

MUNICIPALITY OF ANCHORAGE REAL ESTATE DEPARTMENT HERITAGE LAND BANK

Date: November 14, 2024

To: File

Thru: Tiffany Briggs, Real Estate Director

From: Heritage Land Bank Staff

Subject: Glacier Creek Embankment located on HLB Parcel 6-060

Issue

What is the history and status of the constructed embankment? What regulatory requirements at the local, state, and federal level apply? What monitoring, reporting, management, or maintenance is necessary?

Key Takeaways

- The embankment is not regulated by any government entity or subject to any reporting requirements by the Municipality of Anchorage (MOA), State of Alaska, or the U.S. Army Corps of Engineers (Corps).
- During a 100-year flood event the embankment is likely to be overtopped.
- There are no known areas of active erosion or known weak points on the embankment.
- Neighboring private property owners access their lots by driving over the embankment, not in the platted right-of-way.

MOA Action Items/Recommendations

- Continue to perform annual site visits.
- Continue to collaborate with other agencies as appropriate going forward.
- Determine a path forward regarding unauthorized physical access to private lots, potentially through issuing an Intergovernmental Permit (IGP) to Street Maintenance for continued road maintenance on the embankment.
- Support GBOS if they desire to move forward with a possible courtesy inspection of the embankment from the Corps.

Property Information

HLB Parcel Number: 6-060Parcel/Tax ID: 075-141-04-000

• Legal Description: US Survey 4805 Lot 2

- Location: In Girdwood along the Seward Highway starting at the west bank of Glacier Creek
- Size: Approximately 332 acres
- Zoning: Girdwood Open Space (GOS)
- Wetlands: Nearly all of this is parcel is freshwater wetlands on the inland side of the Seward Highway and tidal marshlands on the outer side of the Seward Highway.
- Existing condition and land use: This parcel is undeveloped vacant land. The property is subject to several exceptions including easements for rights-of-way, electrical, pipelines, etc. and is subject to Public Land Orders, Permits, and Alaska Division of Land decisions.
- Adopted Land Use Plan: Girdwood Area Plan (1995) shows this area as Open Space. The draft Girdwood Comprehensive Plan also shows this area as Open Space.
- Vicinity maps in Appendix A

Embankment History

On the west side of Glacier Creek, between the Alaska Railroad bridge and the Seward Highway bridge, there is a constructed earthen embankment on a parcel of land owned by the Municipality of Anchorage and managed by the Heritage Land Bank division. A limited history regarding the embankment has been formulated from conversations with many Municipal, State, and Federal agencies, and extensive research through digital archives and databases.

The embankment was constructed prior to statehood as a direct result of the Federal Aid Highways Project to construct the Seward Highway in 1950 (See Appendix B). No documents have been found that indicate any improvements or maintenance of the embankment was performed after initial construction.

During the earthquake of March 27, 1964, it is known that there was extensive damage to Old Girdwood, including an elevation loss of several feet, fire, flooding, and damage to the highway and railroad in the general area. However, there are no documents indicating whether the embankment, which was still under federal ownership at that time, was damaged. Alaska's Digital Archives contains photos of Corps personnel in the area building defenses against flooding along the Seward Highway in Girdwood after the earthquake (See Appendix B).

Until July 28, 1972, this parcel was under federal ownership. The property was patented to the State of Alaska pursuant to the Statehood Act of 1958, Patent 50-73-0028.

In 1975, the neighboring privately owned parcels, Girdwood Original Townsite Block 1 Lots 1A – 4, were replatted with a partial vacation of East Street. At the time, the parcel was still in the State of Alaska ownership and the State issued a statement of non-objection to the half cul-de-

sac to be on the State's property (See Appendix C). Further, the State did not require the cul-desac to be constructed, meaning that the MOA and the State knew the physical access was not in the location of the platted right-of-way.

This parcel transferred to the Municipality of Anchorage pursuant to the Municipal Land Entitlement Act of 1978 on December 19, 1984, Patent 7867. It was placed into HLB Inventory as Parcel 6-060.

In 1997, the Girdwood Board of Supervisors (GBOS) performed stabilization work on the stream bank directly next to the Railroad bridge. It is unclear whether this work was performed on the HLB Parcel or in the Railroad Right-of-Way. The work was done without permits and a violation was issued by the Alaska Department of Fish and Game.

Starting in 2006, embankment repair was listed on the MOA's Capital Improvement Project list for a few years, however a project never advanced.

In Spring of 2024, a landowner in Old Girdwood contacted HLB Staff, the HLB Advisory Commission, and GBOS with concerns about the embankment's integrity, and potential flood risk. MOA staff performed multiple site visits and did not find any indicators of erosion or areas of concern. HLB Staff contacted State, Federal and Municipal agencies, and performed extensive research through digital archives and databases to gather information about the embankment.

Agency Involvement

US Army Corps of Engineers

The Corps was in the area in March 1964 right after the March 27, 1964, earthquake. Photos from the Alaska's Digital Archive indicate that Corps personnel stacked sandbags along the Seward Highway to prevent flooding of Old Girdwood from Turnagain Arm. In a Corps report from 1969, it is stated that the Corps built an emergency sandbag dike to protect Old Girdwood against high-tide flooding after the earthquake.

The Corps does not have any records that the embankment was a federally authorized levee built with consultation from the Corps. Since it is not a Corps authorized levee, it would be up to the MOA on frequency of inspections, on-going maintenance, or repairs. There is not a MOA code requirement or policy to inspect embankments like the one found on HLB Parcel 6-060.

The Corps maintains a National Levee Database which identifies all known levees, embankments, and floodwalls in the United States, regardless of their origins. This embankment, along with the adjoining Alaska Railroad and Seward Highway embankments, have recently been added to the National Levee Database. In conversation with the Corps Levee Safety Program Manager, this addition is based on Lidar data, did not include a site visit, and does not trigger any requirements for inspections, maintenance, or repairs. The embankment being listed on the database does not entitle the MOA to any technical support or funding; it is a database for informational purposes only.

The Corps offers courtesy inspections (as time and staffing allows); however, there is not a mandate by the Corps, generally or post inspection, to do regular inspections, maintenance, or repairs.

Alaska Department of Transportation & Public Facilities

DOT&PF has reviewed their files, and they do not have any documentation regarding the embankment, despite the gated connection at the Seward Highway. It is believed that any further information regarding the original construction of the embankment as part of the Seward Highway project would be in the archives and would be challenging to locate. However, if any further information is unearthed about the original construction, the MOA will be contacted.

Alaska Railroad

The bridge that crosses Glacier Creek north of the embankment was built in the late 1920's. The bridge is routinely inspected, and ARR has no current concerns. There is no near-term replacement plan for the bridge.

Alaska Department of Fish & Game

On September 24, 1997, the State issued Girdwood Board of Supervisors a Notice of Violation for unpermitted bank stabilization with the placement of riprap with heavy machinery without a Fish Habitat Permit. There is no documentation that this work was permitted by the MOA.

MOA Watershed Management Services & Flood Hazard Administrator

The most recent flood study for Girdwood Original Townsite has determined the base flood elevation to be 25 feet mean sea-level. Furthermore, the height of the embankment is estimated between 23-26 feet of elevation (depending on location along the embankment), which would overflow at a 100-year flood event (also known as 1% Annual Chance Flood Hazard). Given the timeframe of its original construction, the embankment functions and is treated as a natural riverbank. The original construction of the embankment, the Seward Highway, and the Railroad infrastructure all pre-date, and were not regulated by FEMA regulations (Code of Federal Regulations 44). Any new work below the ordinary high-water mark of Glacier Creek would be regulated by the Corps and potentially require a flood hazard permit from the MOA under CFR 44. All new construction in Old Girdwood must be built to above the base flood elevation (see contour and FEMA flood maps in Appendix A).

MOA Planning Department

The platted right-of-way of East Street was never constructed and lots 1A - 9 of Block 1 access their private property over the embankment. The State of Alaska submitted written comments not requiring the cul-de-sac to be constructed, which suggests that the MOA was aware that the right-of-way was not constructed, and that the embankment was being utilized for physical access (see Plat 75-135 in Appendix C).

MOA Public Works

Embankment work was identified as a Capital Improvement Project for 2006 - 2011 capital planning; however, the work was never scoped out, documented, or completed. The item was listed several times over a multi-year period:

- The 2006 Project was described as, "Dike Reconstruction, redevelopment planning, road access, and pre-construction.
- 2007 Capital Improvement Budget listed the item with zero dollars for the budget.
- 2010 Capital Project Needs List, the project appears again as a priority for Heritage Land Bank.

Girdwood Board of Supervisors / Girdwood Valley Service Area

The Girdwood Valley Service Area has been maintaining the embankment as a drivable surface, including snow plowing. The location of the embankment is not within a platted right-of-way, easement, or intergovernmental permit; therefore, there is no legal right for access through this area. The legally platted right-of-way remains undeveloped.

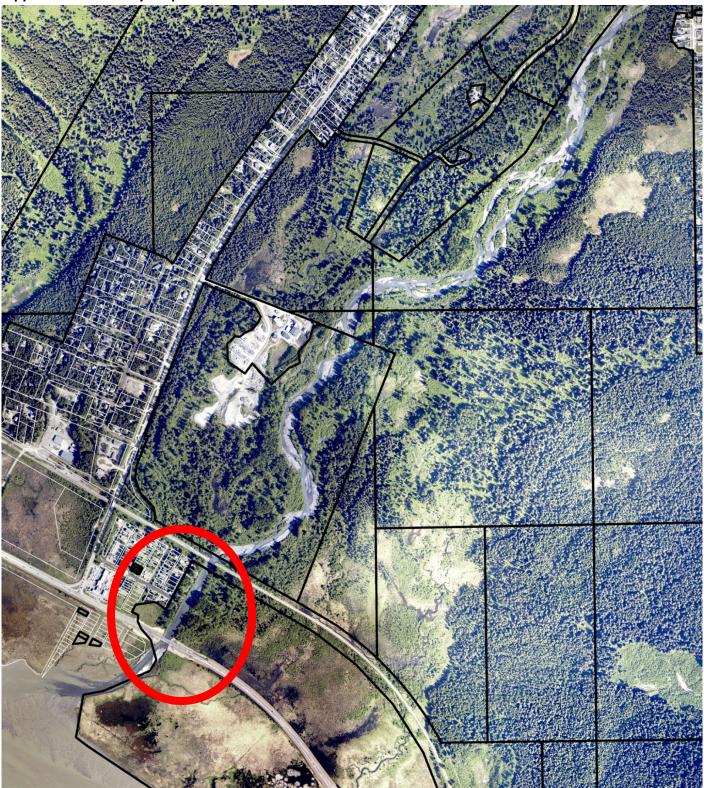
GBOS has performed work on the embankment which was documented in 1997 by Alaska Department of Fish Game. No further information has been provided on the scope of that work.

Appendix A – Vicinity Maps Appendix B – Photos Appendix C – Plat 75-135

CC: Heritage Land Bank Advisory Commission

CC: Girdwood Board of Supervisors

Appendix A – Vicinity Maps



Municipality of Anchorage - Heritage Land Bank Lower Girdwood Valley

0 500 1,000 2,000 Feet



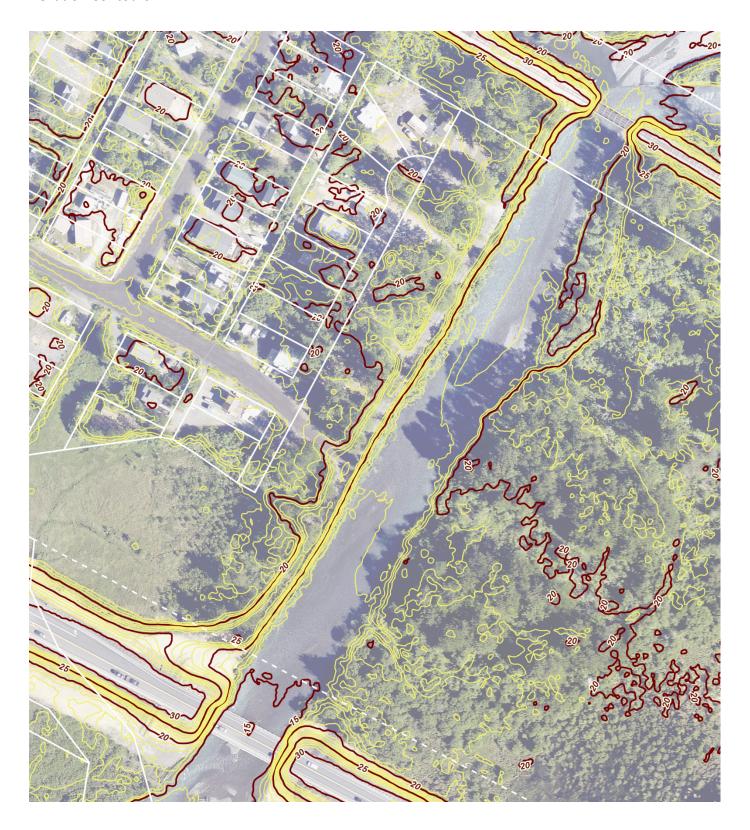
Municipality of Anchorage - Heritage Land Bank Parcel 6-060 (PID 075-141-04)

US Survey 4805 Lot 2 0 100 200 400 Feet

FEMA Flood Hazard Mapping



Elevation Contours



Appendix B – Photos

2024 Aerial oblique imagery

Looking West



Looking North



Photo from "Photo Album: Original Construction of the Seward Highway and Sterling Highway, 1949 -1951"

Territory of Alaska

Project No.: Section F2

Photo by: M. M. Flint

Date: April 20, 1950

Station:

Division File No.: 7504

Route: Turnagain Arm

Date: April 20, 1950

Looking:

Subject: View looking up Glacier River from highway bridge showing dike constructed between the two bridges

to protect Girdwood from overflow waters.



Title: U.S. Army Corps of Engineers personnel build sandbag defenses against

flooding in the Girdwood area.

Description: View of U.S. Army Corps of Engineers stacking sandbags to prevent

flooding near Girdwood, Alaska, after March 27, 1964 earthquake. Land in Girdwood area sank after the earthquake, so flooding from Turnagain

Arm waters occurred. March 1964. Photo by U.S. Army Corps of

Engineers.

Collection Name: AMRC. Woodman Photograph Collection

Identifier: AMRC-b80-27-12



Title: Sandbag levee along Seward Highway

Description: A sandbag levee constructed by soldiers of the 172nd Infantry Brigade,

Fort Richardson, to prevent floating ice from entering the Seward Highway near Girdwood. Photo by PFC John Bacheller 172nd Infantry

Brigade Fort Richardson, Alaska.

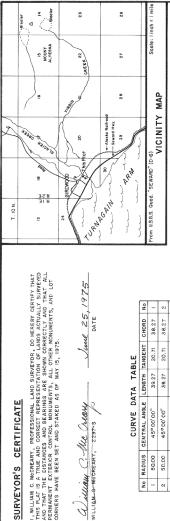
Collection Name: William G. Sprowls photographs, 1964. UAA-HMC-1464

Identifier: uaa-hmc-1464-f2-22



Appendix C - Plat 75-135

Q4(351-37)



OF OWNERSHIP AND DEDICATION CERTIFICATE

I (WE) HEREBY CERTIFY THAT I (WE) AM (ARE) THE OWNERS) OF THE PROPERTY DESCRIBED HERGOW MAD (WE) HEREBY DECOLÓATE TO THE PUBLIC ALL EASEMENTS CRED RELIC UTILITES, STREETS ALLEYS, WALKWAYS, THOROUGHFARES, PARKS, AND OTHGE VEBLIC AREAS SHOWN HEREON.

PUBLY & N. 10 5

SUBSCRIBED AND SWORN TO BEFORE ME THIS CALL ACKNOWLEDGEMENT NOTARY'S

S.

LOT 2A

Michelle M. M. Cream NOTARY PUBLIC FOR STATE OF ALASKA MY COMMISSION EXPIRES 5-44-79

ACCEPTANCE OF DEDICATION

THE CITY OF GIRDWOOD HEREBY ACCEPTS FOR PUBLIC USE AND FOR PUBLIC PUR-POSES THE REAL PREEKTY DEDICANTED ON THIS PLAT INCLUDING, BUT NOT LIMITED TOT, THE CASCENSITYS, RIGHTS-GEWAY, ALLEYS, ROADWAYS, WALKWAYS, THOROUGH-FARES AND PARKS SHOWN HEROM.

DATED AT GIRDWOOD, ALASKA∵THIS<u>A^4</u>DAY OF_ Wennek Mary CLERK

PLAT APPROVED BY THE GREATER ANCHORAGE AREA BOROUGH PLATTING AUTHORITY WAY PLAT APPROVAL AUTHORIZED OFFICIAL THIS COT DAY OF

,1975.

LOTS IA, 2A & 3A, BLOCK I GIRDWOOD TOWNSITE, U.S. SURVEY No. 1177 A RE-SUBDIVISION OF Lots I thru 4, Bik.1, Girdwood Townsite, U.S. Survey No. 1177

SURVEYED BY
William C. McCreary, Registered Land Surveyor
906 Lancaster Drive, Anchorage, Alaska 99503, phone 274-1217 JUNE 25, 1975

SITUATED WITHIN 1/4 SEC. 19, TION, R 2 E, S.M., ALASKA

S.E.

3.00

Anchorage

75-135

ORIGINAL LOG CABIN

YTILITU *# OI

LOI

TNBMBEAB

202

DATA TABLE

William O. Me Orlany WILLIAM - MEGEREARY, 2237.5

Monument O.I' above ground.

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Now

CERTIFICATE

SURVEYOR'S

49 IH

| S | ю | ю | 'n | - | |
|------------------------------|-----------|-----------|-----------|-----------|--|
| TANGENT | 20.71 | 20.71 | 20.41 | 8.16 | |
| LENGTH | 39.27 | 39,27 | 38.76 | 15,50 | |
| CENTRAL ANGLE LENGTH TANGENT | 45°00'00" | 45°00'00" | 44°24'54" | 44°24'54" | |
| No RADIUS | 50.00 | 50.00 | 50.00 | 20.00 | |
| No | | 2 | ю | 4 | |

7.80 3 5.12 4

- 3"diameter standard B.L.M. brass cap monument
 - 5/8" x 38" iron rod (rebar) set this survey.

A laska Division of Lands from Alaska Division of Lands for con
3. struction of Southeasterly half of cut-de-sac on State owned land.

Letter in G.A.A.B. File S-3644.

STAEET

ROSEMARY AREDMOND
739 "O" STREET
ANCHORAGE, ALASKA 99501

NOTES

- INO DEVELOPMENT INTENDED FOR HUMAN OCCUPATION SHALL BE PERMITTED CM. LOTS 2.8 & \$3 th. UNTIL SUCH TIME AS PUBLIC SEWER AND PUBLIC WATER ARE AVAILEBLE FOR CONNECTION.
- ADDITIONAL INFORMATION REGARDING BOUNDARY CONTROL AND TIES, REFER WILLIAM C. MCCREARY FILE ON THIS SUBDIVISION. T.P.L.V. WILL BECOME NULL AND VOID AT THE TIME EITHER ARE DEVELOPED. THE 3A A FOR A TO V

(2)

1A 11,480 sq ft. 2A 6,378 " " 3A 6,382 " " Toral = 24,240 sq ft. LOT AREAS

OYOS

LOTS 18,19 & 20, BLOCK 1, ARE OWNED BY ROSEMARY J. REDWOND AND WERE SUR-CHETED ALLOWS WITH LOTS 18, 2A & 3A, BLOCK 1, BUT ARE NOT THE SUBJECT THIS RE-SUBDIVISION. (3)

SURVEY No. 4805

si Si

Monument 0.4' above ground

CJ

NOSMBO

TEMPORARY PUBLIC IMPROVEMENT VARIANCE (T.P.I.V.)

IT IS HEREBY CONSTANTED THAT THE OWNERS, THEIR HERS, ASSIGNS AND SUCCTURED CONSTANT OF THE WILLS GAR A DETTION WHEN PRESENTED FOR THE GERTION FOR A ROAD IMPROPERTY OF THE IMPROVEMENT OF EAST STREET. REFUSAL, OR UN-AVAILABILITY OF ANY PARTY TO SHOW THE PETITION WILL ALLOW THE GERETISE FOR THAT BORNOUSE ARE ABORDOUGH MAYOR, OR HIS SUCCESSOR, TO SHOW THE PETITION TO SHOW THE RETITION TO SHOW THE RESTITION FOR THAT PURPOSE.

Date B-/8-75 Approved in accordance w Chapter 21, Article 16, Code Ordinances.

(Reflecting Existing Conditions on Morch 14, 1975. Original Lot Lines Not Shown.)

SCALE 1"= 20

"AS-BUILT"

PUBLIC WORKS DEPARTMENT Greater Anchorage Area Borough Survey Ogle R. and D.

25, 0 Sept. 5, 2,26 E

S-3644 75-735 1975-314