Land Use Assessment

Dillingham Airport Master Plan Update

Project No. CFAPT00353/ AIP 3-02-0078-017-2018

Prepared for:



Alaska Department of Transportation & Public Facilities
4111 Aviation Avenue
Anchorage, Alaska 99502

Prepared by:

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October 2021

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1.0 Introduction

The Alaska Department of Transportation & Public Facilities (DOT&PF) is conducting a Land Use Assessment to support updates of the Dillingham Airport Master Plan (AMP) and Dillingham Airport Layout Plan (ALP). The last AMP was completed in 2005 and no longer serves as an effective guide for airport improvements. The updated AMP and accompanying ALP will provide a plan for capital improvements, maintenance, and operations at Dillingham Airport (DLG) over the next 15-20 years. It will provide recommendations that allow DLG to continue to serve the City of Dillingham and its surrounding communities.

Evaluating current land uses on and adjacent to airport property is an essential element in AMP development, as inconsistencies or incompatibilities in land use can result in safety and operational issues. It also directly informs recommendations in the AMP to ensure future land use decisions are in the best interests of DOT&PF, airport staff, operators, passengers, and residents of Dillingham.

2.0 Regional Setting

The City of Dillingham is located on the northwest shoreline of Wood River where it meets the Nushagak River at the far north end of Nushagak Bay in northern Bristol Bay. See Figure 1, Project Location & Vicinity Map on page 3. The city encompasses 33.6 sq. miles of land and 2.1 sq. miles of water. Dillingham is the transportation, economic, and public service hub for the Bristol Bay region and can only be reached by air or sea, making the airport and port vitally important for the livelihoods of Dillingham-area residents. Adjacent communities, including Ekwok, King Salmon, Koliganek, Manokotak, New Stuyahok, and Togiak, regularly rely on Dillingham and DLG for meeting transportation and other public service needs. Dillingham's economy relies heavily on the commercial fishing industry and use of its ports and airport for the export of salmon and seafood from Bristol Bay.

2.1 Community Overview

Dillingham has a highly integrated population of Alaska Natives and non-Natives. Historically, the area around Dillingham was inhabited by both Yup'ik and Athabascans and became a trade center when Russians erected the Alexandrovski Redoubt Post in 1818. Local Native groups and Natives from the Kuskokwim Region, the Alaska Peninsula, and Cook Inlet converged as they came to visit or live at the post. The community was known as Nushagak by 1837, when a Russian Orthodox mission was established. In 1884, the first salmon cannery in the Bristol Bay region was built by Arctic Packing Co., east of the site of modernday Dillingham. Ten more canneries were established within the next seventeen years. The Dillingham town site was first surveyed in 1947. The city was incorporated in 1963 and is a 1st class city.¹

Commercial fishing, fish processing, cold storage, and support of the fishing industry are the primary economic activities, producing half of the world's sockeye salmon supply each summer. In 2018, the region saw a harvest of 152 million pounds of sockeye. After processing, this harvest was valued at \$688 million.

¹ Alaska Community Database Online (Accessed March 2020).

Dillingham's role as the regional center for government and services helps to stabilize seasonal employment. Many residents depend on subsistence activities, and some trap beaver, otter, mink, lynx, and fox for supplemental income. Salmon, grayling, pike, moose, caribou, and berries are locally harvested.

3.0 Airport Setting & Adjacent Land Uses

A large proportion of the road-accessible, developable land in the City of Dillingham is held as Native allotments. Other major landowners include Choggiung Limited, the City of Dillingham, and the State of Alaska. DLG property is entirely within the Dillingham city limits. Alaska DOT&PF owns DLG and maintains jurisdiction over its operations. See Figure 2. City of Dillingham Land Ownership.

The US Army Corps of Engineers has mapped wetlands around and within DLG property. Wetland classifications in the area include freshwater forested/shrub wetlands and freshwater emergent wetlands. This is consistent with much of the land within the City of Dillingham boundary, with mapped wetlands prevalent north and east of the airport. Squaw Creek runs southwest of the airport property and drains into the Nushagak River to the south.

DLG is located near the junction of Dillingham's three major roads: Kanakanak Road, Wood River Road, and Aleknagik Lake Road. Kanakanak Road crosses airport property south and southeast of the runway, and a portion of Wood River Road enters airport property southeast of the runway and north of Kanakanak Road. These road corridors contain the majority of Dillingham's residential development. The airport property is surrounded by residential development on all sides except the northwest.

The locations of existing residential properties and the city cemetery present possible land use conflicts with airport property. Two residents are located adjacent to the northwest airport property boundary. Access to the residence is from Airport Road connecting to West Airport Road and North Airport Road, around the general aviation (GA) apron. This may result in difficult public access control along these roads and on airport property. Additionally, a residence encroaches onto airport property east of the runway, north of Kanakanak Road, and is labeled on the 2019 DLG Land Occupancy drawing as *Delpin Lopez Encroachment* (see Attachment 1. DLG Land Occupancy).

A city cemetery, Evergreen Cemetery, is located east of the runway on a knoll above the runway elevation, fully within airport property boundaries. The cemetery is still in use. It encroaches on areas that, according to Federal Aviation Administration (FAA) standards, should be cleared of obstructions and elevated terrain, including the Objective Free Area (OFA). Both the adjacent residential uses and the culturally sensitive city cemetery may affect the safe operation of the airport or limit its expansion.

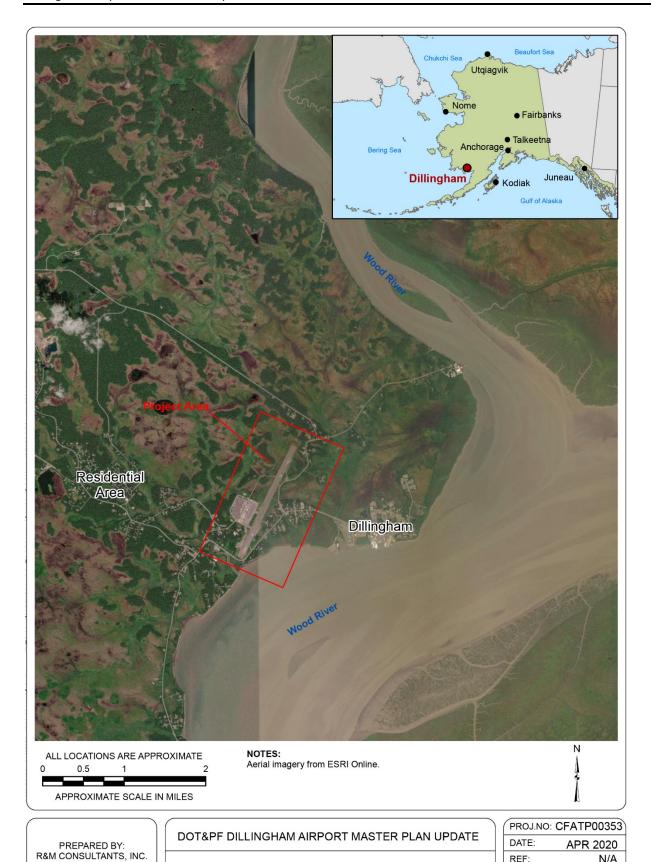


Figure 1. Project Location & Vicinity Map

LOCATION AND VICINITY MAP

N/A

REF:

FIGURE NO:



Figure 2. City of Dillingham Land Ownership. Source: City of Dillingham Parcels (2021 GIS)



Figure 3. City of Dillingham Land Use Map. Source: City of Dillingham Parcels (2021 GIS)

4.0 Land Use at DLG

The first tract of land transferred from the Bureau of Land Management (BLM) to the State of Alaska for DLG occurred in 1953, when the airport was built. The land within DLG boundaries is owned and operated by DOT&PF and was acquired by 1985. See Attachment 2, DLG Property Plan 2003. Since the airport was built, lease lots for tenants have been developed, and buildings and vehicle parking areas have been constructed. Underground piped city water and sewer are available in Dillingham, but the airport is not connected to the systems. The city sewer system currently ends directly across the runway from the airport along Kanakanak Road. Water and sewer at the airport are provided by well and septic systems.

Airport land uses can be classified as either aeronautical (uses directly related to or involved with the operation of aircraft) or non-aeronautical. Non-aeronautical land uses are any airport land use, business, service, or function that is not involved with or directly related to the operation of aircraft. Almost all current land uses on DLG are aeronautical uses, with only Evergreen Cemetery being non-aeronautical. Prior to 2021, the Twin Dragon restaurant operated on a lot leased by private air operator Grant Aviation, Inc. Airport access roads, current lease lots, and airport facilities all are used for transportation activities or to support aeronautical activities.

4.1 Land Use Plan (2012/2016 ALP)

The 2016 ALP includes a Land Use Plan. See Attachment 3, DLG ALP 2016. The Land Use Plan designates areas on and adjacent to airport property for uses based on the ultimate layout identified in the ALP. Aeronautical use areas include aviation use, revenue generation, avigation hazard easement, and aviation reserve. Non-aeronautical use areas include non-aviation, commercial mixed use, residential, and no airport interest.

A significant portion of DLG property is designated as aviation reserve, which is intended to protect or preserve airport land for future expansion of aviation facilities. This area is west of the building restriction line, GA Apron, and existing lease lots. Aviation reserve areas intend to protect or preserve airport land for future expansion of aviation facilities. Based on the orientation and shape of the airport property boundary and the aviation reserve area in the 2016 ALP Land Use Plan, it is assumed the area has been reserved for the potential addition of a crosswind runway; however, the ultimate layout does not include a crosswind runway or any aviation facility expansion into this area.

All existing lease lots at DLG are within revenue generation designated areas. There is a small area south of the GA Apron, west of Airport Road, that is categorized for non-aviation revenue. A portion of that area is currently being used as a vehicle parking lot. A second non-aviation revenue area is identified east of Runway 1-19, west of the existing airport fence and building restriction line, that is accessible from Wood River Road. Beyond airport boundaries, the Land Use Plan identifies the commercial mixed-use area where Dillingham residents live and work.

4.2 Aeronautical Uses

Aviation use areas contain aeronautical facilities and support facilities (see the following Aeronautical Use section), including the runway, runway protection zones (RPZs), terminal apron, taxiways, and GA Apron. Aeronautical uses at DLG include commercial passenger service, freight and mail services, general aviation, and military aviation. Runway 1-19 is the only runway at DLG and is used by all aircraft, except for helicopters. Taxiways A & B connect the Main Apron to Runway 1-19, and Taxiway C connects the Main Apron to the GA Apron. DLG does not have a full-length parallel taxiway.

Support facilities include:

- Flight Service Station (FSS)
- Aircraft Rescue and Fire Fighting (ARFF)/Snow Removal Equipment Building (SREB)

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- Chemical Storage Building
- Sand Storage Building
- Maintenance and Operations Reserve

Avigation hazard easements are identified south of Runway 1-19 within and around the south RPZs, south of Kanakanak Road, and east of the runway where the city cemetery is located. The Land Use Plan recommends acquisition of property north of the Runway 19 end for RPZ protection, expanding airport property and aviation use area, to contain the existing RPZ within airport property and accommodate the ultimate runway length and location.

4.3 Lease Lots

Developed lease lots are on the west side of the runway and are accessed primarily from Airport Road. See Attachment 1, DLG Land Occupancy. These privately developed lots are occupied by small passenger and cargo terminal facilities belonging to air carrier operators or public agencies. Air carriers include Grant Aviation, Alaska Pride Air, Bristol Bay Air Service, Alaska Island Air, Mulchatna Air LLC, Tucker Aviation, Peninsula Airways, Fresh Water Adventures, Starflite Inc, Bay Air, and Alaska Cargo Services. Agencies include Alaska Department of Fish and Game, US Fish and Wildlife Service, City of Dillingham, and the FAA. The Alaska State Troopers (AST), the principal law enforcement agency in the region, operates their own aircraft stationed at DLG. Agencies also extensively use local commercial operators for a variety of work.

Airlines and air taxis operating from Dillingham maintain individual passenger and cargo handling facilities or sublet space. Most operators combine passenger, cargo handling, and hangar functions within one building. All facilities are located west of the runway. The FAA building hosting the Flight Service Station is the only lot north of Taxiway C and east of North Airport Road.

4.4 Tiedown System

Aircraft tiedowns are available on the GA Apron along Taxiway C. Lease lots are adjacent to the GA Apron to the west and east, and between the Main Apron and Airport Road. Most of the existing lease lot holders also rent tiedowns. There are 74 tie downs at DLG with 41 tiedowns occupied for all or a portion of 2020, according to the DLG Tiedown Invoice Report run on June 30, 2020. Tiedowns are rented for various time periods including annual, seasonal and extended seasonal at a rate of \$492 per year and are pro-rated for seasonal renters (\$41 per month). A portion of the tiedowns are reserved for transient parking.

5.0 City of Dillingham Land Use Planning

The City of Dillingham has limited land use regulatory policies in their current code, and they do not have a municipal zoning program. While there are processes in Title 18, *Planning and Land Use Regulation,* for obtaining three different land use permits (General Land Use, Administrative, and Conditional Use), the use-specific standards for the underlying land use districts are not well defined. Two land use district classifications are codified and used in the city, General Use district (GU) and Central Business district (CB).

The CB district is intended to provide for commercial uses for the entire community in a central location and a compact, high density setting. The GU district is intended to provide for all uses with a minimum of standards required for public health, safety and welfare. DLG is located about two miles from the City of Dillingham city center and lies within the GU District.

The city of Dillingham adopted the "City of Dillingham Comprehensive Plan Update & Waterfront Plan" in October 2010. The plan serves as the city's guiding document for management and future development decisions. The plan recommendations are based on community-defined needs and interests to improve Dillingham as a place to live, work, and visit. Decisions are based in part on land use designations. The plan provides a Land Use Designations map that outlines the locations of current land uses, the general expectations about locations of future development, and eight general land use designations. (See Figure 4, Land Use Designations, City of Dillingham Comprehensive Plan Update & Waterfront Plan, 2010).

Airport and residential uses are not typically considered compatible, yet the land use designations surrounding DLG are a combination of residential and commercial mixed uses, consistent with long standing use patterns. DLG is designated as a Public Land and Institution (PF), consistent with other public facilities such as schools, police or fire stations, sewer treatment, parks, and ports and airports. Land surrounding DLG is primarily designated as "Residential Focus", which allows for low-density, residential use, including options for home-based and other businesses compatible with a predominately residential area. Additionally, an area southwest of the northern half of the DLG runway is designated as Commercial Mixed Use, which allows for commercial and retail services, with an option for secondary uses including residential.

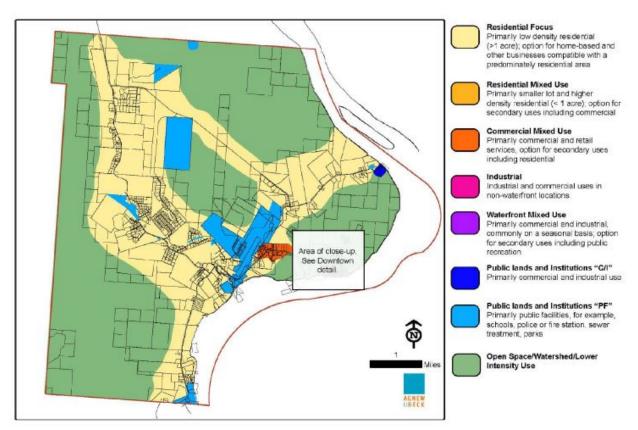


Figure 4. Land Use Designations, 2010 City of Dillingham Comprehensive Plan

A map of existing trails in the 2010 Comprehensive Plan shows traditional local trails that circulate the northern half of the airport property, including segments near or potentially within the north RSA. Based on the aerial imagery and climate information available for the area, this trail may be seasonal and only used in the winter months as it traverses areas of wetlands.

The 2010 Comprehensive Plan outlines goals, objectives, and priority strategies for improving the City of Dillingham. As a vital part of public infrastructure, the continued maintenance and improvement of DLG is supported in the comprehensive plan to achieve a well-planned and managed system of public infrastructure. The following goals identified in the 2010 Comprehensive Plan apply to DLG and this AMP update:

- Transportation Goal: "Develop and maintain an integrated transportation system that provides a
 range of safe and efficient ways to move people and goods within, as well as in and out of
 Dillingham; provide for both utilitarian needs such as access to jobs, schools, services and facilities,
 subsistence resources, and for recreation and health."
- Transportation Goal 2: "Improve the system of roads, docks and harbors, and airports to meet current and anticipated future needs, minimize maintenance costs, and to minimize potential conflicts between transportation and other community goals."

• Economic Development Goal: "Diversify and strengthen Dillingham's economic base to ensure a prosperous future for the community's residents while protecting the health of the environment; grow local businesses and industries."

The Comprehensive Plan recommends the following strategies under Transportation Goal 2 to improve air travel infrastructure in the area:

- "Work with DOT&PF to finalize and implement the AMP, including reserving land for a crosswind airstrip at the DLG."
- "Maintaining, and preferably increasing, the number of passengers visiting Dillingham is critical to maintaining regular air service. Consequently, the City should work with private tourism businesses, a revitalized Chamber and other interests to increase visitor travel to Dillingham implementers are the City, Chamber, and regional partners."
- "Pave and improve drainage on Airport Road/Airport Spur Road (1 mile), Waskey Road (4.1 miles), and Emperor Road on existing road and add new road connection (project total: 3.9 miles)."
- "Engage ADOT&PF and local air services to provide space to build and expand Dillingham's infrastructure for transporting fish and fish products."
- "Agree to a land trade to move DOT&PF maintenance vehicles and other storage away from downtown."
- "Resolve land use conflicts in the area surrounding the airport in order to ratify the AMP and designate the expansion area."

6.0 Public Engagement

6.1 Airport Stakeholder Interviews

As part of the DLG AMP update, telephone interviews were conducted with community and business leaders, tribal entities, and service organizations to provide input for the plan. A total of 23 interviewees were asked a series of questions about how their businesses or organizations use the airport, how well the airport meets their needs, and how the airport could be improved. The following information pertaining to airport land use emerged as key themes:

- Terminal facilities (owned and operated by air carriers) lack adequate space for Transportation Security Administration (TSA) screening; the Alaska Airlines terminal is too small to accommodate a full jet load of people, and the baggage area is congested.
- A cold storage facility is needed for sportfishing businesses and hunters. The commercial processing plant does not have a storage need since their shipping methods do not require refrigerated space at the airport.

- A desire to construct new hangar facilities at the airport was expressed by private pilots and one fish processing plant manager who lacks adequate space to build. One interviewee stated, "leases to build private hangers would be taken advantage of in a heartbeat."
- Improvements to water and sewer was a top priority for some interviewees; they noted available
 well water is contaminated with perfluoroalkyl and polyfluoroalkyl substances (PFAS) not safe for
 consumption, and bathrooms are often out of service. "There are serious deficits for sanitation in
 terms of functioning toilets and sinks."
- Passenger vehicle parking space was described as insufficient when the airport gets busy. Loading space for passengers boarding an Alaska Airlines jet and for loading large totes of fresh salmon are insufficient.
- There are few options to get planes out of the weather and get them serviced with limited aircraft mechanical services at the airport. DLG is currently served by only one mechanic carrying tools in his vehicle who parks next to a plane needing service; additional hangar space would allow a mechanic to set up a shop and offer expanded services many Dillingham pilots need.
- Given the many identified areas for infrastructure improvement and challenges posed by the current airport, one interviewee suggested that "it may be easier to simply start over. The limited space around the airport would only allow for so much expansion and it might not only be simpler," but also financially sensible to find a new location and build a new airport meeting the needs of Dillingham and the region. A new airport would have larger runways, taxiways, and parking areas, a common public terminal, leasable space for private hangar construction and improved passenger services.

Runway and taxiway desired improvements include:

- Lengthening and widening the runway as a safety improvement for incoming flights, especially larger planes.
- The existing taxiway used by smaller aircraft (Taxiway C) is not wide enough for two planes to pass each other. As one interview stated, "pilots make it work," but the taxiway also needs to be widened.
- A full-length parallel taxiway to the north end was suggested as well as a crosswind and even a shorter gravel runway for small aircraft to land to make way for larger aircraft using the large runway.
- Charter aircraft want more parking space at the north end of the apron.
- Fencing on the south end of the runway causes snow drifts onto the adjacent road.

6.2 Public Meeting

The first public open house was held virtually on October 22, 2020, and yielded valuable insight regarding facility issues and land use opportunities for DLG. There was considerable overlap between the open house comments and those from the earlier stakeholder interviews.

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- Most comments at the first open house pertained to a common, upgraded terminal. They expressed a desire for a large enough facility for the larger commercial operators as well as private charters, with separate baggage and waiting areas. Each operator currently manages and maintains their own facility on lease lots, many in sub-prime condition. A new, shared terminal would serve as an attractive 'welcome' to Dillingham and the Bristol Bay region, since most residents and visitors travel through DLG to access the region. Adding concession space would be valuable for those waiting at the airport. There was one comment that mothers with infants cannot get water for baby formula, and even adding a vending machine with water bottles would be a simple, but meaningful, improvement.
- A significant demand for new lease lots and hangar space was expressed. One participant mentioned having to store his aircraft at a different airport during the winter months, which was an added expense and left him without use of this aircraft during those months.
- Airport maintenance equipment should be improved, particularly the de-icing and other winter equipment.
- Improving restroom facilities had a lot of support at the open house. Restrooms are in the Alaska Airlines terminal and therefore not publicly available. There is only one men's restroom and one women's restroom, which is especially insufficient during the summer, when demand is high. There are times when the restroom is closed, and airport employees must close counters for 20 minutes or more to leave the airport to use the restroom and return.
- Insufficient access to drinking water was also a popular comment. Connecting to the City of Dillingham water supply would improve the customer and employee experience and yield additional growth opportunities.
- Parking facilities should be improved. There are safety and security concerns with the long-term
 parking area, given inadequate lighting, no security systems or a gate/fencing. Short-term parking
 is regularly full and can be difficult for pedestrians and drivers to safely navigate, especially during
 the summer.
- The City Cemetery has cultural value to Dillingham residents, potentially limiting Runway Safety Area (RSA) improvement options.

7.0 Opportunities

The following are potential land use opportunities at DLG. Public engagement activities conducted since the beginning of the planning process and prior plans have lent additional insight regarding potential opportunities.

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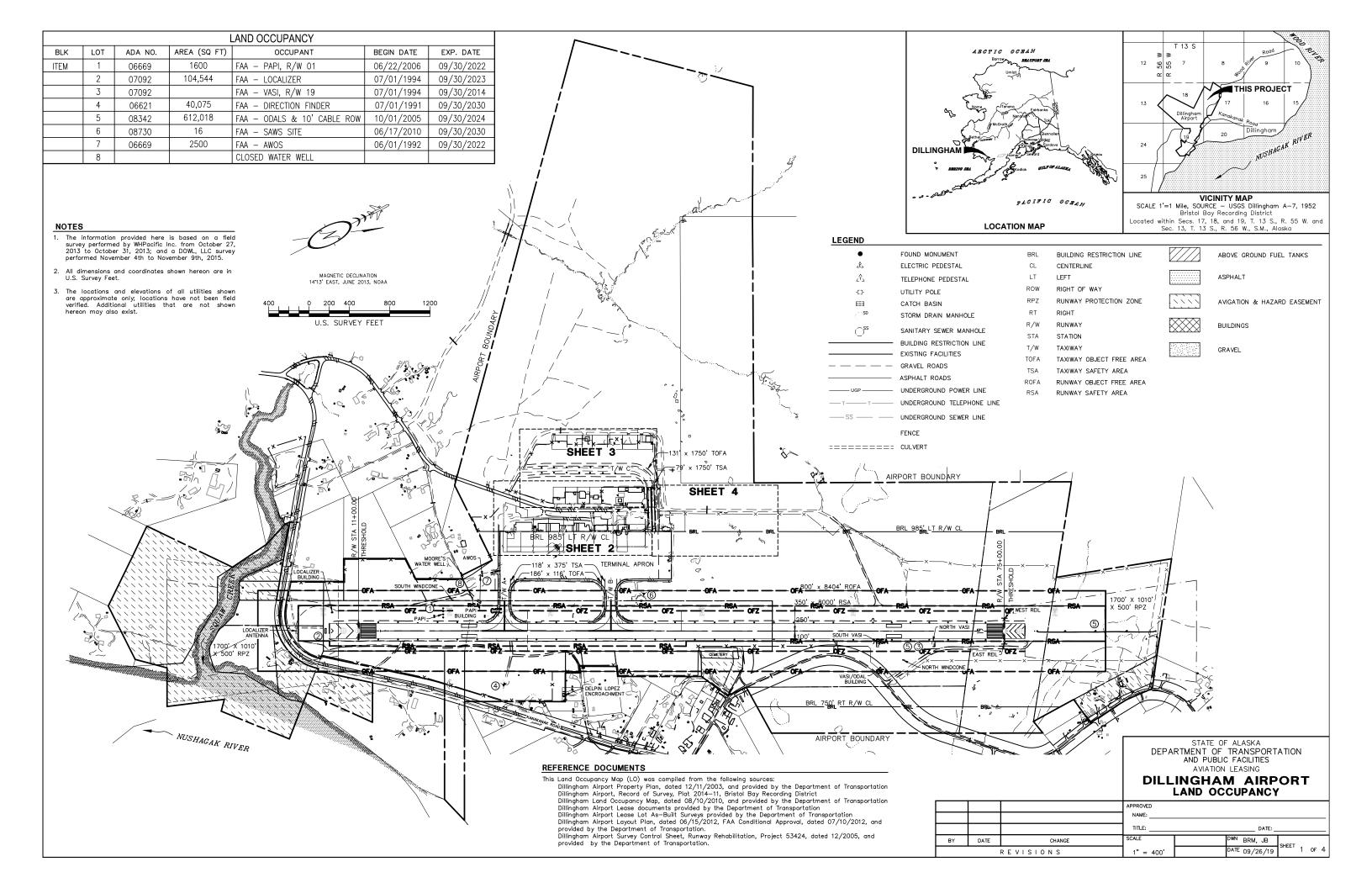
- One of the main concerns of the community has been identified since the 1985 DLG Airport Master
 Plan: the lack of adequate terminal facilities. Currently, air carriers primarily operate out of small
 private buildings, with the primary terminal being a standalone building owned and operated by
 Alaska Airlines. Desire for a joint-use terminal has strengthened over the years.
 - o Interviews echoed this need and added building a public terminal that could accommodate multiple airlines could result in numerous efficiencies for airlines and increased convenience and comfort for passengers. Making Dillingham an easier community to travel in and out of and allowing space for gift shops and food service concessions could be a potential economic benefit.
- DLG has a significant amount of unoccupied, undeveloped land that has potential to host expanded services, lease lots, new or expanded runways/taxiways, or non-aeronautical uses.
 - However, the presence of classified wetlands may limit the practicability of some development as the cost to construct and permit would increase. Additional limitations for expansion would include a change in runway and/or RSA locations and an addition or plan for a crosswind runway.
 - The 2010 Dillingham Comprehensive Plan recommends implementing the existing AMP and reserving land for a crosswind airstrip at DLG; this is reflected in the 2012/2016 ALP Land Use Plan. The need and practicability of a crosswind runway will be examined through this AMP/ALP update, along with the need to carry the 2016 ALP Land Use Plan's aviation reserve areas forward.
 - According to the trails map included in the 2010 City of Dillingham Comprehensive Plan, there are existing trails on airport property. If expansions of developed areas, facilities, or a new crosswind runway are recommended, possible impacts to existing trails on airport property should be taken into consideration, specifically if they are culturally significant or used to access Native allotments not otherwise accessible by the road system.
 - DLG experiences significant increases in use and demand during the summer seasons due to commercial and sport fishing and tourism from late May through September. The highly seasonal component to Dillingham's economy puts large strains on infrastructure for short durations of time. It is a constant struggle to balance building up the necessary or desired infrastructure for increased summer capacity/demand while justifying those investments during times of considerably lower use. It can also be difficult to justify airport geometry

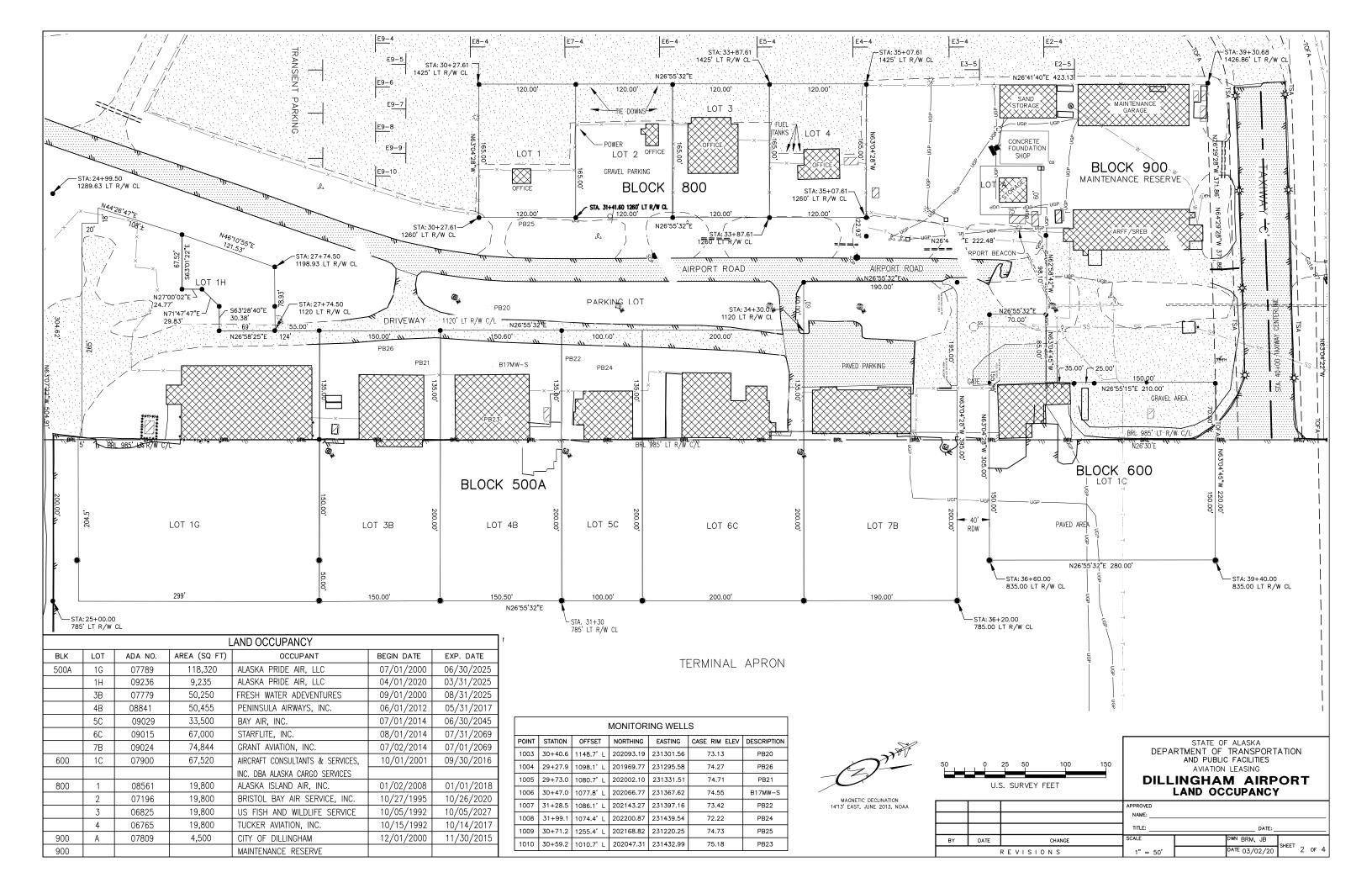
upgrades or expansions with seasonal use as FAA bases their critical aircraft determination on annual operations.

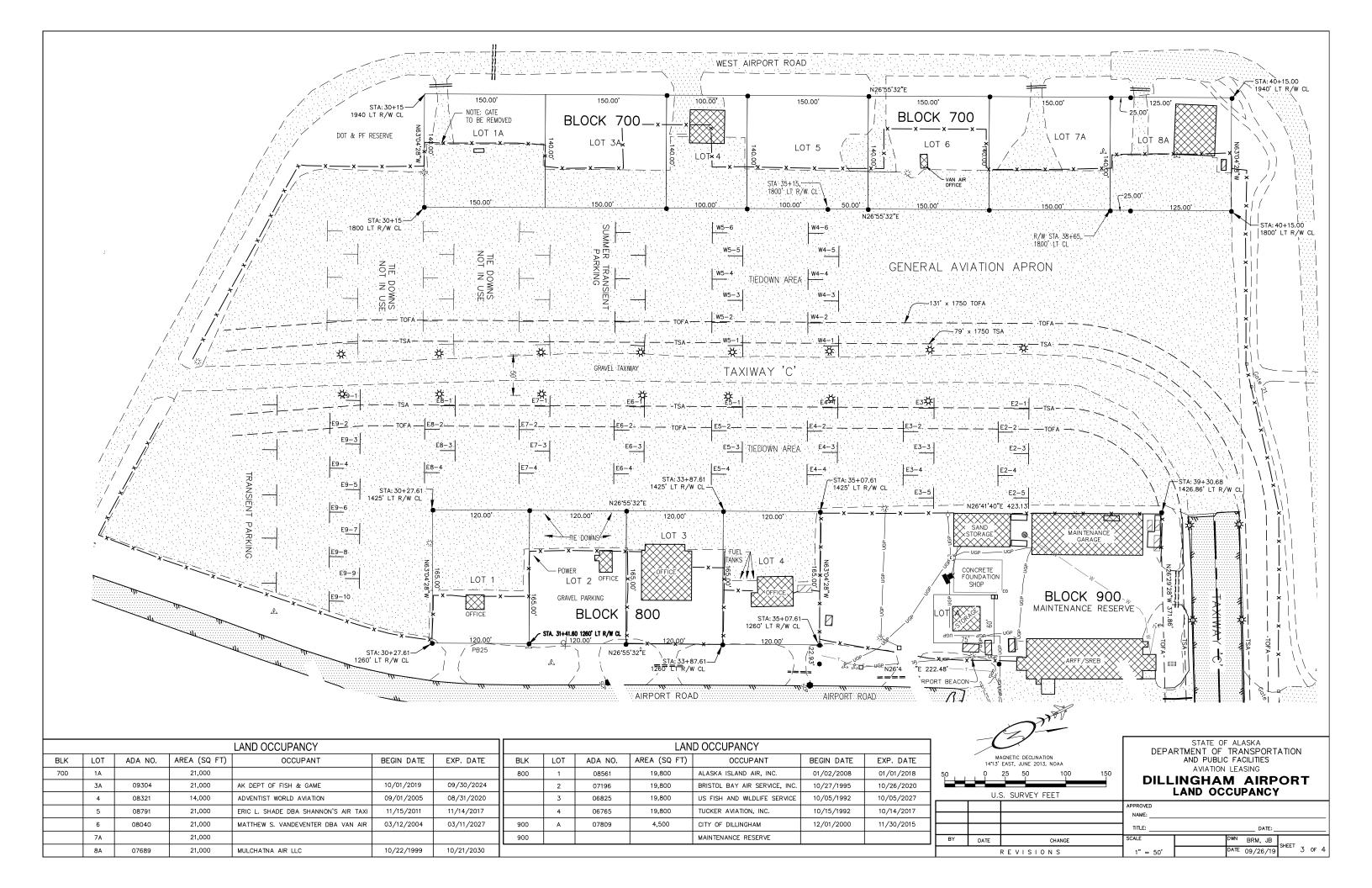
- In the face of growing economic change, FAA has begun encouraging airport sponsors and operators to become more self-sufficient. FAA recommends airports examine their real estate holdings to see where non-aviation airport land could be marketed and leased for increased revenue generation. The 2016 ALP designates areas for commercial mixed use, revenue support, non-aviation revenue, and aviation reserve. See Attachment 3, DLG ALP 2016.
 - It should be examined if DOT&PF has a desire (and if potential demand exists) to lease land identified for non-aviation revenue for commercial mixed uses or public infrastructure (such as potential 5G infrastructure or community services) which tend to have long-term leases.
- Implement the 2010 Dillingham Comprehensive Plan's recommendation to resolve land use conflicts in the area surrounding the airport to ratify AMP and designate expansion area.
 - Resolve the encroachment of a residential property east of the runway, either through a land purchase/acquisition or replat of property boundaries in such a way that retains compliance with all FAA requirements for airport safety areas and boundaries. If a land purchase was pursued, the residence could potentially remain by obtaining a lease from DOT&PF if consistent with non-aeronautical land use requirements.
 - Resolve access, safety, and development concerns with the City of Dillingham for the cemetery, which is currently located on airport property. Solutions may include land trades and access control measures.

This Land Use Assessment will inform the Dillingham AMP and accompanying, updated ALP. The opportunities identified will be explored through the alternative development process for their feasibility and benefit to DOT&PF, airport staff, air carriers and operators, passengers, and the community. Viable opportunities will be incorporated into the draft AMP as recommendations and will undergo a formal public review process.

Figure 1. DLG Land Occupancy 2020







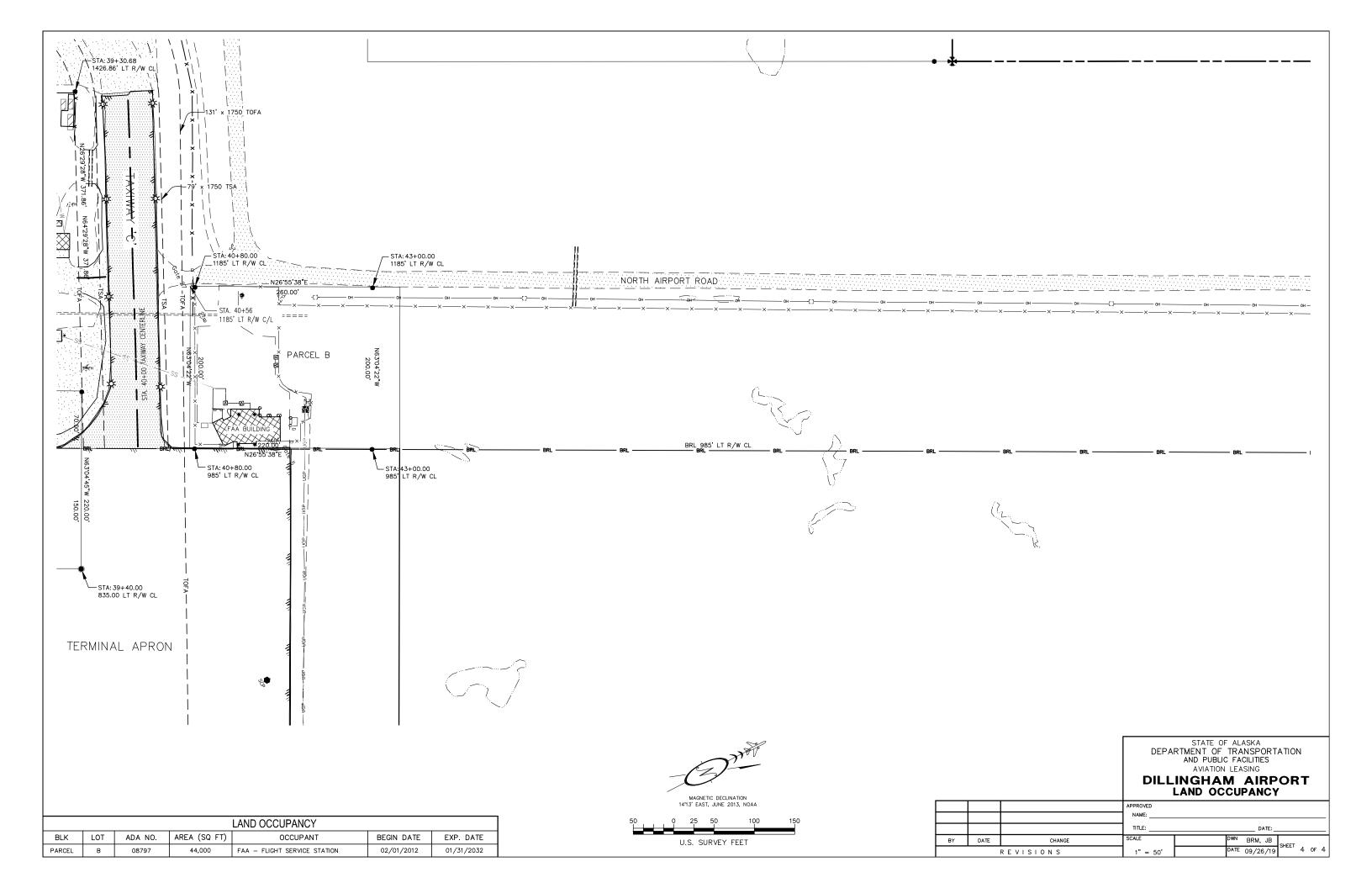
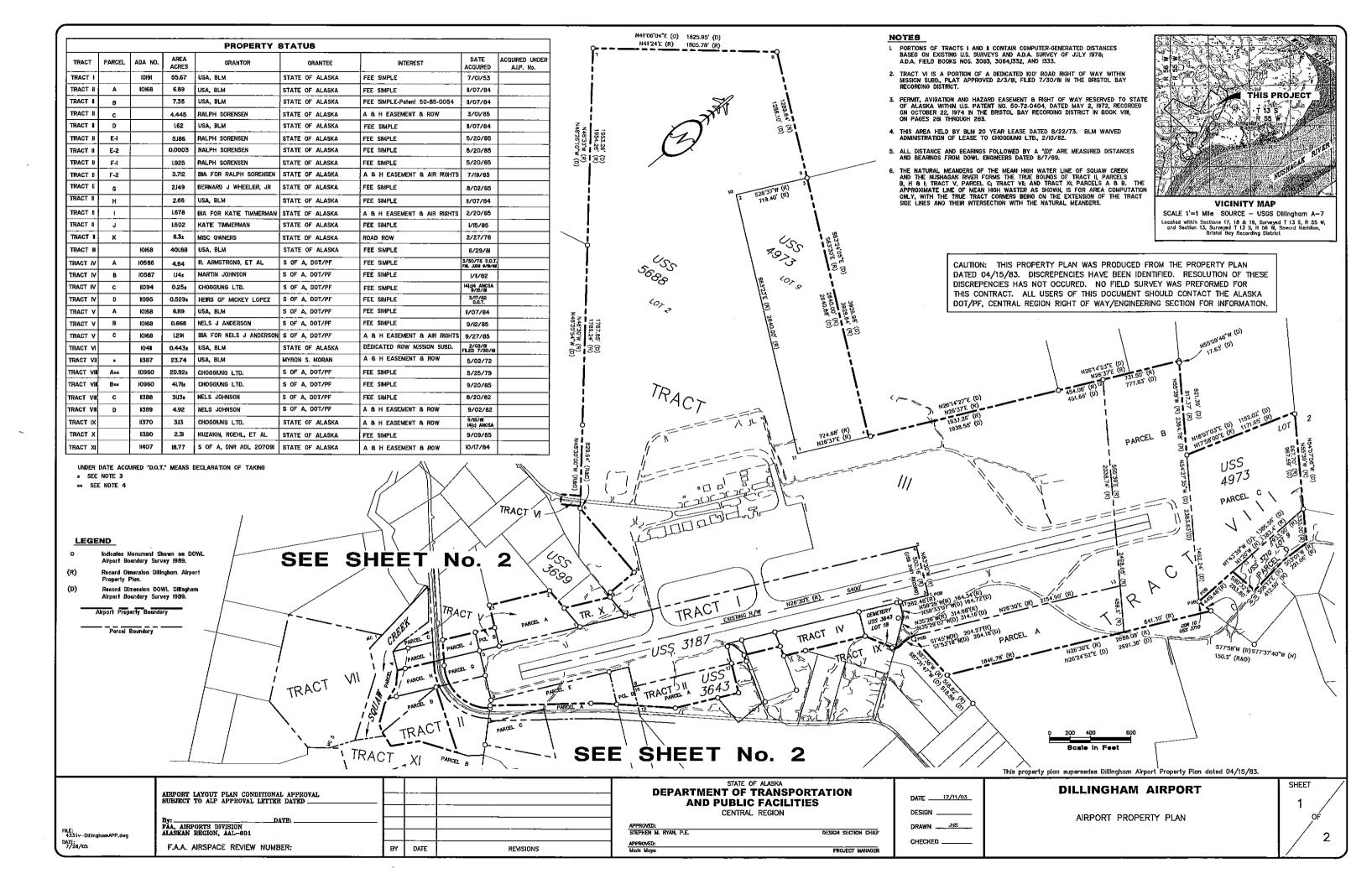


Figure 2. DLG Property Plan 2003



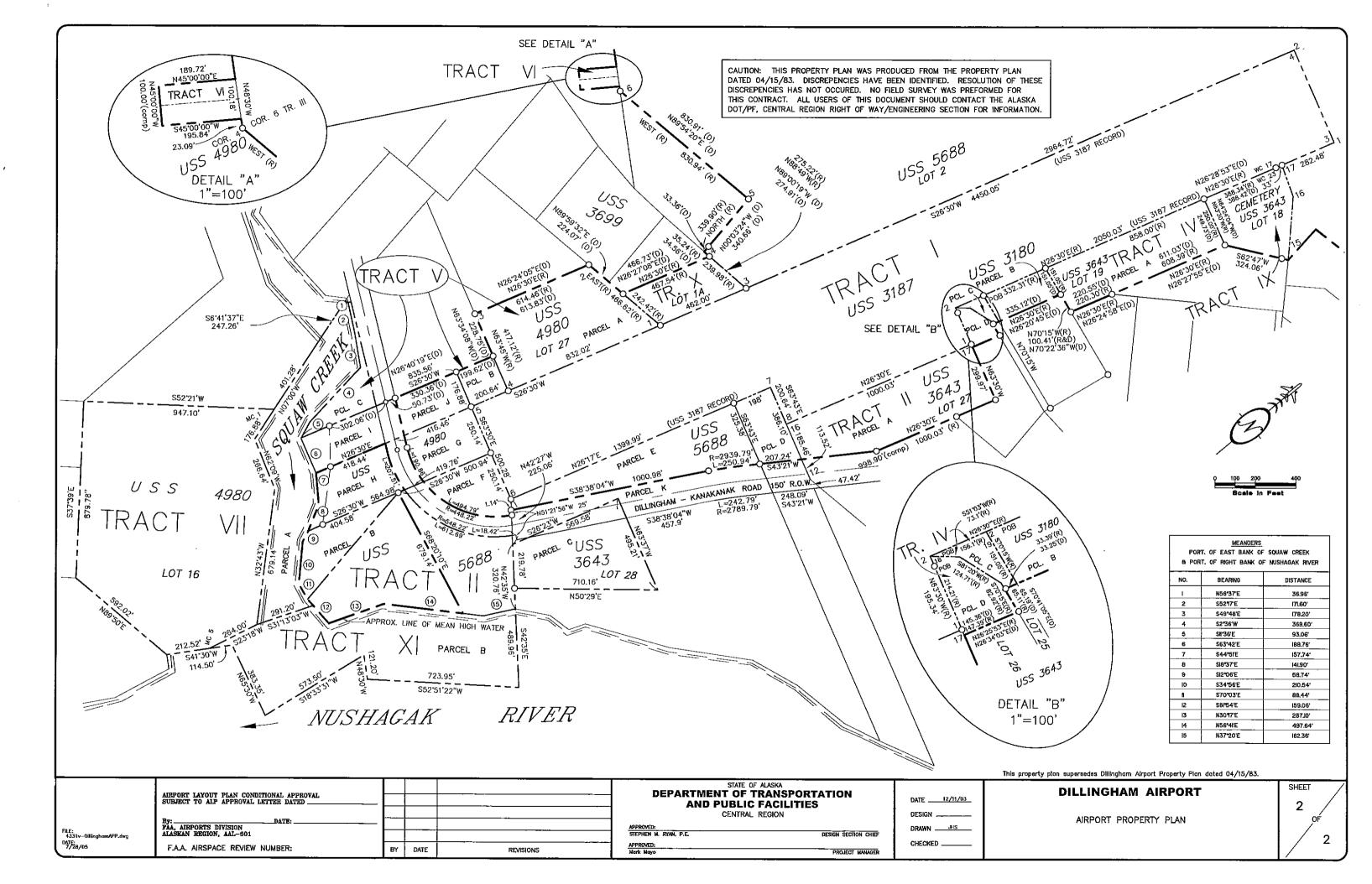


Figure 3. DLG ALP Land Use Plan 2016



Federal Aviation Administration

October 6, 2016

Jessica Wuttke ADOT&PF Central Region P.O. Box 196900 Anchorage, AK 99513-7587

Dear Ms. Wuttke:

Dillingham Airport
Dillingham, Alaska
As-Built Airport Layout Plan (September 2016)
(Original ALP Airspace #2012-AAL-68-NRA)

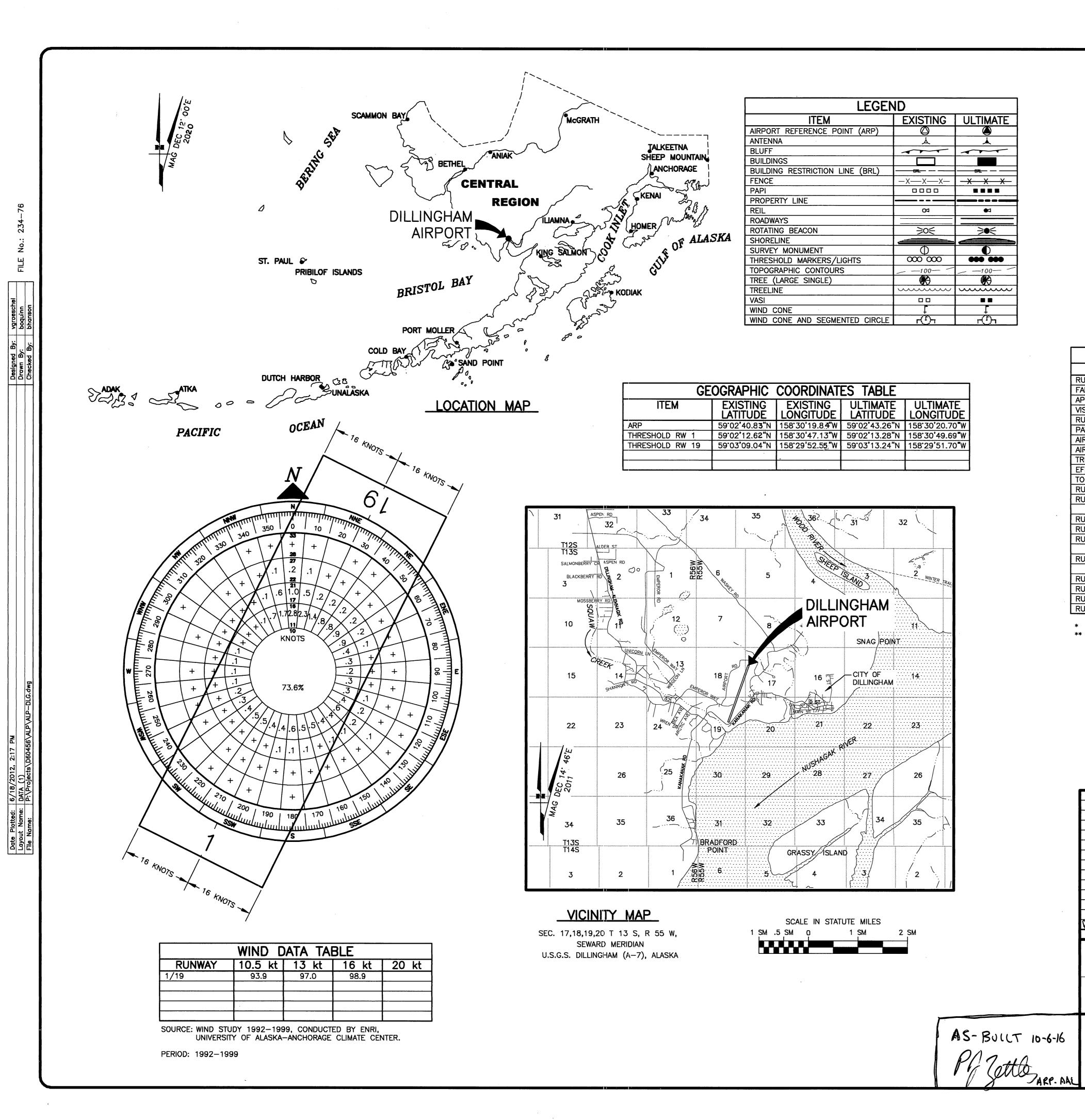
We have completed our review of the Dillingham Airport As-Built Airport Layout Plan (ALP) dated September 2016, and find it acceptable for documenting the existing conditions of the airport.

Please attach this letter to the enclosed ALP and retain it in your files for future use

Sincerely,

Pat Zettler, P.E., Lead Engineer

Airports Division



AIRPORT DATA						
ITEM	EXISTING	ULTIMATE				
ICAO IDENTIFIER	PADL	PADL				
NATIONAL AIRPORT IDENTIFIER, '	DLG	DLG				
FAA SITE NUMBER	50153.*A	50153.*A				
AIRPORT ELEVATION NAVD88	82	84				
AIRPORT REFERENCE CODE	C-III	C-III				
MEAN MAX. TEMPERATURE, HOTTEST MONTH	62.5°F, JULY	62.5°F, JULY				
AIRPORT AND TERMINAL NAVIGATION AIDS	VOR, DME, DF, NDB	VOR, DME, DF, NDB				
	ROTATING BEACON, LOCALIZER	ROTATING BEACON, LOCALIZER				
TAXIWAY LIGHTING/MARKING	MITL	MITL				
OBSTRUCTION SURVEY SOURCE & TYPE	ASCG, 2002, TOPO	ANAPC				
MAGNETIC DECLINATION, YEAR, RATE OF CHANGE	12.00'E / 2020	-0.14'(W) / YEAR				

RUNWAY 1/19 DATA,						
ITEM	EXISTING	EXISTING	ULTIMATE			
RUNWAY TYPE UTILITY OR OTHER THAN UTILITY	OTHER THAN UTILITY	OTHER THAN UTILITY	OTHER THAN UTILITY			
FAR PART 77 APPROACH CATEGORY (V, NPI, P)	NPI	NPI	NPI			
APPROACH SURFACES	34:1	34:1	34:1			
VISIBILITY MINIMUM	1 SM	1 SM	1 SM			
RUNWAY SURFACE	SPHALT GROOVED	ASPHALT GROOVED	ASPHALT GROOVED			
PAVEMENT STRENGTH SW,DW,DTW,DDTW x1000lbs	S 7 5, T160, TT2 3 0	S75, T160, TT280	S75, T160, TT280			
AIRCRAFT APPROACH CATEGORY	С	С	С			
AIRPLANE DESIGN GROUP	III	111	111			
TRUE BEARING	N26 29'43.20"E	N26'29'43.80"E	N26'29'36.60"E			
EFFECTIVE GRADE	2.26%	0.26%	0.07%			
TOUCHDOWN ELEVATION NAVD88 (ESTIMATED)	81.8 / 81.6	81.8 / 81.6	79.1 / 77.5			
RUNWAY DIMENSIONS	150 💥 6404	150 x 6400	150 x 6801			
RUNWAY SAFETY AREA (RSA) DIMENSIONS	200 x 6893	*350 x 8000	500 x 8001			
LENGTH BEYOND RW END	28 / 200	*600 / *1000	**1000 / 1000			
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS-RW 1	1700 🖈 500 🖈 1010	1700 x 500 x 1010	1700 x 500 x 1010			
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS-RW 19	1700 x 500 x 1010	1700 x 500 x 1010	1700 x 500 x 1010			
RUNWAY OBJECT FREE AREA (ROFA) DIMENSIONS	800 x 8404	800 x 8400	800 × 8801			
LENGTH BEYOND RW END OR STOPWAY	1000 / 1000	1000 / 1000	1000 / 1000			
RUNWAY OBSTACLE FREE ZONE (ROFZ) DIMENSIONS	400 x 8304	400 x 830 <u>0</u>	400 x 8701			
LENGTH BEYOND RW END OR STOPWAY	200 / 1700	200 / 1700	200 / 1700			
RUNWAY LIGHTING	HIRL	HIRL	HIRL			
RUNWAY MARKING TYPE	NON-PRECISION	NON-PRECISION	NON-PRECISION			
RUNWAY VISUAL APPROACH AIDS-RW 1	PAPI	PAPI	PAPI			
RUNWAY VISUAL APPROACH AIDS-RW 19	VASI, ODALS	VASI ODALS	VASI ODALS			

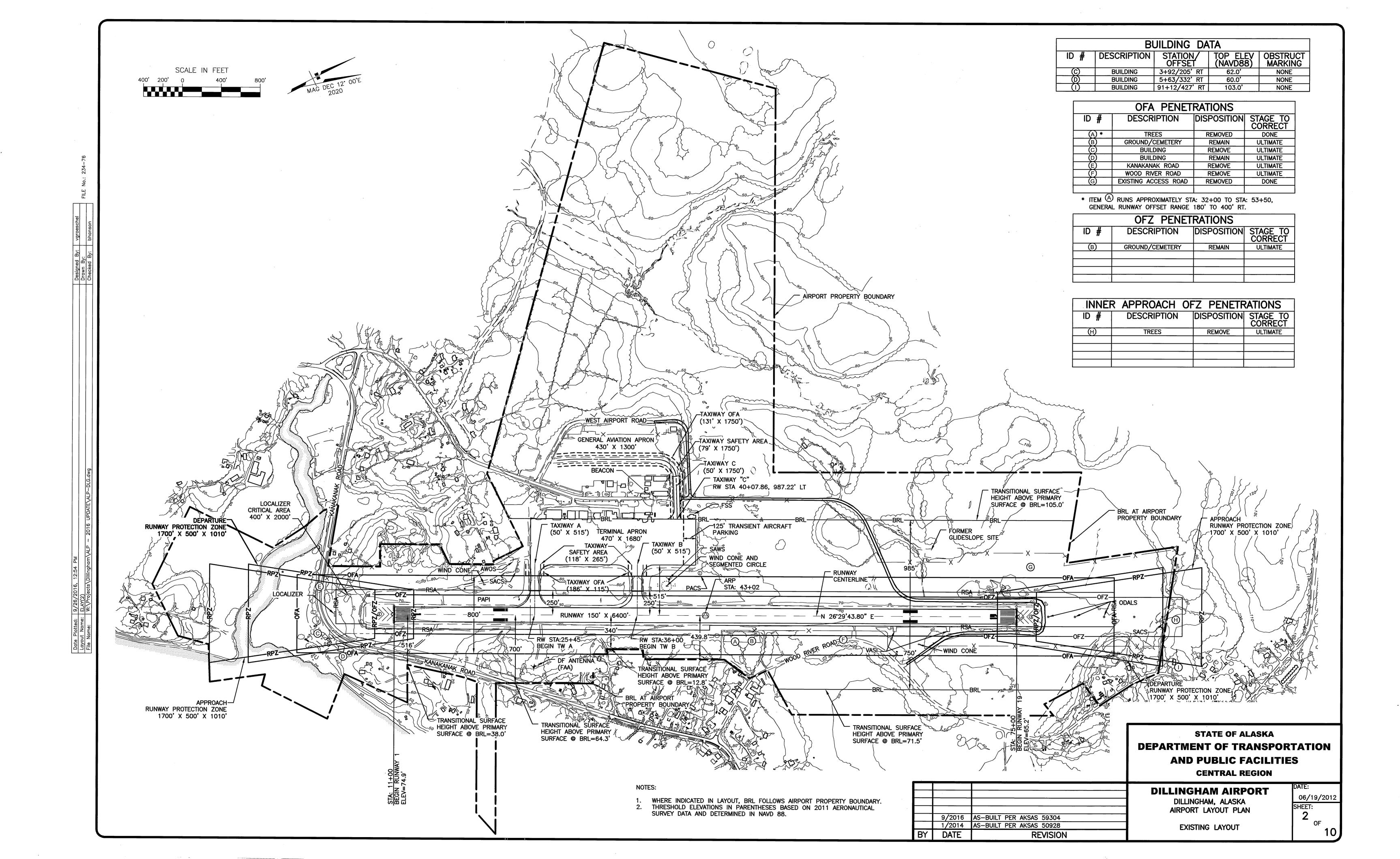
* NEAR-TERM RSA HAS IRREGULAR DIMENSIONS. ** BEYOND THE ASDA

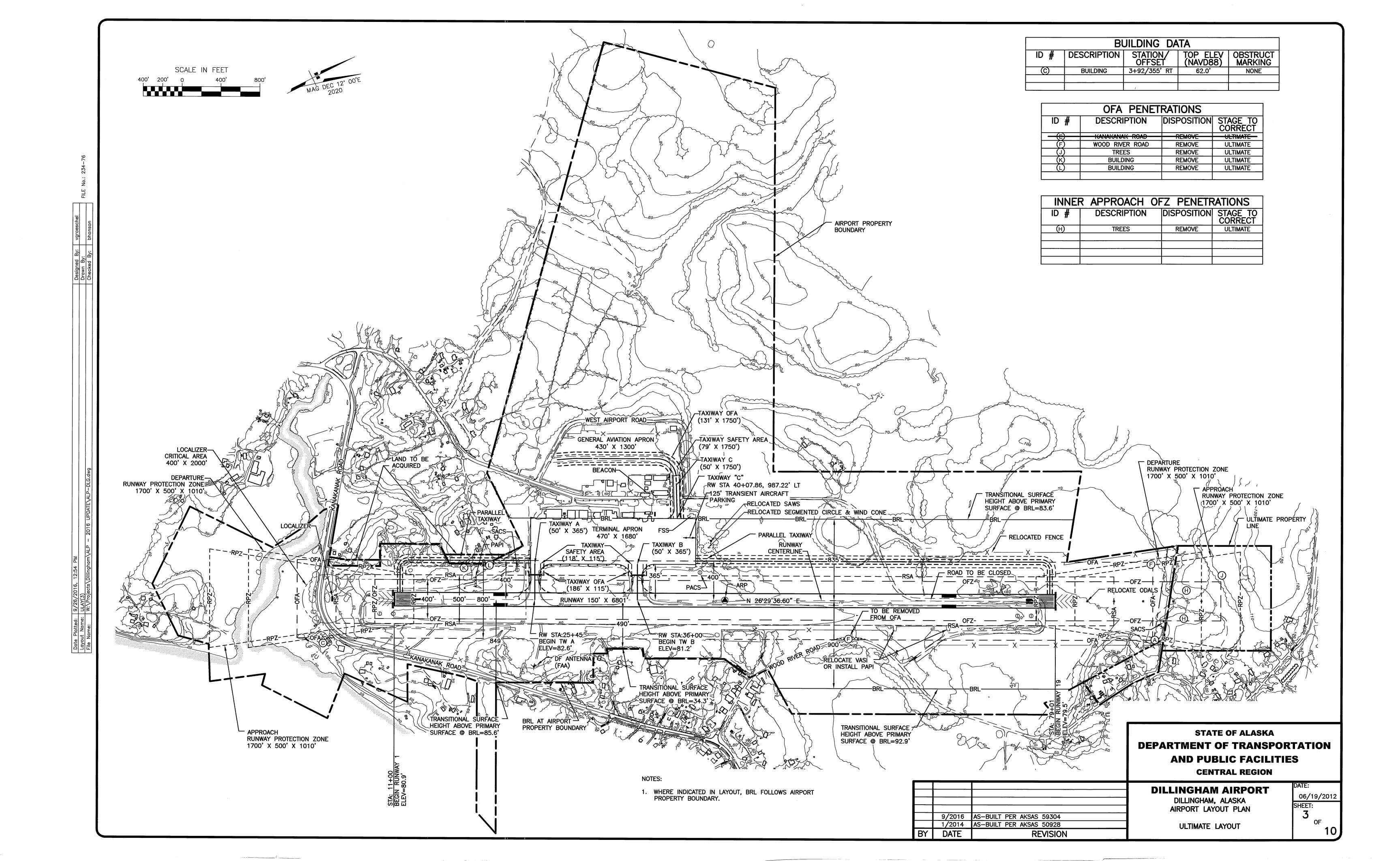
<u>NOTES</u>

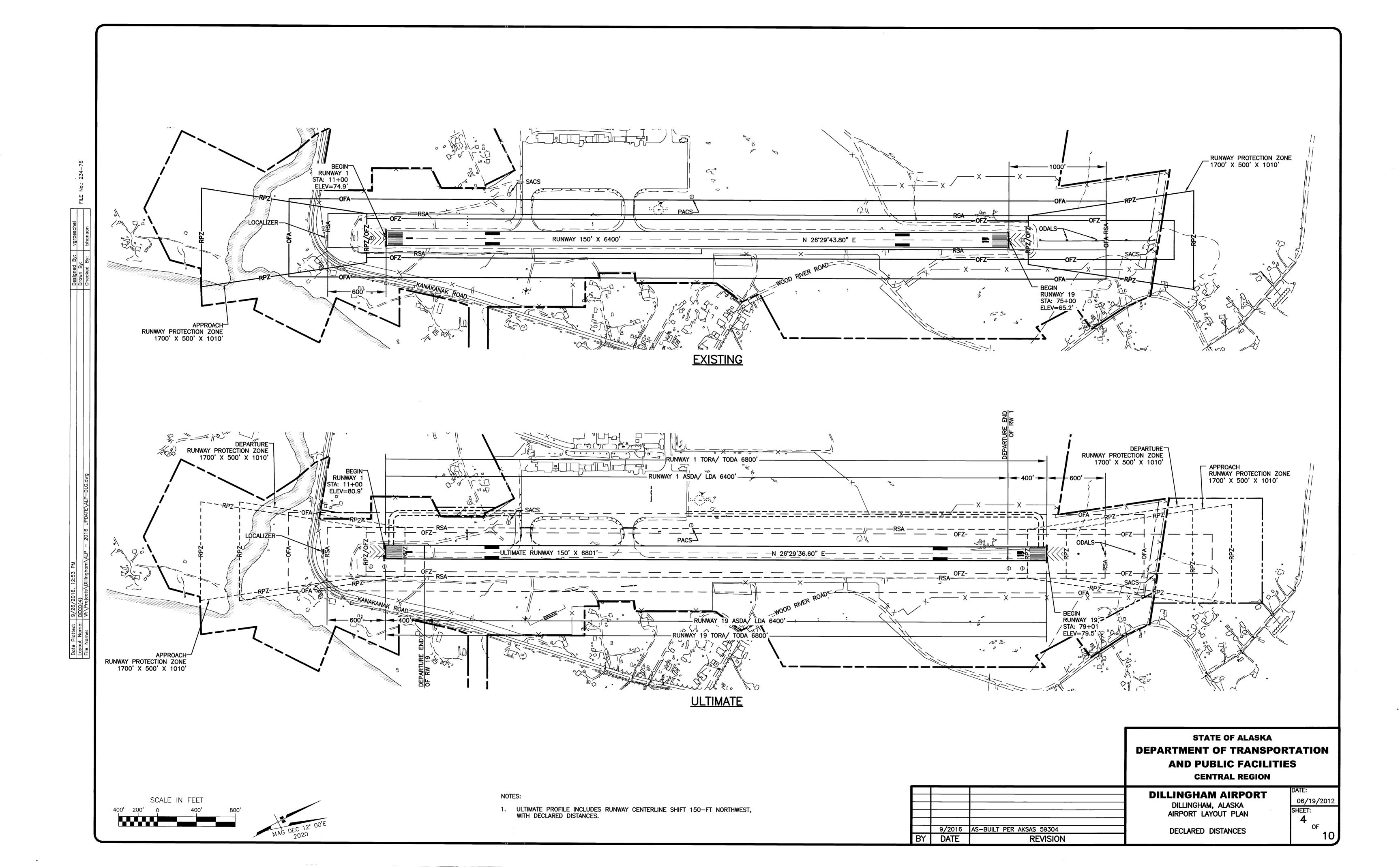
1. THRESHOLD ELEVATIONS ARE BASED ON 2003 ALP TOPOGRAPHICAL SURVEY DATA. AIRPORT ELEVATIONS SHOWN IN PARENTHESES ARE BASED ON THE 2011 AERONAUTICAL SURVEY DATA, AND DETERMINED IN NAVORE.

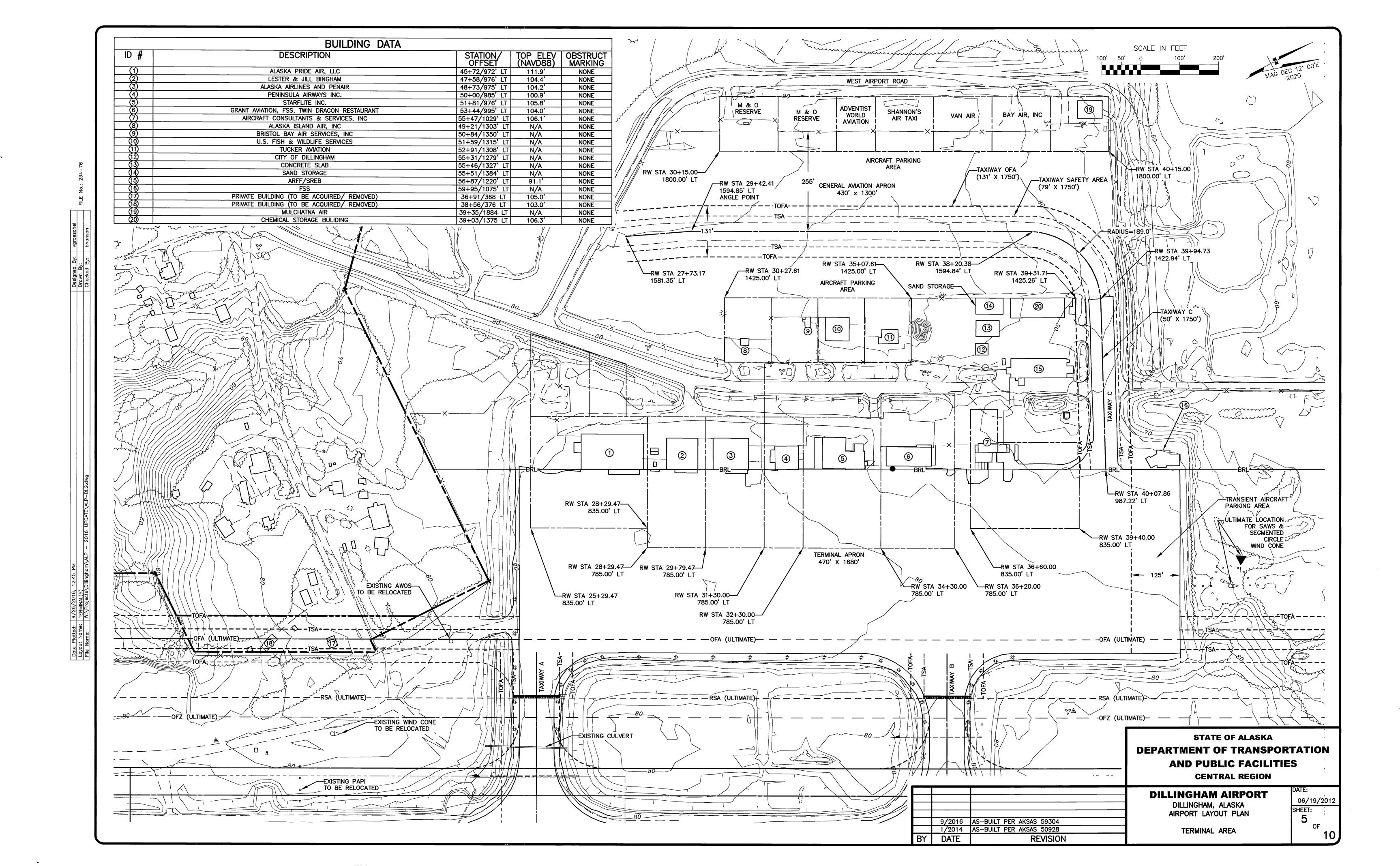
 THRESHOLD COORDINATES DETERMINED FROM 2011 AERONAUTICAL SURVEY DATA AND HORIZONTAL VERIFIED, NAD83(2007).

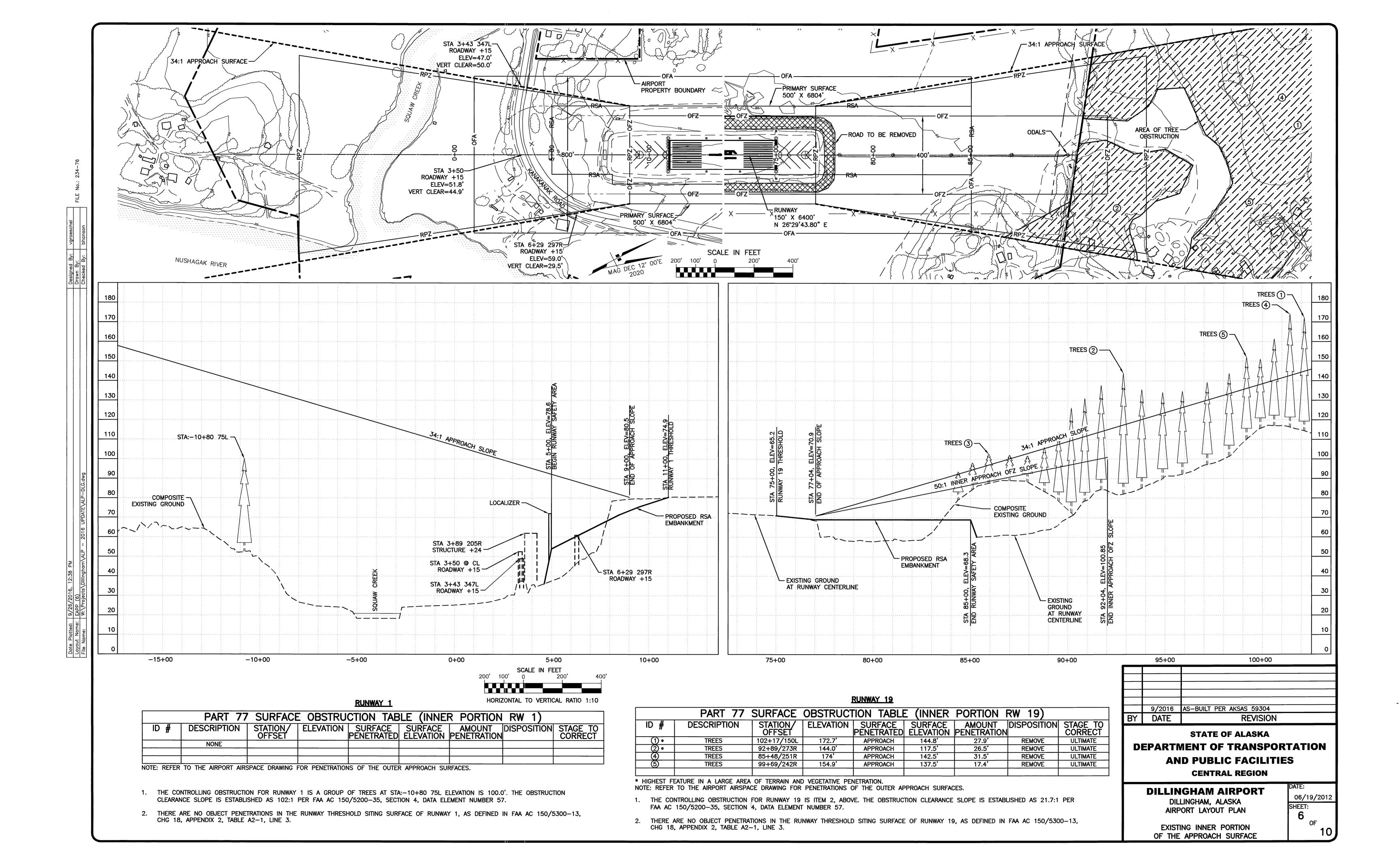
				DRAWING INDEX		
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ŀ			1	AIRPORT DATA SHEET		
ł			2	EXISTING LAYOUT		
İ			3 -	-NEAR-TERM LAYOUT:		
ı		1.0.00	4 3	ULTIMATE LAYOUT		
ŀ			5 4	DECLARED DISTANCES		
ł			-5- 5	TERMINAL AREA		
ı			≱ 6	EXISTING INNER PORTION OF THE APPROACH	+ SURFACE	
I			-8	NEAR-TERM INNER PORTION OF THE APPRO	ACH SURFACE	
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ŀ	是 9/2016 AS-BUILT PER AK	SAS 59304	10- 8	AIRPORT AIRSPACE, 14 CFR, PART 77		
ł	1/2014 AS-BUILT PER AKSA	S 50928	44 9	AIRPORT PROPERTY MAP		
t	11 11	EVISION	12-10	LAND USE PLAN		
I	APPROVED:	DATE: 6-22-2012	STATE OF ALASKA			
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ı	KENNETH M. MORTON, P.E. PRE	CONSTRUCTION ENGINEER	DE	PARTMENT OF TRANSPORT	TATION	
I	RECOMMENDED:	DATE: 6.2/.20/2		AND PUBLIC FACILITIES	5	
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	HARVEY M. DOUTHIT, P.E. DESIGN SECTION CHIEF			CENTRAL REGION		
	AIRPORT LAYOUT PLAN CONDITIONAL A			DILLINGHAM AIRPORT	DATE:	
ı	ALP APPROVAL LETTER DATED _1/_			DILLINGHAM, ALASKA	06/15/2012	
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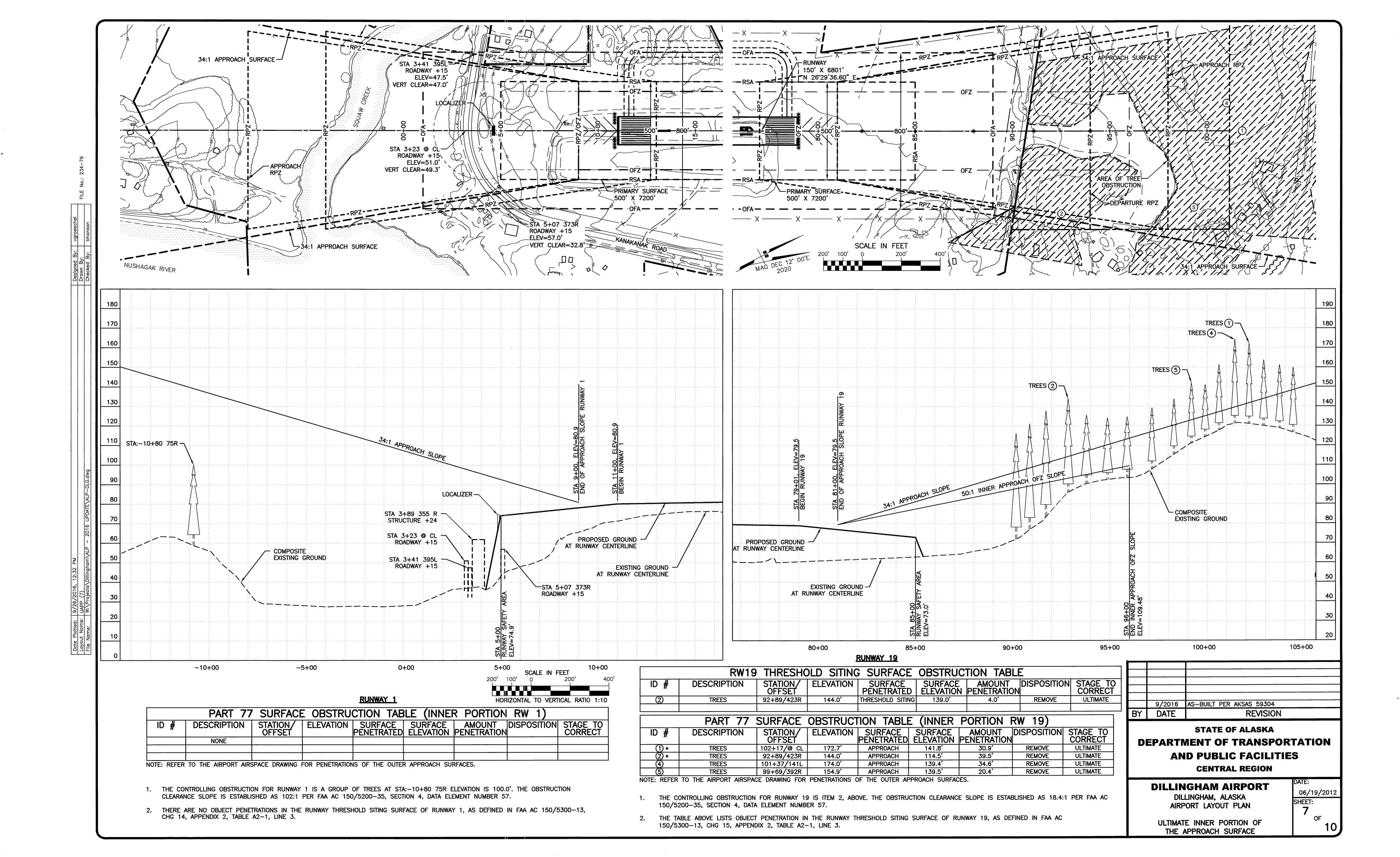


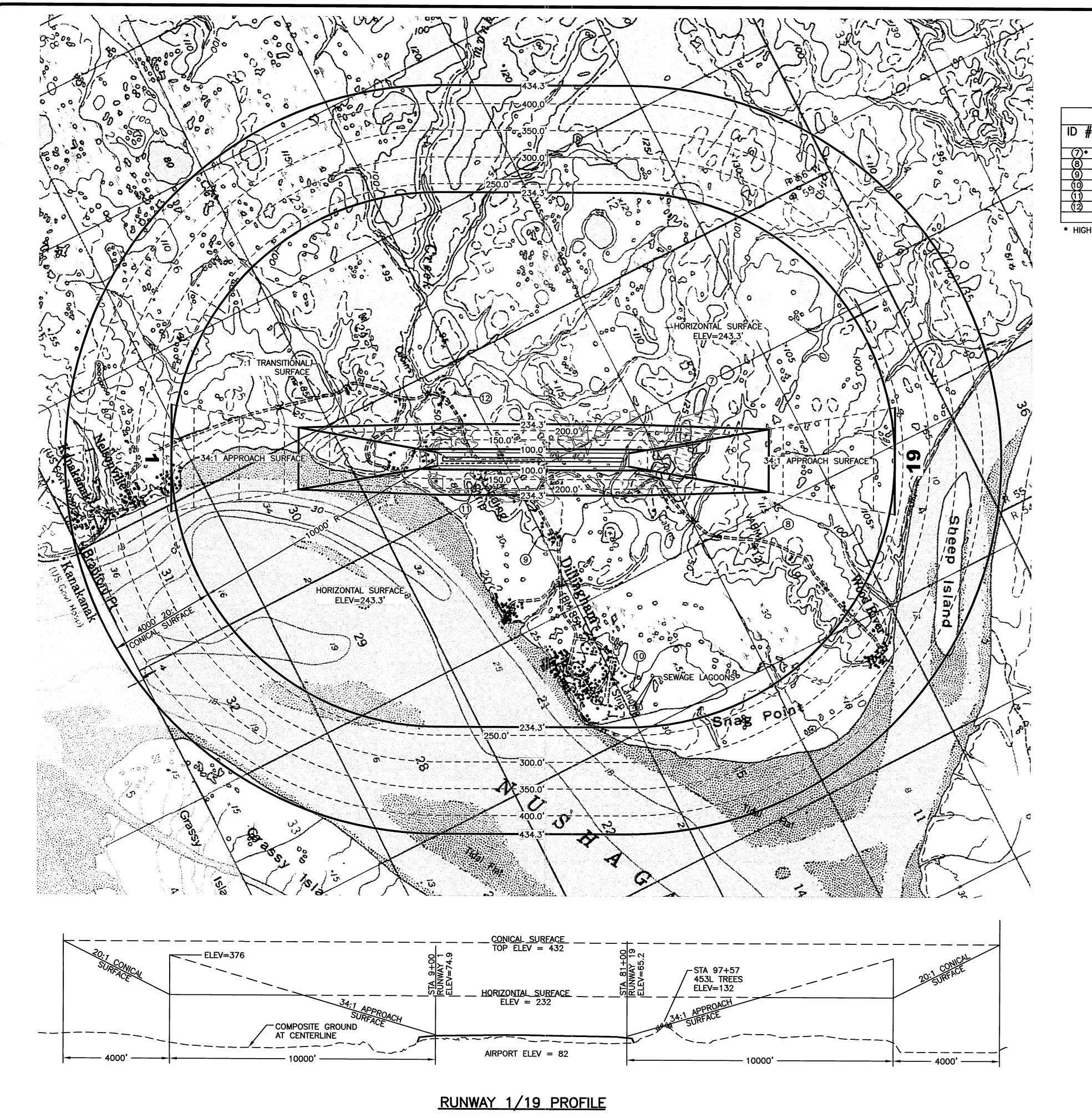










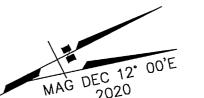


PART 77 SURFACE OBSTRUCTION TABLE (OUTER PORTION RW 1/19)						9)		
ID#	DESCRIPTION	STATION/ OFFSET	ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT PENETRATION	DISPOSTION	STAGE TO CORRECT
7)*	TREES	107+05/1390 L	252.0'	HORIZONTAL	243.3'	8.7'	REMOVE	ULTIMATE
(8)	ANTENNA	128+23/3223 R	287.0'	HORIZONTAL	243.3'	43.7'	REMAIN	ULTIMATE
9	ANTENNA	48+64/2830 R	255.0'	HORIZONTAL	243.3'	11.7'	REMAIN	ULTIMATE
(10)	ANTENNA	83+07/8570 R	422.0'	HORIZONTAL	243.3'	178.7'	REMAIN	ULTIMATE
(1)	ANTENNA	25+42/685 R	196.0'	TRANSITIONAL	149.0'	47.0'	REMAIN	ULTIMATE
(12)	ANTENNA	15+62/2480 L	268.0'	HORIZONTAL	243.3'	24.7'	REMAIN	ULTIMATE

^{*} HIGHEST FEATURE IN A LARGE AREA OF TERRAIN PENETRATION. REFER TO HATCHED AREAS ON MAP.

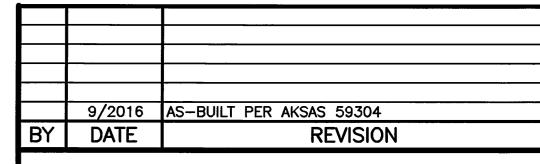
NOTES

- 1. AIRPORT ELEVATION IS 82'.
- 2. ALL CONTOURS ARE IN FEET. BASEMAP DATA IS PROVIDED FROM 2003 ALP SURVEY DATA.
- 3. PRIMARY SURFACE WIDTH IS 500'.
- 4. REFER TO INNER PORTION OF THE APPROACH SURFACE DRAWING FOR CLOSE—IN OBSTRUCTIONS.
- 5. PART 77 SURFACES BASED ON ULTIMATE AIRPORT LAYOUT.
- 6. APPROACH SURFACES ARE 34:1 BEGINNING AT 200 FEET BEYOND THE THRESHOLDS.
- 7. LANDFILL IS LOCATED APPROXIMATELY 3.8 MILES (20,064 FEET) NORTHWEST OF
- 8. THERE ARE NO KNOWN ORDINANCES OR STATUTES IN EFFECT THAT SPECIFY HEIGHT RESTRICTIONS.
- 9. SEWAGE LAGOON IS LOCATED APPROXIMATELY 1.73 MILES (9,175 FEET) NORTHEAST OF RUNWAY 19.



SCALE IN FEET
2000' 1000' 0 2000' 4000'

HORIZONTAL TO VERTICAL RATIO 1:10



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

DILLINGHAM AIRPORT

DILLINGHAM, ALASKA AIRPORT LAYOUT PLAN

AIRPORT AIRSPACE 14 CFR, PART 77 OF 1

06/19/2012

SHEET:

