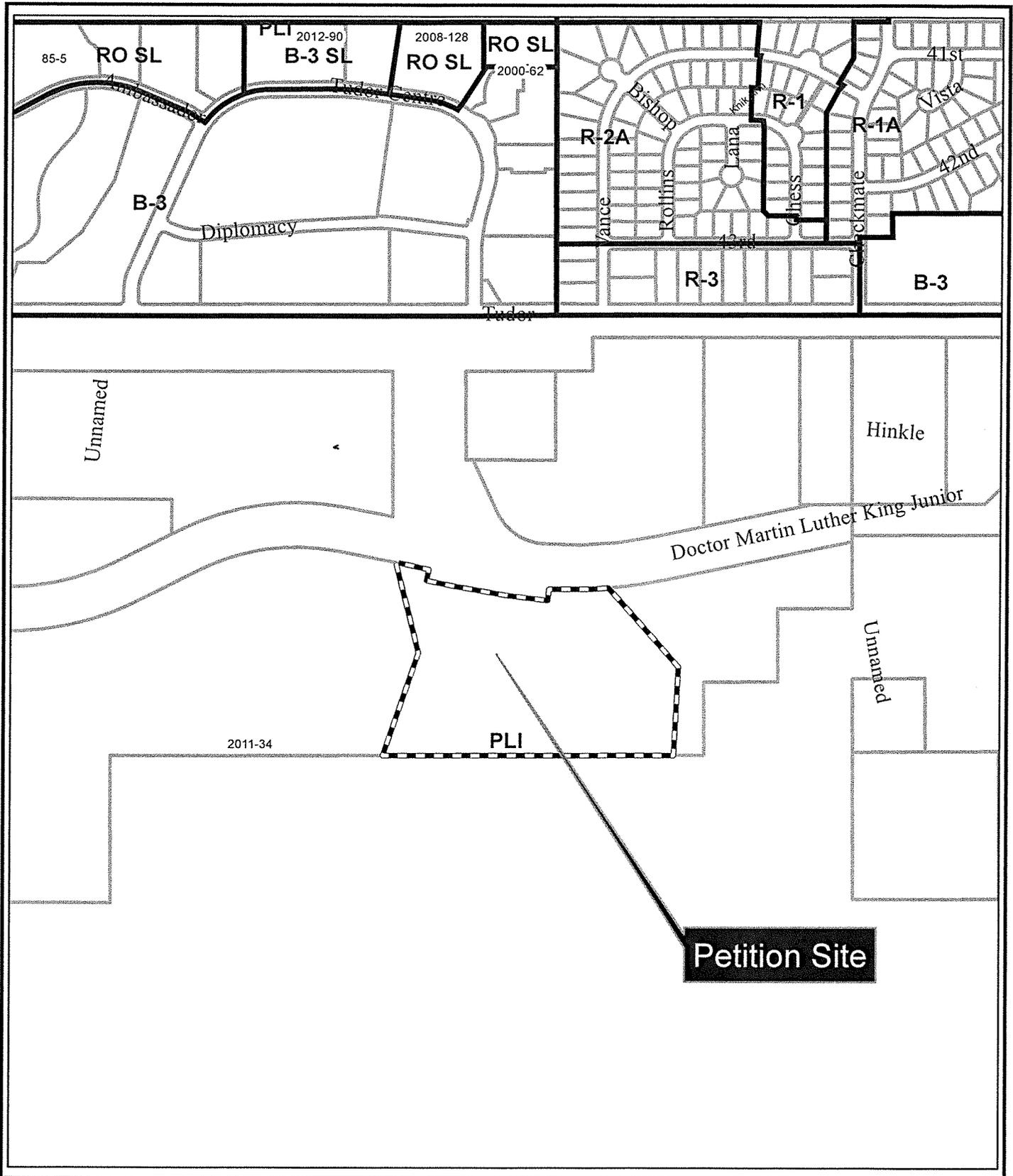
1/4" = 1'-0"

- GENERAL WALL NOTES:**
- CONTRACTOR HAS THE OPTION TO USE WOOD OR METAL STUDS.
 - ALL WALLS SHALL BE TAPED, SANDED AND READY FOR PAINT UNLESS NOTED OTHERWISE.
 - FOR METAL STUDS:
 - FASTEN STUDS TOP AND BOTTOM TO RESIST 19 PSF LATERAL LOAD
 - FOR 16" O.C. STUD SPACING:
 - ATTACH STUDS TO TOP AND BOTTOM PLATES WITH 1/2" TYPE "S" PAN HEAD SCREWS
 - ATTACH STUDS TO TOP AND BOTTOM PLATES WITH 1/2" TYPE "S" PAN HEAD SCREWS AT 16" O.C.
 - ATTACH STUDS TO TOP AND BOTTOM PLATES WITH 1/2" TYPE "S" PAN HEAD SCREWS AT 12" O.C.
 - FOR 24" O.C. STUD SPACING:
 - ATTACH STUDS TO TOP AND BOTTOM PLATES WITH 1/2" TYPE "S" PAN HEAD SCREWS
 - ATTACH STUDS TO TOP AND BOTTOM PLATES WITH 1/2" TYPE "S" PAN HEAD SCREWS AT 16" O.C.
 - ATTACH STUDS TO TOP AND BOTTOM PLATES WITH 1/2" TYPE "S" PAN HEAD SCREWS AT 12" O.C.
 - STAGGER GYP BD JOINTS ON OPPOSITE SIDES
 - FOR 16" O.C. STUD SPACING:
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 16" O.C.
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 12" O.C.
 - FOR 24" O.C. STUD SPACING:
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 16" O.C.
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 12" O.C.
 - STAGGER GYP BD JOINTS 24" ON OPPOSITE SIDES
 - FOR 16" O.C. STUD SPACING:
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 16" O.C.
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 12" O.C.
 - FOR 24" O.C. STUD SPACING:
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 16" O.C.
 - SECURE GYP BD WITH 1" MINIMUM - 1/4" PREFERRED TYPE "W" DRYWALL SCREWS AT 12" O.C.
 - USE MOISTURE-RESISTANT GYP BD AT ALL WET AREAS

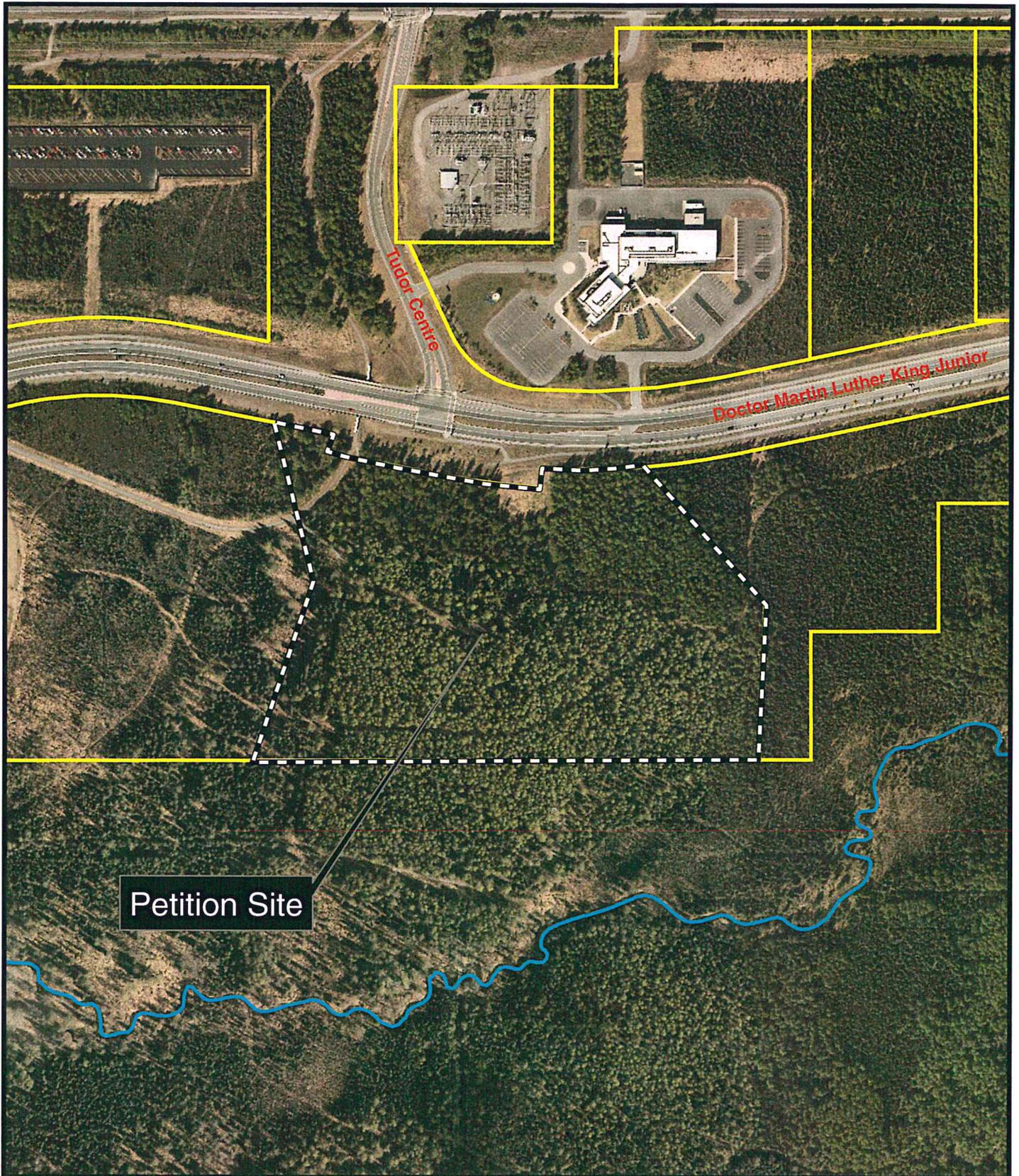
Wall Types

1 1/2" = 1'-0"

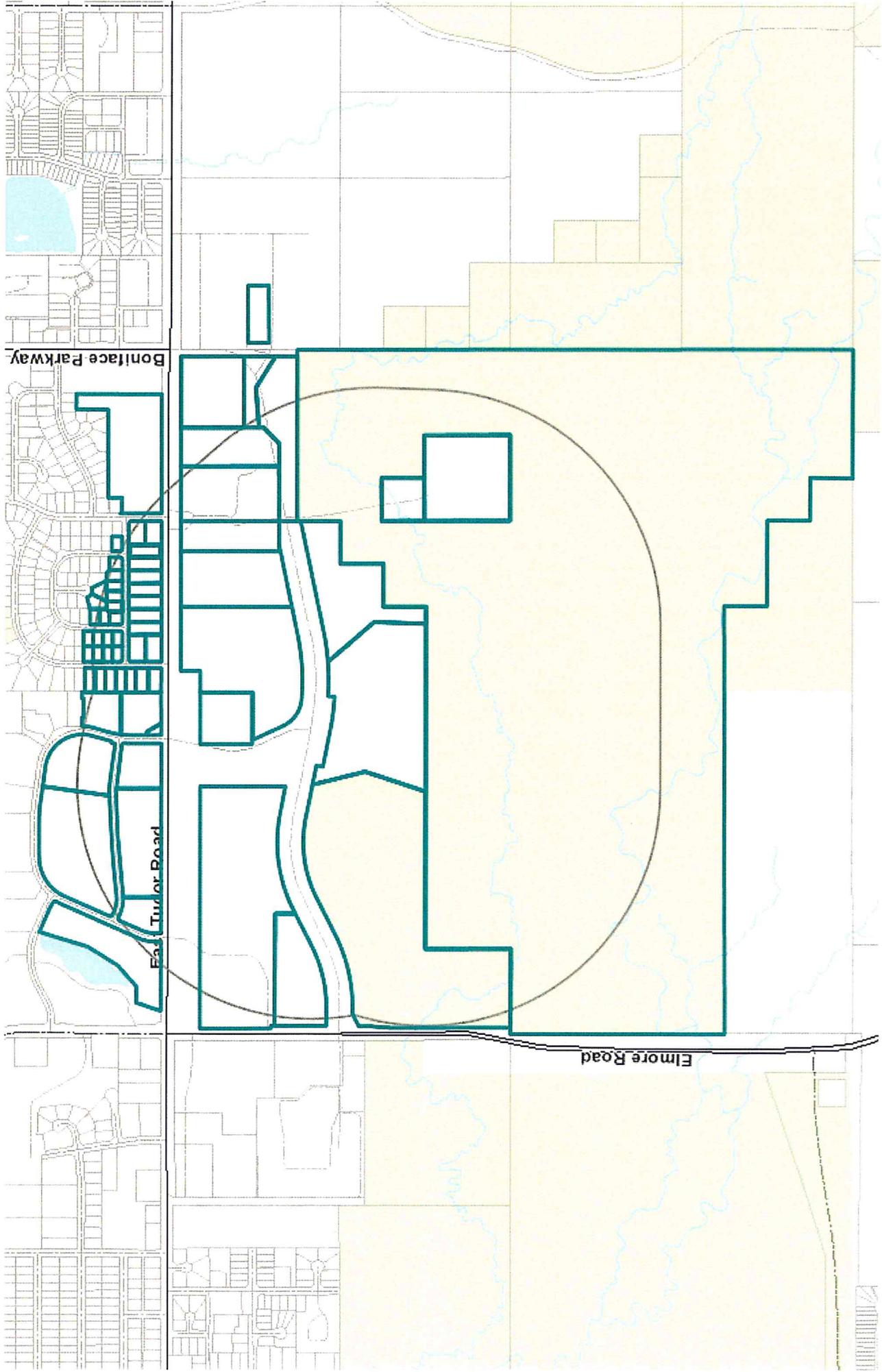
2021-0062



2021-0062



Anchorage



2021-0062 PAN map
Distance = 1800' (65 parcels)