WAR DEPARTMENT ALASKA ROAD COMMISSION JUNEAU, ALASKA

December 22, 1930.

Alaska Road Commission Fairbanks, Alaska.

Gentlemen:

There are being forwarded under separate cover blue prints of Graehl Footbeidge.

Some changes have been made in the original design as follows:

- 1. In order to keep within the allotment, the original factor of safety was reduced to allow for the use of a 3/4 inch cable instead of a 7/8 inch.
- 2. From information available in this office, it was found that wire rope could be used for suspenders within the cost limit. Sash cord was selected for its flexibility so that suspender connections could be knots, thus saving the expense of clips.

Attention is invited to the anchor knot connection of the suspenders. This knot should be drawn as tight as possible and the wire rope clip fastened as close to the knot as is practicable. The seizing of the free end can be accomplished by one or two turns of wire, if desired, the number of turns shown on the drawing not being necessary since the seizing performs no function as far as stress is concerned, but only serves to hold theffree ends.

All hardware has been ordered from Seattle, with the exception of guy wires for wind sway. Almost any size wire will do for this so whatever is locally available should suffice.

Very truly yours

L. E. Atkins Engineer Officer

WAR DEPARTMENT ALASKA ROAD COMMISSION JUNEAU, ALASKA December 22, 1930. Mr. C. E. Burglin Junior Engineer A. R.C. Fairbanks, Alaska. Dear Clarence: I have had much more time to spend on the Graehl Footbridge here than I had in Fairbanks, so I have checked the computations and the plan. This additional time, together with consultation with others in the office, brought about some changes which you will notice on the blueprints which are being forwarded under separate cover. The points referred to in your letter of November 26, are well taken, but the changes in the plan have eliminated some of them except: The sills of the tower should be dapped into the mud sills as you suggest. This was intended but not shown The mudhsills have been changed from 3 feet to 6 feet. I do not believe I muite understand your point about either the mud sills being variable as "H" changes, or using a suspender. I think that you mean that if the bases of the tower posts are separated by a fixed distance, then, as the height of the tower is increased the distance between the interior posts at the elevation of the bridge floor will become less. Hence, if the height is increased enough, there will not be sufficient distance between the interior posts to permit of the floor being between the posts. This would be true if "H" were to be a very large figure, but it was not contemplated that "H" would be over 5 feet or so, and this should not pinch out the floor. Allowance was made for this. If a suspender were used at the tower, there would then be no part of the floor system fixed. The floor is to be bolted to the horizontal 4 x 4 s at the tower. This should make for a little increased rigidity to the structure. It was, in error, assumed that washers would accompany bolts with specifying them. Washers have been specified on the revised bill of materials.

C. E. Burglin -2-

Marlin twine was ordered for use in fastening the hand rail rope to the suspenders. If this will not hold the rope in place, it could be made fast with wire which can be procured locally.

In the event that you have close supervision over the construction of the bridge, I wish you would let me know the details about its construction, especially any difficulties experienced which might have been eliminated in the design. I suppose photographs will be taken during construction as a matter of routine and I surely would like to see some of them, which I will if them come to this office.

Yours very truly,

Leland B. Kuhre

Jr. Engr. A. R. C.

AFG GMT ELR

DEPARTMENT OF THE INTERIOR ALASKA ROAD COMMISSION FAIRBANKS ALASKA

September 7, 1948

Alaska Road Commission. Juneau, Alaska.

Gentlemen:

Attached hereto is a petition for graveling a road 500 feet in length. This road is an East spur of the road going into Graehl close to its junction with the Steese Highway; about 100 yards of gravel are involved.

At the paragraph of the At the present time we are bailing gravel with a dragline on the North side of the Noyes Slough Bridge and the immediate future would be the best time to fo the job should the petition be

Yours truly,

John G. Shepard Assistant Superintendent

Juneau, Alaska, Sept. 24, 1948.

Fairbanks:

The Alaska Road Commission has no funds for this type of work. If residents care to do the hauling, we can load the gravel without charge, or if they will pay the cost of hauling we can do it for them. Otherwise they should take it up with the Territorial Highway Engineer.

Steel CREEK - FARM ROADS

Route 7A Month July Your 1949. Rem. 7/20/45) Foreman Vichols ENT WORK AJCOMPLISTED ENTER DAILY 5 9 10 11 12 13 14 15 16 17 18 19 20 20 20 20 20 20 20 20 20 30 30 Total Reput 1 Crade, Scrapers, Drag C.Y. S n u Myrg.c.X. 3 The Shovel, C.Y. 4 Gravel Load, Trap, C.Y. # Shovel, C.Y. Screen/Crush C.Y. " Lead, Hand, Cu. Yd. 99 44 33 24 60 187 133 112 122 109 123 111 72 " Haul, Cu.Yds. H Av. Dist. today 30 Corduroy. L.F. completed 11 Metal Culverts L.F. and Dia. 12 Timber " " " " Repaired L.F. 14 Wooden Bridges " " " 15 Steel " " " " 16 Snow Removal, Miles Measure up at END of month and enter only that part which has been entirely completed during month: 18. Grub and Stripping, Length & Width 19. Grading, Miles 24. Maintenance, Miles 23. Bridges, Steel. L.F. & Width 17. Clearing, Length & Width

18. Grub and Stripping, Length & Width

19. Grading, Miles

24. Maintenance, Miles

25. Winter Maintenance, Miles

26. Meals Served

27. Powder used, Lbs.

29. Coel used, other, tons

30. Fuel Oil, mess

31. Fuel Oil, Bunk houses

Mc GRATH - FARM ROADS.

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File June 1949. 7A-Steel Creek --- 2,104 yds 14 - Steese Highway - -7 N. Sarmere Lago - --- 350"

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